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1996 ASSESSMENT REPORT

BIG MISSOURI PROPERTY  
STEWART, BRITISH COLUMBIA

DIAMOND DRILLING

SKEENA MINING DIVISION

NTS 104B/1, 104A/4

LATITUDE 56° 12'00" N, LONGITUDE 130° 01'00" W

OWNER/OPERATOR

WESTMIN RESOURCES LIMITED

REPORT BY

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WESTMIN RESOURCES LIMITED

MARCH 5, 1997

GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT

24,905

PT 97-004

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## **1.0 SUMMARY**

A diamond drilling program was carried out on the Martha Ellen deposit during August and September 1996. Martha Ellen deposit is located within Westmin Resources Limited's Big Missouri mineral property. The purpose of the program was to test interpreted favourable subsurface geology eastward from the Martha Ellen deposit with a series of widely-spaced drill holes.

Nine holes totalling 2,155.23 metres were drilled, seven of which intersected typical Premier Porphyry and the underlying andesitic rocks. Quartz breccia mineralized with pyrite, sphalerite, galena and rare chalcopyrite occurs along the eastward-dipping contact between the porphyry and the andesitic rocks. This mineralized quartz breccia locally contains significant amounts of gold and silver. One hole was drilled within altered andesitic rocks, to test the presumed subsurface extension of an easterly striking, mineralized quartz vein. The other remaining hole was drilled to test for the possible southward extension of the Martha Ellen occurrence. Typical Premier Porphyry does not occur within this southern area.

Drilling indicates that the geology of the target area is favourable and the presence of alteration and mineralization in the holes is encouraging.

Six to ten holes should be drilled to further test the Martha Ellen occurrence area. Some of these holes should be drilled in the vicinity of drill holes B96CH1, B96CH2 and B96CH7 as the mineralized quartz breccia within these two holes contains significant amounts of gold and silver. The other holes should be wider-spaced to continue evaluating the overall continuity and grade of the mineralized quartz breccia zone eastward from the Martha Ellen occurrence area.

## **2.0 INTRODUCTION**

The Big Missouri property is 100% owned by Westmin Resources Limited.

Previous work on the Martha Ellen occurrence area began in the early 1900's. Two shallow shafts, a few short adits and numerous trenches were excavated by 1930. Westmin Resources Limited began work in the area during 1979; by 1988 a total of 8,389 metres of diamond drilling in 144 holes had been completed. For further historical information see Greig (1996).

During September 1995 the author mapped the surface geology of the Martha Ellen area, and re-examined core from some of the earlier drill holes. The results of this work indicated that the geometry of the mineralized zones at Martha Ellen was not well established. The geometry of the mineralized zones in the subsurface was difficult to determine because the mineralized quartz

veins exposed at surface have variable geometries, and because many of the earlier drill holes are shallow and randomly oriented. However, the mineralized zones generally appear to dip eastward, following the contact between Premier Porphyry and underlying andesitic rocks.

The drilling program tested the idea that the mineralized quartz breccia zone generally follows the contact with the intrusive(?) Premier Porphyry body, and dips moderately eastwards.

### **3.0 1996 EXPLORATION PROGRAM**

A program of diamond drilling was carried out between August 3 and September 2, 1996 under the direction of the author.

Diamond drilling was contracted to F. Boisvenu Drilling Ltd. of Delta, B.C. A Boyles 56A drill was used for the drilling. A Komatsu D-58 tractor was used to move the drill, to refurbish existing cat roads, and also to prepare drill sites. Most of the holes were drilled from the edges of previously existing cat roads. Areas disturbed by the tractor were recontoured upon completion of the work. A list of personnel employed on the project is included as Appendix A.

The crew was accommodated at Westmin's exploration trailer camp at Premier Gold, 8 kilometres south of the work area.

### **4.0 EXPENDITURES**

Assessment work in the amount of \$191,891.00 was filed on November 14, 1996.

Expenditures for the 1996 exploration program are shown in Table 1.

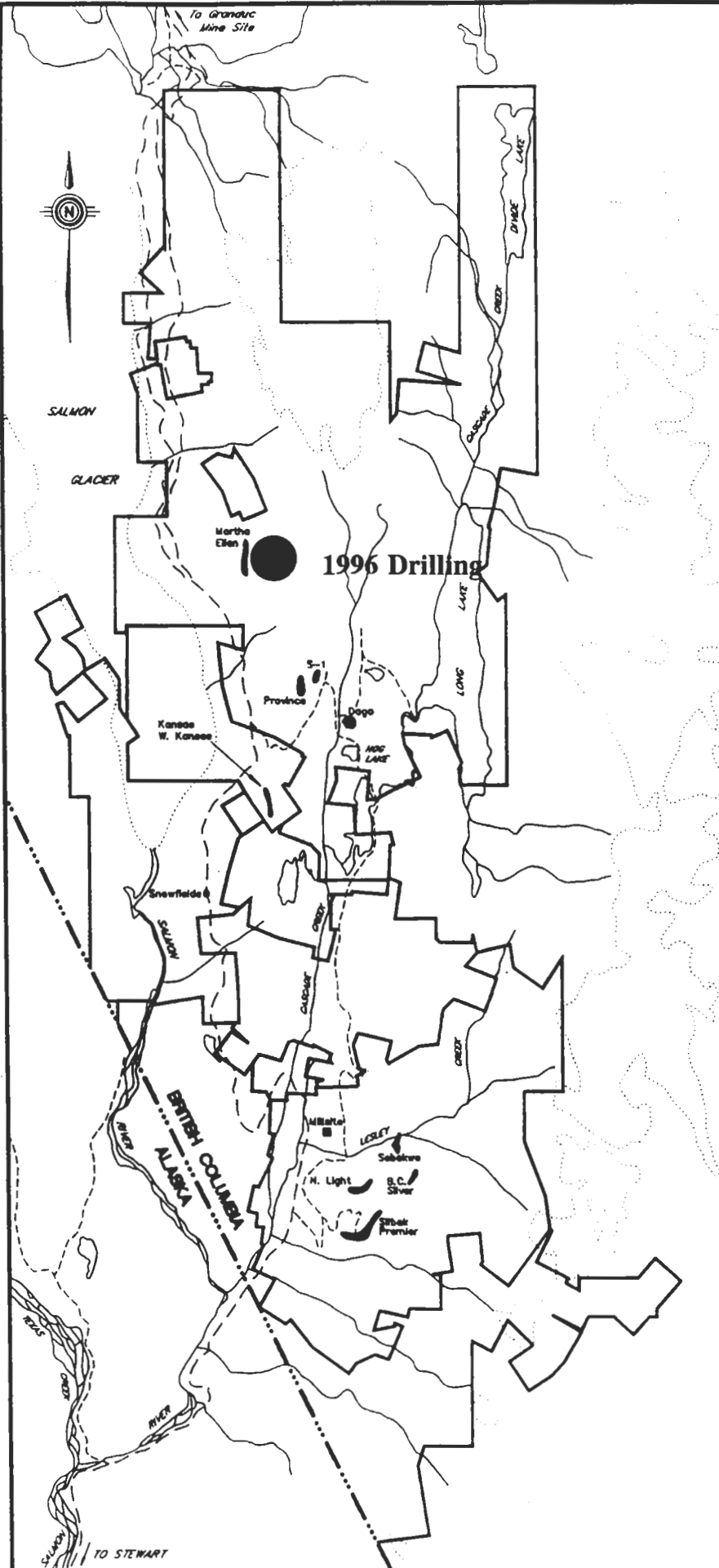
Assessment work done on the Big Missouri property was filed on adjacent mineral claims. These adjacent mineral claims were grouped with the Big Missouri property in order to best utilize the assessment credit. Westmin has a 100% interest in all of these properties.

### **5.0 LOCATION, ACCESS, VEGETATION AND PHYSIOGRAPHY**





The Big Missouri property is located 24 kilometres north of Stewart, British Columbia, within NTS map-sheets 104A/4 and 104B/1, at latitude 56° 12' N, longitude 130° 01' W (see Figures 1 and 2).


<b>TABLE 1</b>		
<b>EXPENDITURES</b>		
	<b>(\$)</b>	<b>Total (\$)</b>
<b>Diamond drilling</b>		
Coring, 7,071 feet (2,155.23 metres)	124,757	
Mobilization/demobilization	9,000	
Cat rental	4,960	
Other drilling costs	7,327	146,044
<b>Core boxes</b>		2,914
<b>Camp expense</b>		
145 mandays at \$50 per manday		7,250
<b>Materials and supplies</b>		500
<b>Equipment and instrument rentals</b>		2,550
<b>Salaries and benefits</b>		19,225
<b>Travel</b>		250
<b>Fuel</b>		5,000
<b>Shipping and telephone</b>		250
<b>Assays</b>		
416 samples at \$13 per sample		5,408
<b>Total</b>		<b>191,891</b>

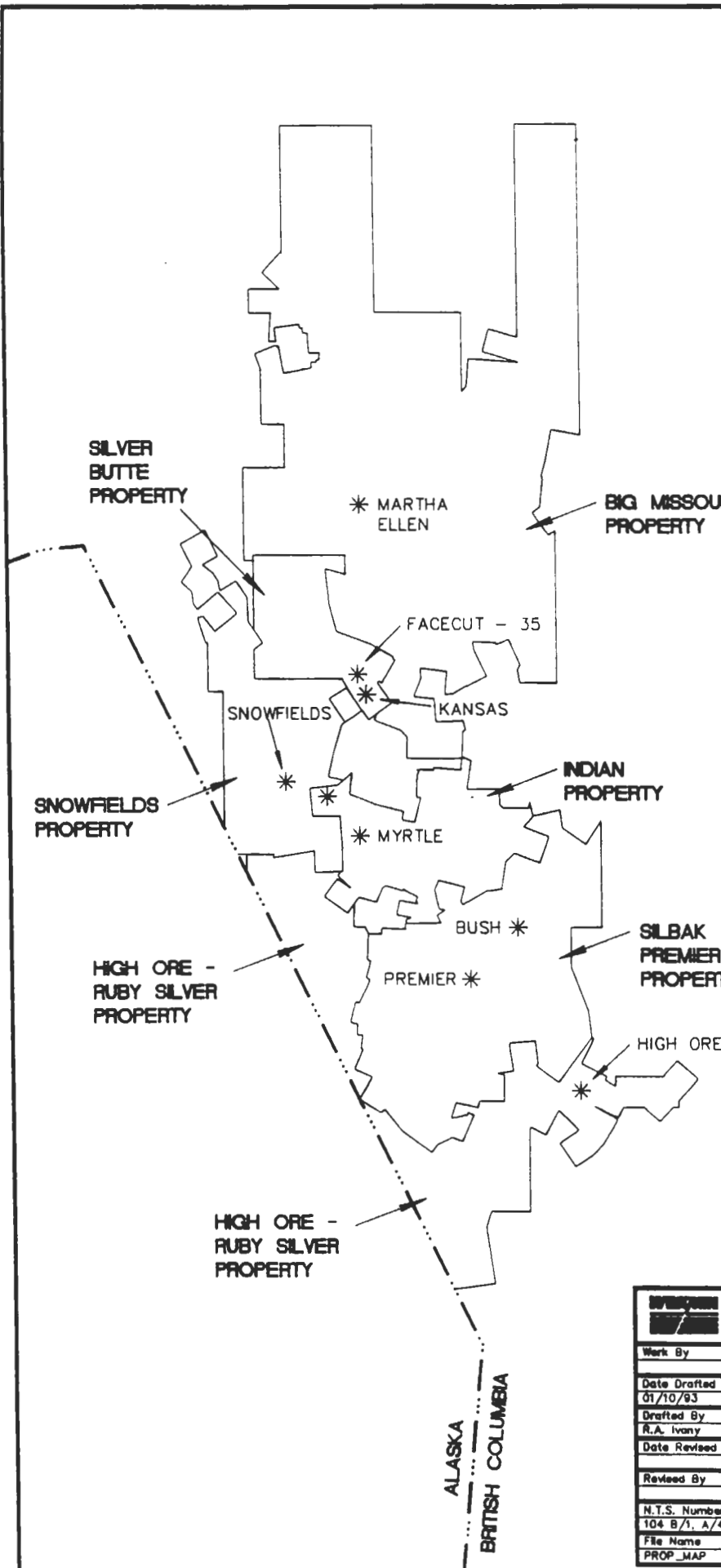




**SYMBOLS**

-  ROAD
-  CREEK
-  GLACIER
-  MINERALIZED ZONES

<b>Westmin Resources Limited</b>	
Work By: F. Uebler Date Drafted: 01/10/83 Drafted By: R.A. Ivany Date Revised:	<b>PREMIER GOLD PROJECT</b> <b>196 MARTHA ELLEN DRILLING</b> <b>LOCATION MAP</b>
Revised By:	
U.S.A. Number: 104 871 4/4 File Name: SP8m_LOC	 SCALE 1 : 80,000
	Figure <b>1</b>



<b>Westmin Resources Limited</b>	
Work By	
Date Drafted	01/10/93
Drafted By	R.A. Ivany
Date Revised	
Revised By	
N.T.S. Number	104 B/1, A/4
File Name	PROP_MAP
<b>PREMIER GOLD PROJECT PROPERTY MAP</b>	
SCALE 1 : 100,000	
Figure <b>2</b>	

Access to the property is via an old road established to provide access for the earlier drilling. This road starts in the area of the old Big Missouri townsite, at the S-1 open pit. A network of good bulldozer roads covers the Martha Ellen area. Heavy snowfalls limit exploration work to the period between mid-July and the end of September.

The area is mostly above treeline. A few flat areas are covered with peat bogs. Local topographic relief is gentle.

## **6.0 CLAIM STATUS**

The Big Missouri property consists of 29 reverted Crown grants, 80 two-post and four-post mineral claims that cover the equivalent of 148 units. The Big Missouri property is 100% owned by Westmin Resources Limited (Figure 2). Claim data is presented in Appendix D.

## **7.0 PROPERTY GEOLOGY**

The Big Missouri property is underlain by lower Jurassic "Hazelton Group" volcanic and sedimentary rocks which are part of the accreted terrane of Stikinia. In the Stewart area Alldrick (1985, 1987) subdivided the Hazelton Group into four formations. It is unclear which portions of Alldrick's stratigraphy correlate with the descriptions that follow, but the Unit 9 rocks described below probably belong within Alldrick's Unuk River Formation.

Detailed mapping by the author during September 1995 showed that the Martha Ellen area is underlain mainly by extensive Unit 9 andesitic tuffs and flows. These rocks are locally altered with abundant sericite, pyrite and quartz in the vicinity of mineralized zones.

Immediately overlying the andesitic rocks is a potassic intrusive(?) body of Premier Porphyry. This porphyry contains diagnostic potassium feldspar megacrysts. The contact between the porphyry and the andesitic rocks dips at 25 to 30 degrees to the east; it is locally irregular. Subhorizontal apophyses of Premier Porphyry up to 5 or 7 metres wide intrude the andesitic rocks. The Premier Porphyry is often bleached and altered near its contact with the andesitic rocks.

Fresh granodiorite, diorite and monzodiorite dykes of Tertiary age intrude the Unit 9 andesites. These dykes are mainly medium grained, and contain dark green, acicular hornblende crystals. The largest of the dykes trends southeasterly and dips 65 to 80 degrees to the southwest. These dykes are part of the Portland Canal swarm.

Late dykes of andesite or, less commonly, dacite or rhyolite are also present within the Martha Ellen area. Andesite dykes intrude some of the dioritic dykes of the Portland Canal swarm.

The South and the North (or Glacier) faults are the two main fault structures within the Martha Ellen area. These faults strike northerly and have apparent right-lateral displacements. The South Fault has an apparent displacement of about 15 metres, and the North Fault has an apparent displacement of about 30 to 60 metres. These faults dip approximately 68 degrees to the west.

The Unit 9 rocks at Martha Ellen occurrence area have a consistent, pervasive, northerly trending foliation that dips from 49 to 64 degrees to the west.

Mineralized veins and zones at Martha Ellen are similar to other occurrences within the Big Missouri area (Greig, 1996). Semi-massive to massive lenses, pods and stringers of pyrite, sphalerite, galena and chalcopyrite occur within variably altered andesitic rocks of Unit 9. Unit 7a Premier Porphyry has also been mineralized in a few places. The Premier Porphyry and the mineralized zones in the Martha Ellen area appear to be genetically related. Mineralization has occurred directly at the porphyry contact, and also within 12 or 15 metres of this contact. The mineralization may have occurred during the later stages of the intrusive event. The mineralized quartz veins exposed in the surface trenches at the Martha Ellen occurrence area have variable geometries and orientations.

The mineralized Unit 9 andesites have been silicified and sericitized, and also contain finely disseminated pyrite. They have a bleached appearance. Contacts between mineralized zones and the wallrock andesites are usually gradational.

Vein quartz within the mineralized zones ranges from watery grey to off-white to clear. This quartz has been brecciated and rehealed by silica. Later, barren veins in the area contain white quartz, carbonate and chlorite with minor local pyrite.

## **8.0 DIAMOND DRILLING**

Diamond drilling was conducted using a skid-mounted Boyles 56A drill. Drilling took place on two 10-hour shifts. The total, all-inclusive cost of the drilling was \$97.93 per metre.

NQ size core was recovered. The nine holes were drilled from nine different sites. Locations and directions of the holes are shown on Figure 3, and listed within Table 2.

**TABLE 2**  
**1996 MARTHA ELLEN DRILL HOLE CO-ORDINATES AND DOWNHOLE SURVEYS**

Hole	Length (m)	Estimated Collar Co-ordinates			Azimuth (wrt true n)	Dip	Depth (m)	Method	Comments
		East	North	Elevation					
B96CH1	334.06	95437	107566	1183	240 254	-52 -51 -55	0 324.92 332.23	Acid Tropari	
B96CH2	270.05	95224	107551	1167	240 241	-58 -63	0 268.22	Tropari	
B96CH3	209.05	94991	107608	1169	240 241	-62 -66	0 207.26	Tropari	
B96CH4	254.81	95604	107573	1143	240 345	-62 -62	0 252.98	Tropari	Probably Unreliable
B96CH5	135.03	95155	107293	1065	111 111	-45 -58	0 131.98	Tropari	
B96CH6	248.72	94875	107814	1205	240 256	-50 -63	0 247.19	Tropari	
B96CH7	273.1	95255	107803	1232	240 254	-50 -58	0 271.58	Tropari	
B96CH8	148.13	95756	107468	1101	240	-50	0		
B96CH9	282.24	95377	107758	1204	240 016	-50 -51	0 213.36	Tropari	Probably Unreliable
<b>Total</b>	<b>2,155.2</b>								

**Note:** Collars have not been surveyed. Co-ordinates were estimated using detailed 1:1,000 scale orthophotographs prepared by Eagle Mapping in 1995. Uncertainties are expected to be less than 5 metres in X, Y, Z.

Complete geological logs for the holes are included as Appendix B and assay results are included as Appendix C. All of the split core samples were analyzed for gold, silver, copper, lead and zinc.

Cross-sections showing the 1996 diamond drill holes are included as Figures 4 to 11.

#### **Hole B96CH1 (Figure 6)**

Hole B96CH1 was drilled to test the theory that the mineralized zone at the south part of Martha Ellen follows the eastward-dipping contact between altered Unit 9 andesitic rocks and Premier Porphyry (Figures 3 and 4).

The hole is within Premier Porphyry to a depth of 129.48 metres. This rock contains phenocrysts of plagioclase, hornblende and potassium feldspar. The porphyry also contains about 1% quartz veinlets, and 1% pyrite as subhedral crystals averaging about 0.75 millimetres across.

From 129.48 to 135.82 metre depth, mineralized quartz breccia was cored. The breccia contains angular fragments of vein quartz and variably silicified andesite wallrock; the breccia has been rehealed by late silica. Both the upper and lower contacts of the mineralized zone are gradational across 5 to 20 centimetres. The mineralized zone contains pyrite, sphalerite and galena. Sphalerite occurs as irregular, brecciated veins and patches up to 25 by 120 millimetres across; sphalerite is usually rimmed by galena. Vein material from the lower part of the zone was stained by sodium cobaltinitrite. This stained material contains about 25% angular fragments 3 or 4 centimetres across with abundant potassium feldspar, within a siliceous matrix. From 130.00 to 132.50 metre depth the core assayed 0.228 oz/ton gold and 5.17 oz/ton silver.

From 135.82 to 334.06 metre depth mainly Unit 9 andesite lapilli tuff was cored in B96CH1. Alteration and stringer mineralization within this unit decrease downhole. The andesitic rocks are faulted in several places, and are also cut by mineralized quartz veins up to 84 centimetres wide. The andesitic rocks are also intruded by dykes of andesite, feldspar porphyry and Premier Porphyry up to 5.6 metres wide.

#### **Hole B96CH2 (Figure 8)**

Hole B96CH2 was drilled parallel to B96CH1, about 200 metres northwest of B96CH1.

<b>TABLE 3</b>					
<b>SUMMARY OF SIGNIFICANT INTERSECTIONS</b>					
<b>Hole</b>	<b>From</b>	<b>To</b>	<b>Width (m)</b>	<b>Gold (oz/ton)</b>	<b>Silver (oz/ton)</b>
B96CH1	130.00	132.5	2.5	0.228	5.17
	318.30	319.30	1.0	0.118	0.38
B96CH2 includes	140.40	146.75	6.35	0.226	0.59
	141.40	142.90	1.50	0.869	2.20
B96CH3	168.50	169.00	0.50	0.074	0.09
B96CH4	39.79	40.59	0.80	0.002	1.72
B96CH5	59.50	60.50	1.00	0.156	0.06
	113.11	113.61	0.50	0.240	0.55
B96CH6	55.41	57.17	1.76	0.099	4.38
	60.17	61.17	1.00	0.102	0.47
	108.35	109.85	1.50	0.143	0.82
B96CH7  includes	175.83	176.33	0.50	0.262	40.54
	245.90	246.70	0.80	0.100	0.15
	255.25	256.70	1.45	0.206	0.14
	255.25	255.75	0.50	0.494	0.23
	256.20	256.70	0.50	0.102	0.18
	263.68	263.98	0.30	0.446	8.66
B96CH8	131.80	132.40	0.60	Trace	0.61
B96CH9	268.30	269.30	1.00	0.068	0.23

The upper part of this hole is within Premier Porphyry similar to that in B96CH1; the porphyry extends to a depth of 105.36 metres. From 16.77 to 34.32 metres the porphyry is bleached, brecciated and contains quartz veins with open cavities lined by drusy quartz crystals. This vein quartz contains traces of dusty disseminated pyrite, galena and sphalerite.

From 90.86 to 91.61 metres and from 95.00 to 96.44 metres the rock is about 60% quartz with 5% pyrite and to 1% combined sphalerite and galena. The sulphides are finely disseminated within irregular masses up to 10 by 30 millimetres across; the sulphide masses generally have faint boundaries. Pyrite is most abundant near the margins of the silicified zones.

From 105.36 to 141.40 metres hole B96CH2 intersected massive porphyritic andesite with fine pale yellow-green leucoxene speckles. The contact between the Premier Porphyry and the andesitic rocks has a relatively consistent dip of 25 to 30 degrees to the east in this area.

From 141.40 to 142.90 metres the hole intersected 50% vein quartz breccia mineralized with pyrite, galena and sphalerite, and 50% intensely brecciated porphyry. The sulphides are most abundant along the margins of quartz and quartz-carbonate veins. High grade gold values occur in this area.

From 142.90 to 270.05 metre depth the hole was mainly in andesitic lapilli tuffs and porphyritic flows(?), with occasional late andesite dykes.

The mineralized zone along the Premier Porphyry contact in B96CH2 is better mineralized, though not as wide as the mineralized zone in hole B96CH1. In hole B96CH2 the Premier Porphyry nearby the andesite contact is finer grained, and more bleached, altered and brecciated than the Premier Porphyry near the andesite contact within hole B96CH1.

### **Hole B96CH3 (Figure 9)**

This hole was collared 250 metres northwest of B96CH2, and like the first two holes it was designed to test the eastward-dipping contact between the Premier Porphyry and the underlying Unit 9 andesitic rocks.

From surface to 80.17 metres the hole intersected Premier Porphyry mainly similar to that seen in the first two holes. From 3.66 to 32.30 metres, however, the porphyry contains 2 to 3% finely disseminated pyrite with local traces of finely disseminated sphalerite, galena and chalcopyrite. This rock may be part of Dykes' Unit 6, surface exposures of which have been mapped eastward from the collar of B96CH3.



From 80.17 to 82.35 metres weakly mineralized quartz breccia with contacts at 60 degrees to the core axis was recovered. This unit contains disseminated pyrite, sphalerite and galena; the vein quartz gradually changes from medium grey at the top of the interval to pale grey-green at the bottom. A stained sample of mineralized rock from 82.25 metre depth contains 5% potassic fragments within a siliceous matrix.

From 82.35 to 128.56 metres the hole intersected massive to locally brecciated Unit 9 andesite. The rock is locally bleached across 10 to 40 centimetres where quartz-carbonate +/-pyrite-galena-sphalerite stringers are present.

From 128.56 to 128.83 metres weakly mineralized quartz breccia was intersected.

From 128.83 to 209.09 metres the hole intersected mainly dark grey, fine-grained intrusive diorite, probably of Tertiary age. Andesitic dykes up to 12.8 metres wide are present within this interval.

#### **Hole B96CH4 (Figure 5)**

This hole was collared approximately 175 metres southeast of B96CH1, and like the first three holes it was designed to test the eastward-dipping contact between the Premier Porphyry and the underlying andesitic rocks.

From surface to 146.53 metres the hole intersected Premier Porphyry mainly similar to that seen in holes B96CH1 and B96CH2. However, the porphyry is thicker and coarser-grained than that seen in the holes to the north. Possibly hole B96CH4 is collared near the source of the Premier Porphyry in this area. The rock locally contains 1% euhedral quartz phenocrysts, and also occasional subhedral to euhedral potassium feldspar megacrysts up to 15 by 8 millimetres. From 94.33 to 126.20 metres the rock has a pseudo-"fragmental" appearance due to sericite and silica alteration apparently related to pervasive fluid movement through the rock. A weathered surface exposure of this "fragmental" rock could possibly be mapped as a breccia dyke within the Premier Porphyry.

From 146.53 to 156.48 metres the hole intersected weakly mineralized quartz breccia which has been brecciated and rehealed by later silica. Spots of pyrite, galena and sphalerite up to a few millimetres across are evenly distributed throughout the unit. The rock locally contains wispy veinlets of blue-black carbonaceous material. A graphite veinlet 2 millimetres wide was seen at 149.75 metres. More or less altered, angular Premier Porphyry fragments to 8 centimetres across are present in the middle third of the interval; angular andesite fragments are present in the lower third of the quartz breccia interval.

#### **Hole B96CH5 (Figure 11)**

This hole was collared approximately 225 metres west-northwest of B96CH2. It was designed to test the presumed down-dip extension of the eastward-striking mineralized quartz vein exposed on surface in Trench "86." The mineralized quartz vein here cuts altered andesitic rocks. Trench "86" was sampled during 1986 work by Dykes. Chip samples from the trench contain up to 0.130 oz/ton gold and 41.82 oz/ton silver across 4 metres, and 0.104 oz/ton gold and 83.13 oz/ton silver across 4 metres.

From surface to 55.83 metres the hole intersected mainly green-grey, faintly banded andesitic tuff. There are local patches where sericite-altering fluids have moved through the rock.

From 55.83 to 77.00 metres the hole intersected mainly black, magnetic andesite dykes of Tertiary age. Some of these dykes are brecciated and contain veinlets of garnet, epidote and calcite.

From 77.00 to 101.61 metre depth the hole intersected a medium grained, moderately magnetic diorite dyke.

From 101.61 to 125.80 metres the hole intersected dark grey, fine grained, argillaceous andesite tuff. Quartz occurs both as pervasive alteration and as wormy veinlets. Sphalerite veinlets 1 to 3 millimetres wide, on average at about 60 degrees to the core axis, occur throughout much of the unit. No quartz breccia was intersected; the mineralization is of a different style than that seen along the base of the Premier Porphyry to the east.

From 125.80 to 135.03 metres a Tertiary andesite dyke was cored.

#### **Hole B96CH6 (Figure 10)**

Hole B96CH6 was drilled parallel to B96CH3, about 240 metres north-northeast of B96CH3.

The upper part of this hole is Premier Porphyry similar to that within B96CH3; the porphyry extends to a depth of 106.85 metres. Above 12.31 metres, books of pale mica up to 5 millimetres across are present. A weakly mineralized, locally banded quartz breccia is present from 55.41 to 57.17 metre depth; mineralized stringers occur both above and below this interval.

From 106.85 to 110.71 metres the rock is finely brecciated quartz breccia mineralized with pyrite, sphalerite and galena. The upper contact between the quartz breccia and the porphyry is at 55 degrees to the core axis; the lower quartz breccia contact is gradational.

From 110.71 to 154.23 metre depth very fine grained porphyry was cored. This unit may be an altered andesite porphyry of Unit 9, but contains no diagnostic leucoxene. This rock becomes less silicified and less brecciated with depth. The rock contains faint hornblende and plagioclase phenocrysts.

From 154.23 to 248.72 metres hole B96CH6 intersected mainly massive andesitic lapilli tuff, with rare sphalerite in carbonate-quartz veinlets. The rock has a local pervasive fabric subparallel the core axis.

#### **Hole B96CH7 (Figure 8)**

Hole B96CH7 was drilled parallel to and behind B96CH2; it was collared about 243 metres northeast of B96CH2.

The upper part of this hole is in Premier Porphyry similar to that within B96CH2; the porphyry extends to a depth of 224.21 metres. Dacite and rhyolite dykes intrude the porphyry. The late dykes intruding porphyry within other holes in this area are more commonly andesite. Sericite-altered patches are present below 180.35 metre depth.

From 224.21 to 227.91 metres quartz breccia weakly mineralized with pyrite, galena and sphalerite was recovered. This unit has been brecciated and rehealed by watery grey quartz. Pyrite is most abundant in topmost 30 centimetres and within lowermost 15 centimetres of unit. Late, off-white carbonate veins are present. The contacts between the quartz breccia and the wallrocks are at 37 and 48 degrees to the core axis.

From 227.91 to 273.10 metre depth andesite was recovered. Mineralized stringers to 30 millimetres wide are locally present within this unit. A massive sulphide band at 40 degrees to the core axis was cored from 263.72 to 263.95 metre depth. The sulphides are both banded and brecciated. The sulphide band contains about 50% sphalerite, 30% chalcopyrite, 2.5% pyrite and about 2.5% galena as well as about 10% vein quartz. Sulphide mineralization of this style was not seen in any of the other drill holes. The andesite wallrock is altered across a couple of centimetres at the upper contact, and across 30 centimetres at the lower contact.

**Hole B96CH8 (Figure 4)**

Hole B96CH8 was drilled parallel to holes B96CH1 and B96CH4 (Figure 3). It was collared about 175 metres south of B96CH4 to test for the possible southward extension of the mineralized zone at Martha Ellen, and also to test for the presence of Premier Porphyry in the same area.

The hole did not intersect typical Premier Porphyry. The rock cored is a medium to fine grained feldspar porphyry with plagioclase and hornblende phenocrysts, but only one (probable) potassium feldspar megacryst was observed at 39.55 metre depth. The rock is less quartz- and less carbonate-altered than typical Premier Porphyry from the area. Sericite-altering fluids have likely moved through the rock; a similar style of alteration is seen in core from a few of the other holes in the Martha Ellen area.

No mineralized quartz breccia was intersected in hole B96CH8.

**Hole B96CH9 (Figure 7)**

Hole B96CH9 was drilled parallel to, between and behind holes B96CH1 and B96CH2 (Figure 3). Hole B96CH9 was collared about 200 metres northeast of B96CH1. It was drilled to test for the down-dip extension of the mineralized quartz breccia seen in holes B96CH1 and B96CH2, along the Premier Porphyry/andesite contact. Surface geological mapping had outlined an area of abundant quartz veins in the vicinity of the collar.

The upper part of the hole is Premier Porphyry similar to that within B96CH2 and B96CH1; occasional zoned potassium feldspar megacrysts up to 13 by 26 millimetres across are present. This porphyry extends to a depth of 131.88 metres.

A major fault zone with broken core and gouge is present from 120.70 to 131.88 metre depth. The Premier Porphyry below the fault zone is altered by silica sericite and clay. Phenocrysts are obscured by the alteration, but are visible with a hand lens. This more altered porphyry extends from 131.88 to 206.59 metre depth.

From 206.59 to 282.24 metre depth generally uniform, massive to mottled andesite was recovered. No mineralized quartz breccia was intersected along the Premier Porphyry/andesite contact in this hole; perhaps the mineralized zone here has been displaced as a result of late faulting.

## **8.1 Analytical Methods**

All of the split drill core samples collected were prepared and analyzed at the Premier Gold Assay Laboratory under the direction of Senior Assayer Rosa Craverio.

The core samples were oven dried and crushed in a jaw crusher to about minus 1/4". The samples were then cone crushed to minus 1/8", and then split using a riffle splitter. About 250 grams were then pulverized in a stainless steel ring and puck pulverizer.

Gold assays were done on a one-half assay ton aliquot by standard fire assay techniques using lead collection; silver was parted and the remaining gold bead weighted gravimetrically.

A separate aliquot of the pulp was digested with acid and analyzed for silver, copper, lead and zinc by atomic absorption.

Four hundred sixteen split core samples from the 1996 diamond drill holes were analyzed.

## **9.0 CONCLUSIONS**

Six of the holes intersected the targeted quartz breccia zone along or near the eastward-dipping Premier Porphyry/andesite contact. Base metals were present in the mineralized quartz breccia from all of these six holes. Holes B96CH1 and B96CH2 contained the highest gold and silver concentrations. Gold and silver contents of the mineralized quartz breccia are variable. In addition, some of the mineralized quartz breccia contains fragments of potassium feldspar-altered material.

The above indicates that the geological model upon which the drilling was predicated is correct. A favourable setting for mineralization has been confirmed in the subsurface east of the Martha Ellen deposit.

## **10.0 RECOMMENDATIONS**

Further drilling is warranted to test the prospective Premier Porphyry/andesite contact east of Martha Ellen.

Six to ten holes should be drilled during the next phase of work. Some of these holes should be spotted in the vicinity of holes B96CH1 and B96CH2, in order to follow-up on the favourable results from the 1996 drilling.

## 11.0 STATEMENT OF QUALIFICATIONS

I, David J. Pawliuk, of Nanoose Bay, in the Province of British Columbia, hereby certify that:

1. I reside at R.R. 2, Box 133, Garry Oaks, Nanoose Bay, British Columbia, V0R 2R0.
2. I hold a B.Sc. in Geology from the University of Alberta in 1975.
3. I am registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. I am registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of the Province of Alberta.
5. I have practised geology in Canada since 1975.
6. I have no direct financial interest in this property.
7. I supervised the work described in this report.

DATED this 26<sup>th</sup> day of February, 1997 at Vancouver, British Columbia.



A handwritten signature in cursive script that reads "David J. Pawliuk".

David J. Pawliuk, B.Sc., P.Ge.  
Geologist

## 12.0 REFERENCES

Alldrick, D. J. 1987. Geology and Mineral Deposits of the Salmon River Valley, Stewart Area. B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Open File Map 1987-22.

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**APPENDIX A**  
**PERSONNEL**

<b>APPENDIX A</b>		
<b>PERSONNEL</b>		
<b>Name</b>	<b>Position</b>	<b>Company</b>
Paul Lhotka	Senior Project Geologist	Westmin Resources Limited
David Pawliuk	Geologist	Westmin Resources Limited
Leigh Edwards	Cook	Westmin Resources Limited
Patrick Burns	Core Splitter	Westmin Resources Limited
Waylon Grue	Core Splitter	Westmin Resources Limited
F. Falardeau	Driller	F. Boisvenu Drilling Ltd.
C. Johnston	Driller	F. Boisvenu Drilling Ltd.
D. Cleveland	Drill Assistant	F. Boisvenu Drilling Ltd.
M. Leduc	Drill Assistant	F. Boisvenu Drilling Ltd.
S. Tarrant	Drill Assistant	F. Boisvenu Drilling Ltd.
J. Cleveland	Cat Operator	F. Boisvenu Drilling Ltd.

**APPENDIX B**  
**DRILL HOLE GEOLOGICAL LOGS**

```

linek f      T %   T   Q TEXT   M   U ST A TD ALTERATION  SULFIDES ALT
e i from to   m MROCK  MAT  GRANI  N  RU Z /I  MIN      MIN  MIN
y a          d X    MAT  FRAG  N  I CT  BP
g
/           #   #   rec QZX * PFAX * * * FC%M* * * * # ***QZLECYCBAKXXPCGLYF1F2
L           rqd KS  CR * * * * * * # ***KFMUCLEPHE SSSVSL M1M2
R
K           #   #
0           1           2           3           4           5           6           7           8
12345678.901234.56789012345678901234567890123456789012345678901234567890

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=====
1 IDEN6B0202      S94CU28 BQTK941017PGL      BOISVEN94
2 IPRJ           WESTMIN RESOURCES LTD.      KANSAS
3 S 1 0.00 0.00
4 R 0.00 0.00 SEC 700M -20E
5 / 0.00 2.80      AXYS  GG+MXBR      P GC  B4085  V)  E1 E* 65
6 L 0.00 2.80      5A      Q+      E) 54
7 R 0.00 2.80 V. SIMILAR TO UNIT OF SAME NAME IN 94-26 AND 27 WITH REPLACEMENT
8 R 0.00 2.80 SULFIDES. METALLIC GREY SPHALERITE. ABRUPT END.
9 PFLT 1.00 1.30
10 R 1.00 1.30 MINOR FAULT AT 30 DEGREES TO CORE AXIS.

```

**EXPLANATORY NOTES:**

AFTER THE TOP THREE HEADER LINES THERE ARE THREE MAIN TYPES OF LINE

"/" LINES ARE THE UPPER LINE OF A COUPLET WHICH CONTAIN THE INFORMATION FOR CODE ITEMS AS NOTED ABOVE

"L" LINES ARE THE LOWER LINE OF THE CUPLET AND CONTAIN CODES FOR DIFFERENT ITEMS

"R" LINES ARE SIMPLY FREE FORM TEXT COMMENTS

**LASTLY**

"K" LINE ARE SOMETIMES USED TO FLAG OTHER FEATURES (EG FAULTS) AND DO NOT CONTAIN ANY CODED INFORMATION EG "KTMN" MEANS "KEY TOP OF MINERALIZATION"

**LITHOLOGIC UNIT TYPES (INDICATED IN COLUMN 47 IN / LINE)**

"P" P-UNITS ARE THE PRIMARY ROCK TYPE AND MUST FORM A CONTINUOUS NON OVERLAPPING SEQUENCE FROM THE START TO END OF THE HOLE.

"R" R-UNITS ARE DIFFERENT TO THE ENCLOSING P-UNIT FOR EXAMPLE A SMALL ANDESITE DIKE IN SHALES THEY CAN FIT ANYWHERE IN THE P-UNIT CHAIN.

"D" D-UNITS ARE SUBUNITS OF THEIR HOST P-UNIT AND ARE THE SAME EXCEPT FOR THE CODES ENTERED IN THE D-UNIT.

"A" A-UNITS ARE THE SAME AS THE PREVIOUS P-NITS EXCEPT FOR WHATEVER IS CODED IN THE A-UNIT

**NOTES ON CODE POSITIONING**

CODES BEGIN IN COLUMN 21 FOR BOTH / AND L LINES

**A. PHENOCRYSTS (TYPIFYING MATERIAL) ARE INDICATED AS FOLLOWS:**

```

QUARTZ           / COL 21-22      IN ALL CASES
K-SPAR           L COL 21-22      THE 1ST COLUMN IS THE SIZE FROM S-SCALE
PLAGIOCLASE     / COL 28-29      THE 2ND COLUMN IS THE AMOUNT FROM THE G-SCALE
AMPHIBOLE       / COL 30-31
EG "J2" IN LCOL28-29 MEANS "K-SPAR PHENOCRYSTS OF 1.4MM MAKE UP 20% OF ROCK"

```

B. ROCK CODE

A FOUR LETTER ROCK CODE IN /24-27 SEE LIST OF ROCK CODES  
EXAMPLE ABOVE MEANS "ANDESITE SILICIFIED"

C. %MIX

IN /COL23 INDICATES THE PERCENTAGE OF THE ROCK UNIT USING THE G-SCALE (NORMALLY 100% BUT  
COULD USE LESS EG A ZONE OF R-UNIT DYKES TALLING 70% OF THE INTERVAL)

D. ROCK COLOR IS IN L28-29 SEE LIST OF COLOR CODES TWO COLORS OR A COLOUR AND INTENSITY CAN BE ENTERED  
EG "5A" MEANS "MEDIUM GRAY"

E. Q MAT (QUALIFYING MATERIAL IN / AND L 32-34)

IS USED TO INDICATE THE TYPE OF MATERIAL COL 32-33 AND AMOUNT COL 34 USING THE G-SCALE  
EG. "GG+" MEANS "GOUGE 2.5%"

F. TEXTURES (TWO DESCRIPTORS MAY BE USED IN /35-36 AND /37-38)

IN THE EXAMPLE "MX" MEANS "MASSIVE" AND "BR" MEANS "BRECCIATED"

G. FRAGMENT TYPES ARE INDICATED IN L35-36 AND L37-38 SEE CODE LIST

H. GRAIN SIZE IS INDICATED IN /39-42 WHERE

/39 IS THE FINE FRACTION USING S-SCALE  
/40 IS THE COARSE FRACTION USING S-SCALE  
/41 IS THE % OF COARSE FRACTION USING G-SCALE  
/42 IS THE MAXIMUM SIZE USING THE G-SCALE

I. THE ROCK UNIT TYPE CODE IS IN /47 (SEE ABOVE)

K. STRUCTURES ARE INDICATED IN /49-50 AND/OR L49-50

EG "GC" MEANS GRADATIONAL CONTACT"

THE AZIMUTH OF THE STRUCTURE WOULD BE INDICATED IN /51-53 AND/OR L51-53

THE TOP OR BOTTOM OF A CONTACT IS INDICATED IN /54 AND/OR L54  
EG THE "B" MEANS THE "BOTTOM GRADATIONAL CONTACT"

DIP OF A STRUCTURE TO CORE AXIS IS INDICATED IN /55-56 AND/OR L55-56 ORDINARY INTEGERS  
EG "40" MEANS "40 DEGREES TO CORE AXIS"

L. ALTERATION MINERALS ARE INDICATED IN / AND L 57-68

EACH MINERAL HAS A SPECIFIC POSITION AS INDICATED WHERE THE H-SCALE AND G-SCALE  
INDICATE HOW THEY OCCUR AND IN WHAT AMOUNT RESPECTIVELY.

QZ QUARTZ	KF K-SPAR
LE LEUCOXENE	MU MUSCOVITE/SERICITE
CY CLAY	CL CHLORITE
CB CARBONATE	EP EPIDOTE
AK ANKERITE	HE HEMATITE
XX USER DEFINED	XX HOW AND AMOUNT
USER DEFINED	RC RHODOCHROSITE
	BA BARITE
	JS JASPER
	AB ALBITE

FOR EXAMPLE "V)" IN /63-64 MEANS "CARBONATE OCCURS AS VEINS TOTALING 1%"  
FOR OTHER USER DEFINED MINERALS THE MINERAL IS INDICATED IN /63-64 AND THE  
HOW AND AMOUNT OF THE USER DEFINED MINERAL ARE INDICATED IN L63-64

M. METALLIC MINERALS WORK EXACTLY THE SAME AS ALTERATION MINERALS AND ARE INDICATED  
IN /69-76 AND /69-76

PY PYRITE	SS SULPHOSALTS
CP CHALCOPYRITE	SV NATIVE SILVER
GL GALENA	SL SPHALERITE
YY USER DEFINED	YY HOW AND AMOUNT
USER DEFINED	TD TETRAHEDRITE
	EL ELECTRUM
	RS RUBY SILVER
	AP ARSENOPYRITE

- N. ALTERATION SUMMARY IS IN /77-78 AND/OR /79-80  
AND INDICATES THE TYPE OF ALTERATION (SEE CODES) AND INTENSITY (1-9 INCREASING)  
FOR EXAMPLE "65" ABOVE MEANS "SILICIFICATION MODERATE" ~~SEE~~ N-SCALE
- O. MINERALIZATION SUMMARY WORKS THE SAME AS ALTERATION SUMMARY BUT IN /77-78 AND/OR L79-80  
EG "54" MEANS "PYRITE>GALENA + SPHALERITE LOW-MODERATE INTENSITY" ~~SEE~~ N-SCALE

## LC-COLOUR SCALE

## COL 28

1	W	WHITE
2	9	PALEST
3	8	PALE
4	7	LIGHT
5	6	LIGHTER (M. LIGHT)
6	5	MEDIUM (50%)
7	4	DARKER (M. LIGHT)
8	3	DARK
9	2	VERY DARK
10	1	DARKEST
11	N	BLACK

## 12 COL 29

13	R	RED
14	U	BROWN (UMBER)
15	O	ORANGE
16	T	TAN (KHAKI)
17	Y	YELLOW
18	L	LIME (Y-G)
19	G	GREEN
20	Q	AQUA (B-P)
21	B	BLUE
22	V	VIOLET (B-P)
23	P	PURPLE
24	M	MAUVE (P-R)
25	W	WHITE
26	A	GRAY
27	N	BLACK

## G - SCALE

8	(	0.1 %
9	)	1 %
10	*	0.3 %
11	+	2.5 %
13	-	0.03 %
14	.	0.01 %
15	/	Non Determined Amount of
17	1	10 %
18	2	20 %
19	3	30 %
20	4	40 %
21	5	50 %
22	6	60 %
23	7	70 %
24	8	80 %
25	9	90 %
29	=	5 %
31	?	Possibly Present
56	X	100 %

N - SCALE

```
=====
```

8	(	0.1 %
9	)	1 %
10	*	0.3 %
11	+	2.5 %
13	-	0.03 %
14	.	0.01 %
15	/	Non Determined Amount of
16	0	absent
17	1	trace
18	2	very low
19	3	low
20	4	fairly low
21	5	moderate
22	6	fairly high
23	7	high
24	8	very high
25	9	extremely high
29	=	5 %
31	?	Possibly Present
56	X	exceptionally high



H - SCALE

=====		
3	#	In Breccia Fillings,
4	\$	as sheetings
8	(	0.1 %
9	)	1 %
10	*	as clasts,
11	+	as phenocrysts,
13	-	0.03 %
14	.	0.01 %
15	/	Non Determined Amount of
16	0	as spots,
17	1	occurs as amygdaloids, minor veins and disseminations,
18	2	occurs as macro veins and veins,
19	3	occurs as veins and dalmationite,
20	4	occurs as veins occasionally with envelopes,
21	5	occurs as veins often with abundant envelopes,
22	6	as Veins > Diss, Env, & Perv,
23	7	occurs as perv. dissem. = to veins, selvages and envelopes,
24	8	Occur as Diss, Env, & Perv, >Veins,
25	9	Flooded,
28	<	in micro veins,
29	=	5 %
30	>	in macro veins,
31	?	Possibly Present
33	A	in amygdaloids or cavity fillings,
35	C	as coatings,
36	D	as disseminations,
37	E	In Envelopes of Veins,
38	F	as framework crystals,
39	G	as gouge,
40	H	as Phenocryst Replacement,
41	I	as eyes or augens,
42	J	interstitial,
43	K	in stockwork,
44	L	as laminations or beds,
45	M	is massive,
46	N	as nodules,
47	O	as spots,
48	P	pervasive,
49	Q	as patches,
50	R	as rosettes,
51	S	in selvages,
52	T	as stainings,
53	U	as euhedral crystals,
54	V	as Veins,
55	W	in lenses,
56	X	massive,
58	Z	Primary Mineral in Rock

## TEXTURES

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1	BD	bedded,
2	BK	blocky,
3	BN	banded veins,
4	BR	brecciated,
5	F\$	fissile,
6	FB	Flow Banded
7	FO	foliated,
8	FR	fragmented,
9	HO	homogeneous,
10	HT	heterogeneous,
11	IB	In-Situ Breccia
12	IC	intercalated,
13	LM	laminated,
14	LN	lensoidal,
15	MX	massive,
16	ND	nodular,
17	SC	schistose,
18	SL	slaty,
19	UF	uniform,
20	VR	varved,
21	XB	cross-bedded,
22	\$	slickensided,
23	IQ	inequigranular,
24	EQ	equigranular,
25	AM	amygdaloidal,
26	AG	augen,
27	CR	crenulated,
28	FB	FUBERITE
29	LV	LEVERITE
30	XC	cross-cutting,
31	XL	crystalline,
32	G;	graded bedding,
33	GN	gneissic,
34	GP	glomeroporphyritic,
35	<<	micro-veined,
36	>>	macro-veined,
37	PK	poikilitic,
38	PB	porphyritic,
39	P/	porphyroblastic,
40	VG	vuggy,
41	WL	welded,
42	VV	intense veining,
43	TB	thick bedded,
44	BC	bicoloured,
45	SP	spotted,
46	MT	mottled,
47	PO	porphyritic,
48	BR	Breccia
49	FI	Fiamme
50	CS	Carbonate Spots
51	IB	In-situ Breccia
52	OX	Oxidized
53	BN	Banded Veins
54	FO	Foliated,
55	SS	Slickensided

56 OX Oxidized  
57 BX Brecciated,

## STRUCTURAL IDENTIFIERS

1	BN	Banding at
2	BD	Bedding at
3	CV	Cleavage at
4	CN	Sharp Contact at
5	D/	Dyke at
6	F/	Fault at
7	SH	Shear at
8	GC	Contact Gradational,
9	LM	laminations at
10	VN	veins at
11	FO	foliation at
12	V5	Cb-(Qtz) Veins at
13	V2	Grey Chalcedony + Py Veins at
14	V1	Qtz-Kf Veins at
15	V0	Qtz - Carb Veins at
16	V3	Qz-(Py-Sl-Gl)-(Ss) Veins at
17	V4	Qz-Py-Ss Veins at
18	VP	Pyrite Veins at
19	V8	Qz-Cl-Cb Veins at
20	VS	Sericite Veins at
21	V6	Cb-Rc-Base Metal Veins at
22	V7	Cb-Qtz-Ser Veins at
23	F4	Fairly Low Foliation at
24	F2	Very Low Foliation at
25	FI	Faint Foliation at
26	F2	Very Weak Foliation at
27	F3	Weak Foliation at
28	F4	Fairly Weak Foliation at
29	F5	Moderate Foliation at
30	F6	Fairly Strong Foliation at
31	F7	Strong Foliation at
32	F8	Very Strong Foliation at
33	F9	Extremely Strong Foliation at
34	VO	as Qtz-(Cb)
35	F1	Faint Foliation at
36	VC	Cb-Gl-Ss veins at
37	F0	foliation at

T-SCALE

1	BN	Banding at
2	BD	Bedding at
3	CV	Cleavage at
4	CN	Sharp Contact at
5	D/	Dyke at
6	F/	Fault at
7	SH	Shear at
8	GC	Contact Gradational,
9	LM	laminations at
10	VN	veins at
11	FO	foliation at
12	V5	Cb-(Qtz) Veins at
13	V2	Grey Chalcedony + Py Veins at
14	V1	Qtz-Kf Veins at
15	V0	Qtz - Carb Veins at
16	0	THINLY LAMINAR (<0.2 cm)
17	1	LAMINATED (0.2 cm to 0.6 cm)
18	2	VERY THIN BEDDED (0.6 cm to 2 cm)
19	3	THIN BEDDED (2 cm to 6 cm)
20	4	MEDIUM THIN BEDDED (6 cm to 20 cm)
21	5	MEDIUM BEDDED (20 cm to 60 cm)
22	6	MEDIUM THICK (60 cm to 2 m)
23	7	THICK BEDDED (2 to 6m)
24	8	VERY THICK (6 to 20m)
25	9	EXTREMELY THICK (>20m)
26	F2	Very Weak Foliation at
27	F3	Weak Foliation at
28	<	micro-
29	F5	Moderate Foliation at
30	F6	Fairly Strong Foliation at
31	F7	Strong Foliation at
32	F8	Very Strong Foliation at
33	F9	Extremely Strong Foliation at
34	VO	as Qtz-(Cb)
35	F1	Faint Foliation at
36	VC	Cb-Gl-Ss veins at
37	F0	foliation at
38	PB	porphyritic,
39	P/	porphyroblastic,
40	VG	vuggy,
41	WL	welded,
42	VV	intense veining,
43	TB	thick bedded,
44	BC	bicoloured,
45	SP	spotted,
46	MT	mottled,
47	PO	porphyritic,
48	BR	Breccia
49	FI	Fiamme
50	CS	Carbonate Spots
51	IB	In-situ Breccia
52	OX	Oxidized
53	BN	Banded Veins
54	F0	Foliated,
55	SS	Slickensided

56 OX Oxidized  
57 BX Brecciated,  
58 Z Primary Mineral in Rock

S - SCALE

1	BN	Banding at
2	BD	Bedding at
3	CV	Cleavage at
4	CN	Sharp Contact at
5	D/	Dyke at
6	F/	Fault at
7	SH	Shear at
8	GC	Contact Gradational,
9	LM	laminations at
10	VN	veins at
11	FO	foliation at
12	V5	Cb-(Qtz) Veins at
13	V2	Grey Chalcedony + Py Veins at
14	V1	Qtz-Kf Veins at
15	V0	Qtz - Carb Veins at
16	0	0.003 mm
17	1	0.008 mm
18	2	0.03 mm
19	3	0.12 mm
20	4	0.5 mm
21	5	2.0 mm
22	6	8.0 mm
23	7	16-64 mm
24	8	6.4-256 cm
25	9	25.6 cm to 1 m
26	F2	Very Weak Foliation at
27	F3	Weak Foliation at
28	<	micro-
29	F5	Moderate Foliation at
30	F6	Fairly Strong Foliation at
31	F7	Strong Foliation at
32	F8	Very Strong Foliation at
33	A	0.003-0.004 mm
34	B	0.004-0.004 mm
35	C	0.008-0.016 mm
36	D	0.016-0.03 mm
37	E	0.03-0.06 mm
38	F	0.06-0.12 mm
39	G	0.12-0.25 mm
40	H	0.25-0.50 mm
41	I	0.5-1.0 mm
42	J	1.0-2.0 mm
43	K	2.0-4.0 mm
44	L	4.0-8.0 mm
45	M	8.0-16.0 mm
46	N	16 mm - 3.2 cm
47	O	3.2-6.4 cm
48	P	6.4-13.0 cm
49	Q	13.0-25.0 cm
50	R	25.0-50.0 cm
51	S	0.5-1.0 m
52	T	1.0-2.0 m
53	U	2.0-4.0 m
54	V	4.0-8.0 m
55	W	> 8.0 m

DEGREE SCALE

=====

1	BN	Banding at
2	BD	Bedding at
3	CV	Cleavage at
4	CN	Sharp Contact at
5	D/	Dyke at
6	F/	Fault at
7	SH	Shear at
8	GC	Contact Gradational,
9	LM	laminations at
10	VN	veins at
11	FO	foliation at
12	V5	Cb-(Qtz) Veins at
13	V2	Grey Chalcedony + Py Veins at
14	V1	Qtz-Kf Veins at
15	V0	Qtz - Carb Veins at
16	0	0 Degrees
17	1	1 Degrees
18	2	2 Degrees
19	3	3 Degrees
20	4	4 Degrees
21	5	5 Degrees
22	6	6 Degrees
23	7	7 Degrees
24	8	8 Degrees
25	9	9 Degrees
26	F2	Very Weak Foliation at
27	F3	Weak Foliation at
28	<	micro-
29	F5	Moderate Foliation at
30	F6	Fairly Strong Foliation at
31	F7	Strong Foliation at
32	F8	Very Strong Foliation at
33	A	0.003-0.004 mm
34	B	0.004-0.004 mm
35	C	0.008-0.016 mm
36	D	0.016-0.03 mm
37	E	0.03-0.06 mm
38	F	0.06-0.12 mm
39	G	0.12-0.25 mm
40	H	0.25-0.50 mm
41	I	0.5-1.0 mm
42	J	1.0-2.0 mm
43	K	2.0-4.0 mm
44	L	4.0-8.0 mm
45	M	8.0-16.0 mm
46	N	16 mm - 3.2 cm
47	O	3.2-6.4 cm
48	P	6.4-13.0 cm
49	Q	13.0-25.0 cm
50	R	25.0-50.0 cm
51	S	0.5-1.0 m
52	T	1.0-2.0 m
53	U	2.0-4.0 m
54	V	4.0-8.0 m
55	W	> 8.0 m



NUMBER CODE SCALE

```

=====
1  BN   Banding at
2  BD   Bedding at
3  CV   Cleavage at
4  CN   Sharp Contact at
5  D/   Dyke at
6  F/   Fault at
7  SH   Shear at
8  GC   Contact Gradational,
9  LM   laminations at
10 VN   veins at
11 FO   foliation at
12 V5   Cb-(Qtz) Veins at
13 V2   Grey Chalcedony + Py Veins at
14 V1   Qtz-Kf Veins at
15 V0   Qtz - Carb Veins at
16 0    0
17 1    1
18 2    2
19 3    3
20 4    4
21 5    5
22 6    6
23 7    7
24 8    8
25 9    9
26 F2   Very Weak Foliation at
27 F3   Weak Foliation at
28 <    micro-
29 F5   Moderate Foliation at
30 F6   Fairly Strong Foliation at
31 F7   Strong Foliation at
32 F8   Very Strong Foliation at
33 A    0.003-0.004 mm
34 B    0.004-0.004 mm
35 C    0.008-0.016 mm
36 D    0.016-0.03 mm
37 E    0.03-0.06 mm
38 F    0.06-0.12 mm
39 G    0.12=0.25 mm
40 H    0.25-0.50 mm
41 I    0.5-1.0 mm
42 J    1.0-2.0 mm
43 K    2.0-4.0 mm
44 L    4.0-8.0 mm
45 M    8.0-16.0 mm
46 N    16 mm - 3.2 cm
47 O    3.2-6.4 cm
48 P    6.4-13.0 cm
49 Q    13.0-25.0 cm
50 R    25.0-50.0 cm
51 S    0.5-1.0 m
52 T    1.0-2.0 m
53 U    2.0-4.0 m
54 V    4.0-8.0 m
55 W    > 8.0 m

```

## DIP SCALE

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1	BN	Banding at
2	BD	Bedding at
3	CV	Cleavage at
4	CN	Sharp Contact at
5	D/	Dyke at
6	F/	Fault at
7	SH	Shear at
8	GC	Contact Gradational,
9	LM	laminations at
10	VN	veins at
11	FO	foliation at
12	V5	Cb-(Qtz) Veins at
13	V2	Grey Chalcedony + Py Veins at
14	V1	Qtz-Kf Veins at
15	V0	Qtz - Carb Veins at
16	0	0 Degrees to Core Axis
17	1	1 Degrees to Core Axis
18	2	2 Degrees to Core Axis
19	3	3 Degrees to Core Axis
20	4	4 Degrees to Core Axis
21	5	5 Degrees to Core Axis
22	6	6 Degrees to Core Axis
23	7	7 Degrees to Core Axis
24	8	8 Degrees to Core Axis
25	9	9 Degrees to Core Axis
26	F2	Very Weak Foliation at
27	F3	Weak Foliation at
28	<	micro-
29	F5	Moderate Foliation at
30	F6	Fairly Strong Foliation at
31	F7	Strong Foliation at
32	F8	Very Strong Foliation at
33	A	0.003-0.004 mm
34	B	0.004-0.004 mm
35	C	0.008-0.016 mm
36	D	0.016-0.03 mm
37	E	0.03-0.06 mm
38	F	0.06-0.12 mm
39	G	0.12-0.25 mm
40	H	0.25-0.50 mm
41	I	0.5-1.0 mm
42	J	1.0-2.0 mm
43	K	2.0-4.0 mm
44	L	4.0-8.0 mm
45	M	8.0-16.0 mm
46	N	16 mm - 3.2 cm
47	O	3.2-6.4 cm
48	P	6.4-13.0 cm
49	Q	13.0-25.0 cm
50	R	25.0-50.0 cm
51	S	0.5-1.0 m
52	T	1.0-2.0 m
53	U	2.0-4.0 m
54	V	4.0-8.0 m
55	W	> 8.0 m

QUALIFYING MATERIALS

- =====
- 1 KF K-FELDSPAR IN SIBX MATRIX
  - 2 SI SILICA IN SIBX MATRIX
  - 3 CB CARBONATE IN SIBX MATRIX
  - 4 SL SULPHIDE IN SIBX MATRIX
  - 5 GG GOUGE IN FAULT ZONE
  - 6 VN VEINS

ALTERATION FACIES

```

=====
1 KF K-FELDSPAR IN SIBX MATRIX
2 SI SILICA IN SIBX MATRIX
3 CB CARBONATE IN SIBX MATRIX
4 SL SULPHIDE IN SIBX MATRIX
5 GG GOUGE IN FAULT ZONE
6 VN VEINS
7
8 GC Contact Gradational,
9 LM laminations at
10 VN veins at
11 FO foliation at
12 V5 Cb-(Qtz) Veins at
13 V2 Grey Chalcedony + Py Veins at
14 V1 Qtz-Kf Veins at
15 V0 Qtz - Carb Veins at
16 0 Fresh Rock
17 1 Propylitic
18 2 Chlorite
19 3 Albite
20 4 Carbonate
21 5 5 Degrees to Core Axis
22 6 Silicification
23
24 8 K-Feldspar Flooding
25 9 9 Degrees to Core Axis
26 F2 Very Weak Foliation at
27 F3 Weak Foliation at
28 < micro-
29 F5 Moderate Foliation at
30 F6 Fairly Strong Foliation at
31 F7 Strong Foliation at
32 F8 Very Strong Foliation at
33 A Argillic
34 B 0.004-0.004 mm
35 C 0.008-0.016 mm
36 D 0.016-0.03 mm
37 E 0.03-0.06 mm
38 F 0.06-0.12 mm
39 G 0.12-0.25 mm
40 H 0.25-0.50 mm
41 I 0.5-1.0 mm
42 J 1.0-2.0 mm
43 K K-Feldspar Flooding
44 L 4.0-8.0 mm
45 M 8.0-16.0 mm
46 N 16 mm - 3.2 cm
47 O 3.2-6.4 cm
48 P 6.4-13.0 cm
49 Q 13.0-25.0 cm
50 R 25.0-50.0 cm
51 S 0.5-1.0 m
52 T 1.0-2.0 m
53 U 2.0-4.0 m
54 V Qtz + Adularia Veins,
55 W > 8.0 m

```

56 X Hematite  
57 BX Brecciated,  
58 Z Primary Mineral in Rock

METALLIC MIN. FACIES

=====

1	KF	K-FELDSPAR IN SIBX MATRIX
2	SI	SILICA IN SIBX MATRIX
3	CB	CARBONATE IN SIBX MATRIX
4	SL	SULPHIDE IN SIBX MATRIX
5	GG	GOUGE IN FAULT ZONE
6	VN	VEINS
7		
8	GC	Contact Gradational,
9	LM	laminations at
10	VN	veins at
11	FO	foliation at
12	V5	Cb-(Qtz) Veins at
13	V2	Grey Chalcedony + Py Veins at
14	V1	Qtz-Kf Veins at
15	V0	Qtz - Carb Veins at
16	0	Negligible,
17	1	Ss >Py+(Gl),
18	2	Ss-Gl-Py,
19	3	Py+Gl+(Sl) >Ss,
20	4	Sl+Gl >Py,
21	5	Py >Sl+Gl,
22	6	Pyrite in Addition To Normal Dissemination,
23	7	Barren Veins,
24	8	K-Feldspar Flooding
25	9	9 Degrees to Core Axis
26	F2	Very Weak Foliation at
27	F3	Weak Foliation at
28	<	micro-
29	F5	Moderate Foliation at
30	F6	Fairly Strong Foliation at
31	F7	Strong Foliation at
32	F8	Very Strong Foliation at
33	A	Argillic
34	B	0.004-0.004 mm
35	C	0.008-0.016 mm
36	D	0.016-0.03 mm
37	E	0.03-0.06 mm
38	F	0.06-0.12 mm
39	G	0.12-0.25 mm
40	H	0.25-0.50 mm
41	I	0.5-1.0 mm
42	J	1.0-2.0 mm
43	K	K-Feldspar Flooding
44	L	4.0-8.0 mm
45	M	8.0-16.0 mm
46	N	16 mm - 3.2 cm
47	O	3.2-6.4 cm
48	P	6.4-13.0 cm
49	Q	13.0-25.0 cm
50	R	25.0-50.0 cm
51	S	0.5-1.0 m
52	T	1.0-2.0 m
53	U	2.0-4.0 m
54	V	Qtz + Adularia Veins,
55	W	> 8.0 m

STRUCTURE DIP CODE

```

=====
1  KF   K-FELDSPAR IN SIBX MATRIX
2  SI   SILICA IN SIBX MATRIX
3  CB   CARBONATE IN SIBX MATRIX
4  SL   SULPHIDE IN SIBX MATRIX
5  GG   GOUGE IN FAULT ZONE
6  VN   VEINS
7
8  GC   Contact Gradational,
9  LM   laminations at
10 VN   veins at
11 FO   foliation at
12 V5   Cb-(Qtz) Veins at
13 V2   Grey Chalcedony + Py Veins at
14 V1   Qtz-Kf Veins at
15 V0   Qtz - Carb Veins at
16 0    Negligible,
17 1    Ss >Py+(Gl),
18 2    Ss-Gl-Py,
19 3    Py+Gl+(Sl) >Ss,
20 4    Sl+Gl >Py,
21 5    Py >Sl+Gl,
22 6    Pyrite in Addition To Normal Dissemination,
23 7    Barren Veins,
24 8    K-Feldspar Flooding
25 9    9 Degrees to Core Axis
26 F2   Very Weak Foliation at
27 F3   Weak Foliation at
28 <    micro-
29 F5   Moderate Foliation at
30 F6   Fairly Strong Foliation at
31 F7   Strong Foliation at
32 F8   Very Strong Foliation at
33 A    Argillic
34      SS- GL -PY,
35 C    0.008-0.016 mm
36 D    0.016-0.03 mm
37 E    0.03-0.06 mm
38 F    0.06-0.12 mm
39 G    0.12=0.25 mm
40 H    0.25-0.50 mm
41 I    0.5-1.0 mm
42 J    1.0-2.0 mm
43 K    K-Feldspar Flooding
44 L    4.0-8.0 mm
45 M    8.0-16.0 mm
46 N    16 mm - 3.2 cm
47 O    3.2-6.4 cm
48 P    6.4-13.0 cm
49 Q    13.0-25.0 cm
50 R    25.0-50.0 cm
51 S    0.5-1.0 m
52 T    Top
53 U    2.0-4.0 m
54 V    Qtz + Adularia Veins,
55 W    > 8.0 m

```

FRAGMENT TYPES

```

=====
1  KF   K-FELDSPAR IN SIBX MATRIX
2  SI   SILICA IN SIBX MATRIX
3  CB   CARBONATE IN SIBX MATRIX
4  SL   SULPHIDE IN SIBX MATRIX
5  GG   GOUGE IN FAULT ZONE
6  VN   VEINS
7
8  GC   Contact Gradational,
9  LM   laminations at
10 VN   veins at
11 FO   foliation at
12 V5   Cb-(Qtz) Veins at
13 V2   Grey Chalcedony + Py Veins at
14 V1   Qtz-Kf Veins at
15 V0   Qtz - Carb Veins at
16 0    type 1 non-porphyritic
17 1    Type 2 non-porphyritic
18 2    Plagioclase porphyritic
19 3    Amphibole porphyritic
20 4    Plagioclase and Amphibole prophyritic
21 5    Py >Sl+Gl,
22 6    Pyrite in Addition To Normal Dissemination,
23 7    Barren Veins,
24 8    K-Feldspar Flooding
25 9    9 Degrees to Core Axis
26 F2   Very Weak Foliation at
27 F3   Weak Foliation at
28 <    micro-
29 F5   Moderate Foliation at
30 F6   Fairly Strong Foliation at
31 F7   Strong Foliation at
32 F8   Very Strong Foliation at
33 A    Argillic
34     SS- GL -PY,
35 C    0.008-0.016 mm
36 D    0.016-0.03 mm
37 E    0.03-0.06 mm
38 F    0.06-0.12 mm
39 G    0.12=0.25 mm
40 H    0.25-0.50 mm
41 I    0.5-1.0 mm
42 J    1.0-2.0 mm
43 K    K-Feldspar Flooding
44 L    4.0-8.0 mm
45 M    8.0-16.0 mm
46 N    16 mm - 3.2 cm
47 O    3.2-6.4 cm
48 P    6.4-13.0 cm
49 Q    13.0-25.0 cm
50 R    25.0-50.0 cm
51 S    0.5-1.0 m
52 T    Top
53 U    2.0-4.0 m
54 V    Qtz + Adularia Veins,
55 W    > 8.0 m

```



ROCK NAMES

=====

1	ALXX	ANDESITE LAPILLI TUFF
2	ATXX	ANDESITE TUFF
3	AFPX	PORPHYRITIC ANDESITE
4	AXXX	ANDESITE, NONDESCRIPT
5	BXXX	BRECCIA, BLACK MATRIX
6	FZXX	FAULT ZONE
7	FXXX	FAULT
8	AM*X	"MESSY" ANDESITE
9	SXXX	SEDIMENTS
10	SA/9	INTERMIXED ANDESITE/ARGILLITE
11	SAXX	ARGILLITE
12	CTUF	CHERTY TUFF
13	AXXS	ANDESITE, SILICIFIED
14	ALXS	ANDESITE LAPILLI TUFF, SILICIFIED
15	QBXX	QUARTZ BRECCIA
16	QBXD	QUARTZ BRECCIA, DISSEMINATED SULFIDE 2-10%
17	QBXS	QUARTZ BRECCIA, SEMIMASSIVE SULFIDE 10-25%
18	QBXM	QUARTZ BRECCIA, MASSIVE SULFIDE >25%
19	VMXX	VEIN, MINERALIZED
20	V3XX	VEIN, LATE STAGE QUART-CALCITE+-CHLORITE
21		
24		

## KEY NAMES

```
=====
1  MN  MINERALIZATION
2  IB  IN-SITU BRECCIA
3  SA  SERICITE ALTERATION
4  IA  INTENSE ALTERATION
5  SB  SILICEOUS BRECCIA
6  FR  FRACTURE ZONE
7  FZ  FAULT ZONE
8  VG  VISIBLE GOLD/ELECTRUM
8  BK  BROKEN CORE
9  FL  FAULT
10 C1  10% CORE LOSS
11 C2  20% CORE LOSS
12 C3  30% CORE LOSS
13 C4  40% CORE LOSS
14 C5  50% CORE LOSS
15 C6  60% CORE LOSS
16 C7  70% CORE LOSS
17 C8  80% CORE LOSS
18 C9  90% CORE LOSS
```

## FLAG NAMES

```
=====
1  FAL  MAJOR FAULT
2  CON
```

## XX MINERALS

```
=====
1  LE  Leucoxene
2  AK  Ankerite
3  RC  Rhodocrosite
4  BA  Barite
5  X1  Unknown mineral
6  96  zzz
7  JS  Jasper
8  AB  Albite
```

## YY MINERALS

```
=====
1  SS  Sulphosalts
2  SV  Native Silver
3  TD  Terahedrite
4  EL  Electrum
5  RS  Ruby Silver
6  Y1  Unknown mineral
7  AP  Arsenopyrite
```





82 /	169.20	169.80	FALT			R F/	20			
83 R										
84 /	172.56	174.40	AXLT			A				
85 R										
86 /	172.85	172.85	FALT			GG*	R F/	10		
87 R										
88 /	174.40	180.00	DXPXA	KF	M B	6	P CN	15		D)
89 L						UG	F/	50	P) P)	
90 R										
91 /	177.00	178.80	AXLT				R			
92 R										
93 /	178.65	178.80	FALT				R			
94 R										
95 /	180.00	205.06	AXLT				P			
96 L						GA				
97 R										
98 /	189.87	190.19	DIDI				R CN	70		
99 L						3A				
100 /	190.84	191.72	DIDI				R CN	55		
101 L						3A				
102 /	197.46	198.77	PIKX	KF PF			R CN	22	V+	
103 L						G				
104 R										
105 R										
106 /	203.40	203.45	VEIN				R CN	35 V6	V4	D)
107 R										
108 /	205.06	255.23	D/AN	AX	M F	6	P CN	40		D*
109 L						GA			P) P)	
110 R										
111 R										
112 R										
113 /	210.70	212.18	D/AN		BR		CN	50		
114 R										
115 R										
116 /	223.05	223.50	AFXX		BR		D CN	25 V1	V*	D* D.
117 L									P*	D)
118 R										
119 R										
120 R										
121 /	225.70	226.20	AFXX		BR		D CN	15 84	V)	D) Q)
122 L									P) P)	<*
123 R										
124 R										
125 /	224.79	245.27	AFXX		BR		D CN	20 63	V)	Q= D-
126 L									P) P+	Q*
127 /	225.23	289.41	AXLT		MT	7	P CN	25 V+	V*	D*

MODERATELY BROKEN CORE; CL SLIP AT 169.62. FAIRLY MAJOR FAULT.

AS FOR 135.82 - 169.80.

CLAY AND PY GOUGE ON SLIP.

SOMEWHAT ALTERED, NON-MAGNETIC.

AS FOR 135.82 - 169.80.

15 CM MODERATELY BROKEN CORE;; ?? ORIENTATION.

AS FOR 135.82 - 169.80.

APPEARS TO BE TWO GENERATIONS OF PORPHYRY. LATE CB VEINS TO 13 MM WIDE, RANDOMLY ORIENTED.

4 CM WIDE.

BRECCIATED PY-QZ-CB +/- PY VEINS AT 212.00, 219.25, 238.70 4 MM WIDE AT 15 DEGREES. UNIT MAY BE MASSIVE FLOW.

MODERATELY BRECCIATED BAND. BX'D PY-QZ-SL(?) VEIN 15 MM WIDE SUBPARALLEL CORE AXIS FROM 211.80 -212.18.

SL AS REDDISH BROWN MASSES AV. 1 TO 1.5 MM. GL AS FAINT DISSEMINATIONS AND AS WISPY MASSES. UPPER CONTACT CHLORITIC SLIP AT 25 DEGREES.

LIGHT REDDISH BROWN TO BROWN -ORANGE, MOSTLY AS MASSES 2 TO 4 MM. GL PATCHES TO 3 X 10 MM. NO CP SEEN. VEIN QZ MAINLY WATERY GREY.

128 L			G					P) P)		
129 /	259.30	259.93	SBXX	QZ	B BN	R CN	B'20>7	V)	D)	D<
130 L				WA			V1	D*		D*
131 R				VEIN OFF-WHITE TO WATERY GREY TO PALE GREEN, WITH 20 % INCLUSIONS						
132 R				OF BRECCIATED WALLROCK. SULPHIDES MAINLY BLEBBY DISSEMINATIONS WITHIN						
133 R				CERTAIN GREY VEIN QUARTZ BANDS.						
134 /	264.70	264.80	AXLT			D VN	25			
135 R				BX'D QZ - SL - GL - CL VEIN 12 MM WIDE AT 25 DEGREES.						
136 /	267.48	268.75	AXLT		B MT	D	V2	V*	D+	D-
137 L								P) P+		D*
138 R				INTENSELY BRECCIATED, REHEALED; PALE GREEN VEIN QUARTZ.						
139 R				SULPHIDES AS BLEBS AV. 2 TO 4 MM						
140 /	269.41	274.77	D/AN		MX	5	P CN	32 V*	A)	D*
141 L				GA				P) P)		
142 /	274.77	302.45	AXLT		M B	7	P	V)	V+	D+
143 L				G				P) P)		
144 R				PY VEIN 4 MM WIDE AT 20 DEGREES AT 276.35. D/AN 20 MM WIDE AT 15 DEGREES AT						
145 R				AT 279.26; DYKE CLOUDY, APHANITIC, LIGHT GREEN GREY.						
146 R				QZ-SL-GL-PY STRINGERS AT 15 TO 40 DEGREES AT 294.98, 295.86, 298.25, 298.98,						
147 R				299.90 AND 300.73.						
148 /	284.70	285.15	D/AN			R CN	60			
149 L				3A						
150 R				MODERATELY MAGNETIC. LIGHT GREEN, CLOUDY, CHILLED MARGINS.						
151 /	290.60	292.10	D/AN			R				
152 L				3A						
153 /	293.05	295.60	D/AN			R				
154 L				3A						
155 /	302.45	303.29	SBXX		B MT		CN	20 67		D+ D-
156 L				WG		BGC	P1	P)		D)
157 R				SULPHIDES MAINLY AS DUSTY DISSEMINATIONS WITHIN AND ALONG MARGINS						
158 R				OF EARLIER VEIN QUARTZ. LATER QZ-CB VEINS OFF-WHITE AND UNMINERALIZED.						
159 R				LOWER CONTACT GRADATIONAL ACROSS 5 CM. KSPAR VEIN CUT BY LATER WHITE						
160 R				VEIN QUARTZ.						
161 /	303.29	320.28	AXLT		MT	8	F/	61	V*	D+ D-
162 L				GA				P* P)		D*
163 R				MODERATELY BRECCIATED, MODERATELY SILICIFIED WITH 5 % PY BELOW 316.75						
164 R				SAY 20 % AFXX(?) WITH CB FILLING AMYGDULES. FAULT CONTACT WITH UNDERLYING						
165 R				DYKE MARKED BY MODERATELY TO FINELY BROKEN CORE ACROSS 17 CM.						
166 R				QZ-PY-CL-SL-GL VEIN ABOUT 20 CM WIDE AT 20 DEGREES AT 314.50.						
167 R				318.30-318.90 WATERY GREY QZ-PY-GL-SL VEIN APPROX. 15 MM WIDE SUBPARALLEL						
168 R				C.A. WK KSPAR STAIN IN PATCHES WITH FAINT MARGINS AT 318.40.						
169 /	316.30	316.30	FALT			R F/	20			
170 R				HEALED PYRITIC SLIP.						
171 /	319.07	319.07	FALT		GG-		R F/	25		
172 R				SMEAR CLAYEY, SERICITIC GOUGE ON SMOOTH SLIP/						
173 /	320.28	321.80	D/FP	PF	MX	4	P			

174 L				GW
175 R				EUHEDRAL WATERY GREY FLAG LATHS. NON-MAGNETIC. BOTH TOP AND
176 R				BOTTOM CONTACTS FAULTED -ORIENTATION NOT MEASUREABLE.
177 /	321.80	334.06	AXXX	MX 5 P V) V* D* D.
178 L				GA P) P) D-
179 /	334.06			END OF HOLE
180 RSUM				MINERALIZED STRINGERS AT 327.06, 327.40, 327.56, 333.20 ALL AT APPROX.
181 RSUM				50 DEGREES TO C.A., AND FROM 4 TO 30 MM WIDE.
182 RSUM				FIRST HOLE 1996 PROGRAMME. MAIN ZONE INTERSECTED IMMEDIATELY
183 RSUM				UNDERLYING THE PREMIER PORPHYRY. ONLY OCCASIONAL STRINGERS
184 RSUM				BELOW THE MAIN ZONE. NO CP NOR V.G. SEEN.
185 RSUM				TROPARI AT 332.23 M AZ. 254 DEGREES, INCLIN. -55 DEGREES.
186 RSUM				ACID TEST AT 324.92 M - 51 DEGREES.

line	k f	from	to	T %	T	Q TEXT	M	U S A	D ALTERATION	SULFIDES	ALT. FACIES			
	e l			m ROCK		MAT	GRA I	N R Z / I	MIN	MIN	MIN. FACIES			
	y a			d X		F AG	N	I CT	P					
	g													
/	#	#	rec	Q	*	PFA	*	*	#	***	Q LEC C A X P C G Y F1F2			
L			rqd	KS		CR	*	**	#	***	K M C E HE S S SL M M2			
R														
K	#	#												
0		1		2		3	4	5	6	7	8			
	1234	5678.90	1234.56	7890	12	34567	89 01	234	56 78	34 56	90 123	56 78 90	12 34 56 78 90	12 34 56 78 90
1	IDEN6B0202	B96CH2	NQ 960814	BOISVEN										
2	I DP	WESTMIN	RESOURCES LTD.	MARTHA ELLEN										
3														
4	/	0.00	3.66	CASN				P						
5	/	3.66	105.36	PIKX	KFP VN)	M B ' ' '6		P	V)	V*	D*	26		
6	L			AG						P+P*		62		
7	R			MEDIUM GREEN-GREY, COMPETENT ROCK WITH KSPAR, PLAG AND HBLD										
8	R			PHENOS ALL PRESENT. HBLD PHENOS LIGHT COLOURED, EUHEDRAL,										
9	R			SERICITE ALTERED. PERVASIVE STAIN ENVELOPES OF ORANGE-BROWN										
10	R			EUHEDRAL XTALS 1 MM ACROSS AND ALSO AS DUSTY DISSEMINATIONS.										
11	R			LATE QZ-CB VEINLETS MOSTLY 2 TO 5 MM WIDE, ABOUT 50 DEGREES										
12	R			FEW 3 TO 5 CM WIDE WITH GREENISH BLACK CHLORITE. PORPHYRY										
13	R			DARKER THAN IN HOLE B96CH01. LARGER KSPAR MEGACRYSTS APPEAR										
14	R			TO BE ZONED, ONE OF 7 X 12 MM. ORANGE ZEOLITE OR FELDSPAR										
15	R			IN CB VEINLET AT 50.05. MODERATE KSPAR IN MATRIX AND MEGACRYST										
16	R			STAINED, AT 81.80 M.										
17														
18	/	16.77	34.32	PIKX		B MX		D	V=	P1	D)	D*	66	
19	L			UW						P+		D*		
20	R			BLEACHED PALE CREAMY BROWN PORPHYRY, OFTEN MODERATELY										
21	R			BRECCIATED WITH WATERY GREY TO OFF-WHITE QZ VEINS AS										
22	R			BRECCIA MATRIX; THERE ARE OPEN CAVITIES TO 2 X 5 CM LINED BY										
23	R			DRUSY QZ XTALS. BLEACHED ENVELOPE ALONG FAULT. > 50 % VEIN										
24	R			QZ (MINERALIZED) FROM 16.77 - 17.07, 23.40 - 24.92 (AT 42 DEGREES TO C.A.)										
25	R			26.55 -26.85 (AT 60 DEGREES TO C.A.). LIMONITE STAIN ENVELOPES ALONG										
26	R			FRACTURES. DUSTY DISSEMINATED SULPHIDES. GRADATIONAL CONTACT										
27	R			BETWEEN BLEACHED AND UNBLEACHED PORPHYRY AT BOTTOM OF INTERVAL.										
28	R			QZ VEINS LIKELY TERTIARY AGE.										
29	/	25.30	25.30	FALT		GG)		R F/	23					
30	R			3 MM PALE GREY CLAYEY GOUGE.										
31	/	75.94	78.46	PIKX		M BR		D	V+	P1	D+			
32	L			UW						V) P+				
33	R			BLEACHED ENVELOPE AROUND FAULT AT 77.80. VN QZ HERE WHITE,										
34	R			BARREN, WITHOUT OPEN CAVITIES. CREAMY FELDSPAR WITHIN MOST OF										
35	R			THE QZ VEINS. GRADATIONAL MARGINS ACROSS 3 CM BOTH TOP AND BOTTOM										



36 R																			OF BLEACHED INTERVAL.		
37 /	77.70	77.97	FALT						R												
38 R																			MODERATELY BROKEN WITH SOME GOUGE ON FRACTURE SURFACES.		
39 /	85.12	98.90	PIKX						D	'7+	P)										
40 L									GA										P+		
41 R																			LIGHT GREYISH GREEN AND GREYISH BROWN PATCHES. STREAMING SERICITE		
42 R																			AND QUARTZ ALTERATION HAS OCCURRED GIVING ROCK THE APPEARANCE OF BRECCIA.		
43 L																			93.7 STAINED FOR KSPAR; 2 -3 % IN MATRIX. FROM 90.86 - 91.61 AND 95.00 - 96.44 ROCK CONTAINS 60		
44 R																			60 % QUARTZ, 5 % PYRITE (MOST ABUNDANT NEAR MARGINS OF SILICIFIED ZONES), AND		
45 R																			0.5 TO 1 % COMBINED SL AND GL. SULPHIDES DUSTY DISSEMINATIONS, AND WITHIN IRREGULAR		
46 R																			MASSES UP TO 10 X 30 MM ACROSS. SULPHIDE MASSES GENERALLY HAVE FAINT BOUNDARIES.		
47 R																			IRREGULAR PY VLT 2 MM WIDE AT 15 DEGREES AT 96.23 M DEPTH.		
48 /			PIKX						CN	50	V+			8)					V)		
49 L									CN	50	P+								V-		
50 R																			BAND OF SLIGHTLY BLEACHED, LIGHT GREEN PORPHYRY WITH QZ-GL-PY-SL VLTS AV.		
51 R																			3 TO 4 MM WIDE SUBPARALLEL C.A., AND AT ABOUT 40 DEGREES TO C.A. VLTS		
52 R																			CONTINUE TO 103.25 M.		
53 /	103.25	104.14	VEIN						CN	20											
54 L									W										CN 65		
55 R																			OFF -WHITE QZ-CB-CL VEIN.		
56 /	105.36	141.40	AXPX						M	B	5	P	F1	20	P	P*			D)	D.	
57 L									4G										P+	D-	
58 R																			VERY FINE SPECKLES YELLOW-GREEN LEUCOXENE. PERVASIVE		
59 R																			GREEN CL(?) ALTERATION; FAINT PHENOCRYSTS. OFTEN GREENISH		
60 R																			BLACK CL COATING FRACTURE SURFACES. FAINT FABRIC		
61 R																			AT 20 DEGREES. ANDESITE PORPHYRY?		
62 /	106.06	106.06	VEIN						R	CN	60										
63 L									W										CN 43		
64 R																			OFF-WHITE QZ-CB-CL VEIN.		
65 /	129.10	129.10	VEIN						R	CN	18	V7							D+	V2	
66 L									AB												
67 R																			GREYISH BLUE QZ-GL-PY VEIN 7 MM WIDE.		
68 /	131.41	131.41	FALT						GG*		R			34							
69 R																			SMEAR GREY, CLAYEY GOUGE ON SMOOTH SLIP.		
70 /	134.19	134.43	PIKX						BR		D	CN	30	P4		V=			D=	D*	
71 /	141.40	142.90	QBXX						BR		P	CN	20	76		V+			7)	7+	66 41
72 L									6A			CN	27	P)	P*					Q+	44
73 R																			VEIN QUARTZ AS PALE GREY, IRREGULAR MASSES WITHIN MATRIX; FAINT		
74 R																			MARGINS. CB AS LATE WHITE VEINS. INTERVAL ABOUT 50 % INTENSELY		
75 R																			BRECCIATED(?) PORPHYRY.		
76 /	142.90	158.55	AXLT						MX	8	P			V)	P*	V)			D-	V. V.	
77 L									5G										P)		
78 R																			PALE YELLOW-GREEN VERY FINE LEUCOXENE(?) SPECKLES VARY FROM TRACES TO		
79 R																			LOCALLY 2 % ACROSS 20 TO 30 CM.		
80 /	142.90	145.25	APXX						BR	6	D	GC	B	82		V*			D+	D)	62
81 R									5A							P)	P*			D)	51

82 R				GRADATIONAL CONTACT OVER ABOUT 50 CM WITH UNDERLYING AXLT.
83 R				LOWERMOST 110 CM OF INTERVAL IS BEST-MINERALIZED.
84 R				NO KSPAR STAINED AT 145 A
85 /	158.55	270.05	AXPX	M F 6 P CN 25 V+D) V) D)
86 L				4G R F/ 10
87 R				WATERY GREY, FAINT, SUBHEDRAL PLAG PHENOS. 2 % PY (AND SL?) AS
88 R				IRREGULAR VLTS TO 4 MM WIDE FROM 170.10 - 170.50. NO KSPAR STAINED AT
89 R				240.40. SAY 2 % KSPAR STAINED AT 254.00 AS FAINT, BRECCIATED VLTS.
90 R				TWO QZ-PY-GL VEINS 8 MM WIDE AT 30 DEGREES AT 194.09. 5 % PY-GL-SL VLTS
91 R				AND IRREGULAR MASSES ACROSS 20 CM AT 211.95. 1 % DISSEMINATED SL ACROSS
92 R				10 CM AT 219.90. FEW SL VLTS TO 3 MM AT 40 DEGREES FROM 229.40 - 229.80.
93 R				QZ-PY-GL VEIN 15 MM AT 20 DEGREES AT 239.77. MODERATELY BRECCIATED
94 R				FROM 239.60 - 240.40.
95 /	161.52	163.54	D/AN	MX R CN 35 A)
96 L				9G 40
97 R				MODERATELY MAGNETIC. LATE QZ-CB-CL VEINS 23 CM WIDE ALONG BOTH UPPER
98 R				AND LOWER DYKE CONTACTS. FAULT SLIP BOTTOM DYKE CONTACT.
99 /	164.00	164.50	FALT	GG- R 40
100 R				GREEN CHLORITIC GOUGE ON SLIP AT 164.40. MODERATELY BROKEN
101 R				CORE OVER INTERVAL.
102 /	231.06	238.52	AXLT	A CN 35
103 R				AS FOR 145.25 - 158.55.
104 /	248.56	253.70	AXPX	6 D CN 28
105 L				6G F/ 25
106 R				POSSIBLE APOPHYSIS OF PREMIER PORPHYRY, THOUGH NO MEGACRYSTS
107 R				SEEN. LOWER CONTACT FAULT WITH 3 MM GREY GOUGE; FINER GRAINED
108 R				NORMAL" AXPX BELOW FAULT IS INTENSELY TO MODERATELY BRECCIATED
109 R				ACROSS 70 CM; THIS INTERVAL CONTAINS 3 % DISSEMINATED PY AND 0.3 %
110 R				DISSEMINATED GL.
111 /	256.50	258.65	AXPX	D V+ V* 6) V)
112 L				V* V-
113 R				IRREGULAR STRINGERS AND VEINLETS TO 12 MM WIDE, MOSTLY AT ABOUT 25 DEGREES.
114 /	259.54	259.80	FALT	GG4 K CN 27
115 R				35 CM FINELY BROKEN CORE AND GREY-GREEN CHLORITIC GOUGE.
116 R				CORE MODERATELY TO LOCALLY FINELY BROKEN 256.00 - 262.50.
117 /	265.50	266.24	D/AN	R CN 40 A)
118 L				7A F/ 36
119 R				MODERATELY MAGNETIC. CHILLED MARGIN 9 CM WIDE AT TOP.
120 R				LOWER CONTACT FAULT SLIP WITH 1 MM GOUGE.
121 /	267.17	267.79	D/AN	R CN 40 A)
122 L				7A CN 38
123 R				MODERATELY MAGNETIC. CHILLED MARGIN 6 CM WIDE ALONG LOWER CONTACT.
124 /		270.05		K
125 R				END OF HOLE.
126 RSUM				TROPARI AT 268.22 M AZ. 241 DEGREES INCLIN. -63 DEGREES.
127 RSUM				MINERALIZED ZONE ALONG PORPHYRY / VOLCANIC CONTACT AS

128 RSUM  
129 RSUM

FOUND IN HOLE B96CH01. ZONE IN HOLE -2 BETTER-MINERALIZED BUT NOT  
AS WIDE AS IN HOLE -1.



36 R				71.80 FORM SAY 1 % OF THE ROCK VOLUME.									
37 /	59.74	60.09	QBX	Q C VN5 BR	K CN	55 V4	V1	8)	D)				
38 L				GA									
39 R				LOWER THIRD LATE, OFF-WHITE CB-QZ VEIN.									
40 /	70.68	70.94	VEIN	QZ	K F/	22							
41 L				9G									
42 R				OPEN CAVITIES TO 12 MM ACROSS LINED BY CLEAR, DRUSY QUARTZ									
43 R				CRYSTALS. LOCAL TRACES BLUISH, VERY FINELY DISSEMINATED									
44 R				SULPHIDES; GL? TOP CONTACT FAULT SLIP.									
45 /	71.04	71.14	FALT	BR	K F/	20							
46 R				IRREGULAR FRACTURE AT 20 DEGREES COATED BY YELLOW-BROWN									
47 R				LIMONITE AND A MINOR AMOUNT OF FINELY BROKEN CORE.									
48 /	73.65	73.8	FALT	GG*	K F/	42							
49 R				SERICITIC GOUGE ON SLIPS AT 42 DEGREES; MOERATELY BROKEN CORE.									
50 /	76.28	78.5	D/AN		R								
51 L				4A									
52 R				WEAKLY MAGNETIC.									
53 /	80.17	82.35	QBX	QZ VN9 B MT	P CN	60 69	V*	6)	D*				
54 L				8A		P=			D-	54			
55 R				PY ( AND CP?) MASS 4.3 X 11.0 CM WITHIN IRREGULAR VEIN AT 20 DEGREES AT 81.08.									
56 R				PY VEIN CUT BY LATE WHITE CB VEINLETS TO 4 MM WIDE. VEIN QUARTZ GRADUAL CHANGE									
57 R				FROM MEDIUM GREY AT TOP OF VEIN TO PALE GREY-GREEN AT BOTTOM OF VEIN.									
58 R				5 % STAINED KSPAR FRAGMENTS WITHIN SILICEOUS BRECCIA MATRIX AT 82.25 M.									
59 /	82.35	128.56	AXXX	VN+ M B	5 P		V) P*	V+					
60 L				GA				8)					
61 R				LOCALLY MODERATELY BRECCIATED ACROSS 10 TO 40 CM WHERE									
62 R				QZ-CB +/- PY-GL-SL STRINGERS PRESENT. LOCAL CHLORITIC SELVAGES									
63 R				ALONG VEINS. AXXX UNIFORM, MONOTONOUS. MODERATELY BRECCIATED									
64 R				ABOVE 83.70. LHOTKA THINKS THAT UNIT MAY BE EARLY SILL OR DYKE.									
65 R				2 % STAINED KSPAR VEINLETS TO 3 X 20 MM AT 85.00 M.									
66 /	93.8	96.35	AXXX	VN1 BR	D	V1	V+	D)	D-				
67 L									D.				
68 R				OCCASSIONAL SHORT, DISCONTINUOUS, WISPY STRINGERS.									
69 /	101.07	101.96	AXXX	VN3 BR	D CN	43 V3	V=	8=	D-				
70 /	113.85	114.32	VEIN		R CN	75 V8	V2						
71 L				W		55	V+						
72 /	116.48	116.74	FALT		R								
73 R				MODERATELY BROKEN, SLIGHTLY BLEACHED CORE. 50 % VEIN									
74 R				QUARTZ ACROSS 10 CM WITH 2 - 3 % DISS. PY BELOW FAULT.									
75 /	123.18	123.25	VEIN	Q CB BR	R CN	65			Q*				
76 L				W CL					Q*				
77 R				3 % COMBINED SL AND GL AS IRREGULAR MASSES OVER 15 CM WITHIN AND									
78 R				BELOW VEIN.									
79 /	128.56	128.83	QBXX	B MT	P CN	54 75	V+	D+	D-				
80 L				4A					D*	53			
81 /	128.83	193.8	DIDI	VN) M B	5 P GC	T V)	V)						

82 L				GA					
83 /	128.83	137	DIDI		D GC	B			
84 L				1A					
85 R				DARK GREY TO BLACK, VERY FINE GRAINED, MODERATELY MAGNETIC.					
86 R				LOOKS MUCH LIKE D/AN EXCEPT GRADATIONAL CONTACT ACROSS A COUPLE OF					
87 R				METRES WITH UNDERLYING AXXX.					
88 /	155.7	161.5	DIDI		D F7	40		D+	
89 R				LOCAL MODERATELY WELL DEVELOPED FABRIC.					
90 /	168.8	168.8	VEIN	Q CB	R CN	35		D	D
91 L				6U PY					
92 R				QZ-CB-PY-GL VEIN 15 MM WIDE AT 35 DEGREES.					
93 /	175.84	176.34	DIDI		D				
94 L				8G			P) P+		
95 R				BLEACHED ENVELOPE ALONG FAULT AT 176.20; FAULT SMEAR OF PALE					
96 R				GREY CLAYEY GOUGE ON FRACTURE AT 50 DEGREES.					
97 /	181	193.8	DIDI		D F3	40		D+	
98 R				AS FOR 155.70 - 161.50 WITH LOCAL, MODERATELY WELL-DEVELOPED					
99 R				FABRIC AT ABOUT 40 DEGREES.					
100 /	193.8	209.09	D/DI	VN- MX	6	P CN	25 V-	V-	D.
101 L				GA				P-	
102 R				SUBHEDRAL, BLOCKY PLAG PHENOS WKLY ALTERED TO PALE YELLOW-					
103 R				GREEN EPIDOTE(?). PY VERY FINELY DISSEMINATED.					
104 /	205.28	207.97	DIDI	VN) B FO	D		P1	<)	
105 L				8T			P+		
106 R				BLEACHED, CLAY-ALTERED FAULT ENVELOPE. MODERATELY BROKEN 206.50					
107 R				- 207.97. CLEAR, DRUSY QZ XTALS TO 2 MM ALONG FRACTURE SURFACE					
108 R				AT 35 DEGREES.					
109 /	207.6	207.85	FALT		R F/	46			
110 L				6A					
111 R				FINELY CRUSHED AND REHEALED BRECCIA; BANDED AT 46 DEGREES.					
112 /	209.09			END OF HOLE					
113 RSUM				MINERALIZED QUARTZ BRECCIA AGAIN ALONG PREMIER PORPHYRY -					
114 RSUM				ANDESITE CONTACT. ZONE LESS MINERALIZED AND MORE NARROW THAN					
115 RSUM				IN HOLES B96CH01, B96CH02. TROPARI AT 207.26 M AZ. 241DEGREES,					
116 RSUM				INCLIN. - 66 DEGREES.					



Sample ID	Weight 1	Weight 2	Code	Grade	Grade	Grade	Grade	Grade	Grade	Grade	Grade
36 R											
37 R											
38 R											
39 /	56.47	146.53	PIKX	=5 16	M B	6	P	8+	V*	8)	
40 R				A *6				V)	P+ P*		
41 R				HBLD PHENOS ELONGATE, EUHEDRAL, WKLY CHLORITE-ALTERED. PATCHY							
42 R				MODERATELY SILICIFIED WHERE ROCK IS BRECCIATED. BRECCIA MATRIX IS SILICA.							
43 R				2 TO 5 % PY WITHIN AND ALONG THE MARGINS OF THESE BRECCIATED AND SILICIFIED							
44 R				ZONES. DARK BLUISH BLACK CARBONACEOUS MATERIAL IN WISPY IRREGULAR VLTS							
45 R				TO 2.5 MM WIDE THROUGHOUT; < 0.5 % ROCK VOLUME.							
46											
47 /	57.00	58.05	PIKX		B MT		D	64		8+	
48 L								V+			61
49 R				PATCHY MOTTLED GREY-WHITE VEINS AT ABOUT 20 DEGREES TO C.A.							
50 /	67.00	68.20	PIKX				D V4	30 V=		8+	
51											
52 /	71.83	73.03	PIKX		M BR		D VP	40 84		6=	
53 L											62
54 /	74.72	75.31	PIKX		BR		D VP	15 82		82	
55 L											66
56 R				DISSEMINATED PY WITHIN VEIN 25 MM WIDE.							
57 /	80.50	94.33	PIKX		M BR		D	84			
58 L				6A				P= P=		D-	
59 R				LIGHT BROWN CAST TO ROCK BELOW 93.45 M DEPTH POSSIBLY							
60 R				DUE TO DUSTY DISSEMINATED HEM.							
61 /	93.75	93.75	FALT				R F/	37			
62 R				SLICKS ON PY-COATED SLIP.							
63 /	94.33	126.20	PIKX				D	81		D)	
64 R				GU				P+			
65 R				PSUEDO "FRAGMENTAL" WITH PERVASIVE SERICITE-SILICIA ALTERATION							
66 R				POSSIBLY WITH FLUID MOVEMENT THROUGH ROCK. ANGULAR PIKX							
67 R				FRAGMENTS" (THE LESS ALTERED PATCHES) MAX. 20 CM ACROSS,							
68 R				SOMETIMES WITH FAINT BOUNDARIES. UNALTERED PATCHES USUALLY							
69 R				LENSOID 1 TO 4 CM ACROSS. APPARENT "DUCTILE" MOVEMENT LIKELY							
70 R				A RELIC OF ALTERING FLUID MOVEMENT THROUGH ROCK. ODD-LOOKING;							
71 R				PERHAPS ON WEATHERED SURFACE THIS UNIT COULD BE MAPPED AS							
72 R				UNIT 7A BRECCIA DYKE.							
73 /	117.97	118.10	VEIN		MT		CN	28 V9	V=	D+	
74 R				QZ - CB VEIN 6 CM WIDE WITH MODERATELY SILICIFIED , PYRITIC ENVELOPES							
75 R				3 CM WIDE ALONG UPPER AND LOWER CONTACTS.							
76											
77 /	126.20	128.43	PIKX		M BR		CN	65 P5	V)	D*	64
78 L				7A					P+ P-		
79											
80 /	128.43	146.53	PIKX		MX		CN	54		D+	
81 L				MU				P+		D+	





128 L			6A	P=P-
129 R			LATE CB-QZ VLTS MAINLY AT ABOUT 30 DEGREES. QZ-SER-PY ALTERATION GRADUALLY	
130 R			DECREASES DOWNHOLE. ROCK WEAKLY BRECCIATED IN TOPMOST 5 M WITH SAY 5 %	
131 R			QZ-CB+/-PY VEINS TO 5 CM WIDE.	
132 /	240.00	240.00	VEIN	R
133 R			PY-QZ-SL VEINLET 3 TO 5 MM WIDE SUBPARALLEL C. A.	
134 /	254.81		END OF HOLE.	
135 RSUM			TROPARI TEST HOLE AZ. 345 DEGREES, INCLIN. -62 DEGREES AT 252.98 M;	
136 RSUM			AZIMUTH DUBIOUS. THICK PORPHYRY ALONG THIS SECTION WITH	
137 RSUM			MINERALIZED ZONE ALONG BASE. NOT AS WELL-MINERALIZED AS	
138 RSUM			HOLES B96CH1, B96CH2, BUT WIDER.	



36 R				BXD AND REHEALED WATERY GREY QZ-CB VNS TO 8 CM WIDE AT 40 DEGREES
37 R				AND 60 DEGREES. SL AS SPOTS AND VEINLETS TO 3 MM WIDE,
38 R				WITHIN VEINS OR INTENSELY SILICIFIED BANDS.
39 /	49.84	49.84	VEIN	R
40 R				SL - QZ - GL VEINLETS 4 MM WIDE AT 35 AND 65 DEGREES.
41 /	52.7	53.15	AXXT	BR D F/ 70 65
42 L				6A
43 R				MOD. SIL, HEALED FAULT WITH WATERY GREY VEIN QZ FRAGS.
44 /	55.83	77	D/AN	VN2 B MT CN 50 61 V+ V1 D) D.
45 L				UN V*
46 R				LIGHT BROWN GARNET AS IRREG., HAIRLINE WISPY VLTS MOSTLY AT
47 R				ABOUT 60 DEGREES. RARE TR DUSTY DISS GL. LOWER CONTACT DISCRETE.
48 R				IRREG., WORMY QZ-CB-GT STGRS BELOW D/AN; SOME SL LIKELY
49 R				PRESENT AS WELL.
50 /	62.79	63.88	D/AN	VN5 BR D P= V5 Q)
51 L				5A <- <-
52 R				MOD. TO INT. BXD; REHEALED. AT LEAST 2 GENERATIONS OF VEIN CB,
53 R				ONE WITH BLUISH GREY CALCITE. DOGTOOTH SPAR XTALS UP TO
54 R				6 OR 8 MM ACROSS. EP AS LOCAL HAIRLINE RIMS AROUND
55 R				IRREG. GT MASSES. LIKELY SL TRACES WITHIN GARNET.
56 /	73.98	73.98	FALT	GG. R F/ 55 P1
57 R				BLEACHED, CLAY-ALTERED ENVELOPE 80 CM WIDE ALONG FAULT;
58 R				40 CM ABOVE AND 40 CM BELOW FAULT. WISPY SL VLT 1.5 MM
59 R				WIDE AT 74.48.
60 /	75.1	75.1	VEIN	R CN 80
61 R				WATERY GREY QZ-CB VEIN 7 MM WIDE AT 80 DEGREES PARALLEL
62 R				TO ADJACENT SL-HE-PY VLT 4 MM WIDE.
63 /	76.55	77	D/AN	D
64 R				MEDIUM GREY - GREEN; CHILLED CONTACT ZONE.
65 /	77	101.61	D/DI	55 62 MX 6 GC <-
66 L				5A 61 <-
67 R				MOD. MAGNETIC; BOTTOM CONTACT GRADATIONAL ACROSS 15 CM.
68 /	84.45	84.95	D/DI	D V) <*
69 L				
70 R				WEAKLY BLEACHED ENVELOPE ALONG SMALL HEALED FAULT
71 R				SLIP AT 20 DEGREES AT 84.70.
72 /	100.4	101.61	D/DI	5 D A+
73 R				FINE GRAINED CHILLED MARGIN WITH CB AMYGDULES TO 6 MM ACROSS.
74 /	101.61	125.8	AXXT	M B 4 P 82 6) 7* D- 63
75 L				4A P) 6* 44
76 R				DK GREY TO MEDIUM OR LIGHT GREY (WHERE MORE SILICIFIED) TO
77 R				BLACK. UNIT APPEARS ARGILLACEOUS; NO CL NOR LEUCOXENE SEEN.
78 R				WATERY GREY TO LIGHT BLUISH GREY TO OFF-WHITE QZ BOTH AS PERVASIVE
79 R				ALTERATION AND AS WORMY VEINLETS. SL AS SOMEWHAT IRREGULAR
80 R				VEINLETS AV. 1 TO 3 MM WIDE OFTEN WITHIN OR
81 R				ALONG MARGINS OF QZ VEINLETS. SL VEINLETS DISCONTINUOUS

82 R																					AND MOSTLY AT ABOUT 60 DEGREES. IRREGULAR, WISPY MASSES
83 R																					AND VEINLETS OF SL ALONG SHORT, DISCONTINUOUS FRACTURES TO 20 MM
84 R																					LONG ARE IN DETAIL RANDOMLY ORIENTED; THERE SEEMS TO BE A
85 R																					PREFERRED ALIGNMENT OF THESE SL VLTS AT ABOUT 60 DEGREES.
86 R																					MINERALIZATION DIFFERENT IN STYLE FROM THAT SEEN ALONG BASE OF
87 R																					PREMIER PORPHYRY TO THE EAST OF THIS HOLE. THERE IS NO SBXX
88 R																					WITHIN THIS HOLE, AND NUMEROUS SL +/- GL VLTS OCCUR WITHOUT
89 R																					ANY ACCOMPANYING QZ. MINERALIZATON OF LOWER GRADE BUT WIDER
90 R																					(STRATABOUND WITHIN ARGILLACEOUS AXXT?)
91 R																					THAN IN SBXX AT PREMIER PORPHYRY CONTACT.
92 /	101.61	104.78	AXXT	MT	D	P6		7)													
93 L																					6A
94 R																					HARD, SILICA-INDURATED; MORE PY AND LESS SL THAN
95 R																					IN UNDERLYING ROCK.
96 /	108.8	113.5	AXXT	BR	D																
97 L																					D. 8*
98 R																					<+
99 R																					WKLY TO MODERATELY BX'D, WELL-MINERALIZED ZONE. QZ-SL-GL VEINS
100 R																					AT 64 DEGREES AT 109.52, AT 45 DEGREES AT 110.58, AT 70 DEGREES AT 112.45,
101 R																					AT 40 DEGREES AT 113.13, AT 60 DEGREES AT 113.35. SL VLTS AT
102 /	124.71	125.8	VEIN	M BR	CN	40 V8	V1	D-	D-												110.10 M AT 75 DEGREES.
103 L																					WA
104 R																					CN 40 S+ Q* 41
105 R																					BOTH UPPER AND LOWER CONTACTS BRECCIATED; APPROX. ORIENTATION. VEIN
106 /	125.8	135.03	D/AN	VN=M B	4	P	V)	V=	D-												POSSIBLY ALONG A HEALED FAULT?
107 L																					3A
108 R																					CB IN AMYGDULES AND PERVASIVE AS WELL AS VEINS. FREH-LOOKING
109 R																					ROCK,; LOCALLY WKLY MAGNETIC.
110 /	127.87	128.31	VEIN	MT	CN	30 V3	V7		D-												
111 L																					7A
112 R																					S)
113 /		135.03																			END OF HOLE.
114																					
115 RSUM																					TROPARI AT 131.98 M INCLIN. - 58 DEGREES, AZ. 111 DEGREES.
116 RSUM																					SEE REMARKS FOR INTERVAL FROM 101.61 TO 125.80 M DEPTH
117 RSUM																					FOR DETAILS ON MINERALIZATION WITHIN THIS HOLE.

line	k f	from	to	T %	T	Q	TEXT	M	U	S	A	D	ALTERATION	SULFIDES	ALT. FACIES												
	e l			m	ROCK	MAT	GRA	I	N	R	Z	/	I	MIN	MIN. FACIES												
	y a	#	#	d	X	MAT	F	AG	N	I	CT	P															
	g			rec	Q	*	PFA	*	*	*	*	*	Q	LEC	C	A	X	P	C	G	Y	F1	F2				
	/	#	#	reqd	KS	CR	*	*	*	*	**	#	***	K	M	C	E	HE	S	S	SL	M	M2				
	L																										
	R																										
	K																										
	0																										
		1	2	3	4	5	6	7	8																		
		1234	5678.90	1234.56	7890	12	34567	89	01	234	56	78	90	123	56	78	90	12	34	56	78	90	12	34	56	78	90
1	IDEN6B0202	B96CH6	NQ 960824	BOISVEN																							
2	I DP	WESTMIN	RESOURCES LTD.	MARTHA ELLEN																							
3																											
4	/	0.00	3.66	CASN					P																		
5	/	3.66	12.31	PIKX	53 Q	VN*	M F	' ' ' ' 6	P	F1	10		V*		D+												
6	L				'5U				CN	30	P)																
7	R				RARE, OFF-WHITE, SOFT, HEXAGONAL MICA BOOKS TO 5 MM ACROSS;																						
8	R				GROUNDHOG MARKER?? WEAK FABRIC SUBPARALLEL TO 10 DEGREES TO C.A.																						
9	R				PY DUSTY DISSEMINATED.																						
10	/	7.30	12.31	PIKX		BR			D			P=			D=												
11	R																										
12																											
13	/	12.31	23.74	D/AN		VN*	MX	' ' ' ' 5	CN	'3	P+		A*		D-												
14	L				GA								Q*														
15	R				EP AS FAINT PATCHES AND RIMMING CB AMYGDULES. NON-MAGNETIC ROCK.																						
16	/	23.74	29.86	PIKX		MX		5	CN	19	P+				D=												
17	L				5U							P)													65		
18	R				VERY SIMILAR TO UNIT IN TOP OF HOLE B96CH3.																						
19	/	29.86	37.53	D/AN	5	MX		5	CN	33		A)															
20	L				AG							P-															
21	R				CB IN AMYGDULES, MATRIX AND VLTS. MODERATELY MAGNETIC.																						
22	R				10 % BLACK, EUHEDRAL HORNBLLENDE PHENOS.																						
23	/	37.53	55.41	PIKX	53 5+	MX		6	CN	28		V*			D-												
24	L				AU																						
25	R				RELATIVELY FRESH, MEDIUM TO FINE GRAINED PORPHYRY.																						
26	/	38.77	39.56	D/AN					CN	20		A*															
27	/	45.2	45.2	FALT						R	F/	23	P1			Q2											
28	L																								62		
29	R				LIKELY HEALED FAULT 20 MM WIDE. PY AS ELONGATE LENSES AND DISS.																						
30	/	52.75	55.41	PIKX		VN1	B	MT		D			62	V=		6+									63		
31	L											P*													61		
32	R				BLUISH BLACK CARBONACEOUS MATERIAL AS LOCAL WISPY HAIRLINE VLTS.																						
33	R				REDDISH BROWN SL SPOTS TO 6 MM.																						
34	/	55.41	57.17	SBXX		VN5	B	MT		CN	30	77		V2		D)		D-									
35	R				6A		BN									D-		D-									



80 /	110.71	154.23	PIPA	VN+ B M	5	GC	7A	V+	D*	D-	62
81 R				AG				P) P-		D*	52
82 R				LIGHT GREENISH GREY, VERY FINE GRAINED PORPHYRY WITH ONLY LOCAL, FAINT							
83 R				HORNBLLENDE AND PLAG PHENOS. UNIT MAY POSSIBLY BE UNIT 9 ANDESITE BUT NO							
84 R				DIAGNOSTIC LEUCOXENE SEEN. SILICIFICATION AND BRECCIATION DECREASE							
85 R				DOWNHOLE. OCCASSIONAL OFF-WHITE CB (MAINLY)-QZ STRGRS WITH SL AND GL							
86 R				SPECKLES ABOVE 127.80 M, MOSTLY AT 25 TO 40 DEGREES TO C.A. GRADATIONAL							
87 R				CONTACT ACROSS 3 TO 4 M AT BOTTOM OF UNIT.							
88 R											
89 /	110.71	114	PIPA	VN2 BR		GC	74	V+	D)	D)	65
90 R								S*		D)	44
91 R				WATERY GREY, MOTTLED QZ-PY-SL-GL STRGRS UP TO 30 MM WIDE THROUGHOUT							
92 R				MOSTLY AT ABOUT 35 DEGREES TO C.A. THESE MINERALIZED STRINGERS FORM ABOUT							
93 R				10 % OF THE ROCK VOLUME FROM 110.71 TO 114.00 M DEPTH.							
94 /	118.43	119.76	PIPA	VN= BR		D	71	V)	D+	D)	61
95 L										D)	42
96 R				FINELY BRECCIATED AND REHEALED WITH PY AND QZ MATRIX.							
97 /	130.42	138.43	PIPX	VN+ BR		D	6+	V)	D=	D*	
98 L								P+		D*	52
99 R				PY VERY FINELY DISS. GL AND SL SPOTS IN CB-QZ STRINGERS AV. ABOUT 30 DEGREES,							
100 R				UP TO 15 MM WIDE.							
101 /	138.43	143.25	PIPX	M BR		D F/	8=	V)	D+		
102 /	146.67	154.23	PIPA	BR	5	CN	20 71	V)	D=		
103 L						GC		P+ D)			
104 R				BOTH PLAG AND HORNBLLENDE PHENOS HAVE FAINT BOUNDARIES; MATRIX							
105 R				APHANITIC AND SOMEWHAT ALTERED.							
106 /	154.23	181.32	AALT	VN+ M F	8	GC	6+	V)	D*		
107 L				5G		F/	35	P* P*			
108 R				RARE SL IN CB-QZ VLTS. PATCHY, WEAK PERVASIVE FABRIC SUBPARALLEL							
109 R				C.A. BRECCIA MATRIX APPEARS TO BE SOMEWHAT PORPHYRITIC; PROBABLY							
110 R				A CRYSTAL TUFF THOUGH IN PLACES IT HAS THE APPEARANCE OF FINE							
111 R				GRAINED PREMIER PORPHYRY. SUBANGULAR TO SUBROUND FRAGMENTS OF							
112 R				VARIOUS LITHOLOGIES, LOCALLY WITH ALTERED RIMS, ARE PRESENT.							
113 R				COMPETENT UNIT.							
114 /	162.35	162.87	AALT	VN3 MX		D	V2	V1	D)	D-	63
115 L				7G						D*	51
116 /	170.4	170.4	FALT	VN-		R F/	17				
117 R				CB VLT 1 MM WIDE WITH CHLORITIC SELVAGES ALONG FAULT FRACTURE							
118 R				SURFACE. WELL-DEVELOPED SLICKS.							
119 /	181.32	190.34	AXXT	VN* M F	5	CN	20 V*	V-			
120 L				6G				S-			
121 R				UNIFORM. NON-MAGNETIC. ROCK LOCALLY HAS THE APPEARANCE OF							
122 R				FINE GRAINED CRYSTAL TUFF.							
123 /	189.32	189.32	FALT	GG.		R F/	31				
124 R				TRACE PALE GREY GOUGE ON SLIP. MYLONITIC FABRIC PARALLEL FAULT							
125 R				WITHIN BLEACHED ENVELOPE 45 CM WIDE.							



126 /	190.34	248.72	AALT	VN) M F	7	P	V* P*	V)	D*
127 L				6G			P+ 5-		
128 R				MORE SER-ALTERED, SOFTER AND LIGHTER COLOURED THAN LAPILLI					
129 R				TUFF ABOVE. LAPILLI SMALLER AND A LITTLE LESS ABUNDANT. MORE					
130 R				LAPILLI WITHIN THIS LOWER UNIT HAVE SERICITE-ALTERED RIMS THAN ABOVE.					
131 R				1 % PY LAPILLI FROM 228.10 - 229.00 M, TO 6 MM ACROSS.					
132 /	190.34	201.5	AALT	VN+ BR		D	V)	V+	D)
133									
134 /	212.16	218.08	AALT			D		P+	P1
135 L				8L					
136 R				PALE GREENISH YELLOW, BLEACHED ENVELOPE ALONG FAULTS.					
137 /	212.5	212.75	FALT			R F/	22		
138 R				25 CM MODERATELY BROKEN CORE.					
139 /	216.3	216.3	FALT	GG5		R F/	30		
140 R				12 MM CLAYEY, PYRITIC GOUGE ON SLIP AT 30 DEGREES.					
141 /	218.08	218.08	FALT	GG		R F/	30		
142 R				2 MM CLAYEY, PYRITIC GOUGE ON SLIP AT BOTTOM OF BLEACHED INTERVAL..					
143 /	238.47	240.11	AALT			D		P1	
144 L				8L					
145 R				BLEACHED ENVELOPE ALONG FAULT.					
146 /	239.17	239.23	FALT	GG2		R F/	55		
147 R				5 CM FINELY BROKEN CORE AND GOUGE.					
148 /	243.76	244.1	VEIN			CN	25 V8	V2	
149 L				W		CN	80	S+	
150									
151									
152 /	248.72			END OF HOLE					
153 RSUM				APPEARS TO BE BEST-MINERALIZED HOLE OF 1996 PROGRAMME.					
154 RSUM				MINERALIZED ZONES WITHIN PREMIER PORPHYRY, AND CHARACTERIZED					
155 RSUM				BY FINELY BRECCIATED AND REHEALED WATERY GREY QUARTZ. SULPHIDES					
156 RSUM				MOSTLY DISSEMINATED, BUT BOTH SL AND GL LOCALLY OCCUR					
157 RSUM				AS MASSES 18 MM ACROSS. TROPARI AT 247.19 M DEPTH INCLIN.					
158 RSUM				- 63 DEGREES, AZ. 256 TRUE.					



36 R				ACROSS. NON-MAGNETIC. NO CB PRESENT.
37 /	54.23	58.68	PIKX	VN+ BR GC 6= P= 8) A2
38 L			7T	GC P* S* 61
39 R				BLEACHED, WEAKLY TO MODERATELY BRECCIATED FAULT ENVELOPE.
40 R				CLAY ALONG SELVAGES OF LATE WHITE QZ VEINS.
41 /	56	56	FALT	GG- R F/ 20
42 R				SMEAR OF PALE ORANGE LIMONITIC GOUGE ON FRACTURE AT 20 DEGREES.
43				
44				
45 /	60.9	66.33	PIKX	VN+ BR GC 82 P= 7) A2
46 L			7T	GC P) 61
47 R				INTENSELY BRECCIATED 64.27 TO 65.14 M.
48 R				
49 R				
50 /	61.28	61.35	FALT	GG- BR F/ 46 71 D=
51 L			4U	F/ 46 62
52 R				HEALED, FINELY BRECCIATED AND CRUSHED BAND WITH DISS PY AND PERVASIVE
53 R				SILICA WITHIN MATRIX. SMOOTH SLIPS WITH THIN SMEARS OF GOUGE AT TOP AND BOTTOM.
54 /	62.03	62.23	FALT	R
55 R				INTERVAL INCLUDES 8 CM FINELY BROKEN CORE.
56 /	63.68	63.9	FALT	GG. R F/ 18
57 R				SMEAR ORANGE LIMONITIC GOUGE ON FRACTURE.
58 /	74.7	85.86	PIKX	B MX GC 81 P2 A4
59 L			8T	GC P=
60 R				BLEACHED, GENERALLY BRECCIATED FAULT ENVELOPE. OCC. KSPAR MEGACRYSTS
61 R				TO 18 MM ACROSS. SMEARS BLACK CARBONACEOUS MATERIAL ALONG MINOR, SMOOTH SLIPS.
62 /	80.43	80.43	FALT	GG8 R F/ 20
63 R				SEAM OF LIGHT GREY CLAYEY GOUGE 7 MM THICK ON FRACTURE
64 R				AT 20 DEGREES. PROBABLY MAJOR FAULT.
65 /	90.4	90.4	FALT	GG* R F/ 21
66 R				0.5 MM MEDIUM GREY PYRITIC GOUGE ON SMOOTH SLIP.
67 /	92.3	94.33	D/RH	MX CN 16
68 L			8T	CN 11
69 R				2 % SUBHEDRAL QZ PHENOS UP TO 8 MM ACROSS.
70 R				
71 /	94.33	96.63	D/AN	MX F/ P+ P*
72 L			3G	
73 R				BOTTOM CONTACT FAULTED. MODERATELY MAGNETIC ROCK.
74 /	116.98	118.25	FALT	VN= BR R F/ 14 7= P+ 7=
75 L			7T	P)
76 R				MODERATELY TO INTENSELY BRECCIATED, FINELY FRACTURED, WITH SAY 5 %
77 R				BLACK CARBONACEOUS MATERIAL IN ABUNDANT IRREGULAR, HAIRLINE VEINLETS
78 R				AND AS BRECCIA MATRIX. IRREGULAR FAULT SLIP AT 14 DEGREES TO C. A. AT 117.97 M.
79 R				
80 /	118.25	130.67	PIKX	VN) BR D 8+ P) 7)
81 L			TG	P)



127 L			6G		CN	33					
128 R			CHILLED MARGINS. BANDED THROUGHOUT.								
129 /	184.81	191.57	PIKX	BR	D						
130 R			WEAKLY TO MODERATELY BRECCIATED. SOMEWHAT FRAGMENTAL								
131 R			APPEARANCE.								
132 /	197.06	201.13	PIKX	VN1 BR	GC	83	V*	D+	D+	63	
133 L			AU		GC		P=P+		D*	51	
134 R			MODERATELY TO INTENSELY BRECCIATED. PATCHY MODERATE SILICIFICATION. SULPHIDES								
135 /	202.1	202.1	VEIN		R CN	28					
136 L			4A								
137 R			GL - SL VEINLET 8 MM WIDE.								
138 /	202.72	202.72	VEIN		R CN	30					
139 L			4A								
140 R			GL - SL - QZ VEIN 10 MM WIDE.								
141 /	204.02	204.02	FALT	GG*	R F/	10					
142 R			3 MM GOUGE AND FINELY BROKEN CORE ON CHLORITIC SLIP.								
143 /	216.75	218.13	PIKX		D F/	45 P1	P=		D+		
144 L			7T				P+				
145 R			BLEACHED FAULT ENVELOPE; 0.5 MM GOUGE ON SLIP AT 45 DEGREES								
146 R			AT 217.55 M.								
147 /	224.21	227.91	SBXX	VN6 M BR	CN	37 67	V)	Q+	D*	67	
148 L			6A		CN	48	P)		D*	52	
149 R			BRECCIATED AND REHEALED BY WATERY GREY QUARTZ. PY AS IRREGULAR MASSES								
150 R			UP TO 15 BY 45 MM. SL AND GL DISS. SPOTS TO 3 OR 4 MM ACROSS. VEIN CB LATE,								
151 R			OFF - WHITE. PY MOST ABUNDANT IN TOPMOST 30 CM OF SBXX WHERE IT IS UP TO 25 %								
152 R			ROCK VOLUME. PY ALSO ABUNDANT IN LOWERMOST 15 CM OF UNIT.								
153 /	227.91	263.72	AXXX	42 41 VN) M B	5	P	V) D-	V*	D)		
154 L			5G				P+ P+				
155 R			VEIN QZ MAINLY IN UPPER HALF OF UNIT. VEIN CB MAINLY IN LOWER HALF.								
156 R			OCCASSIONAL MINERALIZED PY- SL - +/- STRGR VEINS TO 8 MM WIDE								
157 R			AT 30 TO 40 DEGREES TO C.A.								
158 /	246.1	246.6	VEIN		R						
159 R			QZ - PY - SL - GL VEIN 12 TO 30 MM WIDE SUBPARALLEL CORE AXIS.								
160 /	248.5	248.95	AXXX	VN2 BR	D	V2	V*	D1			
161 L											
162 /	255.5	255.5	VEIN		R CN	40			D-	D=	
163 L										Q4	
164 R			SL - QZ - CB - GL - PY VEIN 15 MM WIDE AT 40 DEGREES.								
165 /	256.3	256.3	AXXX	BR	D	V1			D=		
166 L			6G							D4	51
167											
168											
169 /	263.1	263.3	FALT		R						
170 R			MODERATELY BROKEN CORE; POSSIBLE FAULT.								
171											
172 /	263.72	263.95	MSSB	SL9 B B	5	CN	40 V1		D L3 D=	61	

173 L			UY		CN	40		L5	49
174 R			BANDED MASSIVE SULPHIDES. THIS STYLE OF MINERALIZATION NOT SEEN IN ANY OF THE						
175 R			PREVIOUS 1996 DRILL HOLES. MODERATELY BRECCIATED AND MODERATELY SERICITE-ALTERED.						
176 R			AXXX OVER A COUPLE OF CM AT THE UPPER MARGIN. MODERATELY BRECCIATED WITH						
177 R			20 % PY ACROSS 30 CM AT THE LOWER MARGIN. NO CB WHERE TESTED. NON-MAGNETIC.						
178 /	263.95	273.1	AXXX		P				
179 R			AS FOR 227.91 - 263.72 ABOVE.						
180 /	270	270.63	AXXX	VN1 BR	D	V1	D*	D-	
181 L								D*	
182 R			IRREGULAR OFF-WHITE QZ VEINS TO 20 MM WIDE SPOTTED BY 1 TO 2 MM SL, PY AND GL.						
183 /	273.1		END OF HOLE						
184 RSUM			MINERALIZED SILICEOUS BRECCIA AGAIN NEAR PREMIER PORPHYRY/						
185 RSUM			VOLCANIC CONTACT. INTERESTING MASSIVE SULPHIDE BAND						
186 RSUM			MORE LIKE PREMIER MINE - STYLE MINERALIZATION INTERSECTED.						
187 RSUM			TROPARI TEST AZ. 254 DEGREES, INCLIN. - 58 DEGREES, AT 271.58 M.						



36 R				PY DISSEMINATED WITHIN IRREGULAR MASSES TO 11 BY 25 MM.
37				
38 /	54.04	91.66	PIPX '5 '5 VN) MX ' ' ' '6	CN '7 '8= V) D*
39 L			6A	CN '40 P=D+
40 R				LIGHT GREENISH GREY, MASSIVE. PERVASIVE ALTERATION MAKES PHENOS
41 R				LOCALLY APPEAR FAINT. NO SERICITE STREAMING AS SEEN IN OVERLYING UNIT.
42 R				HORNBLLENDE PHENOS MORE OR LESS COMPLETELY CHLORITE - ALTERED AND
43 R				GREEN - BLACK. CONTACT WITH OVERLYING UNIT DISCRETE WITH 2 % PY OVER 10 CM.
44 R				
45 /	66.09	66.09	FALT GG*	R F/ 07
46 R				THIN SMEAR OF GOUGE ON SLIP WITH SLICKS; PY VLT 1 MM
47 R				WIDE ALONG FAULT.
48 /	78.35	78.55	FALT	R F/ 27
49 R				HEALED FAULT; FINELY BANDED INTERVAL.
50 /	86.03	86.92	PIPX VN=BR	D V= D) D-
51 R				MODERATELY BRECCIATED. IRREGULAR CB VEINS AND VEINLETS.
52 /	91.66	134.71	PIPX 52 51 MX ' ' '6	P ' < * D- ' < * D- '73
53 R			GA	P1 P) D-
54 R				MEDIUM TO FINE GRAINED FELDSPAR PORPHYRY. PLAG PHENOS PALE
55 R				GREY, SERICITE- AND LOCALLY ALSO CLAY-ALTERED. SERICITE ALTERATION
56 R				THROUGHOUT ROCK UNIT APPEARS TO HAVE OCCURRED AS A RESULT OF FLUID
57 R				STREAMING AS SEEN IN SIMILAR ROCK ABOVE PREMIER PORPHYRY TO THE NORTH OF
58 R				THIS HOLE. SER-ALTERING STREAMING IN THIS HOLE OVER MUCH WIDER INTERVAL THAN
59 R				SEEN ELSEWHERE. PERHAPS THIS IS A MARGINAL PHASE OF THE PREMIER PORPHYRY?
60 R				ONLY ONE (PROBABLE) KSPAR MEGACRYST SEEN AT 39.55 M DEPTH.
61 R				UNIT HAS LESS QZ AND LESS CB ALTERATION THAN USUAL AT MARTHA ELLEN.
62 R				NON-MAGNETIC. PSUEDO "BRECCIA" WITH FRAGMENTS OF RELATIVELY UNALTERED
63 R				PORPHYRY WITHIN GREYISH, SERICITE-ALTERED MATRIX.
64 R				IRREGULAR PY MASSES. PATCHY WEAK TO MODERATE KSPAR STAIN
65				
66 /	121.62	121.62	FALT GG*	R F/ 29
67 R				0.5 MM GREY PYRITIC GOUGE ON SLIP.
68 /	131.88	132.27	VEIN MT	CN 40 P9 D*
69 L			7A	CN 20
70 R				PYRITE - RICH SELVAGES.
71 /	134.71	148.13	PIPX VN) M BR	CN 29 P= V) D+ 71
72 L			5U	P+ 61
73 R				LOCAL FAINT PY VEINLETS TO 1 MM WIDE.
74				
75 /	137.57	138.42	FALT	R F/ 19 V+ D+
76 R				62
77 R				MODERATELY TO INTENSELY BRECCIATED. FAULT SLIP AT 137.75 M.
78 R				
79 /	148.13		END OF HOLE.	P
80				
81 RSUM				TROPARI AT 122.22 M INCLIN. - 53 DEGREES, AZ. 237 DEGREES.



82 RSUM  
83 RSUM  
84 RSUM  
85 RSUM

HOLE DID NOT INTERSECT TYPICAL PREMIER POPYRYAS SEEN IN HOLES TO NORTH. ALSO, NO MINERALIZED SILICEOUS BRECCIA WAS INTERSECTED. HOLE PERHAPS ORIENTED PARALLEL TO, OR AT A SHALLOW ANGLE TO, ROCK UNIT CONTACTS.



36 R													FRACTURE SURFACE. WALLROCKS WEAKLY BLEACHED ACROSS A FEW CM.
37 /	35.03	35.40	FALT	GG=	R F/	'25							
38 R													GREY GOUGE WITH SOOTY PY ON SLIP. MODERATELY BROKEN CORE
39													
40 /	35.88	36.04	PIKX		D	'83			D=				
41 L													7A
42 R													MODERATELY SILICIFIED; DRUSY QZ XTALS TO 3 MM LINE CAVITY 10 MM ACROSS
43 /	38.80	39.33	FALT	B MX	GC	P+							
44 R													7G
45													GC
46													WEAKLY BLEACHED, CLAY-ALTERED FAULT ENVELOPE. GENERALLY MODERATELY
47 '/	43.69	44.28	FALT		R 'F/	'18							FRACTURED AND WEAKLY BRECCIATED INTERVAL
48 R													MODERATELY BROKEN CORE; INTENSELY BRECCIATED ACROSS 18 CM.
49 '/	46.00	46.00	FALT		R 'F/	'05							
50 R													SMOOTH BLACK SLIP COATED WITH CHLORITE(?).
51													
52 /	51.50	56.35	PIKX	BR	GC	85			D) D.	66			
53 R													7A
54 R													F/ 30
55 R													MODERATELY BRECCIATED. REHEALED BY PERVASIVE WATERY GREY QUARTZ. SAY 1 %
56 R													BLUISH BLACK CARBONACEOUS MATERIAL AS WISPY, HAIRLINE LOCALLY STYLOLITIC
57 R													VEINLETS AND AS IRREGULAR PATCHES. POSSIBLE RARE TRACE GALENA; SAMPLED FOR ASSAY.
58 /	53.17	53.57	FALT	GG)	R F/	25							
59													3A
60 R													0.5 MM BLACK, GRAPHITIC GOUGE ON SLIP. CORE MODERATELY BROKEN
61 R													ACROSS 40 CM.
62 /	59.43	59.88	PIKX	BR	D	83	P+		6=				
63 L													8T
64 R													BLEACHED, BRECCIATED. PROBABLE FAULT
65 /	60.10	60.10	FALT	GG*	R F/								
66 R													SMEAR OF PYRITIC GOUGE ON SMOOTH SLIP @ 30 DEGREES
67 R													
68 /	64.40	69.45	PIKX	B MX	GC				P=				
69 L													7T
70 R													GENERALLY MODERATELY BLEACHED; WEAKLY BRECCIATED; LIGHT TAN COLOUR
71 R													
72 /	65.57	65.57	FALT	GG-	R F/	43							
73 R													TRACE PYRITIC GOUGE ON SMOOTH SLIP
74 /	68.70	68.70	FALT		R F/	10							
75 R													APPROXIMATE ORIENTATION OF FRACTURE SURFACE
76 /	69.82	70.73	FALT	GG*	R F/	05							
77 R													SMEAR PYRITIC GOUGE ON SMOOTH SLIP
78													
79 /	74.90	77.25	PIKX	BR	D	82	P+		6)	62			
80 L													6G
81													LIGHT GREYISH GREEN, MODERATELY TO INTENSELY BRECCIATED

82 /	76.72	77.23	FALT		R F/	05		
83 R								
84 /	78.13	78.40	VEIN	MT	CN	65 V9		
85 L					CN	40		
86 R								
87 /	78.50	78.54	FALT	GG2	R F/	63		67
88 R								52
89 /	79.60	79.60	FALT		R F/	30		
90 R								
91 /	81.19	86.51	PIKX	B MT	CN	58 76 P* V-	7)	67
92 L				7A	CN	40 V* P+		
93 R								
94 R								
95 R								
96 R								
97 R								
98								
99 /	87.72	88.70	PIKX	BR	GC	82 P)		
100 L				7T	GC	P+		
101 R								
102 /	88.23	88.23	FALT	GG-	R F/	23		
103 R								
104								
105 /	89.35	91.00	PIKX	M BR	D	82		6+
106								
107 /	97.23	98.52	PIKX		D	82		P+
108 L				8T				
109 R								
110								
111 /	97.24	97.24	FALT	GG*	R F/	23		
112 R								
113								
114 /	99.00	115.00	PIKX		D	71		
115 R								
116								
117 /	104.82	104.82	FALT	GG)	R F/	20		
118 R								
119 /	114.50	115.22	FALT		R F/	10		
120 R								
121								
122 /	118.75	125.19	PIKX	BR	D			P=
123 R				8T				
124								
125								
126 /	120.70	131.88	FALT	BR	R F/	12		
127 L				6T				



174 / 175 R 176 R 177	192.16	201.16	PIXX	VN=BR	D	71	V+	WEAKLY BRECCIATED WITH MILKY WHITE QZ-CB VEINS TO 5 CM WIDE MAINLY AT ABOUT 65 DEGREES TO C.A., SOME WITH CL SELVAGES.
178 / 179 R	195.70	195.88	FALT		R F/			MODERATELY TO FINELY BROKEN CORE.
180 / 181 R 182	198.71	199.33	FALT	BN	R F/	43		REHEALED; FINELY CRUSHED, MYLONITIC BANDING
183 / 184 L 185 R 186 R 187 R 188	206.59	282.24	AXXX	52 51 VN* M M	5	P	V- D- V*	4G P* P+
189 / 190 L 191 R 192 R 193 R	206.59	209.78	AXXX	F BR	D F5	40	P= L=	FINELY LAMINATED, MYLONITIC, CRUSHED BRECCIA ZONE BELOW FAULT CONTACT WITH OVERLYING PORPHYRY. BANDS AND SLIPS AT 40 DEGREES LINED BY BLACK CHLORITE.
194 R 195 L 196 R 197	220.94	221.00	D/AN		R CN	15		4T CN 54 CHILLED MARGINS; WEAKLY MAGNETIC
198 / 199 R 200	224.30	224.30	FALT		R F/	22		BLACK CHLORITE(?) ON SLIP. 5 % DISSEMINATED PY ACROSS 5 CM ABOVE FAULT
201 / 202 R	236.25	236.25	FALT		R F/	21		SLICKENSIDES; SOOTY PY ON SLIP SURFACE
203 / 204 R	248.33	248.33	FALT		R F/	21		SLICKENSIDES; BLACK CHLORITE ON SLIP SURFACE
205 / 206 L 207 R 208 R 209	252.13	256.86	AXXX	VN+ BR	D	V) V) D)	P+	7G LIGHT GREEN, WEAKLY BRECCIATED. VEINLETS IRREGULAR, DISCONTINUOUS; MOST AT ABOUT 10 DEGREES.
210 / 211 L 212 R 213 R 214	267.33	270.15	AXXX	MT	D		D=	GU P) BROWNISH GREEN. PY FORMING FINE DISSEMINATIONS IN IRREGULAR MASSES UP TO 25 MM ACROSS. PY OFTEN VERY FINE, SOOTY, BROWN COLOUR
215 / 216 L 217 R	272.30	276.83	AXXX	VN+ B MX	D	81	P=V)	7T BLEACHED, ALTERED FAULT ENVELOPE.
218 / 219 R	275.13	275.33	FALT		R F/			FINELY BRECCIATED, REHEALED BY SILICA. MODERATELY BROKEN CORE.

220  
221 / 282.24  
222 RSUM  
223 RSUM  
224 RSUM  
225 RSUM

END OF HOLE P  
TROPARI TEST HOLE AZ. 016 DEGREES, INCLIN. -51 DEGREES AT 213.36 M;  
AZIMUTH DUBIOUS. NO SILICEOUS BRECCIA INTERSECTED IN HOLE ALTHOUGH  
FAVOURABLE PORPHYRY/VOLCANIC CONTACT WAS CORED. PERHAPS  
SILICEOUS BRECCIA HERE WAS TRANSPORTED OR DISPLACED BY LATE FAULTING?

**APPENDIX C**  
**ASSAY RESULTS**



drill hole number= B96CH1

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
6.10	8.50	2.40	59001	HF-CORE	0.010	1	20	165	2
11.00	12.00	1.00	59002	HF-CORE	0.014	0	4	65	130
20.00	21.00	1.00	59003	HF-CORE	0.010	0	19	49	67
21.00	22.00	1.00	59004	HF-CORE	0.022	2	38	40	31
37.20	38.20	1.00	59005	HF-CORE	0.010	0	11	40	36
38.20	39.20	1.00	59006	HF-CORE	0.006	4	0	28	0
49.00	50.00	1.00	59007	HF-CORE	0.006	9	18	98	27
57.60	58.10	0.50	59008	HF-CORE	0.006	5	6	46	2
103.45	104.45	1.00	59009	HF-CORE	0.000	2	22	66	28
104.45	105.49	1.04	59010	HF-CORE	0.002	13	78	190	156
126.20	127.20	1.00	59011	HF-CORE	0.000	5	16	64	66
127.20	128.48	1.28	59012	HF-CORE	0.004	3	25	141	51
128.48	129.48	1.00	59013	HF-CORE	0.004	12	32	84	86
129.48	130.00	0.52	59014	HF-CORE	0.014	21	92	990	956
130.00	130.50	0.50	59015	HF-CORE	0.152	48	131	2120	1100
130.50	131.00	0.50	59016	HF-CORE	0.128	45	155	2880	1440
131.00	131.50	0.50	59017	HF-CORE	0.294	220	528	22400	12100
131.50	132.00	0.50	59018	HF-CORE	0.124	249	568	9820	9530
132.00	132.50	0.50	59019	HF-CORE	0.440	324	414	29500	14900
132.50	133.00	0.50	59020	HF-CORE	0.036	27	45	241	293
133.00	133.50	0.50	59021	HF-CORE	0.024	17	15	255	239
133.50	134.00	0.50	59022	HF-CORE	0.016	7	9	31	57
134.00	134.60	0.60	59023	HF-CORE	0.012	6	3	62	122
134.60	135.05	0.45	59024	HF-CORE	0.012	2	4	47	23
135.05	136.00	0.95	59025	HF-CORE	0.018	3	0	51	6
136.00	137.00	1.00	59026	HF-CORE	0.014	2	8	89	9
137.00	138.00	1.00	59027	HF-CORE	0.016	2	2	90	22
138.00	139.00	1.00	59028	HF-CORE	0.016	3	1	105	29
139.00	140.00	1.00	59029	HF-CORE	0.014	15	3	77	99
140.00	141.00	1.00	59030	HF-CORE	0.012	5	12	323	95
141.00	142.00	1.00	59031	HF-CORE	0.028	6	13	628	170
142.00	143.00	1.00	59032	HF-CORE	0.026	7	42	112	66
149.50	150.50	1.00	59033	HF-CORE	0.010	6	65	167	71
150.50	151.50	1.00	59034	HF-CORE	0.018	2	12	90	56
155.15	156.15	1.00	59035	HF-CORE	0.026	6	3	65	13
203.25	203.75	0.50	59036	HF-CORE	0.006	44	28	90	28
211.75	212.25	0.50	59037	HF-CORE	0.002	7	14	66	49
219.00	219.50	0.50	59038	HF-CORE	0.008	3	29	83	1
222.00	223.00	1.00	59039	HF-CORE	0.006	1	16	116	26
223.00	223.50	0.50	59040	HF-CORE	0.026	3	21	1590	970
223.50	224.50	1.00	59041	HF-CORE	0.022	1	22	423	197
224.50	225.50	1.00	59042	HF-CORE	0.018	2	26	271	101
225.50	226.25	0.75	59043	HF-CORE	0.038	4	47	5040	1110
226.25	227.25	1.00	59044	HF-CORE	0.028	0	21	258	59
238.50	239.00	0.50	59045	HF-CORE	0.014	1	25	146	36
244.75	245.35	0.60	59046	HF-CORE	0.028	26	41	264	205
258.30	259.30	1.00	59047	HF-CORE	0.008	2	28	431	257
259.30	259.93	0.63	59048	HF-CORE	0.016	1	35	428	194
259.93	260.93	1.00	59049	HF-CORE	0.014	0	24	148	81
264.20	265.20	1.00	59050	HF-CORE	0.018	1	59	1580	502
267.20	267.90	0.70	59051	HF-CORE	0.020	1	14	586	320
267.90	268.90	1.00	59052	HF-CORE	0.012	1	15	446	97
276.00	276.50	0.50	59053	HF-CORE	0.012	1	5	85	47
294.80	295.30	0.50	59054	HF-CORE	0.018	3	98	3490	2110
295.30	296.30	1.00	59055	HF-CORE	0.008	2	24	1340	952
296.30	297.30	1.00	59056	HF-CORE	0.022	0	9	244	111
297.30	298.30	1.00	59057	HF-CORE	0.006	0	5	1160	775
298.30	299.30	1.00	59058	HF-CORE	0.004	4	40	5110	3360
299.30	300.30	1.00	59059	HF-CORE	0.008	11	151	12700	8050
300.30	301.30	1.00	59060	HF-CORE	0.010	2	27	1760	1120
301.30	302.30	1.00	59061	HF-CORE	0.008	1	13	340	289
302.30	303.30	1.00	59062	HF-CORE	0.012	2	26	1090	409

drill hole number=

B96CH1

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
303.30	304.60	1.30	59063	HF-CORE	0.018	1	1	830	201
306.90	307.90	1.00	59064	HF-CORE	0.018	0	4	643	254
314.30	315.30	1.00	59065	HF-CORE	0.014	0	19	306	128
315.30	316.30	1.00	59066	HF-CORE	0.016	2	17	78	49
316.30	317.30	1.00	59067	HF-CORE	0.018	2	11	123	112
317.30	318.30	1.00	59068	HF-CORE	0.008	2	6	174	110
318.30	319.30	1.00	59069	HF-CORE	0.118	13	247	2300	1380
319.30	320.28	0.98	59070	HF-CORE	0.012	2	10	99	51
326.90	327.30	0.40	59071	HF-CORE	0.008	1	12	1030	532
327.30	327.70	0.40	59072	HF-CORE	0.010	3	11	1210	682
332.92	333.42	0.50	59073	HF-CORE	0.058	5	15	204	102

drill hole number= B96CH2

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
15.77	16.77	1.00	59074	HF-CORE	0.012	10	16	125	93
16.77	17.07	0.30	59075	HF-CORE	0.03	65	37	146	161
17.07	18.07	1.00	59076	HF-CORE	0.01	4	8	128	57
18.07	19.07	1.00	59077	HF-CORE	0.014	2	15	76	15
19.07	20.07	1.00	59078	HF-CORE	0.014	3	13	75	22
20.07	21.07	1.00	59079	HF-CORE	0.008	5	15	65	44
21.07	22.07	1.00	59080	HF-CORE	0.004	4	15	93	56
22.07	23.37	1.30	59081	HF-CORE	0.014	23	23	293	93
23.37	23.87	0.50	59082	HF-CORE	0.018	50	99	475	290
23.87	24.37	0.50	59083	HF-CORE	0.012	26	28	297	84
24.37	24.97	0.60	59084	HF-CORE	0.024	20	22	322	90
24.97	25.97	1.00	59085	HF-CORE	0.006	5	10	148	20
25.97	26.97	1.00	59086	HF-CORE	0.008	5	10	89	25
26.97	27.97	1.00	59087	HF-CORE	0.006	3	22	58	11
27.97	28.97	1.00	59088	HF-CORE	0.004	2	19	69	16
28.97	29.97	1.00	59089	HF-CORE	0.004	1	18	60	27
89.86	90.86	1.00	59090	HF-CORE	0.004	1	19	51	41
90.86	91.66	0.80	59091	HF-CORE	0.018	3	27	562	596
91.66	92.66	1.00	59092	HF-CORE	0.008	1	22	349	238
94.00	95.00	1.00	59093	HF-CORE	0.01	2	35	599	300
95.00	95.50	0.50	59094	HF-CORE	0.016	2	10	564	330
95.50	96.00	0.50	59095	HF-CORE	0.022	5	66	601	324
96.00	96.50	0.50	59096	HF-CORE	0.046	4	30	291	134
96.50	97.50	1.00	59097	HF-CORE	0.002	5	6	175	40
101.20	102.00	0.80	59098	HF-CORE	0.014	6	227	547	570
102.00	102.60	0.60	59099	HF-CORE	0.018	12	257	2000	4900
102.60	103.25	0.65	59100	HF-CORE	0.008	3	113	636	518
128.80	129.30	0.50	59101	HF-CORE	0.008	2	13	102	4100
133.69	134.19	0.50	59102	HF-CORE	0.004	3	19	140	63
134.19	134.49	0.30	59103	HF-CORE	0.002	2	8	66	54
134.49	134.99	0.50	59104	HF-CORE	0.006	1	16	98	66
140.40	141.40	1.00	59105	HF-CORE	0.022	3	74	1960	2000
141.40	141.90	0.50	59106	HF-CORE	0.35	34	712	46200	5280
141.90	142.40	0.50	59107	HF-CORE	1.376	79	2280	69100	8800
142.40	142.90	0.50	59108	HF-CORE	0.88	113	4000	58800	8400
142.90	143.90	1.00	59109	HF-CORE	0.01	3	68	2400	861
143.90	144.40	0.50	59110	HF-CORE	0.038	7	127	2520	3200
144.40	144.90	0.50	59111	HF-CORE	0.018	4	90	580	379
144.90	145.25	0.35	59112	HF-CORE	0.01	4	15	320	204
145.25	146.75	1.50	59113	HF-CORE	0.044	2	112	2510	2800
170.00	170.60	0.60	59114	HF-CORE	0.006	3	33	227	116
193.85	194.75	0.90	59115	HF-CORE	0.022	3	69	5800	4400
211.50	212.20	0.70	59116	HF-CORE	0.002	1	14	107	9
219.50	220.30	0.80	59117	HF-CORE	0.01	2	81	3200	3000
229.00	230.00	1.00	59118	HF-CORE	0	1	32	123	98
239.50	240.50	1.00	59119	HF-CORE	0.002	1	65	1980	368
253.70	254.40	0.70	59120	HF-CORE	0.008	12	60	6900	3600
256.00	257.00	1.00	59121	HF-CORE	0.004	10	114	5000	3100
257.00	258.00	1.00	59122	HF-CORE	0.002	7	89	4400	4000
258.00	259.00	1.00	59123	HF-CORE	0.006	5	108	8500	3600

drill hole number= B96CH3

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
8.68	9.68	1.00	59124	HF-CORE	0	1	17	80	20
9.68	10.68	1.00	59125	HF-CORE	0	1	40	2290	53
10.68	11.68	1.00	59126	HF-CORE	0	1	21	189	75
11.68	12.68	1.00	59127	HF-CORE	0	1	19	78	31
12.68	13.68	1.00	59128	HF-CORE	0	1	18	87	28
13.68	14.68	1.00	59129	HF-CORE	0.002	1	21	166	43
14.68	15.68	1.00	59130	HF-CORE	0.002	2	19	94	58
15.68	16.68	1.00	59131	HF-CORE	0.002	3	17	79	48
16.68	17.68	1.00	59132	HF-CORE	0.002	2	21	80	19
17.68	18.68	1.00	59133	HF-CORE	0.002	2	16	75	23
18.68	19.68	1.00	59134	HF-CORE	0.002	2	20	84	55
19.68	20.68	1.00	59135	HF-CORE	0.002	2	19	74	49
20.68	21.68	1.00	59136	HF-CORE	0.002	2	18	69	25
29.45	30.45	1.00	59137	HF-CORE	0.002	3	24	81	21
30.45	31.45	1.00	59138	HF-CORE	0.002	3	23	40	25
31.45	32.45	1.00	59139	HF-CORE	0	2	20	52	28
32.45	33.45	1.00	59140	HF-CORE	0	3	49	61	18
38.75	40.25	1.50	59141	HF-CORE	0	0	5	71	14
59.70	60.70	1.00	59142	HF-CORE	0	2	8	42	37
71.80	72.80	1.00	59143	HF-CORE	0.002	5	35	66	36
72.80	73.80	1.00	59144	HF-CORE	0.006	3	23	344	188
79.17	80.17	1.00	59145	HF-CORE	0.002	2	29	294	131
80.17	80.67	0.50	59146	HF-CORE	0.012	1	63	616	387
80.67	81.05	0.38	59147	HF-CORE	0.028	6	53	1470	1260
81.05	81.30	0.25	59148	HF-CORE	0.028	8	45	341	945
81.30	81.80	0.50	59149	HF-CORE	0.008	20	72	127	236
81.80	82.35	0.55	59150	HF-CORE	0.012	4	38	165	121
82.35	83.35	1.00	59151	HF-CORE	0.026	3	17	67	93
83.35	84.35	1.00	59152	HF-CORE	0	3	23	101	56
84.35	85.35	1.00	59153	HF-CORE	0	0	28	151	62
85.35	86.35	1.00	59154	HF-CORE	0.006	1	35	241	87
93.80	94.80	1.00	59155	HF-CORE	0.006	2	34	190	101
94.80	96.30	1.50	59156	HF-CORE	0.004	1	20	226	65
101.00	102.00	1.00	59157	HF-CORE	0.002	2	21	405	298
123.00	123.50	0.50	59158	HF-CORE	0	2	0	56	60
126.30	127.30	1.00	59159	HF-CORE	0.008	1	7	1210	588
127.30	128.50	1.20	59160	HF-CORE	0.002	0	21	1090	407
128.50	128.90	0.40	59161	HF-CORE	0.002	0	11	421	894
128.90	129.90	1.00	59162	HF-CORE	0.006	9	122	3080	5100
158.50	160.00	1.50	59163	HF-CORE	0.054	2	58	2450	658
160.00	161.50	1.50	59164	HF-CORE	0.004	1	23	83	51
168.50	169.00	0.50	59165	HF-CORE	0.074	3	26	79	39

drill hole number= B96CH4

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
33.80	34.30	0.50	59167	HF-CORE	0.002	14	7	270	34
38.39	38.79	0.40	59168	HF-CORE	0.002	6	5	50	31
38.79	39.79	1.00	59169	HF-CORE	0.002	22	13	92	19
39.79	40.59	0.80	59170	HF-CORE	0.002	59	17	620	180
40.59	41.34	0.75	59171	HF-CORE	0.004	35	15	260	72
41.34	42.88	1.54	59172	HF-CORE	0.004	7	13	80	15
57.00	58.10	1.10	59173	HF-CORE	0.008	22	28	183	150
67.00	68.20	1.20	59174	HF-CORE	0.004	2	11	70	20
71.83	73.03	1.20	59175	HF-CORE	0.006	14	31	93	98
74.70	75.40	0.70	59176	HF-CORE	0.002	14	21	68	50
117.80	118.30	0.50	59177	HF-CORE	0.002	4	19	69	41
143.13	144.13	1.00	59178	HF-CORE	0.004	5	31	128	106
144.13	145.13	1.00	59179	HF-CORE	0.002	3	19	105	100
145.13	146.13	1.00	59180	HF-CORE	0.002	3	20	176	151
146.13	146.53	0.40	59181	HF-CORE	0.006	4	15	75	69
146.53	147.13	0.60	59182	HF-CORE	0.028	9	25	553	410
147.13	147.63	0.50	59183	HF-CORE	0.024	10	102	2630	1920
147.63	148.13	0.50	59184	HF-CORE	0.01	7	101	435	400
148.13	148.63	0.50	59185	HF-CORE	0.004	12	41	712	650
148.63	149.13	0.50	59186	HF-CORE	0.012	8	83	1460	1590
149.13	149.63	0.50	59187	HF-CORE	0.004	6	151	2190	2260
149.63	150.13	0.50	59188	HF-CORE	0.01	12	125	1950	1890
150.13	150.63	0.50	59189	HF-CORE	0.004	8	65	148	169
150.63	151.13	0.50	59190	HF-CORE	0.006	11	100	166	151
151.13	152.13	1.00	59191	HF-CORE	0.004	7	103	1090	960
152.13	153.13	1.00	59192	HF-CORE	0.034	25	185	7200	5900
153.13	153.63	0.50	59193	HF-CORE	0.014	3	98	625	510
153.63	154.13	0.50	59194	HF-CORE	0.004	12	586	6430	5000
154.13	154.63	0.50	59195	HF-CORE	0.004	9	504	3810	2960
154.63	155.13	0.50	59196	HF-CORE	0.002	14	556	7770	6870
155.13	155.63	0.50	59197	HF-CORE	0.002	2	24	201	153
155.63	156.13	0.50	59198	HF-CORE	0.002	3	74	256	199
156.13	156.48	0.35	59199	HF-CORE	0.004	3	28	651	549
156.48	157.28	0.80	59200	HF-CORE	0.002	3	31	110	129
157.65	158.65	1.00	59201	HF-CORE	0.002	3	25	93	150
158.65	159.65	1.00	59202	HF-CORE	0.002	3	26	78	95
159.65	160.65	1.00	59203	HF-CORE	0.002	2	33	68	17
160.65	161.65	1.00	59204	HF-CORE	0.004	4	24	96	33
161.65	162.65	1.00	59205	HF-CORE	0.002	4	15	100	35
199.97	200.97	1.00	59206	HF-CORE	0.004	4	15	67	48
200.97	201.97	1.00	59207	HF-CORE	0.006	3	15	191	58
201.97	202.47	0.50	59208	HF-CORE	0.006	5	7	43	40
202.47	202.97	0.50	59209	HF-CORE	0	6	6	33	29
202.97	203.67	0.70	59210	HF-CORE	0	3	7	45	35
203.67	204.67	1.00	59211	HF-CORE	0.01	7	19	109	20
204.67	205.67	1.00	59212	HF-CORE	0.002	5	10	53	24
205.67	206.67	1.00	59213	HF-CORE	0.002	2	6	52	16
206.67	207.67	1.00	59214	HF-CORE	0.034	4	5	82	17
240.90	242.40	1.50	59215	HF-CORE	0	2	26	69	24

drill hole number= B96CH5 HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
18.80	19.80	1.00	59216	HF-CORE	0.012	4	131	89	52
32.60	33.10	0.50	59217	HF-CORE	0.006	5	26	5180	997
33.10	33.60	0.50	59218	HF-CORE	0.002	4	34	502	262
45.40	46.40	1.00	59219	HF-CORE	0.002	1	34	936	437
46.40	47.40	1.00	59220	HF-CORE	0	4	34	785	206
49.60	50.10	0.50	59221	HF-CORE	0	4	32	3290	1240
59.50	60.50	1.00	59222	HF-CORE	0.156	2	115	1760	394
60.50	60.80	0.30	59223	HF-CORE	0.016	4	197	23800	1410
60.80	61.15	0.35	59224	HF-CORE	0.012	12	433	107000	3720
61.15	61.65	0.50	59225	HF-CORE	0.006	4	109	11700	3050
61.65	62.65	1.00	59226	HF-CORE	0.008	3	53	10700	926
62.65	63.15	0.50	59227	HF-CORE	0.004	4	22	1440	373
63.15	63.65	0.50	59228	HF-CORE	0	5	11	632	249
63.65	64.10	0.45	59229	HF-CORE	0.008	6	57	3890	480
73.60	74.70	1.10	59230	HF-CORE	0	4	178	98	30
74.70	75.70	1.00	59231	HF-CORE	0	5	141	5070	269
75.70	77.00	1.30	59232	HF-CORE	0	1	41	156	20
101.61	102.61	1.00	59233	HF-CORE	0.002	1	15	227	39
102.61	103.61	1.00	59234	HF-CORE	0	5	20	508	163
103.61	104.61	1.00	59235	HF-CORE	0.002	4	14	274	90
104.61	105.61	1.00	59236	HF-CORE	0.004	2	15	956	89
105.61	106.61	1.00	59237	HF-CORE	0.002	2	26	1200	238
106.61	107.61	1.00	59238	HF-CORE	0.002	4	40	1611	1090
107.61	108.61	1.00	59239	HF-CORE	0.004	1	13	96	45
108.61	109.11	0.50	59240	HF-CORE	0.024	3	92	1860	370
109.11	109.61	0.50	59241	HF-CORE	0.002	2	87	2160	320
109.61	110.11	0.50	59242	HF-CORE	0.006	2	41	1010	191
110.11	110.61	0.50	59243	HF-CORE	0.002	1	48	1300	480
110.61	111.11	0.50	59244	HF-CORE	0.012	3	87	5990	1540
111.11	111.61	0.50	59245	HF-CORE	0.004	2	45	1530	680
111.61	112.11	0.50	59246	HF-CORE	0.016	3	9	1990	737
112.11	112.61	0.50	59247	HF-CORE	0.03	8	77	4610	1520
112.61	113.11	0.50	59248	HF-CORE	0.004	1	26	2013	277
113.11	113.61	0.50	59249	HF-CORE	0.24	19	136	2933	310
113.61	114.61	1.00	59250	HF-CORE	0.002	3	31	920	252
114.61	115.61	1.00	59251	HF-CORE	0	3	15	700	236
115.61	116.61	1.00	59252	HF-CORE	0	3	17	841	214
116.61	117.61	1.00	59253	HF-CORE	0	2	28	1250	148
117.61	116.51	-1.10	59254	HF-CORE	0	1	17	359	87
116.51	119.61	3.10	59255	HF-CORE	0	2	25	1250	258
119.61	120.61	1.00	59256	HF-CORE	0.002	2	35	260	71
120.61	121.61	1.00	59257	HF-CORE	0	2	22	307	118
121.61	122.61	1.00	59258	HF-CORE	0.002	2	14	191	78
122.61	123.61	1.00	59259	HF-CORE	0	4	37	4040	1140
123.61	124.61	1.00	59260	HF-CORE	0	6	32	2260	1100
124.61	125.81	1.20	59261	HF-CORE	0	1	2	295	161

drill hole number= B96CH6

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
52.75	53.75	1.00	59262	HF-CORE	0.02	9	68	782	334
53.75	54.25	0.50	59263	HF-CORE	0.048	27	102	3600	1540
54.25	54.75	0.50	59264	HF-CORE	0.024	17	61	3160	980
54.75	55.41	0.66	59265	HF-CORE	0.008	16	73	335	317
55.41	55.91	0.50	59266	HF-CORE	0.056	102	167	3710	1310
55.91	56.41	0.50	59267	HF-CORE	0.062	336	266	6050	2830
56.41	57.17	0.76	59268	HF-CORE	0.152	60	620	7100	3190
57.17	58.17	1.00	59269	HF-CORE	0.004	10	43	289	405
58.17	59.17	1.00	59270	HF-CORE	0.01	11	111	58	52
59.17	60.17	1.00	59271	HF-CORE	0.006	8	145	71	43
60.17	61.17	1.00	59272	HF-CORE	0.102	16	293	4440	1810
61.17	62.17	1.00	59273	HF-CORE	0.014	6	57	241	190
62.17	63.17	1.00	59274	HF-CORE	0.016	3	33	74	15
63.17	64.17	1.00	59275	HF-CORE	0.034	5	142	158	162
64.17	65.17	1.00	59276	HF-CORE	0.002	3	24	100	26
65.17	66.17	1.00	59277	HF-CORE	0.01	6	64	118	284
66.17	67.17	1.00	59278	HF-CORE	0.022	8	241	90	138
67.17	68.17	1.00	59279	HF-CORE	0.004	5	71	76	31
68.17	68.84	0.67	59280	HF-CORE	0.01	5	22	96	61
68.84	69.44	0.60	59281	HF-CORE	0.04	22	335	20500	4260
69.44	69.94	0.50	59282	HF-CORE	0.052	18	345	7010	4700
69.94	70.44	0.50	59283	HF-CORE	0.032	9	124	3240	1110
70.44	70.94	0.50	59284	HF-CORE	0.124	31	672	14100	6630
70.94	71.94	1.00	59285	HF-CORE	0.03	10	121	1950	1260
71.94	72.94	1.00	59286	HF-CORE	0.008	4	28	172	128
72.94	74.14	1.20	59287	HF-CORE	0.008	5	26	78	101
87.25	87.75	0.50	59288	HF-CORE	0.004	5	317	1950	275
94.30	94.80	0.50	59289	HF-CORE	0.022	4	17	2420	1380
99.50	100.50	1.00	59290	HF-CORE	0.008	8	277	1460	1390
100.50	101.50	1.00	59291	HF-CORE	0.004	13	32	1220	960
101.50	102.50	1.00	59292	HF-CORE	0.038	5	50	460	330
102.50	103.50	1.00	59293	HF-CORE	0.018	6	59	310	190
103.50	104.50	1.00	59294	HF-CORE	0.054	8	108	140	110
104.50	105.50	1.00	59295	HF-CORE	0.102	6	31	110	159
105.50	106.50	1.00	59296	HF-CORE	0.038	15	182	1031	1130
106.50	106.85	0.35	59297	HF-CORE	0.058	5	18	1440	265
106.85	107.35	0.50	59298	HF-CORE	0.042	10	91	2480	726
107.35	107.85	0.50	59299	HF-CORE	0.036	19	91	2280	4000
107.85	108.35	0.50	59300	HF-CORE	0.01	13	272	1820	1470
108.35	108.85	0.50	59301	HF-CORE	0.162	29	58	11900	14700
108.85	109.35	0.50	59302	HF-CORE	0.142	30	69	24800	16100
109.35	109.85	0.50	59303	HF-CORE	0.124	25	101	37700	15400
109.85	110.35	0.50	59304	HF-CORE	0.032	22	130	32100	12700
110.35	110.70	0.35	59305	HF-CORE	0.01	6	19	2370	2740
110.70	111.20	0.50	59306	HF-CORE	0.014	3	19	1400	316
111.20	111.70	0.50	59307	HF-CORE	0.036	4	17	772	380
111.70	112.20	0.50	59308	HF-CORE	0.02	4	43	4680	331
112.20	112.70	0.50	59309	HF-CORE	0.02	5	38	5120	1320
112.70	113.20	0.50	59310	HF-CORE	0.022	5	79	6000	1360
113.20	113.70	0.50	59311	HF-CORE	0.036	7	44	6300	2570
113.70	114.20	0.50	59312	HF-CORE	0.004	6	49	5730	2130
114.20	115.20	1.00	59313	HF-CORE	0.002	5	31	1360	1010
115.20	116.20	1.00	59314	HF-CORE	0.01	5	46	1030	908
116.20	117.20	1.00	59315	HF-CORE	0.006	6	39	775	598
117.20	118.20	1.00	59316	HF-CORE	0.012	4	23	391	460
118.20	119.20	1.00	59317	HF-CORE	0.01	4	11	520	337
119.20	120.20	1.00	59318	HF-CORE	0.01	3	9	1896	1310
120.20	121.20	1.00	59319	HF-CORE	0	3	21	151	148
121.20	122.20	1.00	59320	HF-CORE	0.004	4	13	682	461
122.20	123.20	1.00	59321	HF-CORE	0.01	6	12	1340	952
123.20	124.20	1.00	59322	HF-CORE	0.006	4	14	2610	1820
124.20	125.20	1.00	59323	HF-CORE	0.004	5	9	790	558

125.20	126.20	1.00	59324	HF-CORE	0.01	3	18	2960	1380
126.20	127.20	1.00	59325	HF-CORE	0.002	4	28	820	388
127.20	128.20	1.00	59326	HF-CORE	0.006	9	13	316	279
133.10	134.10	1.00	59327	HF-CORE	0.024	5	10	2620	1810
134.10	135.10	1.00	59328	HF-CORE	0.026	5	8	1010	734
135.10	136.10	1.00	59329	HF-CORE	0.026	8	9	360	277
136.10	137.10	1.00	59330	HF-CORE	0.018	5	8	2161	1700
137.10	138.10	1.00	59331	HF-CORE	0.034	5	5	720	577
162.20	162.90	0.70	59332	HF-CORE	0.012	13	17	932	594



drill hole number= B96CH7

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
30.40	31.10	0.70	59333	HF-CORE	0	5	9	152	19
39.80	41.00	1.20	59334	HF-CORE	0	3	9	96	32
174.83	175.83	1.00	59335	HF-CORE	0.014	72	19	430	138
175.83	176.33	0.50	59336	HF-CORE	0.262	1390	160	9960	6580
176.33	176.83	0.50	59337	HF-CORE	0.002	10	28	410	155
176.83	177.33	0.50	59338	HF-CORE	0.004	12	59	699	481
177.33	177.83	0.50	59339	HF-CORE	0	9	36	720	544
177.83	178.33	0.50	59340	HF-CORE	0.002	7	16	151	108
178.33	178.83	0.50	59341	HF-CORE	0	6	22	460	249
178.83	179.33	0.50	59342	HF-CORE	0.002	5	13	103	75
179.33	179.83	0.50	59343	HF-CORE	0	7	12	114	57
179.83	180.33	0.50	59344	HF-CORE	0.002	5	25	260	138
180.33	181.33	1.00	59345	HF-CORE	0.002	2	13	74	28
196.06	197.06	1.00	59346	HF-CORE	0.002	2	46	52	18
197.06	197.56	0.50	59347	HF-CORE	0.02	6	96	3610	2570
197.56	198.06	0.50	59348	HF-CORE	0.018	5	42	2280	1120
198.06	198.56	0.50	59349	HF-CORE	0.016	3	44	1030	552
198.56	199.06	0.50	59350	HF-CORE	0.018	4	24	960	436
199.06	199.56	0.50	59351	HF-CORE	0.014	4	17	420	85
199.56	200.06	0.50	59352	HF-CORE	0.018	3	35	590	115
200.06	200.56	0.50	59353	HF-CORE	0.026	6	44	4950	3090
200.56	201.16	0.60	59354	HF-CORE	0.018	3	36	275	183
201.16	202.16	1.00	59355	HF-CORE	0.018	4	93	4210	2620
202.16	203.16	1.00	59356	HF-CORE	0.022	18	1230	10200	8520
205.20	205.70	0.50	59357	HF-CORE	0.01	7	62	3040	2170
212.10	212.60	0.50	59358	HF-CORE	0.006	2	14	69	35
223.21	224.21	1.00	59359	HF-CORE	0.004	4	13	54	25
224.21	224.71	0.50	59360	HF-CORE	0.008	9	16	103	63
224.71	225.21	0.50	59361	HF-CORE	0.022	40	22	307	159
225.21	225.71	0.50	59362	HF-CORE	0.022	31	19	351	375
225.71	226.21	0.50	59363	HF-CORE	0.018	92	27	760	520
226.21	226.71	0.50	59364	HF-CORE	0.012	6	28	393	215
226.71	227.21	0.50	59365	HF-CORE	0.006	6	50	193	101
227.21	227.91	0.70	59366	HF-CORE	0.032	8	177	880	590
227.91	228.91	1.00	59367	HF-CORE	0.004	4	191	94	39
233.90	234.40	0.50	59368	HF-CORE	0.004	1	5	374	460
245.90	246.70	0.80	59369	HF-CORE	0.1	5	50	22	1400
248.50	249.00	0.50	59370	HF-CORE	0.024	3	5	93	57
255.25	255.75	0.50	59371	HF-CORE	0.494	8	108	2390	2610
256.20	256.70	0.50	59372	HF-CORE	0.102	6	279	4861	4100
263.68	263.98	0.30	59373	HF-CORE	0.446	297	44600	82000	10400
263.98	265.48	1.50	59374	HF-CORE	0.054	8	366	7233	5820
269.80	270.80	1.00	59375	HF-CORE	0.008	4	46	1459	1010

drill hole number= B96CH8

HF=half  
W=whole

from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
36.65	37.15	0.50	59376	HF-CORE	0	1	15	57	96
86.00	87.00	1.00	59377	HF-CORE	0	3	24	36	25
131.80	132.40	0.60	59378	HF-CORE	0	21	23	623	410
137.50	138.50	1.00	59379	HF-CORE	0	5	15	162	109

drill hole number= B96CH9

HF=half  
W=whole

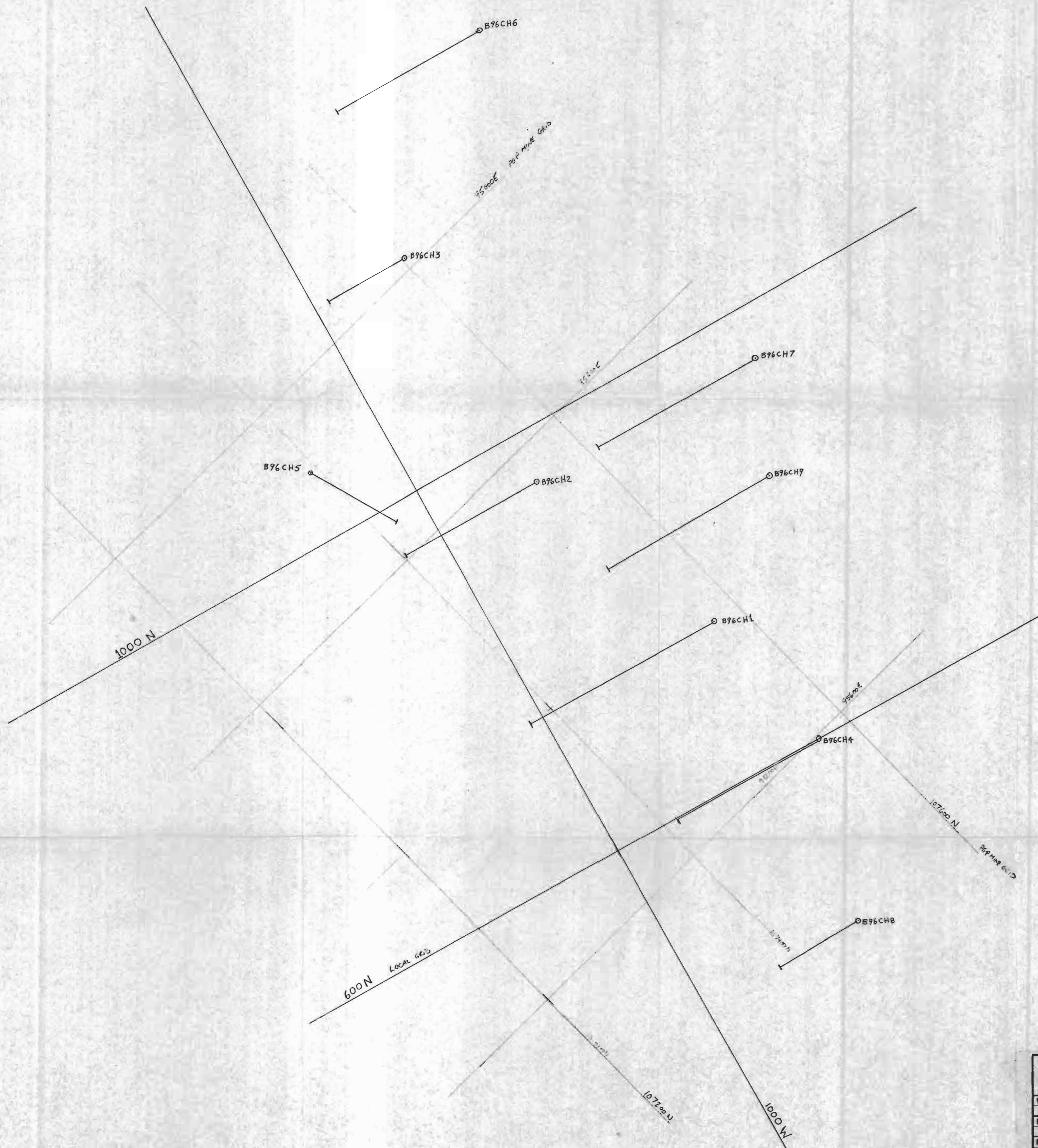
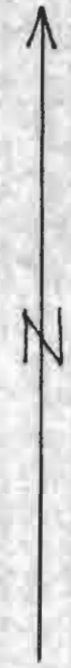
from (m)	to (m)	interval (m)	sample no.	core sampled	GOLD (oz/ton)	SILVER (g/t)	COPPER (g/t)	ZINC (g/t)	LEAD (g/t)
4.20	5.20	1.00	59380	HF-CORE	0.002	2	15	111	200
18.43	19.13	0.70	59381	HF-CORE	0.002	4	14	58	150
51.50	52.50	1.00	59382	HF-CORE	0	3	6	31	70
52.50	53.50	1.00	59383	HF-CORE	0.008	5	9	54	69
53.50	54.50	1.00	59384	HF-CORE	0.012	2	5	90	58
54.50	55.50	1.00	59385	HF-CORE	0.002	2	11	57	85
55.50	56.50	1.00	59386	HF-CORE	0.002	5	9	28	15
81.19	82.19	1.00	59387	HF-CORE	0.012	4	9	27	19
82.19	83.19	1.00	59388	HF-CORE	0.002	4	10	36	26
83.19	84.19	1.00	59389	HF-CORE	0.002	7	9	35	30
84.19	85.19	1.00	59390	HF-CORE	0	40	11	201	140
85.19	86.19	1.00	59391	HF-CORE	0	81	13	160	97
86.19	87.19	1.00	59392	HF-CORE	0	16	18	73	81
130.00	130.70	0.70	59393	HF-CORE	0	3	6	19	10
130.70	131.70	1.00	59394	HF-CORE	0.004	2	7	17	10
141.35	142.15	0.80	59395	HF-CORE	0.004	5	9	24	30
142.80	143.30	0.50	59396	HF-CORE	0.006	2	16	48	29
150.90	151.40	0.50	59397	HF-CORE	0.002	3	11	37	40
154.80	155.80	1.00	59398	HF-CORE	0.002	2	7	17	10
155.80	156.80	1.00	59399	HF-CORE	0	3	13	34	19
156.80	157.80	1.00	59400	HF-CORE	0	3	13	70	65
205.59	206.59	1.00	59401	HF-CORE	0	2	14	44	31
206.59	207.59	1.00	59402	HF-CORE	0	3	12	48	39
207.59	208.59	1.00	59403	HF-CORE	0	2	12	65	50
208.59	209.59	1.00	59404	HF-CORE	0.004	4	20	112	79
224.00	224.50	0.50	59405	HF-CORE	0.002	3	12	53	33
252.13	253.13	1.00	59406	HF-CORE	0	9	20	52	26
253.13	254.13	1.00	59407	HF-CORE	0	8	23	49	59
254.13	255.13	1.00	59408	HF-CORE	0	8	14	61	70
255.13	256.13	1.00	59409	HF-CORE	0	17	24	76	59
256.13	257.13	1.00	59410	HF-CORE	0.004	8	21	47	56
267.30	268.30	1.00	59411	HF-CORE	0.002	7	15	38	19
268.30	269.30	1.00	59412	HF-CORE	0.068	8	13	38	15
269.30	270.30	1.00	59413	HF-CORE	0	6	15	48	38
270.30	271.30	1.00	59414	HF-CORE	0	4	9	42	40
271.30	272.30	1.00	59415	HF-CORE	0	4	8	44	57
274.50	275.50	1.00	59416	HF-CORE	0.002	9	20	117	95

**APPENDIX D**  
**CLAIM STATUS, BIG MISSOURI PROPERTY**

PREF	DISP'N #	DISPOSITION NAME	LOT No	TYPE	NTS	UNITS	REC DATE	EXP DATE
L	1521	MARTHA ELLEN			104B/1E			Wednesday, 02 July, 1997
L	1522	GLACIER			104B/1E			Wednesday, 02 July, 1997
L	1525	LECKIE FR.			104B/1E			Wednesday, 02 July, 1997
L	3208	PROVINCE			104B/1E			Wednesday, 02 July, 1997
L	3210	GOLDEN CROWN			104B/1E			Wednesday, 02 July, 1997
L	3211	J P FRACTION			104B/1E			Wednesday, 02 July, 1997
L	3213	E PLURIBUS		+SUR	104B/1E			Wednesday, 02 July, 1997
L	3216	UNUM FR.		+SUR	104B/1E			Wednesday, 02 July, 1997
L	4036	BELLA COOLA			104B/1E		10/01/76	Wednesday, 02 July, 1997
L	4037	GOOD HOPE			104B/1E		02/14/78	Wednesday, 02 July, 1997
L	4038	MAY P.J.			104B/1E		10/01/76	Wednesday, 02 July, 1997
L	4039	SILVER LEAF			104B/1E		02/08/79	Wednesday, 02 July, 1997
L	4040	LADYBIRD #2			104B/1E		10/01/76	Wednesday, 02 July, 1997
L	4127	DAY NO 1			104B/1E			Wednesday, 02 July, 1997
L	4129	DAY NO 2			104B/1E			Wednesday, 02 July, 1997
L	4130	DAY NO 3			104B/1E			Wednesday, 02 July, 1997
L	4131	DAY NO 4			104B/1E			Wednesday, 02 July, 1997
L	4132	DAY FRACTION			104B/1E			Wednesday, 02 July, 1997
L	4163	SEPTEMBER FR.			104B/1E		02/08/79	Wednesday, 02 July, 1997
L	4534	UNICORN			104B/1E			Wednesday, 02 July, 1997
L	4535	UNICORN NO 2			104B/1E			Wednesday, 02 July, 1997
L	4536	UNICORN NO 3			104B/1E			Wednesday, 02 July, 1997
L	4537	UNITY			104B/1E			Wednesday, 02 July, 1997
L	4538	GOOD HOPE			104B/1E			Wednesday, 02 July, 1997
L	4539	SNOW KING			104B/1E			Wednesday, 02 July, 1997
L	4540	SILVER CREEK FR		+SUR	104B/1E			Wednesday, 02 July, 1997
L	4541	H AND W FRACTION			104B/1E			Wednesday, 02 July, 1997
L	4542	UNITY FR.			104B/1E			Wednesday, 02 July, 1997
L	4543	V FRACTION			104B/1E			Wednesday, 02 July, 1997
	250350	TIGER	L4152		104B/1E		75/08/11	Saturday, 11 August, 2007
	250351	PYRARGYRITE	L4155		104B/1E		75/08/11	Saturday, 11 August, 2007
	250352	SILVERCREST FR.	L4162		104B/1E		75/08/11	Wednesday, 10 September, 2003
	250353	LION #1	L4166		104B/1E		75/08/11	Saturday, 11 August, 2007
	250354	LION #2	L4167		104B/1E		75/08/11	Saturday, 11 August, 2007
	250359	YELLOWSTONE FR.	L4025		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250360	BOSTON	L4026		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250361	DARWIN	L4028		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250362	DUMAS	L4029		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250363	DICKENS	L4030		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250364	OCCIDENTAL FR.	L4035		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250365	LION #3	L4168		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250366	LION FR.	L4169		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250367	HIGH GRADE #2	L4603		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250368	HIGH GRADE #1	L4604		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250369	HIGH GRADE	L4605		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250370	GALENA	L4615		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250373	MONTANA	L5092		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250374	MONTANA #1	L5093		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250375	MONTANA #2	L5094		104B/1E		75/09/10	Wednesday, 10 September, 2003
	250376	TERMINUS	L3221		104B/1E		75/09/30	Tuesday, 30 September, 2003
	250431	G. T. FR.	L3222		104B/1E		77/09/19	Friday, 19 September, 2003
	250432	FALLS VIEW	L3223		104B/1E		77/09/20	Saturday, 20 September, 2003
	250433	PROUSTITE	L4156		104B/1E		77/09/20	Saturday, 20 September, 2003
	250434	STEPHANITE	L4157		104B/1E		77/09/20	Saturday, 20 September, 2003
	250435	NATIVE	L4158		104B/1E		77/09/20	Saturday, 20 September, 2003
	250436	HESSITE	L4159		104A/4W		77/09/20	Saturday, 20 September, 2003
	250437	CERARGERITE	L4160		104A/4W		77/09/20	Saturday, 20 September, 2003
	250438	STROMEYRITE	L4161		104A/4W		77/09/20	Saturday, 20 September, 2003
	250439	A. G. FR.	L4171		104B/1E		77/09/20	Saturday, 20 September, 2003
	250440	DAUNTLESS	L3219		104B/1E		77/09/20	Saturday, 20 September, 2003

PREF	DISP'N #	DISPOSITION NAME	LOT No	TYPE	NTS	UNITS	REC DATE	EXP DATE
	250666	PASS FR.	L3906		104B/1E		79/04/04	Wednesday, 04 April, 2007
	250754	DICKY			104B/1E	4	79/08/13	Saturday, 13 September, 2003
	250755	20TH CENTURY			104B/1E	12	79/08/13	Saturday, 13 September, 2003
	250756	WMI			104B/1E	4	79/08/13	Saturday, 13 September, 2003
	250758	BOX FR.			104B/1E	1	79/08/13	Saturday, 13 September, 2003
	250759	BOETS FR.			104B/1E	1	79/08/13	Saturday, 13 September, 2003
	250767	LINDGREN			104B/1E	18	79/08/30	Thursday, 30 August, 2007
	250770	SILVER LAKE			104B/1E	4	79/08/27	Monday, 27 August, 2007
	250908	LOUPY			104A/4W	10	80/09/26	Friday, 26 September, 2003
	250909	HELEN			104A/4W	6	80/09/26	Friday, 26 September, 2003
	250910	B.C. FR.			104A/4W	1	80/09/26	Friday, 26 September, 2003
	250920	VASEY FR.			104B/1E	1	80/09/08	Monday, 08 September, 2003
	251030	KAT			104A/4W	10	81/10/14	Tuesday, 14 October, 2003
	251031	ERL			104A/4W	10	81/10/14	Tuesday, 14 October, 2003
	251067	PAM FR.			104B/1E	1	82/07/28	Saturday, 28 July, 2007
	251778	LOOKOUT	L3905		104B/1E		87/04/06	Friday, 06 April, 2007
	252193	CHICAGO FR.			104B/1E	1	88/08/11	Saturday, 11 August, 2007
	252194	MARIE RITA			104A/4W	2	88/08/11	Saturday, 11 August, 2007
	252201	TIGER FR.			104B/1E	1	88/08/11	Saturday, 11 August, 2007
	252952	MARIE NO. 2			104B/1E	8	89/07/21	Saturday, 21 July, 2007
	255397	POLYBACITE	L4154		104B/1E		75/01/06	Saturday, 06 January, 2007
	255398	ARGENTITE	L4153		104B/1E		75/01/06	Saturday, 06 January, 2007
	255399	POLYBACITE FR.	L4177		104B/1E		75/01/06	Saturday, 06 January, 2007
	255400	THE "49"	L4024		104B/1E		75/03/04	Sunday, 04 March, 2007
	255401	OXEDENTAL	L4023		104B/1E		75/03/04	Sunday, 04 March, 2007
	255402	CHICAGO	L4027		104B/1E		75/03/04	Sunday, 04 March, 2007
	255403	MILLAN DOLLAR FR.	L4034		104B/1E		75/03/04	Sunday, 04 March, 2007



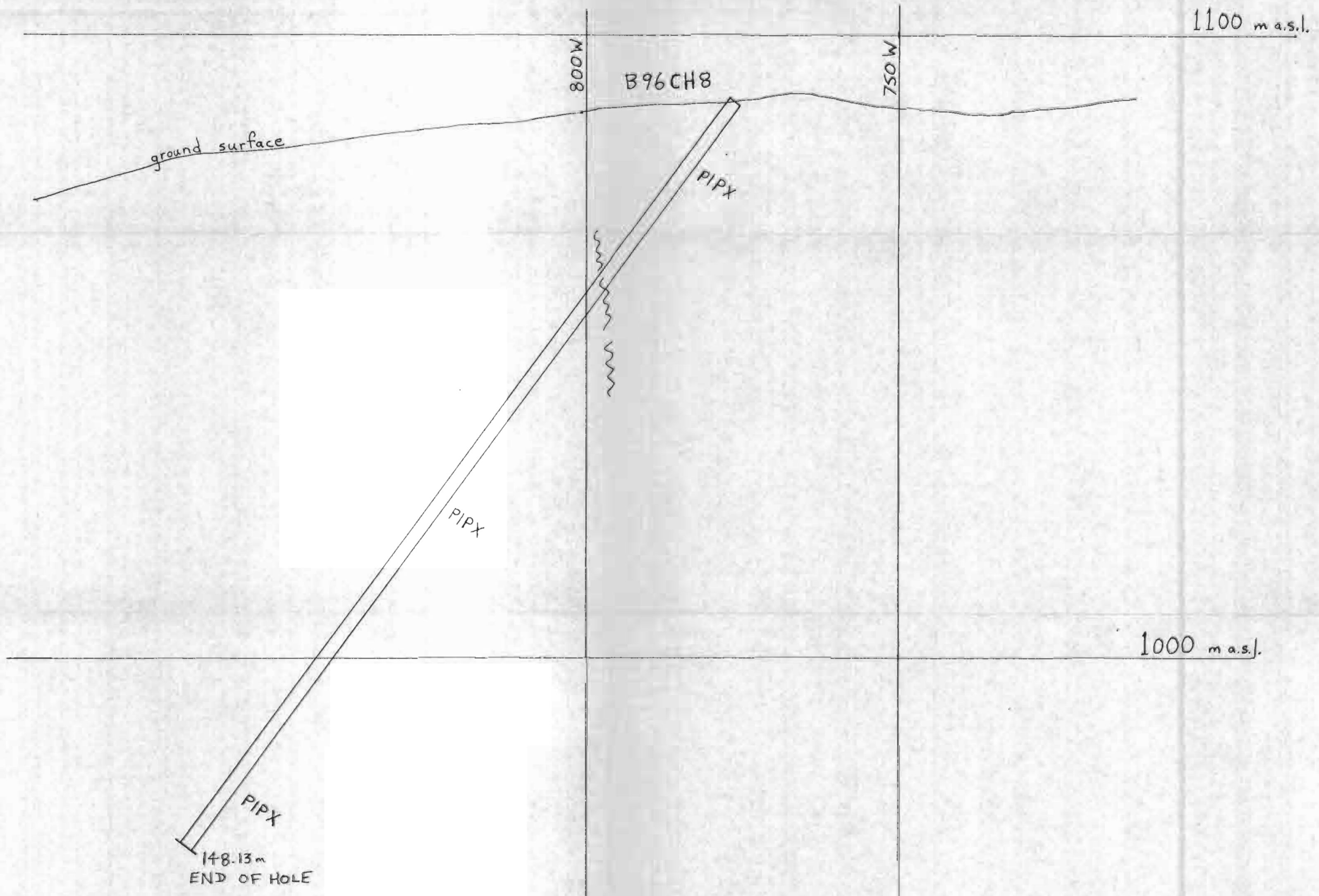


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24,905



		<b>Westmin Resources Limited</b> MINING DIVISION	
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Drafted By			
Date Revised		DRILL HOLE LOCATION MAP	
Revised By			
N.T.S. Number			Figure 3





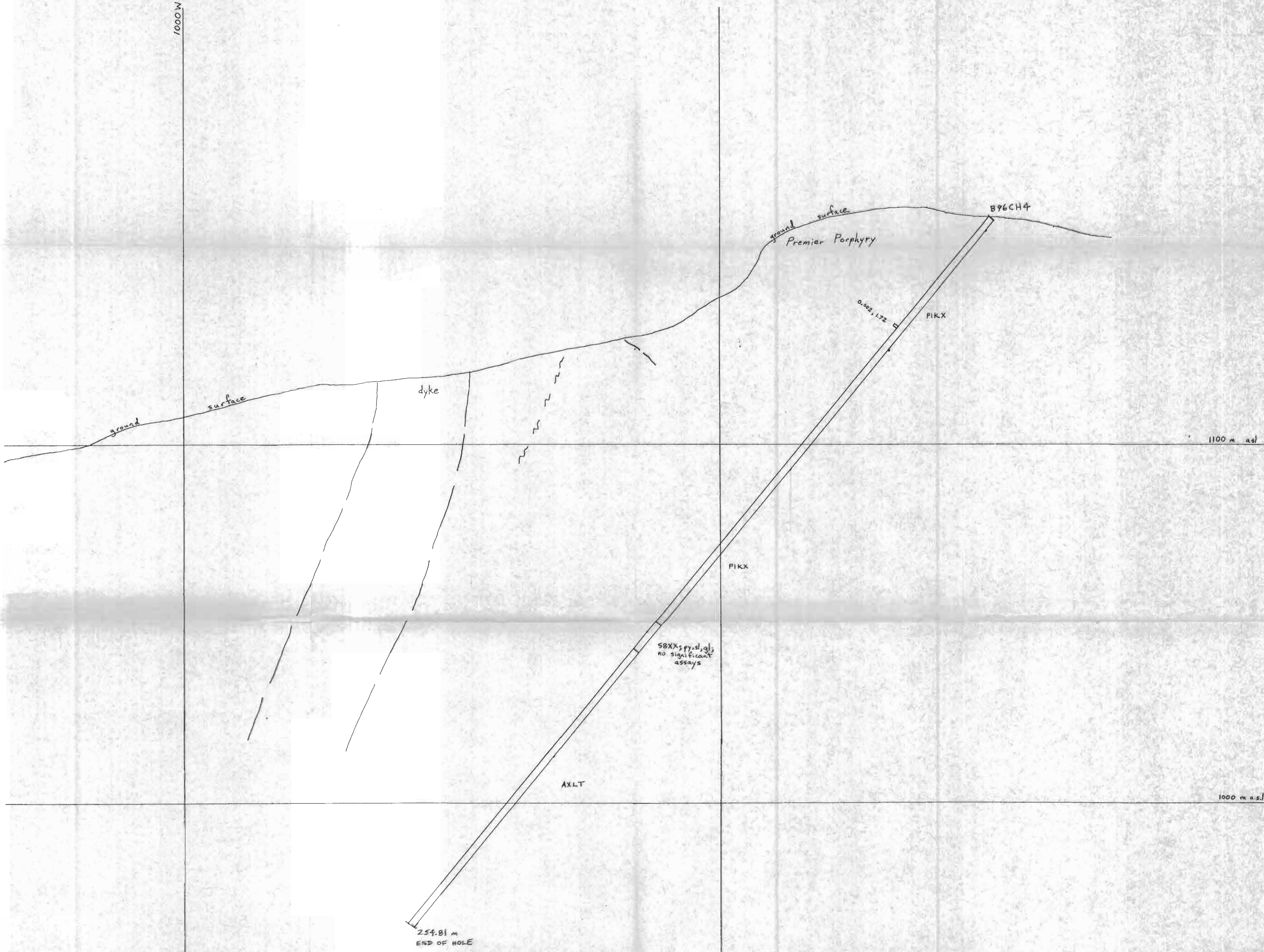
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1000'



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MARTHA ELLEN  
ZONE  
SECTION 600N  
1:500 scale

RTS: Number

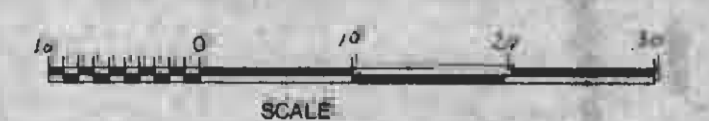
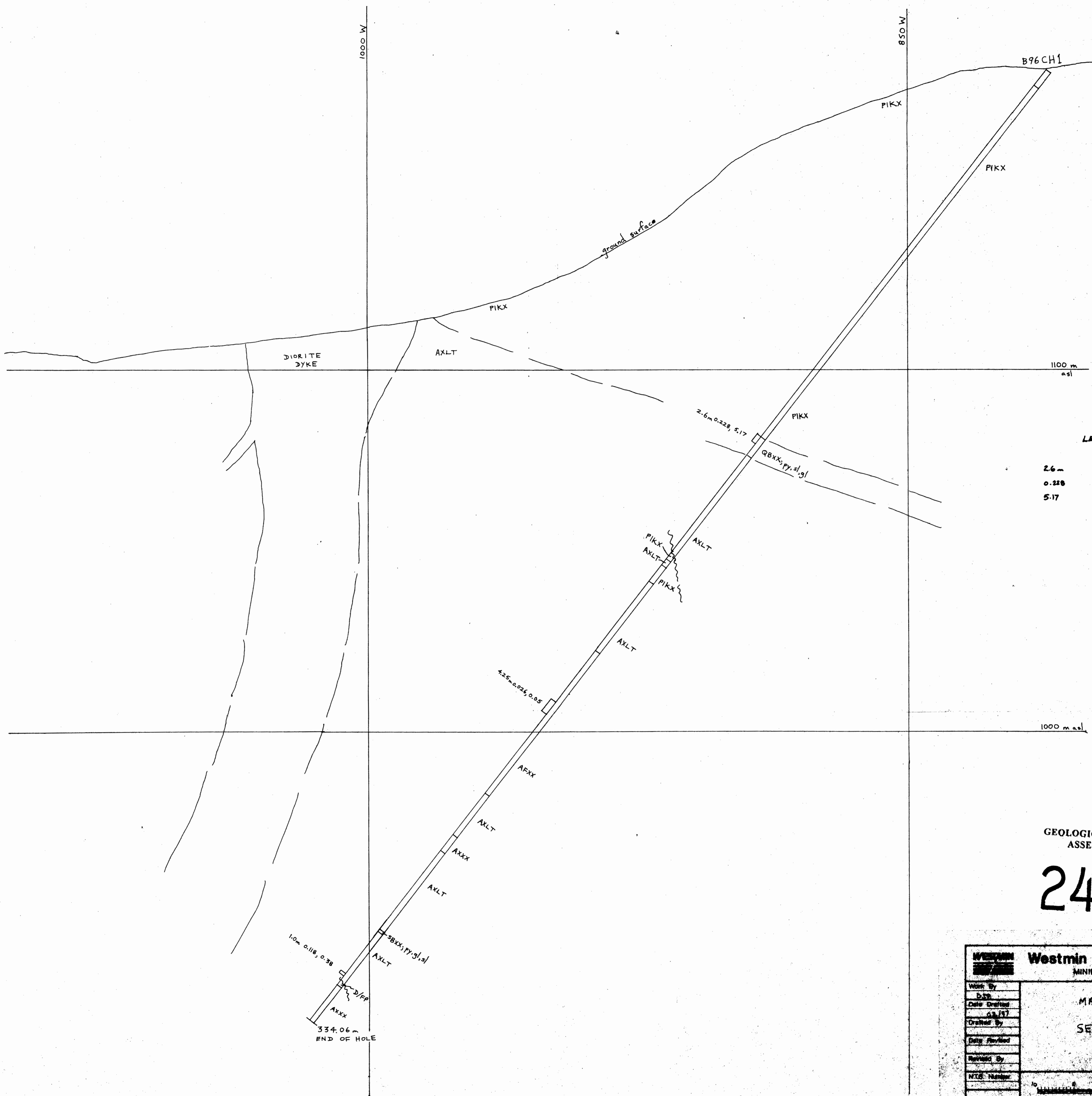


Figure  
5





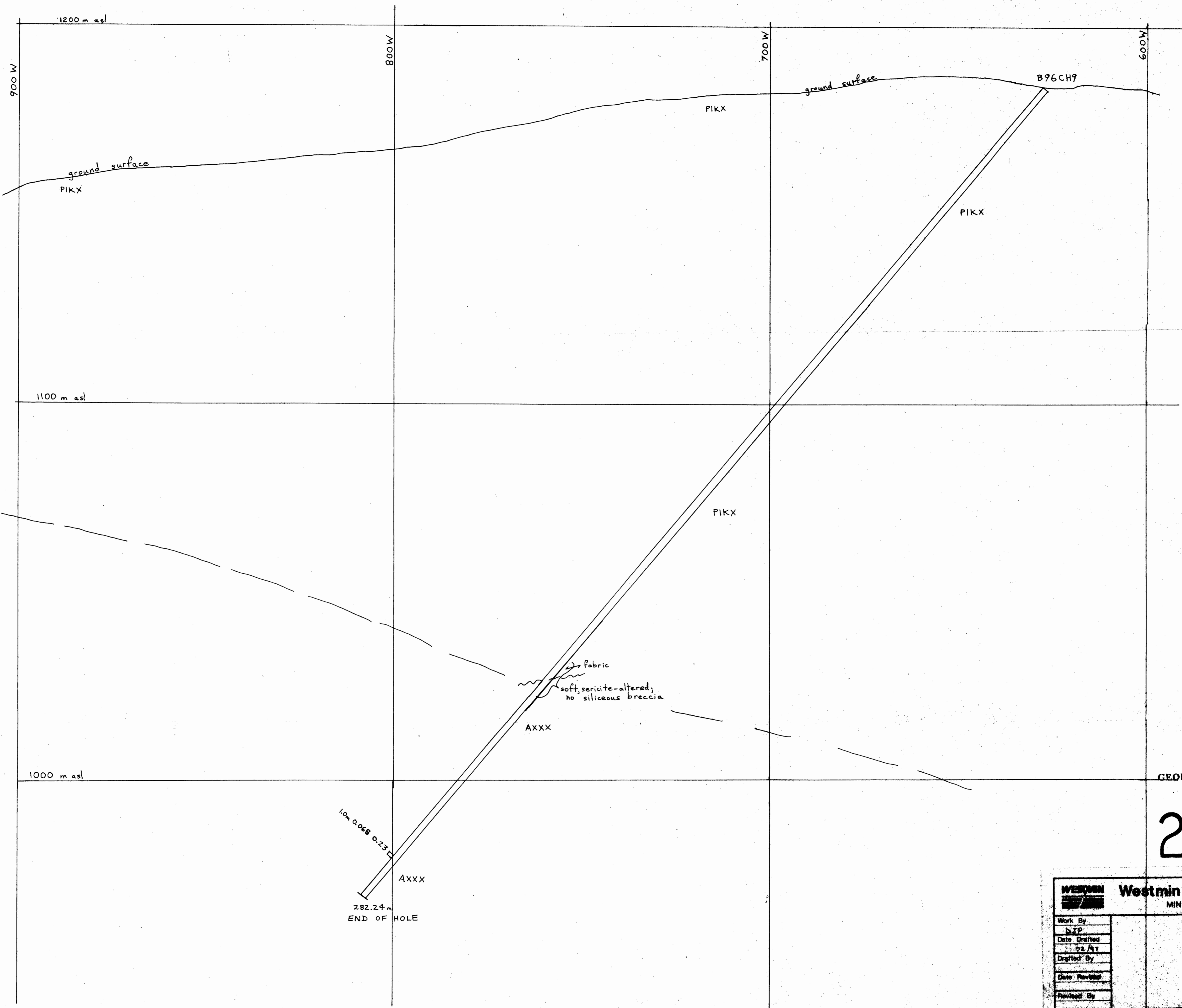
**LEGEND**

2.6m core length  
 0.228 gold oz/ton  
 5.17 silver oz/ton

GEOLOGICAL SURVEY BRANCH  
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**24,905**

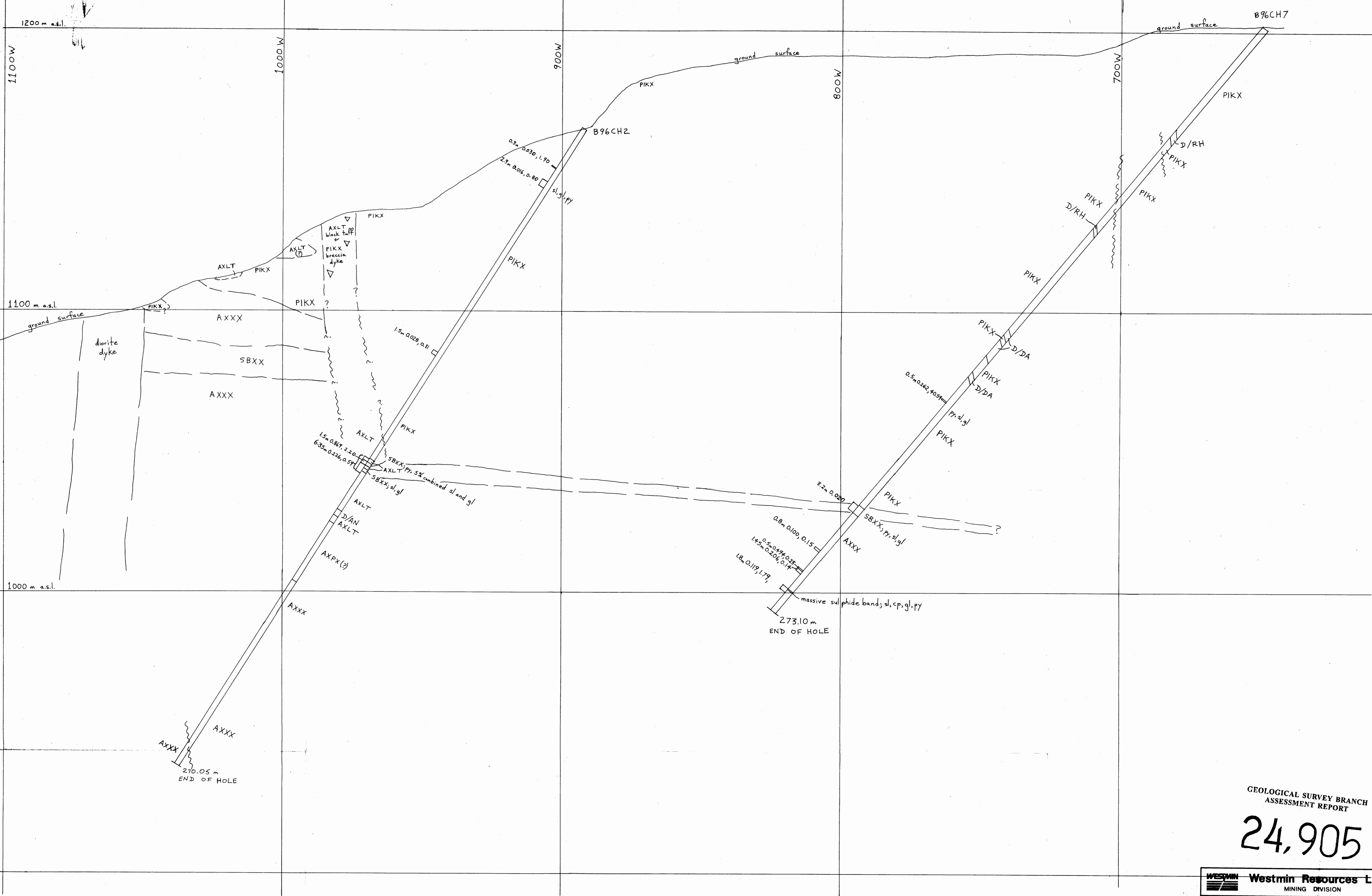
<b>Westmin Resources Limited</b> MINING DIVISION	
MARtha ELLEN ZONE SECTION 750 N 1:500 scale	
Work by D.S.P.	
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Revised by	
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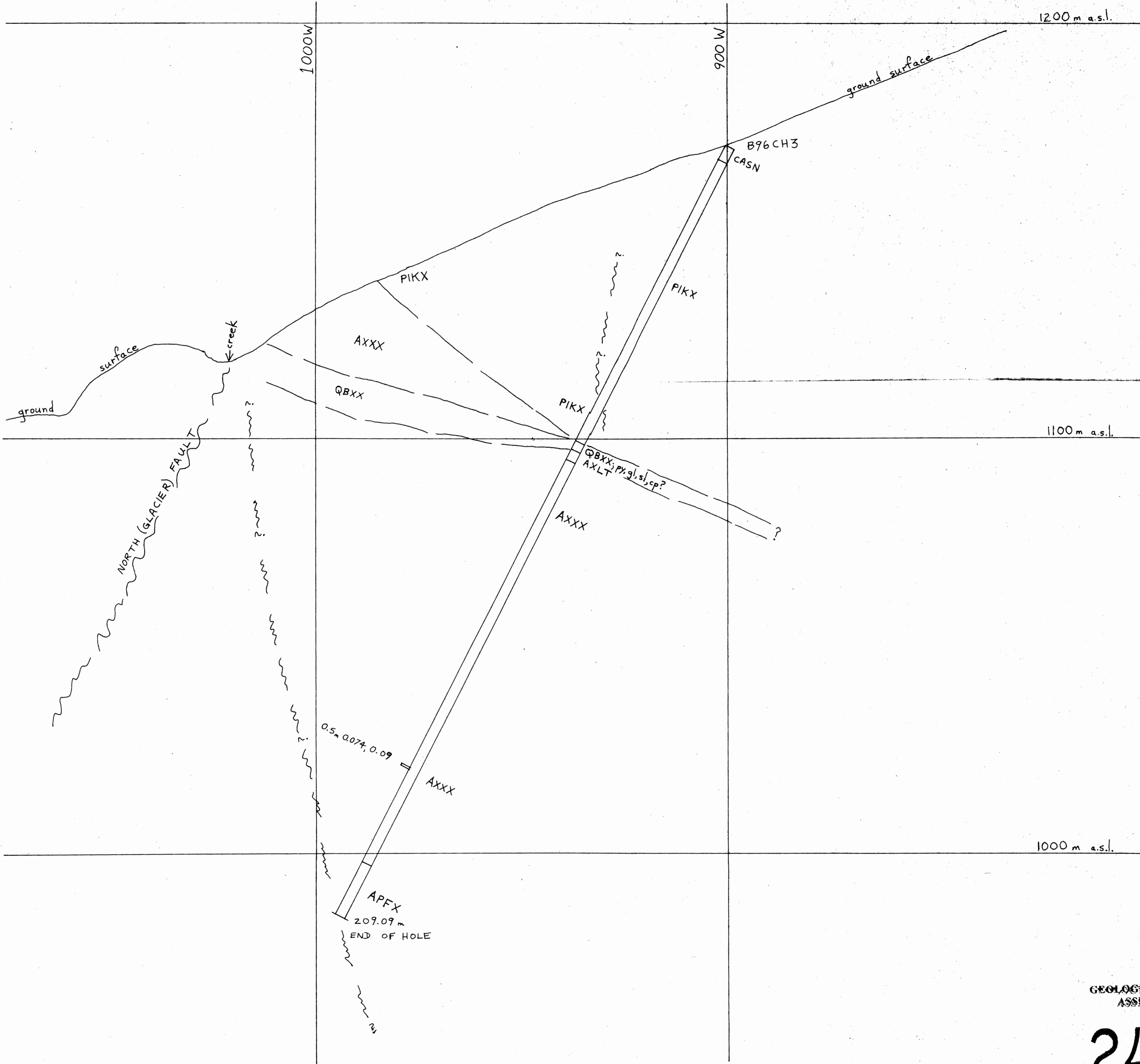


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SCALE 0 20 40

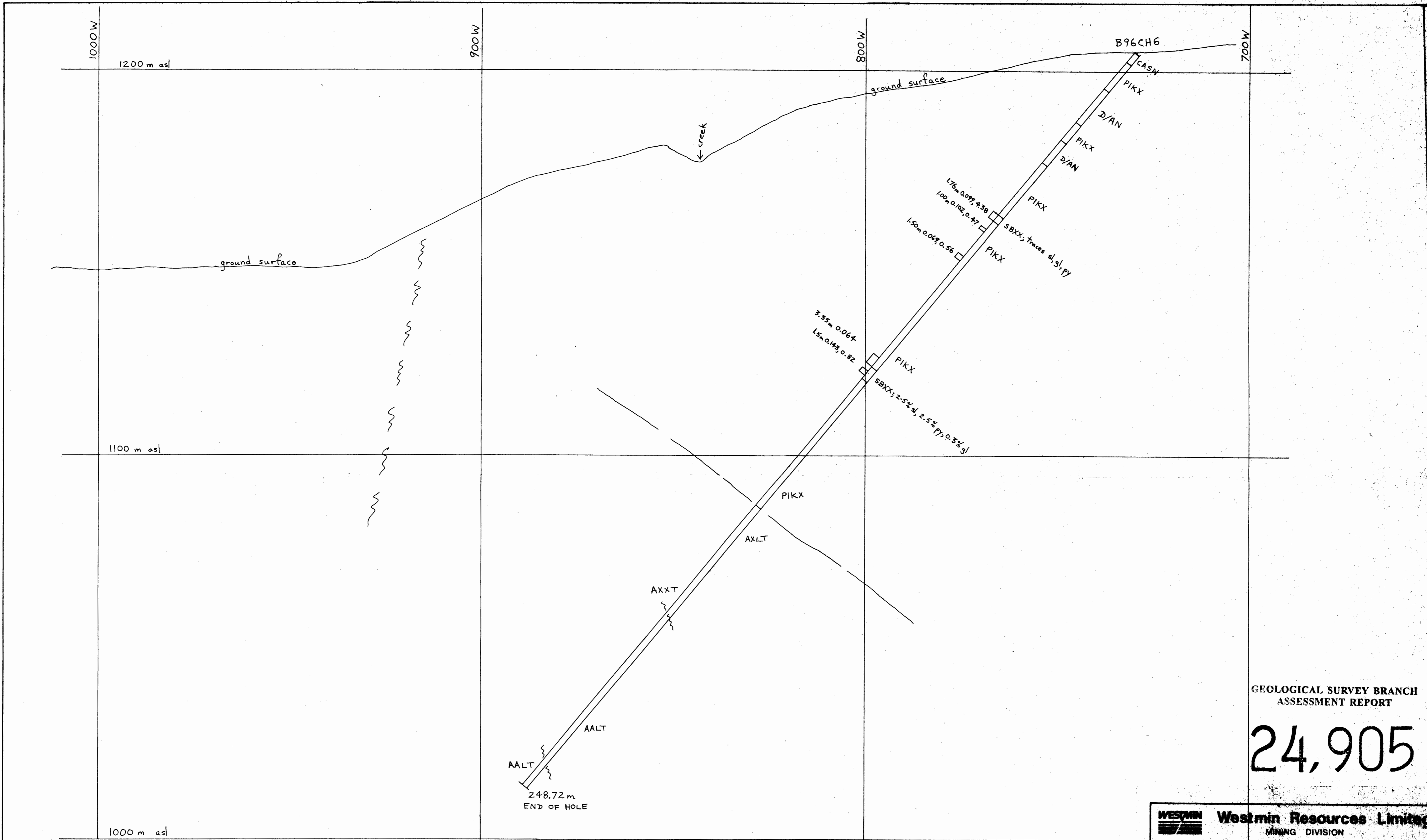




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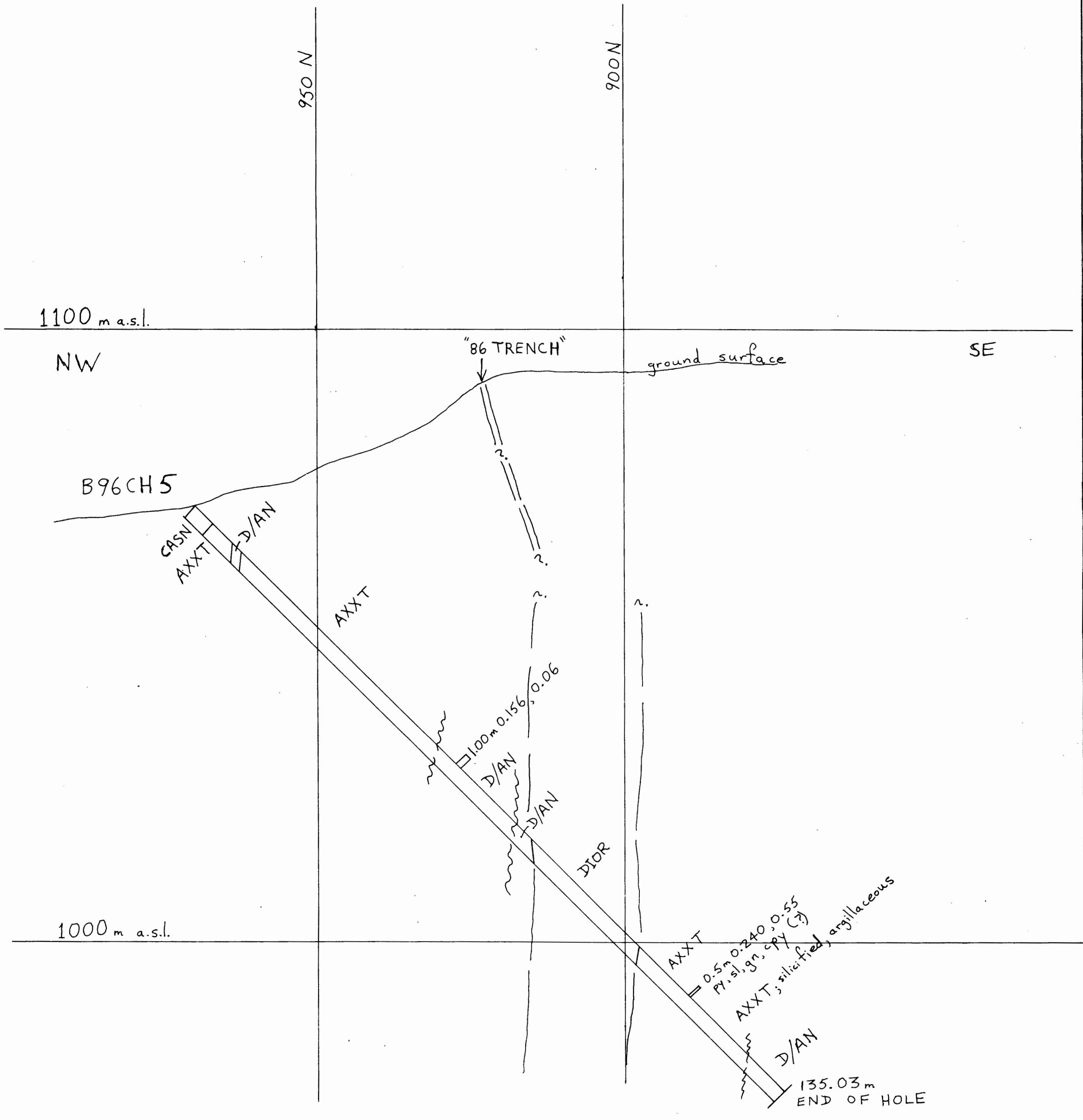
<b>Westmin Resources Limited</b> MINING DIVISION	
Work By J.P.P.	<b>MARTHA ELLEN ZONE</b> <b>SECTION 1200N</b> scale: 1:500
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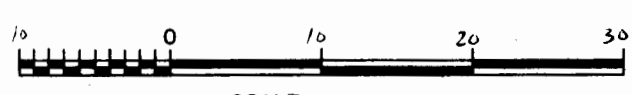
24,905

<b>WESTMIN</b>		<b>Westmin Resources Limited</b>	
		MINING DIVISION	
Work By	DIP	MARTHA ELLEN	
Date Drafted	02/97	ZONE	
Drafted By		SECTION 1358 N	
Date Revised		scale 1:500	
Revised By			
N.T.S. Number			



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Figure 11	