New Polaris Gold Mines Ltd.
Canarc Resource Corp.

## New Polaris Project

## Diamond Drilling Report-Fall 2005 <br> 

Atlin Mining Division
NTS 104K/12
N 58 42' lat., W $^{\prime} 13337^{\prime}$ long.

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### 1.0 Introduction

### 1.1 Location

The New Polaris Gold Mine (formerly Polaris -Taku Gold Mines) is located in the Atlin mining district approximately 140 kilometres south of the town of Atlin, British Columbia, and approximately 60 kilometres east of Juneau, Alaska. The index map (figure 1.1) indicates the relative location of the property.
The property is located at approximately $13337^{\prime} \mathrm{W}$ longitude and $5842^{\prime} \mathrm{N}$ latitude on the west shore of the Tulsequah River, approximately 6 miles north of its' confluence with the Taku River.
Between October and November 2004, 5417 feet ( 1651 metres) of diamond drilling comprised the first phase of an infill drilling program on the program. A portion of these results, from the eastern portion of the $C$ Vein, are reported here.

### 1.2 Access

Small aircraft provides access from Atlin or Juneau. Ocean-going barges have been used in the past to access the site when heavier equipment is required. Redcorp has applied to complete a road to their Tulsequah Chief project site, which could change the infrastructure to the area. The property can be operated year round. Access would be difficult during break up and freeze up.

The property is accessible only by air. The most proximal airstrips of significant scale are located in Juneau and Atlin. The nearest road access terminates 7 kilometres south of Atlin, and 18 kilometres southeast of Juneau. Historically the property was serviced by a barge landing on the west bank of the Taku River just downstream of its' conflurence with the Tulsequah River, however heavy silt deposition in the Taku Inlet over the last fifty years now limits river traffic to small jet boats capable of carrying passengers only.

Two airstrips service the property. A 400 metre gravel strip is located on the property and the second is located approximately 4.5 kilometres to the south. The historic road access to this strip has fallen into disrepair, with side-channels of the Tulsequah River cutting it off at a few points.. The length and condition of the second strip is undetermined. The present operators have not used this strip in the past ten years. Being proximal to the river it is subject to annual erosion, and therefore a careful study would be necessitated to determine the overall suitability for use. In the past this strip was long enough for larger aircraft such as the DC 3 and DC 4. The first strip is suitable for use by fully loaded Cessna's, Beaver's, and larger capacity aircraft with STOL capability such as the Short's Skyvan.

On the property there are numerous roads and trails. These have been left from previous mining activities, and have been in some cases modified. The roads are suitable for use by small pick-up or allterrain vehicle. The trails are suitable for foot passage only.

Figure 1.2 indicates the approximate location of the roads and airstrips about the property.

### 1.3 Climate

The climate is very characteristic of this section of the British Columbia coast, with heavy rainfall prevailing during the late summer and fall months, and comparatively heavy snowfall, interspersed with rain during the winter. The annual precipitation is approximately seventy-five inches of which twentyeight inches occurs as rainfall. The snow seldom accumulates to a depth greater than five feet on the
level. Winter temperatues are not severe and rarely fall below 10 degrees below zero Fahrenhit. Summer temperatures in July average $60^{\circ} \mathrm{F}$ with daytime femperatures reaching the high $80^{\prime} \mathrm{s}$ on occasion. The vegetation is typical of northern temperature rain forest, consisting primarily of fir, hemlock, spruce and cedar forest on the hillsides and aspen and alder groves in the river valiey.


Figure 1.1


NTS 104K/12
Atlin Mining Division

# Canarc Resource Corp New Polaris Project Claim Map 

Figure 1.2

### 1.4 Physiography

Extensive glaciation of recent age has been the dominant factor in topographic development. The Taku and Tulsequah Rivers, which dissect the area, provide its most striking features, with their broad valleys bounded by steep mountains. Numerous tributary streams flow from valleys filled with glaciers. The majority of the glaciers are fingers branching from the extensive Muir ice cap, lying to the northwest of the Taku River. The Tulsequah glacier, which terminates in the Tulsequah valley about ten miles north of the New Polaris mine site, is one of the largest glaciers in the immediate area. It forms a dam causing a large lake in a tributary valley that breaks through the ice barrier (Jokülhlaup) during the spring thaw every year, flooding the Tulsequah and Taku valleys below for three to five days.

Rugged relief characterizes the project site as alpine glaciation has been the pincised $U$-shaped valleys and . Located in the Coast Mountain Range, the topography of the area ranges between sea level and 2600 metres. The elevation of the New Polaris property ranges from 10 metres asl. on the Tulsequah River valley floor to 730 metres asl. on the eastern flanks of Whitewater Mountain..

Recent alpine glaciation typifies The physiography an area, which has been influenced by recent glaciation. The Taku and Tulsequah Rivers are broad till-filled valleys commonly more than 1.5 kilometres wide. The vertical extent of the till is unknown, however past seismic work and surface diamond drilling indicate thicknesses increasing away from the margins of the valley floor to a maximum of approximately 240 metres at its centre.

Outcrops on the property are scarce and represent only $5 \%$ of the total surface area.

### 1.5 Vegetation

Vegetation on the property consists of heavily forested slopes and floodplains. The forest was cutover approximately 50 years ago to provide lumber for the mining and residential requirements of the day. Today the forest is composed of cottonwoods, alders and brush in the near floodplain area, and spruce, hemlock and red on the mountain slopes to elevation of approximately $3500^{\circ}$. Above this elevation alpine vegetation (sedge, heather) prevails. This secondary growth is mature enough to provide a valuable resource for current mining purposes.

### 1.6 Wildlife

Wildlife observed in the area includes moose, black bear, grizzly bear, mountain goat, wolf and wolverine along with other small mammals. Trumpeter swans, bald eagles, rock ptarmigan and grouse are indigenous to the area. The disruption of flow in the Tulsequah River by the seasonal glacial outbursts provides for a negligible commercial fishery, however, the Whitewater and Shazah creeks, and pools in the Tulsequah River flood plain have been identified as spawning and rearing habitat for Steelhead, Dolly Varden char, and all five species of Pacific salmon.

### 2.0 Property History

From 1923 to 1925 the Big Bull and Tulsequah Chief properties were discovered along the east side of the Tulsequah River and opened up the Taku River district. In 1930, Noah A. Timmins Corporation optioned some of the claims that make up the New Polaris property and conducted trenching and diamond drilling in 1931. The trenching exposed a number of veins of which 10 showed promising grades. A short exploration adit (about 30 feet long) was also driven into the side of the hill and Timmins drilled 19 holes for a total of 5297 feet but was unable to correlate the intersections and elected to drop the option in September 1932.

The Alaska Juneau Gold Mining Company then optioned the property and conducted underground exploration from the "AJ" (Alaska Juneau) adit. Alaska Juneau drove a total of 625 feet of drifting and, although they intersected "ore grade" mineralization, they too had problems with correlation and dropped the property in the fall of 1934 .
H. Townsend and M.H. Gidel of the Anaconda Corporation examined the property in 1934 carefully mapping the showings. They came to the conclusion that commercial ore bodies existed even though these showed irregularity due to faulting. Samples were sent to Geo G Griswold in Butte Montana who obtained gold recoveries from flotation tests in the order of 88 percent.
D.C. Sharpstone then secured an option on the property on behalf of Edward C. Congdon and Associates of Duluth, Minnesota. Congdon conducted 775 feet of underground exploration in the "AJ" tunnel and collared 85 feet into the Canyon adit. The Polaris-Taku Mining Company was then incorporated in 1936 to take over the property from Congdon. Polaris-Taku erected a 150 -ton per day flotation mill in 1937 and mined underground continuously until it was closed down in April 1942 due to labour restrictions brought on by the Second World War. Mining Operations resumed in April 1946 and continued until 1951 when the mine was closed due to high operating costs, a fixed gold price and the sinking of a concentrate barge shipment during a storm in March 1951.

An Edwards roaster and a cyanide plant to produce bullion were installed and tested in 1949 in order to improve recovery and reduce shipping cost of concentrates to the Tacoma smelter. The addition of the roaster helped improve milling economics, but its capacity was somewhat limited as it could treat only about $45 \%$ of the concentrates produced from the flotation plant.

After closure the mill was leased to Tulsequah Mines Ltd. (owned by Cominco) who modified it to process 600 TPD of massive sulphide polymetallic ore (containing gold, silver copper, lead and zinc) from the Tulsequah Chief and Big Bull Mines. Tulsequah Mines Ltd used the mill from 1953 to 1957.

Numalake Mines acquired the property in 1953, changed their name to New Taku Mines Ltd and undertook rehabilitation work of the mine's plant. A negative feasibility study in 1973 halted this work. New Taku changed its name to Rembrandt Gold Mines Ltd in 1974.

The property lay idle until Suntac Minerals Corp. optioned the property in 1988 and started surface exploration. Canarc merged with Suntac in 1992 and bought out Rembrandt's interest in 1994 and has continued exploration up to the present. The Canarc's subsidiary New Polaris Gold Mines (formerly Golden Angus Mines Ltd.) currently operates the property.

Some pieces of major equipment were removed from the Polaris-Taku site since closure (crushers and mills) and no further mining has taken place on the property. Most of the buildings have been removed.

A few of the townsite houses and the mechanical shop are in reasonably good condition and are currently being used for exploration purposes.

Although the underground equipment has been removed, the hoist, sheaves and conveyances are still in place. The "AJ" level was reopened in 1990. Ground conditions are excellent and there is excellent airflow throughout. The shaft is in excellent condition and required very little repair to facilitate the 1997 underground program. The "Polaris" adit collar was also re-established at this time and used as the primary access for that program.

### 3.0 Geology

### 3.1 Regional Geology

The Polaris-Taku mine lies within the Intermontane Province of the Western Cordillera approximately 4.5 kilometres from its western contact with the Coast Plutonic Complex. This portion of the Intermontane belt is predominantly composed of the lowermost sections of the Stikine Terrane.

The Whitewater Suite represents the oldest rocks in the area, possibly early Palaeozoic in age, and dominates the geology on the western edge of the property. It consists primarily of strongly metamorphosed and deformed quartzite and quartz-rich graphitic schist with interlayers of mafic, ultramafics, marble, and gneiss. The Whitewater Suite grades to the east into the less metamorphosed metavolcanic and metasedimentary rocks of the Mount Stapler Suite. Continuing east across the property, the Mount Stapler Suite is in fault contact with the similar yet less deformed mid to upper greenschist facies metamorphosed rocks of the Mount Eaton Suite.

This group of rocks hosts the deposit and composes the northeastern third of the property. It dominates the geology on the opposite (eastern) bank of the Tulsequah River where it hosts the Tulsequah Chief and Big Bull volcanogenic massive sulphide $\mathrm{Cu}-\mathrm{Pb}-\mathrm{Zn}-\mathrm{Au}-\mathrm{Ag}$ deposits.

### 3.2 Regional Structural Geology

The structural trend in the area is north-northwest to south-southeast, parallel to the alignment of the Late Cretaceous-Tertiary Coast Plutonic Complex which dominates the geology immediately west of the B.C.Alaska international border. The older rocks have been intensely folded, sheared and deformed into broad doubly plunging symmetrical folds with large amplitudes.

The Mount Stapler and Mount Eaton Suites are separated by the Llewellyn fault which is a regionally significant north-south structure having a long history of movement. The most recent movement has been dextral (west side to the north). Slightly north of the Tulsequab Chief deposit on the east bank of the Tulsequah River, the Llewellyn fault is truncated and offset to the west onto the Polaris-Taku property by the east-west oriented Chief Cross fault.

### 3.3 Property Geology

The Mount Eaton Suite is a package of weakly metamorphosed volcanic rocks within the middle to upper Palaeozoic Stikine assemblage, which constitutes the basement of the Stikine Terrane. The Polaris-Taku portion of this suite is composed predominantly of basaltic to andesitic augite-phyric volcaniclastics and associated intrusives with lesser amounts of limestone, serpentinised ultramafics, and gabbro. These volcaniclastic and sedimentary units are northwest to north striking, vertical to steeply dipping and range in character from laminated ash to coarse tuffbreccia. Radical lateral facies changes typical of a dynamic depositional environment preclude reliable correlation of individual units across significant distances and thus hamper accurate interpretation of large-scale folding and fault offsets.

### 3.4 Property Structural Geology

All of the strata within the property have been subjected to compression, rotation, and subsequent extension. Figure 3.1 shows the prominent structural orientation, which is characterised by folds


## NEW POLARIS PROJECT Property Geology Northern Portion

Mount Eaton Suite

serpentinite
amphibolite
Elli gabbro
basalt
feidspar porphyry andesite metavolcanic rocks limestone

Mount Stapler Suite

schist
boundary schist
$\approx$ Portal

Figure 3.1
trending, northwest southeast and plunging to the southeast. The plunge of folds appears to be variable though generally shallow. Pcrvasive, weak to moderate, bedding-parallel flattening across the property is suggested both by the absence of obiique fabrics and by local strongly foliated zones having the same attitude as bedding within weakly foliated units. Small-scale isoclinal and intra-folial folds strike north-north-westeriy and plunge moderately to the north. This is typical across most of the Mount Eaton suite. Numerous faults arc found on the propenty, the more significant of which are summarised below.

The possible exteusion of the L.lewellyn fault, termed the South Llewellyn fault, continues south from the Chief Cross fault along mine grid co-ordinate 4400 East. Slightly north of Whitewater Creek it is offset to the west by an east-west fault, the 101 fault, to contirue in a more southeast orientation on the opposite
side of Whitewater Creek. This northwest-southeast oriented structure was named the Limestone Fault due to its bedding parallel attitude within a discontinuous limestone/marble horizon. It marks the southwest boundary of the "mine wedge"; the wedge shaped package of rock within which all past production took place. The northern boundary of the "mine wedge" is further defined by the Whitewater Creek Schist Zone, a zone of schistose chlorite-amphibolite-serpentinite altered andesitic to ultramafic rocks less than 300 feet thick. A complex network of brittle faults is also found within this zone. Three major faults, Numbers 1 and 5, and an unnamed fault, lie within the Mine wedge. The No, 1 and No. 5 faults strike northwest southeast, dip approximately $45^{\prime}$ to the northeast, and are subparallel to the unnamed fault, which dips steeply to the southwest. The No. 1 fault has reverse displacement of up to 100 feet while the displacement of the No. 5 fault is poorly defined. The southwest dipping, unnamed fault shows no displacement, as it apparently parallels the A-B vein system. Between the No. 1 and No. 5 faults, the subparallel Nos. 2, 3 and 4 faults have been mapped in the upper levels. Displacement along these three faults is poorly defined, although movement of up to 30 feet is observed. Nos. 2, 3 and 4 faults appear to converge into a single fault and to weaken with depth.

### 3.5 Deposit Geometry

The property geology, figure 3.2, and mine workings, figure 3.3, diagrams show the general structure of the veins. The distribution outlines the wedge shape, the predominant orientations and continuity of the zones, and the overall plunge of the system to the southeast. An early interpretation of the structure shows that various veins appear to meet and form "junction arcs" where both thickness and grade improve.

The most prominent vein orientations are: northwest striking and southwest dipping, the "A-B" veins; north striking and east dipping, the ' Y ' veins; and the less extensive but economically important east to northeast striking and south dipping zones at the intersection of the previously mentioned vein sets. Recent workers interpreted these zones initially as "junction arcs". Historically they were known individually as the 25 vein, the 1-3-5 veins, and the deep, similarity oriented component of the current resource, the "C" vein. Up to $75 \%$ of total past production came from within 300 feet to either side of these junction arc centre lines. The recently discovered north zone bears many similarities to the $A B$ zone and is interpreted as its fault offset northward continuation.

The arcuate nature of the deposit geometry within the mine wedge lends itself to an interpretation as a fold structure. However, this interpretation is not supported by both the intersection relationships between the ore structures and regional foliation, and textural differences between the individual vein sets.

More detailed analysis of the vein sets (Rhys, 1992) suggests they developed as a conjugate shear system during northeast to southwest compression. Respectively, the AB and Y vein systems represent the sinistral and dextral shears, while the Junction Arc and C vein systems represent the tensional component of the conjugate system.

### 3.6 Mineralisation

Mineralisation of the Polaris-Taku deposit bears strong similarities to many Archean Lode gold deposits such as the arsenical gold camp of Red Lake, Ontario, and the deposits of the Wiluna Belt in Western Australia.

The vein mineralization consists of arsenopyrite, pyrite, stibnite, and gold in a gangue of quartz and carbonates. The sulphide content is up to $10 \%$, with arsenopyrite the most abundant, and pyrite the next important. Stibnite is fairly abundant in some specimens but overall comprises less than one-tenth of $1 \%$ of the vein matter. Alteration minerals include fuchsite, silica, pyrite, sericite carbonate and albite. Age dating by 'Ar / "Ar on sericite/fuchsite alteration associated with mineralisation provides an early tertiary date of 63.44 Ma . Gold is associated primarily with arsenopyrite and to a lesser extent with pyrite. Arsenopyrite is very fine-grained ( $<1 \mathrm{~mm}$ ) and acicular with a mode of occurrence commonly referred to as the "replacement type". It is observed as pervasive and patchy disseminations in altered wall rocks proximal to, or as breccia fragments within, quartz-ankerite veined shear zones.

Stibnite has no apparent influence on gold grade as it is found only in what are interpreted to be postmineralisation quartz veinlets. It is also fine to very fine grained, frequently occurring as styolitic stringers within quartz.

The quartz-ankerite veining associated with the ore is itself not mineralised. Evidence from drillcore and historic observations confirm that with an increase in the proportion of veining comes a corresponding dilution of the ore zone. Ankerite veining may represent a slightly later veining event, which exploited the same structurally prepared fluid pathways as those which may have carried the earlier silica-sulphidegold mineralisation. This is displayed quite well by the abundant breccia veining throughout the deposit where angular wall-rock fragments, both altered and unaltered, mineralised and unmineralised, are suspended in an ankerite-quartz vein matrix. Sulphide rich ribbon veinlets may represent mineralised host rocks, which have undergone subsequent flattening/shearing and veining.
Gold is distributed in three weakly defined populations, 0 to $0.12,0.12$ to 0.52 , and greater than 0.52 oz $\mathrm{Au} / \mathrm{t}$.


Figure 3.2

### 4.0 Exploration History

4.1 Exploration Results, 1988-1997

Recent exploration drilling consists of 143,992 feet in 202 holes drilled since 1988. Individual annual footages are provide in table 4.1. A general distribution of this drilling can be seen in figure 3.2. Initial efforts were confined to the lower elevations of the property due to limited availability of road building equipment and were designed to test the " Y " Vein system either down dip or along strike from old workings. Discovery of the "C" Vein system in 1989 resulted in a refocusing of efforts towards defining this Zone. Drilling during 1994 and 1995 has been designed to test the North Zone and the downward continuity of the " C " Zone.
Diamond drilling from underground workings in 1996 was focused from the AJ level and targeted both the $A B$ and $Y$ vein systems.
Diamond drilling from underground workings in 1997, was focused from the AJ, Polaris and 150 levels and targeted the $A B, Y$, and $C$ vein systems.

Table 4.1

## SUMMARY OF EXPLORATION DRLLING TO 1997

| Year | Zone \# | \# of Holes | Footage |
| :---: | :---: | :---: | ---: |
| 1988 | Y VEIN | 8 | 3373 |
| 1989 | Y VEIN | 19 | 13378 |
| 1990 | C VEIN | 10 | 9391 |
| 1991 | Y VEIN | 4 | 4205 |
| 1991 | C VEIN | 7 | 6729 |
| 1992 | Y VEIN | 5 | 5262 |
| 1992 | C VEIN | 18 | 15662 |
| 1993 | C VEIN | 8 | 4270 |
| 1994 | C VEIN | 9 | 7729 |
| 1994 | Y VEIN | 5 | 5044 |
| 1994 | NORTH ZONE | 16 | 4403 |
| 1995 | NORTH ZONE | 14 | 11596 |
| 1995 | C VEIN | 6 | 13338 |
| 1996 | Underground | 24 | 10514 |
| 1997 | Underground | 49 | 29098 |
| 2003 | C, AB Veins | 3 | 5021 |
|  |  |  |  |
|  | Total | 205 | 149013 |

### 4.2 Mineral Resources

A review of previous resource calculations has been made with the goal of identifying the probable order of magnitude of "reserves" that may be defined over time. While very little of these resources can be
defined as proven mineable reserves at this time. There is sufficient available data to qualify them as probable and possible resources.

An estimate of Polaris-Taku reserves was made prior to closure in 1951 based on stringent precepts. "Reasonably Assured" ore was projected 25 feet in the plane of the vein above and below sampled drift sections of mineable grade while "possible" ore was projected an additional 25 feet beyond these confines (Parliament 1949). These reserves were apparently based solely on underground sampling without using underground diamond drill intercepts (WGM 1992). The "remaining reserves" at the time of closure was 105,000 tons grading $0.42 \mathrm{oz} /$ ton including $17 \%$ dilution.

Adtec Mining Consultants (1972) recalculated these "reserves" in contemplation of reopening the mine. These were recalculated to be 148,000 tons at $0.29 \mathrm{oz} / \mathrm{ton}$. Based on similar definitions and existing mine drawings and assay plans, Adtec Consultants (1983) recalculated the remaining "reserves" within the mine workings. These were defined to be in the order of 223,000 tons at $0.32 \mathrm{oz} \mathrm{Au} / \mathrm{SDT}$ (diluted) based on a $0.15 \mathrm{oz} / \mathrm{t}$ cut-off and a minimum mining width of 4 feet. These reserves were subdivided into 151,000 tons of "assured" and 72,000 tons of "reasonably assured" reserves.

Beacon Hill recalculated these reserves in 1988 for Suntac Minerals Corporation using a minimum mining width of 5 feet (instead of 4 feet) with similar results. Their reserve estimate was "limited to those areas where continuous sampling data was available along drifts, raises and stope backs, etc. and where it appears that minimal development work would be required to access the reserves". Beacon Hill estimated a total probable and possible reserve of 244,420 tons at 0.33 oz . Au/SDT with 132,210 tons at $0.33 \mathrm{oz} . / \mathrm{t}$ classed as probable and 112,210 tons at 0.32 classed as possible. Table 4.2 summarises their calculations. In 1989, Beacon Hill added further probable and possible mining reserves from 27 new drill holes completed by Suntac. They estimated that the new drilling had increased the reserves by 380,000 tons at 0.39 oz . Au/SDT (probable) and 820,000 tons at $0.39 \mathrm{Au} / \mathrm{SDT}$ (possible) which, added to their previously calcuiated reserves, brought the overall reserve potential up to $1,450,000$ SDT @ 0.38 oz . $\mathrm{Au} / \mathrm{SDT}$ (diluted) above the lowest worked level of the mine ( 600 level at elev. -462 feet Below Sea Level 'BSL').

Montgomery Consultants were commissioned to conduct a Geostatistical Study of the Geological Resource for the Polaris-Taku Deposit in 1991. G.H. Giroux carried out this review and calculated a total resource of $2,225,000$ tons grading 0.433 oz ./ton based on a geostatistical approach using a cut-off grade of $0.25 \mathrm{oz} /$ ton. These reserves were divided into 333,000 tons @ $0.437 \mathrm{oz} . / \mathrm{t}$ (probable) and $1,892,000$ tons @ $0.432 \mathrm{oz} . / \mathrm{ton}$ (possible). The calculation discounted much of the reserves around the old workings and did not include dilution and minimum mining width provisions. These calculations were based on both old and new drilling and extended the resource base down to roughly 1200 feet BSL.

Table 4.2
BEACON HILL RESERVES (1988) WITHIN MINE WORKINGS

| PROBABLE RESOURCES |  |  |  |  | POSSIBLE RESOURCES |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Level | In-Situ |  | Diluted |  | In-Situ |  | Diluted |  |
|  | Tons | Grade | Tons | Grade | Tons | Grade | Tons | Grade |
|  | (SDT) | (oz/SDT) | (SDT) | (oz/SDT) | (SDT) | (oz/SDT | (SDT) | (oz/SDT) |
|  | Above Polaris Adit |  |  |  |  |  |  |  |
| Canyon | 8,120 | 0.5 | 10,650 | 0.38 | 2,380 | 0.47 | 3,340 | 0.33 |
| C | 9,700 | 0.31 | 11,840 | 0.25 | 5,170 | 0.33 | 6,700 | 0.25 |
| B | 16,930 | 0.36 | 10,120 | 0.3 | 16,930 | 0.36 | 20,120 | 0.3 |
| AJ | 6,020 | 0.28 | 8,470 | 0.2 | 6,630 | 0.29 | 9,210 | 0.21 |
| Polaris | 12,670 | 0.37 | 16,720 | 0.28 | 10,450 | 0.36 | 14,080 | 0.27 |
| Sub |  |  |  |  |  |  |  |  |
| Total | 53,440 | 0.37 | 67,800 | 0.29 | 41,560 | 0.35 | 53,450 | 0.27 |
|  | Below Polaris Adit |  |  |  |  |  |  |  |
| 150 | 310 | 0.52 | 570 | 0.28 | 400 | 0.52 | 740 | 0.28 |
| 300 | 19010 | 0.51 | 23830 | 0.4 | 14640 | 0.51 | 18870 | 0.39 |
| 450 | 120600 | 0.46 | 27080 | 0.35 | 18910 | 0.45 | 25080 | 0.34 |
| 600 | 10050 | 0.51 | 12930 | 0.4 | 11050 | 0.51 | .14,070 | 0.4 |
| Sub |  |  |  |  |  |  |  |  |
| Total | 50170 | 0.5 | 64410 | 0.39 | 45000 | 0.48 | 58760 | 0.37 |
| TOTAL | 103,610 | 0.43 | 132,210 | 0.33 | 85,560 | 0.42 | 112,210 | 0.32 |

Watts, Griffis, and McQuat were contracted to review the previous reserves in August 1992. Their review incorporated the residual reserves within the mine workings, as calculated by Beacon Hill in 1989, into their overall estimate of a total (diluted) mineral resource of $1,600,000$ tons at 0.46 oz . $\mathrm{Au} / \mathrm{SDT}$. Their calculations were based upon a minimum mining width of 5 feet or $15 \%$ dilution and a cut-off grade of $0.25 \mathrm{oz} /$ ton. The improvement in grade stems from the inclusion of new deeper holes that extend the known mineralzation to a depth of 1200 feet BSL and exclusion of lower grade material previously included in the Montgomery estimate.

Giroux was further contracted to provide reserve updates throughout 1992 and in February 1995 he recalculated the resources for the newly drilled portions of the "C" Zone. Recent drilling has also confirmed the existence of a new "North" Zone which, although it appears to be low grade ( $0.18 \mathrm{oz} / \mathrm{t}$ ) has exbibited possible significant widths in the order of 22 feet. Giroux has included calculations for this zone, which for purposes of this review have been excluded due to grade. The results of his recalculation show that the "C" Vein discovered just prior to mine closure represents a significant new addition to the resource base. He has calculated a total of 85,700 tons grading $0.426 \mathrm{oz} /$ ton (probable) and 595,000 tons
grading $0.425 \mathrm{oz} /$ ton (possibie) for this zone below the 450 Level (elev. 313 ft BSL ) and 1000 feet BSL. Most of this resource lies above 800 feet BSL and within 200 feet of the existing shaft bottom. The total resources calculated by Giroux to date are summarised on Table 4.2. His calculations were in situ based on a $0.25 \mathrm{oz} /$ ton cut-off and did not include dilution provisions as shown below.

In order to summarise the variety of RESOURCE CALCULATIONS identified above; the Beacon Hill calculation of residual reserves within and around the workings were totalled. To this total, the geostatistical resource calculations of Giroux were added after applying a general dilution factor of $25 \%$ at zero grade to Giroux's figures for the " Y " Zone and $15 \%$ at zero grade for the "AB" and "C" Zones. The in-situ resource base is presently estimated as 582,910 SDT @ 0.359 oz . Au/SDT (Probable), and 2,614,210 SDT @ 0.363 oz . Au/SDT (Possible) including appropriate dilution factors. The dilution factors were estimated based on vein characteristics. The " $Y$ " Veins are described as being high grade but narrow which makes them prone to high dilution from overbreak during mining as well as overmining. The "AB" veins in-situ grade, as calculated by Giroux, already contains internal dilution from a parallel dike. To this total, an overall additional dilution of $15 \%$ is considered appropriate. The " $C$ " vein should not experience much dilution since it is generally thought to be fairly thick however it has been diluted $15 \%$ to allow for its relatively flat slope in places.

Table 4.3

| Polaris Takus Geostatistical Resources |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Zone | PROBABLE RESOURCES |  |  |  | POSSIBLE RESOURCES |  |  |  |
|  | In-Situ |  | Diluted |  | In-Situ |  | Diluted |  |
|  | Tons | Grade | Tons | Grade | Tons | Grade | Tons | Grade |
|  | (SDI) | (oz/SDT) | (SDI) | (oz/SDI) | (SDI) | (oz/SDT) | (SD1) | (oz/SDI) |
| GIROUX (1995) |  |  |  |  |  |  |  |  |
| Y Zone | 210,000 | 0.461 | 262,500 | 0.369 | 987,000 | 0.469 | 1,234,000 | 0.375 |
| AB Zone | 78,000 | 0.403 | 89,700 | 0.35 | 508,000 | 0.387 | 584,000 | 0.337 |
| C Zone | 85,700 | 0.426 | 98,500 | 0.37 | 595,000 | 0.425 | 684,000 | 0.37 |
| Sub-total | 373,000 | 0.441 | 450,700 | 0.365 | 2,090,000 | 0.437 | 2,502,000 | 0.365 |
| BEACON HILL (1988) |  |  |  |  |  |  |  |  |
| Upper Levels | 53,440 | 0.37 | 67,800 | 0.29 | 41,560 | 0.35 | 53,450 | 0.27 |
| Lower Levels | 50,170 | 0.5 | 64,410 | 0.39 | 45,000 | 0.48 | 58,760 | 0.37 |
| Sub-total | 103,610 | 0.43 | 132,210 | 0.33 | 85,560 | 0.42 | 112,210 | 0.32 |
| TOTAL | 476,610 | 0.439 | 582,910 | 0.359 | 2,175,560 | 0.436 | 2,614,210 | 0.363 |

### 5.0 2004 Drill Program

### 5.1 Targeting

This program represents phase 1 of the and infill driliing program to gain a 100 feet by 100 feet pierce point spacing on more cohesive portions of the current resource. The western portion of the C vein was targeted by this program between the elevations of -450 and -1100 feet

Table 5.1 Drill Hole Collar Data

| Hole | Easting | Northing | Elevation | Inclination | Length |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $04-2000$ SW1 | 6045.3 | 2961.9 | 56.0 | -66 | 735 |
| $04-2000$ SW2 | 6041.9 | 2958.0 | 56.5 | -75 | 810 |
| $04-2000$ SW3 | 6045.6 | 2961.7 | 55.6 | -83 | 815 |
| $04-2100$ SW1 | 5858.6 | 3026.7 | 54.6 | -82 | 699 |
| $04-2100$ SW2 | 5871.5 | 2966.1 | 54.0 | -83 | 779 |
| $04-2200$ SW1 | 5831.3 | 2902.0 | 54.1 | -75 | 779 |
| $04-2200$ SW2 | 5831.3 | 2902.0 | 54.1 | -83 | 800 |

### 5.2 Equipment

Drilling was performed by Hy-Tech Drilling Ltd. of Smithers, BC, utilising a F-Tech 5000 drill rig and NQ2 ( 51 mm core diameter) sized rods. A D6 Ct bulldozer and John Deere Backhoe facilitated drill mobilisation and site preparation.

### 5.3 Sample Preparation

Drill core was logged and sampled in Canarc's on site core shack facility. All core was described, measured and intersections indicating potential for gold mineralisation were sampled and split using a rock saw. Half of the core was retained for reference and is stored in the core-racks on site.

Indiviual samples were placed in typical thick plastic sample bags, further grouped into large rice bags and sealed for transport to Atlin via fixed wing aircraft. Atlin Trucking delivered the shipment to Air North cargo in Whitehorse, Yukon. A courier service would take the shipment from Vancouver International Airport to ALSChemex Laboratories in North Vancouver B.C. At ALSChemex the analysis procedure is as follows:
Log sample in tracking system, dry, fine crush entire sample to better than $70 \%-2 \mathrm{~mm}$, split off up to 250 g and pulverize split to better than $85 \%$ passing 75 micron.
A 30 g nominal sample weight would be sent to fire assay, with samples having Au content greater than 1000 ppb (using Atomic Absorption finish) being treated to gravimetric finish.
Arsenic and Antimony were also measured utilising 27 elements by $\mathrm{HF}-\mathrm{HNO} 3-\mathrm{HClO} 4$ acid digestion, HCl leach and ICP-AES. Arsenic overlimits ( $0.01-30 \%$ ) by aqua regia digestion and AAS.

### 5.4 Hole Summaries

## 04-2100SW1

Collared to intersect the C Vein 50 feet down-dip of the 600 Level (el. -460 feet) this hole drilled 211.4 of overburden and proceeded through interlayered volcaniclastic rocks to the start of veining, alteration and mineralisation at 538.75 feet, and continued through to 574.5 feet. The lower portion of this section between 565.5 and 572.5 feet in the immediate footwall of the Sloco andesite dyke contains the strongest and most consistent gold mineralisation, averaging 1.0 ounces per ton.

## 04-2100SW/2

Collared to intersect the C vein 100 feet down-dip of hole 2100SW1 this hole reached bedrock at a depth of 218.6 feet. Interlayered volaniclastic rocks host a zone of veining and mineralisation in the hanging wall of the target zone that contains 0.40 ounces per ton between 560.8 and 563.0 feet. Further volcaniclastic rocks separate this from the $C$ vein upper boundary at a depth of 637.2 feet. Similar to hole 2100SW1, the lowermost portion of the structure contains the highest gold concentration with a grade of 0.93 ounces per ton over 26.4 feet.

## 04-2200SW1

Collared to intersect the C Vein 50 feet down-dip of the 600 Level and 100 feet along strike to the southwest of section 2100 SW. Reaching bedrock after 200 feet, ash tuffs and ash-lapilli tuffs along with variably foliated andesites with a thin zone of mineralisation at 534.0 feet comprise the hanging wall of the C vein. Commencing at 587.6 feet, a 47.0 feet intersection to a depth of 634.6 feet carries a grade of 0.34 ounces per ton. Within this interval a less mineralised portion from 610 to 619.8 feet carries only 0.046 ounces per ton Au . Similar to the holes on section 2100 SW , the the Sloko andesite dyke is located in the lower portion of the zone, from 622.5 to 625.0 feet.

## 04-2200SW2

224 feet of overburden was drilled in this hole targeted to pierce the C Vein 100 feet down-dip of of hole 2200SW1. Interlayered andesite tuffs to a depth of 415.3 feet are terminated by a 5 foot wide shear zone followed by seventy feet of andesitic tuffs and cherty argillites/tuffaceous sediment. More massive andesitic flows commence at 490 feet and continue to a depth of 679.0 feet. This interval hosts the C vein mineralisation. Alteration and qz -ankerite veining commence at a depth of 542.5 feet, however strong mineralisation is absent until between 627.3 and 641.0 where two high grade intersections bracket a five feet thick low grade interval and combine to average 0.75 ounces per ton over the 13.7 feet thick zone. The Sloko andesite dyke was not observed in this portion of the C vein, however the lowermost contact is close to the C veins projected intersection with the \#1 fault. Strongly foliated and or brittle faulted rocks that continue throught to the bottom of the hole at 800 feet indicate that the lowermost portion of the $C$ Vein may be faulted off in this area.

## 04-2000SW1

Unexpected flattening in this hole made for it's intended pierce point with the $C$ Vein to lie significantly higher than anticipated at the 600 level (el. -463 '), rather than 50 feet down-dip at and elevation of $-500^{\prime}$ a.s.1. The shallower dip of the this hole contributed to a greater length of overburden being drilled. Bedrock comprised of ash-lapilli tuffs was reached at a down-hole depth of 299 feet, and this lithology continued throughout the length of the hole over it's entire length of 735 feet. Alteration and veining associated with the $C$ vein comprise a narrow zone between 585.0 and 601.0 feet, including a 3.7 feet thick Sloko andesited dyke starting at 589.3 feet. While the entire zone is anomalous in gold content, only a 3.2 feet thick interval below the dyke at 593.0 shows a significant gold content of 0.327 ounces per ton.

## 04-2000SW2

260 feet of overburden at this location is followed by lapilli tuff and ash tuff to a depth of 309.5 feet where an 81 foot thick more massive basaltic rock is encountered. Ash tuff comprises the remainder of the whole and contains abundant hanging wall alteration and intermittent mineralisation in the hanging wall of the $C$ Vein. Strong gold mineralisation is restricted to the margins of the shear commencing at a depth of 677.6 feet. and continuing until 685.5 feet. A 3 feet thick Sloko andesite dyke that exploited this shear bisects this interval, thuse diluting the grade to an average of 0.43 ounces per ton over 7.9 feet.

## 04-2000SE3

Collared over a 253 foot thickness of overburden, this hole produced the deepest pierce point of the program, and was also distinct in it's intersection of multiple veins.
Interlayered volcaniclastics dominate to a depth of 625 feet and much of it is alterd and veined between 403.5 and 479.0 feet. A single 4.2 feet thick interval grading 0.31 ounces per ton is the only significant gold mineralisation in this zone.
A 22 feet thick basaltic unit below the volcaniclastics marks the hanging wall contact of stronly altered and sporadically veined and mineralised ash and lapilli tuffs, resulting in a 23.7 feet thick interval from 644.3 to 668.0 averaging 0.21 ounces per ton Au .
Sixty-six feet of weakly mineralised andesite separate this upper altered and mineralised zone from the principle $C$ vein intersection commencing at a hole-depth of 734.5 feet. Consistent strong veining and mineralisation is found within a 16 feet long interval from 741.0 to 757.0 feet that contains 0.58 ounces per ton gold

### 6.0 Summary and Interpretation

Drilling at this tighter 100 feet pierce point spacing indicated good continuity of the veining and gold mineralisation and offered few surprises regarding vein width and grade with respect to previous more widely spaced drilling. Phase 2 of this infill drilling program should continue both down-dip and along strike at a similar spacing.
The apparent flattening and thickening of the C Vein suggested by hole 2200SW1 is consistent with structural observations from past mining activity.
Future holes should be collared at inclinations steeper than 70 degrees as significant flattening at inclinations shallower than this contibute to inaccurate pierce point locations.

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### 8.0 Statement of Qualifications

I, James Gregory Moors, of 3375 Ontario St., Vancouver, British Columbia hereby certify that:

1. I am a geologist under the employ of Canarc Resource Corp., and have from November 1993 to April 1995, and from July 2002 till present been responsible for mineral exploration at the New Polaris Gold Mines site.
2. I am a graduate of University of Waterloo, with a B.Sc. Honours Earth Science degree (1989).
3. I am a Registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have practised as a Geoscientist in British Columbia since 1991.
5. This report was prepared by me


Dated this $23^{\text {rd }}$ day April 2005.
VANCOUVER, BRITISH COLUMBIA

## Appendix A

## Drill Hole Geology Logs

| Hole Name | From | to | Geology | Core Angles |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | So | S1 |
| 5000SE1 | 0.0 | 299.0 | overburden |  |  |
|  | 299.0 | 556.0 | ash-lapilli tuff | 25 |  |
|  | 556.0 | 563.8 | fit |  | 20 |
|  | 563.8 | 585.0 | ash-lapilli tuff | 25 |  |
|  | 585.0 | 589.3 | veined-mineralised zone |  |  |
|  | 589.3 | 593.0 | dyke |  |  |
|  | 593.0 | 601.0 | veined-mineralised zone |  | 50 |
|  | 601.0 | 735.0 | ash-lapilli tuff | 25 |  |
| 5000SE2 | 0.0 | 259.0 | overburden |  |  |
|  | 259.0 | 273.0 | lapilli tuff |  |  |
|  | 273.0 | 309.5 | andesite tuff | 30 |  |
|  | 309.5 | 490.5 | Bas |  |  |
|  | 490.5 | 591.2 | Ash tuff | 30 |  |
|  | 591.2 | 679.0 | altered-mineralised zone |  |  |
|  | 679.0 | 681.9 | dyke |  | 65 |
|  | 681.9 | 695.9 | altered-mineralised zone |  |  |
|  | 695.9 | 810.0 | andesite tuff |  |  |
| 5000SE3 | 0.0 | 253.0 | overburden |  |  |
|  | 253.0 | 277.0 | lapilli tuff |  |  |
|  | 277.0 | 403.0 | ash-lapili tuff |  |  |
|  | 403.0 | 431.0 | altered-mineralised zone |  |  |
|  | 431.0 | 479.0 | veined-mineralised zone |  |  |
|  | 479.0 | 621.5 | ash-lapilli tuff |  |  |
|  | 621.5 | 644.3 | basalt |  |  |
|  | 644.3 | 668.0 | veined-mineralised zone |  | 40 |
|  | 668.0 | 693.0 | andesite | 20 | 40 |
|  | 693.0 | 715.0 | altered-mineralised zone |  |  |
|  | 715.0 | 731.0 | ash tuff |  |  |
|  | 731.0 | 767.2 | veined-mineralised zone |  |  |
|  | 767.2 | 775.0 | dyke |  |  |
|  | 775.0 | 779.0 | veined-mineralised zone |  |  |
|  | 779.0 | 815.0 | ash tuff |  |  |
| 5100SE1 | 0 | 211.4 | overburden |  |  |
|  | 211.4 | 291.6 | lapilli tuff | 15 |  |
|  | 291.6 | 333.8 | ash tuff |  |  |
|  | 333.8 | 374.75 | ash-lapilli tuff | 20 |  |
|  | 374.75 | 434.25 | lapilli tuff |  |  |
|  | 434.25 |  | ash tuff | 12 |  |
|  | 535 | 538.75 |  | 10 |  |
|  | 538.75 | 559.6 | veined and mineralised |  | 65 |
|  | 559.6 |  | dyke |  |  |
|  | 565 |  | veined and mineralised |  |  |
|  | 581 | 606.6 | ash-Japilli tuff |  |  |
|  | 606.6 | 638.6 | ash tuff |  |  |
|  | 638.6 | 699 | ash-lapilli tuff |  |  |


| Hole Name | From | to Geology | Core Angles |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | So | S1 |
| 5100SE2 | 0 | 218.6 overburden |  |  |
|  | 218.6 | 270.9 ash tuff | 10 |  |
|  | 270.9 | 368.5 ash-lapilli tuff | 10 |  |
|  | 368.5 | 436.5 andesite |  |  |
|  | 436.5 | 471 ash-lapilli tuff |  |  |
|  | 471 | 475 andesite brecc |  |  |
|  | 475 | 549 ash tuff | 10 |  |
|  | 549 | 570.2 altered and mineralised |  |  |
|  | 570.2 | 596.6 ash tuff |  |  |
|  | 596.6 | 614.1 veining, alteration |  | 45 |
|  | 614.1 | 637.2 altered and mineralised |  |  |
|  | 637.2 | 651 veined and mineralised |  |  |
|  | 651 | 654.2 wk veining |  |  |
|  | 654.2 | 663.6 veined and mineralised |  |  |
|  | 663.6 | 680.4 ash tuff |  |  |
|  | 680.4 | 779 ash-lapilli tuff |  |  |
| 5200SE1 | 0 | 200 overburden |  |  |
|  | 200 | 466 ash-lapilli tuff |  |  |
|  | 466 | 497.4 andesite schist |  |  |
|  | 497.4 | 518.2 andesite |  |  |
|  | 518.2 | 534 andesite tuff |  |  |
|  | 534 | 583.5 altered-mineralised | 10 | 75 |
|  | 583.5 | 620.5 veined-mineralised |  |  |
|  | 620.5 | 625 dyke |  |  |
|  | 625 | 632.2 andesite |  |  |
|  | 632.2 | 652 argillite |  |  |
|  | 652 | 674 fault |  |  |
|  | 674 | 779 andesite / flit |  |  |
| 5200SE2 | 0 | 224 overburden |  |  |
|  | 224 | 415.3 Andesite tuff |  |  |
|  | 415.3 | 420 Shear zone |  |  |
|  | 420 | 444.8 Andesite tuff, tuff seds |  |  |
|  | 444.8 | 452.2 cherty tuffs |  |  |
|  | 452.2 | 490 fracture, faulted tuff, tuff sedd |  |  |
|  | 490 | 517 andesite |  |  |
|  | 517 | 529.5 Fault, argillic, graphite |  |  |
|  | 529.5 | 534.5 Andesite |  |  |
|  | 534.5 | 542.5 cherty argillite |  |  |
|  | 542.5 | 607.3 Andesite, stcwk veining |  |  |
|  | 607.3 | 650.4 veined-mineralised |  |  |
|  | 650.4 | 662.3 altered-mineralised |  |  |
|  | 662.3 | 679 Andesite, foliated |  |  |
|  | 679 | 699 foliated argillic |  |  |
|  | 699 | 717.8 strongly foliated lapilli tuff |  |  |
|  | 718 | 800 argillic schist |  |  |

## Appendix B

## Assay Data

| DDHID | Sample\# | From | To | interval | Augpt | Aufagpt | Au opt | As.ppm | Sb ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04-2100SW1 | 20701 | 301.0 | 306.0 | 5.00 | 0.006 |  | 0.000 |  |  |
| 04-2100SW1 | 20702 | 306.0 | 311.0 | 5.00 | 0.005 |  | 0.000 |  |  |
| 04-2100SW1 | 20703 | 311.0 | 316.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2100SW1 | 20704 | 535.0 | 538.8 | 3.75 | 0.012 |  | 0.000 |  |  |
| 04-2100SW1 | 20705 | 538.8 | 542.5 | 3.75 | 0.063 |  | 0.002 |  |  |
| 04-2100SW1 | 20706 | 542.5 | 544.3 | 1.75 | 0.035 |  | 0.001 |  |  |
| 04-2100SW1 | 20707 | 544.3 | 546.6 | 2.35 | 0.024 |  | 0.001 |  |  |
| 04-2100SW1 | 20708 | 546.6 | 547.0 | 0.40 | 0.083 |  | 0.002 |  |  |
| 04-2100SW1 | 20709 | 547.0 | 548.5 | 1.50 | 0.017 |  | 0.000 |  |  |
| 04-2100SW1 | 20710 | 548.5 | 552.0 | 3.50 | 1.045 | 1.13 | 0.031 | 0.23 | 0.01 |
| 04-2100SW1 | 20711 | 552.0 | 553.8 | 1.75 | >10.0 | 10 | 0.292 | 1.05 | 0.02 |
| 04-2100SW1 | 20712 | 553.8 | 559.5 | 5.75 | 0.917 |  | 0.027 |  |  |
| 04-2100SW1 | 20713 | 559.5 | 565.0 | 5.50 | 0.362 |  | 0.011 |  |  |
| 04-2100SW1 | 20714 | 565.0 | 565.5 | 0.50 | 1.265 | 1.16 | 0.037 | 0.06 | 0.05 |
| 04-2100SW1 | 20715 | 565.5 | 567.0 | 1.50 | >10.0 | 30 | 0.876 | 2.73 | 0.83 |
| 04-2100SW1 | 20716 | 567.0 | 570.0 | 3.00 | >10.0 | 35.4 | 1.034 | 3.14 | 1.28 |
| 04-2100SW1 | 20717 | 570.0 | 571.5 | 1.50 | 9.93 | 10.15 | 0.290 | 2.75 | 0.33 |
| 04-2100SW1 | 20718 | 571.5 | 572.5 | 1.00 | >10.0 | 80.5 | 2.351 | 4.41 | 2.23 |
| 04-2100SW1 | 20719 | 572.5 | 574.5 | 2.00 | 2.13 | 2.05 | 0.062 | 1.03 | 0.02 |
| 04-2100SW1 | 20720 | 574.5 | 576.0 | 1.50 | 0.141 |  | 0.004 |  |  |
| 04-2100SW1 | 20721 | 576.0 | 577.5 | 1.50 | 0.032 |  | 0.001 |  |  |
| 04-2100SW1 | 20722 | 577.5 | 581.0 | 3.50 | 0.1 |  | 0.003 |  |  |
| 04-2100SW2 | 20723 | 549.0 | 554.0 | 5.00 | 0.016 |  | 0.000 |  |  |
| 04-2100SW2 | 20724 | 554.0 | 560.8 | 6.80 | 2.83 | 2.77 | 0.083 | 0.27 | 0.01 |
| 04-2100SW2 | 20725 | 560.8 | 563.0 | 2.20 | >10.0 | 13.65 | 0.399 | 2.15 | 0.01 |
| 04-2100SW2 | 20726 | 563.0 | 568.0 | 5.00 | 0.027 |  | 0.001 |  |  |
| 04-2100SW2 | 20727 | 568.0 | 570.3 | 2.25 | 0.014 |  | 0.000 |  |  |
| 04-2100SW2 | 20728 | 570.3 | 575.0 | 4.75 | 0.012 |  | 0.000 |  |  |
| 04-2100SW2 | 20729 | 575.0 | 580.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2100SW2 | 20730 | 580.0 | 585.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2100SW2 | 20731 | 585.0 | 590.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2100SW2 | 20732 | 590.0 | 595.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2100SW2 | 20733 | 595.0 | 596.6 | 1.60 | 0 |  | 0.000 |  |  |
| 04-2100SW2 | 20734 | 596.6 | 601.8 | 5.16 | 0.007 |  | 0.000 |  |  |
| 04-2100SW2 | 20735 | 601.8 | 603.0 | 1.24 | 0.023 |  | 0.001 |  |  |
| 04-2100SW2 | 20736 | 603.0 | 605.5 | 2.50 | 0.048 |  | 0.001 |  |  |
| 04-2100SW2 | 20737 | 605.5 | 610.5 | 5.00 | 0.226 |  | 0.007 |  |  |
| 04-2100SW2 | 20738 | 610.5 | 614.1 | 3.60 | 0.008 |  | 0.000 |  |  |
| 04-2100SW2 | 20739 | 614.1 | 615.7 | 1.60 | 0.382 |  | 0.011 |  |  |
| 04-2100SW2 | 20740 | 615.7 | 620.0 | 4.30 | 0.288 |  | 0.008 |  |  |
| 04-2100SW2 | 20741 | 620.0 | 625.3 | 5.25 | 0.092 |  | 0.003 |  |  |
| 04-2100SW2 | 20742 | 625.3 | 626.0 | 0.75 | 0.032 |  | 0.001 |  |  |
| 04-2100SW2 | 20743 | 626.0 | 629.8 | 3.80 | 0.185 |  | 0.005 |  |  |
| 04-2100SW2 | 20744 | 629.8 | 631.8 | 2.00 | 2.33 | 2.22 | 0.068 | 1.83 | 0.26 |
| 04-2100SW2 | 20746 | 631.8 | 633.5 | 1.70 | 0.645 |  | 0.019 |  |  |
| 04-2100SW2 | 20747 | 633.5 | 637.2 | 3.70 | 0.228 |  | 0.007 |  |  |
| 04-2100SW2 | 20748 | 637.2 | 641.6 | 4.40 | >10.0 | 16.2 | 0.473 | 1.89 | 0.08 |
| 04-2100SW2 | 20749 | 641.6 | 646.6 | 5.00 | >10.0 | 44.3 | 1.294 | 2.39 | 1.48 |
| 04-2100SW2 | 20750 | 646.6 | 651.0 | 4.40 | >10.0 | 39.7 | 1.159 | 2.26 | 0.38 |
| 04-2100SW2 | 20751 | 651.0 | 654.2 | 3.20 | 0.54 |  | 0.016 |  |  |
| 04-2100SW2 | 20752 | 654.2 | 658.2 | 4.00 | >10.0 | 45.6 | 1.332 | 1.49 | 0.15 |
| 04-2100SW2 | 20753 | 658.2 | 663.6 | 5.40 | >10.0 | 35.3 | 1.031 | 2.45 | 0.01 |
| 04-2100SW2 | 20754 | 663.6 | 667.0 | 3.40 | 0.158 |  | 0.005 |  |  |


| DDHID | Sample \# | From | To | interval | Augpt | Au fagpt | Au opt | As ppm | Sb ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04-2100SW2 | 20755 | 667.0 | 668.5 | 1.50 | 1.6 | 1.53 | 0.047 | 0.71 | $<0.01$ |
| 04-2100SW2 | 20756 | 668.5 | 674.5 | 6.00 | 0.019 |  | 0.001 |  |  |
| 04-2100SW2 | 20757 | 674.5 | 677.0 | 2.50 | 0.029 |  | 0.001 |  |  |
| 04-2100SW2 | 20758 | 677.0 | 680.4 | 3.40 | 0.009 |  | 0.000 |  |  |
| 04-2200SW1 | 20787 | 462.8 | 467.4 | 4.60 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20789 | 467.4 | 473.0 | 5.60 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20790 | 473.0 | 478.0 | 5.00 | 0.008 |  | 0.000 |  |  |
| 04-2200SW1 | 20791 | 478.0 | 482.0 | 4.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20792 | 482.0 | 486.8 | 4.80 | 0.111 |  | 0.003 |  |  |
| 04-2200SW1 | 20793 | 486.8 | 491.5 | 4.70 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20794 | 491.5 | 496.0 | 4.50 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20795 | 496.0 | 500.0 | 4.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20797 | 518.2 | 523.2 | 5.00 | 0.011 |  | 0.000 |  |  |
| 04-2200SW1 | 20798 | 523.2 | 528.2 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20799 | 528.2 | 532.2 | 4.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20800 | 532.2 | 534.0 | 1.80 | 0.035 |  | 0.001 |  |  |
| 04-2200SW1 | 20801 | 534.0 | 537.0 | 3.00 | 5.16 | 5.44 | 0.151 | 0.07 | $<0.01$ |
| 04-2200SW1 | 20802 | 537.0 | 539.9 | 2.90 | 0.104 |  | 0.003 |  |  |
| 04-2200SW1 | 20803 | 539.9 | 543.5 | 3.60 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20804 | 543.5 | 549.0 | 5.50 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20805 | 549.0 | 553.0 | 4.00 | -0 |  | 0.000 |  |  |
| 04-2200SW1 | 20806 | 553.0 | 558.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20807 | 558.0 | 560.6 | 2.60 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20808 | 560.6 | 563.0 | 2.40 | 0.048 |  | 0.001 |  |  |
| 04-2200SW1 | 20809 | 563.0 | 567.6 | 4.60 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20810 | 567.6 | 574.0 | 6.40 | 0.009 |  | 0.000 |  |  |
| 04-2200SW1 | 20811 | 574.0 | 576.6 | 2.60 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20812 | 576.6 | 581.5 | 4.90 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20813 | 581.5 | 583.6 | 2.10 | 0.036 |  | 0.001 |  |  |
| 04-2200SW1 | 20814 | 583.6 | 587.6 | 4.00 | 0.021 |  | 0.001 |  |  |
| 04-2200SW1 | 20815 | 587.6 | 590.7 | 3.10 | $>10.0$ | 31.3 | 0.914 | 2.36 | 7.99 |
| 04-2200SW1 | 20816 | 590.7 | 595.7 | 5.00 | 4.79 | 4.94 | 0.140 | 1.17 | 0.02 |
| 04-2200SW1 | 20817 | 595.7 | 598.4 | 2.70 | 9.27 | 9.12 | 0.271 | 2.84 | 0.13 |
| 04-2200SW1 | 20818 | 598.4 | 603.5 | 5.10 | $>10.0$ | 28.5 | 0.832 | 2.49 | 0.46 |
| 04-2200SW1 | 20819 | 603.5 | 605.2 | 1.70 | $>10.0$ | 13.95 | 0.407 | 2.26 | 0.02 |
| 04-2200SW1 | 20820 | 605.2 | 610.0 | 4.80 | 5.09 | 4.98 | 0.149 | 0.94 | 0.02 |
| 04-2200SW1 | 20821 | 610.0 | 614.8 | 4.75 | 1.49 | 1.43 | 0.044 | 0.11 | 0.01 |
| 04-2200SW1 | 20822 | 614.8 | 619.8 | 5.00 | 1.65 | 1.63 | 0.048 | 0.09 | 0.01 |
| 04-2200SW1 | 20823 | 619.8 | 622.5 | 2.75 | >10.0 | 14.2 | 0.415 | 0.33 | 0.01 |
| 04-2200SW1 | 20824 | 622.5 | 625.0 | 2.50 | 0.305 |  | 0.009 |  |  |
| 04-2200SW1 | 20825 | 625.0 | 628.9 | 3.90 | >10.0 | 12.75 | 0.372 | 1.12 | 0.11 |
| 04-2200SW1 | 20826 | 628.9 | 632.2 | 3.30 | >10.0 | 18.35 | 0.536 | 2.61 | 0.02 |
| 04-2200SW1 | 20827 | 632.2 | 634.6 | 2.40 | >10.0 | 17.6 | 0.514 | 3.71 | 0.02 |
| 04-2200SW1 | 20828 | 634.6 | 639.6 | 5.00 | 0.767 |  | 0.022 |  |  |
| 04-2200SW1 | 20829 | 639.6 | 643.0 | 3.40 | 0.09 |  | 0.003 |  |  |
| 04-2200SW1 | 20830 | 643.0 | 648.0 | 5.00 | 0.017 |  | 0.000 |  |  |
| 04-2200SW1 | 20831 | 648.0 | 652.0 | 4.00 | 0.016 |  | 0.000 |  |  |
| 04-2200SW1 | 20832 | 652.0 | 654.2 | 2.20 | 0.007 |  | 0.000 |  |  |
| 04-2200SW1 | 20833 | 654.2 | 659.0 | 4.80 | 0.029 |  | 0.001 |  |  |
| 04-2200SW1 | 20834 | 659.0 | 660.0 | 1.00 | 0.039 |  | 0.001 |  |  |
| 04-2200SW1 | 20835 | 660.0 | 664.0 | 4.00 | 0.007 |  | 0.000 |  |  |
| 04-2200SW1 | 20836 | 664.0 | 665.5 | 1.50 | 0.006 |  | 0.000 |  |  |
| 04-2200SW1 | 20837 | 665.5 | 670.0 | 4.50 | 0.084 |  | 0.002 |  |  |


| DOHID | Sample\#\# | From | To | interval | Augpt | Au fa gpt | Au opt | As ppm | Sb ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04-2200SW1 | 20838 | 670.0 | 673.9 | 3.90 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20839 | 739.0 | 745.0 | 6.00 | 0.03 |  | 0.001 |  |  |
| 04-2200SW1 | 20840 | 745.0 | 750.0 | 5.00 | 0.007 |  | 0.000 |  |  |
| 04-2200SW1 | 20841 | 750.0 | 755.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20842 | 755.0 | 759.0 | 4.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20843 | 759.0 | 764.0 | 5.00 | 0.005 |  | 0.000 |  |  |
| 04-2200SW1 | 20844 | 764.0 | 768.3 | 4.30 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20845 | 768.3 | 773.3 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2200SW1 | 20846 | 773.3 | 779.0 | 5.70 | 0 |  | 0.000 |  |  |
| 04-2200SW2 | 20759 | 452.0 | 457.0 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2200SW2 | 20760 | 457.0 | 461.1 | 4.10 | 0.014 |  | 0.000 |  |  |
| 04-2200SW2 | 20761 | 461.1 | 466.0 | 4.90 | 0.023 |  | 0.001 |  |  |
| 04-2200SW2 | 20762 | 466.0 | 472.0 | 6.00 | 0.025 |  | 0.001 |  |  |
| 04-2200SW2 | 20763 | 472.0 | 477.0 | 5.00 | 0.017 |  | 0.000 |  |  |
| 04-2200SW2 | 20764 | 477.0 | 481.2 | 4.20 | 0.006 |  | 0.000 |  |  |
| 04-2200SW2 | 20765 | 481.2 | 485.0 | 3.80 | 0.01 |  | 0.000 |  |  |
| 04-2200SW2 | 20766 | 485.0 | 490.0 | 5.00 | 0.052 |  | 0.002 |  |  |
| 04-2200SW2 | 20767 | 517.0 | 521.8 | 4.80 | 0.107 |  | 0.003 |  |  |
| 04-2200SW2 | 20768 | 521.8 | 526.5 | 4.70 | 0.263 |  | 0.008 |  |  |
| 04-2200SW2 | 20769 | 526.5 | 529.5 | 3.00 | 0.071 |  | 0.002 |  |  |
| 04-2200SW2 | 20770 | 529.5 | 534.0 | 4.50 | 0.028 |  | 0.001 |  |  |
| 04-2200SW2 | 20772 | 607.3 | 612.7 | 5.40 | 0.246 |  | 0.007 |  |  |
| 04-2200SW2 | 20773 | 612.7 | 617.3 | 4.60 | 0.065 |  | 0.002 |  |  |
| 04-2200SW2 | 20774 | 617.3 | 622.3 | 5.00 | 0 |  | 0.000 |  |  |
| 04-2200SW2 | 20775 | 622.3 | 627.3 | 5.00 | 1.365 | 1.19 | 0.040 | 0.13 | 0.02 |
| 04-2200SW2 | 20776 | 627.3 | 631.3 | 4.00 | >10.0 | 62.2 | 1.816 | 0.35 | 0.02 |
| 04-2200SW2 | 20777 | 631.3 | 636.2 | 4.90 | 0.115 |  | 0.003 |  |  |
| 04-2200SW2 | 20778 | 636.2 | 641.0 | 4.80 | >10.0 | 21.3 | 0.622 | 0.03 | 0.01 |
| 04-2200SW2 | 20779 | 641.0 | 647.1 | 6.10 | 0.033 |  | 0.001 |  |  |
| 04-2200SW2 | 20780 | 647.1 | 650.4 | 3.30 | 0.045 |  | 0.001 |  |  |
| 04-2200SW2 | 20781 | 650.4 | 654.6 | 4.20 | 2.47 | 2.42 | 0.072 | 0.08 | 0.01 |
| 04-2200SW2 | 20782 | 654.6 | 659.5 | 4.90 | >10.0 | 9.49 | 0.277 | 1.03 | 0.05 |
| 04-2200SW2 | 20783 | 659.5 | 662.3 | 2.80 | 1.71 | 1.95 | 0.050 | 0.88 | 0.12 |
| 04-2200SW2 | 20784 | 662.3 | 667.3 | 5.00 | 0.111 |  | 0.003 |  |  |
| 04-2200SW2 | 20785 | 667.3 | 667.7 | 0.40 | 0.163 |  | 0.005 |  |  |
| 04-2000SW1 | 109177 | 586.1 | 589.3 | 3.2 | 0.896 |  | 0.026 |  |  |
| 04-2000SW1 | 109178 | 589.3 | 593.0 | 3.7 | 1.47 | 1.23 | 0.036 | 0.05 | 0.06 |
| 04-2000SW1 | 109179 | 593.0 | 596.2 | 3.2 | >10.0 | 11.2 | 0.327 | 1.18 | 0.05 |
| 04-2000SW1 | 109180 | 596.2 | 601.0 | 4.8 | 0.032 |  | 0.001 |  |  |
| 04-2000SW2 | 109074 | 263.6 | 264.5 | 0.9 | 0.245 |  | 0.007 |  |  |
| 04-2000SW2 | 109075 | 264.5 | 270.0 | 5.5 | 0.043 |  | 0.001 |  |  |
| 04-2000SW2 | 109076 | 270.0 | 273.0 | 3 | 0.681 |  | 0.020 |  |  |
| 04-2000SW2 | 109077 | 353.4 | 356.7 | 3.3 | 0.457 |  | 0.013 |  |  |
| 04-2000SW2 | 109078 | 356.7 | 361.8 | 5.1 | 0.013 |  | 0.000 |  |  |
| 04-2000SW2 | 109079 | 361.8 | 365.5 | 3.7 | 4.1 | 3.98 | 0.116 | 2.1 | 0.01 |
| 04-2000SW2 | 109080 | 365.5 | 368.3 | 2.8 | 4.87 | 4.57 | 0.133 | 2.61 | <0.01 |
| 04-2000SW2 | 109081 | 368.3 | 372.0 | 3.7 | 0.014 |  | 0.000 |  |  |
| 04-2000SW2 | 109082 | 372.0 | 374.0 | 2 | 0.042 |  | 0.001 |  |  |
| 04-2000SW2 | 109083 | 591.2 | 594.5 | 3.3 | 0.033 |  | 0.001 |  |  |
| 04-2000SW2 | 109084 | 594.5 | 596.0 | 1.5 | 5.56 | 5.49 | 0.160 | 1.09 | 0.07 |
| 04-2000SW2 | 109085 | 596.0 | 599.0 | 3.0 | 0.192 |  | 0.006 |  |  |


| DDHID | Sample\#\# | From | To | interval | Augpt | Au fagpt | Au opt | As pom | Sb ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04-2000SW2 | 109086 | 599.0 | 602.0 | 3.0 | 0.027 |  | 0.001 |  |  |
| 04-2000SW2 | 109087 | 602.0 | 607.0 | 5.0 | 0.005 |  | 0.000 |  |  |
| 04-2000SW2 | 109088 | 607.0 | 611.8 | 4.8 | 0 |  | 0.000 |  |  |
| 04-2000SW2 | 109089 | 611.8 | 615.8 | 4.0 | 0 |  | 0.000 |  |  |
| 04-2000SW2 | 109090 | 615.8 | 619.7 | 3.9 | 0 |  | 0.000 |  |  |
| 04-2000SW2 | 109091 | 619.7 | 624.7 | 5.0 | 0.006 |  | 0.000 |  |  |
| 04-2000SW2 | 109092 | 624.7 | 626.3 | 1.6 | 0.014 |  | 0.000 |  |  |
| 04-2000SW2 | 109093 | 626.3 | 627.2 | 0.9 | 0.018 |  | 0.001 |  |  |
| 04-2000SW2 | 109094 | 627.2 | 632.9 | 5.7 | 0.042 |  | 0.001 |  |  |
| 04-2000SW2 | 109095 | 632.9 | 633.5 | 0.6 | 0.031 |  | 0.001 |  |  |
| 04-2000SW2 | 109096 | 633.5 | 638.5 | 5.0 | 0.049 |  | 0.001 |  |  |
| 04-2000SW2 | 109097 | 638.5 | 640.3 | 1.8 | 0.108 |  | 0.003 |  |  |
| 04-2000SW2 | 109098 | 640.3 | 645.5 | 5.2 | 0.152 |  | 0.004 |  |  |
| 04-2000SW2 | 109099 | 645.5 | 648.5 | 3.0 | 0.033 |  | 0.001 |  |  |
| 04-2000SW2 | 109100 | 648.5 | 655.5 | 7.0 | 0.022 |  | 0.001 |  |  |
| 04-2000SW2 | 109101 | 655.5 | 659.5 | 4.0 | 0.307 |  | 0.009 |  |  |
| 04-2000SW2 | 109102 | 659.5 | 664.5 | 5.0 | 0.016 |  | 0.000 |  |  |
| 04-2000SW2 | 109103 | 664.5 | 669.0 | 4.5 | 0.009 |  | 0.000 |  |  |
| 04-2000SW2 | 109104 | 669.0 | 674.0 | 5.0 | 0.017 |  | 0.000 |  |  |
| 04-2000SW2 | 109105 | 674.0 | 677.6 | 3.6 | 0.092 |  | 0.003 |  |  |
| 04-2000SW2 | 109106 | 677.6 | 679.0 | 1.4 | >10.0 | 10.1 | 0.295 | 1.3 | 0.02 |
| 04-2000SW2 | 109107 | 679.0 | 681.9 | 2.9 | 0.034 |  | 0.001 |  |  |
| 04-2000SW2 | 109108 | 681.9 | 685.5 | 3.6 | >10.0 | 28.6 | 0.835 | 2.01 | 0.03 |
| 04-2000SW2 | 109109 | 685.5 | 690.9 | 5.4 | 0.532 |  | 0.016 |  |  |
| 04-2000SW2 | 109110 | 690.9 | 695.9 | 5.0 | 0.04 |  | 0.001 |  |  |
| 04-2000SW3 | 109113 | 254.7 | 259.0 | 4.3 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109114 | 259.0 | 264.0 | 5 | 0.008 |  | 0.000 |  |  |
| 04-2000SW3 | 109115 | 264.0 | 265.5 | 1.5 | 0.023 |  | 0.001 |  |  |
| 04-2000SW3 | 109116 | 265.5 | 267.5 | 2 | 0.038 |  | 0.001 |  |  |
| 04-2000SW3 | 109117 | 267.5 | 272.5 | 5 | 0.013 |  | 0.000 |  |  |
| 04-2000SW3 | 109118 | 272.5 | 277.0 | 4.5 | 0.008 |  | 0.000 |  |  |
| 04-2000SW3 | 109119 | 403.5 | 407.5 | 4 | 0.144 |  | 0.004 |  |  |
| 04-2000SW3 | 109120 | 407.5 | 412.2 | 4.7 | 0.02 |  | 0.001 |  |  |
| 04-2000SW3 | 109121 | 412.2 | 414.2 | 2 | 2.1 | 2.13 | 0.062 | 1.19 | 0.01 |
| 04-2000SW3 | 109122 | 431.5 | 436.5 | 5 | 1.435 | 1.38 | 0.040 | 0.83 | <0.01 |
| 04-2000SW3 | 109123 | 436.5 | 439.7 | 3.2 | 0.009 |  | 0.000 |  |  |
| 04-2000SW3 | 109124 | 439.7 | 445.6 | 5.9 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109125 | 445.6 | 447.4 | 1.8 | 0.183 |  | 0.005 |  |  |
| 04-2000SW3 | 109126 | 447.4 | 451.6 | 4.2 | >10.0 | 10.65 | 0.311 | 1.99 | $<0.01$ |
| 04-2000SW3 | 109127 | 451.6 | 455.6 | 4 | 0.405 |  | 0.012 |  |  |
| 04-2000SW3 | 109128 | 455.6 | 460.1 | 4.5 | 0.034 |  | 0.001 |  |  |
| 04-2000SW3 | 109129 | 460.1 | 461.3 | 1.2 | 0.015 |  | 0.000 |  |  |
| 04-2000SW3 | 109130 | 461.3 | 466.4 | 5.1 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109131 | 466.4 | 471.8 | 5.4 | 0.007 |  | 0.000 |  |  |
| 04-2000SW3 | 109132 | 471.8 | 473.4 | 1.6 | 0.03 |  | 0.001 |  |  |
| 04-2000SW3 | 109133 | 473.4 | 476.0 | 2.6 | 0.028 |  | 0.001 |  |  |
| 04-2000SW3 | 109134 | 476.0 | 477.0 | 1 | 0.326 |  | 0.010 |  |  |
| 04-2000SW3 | 109135 | 477.0 | 479.0 | 2 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109136 | 638.8 | 644.3 | 5.5 | 0.097 |  | 0.003 |  |  |
| 04-2000SW3 | 109137 | 644.3 | 645.9 | 1.6 | >10.0 | 13.25 | 0.387 | 1.3 | 0.03 |
| 04-2000SW3 | 109138 | 645.9 | 647.9 | 2 | 1.86 | 1.76 | 0.051 | 0.58 | 0.02 |
| 04-2000SW3 | 109139 | 647.9 | 653.0 | 5.1 | $>10.0$ | 10.3 | 0.301 | 2.67 | 0.02 |
| 04-2000SW3 | 109140 | 653.0 | 655.5 | 2.5 | 0.09 |  | 0.003 |  |  |


| DDHID | Sample\# | From | To | interval | Augpt | Aufagpt | Au opt | Asppm | Sb ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04-2000SW3 | 109141 | 655.5 | 659.8 | 4.3 | 2.17 | 2.11 | 0.062 | 1.13 | 0.01 |
| 04-2000SW3 | 109142 | 659.8 | 661.5 | 1.7 | 3.06 | 2.88 | 0.084 | 1.2 | 0.01 |
| 04-2000SW3 | 109143 | 661.5 | 664.6 | 3.1 | 7.55 | 7.3 | 0.213 | 2.42 | 0.02 |
| 04-2000SW3 | 109144 | 664.6 | 668.0 | 3.4 | >10.0 | 16.95 | 0.495 | 3.41 | 0.02 |
| 04-2000SW3 | 109145 | 668.0 | 671.2 | 3.2 | 0.072 |  | 0.002 |  |  |
| 04-2000SW3 | 109146 | 671.2 | 674.0 | 2.8 | 0.557 |  | 0.016 |  |  |
| 04-2000SW3 | 109147 | 674.0 | 678.3 | 4.3 | 0.005 |  | 0.000 |  |  |
| 04-2000SW3 | 109148 | 678.3 | 683.0 | 4.7 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109149 | 683.0 | 687.5 | 4.5 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109150 | 687.5 | 693.0 | 5.5 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109151 | 693.0 | 697.3 | 4.3 | 0.012 |  | 0.000 |  |  |
| 04-2000SW3 | 109152 | 697.3 | 700.0 | 2.7 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109153 | 700.0 | 704.5 | 4.5 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109154 | 704.5 | 706.4 | 1.9 | 0.007 |  | 0.000 |  |  |
| 04-2000SW3 | 109155 | 706.4 | 711.0 | 4.6 | 0.005 |  | 0.000 |  |  |
| 04-2000SW3 | 109156 | 711.0 | 715.0 | 4 | 0.025 |  | 0.001 |  |  |
| 04-2000SW3 | 109157 | 715.0 | 720.2 | 5.2 | 0.024 |  | 0.001 |  |  |
| 04-2000SW3 | 109158 | 720.2 | 725.7 | 5.5 | 0 |  | 0.000 |  |  |
| 04-2000SW3 | 109159 | 725.7 | 731.0 | 5.3 | 0.026 |  | 0.001 |  |  |
| 04-2000SW3 | 109160 | 731.0 | 733.0 | 2 | 0.322 |  | 0.009 |  |  |
| 04-2000SW3 | 109161 | 733.0 | 734.5 | 1.5 | 0.341 |  | 0.010 |  |  |
| 04-2000SW3 | 109162 | 734.5 | 736.8 | 2.3 | 5.09 | 4.84 | 0.141 | 1.85 | 0.02 |
| 04-2000SW3 | 109163 | 736.8 | 741.0 | 4.2 | 0.015 |  | 0.000 |  |  |
| 04-2000SW3 | 109164 | 741.0 | 745.6 | 4.6 | >10.0 | 22.4 | 0.654 | 3.27 | 0.13 |
| 04-2000SW3 | 109165 | 745.6 | 747.9 | 2.3 | 2.16 | 2 | 0.058 | 0.84 | 0.03 |
| 04-2000SW3 | 109166 | 747.9 | 750.8 | 2.9 | >10.0 | 22.2 | 0.648 | 1.95 | 1.36 |
| 04-2000SW3 | 109167 | 750.8 | 754.6 | 3.8 | >10.0 | 34.1 | 0.996 | 2.98 | 0.02 |
| 04-2000SW3 | 109168 | 754.6 | 757.0 | 2.4 | 6.47 | 5.81 | 0.170 | 1.17 | 0.01 |
| 04-2000SW3 | 109169 | 757.0 | 762.0 | 5 | 0.097 |  | 0.003 |  |  |
| 04-2000SW3 | 109170 | 762.0 | 767.2 | 5.2 | 0.009 |  | 0.000 |  |  |
| 04-2000SW3 | 109171 | 767.2 | 771.0 | 3.8 | 0.007 |  | 0.000 |  |  |
| 04-2000SW3 | 109172 | 771.0 | 775.0 | 4 | 0.015 |  | 0.000 |  |  |
| 04-2000SW3 | 109173 | 775.0 | 776.6 | 1.6 | 0.127 |  | 0.004 |  |  |
| 04-20005W3 | 109174 | 776.6 | 779.0 | 2.4 | 0.011 |  | 0.000 |  |  |
| 04-2000SW3 | 109175 | 779.0 | 784.0 | 5 | 0 |  | 0.000 |  |  |



## Appendix C

## Itemised Costs

| hole | feet | \$/foot | drilling cost | Samples | assay cost |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04-2100SW1 | 735 | 25 | 18375 | 22 | 594 |  |  |
| 04-2100SW2 | 810 | 25 | 20250 | 26 | 702 |  |  |
| 04-2200SW1 | 815 | 25 | 20375 | 58 | 1566 |  |  |
| 04-2200SW2 | 699 | 25 | 17475 | 30 | 810 |  |  |
| 04-2000SW1 | 779 | 25 | 19475 | 4 | 108 |  |  |
| 04-2000SW2 | 779 | 25 | 19475 | 37 | 999 |  |  |
| 04-2000SW3 | 800 | 25 | 20000 | 63 | 1701 |  |  |
| total | 5417 |  | \$135,425 | 240 | \$6,480 |  |  |
| boxes (on site) | 301 | \$ 20 |  |  |  | \$ | 6,019 |
|  | bags | cost | freight |  |  |  |  |
| mud (bentonite) | 150 | \$ 10 | \$21 |  |  | \$ | 4,650 |
|  | days | staff |  | man days |  |  | total |
| Clive Aspinall, P.Geo. | 29.3 | 1 |  | 29.3 |  |  |  |
| James Moors, P.Geo. | 45.0 |  |  |  |  |  |  |
| J. Reed, electircian | 2 | 1 |  | 2.0 |  |  |  |
| J. Parent- Camp Manager. | 24.3 | 1 |  | 24.3 |  |  |  |
| J. Hallman-surveyor | 5 | 1 |  | 5.0 |  |  |  |
| A. Giesbrecht-Cook/first aid | 0.0 | 1 |  | 0.0 |  |  |  |
| Core Splitter, Catskinner | 22.3 | 1 |  | 22.3 |  |  |  |
| Plumber | 4.0 | 1 |  | 4.0 |  |  |  |
| Core Splitter, Labourer | 14.0 | 1 |  | 14.0 |  |  |  |
| drillers | 26 | 5 |  | 131.7 |  |  |  |
|  |  | 13 | totals | 233 | \$40,743 |  |  |
| average days for fuel | 22.3 |  |  |  |  |  |  |
| mob drill (man hours) |  |  |  |  |  |  | \$7,500 |
| mob drill | flat rate |  |  |  |  |  | \$8,800 |
| mob drill | skyvan |  |  |  |  |  | \$17,000 |
|  | man days | \$/day w cook | ok and freight |  |  |  |  |
| food | 233 | 60 |  |  |  |  | \$13,962 |
| first aid | 233 | 3 |  |  |  |  | \$698 |
| fuel | consumptio | ion/day |  |  |  |  |  |
|  | driling | camp/cat | cost/drum | Ereight | total drums |  |  |
|  | 2 | 1 | 120 | 125 | 67 |  | \$16,418 |
|  | drum purchase |  | 50 |  | 20 |  | \$1,000 |
| flights, general | 5.0 |  |  |  | 600 |  | \$3,000 |
| equipment, maintenance |  |  |  |  |  |  | \$2,000 |
| airfare |  |  |  |  |  |  | \$2,100 |
| expediting |  |  |  |  |  |  | \$4,467 |
| Sample shipping |  |  |  |  |  |  | \$500 |
| phone |  |  |  |  |  |  | \$3,000 |
|  |  |  |  |  | sub total |  | \$273,762 |
|  |  |  |  | $2 \%$ administ | stration |  | \$5,475 |
|  |  |  |  |  |  |  | \$279,237 |






