

**NI 43-101 Preliminary Assessment  
Dublin Gulch Property – Mar-Tungsten Zone  
Mayo District, Yukon Territory, Canada**

**Prepared for:**

***StrataGold Corporation***  
*2550-1066 Hastings Street*  
*Vancouver, British Columbia*  
*Canada, V6E 3X2*  
*1.604.682.5122*

**SRK Project Number: 173203**

**Prepared by:**



*7175 W. Jefferson Ave.*  
*Suite 3000*  
*Lakewood, CO 80235*

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**Contributors:**

Dr. Bart Stryhas, PhD, CPG  
Syver W. More, RG, CPG  
Alva Kuestermeyer, MS Mineral Economics, CP, SME  
Stuart Collins, P.E.  
Bret Swanson, B.E., AusIMM  
Kenneth P. Black, P. Eng.  
Michael Levy, P.E., P.G.  
Terry Mandziak, P.E.  
Valerie Obie, B.Sc., M.A., SME

**Endorsed by QP:**

Dr. Bart Stryhas, PhD, CPG  
Syver W. More, RG, CPG  
Bret Swanson, B.E., AusIMM  
Michael Levy, P.E., P.G.  
Kenneth P. Black, P. Eng.

## **Executive Summary (Item 3)**

### **Property Description and Location**

The Mar-Tungsten Zone (or the Project) is an advanced stage exploration project located in the central Yukon Territory, Canada in the Mayo Mining District. The property is located approximately 85km by road north-northeast of the village of Mayo, that is in turn sited 350km due north of the Territorial capital of Whitehorse. The approximate center of the Mar-Tungsten Zone is located at 64° 01' 40" N. latitude and 135° 45' 04" W longitude (UTM coordinates 7,100,325 N and 463,298 W, Zone 8, N).

### **Ownership**

The Mar-Tungsten Zone comprises a small portion of the Dublin Gulch Property, which consists of 1,896 quartz claims, 10 quartz leases, and one Federal Crown Grant quartz claim. These form a contiguous claim group covering 34,576ha (data as of October 15, 2007). The Mar-Tungsten Zone is defined within the Dublin Gulch Property by a total of 15 claims and leases covering the tungsten skarns. StrataGold Corporation (StrataGold) purchased the Mar-Tungsten Property in December 2004, and has full ownership except for a 1/8<sup>th</sup> interest in the Olive Federal Crown Grant.

StrataGold Corporation (StrataGold) purchased from New Millennium Mining Ltd a 100% interest in 30 claims and a 7/8<sup>th</sup> interest in the Olive Crown Grant, referred to during the transaction as the 'Mar-Tungsten Property', and a 51% interest in 22 claims and 10 leases, collectively the 'Mar Tungsten Leases', in December 2004. In July 2006 StrataGold purchased the remaining 49% interest in the Mar Tungsten Leases and the remaining rights on the Mar Tungsten Property, which were held by Queenstake Resources Ltd.

### **History and Exploration**

The Dublin Gulch properties have been explored and prospected since the mid-1890's, initially for placer gold and later for hard-rock tungsten, tin, gold, silver, and minor base metals. The Mar-Tungsten Zone comprises a portion of the Dublin Gulch mineralization system. The exploration history of the Mar-Tungsten Zone and the shifting ownership of the various sub-districts are linked to the overall exploration efforts directed across the larger Dublin Gulch Property.

At the Mar-Tungsten Zone, prospector Harvey Ray first located scheelite (CaWO<sub>4</sub>)-bearing float in 1942. The Geologic Survey of Canada investigated the property from 1942-1944. They located the source of the scheelite float in 1943 in several skarn zones at the headwaters of Ray Gulch plus several other drainages cutting the steep outcropping southern face of Potato Hill Ridge. Stride Exploration and Development Co. prospected and sampled the skarns in 1956. Both the Mar-Tungsten Zone and the Dublin Gulch areas were re-staked by C. Provencher in 1968 and the ground was subsequently optioned to Great Plains Development Ltd in 1968, Tam Mining in 1969, and Connaught Mines Ltd. from 1969 to 1971.

In 1977 Gordon Gutrath of Queenstake staked claims over the tungsten-bearing skarns in the Mar-Tungsten Zone and conducted a small program of geological mapping and sampling of the skarn zones in the vicinity of Ray Gulch. In 1978 Queenstake optioned the ground to Canada Tungsten Mining Corporation. They explored the Mar-Tungsten Zone for tungsten and gold

between 1978 and 1986, retaining BEMA Industries, Ltd. (Bema) in 1980 to manage the program. During their tenure, Bema excavated over 10km of bulldozer trenches and drilled a total of 86 diamond core holes totaling to 13,737m. Upon completion of the drilling, Bema conducted a cross sectional polygon resource estimate which identified a drill indicated resource of 4.1Mt @ 0.56% WO<sub>3</sub> using a 0.2% WO<sub>3</sub> cut-off (Kaye, 1981). This resource estimate is historical in nature and not compliant with today's Canadian Institute of Mining, Metallurgy and Petroleum (CIM) standards for Canadian National Instrument 43-101 (NI 43-101).

The Yukon Geological Survey MINfiles (106D 027, 10-2007) note that Canada Tungsten Mining (CanTung) drilled an additional three holes, totaling 751m in 1982, and continued geochemical sampling, trenching, VLF-EM surveying and geological mapping. CanTung returned the Mar-Tungsten Zone along with the adjacent Dublin Gulch Property to Queenstake in 1986.

In 1996 First Dynasty Mining, to whom Queenstake transferred its interest in the property, formed a subsidiary, New Millennium Mining Limited (NMML) and transferred the Dublin Gulch Property, including the Mar-Tungsten Zone, into its project portfolio. NMML conducted a revised resource estimation accompanied by a preliminary open-pit mining plan of the Mar-Tungsten Zone that year.

StrataGold acquired the Dublin Gulch Property in 2004, and currently holds 100% of the Mar-Tungsten Zone claims. The historical CanTung drill core from the Mar-Tungsten Zone has been stored on the property since 1979-1980. During 2006, StrataGold re-logged and re-sampled five of the historic drillholes in order to evaluate their gold potential. No significant gold zone was found. In 2007, they collected 120 samples from 18 drillholes to provide verification of the historical tungsten assays. The results of this work showed that the historical tungsten analyses were very accurate. During this same year, 26 samples were collected and tested for specific gravity and an NI 43-101 resource estimation was completed. In 2008, StrataGold drilled 34 diamond core holes totaling to 4,058m. These were targeted at the up dip projection of the mineralization and infill within wider spaced drilling.

## **Geology and Mineralization**

The Dublin Gulch Property, which includes the Mar-Tungsten Zone, is located within the northern portion of the Selwyn Basin. The property consists of metasedimentary rocks of Late Proterozoic to lower Cambrian age that were folded and thrust faulted during the collision of Wrangellia with the North American craton during the early Cretaceous. The metasedimentary rocks were intruded by mid-Cretaceous stocks and sills at estimated depths of 5-8km. The main intrusion is termed the Dublin Gulch stock and is affiliated with tungsten, tin, and gold mineralization.

The Mar-Tungsten Zone consists of skarn-hosted scheelite mineralization within a roof pendant of calcareous metasediments. The metasediments are altered to calc-silicate exoskarn and the intrusive sills contain local zones of endoskarn. Exploration drilling to date has delineated a zone of tungsten mineralization along 800m of strike length and 300m down dip. The deposit remains unconfined in nearly all directions.

## **Metallurgical Testing and Mineral Processing**

To date, two metallurgical test programs on composite samples from the Mar-Tungsten Zone were completed at Lakefield Research (1980) and SGS (2008). Preliminary studies by Lakefield

Research entailed bench scale metallurgical lab tests on a 136kg bulk sample collected from outcropping mineralization. Only gravity tests were conducted in the Lakefield program. Overall, the higher-grade scheelite mineralization in the Mar-Tungsten Zone responded remarkably well to the gravity separation in this limited metallurgical investigation. Scheelite gravity recoveries in excess of 75% are predicted from the test results. Most of the tungsten losses occurred in the fine fractions of -200 mesh, which Lakefield believed could probably be recovered by simple flotation treatment. The resultant concentrates were relatively free of contaminants. However, this outcrop sample for the Lakefield program is not considered representative at 1.0% WO<sub>3</sub> which is significantly higher than the current average mine grade of 0.30% WO<sub>3</sub>.

The most recent program at SGS in Vancouver, Canada was conducted on a 50kg composite of 26 individual samples from Mar-Tungsten. The SGS metallurgical test program evaluated the following parameters:

- Bond ball mill work index;
- Gravity recovery of the WO<sub>3</sub>;
- Flotation recovery of the WO<sub>3</sub>; and
- Combined gravity and flotation recovery of the WO<sub>3</sub>.

The head grade assay for the sample composite was determined by chemical analysis at 0.39% WO<sub>3</sub>. The chemical analysis indicates that tungsten as WO<sub>3</sub> is the only economically recoverable metal or mineral as the others were of a low sample content. Mineralogical analysis showed that tungsten is present as scheelite and principal gangue minerals are quartz, feldspar and pyroxenes.

The Bond work index for the Mar-Tungsten composite was calculated to be 14.1kWh/t which is considered to be a medium hardness ore.

Two gravity tests were done to evaluate a gravity-only flow sheet yielded WO<sub>3</sub> concentrate grades as high as 50-60% WO<sub>3</sub> at an overall recovery of about 65%. Flotation tests were done on 2kg samples for: two rougher tests at different grind sizes, K<sub>80</sub> 77µm and K<sub>80</sub> 125µm; and one cleaner test. Results of the two rougher tests demonstrated that a finer grind size to flotation was necessary to achieve a viable recovery with recoveries of 90% and 55% for the grind sizes of K<sub>80</sub> 77µm and K<sub>80</sub> 125µm, respectively. These flotation tests in combination with gravity test results demonstrate that the coarse WO<sub>3</sub> as scheelite is recoverable by gravity methods and the finer fractions are amenable to recovery by flotation. One cleaner test was completed with a good recovery of about 90% was obtained; however, the recovery decreased significantly in the cleaning stages. Three tests were performed using a combination of gravity concentration and flotation which showed that the combination of gravity and flotation indicates that an overall recovery of about 80-85% is achievable with 60-65% from gravity and an additional 20% from flotation. For this analysis, SRK has used an average LoM WO<sub>3</sub> recovery of 82.5% and a 58% WO<sub>3</sub> concentrate grade.

Based on the SGS preliminary metallurgical test program, the indicated flow sheet for mineral processing at Mar-Tungsten would be comprised of the following unit processes:

- Blending of RoM ore to provide a consistent WO<sub>3</sub> feed grade to the processing plant;

- Primary crushing of RoM ore;
- SAG-ball mill grinding;
- Gravity recovery and cleaning of gravity concentrate;
- Sulfide and non-sulfide rougher flotation with regrind ball mill;
- Cleaner flotation with regrind ball mill; and
- WO<sub>3</sub> final concentrate thickening, filtering and packaging for shipment.

## Resource Estimation

The Mar-Tungsten Zone resource estimation is based on information from 120 drillholes totaling 17,825m. The drillhole database was compiled and verified by StrataGold personnel and is determined to be of high quality. Modern assay duplicates indicate good correlation of historical WO<sub>3</sub> results between different analysis techniques. All modern analyses were accompanied by an industry standard QA/QC program. The resource estimation employed a categorical indicator technique to develop a 0.05% WO<sub>3</sub> grade shell used to limit the projection of mineralization. A very generalized geologic model consisting of five rock types that strike north and dip moderately to the west were also used as density and estimation domains. The deposit was modeled only for WO<sub>3</sub> content. The model blocks are uniform 4m x 4m x 4m cubes and all block grade estimates were made using 2m down hole composites. An Inverse Distance Squared algorithm was employed using a two pass estimation method.

The results of the resource estimation provided a CIM classified Indicated Mineral Resource of 12.7Mt of material with 0.31% WO<sub>3</sub> and an additional Inferred Mineral Resource of 1.3Mt of material with 0.30% WO<sub>3</sub> both using a 0.1% WO<sub>3</sub> cut-off. The quality of the Mar-Tungsten Zone drilling and data is very good and the Mineral Resource was classified mainly according to the general drillhole spacing.

**Table 1: Mar-Tungsten Zone Mineral Resource Statement**

Resource Category	% WO <sub>3</sub> Cut-off	Total Mt	% WO <sub>3</sub> Grade	Contained WO <sub>3</sub> (Mlbs)
Indicated	0.10	12.7	0.31	86.2
Inferred	0.10	1.3	0.30	8.9

## Mining

Mining capital costs for this study were not estimated because the option of employing a mining contractor was selected. The mining contractor would be responsible for all mining equipment and infrastructure associated with the open pit mining and project support (grading, snow removal etc.).

Mineable resources will be difficult to liberate given the thin and dipping orientation of the mineralization leading to possible grade control and dilution risk.

The preliminary pit design was determined to be approximately 0.5km diameter, 250m deep with a volume of 27.6Mm<sup>3</sup>. The pit design was broken into three phases for scheduling purposes, with 25m wide ramps at a maximum in pit grade of 10%.

**Table 2: Pit Design Results**

Variable	Value
Mill Tonnes	9,868,551
Waste Tonnes	66,071,293
Strip Ratio	6.70
WO <sub>3</sub> Cut-Off Grade (%)	0.117
WO <sub>3</sub> Average Grade (%)	0.33
Contained WO <sub>3</sub> lbs	70,856,775

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability

Mine life is estimated to be 11 years; one year of preproduction and ten years of mining. Mill production was estimated to 1Mt/y and the open pit waste to minable resource strip ratio is 6.7 to 1.

**Table 3: Production Schedule**

Year	Mill Accumulation (000's)	Waste Mass (000's)	Stripping Ratio	WO <sub>3</sub> Grade (000's)	WO <sub>3</sub> (klbs)
2011	150	2,850	19.00	0.27	894
2012	769	7,041	9.16	0.31	5,284
2013	1,018	8,227	8.08	0.28	6,333
2014	1,018	8,196	8.05	0.32	7,106
2015	1,018	5,520	5.42	0.32	7,288
2016	1,021	6,166	6.04	0.33	7,360
2017	1,018	6,155	6.04	0.27	6,040
2018	1,018	6,345	6.23	0.34	7,719
2019	1,018	7,066	6.94	0.39	8,644
2020	1,021	6,915	6.77	0.34	7,661
2021	797	1,589	1.99	0.37	6,528
<b>Total</b>	<b>9,869</b>	<b>66,071</b>	<b>6.70</b>	<b>0.33</b>	<b>70,857</b>

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

## Geotechnical

SRK developed a conceptual Tailings Storage Facility (TSF) design to contain 10Mt of tailings. The design assumed conventional slurry tailings storage, with an average dry density of 1,200kg/m<sup>3</sup> and flat tailings surface slope, no barrier system to inhibit seepage losses to the environment, and construction over three phases:

Assuming that the first phase of construction would be considered Capex and any subsequent construction phases would be considered Opex, SRK has estimated that the Capex would be about \$6.2million, and total subsequent Opex costs would be \$16.1million.

## Economic Model

SRK estimates the Project will return a pre-tax IRR of 15.5% using a projected WO<sub>3</sub>-APT price of \$253/mtu (\$11.50/lb). Model results indicate operating costs of \$6.43/lb of WO<sub>3</sub> and projected cashflow of US\$93.4million.

The Project is sensitive to the market price of WO<sub>3</sub> for NPV evaluation and this will drive the economic viability of the Project followed closely by operating costs. To a lesser extent capital cost will also affect the Project, but with less severity than WO<sub>3</sub> price variation. Table 4 illustrates the Mar-Tungsten project NPV sensitivity using an 8% discount rate.

**Table 4: Project Sensitivity (NPV<sub>8%</sub>, US\$000s)**

Description	-10%	-5%	Base Case	5%	10%
Market Price	(7,359)	8,333	24,026	39,719	55,412
Operating costs	30,464	27,245	24,026	20,807	17,588
Capital costs	46,185	35,106	24,026	12,947	1,867

## Exploration Potential

The Mar-Tungsten Zone has excellent opportunities for significant resource expansion. The mineralization has currently been tested along an 800m strike length and remains unconfined in several areas. In the northern part, the mineralization remains unconfined both along strike and down dip. In the central portion, the deposit remains untested down dip from the current drilling. In this area, there are many sections that also remain unconfined down dip. In the southern part, the mineralization remains unconfined mainly down dip.

The Mar-Tungsten Zone is a component of the much larger Dublin Gulch hydrothermal system. The Eagle Gold Zone is located 2.5km along strike from the Mar-Tungsten Zone. The continuity from earlier tungsten-bearing calc-silicate skarns to later-formed gold veins within similar structural regimes provides excellent opportunities to explore for extensions of both tungsten and gold mineralization in the metasediments and within the intrusives. StrataGold currently holds an extensive claim position at its Dublin Gulch Property that incorporates the targets described above.

## Conclusions and Recommendations

The Mar-Tungsten Property contains an Indicated and Inferred Mineral Resource based on well-documented exploration work. The results of 121 diamond drillholes completed during an eleven year exploration history have delineated a north striking, moderately west dipping zone of skarn mineralization. The mineralization is defined over an 800m strike length and remains open in several directions. Further exploration drilling is warranted on the north and south extensions of the mineralization and further down dip to the west.

The pit optimization, mine plan and production model were constructed by SRK using the latest economic and resource knowledge at the time of pit optimization. Results indicate a small sized, moderately high cost open pit with the potential for further minable pit resources along strike and at depth. In SRK's opinion, there is sufficient information to commence detailed pit design and scheduling for the generation of a pre-feasibility level reserve statement. SRK recommends analysis of possible mining recovery and dilution issues be conducted in addition to refinement of costs during pre-feasibility.

The current metallurgical test work indicates that a recovery of about 80-85% can be achieved using a combination of gravity and flotation processing techniques. However, this is based on only limited metallurgical test work performed at SGS in 2008. Additional metallurgical test

work is recommended for future engineering studies to confirm the design criteria and processing flow sheet to include:

- Crushing and grinding work indices;
- Optimize gravity and flotation grind sizes for  $WO_3$  recovery;
- Optimize flotation retention times, reagents and reagent consumptions; and cleaning stages;
- Determine regrind parameters,
- Abrasion indices;
- Tailings and concentrate settling characteristics; and
- Concentrate filtration rate.

There is potential for optimization of pit slope angles at the Mar-Tungsten Zone provided additional geotechnical data is collected. The existing geotechnical data are based on field estimates of rock properties, no laboratory testing or discontinuity orientation has been performed. Additional geotechnical data collection and analysis will be necessary for further mine planning. Additional geotechnical core drilling programs should be conducted with a triple tube coring system where logging can be conducted in the splits, before additional core damage occurs during boxing and transport. Future geotechnical core logging programs should also include the orientation of discontinuities and Point Load Testing (PLT). A laboratory strength testing program including Uniaxial Compressive Strength (UCS), Triaxial Compressive Strength (TCS) and Small Scale Direct Shear (SSDS) testing should also be conducted encompassing each major rock type at the site.

Ground water monitoring wells and dewatering wells should also be constructed. These will be used to collect base line data required for permitting and to assess the costs associated with pit dewatering. Continued work is also recommended to advance the environmental monitoring required for permitting of the Project.

Confirmation of an updated contractor mining cost and equipment list should be sought in conjunction with the geotechnical factor of safety analysis relating to future pit designs.

The data collected above will support a Pre-feasibility Study which could be initiated simultaneously with the proposed studies. The Pre-feasibility Study could be completed in 12-18 months.

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### Appendix A

Certificates of Authors

### Appendix B

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Tailings Cost Estimate

# 1 Introduction (Item 4)

## 1.1 Terms of Reference and Purpose of the Report

SRK Consulting (US), Inc. (SRK) has been commissioned by StrataGold Corporation (StrataGold) to prepare a Canadian National Instrument 43-101 (NI 43-101) compliant Preliminary Assessment for the Dublin Gulch Property, Mar-Tungsten Zone (or the Project), Mayo Mining District, Yukon Territory, Canada located near the village of Mayo. StrataGold has performed re-logging and re-sampling of historical drill core on the property during 2006-2007 and has drilled 34 additional holes in 2008. This document provides a Preliminary Assessment of the Mar-Tungsten Zone prepared according to NI 43-101 guidelines. Form NI 43-101F1 was used as the format for this report. The intent of this Preliminary Assessment is to provide the reader with a comprehensive review of the exploration activities, resource estimate and economic evaluation of the Project. StrataGold may also use the Preliminary Assessment for any lawful purpose to which it is suited. This Preliminary Assessment includes the potential mining of Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the preliminary assessment will be realized. Therefore, the term “mineable resource” is used in lieu of “mineral reserves” to describe mineable quantities in this report.

The Project is an advanced stage exploration project that was mapped, surveyed, and drilled in the period from 1977 to 1986 and drilled in 2008. The property had largely been inactive between 1986 to 2006 due to depressed tungsten commodity prices. One historical tungsten resource estimation with supporting documentation was completed by BEMA Industries, Ltd (Bema), for Canada Tungsten Mining (CanTung) in 1981. This report provides a summary of the exploration history and geology of the deposit, and a modern resource estimate based on the current drilling and assays.

This Preliminary Assessment is prepared using the industry accepted Canadian Institute of Mining, Metallurgy and Petroleum (CIM) “Best Practices and Reporting Guidelines” for disclosing mineral exploration information, the Canadian Securities Administrators revised regulations in NI 43-101 (Standards of Disclosure For Mineral Projects) and Companion Policy 43-101CP, and CIM Definition Standards for Mineral Resources and Mineral Reserves (December 11, 2005).

## 1.2 Reliance on Other Experts (Item 5)

Qualified Person (QP), Dr. Bart Stryhas, has examined the historical and modern data for the Mar-Tungsten Property provided by StrataGold, and has relied upon that basic data to support the statements and opinions presented in this Preliminary Assessment. In the opinion of the Dr. Bart Stryhas, the data is present in sufficient detail, is credible and verifiable in the field, and is an accurate representation of the Mar-Tungsten Zone.

The historic documentation available for the Mar-Tungsten Zone is limited in certain areas, but of very good quality. It is the opinion of Dr. Bart Stryhas that there are no material gaps in the drilling and assay information for the Project. Sufficient information is available to prepare this report, and any statements in this report related to deficiency of information are directed at information which, in the opinion of the author, either has been lost over the last two decades

period of inactivity and ownership transfers, is stored in non-sorted corporate file cases, or else was not gathered by previous workers.

This report includes technical information which requires subsequent calculations to derive sub-totals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently can introduce a margin of error. Where these rounding errors occur, SRK does not consider them to be material.

The authors have relied upon the work of others to describe the land tenure and land title in Yukon Territory, referring specifically to Sections 2.1 – Property Location and 2.2 – Mineral Titles. The information contained in these sections was obtained from the following three reports. Dublin Gulch Property Map, StrataGold Corp. internal company map reference to data from: Yukon Geometrics Quartz Claim GIS File 2006/03/17 and Claim Status Report Data from Mayo Mining Records Office 2006/03/07; Annual Information Form, StrataGold Corp. March 26, 2007; Mar-Tungsten Due Diligence, StrataGold Corp, internal company report by Hugh Coyle, January 8, 2008.

The authors have relied upon the work of others to describe the Royalties, Agreements and Encumbrances in Section 2.4. The information contained in this section was obtained from: Letter of Agreement, Royalty Opinion, Davis LLP, Legal Advisors, January 30, 2008

The authors and SRK are not insiders, associates, or affiliates of StrataGold. The results of this Technical Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between StrataGold and the authors. SRK will be paid a fee for its work in accordance with normal professional consulting practice.

### **1.2.1 Sources of Information**

Standard professional review procedures were used in the preparation of this report. The authors reviewed historical data provided by StrataGold, conducted a site visit to confirm the data and mineralization, and reviewed the Project site. The majority of the exploration data is historical, dating from 1977 through 1986 and was obtained from Queenstake Resources Ltd. (Queenstake) by StrataGold. The historical exploration data sources referenced by SRK include the 1980 Bema Diamond Drilling Program Report, legible descriptive drill logs from the 2006 re-logging and re-sampling program, two NI 43-101 compliant reports on the adjoining Eagle and Shamrock gold zones, and report maps and cross-sections. A drillhole database detailing the distribution of scheelite ( $\text{CaWO}_4$ ) in calc-silicate-altered rocks, drillhole coordinates, down hole survey data and tungsten assay data was assembled and verified by StrataGold and provided to SRK for the resource estimate detailed in Section 15 of this report.

The majority of the exploration data used for this report was generated by exploration activities conducted by Bema for CanTung in 1979-1980. The historic data, largely a compiled drillhole assay database and drillhole coordinate information, is judged as very good and provides an excellent record of drill results. CanTung and Queenstake ceased tungsten exploration activities at Mar-Tungsten Zone in approximately 1986. Most of the drill core has been carefully stored at StrataGold's field camp facilities at Dublin Gulch since that time. The lithology, alteration, and visible mineralization in five drillholes were descriptively re-logged in June 2006 by StrataGold, and provide a basic lithological verification of the earlier logging. In 2007, they collected 120

samples from 18 drillholes to provide verification of the historical tungsten assays. The results of this work showed that the historical tungsten analyses were very accurate.

In 2008, StrataGold completed 34 diamond drillholes totaling to 4,058m. These produced a total of 3,800 samples for analysis. These analyses were accompanied by an industry standard QA/QC program. Additionally, the core was logged for lithology, alteration and geotechnical measurements.

### **1.3 Involvement and Qualifications of Consultants (SRK)**

#### **Dr. Bart Stryhas, PhD, CPG**

Dr. Bart Stryhas constructed the geologic and resource model, conducted the QA/QC analysis and provided the final editing for the report, he is primarily responsible for Sections 1, 8, 10, 11-16, 17.3, 17.4, 17.5, 17.7.2, 17.8.2-17.8.4, 17.9-17.10, and 18-21. He is responsible for the resource estimation methodology, the resource statement and for quality assurance on all sections of the report. He visited the property during August 19 and 20, 2008, and is a QP as defined by NI 43-101.

#### **Syver W. More. RG, CPG**

Syver More is responsible for the background and compilation sections of Sections 2.1-2.4, 3, 4, 5-7, and 9. He also contributed to Sections 2.1, 2.3, 2.4, 8.1, 10, and 11.1, compiled prior to the 2008 drilling program., with additional data added by Bart Stryhas. He has thoroughly reviewed the historical data files and provided a compilation of the historical work. He has not made a site visit to the Mar-Tungsten Property. Mr. More is a QP as defined by NI 43-101.

#### **Al Kuestermeyer, MS Mineral Economics, CP, SME**

Al Kuestermeyer is the author of the metallurgical and infrastructure sections of this report. He has overseen the SGS metallurgical test work conducted during 2008, reviewed the SGS final report and provided operating costs and capital costs related to milling and project construction. Mr. Kuestermeyer has visited the property during August 19 and 20, 2008.

#### **Stuart Collins, P.E.**

Stuart Collins is the author of the mining operation and capital costs. Mr. Collins has not visited the property.

#### **Bret Swanson, B.E., AusIMM**

Bret Swanson is the author of the pit design, pit optimization, mining production schedule and is responsible for Sections 17.1, 17.7.1, 17.7.3 and 17.8.1. He has conducted numerous Whittle pit optimization runs on the resource block model in order to generate a mine schedule. Mr. Swanson visited the property during August 19 and 20, 2008. Bret Swanson is a QP as defined by NI 43-101.

#### **Kenneth P. Black, P.Eng.**

Kenneth Black is the author of the environmental and permitting assessment of the property, Sections 2.5 and 17.6. He has reviewed all of the pertinent documents related to these aspects of the property. Mr. Black visited the property during August 19 and 20, 2008.

### **Terry Mandziak, P.E.**

Terry Mandziak is the author of the geotechnical work on tailings design. He has conducted conceptual site location studies to determine suitable volume calculations for the tailings impoundment areas. He is the author of Section 17.2.1. Mr. Mandziak has not visited the Project site.

### **Michael Levy, P.E., P.G.**

Mike Levy is the author of the geotechnical work of pit slopes and is responsible for Section 17.2. He has conducted basic rock mechanical studies to determine pit slopes and volume calculations to site locations of the mining waste dumps and tailings impoundment areas. Mr. Levy visited the site during August 19 and 20, 2008. Mike Levy is a QP as defined by NI 43-101.

### **Valerie Obie, B.Sc., M.A., SME**

Valerie Obie is the author of the economic sections of this report. She has obtained pertinent price information for  $WO_3$  and incorporated such into an integrated financial model based on the mining and milling parameters. She has not visited the Project site.

Certificates of Authors are presented in Appendix A.

#### **1.3.1 Site Visit**

On August 19, 2008 the SRK project team, and Mark Ayranto of StrataGold took a charter flight from White horse to Mayo where they were met by Kevin Piepgrass and Graham Kubale of StrataGold. The team then drove in two pickups for about one hour to the StrataGold camp site. The recent weather had been extremely wet and the road conditions in the vicinity of the Project were a bit muddy. The StrataGold camp currently services exploration work at two of the company's projects, namely the Eagle Zone gold deposit and the Mar-Tungsten Zone. The site tour began by reviewing the camp safety plan, viewing geologic cross sections of the Mar-Tungsten and Eagle Zone and viewing drill core from the recently completed drilling on the Mar-Tungsten Zone. The team next traveled to the actual location of the Mar-Tungsten mineralization. The mineralization occurs on a broad hill top approximately 650m above the valley floor. Several new drill pads and exploration trenches were observed and a great overview of the site was available from a small hill top. The team next traveled to the location of the Eagle Zone gold mineralization. This deposit lies on a steep northwest facing slope approximately 200m above the valley floor. Upon completion of the field tour the group meet at the camp kitchen for a general discussion. Mark Ayranto and Kevin Piepgrass then left the group in order to travel to Whitehorse. The SRK team next toured the core logging and sampling facility, lead by Graham Kubale. The team spent the evening and overnight at the campsite and departed the following morning. On the trip back to Mayo a short detour was made to inspect the power line as a potential source of electricity to the site, an estimated distance of about 12km.

## **2 Property Description and Location (Item 6)**

### **2.1 Property Location**

The Mar-Tungsten Zone is located approximately 42km north-northeast of the village of Mayo, Yukon Territory, Canada, and approximately 390km north of the territorial capital of Whitehorse (Figure 2-1). The drive from Whitehorse to Mayo is approximately 5½ hours, to complete the 350km journey. The road access from Mayo to StrataGold's field camp is a 1½ hour, 85km drive (Figure 2-2). The Mar-Tungsten Zone is centered about 64° 01' 40" N. latitude and 135° 45' 04" W longitude (UTM coordinates 7,100,325 N and 463,298 W, Zone 8, N). The property is located in the southwest corner of National Topographic System Sheet 106D/04, Dublin Gulch (1:50,000 scale).

The Dublin Gulch claim block lies adjacent to two tracts of First Nations Settled Lands on its south and west ends. Two additional tracts of First Nations Settled Lands are located a short distance away to the north and east.

### **2.2 Mineral Titles**

The history of ownership and transfer of the mineral claim titles underlying the Mar-Tungsten Zone is intimately linked with the transfer and acquisition of the entire Dublin Gulch Property mineral titles. In December 2004, StrataGold purchased 51% of the Dublin Gulch Property that included 51% of the Mar Tungsten Leases, a total of 15 claims and leases of which comprise the Mar-Tungsten Zone, and 100% of the adjoining Mar Gold Claims. These were part of a package collectively called the Dublin Gulch Property purchased from New Millennium Mining Ltd. (NMML), a subsidiary of Sterlite Gold Ltd.

The purchase price was an upfront payment of US\$3million in cash and issuance of 5million common shares of stock followed by a balance payment of US\$3million, plus interest, due within three years. The Mar-Tungsten Zone property package consisted of two holdings, the Mar-Tungsten Property and the Mar-Tungsten Leases. The Mar-Tungsten Property consisted of 31 Quartz claims that included the Olive Federal Crown Grant. The Mar-Tungsten Leases includes 22 additional Quartz claims and 10 leases. The Mar Gold Zone covered 124 adjoining claims plus 23 claims staked later by NMML. The total number of Mar claims in the purchase agreement was 210, plus the 10 leases. During November and December 2004 and September 2005, StrataGold staked an additional 1,592 claims surrounding and infilling among the claims and leases described above.

In April 2006, StrataGold exercised its prepayment option and made a final cash payment of US\$3,245,591.63 to NMML.

In June 2006, StrataGold made an outright purchase of the remaining 49% interest held by Queenstake on the Mar Tungsten Leases and acquired Queenstake's 5% net profits royalty interest on the Mar Tungsten Property. Compensation was a cash payment of US\$100,000 plus a 1% Net Smelter Return (NSR) on the Mar Tungsten Property and the Mar Tungsten Leases. StrataGold's, Dublin Gulch Property currently includes 1,907 contiguous quartz claims and/or leases covering a cumulative area of 34,576ha (Figure 2-3). The 63 leases and properties pertaining specifically to the Mar-Tungsten Zone are listed in Appendix B by claim names, type, obligations for retention and expiration dates. Fifteen of these, overlay the actual mineralization that is the subject of this report (Figure 2-4).

## 2.3 Location of Mineralization and Facilities

The Mar-Tungsten Project is located approximately 42km north-northeast of the village of Mayo, Yukon Territory, Canada, and approximately 390km north of the territorial capital of Whitehorse. The tungsten-bearing skarns of the Mar-Tungsten Zone are located above Lynx Creek in and around Ray Gulch, a north-south oriented steep drainage leading south into Lynx Creek. Mineralization tested to date is confined to a roof pendant of calcareous metasediments dissected by several sill bodies related to the Dublin Gulch pluton. The tungsten skarns are exposed on the south facing slopes of Potato Hill Ridge separating Lynx Creek and Dublin Gulch. (Figure 2-5).

A large number of gold, gold-silver, and tungsten anomalies have been outlined throughout the modern exploration history of the Dublin Gulch Property. The major zones of mineralization include the Eagle Zone, Lynx Zone, Shamrock Zone, Steiner Zone, Olive Zone, Peso-Rex Zone and the Mar-Tungsten Zone. StrataGold issued a NI 43-101 compliant resource estimate for the Eagle Gold Zone located west of Mar-Tungsten in 2006 and then issued a re-confirmation of this same resource in 2007. (Carter and Mosher, 2006; Sparling and Maunula, 2007).

Within the claims specific to the Mar-Tungsten Zone, there are no historical mine pits, underground workings, mine waste dumps, ore stockpiles or tailings ponds.

## 2.4 Royalties, Agreements and Encumbrances

The Mar-Tungsten Zone was originally subject to two royalties and interests. The Mar-Tungsten Property Option was a 5% net profits royalty held by Queenstake dated April 11, 1991. The Tungsten Royalty was a 10% interest in any net cash flow earned by Queenstake and held by CanTung in an agreement dated October 2, 1987. On July 25, 2006 StrataGold purchased the 5% net profits royalty and remaining rights held by Queenstake on the 31 claims of the Mar-Tungsten property plus the 49% interest it retained on the Mar-Tungsten leases. Queenstake currently retains a 1% NSR royalty on the Mar Property.

Certain claims that are part of the Dublin Gulch Property but are not included with the Mar-Tungsten Zone also have royalty agreements. These claims are not the subject of this report.

StrataGold now holds 100% ownership of all claims and leases, except the Olive Federal Crown Grant. The Olive Federal Crown Grant is held in the name of StrataGold, with 7/8 owned by StrataGold and 1/8 owned by G. William Vivon. There are no other known encumbrances on the Mar-Tungsten Zone.

## 2.5 Environmental Liabilities and Permitting

The Canadian Environmental Assessment Act (*CEAA*) is the overarching framework from which the Canadian provinces or territories have developed processes for environmental assessment. Under federal law once a section 21(1) of *CEAA* has been initiated by the proponent that requires the “*responsible authority*” to commence public consultation process with respect to the applicant’s proposed scope. After the public consultation, as soon as it is of the opinion that it has sufficient information to do so, “*responsible authority* shall report and make a recommendation to the government on the need for a comprehensive environmental study.

In accordance with section 16 of the Federal *Comprehensive Study List Regulations*, SOR/94-638, the Project would proceed by way of a comprehensive study as it is a “proposed construction” of:

- A metal mine, other than a gold mine, with an ore production capacity of 3,000t/d or more;
- A metal mill with an ore input capacity of 4,000t/d or more; and
- A gold mine, other than a placer mine, with an ore production capacity of 600t/d or more.

An agreement between the federal government of Canada and the territorial authorities of Yukon establishes administrative mechanisms for the environmental assessment of projects that require federal-provincial coordination. Figure 2-6 provides a broad description of the environmental process.

The objectives of this process are to:

1. Determine if an environmental assessment is required. A federal and provincial authority determines whether it has a responsibility to ensure that an environmental assessment is conducted.
2. Identify who is involved. The responsible party, called a responsible authority.
  - a. Notifies other federal parties to determine whether they may have responsibilities to ensure the conduct of an environmental assessment.
  - b. Contributes expert information.
3. Plan the environmental assessment. The responsible authority(ies) determines how the environmental assessment will be conducted. For example, they identify the.
  - a. Scope of the proposed project.
  - b. Scope of the factors that must be considered in the environmental assessment.
  - c. Timelines for conducting the review.
4. Conduct the analysis and prepare the environmental assessment report. One or more qualified environmental assessment practitioners identify the potential environmental effects and measures to mitigate those effects. The findings are presented in a written report.
5. Review environmental assessment report. The responsible authority(ies) reviews the report for adequacy and accuracy, and may have others review the report as well.
6. Make environmental assessment decision. Based on the findings of the report, the responsible authority(ies) decides whether adverse environmental effects are likely to be significant. This decision is taken into account when determining whether the proposed project should proceed.
7. Implement mitigation and follow-up program, as appropriate. If the proposal is to be carried out, the mitigation measures identified in the report are incorporated into the design plans and implemented with the project. Where required or appropriate, a follow-up program is also designed and implemented to verify that the environmental assessment was accurate and the mitigative measures were effective.

The permitting of the proposed Mar-Tungsten Project is governed by a two stage process that includes the *Yukon Environmental and Socio-economic Assessment Act (YESAA)* and approvals and/or licenses issued by the Quartz Mining Act and the Waters Act. Effective 2005, the

Council of Yukon First Nations (CYFN) and the Yukon Territorial Government was granted to work with the Government of Canada to jointly establish establishment by federal legislation of an assessment process that would apply on all lands of the Yukon and has functionally replaced the federal Canadian Environmental Assessment Act.

The *YESSA* process is a broadly scoped planning process whereby the affected governments (territorial, federal or First Nations) use an assessment report prepared by a third party to evaluate whether a project has significant adverse environmental or socio-economic effects and that appropriate mitigation can be implemented before providing a recommendation to the government on whether a project should proceed.

As part of the assessment, they seek input from government and First Nations and provide opportunities for the public to provide comments on proposed projects. The assessment process basically consists of identifying the environmental and socio-economic effects of a project and this harmonization process among the federal, territorial and First Nations has streamlined the regulatory review however it should be noted that no hardrock mines has yet to be approved by this Yukon process. *Yukon Environmental and Socio-economic Assessment Board (YESAB)* will act as the ‘responsible authority’ and will establish appropriate work plans; setting timelines for conducting the EA review, the scope of the project for the cooperative assessment and scope of the cooperative assessment that is consistent with *YESSA*. At present, no hard rock mine has received approval under this new *YESSA* process.

*YESAA* was developed to allow for one process to support environmental assessment (EA) decision making by territorial, federal and First Nation governments in the Yukon and minimize regulatory duplication. Under the *Canada-Yukon Agreement on Environmental Assessment Cooperation (CYAEAC)* one government acts as lead agency to administer the assessment process, but all governments are full and active partners in it.

In accordance with the *CYAEAC* and the *Environmental Assessment Subagreement*, the “Lead Agency or Party” will generally be the federal government “for projects proposed to occur on federal lands” and the territorial government “...for projects proposed to occur on lands within its territorial boundary...” - and not federal lands – “...where territorial approvals/authorizations are required to enable the project to be carried out in whole or part”. For any project not covered by the descriptions above “the Lead Party will be determined by mutual agreement of the Parties” taking into account a range of project-related factors and any decision to vary the Lead Party must be agreed to by both parties. However, each government maintains authority in the areas under its jurisdiction and remains responsible for environmental assessment decisions required by its’ legislation.

The permitting and approval process includes environmental assessment, project certificates, water licenses, land use permits, fisheries and navigable water authorizations; and land and mineral leases; registrations and relevant requirements under federal and territorial legislation. The agencies involved include public boards – Yukon Water Board; and potentially the Government of Canada departments of Indian and Northern Affairs Canada (INAC), Department of Fisheries and Oceans (DFO), Environment Canada (EC), Transport Canada (TC) and Health Canada (HC); Health and Social Services and the Office of the Fire Marshall.

## **2.5.1 Required Permits and Status**

### **Quartz Mining Act**

The Yukon Department of Energy Mines and Resources (EMR) is responsible for administering the Quartz Mine Act and issuing all associate regulatory approvals. A Quartz Mine License

cannot be issued until a decision document has been issued by *YESAB* involved in the environmental assessment.

The EMR regularly works with proponents to facilitate preparation of the Quartz Mine license application concurrent with the environmental assessment review process. This license approach allows for a relative quick (30–60 days) review and approval upon issuance of the environmental assessment document.

### **Water Act**

The Yukon Water Board is an independent administrative tribunal responsible for all regulatory approvals of water licenses pursuant to the Yukon Waters Act. The water license can be issued once a YESAA decision is confirmed, and requires public review and hearings (~35 days). The Water Board is guided under their obligations under Chapter 14 of the Umbrella Final Agreement (UFA) and will facilitate an adequacy review of the application concurrent with the YESAA assessment process. However, the processing of the water license application and any associated public hearings cannot commence until after the Water Board receives the YESAA decision document(s).

### **2.5.2 Environmental Studies**

StrataGold has secured the environmental consulting services from Jacques Whitford AXYS Ltd. (JWA) in Vancouver to conduct various baseline studies. JW conducted a gap analysis on the requirements to be satisfied for the Environmental Assessment for the Mar-Tungsten Zone. Based on SRK's review there is a substantial amount of field work that is required to characterize baseline conditions and this likely to take 6-8 months of field work in 2009. The environmental impact analysis, mitigation and management plans and reporting would be completed after the project definition and the aforementioned baseline work is compiled.

### **2.5.3 Other Agreements, Permits or Authorization**

StrataGold has established an exploration cooperation agreement with NaCho Nyak Dun (NND) First Nation to further explore the Dublin Gulch and other regional deposits. The agreement, dated May 21, 2008 is for a three year term with an option for an additional three years. The agreement further recognizes and supports the rights and title of NND within their traditional territory. This Exploration Cooperative Agreement is committed to conduct exploration while establishing a cooperative and mutually beneficial long-term relation with NND. The agreement requires that StratGold and NND work cooperatively on employment, training, business development and environmental protection while respecting the culture and heritage of the NND First Nation band. If the Project advances a Comprehensive Cooperation and Benefit Agreement would be developed between the two parties.

StrataGold is operating under a Class III Operating Plan Approval (LQ00090) which was granted by the Yukon Department of Mines and Energy in 2002 to cover an existing claim block known as the Lynx Property. The Lynx Property and its Operating Plan was transferred to StrataGold by Expatriate Resources Ltd. upon its formation in 2003 and was amended in 2005 to include the entire Dublin Gulch claim block once it was acquired and was extended to its current expiry date of July 25, 2012.

## 2.5.4 Permitting Timeline

The environmental assessment and permitting process is a two step process where the authorization process can be complex with a great many variables that can influence timelines. However, time requirements for the YESAA process are specified in the regulations and are summarized in Table 2.5.4.1. This timeline identifies minimum time requirements, potential additional time that may be required at the discretion of the assessor and the maximum allowable time under the regulations. There are a number of circumstances which can further extend the YESAA timeline that are not listed in Table 2.5.4.1; these are:

- Assessment of Adequacy that typically takes (30-60 days);
- Two step public comment period; initial period is 21 days followed by a second comment period for the same duration; and
- One or more of the Decision Bodies refers the recommendation back to the assessor for reconsideration (93-107 days).

To avoid triggering these additional time requirements, regulators encourage proponents to be proactive in developing comprehensive application packages that clearly address regulatory requirements, prior to initiating the YESAA review process.

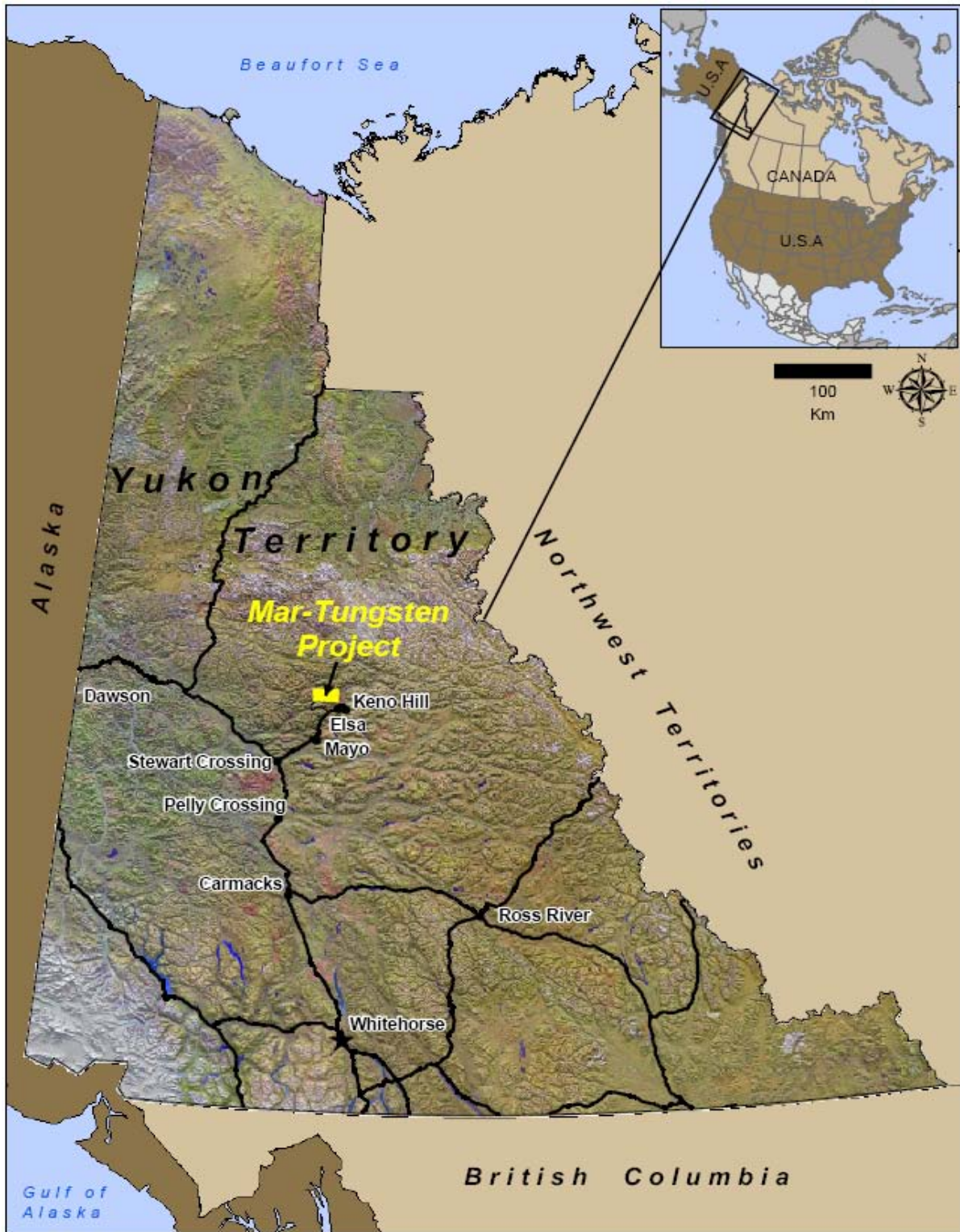
The water license that is processed through the Yukon Water Board does not have defined timelines and therefore the application is likely to be the most lengthy approval process required by the proponent. However timelines can be mitigated through constant review and dialogue with the agencies.

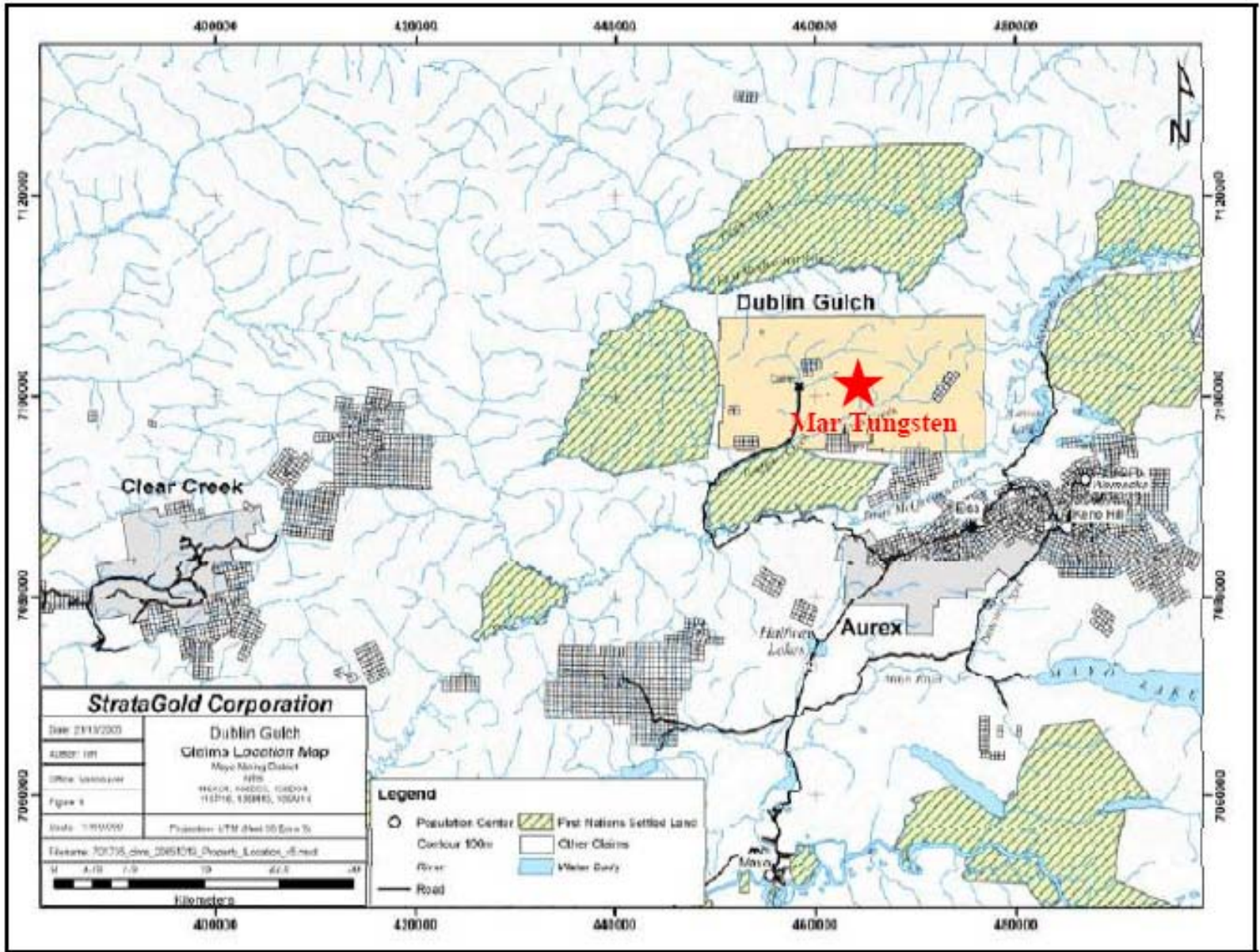
**Table 2.5.4.1: Permitting Timeline**

Process	Activity	Min. <sup>(1)</sup>	Max. <sup>(1)</sup>
Baseline	Complete Baseline Studies	240	300
Impact Analysis, Alternatives, and Mitigation	Complete Analysis of Impacts	60	120
Environmental Management Plans	Develop Project Management Plans	60	90
Pre-screening <sup>(2)</sup>	YESAB Review Application	60	90
Screening	Public Notice of Screening	6	6
	Public Comment Period	30	60
	Review, Define Purpose and Need	21	42
	Draft Screening Report	120	390
	Public Notice	6	6
	Public Comment Period	21	42
	Response to Comments	30	60
Assessment Report	Executive Committee Make Recommendations	60	90
Decision	Decision Body Recommends, Rejects or Modifies	60	81
<b>Total</b>		<b>774</b>	<b>1,377</b>

<sup>(1)</sup> No. of working days

<sup>(2)</sup> Statutory timelines were considered for the pre-screening and screening process





SRK Job No.: 173203

File Name: Figure 2-2.doc

**Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada**

**Source: StrataGold**

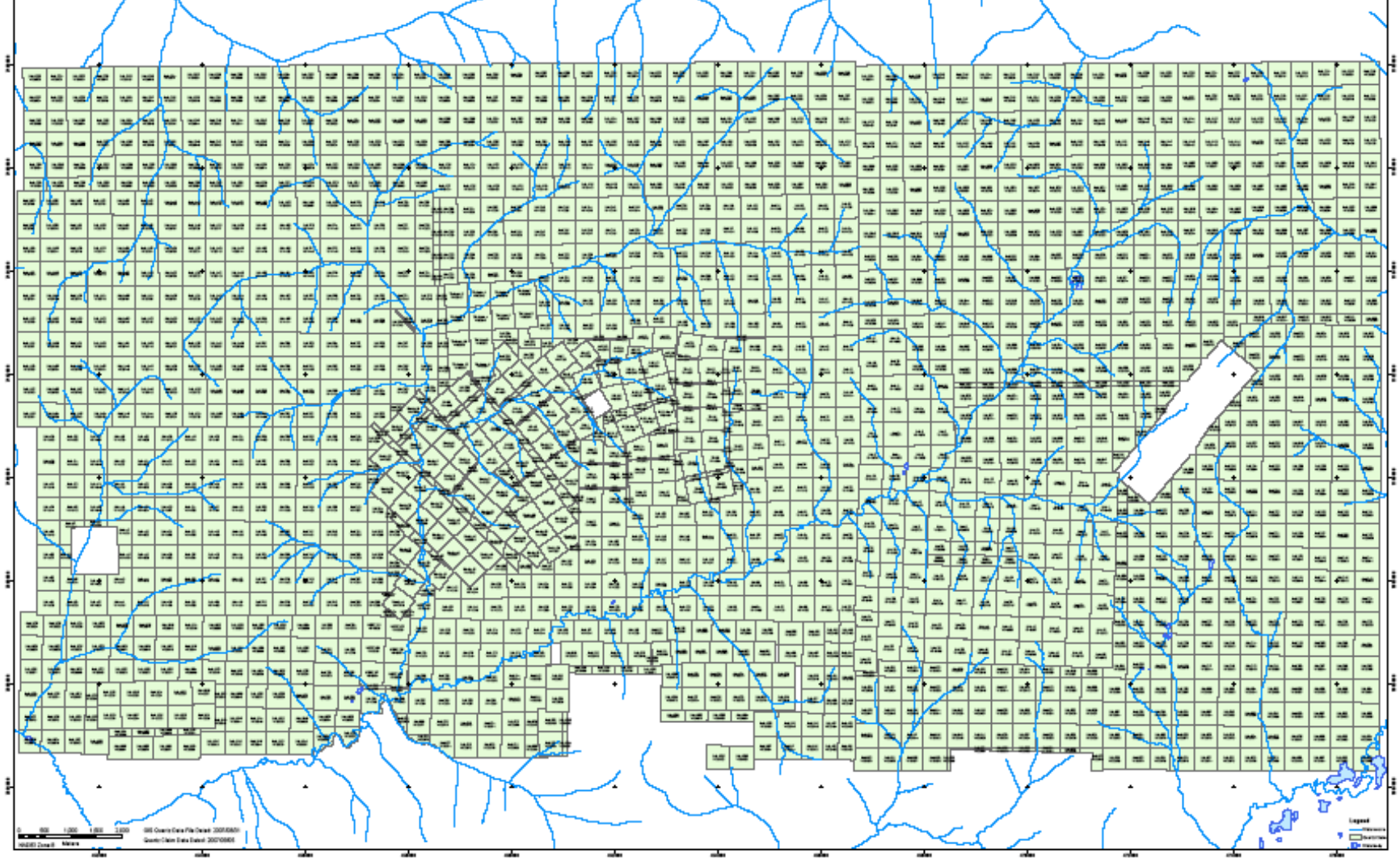
**Location Map of the Dublin  
Gulch Property,  
Mar-Tungsten Zone**

Date: 10/20/08

Approved: BAS

Figure: 2-2

Dublin Gulch Quartz Claims  
September 5th, 2007



SRK Job No.: 173203

File Name: Figure 2-3.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

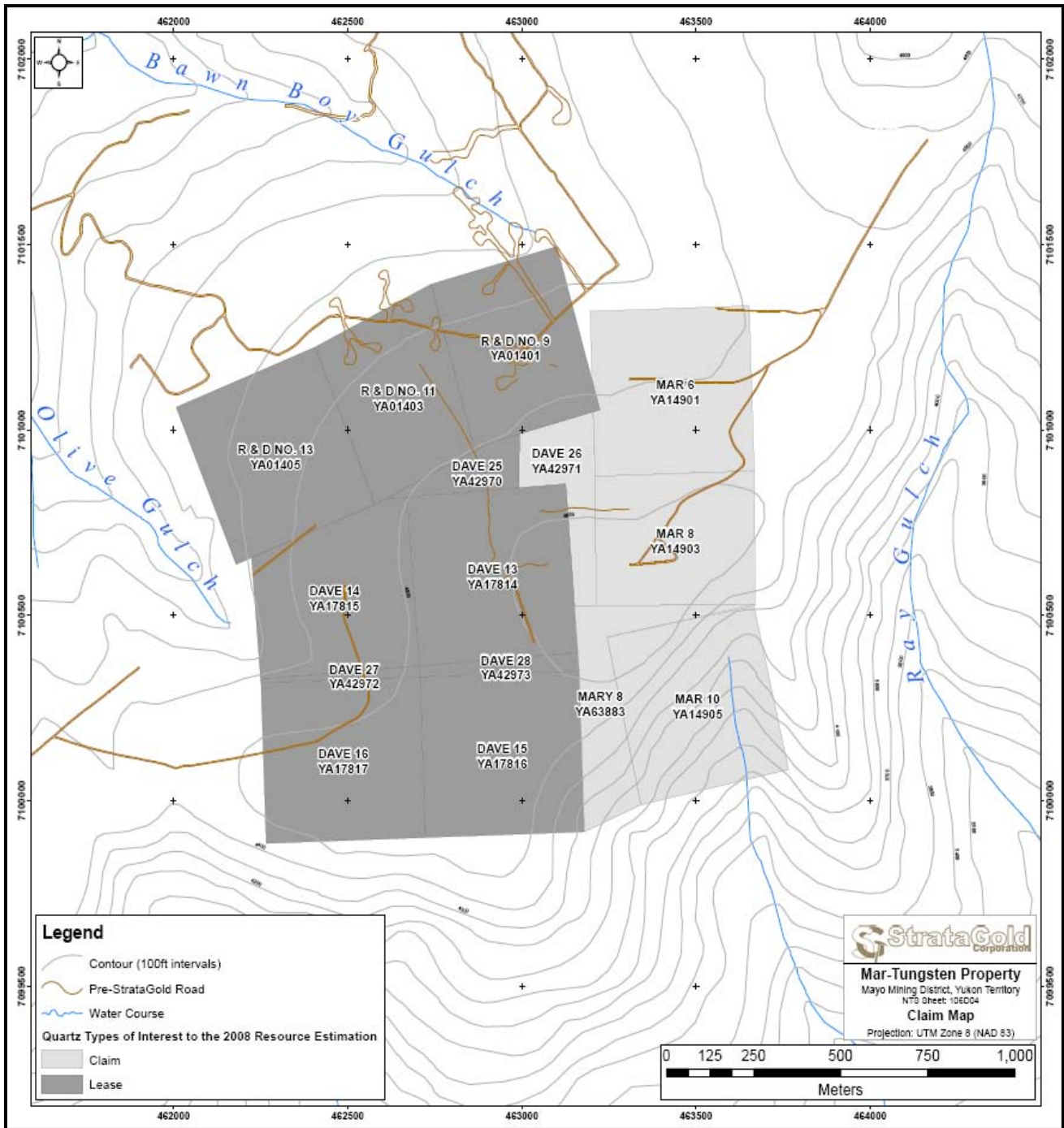
Source: StrataGold

Location Map of the Dublin  
Gulch Claim Group

Date: 10/20/08

Approved: BAS

Figure: 2-3



SRK Job No.: 173203

File Name: Figure 2-4.doc

**Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada**

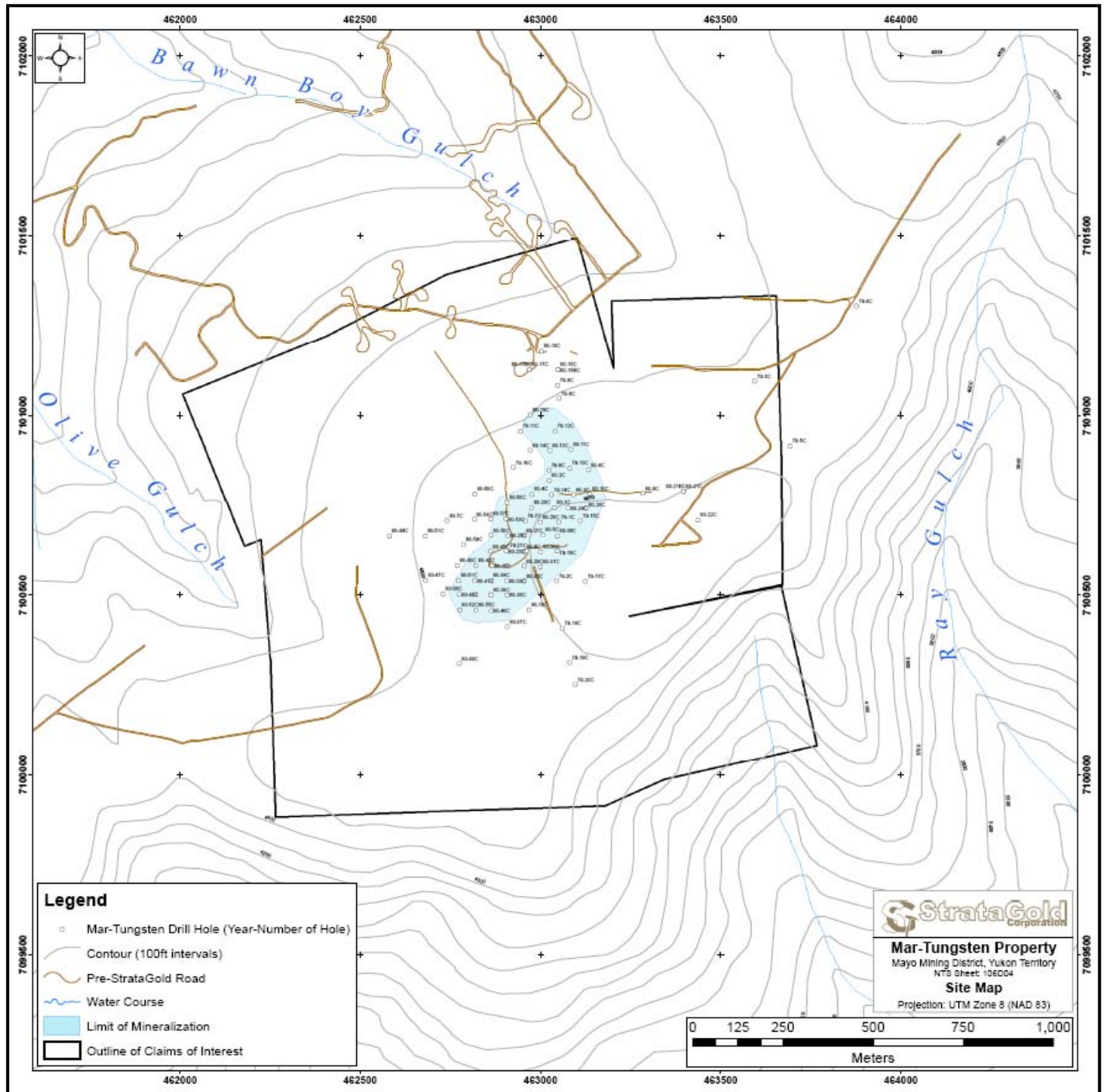
**Source: StrataGold**

**Mar-Tungsten Zone Claim  
Map**

Date: 10/20/08

Approved: BAS

Figure: 2-4



SRK Job No.: 173203

File Name: Figure 2-5.doc

**Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada**

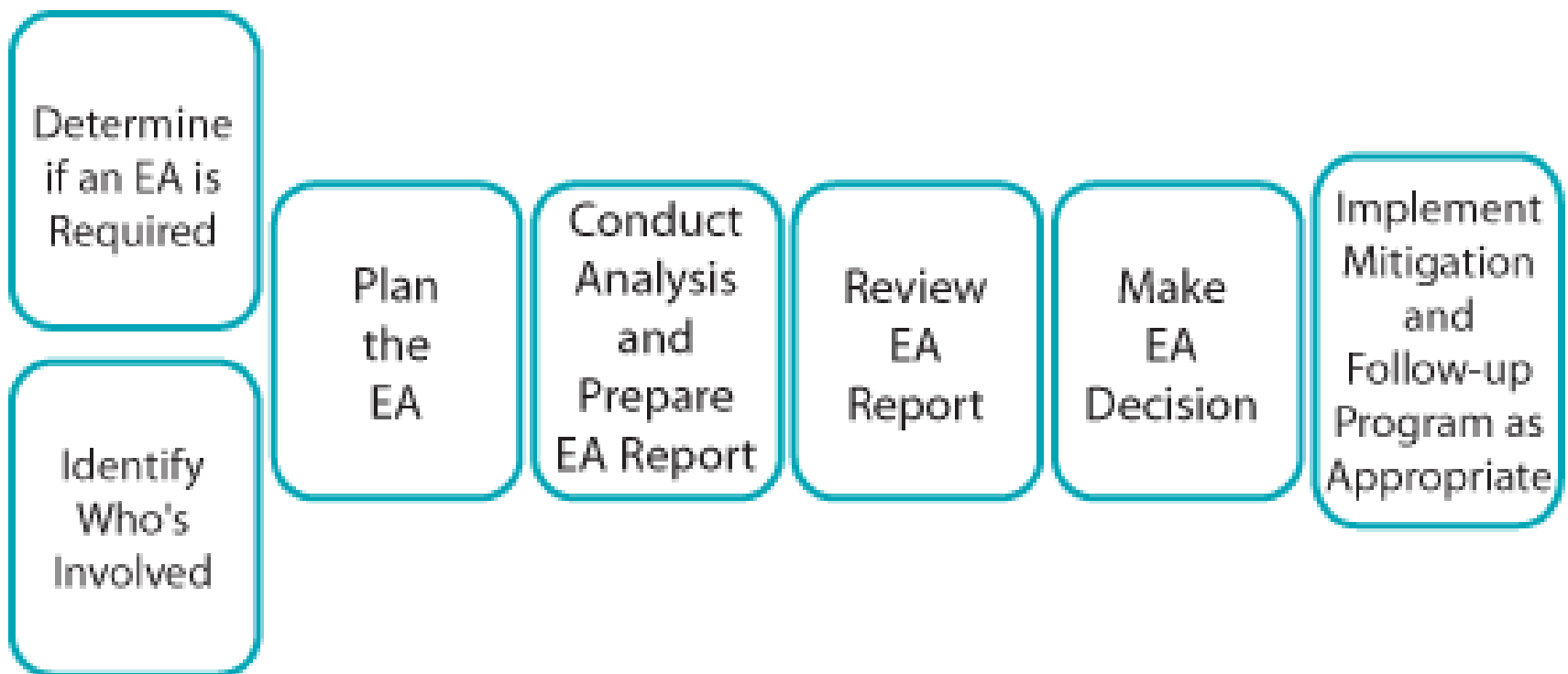
**Source: StrataGold**

**Mar-Tungsten Zone,  
Site Map Showing Location  
of Mineralization**

Date: 10/20/08

Approved: BAS

Figure: 2-5



SRK Job No.: 173203

File Name: Figure 2-6.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

**Environmental Process**

Date: 11/21/08

Approved: KB

Figure: 2-6

## **3 Accessibility, Climate, Local Resources, Infrastructure and Physiography (Item 7)**

### **3.1 Topography, Elevation and Vegetation**

The topography of the Dublin Gulch Property is characterized by rolling hills and plateaus, with elevations ranging from 800m south of the confluence of Haggart and Lynx Creek to 1,537m at the summit of Potato Hills. The hills and ridges are drained by gentle to deeply incised creeks and canyons. The ground surface is covered by both residual soil and boulder fields. Outcrop is generally rare, perhaps 2% or less over the entire property.

Vegetation is typical of the central Yukon and locally varies between lichen, moss, buckbrush and spruce. Moss and lichens occur on steep, north facing, felsenmeer covered slopes. Buckbrush is ubiquitous in the Dublin Gulch area, while spruce to 30cm diameter, is restricted to valley bottoms and areas underlain by glacial till or residual soil (Kaye, 1981). Lower elevations are vegetated by black spruce, willow, alder and moss, and higher elevations by sub-alpine vegetation (Sparling and Maunula, 2007).

The Mar-Tungsten Zone occupies the south face of a large east-northeast trending plateau shaped hill, herein termed Potato Hills Ridge for local reference. It separates Lynx Creek and Dublin Gulch Skarn outcrops are exposed in Ray Gulch intermittently to the top of the hill. The historic drilling took place within drill pads with an average collar elevation of 1,391m. Local relief as measured from the confluence of Lynx Creek and Ray Gulch to Potato Hills Ridge is approximately 585m.

### **3.2 Climate and Length of Operating Season**

The Mar-Tungsten Zone has a northern continental climate, with average minimum temperatures of -3°C and maximum temperatures of 13°C. In winter months, temperatures average -11°C, while summer temperatures reach to 14°C. (Source: Mayo Landing Data, 1931-1960). Annual precipitation varies from 375mm to 600mm, approximately half of which falls as snow. North-facing slopes have patchy permafrost areas. The operating exploration season begins in early May and continues through early October.

### **3.3 Physiography**

The physiography of the Dublin Gulch Property is moderately steep and controlled by the structure of the underlying geology. The Mar-Tungsten Zone is sited on a gently sloping asymmetric plateau-topped hill, informally termed Potato Hills Ridge. The ridge trends east-northeast, with the southeast side above Lynx Creek ruggedly steep and deeply incised. The hill is semi-parallel to the east-west-trending Lynx Creek and Tin Dome anticlines. The northwest slope of Potato Hills Ridge rolls gently into Dublin Creek. The metasedimentary plateau attains a local maximum elevation at Potato Hills of 1,537m. The creeks and canyons draining Potato Hills Ridge are oriented perpendicular to it. Lynx Creek and Dublin Gulch both trend east-northeast parallel to Potato Hills Ridge and drain to the south-southwest. Dublin Creek converges with south-draining Haggart Creek, which along with Ray Gulch occupy north-south trending fault zones or shear zones. A series of four-wheel drive trails exit Haggart Creek and traverse the length of Potato Hill Ridge.

Numerous placer workings are sited within the Haggart Creek and Dublin Gulch drainages. The tailings mounds and ponds extend 2.75km south of Haggart Creek and Dublin Gulch confluence, and 0.5km south of where the Holway vein is believed to occur. The tailings were generated during the more recent period of placer operations in the 1970's through 1990's.

The Dublin Gulch Property has sufficient sites suitable to accommodate mining and processing facilities both on Potato Hills Ridge and in the low-lying areas. As part of a scoping level study, Rescan Engineering (1997) identified locations for heap leach pads, waste rock and tailings dumps.

### **3.4 Access to Property**

The Mar-Tungsten property is readily accessible by SUV or truck during the field season months. The property is 42km east-northeast from the village of Mayo. Access follows Highway 2 for 35km and then proceeds along South McQuesten Road for 46km, of which the last 25km are unpaved and not maintained, but generally in good repair. In July-August 2007 StrataGold had this section of the road graded. The Mar-Tungsten Property is accessed by a network of four-wheel drive trails.

### **3.5 Surface Rights**

The Crown retains all surface ownership rights to the property, while permitting StrataGold to explore and develop the site for eventual mining. StrataGold is bound and must follow all environmental strictures pertaining to land degradation, remediation, and reclamation as specified in Federal and Yukon Territorial laws.

### **3.6 Local Resources and Infrastructure**

The village of Mayo (population: 348) has an airstrip with daily charter flights and provides basic hotel, restaurant, and shopping facilities. Chartered fixed-wing and rotary wing aircraft are available at Whitehorse, which provides regular air service across the Territory and on into Vancouver, British Columbia (B.C).

#### **3.6.1 Transportation**

The Alaska Highway 1 (AlCan) passes through Whitehorse, and 8km to the north, Klondike Highway 2 diverges to Mayo, a road distance of approximately 342km.

#### **3.6.2 Power Supply**

There is currently no power supply into the Dublin Gulch Property and the existing field camp facilities have generated power. The generators are supplied by fuel trucked in from Mayo. Current planning anticipates that transmission lines will have to be erected over 20km from a transmission line currently tied into the hydroelectric generating station at Mayo.

#### **3.6.3 Communications**

A satellite communications system is currently in use. The system employs a satellite telephone/data system linking the man-camp to the outside world.

Site radio communications will be by both stationary and mobile radios. The system will be comprised of a base unit and a repeater unit matched to two antennas mounted on a tower located on a hill above the mine.

### **3.6.4 Water Supply**

Hydrologic studies have not been completed for the Dublin Gulch Property. Previous planning for mineral processing has assumed adequate water supplies may be drawn from Haggart Creek.

### **3.6.5 Port**

The nearest port facilities are at Skagway, Alaska, a road journey of 594km via Whitehorse to Mayo and the property. The route is largely paved highway.

### **3.6.6 Buildings and Ancillary Facilities**

StrataGold maintains a field camp at the property to house exploration and support personnel and drilling contractors due to the logistical demands of the exploration program and the driving times involved in commuting into Mayo. The Dublin Gulch field facilities provide housing, a food preparation and dining hall, offices, electric generating sets, and core logging and storage facilities. The camp is maintained during the operating season from May to October and is currently in very good shape.

### **3.6.7 Potential Plant Sites**

SRK has tentatively identified and evaluated suitable sites for future plant sites. The areas identified are located along the Potato Hills Ridge approximately 1.0 to 1.5km northeast of the mineralization.

### **3.6.8 Tailings Storage Area**

SRK has tentatively identified and evaluated suitable sites for future tailings storage areas. The areas identified are along the northern side of Potato Hills Ridge.

### **3.6.9 Waste Disposal Area**

SRK has identified and evaluated suitable sites for waste rock storage areas. The areas identified are primarily in low-lying, valley fill areas to the northwest of Potato Hills ridge.

### **3.6.10 Manpower**

Any anticipated pre-development activities will require manpower and supplies for exploration and pre-development activities to be brought in from Whitehorse and British Columbia. Facilities at Mayo to handle an influx of temporary and permanent workers are limited, and a social development impact plan will most likely need to be developed with Territorial and Mayo village planners.

## **4 History (Item 8)**

### **4.1 Ownership**

StrataGold is the sole owner of the Mar-Tungsten Zone, retaining 100% ownership of all claims and leases. The ownership of the Olive Federal Crown quartz claim grant is held 7/8 by StrataGold and 1/8 by Mr. G. William Vivon. Outside of the Mar-Tungsten Zone the remainder of the Dublin Gulch holdings are in the name of StrataGold and its subsidiary, StrataGold Exploration, which together hold 100% ownership of all claims and leases. The reports by Mosher and Carter (2006) and Sparling and Maunula (2007) provide documentation of the rest of the Dublin Gulch gold exploration history, geology, and gold resource estimation.

### **4.2 Past Exploration and Development**

The Dublin Gulch Properties have been explored and prospected since the mid-1890's, initially for placer gold and later for hard-rock tungsten, tin, gold, silver, and minor base metals. The Mar-Tungsten Zone comprises a portion of the Dublin Gulch mineralization system. The exploration history for the Mar-Tungsten Zone, and the shifting ownership of the various sub-districts is linked to the overall exploration efforts directed across the larger Dublin Gulch Property and for clarity, the exploration history requires reference to the larger Dublin Gulch Property exploration.

Placer mining commenced in the district in the mid-1890's, with the first placer gold discovered at Dublin Gulch in 1898. In 1904 scheelite was discovered in the placer concentrates. In 1907, J.S. Stewart and Dr. William Catto staked the Victoria Claim on a major vein system containing gold, arsenopyrite and silver on the north face of Potato Hill Ridge overlying Dublin Gulch. The Geological Survey of Canada (GSC) located scheelite and wolframite in quartz and pegmatitic veins at the head of Dublin Gulch in 1908. In time, an additional ten gold veins were discovered between Stewart and Olive Gulches within Eagle Pup, Suttle Pup, Platinum Pup, and Bawn Boy Pup side-canyons, and near the junction of Cascallen Pup and Dublin Gulch. A number of these veins were reported to have extended underground for more than 61m with widths up to 3m.

Some of the placer scheelite concentrate was retained and shipped from the operations in 1916 to 1918. During this time, Robert Fisher prospected around the headwaters of Dublin Gulch and located several small lode occurrences of scheelite, but did not work the showings. In 1928, the GSC noted the scheelite in the placer deposits was derived from quartz and pegmatite veins found in and adjacent to the Dublin Gulch Stock, located to the south of the Gulch. The veins vary in width from 3mm to 1.5m. Samples collected by the GSC returned assay values of nil to 10% WO<sub>3</sub>. Various placers in the area were worked from 1934 to the 1940's.

At the Mar-Tungsten Zone, scheelite-bearing float was located by prospector Harvey Ray in 1942, who staked the Tip Top claim (claim 55220) on it. The GSC investigated the property from 1942-1944. They located the source of the scheelite float in 1943 where several skarn zones at the headwaters of Ray Gulch and several other drainages cutting the steep southern face of Potato Hill Ridge were outcropping. The gulches all drain into Lynx Creek. The Ray Gulch claims were re-staked in 1951 by R.A. Batty and E. Barker (claim 61878). Stride Exploration and Development Co. prospected and sampled the skarns in 1956. In 1960, Mayo Silver Mines Ltd. located a 76cm wide vein of arsenopyrite and quartz on the east side of the headwaters at

Ray Gulch, and dug several bulldozer trenches in 1963 or 1964. Mayo Mines did not, however, conduct exploration for tungsten at Ray Gulch.

Both Ray Gulch and Dublin Gulch areas were re-staked by C. Provencher in 1968 (claim Y27203 as Pan and Arpa). The ground was optioned to Great Plains Development Ltd. in 1968, Tam Mining in 1969, and Connaught Mines Ltd. from 1969 to 1971. In 1969 Connaught subleased the Mar-Tungsten Zone from Canex Placer, but returned it in 1971. In 1971, Canex-Placer drilled three holes and dug 20 trenches to evaluate the low-grade quartz-scheelite vein systems, and conducted a soil geochemistry program that extended from Platinum Pup to the Potato Hills and covered the north side of Potato Hills Ridge above Dublin Gulch.

The Dublin Gulch district was explored and placer mined on a large-scale beginning in 1973, when Ron Holway first commenced mechanized placer mining of gravels. From the time documentation of placer gold production was enacted as an assessment requirement, at least 110koz of placer gold have been reported from the district.

Gordon Gutrath of Queenstake Resources staked the Mar 1-24 claims (claim YA14897) over tungsten-bearing skarns in the Ray Gulch area in 1977, and later that year staked Mar 25-30 claims adjacent to and east of the original block. Queenstake conducted a small program of geological mapping and sampling of the skarn zones near Ray Gulch. In 1978, Queenstake optioned the ground to CanTung, who also optioned the adjoining R and D claims from Dublin Gulch Mining Ltd. CanTung explored the Mar-Tungsten Zone for tungsten and gold between 1977 and 1986, retaining Bema in 1980 to manage the program.

Bema conducted first phase geological mapping and limited outcrop sampling delineating the stratigraphic controls of the tungsten mineralization. This was augmented by a program of bulldozer ripping to expose bedrock in areas of shallow to moderate overburden thickness. The bedrock exposures were mapped and 3m samples were taken on skarn exposures. Over 9km of bulldozer trenches were made, and 68 samples collected; the samples returned assays ranging from nil to 0.5% WO<sub>3</sub>. The phase one program was followed by a second phase that included approximately 25 new trenches uncovering 1,491m of bedrock. Total volume excavated in trenching operations was in excess of 12,647cm<sup>3</sup>. CanTung also conducted extensive geophysical survey programs in 1978, which were later supplemented with VLF-EM surveys.

During the 1979-1980 exploration programs, 86 diamond core holes of BQ and NQ diameter were drilled into the down dip projections of the mineralized outcrops. The drilling program totaled 13,737m.

While exploring the Mar-Tungsten Zone, Bema also excavated, mapped and sampled nearly 100 trenches along the regional gold fault-vein system. This structure is developed along the northern contact of the Dublin Gulch stock, largely between Olive Gulch and the Blue Lead Ridge, and on the Creek Zone fissure in Dublin Creek. They delineated two new shear-hosted gold-bearing quartz veins in bedrock uncovered by recent placer mining operations, the Victoria and Catto veins.

The Yukon Geological Survey MINfiles (106D 027, 10-2007) notes that CanTung drilled an additional three holes, totaling 751m, in 1982, and continued geochemical sampling, trenching, VLF-EM surveying and geological mapping. This later period of exploration was located approximately 2km east-south east of the Mar-Tungsten Zone. The drilling targeted down dip extension of skarn alteration identified by surface trenching. A 30m thick zone of skarn

alteration was intercepted by the drilling which contained low grade tungsten mineralization. The best intersection (drillhole 82-1) reported 0.18% WO<sub>3</sub> and 0.34g/t Au over 0.8m, in addition to a 1.7m section that reported 0.14% WO<sub>3</sub>. The 1982 Bema Exploration Report recommended further drilling be conducted in this area.

CanTung returned the Mar-Tungsten Zone and adjacent gold claim blocks to Queenstake in 1986. Queenstake subsequently drilled four NQ diamond core holes on the two gold veins, for a total of 705m.

From 1987 onwards, exploration emphasis across the Dublin Gulch Property was directed at gold as the primary metallic commodity of interest. Queenstake held the Mar-Tungsten Zone claim group as their sole district asset until 1996 when they sold them to First Dynasty Mining Ltd.

In 1996 First Dynasty Mining formed a new subsidiary, NMML and transferred the Dublin Gulch Property, including the Mar-Tungsten Property, into its project portfolio. NMML undertook preliminary resource estimation and a very preliminary open-pit mining examination of the Mar-Tungsten property that year. StrataGold acquired the Dublin Gulch Property in 2004, and currently holds 100% of the Mar-Tungsten claims.

### **4.3 Interpretation of Historical Exploration**

The 1979-1989 exploration drilling program was responsible for advancing the property from a raw exploration prospect to its current status. This program mapped, sampled and diamond core drilled the west-dipping skarn units. These procedures were conducted in a careful and professional manner. Most of the drillholes were surveyed for down hole deviation. The core was logged, split and sampled properly. All samples were analyzed using appropriate assay procedures of the time. The drill logging and assay results were correctly compiled onto cross-sections. The exploration work described above resulted in the delineation of anomalous tungsten mineralization located within several tabular west dipping units which average 12m in true thickness along 800m of strike length and 200-300m of down dip extent. In some locations, the tungsten mineralization thickens to a maximum true thickness of 25m. The drilling and assay results of the exploration work described above were subsequently incorporated into historical resource estimates (Bema 1981, Rescan 1996) as discussed above in Section 4.3. They also have provided much of the technical data supporting the resource estimation discussed in Section 15.

All of the exploration work described above was conducted by previous owners or operators of the property as referenced. None of this work was conducted by StrataGold personnel.

### **4.4 Historic Mineral Resource and Reserve Estimates**

Following the 1980 drilling campaign, Bema prepared a “drill-indicated” resource estimate for the Mar-Tungsten Zone. The resource estimate was based mainly on the 86 diamond core holes completed in the 1979-1980 drilling campaign.

Bema outlined and selected mineralized blocks using cross-sections constructed from outcrop and trench mapping plus drillhole compilation. The mineable resource blocks required a minimum width of 2.438m with a minimum average grade 0.2% WO<sub>3</sub>. Drill intersections that did not meet these minimum requirements were disregarded and were not included in the resource calculations (Kaye, 1981).

The geometries of the mineralized zones were defined by several criteria including geological interpretation of the of the favorable calc-silicate host unit, by correlation of skarn units between

drillholes and according to general lithologic and structural trends. This included attenuation and thickening of mineralized zones by folding and related deformation, termination or abutment by granodiorite sheet and dike intrusions, and displacement by faulting. Internal dilution factors were applied, including various ratios of biotite-quartz schist and barren skarn and sub-skarn sections. The zones were outlined on sections at a scale of 1:400 on east-west drill sections, and each zone was measured in the section plane with a polar planimeter. The north-south projection of each outlined block was based on 1/2 the distance to the neighboring section of drillholes. A density of  $3.531\text{g/cm}^3$  was employed to convert the volume for each mineralized block to metric tonnes, and then by simple conversion to short tons. Waste rock was assigned a density of  $2.55\text{g/cm}^3$ .

Most of the mineralized blocks with  $>0.6\%$   $\text{WO}_3$  occur within a horizon termed the Garnet Zone. This has a strike length of 800m and a down dip extension of 300m with an average thickness of 12m (up to 25m in places). This strongly mineralized zone dips moderately west into the Potato Hills stock.

The results of the Bema Resource Estimate are presented below in Table 4.4.1. Note that figures and methodologies employed by Bema for the Mar-Tungsten Zone resource estimate are not NI 43-101 compliant, they are unclassified and do not meet current CIM classification standards, and are only described herein for a historical recounting of the deposit.

A second resource estimate was conducted by Rescan Engineering Ltd., Vancouver, B.C., in 1996 for New Millennium Mining Limited (NMML). The estimate was prepared from cross-sectional and grade information originally constructed by Queenstake. The cross sections are described as containing “ore zones” which were defined at an unknown cut-off. Each was digitized for area and extruded halfway to the next section for volume. A specific gravity of 3.531 was again applied to mineralized material and 2.55 was used for un-mineralized material to determine tonnage. Two open-pit outlines were “roughed in” using an assumed  $45^\circ$  pit wall. Pit 1 was extended approximately 50m below present surface elevation. Pit 2 extended approximately 100m below present surface elevation. The results of the Rescan resource estimate are presented below in Table 4.4.2. There is no documentation in the Rescan report to explain why the resource increased dramatically over that estimated by Bema.

Note that figures and methodologies employed by Rescan Engineering for the Mar-Tungsten Zone resource estimate are not NI 43-101 compliant, they are unclassified and do not meet current CIM classification standards, and are only described herein for a historical recounting of the deposit.

A third resource estimate is listed in Smit, Sieb, and Swanson (1996), which quotes 5.4Mt grading at  $0.82\%$   $\text{WO}_3$  for the Mar-Tungsten Zone (Table 4.4.3). The authors do not provide any explanation of resource estimation methodology or cut-off grade. Note that figures provided by Smit, Sieb, and Swanson for the Mar-Tungsten Zone resource estimate are not NI 43-101 compliant, they are unclassified and do not meet current CIM classification standards, and are only described herein for a historical recounting of the deposit.

A fourth resource estimate is listed in the Yukon Geological Survey (2006) which states a resource of 4,861,593Mt @  $0.48\%$   $\text{WO}_3$ , and lists the source as “historical calculations”. (Table 4.4.4). It does not provide any explanation of resource estimation methodology or cut-off grade. Note that figures provided by Yukon Geological Survey for the Mar-Tungsten Zone resource

estimate are not NI 43-101 compliant, they are unclassified and do not meet current CIM classification standards, and are only described herein for a historical recounting of the deposit.

The resource estimates conducted by Bema (1981) and Rescan (1996) are relevant and reliable due to the fact that they are properly documented and referenced to actual technical data derived from exploration work conducted on the Mar-Tungsten Property. The resource estimates provided by Smit, Sieb and Swanson (1996) and Yukon Geological Survey (2006) may not be relevant or reliable since there is no documentation available describing any explanation of resource estimation methodology or cut-off grade

An up to data resource estimation conducted by modern industry standards and fulfilling the requirements of NI 43-101 is contained in Section 15 of this report. This resource estimation supersedes the four historical resource estimations discussed above.

**Table 4.4.1: Bema, Historical Mar-Tungsten Resource Estimate 1981**

CoG % WO <sub>3</sub>	Tons	Tonnes	Average Grade% WO <sub>3</sub>
> 0.80	970,246	880,441	1.194
> 0.70	1,244,749	1,129,536	1.090
> 0.60	1,671,249	1,516,560	0.945
> 0.40	2,623,771	2,389,917	0.754
> 0.20	4,134,210	3,751,552	0.555

**Table 4.4.2: Rescan Engineering, Historical Mar-Tungsten Resource Estimate 1996**

CoG % WO <sub>3</sub>	Depth Below Surface (m)	Tons	Tonnes	Average Grade% WO <sub>3</sub>
Unknown	50	6,896,575	6,258,276	0.68
Unknown	100	8,917,000	8,091,651	0.67

**Table 4.4.3: Historical Mar-Tungsten Resource Estimate 1996**

CoG % WO <sub>3</sub>	Tons	Tonnes	Average Grade% WO <sub>3</sub>
Unknown	5,950,800	5,400,000	0.82

**Table 4.4.4: Yukon Geological Survey, Historical Mar-Tungsten Resource Estimate 2006**

CoG % WO <sub>3</sub>	Tons	Tonnes	Average Grade% WO <sub>3</sub>
Unknown	4,861,593	4,411,609	0.48

## 4.5 Historic Production

The Mar-Tungsten Zone is an exploration target, and has not yet been developed and exploited. Minor scheelite recovery as a byproduct in historical gold placer operations has reportedly been recovered but the author has no records as to quantity or quality.

## 5 Geologic Setting (Item 9)

### 5.1 Regional Geology

The Mar-Tungsten Zone lies within the geological province termed the Selwyn Basin, a leading edge fold belt of the North American craton formed in the Cretaceous-age convergent plate accretionary terrain assembly of Wrangellia. An arcuate belt of Mid-Cretaceous intrusives, termed the Tombstone Plutonic Series, is distributed along the eastern side of the accretionary arc. These include a number of intrusion- and orogenic related gold systems stretching from Alaska into British Columbia, namely; Donlin Creek, Shotgun, Fort Knox, Pogo, Brewery Creek, Clear Creek, Scheelite Dome, and Dublin Gulch (Figure 5-1). These deposits and many lesser ones, constitute the 2,000km long Tintina Gold Province (TGP). The gold and tungsten deposits within this orogenic intrusive series have been classified as intrusion-related, epizonal, or shear hosted deposits and have formed over a relatively wide time span. The Mar-Tungsten Zone is sited within the eastern portion of the TGP termed the Tombstone Gold Belt (TGB). It is associated with the Dublin Gulch Stock that formed within a reduced primary oxidation state during an ilmenite-series magmatism that is post orogenic.

Locally, the TGB includes the Clear Creek, Scheelite Dome, and Dublin Gulch properties. The correlative western end of the TGB, with the Fort Knox - True North deposits, appears to exhibit dextral displacement of 400km along the Tintina convergent wrench fault (Figure 5-2). The gold deposits characteristically have east-striking steeply-dipping auriferous quartz veins developed within the intrusives. Gold, and in some cases tungsten, are hosted within sub-vertical northwest to north-northwest-striking sinistral faults, as veins and breccias in east to northeast striking dilatational fault zones. The TGB kinetics involve broad scale low-magnitude regional east-west shortening and north-south extension during regional intrusive emplacement and accompanying late-stage gold-tungsten mineralization at ~92m.a. These orogenic-related deposits formed at depths of five to eight kilometers and consequently exhibit pronounced and consistent vein orientations. The fault-hosted gold-tungsten mineralization in adjacent metasedimentary rocks, i.e., Mar-Tungsten Zone, have comparable vein geometry, but tend to be somewhat smaller than in other orogenic systems. (Stephens et al, 2004).

The Mar-Tungsten Zone area is underlain by Upper Proterozoic to Lower Cambrian Hyland Group clastic rocks of the Selwyn Basin. The rocks in the northern part of the Selwyn Basin underwent deformation and greenschist-facies metamorphism in the early Cretaceous by north-directed thrusting. The three main thrusting zones are enumerated as the Dawson, Tombstone, and Robert Service thrusts. The Tombstone and Robert Service thrusts were coeval. The Robert Service thrust is believed to have superimposed the Hyland group of clastics over Mississippian-age Keno Hill Quartzite.

These highly deformed clastic rocks, were subsequently dissected by a series of mid-Cretaceous intrusives of the Tombstone Plutonic Series. This event occurred coeval to deformation and intrusive activity related to north-northeast directed subduction of the Farallon oceanic plate beneath the North American plate in the Mid-Cretaceous. In proximity to the intrusives, the clastic rocks have been converted to hornfels and the calcareous sediments are metasomatically altered to calc-silicate skarns that host the Mar-Tungsten Zone mineralization.

## 5.2 Local Geology

The Mar-Tungsten Zone occurs within a large roof pendent of Paleozoic metasediments enclosed by the Mid Cretaceous Dublin Gulch Granodiorite Stock. The mineralization is associated with skarn alteration developed along the contact of calcareous metasediments with the intrusive. The main stock has intruded an overthrust section of highly folded and deformed series of clastic metasedimentary rocks with minor carbonate intercalations. Contact metamorphism and metasomatism associated with the granodiorite pluton overprinted the earlier pervasive regional metamorphic fabric. During this event, the favorable calc-silicate skarn host was formed and the tungsten-bearing mineralizing fluids were generated. Late, post-intrusion structural adjustments produced tension fractures, faults, and shear zones that provided conduits and loci for late stage tungsten, silver, and gold-bearing structures.

### 5.2.1 Local Lithology

The local terminology and lithologic sub-divisions are adopted from the early work of Bema developed during the 1979-1980 exploration drilling program. The rocks described by the trench mapping and diamond core drilling of Mar-Tungsten represent a metasedimentary assemblage of essentially hornfelsic micaceous quartzites and calc-silicate skarns derived from a succession of impure sandstones, siltstones, and limestones of Upper Proterozoic–Lower Paleozoic age Hyland Group metasediments. The Hyland rocks are regionally correlated to the Upper Schist division of the Yukon Group (Figure 5-3).

#### **Metasedimentary Rocks**

The lowest unit in the District is the Keno Hill Quartzite of Mississippian age. This unit is exposed in the South McQuesten River Valley and Keno Hill where it can be seen overlain by the Lower Schist Unit. Both of these lithologies are absent at Dublin Gulch.

The Central Quartzite Formation conformably overlies the Lower Schist. This unit consists largely of bedded quartzite of varied thickness intercalated with graphitic phyllite, argillite, and schist. Between the southern base of Lynx Dome and Lynx Creek it is mapped as a clean massive quartzite grading upwards into graphitic quartzite and argillite and ultimately into graphitic phyllite. Its contact with the overlying rocks appears conformable and gradational.

The Upper Schist Formation, which underlies most of the Dublin Gulch area, is structurally overlying the central Quartzite Formation. The Upper Schist is comprised of a series of foliated quartzite, phyllite, schist, marble, and skarn units. It has been informally subdivided at the Mar-Tungsten Zone by project workers for more detailed mapping and drill core logging. The unit is assigned to the Hyland Group of Late Proterozoic-Early Cambrian age. The Hyland group may be correlative with the Klondike Schist of the Dawson area, and has been correlated by some authors with the Yukon Group of the Dawson area.

#### **Subdivisions of the Upper Schist Formation**

##### **Massive and Gritty Quartzite**

The massive quartzite and Gritty Quartzite occur in the upper section of the Upper Schist Formation and are located mainly north of Potato Hills Ridge and west of Haggart Creek. The Massive Quartzite is strongly foliated with variable percentages of mica. Quartz comprises in excess of 80% of the rock. The Gritty quartzite carries medium-grained quartz and feldspar.

### Biotite-Quartzite-Schist/Hornfels (BQS)

The BQS lithologic description covers a variety of biotite- and muscovite-rich schists, hornfels, and foliated, micaceous quartzites that occur in the middle section of the Upper Schist Formation. This unit is widespread throughout the area.

The rocks are medium to dark-grayish-brown to grey and are very fine to fine grained. They are distinguished by discontinuous, compositionally distinct mica-rich and quartz-feldspar-rich layers, likely created by metamorphic segregation. Compositionally, the rocks are made up of variable amounts of muscovite and biotite (>70%), quartz (<40%), and lesser plagioclase, K-feldspar. Pyrite and pyrrhotite are locally present in trace amounts. Andalusite (to 25%) is a common constituent throughout the series, and occurs as elongate prismatic grains to 2mm in length. Locally, coarse-grained andalusite grains to 1cm length have been observed. Under UV light, the andalusite fluoresces with a greenish-white fluorescence.

Silicification is noted in drill logs as “quartz ribbon”, commonly associated with swarms of banded vein-like quartz concordant with foliation. Calc-silicate units are intercalated within the BQS at a ratio of 1: 3-4.

### Micaceous Phyllite and Graphitic Phyllite

The micaceous phyllite occurs in lower sections of the Upper Schist northeast of Potato Hills and southwest of Lynx Dome. The unit retains a highly developed foliation highlighted by weakly-developed mica with a distinct orange-weathering, buff-colored. The graphitic phyllite is black to silver and scattered across the property. Coherent sections are present above the Inferred contact of the Central Quartzite Formation. The unit forms a moderately thick section interbedded with minor amounts of quartzite and limestone at Dublin Creek, Tin Dome, and North Ridge.

### Muscovite-Sericite-Quartzite Schist

This unit is similar to the BQS, and occurs on the south side of Dublin Gulch towards Platinum Pup. The muscovite and sericite impart a buff-color, rendering it difficult to separate out from some of the underlying units.

### Calc-silicate Skarn

The calc-silicate skarns are the massive and laminated dark-green skarns that occur in the Mar-Tungsten Zone. Compositions and colors vary widely. Dark-green skarns contain up to 89% pyroxene (diopside) and up to 35% plagioclase (An<sub>50</sub>). Uralite is common and can comprise up to 15% of the rock. Garnet is present in some massive pyroxene skarns but is not exclusive to calc-silicate skarns. Calcite is present in some sections to 10% locally. Scheelite is associated with the Mar-Tungsten Zone mineralization. The scheelite selectively replaces quartz and encloses pyroxene and plagioclase, indicating it is paragenetically later than the skarn alteration.

### Calc-silicate Sub-skarn

The calc-silicate sub-skarn is a weakly-developed version of the calc-silicate skarn. The sub-skarn unit is composed of light-green streaky layers of light-green pyroxene and Uralite intercalated with discontinuous biotite and quartz-rich lamina. The light color is related to composition, and the banding is a result of varied pyroxene-quartz and plagioclase ratios. Petrographic studies reveal 59% quartz, 25% pale-green pyroxene, 15% plagioclase, and scheelite up to 1%. The sub-skarn is most abundant on the southeast side of the Dublin Gulch

stock, intercalated with the calc-silicate skarn and biotite-quartzite-schist-hornfels. Some sections contain abundant dark-red, massive, anhedral garnet crystals. Other garnetiferous sections are located north of West Potato Hills Ridge and near the stock, east of the Potato Hills Ridge, on North Ridge and in the Stewart and Catto areas.

### Marble

Thick sections of white to grey marble occur southeast of the Dublin Gulch stock, intercalated with biotite-quartzite and BQS. Large exposures are found on the south facing slope of Potato Hills Ridge above Lynx Creek and in Ray Gulch. Some units show pervasive silica alteration, while a few show pyroxene skarn development along narrow, silica altered fractures. A very thick section occurs east of Lynx Dome.

### Greenstone

The sheared greenstone bodies observed throughout the Dublin Gulch and Keno Hill areas are interpreted as the oldest intrusives in the district. At Keno Hill, the greenstones occur throughout the stratigraphic section as elongate resistant knobs. They are interpreted as highly-altered basic sills and are often intensely sheared along contacts and locally boudinaged. Deformation of the greenstones was synchronous with the first phase of intense regional deformation. Composition ranges from peridotite to diorite to gabbro. In some, the mineralogy consists of chlorite after amphibole, while in others a roughly equal amount of chlorite after amphibole or pyroxene and altered plagioclase dominates. In the Dublin Gulch area, these greenstones are somewhat rare. Three exposures have been mapped, one above Lynx Creek, one near the Central Quartzite area south of Lynx Dome, and one on the east side of Stewart Gulch.

### Intrusive Rocks

The plutonic rocks of the Dublin Gulch area include the main Dublin Gulch Granodiorite Stock, quartz diorite observed only to date in drill core, and various apophyses of quartz-feldspar porphyry, aplite, and leucocratic granite.

#### Aplite and Leucocratic Granite

The aplite and leucocratic granite bodies are the youngest intrusives. They occur peripheral to the main stock as thin sills and as sub-vertical to vertical dikes. Small aplite dikes are mapped in the Stewart and Catto areas. The aplites are typically light-brown or buff to grey-green felsites with saccharoidal textures, lack biotite, and can grade into grey-green felsites. The felsites are highly silicic rocks with a waxy appearance. Locally, dike material may include transitional phases of aplitic granite and felsic quartz porphyry.

#### Quartz Monzonite

Brown et al (2002) reports that quartz monzonite is mapped at Dublin Gulch as the second oldest intrusive unit, but the Bema documentation does not reference the unit.

#### Quartz Diorite

Quartz diorite is only recognized in drill core on the southeast side of the main granodiorite stock. The unit has a distinctive dark color due to the relative abundance of mafic minerals and calcium-end plagioclase. It is essentially a melanocratic, quartz-poor, highly biotitic rock that can be gradational into biotite granodiorite, or may occur as discrete dikes. Texturally, it is porphyritic to sub-porphyritic, with euhedral to subhedral plagioclase phenocrysts from 1mm to

6mm diameter, set in a fine to medium-grained groundmass. The unit is useful in local correlation between drillholes and is relatively frequent in drill intercepts.

### Granodiorite

The Dublin Gulch stock is the largest granodiorite body in the area and outcrops for over 5km in diameter, from Platinum Pup Gulch to Potato Hills. The stock is recognized as part of the Tombstone Plutonic Series extensive across the Yukon. It is composed of reduced quartz-alkalic series granodiorite dated at  $92.8 \pm 0.8$ m.a.

Alteration and mineralization at the Mar-Tungsten Zone is believed to be related to the Dublin Gulch Stock. The granodiorite consists of medium to coarse-grained, variably leucocratic to melanocratic, uniformly textured pyroxene-biotite granodiorite. Petrographic examination shows 20% - 30% quartz, 40% - 55% plagioclase, 5% - 30% biotite, microcline <15%, pyroxene 2% - 3%, and several percent accessory minerals including: hornblende, apatite, epidote, sphene, and zircon. Locally, the rock attains a “mega-porphyratic” texture with the appearance of coarse plagioclase phenocrysts. The granodiorite plug at the junction of Olive and Dublin Gulch is a subsidiary of the main stock and differs only in the degree of silicification. Zones of strong silica alteration are adjacent to closely spaced quartz veined fractures. Dike and sills emanating from the main stock occur both north and south of the pluton, but are more commonly developed south of the stock. Large granodiorite sills were responsible for the development of the scheelite-bearing vein mineralization within the skarns.

### Quartz-Feldspar Porphyry

Quartz-feldspar porphyry dikes and sills are distributed across the main stock, particularly along the northwest side. These are comprised of altered feldspar phenocrysts up to 5mm in diameter plus variable quantities of quartz phenocrysts of equivalent size, in a groundmass often strongly altered to clay, sericite, and iron oxide. Most of the dikes and sills are highly deformed, and predate the period of faulting deformation.

### Mafic Dikes

Younger mafic dikes occur west of Haggart Creek. They are composed of lamprophyre with dark-green, fine- to coarse-grained and contain augite, amphibole, biotite and feldspar. The bodies are un-foliated and cut across the regional foliation. Origin of the dikes is uncertain and the units are tentatively interpreted as Tertiary age.

## **5.2.2 Alteration**

The calc-silicate skarn and sub-skarn units are closely related alterations of impure crystalline limestones and affiliated calcareous metasediments. The skarns exhibit a notably wide range of green coloration ranging from light-greenish-grey to light-green and from medium to dark-green. The darker green skarns are the most important hosts for scheelite mineralization. All types occur as discrete laminations, lenses or layers, varying on the scale of centimeters to meters in apparent thickness.

The paragenesis of the skarn alteration is elucidated in Brown et al (2002) as follows:

- Granodiorite intrusion;
- Stage I – Wollastonite-quartz skarn development;

- Stage II – Pyroxene-garnet-scheelite skarn development responsible for the majority of the tungsten mineralization;
- Stage III – Aplite development with associated quartz-scheelite-2<sup>nd</sup> K-feldspar-veins;
- Stage IV – Quartz Veining with associated amphibole-calcite-2<sup>nd</sup> K-feldspar-chlorite; and
- Stage V – Quartz Veining with associated 2<sup>nd</sup> K-feldspar-pyrrhotite-molybdenite-arsenopyrite-pyrite-chalcopyrite.

The Stage I Wollastonite quartz alteration typifies the calc-silicate sub-skarn unit. It is interpreted as a poorly-developed version of the Stage II pyroxene-garnet-scheelite skarn alteration. The calc-silicate sub-skarn unit is composed of light-green streaky layers of light-green pyroxene and uralite intercalated with Wollastonite, quartz, calcite, K-feldspar, and discontinuous biotite and quartz-rich lamina. The color is related to the abundance of light-colored minerals, and the banding is a result of varied pyroxene-quartz and plagioclase ratios. Petrographic studies reveal 59% quartz, 25% pale-green pyroxene, 15% plagioclase, and scheelite up to 1%. The sub-skarns are massive to laminated and very fine to fine grained. They are felsic in composition with clinopyroxene subordinate in abundance to combined quartz and plagioclase. The sub-skarns comprise approximately 5% of all skarn units and have gradational contacts into the Stage II pyroxene-garnet-scheelite skarn.

The Stage II skarns are dark-green, contain up to 89% pyroxene (diopside) and up to 35% plagioclase (An<sub>50</sub>). Uralite is common and can comprise up to 15% of the rock. Garnet is present in some massive pyroxene skarns. Calcite is present in some sections to 10% locally. Scheelite is associated with alteration phase at the Mar-Tungsten Zone. The scheelite selectively replaces quartz and encloses pyroxene and plagioclase, indicating it is paragenetically late in the alteration phase. Microprobe analysis of pyroxene demonstrates a typical trend of increasing iron component during the skarn evolution from Stage I to Stage II.

The Stage I and Stage II skarns are locally garnet-rich. Grossular garnet porphyroblasts are reddish-brown in color and appear to be strongly altered. They are subhedral to sub-rounded and typically medium to very coarse in size (2mm to 3cm). They occur as disseminations, as ragged, streaky aggregates, in bands and in clusters. No correlation is noted between garnet development and scheelite development in the skarn unit. Isolated marble skarn is associated with a thick unit of calcareous garnetiferous, massive coarse-grained, dark-green skarn carrying strong scheelite (0.45m with 3.08% WO<sub>3</sub>).

Strong calcite development in the skarns and marble is noted in drill logs. Several marble beds grade along strike into skarn units. Scheelite is disseminated within the marble, as grains 0.2mm to 0.5mm, and locally as larger grains in cross-cutting veins. Some amphibole occurs as a retrograde alteration product of pyroxene.

The term “endoskarn”, is applied locally in logging at the Mar-Tungsten Zone in reference to xenoliths and partially assimilated inclusions of skarn material in the granodiorite intrusive rocks at the Project site.

Alteration within the granodiorite stocks and plugs is restricted to and along faults and shears; pervasive alteration is not noted in the documentation. The fracture-controlled alteration consists of silicification, secondary K-feldspar, bleaching, or minor sericitization.

### 5.2.3 Structure

#### **Folding and Deformation**

Two major phases of deformation have been delineated at the Mar-Tungsten Zone. The first is the large-scale over thrusting with concurrent development of both large and small-scale folding. The second is development of large open folds.

The earliest deformation occurred during a convergent arc accretionary event as the subcontinent of Wrangellia collided with the North American craton during the early Cretaceous. The Dawson, Tombstone, and Robert Service Thrust Faults are regional structures formed during this period. Locally, the event is expressed by pervasive foliation, intense shearing, folding and boudin development all associated with greenschist facies metamorphism. Both similar and cylindrical fold styles are present typically dependent on the host lithology. Shear foliation planes accounts for the discordant contacts between various lithologies at differing scales ranging from mapped units to banding seen in drill cores.

The thrusting and folding of metasediments created small-scale folds interpreted as parasitic on larger-scale structures of equivalent style. These features suggest that the discrete calc-silicate units distributed across Potato Hill Ridge may represent one or more calcareous clastic units that were subsequently duplicated by folding or thrusting and subsequently altered to calc-silicate assemblages. Cross-section compilations have suggested that metasomatic fluids replaced calcareous units after folding. Small-scale folds are widespread in the drill core, and best defined within the biotite quartz schist and in thinly interlaminated BQS and greenish calc-silicate skarns. Fold closure angles in drill core are variable up to 30°, and typically lie between 5° and 20°. Folds are moderately asymmetric and have a pronounced thickening of hinge zones. There is a penetrative fabric of axial planar foliation. Fold axes typically plunge 10° to 20° to the south-southwest, but many also plunge north-northeast. In high strain zones, attenuation of fold limbs and rootless intrafolial folds have developed. Overturned and recumbent, cylindrical folds with fold axes perpendicular to the direction of thrusting developed in the Central Quartzite and Lower Schist formations in the Keno Hill.

The second period of deformation is characterized by the development of broad open folds forming the Mayo Lake anticline and subsidiary McQuesten Valley and Lynx Creek anticlines. This event is correlated with the emplacement of the Dublin Gulch Granodiorite Stock. This phase of folding produced the existing lithologic distribution of the area. The Mar-Tungsten Zone stratigraphy lies on the west flank of the Lynx Creek anticline and dips moderately to the west. Locally crenulation folds of the earlier penetrative fabric have developed during this second deformation.

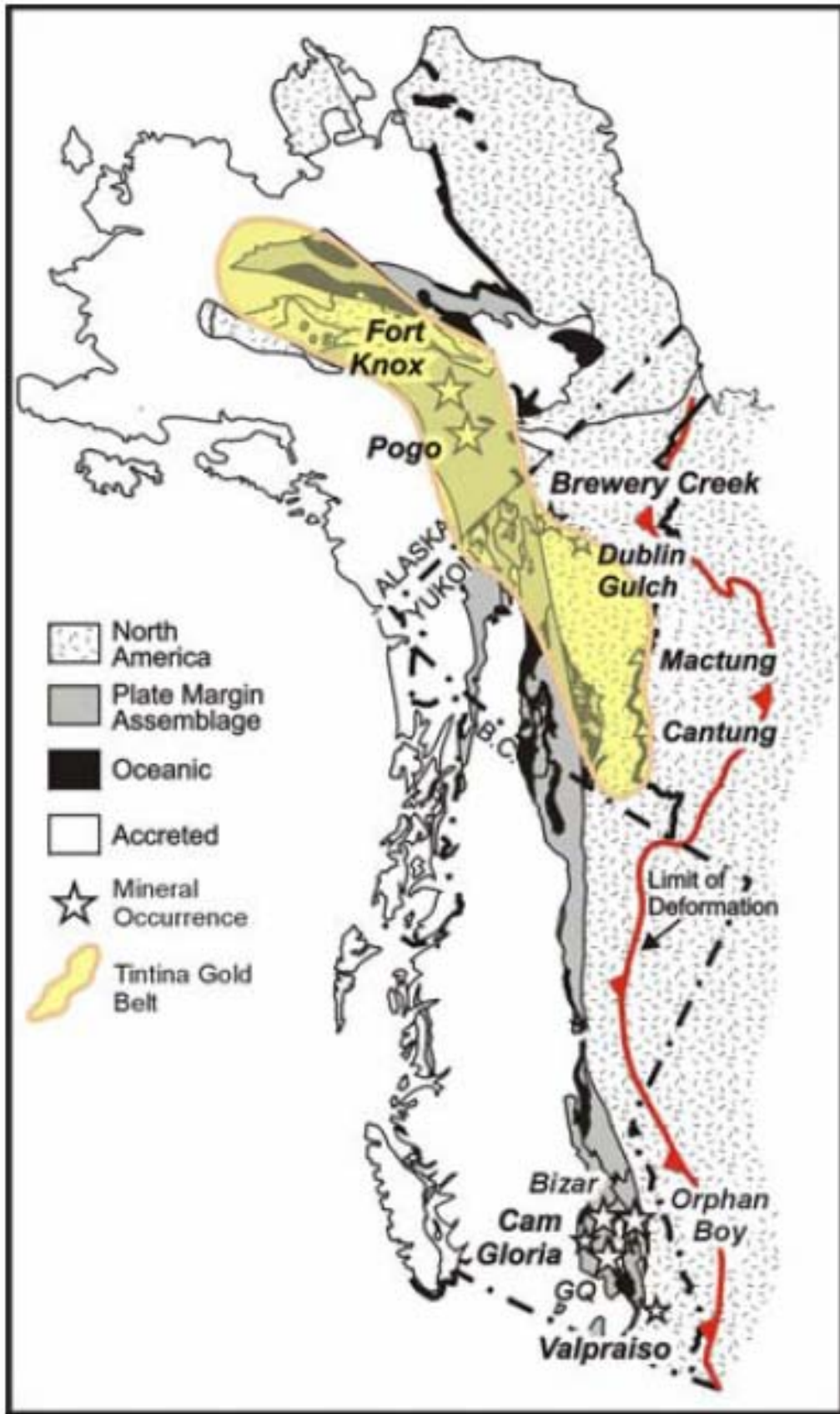
The major structural fabric is a strong pervasive foliation sub-parallel to the lithologic contacts striking north and dipping 25° to 30° to the west. This fabric has been an important structural control for the emplacement of the granodiorite sills and sheets. Most of the 1979-1980 drillholes were oriented on a 090° azimuth at -70° inclination normal to the structural fabric.

#### **Faulting**

Several generations of faults are suspected in the area but are not well exposed and their development history is poorly understood. The Mar-Tungsten Zone is cut by steeply-dipping, sub-vertical to vertical brittle faults, as evidenced by drill intersections of gouge, fault breccias, and zones of well-developed fracture foliation. Based on trench mapping, the majority of the

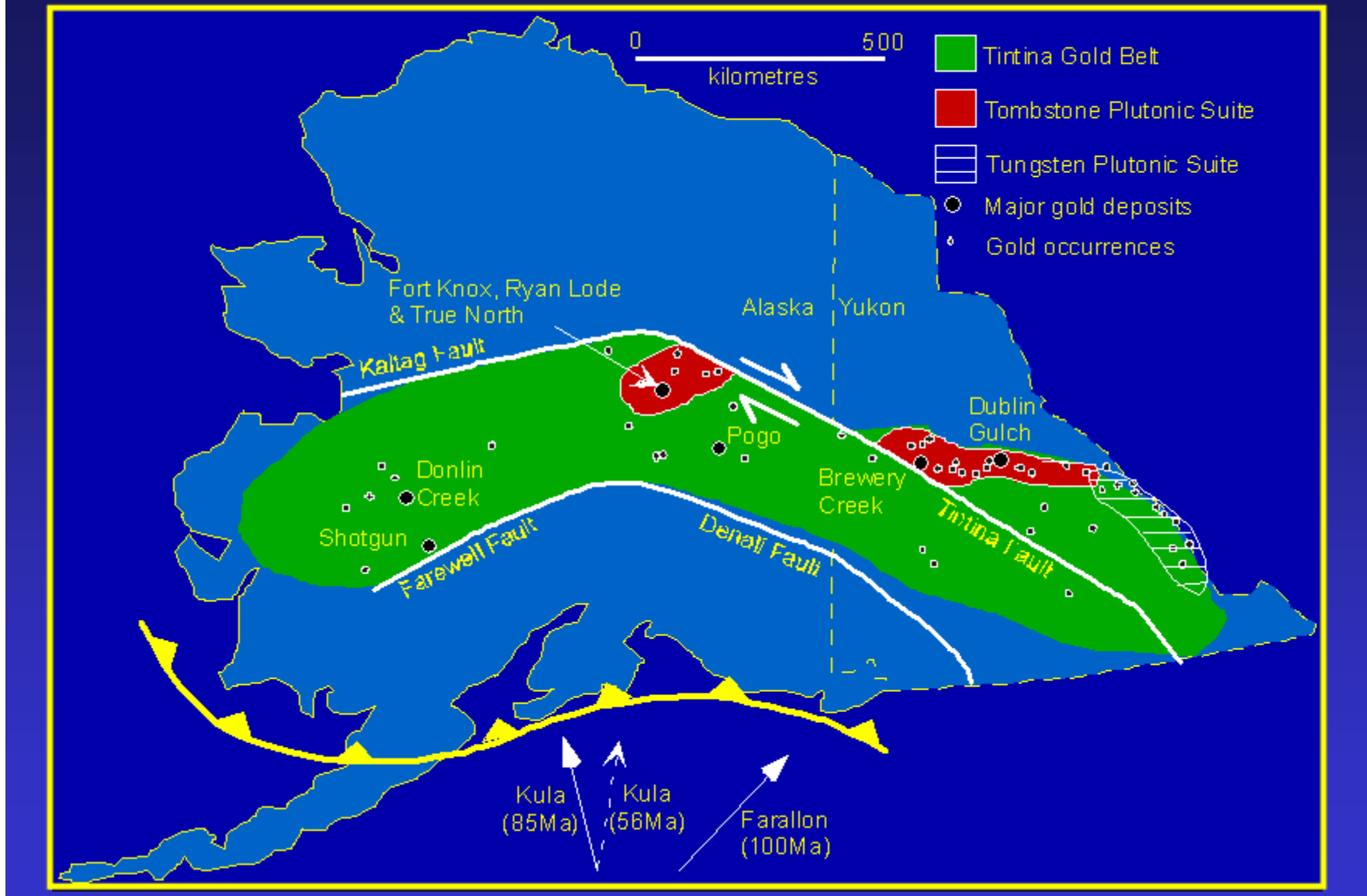
faults appear to strike north-northeast. The faults zones are discontinuous and are rarely traceable for more than 100m. They are 10m to 15m in apparent thickness and can rapidly dissipate into wide spaced less-well developed structures. Discrete faults planes are more prevalent within the uniform granodiorite whereas the heterogeneous calc silicates tend to disperse the fault fabric. Limited movement indicators suggest a dip-slip displacements of composite step-faults of up to 20m.

The faulting is interpreted to be the result of structural movement associated with late-stage consolidation of the Dublin Gulch granodiorite stock. Tension fractures associated with these faults may also have provided the permeable channel ways for the introduction of late hydrothermal fluids responsible for deposition of late-stage scheelite and gold-silver bearing quartz veining. Aplitic dikes located along these faults, and are strongly sheared or faulted.





# TINTINA GOLD BELT



SRK Job No.: 173203

File Name: Figure 5-2.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

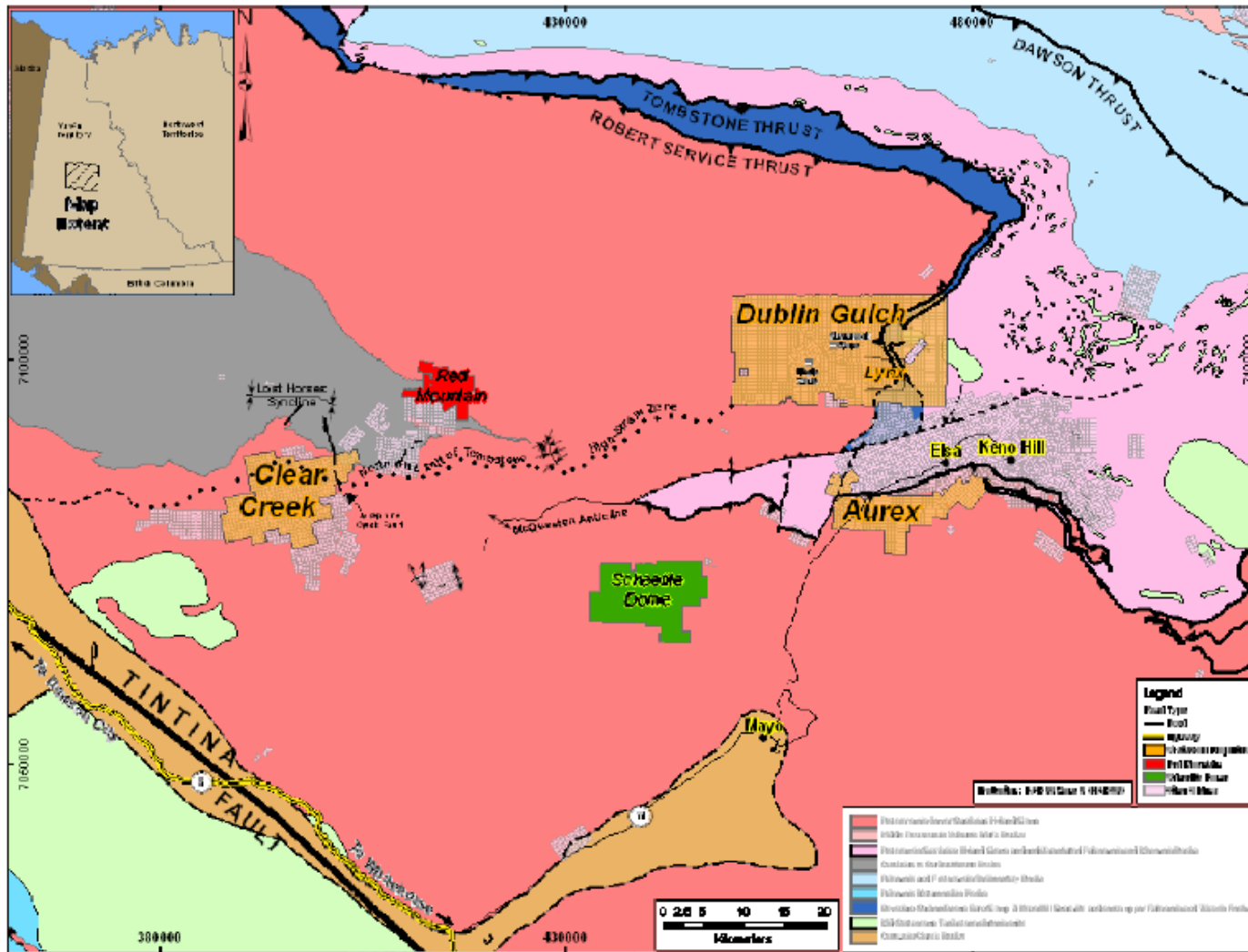
Source: Baker 2003

Dextral Offset of Tombstone  
Plutonic Belt along Tintina  
Fault

Date: 10/20/08

Approved: BAS

Figure: 5-2




  
**SRK Consulting**  
 Engineers and Scientists

SRK Job No.: 173203

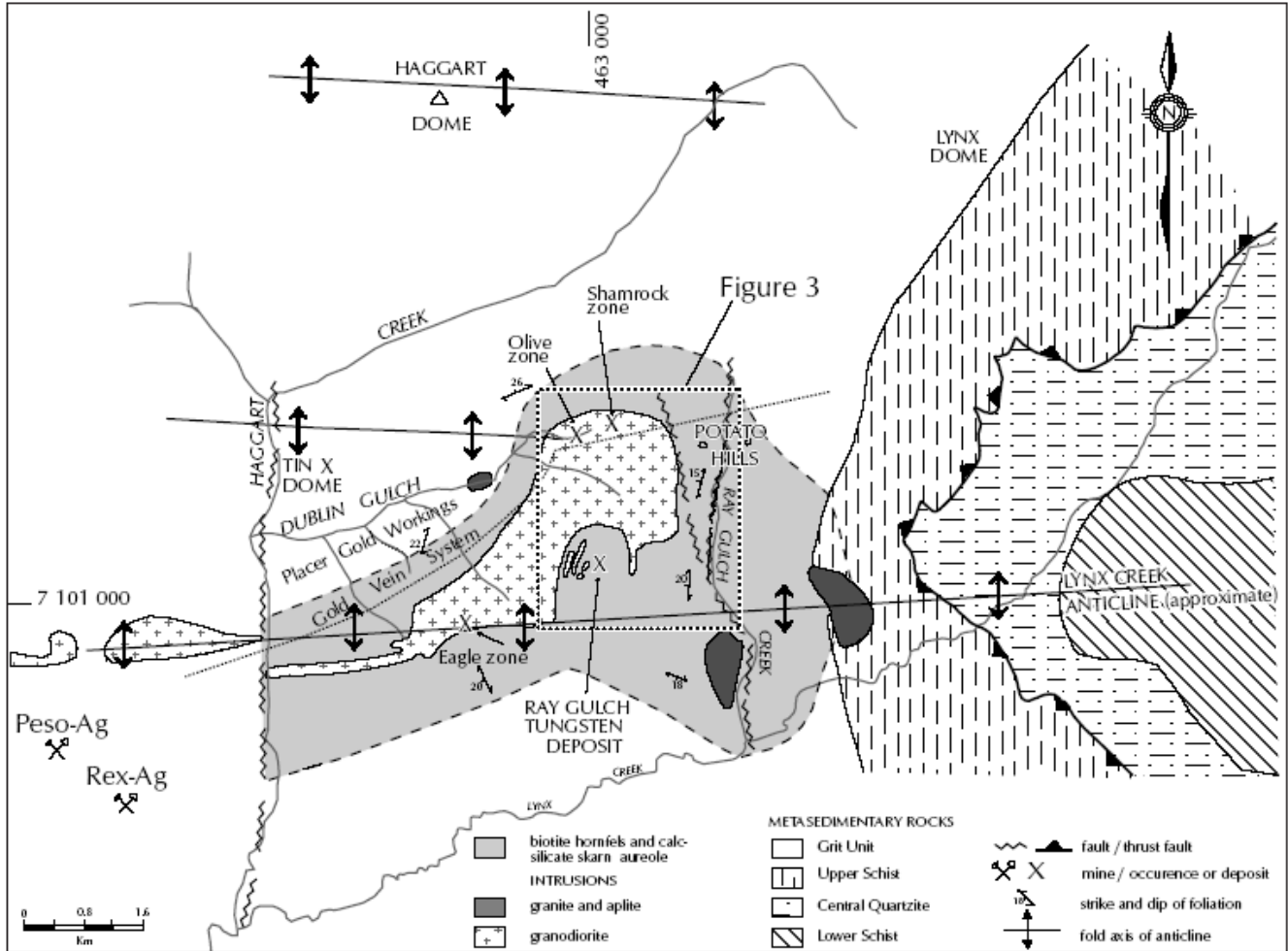
File Name: Figure 5-3.doc

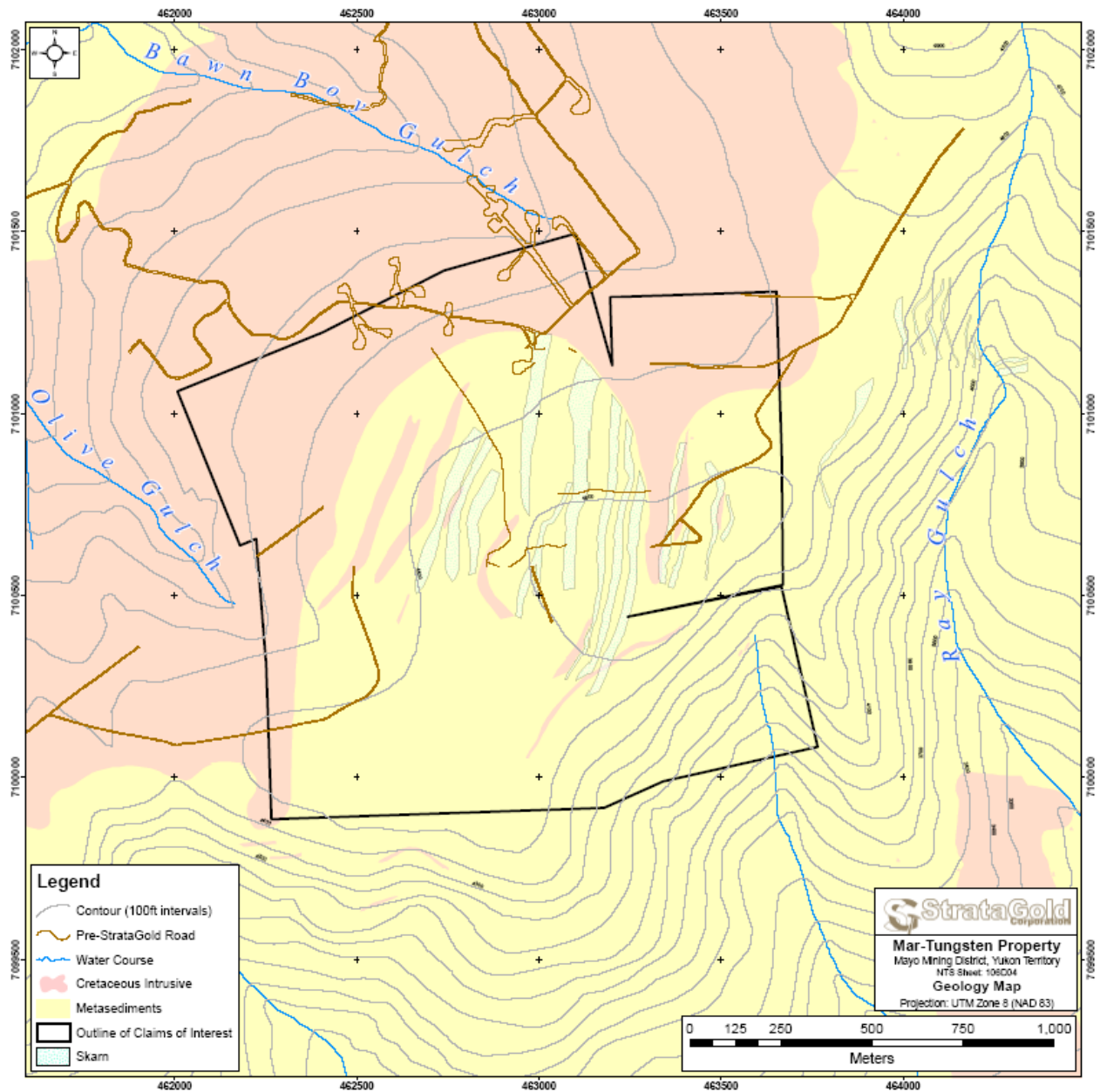
Dublin Gulch Property,  
 Mar-Tungsten Zone,  
 Yukon Territory Canada

Source: Sparling and Maunula 2007

**Structural Setting of the  
 Mar-Tungsten – Dublin Gulch  
 Deposits**

Date: 10/20/08	Approved: BAS	Figure: 5-3
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**Dublin Gulch Property,  
 Mar-Tungsten Zone,  
 Yukon Territory Canada**

**Geologic Map of the  
 Mar-Tungsten Property**

SRK Job No.: 173203

File Name: Figure 5-5.doc

**Source: StrataGold**

Date: 10/20/08

Approved: BAS

Figure: 5-5

## 6 Deposit Type (Item 10)

### 6.1 Geological Model

The Mar-Tungsten Zone is a disseminated tungsten deposit with a component of vein and breccia mineralization, developed in a roof pendant of calc-silicate-altered calcareous metasediments distributed along the southern contact of the Dublin Gulch Granodiorite Stock. Exploration to date has concentrated on a 800m long x 300m wide zone of skarn alteration located in the upper reaches northwest of Ray Gulch and along the steep southern face of Potato Hills Ridge. The calcareous metasediments are comprised of north-south-striking west-dipping units that may represent repetition of one or more original beds deformed by intense folding and translocation along shear foliation planes. The westerly dip of the skarn units allows drill exploration at ideal near-perpendicular drill orientation for intersection of the complete stacked sequence of prospective units. The west-dipping pervasive axial planar foliation has controlled emplacement of early metasomatic fluids responsible for skarn alteration and subsequent scheelite mineralization.

Scheelite is the only tungsten mineral identified to date in the skarns, and occurs inter-grown with quartz and dark-green calc-silicates, and in rare quartz-gold-silver veinlets. Scheelite precipitation involved the interaction of evolved magmatic fluids with calcareous sediments. Early skarn development included the addition of Si and Mg. Later skarn development included the addition of Si, Mg and Fe. Sulfides are not associated with the scheelite depositional phase of mineralization and are noticeably absent. The late-stage of scheelite paragenesis contributes to the exceptional cleanliness of scheelite concentrates.

The presence of minor gold with tungsten in narrow intercepts suggests a continuum in the hydrothermal cell and channeling along through-going fractures trending south-southwest 2.5km into StrataGold's Eagle Gold Vein Zone (Sparling and Maunula, 2007). Brown et al (2002) note that the bismuth-gold mineralization in the Eagle Zone, which includes elevated background tungsten levels, occurs after the equivalent end stage of mineralization at the Mar-Tungsten Zone, and hence is younger than the scheelite mineralization. The extension of tungsten in fractures and sediments outside of the present zone, and adjacent properties, offers additional exploration potential.

## 7 Mineralization (Item 11)

Scheelite is the primary tungsten mineral at the Mar-Tungsten Zone and occurs principally as disseminated replacements within calc-silicate skarn units. Based on metallurgical studies, it constitutes 99.3% of the tungsten mineralogy. It also occurs to a very minor degree in “endoskarns” or xenoliths and partially assimilated metasedimentary blocks, and in late quartz-gold veins.

### 7.1 Mineralized Zones

The Mar-Tungsten Zone occurs on the crest and northern limb of the westerly-plunging Lynx Creek anticline. The anticline is defined by a gently folded preexisting metamorphic foliation. This foliation controls the geometry of the skarn mineralization. It strikes northerly and dips westerly 25° in the center of the deposit and shifts to a 015° azimuth and dipping to the west-northwest in the northern portion (Figures 5-5 and 7-1).

Tungsten mineralization is largely confined to mineralized horizons within calc-silicate altered lithologies. Only minor amounts of mineralization occurs in late quartz veins and “xenoliths” of partially assimilated metasediments within the Dublin Gulch Granodiorite. The stratigraphic distribution of calcareous sections within the metasedimentary rocks is an important controlling factor in the precipitation and localization of scheelite.

The skarn sections form tabular west to west-northwest dipping units. Mineralized intervals form a composited average of 12m thickness along the 800m of strike length explored to date. In some holes, scheelite mineralization thickens to a composited maximum thickness of 25m (Figure 7-1). The skarn horizons are laterally continuous, massive, and generally coarse-grained. Tungsten grade increases proportionally with pyroxene development, and with increasing proximity towards the contact of the skarns with the granodiorite.

Pyroxene skarn and sub-skarn units assay low to non-detectable for base metals and gold. However, scattered quartz-arsenopyrite veins in core and outcrop with assays of 2-30g/t Au suggest these veins are related to the sheeted quartz-gold vein complex at the Eagle Zone. Bismuth in the Mar-Tungsten skarns, along with gold, are low and contrast with the Eagle Zone where the veins have typical Tombstone Plutonic Suite signatures of gold and correlative bismuth.

Vein abundance in the skarn is low, typically less than 10% of the drill core, and veins are narrow. At the Eagle Zone, the veins are significantly wider, through-going sheeted veins that cut earlier quartz-feldspar-scheelite veins. These relations demonstrate that tungsten mineralization was temporally and spatially removed from gold-bismuth mineralization in the Eagle Zone system.

### 7.2 Surrounding Rock Types

The surrounding rocks to the skarn and granodiorite units are the BQS and foliated quartzite, phyllite, schist, and marble units. Scheelite mineralization replacement within the enclosing clastic rocks and granodiorite stock is extremely minor, as noted by a slight geochemical elevation of background tungsten levels in intervals. The through-going north to north-northwest-striking faults and fractures have introduced trace amounts of scheelite as discordant quartz veins.

### 7.3 Relevant Geological Controls

The dominant controls on tungsten mineralization are structural channeling along a pre-existing fabric and chemically favorable host rocks. Structural duplication of carbonate horizons during early thrusting and folding has produced multiple horizons of calcareous horizons. Subsequent introduction of multiple intrusive sills within these units was accompanied by metasomatic alteration fluids. These fluids are believed to have moved along the numerous sill contacts gradually permeating into the skarn altered calc-silicates where the stability fields were exceeded and precipitated tungsten.

### 7.4 Type, Character and Distribution of Mineralization

The predominate scheelite habit is clearly replacement mineralization in pyroxene skarn. It occurs as anhedral to subhedral grains and crystals in the size range of 0.5mm-2.0mm, and is described as “fine- to medium-grained”. Coarse to very coarse scheelite crystals of 2mm to 1cm size are somewhat common. Scheelite disseminations are irregularly distributed, both as random in trace to weakly disseminated amounts, or as medium to heavy concentrations in zones or bands.

Scheelite also occurs within the rare late-stage quartz veins and quartz breccias. The scheelite occurs as subhedral to euhedral crystals ranging in size up to several centimeters across. Fine to coarse scheelite crystals have also been observed in fractures and shears lacking quartz, particularly within the granodiorite stock.

There appear to be a spatial correlation between grade of tungsten mineralization and proximity to the granodiorite. There is also an increase in scheelite content with pyroxene content as noted by Brown et al, (2002).

Fluid inclusion studies on Mar-Tungsten Zone mineralization show the mineralization fluids were low-salinity and dominated by CO<sub>2</sub> vapor inclusions, consistent with reduced conditions under which intrusion-related gold systems form. Tungsten levels are elevated, characteristic of systems forming at deep levels, i.e. 5 to 8km depths, and likely due to formation of tungstate rather than chloride complexes (Baker et al, 2006).

Brown et al. (2002) undertook an examination of the veins and skarn paragenesis at the Mar-Tungsten Zone. They discovered that structurally controlled post-skarn tungsten veins developed during the final three alteration stages described above in Section 5.2.2.

Stage III veins consist of quartz-scheelite-clinopyroxene ± 2<sup>nd</sup> K-feldspar ± calcite ± sphene. These veins are less than one centimeter wide and overall constitute less than 10% of the total veining mass in the skarn. They carry coarse-grained subhedral scheelite and lack amphibole alteration selvages. The Stage III veins commonly occur in dark-green pyroxene skarn, and the intergrown textures of pyroxene and scheelite indicate they may have been part of the main pyroxene skarn formation. The veins cross-cut granodiorite, but do not cut aplite dikes. Aplite dikes prominently cross-cut pyroxene skarn stages and do not display any alteration to endoskarn within the granodiorite. The Stage IV and Stage V veining phases post date aplite dikes.

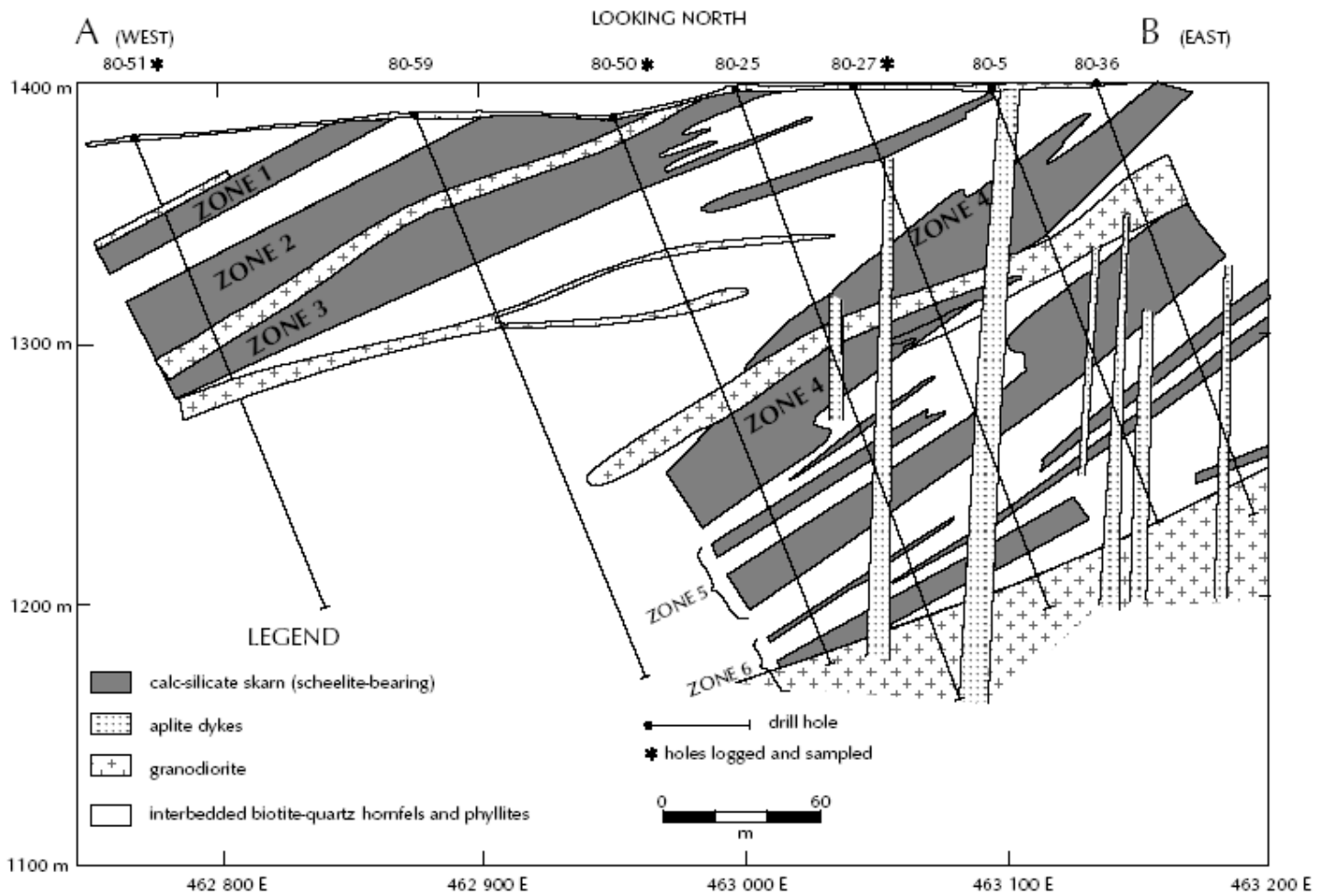
Stage IV veins consist of quartz, amphibole and calcite, ± plagioclase ± 2<sup>nd</sup> K-feldspar ± 2<sup>nd</sup> biotite ± sphene ± epidote ± chlorite ± minor molybdenite ± pyrrhotite. The veins are commonly sheeted and occur within both sub skarn and pyroxene skarn. They exhibit an amphibole selvage that extends into the host rock for several millimeters. Although overall retrograde alteration

within the deposit appears to be minor, the Stage IV veins appear to represent the alteration phase affiliated with the most abundant retrograde minerals. Stage IV veins constitute 20% to 30% of the total veined mass of Mar-Tungsten.

Stage V veins have assemblages of quartz and 2<sup>nd</sup> K-feldspar ± calcite ± epidote ± chlorite ± sphene ± pyrrhotite ± arsenopyrite ± molybdenite ± pyrite ± chalcopyrite. They are essentially quartz-2<sup>nd</sup> K-feldspar veins and are ubiquitous in the deposit, comprising 60% to 70% of the veined material. Vein widths range from several millimeters to five centimeters. They cross-cut all lithologies, but are most abundant in the intrusive units. Only minor sericite occurs where K-feldspar rich veins crosscut aplite and granodiorite.

Geochemical analysis of the skarn zones indicate the Mar-Tungsten Zone lacks bismuth and gold, and predates the gold-bismuth mineralization at the Eagle Zone to the southwest. Elsewhere at Dublin Gulch scheelite in stockwork quartz veinlets, including some observed minor wolframite, are mapped cutting the stock and occurring within the Hit intrusion.

Across the Dublin Gulch Property later-stage mineralization is zoned, forming precious- and base-metal sheeted and fissure veins, and producing a district-scale zoned metallogenic profile.



## **8 Exploration (Item 12)**

### **8.1 Surveys and Investigations**

StrataGold has completed three seasons of exploration work on the Mar-Tungsten project. The first was a small program during 2006. They re-logged and re-sampled five of the historic drillholes in order to evaluate their potential for gold mineralization. No significant gold zones were found.

In 2007, they collected 120 samples from 18 drillholes to provide QA/QC verification of the historical tungsten assay results. The results of this work showed that the historical tungsten analyses were very accurate. Additionally, 65 samples were collected from a variety of different rock types, mineralization types and locations in the drill core for specific gravity determinations. This resulted in characterization of five different material types as related to specific gravity.

In 2008, StrataGold completed 34 diamond core drillholes totaling to 4,058m and collected 26 samples from the mineralized material for a metallurgical composite sample. The drilling was focused in two main areas, up-dip from the historical drilling and infill within the historical drilling. The up-dip drilling included 18 holes which confirmed mineralization over an average strike and dip distance of 450m x 75m respectively. The infill drilling includes 16 holes located throughout the deposit. These confirmed grade continuity and increased confidence in the resource classification. The drilling program was accompanied by an industry standard QA/QC program as discussed in Section 11.2.

The core logging involved both geologic and geotechnical observations. As core was delivered from the drill site it was first logged for geotechnical parameters. This included; recovery, rock quality determinations, hardness, degree of breakage, percent broken, weathering and joint classification by shape and roughness. The core was then logged for geological characteristics including; lithology, alteration, veining, structure, texture and mineralization.

### **8.2 Interpretation**

The exploration work conducted by StrataGold meets and exceeds current industry standards. The verification sampling has shown that the historical assay results compare very well with modern check analyses accompanied by QA/QC samples. The exploration drilling program was well planned and carried out in a prudent manner. The drilling was all located in previously untested material and has augmented the historical drilling.

## **9 Drilling (Item 13)**

### **9.1 Type and Extent of Drilling**

Mar-Tungsten Property was drilled during 1979 to 1980 with diamond coring rigs by Canada Longyear Ltd. Drilling was concentrated on the flat plateau along Potato Hills Ridge at an average collar elevation of 1,390m. The majority of the holes were drilled on a 40m grid pattern and largely within a target area of 800m long x 300m wide. Most holes were drilled approximately 100-200m deep. The drilling was completed while CanTung held the property and CanTung employed Bema to conduct all field exploration work.

#### **9.1.1 Procedures**

During the 1980 drilling program, Bema contracted two Longyear drilling rigs from Longyear Canada Ltd, a Model Super 38 and a Model B8. These rigs are both standard wireline coring machines with depth capabilities in excess of 500m. No details of the 1979 drilling operations are available, but SRK assumes that drilling employed similar equipment to that used in 1980.

All of the 1979 series drillholes and 15 of the 1980 drillholes were drilled with BQ diameter bits. The remaining 46 drillholes completed in 1980 were drilled with NQ diameter bits. In areas with thin overburden, the first meter or so was often drilled with a rock bit to set drill casing; overburden was not recovered.

All but three core holes were angled holes, generally collared on a 090° (due east) azimuth. Most were drilled at an inclination of -70°; four holes were drilled at angles between -45° to -65°. None of the 1979 drillholes nor the first seven of the 1980 series were surveyed for down hole deviation and deflection. Drillholes 80-8C to 80-13C, and 80-16C were surveyed with an acid-etch bottle test for drillhole dip inclination. All of the remaining 1980 series drillholes were surveyed with a Sperry-Sun directional survey instrument, recording departure azimuth and drillhole dip inclination. The survey results are included in the StrataGold database and applied in the resource estimation. In general, the down hole deviation is normal for holes of this type and depth and the lack of surveys on the earlier holes is not considered significant.

During the 2007 field season, StrataGold was able to locate all of the historical drillholes in the field. The collars were located by either wooden location posts or distinct depressions where the casing had been removed. All the drill collars were marked by fresh posts and were subsequently surveyed by a licensed surveyor in UTM NAD 83 coordinates. These coordinates were used in the resource estimation.

The 2008 drilling program included 34 holes totaling to 4,058m. The holes were all collared with HQ diameter core and only if conditions warranted, were reduced to NQ diameter. Down hole deviation measurements were taken at nominal 50m spacing using a Reflex Easyshot survey tool. The final drill collar coordinates were located by licensed surveyor, Carl Friesen of Geomatics in Whitehorse, Yukon.

### **9.2 Results**

A total of 120 drillholes totaling 17,825m were completed in the three drilling seasons. Twenty-one cored drillholes were completed in 1979 for a total of 2,042m, 65 core holes were drilled in 1980 for 11, 343m and 34 core holes were drilled in 2008 for 4,058m. The interpretation of all drilling results indicates that anomalous tungsten mineralization is located within several tabular

west dipping units which average 12m in true thickness along 800m of strike length and 300-400m of down dip extent. In some locations, the tungsten mineralization thickens to a maximum true thickness of 25m. The drilling holes are predominantly oriented vertical whereas the mineralization dips at 25° to the west. Therefore the drillholes intercepts do not represent true thickness. Rather, true thickness is approximately 90% of the drillhole intercept distance.

SRK is of the opinion that the drilling operations were conducted by professionals, the core was handled, logged and sampled in an acceptable manner by professional geologists, and the results are suitable for support of a NI 43-101 compliant resource estimation.

## 10 Sampling Method and Approach (Item 14)

The details on core sampling procedures enumerated by Bema are short but present in the property documentation. Many companies of that era did not document their routine sample and analytical handling procedures as a matter of course.

### 10.1 Sample Methods and Chain of Custody

All drill core in the 2008 and 1980 drilling program, and in SRK's opinion likely for the prior 1979 program, was first inspected under short-wave ultra-violet light for scheelite mineralization. Observations on the nature of the occurrence of scheelite mineralization and visual estimates of the percentage of WO<sub>3</sub> content were noted in drill logs. Mineralized core was marked with a marking pen for sampling in variable lengths. The original assay lengths range from 0.2m to 5.6m with an average of 0.95m. Typically samples were collected both from the mineralized zone and from within the un-mineralized zones above and below. Additional check samples were also collected between mineralized intervals. The core from 1979-1980 was split with a mechanical splitter. One-half of the core was then gathered and run through a jaw crusher on site resulting in material averaging -1cm mesh. The crushed sample was bagged, and sent directly to the analytical laboratory for assay. The remaining half core and all un-sampled core was placed in core rack storage for future reference.

The core from the 2008 drilling was marked with a cut line by project geologist and then sawn on site. One half of the core was bagged by the sawyer, with a sample tag containing a blind sample number and the bags were immediately closed with a zip tie. The remaining half core and all un-sampled core was placed in core rack storage for future reference. The sample bags were accumulated on site into pallet boxes. These were delivered to Byers Transport in Whitehorse by StrataGold personnel. Sample shipments were received and recorded by Byers with relevant paperwork and a bar coding system. StrataGold keeps a copy of the Byers Paperwork with the attached bar code. The samples then were sent via Byers to ALS Terrace for preparation. When the samples arrive at Terrace, ALS sends StrataGold a notification with the corresponding certificate number and sample numbers. Once prepped, the samples were sent to ALS Vancouver for assay. All certificates are uploaded on the ALS webtrieve website once the Vancouver lab receives the sample shipment.

### 10.2 Factors Impacting Accuracy of Results

The 1979-1980 drilling program was conducted by professional geologists and drillers who undoubtedly performed to the standards of the mining industry. Drillers of the era were expected to accurately record the runs and depths of the drill on the core boxes and in daily drill reports, and for helpers to pull the core from the barrel and assign correctly in the box with regards to sample polarity. The geologists of the era were expected to accurately mark and record intervals with an engineering-scale tape measure. Based on information within the 1981 Bema Exploration Report (Kaye, 1981), SRK is of the opinion that the drilling and geological personnel assigned to the Project during both historical and current sampling programs performed according to industry standards and carried out their duties accordingly.

### 10.3 Sample Quality

The drill logs from all of the core holes indicate average recoveries were typically in excess of 90%. Recoveries on this magnitude inherently ensure that a good sample has been provided by

the drilling contractor. Because tungsten assays can in some deposits exhibit variance caused by particle size effects, the larger sized HQ and NQ core will provide a better sample than the smaller BQ core. To date, there has been no indication that scheelite mineralization at the Mar-Tungsten Zone exhibits such particle size effects. SRK is of the opinion that the drilling staff and geological staff ensured that all drill samples met client and industry standards for production and delivery.

#### **10.4 Relevant Samples**

The samples of importance to the exploration program were the calc-silicate horizons bearing scheelite. Careful geologic logging, combined with UV lamping provided the necessary information required to determine the widths of mineralization and the sample intervals which would accurately characterize and quantify them. The average sample interval of 0.95m discussed above, is appropriate for the nature of the tungsten mineralization and generally, will not incorporate any higher grade intervals within longer, lower grade intervals. Since not all tungsten mineralization is readily visible to UV lamping or the naked eye, the intervening “non-mineralized” horizons were sampled over limited portions of their length as best determined by the geologist in charge. The sampled intervals are noted on the geologic drill logs for each hole that correspond to a lithologic notation entry and the later recorded respective tungsten assay.

# 11 Sample Preparation, Analyses and Security

## (Item 15)

The details on sample preparation and analytical procedures enumerated by Bema are short but nevertheless present. Missing from the singular report are discussions of security measures taken by Bema and Canada Tungsten Mining in sample handling and delivery. Many companies of that era did not document their routine sample and analytical handling procedures as a matter of course.

### 11.1 Sample Preparation and Assaying Methods

In the 1980 drilling campaign, Bema collected 3,198 drill core samples and sent the samples to Chemex Labs Ltd, North Vancouver, B.C. SRK is of the opinion that the 1979 drilling campaign by Canada Tungsten Mining used the same facilities and assay methodologies. All of the 3,198 drill core samples collected by Bema predate any involvement of StrataGold and therefore no StrataGold employees, officers or directors were involved with the sample preparation or analysis.

The Mar-Tungsten samples were analyzed by colorimetric analytical methodologies, described as such:

*“...A one gram sub sample was weighed into a Teflon dish and a hydrofluoric, hydrochloric, phosphoric acid mixture was added. This was heated leaving a phosphoric acid paste that was dissolved in hydrochloric acid, and then transferred into a volumetric flask. An aliquot was pipetted into a volumetric flask. reduced with stannous chloride then colored with potassium thiocyanate. The tungsten thiocyanate complex color was measured on a Spectronic 700 Colorimeter and compared to standards...” (Kaye, 1981)*

Chemex also performed limited gold, silver, lead, and zinc analyses on selected samples, but the analytical results and methodologies employed are not included in the documentation package.

The 2008 drilling samples were all sent to ALS Laboratories preparation and assay facilities in Terrace and North Vancouver respectively. The samples were run through a typical ALS preparation routine which involves drying in ovens, crushing to 70% are minus 2mm or better, splitting by riffle splitter and pulverizing a 250g split to 85% passing 75 micron or better. All samples were analyzed by three techniques. WO<sub>3</sub> analyses were made using an X-ray fluorescence spectroscopy (XRF) fusion method and multi element analyses were made using Inductively Coupled Plasma Mass Spectrometer (ICP-MS) fusion method. The samples were additionally analyzed for gold using a 50g fire assay with an atomic absorption finish.

#### 11.1.1 Testing Laboratories

The primary laboratory used by Bema was Chemex Labs, North Vancouver, B.C., a well-known and respected provider of analytical services to the exploration and mining community. Chemex Labs is now renamed as ALS Laboratory Group. The 2008 samples were all analyzed by ALS Laboratory Group in North Vancouver B.C. Canada.

### 11.2 Quality Controls and Quality Assurance

There is no discussion provided in the documentation supplied to SRK of QA/QC procedures used by Bema and Chemex Labs in the handling and treatment of analytical samples, or the use of blanks, duplicates, and standards inserted into the assay pulp stream of the 1979-1980

sampling program. SRK frequently has to rely on the historic professional levels of expertise and sample handling that were expected of project geologists and assay labs of the time. The performance of colorimetric analysis for tungsten was a standard method employed at the time. The certification of analytical labs to ISO 9001/9002 standards was not in effect in the early 1980's. SRK presumes that a reputable lab such as Chemex conducted sufficient and rigorous internal check program on Mar-Tungsten samples to ensure precision and accuracy in their analyses.

StrataGold conducted a supplementary QA/QC program during 2007 in order to assess the quality of previous assaying. Samples were collected from 18 historic diamond drillholes located throughout the deposit and at a variety of depths. The samples were selected from a wide variety of tungsten concentrations in both the exoskarn and endoskarn. The samples were all collected from core that had been hand split during the original assaying. The half core was again hand split such that  $\frac{1}{4}$  was bagged for analysis and the remaining  $\frac{1}{4}$  was retained in the core boxes. Most of the re-assay sample intervals are composed of multiple original assay intervals. All of the reanalyzed sample intervals were located relative to down hole distances either labeled on blocks within the core boxes or from intervals labeled on the core boxes.

In total, 120 samples over 462m of drilling were analyzed. These samples were accompanied by six duplicate analyses and seven blank samples, each inserted every 20<sup>th</sup> interval. All were submitted to ALS Chemex in Vancouver B.C., accredited by ISO 9001: 2000 and ISO 17025. All the samples were crushed, split and pulverized using standard lab techniques. The samples were analyzed using two different techniques. Tungsten only analysis was conducted by XRF and Inductively Coupled Plasma (ICP) was used for 33-element analysis including tungsten. The ICP analysis uses an analyte prepared by a four acid "near total" digestion. This method has a tungsten detection range from 10ppm to 1%. Samples for XRF tungsten analyses are prepared by fusion of the pulp material with lithium metaborate in a furnace at 1100°C. A flat glass disc is prepared from the resulting melt. The fusion technique of sample preparation minimizes particle size effects that could otherwise cause problems with the measurement process. Numerous trace elements can also be determined from the same fused disk. The disks themselves can be stored indefinitely. The XRF method has a detection range from 0.01% to 50.0% and is the preferred method for tungsten analysis.

The tungsten results from each of the two analysis techniques were plotted on an x-y scatter plot to assess their correlation. Figure 11-1 shows that up to 0.3% concentration the two methods have very good correlation. However, above this level there is very poor correlation, with the ICP technique severely under reporting tungsten relative to the XRF.

The seven blank samples and the six duplicate samples all reported tungsten concentrations at the appropriate levels. The results of the six duplicate samples are plotted against the original analysis in Figure 11-2.

The tungsten results determined by the XRF analysis were plotted against the weight-averaged original assay intervals on x-y scatter diagrams. Figure 11-3 shows that the QA/QC results verify the original analysis extremely well. A one to one correlation line plotted on the scatter plot shows that at concentrations above 0.75% at many of the historical analysis actually reported lower tungsten values than the modern analyses.

The 2008 sampling program was accompanied by a rigorous QA/QC program including blanks, standard reference material and duplicate samples. The program was designed to address three

important issues; contamination, accuracy and precision. Accuracy is defined as, "the ability of a measurement to match the actual value of the quantity being measured". Precision is defined as, "the ability of a measurement to be consistently reproduced". For every 20 samples a field duplicate was inserted as the 2<sup>nd</sup> sample, a lab duplicate as the 9<sup>th</sup> sample, a prepared standard as the 10<sup>th</sup> sample and a blank as the 16<sup>th</sup> sample. This routine was repeated after every 20<sup>th</sup> sample for the entirety of the drill program.

Four prepared standards were used, representing typically low grade ( $W4=0.366\pm 0.024$ ), middle grade ( $W1=1.04\text{ppm} \pm 0.10$ ), high grade ( $W3=1.73\pm 0.19$ ) and very high grade ( $W2=2.78\pm 0.39$ )  $WO_3$  mineable resource. Standards were purchased from CDN laboratories with material originating from North America's Cantung mine in the NWT. Reject material was dried, crushed and passed through a 200 mesh screen. The +200 material was discarded. The -200 material was mixed for 5 days in a double-cone blender with splits taken and sent onto twelve different laboratories for round robin assaying.

A total of 234 prepared standards were used for this analysis. Assaying of the prepared standards produced extremely consistent results, indicating the standards and assay methodologies were precise and accurate. Figure 11-4 shows the distribution of assay values and standard deviations of the four commercially used prepared standards. These represent 100% of the samples returned by ALS Laboratories. No significant variations were found in the performance gates of the four standards.

A total of 241 sample blanks were inserted into the sample stream and used for this analysis. Sample blanks are primarily used to detect contamination between samples during the sample prep process but also to evaluate the accuracy of the assay. Unmineralized dolomite rock fragments were used as the blank material. Nearly all of the sample blanks inserted into the sample stream assayed close to or below XRF detection limits indicating contamination during sample preparation is negligible.

A total of 249 field duplicates and 233 lab duplicates were inserted into the sample stream. The field duplicates are composed of  $\frac{1}{4}$  core samples taken from the identical interval as the original  $\frac{1}{2}$  core sample. The laboratory duplicates are composed of additional splits taken at the riffle splitter and then pulverized and analyzed separately. Duplicate samples are used to check for assay correlation between duplicated sample intervals. In conjunction with prepared standards and blanks, they provide additional support for the accuracy and precision of the received assays. Assaying of both field and lab duplicates has produced consistent results, indicating excellent correlation between samples. Figure 11-5 shows the results of the field and laboratory duplicates. These represent 100% of the samples returned by ALS Laboratories.

### 11.3 Interpretation

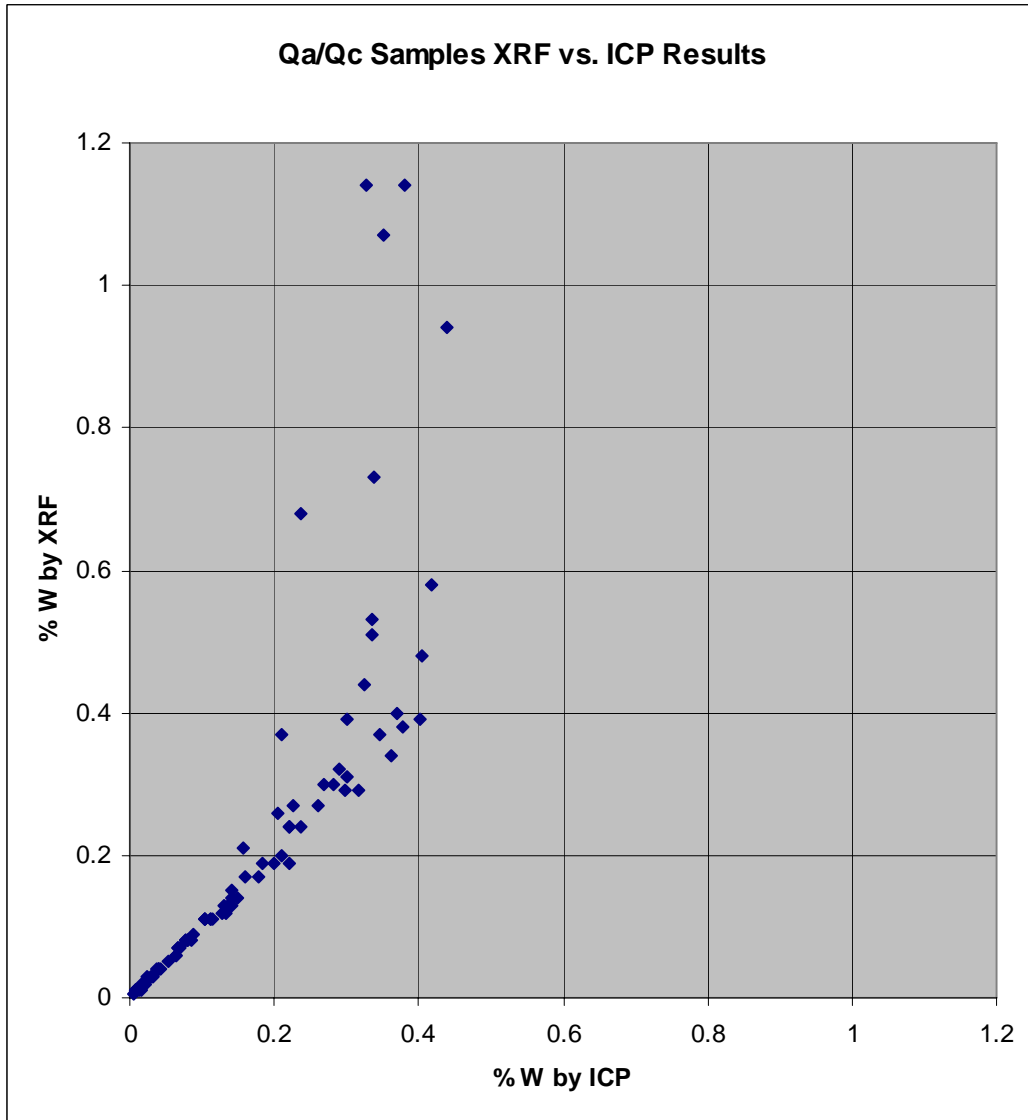
SRK is of the opinion that the analytical work performed by Chemex Labs on Mar-Tungsten Zone mineralization was good, and suitable for use in resource estimation. The colorimetric method, as well as the gravimetric techniques, are methodologies commonly used for tungsten analysis in that era. Tungsten determinations today utilize XRF spectroscopy or Neutron Activation Analysis (NAA) methodologies for determination of tungsten values.

There are no references in any of the documents supplied to SRK pertaining to security procedures in effect at the drill site and field camp. During the late 1970's it was not a standard component of project reporting to document the routines of project operation. Industry and

corporate standards have always been to prohibit any outsiders to handle or inspect fresh drill core at any stage of exploration operations. The drill core is picked up at the drill site by the geologist or designated assistant, or delivered by the driller at the end of shift. At the core logging facility, only the geologist and assistant help are permitted to handle and prepare the core. Transportation of the split bagged core to a laboratory facility is usually handled by commercial carriers in bulk form in boxes, larger sacks, pallets, or buckets.

SRK assumes the drill core for the 1979-1980 program was handled in the accustomed industry manner by drill contractors, geologists, and transportation carriers, and was not compromised by outsiders.

StrataGold has conducted a modern QA/QC analysis on the historical drill core at the Mar-Tungsten Zone. This consisted of re-sampling a wide distributing of the core, insertion of blanks and standards, and submitting all these to an accredited laboratory. The laboratory employed industry standard sample preparation and the techniques of analyses were appropriate for the level of tungsten mineralization. The results of the QA/QC study verified the original assay analyses and suggest that at higher level of mineralization, the historical analyses may be reported slightly lower than their modern counterparts.



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Mar-Tungsten Zone,  
Yukon Territory Canada

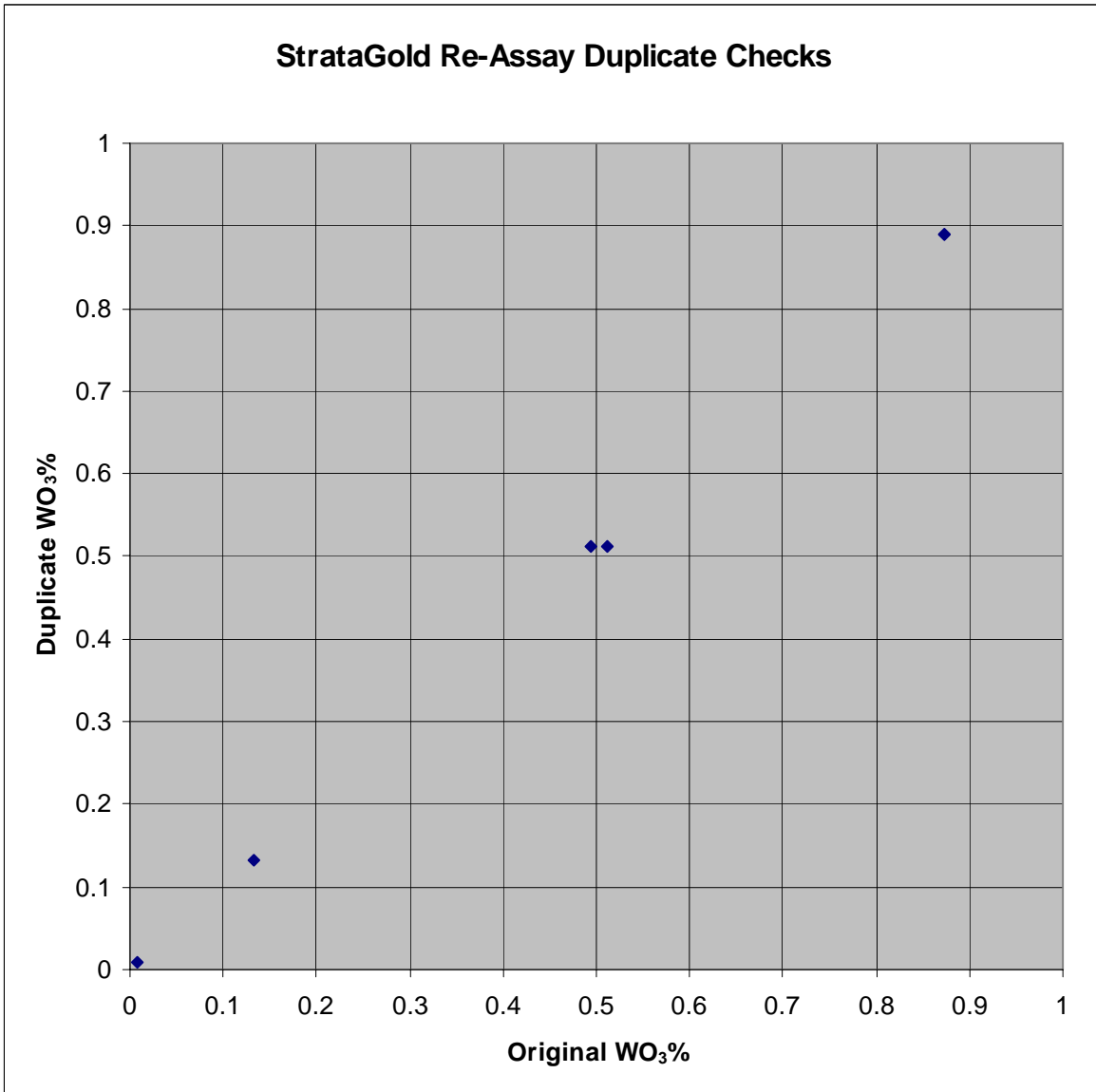
StrataGold Re-assay Samples  
Comparing XRF to ICP  
Tungsten Analysis

Date: 10/20/08

Approved: BAS

Figure: 11-1

### StrataGold Re-Assay Duplicate Checks



SRK Job No.: 173203

File Name: Figure 11-2.doc

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Mar-Tungsten Zone,  
Yukon Territory Canada

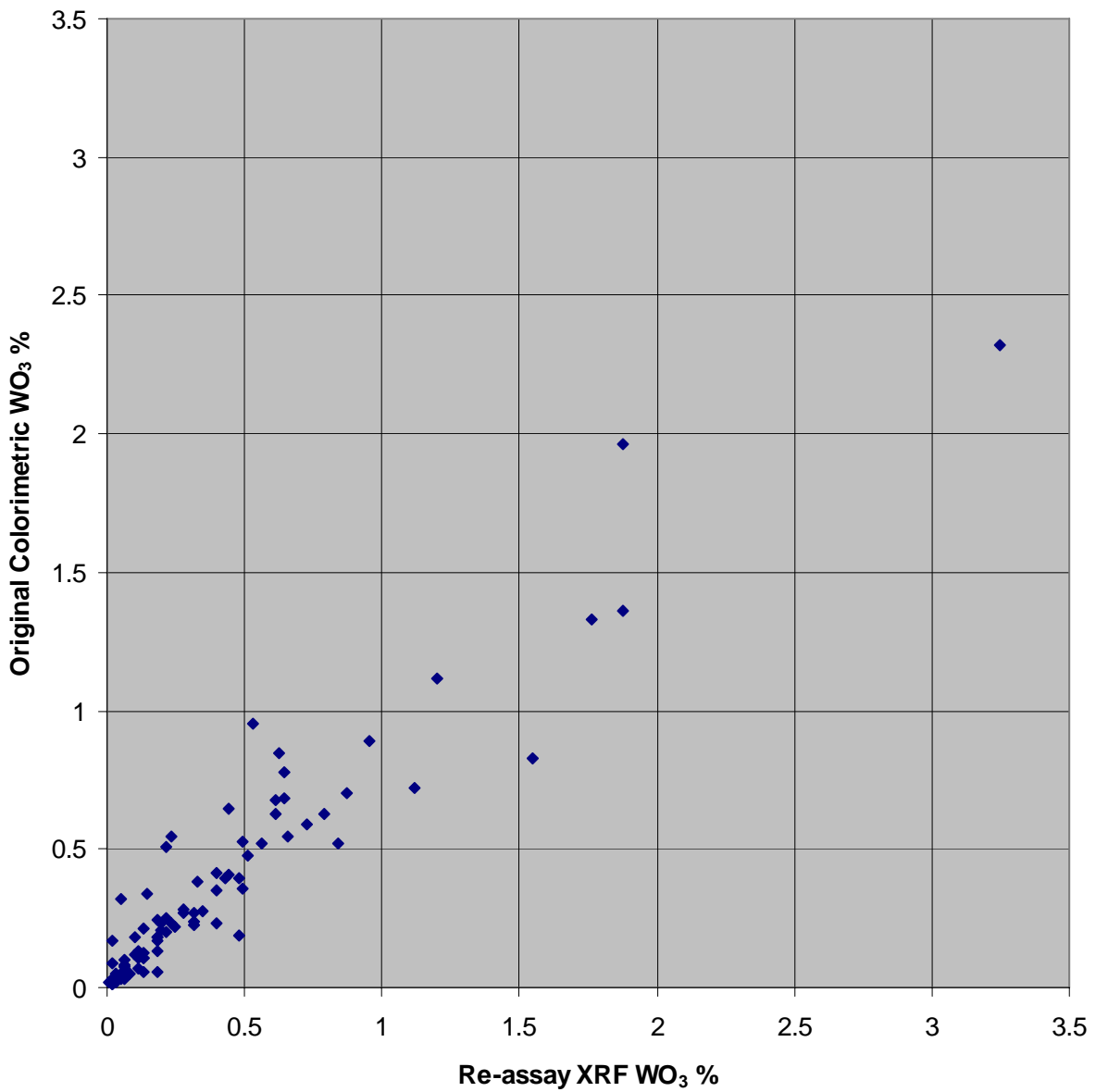
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Comparing Duplicate ICP  
Tungsten Analysis

Date: 10/20/08

Approved: BAS

Figure: 11-2

### Mar Tungsten Duplicate WO<sub>3</sub> Assays



SRK Job No.: 173203

File Name: Figure11-3.doc

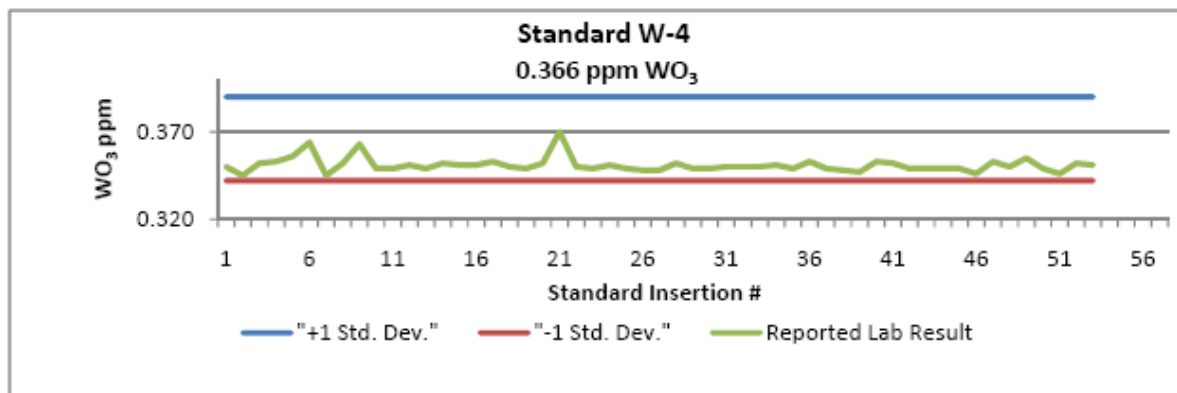
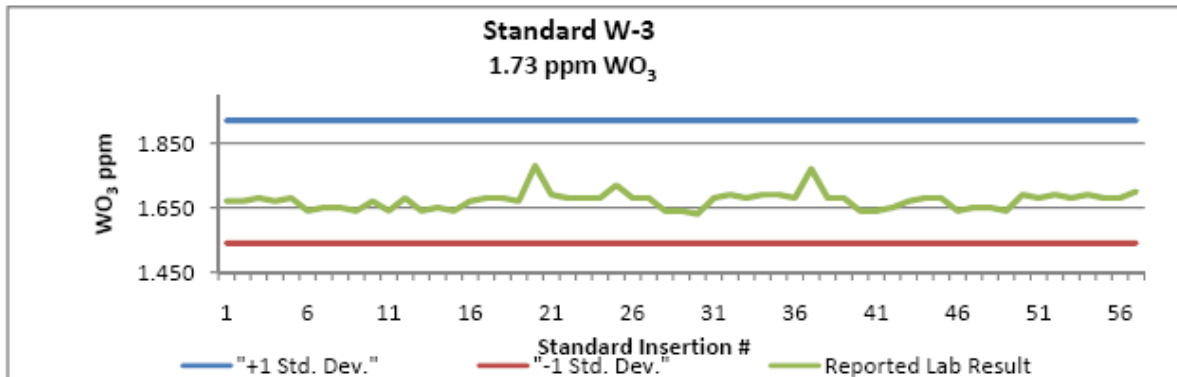
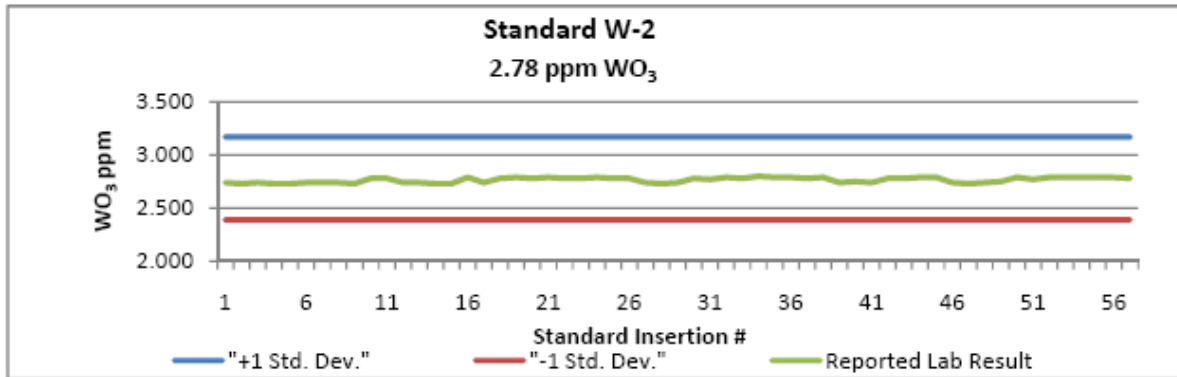
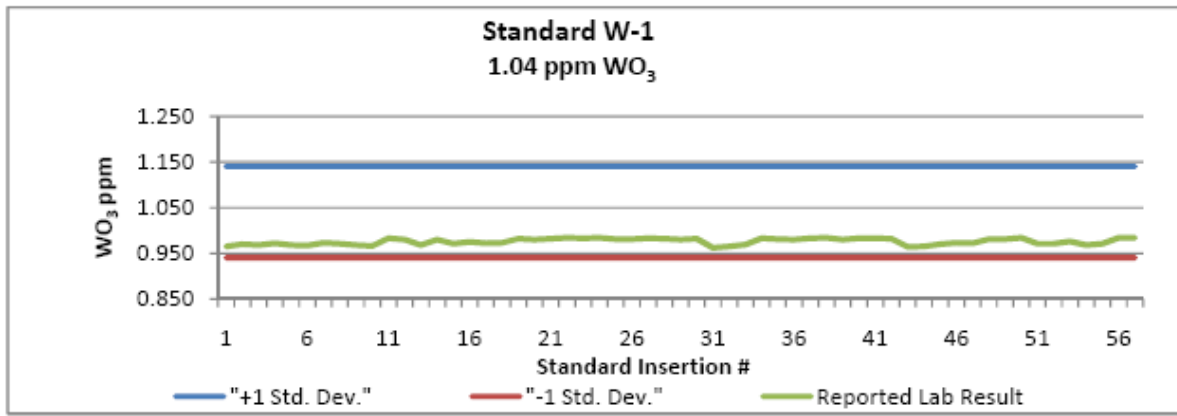
Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

StrataGold Re-assay Samples  
Comparing Original Colorimetric  
WO<sub>3</sub> Assays to XRF WO<sub>3</sub> Assays

Date: 10/20/08

Approved: BAS

Figure: 11-3



**Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada**

**StrataGold's 2008 Standard  
Reference Materials**

SRK Job No.: 173203

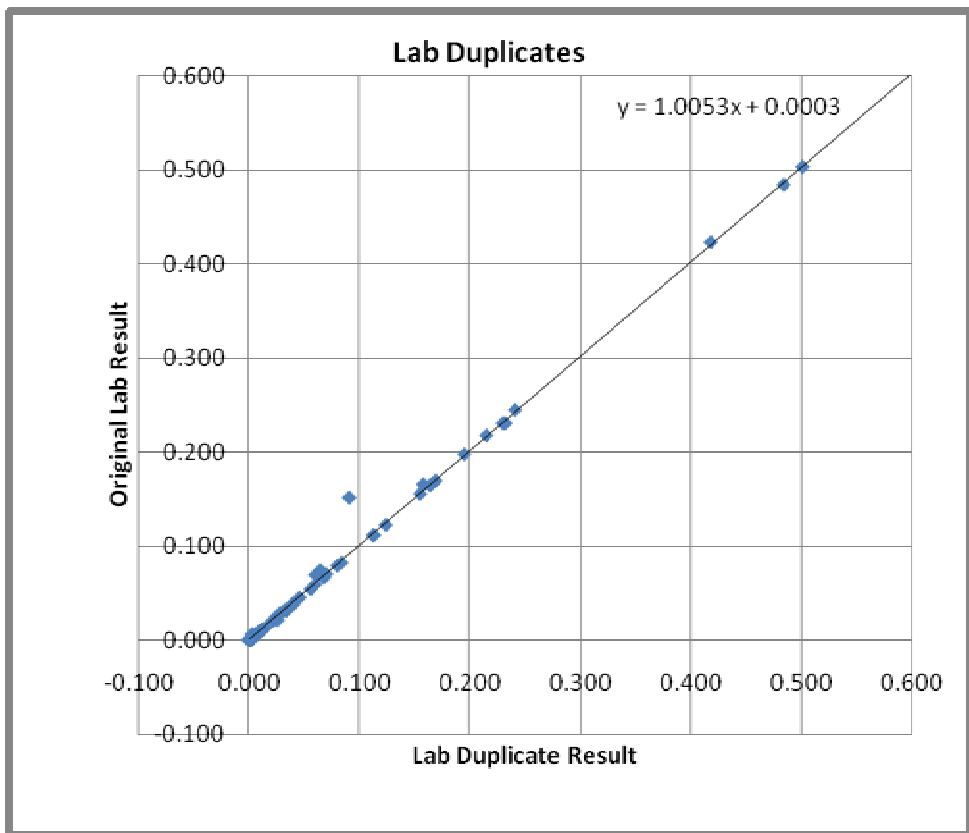
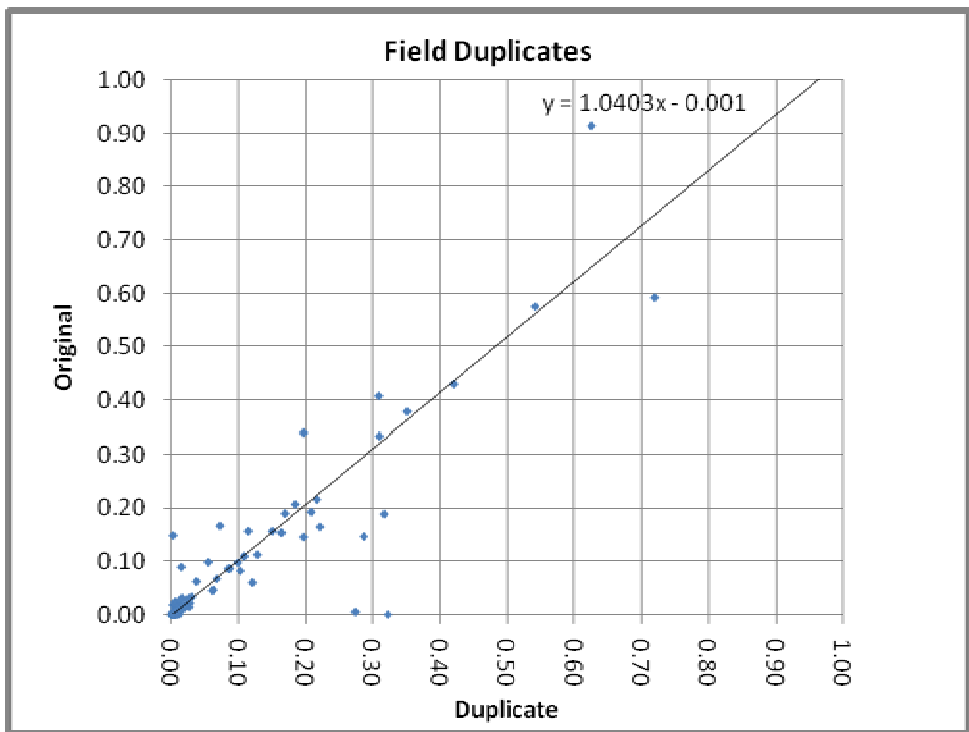
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**Source: SRK Consulting**

Date: 10/20/08

Approved: BAS

Figure: 11-4



## **12 Data Verification (Item 16)**

### **12.1 Quality Control Measures and Procedures**

Data supporting the Mar-Tungsten resource estimation was verified in two areas. The first pertains to the electronic database and the second involved re-assay of the historical core drilling.

The electronic database of historical drilling was constructed directly from hard copies of the original drill logs. The logs consisted of standardized, hand typed paper log sheets that included from, to, intervals, rock type codes, geologic descriptions, sample numbers and assays. They are organized by drillhole and each lists the property name, start date, completion date, logged by, bearing, dip, recovery, core size and list the collar coordinates in UTM grid within 0.1m. No original assays certificates were available to validate the drill log assay values. Data from the drill logs was manually inputted into an electronic template designed by StrataGold. Certain abbreviations were modified at this time to follow StrataGold's standard notations. The resulting electronic database was then printed and verified by StrataGold personnel to the original drill logs line by line. Corrections were made and the procedure was repeated until no errors were found. Construction and verification of the database was carried out entirely by StrataGold personnel. The authors of this report have not verified the electronic database since no original assays are available and the electronic database was provided by StrataGold with the assurance that it had been properly verified. StrataGold maintains the drilling information within a read only Access database to prohibit potential corruption.

The 2008 exploration results were entered directly into an electronic database by two methods. The geologic database was entered directly into an Access database as the core was logged using a custom entry program designed by StrataGold. The laboratory results were imported to the Access database from electronic reports supplied by ALS Laboratories. These sample intervals and assay results were all indexed by a blind sampled number. The assay intervals and sample numbers were hand entered from the sample books and then verified by StrataGold personnel. SRK was provided with the original 2008, ALS assay certificates in .pdf format. These were checked against the electronic assay database and no errors were found.

StrataGold conducted a re-assay program on the historical core because no original assay certificates were available. Samples were collected from 18 diamond drillholes located throughout the deposit and at a variety of depths. In total, 120 samples over 462m of drilling were analyzed. The results of the re-assay program verified the original assay analyses and suggest that at higher level of mineralization, the historical analyses may be reported slightly lower than their modern counterparts.

### **12.2 Limitations**

SRK relies on the industry professionalism of Bema, CanTung, Queenstake and StrataGold, to have assembled and maintained the database with utmost regards to accurate transfer and entry of data.

## **13 Adjacent Properties (Item 17)**

### **13.1 Statement**

The Mar-Tungsten Zone is situated within the larger Dublin Gulch claim block owned by StrataGold. The adjacent properties include the Eagle and Shamrock Gold Zones that are under current exploration by StrataGold. The continuity of quartz-gold veins along strike from the Eagle Zone into Mar-Tungsten suggests there is a hydrothermal system continuity from later-formed gold veins with earlier tungsten ± gold veins associated with the Dublin Gulch pluton.

A large number of gold, gold-silver, and tungsten anomalies have been outlined throughout the modern exploration history of the Dublin Gulch Property. The major zones of mineralization include the Eagle Zone, Lynx Zone, Shamrock Zone, Steiner Zone, Olive Zone, Peso-Rex Zone and the Mar-Tungsten Zone. The information revealing the existence of the major zones of mineralization mentioned above is included within a number of historic company reports and memos by various owners and authors. The authors of this report have not investigated any of these zones and have not been able to verify any information indicative of any mineralization on any of these zones. StrataGold issued a NI 43-101 compliant resource estimate for the Eagle Gold Zone located west of Mar-Tungsten in 2006 and then issued a re-confirmation of this same resource in 2007. (Carter and Mosher, 2006; Sparling and Maunula, 2007).

## **14 Mineral Processing and Metallurgical Testing** (Item 18)

### **14.1 Historical Mineral Processing/Metallurgical Testing**

#### **14.1.1 Lakefield**

The scheelite mineralization found within the Mar-Tungsten Zone has been tested by preliminary metallurgical bench scale investigations conducted towards the end of the 1980 exploration program. Further refinements to the process line were recognized and recommended, but never completed.

Bema contracted with Lakefield Research of Canada Ltd., Lakefield, Ontario, (Lakefield) in September 1980 to investigate the recovery of scheelite by gravity concentration from the Mar-Tungsten Zone mineralization. The Lakefield report was issued November 10, 1980, and appended to the Bema 1980 drill program report (Kaye, 1981).

#### **14.1.2 SGS**

StrataGold contracted SGS Canada in Vancouver, Canada (SGS) to complete a metallurgical test program for three flowsheet options using gravity and flotation for the recovery of tungsten. Grindability, chemical analysis and mineralogical characterizations were also performed on the composite sample. The program was completed over a 4 month period from July to October 2008 and SGS's report was issued on October 14, 2008.

### **14.2 Procedures**

#### **14.2.1 Lakefield**

A 270kg bulk sample was collected from two mineralized outcrops located within road cuts above Ray Gulch. The sample sites are located at UTM coordinates: 7,100,524N, 463,449E, and 7,100,534N, 463,309E. The bulk sample was lamped by UV light and hand sorted down to 136kg with an estimated grade of 1.0% WO<sub>3</sub>. The reduced sample was placed into four large buckets, and delivered to the Lakefield Research lab in Ontario. This sample was collected from mineralization typical of the deposit however it was all sourced from a small area. The sample is representative of the mineralization required to satisfy the current level of metallurgical studies.

At the Lakefield laboratory, the sample underwent jaw crushing followed by cone-crushing, next three-quarters were riffle split out and stored. The remaining one-quarter sample was pulverized to -10 mesh and riffle split into two 1kg charges for test work plus a sample for head grade analysis. The head grade sample underwent assay analysis and mineralogical examination. The met samples were run across laboratory sized, Deister concentrating tables at the original -10 mesh, at a -35 mesh and finally at a -48 mesh.

#### **14.2.2 SGS**

Approximately 50kg of samples were received at SGS on July 18, 2008 from StrataGold in 26 sample bags weighing from 0.7 to 3.6kg each. These samples were obtained from Mar-Tungsten drill core. The 26 individual samples were mixed, crushed to -10 mesh, and split into 2kg and stored in a freezer for testing. Head samples were taken from the 50kg composite chemical and mineralogical analyses.

The SGS metallurgical test program evaluated the following parameters:

- Bond ball mill work index;
- Gravity recovery of the WO<sub>3</sub>;
- Flotation recovery of the WO<sub>3</sub>; and
- Combined gravity and flotation recovery of the WO<sub>3</sub>.

The Bond ball mill work index was conducted on -10 mesh material of the composite sample.

Figure 14-1 shows the laboratory flow sheet used in the SGS test program.

Gravity concentration tests were done on samples using SuperDuty Diagonal Deck concentrating table, a V-Deck laboratory Mozley mineral separator, and KCMD 3 Model Knelson concentrator. Flotation tests were conducted at pH10 and 30-35% solids in laboratory flotation machines on 2kg samples with a set grind size of K<sub>80</sub> 77µm. Sulfide and non-sulfide flotation were done using potassium amyl xanthate (PAX) as a collector in sulfide flotation, sodium silicate and sodium carbonate as regulating reagents, methyl isobutyl carbinol (MIBC) and pine oil as frothers, Cytec A845 and heavy oil as collectors in non-sulfide flotation

## 14.3 Results

### 14.3.1 Lakefield

The head grade assay determined the bulk sample to be 1.10% WO<sub>3</sub>. The mineralogical examination identified scheelite as the only tungsten mineral present. The additional non-opaque minerals were identified as, quartz, feldspar, chlorite, hornblende, diopside, calcite, and traces of secondary alteration products. The opaque minerals were pyrite, chalcopyrite, and pyrrhotite.

The Deister concentrating table produced 70% to 80% recovery of scheelite dependent on the table concentrate grade. Grinding to -48 mesh appeared to have little effect upon improving recoveries. The table concentrates were then super panned to further investigate their amenability to upgrading. The results showed concentrate grades of +65% WO<sub>3</sub> were readily obtained, with 10% to 12% of the WO<sub>3</sub> in cleaner tailings. Most of the latter were expected to be recovered on recirculation.

The tailings from the -48 mesh concentrating test were sized and analyzed, and showed that 8% of the loss was in the -400 mesh material. A second test on the -48 mesh tailings, with a higher head grade, showed a pronounced loss in the coarser table middling product. Finally, the -200 mesh middling was tabled separately to determine if additional WO<sub>3</sub> could be recovered from a sized table feed. The results indicate an additional four percent of scheelite could be recovered in a high-grade concentrate from the -200 mesh table tailing.

Overall, the Mar-Tungsten Zone scheelite mineralization responded remarkably well to the gravity separation in this limited metallurgical test program. Scheelite gravity recoveries in excess of 75% were obtained in these test results. Most of the tungsten losses occurred in the -200 mesh fractions which Lakefield believed could be recovered by flotation. Recovered concentrates are relatively free of contaminants.

The exceptional cleanliness of the tungsten concentrates produced simply from a single gravity concentration step indicated that a higher recovery of 70% to 80% could be achieved.

### 14.3.2 SGS

The head grade assay for the sample composite was determined by chemical analysis at 0.39% WO<sub>3</sub>. Table 14.3.2.1 contains a detailed chemical analysis of the sample composite.

**Table 14.3.2.1: Chemical Analysis of Mar-Tungsten Composite Sample**

Compound/Element	Value
SiO <sub>2</sub>	56.90%
Al <sub>2</sub> O <sub>3</sub>	7.16%
Fe <sub>2</sub> O <sub>3</sub>	14.70%
MgO	1.78%
CaO	15%
Na <sub>2</sub> O	1.31%
K <sub>2</sub> O	0.62%
TiO <sub>2</sub>	0.31%
P <sub>2</sub> O <sub>5</sub>	0.08%
MnO	0.39%
Cr <sub>2</sub> O <sub>3</sub>	0.02%
V <sub>2</sub> O <sub>5</sub>	0.02%
LOI	1.84%
<i>Sum</i>	<i>100.10%</i>
Ag	<2g/t
As	<30g/t
Ba	270g/t
Be	3.7g/t
Bi	<20g/t
Cd	<2g/t
Co	<30g/t
Li	<5g/t
Mo	<10g/t
Ni	45g/t
Sb	<40g/t
Se	<30g/t
Sn	<20g/t
Sr	370g/t
Tl	<30g/t
U	<20g/t
Y	12g/t
Cu	0.002%
Zn	0.013%
Pb	<0.002%
Fe	9.34%
Mo	-
S	0.09%
WO <sub>3</sub>	0.39%
Au	0.03g/t

The chemical analysis indicates that tungsten as WO<sub>3</sub> is the only economically recoverable metal or mineral as the others were of a low sample content.

Mineralogical analysis was completed to determine the tungsten and gangue mineralization. For this, SGS used QEMSCAN technology which is based on x-ray technology for converting chemical composition to a mineral analysis. This analysis showed that tungsten is present as

scheelite and principal gangue minerals are quartz, feldspar and pyroxenes as summarized in Table 14.3.2.2.

**Table 14.3.2.2: Mineralogical Analysis of Mar-Tungsten Composite Sample**

<b>Mineral</b>	<b>Combined Sample (%)</b>
Scheelite	0.59
Molybdenite	0.00
Sulfides	0.30
Pyroxene	40.00
Chlorite	6.30
Clays	0.70
Feldspars	19.90
Micas	2.50
Epidote	4.20
Quartz	17.00
Ti Minerals	0.90
Fe Oxides	0.10
Al Oxides	0.10
Amphiboles	2.30
Garnets	1.10
Carbonates	3.70
Other	0.30
<b>Total</b>	<b>100.00</b>

The Bond work index for the Mar-Tungsten composite was calculated to be 14.1kWh/t. This is considered to be a medium hardness mineable resource. Figure 14-2 shows the particle size distribution from the Bond work index tests for both the feed and product.

Two gravity tests were done to evaluate a gravity-only flow sheet. The first test was done on a 10kg sample passing 300µm sample which was wet screened into six size fractions. Each size fraction was concentrated first in a laboratory SuperDuty diagonal deck concentrating table producing three products: two table concentrates and a table tailings. Table concentrate 1 was cleaned with a V-Deck laboratory Mozley mineral separator producing two products, a Mozley concentrate and a Mozley tailings, resulting in four final products for each fraction after two stages of concentration. The WO<sub>3</sub> recovery into the coarse concentrates was very high; however, a low recovery was observed in the fine fractions. Figure 14-3 shows the WO<sub>3</sub> grades and distributions in Mozley concentrate and WO<sub>3</sub> fraction distributions. WO<sub>3</sub> concentrate grades as high as 50-60% WO<sub>3</sub> were obtained with an overall recovery of about 65%.

In the second gravity test, a sample at K<sub>80</sub> 125µm was subjected to gravity concentration in a Knelson concentrator. The rougher concentrate from the Knelson concentrator was cleaned using a Mozley table. The rougher gravity recovery was 56.7% and an overall recovery of 49.9% was achieved with a final concentrate grade of 62.6% WO<sub>3</sub> as summarized in Table 14.3.2.3.

**Table 14.3.2.3: Gravity Results from the Knelson Rougher-Mozley Cleaner Tests for the Mar-Tungsten Composite Sample**

Products	Weight		Grade (%)			Recovery (%)		
	g	%	WO <sub>3</sub>	S	SiO <sub>2</sub>	WO <sub>3</sub>	S	SiO <sub>2</sub>
Mozley Conc 1	5.90	0.30	62.60	1.23	5.20	49.91	3.33	0.03
Mozley Conc 2	62.10	3.20	0.29	0.38	46.80	2.43	10.84	2.60
Mozley Conc 3	45.10	2.32	0.29	0.10	62.70	1.77	2.07	2.53
Mozley Tails	49.10	2.53	0.39	0.09	59.20	2.59	2.03	2.60
Knelson Tails	1,779.90	91.65	0.18	0.10	58.00	43.30	81.73	92.25
Head (calc.)	1,942.10	100.00	0.38	0.11	57.62	100.00	100.00	100.00

Flotation tests were done on 2kg samples as follows:

- Two rougher tests at different grind sizes, K<sub>80</sub> 77µm and K<sub>80</sub> 125µm; and
- One cleaner test.

Results of the two rougher tests demonstrated that a finer grind size to flotation was necessary to achieve a viable recovery with recoveries of 90% and 55% for the grind sizes of K<sub>80</sub> 77µm and K<sub>80</sub> 125µm, respectively. Figure 14-4 shows the kinetic test for WO<sub>3</sub> recovery in non-sulfide rougher concentrate versus mass pull. Figure 14-5 shows the WO<sub>3</sub> recovery in the non-sulfide rougher concentrate versus flotation time. These flotation tests in combination with gravity test results demonstrate that the coarse WO<sub>3</sub> as scheelite is recoverable by gravity methods and the finer fractions are amenable to recovery by flotation. No desliming was necessary ahead of flotation indicating the clean nature of the Mar-Tungsten gangue materials.

One cleaner test was completed with a good recovery of about 90% was obtained; however, the recovery decreased significantly in the cleaning stages. Figure 14-6 shows the WO<sub>3</sub> grade as a function of the recovery in the cleaner flotation.

Three tests were performed using a combination of gravity concentration and flotation as follows:

- Two tests with gravity concentration using a Knelson concentrator followed by flotation; and
- One test with flotation followed by Mozley cleaning of the flotation concentrate.

Of the two tests, the results of one test approximated the estimated recovery from the gravity-only test work. This test used regrinding of the gravity tailings with a total WO<sub>3</sub> recovery of 89% with gravity and flotation. The one test using the Mozley concentrator for cleaning produced a 30% WO<sub>3</sub> concentrate at a 25% stage recovery. However, this resulted in a high circulating load as a scavenger flotation which is probably not suitable for an operating plant to achieve a viable recovery.

The combination of gravity and flotation indicates that an overall recovery of about 80-85% is achievable with 60-65% from gravity and an additional 20% from flotation. Table 14.3.2.4 summarizes the results for the gravity-flotation test work.

**Table 14.3.2.4: Results for the Combination of Gravity-Flotation Tests for the Mar-Tungsten Composite Sample**

Test No.	Product	Weight		Grade (% WO <sub>3</sub> )	Recovery (% WO <sub>3</sub> )	Conditions
		g	%			
VSGF3	Knelson Ro Conc	72.30	3.79	1.09	10.99	Knelson at 100g Primary grind 25 min. Without regrind of tails from Knelson
	S-Ro Conc	33.20	1.74	0.38	1.76	
	NS-Ro1 Conc	92.10	4.83	4.12	52.91	
	NS-Ro2 Conc	37.80	1.98	1.03	5.43	
	NS-Ro3 Conc	18.60	0.97	0.48	1.24	
	NS-Ro Tails	1,653.90	86.69	0.12	27.67	
	Head (calc.)	1,907.90	100.00	0.38	100.00	
VSGF4	Knelson Conc	110.70	5.65	3.58	54.20	Knelson at 120g Primary grind 25 min. Regrind of tails from Knelson: 25 min.
	S-Ro Conc	57.60	2.94	0.28	2.21	
	NS-Ro1 Conc	106.90	5.46	1.90	27.78	
	NS-Ro2 Conc	48.80	2.49	0.63	4.20	
	NS-Ro3 Conc	35.40	1.81	0.14	0.68	
	NS-Ro Tails	1,600.00	81.66	0.05	10.89	
	Head (calc.)	1,959.40	100.00	0.37	100.00	
VSGF8	S-Cln1 Conc	8.43	0.43	0.14	0.17	Primary grind 55 min. Regrind 10 min.
	Mozley Conc	5.60	0.29	30.30	23.99	
	Mozley Tails	283.50	14.51	1.60	64.13	
	NS-Ro Tails	1,656.00	84.77	0.05	11.71	
	Head (calc.)	1,953.53	100.00	0.36	100.00	

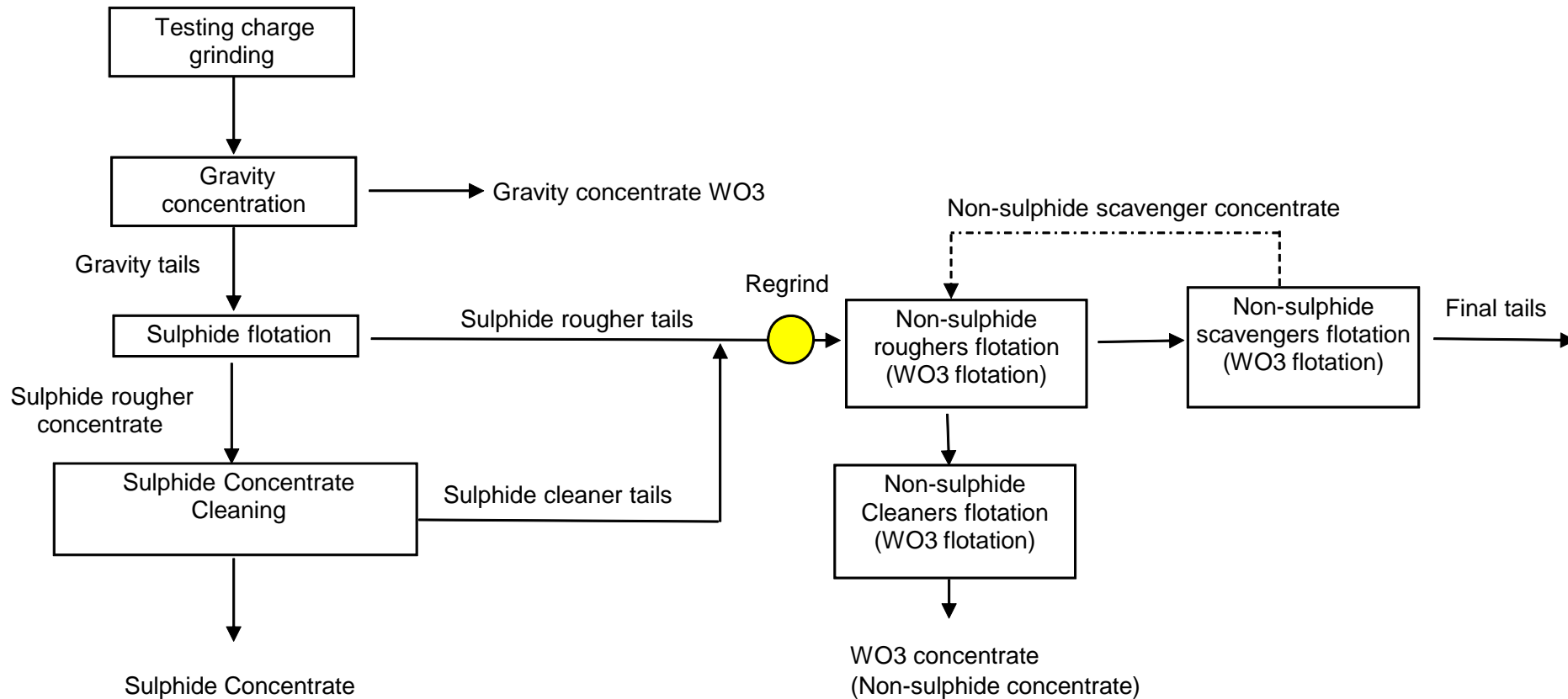
Note: S-Ro Conc. = Sulfide Rougher Concentrate; NS-Ro Conc = Non-Sulfide Rougher Concentrate; NS-Ro Tails = Non-Sulfide Rougher Tailings; S-Cln1 Conc = Sulfide Cleaner Concentrate

## 14.4 Mineral Processing and Metallurgical Testing

Based on the SGS preliminary metallurgical test program, the indicated flow sheet for mineral processing at Mar-Tungsten would be comprised of the following unit processes:

- Blending of RoM mineable resource to provide a consistent WO<sub>3</sub> feed grade to the processing plant;
- Primary crushing of RoM mineable resource;
- SAG-ball mill grinding;
- Gravity recovery and cleaning of gravity concentrate;
- Sulfide and non-sulfide rougher flotation;
- Cleaner flotation with regrind ball mill; and
- WO<sub>3</sub> final concentrate thickening, filtering and packaging for shipment.

Additional descriptions of the proposed processing plant at Mar-Tungsten are contained in Section 17.3.



**StrataGold flowsheet employed in the metallurgical testing**



SRK Job No.: 173203

File Name: Figure 14-1.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

Source: **SGS Canada Inc.**

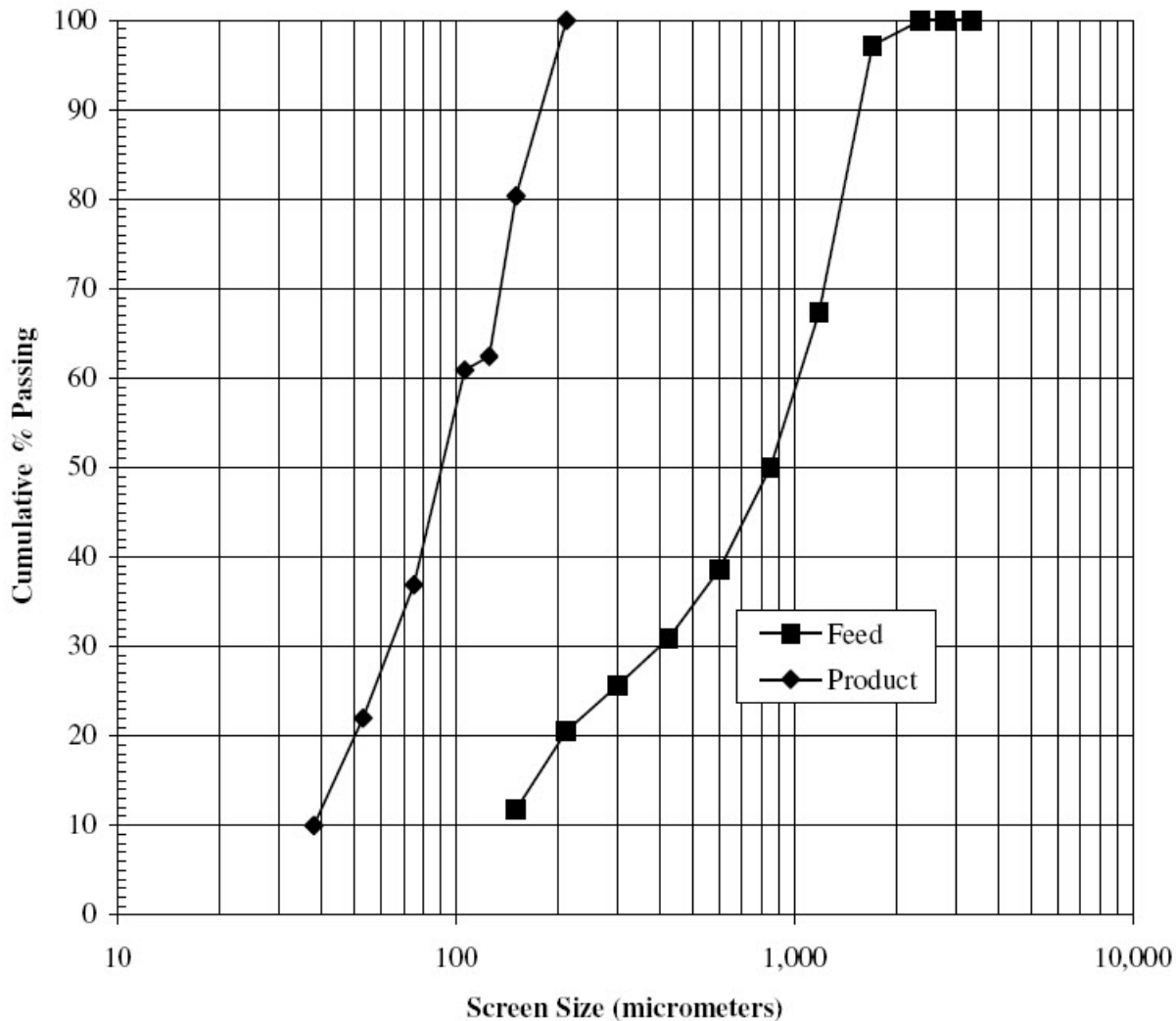
**SGS Laboratory Flow Sheet  
for Mar-Tungsten  
Metallurgical Test Program**

Date: 11/10/08

Approved: ALK

Figure: 14-1

### Particle Size Distribution



SRK Job No.: 173203

File Name: Figure 14-2.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

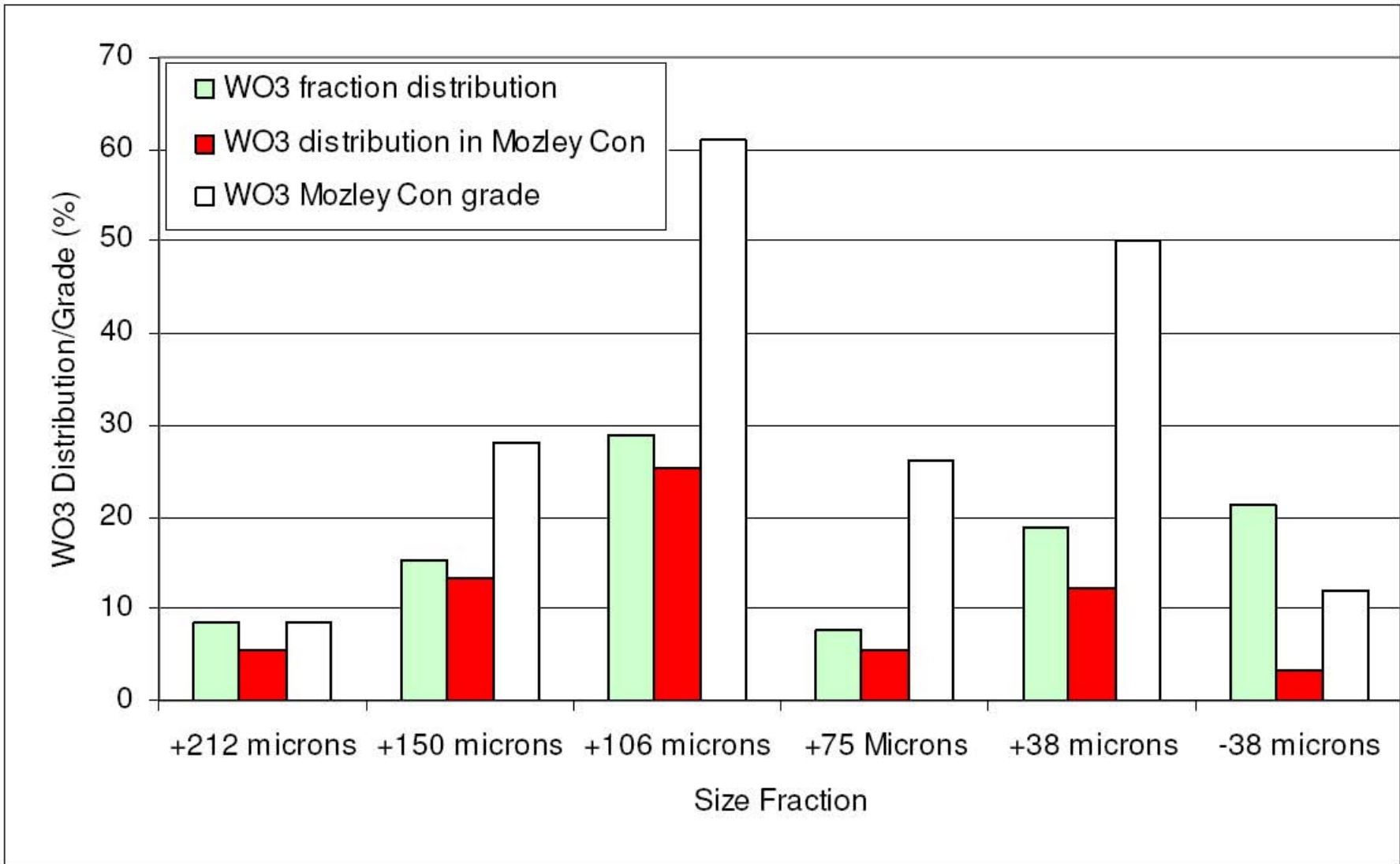
Source: SGS Minerals Services

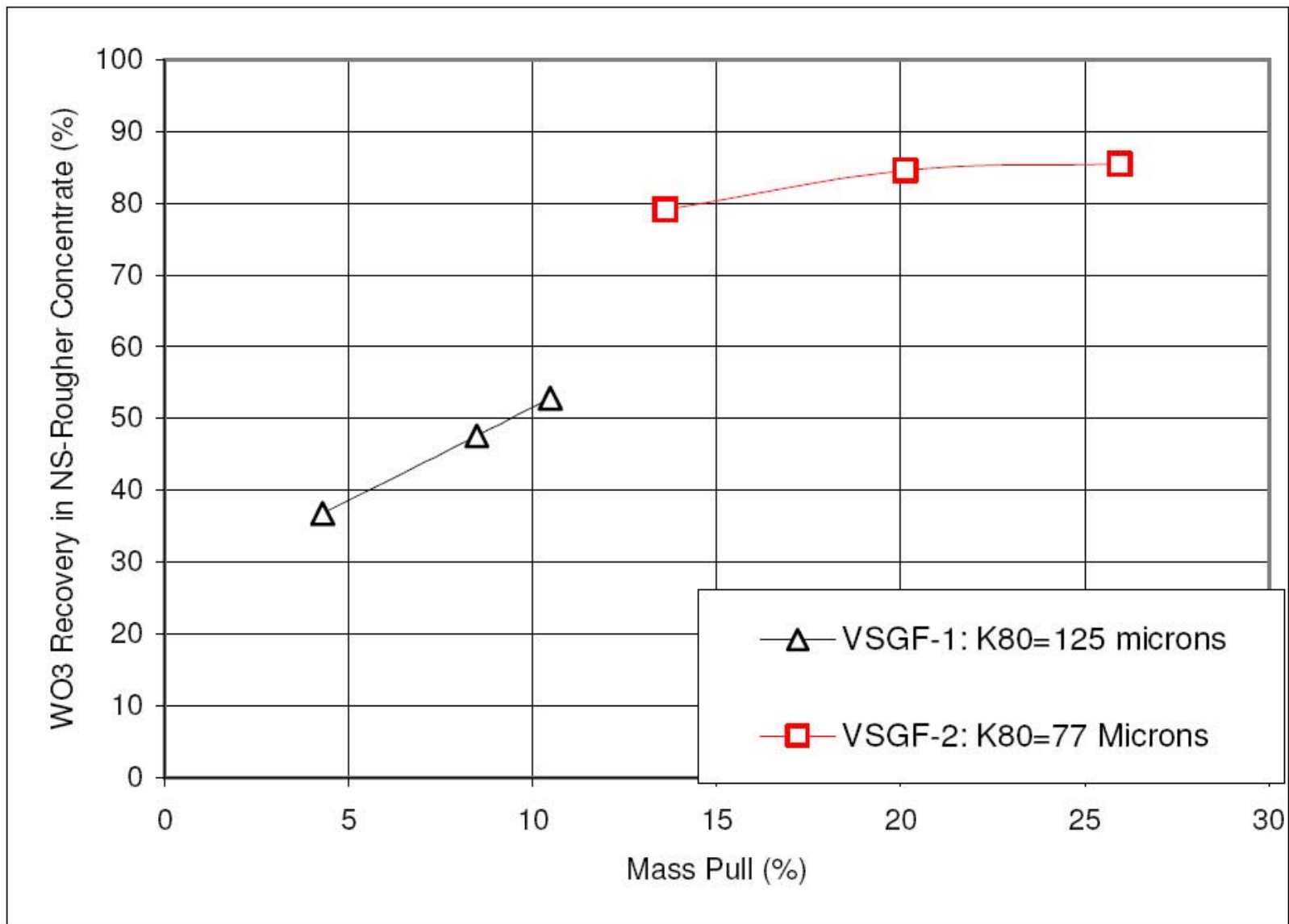
### Particle Size Distribution

Date: 10-31-08

Approved: ALK

Figure: 14-2





SRK Job No.: 173203

File Name: Figure 14-4.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

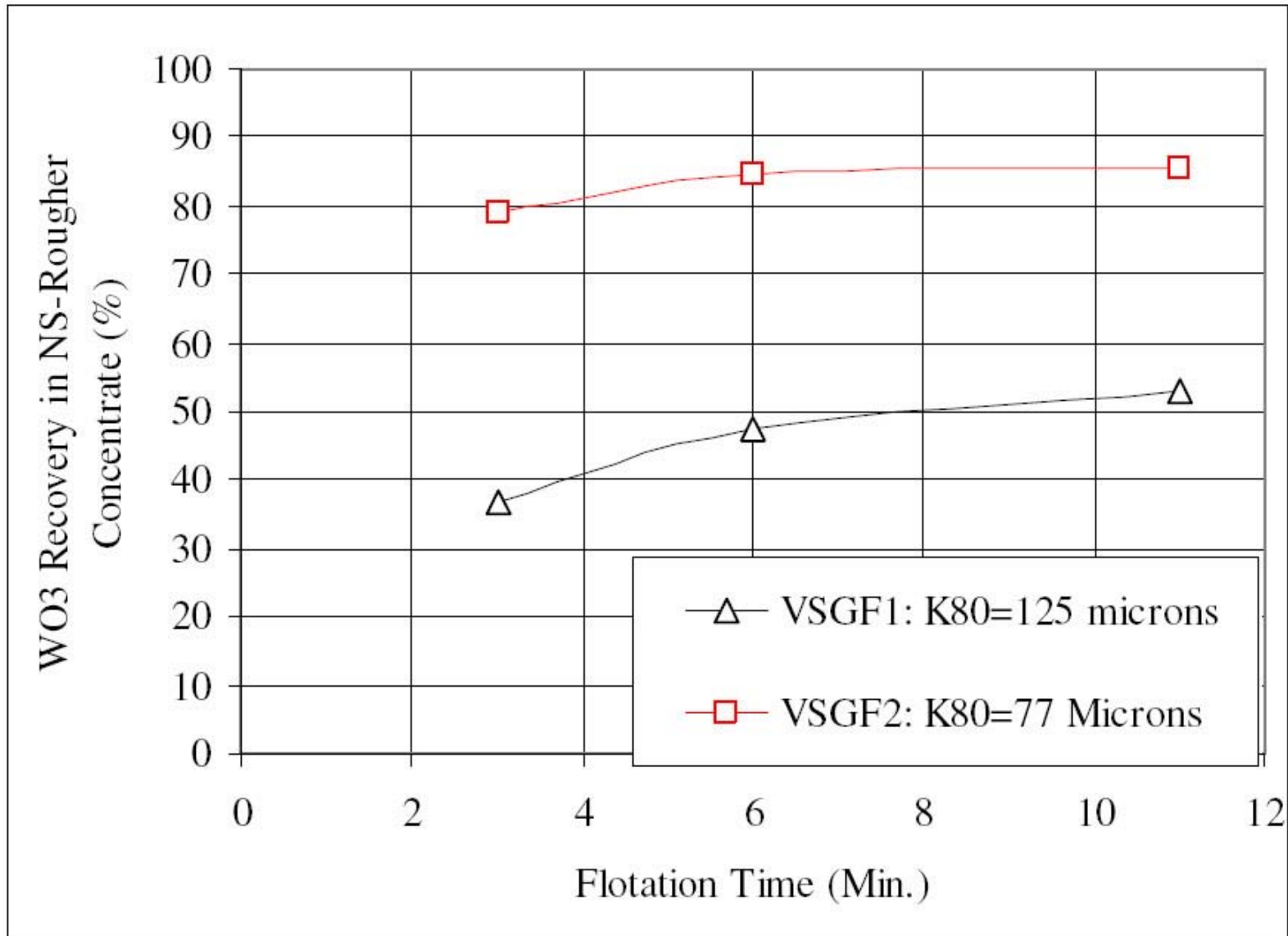
Source: **SGS Minerals Services**

**WO<sub>3</sub> Recovery in Non-Sulfide  
Rougher Concentrate vs.  
Mass Pull**

Date: 10-31-08

Approved: ALK

Figure: 14-4



SRK Job No.: 173203

File Name: Figure 14-5.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

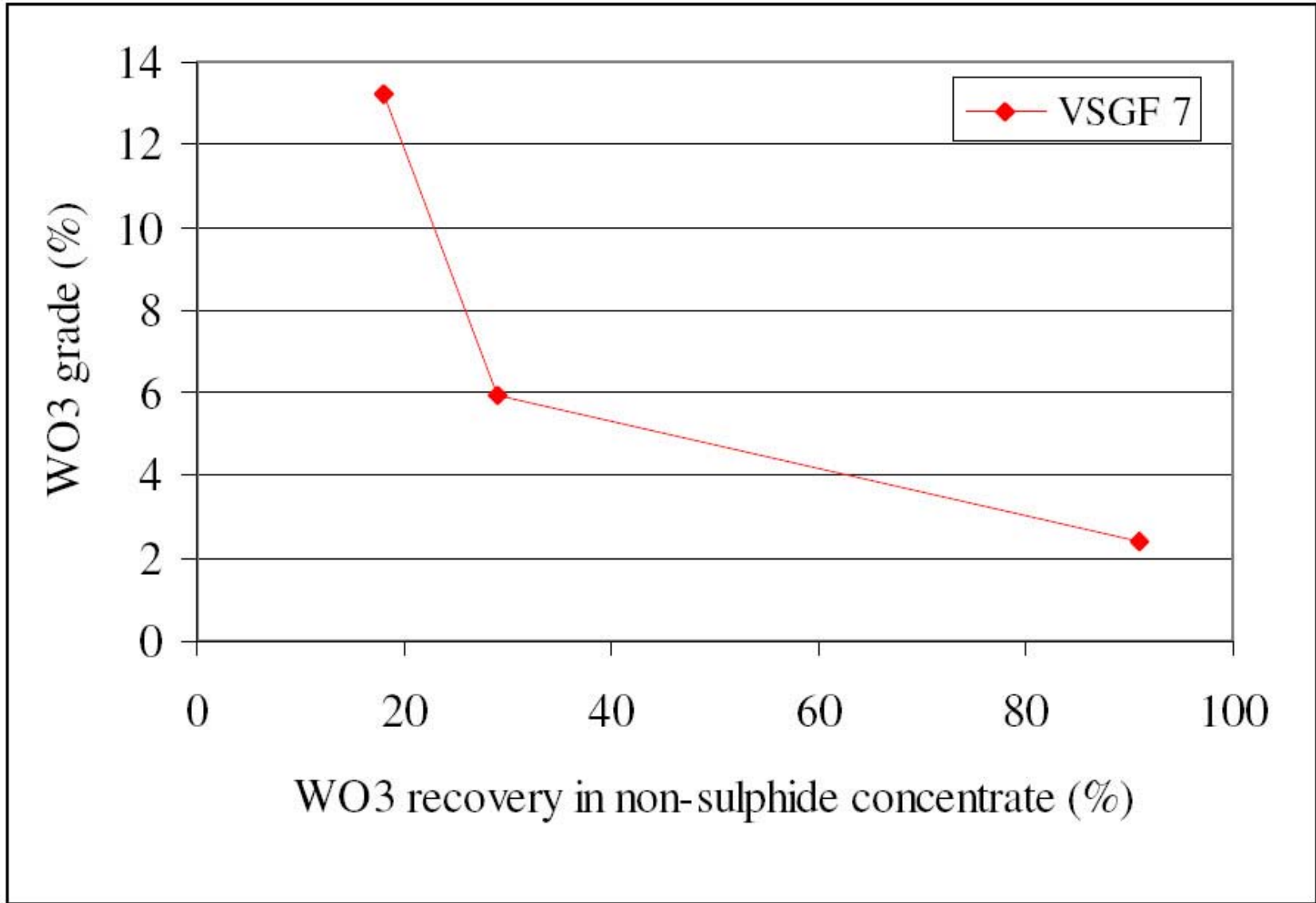
Source: **SGS Minerals Services**

**Wo<sub>3</sub> Recovery in Non-Sulfide  
Rougher Concentrate vs.  
Flotation Time**

Date: 10-31-08

Approved: ALK

Figure: 14-5



## **15 Mineral Resource Estimate (Item 19)**

### **15.1 Qualified Person of the Mineral Resource Estimate**

Dr. Bart Stryhas constructed the geologic and resource model discussed below. He is responsible for the resource estimation methodology and the resource statement. Dr. Stryhas is independent of the issuer applying all of the tests in Section 1.4 of NI 43-101.

### **15.2 Drillhole Database**

The drillhole database was compiled by StrataGold personnel and is determined to be of high quality. The database consists of four Microsoft Excel spreadsheets containing collar locations surveyed in UTM NAD83 coordinates, drillhole orientations with down hole deviation surveys, assay intervals with elemental analyses and geologic intervals with rock types. The appropriate codes for missing samples and no recovery were used during the modeling procedures.

The database contains information from 120 drillholes totaling 17,825m of drilling. There are no obvious gaps in the naming sequence. The maximum drillhole depth is 374m and the average is 150m. Most holes were drilled inclined steeply to the east normal to the strike and dip of the mineralization. Down hole deviations surveys were made on 77% of the using acid dip tests or Sperry Sun tests. The average drillhole inclination is about -85° eastward.

### **15.3 Geology**

The resource estimation is based on a very generalized geologic model consisting of five basic rock types that strike north and dip gently to the west. The rock types were differentiated into non-mineralized metasediments, mineralized metasediments, exoskarn, endoskarn and unmineralized intrusives. The intrusives have a sill geometry and compose four main bodies ranging between 5m and 75m thick. Each of these bodies were first interpreted in cross section and then triangulated into wireframe shapes. The exoskarn was next interpreted in cross section and then triangulated into wireframe solids. These wireframe solid shapes were used to code the rock types into the block model. First, all material was flagged as metasediment, next the blocks enclosed within the exoskarn solid were flagged and last, the blocks enclosed within the intrusive solid were flagged. The mineralized metasediments and the endoskarn were flagged by the categorical indicator described in Section 15.8. Mineralization occurs primarily within the metasediments and exoskarn however, small and relatively high-grade occurrences are found within the endoskarn.

### **15.4 Block Model**

The block model was constructed within the UTM NAD83 grid coordinate limits listed in Table 15.4.1. A 4m block size was chosen as an appropriate compromise between a potential open pit and underground smallest mining unit. The topographic surface was created from the elevation coordinates supplied by StrataGold and projection of this data to the limits of the model area. Soil thickness varies considerably over the deposit and averages about 2m. A “top of bedrock” surface was created from the drilling data and all blocks were flagged in order to limit the interpolation of grade to only those blocks within bedrock.

**Table 15.4.1: Block Model Limits**

<b>Orientation</b>	<b>Minimum (m)</b>	<b>Maximum (m)</b>	<b>Block Dimension (m)</b>
Easting	462,600	463,500	4
Northing	7,100,200	7,101,200	4
Elevation	1,125	1,425	4

## 15.5 Compositing

The raw assay data was first plotted on histogram and cumulative distribution graphs to understand its basic statistical distribution. The histogram shows a strong positive skewness and the cumulative distribution curve illustrates a continuous population set with a distinct break in slope at 0.1% WO<sub>3</sub>. The original assay lengths range from 0.2m to 5.6m with an average of 0.95m. For the modeling, these were composited down hole into 2.0m lengths with breaks at the major geological contacts described above. The cumulative distribution plot of the composited data shows a continuous distribution up to 3% WO<sub>3</sub> followed by three outlier points. During the grade estimation, the composite data was capped at 3% WO<sub>3</sub>. This resulted in nine composites ranging between 3.03 and 10.8 being reduced to 3% WO<sub>3</sub>. The composites were also length weighted during the estimation procedure. This results in shorter composites located at the end of a drill hole or near a geologic contact being weighted by their actual length to reduce any sample support bias.

## 15.6 Specific Gravity

StrataGold conducted a specific gravity study on the drill core to be used for the resource estimation. They selected a total of 65 samples from the five lithic variations. These included: 16 samples from unaltered intrusives; 25 samples from unaltered metasediments; 15 samples from exoskarn, 5 samples from mineralized metasediments, and 4 samples from endoskarn. The SG data from within the exoskarn was plotted against WO<sub>3</sub> grade but no correlation was seen. For this study, weight averaged specific gravities were calculated for the five lithic types and are presented in table 15.6.1. Specific gravity was assigned in the block model based on rock type wireframes and probability assigned from the categorical indicator discussed below.

**Table 15.6.1: Specific Gravity Determinations**

<b>Lithic Type</b>	<b>Specific Gravity (g/cm<sup>3</sup>)</b>
Un-mineralized Intrusives	2.70
Un-mineralized Metasediments	2.76
Mineralized Metasediments	2.80
Exoskarn	2.93
Endoskarn	2.82

## 15.7 Variogram Analysis

Variogram analysis was attempted on the WO<sub>3</sub> composite data. All directions at 20° horizontal increments and 20° vertical increments were analyzed using a variety of lags, tolerances and search parameters. No valid variograms could be constructed at lag intervals representing anything less than the average variance. For this reason, the deposit was estimated using an inverse distance squared estimation technique rather than Ordinary Kriging. Variograms are

commonly difficult to construct in tungsten deposits. The lack of variography is more likely a function of the current drill density rather than a reflection of the continuity of mineralization. Cross-sections clearly indicate that mineralization is continuous between drillholes, however the grade is variable.

## 15.8 Grade Estimation

The Mar-Tungsten Zone was modeled only for  $WO_3$ . All block grade estimates were made using the 2.0m down hole composites.

Due to the intermittent nature of the mineralization, it was necessary to create hard boundaries within which to confine the grade estimation. This was achieved by using a categorical indicator approach. This method first separates the composite data into lower grade and higher-grade groups based on an appropriate cut-off value, in this case 0.05%  $WO_3$ . The composite values below 0.1% are flagged with a 0 and those above are flagged with a 1. The composite indicator values are then interpolated into the block model thus creating indicator block values between 0 and 1. The indicator values were interpolated using an Inverse Distance Squared technique. A min/max of 1/3 composites with an octant maximum of 2 was used. The estimation was allowed to search within a 30m x 30m x 5m ellipsoid, oriented within the plane of mineralization that strikes north and dips 25° west.

This procedure effectively assigns a probability to each block as to whether it would be above the 0.05%  $WO_3$  cut-off. Blocks assigned with a value of 0.1 have a 10% probability, a 0.5 have 50% probability and those with a 1.0 have a 100% probability. For this model, all blocks assigned with a value of 0.5 and above are considered to be within the 0.1%  $WO_3$  grade shell. The composites are next flagged with the interpolated block indicator values so that they can be selected during the grade interpolation. This technique precludes the necessity of creating very complex wire frame grade shells to control grade assignment. Once the indicator estimation was completed, the block located within the metasediment and intrusive units with an indicator value above 0.5 were flagged as mineralized metasediment and endoskarn respectively.

The next step was to run  $WO_3$  grade interpolations using an Inverse Distance Squared method and analyzing the results with a point validation technique. This technique removes a drillhole from the database and then estimates grade for all composites within it. It then removes the next drillhole etc until all composites have been estimated. An x-y scatter plot is constructed for the estimated versus actual grades to evaluate the correlation. Numerous point validation runs are made to test the effects of different of min/max composites/block, octant search limitations and minimum number of drillholes required to assign grade. Once an optimal set of estimation parameters are determined, the actual grade interpolation is then conducted. Once the grade estimation is completed a variety of model validation tests are run and the modeling parameters are modified until all validation tests are passed.

The final estimate employed an Inverse Distance Squared algorithm using a two pass method. The mineralized metasediments and exoskarn units were treated as soft boundaries to each other. The endoskarn was treated as a hard boundary. Grade was estimated within each rock boundary using only composite assay data from that same rock type. In the first estimation pass, the mineralized metasediments and exoskarn blocks were estimated using a minimum of 3 and a maximum of 12 composites to assign grade to each block. The endoskarn blocks were estimated using a minimum of 2 and maximum of 12 composites. In addition, an octant search restriction was also applied to all blocks allowing a maximum of three composites from each octant. No

restriction was placed on the number of drillholes required to assign grade. A search ellipsoid with a range of 50m down dip, 50m along strike and 20m across strike and dip was used. All samples with a WO<sub>3</sub> grade above 2% were restricted to a maximum extrapolation distance of 30m down dip, 30m along strike and 10m across strike and dip. The second pass only considered blocks un-estimated in the first. This required a minimum of 1 composite for all rock types and also used the same remaining parameters as in the first pass. These blocks were flagged so that they could be identified during the resource classification. The search ranges are based mainly on the author's evaluation of what is appropriate for the deposit and from the results of the point validation and model validation tests. A representative cross section of the interpolated block model grades is shown in the Figure 15-1.

## 15.9 Model Validation

Four techniques were used to evaluate the validity of the block model. First, the interpolated block grades were visually checked on sections and bench plans for comparison to the composite assay grades. Second, statistical comparisons were made between the interpolated block grades and composite data within the modeling domains. The results are presented in Table 15.9.1 below. Third, swath plots were generated to compare model blocks and composite grades at a variety of cross sections through the deposit. The results are presented in Table 15.9.1 and in Figure 15-2. Fourth, a nearest neighbor estimation was run using a single composite to estimate each block within the same parameters used for the final model. The total contained WO<sub>3</sub> at a zero cut off was compared in the final model at the same cut-off. The final model contained 20% less metal than the nearest neighbor estimation.

**Table 15.9.1: Model Validation Statistical Results**

Rock Type	Data Group	Mean	Variance	Maximum	# Samples
Exoskarn and Mineralized Metasediments	2m Composites	0.265	0.130	3.0	1,352
	Block Model	0.265	0.040	2.18	84,313
Endoskarn	2m Composites	0.282	0.173	3.0	143
	Block Model	0.280	0.150	2.3	9,222
All Rock Types	2m Composites	0.266	0.134	3.0	1,495
	Block Model	0.266	0.040	2.25	93,535

## 15.10 Resource Classification

The Mineral Resources are classified under the categories of Measured, Indicated and Inferred according to CIM guidelines. Classification of the resources reflects the relative confidence of the grade estimates. This is based on several factors including; sample spacing relative to geological and geo-statistical observations regarding the continuity of mineralization, data verification to original sources, specific gravity determinations, accuracy of drill collar locations, accuracy of topographic surface, quality of the assay data and many other factors, which influence the confidence of the mineral estimation. No single factor controls the resource classification rather each factor influences the end result. Generally most of the factors influencing the resource classification in the Mar-Tungsten Zone are positive. The resources have been classified as Indicated and Inferred based primarily on sample spacing as indicated by drilling density but also by the number of composites used for the block grade estimation. For the resource classification, a solid shape was constructed around the core of the deposit where

most drillholes are spaced less than 50m apart. All blocks located within this area were classified as indicated resource unless they were estimated by just one composite. All blocks located outside of the solid shape and any blocks located within the shape which were estimated by just one composite were classified as Inferred resource.

### 15.11 Mineral Resource Statement

The Mar-Tungsten Zone mineral resource statement is presented below in table 15.11.1. The results reported in the resource statement have been rounded to reflect the approximation of grade and quantity which can be achieved at this level of resource estimation.

**Table 15.11.1: Mar-Tungsten Zone Mineral Resource Statement**

Resource Category	% WO <sub>3</sub> Cut-off	Total Mt	% WO <sub>3</sub> Grade	Contained WO <sub>3</sub> (Mlbs)
Indicated	0.10	12.7	0.31	86.2
Inferred	0.10	1.3	0.30	8.9

### 15.12 Mineral Resource Sensitivity

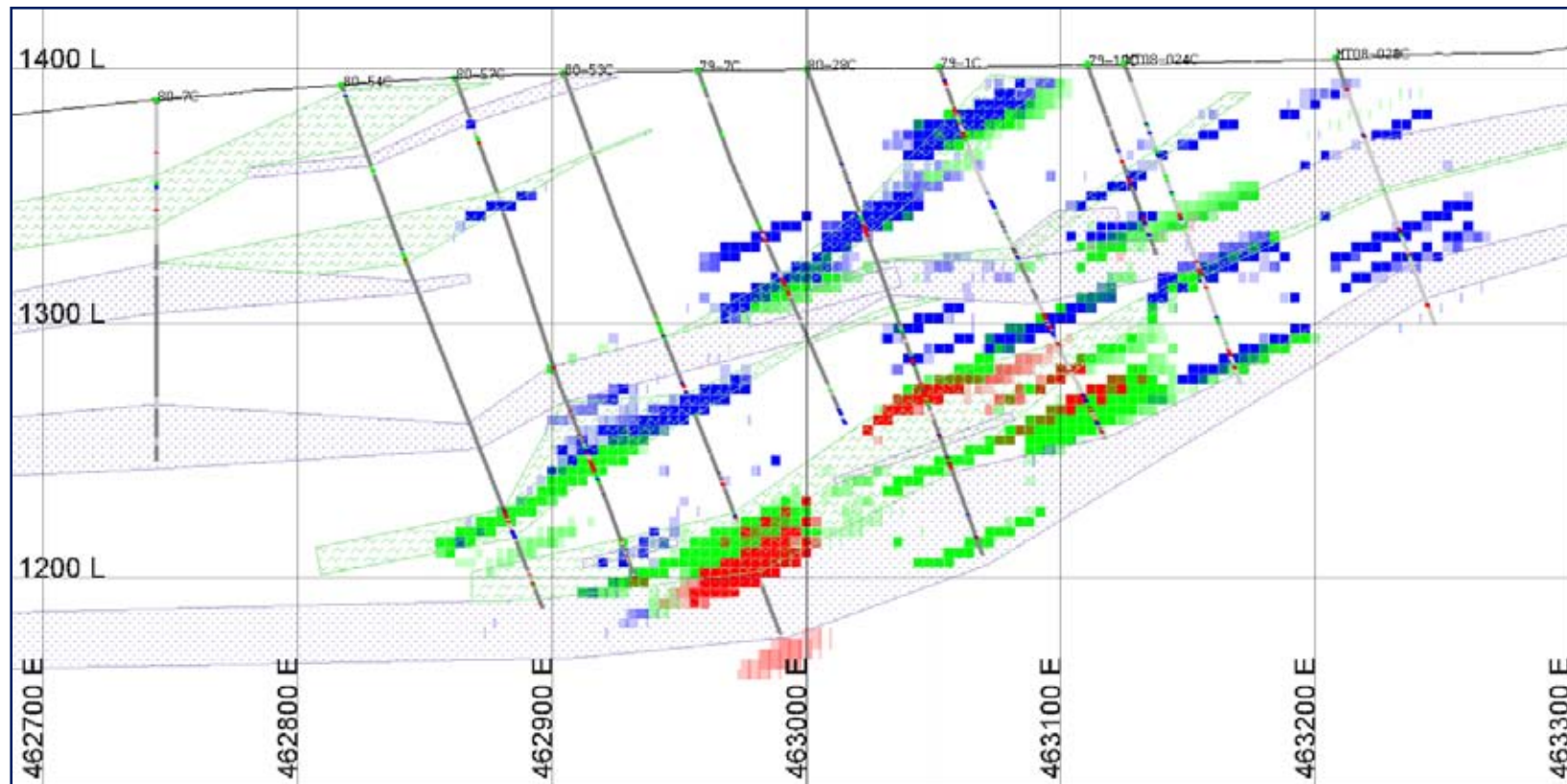
The grade tonnage distributions of the Inferred Mineral Resources at the Mar-Tungsten Zone are presented in Tables 15.12.1 and 15.12.2 and Figures 15-2 and 15-3.

**Table 15.12.1: Mar-Tungsten Zone Indicated Mineral Resource Sensitivity**

% WO <sub>3</sub> Cut-off	Total Mt	% WO <sub>3</sub> Grade	Contained WO <sub>3</sub> (Mlbs)
0.050	14.7	0.276	89.5
0.075	13.9	0.289	88.5
0.100	12.7	0.308	86.2
0.125	11.6	0.327	83.3
0.150	10.5	0.345	80.1
0.175	9.4	0.367	76.1

**Table 15.12.2: Mar-Tungsten Zone Inferred Mineral Resource Sensitivity**

% WO <sub>3</sub> Cut-off	Total Mt	% WO <sub>3</sub> Grade	Contained WO <sub>3</sub> (Mlbs)
0.050	2.1	0.219	10.1
0.075	1.7	0.258	9.5
0.100	1.3	0.300	8.9
0.125	1.1	0.344	8.3
0.150	0.9	0.380	7.8
0.175	0.8	0.414	7.3



Green shading is exoskarn, lavender shading is intrusive.



SRK Job No.: 173203

File Name: Figure 15-1.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

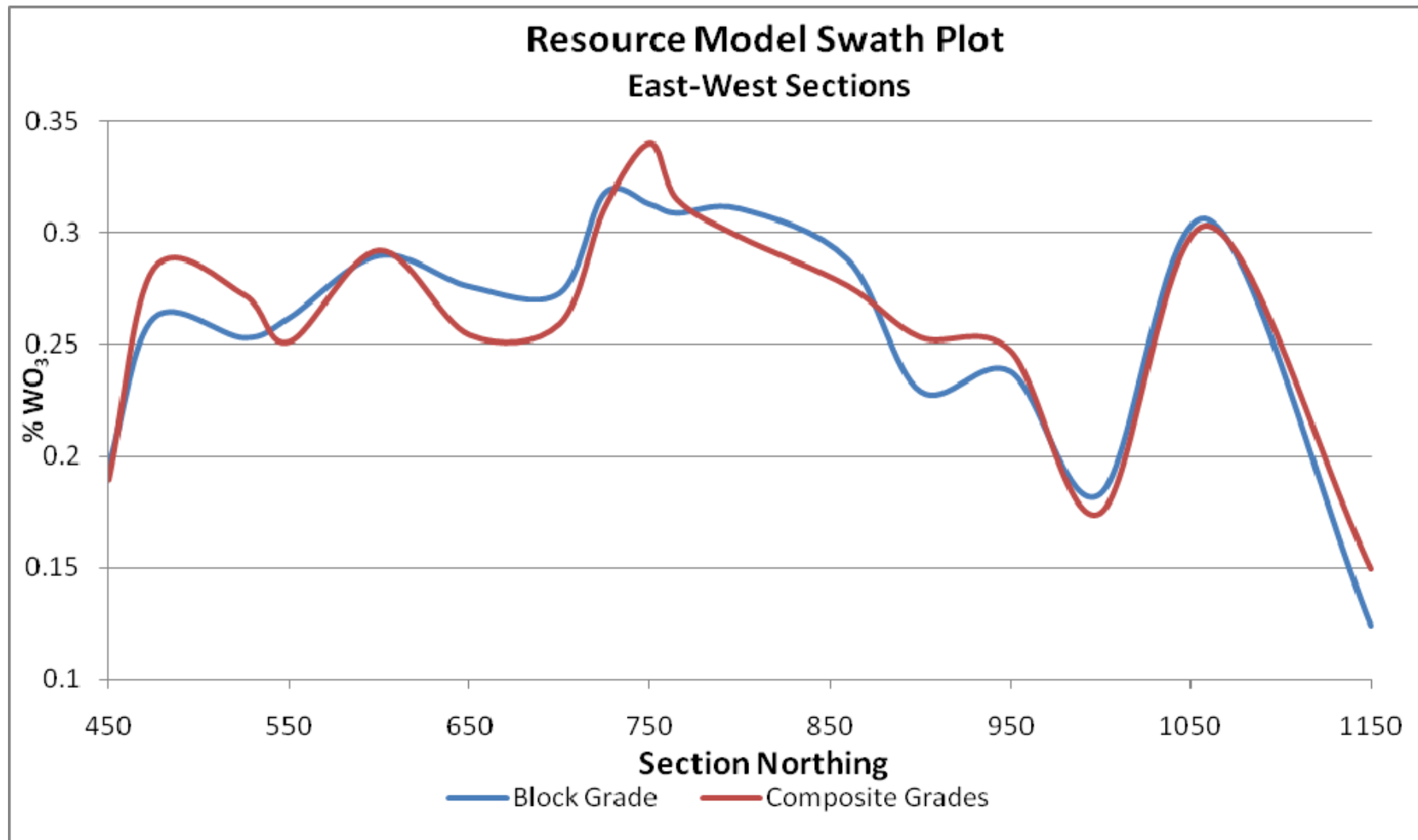
Source: SRK Consulting

Mar-Tungsten Zone Cross-  
Section 7,100,710N Showing  
Interpolated  $WO_3$  Block Grades

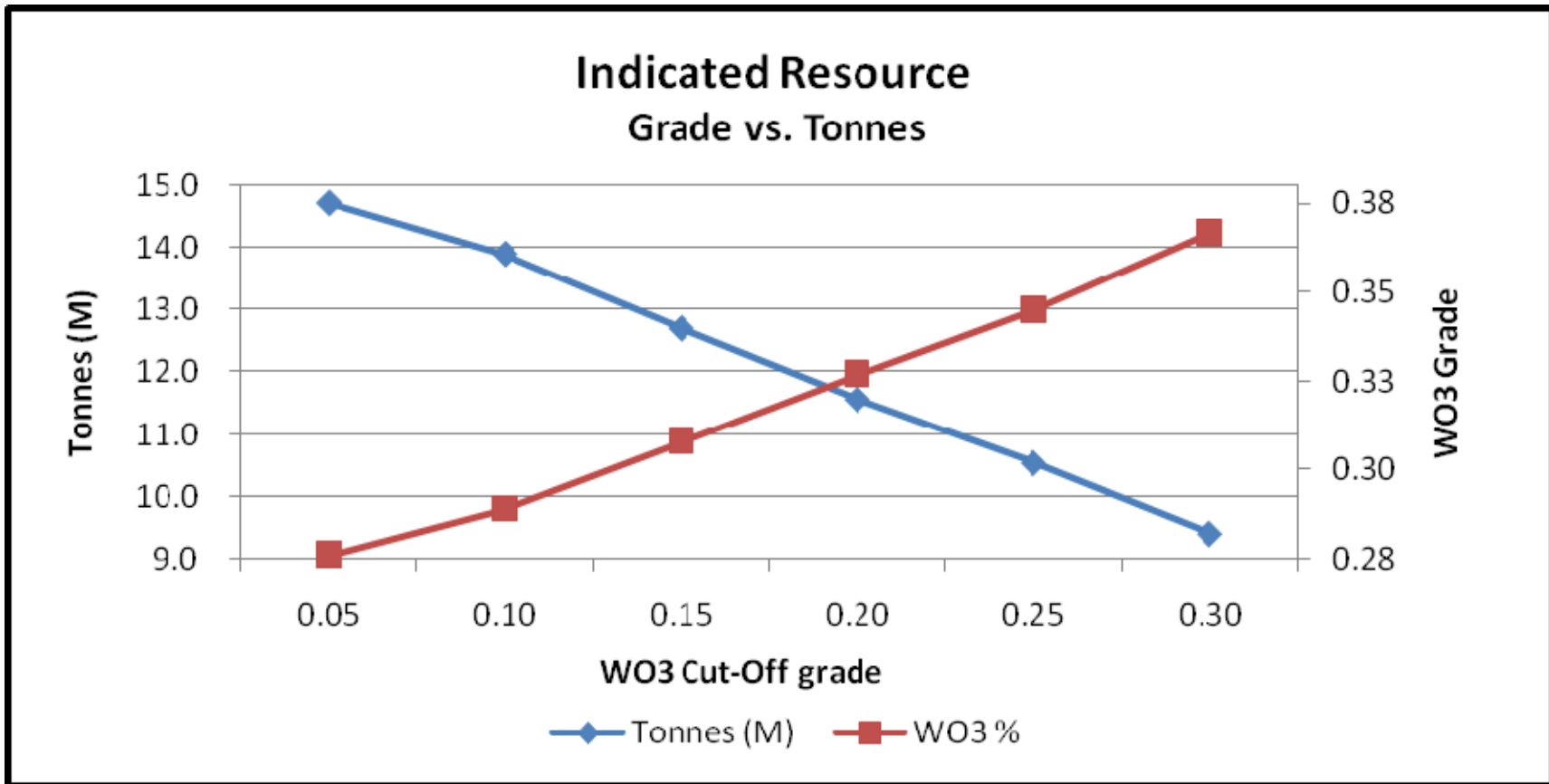
Date: 10/20/08

Approved: BAS

Figure: 15-1



 <b>SRK Consulting</b> <i>Engineers and Scientists</i>	<b>Dublin Gulch Property, Mar-Tungsten Zone, Yukon Territory Canada</b>		<b>Mar-Tungsten Swath Plot of Block Model</b>	
	SRK Job No.: 173203 File Name: Figure 15-2.doc		<b>Source: SRK Consulting</b>	
		Date: 10/20/08	Approved: BAS	Figure: 15-2



SRK Job No.: 173203

File Name: Figure 15-3.doc

Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

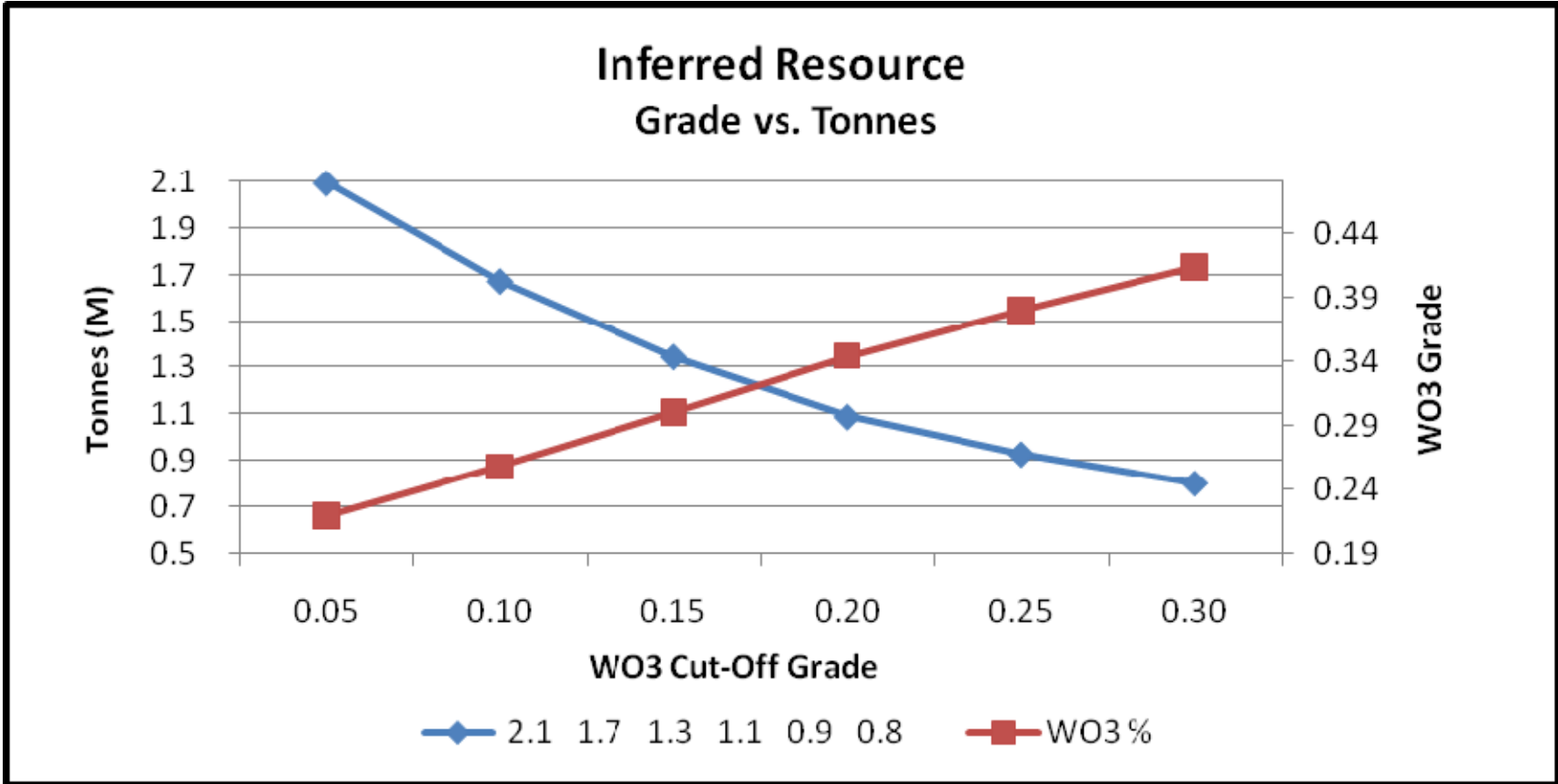
Source: SRK Consulting


Grade Tonnage Relations within  
the Indicated Mineral Resource at  
the Mar-Tungsten Zone

Date: 10/20/08

Approved: BAS

Figure: 15-3




**SRK Consulting**  
*Engineers and Scientists*

SRK Job No.: 173203

File Name: Figure 15-4.doc

**Dublin Gulch Property,  
 Mar-Tungsten Zone,  
 Yukon Territory Canada**

**Source: SRK Consulting**

**Grade Tonnage Relations within  
 the Inferred Mineral Resource at  
 the Mar-Tungsten Zone**

Date: 10/20/08	Approved: BAS	Figure: 15-4
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## **16 Other Relevant Data and Information (Item 20)**

The Mar-Tungsten Zone is a component of the much larger Dublin Gulch hydrothermal system. The Eagle Gold Zone is located 2.5km along strike from the Mar-Tungsten Zone. The continuity from earlier tungsten-bearing calc-silicate skarns to later-formed gold veins within similar structural regimes provides excellent opportunities to explore for extensions of both tungsten and gold mineralization in both the metasediments and within the intrusives. StrataGold currently holds an extensive claim position at its Dublin Gulch Property that incorporates the targets described above.

The nearby Eagle Zone currently contains a NI 43-101 compliant, Indicated gold resource of 1.96Moz contained in material with an average grade of 0.916g/t using a 0.5g/t cut-off (StrataGold Press Release February 27, 2006). StrataGold is currently proposing an aggressive exploration program to expand its gold resource in hopes of moving the property toward eventual production.

# 17 Additional Requirements for Development Properties and Production Properties (Item 25)

## 17.1 Mine Operation

Mining operations at the Mar-Tungsten Zone are characterized by a moderate stripping ratio pit (S.R.=6.7, waste to minable resource) comprised of Skarn hosted Tungsten mineralization located on a plateau in challenging environmental conditions.

The mine plan will be driven by Mill production requirements, and the provision of waste rock for tailings dam construction. Minalable resources will be difficult to liberate given the thin and dipping orientation of the mineralization leading to possible grade control and dilution risk.

The preliminary pit design was determined to be approximately 0.5km diameter, 250m deep with a volume of 27.6Mm<sup>3</sup>. The pit design was broken into three phases for scheduling purposes, with 25m wide ramps at a maximum in pit grade of 10%.

Open pit mining will be by conventional diesel-powered equipment, a combination of blast hole drills, hydraulic excavators, rubber-tired wheel loaders and off-highway 100t trucks. Support equipment such as graders, track dozers, and a water truck will aid in the mining of the Mineral Resource and waste. Truck hours were estimated for preliminary routes to either the tailings dam, or primary crusher and waste dump(s).

Figure 17-1 presents the general arrangement plan of the Mar-Tungsten mine site.

Indicated and Inferred Mineral Resources were used for all mineralization types. There are no Measured Mineral Resources currently defined at Mar-Tungsten. This Preliminary Assessment includes the Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral Resources that are not mineral Reserves do not have demonstrated economic viability.

### 17.1.1 Pit Optimization

Pit optimization was carried out on the Mar-Tungsten Zone using Whittle™ v4.1.3 pit optimization software in conjunction with Maptek's Vulcan 7.5™ general-purpose mine planning package. After analysis of pit optimization results, an optimum pit size using US\$11.5/lb- WO<sub>3</sub> price formed the basis of a conceptual pit design.

Pit optimization is based on preliminary economic estimations of mining, processing and selling related costs. These costs are likely to vary from those reported in the final economic analysis which are based on the final pit design and production schedule.

Dilution and mining recovery were added to the pit optimization which result in conservative pit shell generation given the spotty mineralization and dipping orientation of the host rock.

### 17.1.2 Whittle™ Parameters

Table 17.1.2.1 indicates the parameters used for pit optimization, which are based on the SRK resource block model (Mar\_11.bmf) dated November 18, 2008.

**Table 17.1.2.1: Whittle™ Model and Slope Dimensions**

Whittle™ Parameter	Type	Value
Base Units	WO <sub>3</sub>	%
Block Model Dimensions	Re-Blocked Geological Model	
	X	8m
	Y	8m
	Z	4m
	No. X	119
	No. Y	132
	No. Z	88
Slope	Strike	Slope Angle
	0	50
	90	35
	180	50
	270	50

Slope zones applied to the geologic block model are based on a default of inter ramp angle of 50° with allowance for pit walls orientated parallel to the skarn orientation (Strike = 90) where walls are reduced to 30°.

Table 17.1.2.2 illustrates the economic and operational limits applied to the optimization. Costs are based on current estimates provided by SRK staff. Transportation after beneficiation has been included as a selling cost. Mining rates assume 1,018,350t/y processing rate, which equates to a 3000t/d minable resource mining rate before plant availability of 93%.

For pit optimization, an 8% discount rate and \$79,440,000 initial capital cost was estimated. The capital cost estimate is based on SRK predictions with additional input from StrataGold.

**Table 17.1.2.2: Whittle™ Economic and Operations Parameters**

Whittle™ Parameter	Type	Value
Mining Cost	Reference mining Cost	\$2.64/t
	Mining Recovery Fraction	0.95
	Mining Dilution Factor	1.05
Processing Cost	Process Name	MILL
	Selection Method	Cut-off
	Processing Cost (Plus G&A @ Tailings)	(\$12.68+4.78+1.83)/mill-t
	WO <sub>3</sub> recovery (rck)	0.83
Selling	WO <sub>3</sub> units	lbs
	WO <sub>3</sub> price	\$11.5/lbs
	WO <sub>3</sub> Payfore	\$1.96/lbs
	WO <sub>3</sub> Transportation	\$0.12/lbs
Optimization	Revenue factor range	0.3-2 86 factors
Operational Scenario - Time Costs	Initial Capital Cost	\$79,440,000
	Discount Rate Per period	8%
Operational Scenario - Limits	Processing Method Limits	1,018,000 Mill-t/y

### 17.1.3 Pit Optimization Analysis

From various pit optimizations with multiple processing and mining cost sensitivities, the resultant pit dimension is quite robust as much of the high grade minable resource is deep within the pit.

Figure 17-2 is a representation of how the deposit reacts to different revenue factors or price manipulations from a US\$11.50/lb-WO<sub>3</sub> price for Tungsten. Pit 36 represents a revenue factor of one, which equates to the maximum cash flow possible for the deposit at US\$11.50/lb WO<sub>3</sub>.

The pit optimization algorithm cashflow for the best-case mining scenario (nested pit) shows gradual increase until pit 22 when there is a rapid increase through pit 23. Between pit 23 and pit 28 cash flow increases gradually and then levels to a maximum at pit 36. The area between pit 28 and pit 36 indicates incremental stripping is required to liberate additional material for little additional cash flow. Pit 28 would provide the basis for an optimal pit and reduce mining costs while pit 36 would generate the maximum economic pounds of resource. Pit 28 was used as the basis of pit design.

It should be noted that the increase in cash flow before pit 28, and the leveling affect after, suggest there is an inherent optimal pit where the high grade pods. The decline in available minable resource also suggest the pit is limited by the amount of Tungsten modeled.

Table 17.1.3.1 details the base results for each pit discussed above.

**Table 17.1.3.1: Significant Pit Shell Results**

Pit	WO <sub>3</sub> Grade	WO <sub>3</sub> Mill (kt)	Waste (kt)	S.R	Processing Cost (000's)	Mining Cost (000's)	Selling Cost (000's)	InSitu (klbs)
22	0.34	3,443	15,080	4.38	-66,421	-48,902	-2,579	25,828
23	0.32	7,978	45,703	5.73	-153,886	-141,716	-5,688	56,964
28	0.32	9,812	58,261	5.94	-189,268	-179,713	-6,857	68,670
36	0.32	10,254	61,770	6.02	-197,799	-190,143	-7,120	71,302

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Table 17.1.3.2 illustrates the optimum pit results achieved for pit 28.

**Table 17.1.3.2: Optimum Pit Results**

Variable	Value
Mill Tonnes	9,811,714
Waste Tonnes	58,261,382
Strip Ratio	5.94
WO <sub>3</sub> Cut-Off Grade (%)	0.117
WO <sub>3</sub> Average Grade (%)	0.32
Contained WO <sub>3</sub> lbs	68,669,796

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

### 17.1.4 Pit Design

Pit design slopes were based on a default 45° inter-ramp angle. To reduce any stripping penalty incurred from ramp placement, the ramp was located on the footwall of the mineralization which resulted in an overall slope of 30°. The bench configuration was applied globally and was reduced from 50 to 45° to mediate the inter-ramp slope on the footwall (eastern pit).

3.8m berms were applied every 6m from a reference elevation of RL 1400. This represented the bench height controlling the start and end of ramp placement for a single bench operation

Ramp widths were based on the expected mining trucks to be used at Mar-Tungsten (CAT 777) which have a width of 6.49m. The two-way ramp width was determined using a 3.5 truck width to road width ratio with allowance for a 1.5m drain and 1.5m windrow base. This gave a two-way ramp design width of 25m. One-way traffic haul roads were used at the pit bottom and has a road width of 15m.

**Table 17.1.4.1: Pit Design Results**

Variable	Value
Mill Tonnes	9,868,551
Waste Tonnes	66,071,293
Strip Ratio	6.70
WO <sub>3</sub> Cut-Off Grade (%)	0.117
WO <sub>3</sub> Average Grade (%)	0.33
Contained WO <sub>3</sub> lbs	70,856,775

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The inclusion of haul roads and creation of practical pit design when compared with pit optimization results, indicate a 12.8% increase in stripping ratio and 13.4% increase in waste generation if the quantity of mineralized resource defined in the pit optimization is to be targeted. This variation is attributed to pit optimization results include dilution and mining recovery and the pit design utilized a more conservative slope angle. With further geotechnical evaluation and testing, an optimization of the slope angles may take place.

Table 17.1.4.2 shows the escalated pit size after the inclusion of in-pit ramps and minimum mining widths.

**Table 17.1.4.2: Effect of Mining Width Compared to Optimization Results**

Variable	Variation %
Mill Tonnes	0.6
Waste Tonnes	13.4
Strip Ratio	12.8
WO <sub>3</sub> Grade (%)*	4.1
Contained lbs*	3.2

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Figure 17-3 and 17-4 illustrate an East West and North South section plots respectively and show geology, block model and pit design results.

### 17.1.5 Production Schedule

A simplified phased production schedule was carried out on the pit design. A preliminary pit design and volume triangulation was broken into three phase regions roughly following a design sequence indicated during pit optimization analysis; Figure 17-5 shows a indicative perspective view of phase 1, 2 and 3 with drill hole and topography data.

Each phase triangulation was shelled into a 3-D solid representing a 6m mining bench. Potentially mineable resources were estimated using a 0.117% - WO<sub>3</sub> cut-off for minable resource based on \$11.50/lb- WO<sub>3</sub>. The production schedule included one year of pre-production primarily for the construction of the tailings dam facility followed by 10 years of mill production. This schedule includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Table 17.1.5.1 illustrates the full production schedule with 2011 considered pre-production and mill stockpile.

**Table 17.1.5.1: Production Schedule**

Year	Mill Accumulation (000's)	Waste Mass (000's)	Stripping Ratio	WO <sub>3</sub> Grade (000's)	WO <sub>3</sub> (klbs)
2011	150	2,850	19.00	0.27	894
2012	769	7,041	9.16	0.31	5,284
2013	1,018	8,227	8.08	0.28	6,333
2014	1,018	8,196	8.05	0.32	7,106
2015	1,018	5,520	5.42	0.32	7,288
2016	1,021	6,166	6.04	0.33	7,360
2017	1,018	6,155	6.04	0.27	6,040
2018	1,018	6,345	6.23	0.34	7,719
2019	1,018	7,066	6.94	0.39	8,644
2020	1,021	6,915	6.77	0.34	7,661
2021	797	1,589	1.99	0.37	6,528
<b>Total</b>	<b>9,869</b>	<b>66,071</b>	<b>6.70</b>	<b>0.33</b>	<b>70,857</b>

\*Schedule is based on a 0.117% WO<sub>3</sub> Cut-Off. This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Figure 17-6 graphically illustrates the production schedule.

Waste material will comprise of Till material which is excavated during pre production and phase stripping and bedrock with mineralization below cut-off. Table 17.1.5.2 illustrates annual waste disposal requirements and material breakdown.

**Table 17.1.5.2: Annual Waste Schedule**

<b>Year</b>	<b>Till (kt)</b>	<b>Till BCM (000's)</b>	<b>Bedrock Waste (kt)</b>	<b>Bedrock Waste BCM (000's)</b>	<b>Total Waste (kt)</b>	<b>Total Waste Volume (000's)</b>	<b>Dump Volume Required (000's)</b>
2011	860	430	1,989	716	2,850	1,146	1,490
2012	764	382	6,277	2,259	7,041	2,641	4,923
2013	651	325	7,576	2,724	8,227	3,050	8,888
2014			8,196	2,947	8,196	2,947	12,719
2015			5,520	1,991	5,520	1,991	15,308
2016			6,166	2,225	6,166	2,225	18,200
2017	454	227	5,701	2,046	6,155	2,273	21,155
2018	155	78	6,190	2,223	6,345	2,301	24,145
2019			7,066	2,537	7,066	2,537	27,444
2020			6,915	2,496	6,915	2,496	30,689
2021			1,589	573	1,589	573	31,433
<b>Total</b>	<b>2,885</b>	<b>1,442</b>	<b>63,186</b>	<b>22,737</b>	<b>66,071</b>	<b>24,179</b>	<b>31,433</b>

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

The Mar-Tungsten Zone contains high grade material at the bottom of the pit shell which makes accessing high grade early in the mine life difficult. The phase triangulations used in the production schedule aims to access good grade early in the mine life and blend stripping requirements going forward. Table 17.1.5.3 shows the quantity and grade distribution of minable resources in each phase and when they are mined.

**Table 17.1.5.3: Annual Phase Schedule**

Value	Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Phase 1												
WO <sub>3</sub> Grade (%)	0.34	0.27	0.31	0.28	0.35	0.36	0.48					
Mill Tonnes (000's)	3,867	150	769	958	800	797	393					
Waste Tonnes (000's)	21,330	2,850	7,041	5,434	2,892	2,388	725					
Total Mass (000's)	25,192	2,996	7,809	6,391	3,692	3,185	1,118					
Stripping Ratio	5.52	19.00	9.16	5.67	3.61	3.00	1.84	-	-	-	-	-
Phase 2												
WO <sub>3</sub> Grade (%)	0.32	0.46		0.27	0.20	0.20	0.23	0.27	0.35	0.43	0.75	
Mill Tonnes (000's)	3,956			61	218	221	628	995	890	814	128	
Waste Tonnes (000's)	26,223			2,794	5,305	3,132	5,441	4,657	2,216	2,135	543	
Total Mass (000's)	30,177			2,852	5,523	3,353	6,069	5,653	3,106	2,949	671	
Stripping Ratio	6.63	35.13	-	46.17	24.31	14.14	8.66	4.68	2.49	2.62	4.24	-
Phase 3												
WO <sub>3</sub> Grade (%)	0.31							0.32	0.27	0.20	0.28	0.37
Mill Tonnes (000's)	2,046							23	128	204	893	797
Waste Tonnes (000's)	18,518							1,498	4,128	4,931	6,372	1,589
Total Mass (000's)	20,562							1,519	4,257	5,135	7,265	2,387
Stripping Ratio	9.05	-	-	-	-	-	-	65.11	32.13	24.15	7.13	1.99
<b>Total</b>												
WO <sub>3</sub> Grade (%)	<b>0.33</b>	<b>0.27</b>	<b>0.31</b>	<b>0.28</b>	<b>0.32</b>	<b>0.32</b>	<b>0.33</b>	<b>0.27</b>	<b>0.34</b>	<b>0.39</b>	<b>0.34</b>	<b>0.37</b>
Mill Tonnes (000's)	<b>9,869</b>	<b>150</b>	<b>769</b>	<b>1,018</b>	<b>1,018</b>	<b>1,018</b>	<b>1,021</b>	<b>1,018</b>	<b>1,018</b>	<b>1,018</b>	<b>1,021</b>	<b>797</b>
Waste Tonnes (000's)	<b>66,071</b>	<b>2,850</b>	<b>7,041</b>	<b>8,227</b>	<b>8,196</b>	<b>5,520</b>	<b>6,166</b>	<b>6,155</b>	<b>6,345</b>	<b>7,066</b>	<b>6,915</b>	<b>1,589</b>
Total Mass (000's)	<b>75,931</b>	<b>2,996</b>	<b>7,809</b>	<b>9,243</b>	<b>9,215</b>	<b>6,539</b>	<b>7,187</b>	<b>7,172</b>	<b>7,363</b>	<b>8,084</b>	<b>7,936</b>	<b>2,387</b>
Stripping Ratio (000's)	<b>6.70</b>	<b>19.00</b>	<b>9.16</b>	<b>8.08</b>	<b>8.05</b>	<b>5.42</b>	<b>6.04</b>	<b>6.04</b>	<b>6.23</b>	<b>6.94</b>	<b>6.77</b>	<b>1.99</b>

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

Table 17.1.5.4 details the quantity and grade of Indicated and Inferred minable resource broken down by rock type.

**Table 17.1.5.4: Rock Type Classification of Potentially Minable Resources**

Indicated Material	Value	Inferred Material	Value
Metasediment WO <sub>3</sub> (%)	0.31	Metasediment WO <sub>3</sub> (%)	0.37
Metasediment Tonnes	4,779,622	Metasediment Tonnes	195,733
Skarn WO <sub>3</sub> (%)	0.32	Skarn WO <sub>3</sub> (%)	0.19
Skarn Tonnes	4,389,041	Skarn Tonnes	23,444
Intrusive WO <sub>3</sub> (%)	0.51	Intrusive WO <sub>3</sub> (%)	0.68
Intrusive Tonnes	433,401	Intrusive Tonnes	47,311
<b>WO<sub>3</sub> (%)</b>	<b>0.32</b>	<b>WO<sub>3</sub> (%)</b>	<b>0.41</b>
<b>Mill Tonnes</b>	<b>9,602,064</b>	<b>Mill Tonnes</b>	<b>266,488</b>

\*This Preliminary Assessment includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary assessment will ever be realized. Mineral resources that are not mineral reserves do not have demonstrated economic viability.

## 17.1.6 Mine Equipment

It has been determined that a mining contractor will provide the mine equipment fleet. The major mine equipment fleet requirements are based on the annual mine production schedule, the mine work schedule, and shift production estimates. Table 17.1.6.1 shows an estimate developed by SRK of the contractor's mine equipment fleet requirements by year.

**Table 17.1.6.1: Estimated Contractor’s Mine Equipment Fleet Requirements by Year**

SRK Mine Plan Equipment	Size	Pre-Prod	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Track Drill	65mm	1	1	1	1	1	1	1	1	1	1	1
Blasthole Drill	195mm	1	2	2	2	2	2	2	2	2	2	1
Wheel Loader (Waste Material)	10.0m <sup>3</sup>	1	2	2	2	2	2	2	2	2	2	1
Excavator (Mineralized Material)	390kW	1	1	1	1	1	1	1	1	1	1	1
Haul Truck	100t	3	4	4	4	4	4	4	4	4	4	4
Track Dozer	306kW	2	2	2	2	2	2	2	2	2	2	2
Grader	193kW	1	1	1	1	1	1	1	1	1	1	1
Excavator (Support)	103kW	1	1	1	1	1	1	1	1	1	1	1
Water Truck	22,000L	1	1	1	1	1	1	1	1	1	1	1
Emulsion Truck (Blasting)	20t	1	1	1	1	1	1	1	1	1	1	1
Integrated Tool Handler	93kW	1	1	1	1	1	1	1	1	1	1	1
Fuel/Lube Truck	14,000l	1	1	1	1	1	1	1	1	1	1	1
Mechanics Truck	2t	1	1	1	1	1	1	1	1	1	1	1
Light Plants	8kW	3	4	4	5	5	5	5	5	5	5	5

Table 17.1.6.2 shows the Mar-Tungsten mine support equipment requirements by year. The support equipment will also be required to undertake development of drainage around the mine and maintenance of the tailings dam, which may not be part of the mine contractor’s scope of work. The other support equipment noted in the table will also be used for these needs, and other general site activities.

**Table 17.1.6.2: Mar-Tungsten Mine Support Equipment Requirements by Year**

SRK Mine Plan Equipment	Size	Pre-Prod	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Mine Service Pickups	¾ ton	4	4	4	4	4	4	4	4	4	4	4
Ambulance		1	1	1	1	1	1	1	1	1	1	1
Pumps	250m <sup>3</sup> /hr	3	3	3	4	4	4	4	4	4	4	4

Mar-Tungsten and the mining contractor will agree on a mine operations schedule. This would minimally consist of two 12-hour shifts per day, 7 days per week (365 days per year). The number of scheduled operating days per year would include some allowance for weather delays, which will occur given the cold weather climate that causes severe operating conditions. In the operating costs, an allowance was made for 15% overtime by the Mar-Tungsten mine hourly paid employees. The mining contractor’s equipment fleet requirements included estimation of the productive operating time per 12-hour shift. Non-productive time per shift would include shift change (travel time), equipment inspection, fueling, and lubrication, and operator breaks. It was estimated that the total time per shift for these items to be two hours. (Scheduled production time 10.0 hours per shift.) In addition, an allowance was made for job efficiency including blasting (production delay), equipment moves (production delay while moving to another mining area within the pit), and certain dynamic operational inefficiencies. These items reduced hourly productive time (during the remaining 10.0 shift hours) to an average of so many minutes per operating hour as follows: drills 45 minutes; wheel loader 50 minutes; hydraulic shovel 45 minutes; and trucks 50 minutes. (The utilization factors work out to be: drills 85%; wheel loader 90%; hydraulic shovel 90%; and trucks 90%). Working productivities were estimated for each type of equipment (on an operating hour basis), and allowance was included for a 35% swell factor for handling run-of-mine material.

Mechanical availability of the equipment was generally estimated at 90% for major mine equipment. The use of the scheduled production time factor, utilization factor, equipment

productivity and mechanical availability factor is a standard industry approach to the estimation of overall equipment requirements and fleet productivities.

### **17.1.7 Mine Operations**

Contractor operations are expected to be used at Mar-Tungsten.

#### **Drilling**

The initial drilling equipment fleet would consist of a rotary blast hole drill capable of drilling 195mm blast holes, and a hydraulic track drill capable of pioneering work. Working benches will be 6m in waste and a 3m mining flitch in minable resource. Mining contractor drillers, supervised by Mar-Tungsten engineers and geologists, will take samples of the blast hole cuttings. Grade control will be accomplished by Mar-Tungsten and will include assaying the blast hole samples. Together with blast hole survey data, the results will be plotted on maps, and laid out in the field. Proper grade control by Mar-Tungsten will be important.

#### **Blasting**

Emulsion explosives may predominantly be used to eliminate potential problems of handling wet blast holes differently, which would be required if ANFO prills were used. The anticipated powder factor for main production blasting is 0.29kg/t.

#### **Loading**

The main loading equipment fleet could consist of one, wheel loaders (at least 10m<sup>3</sup> buckets), or a hydraulic excavator (4.4-12M<sup>3</sup>), capable of loading the truck fleet, probably 100t trucks. There should be some allowance for flexibility in the operations. A small hydraulic excavator will be the primary loading unit for the minable resource, which occurs in undulating veins that vary in thickness. Waste stripping will constitute the majority of the material loaded and hauled.

#### **Hauling**

Based on 100t trucks, the initial main hauling equipment fleet would consist of three, diesel mechanical-drive trucks, and additional units would be added over the life of the mine to make up the fleet requirements.

Cycle times based on a Caterpillar 777 equivalent-type truck indicated raw cycle time ranging from 3 minutes to 24 minutes at the end of mine life, combined with one-way distances increasing from 800 to 2,500m, it will be important to account for detailed haul costs in the future. It should be noted that the majority of stripping would require a shorter distance because of the near surface material proximity, and the deeper material will require more mining trucks to achieve the same process plant production.

**Table 17.1.7.1: Indicative Haul Profile Range and Delays**

<b>Cycle and Delay</b>	<b>1-Way Distance (m)</b>
<b>Mill Feed</b>	
Year 1	~800
Pit Bottom	~2,500
<b>Waste</b>	
Year 1	~800
Pit Bottom	~2,500
Total Delays	5.6min
Dump Time	1.0min
Spot Time Dump	0.5 min
Spot Time Stockpile	0.5 min
Loading	4.5 min

### **Mining Support**

The mining contractor's major mining support equipment could consist of two track dozers (306kW), a grader (193kW), a water truck (22,000L) and an excavator (103kW). The track dozers will be required for drill site preparation, road and ramp development, waste dump and stockpile maintenance, and other duties. The mine contractor's grader and water truck will maintain mine roads, ramps and operating surfaces, and the excavator will perform site pit slope stability work, development work including pioneering and road development. The mining contractor will also need to have equipment for pit lighting.

The mining contractor and Mar-Tungsten will be responsible for mine drainage operations. To the extent possible, diversion ditches will be located above the open pit areas to drain water flowing into the pit area and re-direct it into natural drainages. Where this is not possible diversion ditch structures will be developed within the pits to drain into natural drainages. Mine dewatering will also be accomplished using diesel generator powered submersible pumps placed in sumps at pit bottoms. The water will be pumped from the pits and discharged into drainages.

The Mar-Tungsten mine department will have mine surveying equipment, mine engineering and geology office equipment (instruments, computers, software, printers, plotter etc.), and mine communications (radios).

### **17.1.8 Mine Labor**

The Mar-Tungsten mine department will have salaried staff for technical support, and hourly employees for production positions. The Mar-Tungsten mine department staff and hourly employees by are shown in Table 17.1.8.1.

Allowances were included for benefits and vacations in the wages (and 15% overtime for hourly employees).

**Table 17.1.8.1: Mar-Tungsten Mine Department Staff and Employees by Year**

SRK Mine Plan Mine Department Employees	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<b>Mine Technical</b>										
Chief Mine Engineer	1	1	1	1	1	1	1	1	1	1
Geologist	1	1	1	1	1	1	1	1	1	1
Grade Control Geologist	1	1	1	1	1	1	1	1	1	0
Surveyor	1	1	1	1	1	1	1	1	1	1
Surveying/Sampling Technician	2	2	2	2	2	2	2	2	1	0
<b>Mine Technical Total</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>3</b>
<b>Mine Salaried Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>
<b>Mine Hourly Total</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>Mine Department Total</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>5</b>	<b>3</b>

### 17.1.9 Ancillary Mining Operations

In addition to production operations, ancillary work will be carried out by third-party contractors as part of normal operations.

#### Ground Preparation

The mining advance will be preceded by ground preparation, which consists of till clearing followed by cleanup. The till removal, when necessary will be carried out with a Cat D9-type track dozer. Till will be piled alongside the cleared areas and the topsoil, which will also be stockpiled in an appropriate location, will be used later for reclamation purposes.

#### Drainage Preparation

The topographic characteristics of the ground require the construction of a drainage ditch around the pit. All drainage water, either runoff or pumped water, will be held in drainage basins, where suspended solids will be removed by decantation and the water then discharged into the local water courses.

#### Tailings Dam Fill

Some pit waste may be used in the construction of dams for the tailings disposal depending on geotechnical characteristics of the burden. This may reduce the size of the waste dumps and minimize the need to import external fill to the mine site.

#### Pit Dewatering

A drainage system will be installed consisting of submersible pumps with a capacity of 200m<sup>3</sup>/hr. They will pump water from the pit sumps, directly to the drainage ditch (Storm water management) surrounding the entire pit.

### 17.1.10 Waste Dump Design

The waste dump has been placed to preserve current water catchments, avoid possible dry tailings storage location and maximize dumping on relatively flat sections of the Mar-Tungsten plateau. Please refer to Figure 17-1 for proposed dump location.

Waste will be placed as close as possible to the pit exit without influencing the geotechnical stability of the North West pit wall. Currently, a 130m buffer from the dump to the pit wall has been defined but not tested.

If environmentally acceptable, a greater volume of waste may be stored with a lower site footprint if gully's to either side of the current dump can be filled.

The dump has been sized to contain 30 MLCM of waste and was based on a 30% increase of BCM to LCM volume. The dump volume will be subject to the definition of waste at the time of mining and may vary over the mine's life.

The dump has been designed using a 10m lift height, 37° angle of repose and 14m berm width. By placing waste in this manner, a final slope of 20° can be achieved during operations with ability for progressive rehabilitation. If the final benches are required to be contoured and reshaped into smooth slopes, this dump method also minimizes bulldozer requirements at mine closure.

## 17.2 Geotechnical

### 17.2.1 Tailings

The conceptual locations of the proposed Mine, Process Plant Area and Waste Dump for the Mar-Tungsten Zone are shown in Figure 17-7. Conceptual Tailings Storage Facility (TSF) layouts were also developed by SRK for both a 10Mt slurried and dry stack TSF and are shown in Figures 17-8 and 17-9, respectively.

TSF layouts were developed using the following assumptions:

- Conventional slurry tailings storage, assuming an average dry density of 1,200g/m<sup>3</sup> and flat (0%) tailings surface slope;
- Dry stack tailings assuming an average dry density of 1,600kg/m<sup>3</sup>, 5 horizontal to 1 vertical (5H:1V) tailings sideslope and a tailings surface slope that parallels the native ground surface; and
- The TSF Impoundment would not be constructed with a barrier system to inhibit seepage losses to the environment;

A conceptual level cost estimate (defined as +/- 40% level of costing accuracy) was developed for the Mar-Tungsten slurried TSF option. Costing assumptions included the following:

- SRK developed a stage capacity curve for the conceptual slurried TSF layout, and estimated that the TSF would be constructed in three phases;
  - The first phase will consist of a starter embankment constructed in year 0, sized to contain approximately two (2) years of tailings material (Crest el. 1100). The Starter Embankment will be constructed of compacted Structural Fill, and
  - Subsequent raises at years two (2) and five (5), corresponding to Crest El. 1115m and 1130, will be constructed from compacted Structural Fill.
- Engineering was estimated to be 1% of the total construction costs;
- EPCM costs were estimated to be 5% of the total construction costs;
- Owner costs were estimated to be 5% of the total construction costs;
- No closure costs were allowed for;

- Contingency was estimated to be 40% of the total construction costs and was provided to reflect uncertainties associated with;
  - Level of design and assumptions,
  - Inclusion of only high level costing items,
  - Topography and topographic accuracy,
  - Additional embankment height required to account for tailings slope and freeboard,
  - Seepage recovery within the Embankment, including solution management, in addition to seepage monitoring wells,
  - Solution recovery (barges, pumps, etc) within the impoundment, and
  - Escalation in contractor unit prices from such items as crude oil prices.

The cost estimate is summarized in Table 17.2.1.1, with cost spreadsheets presented in Appendix C. Assuming that the Phase 1 Capital costs would be considered Capex and any subsequent capital costs would be considered Opex, SRK has estimated that the Capex would be about \$6.2million, and total subsequent Opex costs would be \$16.1million.

**Table 17.2.1.1: Tailings Cost Estimate Summary**

<b>Design Life</b>	<b>Units</b>	<b>Cost</b>
Maximum TSF Volume	t	10,000,000
Tailings Production Rate	t/d	2,500
Surface Storage Percentage		100%
Contingency		0%
Operational Days per Year		360
Daily Tailings Production with Contingency		2500
<b>Design Life</b>	<b>Years</b>	<b>11.1</b>
<b>Conceptual Level Capital Cost Estimate</b>		
Starter Embankment volume	yd <sup>3</sup>	1,350,000
Starter TSF Volume	Mt	1.8
Site Preparation		\$266,140
Earthworks		\$3,695,000
Geosynthetics		\$-
Overliner		\$-
Piping		\$-
Facilities		\$-
Construction and Engineering		\$435,725
Contingency		\$1,758,746
<i>Subtotal</i>		<i>\$6,155,612</i>
<b>Conceptual Level Operating Cost Estimate</b>		
TSF Phased Embankment Construction		
Expansion Embankment Volume	yd <sup>3</sup>	3,830,000
Expansion TSF Volume	Mt	7.20
Site Preparation		\$687,705
Earthworks		\$9,671,500
Geosynthetics		\$-
Overliner		\$-
Piping		\$-
Facilities		\$-
Construction and Engineering		\$1,139,513
Contingency		\$4,599,487
<i>Subtotal</i>		<i>\$16,098,205</i>
Total Embankment Volume	yd <sup>3</sup>	5,180,000
Total TSF Volume	Mt	9.0
Total Cost per tonne		\$2.47
<b>Total</b>		<b>\$22,253,816</b>

SRK recommends that the following work be performed as part of the pre-feasibility level TSF design:

- Trade off Studies. A possible area for a dry stack TSF has been identified, and a tradeoff study should be considered as part of the next level of evaluation;
- Containment requirements. The current design has assumed no seepage barriers will be required and this should be confirmed from an permitting and environmental risk perspective;
- Detailed Topographic Survey. A topographic survey of the area should be performed to an accuracy level of +/- 2m. The area should be sufficiently large to account for the diversion channels and any borrow areas;

- Field investigation. Field investigations should be performed for the tailings impoundment area, including the characterizing of the embankment foundation conditions and potential borrow areas. These investigations would include a field reconnaissance to confirm the geology and any geologic hazards within and adjacent to the impoundment area; a geotechnical program including boreholes along the embankment centerline, and test pits within the impoundment area; and the hydrogeology of the impoundment area;
- Tailings characterization. Laboratory test work should be done to confirm tailings design assumptions, such as the densities and water contents;
- Sideslope configuration. As part of the conceptual study, sideslope configurations were assumed. Site specific peak ground accelerations should be established for the site, so that a pseudo-static stability analysis could be done to confirm the sideslopes required from a stability perspective;
- Pre-feasibility level engineering. Perform additional analyses to support a pre-feasibility level study for the water balance, slope stability, etc. As the water balance, and process water available for makeup water, is sensitive to the assumptions regarding snowfall and snowmelt, this should be evaluated in more detail; and

The freeboard assumptions should be confirmed.

### **17.2.2 Pit Slopes**

SRK was provided with available geotechnical data related to pit slopes at the Mar-Tungsten Zone. The available data reviewed by SRK included:

- Geotechnical core parameters collected by StrataGold personnel on 32 holes (MT08-003C through MT08-034C) drilled during the recent resource program. (In Excel format, dated September 25, 2008); and
- StrataGold geotechnical logging manual titled *Geotechnical Data Collection for Use at StrataGold Corporation's Dublin Gulch Project*, by Colby J. McConnell T.T.

In addition, geotechnical observations were noted during the July 16, 2008 site visit for select portions of core drilled during the recent resource program. Portions of three coreholes (MT08-011C, MT08-022C and MT08-024C) were selected by StrataGold to represent typical rock mass conditions expected in the deposit.

### **Preliminary Pit Slope Assessment**

No previous geotechnical pit slope programs have been carried out at the deposit. Consequentially, SRK's preliminary estimates of pit slope angles are based on a first principals approach using the above referenced geotechnical data collected by StrataGold during the recent resource drilling program. The existing geotechnical data are based on field estimates of rock properties, no laboratory testing or discontinuity orientation has been performed. Additional geotechnical data collection and analysis will be necessary for further mine planning.

The mineralization is generally hosted within a large metasediment roof pendant contained within a large intrusive body. There are three basic rock types that are anticipated to comprise pit slopes for the Mar deposit; Metasediments, Skarns and Intrusives. Overall, the metasediment package dips nearly due west at about 30°, although local variations are known to exist. The

existing data indicate very similar geotechnical properties between the three rock types. The mean values for some of the geotechnical parameters collected are summarized in Table 17.2.2.1.

**Table 17.2.2.1: Summary of Geotechnical Data Averaged per Rock Unit**

Geologic Unit	Fracture Frequency/m	RQD (%)	Hardness (ISRM 1978)	Weathering (ISRM 1978)	Estimated RMR (1989)
Metasediments	5.4	46	R3.6	W2.1	60
Skarns	4.8	52	R3.5	W2.0	63
Intrusives	3.5	58	R3.9	W2.0	64

The current ultimate pit is planned to have slopes ranging from 200 to 250m in height. SRK carried out preliminary slope stability analyses using limit equilibrium methods and the Generalized Hoek-Brown (2002) criterion to estimate rock mass shear strengths.

For the analyses, a generalized 250m high slope profile was analyzed using the commercially available software package, Slide developed by Rocscience, Inc. Input parameters to the Hoek-Brown criterion were estimated based on the geotechnical data previously discussed and are summarized in Table 17.2.2.2.

**Table 17.2.2.2: Summary of Hoek-Brown Criterion (2002) Input Parameters**

Geologic Unit	GSI (RMR 89')	$m_i$	D	UCS (MPa)	Unit Weight (kN/m <sup>3</sup> )
All 3 Combined	60	9.0	1.0	45	26

SRK conducted analyses both with and without pseudostatic loading to examine not only static slope conditions but also slope response to earthquake-induced seismic loading. Dynamic loading from earthquake ground accelerations was simulated using the pseudostatic analysis and a horizontal Peak Ground Acceleration (PGA) expressed as a coefficient (or percent) of gravity. According to the 2005 National Building Code of Canada, the coefficient of peak horizontal acceleration that corresponds to a 10% probability of exceedance in 50 years is 0.139g for the Dublin Gulch site. When incorporating a PGA value as input to a slope stability model, it is common practice to reduce the PGA by a factor of 0.5 according to research conducted by the U.S. Army Corp of Engineers (Hynes-Griffen and Franklin, 1984). In summary, this reduction in horizontal acceleration is justified for earth and rock structures as damage to these types of structures results from sustained ground acceleration, which is typically less than half the PGA, an instantaneous acceleration. The work by Hynes-Griffen and Franklin also considered the attenuation afforded by earth and rock structures.

Results of the preliminary analyses indicate that an interramp slope angle of 50° yields an acceptable safety factor (1.3 static and 1.1 pseudostatic) for global stability using a conservatively high groundwater level and a pseudostatic seismic coefficient of 0.0695g. However, the footwall (east) side of the pit may require more conservative pit slope angles due to potential relatively continuous, inward dipping discontinuities resulting from relict metasediment bedding planes as well as intrusive contacts.

For preliminary planning, a maximum 50° interramp slope angle is recommended for the west (hanging wall) side of the pit and a 35° overall slope angle for the east (footwall) side. The

portion of the pit recommended for a maximum 35° overall slope is defined as any slope with a dip direction between 255 to 285° azimuth (strike between 345 to 015°). Areas outside this area are recommended to be planned with a maximum 50° interramp slope angle.

### 17.3 Processing

The proposed concentrator for this study is based on an annual mill throughput rate of 1.02Mt, or 3,000t/d at a 93% plant availability, for the production of a WO<sub>3</sub> concentrate. The processing plant will operate 24 hours/day, 365 days/year. Over the LoM, the processing plant will produce an estimated 45,725t of WO<sub>3</sub> concentrate grading 58%WO<sub>3</sub>. The average LoM WO<sub>3</sub> recovery is estimated at 82.5% (note: SRK has decreased the indicated WO<sub>3</sub> recovery obtained in the SGS metallurgical laboratory work of about 85% to account for losses in the cleaner flotation tailing that is returned back to the head of the flotation circuit.).

The proposed process flowsheet is based on the SGS metallurgical test program using a primary crusher-SAG-ball mill-gravity concentration-flotation configuration comprised of the following circuits:

- Primary crushing using a jaw crusher;
- Grinding using a SAG–ball mill-pebble crusher configuration with vibrating screens and hydrocyclones for size classification;
- Gravity concentration using tables and mineral separators;
- Non-sulfide and sulfide flotation with regrind mill;
- Cleaner flotation (3 stages) with regrind mill;
- Final WO<sub>3</sub> concentrate thickening, filtering and packaging; and
- Tailings thickening and disposal.

Figure 17-10 shows a simplified flowsheet for the processing plant. Table 17.3.1 contains a major equipment list.

**Table 17.3.1: Major Equipment List for the Mar-Tungsten Process Plant**

Equipment	Number	Description
Vibrating Grizzly Feeder	1	1m wide x 5m long; 25hp
Primary Crusher	1	Jaw: 74cm x 121cm opening; 150hp
Primary Crusher Conveyor	1	71cm wide x 15m long; 35hp
Coarse Mill Stockpile Conveyor	1	71cm wide x 75 m long; 250hp
Scale	1	2hp
Pan Feeders	2	71cm wide x 3m long; 10hp
SAG Mill Feed Conveyor	1	71 m wide x 60m long; 200hp
SAG Mill	1	6.7m dia x 2.1m EGL; 1,750hp; synchronous motor
Vibrating Screen	1	1.8m wide x 4.9m long; double-deck; 15hp
Pebble Crusher	1	0.5m dia; 100hp
Ball Mill	1	5m dia x 6m long; 2,750hp
Hydrocyclones - Ball Mill	3	28in dia (2 operating; 1 standby)
Mozley Diagonal Deck Gravity Table	1	7.5hp
Mozley V-Deck Mineral Separator	1	3m <sup>2</sup> area; single deck; 3hp
Conditioner Sulfide Flotation	1	5m <sup>3</sup> ; 15hp
Sulfide Flotation Cells	6	8.5m <sup>3</sup> ; 30hp each
Non-Sulfide Flotation Conditioner	1	5m <sup>3</sup> ; 15hp
Non-Sulfide Flotation Cells	4	8.5m <sup>3</sup> ; 30hp each
Tailings Thickener	1	10m dia; 5hp
Hydrocyclones - Regrind Mill	2	30cm dia
Regrind Mill	1	3m dia x 4m long; 600hp
1st Flotation Cleaners	3	1.8m <sup>3</sup> ; 10hp each
Hydrocyclones - Regrind Mill	2	20m dia
Regrind Mill	1	2m dia x 2m long; 40hp
Cleaner Flotation Conditioner	1	0.1m <sup>3</sup> ; 1hp
2nd Flotation Cleaners	2	0.6m <sup>3</sup> ; 2.5hp each
3rd Flotation Cleaners	2	0.6m <sup>3</sup> ; 2.5hp each
WO <sub>3</sub> Thickener	1	3m dia; 2.5hp
WO <sub>3</sub> Filter	1	Drum filter; 2.4m dia x 2.4m long; 10hp

### 17.3.1 Primary Crusher

The RoM minable resource will be placed in stockpiles adjacent to the primary crusher from which it will be fed to a primary jaw crusher (74cm x 121cm: 150hp) by a front end-loader for blending purposes to the process plant. The primary crushed minable resource will be conveyed to a coarse minable resource stockpile located near the concentrator. The coarse minable resource will be reclaimed from beneath the coarse minable resource stockpile by pan feeders and conveyed to the SAG grinding mill.

### 17.3.2 Grinding/Gravity

The primary crushed minable resource will be ground in a SAG-ball mill grinding circuit configuration being comprised of a SAG mill, ball mill, pebble crusher, vibrating screen, and hydrocyclones. The primary crushed minable resource will be reclaimed from the coarse minable resource stockpile and conveyed to the SAG mill (6.7m dia. x 2.1m EGL; 1,750hp). The discharge from the SAG mill is discharged onto double-deck vibrating screen for sizing. The top screen oversize of +3.5cm will be crushed in a pebble crusher and returned to the SAG mill. The vibrating screen undersize will be discharged to the gravity circuit comprised of Mozley Diagonal deck gravity table and a Mozley V-Deck mineral separator for producing a WO<sub>3</sub> gravity concentrate. The gravity concentrate will be dewatered, combined and packaged

with the flotation concentrate for shipment. A ball mill will operate in closed-circuit with hydrocyclones to produce a  $K_{80}$  77 $\mu$ m for flotation. The cyclone underflow will be fed to the ball mill and the cyclone overflow is sent to flotation at about 33-35% solids. Collectors and frothers will be added in the grinding circuit.

### 17.3.3 Flotation

The rougher sulfide flotation feed will be conditioned for about 1 minute prior to non-sulfide flotation. Sulfide flotation will be done in 4-8.5m<sup>3</sup> cells. The tailings from the non-sulfide flotation will be forwarded to the sulfide flotation using 6-8.5m<sup>3</sup> cells. The flotation concentrates will be sent to the regrind circuit comprised of a 3m dia. x 4m long regrind ball mill operating in closed circuit with 30cm dia. hydrocyclones. The hydrocyclone overflow will report to the flotation cleaner circuit and underflow will be recycled to the regrind mill. The tailings from the flotation will represent the final mill tailings and will be thickened in a 10m dia. thickener and pumped to the TMF.

The cleaner circuit is comprised of three cleaning stages using 1.8 and 0.6m<sup>3</sup> cells in a 3-2-2 arrangement. The concentrate from the 1<sup>st</sup> cleaner stage will be reground in a 2m dia. x 2m long regrind mill operating in closed-circuit with 20cm hydrocyclones with the overflow to the 2<sup>nd</sup> cleaner stage. The tailings from all cleaner stages will be returned to the conditioner prior to flotation. The final WO<sub>3</sub> concentrate from the third cleaner stage will be pumped to the concentrate thickener.

### 17.3.4 WO<sub>3</sub> Concentrate Thickening-Filtration

The WO<sub>3</sub> concentrate from the third cleaner stage will be thickened in 3m diameter thickener with the thickener underflow pumped to drum filter. The thickener overflow will be pumped to the mill water tank. The concentrate slurry will be dewatered by a drum filter (2.4m dia x 2.4m long). The filtrate will be returned to the concentrate thickener. The filtered concentrate will be combined with the gravity concentrate and packaged into 2-t tote bags for shipment.

### 17.3.5 Recoverability

The LoM WO<sub>3</sub> production is estimated at 58.467Mlbs of WO<sub>3</sub> contained in 45,725t of WO<sub>3</sub> concentrate produced from the processing of 9.868Mt of mineable resource grading 0.30% WO<sub>3</sub> at a recovery of 82.5% as summarized in Table 17.3.5.1.

As noted earlier, SRK has decreased the indicated WO<sub>3</sub> recovery obtained in the SGS metallurgical laboratory work of about 85% to account for losses in the cleaner flotation tailing that is returned back to the head of the flotation circuit.

**Table 17.3.5.1: Estimated LoM Production from the Mar-Tungsten Process Plant**

Description	Units	Totals/Ave.	Production Year									
			2012	2013	2014	2015	2016	2017	2018	2019		
Minable resource Processed	4. t	5. 9,868,551	6. 919,026	7. 1,018,350	8. 1,018,350	9. 1,018,350	10. 1,021,140	11. 1,018,350	12. 1,018,350	13. 1,018,350	14.	
WO <sub>3</sub> Ore Grade Processed	% WO <sub>3</sub>	0.30	0.31	0.28	0.32	0.32	0.33	0.27	0.34	0.39		
Contained WO <sub>3</sub> in Mineable Resource	t	32,149.2	2,803.4	2,873.4	3,224.1	3,306.5	3,339.2	2,740.5	3,502.3	3,922.1		
WO <sub>3</sub> Recovery	%	82.5	82.0	81.5	82.5	82.5	82.5	82.0	82.5	83.5		
WO <sub>3</sub> Conc Grade	% WO <sub>3</sub>	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0		
WO <sub>3</sub> Conc Production	t	45,725	3,963	4,038	4,586	4,703	4,750	3,874	4,982	5,646		
WO <sub>3</sub> Production in Conc.	lbs WO <sub>3</sub>	58,467,411	5,067,833	5,162,853	5,864,032	6,013,858	6,073,320	4,954,145	6,369,973	7,219,986		

## 17.4 Markets

### 17.4.1 Production and Demand

*The following is excerpted from Goodall Business and Resource Management Pty Ltd, A Preliminary Market Review of Tungsten, 2008.*

*“The global market for tungsten is forecast to maintain strong growth over the next five years. Whilst China continues to dominate world mining and primary processing, the availability of tungsten units to non Chinese markets will continue to decline. Equally important, China is now becoming a major importer of tungsten concentrates and scrap materials. Ongoing rapid growth in demand by China will ensure that competition for raw materials between Chinese and non Chinese processors will continue to intensify with the result that there is now an urgent need for increased mining programs outside China.*

*A strong escalation in prices has already occurred over the past three years. However with producers struggling to meet demand, global mining costs continuing to increase, and the Chinese Government likely to impose tighter production quotas and higher export tariffs to maintain reserves, further global price escalation appears certain. Barriers of entry for new producers is relatively low apart from actual development costs, and new mine projects will continue to receive strong encouragement from processors both in and outside China.”*

### 17.4.2 Price Forecast

For Q3 2008 the average APT price increased to US\$253.02/mtu from the Q3 2007 value of US\$252.76/mtu. The average concentrate sale price for Q3 2008 was 85% of the average APT price, or US\$209.79/mtu as compared to 77% or US\$195.12/mtu for Q3 2007. As of June 30, 2008 the average free market quotation for APT was US\$252/mtu. Table 17.4.2.1 shows the average APT free market price for 2004 through June 2008.

**Table 17.4.2.1: APT Free Market Average Prices**

	Units	Dec '04	Dec '05	Dec '06	Dec '07	June '08
APT Free Market Average	US\$/mtu	94	263	252	241	253

## 17.5 Contracts

Operating and mining costs are base on similar operations in Northwest Canada; however StrataGold has not initiated any contract negotiations with potential miners. Contracts for treatment and payfor are base on recent industry transaction, however StrataGold has not initiated any actual contracts.

## 17.6 Environmental Considerations and Permitting

### 17.6.1 Bond Posting

Rehabilitation, closure and post closure monitoring costs was estimated to be \$9.8million (this excludes engineering and contingency costs). The closure costs assumes zero salvage value for equipment and materials. This a conservative approach as asset disposal is a function of the market.

## 17.6.2 Reclamation

Reclamation involves the capping of the tailings to allow for long term drainage, demolition of the plantsite, grading of the waste rock dumps and revegetation of the site with native species.

## 17.7 Operating Costs

### 17.7.1 Mining

Mining costs for the Mar-Tungsten Zone were based on similar-sized projects that are located in similar geographical locations. Adjustments were made for the current diesel price of US\$0.90/L.

The operating costs for contract mining operations and Mar-Tungsten administration are estimated at \$20.65/t mineable resource processed as summarized in Table 17.7.1.1. The LoM cost per total tonne for mining operations is US\$2.62/t of all tonnes mined. The Project's strip ratio is approximately 6.7 to 1 (waste to mineable resource tonnes)

**Table 17.7.1.1: Operating Cost Estimate for the Contract Mining and Mar-Tungsten Administration**

<b>Contract Mine Operating Cost</b>	<b>LoM Costs US\$000s</b>	<b>Cost/t Mill US\$/t</b>	<b>% of Total</b>
Drilling and Blasting	\$56,301	\$5.86	28.4%
Excavate, Load, Haul and Dump	\$101,027	\$10.52	50.9%
Diesel Consumption	\$21,216	\$2.21	10.7%
Ripping and Pushing	\$3,267	\$0.34	1.6%
Crusher Support	\$3,303	\$0.34	1.7%
Pit Stability	\$702	\$0.07	0.4%
Dewatering	\$605	\$0.06	0.3%
Mar-Tungsten Administration	\$11,874	\$1.24	6.0%
<b>Totals</b>	<b>\$198,295</b>	<b>\$20.65</b>	<b>100.0%</b>

### 17.7.2 Processing

The operating costs for processing plant are estimated at \$12.11/t mineable resource processed as summarized in Table 17.7.2.1.

**Table 17.7.2.1: Operating Cost Estimate for the Mar-Tungsten Process Plant**

<b>Process Operating Cost</b>	<b>LoM Costs</b>	<b>Cost/t Mill</b>	<b>% of Total</b>
Labor - Operations	27,374,842	2.77	22.9
Labor - Laboratories	4,871,590	0.49	4.1
Labor - Maintenance	14,680,540	1.49	12.3
Crushing/Grinding Liners/Media	15,253,820	1.55	12.8
Reagents/Chemicals	21,203,211	2.15	17.7
Power/Fuels	19,562,430	1.98	16.4
Maintenance Repair Parts/Supplies	9,882,247	1.00	8.3
Mobile Equipment	6,667,449	0.68	5.6
<b>Totals</b>	<b>\$119,496,129</b>	<b>\$12.11</b>	<b>100.0</b>

Labor and reagents/chemicals comprise the largest costs of the total processing plant operating cost with each at about 39%.

The total labor staffing for the processing plant is estimated at 74, being comprised of 43 in operations for management, supervision, and plant workers, 8 in the metallurgy and chemical laboratories, and 23 in plant maintenance. The wage rates are based on annual rates for salaried personnel, and an hourly rate for hourly personnel plus an 8% allowance for hourly overtime. Both labor costs include a 35% burden rate. The concentrator will operate using a four rotational crew basis on 12-hour shifts. The work schedules are based on three on-one week off schedule for non-rotational salaried and hourly personnel, and a 2 week on 2 week off schedule for salaried and hourly personnel for the four rotating crews.

The unit costs were based on recent budgetary quotes or from SRK’s database. The unit consumption rates were based on SGS metallurgical test work. Power and fuel cost of \$0.086/kWhr and \$0.90/L were used as unit costs, respectively.

### 17.7.3 G&A Operating Costs

The G&A operating costs average \$3.73/t mineable resource processed. The costs are summarized in Table 17.7.3.1 with a LoM G&A cost of \$36,806,565.

**Table 17.7.3.1: G&A Operating Costs**

Category	LoM Cost	Ave LoM Cost/t-Mill
G&A Labor	12,125,709	1.22
G&A Expenses	24,680,857	2.48
<b>Totals</b>	<b>36,806,565</b>	<b>3.73</b>

The total G&A staff is estimated at 20 people. The wage rates are based on annual rates for salaried personnel, and an hourly rate for hourly personnel plus an 8% allowance for hourly overtime. Both labor costs include a 35% burden rate. The work schedule is based on three on-one week off schedule for both salaried and hourly personnel,

The major cost component for the G&A expenses is for the camp operation which is estimated at \$1.99million per year, or \$1.96/t mineable resource processed. Other major G&A expenses include insurance, employee transportation and small vehicle operation.

## 17.8 Capital Costs

### 17.8.1 Mining

Capital costs associated with mining were not estimated because the option of using a mining contractor was selected. The mining contractor will be responsible for the mining and maintaining of the Project’s earthwork projects. Tasks like road maintenance, snow removal and waste dump work would be the responsibility of the mining contractor. Capital costs such as light vehicles and surveying equipment for Mar-Tungsten employees were estimated in the mine operating costs. If owner operator equipment is too be used that are outside of the contractors scope of work, additional mining capital may be added during pre-feasibility studies.

### 17.8.2 Processing

The total capital cost for the processing plant is estimated at \$41.8million including transportation, owner’s directs and indirects, vendor commissioning/startup, spares, first fills, and plant mobile equipment. The direct construction capital cost is estimated at \$21.9million based on the plant equipment list and other direct construction costs for construction labor,

civil/earthworks, concrete, steel, building, electrical, instrumentation, piping, plant auxiliaries, and paints/sealants/insulation as summarized in Table 17.8.2.1. A 12% transportation cost has been added to the direct construction cost.

Mobile equipment for the processing plant includes the front-end loader for feeding the primary crusher and small vehicles such as pickup trucks, skid-steer loaders, maintenance trucks and forklifts. The capital cost for mobile equipment is estimated at \$1,455,000.

EPCM has been estimated at 15% of the direct construction costs, or \$3.3million.

Table 17.8.2.1 contains the capital costs for vendor commissioning/startup, spare parts and first fills. The vendor commissioning cost is estimated at \$150,000. The capital cost for spare parts is estimated at \$0.5million. First fills for the processing plant are estimated at \$0.5million for liners/grinding media, chemicals/reagents and diesel fuel. The estimation is based on a number of days of inventory for each first fill item as follows: 20 to 30 days for grinding media, 30 to 60 days for reagents-chemicals, and 15 days for diesel fuel.

**Table 17.8.2.1: Capital Cost Estimate for the Mar-Tungsten Process Plant**

Capital Cost Area	Capital Cost, US\$
Major Equipment Mechanical Items	10,200,000
Construction Labor	3,264,000
Civil/Earthwork	765,000
Concrete	714,000
Buildings/Plant Auxiliaries	1,530,000
Structural Steel	1,020,000
Piping	2,040,000
Electrical/Instrumentation	1,836,000
Painting/Insulation/Sealants	510,000
<hr/>	
<i>Subtotal Direct Construction Costs</i>	<i>\$21,879,000</i>
EPCM @ 15%	3,281,850
Freight @ 12%	2,625,480
Initial Spares	510,000
First Fills	503,192
Owner's Direct Costs	1,969,110
Owner's Indirect Costs	1,750,320
Vendor Commissioning/Startup	150,000
Mobile Equipment	1,455,000
<hr/>	
<i>Subtotal Indirects</i>	<i>\$12,244,952</i>
<hr/>	
Contingency @ 35% of Direct	\$7,657,650
<hr/>	
<b>Total Capital Cost</b>	<b>\$41,781,602</b>

### 17.8.3 Infrastructure & Support Facilities

The capital costs for infrastructure and support facilities are estimated at \$13.1million as summarized in Table 17.8.3.1. Site access capital includes upgrading existing access road and roads between the mine pit and mill, mine pit and tailings dam. Building capital includes the man camp, change house, maintenance shop, offices, training facilities, laboratory, and warehouse. Power supply capital includes the construction of a new 20km long, 138kV power line connecting to the existing power grid. Water supply capital includes a new fresh water line to the man camp and process plant, water storage, treatment water treatment system, and sewage treatment plant.

A satellite communications system will be constructed near the administration office and will employ a satellite telephone/data system linking the mine-process plant site to the administration building and corporate office. Site radio communications will be by both stationary and mobile radios.

A 30% contingency has been added to the infrastructure capital cost. Further analysis of the G&A infrastructure capital costs will be required to optimize the required facilities and equipment. SRK's opinion is that the costs shown in Table 17.8.3.1 are realistic, but conservative.

**Table 17.8.3.1: Capital Cost for Infrastructure and Support Facilities at Mar-Tungsten**

Infrastructure Description	US\$
Power Line	6,880,000
Access Road Improvements/Site Roads	172,000
Water Supply/Treatment System/Sewage System	301,000
Communications System	172,000
Laboratory - Equipped and Furnished	344,000
Building - Administration/Training/Safety Offices	172,000
Building - Warehouse/Maintenance Shop	167,700
Building - Changehouse	120,400
Security - Cameras, Guard House, Gates, and Fencing	43,000
Small Vehicles	77,400
Campsite	1,596,504
<b>Total Infrastructure Capital Costs before Contingency</b>	<b>10,046,004</b>
Contingency @ 30%	3,013,801
<b>Total Infrastructure Capital Costs with Contingency</b>	<b>13,059,805</b>

#### 17.8.4 Owner's Costs

The owners cost are based on typical holding expenses which will be incurred from the time of this report until the Project initiates development. These include the major pre-development aspects of the Project scheduled during a three year period. Included are: exploration costs, geotechnical studies, ground water studies, environmental studies, Pre-feasibility Study and Feasibility Study and holding cost associated with the staff and camp facility.

### 17.9 Taxes and Royalties

All economic modeling is based on a pre-tax basis.

The Mar-Tungsten Zone was originally subject to two royalties and interests. The Mar-Tungsten Property Option was a 5% net profits royalty held by Queenstake dated April 11, 1991. The Tungsten Royalty was a 10% interest in any net cash flow earned by Queenstake and held by CanTung in an agreement dated October 2, 1987. .

On July 25, 2006 StrataGold purchased the 5% net profits royalty and remaining rights held by Queenstake on the 31 claims of the Mar-Tungsten Property plus the 49% interest it retained on the Mar-Tungsten Leases. Queenstake currently retains a 1% NSR royalty on the Mar Property.

StrataGold now holds 100% ownership of all claims and leases, except the Olive Federal Crown Grant. The Olive Federal Crown Grant is held in the name of StrataGold, with 7/8 owned by StrataGold and 1/8 owned by G. William Vivon. There are no other known encumbrances on the Mar-Tungsten Zone.

## 17.10 Economic Analysis

The indicative economic results summarized in this section are based upon work performed by SRK or received from StrataGold. The Project is pre-tax and assumes 100% equity to provide a clear picture of the technical merits of the Project.

### 17.10.1 Model Inputs

The following table shows parameters that were used for the economic model.

**Table 17.10.1.1: Economic Model Parameters (US\$000's)**

Model Parameter	Technical Input
<b>General Assumptions</b>	
Mine Life (Includes one year of pre-stripping and tailings dam construction)	11 years
Mining Available Operating Days/Year	350
Production Rate (average)	3,000t/d
Process Recovery	82.5%
WO <sub>3</sub> Concentrate	45,653t
<b>Market</b>	
Discount Rate	8%
WO <sub>3</sub> -APT Price \$/mtu	\$253
WO <sub>3</sub> -APT Price \$/lb	\$11.50
<b>Royalty</b>	
Royalty	1.0%

### 17.10.2 LoM Plan and Economics

The indicative economic model assumes a LoM average WO<sub>3</sub>-APT price of US\$11.50/lb for revenue purposes.

The pre-tax NPV's at an 8% discount rate over the estimated mine life is US\$24.0million. The pre-tax IRR is 15.5%.

The Project economic results are summarized and presented in this report in Table 17.10.2.1 on a pre-tax basis.

**Table 17.10.2.1: LoM Economic Results on a Pre-Tax Basis**

Item Description	LoM Total (US\$000)	
<b>Gross Revenue</b>	<b>\$672,384</b>	
Treatment Charges	(\$114,305)	
Transportation	(\$6,848)	
NSR Royalty of 1%	(\$5,512)	
	<b>Gross Income</b>	<b>\$545,719</b>
<b>Operating Costs</b>		
Mining	(\$198,060)	
Process	(\$133,954)	
G&A	(\$44,127)	
	<b>Total Operating Costs</b>	<b>(\$376,141)</b>
	<i>Per tonne</i>	<i>\$38.12/t resource</i>
	<i>Per WO<sub>3</sub>-lb</i>	<i>\$6.431/WO<sub>3</sub>-lb</i>
	<b>Operating Margin</b>	<b>\$169,578</b>
	<i>Per tonne</i>	<i>\$17.18/t resource</i>
	<i>Per WO<sub>3</sub>-lb</i>	<i>\$2.90/WO<sub>3</sub>-lb</i>
<b>Capital Costs</b>		
Mine	(\$135)	
Process	(\$33,782)	
Tailings Management Facility	(\$6,200)	
Infrastructure	(\$13,059)	
Sustaining Capital	(\$1,245)	
Owner, Closure and Monitoring	(\$21,720)	
	<b>Total Capital</b>	<b>(\$76,141)</b>
<b>Cash Flow (pre-tax)</b>	<b>\$93,436</b>	
	NPV <sub>8%</sub>	\$24,026
	IRR	15.5%

Note: There has been no allowance made in the model for the Comprehensive Cooperation and Benefit Agreement with the NaCho Nyak Dun (NND) First Nation.

### 17.10.3 Sensitivity

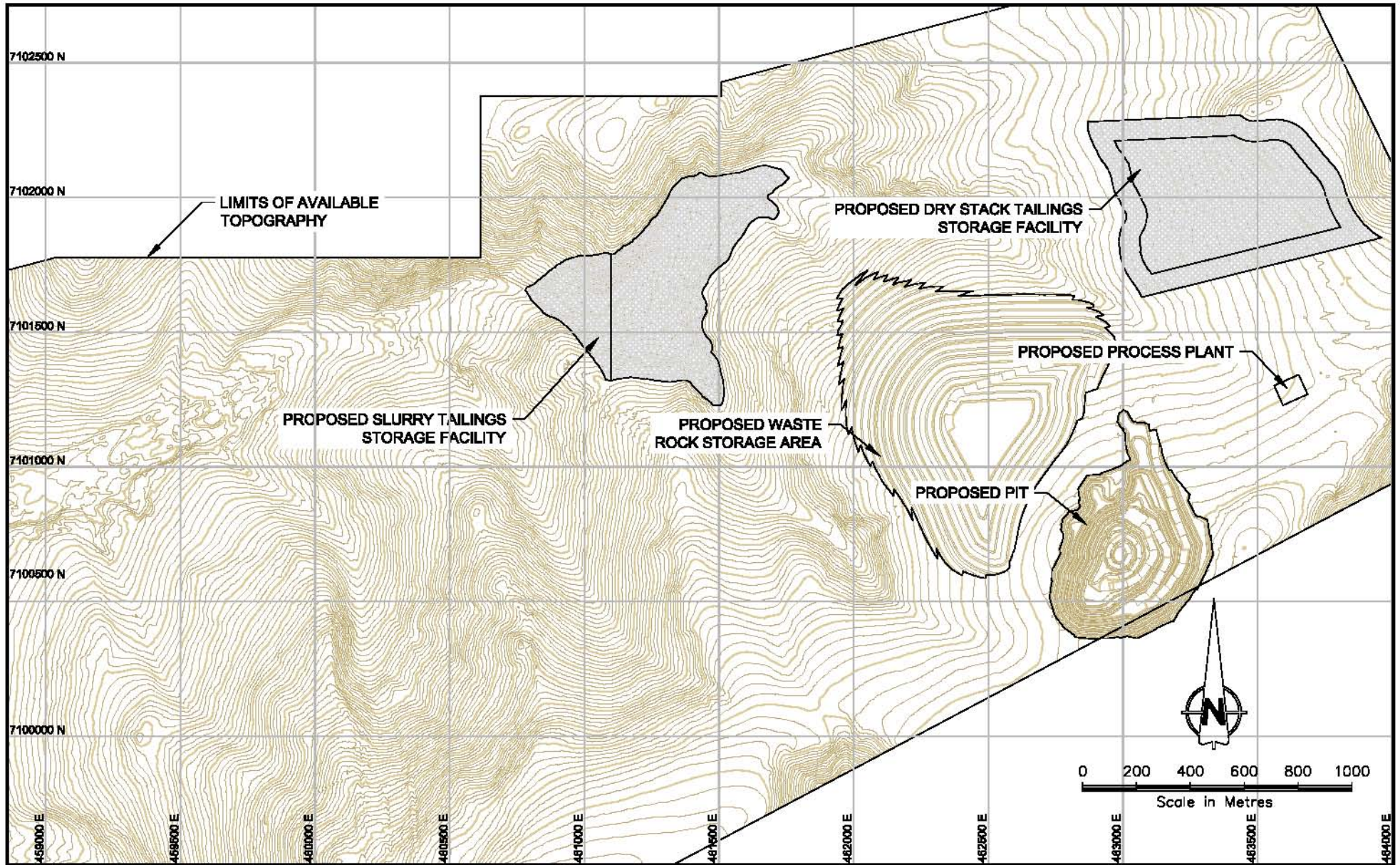
Sensitivity analyses for key economic parameters are shown in Table 17.10.3.1 and Figure 17-11. This analysis suggests that the Project is most sensitive to market price followed closely by operating cost. The Project is least sensitive to capital costs.

**Table 17.10.3.1: Project Sensitivity (NPV<sub>8%</sub>, US\$000s)**

Description	-10%	-5%	Base Case	5%	10%
Market Price	(7,359)	8,333	24,026	39,719	55,412
Operating Costs	30,464	27,245	24,026	20,807	17,588
Capital Costs	46,185	35,106	24,026	12,947	1,867

**Table 17.10.3.2: Project Sensitivity (IRR%)**

Description	-10%	-5%	Base Case	5%	10%
Market Price	7.5%	11.7%	15.5%	19.1%	22.5%
Operating Costs	17.5%	16.5%	15.5%	14.6%	13.7%
Capital Costs	20.8%	18.2%	15.5%	12.8%	10.0%



**LEGEND**



EXISTING GROUND CONTOURS  
(MAJOR/MINOR) 5 METER  
INTERVAL



7176 West Jefferson Ave. Suite 3000  
Denver, Colorado 80236  
303-955-1333

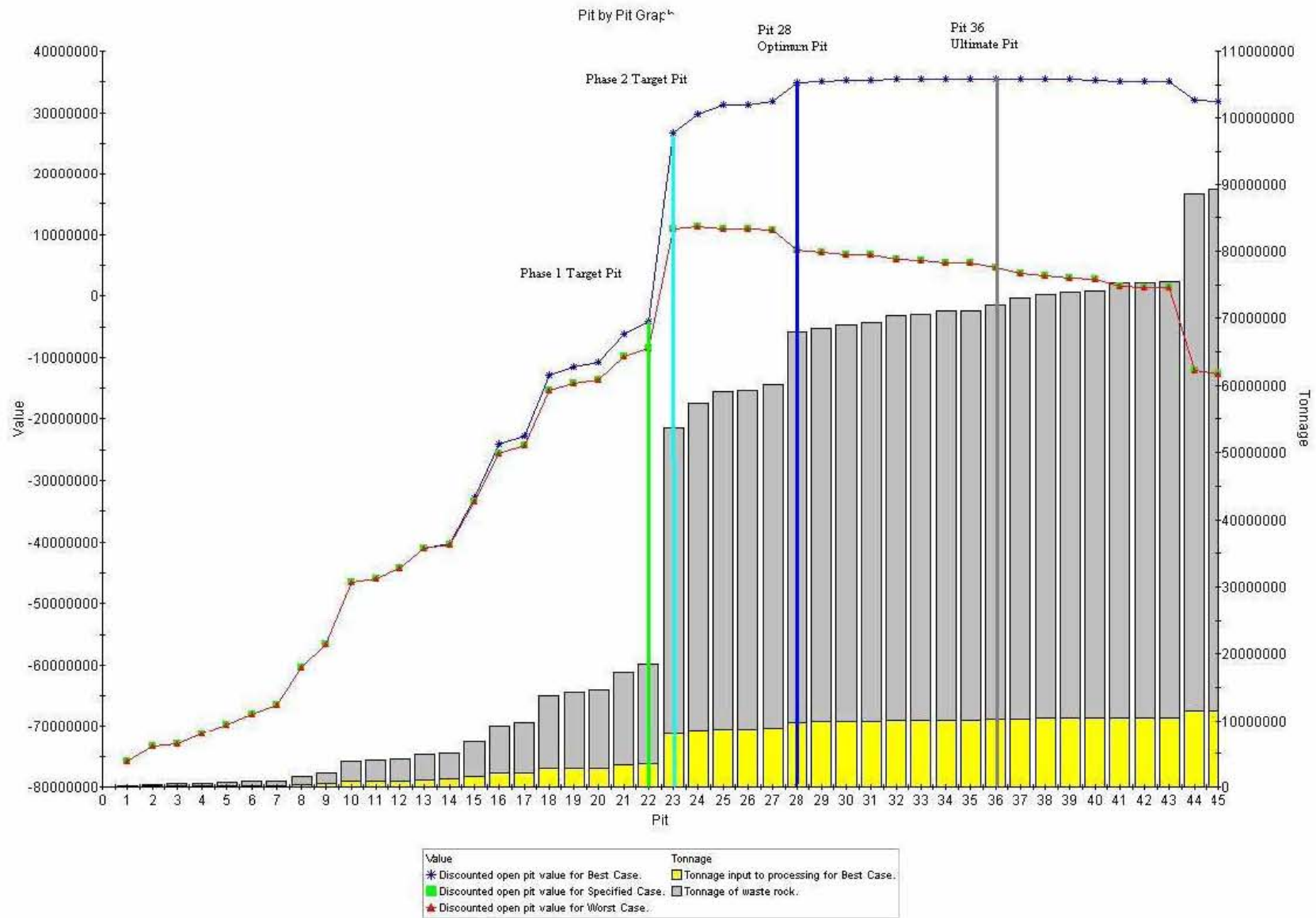
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DUBLIN GULCH PROPERTY,  
MAR-TUNGSTEN ZONE,  
YUKON TERRITORY CANADA

**MAR-TUNGSTEN SITE LAYOUT**

DATE: NOV. 2008	APPROVED: TM	FIGURE: 17-1	REVISION NO.: A
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File Name: Figure 17-2.doc

**Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada**

**Whittle Pit Shell Analysis**

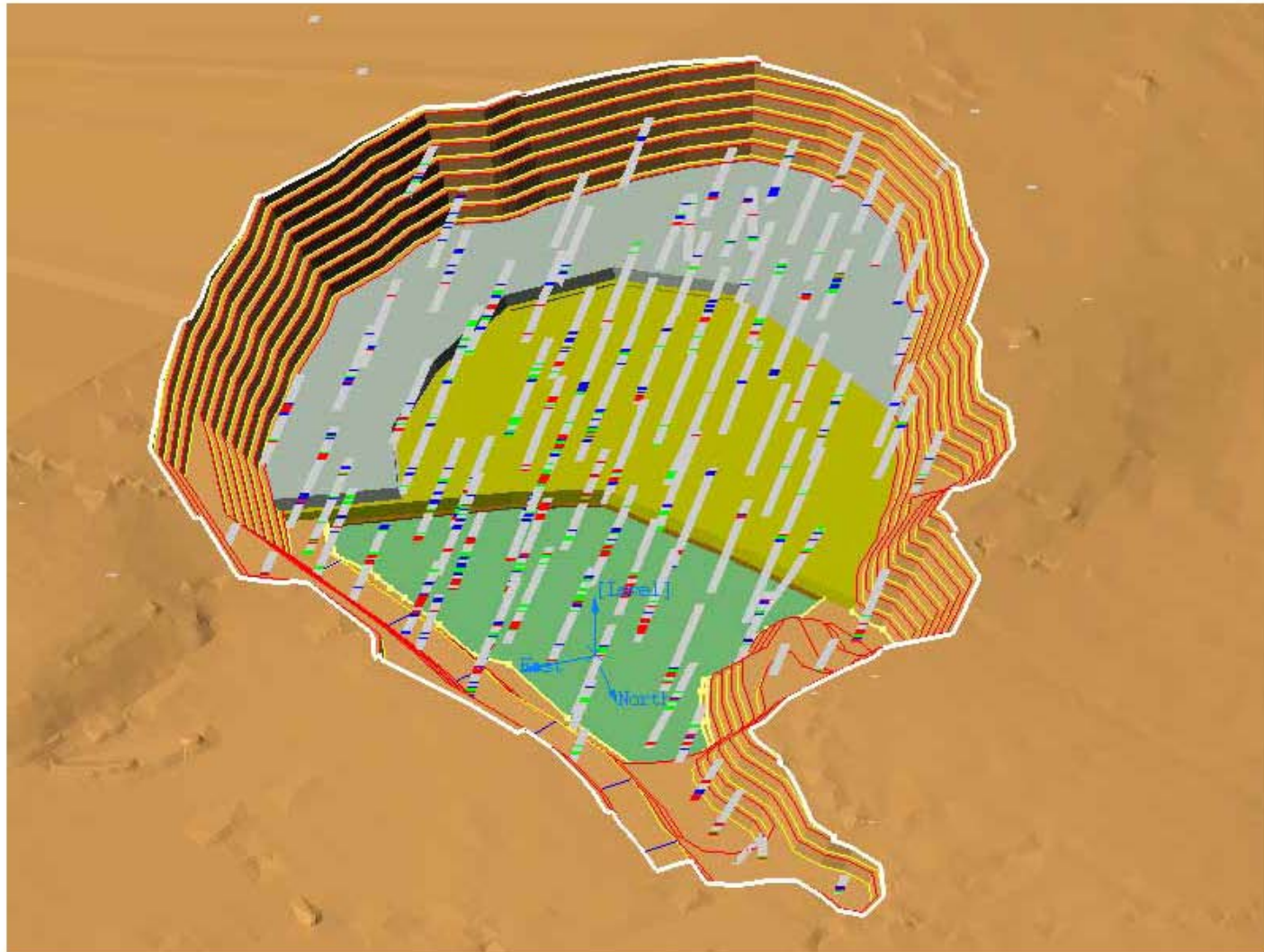
Date: 11/24/08

Approved: BRS

Figure: 17-2







SRK Job No.: 173203

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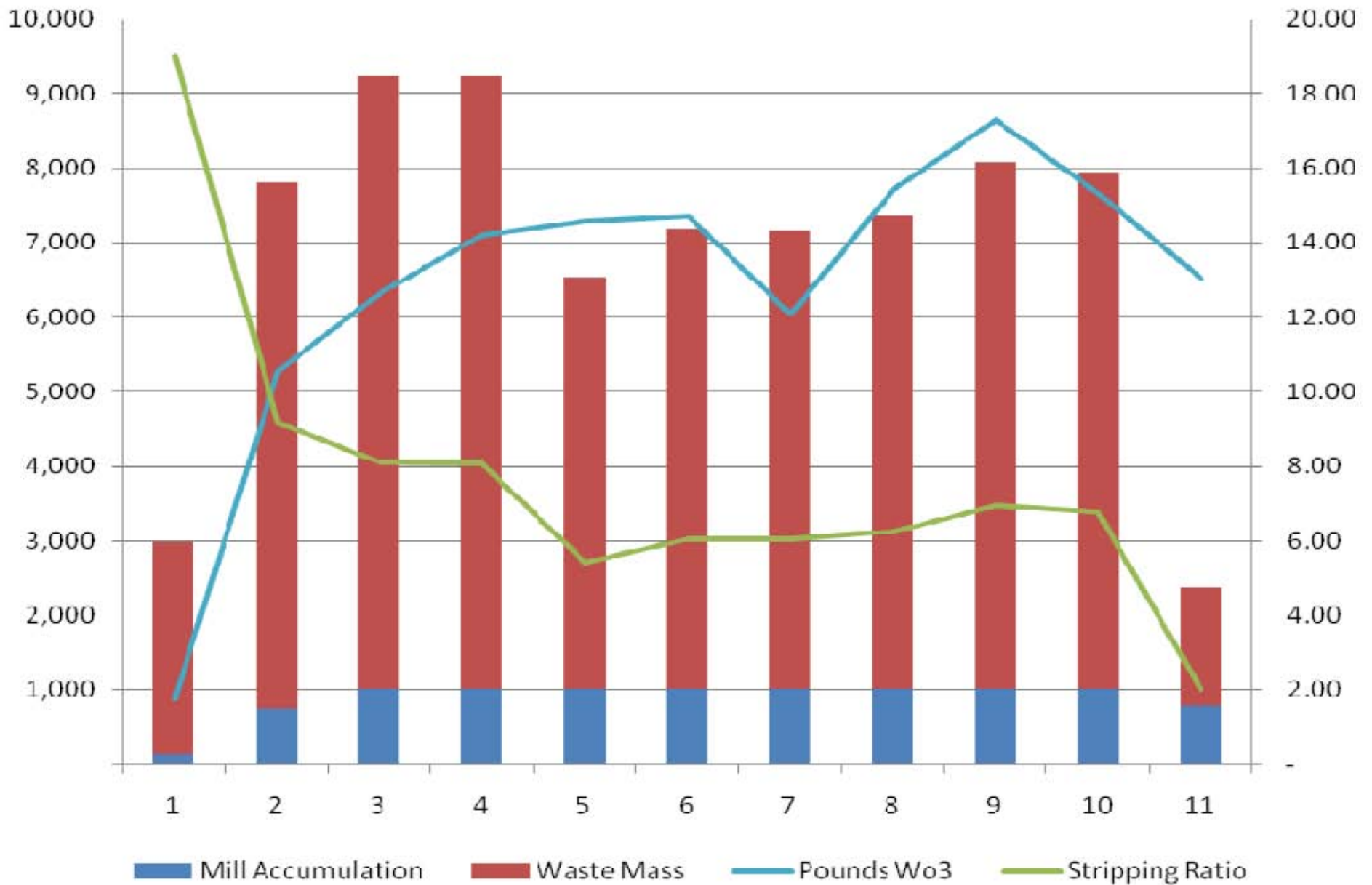
Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

Perspective View of Pit and  
Phase Design

Date: 11/24/08

Approved: BRS

Figure: 17-5



SRK Job No.: 173203

File Name: Figure 17-6.doc

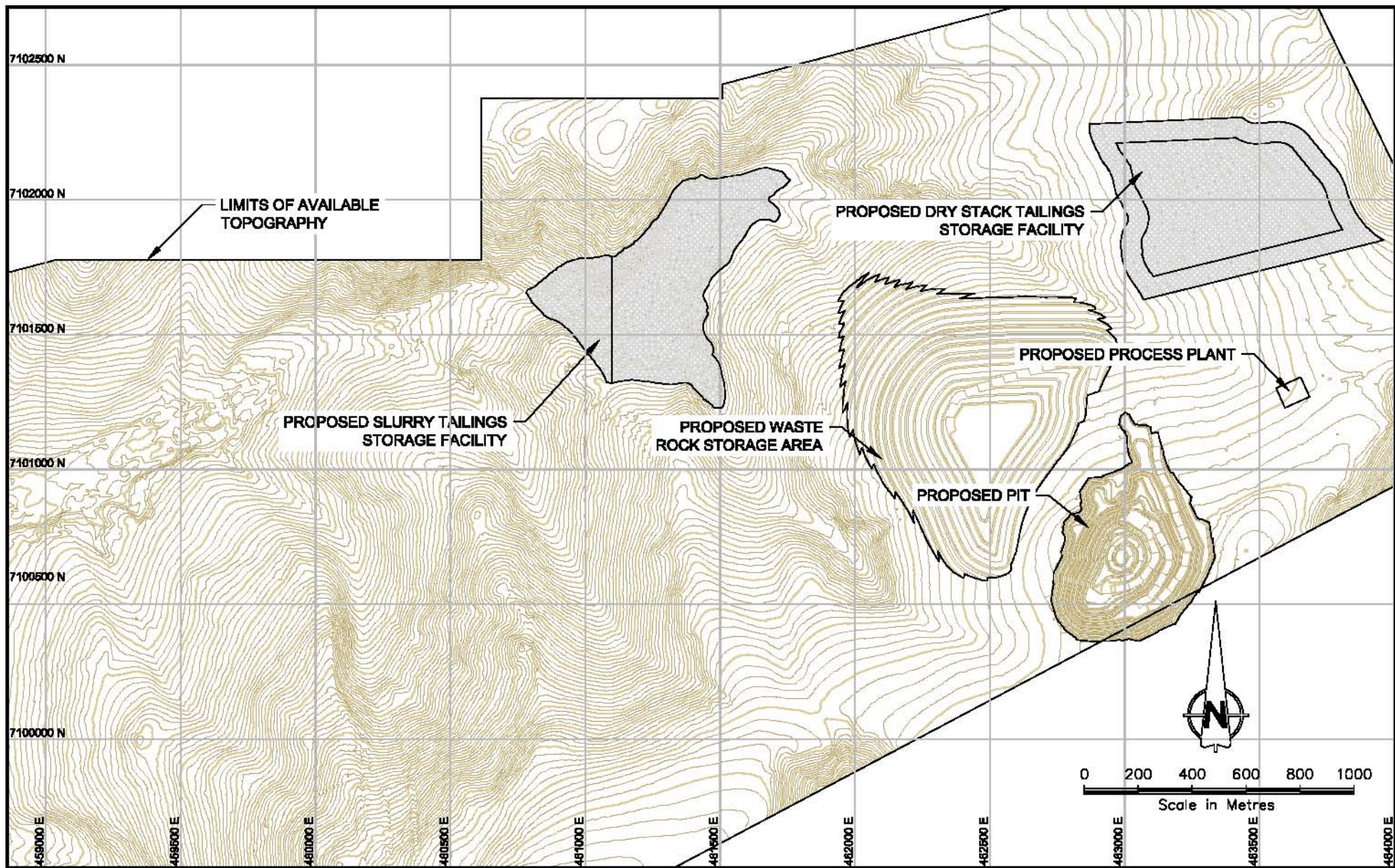
Dublin Gulch Property,  
Mar-Tungsten Zone,  
Yukon Territory Canada

**Annual Production Schedule**

Date: 11/24/08

Approved: BcS

Figure: 17-6



**LEGEND**

 EXISTING GROUND CONTOURS (MAJOR/MINOR) 5 METER INTERVAL



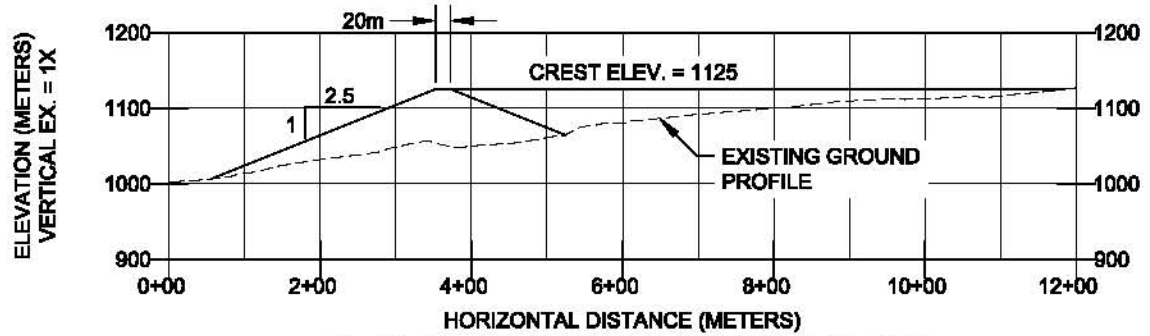
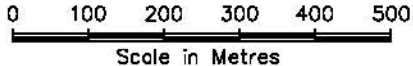
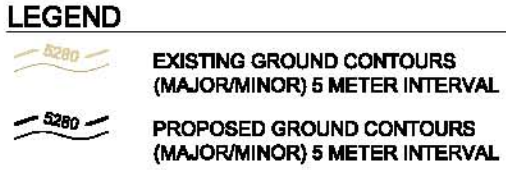
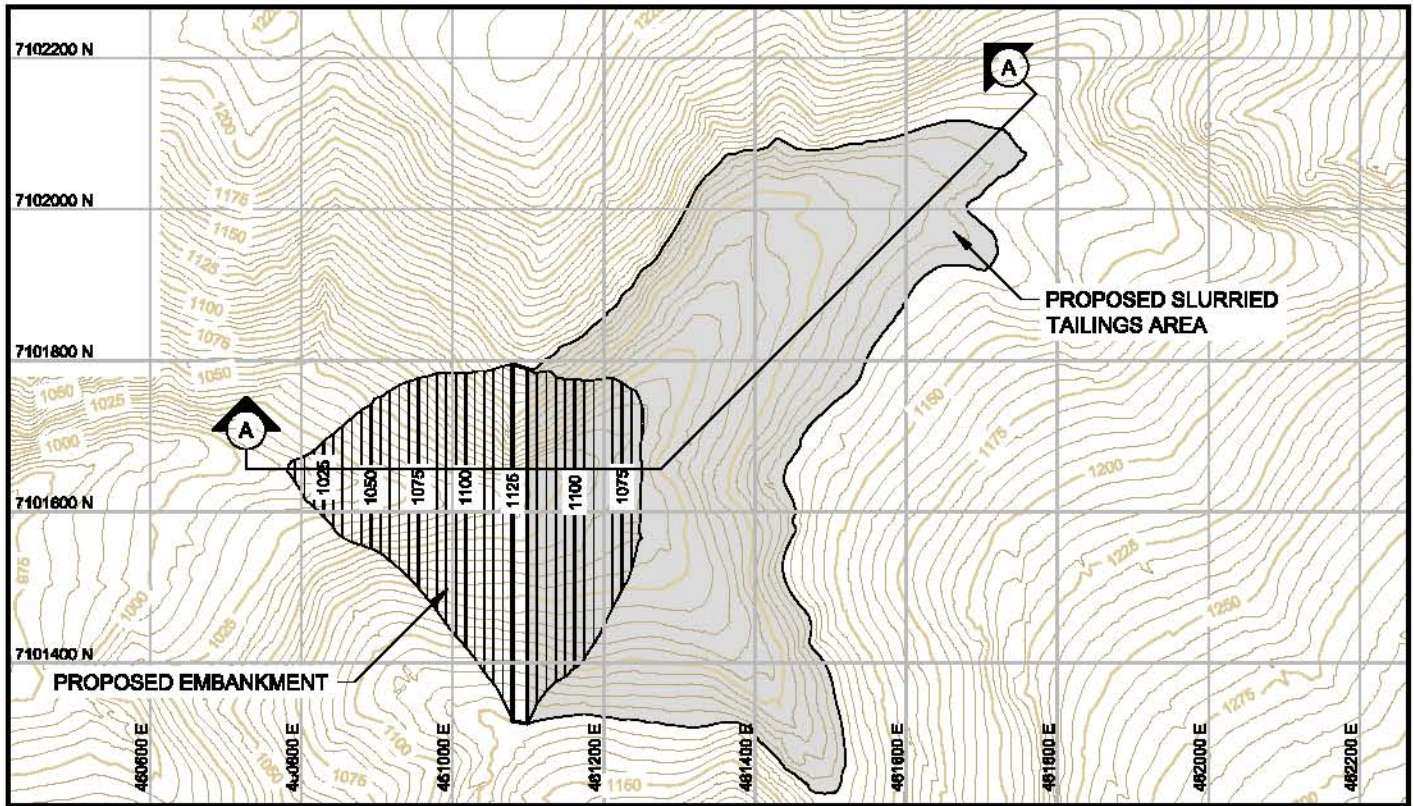
**SRK Consulting**  
 Engineers and Scientists  
 7176 West, Jefferson Ave., Suite 3000  
 Denver, Colorado 80236  
 303-955-1333

DUBLIN GULCH PROPERTY,  
 MAR-TUNGSTEN ZONE,  
 YUKON TERRITORY CANADA

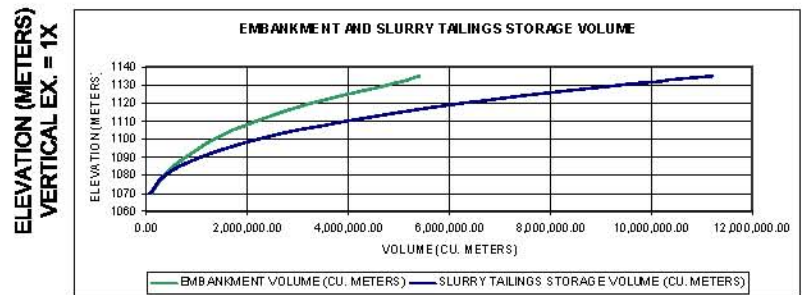
**SITE LAYOUT AND TAILINGS STORAGE OPTIONS**

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DATE: NOV. 2008	APPROVED: TM	FIGURE: 17-7	REVISION NO.: A
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**A SLURRY TAILINGS CROSS SECTION**  
SCALE: PER GRID



**SRK Consulting**  
Engineers and Scientists  
1776 West Jefferson Ave. Suite 3000  
Denver, Colorado 80202  
303-455-1333

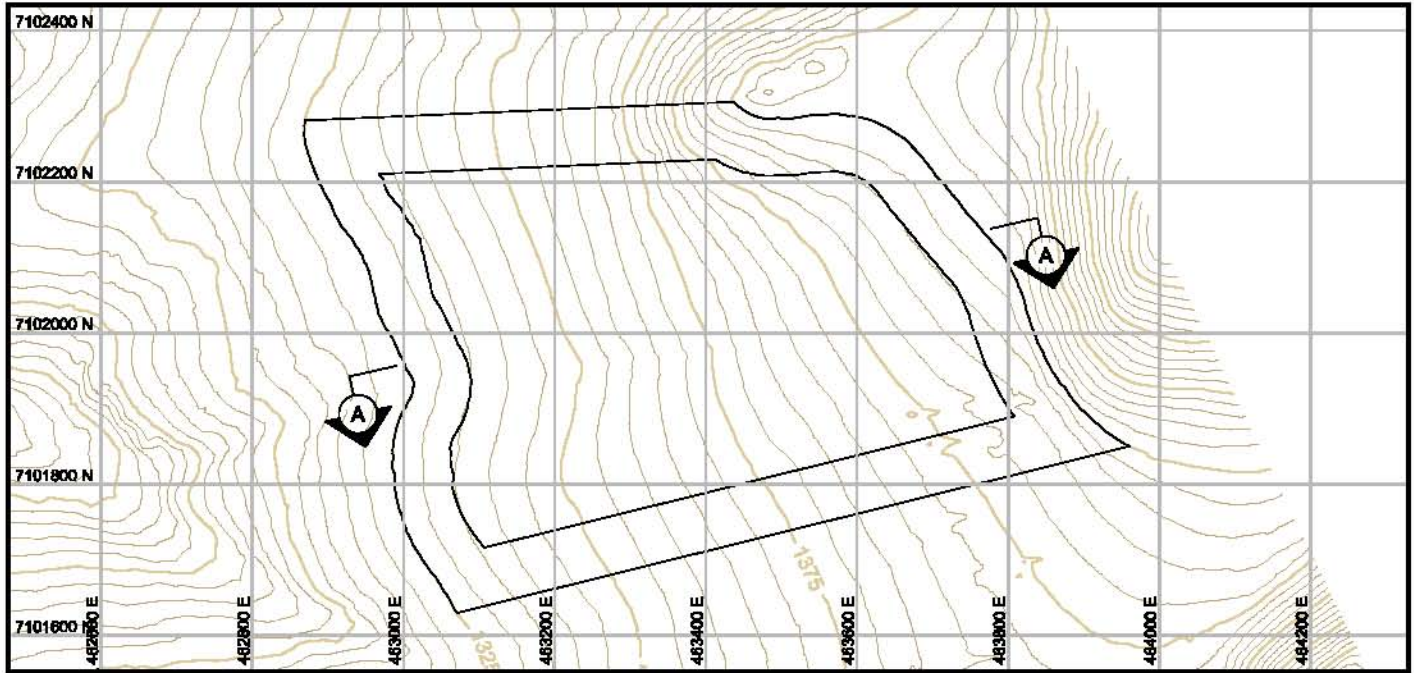
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DUBLIN GULCH PROPERTY,  
MAR-TUNGSTEN ZONE,  
YUKON TERRITORY CANADA

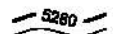
**SLURRY TAILINGS STORAGE FACILITY**

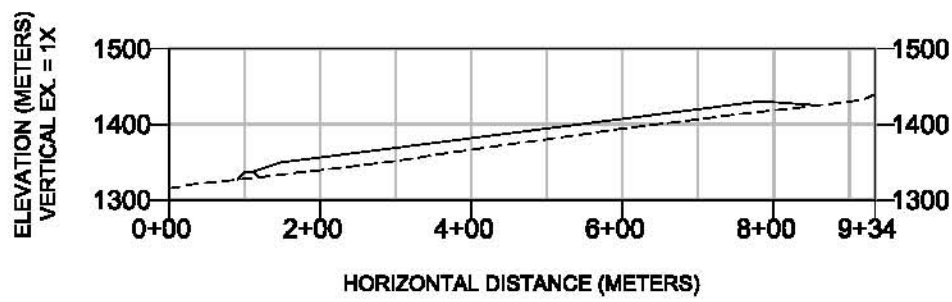
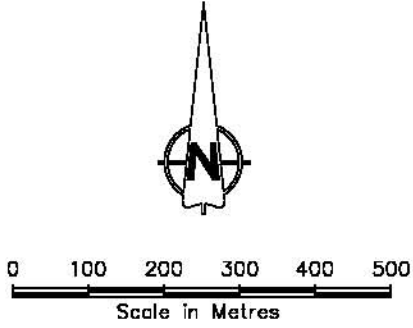
DATE: NOV. 2008	APPROVED: TM	FIGURE: 17-8	REVISION NO.: A
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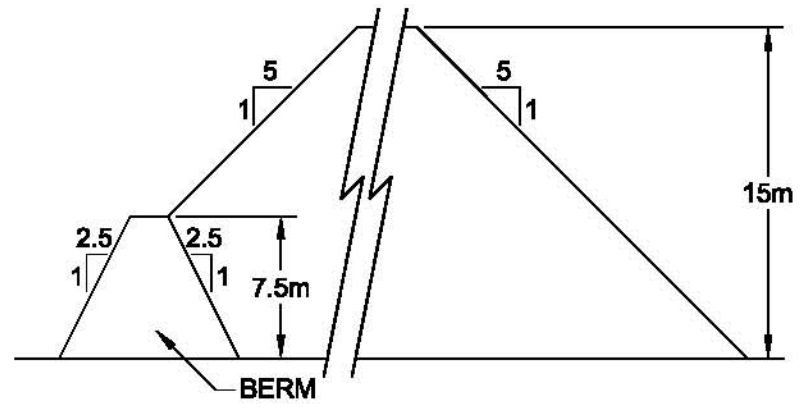
**LEGEND**

 EXISTING GROUND CONTOURS  
(MAJOR/MINOR) 5 METER INTERVAL

 PROPOSED GROUND CONTOURS  
(MAJOR/MINOR) 5 METER INTERVAL



**A DRY STACK TAILINGS CROSS SECTION**  
SCALE: PER GRID



**SRK Consulting**  
Engineers and Scientists  
1176 West Jefferson Ave. Suite 3000  
Denver, Colorado 80202  
303-455-1323

SRK JOB NO.: 173203

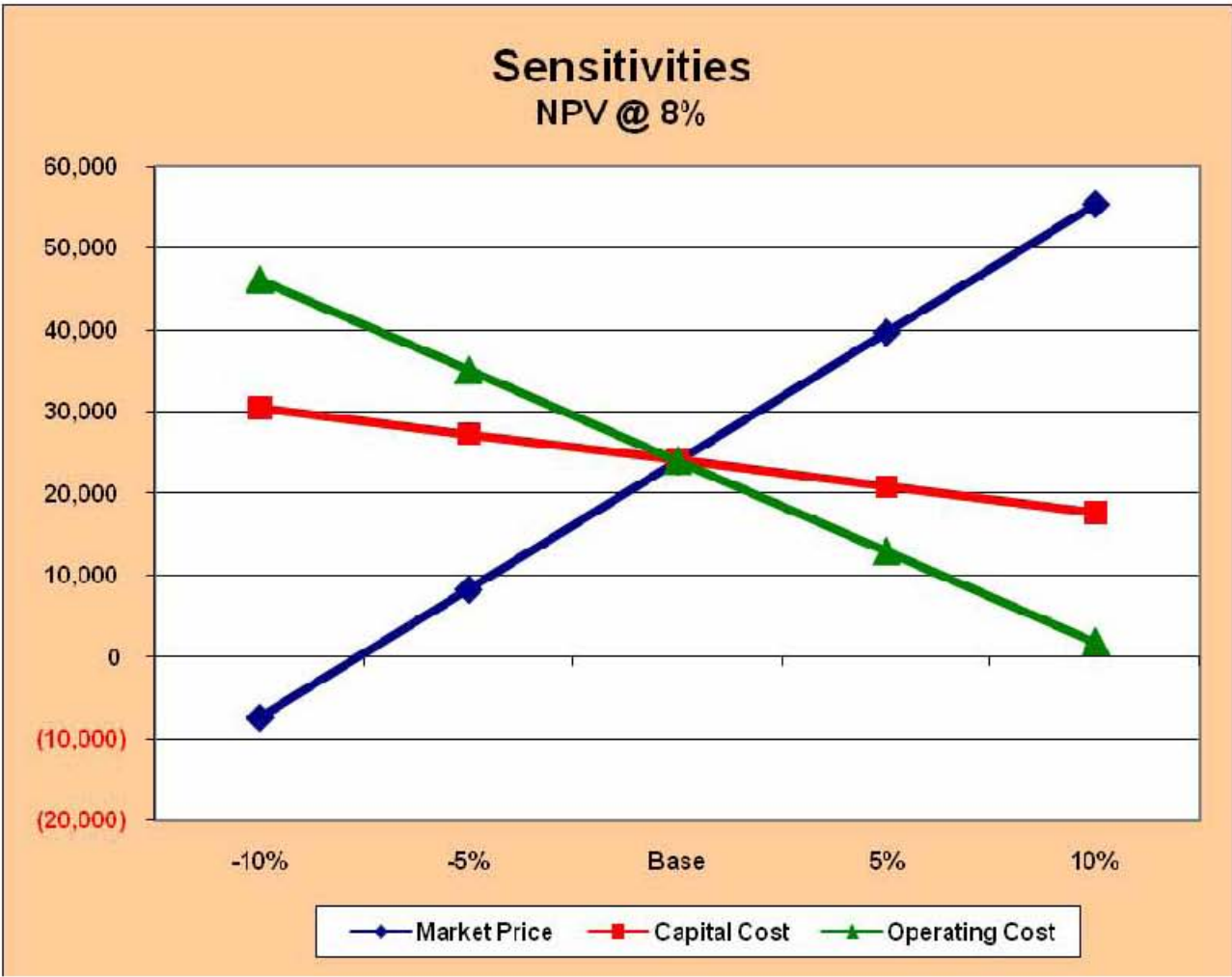
FILE NAME: 173203-Fig.17-9-Rev.A.Dry.Stack.Tailings.2008-11-03.dwg

DUBLIN GULCH PROPERTY,  
MAR-TUNGSTEN ZONE,  
YUKON TERRITORY CANADA

SITE LAYOUT AND TAILINGS  
STORAGE OPTIONS

DATE: NOV. 2008	APPROVED: TM	FIGURE: 17-9	REVISION NO.: A
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*Engineers and Scientists*

SRK Job No.: 173203

File Name: Figure 17-11.doc

Dublin Gulch Property,  
 Mar-Tungsten Zone,  
 Yukon Territory Canada

<b>Project Sensitivities</b>		
Date: 11/24/08	Approved: VO	Figure: 17-11

## 18 Interpretation and Conclusions (Item 21)

### 18.1 Analytical and Testing Data

SRK is of the opinion that the historical analytical work performed by ALS Chemex Labs on the Mar-Tungsten Zone mineralization was good, and suitable for use in resource estimation. The colorimetric method, as well as the gravimetric techniques, are methodologies used for tungsten analysis in that era which were appropriate for WO<sub>3</sub> determinations.

There are no references in any of the documents supplied to SRK pertaining to sample security procedures in effect at the drill site and field camp. In the period of the late 1970's it was not a standard component of project reporting to document the routines of project operation. Industry and corporate standards have always been to prohibit any outsiders to handle or inspect fresh drill core at any stage of exploration operations. Transportation of the split bagged core to a laboratory facility is usually handled by commercial carriers in bulk form in boxes, larger sacks, pallets, or buckets. SRK assumes the drill core for the 1979-1980 program was handled in the accustomed industry manner by drill contractors, geologists, and transportation carriers, and as such was not compromised by outsiders.

StrataGold has conducted a modern QA/QC analysis on the historical drill core at the Mar-Tungsten deposit. This consisted of re-sampling a wide distributing of the core, insertion of blanks, duplicates and standards, and all these were analyses by an accredited laboratory. The laboratory employed industry standard sample preparation and the techniques of analyses were appropriate for the level of tungsten mineralization. The results of the QA/QC study verified the original assay analyses and suggest that at higher levels of mineralization, the historical analyses may be reported slightly lower than their modern counterparts.

The 2008 sampling program was accompanied by a rigorous QA/QC program including blanks, standard reference material and duplicate samples. The program was designed to address three important issues; contamination, accuracy and precision. Accuracy is defined as, "the ability of a measurement to match the actual value of the quantity being measured". Precision is defined as, "the ability of a measurement to be consistently reproduced". For every 20 samples a field duplicate was inserted as the 2<sup>nd</sup> sample, a lab duplicate as the 9<sup>th</sup> sample, a prepared standard as the 10<sup>th</sup> sample and a blank as the 16<sup>th</sup> sample. This routine was repeated after every 20<sup>th</sup> sample for the entirety of the drill program. The results of this QA/QC analysis indicated that all analyses were within the tolerances expected and were suitable to support a modern resource estimate.

### 18.2 Exploration

The 1979-1980 diamond drilling program was carried out at 40m drillhole spacings and clearly defines the core of the tungsten zone. The deposit remains open in several directions and further drilling will likely expand the known tungsten zone. There is potential for the addition of other tungsten resources within the periphery of the Dublin gulch Granodiorite Stock. CanTung drill tested one such target in 1982 and received encouraging results.

The authors recommend inception of a diamond-drilling program on the Mar-Tungsten property in the area of historical drilling, followed by a scoping level study to access the economic viability of the Project. The drill program will provide modern verification of the scheelite-bearing skarn mineralization and step out drilling will likely add significant new resources.

Additionally, fresh samples for mineralogical studies, bench scale grinding studies, metallurgical testing and tungsten recovery optimization will be recovered. An ongoing program of ground magnetometer survey of the prospective ground followed up by mapping, bulldozer trenching and geochemical sampling will likely identify new targets.

### **18.3 Resource Estimation**

The Mar-Tungsten Zone resource estimation is based on information from 120 drillholes totaling 17,825m. The drillhole database was compiled and verified by StrataGold personnel and is determined to be of high quality. Modern assay duplicates indicate good correlation of historical WO<sub>3</sub> results between different analysis techniques. All modern analyses were accompanied by an industry standard QA/QC program. The resource estimation employed a categorical indicator technique to develop a 0.05% WO<sub>3</sub> grade shell used to limit the projection of mineralization. A very generalized geologic model consisting of five rock types that strike north and dip moderately to the west were also used as density and estimation domains. The deposit was modeled only for WO<sub>3</sub> content. The model blocks are uniform 4m x 4m x 4m cubes and all block grade estimates were made using 2m down hole composites. An Inverse Distance Squared algorithm was employed using a two pass estimation method. The details of each estimation pass are outlined in Section 15.8.

The results of the resource estimation provided a CIM classified Indicated Mineral Resource of 12.7Mt of material with 0.31% WO<sub>3</sub> and an additional Inferred Mineral Resource of 1.3Mt of material with 0.30% WO<sub>3</sub> both using a 0.1% WO<sub>3</sub> cut-off. The quality of the Mar-Tungsten Zone drilling and data is very good and the Mineral Resource was classified mainly according to the general drillhole spacing.

### **18.4 Mining**

The pit optimization, mine plan and production model were constructed by SRK using the latest economic and resource knowledge at the time of pit optimization. Results indicate a small sized, moderately high cost open pit with the potential for further minable pit resources along strike and at depth. In SRK's opinion, there is sufficient information to commence detailed pit design and scheduling for the generation of a pre-feasibility level reserve statement.

Mining of the Mar-Tungsten Zone will be a conventional open pit truck and shovel operation, with the necessary support equipment. Due to the high capital cost associated with the purchase of mine equipment, it has been assumed that a mining contractor will execute the mining of the mineralized material and waste material. It is anticipated that pit dewatering will be required, but the amount of dewatering has only be assumed at this point in time. Further hydrological studies need to be performed to determine the amount of pit dewatering that would be required. Further geotechnical investigations will need to be completed to determine the safest and most economical final pit slopes.

Pit optimization, pit design and production scheduling indicate the pit will not be particularly sensitive physically to changes in mining or processing cost as high WO<sub>3</sub> grade lies at the bottom of the pit and is limited by estimated material. The material flow however, is sensitive to the definition of waste and governs the mill throughput, tailings disposal, waste disposal and economic viability of the Project. Minable resources will be difficult to liberate given the thin and dipping orientation of the mineralization leading to possible grade control and dilution risk.

## 18.5 Processing

The Mar-Tungsten mineable resource can be treated using conventional gravity and flotation techniques. However, at this time, only limited metallurgical test work has been completed on representative samples from the Mar-Tungsten Zone.

After these concentrator parameters are known, batch and locked-cycle tests should be conducted on sample composites which represent the annual concentrator mineable resource feed by mineable resource type based on the first 3 to 5 years of the mine production plan.

## 18.6 Economic Evaluation

SRK estimates the Project will return a pre-tax IRR of 15.5% using a projected WO<sub>3</sub>-APT price of \$253/mtu (\$11.50/lb). Model results indicate operating costs of \$6.43/lb of WO<sub>3</sub> and projected cashflow of US\$93.4million.

The Project is sensitive to the market price of WO<sub>3</sub> for NPV evaluation and this will drive the economic viability of the Project followed closely by operating costs. To a lesser extent capital cost will also affect the Project, but with less severity than WO<sub>3</sub> price variation. Table 18.6.1 illustrates the Mar-Tungsten project NPV sensitivity using an 8% discount rate.

**Table 18.6.1: Project Sensitivity (NPV<sub>8%</sub>, US\$000s)**

Description	-10%	-5%	Base Case	5%	10%
Market Price	(7,359)	8,333	24,026	39,719	55,412
Operating costs	30,464	27,245	24,026	20,807	17,588
Capital costs	46,185	35,106	24,026	12,947	1,867

## 18.7 Summary

SRK was commissioned by StrataGold to prepare a NI 43-101 compliant Preliminary Assessment for the Mar-Tungsten Zone including a description and evaluation of exploration work, an updated resource estimate categorized by current CIM guidelines and an economic evaluation. This objective has been met.

## 19 Recommendations (Item 22)

### 19.1 Recommended Work Programs

The mineralization is defined over an 800m strike length and remains open in several directions. Further exploration drilling is warranted on the north and south extensions of the mineralization and further down dip to the west. A program of 25 drillholes per season over two seasons is recommended to delineate the limits of mineralization which can be recovered by open pit mining.

Additional metallurgical test work is recommended for future engineering studies to confirm the design criteria and processing flow sheet to include:

- Crushing and grinding work indices;
- Optimize gravity and flotation grind sizes for WO<sub>3</sub> recovery;
- Optimize flotation retention times, reagents and reagent consumptions; and cleaning stages;
- Determine regrind parameters,
- Abrasion indices;
- Tailings and concentrate settling characteristics; and
- Concentrate filtration rate.

There is potential for optimization of pit slope angles and ramp placement at Mar-Tungsten provided additional geotechnical data is collected. The existing geotechnical data are based on field estimates of rock properties, no laboratory testing or discontinuity orientation has been performed. Additional geotechnical data collection and analysis will be necessary for further mine planning.

SRK recommends analysis of possible mining recovery and dilution issues be conducted in addition to refinement of costs during pre-feasibility. A combination of detailed lithological and mine modeling will be required so accurate mining recovery and dilution corrections can be assessed and compared to estimated grades.

Additional geotechnical core drilling programs should be conducted with a triple tube coring system where logging can be conducted in the splits, before additional core damage occurs during boxing and transport. Future geotechnical core logging programs should also include the orientation of discontinuities and Point Load Testing (PLT).

A laboratory strength testing program including Uniaxial Compressive Strength (UCS), Triaxial Compressive Strength (TCS) and Small Scale Direct Shear (SSDS) testing should also be conducted encompassing each major rock type at the site.

Continued work is recommended to advance the environmental monitoring required for permitting of the Project.

Confirmation of an updated contractor mining cost and equipment list should be sought in conjunction with a geotechnical factor of safety analysis relating to future pit designs.

The data collected above will support a Pre-feasibility Study which could be initiated simultaneously with the proposed studies. The Pre-feasibility Study could be completed in 12-18 months.

### 19.1.1 Proposed Budget

**Table 19.1.1.1: Budget Recommendations**

<b>Program</b>	<b>Cost (US\$millions)</b>
Exploration drilling, logging and assaying (4840m – 25 holes)	3.20
Metallurgical Studies	0.25
Geotechnical Drilling (4 holes)	0.50
Tailings Trade-off Study and Site Geotechnical Studies	0.20
Groundwater Monitor and Dewatering Wells (6 holes)	0.60
Environmental Monitoring and Baseline Work	0.75
Pre-feasibility Study (12-18 months)	1.25
<b>Total Recommended Work Plan</b>	<b>6.75</b>

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# 21 Glossary

## 21.1 Mineral Resources and Reserves

### 21.1.1 Mineral Resources

The mineral resources and mineral reserves have been classified according to the “CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines” (December 11, 2005). Accordingly, the Resources have been classified as Measured, Indicated or Inferred, the Reserves have been classified as Proven, and Probable based on the Measured and Indicated Resources as defined below.

A ‘Mineral Resource’ is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes.

An ‘Indicated Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity.

### 21.1.2 Mineral Reserves

A ‘Mineral Reserve’ is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Pre-feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

A ‘Probable Mineral Reserve’ is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Pre-feasibility Study. This Pre-feasibility Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

A ‘Proven Mineral Reserve’ is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Pre-feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

## 21.2 Glossary

**Table 21.2.1: Glossary**

Term	Definition
Assay:	The chemical analysis of mineral samples to determine the metal content.
BQ Size:	Letter name specifying the dimensions of bits, core barrels, and drill rods in the B-size and Q-group wireline diamond drilling system having a core diameter of 36.5mm and a hole diameter of 60mm.
Capital Expenditure:	All other expenditures not classified as operating costs.
Composite:	Combining more than one sample result to give an average result over a larger distance.
Concentrate:	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing:	Initial process of reducing ore particle size to render it more amenable for further processing.
CoG (CoG):	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dilution:	Waste, which is unavoidably mined with ore.
Dip:	Angle of inclination of a geological feature/rock from the horizontal.
Fault:	The surface of a fracture along which movement has occurred.
Gangue:	Non-valuable components of the ore.
Grade:	The measure of concentration of gold within mineralized rock.
Igneous:	Primary crystalline rock formed by the solidification of magma.
Kriging:	An interpolation method of assigning values from samples to blocks that minimizes the estimation error.
Level:	Horizontal tunnel the primary purpose is the transportation of personnel and materials.
Lithological:	Geological description pertaining to different rock types.
Material Properties:	Mine properties.
Sedimentary:	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Sill:	A thin, tabular, horizontal to sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Stratigraphy:	The study of stratified rocks in terms of time and space.
Strike:	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.
Tailings:	Finely ground waste rock from which valuable minerals or metals have been extracted.
Thickening:	The process of concentrating solid particles in suspension.
Total Expenditure:	All expenditures including those of an operating and capital nature.
Variogram:	A statistical representation of the characteristics (usually grade).

## **Abbreviations**

The metric system has been used throughout this report unless otherwise stated. All currency is in U.S. dollars; where applicable, an exchange rate of US\$0.86:CDN\$1.00 has been used. Market prices are reported in US\$ per mtu. Tonnes are metric of 1,000kg, or 2,204.6lbs. The following abbreviations are used in this report.

**Table 21.2.2: Abbreviations**

<b>Abbreviation</b>	<b>Unit or Term</b>
APT	Amonium Paratungstate
°C	degrees Centigrade
cm	centimeter
cm <sup>3</sup>	cubic centimeter
CTW	calculated true width
°	degree (degrees)
dia.	diameter
ft	foot (feet)
ft <sup>2</sup>	square foot (feet)
ft <sup>3</sup>	cubic foot (feet)
g	gram
g/t	grams per tonne
ha	hectares
ICP	induced couple plasma
kg	kilograms
km	kilometer
L	liter
lb	pound
m	meter
m <sup>2</sup>	square meter
m <sup>3</sup>	cubic meter
masl	meters above sea level
mm	millimeter
Mt	million tonnes
mtu	metric tonne unit, equals 22.04 lbs
NI 43-101	Canadian National Instrument 43-101
OSC	Ontario Securities Commission
%	percent
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
s	second
SG	specific gravity
t	tonne (metric ton) (2,204.6 pounds)
μ	micron or microns
WO <sub>3</sub>	Tungsten trioxide
yr	year

**Appendix A**  
**Certificates of Authors**

## CERTIFICATE of AUTHOR

I, Bart A. Stryhas Ph.D. CPG # 11034 do hereby certify that:

1. I am a Principal Resource Geologist of:

SRK Consulting (US), Inc.  
7175 W. Jefferson Ave, Suite 3000  
Denver, CO, USA, 80235

2. I graduated with a Doctorate degree in structural geology from Washington State University in 1988. In addition, I have obtained a Master of Science degree in structural geology from the University of Idaho in 1985 and a Bachelor of Arts degree in geology from the University of Vermont in 1983.
3. I am a current member of the American Institute of Professional Geologists.
4. I have worked as a geologist for a total of 19 years since my graduation from university.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am responsible for the construction of the geologic and resource model, the QA/QC analysis of the re-assay program and Sections 8, 10, 11-16, 17.3, 17.4, 17.5, 17.7.2, 17.8.2-17.8.4, 17.9-17.10, and 18-21, as well as, provided the final editing for the report titled *NI 43-101 Preliminary Assessment, Dublin Gulch Property – Mar-Tungsten Zone, Mayo District, Yukon Territory, Canada* and dated December 1, 2008 (the “Preliminary Assessment”) relating to the Mar-Tungsten Property. I have visited the Mar-Tungsten Property on August 19<sup>th</sup> and 20<sup>th</sup> 2008.
7. I have had prior involvement with the property that is the subject of the Preliminary Assessment. I was responsible for the construction of the geologic and resource model, the QA/QC analysis of the re-assay program and provided the final editing for the report titled *NI 43-101 Technical Report Resources Dublin Gulch Property – Mar-Tungsten Zone Mayo District, Yukon Territory, Canada* and dated December 1, 2008, relating to the Mar-Tungsten property.

8. As of the date of the certificate, to the best of my knowledge, information and belief, the Preliminary Assessment contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.
9. I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Preliminary Assessment has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Preliminary Assessment with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Preliminary Assessment.

Dated this December 1, 2008.

*Signed*

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Dr. Bart A. Stryhas

## CERTIFICATE of AUTHOR

I, Syver W. More, Reg. Geol., Cert. Prof. Geol., do hereby certify that:

1. I am an Associate Geologist of:

SRK Consulting (US), Inc.  
7175 W. Jefferson Ave, Suite 3000  
Denver, CO, USA, 80235

and a Consulting Geologist with offices at:

Syver W. More, Consulting Geologist  
11321 East Calle Vaqueros  
Tucson, Arizona USA 85749

2. I graduated with a B.Sc. degree in Geosciences from the University of Arizona in 1972. In addition, I have obtained a M.Sc. in Geosciences (Economic Geology) from the University of Arizona in 1980.
3. I am a Fellow of the Society of Economic Geologists, and a member in good standing of the Society for Mining, Metallurgy and Exploration of A.I.M.E. and the Geological Society of America.
4. I have worked as an exploration and mining geologist for a total of 35 years since my graduation from university.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am responsible for the thorough review of the historical data files and compilation of the historical work prior to 2008, and Sections 2.1-2.4, 3, 4, 5-7, and 9 of the Preliminary Assessment titled *NI 43-101 Preliminary Assessment Dublin Gulch Property – Mar-Tungsten Zone, Mayo District, Yukon Territory, Canada* and dated December 1, 2008 (the “Preliminary Assessment”) relating to the Mar-Tungsten Property. I have not visited the Mar-Tungsten Property

Group Offices in:

Australia  
North America  
Southern Africa  
South America  
United Kingdom

North American Offices:

Denver 303.985.1333  
Elko 775.753.4151  
Reno 775.828.6800  
Tucson 520-544-3688  
Toronto 416.601.1445  
Vancouver 604.681.4196  
Yellowknife 867-699-2430

7. I have had prior involvement with the property that is the subject of this Preliminary Assessment. I was responsible for the thorough review of the historical data files and compilation of the historical work of the technical report titled *NI 43-101 Technical Report Resources Dublin Gulch Property – Mar-Tungsten Zone Mayo District, Yukon Territory, Canada* and dated December 1, 2008 relating to the Mar-Tungsten Property.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Preliminary Assessment contains all scientific and technical information that is required to be disclosed to make the Preliminary Assessment not misleading.
9. I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Preliminary Assessment has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Preliminary Assessment with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Preliminary Assessment.

Dated this December 1, 2008.

*Signed*

---

SYVER W. MORE

## CERTIFICATE of AUTHOR

I, Bret C. Swanson, B.E. Mining, do hereby certify that:

1. I am Senior Mining Engineer of:

SRK Consulting (US), Inc.  
7175 W. Jefferson Ave, Suite 3000  
Denver, CO, USA, 80235

2. I graduated with a degree in Bachelor of Engineering in Mining Engineering from the University of Wollongong in 1997.
3. I am a member the Australian Institute of Mining and Metallurgy.
4. I have worked as a Mining Engineer for a total of 12 years since my graduation from university.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am responsible for Sections 17.1, 17.7.1, 17.7.3 for the report titled *NI 43-101 Preliminary Assessment, Dublin Gulch Property – Mar-Tungsten Zone, Mayo District, Yukon Territory, Canada* and dated December 1, 2008 (the “Preliminary Assessment”) relating to the Mar-Tungsten Property. I have visited the Mar-Tungsten Property on August 19<sup>th</sup> and 20<sup>th</sup> 2008.
7. I have not had prior involvement with the property that is the subject of the Preliminary Assessment.

8. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
9. I have read National Instrument 43-101 and Form 43-101F1, and the Preliminary Assessment has been prepared in compliance with that instrument and form.
10. I consent to the filing of the Preliminary Assessment with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Preliminary Assessment..
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Preliminary Assessment contains all scientific and technical information that is required to be disclosed to make the Preliminary Assessment not misleading.

Dated this December 1, 2008.

*Signed*

---

Bret Swanson, B.E., AusIMM



SRK Consulting (U.S.), Inc.  
7175 West Jefferson Avenue, Suite 3000  
Lakewood, Colorado  
USA 80235  
e-mail: [denver@srk.com](mailto:denver@srk.com)  
web: [www.srk.com](http://www.srk.com)  
Tel: 303.985.1333  
Fax: 303.985.9947

## CERTIFICATE of AUTHOR

I, Michael E. Levy, P.E., P.G. do hereby certify that:

1. I am a Senior Geotechnical Engineer of:

SRK Consulting (US), Inc.  
7175 W. Jefferson Ave, Suite 3000  
Denver, CO, USA, 80235

2. I graduated with a B.S. degree from the University of Iowa in 1998 and a M.S. degree from the University of Colorado at Boulder in 2004.
3. I am a member of the American Society of Civil Engineers (ASCE) and the International Society for Rock Mechanics (ISRM), and am a registered Professional Engineer in the states of Colorado (#40268) and California (#70578). I am a registered Professional Geologist in the state of Wyoming (#3550).
4. I have worked as a geologist and engineer for a total of 10 years since my graduation from university.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I am responsible for Section 17.2 of the Preliminary Assessment titled *NI 43-101 Preliminary Assessment Dublin Gulch Property – Mar-Tungsten Zone, Mayo District, Yukon Territory, Canada* and dated Report Date (the “Preliminary Assessment”) relating to the Mar-Tungsten Property. I have visited the Mar-Tungsten Property on August 19 and 20, 2008.
7. I have not had prior involvement with the property that is the subject of the Preliminary Assessment.
8. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
9. I have read National Instrument 43-101 and Form 43-101F1, and the Preliminary Assessment has been prepared in compliance with that instrument and form.

Group Offices in:	North American Offices:
Australia	Denver 303.985.1333
North America	Elko 775.753.4151
Southern Africa	Reno 775.828.6800
South America	Tucson 520-544-3688
United Kingdom	Toronto 416.601.1445
	Vancouver 604.681.4196
	Yellowknife 867-699-2430

10. I consent to the filing of the Preliminary Assessment with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Preliminary Assessment.
  
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Preliminary Assessment contains all scientific and technical information that is required to be disclosed to make the Preliminary Assessment not misleading.

Dated this December 1, 2008.

*Signed*

---

Michael Levy, P.E., P.G.



SRK Consulting (U.S.), Inc.  
7175 West Jefferson Avenue, Suite 3000  
Lakewood, Colorado  
USA 80235  
e-mail: [denver@srk.com](mailto:denver@srk.com)  
web: [www.srk.com](http://www.srk.com)  
Tel: 303.985.1333  
Fax: 303.985.9947

## CERTIFICATE of AUTHOR

I, Kenneth P. Black, P.Eng. # 4023016, Ontario, do hereby certify that:

12. I am a Principal Consultant of SRK Consulting, :

SRK Consulting (US), Inc.  
3275 W. Ina Rd. Ste. 240  
Tucson, AZ, USA, 85741

13. I graduated with a Bachelor degree in Mining Engineering from Nova Scotia Technical College, Nova Scotia, Canada in 1972.

14. I am a current member of the Professional Engineers of Ontario.

15. I have worked as a mining engineer for a over 35 years since my graduation from university.

16. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101.

17. I am responsible for the environmental and permitting assessment of the property, Sections 2.5 and 17.6. I have visited the Mar-Tungsten Property on August 19<sup>th</sup> and 20<sup>th</sup> 2008.

18. I have not had prior involvement with the property that is the subject of the Preliminary Assessment.

19. I consent to the filing of the Preliminary Assessment with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Preliminary Assessment.

Dated this December 1, 2008.

*Signed*

---

Kenneth P. Black, P.Eng.

Group Offices in:	North American Offices:
Australia	Denver 303.985.1333
North America	Elko 775.753.4151
Southern Africa	Reno 775.828.6800
South America	Tucson 520-544-3688
United Kingdom	Toronto 416.601.1445
	Vancouver 604.681.4196
	Yellowknife 867-699-2430

# **Appendix B**

## **Mineral Tenures**

Leases and Properties pertaining to the Mar-Tungsten Property. All Quartz Claims are subject to a work or payment obligation of CDN\$105 per year per claim.

District	Grant Number	Reg Type	Claim Name	Claim Number	Claim Owner	Operation Recording Date	Claim Expiry Date	Status	Quartz Lease	NTS Map Number	Non Std Size	Ops Number
Mayo	YA01401	Quartz	R & D No.	9	STRATAGOLD CORPORATION - 100%.	10/1/1975	1/31/2015	Active	3452	106D04		1500042544
Mayo	YA01403	Quartz	R & D No.	11	STRATAGOLD CORPORATION - 100%.	10/1/1975	1/31/2015	Active	3453	106D04		1500042546
Mayo	YA01405	Quartz	R & D No.	13	STRATAGOLD CORPORATION - 100%.	10/1/1975	1/31/2015	Active	3454	106D04		1500042548
Mayo	YA42970	Quartz	Dave	25	STRATAGOLD CORPORATION - 100%.	9/29/1980	1/31/2015	Active	3455	106D04	Partial Quartz fraction (Partial Quartz fraction (<25 acres)	1500045148
Mayo	YA42972	Quartz	Dave	27	STRATAGOLD CORPORATION - 100%.	9/29/1980	1/31/2015	Active	3456	106D04	Partial Quartz fraction (Partial Quartz fraction (<25 acres)	1500045150
Mayo	YA42973	Quartz	Dave	28	STRATAGOLD CORPORATION - 100%.	9/29/1980	1/31/2015	Active	3457	106D04	Partial Quartz fraction (Partial Quartz fraction (<25 acres)	1500045151
Mayo	YA17814	Quartz	Dave	13	STRATAGOLD CORPORATION - 100%.	4/24/1978	1/31/2015	Active	3458	106D04		1500043515
Mayo	YA17815	Quartz	Dave	14	STRATAGOLD CORPORATION - 100%.	4/24/1978	1/31/2015	Active	3459	106D04		1500043516
Mayo	YA17816	Quartz	Dave	15	STRATAGOLD CORPORATION - 100%.	4/24/1978	1/31/2015	Active	3460	106D04		1500043517
Mayo	YA17817	Quartz	Dave	16	STRATAGOLD CORPORATION - 100%.	4/24/1978	1/31/2015	Active	3461	106D04		1500043518
Mayo	YA17818	Quartz	Dave	17	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043519
Mayo	YA17819	Quartz	Dave	18	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043520
Mayo	YA42971	Quartz	Dave	26	STRATAGOLD CORPORATION - 100%.	9/29/1980	10/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045149
Mayo	YA42974	Quartz	Dave	29	STRATAGOLD CORPORATION - 100%.	9/29/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045152
Mayo	YA42975	Quartz	Dave	30	STRATAGOLD CORPORATION - 100%.	9/29/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045153
Mayo	YA63888	Quartz	Fiji	5	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046095
Mayo	YA14898	Quartz	Mar	3	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043094
Mayo	YA14899	Quartz	Mar	4	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043095
Mayo	YA14900	Quartz	Mar	5	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043096
Mayo	YA14901	Quartz	Mar	6	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043097
Mayo	YA14902	Quartz	Mar	7	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043098

District	Grant Number	Reg Type	Claim Name	Claim Number	Claim Owner	Operation Recording Date	Claim Expiry Date	Status	Quartz Lease	NTS Map Number	Non Std Size	Ops Number
Mayo	YA14904	Quartz	Mar	9	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043100
Mayo	YA14905	Quartz	Mar	10	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043101
Mayo	YA14907	Quartz	Mar	12	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043103
Mayo	YA42984	Quartz	Mar	31	STRATAGOLD CORPORATION - 100%.	9/29/1980	3/1/2018	Active		106D04		1500045162
Mayo	YA43103	Quartz	MAR	35	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045276
Mayo	YA43104	Quartz	MAR	36	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045277
Mayo	YA63878	Quartz	Mary	3	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046085
Mayo	YA63879	Quartz	Mary	4	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046086
Mayo	YA63882	Quartz	Mary	7	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046089
Mayo	YA63883	Quartz	Mary	8	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046090
Mayo	YA14906	Quartz	Mar	11	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043102
Mayo	YA14910	Quartz	Mar	15	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043106
Mayo	YA14911	Quartz	Mar	16	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043107
Mayo	YA14912	Quartz	Mar	17	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043108
Mayo	YA14913	Quartz	Mar	18	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043109
Mayo	YA14914	Quartz	Mar	19	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043110
Mayo	YA14915	Quartz	Mar	20	STRATAGOLD CORPORATION - 100%.	3/30/1977	3/1/2018	Active		106D04		1500043111
Mayo	YA14916	Quartz	Mar	21	STRATAGOLD CORPORATION - 100%.	3/3/1977	3/1/2018	Active		106D04		1500043112
Mayo	YA14917	Quartz	Mar	22	STRATAGOLD CORPORATION - 100%.	3/3/1977	3/1/2018	Active		106D04		1500043113
Mayo	YA14919	Quartz	Mar	24	STRATAGOLD CORPORATION - 100%.	3/3/1977	3/1/2018	Active		106D04		1500043115
Mayo	YA43101	Quartz	MAR	33	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045274
Mayo	YA43102	Quartz	MAR	34	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045275
Mayo	YA43105	Quartz	MAR	37	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045278

District	Grant Number	Reg Type	Claim Name	Claim Number	Claim Owner	Operation Recording Date	Claim Expiry Date	Status	Quartz Lease	NTS Map Number	Non Std Size	Ops Number
Mayo	YA43107	Quartz	MAR	39	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045280
Mayo	YA43108	Quartz	MAR	40	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045281
Mayo	YA63884	Quartz	Fiji	1	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046091
Mayo	YA63886	Quartz	Fiji	3	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046093
Mayo	YA63889	Quartz	Fiji	6	STRATAGOLD CORPORATION - 100%.	8/11/1981	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500046096
Mayo	YA17802	Quartz	Dave	1	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043503
Mayo	YA17804	Quartz	Dave	3	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043505
Mayo	YA17806	Quartz	Dave	5	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043507
Mayo	YA17807	Quartz	Dave	6	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043508
Mayo	YA17808	Quartz	Dave	7	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043509
Mayo	YA17809	Quartz	Dave	8	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043510
Mayo	YA43015	Quartz	Dave	31	STRATAGOLD CORPORATION - 100%.	10/1/1980	3/1/2018	Active		106D04	Full Quartz fraction (25+ acres)	1500045190
Mayo	YA17979	Quartz	Smoky	58	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043680
Mayo	YA17987	Quartz	Smoky	70	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043688
Mayo	YA17988	Quartz	Smoky	71	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043689
Mayo	YA17993	Quartz	Smoky	80	STRATAGOLD CORPORATION - 100%.	4/24/1978	3/1/2018	Active		106D04		1500043694
Mayo	GR1054		Olive Crown Grant				No Expiry	Active		106D04		

**Appendix C**  
**Tailings Cost Estimate**

**Mar Tungsten Project**  
**Slurried TSF**  
**Table A-1: Unit Cost Summary**

Item No.	Item	Unit Cost	Units
<b>100</b>	<b>Site Preparation</b>		
110	Mobilization and Demobilization	7%	ls
120	Clear and Grub	\$1,000.00	ha
<b>200</b>	<b>Earthworks</b>		
210	Subgrade Preparation	\$1.00	m <sup>2</sup>
220	Compacted Fill	\$ 2.5	m <sup>3</sup>
230	Soil Liner - 1 ft	\$ -	m <sup>3</sup>
240	Underdrain	\$ -	lm
250	Diversion Channel	\$ 100	lm
<b>300</b>	<b>Geosynthetics</b>		
310	2.0mm HDPE	\$0.00	m <sup>2</sup>
311	Single Anchor Trench	\$0.00	lm
<b>400</b>	<b>Overliner</b>		
410	Overliner Material - 2 ft	\$ -	m <sup>3</sup>
<b>500</b>	<b>Piping</b>		
510	Piping	\$ -	lm
<b>700</b>	<b>Facilities</b>		
710	Filter Plant	\$ -	ls
<b>800</b>	<b>Construction and Engineering</b>		
810	Engineering	1%	ls
820	EPCM	5%	ls
830	Owner Costs	5%	ls
<b>900</b>	<b>Closure</b>		
910	Regrade	\$0.00	m <sup>2</sup>
920	Soil - Foundation	\$0.00	m <sup>3</sup>
930	30 mil Geomembrane Liner	\$0.00	m <sup>2</sup>
940	Soil - Rooting Layer	\$0.00	m <sup>3</sup>
950	Soil - Germination Layer	\$0.00	m <sup>3</sup>
	Contingency	40%	ls

Mar Tungsten Project  
Table A-2 Slurried TSF Total Cost



		Subtotal	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Crest Elevation				1100		1115								
Design Tailings Storage Volume (without freeboard) (Mt)				1.8		4.4								
Item No.	Item	Units	Unit Cost	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
100	Site Preparation	ls												
110	Mobilization and Demobilization	ls	7%	3		1								
120	Clear and Grub	ha	\$ 1,000	17		7								
200	Earthworks													
210	Subgrade Preparation	m <sup>2</sup>	\$ 1.00	166,500		70,000								
220	Compacted Fill	m <sup>3</sup>	\$ 3	5,180,000		1,350,000								
230	Soil Liner - 1 ft	m <sup>3</sup>	\$ -	-		-								
240	Underdrain	lm	\$ -	-		-								
250	Diversion Channel	lm	\$ 100	2,500		2,500								
300	Geosynthetics													
310	2.0mm HDPE	m <sup>2</sup>	\$ -	-		-								
311	Single Anchor Trench	lm	\$ -	-		-								
400	Overliner													
410	Overliner Material - 2 ft	m <sup>3</sup>	\$ -	-		-								
500	Piping													
510	Piping	lm	\$ -	-		-								
700	Facilities													
710	Filter Plant	ls	\$ -	-		-								
800	Construction and Engineering													
810	Engineering	ls	1%	-		-								
820	EPCM	ls	5%	-		-								
830	Owner Costs	ls	5%	-		-								
Item No.	Item	Units	Unit Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost	Cost
100	Site Preparation		\$	\$53,845	\$	266,140	\$	238,935	\$	448,770	\$	-	\$	-
110	Mobilization and Demobilization	ls	7%	\$ 936,845	\$	259,140	\$	235,935	\$	441,770	\$	-	\$	-
120	Clear and Grub	ha	\$ 1,000	\$ 17,000	\$	7,000	\$	3,000	\$	7,000	\$	-	\$	-
200	Earthworks		\$	13,366,500	\$	3,695,000	\$	3,367,500	\$	6,304,000	\$	-	\$	-
210	Subgrade Preparation	m <sup>2</sup>	\$ 1.00	\$ 166,500	\$	70,000	\$	30,000	\$	66,500	\$	-	\$	-
220	Compacted Fill	m <sup>3</sup>	\$ 3	\$ 12,950,000	\$	3,375,000	\$	3,337,500	\$	6,237,500	\$	-	\$	-
230	Soil Liner - 1 ft	m <sup>3</sup>	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
240	Underdrain	lm	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
250	Diversion Channel	lm	\$ 100	\$ 250,000	\$	250,000	\$	-	\$	-	\$	-	\$	-
300	Geosynthetics		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
310	2.0mm HDPE	m <sup>2</sup>	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
320	Single Anchor Trench	lm	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
400	Overliner		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
410	Overliner Material	m <sup>3</sup>	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
500	Piping		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
510	Piping	lm	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
600	Facilities		\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
610	Filter Plant	ls	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-
800	Construction and Engineering		\$	1,575,238	\$	435,725	\$	396,708	\$	742,805	\$	-	\$	-
810	Engineering	ls	1%	\$ 143,203	\$	39,611	\$	36,064	\$	67,528	\$	-	\$	-
820	EPCM	ls	5%	\$ 716,017	\$	198,057	\$	180,322	\$	337,639	\$	-	\$	-
830	Owner Costs	ls	5%	\$ 716,017	\$	198,057	\$	180,322	\$	337,639	\$	-	\$	-
	Sub Total of All Capital Cost Items		\$	15,895,583	\$	4,396,865	\$	4,003,143	\$	7,495,575	\$	-	\$	-
	Contingency		\$	6,358,233	\$	1,758,746.16	\$	1,601,257.14	\$	2,998,229.88	\$	-	\$	-
	Total Capital Cost		\$	22,253,816	\$	6,155,611.56	\$	5,604,399.99	\$	10,493,804.58	\$	-	\$	-

NI 43-101 Preliminary Assessment, Dublin Gulch Property – Mar-Tungsten Zone, Mayo District, Yukon Territory, Canada dated October 15, 2007.

Dated this 1 December 2008.

*Signed*

---

Dr. Bart Stryhas, PhD, CPG

*Signed*

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Syver W. More, RG, CPG

*Signed*

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Bret Swanson, B.E., AusIMM

*Signed*

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Michael Levy, P.E., P.G.

*Signed*

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Kenneth P. Black, P. Eng.