1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The National Instrument 43-101 (NI 43-101) compliant report on the Kerr, Sulphurets, and Mitchell (KSM) property has been prepared by Wardrop Engineering Inc. (Wardrop) for Seabridge Gold Inc. (Seabridge) based on work by the following independent consultants:

- Resource Modeling Inc. (RMI)
- Moose Mountain Technical Services (MMTS)
- WN Brazier Associates Inc. (Brazier)
- Klohn Crippen Berger Ltd. (KCBL)
- Bosche Ventures Ltd. (BVL)
- McElhanney Consulting Services, Ltd. (McElhanney)
- BGC Engineering Inc. (BGC)
- Rescan Environmental Services Ltd. (Rescan)

Mr. Michael J. Lechner (P.Geo., RPG, CPG) of RMI visited the property on August 9, 2006, and is the Qualified Person (QP) for all matters relating to the mineral resource estimate.

Mr. Jim Gray (P.Eng.) of MMTS visited the property on September 25, 2008 and is the QP for matters relating to mining, mining capital, and mine operating costs.

Mr. John Huang (Ph.D, P.Eng.) of Wardrop visited the property on September 16, 2008 and is the QP for matters relating to the metallurgical testing review, mineral processing, and process operating costs.

Mr. Frank Grills (P.Eng.) of Wardrop visited the property on September 16, 2008 and is the QP for matters relating to the process capital cost estimate and infrastructure.

Mr. Harold Bosche (P.Eng.) of BVL visited the property on September 16, 2008 and is the QP for matters relating to the infrastructure and tailing delivery and reclaim.

Mr. Neil Brazier (P.Eng.) of Brazier visited the property on September 16, 2008 is the QP for matters relating to power supply.

Mr. Graham Parkinson (P.Geo.) of KCBL visited the property on October 23 to 25, June 9 and 10, as well as June 24 to 29, 2008, and is the QP for matters relating to diversions and seepage collection ponds, tailing dams, tailing access roads, pipeline, haulage, and diversion tunnels, hydro plant, and waste dumps.

Mr. R.W. (Bob) Parolin (P.Eng.) of McElhanney visited the property on June 21, 2008 and is the QP for matters relating to main and temporary access roads.

Mr. Greg McKillop (P.Geo.) of Rescan visited the property on June 9 and 10, and July 29, 2008 and is the QP for matters relating to environmental considerations.

Mr. Warren Newcomen (P.Eng) of BGC visited the property on September 17 to 20, 2008 and is the QP for matters relating to the pit slopes.

This Preliminary Economic Assessment (PEA) addendum has been completed to a +25/-10% level of accuracy.

All dollar figures presented in this section are stated in US dollars, unless otherwise specified. An exchange rate of Cdn$1.00 to US$0.90 has been used.

1.2 GEOLOGY

The KSM property is located in northwest British Columbia (BC) at a latitude and longitude of approximately 56.52°N and 130.25°W, respectively. The property is situated about 950 km northwest of Vancouver, 65 km north-northwest of Stewart, BC and 21 km south-southeast of the Eskay Creek Mine.

The property lies within an area known as “Stikinia”, which is a terrain consisting of Triassic and Jurassic volcanic arcs that were accreted onto the Paleozoic basement. Early Jurassic sub-volcanic intrusive complexes are scattered through the Stikinia terrain and are host to numerous precious and base metal rich hydrothermal systems. These include several well known copper-gold porphyry systems such as Galore Creek, Red Chris, Kemess, and Mt. Milligan.

Seabridge entered into the district to secure the previously identified resources of the Kerr and Sulphurets zones. Between 2002 and 2005, Falconbridge/Noranda conducted target evaluation and testing of several occurrences on the property under an option agreement with Seabridge. That work focused on exploration concepts deemed to be appropriate for Cu-rich porphyry targets. Falconbridge/Noranda withdrew from the KSM Project in 2006 having recognized that the districts potential favoured gold-rich copper porphyry targets. Seabridge followed-up on this previous work delineating the Mitchell zone, expanding the Sulphurets zone, and re-evaluating the Kerr zone.

The Mitchell zone is underlain by foliated, schistose, intrusive, volcanic, and clastic rocks that are exposed in an erosional window below the shallow north dipping

Mitchell Thrust Fault. These rocks tend to be intensely altered and characterized by abundant sericite and pyrite with numerous quartz stockwork veins and sheeted quartz veins that are often deformed and flattened. Towards the west end of the zone, the extent and intensity of phyllic alteration diminishes and chlorite-magnetite alteration becomes more dominant along with lower contained metal grades. Within the core of the zone, pyrite content ranges between 1 to 20%, averages 5%, and typically occurs as fine disseminations. Gold and copper tends to be relatively low-grade but dispersed over a very large area and appears to be related to hydrothermal activity associated with Early Jurassic hypabyssal porphyritic intrusions. In general, within the currently drilled limits of the Mitchell zone, gold and copper grades tend to be remarkably consistent between drill holes, which is consistent with a large, stable, and long-lived hydrothermal system.

RMI created a three-dimensional block model for the Mitchell zone using data from 103 diamond core holes spaced at approximately 100 m intervals totalling 40,416 m of data. Gold and copper grades were estimated with 15-m-long drill hole composites using inverse distance, ordinary kriging, and nearest neighbor methods. RMI validated the estimated block grades using visual and statistical methods. It is RMI's opinion that the Mitchell grade model is globally unbiased and represents a reasonable estimate of insitu resources. Measured, Indicated and Inferred Mineral Resources were classified for a portion of the estimated blocks based on the distance to drilling data coupled with the number of holes that were used in the estimate. A gold equivalent grade (AuEQ) was calculated for the estimated blocks using a gold price of US$650/oz at 70% recovery and a copper price of US$2.00/lb, at 85% recovery. These results are summarized at a 0.50 g/t AuEQ cutoff grade in Table 1.1.

The Sulphurets zone has been delineated by about 15,207 m of core drilling from 65 drill holes that are spaced at intervals ranging between 50 to 100 m. The majority of the drilling data were collected by Placer Dome and previous operators. The mineralized zone, as currently recognized, consists of two distinct systems referred to as the Raewyn Copper-Gold and Breccia Gold zones which are exposed within the lower plate of the Sulphurets Thrust Fault. The Raewyn Copper zone hosts porphyry style disseminated chalcopyrite and associated gold in altered sill-like intrusions and volcanic rocks. Hydrothermal alteration in these rocks is characterized by sericite-pyrite-quartz introduction associated with stockwork veins. Gold and copper are concentrated in the stockwork veins and disseminated in the wallrock. The Breccia Gold zone hosts mostly gold bearing pyrite with minor chalcopyrite and sulfosalts in the matrix to a hydrothermal breccia that cross cut the intrusions of the Raewyn zone.

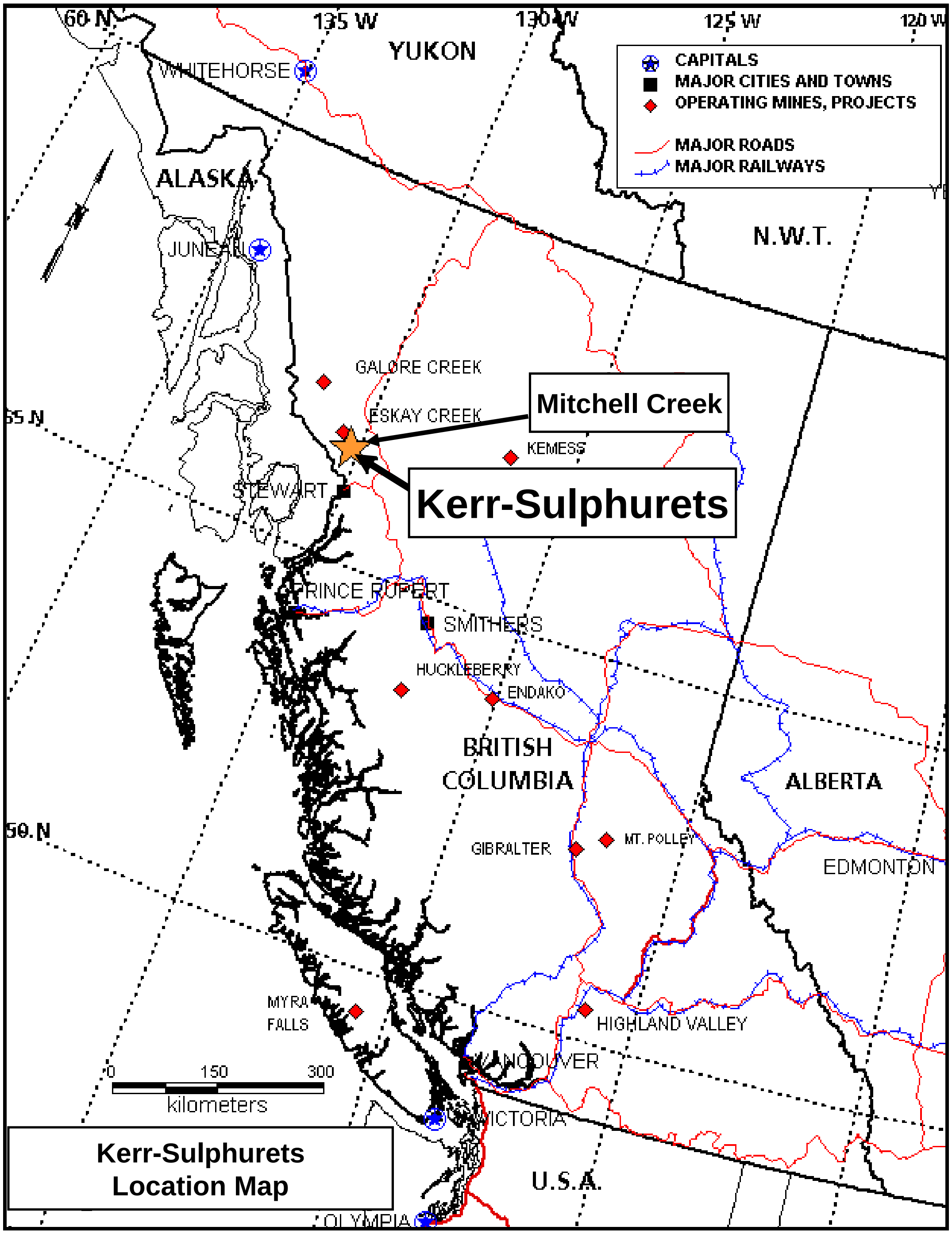
The Kerr zone has been delineated by about 26,409 m of core drilling from 144 holes that are spaced between 50 to 100 m apart. The majority of the drilling data were collected by Placer Dome and previous operators. The Kerr mineralized zone is characterized by finely disseminated, fracture and veinlet controlled chalcopyrite with minor bornite and tennanite associated with an early Jurassic monzonite porphyry that was intruded into Triassic sedimentary and volcanic rocks. Extensive and intensive hydrothermal alteration of the intrusive rocks and surrounding rocks produced a north-south trending zone of sericite-quartz-pyrite rocks. This hydrothermal alteration trend defines the limits of the copper-gold mineral system.

1.3 PROPERTY DESCRIPTION AND LOCATION

The KSM Project area is located in the coastal mountains of northwestern BC. The proposed pit areas lie within the headwaters of Sulphurets Creek, which is a main tributary of the Unuk River. The proposed Tailing Management Facility (TMF) will be located primarily within a tributary of Teigen Creek. A smaller portion of the proposed TMF, which would not be constructed until well into the operational life of the mine, will be located within a tributary of Treaty Creek. Both Teigen and Treaty Creeks are tributaries of the Bell-Irving River, which is itself a major tributary of the Nass River. Both the Nass and Unuk rivers flow to the Pacific Ocean. Figure 1.1 is a general location map of the project area.

The proposed mining area property consists of 30 contiguous mineral claims and 19 contiguous placer claims. These mineral claims cover an area of approximately 6,726 ha while the placer claims cover about 4,554 ha. It should be noted that most of the placer claims lie “over the top” of the mineral claims. Twenty-six of the mineral claims were converted from 58 legacy claims to BC’s new Mineral Titles Online (MTO) system in 2005; 4 of the claims purchased from a third party remain as legacy claims. Barrick Gold retains a capped 1% net smelter royalty on the property. Seabridge has also acquired 45 contiguous mineral claims (Seabee property) that are located about 19 km northeast of the KSM property. These claims were acquired to secure the mineral rights on the TMF and cover 11,160 ha.

Figure 1.1 General Location Map



1.4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

The property lies in the rugged Coastal Mountains of northwest BC, with elevations ranging from 520 m in Sulphurets Creek valley to over 2,300 m at the highest peaks. Valley glaciers fill the upper portions of the larger valleys from just below tree line and upwards. The glaciers have been retreating for at least the last several decades. Aerial photos from 1991 indicate the Mitchell Glacier has retreated almost one kilometre laterally and perhaps several hundred metres vertically since then.

The property is drained by Sulphurets and Mitchell watersheds that empty into the Unuk River, which flows westward to the Pacific Ocean through Alaska. The tree line lies at about 1,240 metres above sea level (masl), below which a mature forest of mostly hemlock and balsam fir abruptly develops. Fish are not known to inhabit the Sulphurets and Mitchell watersheds. Large wildlife such as deer, moose, and caribou are rare due to the rugged topography and restricted access; however, bears and mountain goats are relatively common.

The climate is generally that of a temperate or northern coastal rainforest, with sub-arctic conditions at high elevations. Precipitation is high with an annual total precipitation (rainfall and snow equivalents) estimated to be somewhere between the historical averages for the Eskay Creek Mine and Stewart, BC. This range extends from 1,373 to 2,393 mm (data to 2005). The length of the snow-free season varies from about May through November at lower elevations and from July through September at higher elevations. Access to the property is via helicopter.

Deep water loading facilities for shipping bulk mineral concentrates exist in Stewart and are currently used by the Huckleberry mine. The nearest railway is the CNR Yellowhead route, which is located approximately 220 km to the southeast. This line runs east-west and terminates at the deep water port of Prince Rupert on the west coast of BC.

The property lies on Crown land thus all surface and access rights are granted by the Mineral Tenure Act and the Mining Right of Way Act. There are no settlements or privately owned land in this area and no commercial activity, but there is limited recreational activity in the form of helicopter skiing and guided fishing adventures. The closest power transmission lines run along the Highway 37A corridor to Stewart, approximately 50 km to the southeast. The Eskay Creek mine produces its own diesel generated power. There are proposals to develop local hydroelectric power sources and extend the Highway 37A transmission line northward.

1.5 HISTORY

The modern exploration history of the area began in the 1960s, with brief programs conducted by Newmont, Granduc, Phelps Dodge, and the Meridian Syndicate. All of these programs were focused towards gold exploration. Various explorers were attracted to this area due to the numerous large, prominent pyritic gossans that are exposed in alpine areas. There is evidence that prospectors were active in the area prior to 1935. The Sulphurets zone was first drilled by Esso Minerals in 1969; Kerr was first drilled by Brinco in 1985 and Mitchell by Newhawk Gold in 1991.

In 1989, a 100% interest in the Kerr zone was acquired by Placer Dome from Western Canadian Mines and in the following year they acquired the adjacent Sulphurets property from Newhawk Gold Mines. The Sulphurets property also hosts the Mitchell zone and other mineral occurrences. In 2000, Seabridge Resources acquired a 100% interest from Placer Dome in both the Kerr and Sulphurets properties, subject to capped royalties.

There is no recorded mineral production, nor evidence of it, from the property. Immediately west of the property, small-scale placer gold mining has occurred in Sulphurets and Mitchell zones. On the Bruceside property, immediately to the east and currently owned by Silver Standard Resources, limited underground development and test mining was undertaken in the 1990s on narrow, gold-silver bearing quartz veins at the West Zone.

1.6 Geological Setting

The region lies within “Stikinia”, a terrain of Triassic and Jurassic volcanic arcs that were accreted onto the Paleozoic basement of the North American continental margin in the Middle Jurassic. Stikinia is the largest of several fault bounded, allochthonous terrains within the Intermontane belt, which lies between the post-accretionary, Tertiary intrusives of the Coast belt and continental margin sedimentary prisms of the Foreland (Rocky Mountain) belt. In the Kerr-Sulphurets area, Stikinia is dominated by variably deformed oceanic island arc complexes of the Triassic Stuhini and Jurassic Hazelton groups. An extensive basin formed eastward of the property in the Late Jurassic and Cretaceous that filled with thick accumulations of clastic sedimentary rocks of the Bowser Group. Folding and thrusting due to compressional tectonics in the late Cretaceous generated the area’s current structural features. Remnants of Quaternary basaltic eruptions occur throughout the region.

Early Jurassic sub-volcanic intrusive complexes are common in the Stikinia terrain, and several host well-known precious and base metal rich hydrothermal systems. These include copper-gold porphyry zones such as Galore Creek, Red Chris, Kemess, Mt. Milligan, and Kerr-Sulphurets. In addition, there are a number of related polymetallic zones including skarns at Premier, epithermal veins and subaqueous vein and volcanogenic massive sulfide zones at Eskay Creek, Snip, Bruceside, and Granduc.

1.7 Resources and Mine Planning

RMI constructed three-dimensional block models for the Kerr, Sulphurets, and Mitchell zones. Independent gold and copper grade wireframes were constructed from cross sectional polygons which were then reconciled in bench plan. These wireframes were used by RMI in a multi-pass inverse distance grade interpolation plan. The estimated block grades were validated using visual and statistical methods. Based on those results, it is RMI's opinion that the grade models are globally unbiased and suitable for subsequent pit optimization studies. The estimated block grades were classified into Indicated and Inferred Mineral Resource categories using distance to data in conjunction with the number of drill holes that were used to estimate block grades. The resource information by RMI was reported in a Technical Report filed on SEDAR in March of 2009.

Table 1.1 summarizes the estimated Indicated and Inferred Mineral Resources for each zone. The Mineral Resources tabulated in Table 1.1 were not constrained by conceptual pits although RMI did generate a series of conceptual pits for each zone to test the robustness of the deposits.

Table 1.1 Measured, Indicated and Inferred Mineral Resources for KSM

Zone	Measured Mineral Resources					Indicated Mineral Resources				
	Tonnes (000)	Au (g/t)	Cu (%)	Au oz (000)	Cu lbs (million)	Tonnes (000)	Au (g/t)	Cu (%)	Au oz (000)	Cu lbs (million)
Kerr	No Measured Resources					225,300	0.23	0.41	1,666	2,036
Sulphurets	No Measured Resources					87,300	0.72	0.27	2,021	520
Mitchell	579,300	0.66	0.18	12,292	2,298	930,600	0.62	0.18	18,550	3,692
Total	**579,300**	**0.66**	**0.18**	**12,292**	**2,298**	**1,243,200**	**0.56**	**0.23**	**22,237**	**6,248**

Zone	Measured + Indicated Mineral Resources					Inferred Mineral Resources				
	Tonnes (000)	Au (g/t)	Cu (%)	Au oz (000)	Cu lbs (million)	Tonnes (000)	Au (g/t)	Cu (%)	Au oz (000)	Cu lbs (million)
Kerr	225,300	0.23	0.41	1,666	2,036	69,900	0.18	0.39	405	601
Sulphurets	87,300	0.72	0.27	2,021	520	160,900	0.63	0.17	3,259	603
Mitchell	1,509,900	0.64	0.18	30,842	5,990	514,900	0.51	0.14	8,442	1,589
Total	**1,822,500**	**0.59**	**0.21**	**34,529**	**8,546**	**745,700**	**0.50**	**0.17**	**12,106**	**2,793**

A series of Lerchs Grossman (LG) pit shell optimizations were carried out by MMTS using the resource models provided by RMI.

Mine planning pit optimizations used current projected mining, processing, and general and administrative (G&A) costs and metal recoveries from each of the three separate pit areas: (1) Mitchell, (2) Sulphurets, and (3) Kerr. The 2009 resource definition classifies the mineralization as Indicated and Inferred and both categories were used in the pit optimization. The LG delineated resources are in-situ and use a net smelter return (NSR) cut-off of $6.85 but do not include any mining dilution or mining loss.

MMTS notes that the mine plan incorporates some inferred mineral resources. They are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Therefore MMTS advises that there can be no certainty that the estimates contained in the PEA will be realized.

MMTS identified two sets of potential economic pit limits, a large economic pit limit case called NPV0 and a smaller economic pit limit case called NPV5. Table 1.2 shows that the NPV0 pit has a 51% longer life of mine than the NPV5 LG pit limit, with 44% higher Gold mined and 38% higher Copper mined.

Table 1.2 Comparison of the *NPV0 (Larger) – NPV5 (Smaller)* LG Economic Pit Limit Resources

	Mineralized Material > Cutoff (ktonnes)	Insitu Grades					Waste (kt)	S/R (t/t)	Copper (million Lbs)	Au (million Oz)
		NSR ($/t)	Cu (%)	Au (g/t)	Ag (g/t)	Mo (%)				
NPV5	1,367,702	$21.1	0.210	0.616	2.20	0.0053	2,117,450	1.55	6,346.6	27.1
NPV0	2,062,665	$19.8	0.193	0.588	2.60	0.0057	5,294,872	2.57	8,764.9	39.0
Difference	694,963	-$1.31	-0.018	-0.028	0.40	0.0004	3,177,422	1.02	2,418.4	11.9
Variance	51%	-6%	-8%	-4%	18%	8%	150%	66%	38%	44%

Note: This table does not include drilling results from the 2009 exploration program.

The starter incremental pit phases will likely be the same for both cases and capital payback should occur in approximately the same time frame.

This PEA Addendum study is based on the smaller NPV5 economic pit limit for the following reasons:

- The next phase of study for the KSM project is a Preliminary Feasibility Study (PFS) which under CIM guidelines requires that only measured and indicated class material be used. There is insufficient time prior to the PFS to meet the drilling required to upgrade the inferred class of mineralized material to measured and indicated inside he NPV0 pit limit. Upgrading the assurance classification inside the smaller NPV5 pit is a more realistic exploration goal and is therefore recommended.
- The design work, economic viability and permitting process to expand the pit to the large NPV0 case can be investigated in future studies without disrupting the current 30 Year mine plan.

Table 1.3 Pit Delineated Resources for KSM from LG Analysis

Pit	Percent of Base Case Pit	Category	Mineralized Material > Cutoff (k/t)	Insitu NSR ($/t)	In Situ Grades Cu (%)	Au (g)	Ag (g)	Mo (%)	Waste (kt)	Strip Ratio
Mitchell	75%	Measured	394,080	$22.5	0.191	0.714	3.07	0.0054	-	-
		Indicated	455,835	$21.4	0.180	0.682	2.88	0.0059		
		Inferred	179,198	$13.4	0.082	0.488	2.44	0.0056		
		Sub-Total	**1,029,113**	**$20.4**	**0.167**	**0.661**	**2.88**	**0.0057**	**1,481,592**	**1.44**
Sulphurets	90%	Indicated	89,820	$25.4	0.254	0.708	0.28	0.0087	-	-
		Inferred	83,768	$21.7	0.188	0.671	0.27	0.0066		
		Sub-Total	**173,588**	**$23.6**	**0.222**	**0.690**	**0.28**	**0.0077**	**483,092**	**2.78**
Kerr	85%	Indicated	146,686	$23.2	0.472	0.259	-	-	-	-
		Inferred	18,315	$21.3	0.398	0.147	-	-		
		Sub-Total	**165,001**	**$23.0**	**0.468**	**0.257**	**-**	**-**	**152,766**	**0.93**
ALL		Measured	394,080	$22.5	0.191	0.714	3.07	0.0054	-	-
		Indicated	692,341	$22.3	0.252	0.596	2.45	0.0064		
		Inferred	281,281	$16.4	0.134	0.521	1.75	0.0059		
		Total	**1,367,702**	**$21.1**	**0.210**	**0.616**	**2.20**	**0.0053**	**2,117,450**	**1.55**

Note: This table does not include drilling results from the 2009 exploration program.

1.8 Mining Operations

Detailed pit phases are engineered from the results of a LG sensitivity analysis. Pit Delineated Resources, using an NSR cut-off of $6.24, are tabulated in Table 1.4, which includes an estimated 5% mining dilution and 5% mining loss. Dilution grades represent the average grade of material below the incremental cut-off grade for each pit area. Grades used in the mining section of this report have been interpolated by Inverse Distance Weighting (IDW) as described in the resource section of this report. The grade items used are copper (CUIDW), gold (AUIDW), silver (AGIDW), and molybdenum (MOIDW).

Table 1.4 Summary – Indicated and Inferred Pit Delineated Resource

Pit	Mineralized Material (kt)	Diluted Grades					Waste (kt)	Strip Ratio (t:t)
		NSR (Cdn$/t)	CUIDW (%)	AUIDW (g/t)	AGIDW (g/t)	MOIDW (ppm)		
Mitchell								
M621	110,690	26.4	0.215	0.815	2.98	34.6	49,480	0.45
M622i	114,582	20.4	0.151	0.660	2.92	49.3	147,538	1.29
M623i	182,816	20.9	0.165	0.658	2.65	61.7	151,514	0.83
M624i	263,954	19.8	0.156	0.617	2.87	59.0	717,673	2.72
M625i	355,390	18.8	0.159	0.572	2.82	56.8	424,005	1.19
Sub-total	**1,027,432**	**20.4**	**0.164**	**0.634**	**2.83**	**55.0**	**1,490,570**	**1.45**
Kerr								
K612	166,054	22.729	0.465	0.2506	0	0	157,908	0.95
Sulphurets								
S612	174,144	23.402	0.2152	0.6562	0.28	75.7	489,496	2.81
Total	**1,367,630**	**21.1**	**0.207**	**0.591**	**2.162**	**51.0**	**2,137,974**	**1.6**

Notes: NSR is calculated in Cdn$.
* Mill feed produced from ROM Mineralized Material is 1,293 billion tonnes.
This table does not include drilling results from the 2009 exploration program.

The mine production schedule, based on the detailed pit phases above, vary production annually from the three areas to maximize the NPV returns for the project. This work utilized MineSight® schedule optimization. Large-scale shovels, trucks, and mobile equipment were utilized in the mine planning schedules which are then used for the operating cost estimating. A summary of the Production Schedule is given in Table 1.5.

Table 1.5 Summarized Production Schedule

Production Schedule		Y -2	Y -1	Y1	Y2	Y3	Y4	Y5	Y6-10	Y11-20	Y21-30	LOM
Pit to Mill	kt		-	43,201	43,200	39,452	43,200	43,200	208,733	417,803	411,715	1,250,504
Pit to Stockpile	kt	1,675	1,675	2,847	4,063	1,095	2,123	176	7,843	13,306	10,360	45,165
Pit to Sub Grade	kt	643	643	2,467	1,613	5,538	1,524	209	14,014	24,380	21,338	72,268
Stockpile Reclaim	kt		-	-	-	3,748	-	-	7,267	14,197	17,285	42,497
Stockpile Size	kt	1,675	3,350	6,198	10,261	7,608	9,732	9,908	10,484	9,594	2,669	
Total Mineralized Material Mined	kt	2,318	2,318	48,515	48,876	45,985	46,847	43,585	230,590	455,490	443,413	1,367,938
Plant Feed	kt	-	-	43,201	43,200	43,200	43,200	43,200	216,000	432,000	429,000	1,293,001
AUIDW	g/t	-	-	0.826	0.857	0.686	0.628	0.795	0.644	0.582	0.543	0.609
CUIDW	%	-	-	0.214	0.211	0.165	0.129	0.221	0.146	0.164	0.313	0.214
AGIDW	g/t	-	-	2.34	2.90	3.15	2.19	4.19	2.58	2.67	1.18	2.21
MOIDW	ppm	-	-	40.9	41.1	42.9	61.0	25.2	69.0	61.1	39.2	52.0
Total Waste Mined	**kt**	**44,999**	**44,999**	**80,000**	**79,998**	**91,875**	**94,999**	**99,998**	**539,990**	**641,832**	**419,284**	**2,137,974**
Strip Ratio (waste mined/ Mineralized Material mined)	t/t	19.4	19.4	1.6	1.6	2.0	2.0	2.3	2.3	1.4	0.9	1.6
Strip Ratio (waste mined/Plant Feed	t/t	-	-	1.9	1.9	2.1	2.2	2.3	2.5	1.5	1.0	1.7
Total Material *Mined*	**-**	**47,318**	**47,318**	**128,515**	**128,874**	**137,860**	**141,846**	**143,583**	**770,579**	**1,097,321**	**862,697**	**3,505,911**
Total Material *Moved*	**-**	**47,318**	**47,318**	**128,515**	**128,874**	**141,608**	**141,846**	**143,583**	**777,846**	**1,111,518**	**879,982**	**3,548,408**

The mining operations will be typical of open-pit operations in mountainous terrain in western Canada and will employ tried and true bulk mining methods and equipment. There is a wealth of operating and technical expertise, services, and support in western Canada, BC, and in the local area for the proposed operations. A large capacity operation is being designed and large scale equipment is specified for the major operating areas in the mine to generate high productivities, which will reduce unit mining costs and will allow the lowest mining cost to be achieved. Large scale equipment will also reduce the labour requirement on site and will dilute the fixed overhead costs for the mine operations. Much of the general overhead for the mine operations can be minimized if the number of production fleets and the labour requirements are minimized.

Considerable refinement of mine planning and schedules remains to be done during the next study. An improved Resource Model, with 2009 Mitchell and Sulphurets drilling results included, together with expanded geotechnical information on high wall capabilities should improve pit scheduling, optimization results, and overall economics.

1.9 Metallurgical Test Review

Several metallurgical test programs were carried out to assess the metallurgical response of KSM mineralization. The most recent test programs were performed in 2007 and 2008. Laboratory testing programs have developed a conventional grinding and flotation circuit for Mitchell and Sulphurets mineralization producing copper/gold flotation concentrate and additional gold/silver extraction via a leach circuit treating by-product, gold-bearing sulphide concentrates.

According to the metallurgical test results of the 2008 G&T test program, preliminary estimates for copper, gold, silver, and molybdenum metallurgical performances were developed. In the projection, the metal recoveries are based on the combined process of flotation and cyanidation. The flotation process will produce an average 25% copper concentrate grade and a by-product molybdenite flotation concentrate. The cyanidation leach process on gold-bearing pyrite products will produce a gold-silver dore.

1.10 Mineral Processing

The proposed flotation process is projected to produce a copper/gold concentrate with 25% copper grade containing 60% of the mill feed gold values. Copper flotation recoveries should average 86% with some variability due to copper head changes. A cyanidation circuit (CIL) treating gold-bearing pyrite flotation products will increase the projected overall gold recovery from the Mitchell zone to around 76%. Silver recovery from the flotation and leaching circuit is expected to be 73% on average. A separate flotation circuit has been included to recover molybdenite from copper concentrate when higher-grade molybdenite mineralization is processed in the mill feed.

The mill feed for the KSM project will be processed at an average rate of 120,000 t/d. The process plant will consist of three separate facilities: an ore crushing/grinding and handling facility at the mine site, a ground ore slurry transportation tunnel facility and a main process facility at the plant site, including secondary grinding, flotation, regrinding, leaching and dewatering.

The primary comminution plant at the Mitchell valley mine site will reduce the mill feeds from 100% passing 1,200 mm to 80% passing 180 μm by three stages of crushing and one stage of grinding. The crushing will include primary crushing by gyratory crushers, secondary crushing by cone crushers and tertiary crushing by high pressure grinding rolls (HPGR). The primary grinding circuit, consisting of four conventional ball mills, will grind the crushed materials to a particle size of 80% passing 180 microns.

Through a 23-km tunnel, the ground mill feed will be transported by three stages of pumping to the main plant site, which is located north east of the Mitchell pit. The tunnel will also be used for electrical power transmission and providing maintenance services between the main plant site and the Mitchell valley mine areas.

The main process plant will consist of secondary grinding, flotation, concentrate dewatering, cyanide leaching, gold recovery, and related process facilities. The slurry materials from the primary comminution circuit will be further ground down to 80% passing 125 µm in grinding circuits consisting of ten energy efficient tower mills in closed circuit with hydrocyclones. The ground material will then have copper/gold/molybdenum minerals concentrated by conventional flotation and also produce a gold-bearing pyrite concentrate for gold leaching. Depending on molybdenum content in the copper/gold concentrate, the concentrate will be further processed to produce a copper/gold concentrate and a separate molybdenum concentrate. The gold-bearing pyrite flotation concentrate together with the copper cleaner flotation tailing from the copper/gold cleaner circuit will be leached with cyanide for additional gold and silver recovery. Prior to storing in the tailing facility, the residues from the cyanide leaching circuit will be washed and subjected to cyanide recovery and destruction.

1.11 Tailing and Waste Management

The flotation tailing and the cyanide leach residues will be pumped to the tailing management facility (TMF) located near the process plant. This large storage impoundment has capacity for the 30 years of KSM mined resource (1,296,000 kt) with impoundment dam heights of 150 m. Additional storage capacity would be possible by raising the dams or by using another storage area in the Tiegen Creek drainage area. Cyclone sands will be generated from the low-sulphur flotation tailing and used for dam construction to impound the bulk of the tailing products. The high-sulphide gold leach tailing product will also be impounded in the tailing pond and eventually covered by water or low-sulphide flotation tailing product. Water will be managed in the impoundment during operations, by maximizing the return of decanted tailing solutions and minimizing the input of fresh water to the process circuits.

In the Mitchell valley the waste rock from the operation will be segregated according to its potential to generate acid and soluble metals. A comprehensive testing program using blast-hole cuttings will be established to characterize all rock removed from the pits. This program will be integrated with the ore control program to ensure that mined material is correctly directed to the process plant, the Non-potentially Acid Generating (NAG or NPAG – abbreviations are used interchangeably) storage area, or the Potentially Acid Generating (PAG) waste storage area.

A PAG waste rock dump will be located adjacent to the Mitchell pit and will be designed to isolate the PAG waste rock from ground water and surface runoff. Leachate resulting from internal moisture and precipitation will flow to the treatment plant where pit seepage and dump waters will be treated prior to release. A conventional high density sludge treatment plant will be employed for the treatment. This plant will also treat haulage tunnel water.

A separate NAG waste rock dump may also be required. An additional PAG dump may be constructed on the south side of the Sulphurets ridge.

Other overburden will be disposed in the NAG waste rock dumps. Overburden will be tested for acid generation prior to use.

Some overburden and glacial till will be stored for later use as a cover for the waste rock dumps to create a moisture barrier and a growth medium for eventual revegetation. In addition, the NAG waste rock will be used as an erosion resistant cover and for basal drains for the PAG waste rock dump and to line runoff channels for non-contact surface water. Much of the current surface area of the zones is barren of vegetation due to the relatively recent glacial ice recession.

1.12 Environmental Considerations

The KSM project requires certification under both the *British Columbia Environmental Assessment Act* (BCEAA) and *Canadian Environmental Assessment Act (*CEAA) processes. In addition, numerous federal and provincial licences, permits and approvals will be required to use, construct and operate the project. The BC Environmental Assessment process was initiated in March of 2008 with submittal of a "Project Description" to the BC Environmental Assessment Office (BC EAO). Federal regulatory authorities were also informed of the proposed project at that time

On-site baseline environmental work was initiated by Rescan Environmental Services Ltd. in the spring of 2008 and continues in 2009, with the second year of a planned two year baseline program. Rescan is leading this work, the preparation of the Environmental Assessment and the submissions required to acquire operating permits. Seabridge and its team are involved with consultation meetings with local communities, regulatory agencies, regional and municipal governments, Treaty Nations and the First Nations to advance the proposed project through the review processes.

1.13 INFRASTRUCTURE

The plant and mine facility layouts are located to take advantage of the natural topography and, to the extent possible, minimize the impact on the environment.

Parallel twin tunnels connected by crosscuts containing the slurry and return water pipelines and services will be constructed to deliver the mill feed for processing and tailing storage. The tunnel will extend from the north side of the Mitchell zone approximately 23 km to the northeast into the upper reaches of the Tiegen Creek valley. There is a saddle point approximately 16km from the Mitchell portal where the tunnel daylights.

Highway 37, a major road access to northern BC passes within 14 km of the KSM Project's proposed tailing site. A preliminary road study by McElhanney proposes a 14 km routing to the plant site and 1km spur road to the Teigen Creek side of the tailing facility. A temporary construction road approximately 15 km long, will be provided from the plant site to the tunnel saddle point to facilitate tunnel construction and PAG rock removal from the tunnel saddle portals. Road access to Mitchell Creek will be provided by a 34 km continuation of the Eskay Creek Mine access road.

Copper concentrates (averaging approximately 1,000 t/d) produced at the process site will be filtered near the plant site and transported 200 km by contract trucking firms on Highway 37 and 37A to a storage site near Stewart, BC. Concentrates will be loaded and shipped via ocean transport to overseas smelters.

1.14 POWER SUPPLY AND DISTRIBUTION

The northern most extension of the current BC Hydro grid in this area of the province is a 220 km long, 138 kV transmission line to Meziadin Junction from the Skeena substation near Terrace, BC. The community of Stewart is provided service by a continuation of the transmission line from Meziadin. The existing 138 kV transmission line does not have adequate capacity to supply an extension to the KSM property. There is a currently proposed new 287 kV "Northwest Transmission Line" (referred to as NTL) from Skeena substation following in proximity to Highway 37 past the KSM property as far north as Bob Quinn Lake. However, due to the uncertainty of this project and the estimated costs, it is proposed to take regular service from BC Hydro at Meziadin Junction under their bulk rate schedule 1823.

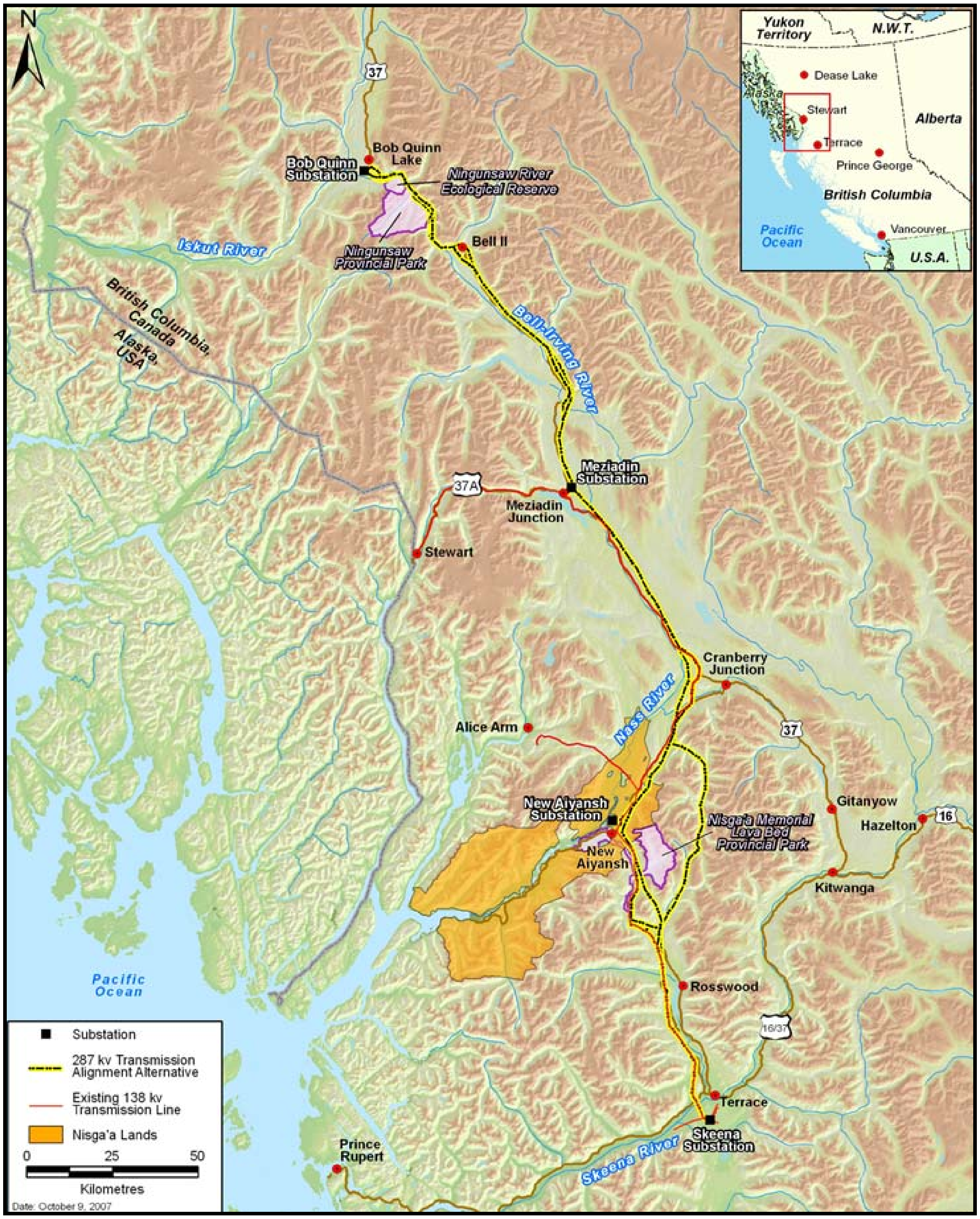
This will require significant system reinforcement on the part of BC Hydro, including the construction of a new 287 kV transmission line from Skeena to Meziadin (similar to the current NTL plans). As the KSM load is large, in the range of 150 MW, BC Hydro's revenues will be sufficient such that they would under current policy fund this construction, only requiring a bond over a seven year period from KSM. Consequently, the KSM Project would take service at Meziadin and would then be responsible for construction of a 287 kV transmission line from Meziadin to Snowbank Creek, just north of Bell II (102 km in length) and then a further 14 km interconnection to the KSM No. 1 substation, located adjacent to the flotation plant.

Overhead power lines and underground cables will be run from feeder breakers in the 287 kV No. 1 Flotation step-down substation to distribute power around the plant site.

Service to the Mitchell mine and mill site would be provided by a 287 kV cable (23 km in length) through the slurry pipeline tunnel connecting the plant site. This supply would terminate at the 287 to 25 kV step-down Substation No.2 at in the proposed Mitchell plant area. Twenty-five kV cables will feed the mill building and 25 kV overhead power lines will extend from the substation to the primary crusher area and around the rim of the open pit mines to service pit equipment.

The PEA capital and operating cost estimates were developed with these electrical service concepts. A map of the proposed KSM and BC Hydro transmission lines, which would be essentially the same as the proposed NTL installation, is shown in Figure 1.2.

Figure 1.2 Map of the Proposed Northwest Transmission Line



The recommended power supply option involves construction of 103 km of 287 kV transmission line from Meziadin Junction, generally parallel to Highway 37, to Snowbank Creek, a point just north of Bell II. The plan is based on use of the same right-of-way and the associated environmental assessment review process, currently underway, for the NTL project and assumes cooperation by BCTC and the BC government. The required environmental studies for the NTL are currently proceeding.

The 287 kV branch line to the mine (also by KSM) includes 14 km of 287 kV transmission line generally following the mine access road.

1.15 CAPITAL COST ESTIMATE

An initial capital of US$3.083 B is required for the project, based on capital cost estimates developed by the following consultants:

- MMTS – mine capital costs
- KCBL – tailing, water management and mine waste construction costs
- BVL – conveying, and piping costs
- Wardrop assisted by Thyssen Mining Construction of Canada Ltd, (TMCC) – tunnel costs
- Wardrop – process plant and associated infrastructure costs
- Brazier – power supply costs
- McElhanney – access road costs.

All currencies in this section are expressed in United States dollars (US$). Costs in this report have been converted using a fixed currency exchange rate of Cdn$1.00 to US$0.90. The expected accuracy range of the capital cost estimate is +25%, -10%.

Initial capital has been designated as all capital expenditures required to produce concentrate and dore. A summary of the major capital costs is shown in Table 1.6.

Table 1.6 Capital Cost Summary

Description	US$000
Direct Works	
Overall Site	84,000
Mining	320,000
Minesite Crushing and Grinding	381,000
Tunnel Pumping	122,000
Plantsite Grinding and Flotation	248,000
Tailing Dam	118,000
Ore Haulage Tunnel	138,000
Mitchell Diversion Tunnel	36,000
Mitchell Diversion Hydro Plant	3,000
Water Treatment	91,000
Site Services and Utilities	11,000
Ancillary Buildings	65,000
Plant Mobile Fleet	6,000
Temporary Services	121,000
Roads, Power & Infrastructure	258,000
Subtotal	**2,002,000**
Indirects	
Project Indirects	645,000
Owner's Costs	45,000
Contingencies	391,000
Subtotal	1,081,000
Total Capital Cost	**$3,083,000**

1.16 OPERATING COST ESTIMATE

The operating cost for the KSM Project was estimated at US$10.57/t milled. The estimate was based on an average annual process rate of 120,000 t/d milled.

The updated costs in this section are stated in Q2 2009 US dollars, however, the remaining costs are in Q3 2008 US dollars. When it was required, certain costs in this report have been converted using a fixed currency exchange rate of Cdn$1.00 to US$0.90 from Seabridge. The expected accuracy range of the operating cost estimate is +25%, -10%.

Power will be supplied by grid lines at an average cost of US$0.039/kWh. Process power consumption estimates are based on the Bond work index equation for specific grinding energy consumption and estimated equipment load power draws for the rest of the process equipment. The power cost for the mining section is included in the mining operating cost. Power costs for surface service is included in site services.

Table 1.7 Average Operating Cost Summary

	US$/a (000's)	US$/t Milled
Mine		
Mining Costs - Mill Feed	173,744*	4.02*
Mill		
Staff & Supplies	176,544	4.03
Power (Process only)	40,567	0.93
G&A and Site Service		
G&A	32,213	0.75
Site Service	5,913	0.14
Tailing and Water Treatment		
Tailing	6,610	0.15
Water Treatment	23,905	0.55
Total	**459,526**	**10.57**

* including pre-production operating costs of US$168.2 M.

The operating costs are defined as the direct operating costs including mining, processing, tailing storage, water treatment, and G&A. Sustaining capital includes all capital expenditures after the process plant has been put into production.

1.17 ECONOMIC EVALUATION

Metal revenues projected in the KSM cash flow models were based on the average metal values indicated in Table 1.8.

Table 1.8 Metal Production from KSM Project

	Years 1 to 8	Life of Mine
Total Tonnes to Mill (000s)	345,601	1,293,001
Annual Tonnes to Mill (000s)	43,200	43,200
Average Grades		
Gold (g/t)	0.711	0.609
Copper (%)	0.176	0.215
Silver (g/t)	2.74	2.21
Molybdenum (ppm)	52.8	51.9
Total Production		
Gold (000s oz)	6,130	19,278
Copper (000s lb)	1,091,872	5,259,442
Silver (000s oz)	22,249	67,054
Molybdenum (000s lb)	14,859	60,043
Average Annual Production		
Gold (000s oz)	766	644
Copper (000s lb)	136,484	175,721
Silver (000s oz)	2,781	2,240
Molybdenum (000s lb)	1,857	2,006

A full production schedule, which maximizes mine and mill production, was carried forward to a cash flow analysis. In the base case scenario, the three year average prices for gold, copper, silver, and molybdenum were used. The cash flow analysis for this scenario shows that the project has a 30 year mine life and a positive cash flow of US$11,570 billion at a 0% discount rate. The analysis shows that the project has a positive net present value (NPV) of $3.424 billion at 5% discount rate. The project NPV decreases to $1.356 billion in the alternate case but increases to $3.703 billion when using the metal spot prices on July 17th, 2009. With the base case three-year metal price average, the cash cost per ounce of gold (net of by-product credits) is negative US$51.00. The corresponding total cost per ounce of gold produced is US$178.00.

The financial analysis shows that the internal rate of return (IRR) will be 12.6% for the base case and will decrease to 8.5% for the alternate case and increase to 13.6% for the spot price case. The payback period is 6.6 years for the three- year base case, 8.8 years for the alternate case, and 5.8 years for the spot price case.

Table 1.9 summarizes the key inputs to the financial model for the base case and the KSM Projects financial results for the alternate cases.

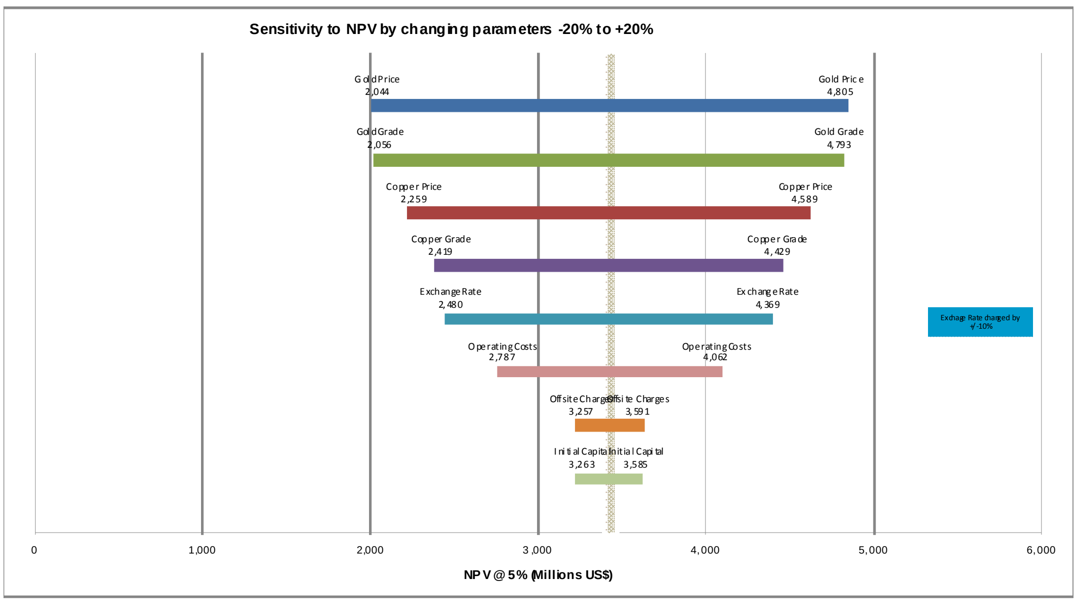
Table 1.9 Summary of the Economic Evaluations

		Base Case 3-year Average	Alternate Case	Spot Price July 27 2009
Gold	US$/oz	778	800	950
Copper	US$/lb	3.00	2.00	2.50
Silver	US$/oz	13.68	12.50	14.00
Molybdenum	US$/lb	26.05	15.00	15.00
Exchange Rate	US:Cdn	0.90	0.90	0.90
NPV (at 0%)	US$B	11.570	6.326	11.707
NPV (at 5%)	US$B	3.424	1.356	3.703
IRR	%	12.6	8.5	13.6
Cash Cost/oz Au	US$/oz	-51	243	114
Payback Period	years	6.6	8.8	5.8
Total Cost/oz	US$/oz	178	472	343

1.17.1 *Sensitivity Analysis*

Figure 1.3 displays the sensitivity to NPV, analyzed by variations of metal grades and prices, capital and operating costs, and the exchange rate.

Figure 1.3 Base Case Sensitivity to NPV at 5% Discount Rate



1.18 PROJECT DEVELOPMENT PLAN

The project will take approximately five years to complete after receipt of operating permits. Section 25.0 gives a high-level project schedule.

1.19 OPPORTUNITIES AND RECOMMENDATIONS

The following sections outline areas to investigate for project improvements.

1.19.1 GEOLOGY/RESOURCE RECOMMENDATIONS

- re-survey drill hole collar locations for holes that show an apparent difference in elevation relative to the new topographic base map
- complete drilling programs to upgrade the currently identified Inferred Resources to Indicated Resources
- construct an updated geological model for the Kerr deposit
- construct a waste rock classification model for each pit area in order to classify waste material.

1.19.2 MINING RECOMMENDATIONS

- evaluate extended mine life with higher Strip Ratio ore as presented in the NPV(0) mine case
- additional drilling/resource modeling for improved resource and geotechnical confidence, reducing waste stripping in the early mine schedules
- detailed hydro-geology evaluation of the area to improve the accuracy of pit dewatering design and to assess the diversion and water management for the mining area
- ongoing evaluation of an overall waste rock management plan to reduce haul distances from Kerr and South Mitchell pits
- alternative mining methods and technologies studies to improve efficiencies and reduce fuel consumption
- further climate studies and operability studies to mitigate disruptions and improve safety during extreme mountain weather conditions
- risk assessment and mitigating study for implementing tasks
- a detailed geotechnical study of the potential pit slope angles to refine the project economics.

1.19.3 PROCESS RECOMMENDATIONS

- further evaluation of the use of high pressure grinding rolls (HPGR) to reduce operating costs for energy and grinding media
- further metallurgical test work and mineralization evaluations for each of the pit areas.

1.19.4 OTHER RECOMMENDATIONS

- a geohazard assessment including snow and avalanche loss control programs as the project infrastructure locations become more defined
- optimization of waste dump locations together with appropriate water management during placement and after mine reclamation has been completed
- crushing and conveying of mill feed and waste from Kerr, rather than using mine haul trucks to transport the mill feed and waste long distances over adverse topography; storage of high-PAG Kerr waste adjacent to Mitchell pit for subsequent flooded disposal within the pit upon Mitchell pit closure
- options involving pumping of concentrate to Stewart, rather than concentrate trucking, indicate marginal economical benefit; however, further evaluation work may be warranted in the project's pre-feasibility stage
- evaluation of other alternative sites for PAG dumps that allow geological confinement and collection of leachate from the surface of low permeability rock areas.