

## 1.0 TITLE PAGE

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**SLEEPER GOLD PROPERTY**  
**Abbreviated Executive Summary**  
**of**  
**PRELIMINARY ECONOMIC ASSESSMENT 2009**

Slumbering Hills  
Awakening Mining District  
Humboldt County, Nevada, U.S.A.

**X-CAL RESOURCES LTD.**

October 19, 2009

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## 3.0 ABBREVIATED EXECUTIVE SUMMARY

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### 3.1 INTRODUCTION

This report summarizes the highlights of the Executive Summary of a Preliminary Economic Assessment (PEA) of the Sleeper Gold Project that is nearing completion.

The PEA is a National Instrument 43-101 (NI 43-101) compliant report on the Sleeper property that has been prepared for X-CAL Resources Ltd (Company) by Moose Mountain Technical Services (MMTS) under the direction and supervision of Mr. Tom Healy P. Eng. and is based on a previous NI 43-101 compliant report "Technical Report 2008 on the Sleeper Gold Property" dated September 22, 2008 and authored by Mr. Gary Giroux (Giroux Consultants Ltd.) and co-authored by Messrs. Larry Kornze, P. Eng. and Larry Martin, CPG.

### 3.2 HISTORY AND GEOLOGY

The 30 square mile Sleeper Gold Property, 100% controlled by X-CAL and located in Nevada, includes a historic open pit mine operated by AMAX Gold from 1986 until 1996, which produced 1.66 million ounces of gold, and 2.3 million ounces of silver.

The Sleeper Gold Property area is situated within the western part of the Northern Nevada Rift geologic province, along the western flank of the Slumbering Hills.

Drilling completed in 2007 has led to a new geologic interpretation of mineralization at Sleeper.

### 3.3 RESOURCES

A resource estimate completed for X-Cal in 2008 documented the in-ground resource contained within the Facilities area east of the Sleeper pit and the West Wood area south west of the pit. The two areas estimated contain a total of 2,328 holes from an overall database of 4,131 drill holes provided by X-Cal.

Cross sections in Figure 3.1 and Figure 3.2 show the interpreted geology and estimated block grades respectively within the Facilities Area while cross sections of Figure 3.3 and Figure 3.4 show the interpreted geology and estimated block grades for the West Wood Area. Estimated blocks were classified as indicated or inferred based on continuity.

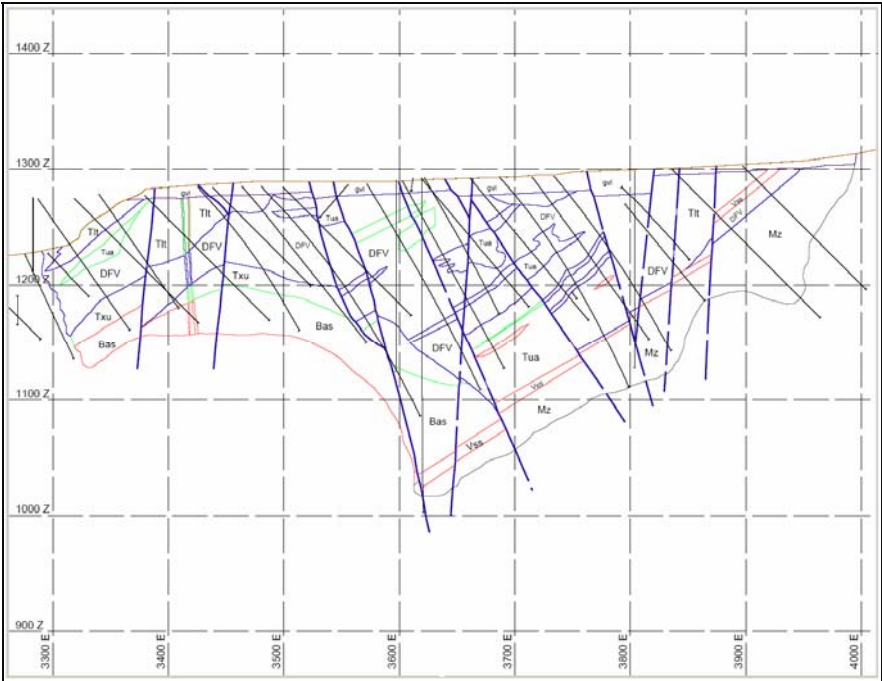


Figure 3.1 Facilities Area, Section 4576200N – Interpreted Geology

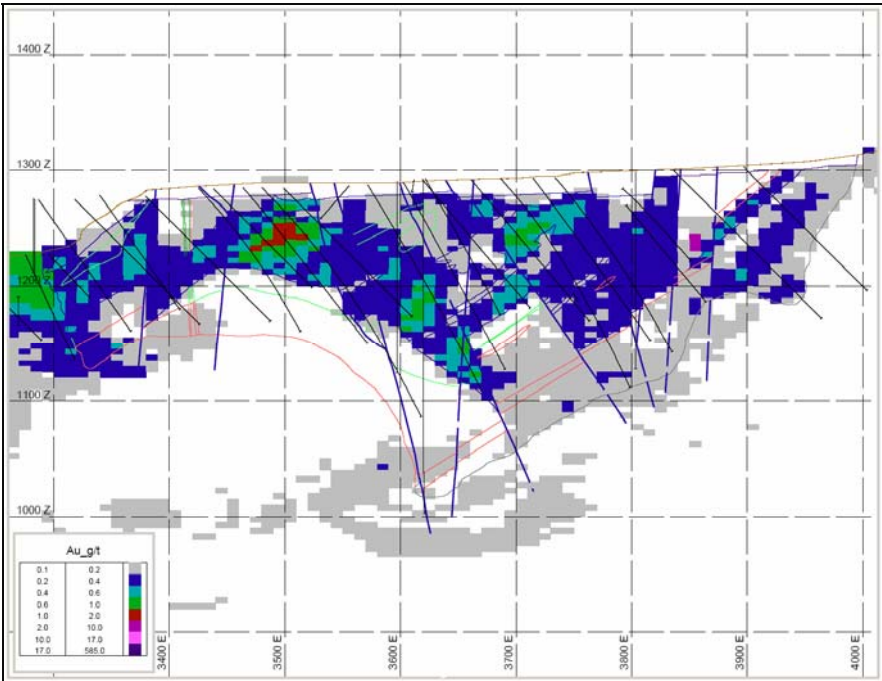
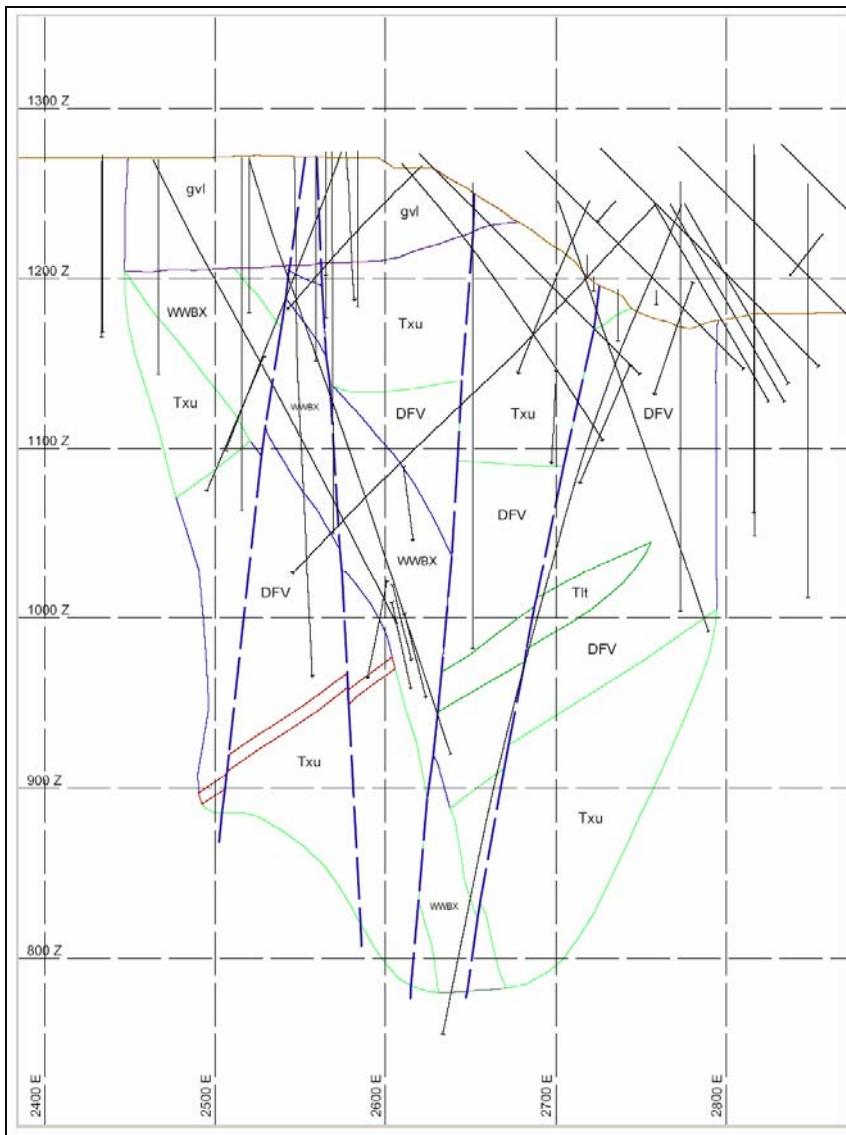
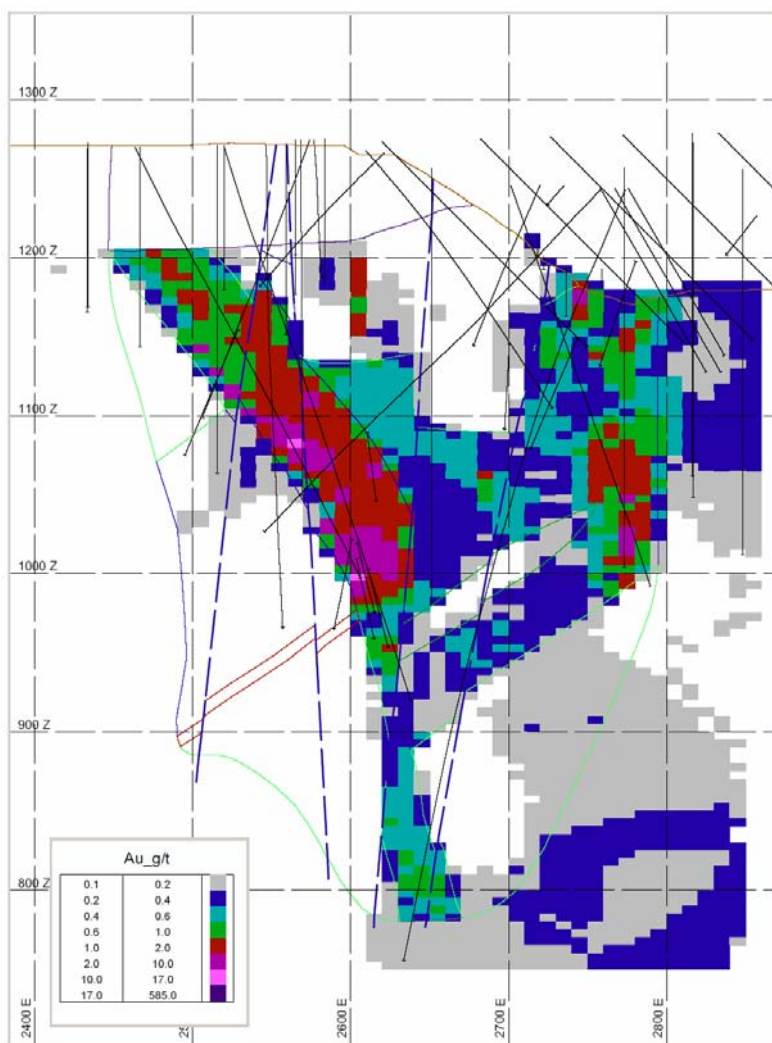


Figure 3.2: Facilities Area, Section 4576200N – Gold Model



**Figure 3.3: West Wood Area, Section 4575525N – Interpreted Geology**



**Figure 3.4: West Wood Area, Section 4575525N – Gold Model**

The in-ground resource present at Sleeper is summarized at a 0.40 g/t cutoff in Table 3-1.

**Table 3-1: Summary of In-Ground Resource**

Class	Au Cutoff (g/t)	Tonnes	Au (g/t)	Ag(g/t)	ozs Au	Ozs Ag
<b>Indicated</b>	0.40	26,960,000	0.87	5.80	750,000	5,030,000
<b>Inferred</b>	0.40	20,000,000	0.59	6.60	380,000	4,240,000

A report by E. K. Zoutomou PhD., Consulting Metallurgist has been completed which reconciled metals in the leach pads (Heap Leach Pad stockpile) and mill tailings (Mill Tailings) from the previous operations to quantify potential recoverable resources. The report indicated approximately 725,000 ounces of gold and 3,194,000 ounces of silver are currently in inventory in the mill tailings and in the heap leach pads.

The above-ground inventory of 44.3 million tonnes averaging 0.41 g/t Au and 0.88 g/t Ag contained in Heap Leach Pads 1 to 4 and Run of Mine (ROM) pads north and Sleeper Gold Property – Summary of Preliminary Economic Assessment Page 6 of 21

south and the 6 million tonnes averaging 0.68 g/t Au and 7.67 g/t Ag in the Mill Tailings would total a combined 0.714 million ounces of Au and 2.7 million ounces of Ag in above ground inventory.

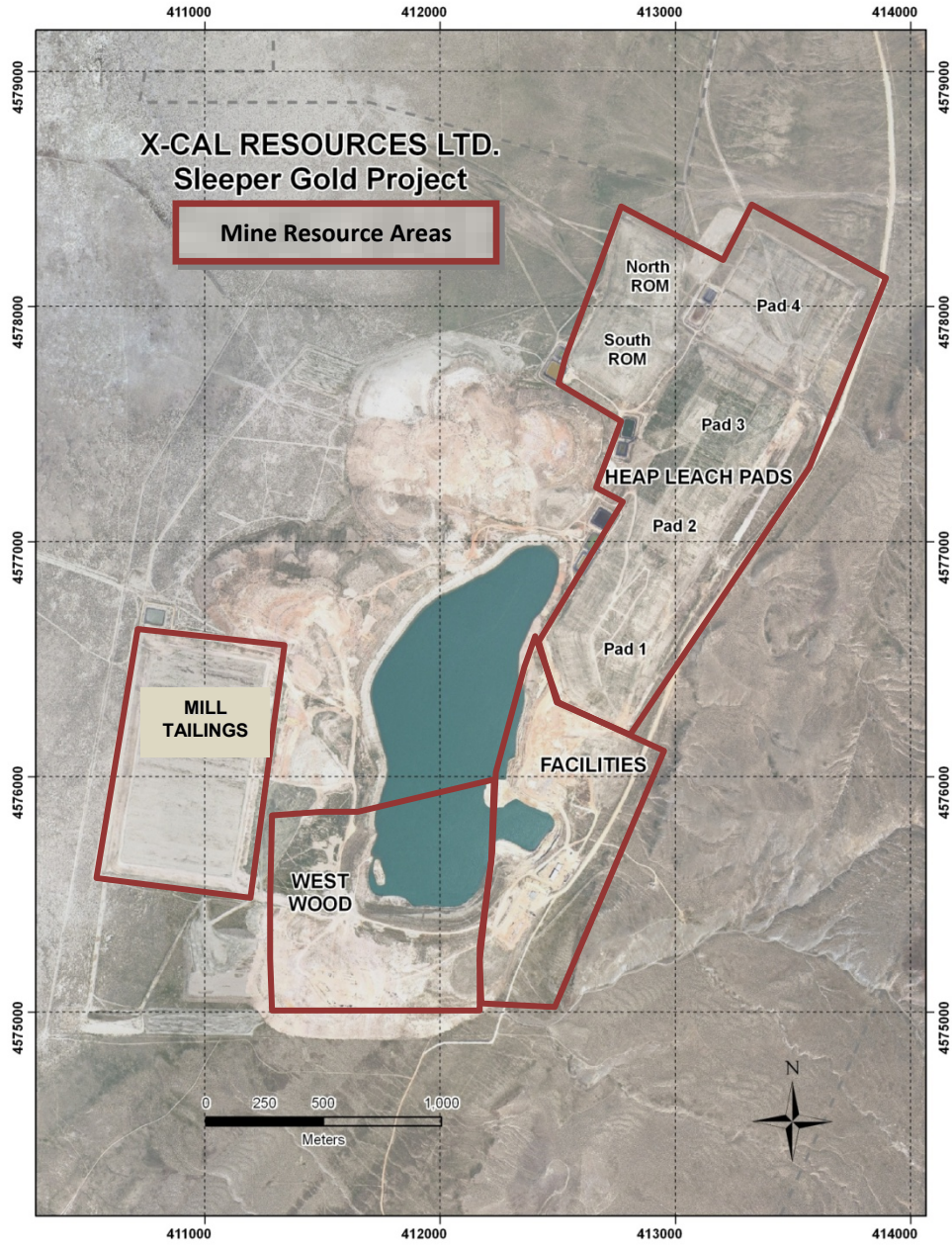
**Table 3-2: Above-Ground Inferred Resource Located in the Heaps and Tails**

AREA	Tons Placed	Tonnes	Avg. Grade Au		Au (oz)	Avg. Grade Ag		Ag (oz)
			(oz/t)	(g/t)	Au Remaining	(oz/t)	(g/t)	Ag Remaining
Pad 1	7,595,860	6,890,919	0.015	0.501	110,935			
Pad 2	5,981,701	5,426,564	0.012	0.411	71,646			
Pad 3	12,581,794	11,414,129	0.012	0.417	152,932			
Pad 4	9,084,620	8,241,513	0.012	0.419	111,046			
ROM South	4,127,400	3,744,353	0.010	0.337	40,584			
ROM North	9,484,900	8,604,645	0.010	0.347	96,110			
Total	48,856,275	44,322,122	0.012	0.409	583,254	0.026	0.877	1,249,983
Mill Tailings	6,600,000	5,987,481	0.020	0.679	130,666	0.224	7.671	1,476,748
<b>TOTAL</b>	<b>55,456,275</b>	<b>50,309,603</b>	<b>0.013</b>	<b>0.441</b>	<b>713,920</b>	<b>0.049</b>	<b>1.686</b>	<b>2,726,731</b>

### 3.4 MINE PLANNING

Sleeper Mine planning is developed for the exploitation of both the in-ground and above-ground resources in the areas shown below





**Figure 3.5: : Aerial photo of Sleeper 2005 – (red lines illustrate major resource areas)**

The economic and technical viability of each of the above Sleeper resources are assessed independently. This is followed by optimization studies to establish a potential production schedule for the Sleeper project.

**3.4.1 OPEN PIT MINING**

A series of Lerchs Grossman (LG) pit shells have been generated in MineSight® using the in-ground resource model provided by Giroux, and using estimated mining, processing, and general and administrative (G&A) costs and typical metal recoveries.



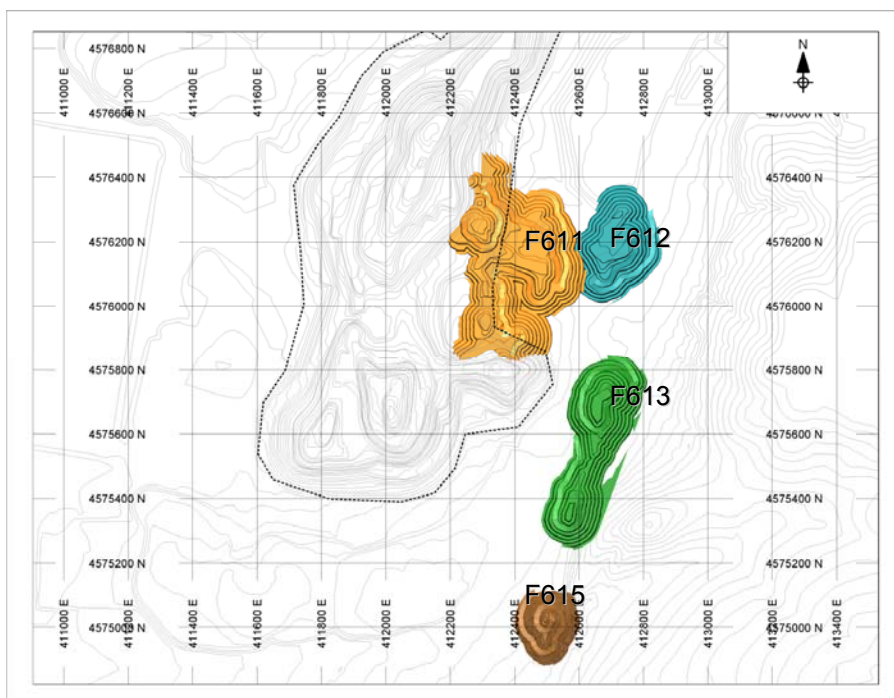
The 2008 in-ground resource definition classifies the mineralization as Indicated and Inferred and both categories are used in the pit optimization. It should be noted that mine planning incorporates some Inferred mineral resources. They are considered too geologically speculative to have the economic considerations applied to them that would enable them to be categorized as mineral reserves but are considered suitable at this level of study to be used as a potentially mineable resource.

The assessment shows that in-ground oxide ore in the Facilities area is potentially economically mineable by open pit methods.

There is insufficient metallurgical data to determine gold recovery from the in-ground sulphide mineralization using traditional processing methods. The sulphide pits are therefore not used in the PEA. Further metallurgical tests will be required before the sulphides outside the oxide pit limits can be considered for inclusion in a potentially economically viable plan.

### OXIDE DESIGNED PIT PHASES

Three conceptual oxide starter pits have been designed in the Facilities Area using the LG pit shells as guides. The oxides starter pits are ranked in order by economic margin and are named F611, F612, F613, and F615 and are illustrated in the figure below.



**Figure 3.6: Sleeper Oxide Starter Pits**

An incremental phase oxide pit mines beneath F611, F612 and F613 to establish the final oxide pit limit together with F615. The incremental phase is named F614i and is shown in the figures below.

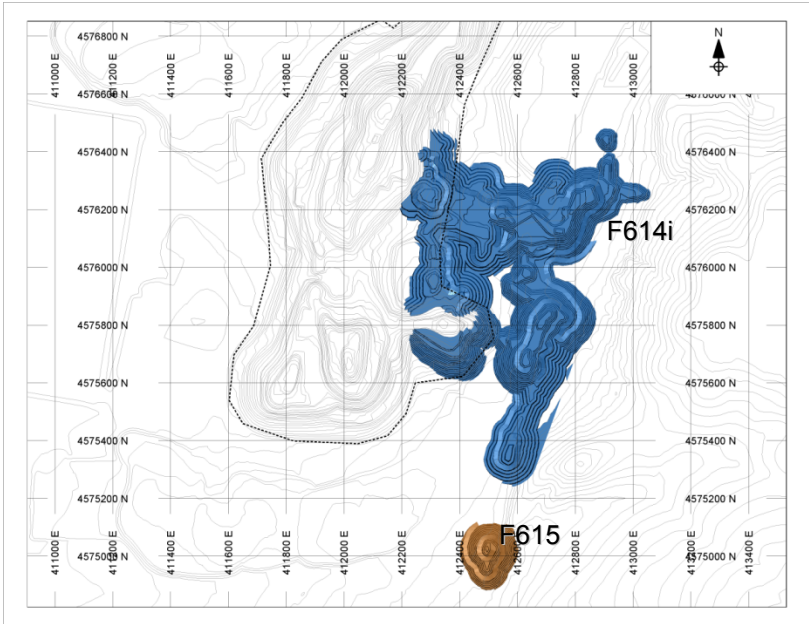


Figure 3.7: Oxide Pit limits - F614 and F615i – Plan View

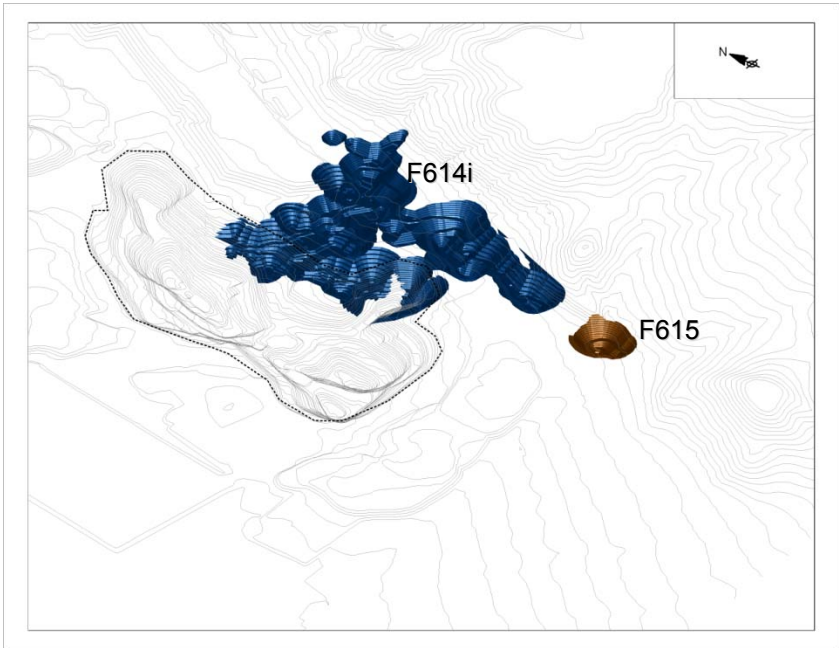


Figure 3.8: : Oxide Pit limits - F614 and F615i – Orthographic View from the southwest

**PIT RESOURCES**

Pit Delineated Resources for oxide pits developed at Sleeper are estimated in the table below using the following assumptions:

- 5% mining dilution
- 5% mining loss

- waste/mineralized material Au cutoff grade of:
  - Au 0.13 g/t for Oxide Mineralized Material
  - Au 0.42 g/t for Sulphide Mineralized Material

**Table 3-3: Pit Delineated Resources for Sleeper from LG Analysis**

Pit	Mineralized Material Type	Mineralized Material (kTonnes)	Grades		Waste (kTonnes)	Strip Ratio (t:t)
			AU (g/t)	AG (g/t)		
F611	oxide	10,243	0.323	4.17		
	sulphide	120	0.613	6.13		
	<b>Total</b>	<b>10,363</b>	<b>0.326</b>	<b>4.19</b>	<b>3,801</b>	<b>0.4</b>
F612	oxide	1,987	0.327	9.34		
	sulphide	11	0.570	47.13		
	<b>Total</b>	<b>1,998</b>	<b>0.329</b>	<b>9.55</b>	<b>2,569</b>	<b>1.3</b>
F613	oxide	4,653	0.276	4.19		
	sulphide	27	0.706	14.58		
	<b>Total</b>	<b>4,680</b>	<b>0.278</b>	<b>4.25</b>	<b>2,299</b>	<b>0.5</b>
F614i	oxide	7,273	0.268	5.61		
	sulphide	72	0.607	12.77		
	<b>Total</b>	<b>7,345</b>	<b>0.271</b>	<b>5.68</b>	<b>6,505</b>	<b>0.9</b>
F615	oxide	1,025	0.436	3.61		
	sulphide	-	-	-		
	<b>Total</b>	<b>1,025</b>	<b>0.436</b>	<b>3.61</b>	<b>1,010</b>	<b>1.0</b>
<b>Total</b>	oxide	25,181	0.303	5.0		
	sulphide	230	0.620	11.2		
	<b>Total</b>	<b>25,411</b>	<b>0.306</b>	<b>5.0</b>	<b>16,184</b>	<b>0.6</b>

#### 3.4.2 HEAP LEACH PADS:

The PEA study assumes that re-leaching the existing Heap Leach Pads and ROM stockpiles will require relocation and re-crushing. Future studies may show that these resources can be re-leached in-place and pilot scale test work is required to improve the level of confidence in the re-leaching design basis

Although the study assumes a traditional truck shovel mining method for the relocation of old leach pads, the optimum mining method considering a conveyor-based system for example, will be assessed in future studies.

#### 3.4.3 MILL TAILINGS

The recovery and transportation of Mill Tailings can either be accomplished by a truck shovel operation or by hydraulic means such as monitoring with water jets or dredging. The optimum mining method for the recovery of the Mill Tailings will be assessed in future studies.

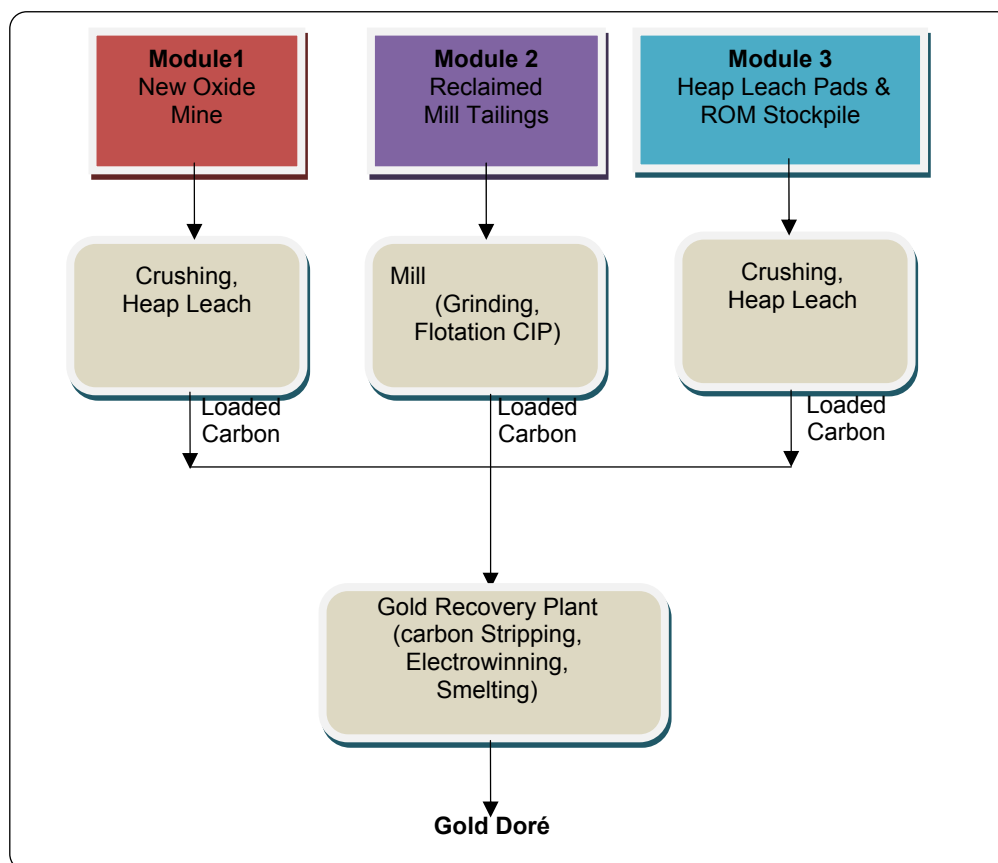
### 3.5 PRODUCTION SCHEDULE

Initial production schedule cases have been conducted to assess which existing NI 43-101 compliant resources components at Sleeper have the most potential to be economically viable

The resulting production scenario developed in the study is based on three independent modules

- **Module 1:** A 15 ktpd heap leach oxide mine including crush, convey and stack with on site carbon adsorption gold recovery plant and doré production plant.
- **Module 2:** Re-leach of existing Heap Leach Pads (pilot re-leach trials start while new oxide mine is ramping up), ramping up from 3 ktpd to 25 ktpd. Re-leach operations include dedicated crushing, convey and stacking equipment to relocate the material to new heap leach pads. The re-leach operates independently of the new heap leach oxide mine, but shares the gold recovery and doré production plant with the other Sleeper operations.
- **Module 3:** A 3 ktpd mill to reprocess Mill Tailings and potentially treat some internal sulphide material released from the Facilities oxide mine. The current design considers comminution, flotation and CIL circuits. A gold recovery plant will be shared with the heap leach operations.

The above three modules are illustrated in the block diagram below.



**Figure 3.9: Sleeper Process Modules**

The mining operations will be typical of open-pit mining operations in Nevada, which has a wealth of operating and technical expertise, services, and support.

Considerable refinement of mine plans and schedules is required during the next stages of study.

### 3.6 METALLURGICAL TESTING

Following a review of the historical recovery of gold and silver from previous heap leach operations and using the limited metallurgical information available on the various resource types, the following gold and silver metal recovery assumptions used in the PEA are as follows:

**Table 3-4: Sleeper PEA Metallurgical Recovery Assumptions**

<b>Module</b>	<b>Recovery %</b>
Module 1 – New Mine Oxide Material	75%
Module 2 - Reclaimed Mill Tailings	85%
Module 3 - Heap Leach Pads & ROM Stockpile	50%

### 3.7 MINERAL PROCESSING

As illustrated above, the processing of Sleeper resources is planned in three (3) essentially independent process modules each producing loaded carbon, which is then stripped of gold using a shared gold recovery plant.

#### **MODULE 1 - NEW MINE OXIDE MATERIAL**

New oxide ore will be crushed and heap leached as an independent operation.

#### **MODULE 2 - RECLAIMED TAILINGS**

Reclaimed tailings will be treated by milling, gravity concentration, flotation and Carbon in Pulp (CIP)

#### **MODULE 3 - HEAP LEACH PADS & ROM STOCKPILES**

The Heap Leach Pads and ROM stockpile materials will be reprocessed, crushed and heap leached using a buffered cyanide lixiviant delivered through an overhead sprinkler system.

It is assumed that the construction of at least one new pad facility and the reconstruction of the original pad bases is required.

#### **GOLD RECOVERY PLANT**

The PEA study assumes that the Gold Recovery Plant will recover the gold and silver from loaded carbon produced by all three production modules to produce gold doré.



### 3.8 TAILINGS AND WASTE MANAGEMENT

Waste and tailings management procedures will be similar to historical mining operations at Sleeper.

A new tailings impoundment is required to contain mill process tailings. Where possible, the new tailings impoundment will use the footprint of the reclaimed Old Mill Tailings.

### 3.9 ENVIRONMENTAL CONSIDERATIONS

The current Sleeper Mine Exploration Plan of Operation allows for continued aggressive exploration and development program on the property.

Future environmental and hydrogeological studies are required to establish a comprehensive water management plan.

At the end of the mine life, a mine closure and reclamation plan will be implemented that will meet the end land use objectives and satisfy the regulatory commitments

### 3.10 INFRASTRUCTURE AND POWER SUPPLY

The Sleeper mine has the following infrastructure:

- existing site access road
- established power supply
- established water supply
- most of the infrastructure for the old heap leach operation is still in place including pumps, solution distribution systems, and solution collection systems (Zoutomou 2007).
- mine offices
- maintenance shops
- some mobile service equipment

The maintenance facilities will be useful for start-up but will require relocation prior to future pit development.

### 3.11 CAPITAL COST ESTIMATE

The Sleeper capital cost estimate is based on:

- Module 1: 15 ktpd Heap Leach of New Oxide Ore
- Module 2: 3 ktpd Mill and CIP for Reclaimed Mill Tailings and New Sulphide ore
- Module 3: 25 ktpd Re-heap leaching old Heap Leach Pads by Year 3

An initial capital requirement is estimated for the Sleeper Project and is determined using factored estimates benchmarked by similar installations. The initial and sustaining capital cost estimates for the Sleeper mine are summarized in the tables below.

**Table 3-5: Sleeper Initial Capital Cost Estimate**

Item	Initial Capital \$m
Feasibility/Permitting/Design	\$4
Pre-Production	\$1
Mill (3ktpd)	\$35
Mining Equipment	\$13
Heap Leach Process (15ktpd)	\$26
Releach Process (25ktpd)	\$0
Gold recovery Plant	\$5
Heap Pads	\$2
<b>Total Capital Cost</b>	<b>\$86</b>

**Table 3-6: Sleeper Sustaining Capital Cost Estimate**

Item	Y1 (mt)	Y2 (mt)	Y3 (mt)	Y4 (mt)	Y5 (mt)	Y6 (mt)	Total
Releach Process (25ktpd)	\$0	\$38	\$0	\$0	\$0	\$0	\$38
Heap Pads	\$2	\$5	\$5	\$4	\$3	\$2	\$21
<b>Total Sustaining Capital</b>	<b>\$2</b>	<b>\$43</b>	<b>\$5</b>	<b>\$4</b>	<b>\$3</b>	<b>\$2</b>	<b>\$59</b>

All capital costs are stated in third quarter (Q3) 2009 prices and are based on factored estimates that have an expected range of accuracy of approximately +30%, -30%. Initial capital has been designated as the capital expenditures required to produce doré and includes all 3 processing modules.

### 3.12 OPERATING COSTS

Conceptual operating cost assumptions for the Sleeper PEA are shown in the table below determined by factored estimates and benchmarked by similar installations.

**Table 3-7: Sleeper Operating Cost Assumptions**

Item	Operating Cost	
Mining Cost – Pit	\$1.20	\$/tonne mined
Mining Cost - Tailings Reclaim	\$0.50	\$/tonne reclaimed
Mining Cost – Re-leach	\$0.50	\$/tonne moved
Heap Leach Process + G&A	\$2.50	\$/tonne
Mill Process + G&A	\$9.00	\$/tonne

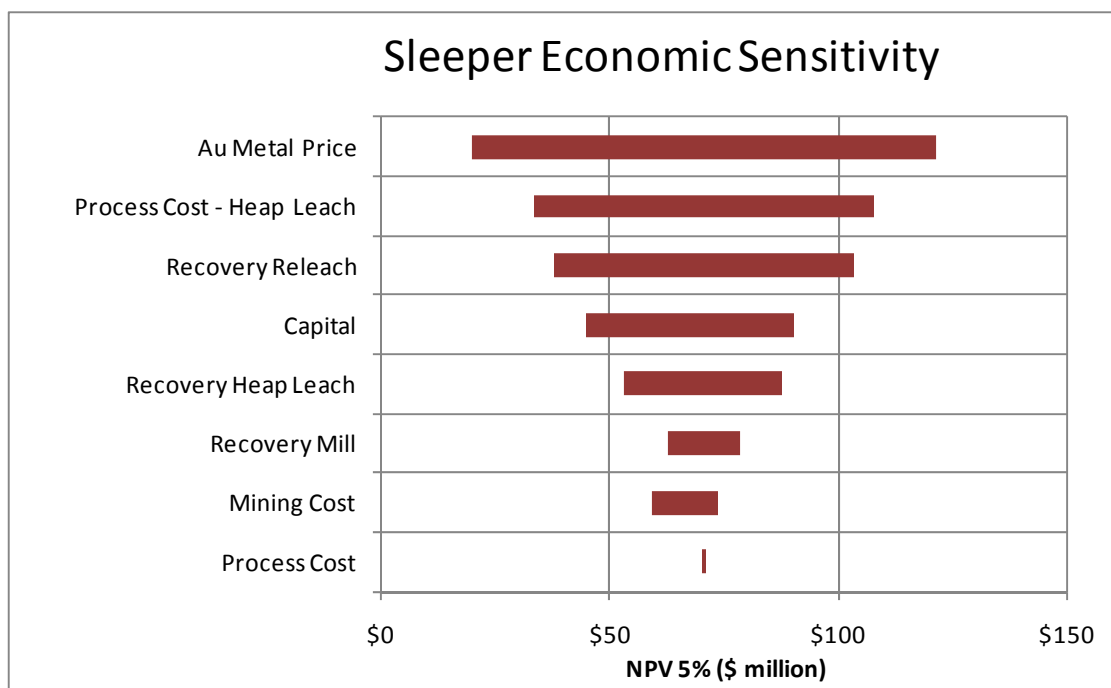
### 3.13 ECONOMIC EVALUATION

Economic sensitivity is tested for the selected PEA production plan. NPV discounted at 5% is tested for various anticipated ranges of the major variable assumptions as shown in the table below.

**Table 3-8: PEA Production Schedule - Economic Sensitivity Test Ranges**

Sensitivity case:	Units	Min	Base	Max	Variation from Base		
					-30%	0%	30%
Milling Cost	\$/t	6.3	9	11.7	-30%	0%	30%
Heap Leach Cost	\$/t	1.75	2.5	3.25	-30%	0%	30%
Mining Cost	\$/t	1.1	1.2	1.56	-8%	0%	30%
Initial Capital Cost	\$million	\$60	\$85	\$111	-30%	0%	30%
Gold Metal Price	\$/Oz	680	800	920	-15%	0%	15%
Recovery Re-leach	%	40%	50%	60%	-20%	0%	20%
Recovery Mill	%	75%	85%	95%	-12%	0%	12%
Recovery Heap Leach	%	65%	75%	85%	-13%	0%	13%

The resulting NPV ranges are shown in the figure below sorted from the variable with the most impact on NPV to the variable with the least impact on NPV.



**Figure 3.10: Sleeper PEA NPV (5% discounting) Sensitivity Ranges**

The above graph shows a robust business case, which is most sensitive to Metal Price and Heap Leach Process cost. The project Highlights are summarized in the table below.

Table 3-9: Sleeper Project highlights

<b>Mine Life</b>	6.5 Years
<b>Production Rate</b>	New Heap Leach - 15 ktpd Re Heap Leach - 25 ktpd Milled Tailings Reclaim - 3 ktpd
<b>Mining Method</b>	Truck and Shovel Hydraulic reclaim of Old Mill Tailings
<b>Process Gold Recovery</b>	New Heap Leach - 75% Re Heap Leach - 50% Milled Tailings Reclaim – 85%
<b>Gold Selling Price</b>	\$800/Oz
<b>Gold produced</b>	589,803 Oz
<b>Mining Cost per tonne Mined/Moved</b>	\$1.20/tonne
<b>Cash Cost (after Silver Credit)</b>	\$324/Oz
<b>Initial Capital</b>	\$86 million
<b>Sustaining Capital</b>	\$59 million
<b>Pre Tax NPV at 5%</b>	\$70 million
<b>Pre Tax IRR</b>	25%
<b>Approximate Pre Tax Pay Back</b>	3.3 Years

The PEA study shows that 25 mt of oxide ore, 6 mt of reclaimed tailings, and 44 mt of re-leached Heap Leach Pads are potentially economically mineable at Sleeper with the following summarized resource:

Table 3-10: Summary of Economically Mineable Resource at Sleeper

Resource	Mineralized Material Type	Mineralized Material (mt)	Grade		Waste (mt)	Ore:Waste Strip Ratio (t:t)
			Au g/t	Ag g/t		
Pits	Oxide - HL	25.1	0.303	4.97		
	Sulphide ROM	0.2	0.62	11.1		
	<b>Total Pits</b>	<b>25.3</b>	<b>0.306</b>	<b>5.02</b>	<b>16.1</b>	<b>0.6</b>
Re-Processed Material	Re-Leach Heap Leach Pads	44.2	0.409	0.9		
	Re-processed Mill Tailings	5.9	0.679	7.67		
	<b>Total Reprocessed</b>	<b>50.1</b>	<b>0.441</b>	<b>1.68</b>		
<b>Total</b>	<b>All</b>	<b>75.4</b>	<b>0.396</b>	<b>2.80</b>		

### 3.14 OPPORTUNITIES AND RECOMMENDATIONS

The PEA shows that the Sleeper property is a potentially viable project using the base case parameters and the existing NI 43-101 compliant resources.

It is recommended however, that the PEA be updated (Phase 1) prior to the commencement of a Pre-Feasibility study (Phase 2).

#### 3.14.1 PHASE 1 – PEA UPDATE

The general strategy for completing Phase 1 is as follows:

- Expand the In-Ground resource base immediately adjacent to the proposed mining areas by additional drilling and also by incorporating existing data outside the current resource model limits.
- Conduct a metallurgical test program to establish preliminary metal recovery and process design parameters for all potential ore types.

Details of the Phase 1 work program are described below:

#### **EXPAND IN-GROUND RESOURCES**

The PEA study is based on the Resource model as provided from the September 2008 NI 43-101 Sleeper Resource Estimate and which is based only on drill hole data within an assumed area of interest for open pit mining. The PEA redefines this area of interest and shows that there is potential to expand the In-Ground resource base by utilizing existing information from drill holes located outside the limits of the current resource model.

At the same time, there is also an opportunity to use a wide spaced drilling program to potentially extend the known mineralization into areas immediately adjacent to the newly defined mining areas. This work is high-priority as the results will either discover additional mineralization that will affect the mine plan, or release areas for new heap leach pad development.

The recommended local exploration work program includes:

- Complete a widely spaced drill program along the Range Front Target (Sillitoe 2006) to the north, south and east of the newly defined Facilities pit limit.
- Complete a widely spaced drill program south and west of the current Facilities pit limit and into the South Pit Dump exploration target (Sillitoe 2006)

A preliminary evaluation of the above indicates that 52 new drill holes totaling 12,700 m and an additional 2,000m of metallurgical core drilling is required.

#### **PRELIMINARY METALLURGICAL SAMPLING AND TEST WORK**

Limited available information on the metallurgy of the Above-ground and In-ground resources requires that test programs be conducted to establish preliminary metal recovery and process design parameters for all potential ore types and including the substantial In-Ground sulphide resources that are evident at Sleeper.



### UPGRADE GEOLOGICAL AND RESOURCE MODEL

The Phase 1 geology and resource model rebuild should:

- Use all available historical and newly acquired drill hole information to rebuild the geological and resource model for the entire deposit including the previously mined out area
- Subtract out the mined out material reconciling with the actual production records.
- Revise the remaining In-Ground Resource statement

This geology and resource model update work can be carried out before the completion of the drilling program, followed by a second update at the completion of the proposed drill program.

### ENVIRONMENTAL & PERMITTING SCHEDULE

In conjunction with a revision to the PEA, a preliminary environmental and permitting plan and cost estimate should be carried out. This plan should include recommendations for all long lead items and work that is required during the next stage of study.

### UPDATE PEA WITH REVISED ECONOMIC PIT LIMITS, PRODUCTION PLANS & FINANCIAL MODEL

A new PEA Update report will be issued following an update of the geological and resource model, revisions to the mine plan and an economic re-evaluation.

**Table 3-11: Sleeper Phase 1 Estimated Cost**

Phase 1 Task	Amount (US\$)
Update geology using existing drill data	50,000
Metallurgical and Exploration Drilling	4,670,000
Scoping Metallurgical Testwork	580,000
Geology and Grade Model update	40,000
PEA Update Report and 43-101	30,000
Environmental and Permitting Schedule	10,000
Contingency (15%)	807,000
<b>Total Estimated Cost</b>	<b>6,187,000</b>

#### 3.14.2 PHASE 2 - PRE-FEASIBILITY STUDY (PFS)

Subject to the satisfactory completion of Phase 1, it is recommended to undertake a Phase 2 Pre-Feasibility study using the revised PEA as a basis to define the work. The following lists some of the general work items that will need to be considered.

#### **PROJECT AREA STEP-OUT EXPLORATION**

More detailed exploration is required to follow up on the work indicated for the revised PEA. This work should include the following:

- Grade and extent of mineralization beneath the existing heap leach pads
- South & North ROM dumps upgrade the resource class from Inferred
- Extent of the West Breccia sulphide resources if sulphides are still of interest
- Grade and extent of mineralization beneath the mined out Sleeper pit including potential for bonanza grade mineralization

#### **GEOLOGY RESOURCE/RESERVE DEFINITION**

An infill-drilling program will be required to upgrade the resource classification from Inferred to Indicated or Measured so this material can be included in the study.

Secondary objectives of this drill program will include:

- Better define the distribution of Oxide, Mixed Oxide – Sulphide and Sulphide mineralization within the Facilities resource area
- Evaluate the distribution of bonanza-grade gold mineralization within the Facilities area
- A drill program within the Mill Tailings and old Heap Leach Pads area to upgrade the resource classification to Indicated

#### **MINING**

Trade-off studies on alternative mining methods and development sequences will need to be investigated prior to the commencement of the PFS.

#### **METALLURGICAL**

The program of metallurgical test work commenced in Phase 1 will continue in Phase 2 and should be carried out to a minimum of PFS level.

The Sleeper project already has significant supporting infrastructure in place that will reduce future engineering and capital cost requirements. It is expected therefore that Phase 2 work will cost less than a typical green field's project in this area

## **4.0 TERMS OF REFERENCE**

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The Preliminary Economic Assessment (PEA) has been prepared at the request of X-Cal Resources Ltd. by Moose Mountain Technical Services (MMTS) under the direction and supervision of Tom Healy, P. Eng.

The PEA is based on a previous NI 43-101 compliant report "Technical Report 2008 on the Sleeper Gold Property" dated September 22, 2008 authored by Mr. Gary Giroux (Giroux Consultants Ltd.) and co-authored by Messrs. Larry Kornze, P. Eng. and Larry Martin, CPG.

The subject of the report is the Sleeper Gold Property, Awakening Mining District, Humboldt County, Nevada, U.S.A. with the primary purpose of summarizing and make public the updated economic evaluations of potential gold and silver resources.

The PEA has been completed to scoping study level of accuracy.

## 5.0 RELIANCE ON OTHER EXPERTS

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The PEA report was prepared by the authors and is partly based upon information derived during the exploration programs at the Sleeper Gold Property. The authors have relied to some extent on geological, geophysical, geochemical, engineering, metallurgical, legal, environmental and other reports and documents completed by others, as well as opinions from other persons. Some of these persons are not “qualified” in terms of the definition of NI 43-101. The report draws substantially on the previous report by Thomason, Kornze and Rowe, 2006.

The authors utilized all known resources available on site and in available computer data bases to verify information in the Technical Report.

The authors of the report are “Qualified Persons” according to the requirements needed for completing a NI 43-101 report for data evaluations. Though the authors have had experience in other matters included in the report, the authors are not qualified to the extent of being “expert” in such issues as metallurgy, geophysics, land title, legal issues and environmental matters.

Some of the opinions expressed in the report are those of other persons and if so are cited. Otherwise the opinions, conclusions and recommendations in the report are those of the authors. The recommendations and conclusions contained in the report are based, in part, on information from sources outside the control of the authors. The authors have exercised reasonable diligence and the information herein is believed to be accurate.