## REGISTRATION PURSUANT TO SECTION 7 OF THE ENVIRONMENTAL ASSESSEMENT ACT

# FOR THE DEER COVE GOLD DEPOSIT

Ming's Bight Area, Baie Verte, Newfoundland

# TENACITY GOLD MINING COMPANY LTD. St. John's, Newfoundland

February 25, 2009

# **REGISTRATION FORM**

#### **Pursuant to Section 7 of**

#### **The Environmental Assessment Act**

# NAME OF UNDERTAKING: Deer Cove Gold Deposit

#### **PROPONENT:**

(i) Name of Corporate Body:	Tenacity Gold Mining Company Ltd.
(ii) Address:	2 Forest Road, St. John's, NL A1C 2B9
(iii) Chief Executive Officer:	Charles Dearin, P. Geo. President 2 Forest Rd, St. John's, NL A1C 2B9 (709) 754-8844

(iv) Principal Contact Person for purposes of environmental assessment: Charles Dearin, P. Geo. President 2 Forest Rd, St. John's, NL A1C 2B9 (709) 754-8844

# SUMMARY

Tenacity Gold Mining Company Ltd. (Tenacity) is the holder of Map Staked Mineral License No. 8014M located near Ming's Bight, Baie Verte, Newfoundland. Tenacity proposes to test mine a portion of the known Deer Cove gold-quartz vein and collect a 4,325 tonne bulk sample. This bulk sample plus the existing 4,275 tonne low-grade gold stockpile will be trucked to and test-milled at the currently operating Nugget Pond gold mill facility near Snooks Arm.

The gold-bearing quartz vein is geologically and structurally complex. Sufficient historical drilling and underground adit-drift development work was carried out by Noranda Exploration during 1986 to 1989 to partially define a small, narrow, possible high-grade gold shoot with a probable gold ore resource of 35,000 tonnes grading 8 to 12 g Au/t that may warrant development and mining with the current high gold price.

The Deer Cove gold-quartz vein is folded and faulted and may present an extreme mining challenge due to a lack of geological continuity both along strike and dip of the vein in addition to irregularities with the gold grades within the gold shoot. The test stope as proposed in this Undertaking, will establish the degree of difficulty in mining this vein and help in determining if the remainder of the vein can be successfully mined.

The nature and amount of 'free' or visible native gold in the shoot may also contribute to unexpectedly low gold recoveries in the Nugget Pond mill. Test milling of both the higher-grade bulk sample and the existing lower-grade stockpile will establish the metallurgical characteristics of the gold 'ore' and whether the mill can achieve a sufficiently high gold recovery. Most importantly, this test milling will establish the veins true gold grade vs. the gold grade estimated from historical diamond drill holes in the area of the test stope. This grade determination will be critical for any future mine development of the remainder of the known veins near the adit.

This test mining, bulk sampling and milling would be critical to determine the following:

- the continuity of the broken and faulted-up quartz vein both along strike and up dip;
- the variability and predictability of the gold grade within the quartz vein and adjacent wall rock;
- the relationship of the vein widths and grades as indicated from diamond drilling to the actual mined vein widths and gold grades;
- whether the vein can be mined by shrinkage stoping, breast cut & fill stoping or by longhole stoping; and if in fact it is economical to mine the remaining high-grade 'ore-shoot' below the floor of the existing adit.
- milling of the bulk sample from the test stope and the existing lower-grade stockpile will prove if the 'ore' is amenable to good gold recoveries at the Nugget Pond gold mill.
- milling of the 'ore' will determine the veins actual gold grade vs. the estimated grade from historical diamond drill hole for this portion of the vein.

This test stope bulk sample will prove the quality of the 'ore', indicate which is the better mining method to recover the remaining high-grade gold vein and will accurately determine what the various mining, extraction, trucking and milling costs of future operations will be.

# **TABLE OF CONTENTS**

1.0	THE UN	NDERTAKING	
	1.1	Nature of the Undertaking	
	1.2	Purpose/Rational/Need for the Undertaking	1
2.0	DESCRI	PTION OF THE UNDERTAKING	
	2.1	Geographic Location	2
	2.2	Physical Features	
		Geographical Setting	
		Topography	
		Climate	
		Wildlife Species & Fish	
	2.3	Infrastructure	
		Access Road	
		Underground Adit	
		Waste Stockpile	
		Low-Grade Gold Stockpile	
		Electrical Power	
		Buildings & Accommodations	7
		Other Support Equipment	
		Potentially Affected Areas	
	2.4	Construction	9
	2.4	1 Potential Sources of Pollution	9
		Water	9
		Noise	10
		Air Emissions	10
		Dust	10
		Fuel & Lubricants	10
		Sewage	10
		Waste & Garbage	
	2.4	.2 Potential Causes of Resource Conflicts	10
	2.5	Operations	11
	2.5	.1 Proposed Test Stope	11
	2.5		
	2.5		
	2.5		
		Water	
		Noise	
		Air Emissions	
		Dust	
		Fuel & Lubricants	
		Sewage	
		Waste & Garbage	
	2.5	5.5 Potential Causes of Resource Conflicts	16

		Wildlife	
		Fish & Fish Habitat	
		Land Use	
		Water Resources	
	2.6	Occupations	
	2.7	Project-Related Documents	
		OVAL OF UNDERTAKING	
4.0	SCHED	DULE	
5.0	FUNDI	NG	
6.0	SUBMI	SSION	

# LIST OF FIGURES

Figure 1: Location map of the Deer Cove Gold Project, Baie Verte (1:150,000)	3
Figure 2: Detailed property map of the Deer Cove Gold Project, Ming's Bight area (1:15,000)	4
Figure 3: Aerial photo of the Deer Cove pond, adit and stockpiled area (1:10,000)	5
Figure 4: Deer Cove Gold Project site plan (1:2,500).	8
Figure 5: Proposed mining layout for the Deer Cove gold-quartz vein test stope (1:500)	.13

# LIST OF TABLES

Table 1: Occupations Required for the Deer Cove Bulk Sample	17
Table 2: Permits and Approvals Required for the Deer Cove Project Undertaking	18

## **1.0 THE UNDERTAKING:**

## 1.1 Nature of the Undertaking

Tenacity Gold Mining Company Ltd. (Tenacity) is the holder of Map Staked Mineral License No. 8014M located near Ming's Bight, Baie Verte, Newfoundland. Tenacity proposes to test mine and collect a bulk sample and to test mill a portion the known Deer Cove gold-quartz vein. The test stope would be mined from the existing Deer Cove adit and will be trucked to the currently operating Nugget Pond gold mill facility near Snooks Arm.

## **1.2 Purpose/Rationale/Need for the Undertaking:**

The gold-bearing vein is geologically and structurally complex. Sufficient historical drilling and underground adit-drift development work was carried out by Noranda Exploration during 1986 to 1989 to partially define a small, narrow, possible high-grade gold shoot that may warrant development and mining with the current high gold price.

The Deer Cove gold-quartz vein is folded and faulted and may present an extreme mining challenge due to a lack of geological continuity both along strike and dip of the vein in addition to irregularities with the gold grades within the gold shoot. The nature and amount of 'free' or visible native gold in the shoot may also contribute to unexpectedly low gold recoveries in the Nugget Pond mill.

Tenacity proposes to test mine a portion of the vein (the test stope) and to collect a bulk sample of this 'ore' for metallurgical purposes. The bulk sample and the existing low-grade stockpile would be trucked to the Nugget Pond gold mill for test milling and metallurgical purposes.

This test mining, bulk sampling and milling would be critical to determine the following:

- The continuity of the broken and faulted-up quartz vein both along strike and up dip;
- The variability and predictability of the gold grade within the quartz vein and adjacent wall rock;
- The relationship of the vein widths and grades as indicated from diamond drilling to the actual mined vein widths and gold grades;
- Whether the vein can be mined by 'shrinkage stoping', 'breast cut & fill stoping' or by 'short-level longhole stoping'; and if in fact it will be economical to mine the remaining high-grade 'ore-shoot' below the floor of the existing adit.
- Milling of the bulk sample from the test stope and the existing lower-grade stockpile will prove if the 'ore' is amenable to good gold recoveries at the Nugget Pond gold mill.
- Milling of the 'ore' will determine the veins actual gold grade vs. the estimated grade from historical diamond drill hole for this portion of the vein.

This test stope bulk sample will prove the quality of the 'ore', indicate which is the better mining method to recover the remaining high-grade gold vein and will accurately determine what the various mining, extraction, trucking and milling costs of future operations will be.

Assuming this test work is economically positive, Tenacity may file another Environmental Assessment in order to commence Phase 2 as a small-scale mining operation to recover the remaining high-grade vein beneath the floor of the existing adit.

#### 2.0 DESCRIPTION OF THE UNDERTAKING:

## 2.1 Geographical Location:

The Deer Cove gold deposit is located approximately 4.2 km north of Ming's Bight near Baie Verte, north-central Newfoundland. Ming's Bight is about 26 road kilometers from the town of Baie Verte. An existing gravel road, 6.5 km in length from near Ming's Bight leads directly onto the Deer Cove property and to the existing underground mine adit (see Figure 1).

The Deer Cove property is included under Map Staked License No. 8014M (Figures 1 & 2). The adit is located on NTS map 12I/01 at UTM coordinates 5,540,645N and 568,510E NAD 1927, Zone 21 and at elevation 76 metres above sea level (Figure 2).

#### 2.2 Physical Features:

#### **Geographical Setting**

The Deer Cove property is located on the Pt. Rousse Peninsula of the Baie Verte Peninsula and within a small, locally restricted watershed containing the nearby Deer Cove Pond and Devils Cove Pond plus several small streams which flow into Deer Cove Pond. These water bodies flow westerly into the Atlantic Ocean at Deer Cove (Figures 2 & 3).

Scrub brush and small stunted spruce covers the majority of the Deer Cove property with outcrop making up approximately 10-15%. No merchantable-size timber exists on the property. Glacial till overburden is generally thin likely ranging from 0.1 m to less than three metres thick although it may be up to ten metres thick in several of the prominent, steep-sided valleys.

#### Topography

Topography in the area is generally rolling to steep and rough terrain with elevations ranging from sea level to 170 m above sea level. The existing adit is at elevation 76 m above sea level approximately 28 m above Deer Cove Pond.

#### Climate

The climate in the north central Baie Verte area of Newfoundland is temperate with six to seven months of snow-free and ice-free seasons from April-May to November. Typical seasonal variation includes snowy winters from late November to March and summers from June through September. At the Baie Verte weather station (elevation at 110 m above sea level) the approximate 30-year averages of the mean winter temperature (i.e. the mean monthly averages of November to March) is  $-6^{\circ}$  C and ranges from  $+0.2^{\circ}$  C in November to  $-10^{\circ}$  C February. Winter conditions, with moderate to heavy snowfalls usually begin in early December and remain until late-March. The average winter snowfall is approximately49 cm per month with ranges of 31 cm in November to 88 cm in January.

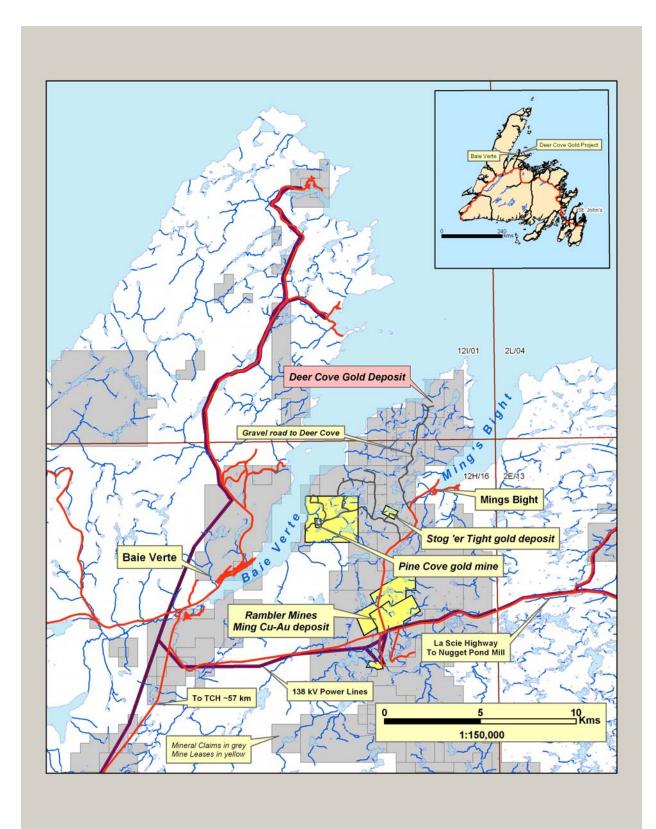


Figure 1: Location map of the Deer Cove Gold Project, Baie Verte (1:150,000)

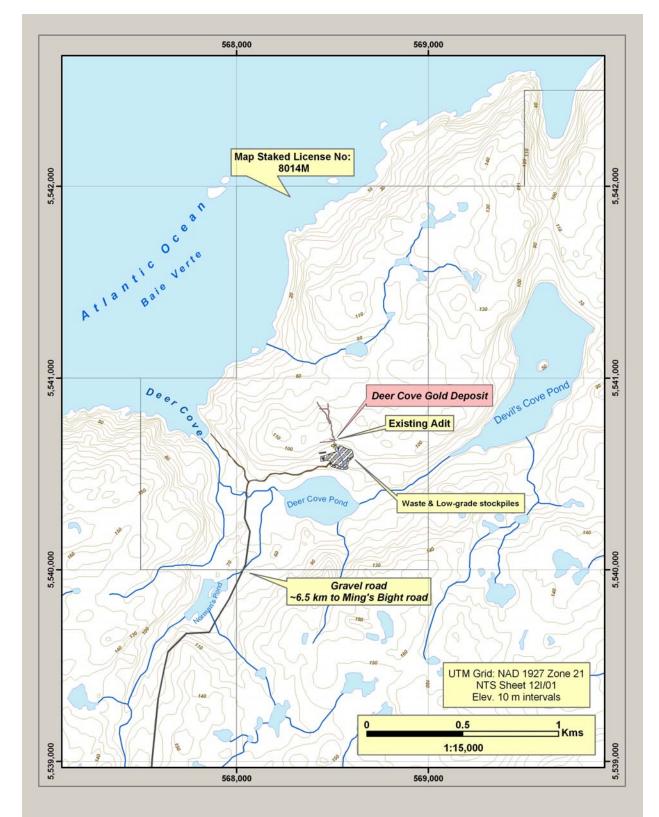


Figure 2: Detailed property map of the Deer Cove Gold Project, Ming's Bight area (1:15,000).

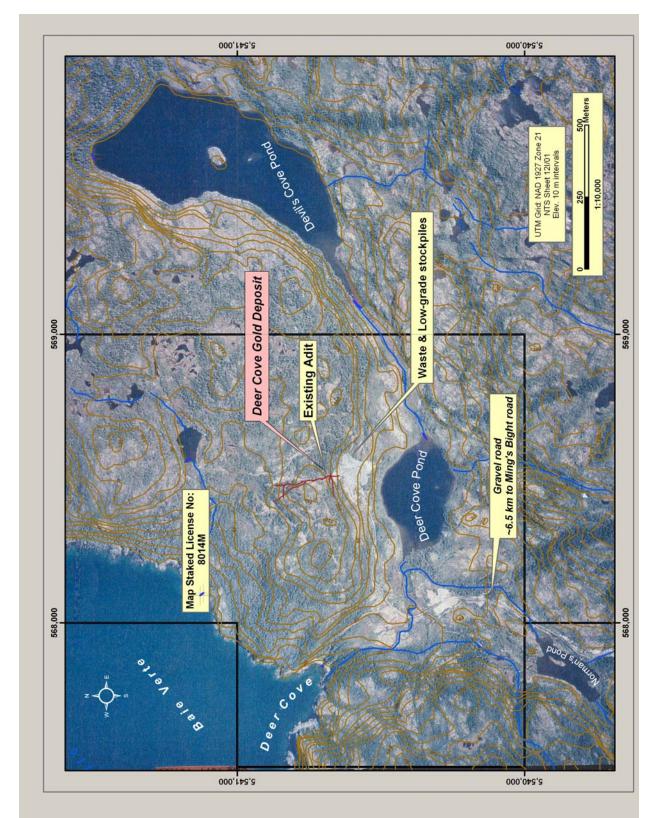


Figure 3: Aerial photo of the Deer Cove pond, adit and stockpiled area (1:10,000).....

The mean 'summer' temperature (mean monthly averages of April to October) is  $9^{\circ}$  C and ranges from  $0^{\circ}$  C in April to  $15^{\circ}$  C in July. The average annual precipitation is 94 cm per month with ranges of 73 cm in April to 112 cm in December (Environment Canada, 2006). Mineral exploration work can easily be carried out year round on the property. Mining work could be efficiently carried out in Deer Cove from late May to late November. Mine related work during December to April would be costly for a small-scale operation due to snow removal and freezing conditions on equipment and rock stockpiles.

#### Wildlife Species & Fish

Wildlife in the Deer Cove valley area is not abundant but rabbit and fox have been observed. Moose and black bear were known to inhabit the area in the past but few signs of either have been noted by the proponent over the past seven years during summer or fall seasons. Small birds and some grouse have been seen in the area but larger birds of prey such as eagles or hawks have not been observed in the Deer Cove pond area. Neither Deer Cove pond nor Devils Cove pond are frequented by local residents for trout fishing and the proponents personnel have yet to see signs of trout in these ponds or brooks.

#### 2.3 Infrastructure

Most of the required physical infrastructure, such as access road, underground adit, marshalling/storage area, is already in place due to Noranda Exploration's 1987 exploration-development program. No new construction or infrastructures such as roads, power lines, stream diversions, dams or long-term buildings will be required.

#### Access Road

The Deer Cove gravel road from near Ming's Bight to the existing adit was constructed by Noranda Exploration in 1987 (Figure 1). Several stream culverts (24 and 32" galvanized corrugated pipe) were placed by Noranda at that time and these are still in excellent condition today. The road is approximately 6.5 km long and is in need of grading, clearing of alders and some ditching. Several minor washouts in the road will require repair with 24" culverts for runoff during seasonal flooding.

#### **Underground Adit**

During 1987 Noranda Exploration drove a 3.3 meters wide by 3.0 m high adit along the partially defined gold bearing quartz vein. The vein was intersected 25 m from the collar of the adit and partially exposed good gold values for the next 32 m of strike length along the adit. The adit was continued for an additional 168 m of strike length in an attempt to follow the vein. A second sub-parallel drift was driven for a length of 135 m; several crosscuts and wall slashing totalling approximately 158 m in length were also driven in 1987 (Figure 4). The portal of the decline was timbered using three sets of 10" x 10" x 8 foot long lumber and boarded with 3" thick plank. A welded steel door currently prevents unauthorized access to the adit.

During June 2008 Tenacity entered the adit with an experienced miner to examine the portal and rock ground conditions. The portal timbers are still in excellent condition and show no signs of rot or displacement. The entire adit was thoroughly examined; there are no cases of

loose existing in the back or walls and no evidence of loose rock having fallen from the back since 1988 when Noranda closed the adit. Because of the parallel drift there is excellent air circulation and ventilation. An estimated 5-10 gallons per minute of clear fresh water is being made from natural rock fractures and several test holes in the walls of the adit. This water flows out the mouth of the adit, along a ditch and over the waste stockpile and eventually makes its way into Deer Cove Pond with no adverse affects.

#### Waste Stockpile

During Noranda's underground exploration-development program a total of 518 m of drifting was accomplished which produced approximately 14,100 tonnes of broken rock made up of 9,800 tonnes of waste rock (basalt & gabbro) and 4,275 tonnes of low-grade gold 'ore'. The waste rock was distributed around and out from the adit portal and eventually formed a waste stockpile of approximately 100 m by 50 m in area (Figures 3 & 4).

#### Low-Grade Gold Stockpile

Noranda recovered and stockpiled both a medium-grade tonnage derived from the initial 32 m long high-grade gold shoot (1,275 tonnes with a diluted grade of 6.7 g Au/t) and a low-grade tonnage derived from the next 150 m long portion of the vein (3,000 tonnes with a diluted grade of 1.6 g Au/t). Both stockpiles were placed separately on the waste pile (see Figure 4) for possible future milling. A total of 4,275 tonnes grading approximately 3.1 g Au/t exist in this low-grade gold stockpile.

#### **Electrical Power**

No electrical lines will be required. We propose to use a portable diesel generator (75 kW) with enough capacity to supply the small operation.

#### **Buildings & Accommodations**

A portable trailer will be used on site for lunchroom, dry and office. This will be located near the adit and will be removed at the end of the operation. The entire workforce will be local residents of the Baie Verte area and no on-site accommodations will be required.

#### **Other Support Equipment**

A portable diesel air compressor  $(600 \text{ m}^3)$  will be used for drill compressed air.

#### **Potentially Affected Areas**

Due to the restricted nature of the bulk sample and the methods proposed herein to extract it, only two small areas of less than 1,500 m<sup>2</sup> total area will be temporarily affected. This includes waste rock removal adjacent to the gold-quartz vein and a temporary haul road built from waste rock on the existing waste stockpile. At the completion of the bulk sample removal the open stope will be back filled. This is the main part of our reclamation plan for backfilling the open stope of the vein and is described in more detail under Operations below.

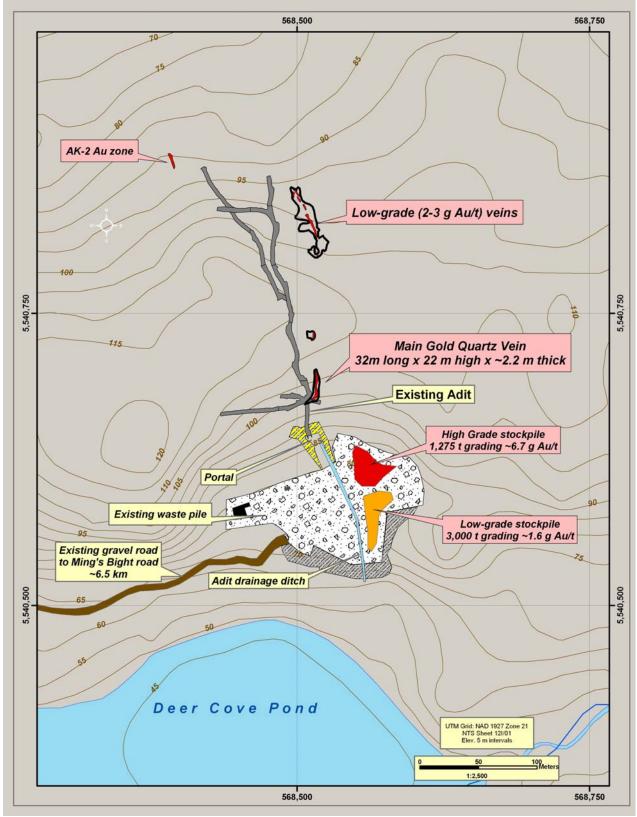


Figure 4: Deer Cove Gold Project site plan (1:2,500).

The existing adit is currently producing 5-10 gallons/minute (during excessive wet periods) of clean water and less than 5 gallons/minute during summer months. All of this water is natural spring water coming from fractures and two drill holes in the adit. Since 1987 all of this water has been directed into a one meter deep ditch adjacent to the mouth of the adit where it flows for about 100 m to the south end of the waste stockpile and into a bog adjacent to Deer Cove Pond (Figure 4). There is no evidence whatsoever anywhere along this ditch or over the waste pile of any sulphide oxidation or bacterial growth. There is no visual evidence of adverse color, cloudiness or algae growth in Deer Cove Pond where the drainage water enters the bog and the pond.

We will use approximately  $3,200 \text{ m}^3$  of waste rock from the stockpile to build the access road and to back fill the test stope. We will ensure that the waste stockpile is graded to conform to the surrounding topography.

Tenacity will construct near the mouth of the adit a series of two to four settling sumps for all mine discharge water to flow into. We would recycle this water for our drill water needs and the sumps would act to remove any drill cuttings and waste from the water before reentering the ditch.

#### 2.4 Construction:

The Deer Cove underground test stope and bulk sample will be a relatively small operation requiring the removal of bulk sample from underground and the removal of the existing low-grade gold stockpile. Approximately seven to ten days will be required to repair the existing access road, mobilize and setup the temporary facilities and construct a waste rock ramp to the vein outcropping on surface.

It is anticipated to begin road repairs-upgrading by mid-June, 2009 and to complete the Construction stage and be ready to begin the mining Operations by July 1, 2009.

#### 2.4.1 Potential Sources of Pollution

Potential sources of pollution during the construction stage may include:

#### Water

During rehabilitation of the existing gravel access road, dust and fine material have the potential to get into ponds and streams near the road. To minimize this, sediment-trapping material such as approved filtration fabrics will be used in areas subject to siltation and erosion.

The current access road passes adjacent to and within 25 to 30 m of approximately a 50 m length of the drinking water supply pond for Ming's Bight. If necessary dust will be controlled here by the application of water to the road.

#### Noise

The Deer Cove adit site is 4.2 km from any homes in Ming's Bight. Equipment noise and truck travel will be attenuated by the surrounding forest growth and rolling topography. Noise is not expected to be a concern for residents of Ming's Bight or wildlife in the area.

#### **Air Emissions**

All company and contractor vehicles and equipment are required to be in good and safe operating conditions. As the road rehab is a minor job it is not anticipated that heavy equipment will spend much time on the access road or the proposed waste rock ramp.

#### Dust

The only potential source of dust is from the existing gravel access road. If needed during the construction stage we will use water to control any dust situations.

#### **Fuel and Lubricants**

Construction activity poses a risk for the release of diesel fuel and lubricants from construction equipment. Tenacity will ensure that all contractors and company equipment are inspected daily to ensure no hydrocarbon leaks occur.

During the construction stage an authorized diesel fuel storage tank will be established within a few hundred metres of the adit. This fuel tank will be an approved double walled container with a self-contained holding berm to prevent potential leaks. This fuel tank will only be filled/serviced by an authorized fuel distributor in Baie Verte. Several emergency oil spill kits will be placed near the fuel tank

Used oils and lubricants will be contained in proper bins and disposed of with a local waste oil handler.

#### Sewage

Sewage will be controlled by an on-site portable facility ('port-a-potty' type unit) during and after construction. The holding tank will be emptied by a pump truck on a regular basis and disposed of in an appropriate manner.

#### Waste & garbage.

All solid waste (wood, steel, etc.) and small garbage will be collected and hauled to an existing local waste disposal site on a regular basis. Any food or organic garbage onsite will be held in animal-proof containers to prevent attracting bears, fox, birds or other wildlife. All such foods and scraps will be removed daily.

#### 2.4.2 Potential Resource Conflicts

No significant resource conflicts are expected during the brief construction phase. Any potential conflicts are outlined under Operations - Potential Resource Conflicts. No marketable timber exists in the area and the area is not known as an attractive fishing or hunting area. Local residents do on occasion fish for trout in several small ponds adjacent to

the access road but these fishing spots are located at least 4 km south of the adit area. Local residents do not fish in Deer Cove Pond or any of the adjacent ponds in the local Deer Cove water shed due to the lack of suitable trout in these ponds.

There are no new roads to be constructed and no new stream crossings. Fish, wildlife and their habitats will not be altered, disturbed or destroyed during or after the construction phase.

## 2.5 **Operations:**

The Deer Cove project is a bulk sampling-test stope trial to be carried out by underground mining from the back of the existing adit to surface, a vertical height of approximately 22 metres. Results from both the test stope mining method and the milling of the bulk sample will determine if mining of the remainder of the narrow gold-quartz vein is economically justified. It is anticipated that the entire mining-extraction period will range from four to six weeks, depending on the gold ore continuity and the mining method used. Following completion of the bulk sample approximately seven to ten days will be needed to backfill the open stope, close the adit and remove the facilities.

## 2.5.1 Proposed Test Stoping

The existing adit was driven by Noranda Exploration in 1987 to explore and test the quality of the gold bearing quartz vein. Results at that time indicated the vein to be too low-grade and too small to justify a small mining operation. With today's high gold price and the existence of the successfully operating Nugget Pond gold mill the Deer Cove gold vein may be economically viable, albeit a small operation.

The Deer Cove gold-quartz vein is, based on historical diamond drilling, surface trenching and sampling and underground drifting and back sample by Noranda Exploration during 1986 to 1989, a small, narrow, possible high-grade gold shoot with a probable gold ore resource of 35,000 tonnes grading 8 to 12 g Au/t that may warrant development and mining with the current high gold price.

Tenacity proposes to test mine a portion of the known Deer Cove gold-quartz vein and collect a 4,325 tonne bulk sample. This bulk sample plus the existing 4,275 tonne low-grade gold stockpile will be trucked and test-milled at the currently operating Nugget Pond gold mill facility near Snooks Arm. The gold-quartz vein is folded and faulted and may present an extreme mining challenge due to a lack of geological continuity both along strike and dip of the vein in addition to irregularities with the gold grades within the gold shoot. The test stope as proposed in this Undertaking, will establish the degree of difficulty in mining this vein and help in determining if the remainder of the vein can be successfully mined.

The test stope will mine a 22 m height of the vein from the adit back to surface and this will be accomplished in four contiguous stages:

1) Trench-open pit: approximately 10 m depth of the vein from surface will be mined by trench type open pit. Two 5 m high benches would be blasted immediately west of

and adjacent to the vein; the vein would then be blasted separately and mucked to an 'ore dump' on the existing waste stockpile for trucking to the Nugget Pond mill. Drilling and blasting would be done with a small air-track drill and ore mucked with a backhoe into trucks and hauled to the 'ore dump'.

- 2) The floor of the existing adit would be ramped down on and slashed and benched the full 32 m length of the vein to a depth of 6 m. The blasted vein would be mucked to the 'ore dump' for trucking to the mill. The floor would then be backfilled with waste to its original level. All drilling and blasting would be done with a drill jumbo and/or hand held air jackleg drills. Ore would be mucked by a low-profile front-end loader (scooptram) directly to the 'ore dump'.
- 3) The back of the vein in the adit would be slashed and breasted to a maximum height of 6 m. Drilling and blasting would be done with a drill jumbo and/or hand held air jackleg drills. Ore would be mucked by a low-profile front-end loader (scooptram) directly to the 'ore dump'.
- 4) From the floor of the trench-open pit (see 1) above) and using the air track drill, a slot or drop raise (3 m by 2.5 m wide) would be drilled into the back of the test stope (see 3) above) and blasted up to the floor of the trench, a distance of 7 m. Once this drop raise is established the remaining 30 m of strike length of the vein would be mined by long holes drilled from the floor of the trench through the back of the stope and blasted in 3 to 5 m strike length segments along the vein. All loading of the blast holes would be done from surface. Broken ore would be mucked from the stope with a scooptram and hauled to the 'ore dump'.

Figure 5 shows the proposed mining layout stages for the Deer Cove test stope.

Once the test mining is complete the open stope will be backfilled using the existing waste stockpile dumped into the trench-open pit and down into the stope.

# 2.5.2 Milling of Ore

The Nugget Pond mill was built by Richmont Mines Ltd. from June 1996 to February 1997 with first gold from the Nugget Pond gold deposit poured on March 27, 1997. From March 1997 to August, 2004 Richmont milled a total of 838,881 tons of ore with an average grade of 0.364 oz Au/t (304,976 ounces of gold) from both the Nugget Pond and Hammerdown gold deposits. The Hammerdown deposit occurred near Springdale and was a narrow vein gold deposit. A total of 301,220 tons grading 0.45 oz Au/t were mined and trucked by 30 tonne haul trucks a distance of 136 km to the Nugget Pond mill.

The mill was bought by Crew Gold Corp. in late 2006 and since February 2007 Crew has being shipping gold ore from Greenland to Goodyears Cove near Springdale. From there it is trucked by 30 tonne haul trucks a road distance of 135 km to the mill. The mill is presently processing the last of this Greenland ore and will be finished by May 2009.

The mill has a rated capacity of 450 tonne per day and has consistently yielded a 97-98% gold recovery on these three separate and different gold deposits. Gold bars are produced at the mill site in a processing facility, which includes crushing, grinding, leaching, gold

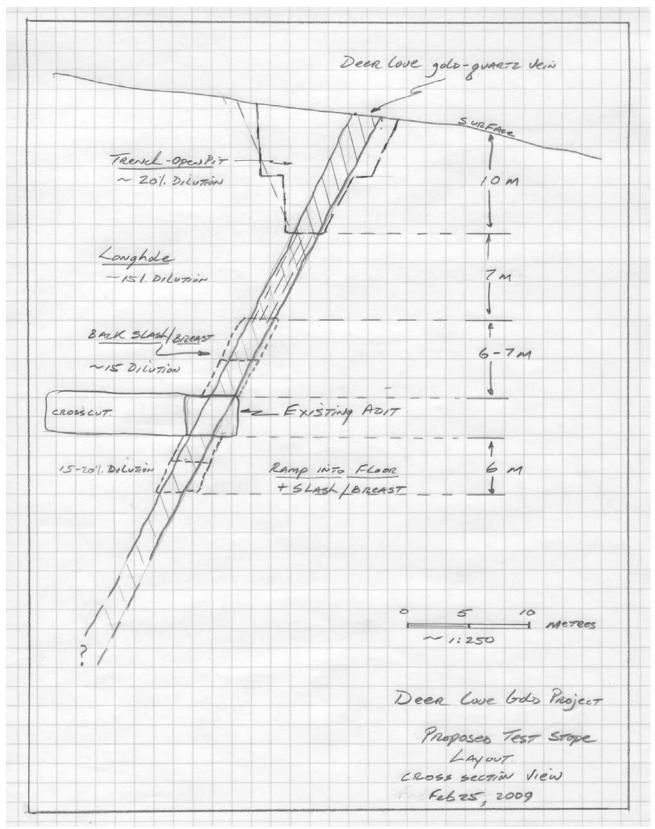


Figure 5: Proposed mining layout for the Deer Cove gold-quartz vein test stope (1:500)

recovery using CIP (carbon-in-pulp) technology and cyanide detoxification using the INCO SO<sub>2</sub> process. A leading edge computerized process control system assists mill operators for both production and environmental control.

Tailings disposal and wastewater control are the key environmental issues for the Nugget Pond mill. The tailings are subject to the INCO  $SO_2$  air destruction process for cyanide destruction prior to being released to the tailings pond where they are submerged; therefore acid mine drainage is not an issue. There is a large capacity remaining in the tailings pond to allow for several more years of mill processing. Environmental sampling is carried out daily at the tailings outflow of water from the environmental control system. Since the start of the mill operation, all samples indicate complete compliance with the Environmental Certificate of Approval for the mill operation. Richmont won several environmental awards for operating a very clean, efficient and safe operation, especially the tailings pond and discharge sites.

The Nugget Pond mill is located 54 km by road from the Deer Cove adit site. This includes approximately 18 km of gravel road and 36 km of paved highway. Tenacity will truck the accumulated gold-ore stockpiles to a yard storage site at the Nugget Pond mill. From here the ore would be processed through the mill over a 25 to 30 day period.

## 2.5.3 Reclamation-Stope Closure

Once the test stope is complete Tenacity will back fill the trench-open pit and the open stope with waste rock from the pit and from the waste stockpile. The surface will be graded to conform to topography. The temporary haulage road to the top of the vein will then be reclaimed and the rock fill removed and stored on the original waste stockpile. The remnants of the haul road will be covered with surrounding soil and allowed to re-vegetate. The waste stockpile will be graded and contoured to conform to topography.

#### 2.5.4 Potential Sources of Pollution

Potential sources of pollution during the Operations stage may include:

#### Water

All water exiting the adit will be directed to a series of two to four sumps where silty mine water will be settled out prior to entering the existing ditch. An oil-water separator will be installed in the last sump to trap and remove any oily substances from mining equipment.

All mechanical equipment will be inspected regularly to ensure leakage of fuel, hydraulics, oils or other hazardous products does not occur.

Blast residues have the potential to be contaminants through ammonia by-products, which can be toxic to aquatic fauna. All such contaminants will exit the adit in water where it will be captured and passed through a series of sumps. If necessary an ammonia destructive agent may be added to the water. All water will follow the 100 m long drainage ditch and pass through a siltation curtain at the end of the ditch prior to flowing over the end of the water pile and then through bog vegetation before draining into Deer Cove pond.

As required, standard mitigation methods, such as on-site drainage ditch channels, collection sumps-catchment basins will be used to control silt and sediment, prevent the introduction of contaminants and maintain the water quality in the watershed.

## Noise

The Deer Cove adit site is 4.2 km from any homes in Ming's Bight. Equipment noise and truck travel will be attenuated by the surrounding forest growth and rolling topography. Noise is not expected to be a concern for residents of Ming's Bight or wildlife in the area. Most blasting at the adit will be underground; such noise effects on wildlife are not expected to be a significant event.

## Air Emissions

All company and contractor vehicles and equipment are required to be in good and safe operating conditions.

#### Dust

During ore haulage and transportation of the gold ore from the adit along the existing gravel access road to the Ming's Bight paved highway, dust and fine material have the potential to get into ponds and streams near the road. The current access road passes adjacent to and within 25 to 30 m of approximately a 50 m length of the drinking water supply pond for Ming's Bight. If necessary, dust will be controlled here by the application of water to the road. The ore haulage trucks will be hauling damp rock in large pieces (generally greater than 4-6") so dust is not anticipated to be a concern from the Ming's Bight highway to the Nugget Pond mill. It is anticipated that the ore will be hauled over a 15 to 20-day period.

#### **Fuel and Lubricants**

Mining activity poses a risk for the release of diesel fuel and lubricants from operating equipment. Tenacity will ensure that all contractors and company equipment are inspected daily to ensure no hydrocarbon leaks occur.

During the Operations stage an authorized diesel fuel storage tank will be established within a few hundred metres of the adit. This fuel tank will be an approved double walled container with a self-contained holding berm to prevent potential leaks. This fuel tank will only be filled/serviced by an authorized fuel distributor in Baie Verte. Several emergency oil spill kits will be placed near the fuel tank

Used oils and lubricants will be contained in proper bins and disposed of with a local waste oil handler.

#### Sewage

Sewage will be controlled by an on-site portable facility ('port-a-potty' type unit) during the Operations stage. The holding tank will be emptied by a pump truck on a regular basis and disposed of in an appropriate manner.

#### Waste & garbage

All solid waste (wood, steel, etc.) and small garbage will be collected and hauled to an existing local waste disposal site on a regular basis. Any food or organic garbage onsite will be held in animal-proof containers to prevent attracting bears, fox, birds or other wildlife. All such foods and scraps will be removed daily.

# 2.5.5 Potential Resource Conflicts

Potential sources of resource conflict during the Operations stage may include:

# Wildlife

No wildlife conflicts are anticipated. While some wild life has been observed in the area very few sightings or signs have been observed around the Deer Cove adit. Some moose, rabbit, fox and squirrel and small game birds have been observed from the access road. Eagles and hawks are known along the coast of Baie Verte. Over the past five years there have been no sightings of such birds or their nests anywhere near the adit or Deer Cove pond.

# **Fish and Fish Habitat**

Deer Cove pond occurs within 160 m south of the adit. Fish are not known to occur in either this pond or the neighboring Devils Cove pond. No signs of trout have been observed by Tenacity personnel in Deer Cove pond or its drainage brook. In any case the Operations stage will have minimal ground disturbances and no water body will be altered during this stage. There are no new roads to be built and no new stream crossings to be built during either the Construction or Operations stages.

# Land Use

Very minor amounts of woodcutting by local residents from Ming's Bight occurred over the years. None of this has ever occurred within 3-4 km of the adit site, mainly because of the poor wood quality. No hunting or trout fishing by local residents occurs within a few km of the adit. Any such possible future activities will not be affected by the proposed mining activities.

# Water Resources

Water use conflicts will not occur as there are no other users in the project area. All water requirements for the test stope mining are estimated at less than 2 to 3 gallons a minute and all such water will be recycled from the existing groundwater flowing out the adit. Domestic wash water will be piped and taken from groundwater derived from the existing drill holes in the adit. Bottled water will be used for drinking water.

# 2.6 Occupations

The Deer Cove gold-quartz vein test stope will employ approximately 19 people for a 4 to 6 week period on two ten hour shifts per day. Required personnel are listed in Table 1 below. Other services such as carpenters, electrician, additional laborers, etc. will be on an asneeded basis and will be employed from the Baie Verte region.

Occupation	Number Required
Manager-Geologist	1
Mining Supervisor	1
Miners (Drillers, blasters, muckers)	6
Mechanic	1
Geological-surveyor technician	1
Laborer	1
Ore haul contractors	8
Total	19

## Table 1: Occupations Required for the Deer Cove Bulk Sample

These jobs are in addition to the approximately 20 people employed at the Nugget Pond mill where the bulk sample will be processed.

The Manager-Geologist and geological surveyor technician positions will be supplied by Tenacity. All mining positions including the mine supervisor, miners, mechanic and laborer will be local Baie Verte personnel with extensive work experience as narrow vein miners and underground work experience. These positions will be on a contract basis; personnel will be hired based on their present health conditions and length of underground experience. All positions are open to both male and female. The Ore haul contractors will involve up to four haul trucks on two shifts for up to three weeks duration; this work will be contracted out to one of the two trucking contractors in the Baie Verte region. Tenacity supports employment equity and diversity opportunities and will require the same from contractors where possible.

# 2.7 Project-Related Documents

There are no relevant environmental documents or studies related to the Deer Cove gold deposit or the immediate area.

## 3.0 APPROVAL OF UNDERTAKING

The following authorizations will be required for the Deer Cove bulk sample Undertaking.

Permit, Approval or Authorization	Issuing Agency
Mining Lease	NL Dept. Natural Resources (Mineral Lands)
Release from Environmental Assessment	Minister of Environment & Conservation
Certificate of Approval for Construction	DOEC-Pollution Prevention Division
Cert. of Approval to Establish a Water Supply	DOEC-Water Resources Manage. Division
and Sewage	
Water Use Authorization	DOEC-Water Resources Manage. Division
Blasters Safety Certificate	Dept. Government Services
Approval for Storing & Handling Fuel	Dept. Government Services
Fuel Tank Registration	Dept. Government Services
Fire, Life & Safety	Dept. Government Services
Operating Permit & Permit to Burn	NL Dept. Natural Resources(Forestry)
Temporary Magazine License	Energy Mines Resources (Explosives Div)
Blasting Magazine License	Energy Mines Resources (Explosives Div)
Approval for Waste Disposal	Town of Ming's Bight or Baie Verte

#### 4.0 SCHEDULE

Construction is scheduled to begin in mid-June, 2009 and mining of the bulk sample immediately after construction completion of June 30. The mining Operations stage would take up to six weeks and is scheduled for completion by August 15, 2009. These dates are during the optimal weather conditions and will assure the best working conditions for personnel and equipment.

#### 5.0 FUNDING

Tenacity will wholly finance the proposed Undertaking; financing will be in place by mid-May, 2009. There is no requirement for a loan or grant from any government agency

#### 6.0 SUBMISSION

Date

Name: Charles Dearin, P. Geo. Title: President