Meliadine East Project 2008 Abandonment and Restoration Plan

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Introduction

Meliadine Resources Ltd. is 50 percent owner and operator of the Meliadine East project located approximately 15 kilometers from Rankin Inlet, Nunavut, as shown in Figure 1. The campsite for the project is located at latitude 62° 57'24"N and longitude 91° 55'10"W as shown in Figure 2. The project is located on Inuit Owned surface lands and as such, access and work activities are subject to licensing and permit approval by the Kivalliq Inuit Association ("KIA") and the Nunavut Water Board ("NWB"). The campsite is currently covered by a "care and maintenance" Land Use License KVL204J31 with the KIA.

This document details the reclamation plans for the Meliadine East project. The plan covers three potential abandonment scenarios for the site, including: planned short-term shutdown, long-term shutdown, and final closure of the operations at the site. Plans for shorter-term cessation of operations at the site generally revolve around "care and maintenance" issues, while final closure plans include details for the demobilization of equipment and the final restoration of the site. An itemized breakdown of the projected costs to demobilize the camp facilities and equipment is provided in Table 1.

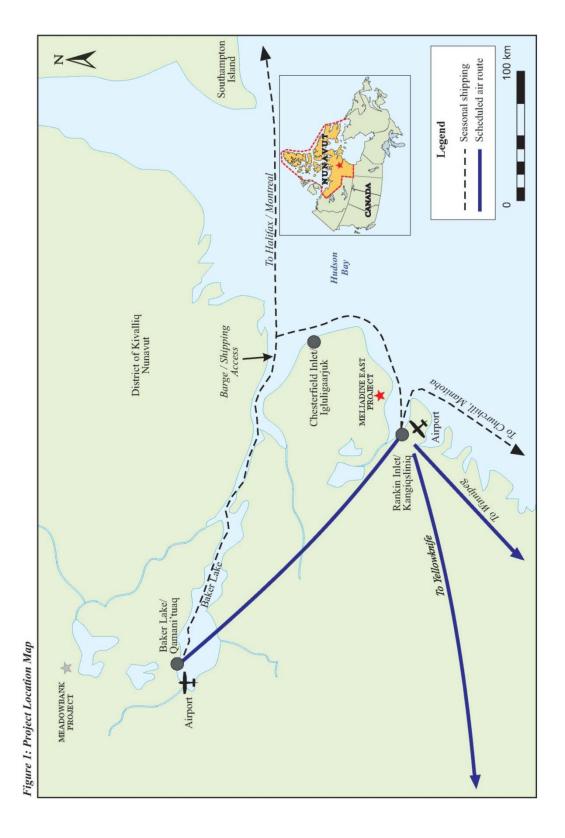
1. Meliadine East Site

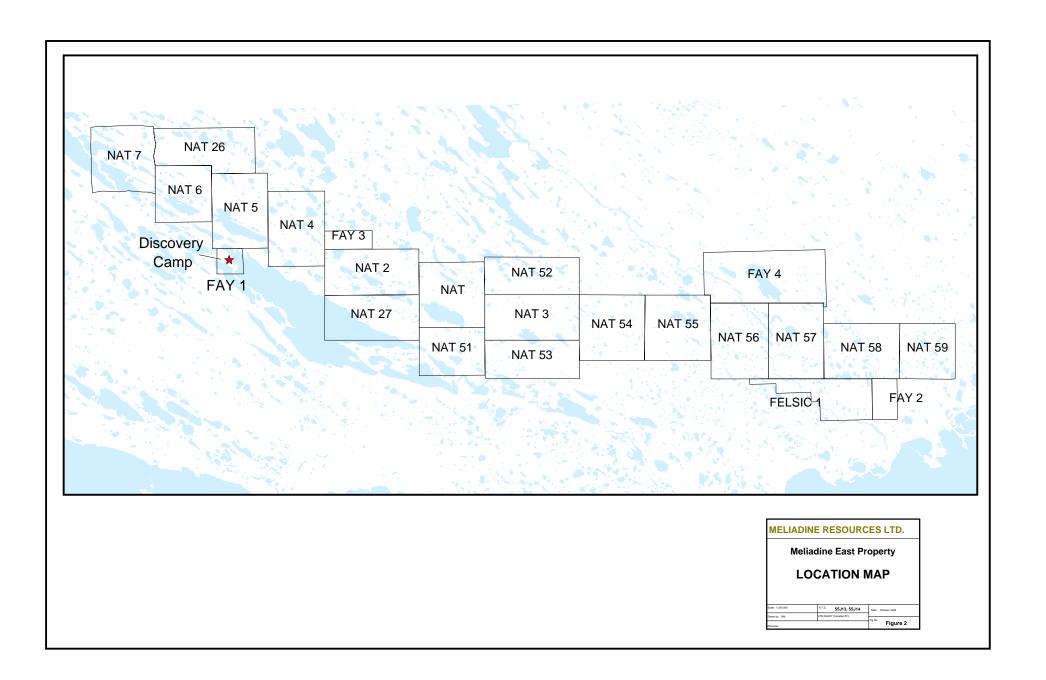
Meliadine Resources Ltd., its predecessors and/or Joint Venture partners have conducted exploration activities in the Meliadine East area since the late 1980's. The Meliadine East area saw significant exploration activities during the 1990's; however, activities at the site have been limited since 2000.

The Discovery campsite was installed at the present location in 1990. The site was chosen due to its close proximity to the 'Discovery' deposit area, which was the focus of early exploration programs. Over the years, the camp has serviced many exploration campaigns on the property.

The campsite is located in close proximity to Rankin Inlet and is currently accessible by helicopter during the summer; however, during the winter months, the campsite is also accessible by winter road for the overland transport of equipment and supplies. Historically, the majority of heavy freight, fuel, supplies and equipment have been delivered to the campsite overland via the winter road.

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1.1. <u>Discovery Campsite Description</u>

The Discovery camp covers an area of less than 1.5 hectares and can accommodate approximately 15-20

people. Facilities at the site include a plywood kitchen/dry structure, along with a 16'x24' Weatherhaven office tent and a plywood core shack. Workers can be accommodated in five 14'x16' Weatherhaven and two 14'x16' wood framed sleeper tents. The sleeper tents can house between two and four people, depending on configuration. The camp has two small plywood storage sheds, a plywood drillers shop, and

a plywood generator shed.

Water for domestic use at the site is pumped from Atulik Lake using a submersible pump. Electrical

power for the camp is provided by a 15kw diesel generator.

There are no bulk fuel storage systems on site. Fuel is currently being stored in 205 liter drums.

1.2. <u>Discovery Site Petroleum Inventory</u>

The estimated inventory provided below for petroleum products indicates the amount stored at the site as of July 12th, 2007. Fuel is currently stored in 205 litre drums.

Diesel Fuel: 9,020 liters

Jet –B: 1,025 liters

1.3. Contact Information

Corporate Contact: *Phone:* **720-946-1453** *Fax:* **720-946-1450**

Russ Cranswick, President, Meliadine Resources Ltd.

Site Contact: Phone: 604-241-4566 Fax: 604-241-4586

Roger March, Project Manager (Note: camp contact numbers are not yet available)

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2. Shutdown / Abandonment of Operations

This section of the Reclamation Plan details the procedures employed for the seasonal shutdown of operations at the site, as well as, plans for the eventual final closure of the site, demobilization of equipment and supplies and the restoration of the project area.

2.1. Planned Seasonal or Short-term Shutdown

The Discovery camp has historically been utilized from April through September. During the seasonal shutdown from October through March, the tents and buildings in the camp are sealed to keep out blowing snow. All water lines are drained to prevent damage from freezing water and the lake pump is pulled out of the lake and placed in storage. All valves on the fuel drums that supply fuel to the individual heating stoves in the tents are closed. Where possible, all equipment is stored in buildings to keep it out of the weather.

2.2. Planned Long Term Shutdown

In the event of a longer-term shutdown of operations at the site, the camp has been closed up in a similar fashion to that employed for seasonal shutdowns. Depending on the length of a planned long-term shutdown, there may be a requirement to ship some of the supplies out of the camp.

2.3. Final Closure / Demobilization

In the event that all work on the project ends and it is decided to cease operations at the site permanently, all equipment, structures and fuel will be removed from the permit area. Non-combustible materials and equipment will be removed from the site and transported to Rankin Inlet. These materials and equipment will be offered to local interests for purchase. Any items that remain will be shipped out of Rankin Inlet on barges.

Local persons and businesses will be given the opportunity to salvage buildings, materials and equipment that would otherwise be destroyed prior to undertaking final land reclamation procedures. The only material and structures that will remain at the site, after demobilization, is the drill core stored in the core racks. This material is an asset to the land holders, which represents millions of dollars of historical expenditures, and would cost even more to reproduce today.

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A detailed description of the plan for dealing with demobilization of the various types of equipment and materials is provided below. A detailed cost estimate for the demobilization is provided in Table 1.

2.3.1. Fuel Removal

All fuel on site will be consumed or sold and delivered to the buyer over the winter road. Sufficient fuel for heating needs will be stored on site in 205 liter drums during the camp closure. Depending on the season of final closure, any remaining fuel will be flown out or transported overland to Rankin Inlet and sold to interested parties.

2.3.2. Fuel Drum Removal

Empty fuel drums will be removed to Rankin Inlet. The fuel drums will be crushed prior to shipment south, in order to reduce the transportation costs. Any useable fuel drums will be offered to interested local parties.

2.3.3. Camp Equipment

All portable and/or mobile equipment will be transported from the site to Rankin Inlet along the winter road. The cost estimates provided in Table 1 assumes that all equipment will be removed. However, local persons and businesses will be given the opportunity to salvage camp equipment that would otherwise be destroyed prior to undertaking final land reclamation procedures.

2.3.4. Camp Structures

Structures presently in use at the Discovery camp include: a plywood kitchen/dry structure, five 14'x16' Weatherhaven sleeper tents, two 14'x16' wooden framed sleeper tents, a 24'x32' Weatherhaven office tent, a plywood core shack, a plywood generator shed, a plywood drillers shop, two small plywood build storage sheds, and a fabric building.

All Weatherhaven units (shell and aluminum frames) and canvas tent skins will be removed and transported to Rankin Inlet for sale or reuse at another site. The wooden frames and flooring for the canvas tents and the wooden flooring for the Weatherhaven tents will be burned at the site. All of the

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other remaining wooden structures and building at the site will also be burned, once everything salvageable and any hazardous materials have been removed. The non-combustible remainder will be collected and removed to the municipal landfill at Rankin Inlet for disposal.

2.3.5. Drill Core

There is approximately 19,900 meters of drill core in storage at the campsite. The drill core is consolidated in a compact area. The integrity of this core is best preserved with minimal rehandling; therefore, it is not intended or recommended that this be moved. It is most useful in its current storage mode.

3. Reclamation

The natural re-vegetation of the site generally will be slow due to the dry conditions that exist at the camp. Fertilizer will be used where it may benefit. There are a number of different types of surface conditions that will require reclamation on termination of activities; each of these is described below.

3.1. Building Bases

The prolonged presence of structures prevents plant growth due to the lack of sunlight. However, the ground surface is undisturbed and remains stable such that time alone will allow plants to re-establish. Growth will be enhanced by limited scarification to improve the germination of seeds from adjacent plants responding to the application of fertilizer throughout the area.

3.2. Drill Sites

The reclamation of drill sites is generally completed as the sites are drilled, therefore we do not expect to have any drill sites that will require reclamation upon closure of the property.

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3.3. Burned Sites

Material to be burned will be consolidated to reduce the number of sites and total area of the scorched tundra. All burning sites will be raked and any remaining metal removed and placed in the municipal landfill in Rankin Inlet.

All live plant tissue in the soil will have been destroyed by the heat but the surface will be stable. Like former building sites discussed above, natural re-vegetation will be slow. The sites will be raked to remove metal, ash scattered, and the sites fertilized. Non-combustible residue will be place in the municipal landfill in Rankin Inlet.

3.4. Contaminated Soils

Any contaminated soils pertaining to the location of stored fuel drums will be removed and either disposed of at site in a lined disposal facility or hauled to Rankin Inlet for disposal at a designated site.

4. Schedule for Reclamation

It is anticipated that all restoration activities will be completed in the season after the site has been de-commissioned of any exploratory operations.

5. Site Monitoring

After the completion of reclamation, two years of annual monitoring of the site will take place in the late summer. The monitoring will consist of measuring and documenting plant re-growth, ensuring that the core racks and boxes are stable and inspecting potential problem areas for erosion and run-off. Reports, including photographs, will be submitted to the KIA.

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6. Management and Contingency Factor

Cost estimates for the above activities are based on unit costs and units. Project management costs are estimated at 10 days at \$600/day or \$6,000. Table 1 is attached to this document, which includes detailed costs estimates for each activity. No contingency factor has been added to the amounts presented in Table 1.

<u>Table 1:</u> Cost Estimate - Abandonment and Restoration of Discovery Campsite

Activity	Sub-Activity	Item	Units	# Units	Cost/Unit		Cost by Activity		# of Man Days	Allocation of Labor \$200 / day		Allocation of Camp Costs \$100 / day		Helicopter \$1,000 / hr		Activity	
1.0 Demobilization											•						
1.1 Fuels	Remove Fuel	Camp to Rankin	liters	9,020	•	0.20		1,804							\$	1,804	
	Remove Fuel Drums	Camp to Rankin	kg	181	\$	0.24		43							\$	43	
Subtotal: Removal of Fuel							\$	1,847	0	\$	-	\$	-	\$	- \$	1,847	
1.2 Other Major Equipment	15 kw Generator	Camp to Rankin	kg	380		0.24		91							\$	91	
	3 Snowmobiles	Camp to Rankin	kg	546		0.24		131							\$	131	
Cultistata Danisma and Maior Farrismant	1 ATV	Camp to Rankin	kg	159	\$	0.24	\$	38	0	\$		¢.		¢	\$	38 260	
Subtotal: Removal of Major Equipment	. –							260	0	\$	-	\$	=	\$	- \$		
1.3 Kitchen / Dry Equipment	1 Refrigerator	Camp to Rankin	kg	113		0.24		27							\$	27	
	1 Stove 1 Freezer	Camp to Rankin Camp to Rankin	kg	91 113		0.24 0.24		22 27							\$	22 27	
Tents	1 Weatherhaven office (16'x24')	Camp to Rankin	kg kg	1,045		0.24		251							Φ \$	251	
TCHO	5 Weatherhaven Sleepers (14'x16')	Camp to Rankin	kg	1,125		0.24		270							\$	270	
	9 Stoves	Camp to Rankin	kg	207		0.24		50							\$	50	
	Miscellaneous equipment/utensils	Camp to Rankin	kg	1,000	\$	0.24	\$	240							\$	240	
Subtotal: Removal of Kitchen / Dry Equipment						_	\$	887	0	\$	-	\$	-	\$	- \$	887	
1.4 Removal of Structures (Labor)																	
	Fabric Tents									\$	600	\$	300		\$	900	
	Wooden Buildings									\$		\$	400		\$	1,200	
	Equipment/Supplies onto Skids					-				\$		\$	300		\$	900	
Subtotal: Labor							\$	=	10	\$	2,000	\$	1,000	\$ 3,	529 \$	6,529	
2.0 All core is racked and left for posterity															\$	-	
3.0 Reclamation																	
3.1 Supplies / Clean-up and Labor	Fertilizer		bulk	1	\$	6,000	\$	6,000	2	\$	400	\$	200		\$	6,600	
	Scarify Burn Areas		op hours							\$	400	\$	200		\$	600	
	General Site Cleanup		op hours						3	\$	600	\$	300		\$	900	
3.2 Site Monitoring	Contract	Year 1	flat rate	1	\$	5,000	\$	5,000							\$	5,000	
		Year 2	flat rate	1	\$	4,000	\$	4,000							\$	4,000	
Subtotal: Reclamation						-	\$	15,000	7	\$	1,400	\$	700	\$ 2,	471 \$	19,571	
Accommodation after Camp Breakdown			man days	10	\$	250	\$	2,500							\$	2,500	
Project Management			man days	10	\$	600	\$	6,000							\$	6,000	
Total			•	4,960			\$	26,494	17	\$	3,400	\$	1,700	\$ 6,0	000 \$	37,594	