RESPONSE TO
MACKENZIE VALLEY ENVIRONMENTAL
IMPACT REVIEW BOARD'S
INFORMATIONAL REQUESTS

Project No. 1740067.002

November, 2003

RESPONSE TO MACKENZIE VALLEY ENVIRONMENTAL IMPACT REVIEW BOARD'S INFORMATIONAL REQUESTS

Submitted To:

MACKENZIE VALLEY ENVIRONMENTAL IMPACT REVIEW BOARD

Prepared by:

EBA ENGINEERING CONSULTANTS LTD.
YELLOWKNIFE, NORTHWEST TERRITORIES
ON BEHALF OF SNOWFIELD DEVELOPMENT CORP.

Project No. 1740067.002

November, 2003

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November 16, 2003 EBA File: 1740067.002

Ms. Sherry Sian, Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
200 Scotia Centre, (5102-50th Avenue)
YELLOWKNIFE, NT. X1A 2N7

Attention: Ms. Sherry Sian

Subject: Response to MVEIRB's Informational Requests
Per Snowfield Development Corp.'s Land Use Application MV2003C0023, Developers' Agreement Report (DAR) and Amendment thereof.

We are pleased to have EBA Engineering Consultants Ltd. submit two bound copies of the above-mentioned response for your review. We trust that the information presented in this response sufficiently addresses the requests for information brought forward by the Board.

We have provided information on two methods of bulk sampling. Trenching would be, by far, our preferred method of choice. Please advise the Board that it is unlikely that Snowfield Development Corp would want to pursue the large-diameter reverse circulation borehole drilling method due to constraints of cost, operating parameters and environmental concerns.

Should you have further questions or comments regarding this report, please contact Mike Beauregard or myself. I would again take this opportunity to thank you for your assistance to this company and your efforts towards the coordination of this matter.

Yours very truly

"*Robert T. Paterson*"

President & C.E.O.
Snowfield Development Corp.

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1.0 INFORMATION REQUEST NUMBER 1.1.1

1.1 Request

Provide the following information:

a. *On a single map, clearly depict the proposed access routes to each of the SDC – claim areas and proposed drilling locations. Include an appropriate legend.*

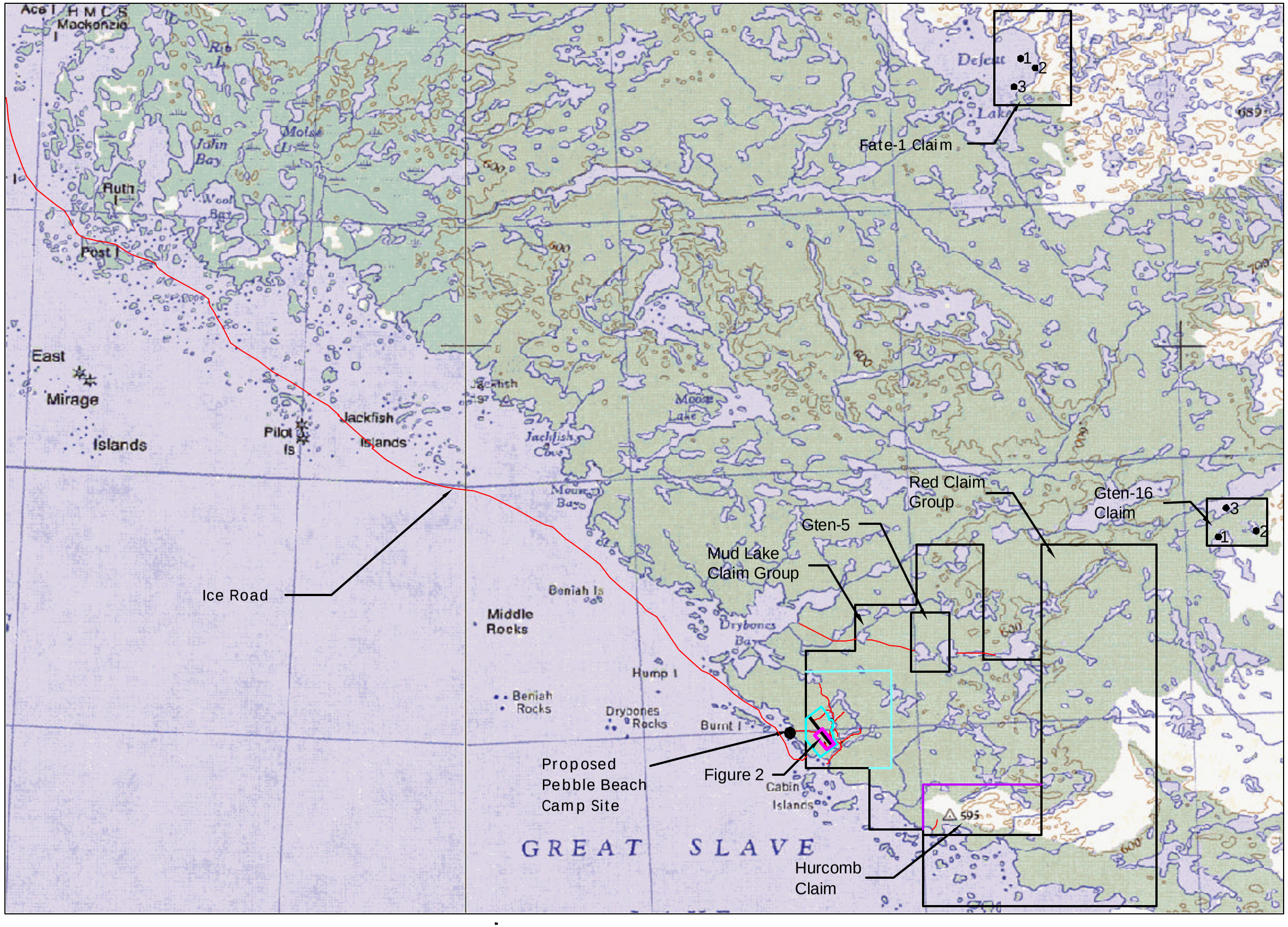
We apologize for the confusion with existing and proposed winter trails on Figures 1, 2 and 3 in Amendments and Additions to Snowfield Development Corporation's (SDC) Agreement Report (DAR). All trails shown were pre-existing with no proposed trails shown (Figure 1).

In this submission, we will ask for certain lengths of new trail within the boundaries of two areas. We cannot propose trails when the locations of drill sites plotted at 1:50,000 scale are either potential sites or not known. We also show two more pre-existing winter trails that have been brought to our attention. An 8 km long winter trail, put in by Avance International in 1996, proceeds from the south shore of Drybones Bay through the north part of the Mud Lake Claim Group. A short winter trail also occurs in the western part of the Hurcomb Claim. Therefore the SDC claim packages have a total of 24 km of pre-existing winter tote trails within its claim boundaries (Figure 1).

The difficulty with this Information Request lies with the perception of "What constitutes a drill site" in an exploration program.

When regulatory agencies are provided with a list of magnetic anomalies, they seem to expect to see ground access laid out to each and every one. We would end up "papering" selected claim groups chock-full of access trails when this is simply not the case. The short answer is that "We don't know where each drill site will be located at this time. Further ground-truthing exploration work is required."

For example, the 2003 Diamonds North drill program on the GTEN claims in the Drybones Bay area started with a list of 36 magnetic anomalies on four separate non-adjoining claims. Ground-truthing eliminated a number of anomalies. 22 anomalies were followed up with ground geophysical surveys, 10 helicopter-supported holes were drilled (often up to several hundred metres away from the original "site") and no kimberlites were found. INAC Land Use inspectors were provided with the UTM coordinates for 36 magnetic anomalies and a



N

Legend

UTM Zone 12 Nad 1927
NTS Mapsheet 85I/4

- Mud Lake Kimberlite Work Area
- Mud Lake Grid Baseline
- Mud Lake Grid Outline
- Claim Boundary
- Pre-Existing Winter Trails
- Denotes Drill Targets

Figures

2 Mud Lake Kimberlite Work Area
3 Central Mud Lake Claim
4 Hurcomb Claim

Scale 1: 160,000

Figure 1
Location Map

1740067.002 fig01.dwg

working map. Progress reports kept all agencies, including the Yellowknife Dene First Nation (YKDFN) Land and Environment Office, updated after startup. A 1:50,000 map and UTM coordinates of the ten drill sites and a temporary storage area were provided at the closure of the program.

Here are the steps for a reconnaissance drilling program:

Reconnaissance Process for Drill Site Selection (Reconnaissance or "Wildcat" Hole)

1. Airborne Geophysical Survey = Magnetic Anomaly
2. Ground-truthing = Ground Geophysical Survey (a narrow cut line up to 500 m long) and/or Till Sampling (no cut lines)
3. Drill Site Selection (Yes/No)
4. Access (Ground or Air)
5. Prepare Drill Pad (100 square m if in trees, 10 square m if in open)
6. Set Up and Drill
7. Success? (Yes/No)

Here are the steps for a follow up drilling program

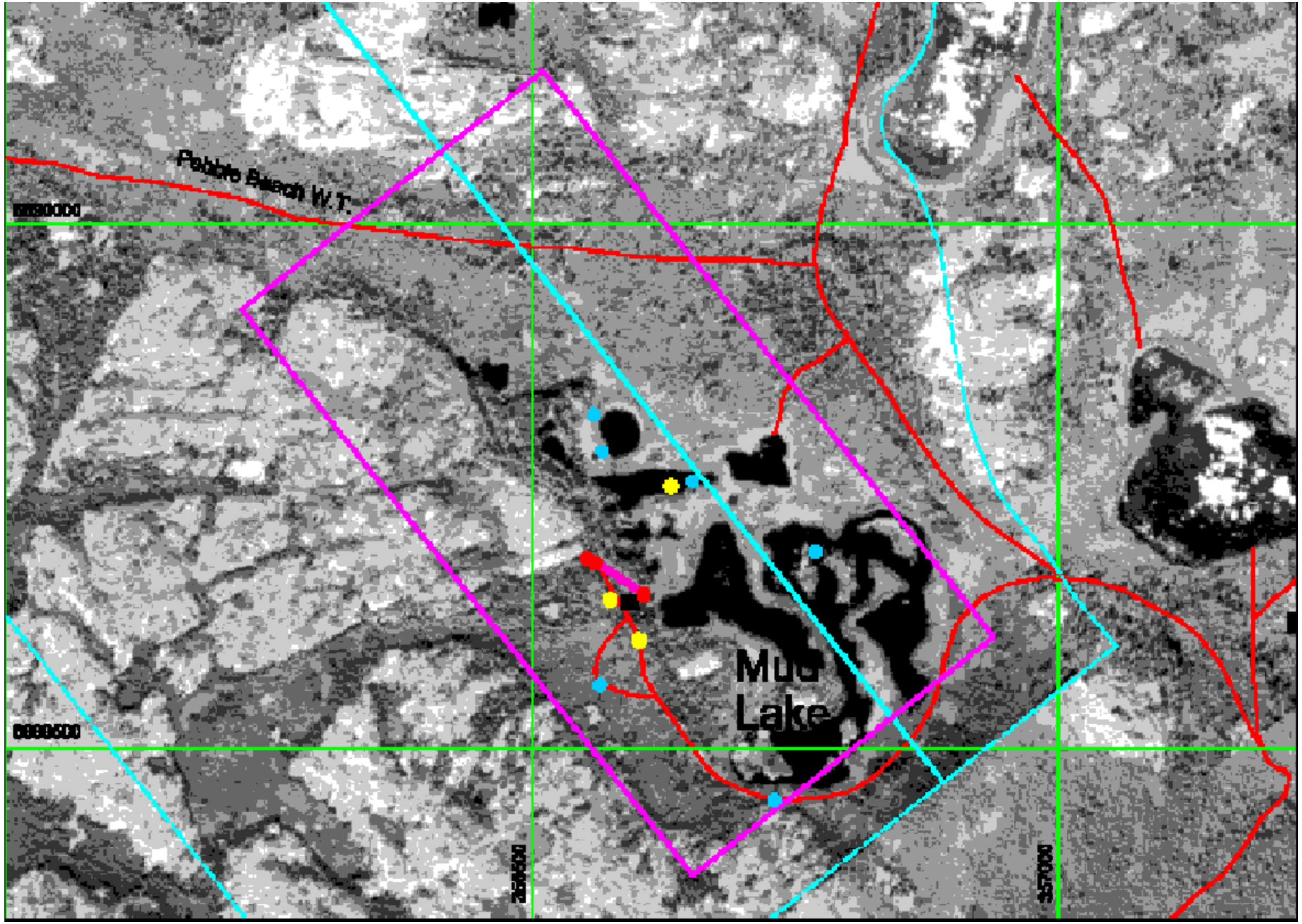
Delineation Process for Drill Site Selection (Delineating a Kimberlite Occurrence)

A. Gridding = line cutting of 1 km long baseline with crosslines every 25 m
B. Detailed Ground Geophysical Survey and/or Systematic Till Sampling
C. Drill Site Selection (Yes/No)
D. Access (Ground or Air)
E. Prepare Drill Pad (100 square m if in trees, 10 square m if in open)
F. Set Up and Drill
G. Step-out Hole or Drill Deeper (Yes/No)

The Mud Lake Kimberlite Work Area is at Level A in the Delineation Process (Figure 2). All other areas and claim groups are at Level 1 in the Reconnaissance Process. Drill site selection is the third level in either process.

The best SDC can do for proposed ground access is to provide MVEIRB with boundaries for two areas of interest, the Mud Lake Kimberlite Work Area and the Central Mud Lake Claim Group Geophysical Survey Area (Figure 3). This is within the area of 18 km of pre-existing winter trails in the westernmost portion of the Mud Lake Claim Group.

The inland or eastern portion of the Mud Lake Claim Group and all other claims and claim groups will be drilled using helicopter access and support.



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Legend

UTM Zone 12 Nad 1927
NTS Mapsheet 85I/4

PRE-EXISTING DRILLHOLES

- Significant Kimberlite Intersection
- Kimberlite Intersection
- Drill Hole
- Kimberlite Occurance
- Mud Lake Kimberlite Work Area
- Mud Lake Grid Baseline
- Mud Lake Grid Outline
- Pre-existing Winter Trail
- Drill Gear / Skid Shack (Under Permit to Store)

Scale 1:4000

Figure 2
Mud Lake Kimberlite Work Area Detail

1740067.002 fig02.dwg

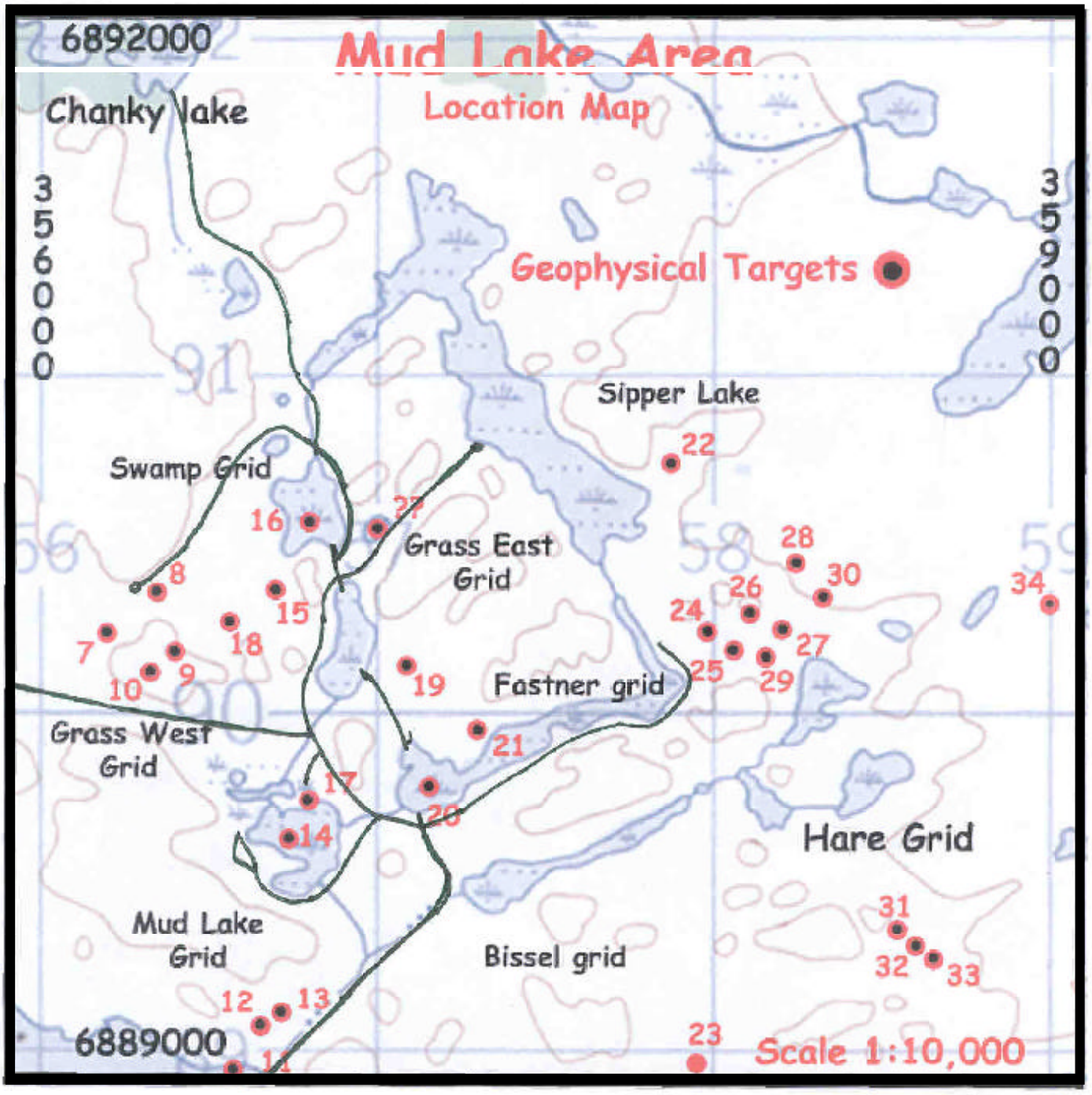

Figure3. CentralMud LakeClaimGroupGeophysicalSurveyArea.

We estimate that there will be 0.5 km of new access winter trail leading to each of 20 yet-to-be-selected drill sites within the boundaries of the Mud Lake Kimberlite Work Area.

We estimate that there will be 2 km of new access winter trail leading to each of 30 yet-to-be-determined drill sites within the boundaries of the Central Mud Lake Claim Group Geophysical Survey Area.

The Central Mud Lake Claim Group Geophysical Area and the Hurcomb Claim (Figure 4) are being readied for Reconnaissance Exploration – Level 2 (ground-truthing).

The GTEN-16 Claim and the Fate Claim (Figure 1) each have three targets with locations provided by prior owners. The targets have not been ground-truthed. The targets (and additional future anomalies) would be tested by helicopter-supported diamond drilling in winter.

The Red Claim Group (Figure 1) is unexplored. SDC anticipates that an airborne geophysical survey will be completed within the next three months on the Red claims. Work must be done before we have sites ready to be diamond drilled in winter with helicopter access and support.

Locations of Proposed Work in Land Use Application MV2003C0023

1.1.1 Mud Lake Claim Group

Mud Lake Kimberlite Work Area

Map reference = Figure 2, this map shows pre-existing trails and drillholes.

Stage I, 20 drill-holes to delineate known kimberlite occurrence inside the boundaries of proposed Work Area. Winter access by ice road, preexisting winter tote trails and new winter tote trails leading to yet-to-be-selected drill sites (estimated 0.5 km out of requested 4 km of new tote trail to be located within the outlined Mud Lake Kimberlite Work Area).

Central Mud Lake Claim Group Geophysical Survey Area

Map reference = Figure 3, this map shows magnetic anomalies and pre-existing trails.

Stage II, 30 drillholes testing yet-to-be-evaluated 34 magnetic anomalies inside the boundaries of the Survey Area. Winter access by ice road, pre-existing winter tote trails and new winter tote trails leading to yet-to-be-selected drill sites (estimated 2.0

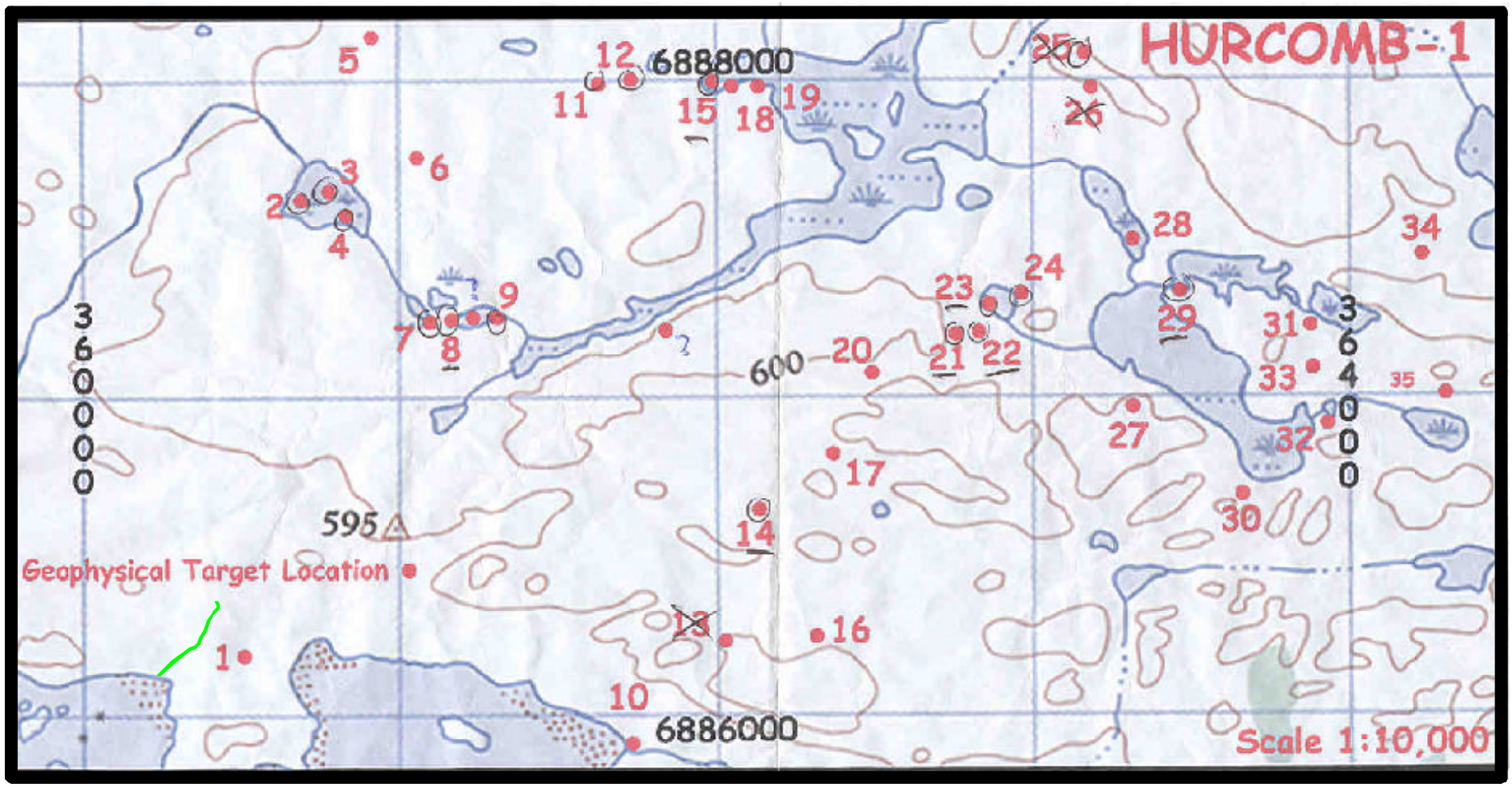

Figure4. Hurcomb ClaimGeophysicalSurveyArea.

Legend

- Magneticanomaly

Futuredrillsiteswillbehelicopter supported,noaccess trails.

- Pre-existingTrail

km out of requested 4 km of new tote trail located within the outlined Central Mud Lake Claim Group Geophysical Survey Area).

Proposed Mud Lake Kimberlite Work Area
Map reference = Figure 2, this map shows pre-existing trails and drillholes.

Stage III, Bulk Sampling of 500 tonnes of kimberlite by preferred method of trenching. Winter access by ice road, pre-existing winter tote trails and new winter tote trails leading to yet-to-be-selected trench sites on the yet-to-be-delineated surface exposure of the known kimberlite occurrence (estimated 0.4 km out of requested 4 km of new tote trail to pass directly over the yet-to-be-delineated surface exposure of the kimberlite occurrence).

The remaining amount of 1.1 km out of requested 4 km of new winter tote trail is anticipated to access future targets that may turn up elsewhere from further exploration of the Mud Lake Claim Group. Such new trail would be "jumped-off" from the pre-existing winter tote trails within the Mud Claim Group. Frozen ponds, lakes and open swamps would be used as much as possible for ground access to lessen the amount of tree clearing.

Please note that much of the Mud Lake Claim Group consists of exposed outcrop unsuitable for winter tote trail construction. An undetermined number of Stage II targets would require helicopter-supported drilling. Additionally, the portion of the Mud Lake Claim Group that lies 3 km or further inland from Great Slave Lake would require helicopter-supported drilling.

1.1.2 Hurcomb Claim

Detailed map reference = Figure 4

Stage II, 10 drillholes testing yet-to-be-evaluated 35 magnetic anomalies shown by 2002 airborne geophysical survey. The rugged topography of the Hurcomb Claim precludes construction of winter tote trails. As the majority of the magnetic anomalies lie under swamps and small lakes, a helicopter-supported winter drilling program is anticipated.

1.1.3 Red Claim Group

Map reference = Figure 1

Stage III, up to 20 helicopter-supported drillholes are anticipated. Exploration has yet to be conducted on the Red Claim Group. SDC anticipates that an airborne geophysical survey will be completed within the next three months on the Red claims.

1.1.4 GTEN-16 Claim (12 km inland from Drybones Bay proper)

Map reference = Figure 1

Stage I, up to 5 drillholes testing 3 known targets. This would be a helicopter-supported winter drill program as one of the targets lies beneath a lake.

1.1.5 Fate Claim (Defeat Lake, NTS 85I/5)

Map reference = Figure 1

Stage I, up to 3 drillholes testing 1 to 3 known targets that lie under Defeat Lake proper. This would be a fixed-wing aircraft and helicopter-supported winter drill program.

b. *Of the sections of proposed access routes that are already in existence as travel corridors, will any work, such as brushing or clearing, be required to render these roads usable by SDC? If so, please specify what will be required and on which sections.*

AND

c. *In a concise table, indicate when each section of proposed access route was last used as a travel corridor of comparable use.*

Brushing or clearing should not be required on the existing winter tote trails on the westernmost portion of the Mud Lake Claim Group. The pre-existing trails need to be snow-packed and plowed in order to be of service.

- The Pebble Beach winter tote trail was cleared during Jan 2003. It was used for ATV access to the Mud Lake grid during the summer of 2003.

- The Cabin Island winter tote trail from Great Slave Lake to Mud Lake was last used for ground access during the Feb 2003 drill program.
- The north-south Grass Lake winter tote trail in the interior of the claim block is in reasonable condition and was last used to implement small diamond drill programs in the winter of 2001.

2.0 INFORMATION REQUEST NUMBER 1.1.2

2.1 Request

Provide the following information:

a. How does SDC propose to eliminate solid kitchen waste from greywater going to sump? Please describe method in detail.

Separation of solid kitchen waste from greywater will occur in the kitchen during food preparation. The food preparation area will have a dedicated garbage container where solid waste material will be disposed of during food preparation. The sink will contain a screen to capture any solid waste material and, thus, separating it from greywater before it reaches the sump. The cook will regularly empty the screen during food preparation.

b. How many outhouse pits does SDC foresee?

The need for two outhouse pits are foreseen.

c. What is the maximum capacity of each outhouse pit?

The maximum capacity of each outhouse pit is not known and will be influenced by the type and depth of substrate. However, outhouse pits will be monitored, and if they fill up a new pit will be dug as needed. The ultimate number of pits needed is unknown and cannot be calculated prior to fieldwork, as the type and depth of substrate will dictate the needs. Latrines and privy pits require a cover of 300 mm of earth material (Section 25b) (CPublic Health Act (1990).

d. How will outhouse pit sites be selected?

Outhouse site selection will be juxtaposed to the camp facilities. They will be placed on a suitable site behind camp.

e. Will outhouse pits be dug before ground freezes?

No, the outhouse pits will be dug during the freezing process. This will occur during camp construction, which will be after a permit has been issued for conducting the proposed work.

3.0 INFORMATION REQUEST NUMBER 1.1.3

After a Nov 5 meeting with DFO, SDC is better able to address fish habitat concerns. SDC's concerns were the generation of realistic operating criteria for (1) a widespread exploration drilling program and (2) its proposed program of diamond drilling concentrated within the Mud Lake Kimberlite Work Area.

3.1 Request

Provide the following information:

a. What factors were considered in the selection of the proposed source lakes for all claim areas?

1. Nearest Water Source to Proposed or Future Drill-site
2. Fish Habitat (Yes/No)
3. Kimberlitic Rock Being Cored? (Yes/No)
4. Size of Water Source (minimum 1 hectare)
5. Depth of Water (minimum of 1 metre of free-standing water beneath ice)
6. Volume of Available Water (minimum 1,000,000 litres = 1 ha X 1 m depth)
7. Volume of Water Used by Single Drill Hole, 100 m in depth (25,000 litres)
8. Draw-down (2.5% or less of available water)
9. More than One Drill Hole Sourced from Same Water Source? (Yes/No)

<u>Mitigating Factors To Be Undertaken By SDC For Exploration (or Reconnaissance) Diamond Drilling</u>

The presence or absence of fish habitat in ponds and small lakes used as drilling water sources across the five claim blocks will be determined by Dissolved Oxygen measurements with results reported to regulatory government agencies and aboriginal Land and Environment offices. The volume of drill cuttings for a drill hole of NQ diameter is estimated to be less than 0.25 cubic metres per 100 metres of core. Draw-down will be monitored and recorded daily by measuring water depths at the water intakes.

Should there be less than 1,000,000 litres of water available per drill hole, the following mitigating measures will be employed:

1. Recirculation of water through the use of settling tanks. Good management of recirculating water should reduce water requirements up to 75% or more.
2. Draw-down will be monitored and recorded by measuring water depth at the water intake once per drill shift.
3. Water may have to be pumped from an adjacent water source.
4. The drill may have to be moved unto next site to allow water level recovery at impacted site before returning to resume/finish drilling.

b. How will SDC determine whether Mud Lake is frozen to the bottom?

The company has determined that Mud Lake does not freeze to bottom from lake sediment sampling data provided by Mr. David Smith**.** "Mud Lake" covers 4 ha of marsh with 2 ha of small, interconnected ponds. An average value of 1 meter of freestanding water below ice yields a minimum of 20,000,000 litres for Mud Lake.

MUD LAKE BOTTOM SAMPLE DATA, LOCATIONS AND DEPTHS

Identifier	UTM Coordinates	Water Depth	Lake Bottom
Southeast	357720 E 6889540 N	2.44 m (8 ft)	organics above gray clay
Central	357800 E 6889600 N	3.05 m (10 ft)	organics above gray clay
central-west	356710E 6889700 N	---	organics below ice
Northeast	356620 E 6889700 N	2.44 m (8 ft)	organics above gray clay
Northwest	356560 E 6889835 N	1.52 m (5 ft)	organics above gray clay

c. In the event Mud Lake is not frozen to the bottom, how will SDC determine whether draw down will be significant or not?

A drop of 2.5 cm per metre of freestanding water (2.5%) will be considered significant.

The company will perform a water depth survey, using a depth finder on the ice of Mud Lake, to ascertain the available volume of water prior to diamond drilling. The original Mud Lake grid, however, must be re-established. The grid survey is planned for Jan. 2004. If only 20,000,000 litres of water is available in the Mud Lake ponds, then there is sufficient water for two to four unmitigated drill holes before drawdown effects should become apparent. It should be noted that a prior drill program at Mud Lake was able to utilize freestanding water with no visually discernable draw-down effects from eight (NQ

diameter) diamond drill holes. Mitigation of the Mud Lake drilling program will include the diamond drilling contractor use of re-circulation tanks at all times and the possibility of pumping from pond to pond. Water will be trucked to the drill site, if and when necessary, in order to complete the proposed 20 hole program.

d. For all claim areas, what volume is adequate for a source lake?

The water source must contain a minimum of 1,000,000 litres of water per drill hole.

e. For all claim areas, what depth is adequate for a source lake?

The water source must have a minimum of 1 m depth of freestanding water below ice.

f. For all claim areas, how are draw down thresholds determined?

A drop of 2.5 cm per metre of freestanding water (25%) would be considered significant. Depth of freestanding water would be measured from pond bottom once per drill shift if the water source has minimums of area, volume or freestanding depth of water.

g. For all claim areas, how will fish bearing status of source lakes be determined?

The company acknowledges that demonstrating Mud Lake is not fish habitat by Dissolved Oxygen measurements should reduce environmental concerns.

Elsewhere, dissolved Oxygen levels would be measured at the water intake during drill setup at each new water source and reported to regulatory government agencies and aboriginal Land and Environment offices. Mitigation measures will be used upon determination of the presence of fish habitat.

Sites that are already identifiable fish habitat are: Target 3, GTEN-16 claim and all three targets within Defeat Lake proper, Fate claim (Figure 1).

4.0 INFORMATION REQUEST NUMBER 1.1.4

4.1 Request

Provide the following information:

a. A detailed consultation plan for the duration of operations to identify and respond to concerns about traditional use areas in the Drybones Bay and surrounds. The consultation plan should describe parties to be consulted, consultation methods, and the frequency of interaction anticipated.

Pre-season	Prior to each exploration season, meeting with traditional users, preferably at one location to outline and discuss proposed exploration programs.*
Operations	Weekly progress reports faxed to regulatory agencies and traditional user groups.** The company would do their best to welcome and accommodate site visits by observer(s) from traditional user groups.
End of Season	Inspection by representative(s) of traditional user groups.
Post-season	Meeting with traditional users, preferably at one location. Written report to regulatory agencies and traditional user groups.

* The company has submitted a four-year exploration plan to the Mackenzie Valley Land and Environment Review Board.

** During the spring of 2003, the SDC Project Geologist was able to file daily progress reports on the SDC/Diamonds North joint venture drilling program in the sensitive area of Drybones Bay, faxed to regulatory agencies and YKDFN Land and Environment office. This was possible because the work crew traveled back and forth to the jobsite daily. Once a camp is established at Pebble Beach, communications may be a bit slower.

b. A list of key questions that SDC will use to identify important traditional use areas before operations start.

This is what SDC would like to ask each group of traditional users.

1. We now know that moose hunting, muskrat trapping, wood-cutting, medicinal plants, berry picking and camping are important traditional activities in the area. Are there any other traditional activities that are important within or near the claims that we should know about?

   Where do they occur?

   When do they occur?

   How often do they occur from year to year?
2. When are moose hunted in the area?
3. We usually see moose in Drybones Bay and south of Cabin Island. Rarely do we see moose inside the claims. Where else have moose been hunted?
4. What more can SDC do to lessen the impact on calf-bearing moose?
5. During previous exploration activities, the SDC project manager has notified the regulatory agencies and the traditional users when we are going to be on the property, our exploration schedule/activities and whether we are drilling or not. Do you want us to keep doing that?
6. If and when the job goes ahead, for safety reasons, will your people stop in at the camp or the drill for a coffee (or tea) if you are hunting, trapping or travelling in the area?
7. Did you know that employees working for SDC are not allowed to hunt in the exploration area? We also keep a log of all wildlife sightings.
8. Who besides Leo Bettsina has a trap-line in the Drybones Bay area?
9. When are muskrat usually trapped?
10. Are the winter roads in the claims used to go muskrat trapping or moose hunting?
11. Are the winter roads in the claims used to go woodcutting?
12. The valley behind Pebble Beach is good for blueberries. Are there other places in the claims that are good for berry picking?
13. Are there any areas of medicinal plants on or near the claims?
14. Where are the important raptor and waterfowl nesting/migratory areas?
15. Who do the new cabins belong to?
16. Where are your camping areas?
17. Can we use certain cabins in case of emergency?

18. Can we help each other map out winter roads and skidoo trails?
19. How should the company report future finds of archeological artifacts?
20. Our company has data from programs of spruce bark sampling, lake sediment sampling and future Dissolved Oxygen in water measurements. Is any of this information of use to start or to add to your baseline environmental studies?
21. How do we get invited to your next cross-cultural camp?
22. Should the company remove its tent frames when the job is done or would they be helpful to your people if let standing for your future use?

5.0 INFORMATION REQUEST NUMBER 1.1.5

5.1 Request

Provide the rational for selecting Pebble Beach semi-permanent campsite as long-term base of operations.

The proposed Pebble Beach campsite was selected for the following reasons:

1. From several years of observation, the site appeared to be in a location offering little interference with other users.
2. It is not in Drybones Bay proper.
3. The Mud Lake area is swampy and buggy, surrounded by fairly rugged outcrop.
4. The site offers good placement with respect to SDC's mineral claims.
5. Pebble Beach is located at the beginning of one of two winter tote trails accessing the Mud Lake Kimberlite Work Area, which lies about one kilometer inland, where much of the attention of SDC will be focused. The start of the Cabin Island tote trail, while providing an area of flat sand for a campsite, is heavily treed. Also, the bay in front of the Cabin Island access trail is very shallow.
6. The gravel beach is the only place on the shore of Great Slave Lake in this locale where a barge can be used to put supplies ashore during calm periods.
7. The beach's exposure to the wind and pounding waves of Great Slave Lake meant that it has seen occasional use as a stop for passing boats. Several recent fireplaces were observed. Recreational boaters moor in the lee of Burnt Island 1.5 km to the north.
8. There is a one to two hectare-sized area of lightly treed, flat sand and gravel behind the beach that is ideal for a campsite of framed and floored tents, or trailers that can be brought in by winter ice road. The site is somewhat exposed and subject to wind year-round, which during summer will reduce flies and mosquitoes.
9. The digging of adequate sumps and outhouse pits should not be a problem.
10. There is an area of low outcrop beside the beach that is a good helicopter pad.
11. There is a small point behind which we can pull small boats ashore for shelter. We would use small boats to access the claims to the south during the summer.

We would not install a semi-permanent dock due to frequent heavy swells and environmental concerns.

12. An inspection with Angus Martin, YKDFN observer, during May 2003 revealed no cultural artifacts.

13. A visit by YKDFN elders during summer 2003 revealed no cultural artifacts.

6.0 INFORMATION REQUEST NUMBER 1.1.8

6.1 Request

Provide the following information:

a. What frequency of access is anticipated by road and air by season?

Frequency of access by road and by air will be twice daily for each drill hole, and each drill hole can take between one to three days to drill depending upon the nature of the bedrock (*i.e.* fractured rock).

During the winter time, drill targets will be accessed via a snowmobile or tote trail. Each drill target will require access once at the start of each shift and once at the end of each shift. A crew of two people access drill targets by traveling on snowmobile along a snowmobile or tote trail in the morning, work at a given site throughout the day and ride a snowmobile back to camp in the evening. The drill will operate 24 hours a day with 2 shifts.

During the summer time, drills will be moved into position by helicopter. A crew of two people will access drill targets via helicopter or on foot, depending upon a target's proximity and accessibility from camp. The crew will work at a given target throughout the day and will return to camp in the evening either by helicopter or on foot. This level of access will occur for two days for each drill target.

b. Based on these frequencies of use, what is the zone of influence for access relative to the wildlife Valued Ecosystem Components chosen? How does this alter the estimate of the disturbance footprint of the operation?

The zone of influence should not change for the Valued Ecosystem Components based on the frequency of access; and, it does not alter the estimate of the disturbance for the footprint of the operation. This is because frequency of access is limited to potentially a few events.

Disturbance associated with drilling and equipment operation will affect wildlife use of habitat outside of the direct development footprints. This displacement will reduce habitat effectiveness for all species, but whether it is measurable is uncertain. The zone of

influence will depend on the specific level of sensitivity of individuals, species and how they habituate to various stimuli.

For small mammals and most passerine birds, loss of effective habitat will be negligible. For species such as carnivores the effects are variable. Black bears and foxes are not expected to be affected. Wolves are potentially in the area when caribou are in the region and are not anticipated to be impacted by equipment operations. Impacts from equipment operations on ungulates (moose and caribou) are expected to be negligible. Moose densities are relatively low in this area compared to other moose ranges in southern Canada. Moose densities in the Yellowknife region are relatively low, with densities varying between 1 moose per 17 km^2 in high quality habitat to 1 moose per 33 km^2 in low quality habitat (Treseder and Graf 1985). The probability of moose being displaced is low based on the nature of this small scale operation. The probability of displacing multiple moose at a given drill target is remote.

The proposed project area does lie within the historic winter range of the Bathurst Caribou Herd. However, it is at the southern extreme of the winter range and is not utilized as frequently as other areas further north. Caribou distribution and density varies from year to year, with the herd rarely using the same area for more than two or three years out of ten (Case *et al*. 1996). The probability of displacing caribou is small as they are distributed over a large area during winter. It is difficult to predict displacement behaviour, as it will vary depending upon various entities such as topography, individuals, weather, etc. However, based on behavioural studies (BHP 1999) conducted on caribou during the spring, summer and fall at BHP's EKATI™ diamond mine, pickup trucks and people were two stressors which caused the greatest displacement, while blasting, helicopters, haul trucks and sirens caused minor displacement.

Reductions in habitat effectiveness resulting from disturbance are mitigated completely and immediately upon cessation of the disturbance.

c. What behavioural effects may be predicted for wildlife Valued Ecosystem Components?

We expect behavioural effects on wildlife to be nil to minor, at most. In the most extreme case, there may be some minor displacement, *e.g.* a moose or caribou will likely not venture into an area where a drill is operating. However, we do not believe it will change the energetics of these individuals and, consequently, they should spend the same amount of time foraging, sleeping, walking, etc. Noise from exploration activity will be of short duration and will not permanently displace animals.

d. What sensitivity thresholds for different life history phases relative to operations have been used to predict no wildlife impacts?

Sensitivity thresholds do not exist for the selected Valued Ecosystem Components for different life history phases for the operations of concern. However, we have conducted behavioural experiments for various species on other projects, and rely on our empirical knowledge to provide insight to individual species sensitivities, taking into consideration life phases and seasons of the year.

Caribou may occur in the area during the winter, a time that is not as sensitive to them as the calving period. Moose occur in the area throughout the year and are sensitive during calving periods. Extrapolating results from moose surveys in the Yellowknife region (Treseder and Graf 1985), we believe there may be 3 to 4 moose calving across the claim areas. Drilling operations for any given drill target will last only a few days. During the brief calving period (late May early June), 1 or 2 drills will be operating and the probability of displacing calving females is remote. It is not a question of displacement but rather one of avoidance. A calving female will not come into an area where a drill is operating; she will calve in adjacent areas.

For the majority of the other Valued Ecosystem Components, summer time is the period of concern. Impacts to wildlife are expected to be minimal, of short duration and localized. Noise levels produced by the operating equipment will inevitably impact some animals, but only to a minor extent. These noise levels will occur during the drilling operation and will be of short duration. Noise from exploration activity will be of short duration and will not permanently displace animals.

e. How has the operation been designed to avoid access related effects on wildlife?

Operational design has limited the extent of access. Primary access will be an ice road linking Yellowknife to Drybones Bay. It is important to note that an ice road has been in existence, intermittently, for many years in the region and adjacent areas, often linking Yellowknife to various mineral deposits. The proposed ice road will end at the proposed Pebble Beach camp location, from which point only snowmobile and tote trails will lead into the bush. Restricting the number and extent of trails further minimizes access related effects on wildlife. The ice road, snowmobile and tote trails are ephemeral, allowing access only during the winter.

f. What is the cumulative effect of access on the wildlife habitat given the apparently concurrent activities of New Shoshoni Ventures, Consolidated Goldwin Ventures, traditional land use and recreational use of the area by season?

We do not believe that there will be any increase in cumulative effect resulting from access to wildlife habitat, or wildlife in general, as a result of concurrent activities from New Shoshoni Ventures or Consolidated Goldwin Ventures who are generally operating in a different area that includes the shoreline of Great Slave Lake, than is SDC.

New Shoshoni Ventures proposes to drill 10 holes, while Consolidated Goldwin Ventures intends to drill 3 to 6 holes. We contend that the relatively few and additional activities proposed by New Shoshoni Ventures and Consolidated Goldwin Ventures will not add to cumulative effects.

g. What is the relative magnitude of cumulative effects, if any, by season?

SDC's exploration program is of modest size, with a footprint of 0.05% of the total area of the mineral claims. Disturbances generated from this activity will be minimal, of short duration and localized. There should be no permanent negative impacts on the wildlife or wildlife habitat in the area, regardless of the season.

Displacement behaviour by wildlife should be marginal, if at all. Instead of displacement we would expect animals to avoid the immediate area during the short-timeframe when the diamond drill or backhoe is operating.

The impact on wildlife will be temporary, short-term disturbance if they were present. Disturbance will stop immediately upon cessation of drilling activities.

Wildlife habitat will be altered marginally as snowmobile trails are cleared. However, the habitat comprises of Canadian Shield with the majority represented by open stands of jack pine and exposed rock outcrop. During the summer access is by air and only the drilling pads will impact the vegetation through compaction. Very little habitat will be disturbed, at worst case the drilling areas will set back vegetation to an earlier successional stage. The process of setting back vegetation to earlier successional stages produces greater forage and, thus, making it highly desirable for most species.

7.0 INFORMATION REQUEST NUMBER 1.1.9

7.1 Request

Answer the following:

a. What information is known about the level of current use of the ice road to the proposed on land junction to access the SDC camp and work sites?

Based on last year's experience, company/contractor traffic consisted of two to three trips daily to change crews and service the drill. The start and finish of the program saw, perhaps, as many as six company and contractor-related trips per day for mobilization and demobilization purposes. One to ten vehicles per day were observed consisting of other traffic.

b. What, if anything, is known about the purpose of travel for those using the ice road?

Last year's "other traffic" on the ice road would be commercial, traditional and recreational fishermen; contractors working at the New Shoshoni program, inspectors and tourists. Most aboriginals travelled by skidoo and the majority of these persons were enroute between Lutsel K'e and Yellowknife. The amount of vehicular and skidoo traffic sharply increased on weekends.

c. What mitigations, if any does SDC propose to avoid potential cumulative effects of access to heritage sites?

Any ice road past Wool Bay fish plant to Drybones Bay (or Thor Lake or other deposits) is usually constructed and maintained by one exploration company or another. Last year it was SDC that constructed and maintained an ice road. Prior to the plowing of the ice road, New Shoshoni personnel were able to drive out with 4x4 vehicles to Drybones Bay.

Ice roads are on Crown Land and nobody can close off access to public domain. Nor can a company post "Keep Off" signs on Crown Land, except to warn of a hard-hat work site, as in the case of an operating diamond drill site.

During the winter season, heritage sites are under snow. People in vehicles rarely leave the ice road.

There is no easy solution to vandalism. Vandals operate in the absence of people. However, the onshore winter ice roads heading into the Mud Lake Kimberlite Work Area are "hooked" so that the winter trails are not visible to anyone boating or snowmobiling by along the shore of Great Slave Lake. During years when the ice road is not emplaced, the casual winter user should go right by. Casual summer boaters don't even know that the winter trails exist unless they have prior knowledge. With the presence of a camp at the start of the winter access trail, the casual visitor should not proceed inland.

8.0 INFORMATION REQUEST NUMBER 1.1.10

8.1 Request

Respond to the following, to the extent possible:

a. *What effects, if any, were used as a basis for delineating the spatial extent of the regional study area?*

The regional study area that we referenced was the same one as defined in Gartner Lee's *Regional Cumulative Effects Study for Drybones Bay and Wool Bay*, Section 1.4.1, page 7.

b. *If forest fire frequency is the basis for establishing temporal boundaries for the regional study area, please describe the forest fire interval in the vicinity of SDC's development.*

Forest fire frequency was not the basis for establishing temporal boundaries for the regional study area. The regional study area that we referenced was the same one as defined in Gartner Lee's *Regional Cumulative Effects Study for Drybones Bay and Wool Bay*, Section 1.4.1, page 7.

9.0 INFORMATION REQUEST NUMBER 1.1.11

9.1 Request

SDC is requested to respond to the following, to the extent possible:

a. *Has non-permitted exploration activity been incorporated into your analysis of cumulative effects?*

We assume that MVEIRB is referring to the summer line-cutting project. In that case, the answer is yes.

Line cutting, an activity that falls below land use permit regulatory threshold levels, was performed to extend the Mud Lake grid this past summer in preparation for a detailed ground geophysical survey.

Footprint Calculation
50 km = 50,000 m X 1.5 m (line width) = 75,000 square metres = 7.5 hectares
that was included in the line-item of 16.5 ha for Pre-existing Grids, Table 6,
Footprint Size in Project Area, Amendments and Additions to SDC Agreement Report (DAR).

b. *How would the inclusion of other nearby and concurrent reasonably foreseeable development into your cumulative effects assessment change your conclusions if at all?*

There is no change to our conclusions. Properly performed mineral exploration has insignificant environmental effects per criteria defined by biologists, environmentalists and government agencies.

SDC is proposing to diamond drill a magnitude more sites than the other concurrent programs combined. All companies have provided MVEIRB with VEC information that their programs have very small footprints with negligible environmental effects. The operation phase of diamond drilling is site-specific with disturbances that are brief, short-term, reversible and of low impact. Cleared drill pads and properly disposed of cuttings that revegetate within years are the longest lasting effects. However, should the winter trails see regular snowmobile usage by local users after the program is completed, snow compaction would slow revegetation.

c. Are traditional and recreational activities reflected in your analysis to get an accurate representation of the current land use pressure?

We agree with the Regional Cumulative Effects Study that the shoreline of Great Slave Lake is a very busy place. Everyone seems focused on archeological artifacts and perhaps not enough on the fact that it is a big land with room enough and opportunities for all. SDC believes that it is working towards reducing interference with traditional and recreational users, especially in areas that impact the shoreline. Once inland, the current land use pressure is much less.

Mineral exploration on Crown Land does not and should not exclude traditional use. We do not understand why this is perceived to be so and will listen very carefully in our role as observers at the upcoming Environmental Hearing to be held Nov. 25th and 26th.

10.0 INFORMATION REQUEST NUMBER 1.1.13

10.1 Request

Respond to the following, to the extent possible:

a. What business has SDC provided or anticipate providing to companies and individuals in Yellowknife, Ndilo and Detah and the region generally?

SDC has conducted exploration at the Drybones Bay area since 2002. Since May of 2003, the company has rented a house and garage in Yellowknife. Additionally, SDC has contracted Titan Drilling, Major Midwest Drilling, Aurora Geosciences, Great Slave Helicopters, Summit Air, Air Tindi, EBA Engineering and their various on-site employees and numerous local service providers.

Proposed Work

If permitted and fully realized, SDC has laid out a four year program to explore five claim blocks in the Drybones Bay area of the NWT with a proposed $3.35 million budget (Land Use Application MV2003C0023). The majority of the money would be spent on services, goods and wages within the NWT.

Record of Past Work

Two airborne geophysical surveys were performed in 2002, one on the central Mud Lake Claim Group and one on the Hurcomb 1, GTEN-16 and Fate Claims.

- Meridian Geoscience of Vancouver
- Helicopter Rental

Mud Lake Drilling Program, Feb/03

- Major Drilling of Yellowknife
- Bob Carrol Drilling of Yellowknife
- Aurora Geoscience Ltd of Yellowknife
- Mike Beauregard of Yellowknife (contract geologist)
- Archie Buckley of Yellowknife (ice road)
- Robinson Trucking Ltd of Yellowknife (ice road)

- Other expenditures for hotels, restaurants and fuels

GTEN-1, -2, -3 and -5 Drilling Program, April-May/03

- Titan Drilling of Yellowknife

  Shawn Godard of Ndilo, labourer

- Great Slave Helicopters of Yellowknife
- Air Tindi of Yellowknife
- Summit Air of Yellowknife
- Discovery Inn of Yellowknife
- Age Automotive of Yellowknife (ice road)
- Two Way Enterprises of Yellowknife (ice road)
- Mike Beauregard of Yellowknife (contract geologist)
- Aurora Geosciences Ltd of Yellowknife
- George Martin, Chris Abel and Alex Martin of Ndilo, labourers

  (30 man-days of work for four aboriginal men)

- Other expenditures for restaurants and fuels

SDC Fieldwork, June-Sept/03

- East Arm Freighting of Yellowknife (barging)
- Air Tindi of Yellowknife
- Various Boat and Motor Rentals, Yellowknife
- Mike Beauregard of Yellowknife (contract geologist)
- Shawn Godard, Felix Beyonie and Chris Abel of Ndilo, line cutters / till samplers

  (101 man-days of work for three aboriginal men)

- Other expenditures for camping equipment, dry goods, fuels and groceries

Hurcomb Claim Expenditures to July 31/03		$ 58,226
Mud Lake Claim Group Expenditures to July 31/03		$303,570
GTEN Claims Expenditures to July 31/03		$405,440
	Total	$767,236

b. What would the process of bulk (kimberlite) samples in Yellowknife (as noted in correspondence dated October 17, 2003) involve? What NWT resources would be required to support such an initiative?

Facilities to process a 500 tonne kimberlite sample do not exist in Yellowknife. It requires a laboratory or plant that has a self-autogenous grinding (SAG) mill, a pan concentrator to recover heavy minerals and an X-Ray Fluorescence (XRF) machine to recover macrodiamonds and microdiamonds.

The sample would have to be trucked south directly to a laboratory or trucked to Hay River and shipped by rail. Storage and trucking resources would be required.

11.0 INFORMATION REQUEST NUMBER 1.1.14

11.1 Request

Provide a succinct evaluation of bulk sampling alternatives, namely trenching and large-diameter borehole drilling, which compares and contrasts the potential environmental impacts of each.

a. The discussion should address the following elements: equipment, fuels and/or other chemical additives, water requirements (if any) and staff requirements.

11.2 Bulk Sampling Evaluation (Added to Scope of EA per Review Board Motion)

Conclusions

The bulk sampling method of trenching would be highly preferred by SDC as opposed to the bulk sampling method of large-diameter borehole drilling. For environmental reasons, bulk sampling would be conducted onshore.

A trench in bedrock with dimensions 5 m wide, 2 m deep and 5 m long would yield 50 cubic metres or 125 tonnes of kimberlite. This volume of rock is about the size of a 14 ft by 16 ft wall-tent with 6 ft walls.

- 1 cubic metre = 2.5 tonnes, and
- 500 tonnes = 200 cubic metres

A total of 4 trenches (or 4 wall-tents) would be required for a 500 tonne sample. Whether the trenches are adjacent to each other or some distance apart would be dictated by the spatial geometry of the occurrence. We estimate that trenching would add 0.3 hectares to the footprint in the Mud Lake Kimberlite Work Area.

Determination of Volume of Proposed Sample of Mud Lake Kimberlite

Preliminary examination indicates that the occurrence is made up of "carbonatized macrocrystal serpentine calcite hypabyssal kimberlite" (petrologist Dr. R. Mitchell, Lakehead University, 2003) with a specific gravity of 2.50 grams per cubic centimeter typical of kimberlite (drill core analysis, Kennecott Canada Mineral Processing Lab, 2003)

Therefore, 500 tonnes of kimberlite would require 200 cubic metres of material. This is an amended value for the 180 cubic metres given previously. Preliminary drilling at Mud Lake has given true width intersections from <1 m to 7 m. In order to proceed, the occurrence must be linear and at least 5 m wide. The country rock is predominately granite with some diabase.

The spatial geometry of the occurrence has yet to be delineated, it may remain onshore or it may head out under the waters of Mud Lake.

Sampling methods:

- Trenching (kimberlite must come to surface)
- Large-diameter reverse circulation drilling (kimberlite does not reach surface)

Trenching and/or large-diameter reverse circulation drilling would be performed on-shore.

Sample Transportation

A. Worksite to Yellowknife

Trenching

One (1) dump truck hauling kimberlite to Yellowknife and backhauling broken quarry rock to refill trench, if required.

Reverse Circulation

One (1) semi-tractor trailer hauling ore bags to Yellowknife.

B. Yellowknife to processing plant in southern Canada

Facilities to process a 500 tonne kimberlite sample do not exist in Yellowknife. The sample would have to be trucked south directly to a laboratory or trucked to Hay River and shipped by rail.

Winter Access

1. Ice road from Yellowknife Bay to winter tote trail.
2. Winter tote trail, 5 m wide, cleared of trees, snow-packed snow, ground surface not to be broken. Pre-existing 5 meter-wide trails into Mud Lake Kimberlite Work Area would be used. Reverse circulation drilling would require 10 m-wide winter tote trails to allow passage of the truck-mounted drill rig.

3. New trail to be cleared by either 10 tonne skidder or 30 tonne D6 Caterpillar Bulldozer working on snow-packed frozen ground.

Bulk Sampling Alternatives

Trenching, kimberlite reaches bedrock surface, on-land sites only.

- 10 tonne backhoe excavator with pneumatic jackhammer tool, haul and pickup trucks.
- Estimated fuel needs are 14,000 litres of diesel fuel

Organic material separated from overburden.
Reclamation = backhaul of quarry material to fill trench if necessary, then overburden and lastly, organic material to restore to original surface level.
Holding wall may be needed to keep water out of trench if proximal to lake.
Each trench site would need to be cleared of trees.
Mitigating factor = no explosives.
Mitigating factor -= no water required.
Manpower = 4 men = backhoe operator, dump truck operator, laborer, foreman (single day shift)
Estimated Length of Program = 2 weeks.
Conclusion = Highly preferred method with low environmental impact and a small footprint versus large-diameter reverse circulation borehole drilling.

Large-diameter Borehole Drilling, near-surface kimberlite or kimberlite buried beneath 5 m (+) of overburden, on-land winter drilling only.

- Reverse Circulation Drill, truck-mounted unit, 30 tonne in size, plus recovery shack, tool shack, bagging shack, 10 tonne loader, water, haul and pickup trucks.
- Estimated fuels needs are 135,000 litres of diesel fuel and 12 (400 lbs) propane tanks for heating.

The material collected would be screened into two fractions, 50% oversize and 50% undersize. Separation of oversize from undersize fractions will be a 1 mm or 1.5 mm screen. Both fractions would be ore-bagged, palletized and removed by tractor-trailer. The oversize fraction would be shipped south for processing while the undersize fraction would be disposed at a quarry or landfill site in Yellowknife.

- With 50% recovery, 1 tonne = 2.74 metres of boring a 60.96 cm (24 inch) wide hole.
- 500 tonnes = 1370 m of borehole in kimberlite
- Recovery Rate = 50 m/shift in kimberlite, 6 tonnes per shift
  = 25 m/shift in mixed ground, 3 tonnes per shift

60 hole program anticipated.
50,000 litres of water per shift required
(mitigation = recirculated water, water truck)
Manpower = 8 men = 4 drillers, 1 truck driver, 2 laborers, foreman, 2 shifts per day.
Estimated Length of Program = 3 months
Conclusion = If cuttings are well managed, all material should be bagged and removed from site. Holes would be plugged or cemented upon completion. Reverse circulation drilling requires larger quantities of water, mitigated in part by recirculation of water and/or trucking water in from Great Slave Lake.

Trenching Site Footprint
0.1 hectares for four trenches + 0.2 hectares for new winter tote trails = 0.3 hectares

Trenching

Fuels = estimated needs are 14,000 litres of diesel fuel
50 square metres per trench, to remove organic layer/overburden and expose 20 square metres of bedrock.
200 square metres cleared of trees per trench, to allow loading of dump truck.
Overburden and organic layer replaced when completed for reclamation.

Area impacted
250 square metres x 4 trenches = 1000 square metres or 0.1 hectares

Access

A maximum of 400 m length of 5 m wide winter tote trail anticipated to be put in from winter tote trails already in existence at the Mud Lake
New trail in vicinity of kimberlite occurrence.

Kimberlite Work Area.

Area impacted
400 m x 5 m = 2000 square metres or 0.2 hectares

The trenching option would add 0.3 hectares to Table 6, Amendment and Additions to SDC Agreement Report (DAR) as a line item for four trenches.

Reverse Circulation Footprint

1.5 hectares of clearing would be necessary to widen the 3 km long Pebble Beach winter tote trail from its present 5 m width to the proposed 10 metre width. The truck-mounted reverse circulation drill would require a trail 10 metres wide.

0.4 hectares for 400 m of new 10 metre wide winter tote trails.

All reverse circulation access routes would need to be twice as wide as existing winter access trails in order to allow passage of the truck-mounted drilling unit. Pre-existing winter tote trails would be used as much as possible in the Mud Lake Kimberlite Work Area.

A maximum of 1.8 hectares of clearing would be required for 60 holes / work sites, each 300 square metres in size. Dependent upon the geometry of the kimberlite occurrence, the drillpads may overlap, greatly reducing the total footprint size. Each reverse circulation drill site would need space for truck-mounted drill unit, the 10 m by 12 m screening shed – tool shed – bagging shed assembly as well as room to load the haul truck.

The proposed reverse circulation drilling option would add a line item of 3.7 ha for 60 holes and inclusion of access trials widened to 10 m in Table 6, Amendments and Additions to SDC Agreement Report (DAR).

b. Potential environmental impacts on hydrology and water quality, ambient noise levels, fish and wildlife and the vegetation recovery should be discussed with consideration of: (i) the physical footprint and (ii) the extended footprint that reflects, at minimum, noise transmission, wildlife avoidance and hydrological effects, if any. Estimates of time to return to pre-disturbance conditions should also be provided for the avoidance by wildlife, re-growth of vegetation, etc. Discussions should include an indication of the direction, magnitude, duration, frequency, probability, reversibility and significance (with clear descriptions of criteria used).

This information is presented in context to bulk sampling alternatives, namely trenching and large-diameter borehole drilling as requested above. This information has been presented in tabular form as it is the most efficient method for presenting and contrasting the details. Table 1 compares and contrasts the difference between a trenching method and a large-diameter borehole drilling method. Trenching is the preferred option. Large-diameter borehole drilling is not desirable due to constraints of high costs, narrow intersections of kimberlite and environmental concerns.

Table 1. Comparison of Environmental Impacts Between Trenching and Large-diameter Borehole Drilling

Environmental Component	Trenching	Large-diameter Borehole Drilling
Hydrology		
Physical Footprint	No water used	Larger Footprint. Large-diameter drilling requires consumes considerable water. We estimate that 50,000 litres of water would be used during each drilling shift.
Noise Transmission	Non-Applicable	Non-Applicable
Wildlife Avoidance	Non-Applicable	Non Applicable
Hydrological Effects	None	Limited effect, as water is recycled through the drilling system.
Water Quality		
Physical Footprint	None to very limited effect	Significant impact due to the eventual discharging of water from the drilling system. Large draw down requirements would have to be mitigated by water trucked to site.
Noise Transmission	None to very limited effect	None to very limited effect
Wildlife Avoidance	None	None
Hydrological Effects	None	Significant impact due to the eventual discharging of water from the drilling system. Large draw down requirements would have to be mitigated by water trucked to site.
Ambient Noise Levels		
Physical Footprint	Non Applicable	Non Applicable
Noise Transmission	More noise due to the pneumatic jack hammer, however, the noise would be shorter duration than that of drilling.	Less noise. Initially noise would be generated from two sources: the drill bit grinding on the rock and the generator with powers the drill rig. After the bit extends into the ground, only the generator noise would be audible. However, the drawback with drilling is the considerable increase in time required for each hole.
Wildlife Avoidance	Possibly greater avoidance for a timeframe of 1 to 3 days per excavation.	Less avoidance for a timeframe of 1 to 3 days per hole.
Hydrological Effects	Non Applicable	Non Applicable

…(cont'd)

Table 1. Comparison of Environmental Impacts Between Trenching and Large-diameter Borehole Drilling (Cont'd)

Environmental Component	Trenching	Large-diameter Borehole Drilling
Fish and Wildlife		
Physical Footprint	Very limited effect	Very limited effect
Noise Transmission	More Noise. The trenching method will generate considerably more noise and at higher decibels, thus broadcaster further distances. The noise will be generated from the pneumatic jackhammer. The distance the noise will travel is unknown and is dependent upon the topography and extent of vegetation. Although it will be considerably louder than the drilling operation, it will only last for about 2 days per excavation.	Less Noise. The drilling method will generate less noise and broadcast shorter distances. Initially, the noise will be generated from the drill bit grinding on the rock surface, however, this will quickly lessen as the bit travels downward into the ground. The generator will also produce a limited amount of noise. The distance the noise will travel is unknown and is dependent upon the topography and extent of vegetation. Estimated duration of drilling is 1 to 3 days per hole.
Wildlife Avoidance	Greater Avoidance. Wildlife avoidance is anticipated to be considerably more with trenching than with large-diameter drilling. The noise level will be greater but the duration will be much less. The time required using the trenching method is only two weeks vs. 12 weeks with drilling.	Less Avoidance. Wildlife avoidance is anticipated to be considerably less with drilling than trenching. The noise level will be less but the duration will be longer.
Hydrological Effects	No water used	Very limited effect, as water is recycled through the drilling system.
Vegetation Recovery		
Physical Footprint	Smaller Footprint. Employing the trenching method will generate 0.3 ha of disturbance for excavating and access trails.	Larger Footprint. Employing the large-diameter drilling will generate greater disturbance, 3.7 ha of footprint for drill pads and access trails.
Noise Transmission	Non Applicable	Non Applicable
Wildlife Avoidance	Overall, no effect	Overall, no effect
Hydrological Effects	Non Applicable	Non Applicable

Table 2: Impact Significance for All Valued Components For Trenching

Attribute	Descriptor	Definition
Spatial Scope	**Site** Local Regional	Exploration impacts will be site-only. Effects from drill holes will be site specific to the drill pad, while access routes will be more local.
Direction	Positive **Neutral** Negative	Exploration impacts will likely be neutral. Holes will be backfilled and seeded with indigenous species.
Magnitude	Low **Moderate** High	Exploration activities (noise from backhoe) will have a low impact on the local surroundings for a brief period of time, 2 days.
Duration	**Short-term** Medium-term Long-term	Exploration activities (noise from backhoe) will be short-term lasting 2 weeks, thus disturbance to wildlife would be short-term in nature.
Frequency	**Once** Sporadic Continuous	Noise impacts from exploration activities will be for one brief period of a day or two at each drill site.
Reversibility	**Reversible**	Effects will be reversed, *i.e*. returned to pre-disturbance state.
Confidence	Low Moderate **High**	Direct supporting information is lacking but conclusions can be made on related evidence and professional judgment.
Significance	**Insignificant** Significant	Exploration activities will have insignificant impacts. Based on the analysis and best professional judgment. Wildlife populations will not be impacted, locally, regionally or at the population level.

Table 3: Impact Significance for All Valued Components for Large-diameter Drilling

Attribute	Descriptor	Definition
Spatial Scope	**Site** Local Regional	Exploration impacts will be site-only. Effects from drill holes will be site specific to the drill pad, while access routes will be more local.
Direction	Positive **Neutral** Negative	Exploration impacts will likely be neutral. Holes will be backfilled and seeded with indigenous species.
Magnitude	Low **Moderate** High	Exploration activities (noise from drill) will have a moderate impact on the local surroundings for a brief period of time, 12 weeks.
Duration	**Short-term** Medium-term Long-term	Exploration activities (noise from drill) will be short-term lasting 12 weeks, thus disturbance to wildlife would be short-term in nature.
Frequency	**Once** Sporadic Continuous	Noise impacts from exploration activities will be for 1 to 3 days at each drill site.
Reversibility	**Reversible**	Effects will be reversed, *i.e*. returned to pre-disturbance state.
Confidence	Low **Moderate** High	Direct supporting information is lacking but conclusions can be made on related evidence and professional judgment.
Significance	**Insignificant** Significant	Exploration activities will have insignificant impacts. Based on the analysis and best professional judgment. Wildlife populations will not be impacted, locally, regionally or at the population level.

c. Mitigation or control measures to minimize potential adverse environmental effects.

This information is presented in context to bulk sampling alternatives (see section 11.2 a):

- Choice of trenching over large-diameter borehole drilling
- Restore trenches (reclamation) to original surface level, and
- Reseeding trenched areas

This information is presented in context to the exploration program, in general:

- Concurrent use of single ice road
- Presence of proposed camp on Pebble Beach limits access to interior, and
- Removal of proposed camp upon completion of program

12.0 INFORMATION REQUEST NUMBER 1.1.17

12.1 Request

Provide recent air photos or satellite imagery of the five SDC claim areas.

The company would not be able to acquire and provide recent air photographs or Landsat imagery in timely fashion for the Review Process. We have, however, provided a paper copy of an air photograph compilation that covers the Drybones Bay area but not the entire SDC claim package area.

We respectfully refer the Board to the location map and figures that make up the response to Information Request 1.1.1.

13.0 CLOSURE

We trust that this submission meets your present requirements. Please contact any of the undersigned should there be any questions.

Respectfully submitted,

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Vancouver

"Mike Beauregard"

Mike Beauregard
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Wildlife Biologist/Environmental Scientist
EBA, Yellowknife

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