

## FERGUSON LAKE PROJECT 2015 WORK PLAN

### PROPERTY DESCRIPTION AND LOCATION

The Ferguson Lake property consists of 33 active mineral claims and 9 mining leases comprising an area of 44,636 hectares (98,200 acres) 100% held by Canadian North Resources and Development Corporation (CNRD). The property is located in the Kivalliq region of southern Nunavut Territory some 240 kilometres west of Rankin Inlet and 160 kilometres south-southwest of Baker Lake. Ferguson Lake, central to the large property area, is midway between Yathkyed and Qamanirjuaq Lakes.

The property encompasses an area which measures approximately 90 kilometres in an east-west direction and 70 kilometres north-south, and consists of two contiguous claim blocks plus one block of contiguous mining leases extending across and south of Ferguson Lake between latitudes 62° 30' and 62°55' North and longitudes 96°10' and 97°30' West in NTS map-areas 65I/10-16 (UTM coordinates 6,945,000 - 6,978,000N, 585,000 -625,00E - Zone 14). The mining leases consist of 13,664 hectares (30,060 acres), cover the Ni-Cu-Co-Pd-Pt Ferguson Lake Deposit, and are located predominately on Kivalliq Inuit Association (KIA) controlled land.

In addition to the above, in February 2014 five Prospecting Permits totaling 232,500 acres (105,682 hectares) were applied and issued to CNRD listed as follows:

<b>Permit No.</b>	<b>Claim Sheet</b>	<b>Quarter</b>	<b>Acres</b>	<b>Length (Years)</b>
8424	065I06	NW	46,500	3
8425	065I16	NW	46,500	3
8426	065I05	NE	46,500	3
8427	065I05	SE	46,500	3
8428	065I15	NE	46,000	3

The following Commercial, Land Use and Right of Way permits, enabling work, water use, and travel to be conducted over the mining leases, claims, and Prospecting Permit areas, are issued by the Kivalliq Inuit Association (KIA), Nunavut Water Board (NWB), and by Aboriginal Affairs and Northern Development Canada (AANDC):

- KVCL305H27 Expires July 22, 2017
- KVCA08Q17 Expires May 27, 2016

- KVRW06F09 Expires October 17, 2015
- 2BE-FER1318 TYPE "B" Expires December 11, 2018
- N2013X0023 Expires March 17, 2017

Application for renewal or extension of the Right of Way (ROW) license over IOL due for expiry in 2015 will be submitted to the KIA.

## **BACKGROUND AND PROJECT DESCRIPTION**

Starfield Resources Inc. (Starfield) had been exploring a significant nickel, copper, palladium and platinum group metals deposit located in an area of Inuit Owned Lands at Ferguson Lake in the Kivalliq Region of Nunavut until 2012. Until 2007, exploration had been based out of the privately owned Ferguson Lake Fishing Lodge, located on an island in Ferguson Lake. In 2006, Starfield began moving the exploration camp from the island to the mainland.

The New Camp location on the west side of Ferguson Lake is safer and provides more convenient access to the current exploration areas, allowing for potential expansion as the project advances. As a result, this new location will serve the longer term needs of the project.

The infrastructure at the New Camp site include buildings for accommodation, offices and areas for fuel storage, core storage, equipment maintenance, core cutting, warehousing, etc. Freshwater will continue to be drawn by pump from Ferguson Lake to the camp.

The airstrip on the Island at the Old Camp location was used for a short time in 2008 to support the exploration program while the new airstrip on the mainland was being constructed. This is in accordance with the KIA's direction to the company to move from the Island. The new airstrip, which was completed in 2008, is fully operational.

Detailed environmental studies, conducted by Rescan Environmental Services Ltd. (Rescan) on behalf of previous owners Starfield, had been ongoing since 1999. In 2008, Starfield expanded the environmental baseline studies significantly in the area of Ferguson Lake.

After CNRD acquired of the Ferguson Lake project in June, 2013, the camp was re-opened that summer for rehabilitation and maintenance including the reactivation of the airstrip. During this time ERM Rescan completed a program of repair of the weather station and of sampling and analytical analysis of waters in the Ferguson Lake camp area focusing on standing water within the fuel berm. No waters from the fuel berm have been discharged since CNRD has acquired the project. The camp was inspected by the KIA in September, 2013. Copies of the camp inspection report and ERM Rescan water testing report was forwarded by CNRD to the KIA, AANDC, and NWB. The camp was kept closed throughout 2014. A Water Licence Inspection was conducted at the camp in July, 2014 by the AANDC. The inspection report was issued in February, 2015 which has been shared with the NWB and the KIA.

## PREVIOUS WORK

No significant exploration on the property was conducted during 2012. The camp has been closed and secured during the winters of 2011-2012, 2012-13 and 2013-14. After the water use license expired on July 1, 2012; an inspection of the site reported items of non-compliance of Act or License in the storage of solid waste and fuel storage in the camp area. The camp was opened for three weeks during July and August, 2012 in order to complete required maintenance of the site and to address deficiencies identified in Part H item 3 of the Act from the camp inspection.

During the 2012 work program, Rescan prepared, compiled and submitted the required documents to the Nunavut Water Board for the Renewal of the water use license including an updated plan for care and maintenance dated November, 2012. In addition, a program of sampling, analytical analysis and discharge of waters within the fuel storage area was completed in October, 2012. During the 2012 work program, remediation work was undertaken in the area of the old camp site with the placement of contaminated soil into barrels and clean-up of scrap material and barrels. The material was then transported to the site of the new camp to be bundled and removed by snow cat.

Exploration work in 2011 included; prospecting, claim staking, geochemical sampling and drilling. A total number of 9 samples were collected for analysis. The 2011 drill program consisted of three core holes totaling 1,866 m. One of the holes was drilled within the known deposit while two were drilled southwest of the West Zone to extend and further evaluate deep massive sulphide mineralization and/ or investigate coincident geochemical and geophysical anomalies.

Exploration work in 2010 included; prospecting, claim staking, sampling and drilling. A total number of 23 samples were collected for analysis. The drill program consisted of four holes drilled in the Y Lake area approximately 20 km south of the camp and two holes drilled approximately 6 km southwest of the camp. This drilling totaled 1,126 metres. In 2009, Starfield drilled one core hole totaling 407 m east of Y Lake, while Thanda Resources, a joint venture partner in diamond exploration at the time, drilled seven shallow holes to test geophysical anomalies in their diamond exploration program.

In 2006/2007, Starfield, at the request of the KIA, began construction of the new (existing) camp. In 2010, only minor maintenance of the new camp, which has enough beds to house 70 people, was undertaken. In 2008, Starfield quarried material to construct an airstrip at the new camp location. The airstrip was completed and fully operational by the fall of 2008. The airstrip is 825 m in length X 30 m wide.

Environmental baseline data was collected during the period 1999- 2008. In 2007, the study was expanded and a detailed wildlife monitoring program was conducted. In 2008, this program was expanded upon and a comprehensive environmental baseline study was undertaken. Due to budgetary constraints, no environmental or wildlife monitoring was undertaken during the 2009 and 2010 programs.

## **PLANNED ACTIVITIES FOR 2015**

### **A) Exploration**

The undertaking of the 2015 exploration program on the property under the management of CNRD will be dependent upon budget availability. It is planned to include some of the same land use activities that have previously been conducted and permitted: prospecting and outcrop mapping, geochemical sampling (including till sampling), re-sampling of drill core, and drilling.

#### **Geophysical Surveys**

Geophysical surveys are not being planned for the 2015 program, however, borehole electromagnetic surveys may be considered to test for interpreted massive sulphide mineralization believed to occur directly beneath known defined bodies at depths greater than 400 metres, too deep to be detected by surface methods.

#### **Sampling**

Helicopter supported reconnaissance mapping, prospecting, and sampling in 2015 will include the collection of rock and till samples focusing on the prospecting permit areas.

#### **Drilling**

Prior to any drilling, a detailed review of drill core, logging, analytical results, resource evaluation, and geological and geophysical models for both the nickel, copper, palladium and platinum group metals and gold deposition on the property will continue to be undertaken. At this time, an up to 8,000 meter drill program is being considered for 2015 with a focus on exploration for potentially high grade zones located directly underneath the Main West Zone at depths of greater than 400 metres and underneath the Centre Zone on Ferguson Lake. Currently, the program is contemplated to operate from early August possibly through the winter of 2015-16. There are presently two drills; one is capable of drilling holes greater than 1,200 metres, on-site at the Ferguson Lake Property. As in the past, this program will be supported from the camp via snowmobile and ATV (under snow and frozen ground conditions if drilling is contemplated for the following winter), and by helicopter during the summer months.

#### **Bulk Sampling**

A mini-bulk sample was taken during the 2011 program, and the bulk sample site reclaimed. Additional bulk sampling is not anticipated in the 2015 program. This is located at the diamond drill staging area near the bulk sampling site, some iron oxide weathering and erosion was noted in the 2014 Water License inspection report. This will be investigated during the summer of 2015.

### **B) New Camp Construction and Maintenance**

Significant work was done in 2008 to the New Camp including; construction of a new airstrip, installation of 3 fuel bladders and additional sleep quarters (see attached camp photo).

During 2011, substantial needed camp maintenance was undertaken and the fuel bladders decommissioned. No major construction activities are planned for 2015, however, routine camp and airfield maintenance will continue. The ROW land use permit (N2013X0023) over Crown Land has been issued by AANDC so the removal of scrap steel and empty fuel drums is planned for the winter of 2015-16, which will be completed overland by snow train, dependent upon favorable weather and ground conditions.

### **C) Engineering**

In the spring of 2008, Starfield completed a Scoping Study and began the next phase needed to undertake a feasibility study of the project. In 2008, BRASS Engineering, on behalf of Starfield, travelled to Ferguson Lake to begin investigations for a slurry pipeline routing and design. The planned slurry pipeline would transport a sulphide concentrate slurry from the Ferguson Lake mill (crushing, grinding and flotation) to the hydrometallurgical processing plant location to Arviat.

In 2009, Starfield continued to investigate the feasibility of the slurry pipeline and will begin to gather data on potential port locations and a processing plant facility. Future work will be coordinated with the Environmental Baseline studies and the socioeconomic studies. A preliminary route for the slurry pipeline was mapped out by an engineering company. There are no additional studies related to the slurry pipeline route, the port facility or the processing plant facility planned. In 2014, alternate development scenarios were being investigated by CNRD focusing on a metallurgical review and tests of the technical feasibility and economics of extraction and recovery of platinum group metals with the base metals from the Ferguson Lake resource. In 2015, follow-up metallurgical tests on the mineralized material are planned creating separate high-grade Cu and low-grade bulk sulphide concentrates.

### **D) Hydrocarbon Assessment**

Starfield conducted a hydrocarbon sampling program in 2007. This sampling program was expanded in 2008 and the results of the sampling programs were used to develop a Remedial Action Plan. A full reclamation plan for the old island camp was presented and submitted to the KIA, and this program is waiting for final approval. Material from the 2012 clean-up of the old island camp site will be removed with the empty barrels and scrap steel to Arviat or Rankin Inlet by snow cat during the winter of 2015-16. It is planned for ERM Rescan to complete a sample survey of the site after this removal with the results submitted to the KIA for review.

### **E) Baseline Studies**

Rescan Environmental Services, on behalf of Starfield, conducted extensive baseline monitoring studies in 2007 of the Ferguson Lake area. These studies were continued and expanded upon in 2008, and included:

- Meteorology
- Hydrology
- Metal Leaching/Acid Rock Drainage (ML/ARD)
- Aquatic Resources and Water Quality

- Fisheries Community and Habitat
- Soils
- Vegetation
- Wildlife
- Traditional Knowledge
- Socio-economics

Due to budgetary constraints, no additional Environmental Baseline Studies have been undertaken. During the 2014 exploration program, ERM Rescan will continue to gather weather data, and collect and analyze additional water sample as needed on behalf of CNRD. Data will continue to be incorporated in the project's baseline environmental studies. CNRD is aware the Property is located within a major caribou migration route which is active between May 15-July 15, and will conduct its activities such as to minimize any disturbances.

#### **F) Removal of Scrap Metal, Storage Batteries and Used Drums**

During the 2011 Exploration Program, the driller's laydown yard was cleaned of debris, and scrap metal related to previous drilling and stockpiled for future transport. Additionally, old storage batteries were transported and removed from the site. As previously mentioned and part of the 2015-16 Work Program, it is planned to ship the scrap steel, material from the 2012 clean-up and 2,000 - 3,000 crushed and bundled empty fuel drums from the project. Removed waste material will not be dumped on Nunavut territory but shipped from Arviat or Rankin Inlet to be disposed at an accredited dump site. During the summer of 2015, soil sampling at the staging site of waste material will be undertaken by ERM Rescan to assess if any contamination of the ground has occurred. Sampling and analysis of waters in the fuel berm will be undertaken at the same time to monitor if any hydrocarbon contamination has occurred

#### **G) Socio-Economic Impacts and Benefits**

During the 2008 - 2012 exploration programs, Starfield hired locally whenever possible with CNRD continuing this practice in 2013. During this period, northern businesses were also utilized whenever possible and practicable. In 2015, Local people will be hired whenever possible and CNRD will continue to utilize the services of northern businesses, as much as is practicable.

#### **H) Archaeological, Traditional Knowledge and Socio-Economic Studies**

As time and budgets permit, this work will continue with the KIA to identify the repository for the Traditional Knowledge studies so that they are secure and also accessible to the communities.

Starfield Resources had since 2008 undertaken a modest donations program for communities in the Kivalliq Region, as well as continue being a member of the Kivalliq Chamber of Commerce and the NWT & NU Chamber of Mines. It has been important to Starfield and now CNRD to not overstate the project, and to "manage" community and government expectations of the project and the possible impacts and benefits to the communities.

## CONCLUSIONS

In summary, since the transfer of the Ferguson Lake project to CNRD, due to the rising costs of development and decreasing metal prices, the present development plan remains on hold and the status of the property has been downgraded to the level of an exploration venture. The property is being re-assessed as an exploration venture with the purpose of increasing the material value of the project by defining new higher grade resource bodies, improving the economic efficiency of the overall metallurgical recovery, and including the value of the platinum group metals in any economic analysis. Moving forward, this policy will continue under the new management pending a significant advancement of the project towards economic feasibility.

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