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TERRITOIRES DU NORD-OUEST RAPPORT SUR LES

ACTIVITÉS D'EXPLORATION MINIÈRE

Mis à jour en novembre 2018

Préparé par:

Commission géologique des Territoires du Nord-Ouest

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Government of Gouvernement des Northwest Territories Territoires du Nord-Ouest

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English

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French

Kîspin ki nitawihtîn ê nîhîyawihk ôma ācimôwin, tipwāsinān.

Cree

Tłıcho yatı k'ee. Dı wegodı newo de, gots'o gonede.

Tłıcho

Perihtli s Dëne Su liné yati t'a huts'elkër xa beyá yati theza zat'e, nuwe ts'ën yolti.

Chipewyan

Edi gondi dehgah got'ie zhatié k'eę edatł'eh enahddhę nide naxets'e'edahli.

South Slavey

K'ahshó got'ıne xədə k'é hederi zedihtl'é yeriniwe nidé dule.

North Slavey

Jii gwandak izhii ginji k vat'atr'ija hch'uu zhit yinohthan ji', diits'at ginohkhii.

Gwich'in

Uvanittuaq ilitchurisukupku Inuvialuktun, ququaqluta.

Inuvialuktun

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Inuktitut

Hapkua titiqqat pijumagupkit Inuinnaqtun, uvaptinnut hivajarlutit.

Inuinnaqtun

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Government of Gouvernement des
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Executive Summary

Trade negotiations, rising interest rates and newly-implemented trade tariffs have made it difficult to gain an impression of the mood of the minerals industry in the Northwest Territories (NWT).

One of the most reliable indicators of exploration health — claims staked vs. lapsed — continued an upward trend that began in 2018.

In the first three quarters of 2018, 257 claims covering 178,868 hectares were added and only 62 claims covering 51,120 hectares were released; a significant increase in area covered by mineral claims (Figure 1). New staking included large areas in the Mackenzie Mountains, complimented by a re-staking of claims in the Lac De Gras region and an expansion of claims in the Yellowknife area.

Although diamonds remain the only commodity currently mined in the NWT, several new projects targeting technology metals emerged or advanced this year. Lithium and cobalt were commodities much discussed in the press, and vanadium was also represented by new projects.

NWT mineral producers continued to advance their projects in 2018 (Figure 2). At the Diavik mine, the opening of the A21 project was celebrated ahead of schedule in August. The first ore was uncovered in March and the new pit is scheduled to reach full production capacity during the fourth quarter of 2018. In the three quarters of 2018, the Gahcho Kué diamond mine recovered over 5,391,000 carats of diamond with grades of the ore and value of the stones outperforming expectations. Positive results from the production were augmented by mine site exploration success, identifying additional tonnage in the Hearne Pipe, and the discovery of the Currie kimberlite within the shell of the Tuzo pit.

At the Ekati mine, current surface operations include the Pigeon, Sable and Lynx open pits. Underground operations at the Koala pit will be concluded by the end of 2018. The Misery Underground Project is now underway and the expansion of Misery Camp is slated for early 2019.

The Territory saw activity at several diamond, gold, base metal and lithium exploration projects (Figure 2). Pine Point Mining expanded their exploration efforts with an aggressive drill program to define new resources in the Pine Point zinc district. Nighthawk continued exploring the Indin Lake volcanic belt and announced an improved resource at their Colomac project.

Closer to Yellowknife, TerraX continued drilling gold targets including the Crestaurum Shear and the extension of the Sam Otto zone on their growing Yellowknife City Gold Project with good results. Far Resources was able to intersect high-grade lithium concentrations at Hidden Lake.

2017-2018 saw the Mining Incentive Program (MIP) budget increased from \$400,000 to \$1 million. This funding was dispersed to 13 exploration projects — seven companies and six prospectors.

This investment resulted in additional exploration investment of over \$2.5 million and led to many encouraging advancements in the funded projects.

In 2018, \$991,065 in MIP funding has been allocated to 17 exploration projects — nine prospectors and eight companies.

Résumé

Avec les négociations commerciales en cours, les taux d'intérêt à la hausse et les tarifs douaniers nouvellement imposés, il est difficile de prendre le pouls du secteur minier des Territoires du Nord-Ouest (TNO).

L'un des indicateurs les plus fiables de la santé des activités d'exploration – le nombre de claims jalonnés comparativement au nombre de claims non utilisés – a poursuivi sa tendance à la hausse amorcée en 2018.

Au cours des trois premiers trimestres de 2018, 257 claims couvrant 178 868 hectares ont été ajoutés et seulement 62 claims couvrant 51 120 hectares ont été abandonnés, ce qui constitue une augmentation significative de la superficie couverte par des claims miniers (cf. figure 1). Les nouveaux claims jalonnés comprennent de vastes zones dans les monts Mackenzie, des claims jalonnés à nouveau dans la région du lac de Gras et une expansion des claims dans la région de Yellowknife.

Bien que le diamant demeure le seul produit extrait actuellement aux Territoires du Nord-Ouest, plusieurs nouveaux projets ciblant les métaux technologiques ont vu le jour ou ont progressé au cours de cette année. Le lithium et le cobalt ont monopolisé l'attention de la presse, et de nouveaux projets d'extraction du vanadium ont également fait parler d'eux.

Les producteurs miniers des TNO ont continué à faire progresser leurs projets en 2018 (figure 2). À la mine de Diavik, l'ouverture du projet A21 a eu lieu en août, plus tôt que prévu. Le premier minerai a été découvert en mars et la nouvelle mine devrait atteindre sa pleine capacité de production au cours du quatrième trimestre de 2018. Au cours des trois premiers trimestres de 2018, la mine de diamants Gahcho Kué a récupéré plus de 5 391 000 carats de diamant, avec des teneurs en minerai et en valeur qui dépassent les attentes. Ces résultats positifs n'arrivent pas seuls : l'exploration du site minier est un succès, du tonnage supplémentaire a été découvert dans la cheminée Hearne, et de la kimberlite de Currie a été découverte dans la coquille de la fosse de Tuzo.

Résumé

À la mine Ekati, les activités de surface actuelles incluent les puits de mine à ciel ouvert Pigeon, Sable et Lynx. Les opérations souterraines de la fosse Koala seront terminées d'ici la fin de 2018. Le projet souterrain Misery est en cours et l'agrandissement du camp Misery est prévu pour le début de l'année 2019.

Plusieurs projets ténois d'exploration de diamants, d'or, de métaux communs et de lithium ont été mis en œuvre au cours de l'année (figure 2). Le projet minier Pine Point Mining a étendu ses efforts d'exploration avec un programme dynamique de forage pour trouver de nouvelles ressources dans le district zincifère de Pine Point. Nighthawk a continué d'explorer la ceinture volcanique du lac Indin et a annoncé une amélioration des ressources pour son projet Colomac.

Dans les environs de Yellowknife, TerraX a poursuivi son forage de cibles aurifères, notamment le cisaillement du Crestaurum, et l'agrandissement de la zone Sam Otto de son projet de mine d'or de Yellowknife en pleine croissance, avec de bons résultats. Far Resources a découvert des concentrations de lithium de haute qualité à Hidden Lake.

En 2017-2018, le budget du Programme d'encouragement aux activités minières est passé de 400 000 \$ à 1 000 000 \$; il a été distribué à sept sociétés et six prospecteurs, qui exploitent 13 projets d'exploration.

Cet investissement a entraîné des investissements en exploration supplémentaire de plus de 2,5 millions de dollars, et permis de nombreuses avancées encourageantes dans les projets financés.

En 2018, une enveloppe de 991 065 dollars provenant du Programme d'encouragement aux activités minières a été allouée à 17 projets d'exploration, réalisés par neuf prospecteurs et huit sociétés.

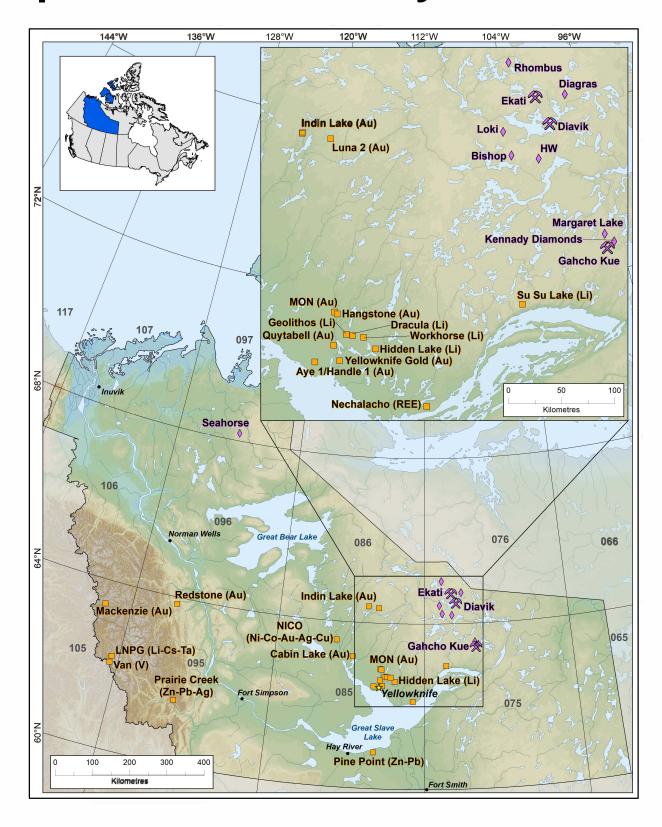
Summary Of Exploration Activities

Operator/Partner	Property	Commodity	Drilling	Geophysics	Sampling and Other Work
Dominion Diamond Mines	Ekati	Diamond	Drilling	Airborne Mag Survey	
Dominion Diamond Mines / North Arrow	LDG	Diamond	Drilling		
De Beers Group of Companies / Mountain Province Diamonds	Gahcho Kué	Diamond	Drilling Hearne, Tuzo-5034 Corridor, Curry		
North Arrow	Loki	Diamond	Drilling (6 Holes)		
Arctic Star Exploration Corp. / Margaret Lake	Diagras	Diamond		Ground Gravity (133 stations), Magnetic (152 line-km) and Electromag. (112 line-km)	
Margaret Lake Diamonds Inc.	Margaret Lake	Diamond	Drilling (5 Targets)		
Olivut Resources / Talmora Diamond	Seahorse	Diamond		Airborne Suvey (postponed)	

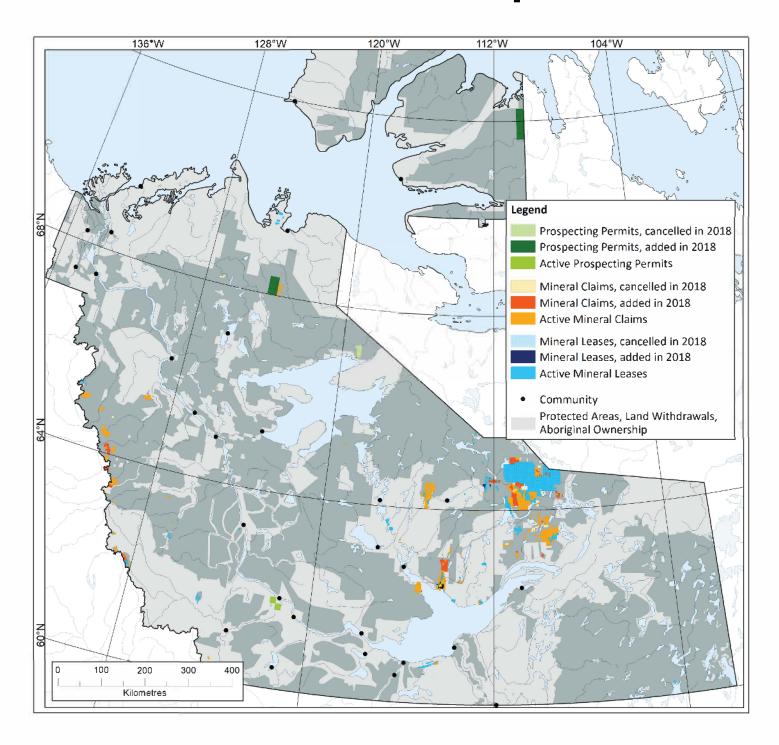
Operator/Partner	Property	Commodity	Drilling	Geophysics	Sampling and Other Work
GGL Resource Corp.	Bishop/ Courageous	Diamond		Ground mag, OhmMapper EM, bathymetric/ gravity surveys	
GGL Resource Corp.	Rhombus	Diamond		Ground mag, OhmMapper EM, bathymetric/ gravity surveys	
Vanadium North	Van	Vanadium			Mapping, Staking
Far Resources / 92 Resource	Hidden Lake	Lithium	10 Hole (1079 m)		Metalurgical Testing
Avalon Advanced Materials	Nechlacho	Lithium/ REE			Biogeochem. (80 samples), Core Sampling (41 samples), Road/Power corridor study
Fortune Minerals	NICO	Cobalt- Gold- Bismuth- Copper			Site Preparation
Norzinc	Praire Creek	Zinc-Lead-Silver			Engineering. Helicopter road program
Osisko Metals	Pine Point	Zinc-Lead	50,000 Metres (3-7 Drills)		
Rover Metals	Cabin Lake	Gold		UAS Mag (102 line-km)	Geochem (485 samples)

Operator/Partner	Property	Commodity	Drilling	Geophysics	Sampling and Other Work
Nighthawk Gold Corp.	Indin Lake	Gold	25,000 Metres (3 Drills)	Ground IP, LiDAR	NI43-101 Resource Study, Mapping, Prospecting
TerraX Minerals	Yellowknife City	Gold	16 Holes (6118 m)	Helicopter Mag and Radiometric (6409 line-km), LiDAR (434 sq km)	Mapping, Prospecting, Channel Sampling, Environmental, Archeology Studies
Nickerson	Aye	Gold			Prospecting, Geochemical Survey
Sixty North Gold	Mon	Gold			Chip Sampling, Metallurgy, Prospecting, Biogeochem (155 spruce bark), Trenching
Seabridge	Courageous Lake	Gold	Drilling 36 Holes (7200 m)		

Map of Mineral Activity



Mineral Tenure Heat Map



Northwest Territories Mining

Diavik Diamond Mine

The Diavik Diamond Mine owned by Rio Tinto (60 per cent) and joint venture partner Dominion Diamond Mines (40 per cent) began production in 2003 and until recently, it has been a fully underground mining operation since 2012.

During the first three quarters of 2018 Diavik Diamond Mine, recovered 5,470,000 carats of diamond (Table 1). During the first half of the year at the Diavik Diamond Mine, 1,208,000 tonnes of ore were processed yielding 3,690,000 carats. Carats recovered in the second quarter of 2018 were three per cent higher than the corresponding period in 2017 due to higher plant throughput, while carats recovered in the third quarter of 2018 were nine per cent lower than the corresponding period in 2017 due to lower grades.

Table 1: Diavik Mine Production - 2018

Measurement	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	9 MTHS 2017	9 MTHS 2018
Ore processed ('000 tonnes)	578	525	556	652	670	1,664	1,879
Diamonds recovered ('000 carats)	1,961	1,767	1,774	1,916	1,776	5,719	5,467

Diavik Diamond Mine (Continued)

Rio Tinto and Dominion Diamond Mines have revealed "The Diavik Stars of the Arctic". They are three exceptional stones; a 177.71 carats white gem diamond (Vega); a 59.1-carat white gem quality rough diamond (Altair); and a 24.82 carat fancy yellow diamond (Capella). These, along with other stones greater than 10.8 carats, were sold by special tender.

After a four year \$US 350 million development period, the fourth kimberlite of the Diavik Mine, A21, is producing ore ahead of schedule. With the first ore uncovered in March, Diavik again has an open pit source of ore to complement underground production from A154N, A154S and the A418 kimberlites. The new pit scheduled to reach full production capacity during the fourth quarter was officially opened August 20th, 2018. The new development is expected to sustain production levels for the next four years. The current life of mine plan for Diavik extends production to 2025.

Ekati Diamond Mine

The Ekati Diamond Mine consists of the Core Zone, which is the primary focus of mining operations, and the adjacent Buffer Zone, which is the focus of new development and exploration efforts. The Core Zone at the Ekati mine, in which Dominion Diamond Mines has an 88.9% participating interest with Stewart Blusson owning the remainder, encompasses 175 mining leases totalling almost 173,000 hectares. Dominion has 100% ownership of the Buffer Zone.

Current operations at the mine include the Pigeon, Sable and Lynx open pits. Underground operations at the Koala pit will be concluded by the end of 2018. The Misery Underground Project is now underway with construction of the portal completed in the summer of 2018. The expansion of Misery Camp is slated for early 2019.

In 2016, the company announced it planned to begin construction of the Jay pipe at Ekati mine in 2018, a year later than previously planned. This year, Dominion Diamond Mines reported that it was slowing down its Jay pipe project. Work planned for this year has been put on hold, while the company studied the project's profitability. The new Jay open pit would extend the Ekati mine's life to 2033, without such a replacement, production at Ekati will end in 2023.

Ekati Diamond Mine (Continued)

Summer exploration on the Ekati mine property included airborne magnetic surveys and diamond drilling and has resulted in the discovery of a new kimberlite. Exploration activities also continued on the Lac de Gras joint venture between Dominion and North Arrow Minerals.

Gahcho Kué Diamond Mine

The Gahcho Kué Diamond Mine (51% DeBeers Group of Companies, 49% Mountain Province Diamonds Inc.) is the world's largest new diamond mine, consisting of a cluster of four diamondiferous kimberlites, three of which are being developed and mined under the initial 12-year mine plan. For the nine months ending September 30, 2018, approximately 2,443,000 tonnes of ore were treated and 5,391,000 carats were recovered, for an average recovered grade of 2.21 carats per tonne, ahead of expectations (Table 2).

The recovered grade for Q3 2018 was also very high at 2.40 carats per tonne (vs. a grade of 2.22 carats per tonne Q3 2017). Ore is currently being mined from the 5034 kimberlite, and commencing in April 2018 from the Hearne kimberlite. The grades of the ore, value of the stones and mining rates continue to outperform expectations despite extensive waste development from the Hearne pipe in Q2 and a planned mill maintenance shutdown in Q3.



Operations at Gahcho Kué

Gahcho Kué Diamond Mine (Continued)

Table 2: Gahcho Kué Production Statistics

	2018 Q2	2017 Q2	2018 H1	2018 Q3	2017 Q3
Tonnes Mined -Ore and Waste	10,285,000	8,390,000		11,592,000	8,313,000
Ore Tonnes Mined	341,000 940,000 1,082,000		1,082,000	1,155,000	1,123,000
Ore Tonnes Treated	899,000	,000 767,000 1,684,479 759,000		823,000	
Carats Recovered 100%	1,930,500	1,614,000	3,571,500	1,819,000	1,825,000
Carats Recovered 49%	946,000	791,000		891,000	894,000
Recovered Grade – Carats/ tonne	2.15	2.1	2.12	2.4	2.22

Gahcho Kué Diamond Mine (Continued)

The plant continued to perform well as a result of ongoing improvements and optimization work since commercial production began in early 2017, as well the recovered grade also continues to exceed expectations, a key driver in achieving production targets.

Mountain Province reports their prices realized per sale of their share of the diamonds from the Gahcho Kué mine (Table 3). The first eight sales of 2018 have shown considerable variation in carats sold and value per carat, but net proceeds realized has remained relatively constant. From this data, the average price realized for these stones has been approximately \$75 US\$ per carat. The joint venture continues to produce extraordinary stones, including a 95.21 carat top clarity white octahedron.

Table 3: Mountain Province Diamonds sales results, carats sold and prices realized for Mountain Province 49% share of 2018 Gahcho Kué production.

	Feb	Mar	April	Мау	June	July	Aug	Sept
Sale	1	2	3	4	5	6	7	8
Carats (000's)	351	177	451	350	356	334.751	411.317	366.505
Million US\$	27.3	25.1	26.4	28.3	30.3	22.2	26.9	24.2
US\$/carat	78	142	59	81	85	66	65	66

The partners conducted a detailed exploration program focused on three objectives; drill test for extensions to the Hearne kimberlite between the north and south lobes, drill test the corridor between 5034 and Tuzo, particularly around the North Pipe kimberlite, and drill test the Curie ground gravity target located between the Tesla and Tuzo kimberlites.

By September the drilling has identified additional kimberlite in the corridor between 5034 and Tuzo, with true intercepts up to 72 metres in thickness. The Curie target has also been confirmed to have kimberlite intercepts up to 52 metres with the full extent of all the additional kimberlite still to be determined.

Gahcho Kué Diamond Mine (Continued)

Additional kimberlite breccia between the north and south lobes at Hearne was confirmed, extending vertically from 40 metres depth from the surface and to at least 220 metres depth. Drill testing of the corridor between 5034 and Tuzo has focused on the zone between the 5034 pipe and the North pipe and an area immediately northeast of the North pipe. Drilling has confirmed kimberlitic material between the north lobe of 5034 and the North Pipe, as well as in the corridor extending northeast of the North Pipe towards Tuzo. This new kimberlitic material extends vertically from 248 metres to 350 metres depth. At the Curie target, kimberlite was intersected at a vertical depth of only 18 metres, with the deepest intercept at 119 metres depth. The Curie kimberlite lies within the proposed open pit mine plan for the Tuzo kimberlite, and midway between Tuzo and the Tesla kimberlite.

Work on developing the model and resource estimates for additional kimberlite on the Hearne and the 5034 North Lobe/North Pipe Extension continues. The new drilling could result in adding 1.5 to 2.8 million tonnes and 2.2 to 4.2 million carats to the current resource. The exploration is scheduled to be finished in Q1 2019 and will be incorporated into a modified mine plan, when completed. These kimberlite discoveries are within the present mine plan area and if economic, will contribute tonnage to extend the mine life at Gahcho Kué.

Northwest Territories Exploration

Diamonds

Kennady Diamonds

On April 13th, 2018, Mountain Province Diamonds Inc. and Kennady Diamonds Inc. announced the successful completion of their business combination, pursuant to which Mountain Province has acquired all of the common shares of Kennady Diamonds.

On May 23rd, 2018, Mountain Province Diamonds announced the completion of the winter drilling program at their Kennady North Project. Three drill rigs were active on the program, one dedicated to delineation drilling on Faraday 2, a second dedicated to geotechnical drilling on the Faraday kimberlites, and the third testing exploration targets within the Kelvin-Faraday Corridor (Table 4.).

Delineation drilling on the northwest extension of the Faraday 2 kimberlite has been completed. The northwest extension, discovered in 2017, extends the Faraday 2 kimberlite by over 150 metres. In early April, a third drill rig tested eight geophysically-defined exploration targets in close proximity to the Faraday and Kelvin kimberlites with seventeen drill holes (Table 5). Kimberlite was intersected in all holes, interpreted as a kimberlite sheet complexes with the longest intercept being 6.85 metres of coherent kimberlite.

Table 4: Farday 2 2018 Delineation Drill program

Kimberlite Intercepts (metres)

Drill Hole	Purpose	Azimuth	Inclination	From	То	Intercept	EOH(Metres)
KDI-18-012a	Delineation / Exploration	0	-90	254.33	270.52	15.18**	334
				279.68	292.94	11.37**	
				297.36	298.34	0.45**	
				304	305.45	0.51**	
KDI-18-12b	Delineation / Exploration	305	-80	-	-	-	317
KDI-18-013	Delineation / Exploration	38	-66	258.69	288.97	28.05**	319
KDI-18-019	Delineation / Exploration	39	-67	306.83	315.45	8.62	337
			3	322.75	323.8	1.05	20
				330.62	331	0.37	
KDI-018-022	Delineation	40	-68	250.5	295.25	44.75	307

^{*}intercepts are not true widths

Drill holes KDI-18-012a and 12b were designed to test for the extension of the Faraday 2 body along strike to the northwest. Vertical hole 18-012a is interpreted to have intersected the marginal zone of the kimberlite as evidenced by the regular intervals of country rock gneiss interbedded within the kimberlite.

^{**}Includes minor country rock intercepts

Hole 18-012b was drilled to the northwest along the projected strike of the body and did not intersect kimberlite, indicating that the pipe had changed orientation. Angled drill hole 18-019 was subsequently drilled in a north-easterly direction and it clipped the bottom edge of the body, indicating that the pipe was now likely trending to the north.

Drill hole 18-013 deviated slightly and intersected the kimberlite off centre and across 28 metres compared to the 50-metre intervals achieved in adjacent delineation holes. In comparison, drill hole 18-022 hit close to the target zone for a 44.75 metre kimberlite intercept. Irrespective of minor deviations in some of the drill holes, the entry and exit pierce points will provide valuable information to advance the three-dimensional modelling of the pipe.

The final hole of the geotechnical program was completed on Faraday 1-3. The hole was designed to test the geotechnical characteristics of the country rock for the purposes of open pit mine design and was not targeted to intersect kimberlite.

Table 5: Results for exploration targets tested under Faraday Lake

Targets Near the Faraday Kimberlites

Kimberlite Intercepts (metres)

Drill Hole	Target	Azimuth	Inclination	From	То	Intercept*	EOH (m)
KDI-18-014a	Target #18-01	0	-90	34.53	35.55	1.02	165
				46.2	46.31	0.11	
KDI-18-014b	Target #18-01	17	45	89.33	89.54	0.021	199
				91.15	93.64	2.49	
				95.18	95.47	0.29	
				96.89	98.09	1.2	
KDI-18-015	Target #18-01	283	-45	78.87	79.18	0.031	199
				91.66	97.3	5.41**	
				62	65.37	2.29**	
				79.51	82.65	3.14	

^{*}intercepts are not true widths

^{**}Includes minor country rock intercepts

Table 5: Results for exploration targets tested under Faraday Lake

Targets Near the Faraday Kimberlites

Kimberlite Intercepts (metres)

Drill Hole	Target	Azimuth	Inclination	From	То	Intercept*	EOH (m)
KDI-18-016a	Target #18-02	0	-90	64.48	66.49	2.01	119
				75.18	76.91	0.93**	
KDI-18-016b	Target #18-02	220	-65	61.03	61.31	0.28	131
				62	65.37	2.29**	
KDI-18-016c	Target #18-02	220	-45	66.89	68.98	1.68**	122
				79.51	82.65	3.14	
KDI-18-018a	Target #18-03	0	-90	128	133	5	179
KDI-18-018b	Target #18-03	341	-62	192.73	193.16	0.43	269
				198.02	198.79	0.77	
				203.61	204.13	0.52	
				225.27	225.77	0.2	
				238.64	239.66	1.02	

^{*}intercepts are not true widths

^{**}Includes minor country rock intercepts

Table 5: Results for exploration targets tested under Faraday Lake

Targets Near the Faraday Kimberlites

Kimberlite Intercepts (metres)

Drill Hole	Target	Azimuth	Inclination	From	То	Intercept*	EOH (m)
KDI-18-020b	Target #18-04	145	-45	55.7	58.83	0.13	116
KDI-18-020c	Target #18-04	145	-71	60.22	63.28	3.06	119
KDI-18-021a	Target #18-05	0	-90	69.6	75.58	4.37**	126
KDI-18-021b	Target#18-05	125	-45	61.26	64.94	3.68	152
KDI-18-023	Target #18-06	220	-76	68	69	1	119
KDI-18-024	Target #18-07	145	-55	59.25	60.5	1.25	121
				66	66.5	0.5	
				83.5	84	0.5	

^{*}intercepts are not true widths

^{**}Includes minor country rock intercepts

Table 5: Results for exploration targets tested under Faraday Lake

Targets Near the Kelvin Kimberlite

Kimberlite Intercepts (metres)

Drill Hole	Target	Azimuth	Inclination	From	То	Intercept*	EOH (m)
KDI-18-025	Target #18-08	135	-55	37.75	45	6.85**	119
KDI-18-026	Target #18-08	135	-55	38	42.5	4.5	114

^{*}intercepts are not true widths

North Arrow

On April 5th, 2018 North Arrow Minerals Inc. announced the discovery of a new kimberlite during its winter exploration drilling program at the Company's 100% owned Loki Diamond Project. The project is located in the Lac de Gras region, approximately 30 kilometres southwest, of the Ekati diamond mine, and immediately adjacent to the west of North Arrow's Lac de Gras Joint Venture Diamond Project with Dominion Diamond Mines.

On April 5th, 2018 North Arrow Minerals Inc. announced the discovery of a new kimberlite during its winter exploration drilling program at the Company's 100% owned Loki Diamond Project. The project is located in the Lac de Gras region, approximately 30 kilometres southwest, of the Ekati diamond mine, and immediately adjacent to the west of North Arrow's Lac de Gras Joint Venture Diamond Project with Dominion Diamond Mines.

^{**}Includes minor country rock intercepts

North Arrow (continued)

Target 465 was initially tested with a south oriented drill hole (18-465-01) that encountered granite country rock with intermittent, non-magnetic mafic dykes and localized fracturing down to a depth of 142 metres (Table 6). A second drill hole (18-465-02), positioned approximately 30 metres to the west, was drilled from south to north and encountered a 20.85-metre interval of black to olive green kimberlite with up to and locally exceeding 10% country rock (granite) dilution. The kimberlite is generally altered and kimberlite indicator minerals including altered olivine and rare garnet have been observed. The position of the kimberlite within the two drill holes suggests 465 may dip steeply to the south.

Table 6: Loki Winter Drilling Program 2018

Kimberlite Intercepts (metres)

Drill Hole	Azimuth	Angle	Target/Kimberlite	From	То	Interval	ЕОН
18-465-01	180	-58	465	N/A			142
18-465-02	0	-51	465	37.68	58.53	20.851	148
18-EG05-05	N/A	-90	EG05	17.53	169	151.472	169
18-EG05-06	0	-60	EG05 West	N/A			148

¹⁾ Includes country rock (granite) blocks from 37.97 to 38.60 metres and 50.80 to 53.43 metres.

The results of detailed logging of the kimberlite intervals from 465 and EG05, including sampling for kimberlite indicator minerals and microdiamonds, are still pending. Additional drilling is required to evaluate the size, orientation, and internal geology of the 465 and EG05 kimberlites. The Loki Project also hosts a number of untested geophysical drill targets having good kimberlite indicator mineral support. Planning is underway for a drilling campaign to continue evaluating this prospective area of the Lac de Gras region.

²⁾ Includes laminated mudstone from 74.21 to 85.23 metres.

Diagras Property

Diagras is a joint venture between Arctic Star Exploration Corp. (40%), and Margaret Lake Diamonds Inc. (60% and operator). Diagras is located in the Lac de Gras region 35 kilometres from the Diavik diamond mine. The property originally consisted of 21 contiguous claims covering 18,699 hectares and hosting 12 previously identified kimberlites. This package was augmented with staking of 8 new contiguous claims covering 3,896 hectares increasing the Diagras property to a total of 22,595 hectares, within 29 mineral claims covering a total of 20 known kimberlites on the property.

Exploration at Diagras in 2018, consisted of Gravity, Magnetic and Electromagnetic (EM) ground surveys focused around historically identified kimberlites as well as other airborne geophysical anomalies with kimberlite like signatures.

Fieldwork was completed by Aurora Geosciences Ltd. and Initial Exploration Services Inc. between May 27 and June 6, 2018. The geophysical surveys targeted kimberlite intrusions and were designed to investigate areas proximal to known kimberlites as well as explore new target areas. Warm temperatures during the time of the surveys forced a premature end to the program. A total of 133 gravity stations, 152 line-kilometres of ground magnetics and 11.2 line-kilometres of OhmMapper survey were completed, with DG007, HL02 and Suzanne emerging as targets, showing evidence of multi-phase kimberlite complexes.

At Suzanne, a combined EM and Gravity anomaly distinctly breaks a diabase dyke, with a separate magnetic low to the south. The anomaly is large enough (250 metres) to warrant more than one drill hole to search for different phases. At HL02, two long angle holes had been completed previously from the shoreline intersecting this kimberlite. The magnetic signature in this area is complex, suggesting the possibility of untested phases. The partly completed EM survey conducted this year shows an EM anomaly associated with the kimberlite but not tested by the previous drilling.

At the DG007 anomaly, previous explorers targeted a "classic" Lac de Gras, magnetic and EM anomaly. Two holes were drilled but intersected only granite. One of the drill collars has been found in the field and its position is displaced from that reported in assessment files, possibly due to GPS errors. Drilling to properly explain this target is still required.

Plans are to drill test the 2017 and 2018 targets as well as generate more targets through an expanded ground geophysical and drill program in Spring 2019.

Margaret Lake Property

Margaret Lake Diamonds Inc. drill tested five separate targets at their wholly-owned Margaret Lake property in a program that lasted from mid-May to early June (Table7). No kimberlite was intersected. Each of the targets tested displayed either a ground gravity low, bedrock conductor or combination of both.

Table 7: Exploration Program Results for Margaret Lake

Anomaly	Drill Hole	TD (metres)	Bearing/Dip Degrees	Comments Location	
ML-06	MLD-18-001	136	035/50	579482 E, 7042260 N 19 metres Overburden. Intersected broken and altered granite.	
ML-051	MLD-18-002	40	225/-70	591435 E, 7047461.1 N Hole lost in overburden	
ML-06	MLD-18-03	100	035/-70	579721.5 E, 7042211.1 N 22 metres of overburden, granite	
ML-041	MLD-18-04	135	145/-50	585787.2 E, 7048534.4 N 17 metres Overburden, altered broken granite, minor granite breccia, mafic dyke.	
ML-07	MLD-18-05	135	148/-60	579063.8 E, 7041636.9 N 5 metres of Overburden, broken Granite	
ML-08	MLD-18-06	93	207/-55	579708.4 E, 7032813.5 N 9 metres of Overburden Gneiss	

The ML-06 and ML-07 targets intersected altered and broken granite, which explained the geophysical anomaly and could suggest proximity to a kimberlite intrusion. The ML-051 gravity low anomaly was explained by the deep overburden. ML-07 and ML-08 targets geophysical signatures were not explained by the drilling. The company also has a several other untested targets remaining. The drilling campaign was based out of Kelvin Camp operated by Aurora Geoscience Limited and owned by Mountain Province Diamonds.

Seahorse Project

In July 2018, Olivut Resources Ltd. signed an option agreement with Talmora Diamond Inc. to earn 50% on the Seahorse Project, part of Talmora's Horton Project, south of Paulatuk. During August, crews and equipment were mobilized to initiate an airborne geophysical survey. Unseasonable, extremely poor weather conditions hampered the airborne geophysical survey. Reconnaissance work to assist with the planned drill program was carried out.

The area covered by the Seahorse Project could be the source of the numerous (18) macro diamonds found in regional stream sediment samples down ice to the west, as well as the positive indicator mineral chemistry found regionally. Plans include drill testing the targets as soon as practical.

GGL Resource Group

On September 18, 2018, GGL Resources Corp. (GGL) announced that it has received final results and completed modelling and evaluations from ground geophysical programs conducted earlier this year near known diamondiferous kimberlites at its wholly owned Bishop and Rhombus properties in the Lac de Gras region.

Bishop Project

A combination of detailed ground magnetic, Ohm-Mapper electromagnetic ("EM"), and bathymetrically corrected gravity surveys were completed on the Bishop property, 40 kilometres southwest of the Diavik diamond mine. The majority of the survey work focused on previously identified airborne anomalies near the diamondiferous Bishop kimberlite discovered by GGL over a decade ago as well as the area surrounding the Courageous kimberlite located 12 kilometres to the south.

Bishop Project (continued)

The Bishop kimberlite geophysical anomaly is described as a moderate gravity low with coincident resistivity low EM signature. Two earlier drill campaigns proved the Bishop kimberlite to be a complex body with multiple kimberlite intercepts across a 250-metre by 160-metre area.

The new geophysical data generated three new targets near the Bishop kimberlite. Target BP-01 lies approximately 1.2 kilometres northwest of the Bishop, is described as a narrow 1,200 nanotesla, reversely polarized magnetic low located on land. Target BP-02 located a kilometre west-southwest of the Bishop kimberlite, in an embayment along a long linear lake. This target is a strong EM anomaly that persists to the depth investigated and measures approximately 150-metres by 100-metres. Target BP-03 is centred 650 metres west-northwest of the Bishop kimberlite, adjacent to a small lake. It is defined by an EM anomaly with an associated quiet magnetic signature within a lithologic package with noisy magnetics. This kimberlite target is interpreted to represent an intruding body locally displacing the host lithology.

Gravity and magnetic surveys were also conducted 12 kilometres to the south in the area of the Courageous kimberlite. Records indicate eight microdiamonds were recovered from a 78.4-kilogram sample of the body, but drilling difficulties prevented evaluation of the kimberlite below crater sediments. Public domain records of previous drill locations and survey work are limited, but GGL believes it has delineated the Courageous kimberlite with its recent gravity survey. This survey returned an anomaly that measures 800-metres by 600-metres and is characterized by a 0.5 milligal gravity low. No discernible magnetic features are present.

Rhombus Project

The Rhombus property, located 40 kilometres northwest of the Ekati diamond mine, was investigated using a full suite of ground geophysical surveys with an emphasis on gravity. The surveys were focused near the diamondiferous Torrie, Sue and Sputnik kimberlites discovered in the 1990s.

The Rhombus survey identified a 0.35 milligal gravity low target measuring over 150 metres in diameter located 600 metres north of the Torrie kimberlite in a moderate size lake. This gravity target has a quiet magnetic signature that lies between two magnetically active lithologies. The anomaly is open to the north and requires additional survey lines to close it off.

Metals

Van Project

In August 2018, Strategic Metals Ltd. optioned its Van property to a newly formed company, Vanadium North Resources Inc. The property consists of seven mineral claims (38 square kilometres) that are located approximately 10 kilometres northwest of the Cantung Mine along the Howard's Pass Access Road. Strategic will retain a 2 percent net smelter return royalty, half of which can be purchased for C\$1 million. Additional claims have been staked since August, expanding the property.

The Van project lies along the eastern margin of Selwyn Basin and is underlain by a large-scale, northwest-trending, upright syncline comprising Upper Proterozoic to Paleozoic clastic sedimentary units. The vanadium mineralization is developed in a siliceous mudstone unit with portions that are rich with sooty black, carbonaceous material. Geological mapping completed previously by Archer Cathro Ltd. has demonstrated that the moderately to steeply dipping unit is at least 50 metres thick and extends over a considerable strike length.

Two lines of continuous chip samples collected 600 metres apart across the prospective horizon returned weighted averages of 0.58% and 0.61% V_2O_5 over true widths of 56.1 metres and 60.2 metres, respectively. A diamond drill hole completed between the chip sample lines yielded a weighted average of 0.42% V_2O_5 over 52.5 metres, within a broader zone averaging 0.3% V_2O_5 over 110 metres. Bedrock exposure is restricted to stream cuts on the property and the length of the mineralized zone has not been conclusively determined.

The majority of demand for Vanadium is as an alloy metal whereby a small amount of vanadium adds strength and heat resistance to the metal it is alloyed with. Examples of this include ferrovanadium, a vanadium-iron alloy, is used in high-stress auto parts such as gears, axles and crankshafts and titanium-vanadium alloys are used in jet engines.

Van Project (continued)

An emerging use of this critical metal is in vanadium flow batteries. As Vanadium can exist in four different oxidation states simultaneously in solution, the vanadium redox battery can rely on one electroactive element for both the cathode and anode making it potentially very efficient. Vanadium redox batteries boast extremely large capacities, limited self-discharge characteristics and rapid response times in comparison to Lithium and other batteries making them well suited to uninterruptible power supply (UPS) type applications, where they can be used to replace lead–acid batteries and even diesel generators.

Far Resources Hidden Lake Lithium Project

The Hidden Lake Project, which consists of five mineral claims totalling 1,849 hectares within the central parts of the Yellowknife Lithium Pegmatite Belt, is located 40 kilometres east of Yellowknife along Highway 4.

Previous exploration efforts in 2016 by 92 Resources Corp.'s returned 1.90% $\rm Li_2O$ over 9 metres and grab samples up to 3.3% $\rm Li_2O$. Four dykes which are between 275 and 790 metres in length and up to 10 metres in width were sampled by 308 channel samples that returned an average lithium concentration of 1.03% $\rm Li_2O$.

These encouraging results led to preliminary metallurgical test work and scoping lithium extraction tests being conducted. The work produced a high-grade mineral concentrate of 6.16% Li_2O with an average spodumene lithium content of 3.8 per cent lithium (8.2% Li_2O). The scoping test work achieved an overall extraction of 97%, indicating that industry standard lithium extraction techniques applied to typical spodumene concentrates are applicable to the pegmatites at Hidden Lake.

In March 2018, Far Resources Ltd. announced that it had entered into an option agreement with 92 Resources Corp. to acquire up to 90% of the Hidden Lake Lithium Project. By May, the Company had mobilized a drill rig to its Hidden Lake Project for a 1,100-metre diamond drilling campaign.

Far Resources Hidden Lake Lithium Project (continued)

The Northtech drill program targeted four pegmatites with channel samples containing up to $1.75\%~\text{Li}_2\text{O}$ and assessed the widths and extent of the dykes at depth. Assaying for the 197 core samples collected from the ten holes (1,079 metres of drilling was conducted by the Lakefield facility of SGS Mineral Services. The dykes, HL-001 through HL-003 and D-12, all included Li2O assays of 1.0% to 2.0% over widths between 2.0 and 9.2 metres. Assay results, based on the total dissolution of the sample by sodium peroxide fusion, are summarized in Table 8.

Far Resources Hidden Lake Lithium Project (continued)

Table 8: Summary of assay results, Phase 1 drilling, Hidden Lake Lithium Project.

Lengths do not represent true widths

Drill hole	Li₂O (%)	Ta (ppm)	Length (m)
HL18-001	1.5	33.4	9.0
HL18-002	1.7	34.0	5.0
HL18-003	1.6	32.4	9.2
HL18-004	1.6	24.4	7.0
HL18-005	1.2	41.8	2.0
HL18-006	1.4	21.5	7.0
HL18-007	2.0	43.6	5.2
HL18-008	1.3	42.5	3.8
HL18-009	1.5	7.8	2.0
HL18-010	1.0	15.1	7.0

While this drill campaign targeted four dykes, the Hidden Lake Project itself hosts a swarm of at least ten lithium-bearing spodumene pegmatite dykes that have been mapped and sampled. A second round of diamond drilling to assess the width and vertical extent of the other pegmatites is being planned.

Nehchalacho Rare Earths Project

Avalon Advanced Materials Inc. re-activated its Nechalacho Rare Earths Project 100 kilometres southeast of Yellowknife, renewing its Land Use Permit and completing the perimeter survey of several contiguous mineral claims in order to bring them to lease.

Avalon sampled in the area of the T-Zone and Tardiff Lakes Zones to begin assessing their potential for neodymium and praseodymium ("Nd-Pr"). These elements are in great demand from magnet applications. Previous work by Avalon focused on the heavy rare earth-rich Basal Zone deposit, (2013 Feasibility Study). In the course of drilling the Basal Zone, Nd-Pr mineralization in bastnaesite was intersected near the surface in the Tardiff Lakes area, including grades up to 10.78% total rare earth oxides over 11 metres.

As the area where the drill holes were sited is largely overburden covered, a biogeochemistry sampling program was undertaken to determine if the method could be used to define the extent of the near-surface mineralization.

Sampling of previously drilled core was from the T-Zone was done to assess the resource potential for lithium, occurring as the lithium-mica, polylithionite. The South T-Zone is known to contain lithium and rare earth mineralization, but exploration drilling in the 1980's was focused on beryllium and no resource estimate was completed for rare earth minerals or lithium. In total, 41 drill core and rock samples and 80 biogeochemistry samples were shipped for analysis for rare earth minerals and lithium. Analytical results are expected in early November.

Work also continued on an independent scoping study for an East Arm-Yellowknife road and hydropower infrastructure corridor.

NICO Cobalt-Gold-Bismuth-Copper Project

Fortune Minerals' efforts to bring the NICO project into production were assisted by the acceptance of the environmental assessment approval for the Tłıcho All-Season Road by the Responsible Ministers of the Governments of Canada and the Northwest Territories. The Tłıcho Government also approved the Board's recommendation with modifications. The Tłıcho Road will require the construction of a permanent 97-kilometre highway, extending north from Highway 3 to the community of Whati .

The NICO Project is located 50 kilometres north of Whati and Fortune has already received approval to construct a road from Whati to the mine site.

Construction of the mine and concentrator is planned to commence using the existing winter ice road, but all-season road access is required for mine operations in order to transport metal concentrates from the property to a refinery. NICO is an iron oxide-copper-gold (IOCG) deposit located in the southern Bear Province approximately 160 kilometres northwest of Yellowknife. Ore is hosted in three stratabound lenses of brecciated ironstone up to 1.3 kilometres long and 550 metres wide, with individual lenses up to 70 metres thick that dip 40° to 50° .

Zinc

Prairie Creek Project

Canadian Zinc — the owners of the Prairie Creek Zinc-Lead-Silver Project in the Mackenzie Mountains northwest of Nahanni Butte — reorganized into a holding corporation named NorZinc Ltd. retaining a subsidiary, Canadian Zinc Corporation. Activities by NorZinc at the Prairie Creek Mine Site, consisting of care-and-maintenance programs continued, along with advancing detailed engineering and design of the mine facilities. A helicopter-supported road program was conducted to collect data for additional baseline studies.

Construction of an all-season road is planned to commence from a winter road in early 2020 and continue into 2022, in parallel with continuous and ongoing site construction and mine development. These plans were assisted by the October 10, announcement that the Ministers responsible under the Mackenzie Valley Resource Management Act adopted the Mackenzie Valley Review Board's positive recommendation for approval of the road construction.

Prairie Creek Project (continued)

The Prairie Creek Mine contains a National Instrument 43-101 Proven and Probable Reserve (September 28, 2017) of 8.1 million tonnes grading 8.6% Zn; 8.1% Pb and 124 g/t Ag, which include a Measured and Indicated Resource of 8.7 million tonnes grading 9.5% Zn; 8.9% Pb and 136 g/t Ag, and represent an initial mine life of 15 years. Prairie Creek also hosts an additional Inferred Mineral Resource of 7.0 million tonnes grading 11.3% Zn, 7.7% Pb, and 166 g/t Ag.

Four styles of base metal mineralization have been identified at Prairie Creek: quartz vein, stratabound, stockwork and Mississippi Valley-type. Only the first three styles have been found in potentially economic quantities to date.

The most significant style of mineralization is the quartz vein-type, on which the underground workings have been developed, containing the bulk of the resource. The Main Quartz Vein (MQV) has been exposed in detail by underground development and diamond drilling over a strike length of 2.1 kilometres (Main Zone). The MQV trends at an azimuth of approximately 20° and dips between vertical and 40° east, with an average dip of 65°. The MQV consists of massive to disseminated galena and sphalerite with lesser pyrite and tennantite-tetrahedrite in a quartz-carbonate-dolomite sheared matrix. The galena and tennantite-tetrahedrite also carry economically significant silver values. This vein style of mineralization has been located, through surface trenching, for 16 kilometres strike length.

Stockwork (STK) mineralization occurs as a series of narrow, massive sphalerite-galena-tennantite veins striking at about 40° azimuth that occupy tensional or dilatant-type fractures within a structural offset translation zone of the MQV. This mineralization has developed in sub-vertical tensional openings formed obliquely to but also related to, the initial primary fault movement along the main vein structure.

Stratabound Massive Sulphide (SMS) mineralization occurs intermittently at the base of the trend of the Prairie Creek vein system over a strike length of more than 3 kilometres. SMS mineralization occurs as semi-massive sphalerite- galena-pyrite replacement located close to both the vein system and the axis of the Prairie Creek antiform.

Prairie Creek Project (continued)

Mississippi Valley-type (MVT) lead-zinc mineralization is exposed at surface on the Property in rock formations marginal to the basin, and consists of cavity-filling type breccias in dolostone with host fragments rimmed by colloform sphalerite-marcasite-galena and the breccia healed with carbonate.

Pine Point Project

At the end of 2017, Osisko Metals announced the acquisition of Pine Point Mining and the Pine Point Project consisting of the approximately 21,500 hectare property near Hay River. During its 23-year production history (Cominco Limited), over 98 deposits were identified of which 52 were mined, producing nearly 64 million tonnes of ore at a time when it was Canada's most profitable zinc-lead mine.

The property included 54 undeveloped lead-zinc deposits on the property, of which 15 have been defined to NI 43-101 standards and the rest classified as historical resources. Upon concluding the acquisition in February, Osisko Metals reported that they would work to convert the historical, unclassified resources of 70.8 million tonnes of 4.2% zinc and 1.6% lead, into NI 43-101 Mineral Resource Estimates.

Pine Point Mining had already started towards this goal with a positive Preliminary Economic Assessment study was filed in May 2017. That report which focused on a restricted subset of open-pit deposits confirmed 25.8 million tonnes of Indicated Resources grading 2.9% zinc and 1.1% lead and 3.7 million tonnes of Inferred Resources grading 2.9% zinc and 0.8% lead.

In early February, three drill rigs were mobilized to the Pine Point project and began a 50,000-metre program, starting with high priority targets that have poor summer access. By April, 129 drill holes (7860 metres) of the planned 700 holes were completed in the central 20-kilometre long portion of the Pine Point Mining Camp. Winter drilling was completed in the East Mill Zone (formerly known as the Cluster 1) and the Central Zone (formerly known as the Cluster 2 area).

Pine Point Project (continued)

The East Mill Zone is a 7.6-kilometre trend of tabular-style mineralization that extends to the east from the electrical substation where the former Cominco concentrator was located. The Central Zone is comprised of a 5.0-kilometre trend of historical deposits, located 10 kilometres to the west of the substation.

Winter drilling highlights

In the East Mill Zone – L27, K-35, L-35 and L36 deposit areas:

- Drill hole EM-18-PP-016 intersected 4.86% Zn and 0.61% Pb over 10.30 metres
- Drill hole EM-18-PP-092 intersected 2.7 metres grading 16.99% Zn + 4.35% Pb
- Drill hole EM-18-PP-107 intersected 4.95% Zn and 0.16% Pb over 4.50 metres
- Drill hole EM-18-PP-106 that intersected 10.69% Zn + Pb over 4.50 metres
- Drill hole EM-18-PP-073 intersected 22.97% Zn and 2.22% Pb over 5.95 metres
- Drill hole EM-18-PP-079 containing 7.75 metres of 11.27% Zn+Pb
- Drill hole EM-18-PP-088 that intersected 5.75 metres of 12.36% Zn+Pb
- Drill hole EM-18-PP-050 intersected 3.84% Zn and 0.92% Pb over 9.20 metres.

In the Central Zone, at the L65 deposit

- Drill hole L65-18-PP-004 intersected 4.29% Zn & 0.56% Pb over 11.10 metres
- Drill hole L65-18-PP-007 intersected 11.20% Zn + 3.42% Pb over 5.35 metres.

At the HZ deposit

- Drill hole HZ-18-PP-008 intersected 8.75% Zn and 0.49% Pb over 7.82 metres
- Drill hole HZ-18-PP-002 intersected 9.16% Zn and 0.24% Pb over 5.10 metres.

In the Central Zone

- Drill hole M6263-18-PP-014 intersected 14.67% Zn and 1.94% Pb over 6.75 metres
- Drill hole M6263-18-PP-013 intersected 6.34% Zn and 1.27% Pb over 15 metres.

Pine Point Project (continued)

From the East Mill Zone

- Drill hole EM- 18-PP-133 intersected 12.71% Zn and 6.97% Pb over 6.30 metres
- Drill hole EM-18-PP-136 intersected 3.96% Zn and 2.29% Pb over 5.33 metres
- Drill hole EM-18- PP-147 intersected 6.36% Zn and 0.80% Pb over 7.85 metres
- Drill hole EM-18-PP-148 intersected 7.65% Zn and 1.33% Pb over 8.98 metres
- Drill hole EM-18-PP- 140 intersected 13.91% Zn and 7.56% Pb over 9.98 metres
- Drill hole EM-18-PP-152 intersected 4.22% Zn and 2.56% Pb over 8.20 metres.
- Drill hole M40-18-PP-021 intersected 5.04% Zn and 1.39% Pb over 11.16 metres
- Drill hole M40-18-PP-008 intersected 8.73% Zn and 3.77% Pb over 3.85 metres.

The drill program is anticipated to continue in order to confirm the historical drill results and assay result. The combination of new and historic holes will provide a combined drill spacing of approximately 30-40 metres suitable for the development of NI 43-1 Mineral Resource Estimate. This is anticipated to be completed by the last quarter of 2018.

Gold

Cabin Lake Project

Rover Metals Corp. acquired a 100% interest in the Cabin, Slemon and Camp lake projects and from Silver Range Resources this summer. The properties are located 110 kilometres northwest of Yellowknife and 38 kilometres north of Behchoko. Silver Range Resources has retained a 2% net smelter royalty, which can be reduced to 0.5%. Historic work at Cabin lake had been conducted by Cominco Ltd., Freeport McMoRan Gold Company, and Aber Resources Ltd. who tested for gold in iron formation interbedded with Archean metasedimentary rocks. The data for much of this work including the logs for 10,000 metres of drilling were acquired from North Arrow Minerals.

Cabin Lake Project (continued)

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The drilling targeted a steeply east-plunging package of folded and sulphidized iron formation containing pyrite, pyrrhotite, chalcopyrite and arsenopyrite referred to as the Bugow Iron Formation. Three resources have been reported from the property that will require additional work to bring them to current standards. On the south limb of the fold, Aber Resources Ltd. reported a resource of 90,000 tonnes at 8.5 g/t gold (100,000 tons at 0.30 ounces per ton gold) while 43,900 tonnes at 4.39 g/t gold in the Bugow Zone on the north limb and 18,100 tonnes grading 7.89 g/t gold in the Andrew North Zone.

The exploration program at Cabin Lake focused on revisiting the historic gold zone occurrences over the gold-rich iron formation to better understand the system, geology, structure and mineralization. Phase one comprised an Unmanned Aerial System Magnetic survey, a geochemical survey and geological mapping. The UAS survey covered the property at 25-metre and 50-metre spacings and readings were taken at one-second intervals, for a total of 102 line-kilometres. The survey was effective in delineating the Bugow Iron Formation and identified anomalous zones similar to known gold-bearing zones.

An accompanying geochemical survey covered an area of approximately 1.5-kilometres by one kilometre in the southeastern part of the property with a close sample spacing (25 metres between samples within lines 50 metres apart from each other in a North-South line orientation) for a total of 485 stations. Samples were taken using auger tools below the topsoil where possible. The geochemical survey was bounded at the western side by the Cabin Lake, Beaver and Camp gold zones to the east covering an area of high density of NE-SW lineaments/faults/shear zones and their intersection of the tightly folded Bugow iron formation. Structure and outcrop mapping was done concurrently to expand the overall understanding of the structures controlling gold mineralization.

Cabin Lake Project (continued)

The results revealed coincident anomalies of pathfinder elements such as Arsenic, Sulphur and Copper with magnetic anomalies following the Bugow iron formation, particularly over the Camp and Andrew South Zones. The surveys also show a new well-defined anomalous zone in the south-east zone of the property. The interpretation of the results supports the hypothesis of a gold-bearing system is not restricted to fold closures in the iron formation but exits in the form of a shear corridor intersecting a series of folded iron formations, with gold preferentially being deposited within sulphidized sections of the iron formations in such zones. This supports the hypothesis that there is a much more extensive gold system than initially discovered by Aber Resources' drilling.

The second phase of the Cabin Lake Gold Project exploration program will consist of diamond drilling scheduled for the upcoming winter months to test new zones that step out from the classic Iron Formation Gold deposit model and transition it to the shear-hosted gold deposit.

Indin Lake Gold Project

Nighthawk Gold Corp. has continued its highly successful exploration efforts on the Indin Lake Property. The 899 square kilometre property contains five main deposits: Colomac (Zone 1.5 and 2.0), Goldcrest and Grizzly Bear (24 and 27) and a number of high-grade showings including Treasure Island, Damoti Lake, and the Leta Arm deposits.

A technical report titled "NI 43-101 Technical Report on the Ind in Lake Property, Colomac Project, Ind in Lake Belt, Northwest Territories, Canada", outlining an updated inferred resource estimate for the Colomac Gold Project was filed in July. It included an updated Inferred Mineral Resource estimate of 50.305 million tonnes with an average grade of 1.62 grams per tonne gold for 2.613 million ounces of gold (74,000 kg Au) for the Colomac Gold Project (Table 9). The resource estimate was prepared by CSA Global Canada Geosciences Ltd., using a total of 1,088 drill holes totalling 141,013 metres (913 historical drill holes totalling 85,178 metres, and 175 drill holes totalling 55,835 metres completed by Nighthawk between 2012 and 2017). Since the 2013 resource estimate, Nighthawk has drilled 145 holes for 44,600 metres which were captured within this latest resource update.

Table 9: Colomac Gold Project Updated Inferred Mineral Resource Estimate (June 13, 2018)

Zone	Tonnes	Grade (grams/tonne Gold)	Inferred Gold Ounces
Colomac North	11,522,000	1.63	604,000
Colomac Central	18,744,000	1.65	997,000
Colomac South	14,533,000	1.65	770,000
Goldcrest North	1,145,000	1.3	48,000
Goldcrest Main (formerly Goldcrest South)	2,636,000	1.6	136,000
Subtotal	48,580,000	1.64	2,554,000
Grizzly Bear (Not Updated, No Change)	807,000	1.04	27,000
27 (Not Updated, No Change)	528,000	1.21	20,000
24 (Not Updated, No Change)	390,000	0.96	12,000
Sub Total	1,725,000	1.06	59,000
Total	50,305,000	1.62	2,613,000

Table 9: Colomac Gold Project Updated Inferred Mineral Resource Estimate (June 13, 2018)

Notes:

- 1. A block cut-off value of 0.70 g/t Au was applied to all Colomac and Goldcrest blocks. Grizzly Bear, 25 and 27 reporting cut off remains at 0.60 g/t Au.
- 2. Tonnes and ounces have been rounded to reflect the relative accuracy of the mineral resource estimate; there-fore numbers may not total correctly.
- 3. Mineral resources were calculated with commercial mining software.
- 4. For 2018 updated Colomac and Goldcrest block models: Drill holes traces showing lithology and gold grade were reviewed in plan and cross section. Geological domains were created using Leapfrog™ Implicit Geological Modelling Software. Assays were composited to regular 1 metre intervals. Colomac assays were capped at 30.00 g/t Au and Goldcrest assays were capped at 15.00 g/t Au. Block model grade interpolation was undertaken using Inverse Distance Cubed.
- 5. For 2012 Grizzly Bear, 24 and 27 block models: Drill holes traces showing lithology and gold grade were reviewed in plan and cross section to generate mineralized domains. Assays with each domain were top cut to 31 g/t Au and then composited to regular 5 ft intervals. Block model grade interpolation was undertaken using Multiple Indicator Kriging (MIK). Refer to Lee and Trinder (2012).
- 6. The resource estimate was prepared by Leon McGarry, B.Sc., P.Geo., of CSA Global.
- 7. Gold price is US\$1300 per ounce.
- 8. A default average specific gravity (SG) value of 2.7 has been used.
- 9. Mineral resource tonnes quoted are not diluted.
- 10. No measured or indicated mineral resources or mineral reserves of any category are identified.
- 11. Mineral resources are not mineral reserves and by definition do not demonstrate economic viability. This mineral resource estimate includes inferred mineral resources that are normally considered too speculative geologically to have economic considerations applied to them and must not be converted to a mineral reserve. It is reasonably expected that the majority of inferred mineral resources could be upgraded to indicated mineral resources with continued exploration.
- 12. 1 troy ounce equals 31.10348 grams

Overall tonnage increased by 26.4% to 50.305 million tonnes over the previous Inferred Mineral Resource estimate (June 17, 2013) of 39.815 million tonnes with an average grade of 1.64 g/t Gold for 2.101 million ounces gold using a cut-off grade of 0.60 g/t Au. The high-grade Zone 1.5 at Colomac was discovered in 2014, and since then 14,660 metres of drilling has led to the delineation of 5,347,000 tonnes at an average grade of 1.85 g/t Gold for 317,000 ounces of gold. Resource blocks at Zone 1.5 extend 490 metres below the surface. However, two holes drilled in 2017 intersected continuous mineralization 900 metres below surface outside the current resource.

The Colomac Sill is a medium-grained quartz diorite/quartz gabbro of dioritic to trondhjemitic composition. The sill ranges in width from 40–200 metres and averages 100 metres wide along its six kilometres of drill-tested strike length. Of this, the quartz diorite portion is 9–60 metres wide. The sill is oriented 010/80° in the north and 023/80° in the south. Brittle deformation of the sill produced fracture stockworks and auriferous quartz-veined zones that are highly altered and carbonatized.

At Goldcrest Main (formerly referred to as Goldcrest South), 11,246 metres of new drilling extended the maximum depth of the resource model from 150 metres to 300 metres below the surface, where it remains open. The increase in the size of the model has added 2.20 million tonnes at an average grade of 1.50 g/t Au resulting in an additional 106,120 ounces of gold.

The 2018 exploration program included 25,000-metres of diamond drilling by three rigs in operation from early March until late September. The drilling was focussed on exploring for high-grade gold zones within Colomac Gold Project, delineation of known high-grade gold zones such as Zone 1.5, and drilling of satellite gold deposits. Summer field activities began in June including extensive geological mapping, prospecting, and ground geophysical programs including an Induced Polarization survey. An aerial LiDAR survey was completed in June that provided full coverage of the Indin Lake property.

Nighthawk's 2018 drill program began in early March with three rigs testing the four Leta Arm deposits. North Inca, Diversified, Number 3, and Lexindin are four gold deposits within Leta Arm Fault Zone, a north-south oriented regional deformation zone upwards of 10 kilometres long and 500 metres wide located sixteen kilometres southwest of the Colomac.

Exploration shafts and limited underground development were completed on the North Inca and Diversified gold deposits in the late 1940's and early 1950's exploring multi-stage quartz veins characterized by high-grade gold mineralization. The Diversified mine is 1.3 kilometres north of the North Inca mine with the Number 3 deposit lying between them and the Lexindin deposit an additional 1.2 kilometres north of Diversified.

North Inca Gold Deposit

Eleven holes (2,513 metres) were completed at its North Inca gold deposit, of which nine tested the East Zone and two holes were directed at the West Zone. North Inca consists of several parallel north-striking quartz-rich veins hosted in a highly strained contact zone between metavolcanic and metasedimentary rocks. The East Zone lies within metasedimentary rocks while the West Zone is hosted by metavolcanic rocks.

Nighthawk's recent geological modelling had postulated a steep northerly plunge to the mineralized system, while the en-echelon nature of their veins suggests they may continue along strike and repeat to depth. This model has formed the basis for target generation at North Inca and the other Leta Arm deposits in 2018. Drilling has validated the modelled steep northern plunge to mineralized veins zones and the latest step out holes drilled at North Inca have extended known mineralization laterally and to new depths.

North Inca Gold Deposit (continued)

Drilling Highlights:

- Hole NI18-03B intersected 25.50 metres (13.00 metres true width) of 2.68 g/t Au, including
 9.95 metres of 4.90 g/t Au, and 4.60 metres of 6.60 g/t Au
- Hole NI18-02B intersected 9.25 metres (5.00 metres true width) of 4.49 g/t Au, including
 4.25 metres of 6.52 g/t Au, and 2.25 metres of 10.45 g/t Au
- Hole NI18-03 intersected 15.10 metres (9.70 metres true width) of 2.36 g/t Au, including
 6.55 metres of 4.60 g/t Au, and 3.05 metres of 8.03 g/t Au
- Hole NI18-05 intersected 11.25 metres (6.50 metres true width) of 3.26 g/t Au, including
 8.25 metres of 4.16 g/t Au, and 2.25 metres of 8.35 g/t Au

Twenty-two holes (5,169 metres) were completed at the Diversified deposit, as well as the Number 3, and Lexindin showings.

Diversified Deposit

The Diversified deposit shares similar characteristics to the North Inca deposit, whereby several parallel north-striking quartz-rich veins occur within a highly strained contact zone between metavolcanic and metasedimentary rocks. The Diversified "Main Zone" lies within metasedimentary rocks and has been traced by historical drilling and limited underground development for 220 metres.

In 2018, fourteen drill holes targeted the steep northern plunge to the vein zones. The drilling confirmed the northerly plunge to the gold mineralization encountered near surface, however, the steeper hole, intersected new near-surface mineralization west of the Main Zone veins, returning 2.25 metres of 6.16 g/t Au, including 0.75 metres of 16.25 g/t Au. Six holes were drilled from three setups along the northern down-plunge extension of the Main Zone. DV18-06 and DV18-06B were collared 90 metres north of DV18-05 and tracked the mineralization to 190 metres vertical depth, intersecting strong mineralization highlighted by DV18-06. Step-out drilling 65 metres north of DV18-06 intersected a new shallow occurrence of mineralized quartz veins in metasedimentary rocks along the projected extension of the deposit and intersected the north plunging Main Zone at depth.

Diversified Deposit

Highlights:

- Hole DV18-08 intersected 17.50 metres (14.00 metre true width) of 5.81 g/t Au, including
 9.25 metres of 9.65 g/t Au, and 4.75 metres of 18.12 g/t Au
- Hole DV18-08B intersected 7.75 metres (5.00 metre true width) of 3.66 g/t Au, including
 5.50 metres of 5.05 g/t Au, and 2.50 metres of 10.65 g/t Au
- Hole DV18-06 intersected 14.10 metres (7.00 metre true width) of 3.50 g/t Au, including
 6.65 metres of 6.67 g/t Au, and 2.35 metres of 18.50 g/t Au;
- Hole DV18-07 intersected 11.75 metres (9.50 metre true width) of 3.86 g/t Au, including
 8.00 metres of 5.34 g/t Au, and 4.25 metres of 8.07 g/t Au
- Hole DV18-07B intersected 10.00 metres (5.00 metre true width) of 3.10 g/t Au, including
 6.25 metres of 4.90 g/t Au, and 3.00 metres of 9.12 g/t Au

Number 3 Showing

The Number 3 showing lies along the Leta Arm Fault Zone, 450 metres south of the Diversified shaft and 800 metres north of North Inca. In 2011, Nighthawk drilled seven holes (1,954 metres) to explore the deposit laterally and to depth.

In the 2018 program, six holes (1,294 metres) were drilled of which DV318-01 and DV318-01B extended the down plunge mineralization zone in the central part of the deposit to 90 metres in depth. The second series of holes collared 50 metres south of DV318-01, returned 10.00 metres of 2.67 g/t Au, including 6.75 metres of 3.54 g/t Au, and 3.00 metres of 6.09 g/t Au.

Lexindin Showing

The Lexindin showing is located 1.2 kilometres north of the Diversified shaft. Tensional, en-echelon, quartz veins lying oblique to branches of the main shear zone represent the mineralized zones at Lexindin. Historical drilling was limited to shallow depths with reported intersections of 113.80 g/t Au over 3.05 metres, 18.85 g/t Au over 1.53 metres, and 22.97 g/t Au over 2.37 metres indicating its potential. In 2011 Nighthawk drilled a single hole to test shallow targets and intersected weak mineralization.

In 2018, the Company drilled two holes (429 metres) 60 metres south of Nighthawk's 2011 hole to validate the down plunge southern extension of the mineralized model. The steeper hole, LX18-01B, intersected a broad new gold occurrence that assayed 21.80 metres of 1.20 g/t Au, including 8.65 metres of 2.03 g/t Au, and 3.65 metres of 2.93 g/t Au.

Treasure Island

Treasure Island is the most northerly showing in the Indin Lake belt at the eastern end of a seven kilometres long mineralized corridor that hosts several gold showings including JPK and Laurie Lake. This year, Nighthawk Gold completed sixteen holes (4,035 metres) at Treasure Island located eleven kilometres north of Colomac. All sixteen holes intersected mineralization.

Treasure Island (continued)

Highlights of Drilling:

- T18-04B 46.25 metres of 3.31 g/t Au, including 21.75 metres of 6.23 g/t Au, and 7.75 metres of 14.20 g/t Au
- T18-06B 26.95 metres of 4.45 g/t Au, including 4.20 metres of 25.95 g/t Au
- T18-08B 11.75 metres of 10.78 g/t Au, including 6.50 metres of 19.15 g/t Au
- T18-03B 18.50 metres of 7.37 g/t Au, including 8.00 metres of 16.14 g/t Au, and 5.25 metres of 22.00 g/t Au

Mineralization consisted of at least five parallel sub-vertical stacked gold zones aligned to, and overlapping, a regional east-west mafic volcanic and sedimentary rock contact with an intervening intermediate to felsic pyroclastic volcanic rocks in between. Shallow mineralization was intersected by most holes within mafic volcanic rocks immediately north of the Gamble Dyke, a quartz-feldspar porphyry dyke that runs parallel to the volcanic rock – sedimentary rock contact. Most of the mineralization appears confined to the felsic/intermediate pyroclastic volcanic rocks close to the greywacke contact, with lesser occurrences within the lower greywacke units.

Drilling has established the gold system to be upwards of 200 metres wide by 700 metres long, including both the Main Zone and East Zone. The results have been successful in confirming the historical reports of a gold zone extending across the lithological contact region between volcanic and sedimentary rocks, successfully extended existing zones in all dimensions while intersecting new high-grade zones at depth. The area between the Main Zone and East Zone remains largely untested, as does the 4 kilometres that separate Treasure Island from Laurie Lake to the west.

Nighthawk Gold also continued preliminary metallurgical test work on material from the Colomac deposit. Testing was completed at Bureau Veritas in Richmond, BC, and audited by Starkey & Associates Inc. in Oakville, Ontario. The test work involved material from three drill core bulk samples of Colomac lower-grade mineralization collected from different regions and elevations in the deposit, totalling 119.5 kilograms, and one higher grade sample, totalling 70 kilograms of split drill core, from Zone 1.5. Grinding tests showed a relatively uniform hardness and indicate that the rock is amenable to all standard gold recovery technologies. When a combination of gravity recovery and cyanide leaching were used, gold recoveries of up to 96.5% in the lower grade material, and up to 98.0% were achieved in the higher-grade rock.

Two initial bottle roll leach tests were conducted out to assess cyanide heap leach feasibility. Minus 12,700 micron (1.27 centimetre) material registered up to 81.8% recoveries on lower-grade rock (1.81 g/t Au head grade) and 57.50% on the higher-grade material (4.99 g/t Au).

Yellowknife Gold Project

During 2018, TerraX Minerals Inc. expanded the area and strike length of the Yellowknife City Gold Project from 440 square kilometres to 780 square kilometres and 45 kilometers to 70 kilometers; which represented 77% and 55% increases, respectively. This expansion was achieved through the acquisition of the past-producing Ptarmigan and Tom Gold mine property (6.5 square kilometres) and the Sickle property (2 square kilometres). In addition, the Quyta Bell property (337.5 square kilometres) added 25 kilometers of strike length that is contiguous to the northern boundary on the current property.

The Ptarmigan Mine was a gold producer from 1941-42, in 1983 and from 1985-1997. The main Ptarmigan vein was accessed by a shaft extending to 275 metres depth and mined over 400 metres of strike length. Production from Ptarmigan totalled 364,874 tonnes producing 112,213 ounces of gold at an average grade 9.56 g/t Au. The Tom Mine was a gold producer from 1985-1997. The Tom and C vein systems were accessed by a ramp to 122 vertical metres over 300 metres of strike length. Production records for the Tom Mine are not available as the ore was combined with the production of the Ptarmigan Mine.

During 2018 TerraX completed 6,118 metres of diamond drilling and collected 2,331 samples in 16 NQ drill holes. The majority of this drilling was completed on the Mispickel, Sam Otto and Dave's Pond targets with 4,948 metres in twelve drill holes. The remainder of the drilling was completed on the Crestaurum Zone with four drill holes totaling 1170 metres. Gold mineralization was intersected in all targets. The most significant gold mineralization was intersected at the Sam Otto, Sam Otto South and Crestaurum zones.

The 1,315 metres in the three holes drilled on the Sam Otto zone extended the depth of the zone to 350 metres vertical. All holes encountered typical Sam Otto main zone deformation and alteration, but with a greater proportion of quartz veins. Hole TSO18-032 intersected 247.5 metres of alteration, with a zone of 0.85 g/t Au over 62.24 metres, including 2.04 g/t Au over 13.95 metres. Hole TSO18-033 intersected two zones of 0.52 g/t Au over 21.50 metres and 0.50 g/t Au over 40.00 metres. Hole TSO18-034 intersected deformation and alteration over 176.2 metres, with zones that included 0.51 g/t Au over 31.80 metres.

The three holes totaling 1,118 metres that were drilled on the Sam Otto South zone were the most significant as these three holes extended Sam Otto zone gold mineralization an additional 1500 metres, south, for a total strike length of 2200 metres.

The Sam Otto South holes are summarized as follows: Hole TSO18-035 was collared 1.5 kilometres south of the Sam Otto Main zone and intersected a broad zone of deformation and alteration (150 metres wide) that contained a mineralized zone assaying 2.16 g/t Au over 27.16 metres, including 1 metre of 23.1 g/t Au, and 2.44 metres at 7.99 g/t Au. TSO18-037 also intersected a 231.5-metre-wide deformation and alteration zone that contained a mineralized zone assaying 1.92 g/t Au over 11.52 metres, including 2.89 g/t Au over 3.64 metres. TSO18-039 was drilled approximately 500 metres south along strike from the Sam Otto Main zone, and 600 metres north of TSO18-037 confirming the continuity of the Sam Otto mineralized structure between the known extents of the Sam Otto Main and Sam Otto South zones. TSO18-039, intersected Sam Otto style of mineralization that returned 0.10 g/t Au over 157.75 metres including multiple 2.50-metre to 9.10-metre-wide zones of 0.35 g/t Au to 0.82 g/t Au.

The Sam Otto South drilling was based on prospecting and channel sampling results from 2017 which demonstrated an extension to the strike length of the Sam Otto zone over a distance of five kilometres. The widest channel sample assayed 0.80 g/t Au over 17.50 metres, including 11.0 metres with 1.09 g/t Au. Importantly, this channel ended in 3.40 metres of mineralization containing 1.31 g/t Au at the edge of the outcrop. Other results originated from a channel sample 350 metres to the south with 0.97 g/t Au over 2.7 metres, including 2.00 metres with 0.81 g/t Au. Both ends of this channel were truncated by the edge of the outcrop while still returning assays of one gram per tonne. In total, the separate channel segment widths with significant assay values extend over 100 metres across strike, which were comparable to the width and grade of the Sam Otto Main zone.

Drilling was also completed on the Sam Otto West zone, another lode style shear and vein deposit near the Sam Otto Main zone. This drilling included 5 holes totaling 2,081 metres that tested the strike and depth potential down to 250 metres vertical. All holes hit gold mineralized structure with best results of 3.00 g/t Au over 2.69 metres in hole TSO18-038, 1.06 g/t Au over 4.00 metres in hole TSO18-041, and 1.32 g/t Au over 2.70 metres in hole TSO18-036. All holes included intersections of 2.0 to 5.6 metres of 0.71 to 0.81 g/t Au. The continuous presence of the gold mineralized structures that now extend over more than a kilometre of strike and 250 meters of depth.

The Crestaurum Zone drilling was designed to test the main mineralized shear/quartz vein system to 300 metres depth. Previous drilling had outlined discrete high-grade shoots to vertical depths of 100 – 150 metres. The four holes totaling 1170 metre intersected the high-grade shoots to depths of 300 vertical metres. The most significant intersections were:

- 5.38 g/t Au over 0.63 metres in hole TCR18-076
- 5.57 g/t Au over 2.06 metres in hole TSO17-078
- 4.41 g/t Au over 0.80 metres in hole TSO17-079

In addition, all drill holes intersected a hanging wall shear/quartz vein system to a vertical depth of 50 to 75 metres. The most significant intersections were:

- 8.84 g/t Au over 2.49 metres in hole TCR18-076
- 3.08 g/t Au over 2.80 metres in hole TSO17-077
- 13.30 g/t Au over 1.24 metres in hole TSO17-079

The four holes demonstrated that the Crestaurum zone continues at depth on multiple surfaces, potentially doubling the size of the zone. The 300-metre vertical depth tested with these holes is still considered very shallow for Archean lode gold deposits and mineralization remains open for further expansion, both along strike and at depth.

Summer field activities included prospecting, mapping and channel sampling on the Northbelt and Eastbelt portions of the property. The Quyta Bell portion of the property had a 6409 line-kilometre helicopter-borne magnetic and radiometric survey, completed by Precision GeoSurveys Inc., and a 434 square kilometre LiDAR survey, completed by LiDAR Services International Inc.

On the Northbelt property, two new zones called Gull Lake and Rater Lake were mapped and prospected. The most significant assays were 43.7 g/t Au, 28.0 g/t Au, and 19.05 g/t Au on the Gull Lake Zone with several additional assays in the 1 to 5 g/t Au range from both zones. These gold zones are interpreted as being the continuation of the Giant Mine gold structure.

The Oro Lake portion of the Northbelt property, which represents the possible extension of Con-Giant trend was mapped and prospected. This area contains multiple sub-parallel gold structures, including the Oro Shear, recognized from exploration dating back to the 1930s. A total of 202 composite and grab samples were collected during this work. Twelve (12) percent of these samples returned assays greater than 0.43 g/t Au. The most significant assays ranged from 10.10 g/t Au to 63 g/t Au.

On the Eastbelt property channel sampling was completed in the Ptarmigan Mine area. The channels were cut from outcrop along the Ptarmigan vein trends and sampled across the gold mineralized structures. Individual channel samples returned assay results up to 226 g/t Au and 126 g/t Ag in 0.50 metres channel samples from Channel ECH18-037. The best channel results were:

- ECH18-037 24.75 g/t Au over 5.50 metres, including 44.82 g/t Au over 3.00 metres.
- ECH18-036 5.39 g/t Au over 7.50 metres, including 10.44 g/t Au over 2.50 metres.
- ECH18-035 4.25 g/t Au over 2.00 metres

Environmental baseline studies were continued in 2018. These studies consist of water sampling, water level measurement, ground temperature measurements via thermistor's, and Archaeology. TerraX also supports two M.Sc. and one Ph.D. theses related to structure (M.Sc. theses) and age dating of intrusive rocks (Ph.D.)

Aye 1 and Aye 2 Claims

Prospector Dave Nickerson continued to explore on his wholly-owned Aye 1 and Aye 2 claims near the Ingraham Trail turnoff (NWT Highway 3 and Highway 4 junction) in Yellowknife. While Mr. Nickerson's previous work in the area has focused on outlining gold related to small high-grade quartz veins, his 2018 work (which build on his results from a 2017 lithogeochemical survey) has focused on defining a larger area with potential for a low-grade gold deposit. Grid sampling conducted by Mr. Nickerson during July 2018 has outlined an area roughly 700 metres by 150 metres, which returned averaged results of 1.26 g/t Au and median results of .037 g/t Au from 22 samples.

Mr. Nickerson's 2018 work has also produced several conventional higher-grade showings, with best grab sample results of 30.5 g/t Au, 15.6 g/t Au, 12.5 g/t Au, 12.35 g/t Au.

Mr. Nickerson is now planning further work that will aim to re-examine the potential of his low-grade area in greater detail.

Mon Gold Project

Sixty North Gold continued exploring the Mon Gold Property consists of 11 contiguous mining leases and 3 mineral claims, comprising an aggregate 621.9 hectares, located 40 kilometres north of Yellowknife. The focus of the project is an Archean, turbidite-hosted, stratabound quartz shear/vein deposit discovered in 1937 by prospectors working for Cominco Limited. The deposit is an anticlinally-folded quartz vein, plunging to the south at around 20 to 40 degrees. Higher gold grades at the fold nose have been verified over the mined length of 75 metres (open to south), with lower grade gold values being found in the limbs of the structure.

This summer, a 60-metre exposure of the crown pillar of the A-Zone was sampled by mechanical chipping in ten continuous chips across the width of the vein. The results of this program samples from 1.20 g/t Au over 0.90 metres to 688 g/t Au over 0.50 metres verified previous sampling results (2016) from the mouth of the central adit averaged grades of 147 g/t Au over 3 metres.

In addition to the chip sampling of the crown pillar, three transects across the East Limb, Fold Nose (hinge) and West Limb of the A-Zone were sampled. The quarter tonne sample material was sent to Bureau Veritas Laboratories metallurgical testing lab in Richmond B.C. for testing by gravity and flotation methods. Test grinds were completed and the samples were batched with a targeted grind of P80 -105 μ m. The recoveries, both by gravity as well as the combined gravity plus flotation, averaged around 76% and 99% respectively and are consistent with historic results.

The assay results of a prospecting program conducted in 2017 were released in 2018. Two parallel dominant gold trends were identified, with lengths over 3 kilometres, identified as the Western Mafic Trend (WMT) and Eastern Mafic Trend (EMT) which includes the A-Zone. Two hundred and fifty grab samples of rock were collected across the property. Thirteen samples exceeded 10 g/t Au with one fire assay returning 144 g/t Au. Another 48 samples exceeded 1 g/t Au. All samples were collected outside of the A-Zone, in an attempt to evaluate other gold showings on the property.

The WMT consists of a series of north-northwest-striking gold zones (6, 7, 8, 9, and 11), three kilometres long. Four of these five gold zones were previously known but not fully investigated. Mineralization is characterized as a series of subparallel discontinuous quartz veins and altered rocks up to 100-metre-wide within Kam Group mafic igneous rocks. A total of 103 grab samples were collected along this trend returning an average grade of 2.98 g/t Au. Individual grab samples up to 38.71 g/t Au were obtained.

The EMT includes the A-Zone as well as other previously recognized mineralization (Gold Zones, 1, 2, 3, 4). Zone 3 is a 4-metre-wide zone with narrow quartz veins containing malachite staining and visible gold over a distance of 140 metres. Twenty-three samples returned an average grade of 6.95 g/t Au with a high value of 144 g/t Au. A new gold zone (4) has been discovered 400 metres east where the Zone 3 contains up to 6.63 g/t Au. An additional new showing yielded an average grade of 5.58 g/t Au with a high value of 9.68 g/t Au from six grab samples.

These trends and new showings were the focus of the 2018 exploration program with detailed mapping, systematic sampling, and trenching. A sampling program of 282 rock samples, 155 biogeochemical samples were collected and a total of 164-metres of trenching were completed in five areas. One hundred and forty-four composite chip samples have been collected and submitted for analysis.

From the sampling program, 102 grab and chip samples were collected from the West Mafic Trend (WMT). The highest assay of 52.4 g/t Au (fire assay 30gm gravimetric finish) with the average grade of 2.67 g/t Au. A 1,500-metre-long splay of the WMT was tested by 39 rock grab and chip samples contained assays up to of 45.5 g/t Au and an average grade of 2.12 g/t Au. Five samples were added to the EMT with an average of 11.96 g/t Au and a high value of 37.5 g/t Au.

A spruce bark biogeochemical survey on the Mon Property has confirmed and extended the mineralized trends. A total of 155 samples were collected and the results support the trends defined by the chip sampling. Samples from the EMT include the most anomalous gold results consistent with the A zone, but the trace of the trend can be identified in areas with poor bedrock exposure.

On the western side of the property is a well-defined biogeochemical anomaly was dominated by mercury and antimony with minor copper arsenic and silver. An additional biogeochemical anomaly characterized by copper, zinc, and silver with minor antimony and mercury could be traced over a distance of 3700 metres, broadly coinciding with the top of a thick felsic tuff in contact with metasedimentary rocks.

The trenching program tested mineralized shear zones from West Mafic Trend. One hundred and forty-four composite chip samples have collected and submitted for analysis. Trenches tested exposed shear zones where clusters of grab samples had previously returned encouraging values. Four zones were sampled using trenches across mineralized portions of the shear zone up to 15 metres wide in composite shear zones up to 60 metres in total width. A portion of the WMT Splay with widths up to 22 metres in width were also sampled in two trenches. Results are pending.

In addition to the gold-bearing trends, Sixty North identified a 2,500-metre-long trend of numerous zones with structurally and stratigraphically controlled massive and disseminate sulphides at the contact of mixed mafic and felsic tuffs. The gossanous schist zones, containing pyrrhotite, pyrite, chalcopyrite, galena, and sphalerite and in places, arsenopyrite, is collectively referred to as the Nelson Lake Deposit. Six zones of significant base metal concentrations have been confirmed within the Nelson Lake Deposit by grab sampling. Samples collected from one of the zones, the 5656 Zone include massive to semi-massive sulfides and the best eight individual samples over 150 metres have yielded results as shown in Table 10.

Table 10: Analyses results from the 5656 Zone

Sample	Pb %	Zn %	Ag g/t	Au g/t	Cd ppm	Sb ppm
1	3.83	1.94	360.1	2.30	1046	164
2	4.70	.05	336.0	2.73	115	>10,000
3	.05	.05	311.60	1.40	17	137
4	4.79	3.74	231.2	3.25	791	266
5	1.44	1.34	210.5	.77	488	239
6	2.38	5.77	210.2	.54	1335	516
7	.76	.07	192.0	.89	32	158
8	1.91	.29	174.7	1.03	63	420
Average	2.45	1.66	253.3	1.61	486	1487

Next phases of work planned: conducting surface exploration on several targets identified in the 2017 field program; acquisition of the balance of mining equipment and bulk consumables needed to conduct a bulk sample on the A-Zone; mobilize to site via winter road (2019); develop the decline to 20 metres below the old stope and extract a 1,000-tonne bulk sample (2019).

Seabridge Gold

Seabridge Gold continued its exploration efforts at the Courageous Lake Project, with the testing of seven historical gold occurrences. The Courageous Lake Project covers almost all of the 53 km long Mathews Lake Greenstone Belt which hosts Seabridge's Felsic-Ash-Tuff or FAT deposit. The FAT Deposit contains 6.46 million ounces of proven and probable gold reserves (July 2012) over approximately 2.5 kilometres of strike length. A second deposit, Walsh Lake has a near surface inferred resource of 482,000 ounces of gold (4.6 million tonnes grading 3.24 g/T). Metallurgical testing has demonstrated that the gold is free-milling with cyanide recoveries as high as 95%.

Seabridge Gold (continued)

This year, Seabridge completed a winter drilling program using two core rigs to core 7,200 metres in 36 holes. The program was designed to test seven historical gold occurrences to determine if any had sufficient grade, strike and width within 200 meters of surface. All the historical occurrences consisted of deformation zones within a well-defined stratigraphic package near the contact between metamorphosed volcanic rocks and clastic metasedimentary rocks and each produced a consistent geophysical response. The intersections showed that the Olsen and Marsh Pond had suitable widths and grades, two other target zones had promise that would require additional work and three targets did not return positive results.

The Marsh Pond showing consists of narrow felsic volcanic units intercalated within a metasedimentary host. The felsic units show more intense silica alteration and sulfide mineralization over a strike length of about 400 meters. The Olsen is exposed over roughly 400 metres of strike length, represented by quartz veins in a broad zone of silica alteration accompanied by intense sericite alteration in fine-grained metasedimentary rocks

North Bulldog was originally identified as two parallel geophysical anomalies with a kilometre of strike length. Drilling demonstrated it to be a broad deformation zone at the contact of sedimentary rocks and mafic volcanic rocks with localized quartz veining and silica-sericite alteration. Intervals of silica alteration and quartz veining were also intersected in the overlying fine-grained sedimentary rock. Perrson is a gold-bearing vein in an isolated surface exposure within a historic prospect pit. The width of the intersections suggests that this vein could be the southern terminus of the Walsh Lake deposit. The size of these targets and the concentration of gold in the intersecting holes suggests the showing warrants more effort.

Assay result highlights from the most prospective targets are as follow:

- Marsh Pond CL-284 contains 3.08 g/t Au over 14 metres,
- Marsh Pond CL-285 contains 2.13 g/t Au over 24 metres,
- Olsen CL-286 contains 3.04 g/t Au over 40.4 metres,
- Olsen CL-288 contains 0.93 g/t Au over 14.3 metres,
- North Bulldog CL-275 contains 1.4 g/t Au over 19.1 metres,

Perrson CL-289 contains 2.88 g/t Au over 3.7 meters and 7.44 g/t Au over 3 metres.

Supporting Exploration

In 2017, the Government of Northwest Territories investment in grassroots mineral exploration through the Mining Incentive Program (MIP) more than doubled from \$400,000 to \$1 million annually.

Funding was dispersed to 13 exploration projects — six prospectors and seven companies. 2017-2018 MIP support resulted in significant additional exploration investment from MIP recipients (\$2,554,856), as well as many encouraging advancements in the funded projects.

Since the MIP was implemented in 2014, MIP recipients have invested over \$10 million in NWT exploration projects.

In 2018, \$991,065 in MIP funding has been allocated to 17 exploration projects (nine prospectors and eight corporate projects, see tables 11 and 12 for the current distribution).

Table 11: Government of Northwest Territories Mining Incentive Program – 2017 recipients (Prospectors)

Recipient and Project	Commodity	Funding Awarded
Blake Mowbray – Workhorse Project	Lithium	\$16,063.23
Danny Yakeleya – Redstone River Project	Gold	\$15,300
Dave Nickerson – Aye 1 and Aye 2	Gold	\$4,950
Dave Webb – Clan Gold Project	Gold	\$21,250
Drake Hyden – Dracula Project	Lithium	\$15,512.80
Jeremie Phister – Geolithos Project	Lithium	\$12,467.73
Ryan Bachynski – Luna 2 Project	Gold	\$14,705
Vern Emary – Susu Lake Project	Gold	\$15,678.25
Wayne Kendrick – Hangstone Project	Gold	\$22,500

Table 12: Government of Northwest Territories Mining Incentive Program – 2017 recipients (Corporate)

Recipient and Project	Commodity	Funding Awarded
Avalon Advanced Materials Inc. – Nechalacho Project	Lithium, REE	\$36,552
Evrim Resources – Mackenzie Project	Gold	\$160,000
Margaret Lake Diamonds Inc. – Diagras Project	Diamonds	\$111,615
Margaret Lake Diamonds Inc. – Margaret Lake Project	Diamonds	\$140,000
North Arrow Minerals Inc. – Loki Project	Diamonds	\$100,000
TerraX Minerals Inc. – Qutya Bell	Gold	\$160,000
Rover Metals Corp. – Cabin Lake project	Gold	\$85,000
Sixty North Gold Mining Ltd. – Mon Gold project	Gold	\$59,417.25

More Information

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