

**KLUANE DRILLING LTD.  
14 MacDonald Road  
Whitehorse, Yukon  
Y1A 1L2**

**ASSESSMENT REPORT ON THE  
2011 DIAMOND DRILLING PROGRAM**

**ON**

**Bob 5            76096**

**Claim**

**North Star Pendant  
Whitehorse Copper Belt**

**April 14 – April 30, 2011**

**60° 38' 00" N and 135° 00' 00" E**

**NTS 105 D/11**

**In the**

**Whitehorse Mining District  
Yukon Territory**

**Prepared by  
R. Stroshein, P.Eng.**

**January 30, 2012**

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## 1.0 SUMMARY

On the Whitehorse Copper Belt iron-rich magnetite skarns contain abundant serpentine, talc and chlorite. Calc-silicate skarn deposits contain only minor magnetite and serpentine but are rich in garnet, tremolite, wollastonite, actinolite and diopside. The Little Chief and Arctic Chief deposits were composed of the Iron-rich skarns with chalcopyrite, bornite and covellite mineralization.

Seven diamond drill holes were completed in 2011 on the North Star copper-gold skarn target. The North Star skarn zone is hosted by Lewes River Formation limestone. The mineralization is contained within a pendant of sedimentary rocks bounded on three sides by diorite of the Whitehorse Batholith. The pendant is located in the Whitehorse Copper Belt within the Whitehorse City limits in the Whitehorse Mining District on NTS Map Sheet 105 D 11 (Figure 1. Location Map). Three drill holes are located on the Bob 5 (76096) quartz claim and four drill holes are located on the Bob 6 (76097) quartz claim. The assessment application in 2011 was filed for expenditures on the Bob 5 claim.

The North Star pendant is located 1.5 kilometres south of the Little Chief Mine that produced 8.5 million tonnes of ore grading 1.5 % copper, 0.75 g/t gold and 9.1 g/t silver between 1967 and 1982. The North Star pendant was explored with diamond drilling in the late 1970's. Significant copper-rich skarn mineralization is located near the base of a buried limestone reef at approximately the 300 metre above sea level (asl) elevation. Reported grades are similar to the Little Chief and Middle Chief deposits.

The mineralization at the North Star is erratic, being partly controlled by proximity to the intrusive contact that is irregular and variably gradational. Twenty-nine drill holes with an aggregate of 12,300 metres have been drilled on the pendant. Whitehorse Copper Mines considered the project an exploration target with an indicated resource of 800,000 tonnes grading 1.5 % copper in the footwall zone. A high-grade zone (14.5 metres grading 5.0 % copper) was intersected in a hanging-wall zone at approximately the 440 metre (asl) elevation.

The 2010 diamond drill hole NS-10-25 intersected multiple bands of skarn mineralization and ended in diorite. The magnetite skarn zone intersected between 211.0 – 217.0 metres yielded values of 2.17 % copper, 18.8 ppm molybdenum, 0.37 g/t gold and 24.9 g/t silver. The epidote-garnet skarn intersected between 379.0 – 384.0 metres yielded values of 0.99 % copper, 132.6 ppm molybdenum, 0.24 g/t gold and 9.2 g/t silver.

Seven diamond drill holes completed in 2011 were drilled to test the northwestern potential extension of the upper zone intersected in 2010. The drill holes NS-11-05 and NS-11-07 on the same section intersected similar grades to the 2010 drill hole while the remainder of drill holes to the northwest and southeast of the section intersected skarn mineralization the assay results indicated only trace amounts of copper and gold. The skarn zones intersected in the two drill holes (NS-11-05 and -07) yielded copper and gold values that included 1.1% copper and 0.8 ppm gold (NS-11-05) over 5.6 metres and 0.2% copper and trace gold (NS-11-07) over 2.1 metres indicating a potentially shallow southwest dip to the upper horizon in drill hole NS-10-25. A corresponding lower horizon was also intersected in NS-11-05 grading 0.5% copper and 0.2 ppm gold over 6.1 metres. Correlation between sections has proven to be difficult.

Further diamond drilling is recommended to test the continuity and continuation of the North Star Skarn mineralization to depth and to trace the lateral extension of the geology to the northeast.



## LITHOLOGICAL LEGEND TO ACCOMPANY FIGURE 1

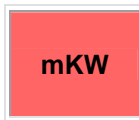
### MIOCENE TO PLOIOCENE



#### **MPMC: MILES CANYON**

dark red to brown weathering, columnar jointed olivine basalt flows, commonly amygdaloidal and vesicular; ultramafic xenoliths (**Miles Canyon Basalt**)

### MID-CRETACEOUS



#### **mKW: WHITEHORSE SUITE**

grey, medium to coarse grained, generally equigranular granitic rocks of felsic (q), intermediate (g), locally mafic (d) and rarely syenitic (y) composition

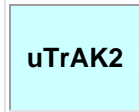
- d. hornblende diorite, biotite-hornblende quartz diorite and mesocratic, often strongly magnetic, hypersthene-hornblende diorite, quartz diorite and gabbro (**Whitehorse Suite, Coast Intrusions**)
- g. biotite-hornblende granodiorite, hornblende quartz diorite and hornblende diorite; leucocratic, biotite hornblende granodiorite locally with sparse grey and pink potassium feldspar phenocrysts (**Whitehorse Suite, Casino granodiorite, McClintock granodiorite, Nisling Range granodiorite**)
- q. biotite quartz-monzonite, biotite granite and leucogranite, pink granophyric quartz monzonite, porphyritic biotite leucogranite, locally porphyritic (K-feldspar) hornblende monzonite to syenite, and locally porphyritic leucocratic quartz monzonite (**Mt. McIntyre Suite, Whitehorse Suite, Casino Intrusions, Mt. Ward Granite, Coffee Creek Granite**)
- y. hornblende syenite, grading to granite or granodiorite (**Whitehorse Suite**)

### UPPER TRIASSIC, CARNIAN TO NORIAN



#### **uTrAK: AKSALA**

mixed clastic-carbonate assemblage divisible into three dominant facies including calcareous greywacke (1), locally thick carbonate (2) and red-coloured clastics (3) (**Aksala**)



1. brown shale, black and minor red siltstone, greenish, calcareous greywacke and interbedded bioclastic, argillaceous limestone; igneous- or limestone-clast pebble and cobble conglomerate; lahaaric debris flows; rare feldspar-augite porphyry flows (**Casca mb. of Aksala**)
2. massive to thick bedded limestone; minor thin bedded argillaceous to sooty limestone; coarsely crystalline, massive dolostone; minor laminated chert; massive to poorly bedded, limestone conglomerate debris flows and fanglomerate (**Hancock mb. of Aksala**)
3. red weathering, medium bedded, green and red greywacke and pebble conglomerate; red shale partings and minor interbedded, red, bioturbated siltstone; crystal-rich greywacke and shale; coarse-grained, tan to brown, massive, lithic arenite (**Mandanna mb. of Aksala**)

## 2.0 INTRODUCTION

At the North Star Target a buried limestone reef lower contact is shallow dipping to flat lying at approximately 300 metre elevation asl. The hanging wall high grade zone occurs near an apparent apophysis of diorite located west of the footwall zone. Whitehorse Copper Geologist recommended additional drilling on the footwall and hanging wall zones in 1981. The footwall zone is open to the southeast at depths of approximately 550 meters while the high-grade zone is a more economically appealing zone and is open to the north and west.

A diamond drill hole in 2010 was drilled vertical to a depth of 589.8 metres. The drill hole intersected a 290 metre thick interval of skarn mineralization and limestone underlying the Aksala Formation above the foot wall contact with the Whitehorse Batholith. The skarn occurs in thick bands of calc-silicate minerals and magnetite skarn. Copper mineralization consists of chalcopyrite and bornite. At 211 meters a 6.0 meter skarn interval averaged 2.17 % copper, 0.37 ppm gold, 24.9 ppm silver and 18.76 ppm molybdenum. At a depth of 379 meters a skarn interval of 5.0 meters averaged 0.99 % copper, 0.24 ppm gold, 9.2 ppm silver and 132.6 ppm molybdenum.

The diamond drill holes in 2011 were planned to test the shallow intersections along strike to the north and south.

The drill holes were drilled between April 4 and April 30, 2011 by Kluane Drilling Ltd. Core was logged by R. Stroshein. The core was sampled by cutting the core in half with a diamond saw at the Hugh Bostock Core Library by employees of Kluane Drilling Ltd. The Author supervised the drilling program and prepared this report.

## 3.0 PROPERTY DESCRIPTION AND LOCATION AND ACCESS

The northern portion of the Whitehorse Copper Belt is owned or controlled by H. Coyne and Sons and Kluane Drilling Ltd. H. Coyne and Sons own Kluane Drilling Ltd.

The Property consists of 376 claims and 9 mineral leases and 13 crown grants. The complete listing of the claims is included in Appendix C. The claim maps showing the claim distribution can be viewed on line at web site:

[Http://www.yukonminingrecorder.ca/PDFs/105/105D11.pdf](http://www.yukonminingrecorder.ca/PDFs/105/105D11.pdf)

The Property is located within the City Limits of Whitehorse on NTS Map Sheets 105 D 10/11. The Property is in the Whitehorse Mining District approximately centered at UTM 672500 N and 0494200 E Nad 83 Zone 6. The geology and pendant locations are displayed on Figure 1. The geology is from Gordey and Makepeace (1999).

The claims are traversed by the old Whitehorse Copper Haul Road that carried ore from the War Eagle deposit near the northern end of the belt to the Mill located at the Little Chief mine near the center of the belt. A net work of roads still exists that provides access to all of the known occurrences and targets in the area. The North Star Pendant is located immediately east of and along what is now called the Mount Sima Road that is connected to the Alaska Highway west of McRae sub division of Whitehorse. The pendant occurs in an area that has not been zoned and is across the Mount Sima Road from the industrial zoned area that includes the former site of the Whitehorse Copper Mine mill site and tailings pond.

## **4.0 HISTORY**

Copper mineralization was first discovered in 1897 on the Whitehorse Copper Belt as it became to be known. Exploration and mining development have been carried out intermittently since that time with the main production era lasting between 1967 and 1982 where production totaled 267,500,000 pounds copper, 225,000 ounces of gold and 2,838,000 ounces of silver from 11.1 million tons of mineralized skarn ore milled.

The list of references that is included with this report provides a more complete history of the property.

Kluane Drilling Ltd. first acquired claims from Hudson Bay Exploration and Development Company Limited in 1998 and added claims since that time to include the current land position. Kluane Drilling Ltd. has carried out exploration programs on various targets since the acquisition that included; IP surveys, bulldozer trenching and diamond drilling.

Kluane Drilling Ltd. Drilled two (2) deep holes in the Arctic Chief Pendant in 2008 that were located 300 metres north of the open pits and the 2010 diamond drill hole. Significant unmineralized skarn zones were intersected at depths of 400 and 700 metres in these holes. The drill holes have confirmed that the extent of the favorable stratigraphy indicates the potential for a large deposit within the pendant between the two sections. The two drill holes intersected 12.7 metres of garnet skarn at 360 metres asl and 16.2 metres of garnet skarn at 60 metres asl.

Kluane Drilling Ltd. Drilled a single shallow hole at the south side of the North Star Pendant in 2008 the hole did not intersect any skarn mineralization.

In 2010 Kluane Drilling completed a single deep hole on each of the North Star and Arctic Chief pendants. The drill hole on the North Star Pendant intersected two significantly mineralized intersections. The drill hole on the Arctic Chief intersected the host horizon but the skarn zone was not mineralized.

## **5.0 REGIONAL GEOLOGY**

The Whitehorse Copper Belt is located within the Whitehorse Trough, a structural/geological subdivision of the Intermontane Belt. The trough trends northwesterly through south central Yukon and is comprised of rocks that formed an Island Arch Complex that ranges from upper Paleozoic through Jurassic time period.

Within the Whitehorse Copper Belt, clastic and carbonate rocks of the Upper Triassic Lewes River Group (uTrAK2) and clastic rocks of the Lower Jurassic Laberge Group (JL) predominate. The copper bearing skarns occur over a length of 32 kilometers along the western flank of the Whitehorse Batholith, a Cretaceous diorite to granodiorite body of the Coast Plutonic Complex. The geology is displayed in Figure 1 and described on the accompanying Geological Legend.

## 6.0 METALLOGENY OF THE WHITEHORSE COPPER BELT SKARN DEPOSITS

Ore bodies of the Whitehorse Copper Belt occur mainly within limestone of the Lewes River Group adjacent to or in proximity to the Whitehorse Batholith contact. Skarn deposits commonly form within irregularities or pendants of the batholith. The most extensive ore zones are developed in coarsely crystalline limestones of the Lewes River Group near the contact with quartzite footwall rocks of the Laberge Group where the contact sub-parallel the diorite batholith contact.

The two main types of skarn present are 1) iron-rich that contain magnetite, serpentine, specular hematite, talc, chlorite and local pyrrhotite and pyrite and 2) iron-poor (calc-silicate) that consist of garnet, diopside, wolastonite, tremolite, epidote, chlorite, calcite and quartz. The Little Chief and Arctic Chief deposits were composed of the Iron-rich skarns with chalcopyrite, bornite and covellite mineralization. The copper minerals occur as grains, blebs, pods and stringers that appear to postdate the skarn minerals. Bornite is predominant in the iron-rich skarns and is slightly more abundant than chalcopyrite in the silicate skarns. Silver content is proportional to the copper grade but gold is more erratically distributed, being more abundant in the iron-rich skarn deposits. The mineralization at the North Star occurrence is typical of the iron-rich type skarn.

## 7.0 MINERALIZATION OF THE NORTH STAR PENDANT

The 2010 hole was designed to test the potential for an up-dip extension of the Foot Wall North Star mineralized skarn Zone. The North Star Foot Wall Zone is estimated to contain 750,000 tons grading 1.5 % copper. The zone is open in all directions with additional skarn zones in the hanging wall of the deposit. Of particular interest is a high-grade zone intersected in several drill holes that is located approximately 100 metres above the Foot Wall Zone. The Foot Wall Zone is at the contact of the overlying limestone and underlying meta-greywacke units. The mineralized zones are hosted by the Lewes River Group limestone that is overlain by meta-sedimentary rocks of the Aksala Formation uTrAK3.

The drill holes were positioned to test the shallow horizons intersected in NS-10-25 along trend and between drill holes NS-14 (60 metres North) and NS-15 (50 metres South). Intersections in these holes are summarized here:

- NS-14 Upper Zone averaged 0.65% Cu, 0.008 opt Au, 0.15 opt Ag – 8.3 metres – Gar skarn  
High-grade Zone averaged 3.39% Cu, 0.72 opt Ag – 3.2 metres – Mag skarn  
Foot Wall Zone averaged 1.52% Cu, 0.31 opt Ag w/trace Mo – 10.1 metres – Gar skarn
- NS-15 High-grade zone averaged 5.05% Cu, 0.02 opt Au, 0.82 opt Ag – 14.6 metres –  
Gar skarn and Mag skarn  
Foot Wall Zone averaged 0.98% Cu, 0.14 opt Ag – 3.1 metres – Mag skarn
- NS-15-W2  
Upper Zone averaged 1.05% Cu, 0.29 opt Ag w/trace Mo – 5.1 metres – Gar skarn  
High-grade Zone averaged 1.71% Cu, 0.66 opt Ag, w/trace Mo – 3.2 metres – Mag skarn  
High-grade Zone averaged 1.53% Cu, 0.45 opt Ag, w/trace Mo – 14.3 metres –  
Mag Skarn  
Foot Wall Zone averaged 0.88% Cu, 0.31 opt Ag, w/trace Mo – 2.7 metres – Mag skarn

The North Star mineralization is composed of bornite, chalcopyrite, and minor magnetite. The calc-silicate minerals are serpentine, phlogopite, red garnet and tremolite.



## 8.0 DIAMOND DRILL HOLES NS-11-01 - -07

The drilling was carried out by Kluane Drilling Ltd.,  
14 MacDonald Road,  
Whitehorse, Yukon,  
Y1A 1L2

The drilling was started April 4, 2011 and completed May 22, 2011.  
The drill holes were drilled at angles from -60° to -75° respectively oriented grid west 225° azimuth. The drill core size was NTW.

The preceding information is noted on the first sheet of the Geologic log of the drill holes included in Appendix D that also contains cross sections of the drill holes. The drill core is in storage at the Industrial yard of Kluane Drilling Ltd. at 25 MacDonald Road in Whitehorse, Yukon.

The sample intervals and metal assays for gold and copper are reported in Appendix E.

**Table: List of Diamond Drill Holes 2011**

Hole ID	UTM East	UTM North	Elev. (m)	Dip (°)	Azimuth (°)	Depth (ft)	Depth (m)
NS-11-01	497528	6720690	835	-70	225	1335	406.9
NS-11-02	497528	6720690	835	-75	225	1510	460.2
NS-11-03	497647	6720630	836	-60	225	1145	349.0
NS-11-04	497647	6720630	836	-67	225	1010	307.8
NS-11-05	497610	6720650	836	-75	225	1280	390.1
NS-11-06	497516	6720729	842	-70	225	1230	374.9
NS-11-07	497584	6720622	844	-70	225	1162	354.2
<b>Total</b>						<b>8672</b>	<b>2643.2</b>

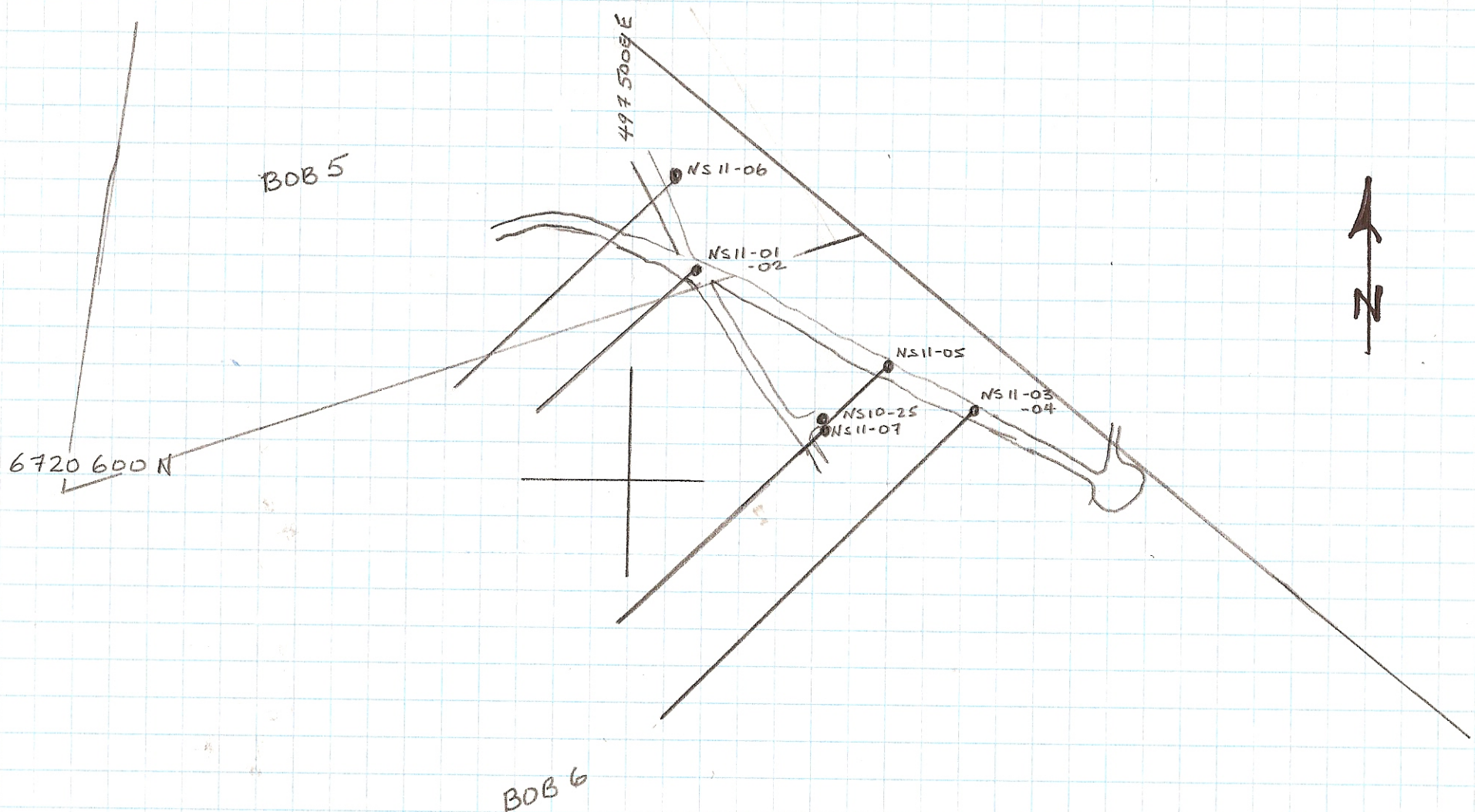
The relative locations of the drill holes are plotted on Figure 2 Drill Plan Map North Star Pendant.

## 9.0 SAMPLING METHODS AND PROCEDURES

Drill core samples were collected using the following procedures:

1. Core was lightly washed and measured.
2. Core was geologically logged and sample intervals were designated. Sample intervals were set at one to three metre core length or sharp changes in sulphide content.
3. Sample intervals were based on skarn and sulphide content or randomly selected.
4. Core was sawn in half with diamond saw at the Hugh Bostock Core Library. One-half was sent for analyses and one-half returned to the core box.
5. Samples were double bagged in 6 millimetre plastic bags, a sample tag was placed in each sample bag, then two or three samples were placed in a fiber glass bag sealed with a metal clasp and sample numbers were written on the outside of that bag with permanent felt pen.

The core samples were delivered by company employees to the ALS Canada Ltd. preparation lab in Whitehorse, Yukon where they were dried and crushed to 70% minus 2 mm, before a 1.5 kg split was taken and pulverized to better than 85% minus 75 microns. Splits of the pulverized fraction were shipped by the ALS Minerals laboratory in North Vancouver and analyzed for gold and copper using an aqua regia digestion and inductively coupled plasma-atomic emission spectroscopy analysis (ME-MS41). All analyses are reported in ppm. The analytical certificate is included in this report in Appendix F.



KLANE DRILLING LTD.  
 January 2012  
 RWS

50m  
 scale 1:2500

NORTH STAR  
 DRILL PLAN  
 2011

Figure 2

Analyses were done using industry-standard ICP techniques. The ALS Laboratory in Vancouver carries ISO 9001:2000 registration and is accredited to ISO 17025 by Standards Council of Canada for a number of specific test procedures including fire assay Au by AA, ICP and gravimetric finish, and multi-element ICP and AA assays for Ag, Cu, Pb and Zn.

Core recovery was excellent averaging 98%. The mineralization is readily recognizable and sulphide content is reflected in assay grades. Care is taken to ensure that the sample split is not biased to sulphide content. The result is that the drill core sampling is reliable and is representative of the mineralization.

## **10.0 INTERPRETATIONS AND CONCLUSIONS**

The drill hole, NS-10-25 intersected multiple skarn zones over a 290 metre thick sequence of limestone and skarn. Two zones included significant copper-gold-silver and molybdenum mineralization. The drill hole intersected the footwall diorite more shallow than expected and the intervals were narrower than in the historic drill holes but may correlate to the Upper, High-grade and Foot Wall Zones.

Drill holes NS-11-05 and NS-11-07 were drilled on the same section as NS-10-25. Low grade copper and gold values 1.1% copper and 0.8 ppm gold (NS-11-05) over 5.6 metres and 0.2% copper and trace gold (NS-11-07) over 2.1 metres indicating a potentially shallow southwest dip to the upper horizon in drill hole NS-10-25. A corresponding lower horizon was also intersected in NS-11-05 grading 0.5% copper and 0.2 ppm gold over 6.1 metres.

Holes along the trend to the northwest (NS-11-01, -02 and -06) and southeast east (NS11-03 and -04) intersected unexpected dyke complexes with local skarn mineralization present but only trace amount of copper.

The gold-silver values correlate to copper grades and are a significant economic factor to the assessment of the deposits. The historic drill programs did not include the full suite of economic minerals. The results of the 2010 drill hole indicate that a complete suite of metal analyses is important.

The drill hole indicates a complicated distribution of mineralization typical of skarn deposits. Further drilling is required to interpret the dispersion of mineralization.

## 11.0 RECOMMENDATIONS

Further diamond drilling is recommended at the North Star Pendant. A fence of drill holes located northeast of the 2011 drill holes also drilling at a 225° Azimuth. Sites accessible from existing roads and trails should be selected. Multiple drill holes at various angles can be drilled from the same pad. Six drill holes are recommended including a deep hole of greater than 600 metres to test possible extension of the high-grade upper and the thick portion of the foot wall zones. The recommended program will consist of approximately 2 500 metres of drill and is estimated to cost \$300 000.

A GPS survey of trails, historic drill sites and outcrops is also recommended. This will enable a compilation of all historic information into a single database to aid in an economic interpretation of the mineralization.

## 12.0 LIST OF REFERENCES

Dobrowolsky, H., Ingram, R., 1993, A History of the Whitehorse Copper Belt. Department of Indian and Northern Affairs Canada, Open File 1993-1, 31p.

Gordey, S.P., Makepeace, A.J., 1999, Yukon Digital Geology. Geological Survey of Canada, Open File D3826; Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File #1999-1(D).

MacKay, G., et.al., 1993, Whitehorse Copper Belt – A simplified Technical History. Department of Indian and Northern Affairs Canada, Open File 1993-2 (1), 48p.

Morrison, G.W., 1981, Setting and Origin of Skarn Deposits in the Whitehorse Copper Belt, Yukon; Unpublished Ph.D. Thesis, University of Western Ontario.

Tenney, D., 1981, The Whitehorse Copper Belt: Mining Exploration and Geology (1967-1980). Department of Indian and Northern Affairs, Geology Section, Yukon Region, Bulletin 1, 29p.

Stroshein, R.W., 2011, Diamond Drilling Assessment Report on the North Star and Arctic Chief Pendants, Whitehorse Copper Belt 2010.

Watson, P.H., 1984, The Whitehorse Copper Belt – A Compilation. Exploration and Geological Services Division – Yukon, Indian and Northern Affairs Canada, Open File #1984-1, 1:25,000 scale map with marginal notes.

## **APPENDIX A**

### **STATEMENT OF QUALIFICATIONS**

**ROBERT W. STROSHEIN, P.ENG.**

I, Robert W. Stroshein, P.Eng. do hereby certify that:

- 1) I am a self-employed Geological Engineer, with an office at  
106 – #3 Glacier Lane  
P.O. Box 10559 Station Main  
Whitehorse, Yukon, Canada  
Y1A 7A1
- 2) I graduated with a BSc. Degree in Geological Engineering from the University of Saskatchewan at Saskatoon, SK in 1973.
- 3) I am a member of the Association of Professional Engineers of Yukon Territory (Registered Professional Engineer, No. 1165).
- 4) I have worked as an Exploration Geologist for a total of thirty-eight years since graduation from university.
- 5) I have examined the mineralization and host lithologies on the Whitehorse Copper Belt and have been an active participant in exploration programs on the property since 1974. Most recently I have planned and executed drilling programs on various targets annually between 2002 and 2011.
- 6) I planned and supervised the 2011 exploration program and completed the Assessment Report on the 2011 Diamond Drilling Program.

Dated at Whitehorse, Yukon Territory this 30<sup>th</sup> day of January, 2012

Robert W. Stroshein, P.Eng.

Kluane Drilling Ltd.

**APPENDIX B**  
**Whitehorse Copper Belt**  
**Summary of Drilling Expenditures**  
**April 4 to May 22, 2011**

North Star Project

<b>Claim No.</b>	<b>Claim Name</b>	<b>Drill Hole No.</b>	<b>Meters</b>	<b>Cost</b>	<b>Date start/end</b>
76096	Bob 5	NS-11-01	406.9	\$49,548	April 4 - 13, 2011
		NS-11-02	460.3	\$51,714	April 14 - 21, 2011
		NS-11-06	376.4	\$41,323	May 9 - 15, 2011
		<b>Total Cost - Bob 5</b>	<b>1243.6</b>	<b>\$142,585</b>	
76097	Bob 6	NS-11-03	349.0	\$37,891	April 21-27, 2011
		NS-11-04	307.8	\$35,401	April 27-May 2, 2011
		NS-11-05	390.1	\$41,577	May 2 - 9, 2011
		NS-11-07	354.2	\$38,274	May 15 - 22
		<b>Total Cost - Bob 6</b>	<b>1401.2</b>	<b>\$153,142</b>	

January 30, 2012

**APPENDIX C**

**LIST OF CLAIMS**

**WHITEHORSE COPPERBELT**

**KLUANE DRILLING LTD.**

Claim Name	Claim No.	Grant Pre	Grant No.	Expiry Date	Lease No.	Map Sheet	Ownership/Title
Zircon	2		64183	11-Nov-18		105D14	H. Coyne & Sons
Bonzo			72699	1-Jan-21		105D11	H. Coyne & Sons
Bornite	1		73783	1-Jan-17		105D14	H. Coyne & Sons
Bornite	2		73784	1-Jan-17		105D14	H. Coyne & Sons
Oro	1		73893	3-Mar-13	3528	105D11	H. Coyne & Sons
Oro	2		73894	3-Mar-13	3529	105D11	H. Coyne & Sons
Oro	3		73895	3-Mar-13	3530	105D11	H. Coyne & Sons
Oro	4		73896	3-Mar-13	3531	105D11	H. Coyne & Sons
Oro	5		73897	3-Mar-13	3532	105D11	H. Coyne & Sons
Zircon	4		74157	1-Jan-17		105D14	H. Coyne & Sons
Emily	1		75709	1-Jan-17		105D11	H. Coyne & Sons
Emily	2		75710	1-Jan-17		105D11	H. Coyne & Sons
Gladys	3		75711	1-Jan-17		105D11	H. Coyne & Sons
Gladys	4		75712	1-Jan-17		105D11	H. Coyne & Sons
Cameron	1		75982	1-Jan-17		105D11	H. Coyne & Sons
Bob	3		76094	1-Jan-17		105D11	H. Coyne & Sons
Bob	5		76096	1-Jan-17		105D11	H. Coyne & Sons
Bob	6		76097	1-Jan-17		105D11	H. Coyne & Sons
Margaret	1		76178	1-Jan-17		105D11	H. Coyne & Sons
Dorothy	2		76179	1-Jan-17		105D11	H. Coyne & Sons
Betty	3		76180	1-Jan-17		105D11	H. Coyne & Sons
Tess	1		76395	1-Jan-20		105D11	H. Coyne & Sons
Tess	2		76396	1-Jan-20		105D11	H. Coyne & Sons
Tess	3		76397	1-Jan-19		105D11	H. Coyne & Sons
Tess	4		76398	1-Jan-19		105D11	H. Coyne & Sons
Ken	1		76403	1-Jan-20		105D11	H. Coyne & Sons
Heather	1		76497	1-Jan-21		105D11	H. Coyne & Sons
Heather	2		76498	1-Jan-21		105D11	H. Coyne & Sons
Heather	3		76499	1-Jan-21		105D11	H. Coyne & Sons
Heather	4		76500	1-Jan-21		105D11	H. Coyne & Sons
Bill	1		76770	1-Jan-20		105D11	H. Coyne & Sons
Bill	2		76771	1-Jan-20		105D11	H. Coyne & Sons
Bill	3		76772	1-Jan-20		105D11	H. Coyne & Sons
Bill	4		76773	1-Jan-20		105D11	H. Coyne & Sons
Bill	5		76774	1-Jan-19		105D11	H. Coyne & Sons
Bill	6		76775	1-Jan-19		105D11	H. Coyne & Sons
Bill	7		76776	1-Jan-19		105D11	H. Coyne & Sons
Bill	8		76777	1-Jan-19		105D11	H. Coyne & Sons
Peter	1		76778	3-Mar-17	3533	105D11	H. Coyne & Sons
Peter	2		76779	3-Mar-17	3534	105D11	H. Coyne & Sons
Parke	1		77664	1-Jan-16		105D11	H. Coyne & Sons
Parke	2		77665	1-Jan-20		105D11	H. Coyne & Sons
Parke	3		77666	1-Jan-16		105D11	H. Coyne & Sons
Ley	1		82027	1-Jan-20		105D11	H. Coyne & Sons
Ley	2		82028	1-Jan-20		105D11	H. Coyne & Sons
Ley	3		82029	1-Jan-20		105D11	H. Coyne & Sons
Ley	4		82030	1-Jan-20		105D11	H. Coyne & Sons
Pitt	4		85088	1-Jan-16		105D11	H. Coyne & Sons
Jan	1		85566	1-Jan-19		105D11	H. Coyne & Sons
Peter	1		85743	3-Mar-13	3535	105D11	H. Coyne & Sons
Peter	2		85744	3-Mar-13	3536	105D11	H. Coyne & Sons
Emidel	12		91827	1-Jan-17		105D11	H. Coyne & Sons
Emidel	13		91828	1-Jan-17		105D11	H. Coyne & Sons
Emidel	14		91829	1-Jan-17		105D11	H. Coyne & Sons
Parke	4	Y	12210	1-Jan-16		105D11	H. Coyne & Sons



Pitt	5	Y	20334	1-Jan-16		105D11	H. Coyne & Sons
Tess	7	Y	29677	1-Jan-16		105D11	H. Coyne & Sons
Tess	8	Y	29678	1-Jan-16		105D11	H. Coyne & Sons
Bill	9	Y	52111	1-Jan-16		105D11	H. Coyne & Sons
Bill	10	Y	52112	1-Jan-16		105D11	H. Coyne & Sons
Bill	11	Y	52113	1-Jan-19		105D11	H. Coyne & Sons
Parke	5	Y	52114	1-Jan-16		105D11	H. Coyne & Sons
Emily	3	Y	52115	1-Jan-16		105D11	H. Coyne & Sons
Emily	4	Y	52116	1-Jan-16		105D11	H. Coyne & Sons
Hat	1	YB	57537	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	2	YB	57538	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	3	YB	57539	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	4	YB	57540	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	5	YB	57541	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	6	YB	57542	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	7	YB	57543	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	8	YB	57544	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	9	YB	57545	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	10	YB	57546	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	11	YB	57547	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	12	YB	57548	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	13	YB	57549	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	14	YB	57550	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	15	YB	57551	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	16	YB	57552	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	17	YB	57553	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	18	YB	57554	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	19	YB	57555	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	20	YB	57556	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	21	YB	58021	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	22	YB	58022	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	23	YB	58023	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	24	YB	58024	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	25	YB	58025	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	26	YB	58026	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	27	YB	58049	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	28	YB	58050	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	29	YB	58051	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	30	YB	58052	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	31	YB	58053	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	32	YB	58054	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	33	YB	58055	11-Nov-20		105D14	Kluane Drilling Ltd.
Hat	34	YB	58056	11-Nov-20		105D11	Kluane Drilling Ltd.
Hat	35	YB	58139	11-Nov-19		105D14	Kluane Drilling Ltd.
Hat	36	YB	58140	11-Nov-19		105D14	Kluane Drilling Ltd.
Hat	37	YB	66395	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	38	YB	66396	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	39	YB	66397	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	40	YB	66398	11-Nov-18		105D14	Kluane Drilling Ltd.
Gin	21	YC	8842	2-Dec-20		105D11	Josh Bailey
Gin	22	YC	8843	2-Dec-20		105D11	Josh Bailey
Gin	23	YC	8844	2-Dec-20		105D11	Josh Bailey
Gin	24	YC	8845	2-Dec-20		105D11	Josh Bailey
Gin	25	YC	8846	2-Dec-20		105D11	Josh Bailey
Gin	26	YC	8847	2-Dec-20		105D11	Josh Bailey
Gin	27	YC	8848	2-Dec-20		105D11	Josh Bailey

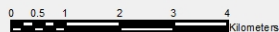
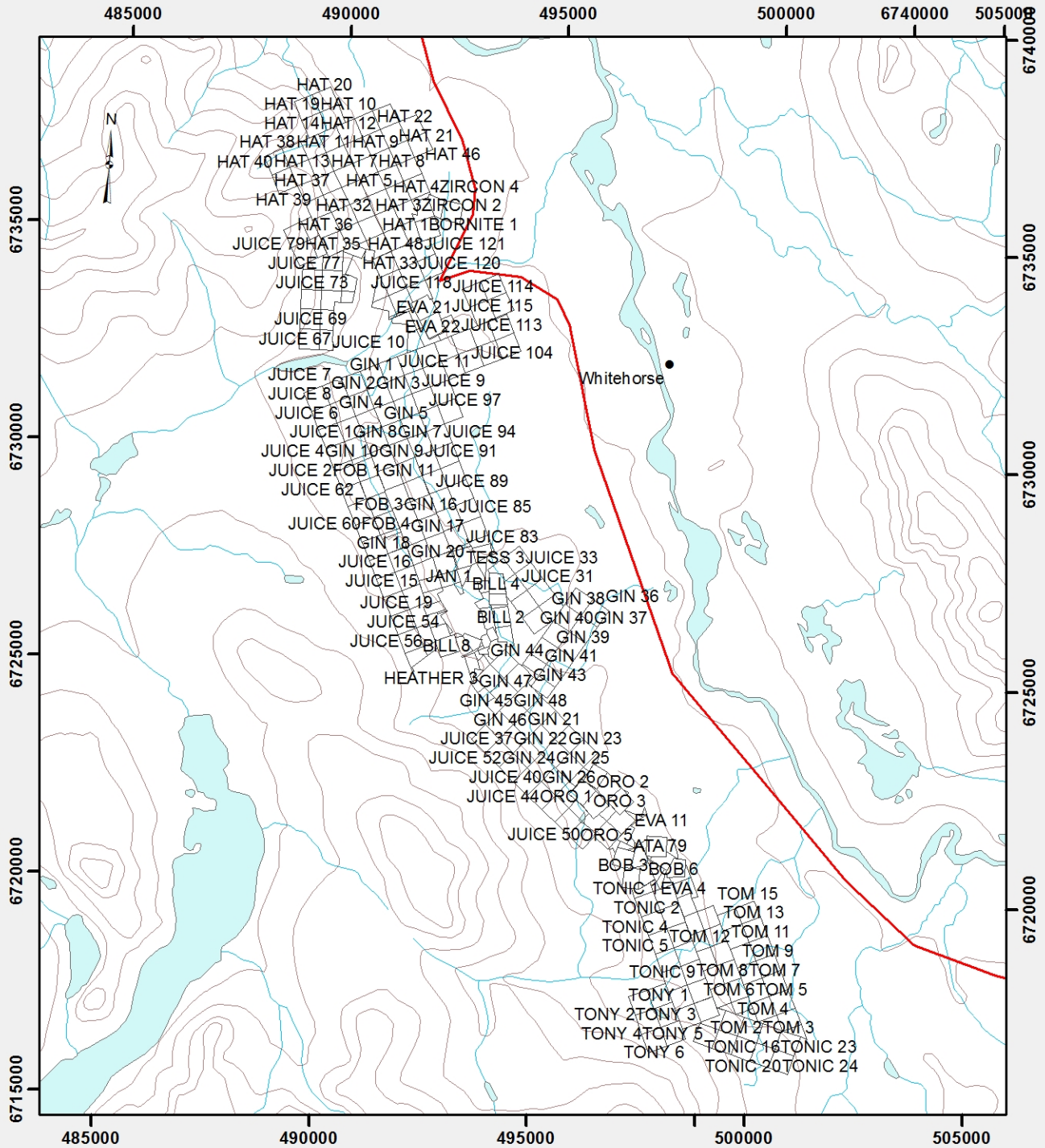
Gin	28	YC	8849	2-Dec-16		105D11	Josh Bailey
Gin	1	YC	8850	3-Jan-16		105D11	Brian R. Sauer
Gin	2	YC	8851	3-Jan-16		105D11	Brian R. Sauer
Gin	3	YC	8852	3-Jan-16		105D11	Brian R. Sauer
Gin	4	YC	8853	3-Jan-16		105D11	Brian R. Sauer
Gin	5	YC	8854	3-Jan-16		105D11	Brian R. Sauer
Gin	6	YC	8855	3-Jan-16		105D11	Brian R. Sauer
Gin	7	YC	8856	3-Jan-16		105D11	Brian R. Sauer
Gin	8	YC	8857	3-Jan-16		105D11	Brian R. Sauer
Gin	9	YC	8858	3-Jan-16		105D11	Brian R. Sauer
Gin	10	YC	8859	3-Jan-16		105D11	Brian R. Sauer
Gin	11	YC	8860	3-Jan-16		105D11	Brian R. Sauer
Gin	12	YC	8861	3-Jan-16		105D11	Brian R. Sauer
Gin	13	YC	8862	3-Jan-16		105D11	Brian R. Sauer
Gin	14	YC	8863	3-Jan-16		105D11	Brian R. Sauer
Gin	15	YC	8864	3-Jan-16		105D11	Brian R. Sauer
Gin	16	YC	8865	3-Jan-16		105D11	Brian R. Sauer
Gin	17	YC	8866	3-Jan-16		105D11	Brian R. Sauer
Gin	18	YC	8867	3-Jan-16		105D11	Brian R. Sauer
Hat	41	YC	18449	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	42	YC	18450	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	43	YC	18451	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	44	YC	18452	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	47	YC	18853	11-Nov-16		105D14	Kluane Drilling Ltd.
Hat	48	YC	18854	11-Nov-16		105D11	Kluane Drilling Ltd.
Hat	45	YC	18695	11-Nov-18		105D14	Kluane Drilling Ltd.
Hat	46	YC	18696	11-Nov-18		105D14	Kluane Drilling Ltd.
Gin	37	YC	19484	1-Jan-21		105D11	Kluane Drilling Ltd.
Gin	38	YC	19485	1-Jan-22		105D11	Kluane Drilling Ltd.
Gin	39	YC	19486	1-Jan-18		105D11	Kluane Drilling Ltd.
Gin	40	YC	19487	1-Jan-18		105D11	Kluane Drilling Ltd.
Gin	41	YC	19488	1-Jan-18		105D11	Kluane Drilling Ltd.
Gin	42	YC	19489	1-Jan-18		105D11	Kluane Drilling Ltd.
Gin	43	YC	19490	1-Jan-18		105D11	Kluane Drilling Ltd.
Gin	44	YC	19491	1-Jan-18		105D11	Kluane Drilling Ltd.
Gin	45	YC	19492	1-Jan-21		105D11	Kluane Drilling Ltd.
Gin	46	YC	19493	1-Jan-21		105D11	Kluane Drilling Ltd.
Gin	47	YC	19494	1-Jan-21		105D11	Kluane Drilling Ltd.
Gin	48	YC	19495	1-Jan-21		105D11	Kluane Drilling Ltd.
Howard	1	YC	37796	29-Dec-16		105D11	Ron Stack
Howard	2	YC	37797	29-Dec-16		105D11	Ron Stack
Alex	1	YC	37798	29-Dec-17		105D11	Ron Stack
Alex	2	YC	37799	29-Dec-17		105D11	Ron Stack
Alex	3	YC	37800	29-Dec-17		105D11	Ron Stack
Alex	4	YC	37801	29-Dec-17		105D11	Ron Stack
Alex	5	YC	37802	29-Dec-17		105D11	Ron Stack
Alex	6	YC	37803	29-Dec-17		105D11	Ron Stack
Alex	7	YC	37804	29-Dec-17		105D11	Ron Stack
Alex	8	YC	37805	29-Dec-17		105D11	Ron Stack
Tonic	1	YC	39077	22-Feb-17		105D11	H. Coyne & Sons
Tonic	2	YC	39078	22-Feb-17		105D11	H. Coyne & Sons
Tonic	3	YC	39079	22-Feb-17		105D11	H. Coyne & Sons
Tonic	4	YC	39080	22-Feb-17		105D11	H. Coyne & Sons
Tonic	5	YC	39081	22-Feb-17		105D11	H. Coyne & Sons
Tonic	6	YC	39082	22-Feb-17		105D11	H. Coyne & Sons
Tonic	7	YC	39083	22-Feb-17		105D11	H. Coyne & Sons

Tonic	8	YC	39084	22-Feb-17		105D11	H. Coyne & Sons
Tonic	9	YC	39085	22-Feb-17		105D11	H. Coyne & Sons
Tonic	10	YC	39086	22-Feb-17		105D11	H. Coyne & Sons
Tonic	11	YC	39087	22-Feb-17		105D11	H. Coyne & Sons
Tonic	12	YC	39088	22-Feb-17		105D11	H. Coyne & Sons
Tonic	13	YC	39089	22-Feb-17		105D11	H. Coyne & Sons
Tonic	14	YC	39090	22-Feb-17		105D11	H. Coyne & Sons
Tonic	15	YC	39091	22-Feb-17		105D11	H. Coyne & Sons
Tonic	16	YC	39092	22-Feb-17		105D11	H. Coyne & Sons
Tonic	17	YC	39093	22-Feb-17		105D11	H. Coyne & Sons
Tonic	18	YC	39094	22-Feb-17		105D11	H. Coyne & Sons
Tonic	19	YC	39095	22-Feb-17		105D11	H. Coyne & Sons
Tonic	20	YC	39096	22-Feb-17		105D11	H. Coyne & Sons
Tonic	21	YC	39097	22-Feb-17		105D11	H. Coyne & Sons
Tonic	22	YC	39098	22-Feb-17		105D11	H. Coyne & Sons
Tonic	23	YC	39099	22-Feb-17		105D11	H. Coyne & Sons
Tonic	24	YC	39100	22-Feb-17		105D11	H. Coyne & Sons
Ata	79	YC	40198	1-Jan-16		105D11	H. Coyne & Sons
Juice	1	YC	46556	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	2	YC	46557	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	3	YC	46558	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	4	YC	46559	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	5	YC	46560	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	6	YC	46561	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	7	YC	46562	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	8	YC	46563	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	9	YC	46564	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	10	YC	46565	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	11	YC	46566	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	12	YC	46567	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	13	YC	46568	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	14	YC	46569	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	15	YC	46570	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	16	YC	46571	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	17	YC	46572	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	18	YC	46573	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	19	YC	46574	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	20	YC	46575	16-Mar-16		105D11	Kluane Drilling Ltd.
Juice	21	YC	46576	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	22	YC	46577	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	23	YC	46578	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	24	YC	46579	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	25	YC	46580	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	26	YC	46581	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	27	YC	46582	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	28	YC	46583	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	29	YC	46584	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	30	YC	46585	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	31	YC	46586	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	32	YC	46587	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	33	YC	46588	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	34	YC	46589	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	37	YC	46592	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	38	YC	46593	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	39	YC	46594	16-Mar-20		105D11	Kluane Drilling Ltd.
Juice	40	YC	46595	16-Mar-20		105D11	Kluane Drilling Ltd.

Jack	1	YC	54444	5-Dec-20		105D11	H. Coyne & Sons
Juice	41	YC	66222	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	42	YC	66223	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	43	YC	66224	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	44	YC	66225	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	45	YC	66226	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	46	YC	66227	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	47	YC	66228	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	48	YC	66229	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	49	YC	66230	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	50	YC	66231	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	51	YC	66232	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	52	YC	66233	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	53	YC	66234	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	54	YC	66235	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	55	YC	66236	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	56	YC	66237	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	57	YC	66238	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	58	YC	66239	1-Jan-21		105D11	Kluane Drilling Ltd.
Juice	59	YC	66240	1-Jan-19		105D11	Kluane Drilling Ltd.
Juice	60	YC	66241	1-Jan-19		105D11	Kluane Drilling Ltd.
Juice	61	YC	66242	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	62	YC	66243	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	63	YC	66244	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	64	YC	66245	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	65	YC	66246	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	66	YC	66247	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	67	YC	66248	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	68	YC	66249	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	69	YC	66250	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	70	YC	66251	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	71	YC	66252	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	72	YC	66253	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	73	YC	66254	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	74	YC	66255	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	75	YC	66256	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	76	YC	66257	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	77	YC	66258	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	78	YC	66259	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	79	YC	66260	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	80	YC	66261	1-Jan-20		105D11	Kluane Drilling Ltd.
Juice	81	YC	66262	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	82	YC	66263	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	83	YC	66264	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	84	YC	66265	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	85	YC	66266	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	86	YC	66267	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	87	YC	66268	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	88	YC	66269	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	89	YC	66270	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	90	YC	66271	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	91	YC	66272	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	92	YC	66273	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	93	YC	66274	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	94	YC	66275	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	95	YC	66276	10-Jan-19		105D11	Kluane Drilling Ltd.

Juice	96	YC	66277	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	97	YC	66278	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	98	YC	66279	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	99	YC	66280	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	100	YC	66281	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	101	YC	66282	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	102	YC	66283	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	103	YC	66284	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	104	YC	66285	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	105	YC	66286	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	106	YC	66287	10-Jan-19		105D11	Kluane Drilling Ltd.
Juice	107	YC	66288	10-Oct-15		105D11	Kluane Drilling Ltd.
Juice	108	YC	66289	10-Oct-15		105D11	Kluane Drilling Ltd.
Juice	109	YC	66290	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	110	YC	66291	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	111	YC	66292	10-Oct-11		105D11	Kluane Drilling Ltd.
Juice	112	YC	66293	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	113	YC	66294	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	114	YC	66295	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	115	YC	66296	10-Jan-20		105D11	Kluane Drilling Ltd.
Juice	116	YC	66297	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	117	YC	66298	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	118	YC	66299	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	119	YC	66300	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	120	YC	66301	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	121	YC	66302	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	122	YC	66303	10-Oct-15		105D11	Kluane Drilling Ltd.
Juice	123	YC	66304	10-Oct-15		105D11	Kluane Drilling Ltd.
Juice	124	YC	66305	10-Oct-16		105D11	Kluane Drilling Ltd.
Juice	125	YC	66306	10-Oct-16		105D11	Kluane Drilling Ltd.
FOB	1	YD	29626	2-Nov-16		105D11	Chris Davis
FOB	2	YD	29627	2-Nov-16		105D11	Chris Davis
FOB	3	YD	29628	2-Nov-16		105D11	Chris Davis
FOB	4	YD	29629	2-Nov-16		105D11	Chris Davis
FOB	5	YD	29630	2-Nov-16		105D11	Chris Davis
TOM	1	YD	59228	11-May-16		105D10	Chris Davis
TOM	2	YD	59229	11-May-16		105D10	Chris Davis
TOM	3	YD	59230	11-May-16		105D10	Chris Davis
TOM	4	YD	59231	11-May-16		105D10	Chris Davis
TOM	5	YD	59232	11-May-16		105D10	Chris Davis
TOM	6	YD	59233	11-May-16		105D10	Chris Davis
TOM	7	YD	59234	11-May-16		105D10	Chris Davis
TOM	8	YD	59235	11-May-16		105D10	Chris Davis
TOM	9	YD	59236	11-May-16		105D10	Chris Davis
TOM	10	YD	59237	11-May-16		105D10	Chris Davis
TOM	11	YD	59238	11-May-16		105D10	Chris Davis
TOM	12	YD	59239	11-May-16		105D10	Chris Davis
TOM	13	YD	59240	11-May-16		105D10	Chris Davis
TOM	14	YD	59241	11-May-16		105D10	Chris Davis
TOM	15	YD	59242	11-May-16		105D10	Chris Davis
TOM	16	YD	59243	11-May-16		105D10	Chris Davis
TOM	17	YD	59244	11-May-16		105D10	Chris Davis
TOM	18	YD	59245	11-May-16		105D10	Chris Davis
TOM	19	YD	59246	11-May-16		105D10	Chris Davis
TOM	20	YD	59247	11-May-16		105D10	Chris Davis
TOM	21	YD	59248	11-May-16		105D10	Chris Davis

TOM	22	YD	59249	11-May-16		105D10	Chris Davis
TOM	23	YD	59250	11-May-16		105D10	Chris Davis
TOM	24	YD	59251	11-May-16		105D10	Chris Davis
TOM	25	YD	59252	11-May-16		105D10	Chris Davis
TOM	26	YD	59253	11-May-16		105D10	Chris Davis
TOM	27	YD	59254	11-May-16		105D10	Chris Davis
TOM	28	YD	59255	11-May-16		105D10	Chris Davis
TOM	29	YD	59256	11-May-16		105D11	Chris Davis
GIN	19	YD	59258	11-May-16		105D11	Chris Davis
GIN	20	YD	59259	11-May-16		105D11	Chris Davis
EVA	1	YD	59260	24-Jun-16		105D11	Chris Davis
EVA	2	YD	59261	24-Jun-16		105D11	Chris Davis
EVA	3	YD	59262	24-Jun-16		105D11	Chris Davis
EVA	4	YD	59263	24-Jun-16		105D11	Chris Davis
EVA	5	YD	59264	24-Jun-16		105D11	Chris Davis
EVA	6	YD	59265	24-Jun-16		105D11	Chris Davis
EVA	7	YD	59266	24-Jun-16		105D11	Chris Davis
EVA	8	YD	59267	24-Jun-16		105D11	Chris Davis
EVA	9	YD	59268	24-Jun-16		105D11	Chris Davis
EVA	10	YD	59269	24-Jun-16		105D11	Chris Davis
EVA	11	YD	59270	24-Jun-16		105D11	Chris Davis
EVA	12	YD	59271	11-Jun-16		105D11	Chris Davis
EVA	13	YD	59272	11-Jun-16		105D11	Chris Davis
EVA	14	YD	59273	24-Jun-16		105D11	Chris Davis
EVA	15	YD	59274	14-Jun-16		105D11	Chris Davis
EVA	20	YD	59279	14-Jun-16		105D11	Chris Davis
EVA	21	YD	59280	14-Jun-16		105D11	Chris Davis
EVA	22	YD	59281	14-Jun-16		105D11	Chris Davis
EVA	23	YD	59282	14-Jun-16		105D11	Chris Davis
TONY	1	YD	59283	24-Jun-16		105D11	Chris Davis
TONY	2	YD	59284	24-Jun-16		105D11	Chris Davis
TONY	3	YD	59285	24-Jun-16		105D11	Chris Davis
TONY	4	YD	59286	24-Jun-16		105D11	Chris Davis
TONY	5	YD	59287	24-Jun-16		105D11	Chris Davis
TONY	6	YD	59288	24-Jun-16		105D11	Chris Davis
EVA	24	YD	59289	24-Jun-16		105D11	Chris Davis
EVA	25	YD	59290	24-Jun-16		105D11	Chris Davis
EVA	26	YD	59291	24-Jun-16		105D11	Chris Davis
EVA	27	YD	59292	24-Jun-16		105D11	Chris Davis
EVA	28	YD	59293	24-Jun-16		105D11	Chris Davis
EVA	29	YD	59294	24-Jun-16		105D11	Chris Davis
EVA	30	YD	59295	24-Jun-16		105D11	Chris Davis
EVA	31	YD	59296	24-Jun-16		105D11	Chris Davis
EVA	32	YD	59297	24-Jun-16		105D11	Chris Davis
EVA	33	YD	59298	24-Jun-16		105D11	Chris Davis
TRAD	1	YD	59299	24-Jun-16		105D11	Chris Davis
TRAD	2	YD	59300	24-Jun-16		105D11	Chris Davis
TRAD	3	YD	59301	24-Jun-16		105D11	Chris Davis
TRAD	4	YD	59302	24-Jun-16		105D11	Chris Davis
TRAD	5	YD	59303	24-Jun-16		105D11	Chris Davis



**Claim-Lease map**

**Kluane Drilling Claims & Leases**

NTS 105D-11 and 14  
Nad 83, Zone 8, Yukon Albers Projection

**APPENDIX D**

**DIAMOND DRILLING 2011  
NORTH STAR PROJECT  
KLUANE DRILLING LTD.**

**DIAMOND DRILL LOGS**

**And**

**DIAMOND DRILL SECTIONS**



East UTM	North UTM	Drill NS-11-01	Angle (°)
497528	6720684	Nad 83 Zone 6 Elevation 835 m Depth 413.0 m	-70
From (m)	To (m)	Description	Core Angle °
0.0	5.0	Overburden	
5.0	10.0	Weathered diorite	
10.0	14.7	Diorite - equigranular, medium grained, light tan green	
14.7	17.1	Skarn - serp-mag- wol - pale grey green	
17.1	19.4	Mafic dyke - dark green, fine grained	
19.4	22.8	Diorite - equigranular, medium grained, light tan green w/ diss py	18 cn
22.8	26.0	Endo-skarn - diopside-mag-gar-wol	70 cn
26.0	27.2	Diorite - equigranular, medium grained, light tan green	80 cn
27.2	31.5	Endo-skarn - diopside-mag-gar-serp	70 - 80 cn
31.5	36.6	Diorite - equigranular, medium grained, light tan green	
36.6	39.1	Porphyritic dyke - feld phenos in med. grey green matrix	
39.1	40.0	Diorite dark grey green w/diss and strgr py	
40.0	49.3	Mafic dyke - dark green, fine grained	
49.3	92.0	Diorite w/mafic dykes and occ. Endo skarn	
92.0	129.2	Meta-seds fine grained grey green locally dioritized	
129.2	135.8	pale skarnified carbonate rich meta-seds w/calcite	
135.8	143.0	Dioritized meta-seds	
143.0	157.0	Skarnoid carbonate rich w/white calcite	
157.0	165.1	Diorite	
165.1	170.7	Skarn - serp-mag pale grey green slickensides w/trace diss py and cpy	
170.7	190.5	Diorite/dioritized meta-seds locally carbonate rich	
190.5	214.5	Skarnoid carbonate rich w/white calcite, gar and serp bns	
214.5	237.0	Light grey crystalline limestone 218.5 - 219.0 m fossiliferous	
237.0	244.0	Marble white crystalline	
244.0	301.1	Limestone and marble with 0.5 - 2.0 m light grey green fine grained dykes	
301.1	301.6	Skarn - hem-py-cpy-mag-born dark green	
301.6	302.7	Marble white crystalline	
302.7	303.4	Skarn - high-grade bornite-chalcopyrite-pyrite	
303.4	304.8	Mafic dyke - dark green, fine grained skarnified w/pyrite	45 cn
304.8	400.2	Limestone light grey, fine grained, crystalline	
		locally fossiliferous w/marble	
		343.8 - 344.3 m fault zone in limestone	45 cn
		357.2 - 359.4 m fine grained, dark green mafic dyke w/patchy epidote endoskarn	40
		360.3 limestone marble graphitic	85 bn
400.2	401.4	Mafic dyke pophyritic pale felspar phenos in dark green matrix	20 cn
401.4	402.9	Limestone w/epidote skarn. Hem bands and strgrs. Seams clotty and diss py	30 cn
		Hem strgs at low core angles to sub-parallel	
402.9	413.0	Porphyritic dyke - feld phenos in light grey green matrix	
	413.0	End of Hole	

UTM NAD 83 ZONE 6

497527, 6720684

NS-11-01 NS-11-02

-70° -75°

DIORITE  
W/ENDOSKARN

TrCu

TrCu

TrCu

META-SEDS  
W/SKARN/DIORITE

0.1% Cu

LST/MARBLE/SKARN  
W/mafic DYKES

LST/MARBLE

Hem.  
DYKE

11-01  
413m

META-SEDS - SLST W/HORNFELS

NORTH STAR  
DRILL SECTION

NS-11-01

NS-11-02

50m  
scale 1:2500

11-02  
460.2m

KLUANE DRILLING LTD.

JANUARY, 2012

RWS

LOOKING NORTHWEST  
315° Az.

East UTM	North UTM	Drill NS-11-02	Angle (°)
497527	6720684	Nad 83 Zone 6 Elevation 835 meters asl (GPS) Depth: 460.2 meters	-75
From (m)	To (m)	Description	Core Angle °
0.0	4.0	Overburden	
4.0	19.8	Diorite - equigranular, medium grained, light tan green w/ patchy serp and black sk	35 cn
19.8	22.6	Mafic Dyke dark green, fine grained.	35 cn
22.6	28.3	Diorite med grained, dark green w/serp endoskarn	
28.3	33.5	Calcite-serp-amphibole skarn upper (irregular) and lower contacts	50/38 cns
33.5	44.3	Diorite - equigranular, medium grained, dark green w/ serp	45 cn
44.3	49.5	Porphyritic mafic dyke white feld phenos in green fine grained matrix	
49.5	64.0	Meta-seds fine grained grey green locally dioritized	80 cn
64.0	83.4	Diorite - medium grained, equigranular, dark green w/serp	80 cn
83.4	173.7	Diorite - equigranular, medium grained, light tan green	
173.7	194.2	Skarn - serp-mag-hem +/- garnet mixed trace pyrite diss	70 cn
194.2	199.5	Diorite grey green, medium grained, equigranular	
199.5	208.5	Skarn - serp-mag-hem +/- garnet mixed trace pyrite diss	
208.5	263.8	Limestone light grey, fine grained, crystalline w/marble sections	
263.8	264.4	Skarn - cpy-py-hem dark grey to red	20 cn
264.4	273.4	Porphyritic Dyke - feld phenos in fine grained creamy green matrix w/serp replace phenos	
273.4	326.4	Light grey crystalline limestone and white crystalline marble	
326.4	335.6	Porphyritic Dyke Mafic feld phenos in grey green fine grained matrix	
335.6	429.2	Light grey carbonaceous crystalline limestone and white crystalline marble	
		Mafic dykes of 0.5 - 1.5 meters in marble sections	10 - 20 cn
		343.5 - 358.4 meters fault zone fractured clay rich with marble clasts	20 - 25 cn
		Skarnoid dark grey to banded grey brown w/serp trace very fine grained py w/yl-lime green	
429.2	433.3	epidote altn calcite bands acute core angles	45 and 30 cn
433.3	438.3	Clastic meta-siltstone	
438.3	445.0	Limestone marble w/weak skarnoid	
445.0	447.5	Meta-siltstone skarnoid w/pyrite clots-diss-seams - 447.0 m 8 cm clay-rich band	
447.5	451.1	Graphic mafic porphyry dyke w/white feld phenos in dark black green fine grained matrix	
451.1	458.7	Hornfels meta-sediments clastic	
458.7	459.2	Diorite sill/dyke	80 cn
459.2	460.2	Hornfels meta-sediments clastic	45 cn
	460.2	End of Hole	

April 21 to April 27 2011

Kluane Drilling Ltd.  
North Star Diamond Drilling 2011

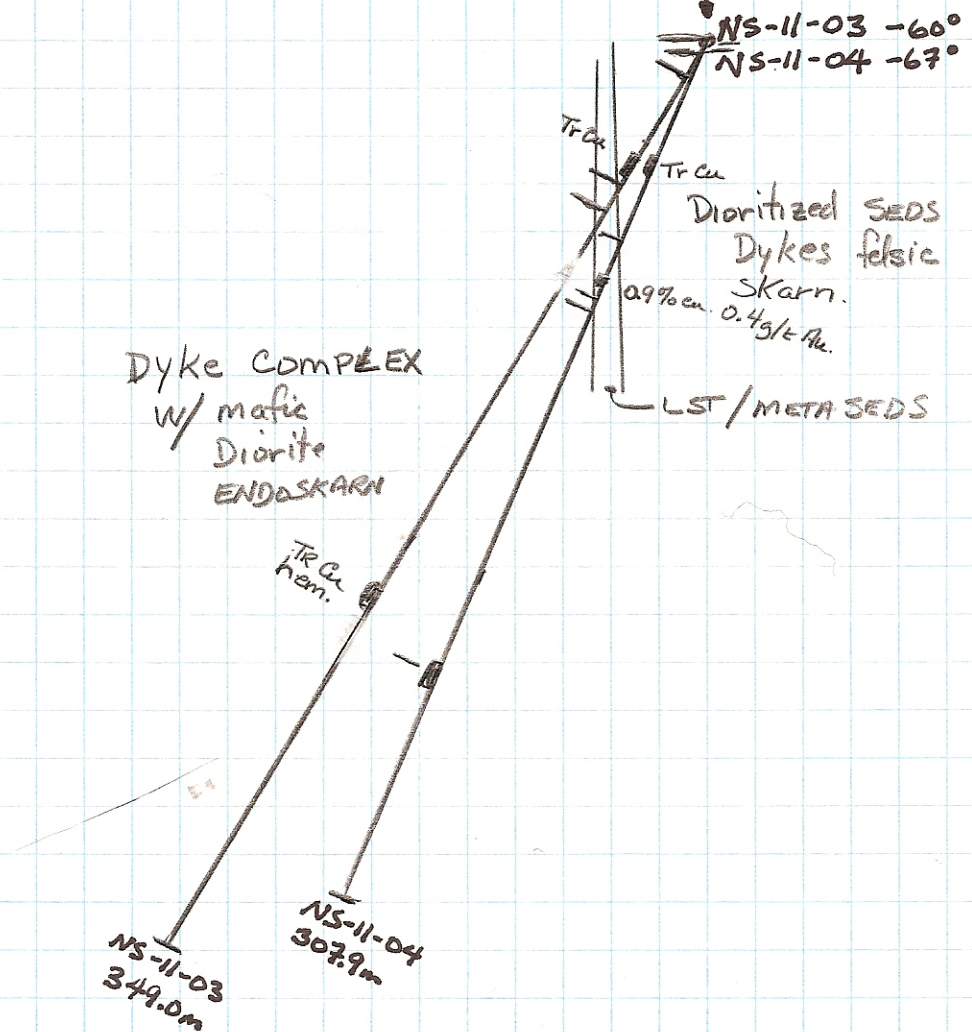
DDH NS-11-03

Logged by R. Stroshein

East UTM	North UTM	Drill NS-11-03	Angle (°)
497647	6720630	Nad 83 Zone 6 Elevation 836 meters asl (GPS) Depth: 349.0 meters	-60
From (m)	To (m)	Description	Core Angle °
0.0	3.0	Overburden	
3.0	13.0	Meta-siltstone skarnoid grey green	72 fol
13.0	42.4	Feldspar porphyry dyke "graphic" texture. Coarse light creamy green feldspar phenos in fine grained medium to dark grey green matrix.	38 cn up 35 cn low
42.4	50.1	Garnet Skarn w/marble	
		42.4 - 45.3 m tr-1% pyrite in strgr stkwk	
		45.3 - 47.5 m garn-diop skarn w/diss py	
		47.5 - 48.0 m fine grained dark green dyke	
		48.0 - 50.1 m white to light grey marble	27 cn
50.1	55.5	Porphyritic dyke crowded fine - medium phenos in light grey green matrix	
		53.0 - 55.5 m strongly fractured core	
55.5	65.1	Marble and limestone white and light grey	
		62.0 - 62.9 m sheared with clay-rich bands	63 bn
65.1	209.2	Mafic dyke complex variably fine to coarse graphic grained dark grey green	
		112.5 - 115.6 m sub-parallel shearing w/calcite veining	
		127.0 - 127.6 m sub-parallel shearing w/calcite veining at contact graphic dyke and fine grained dyke	
		130.5 - 133.7 m garnet endo skarn	30 cn
		202.3 - 203.0 m gar-epi endo skarn	
		205.1 - 206.5 m epi-garn endo skarn	35 cn
		207.3 - 217.0 m epi-garn skarn / altered meta-seds	
		217.0 - 229.7 m epidote skarnified dyke	
		229.7 - 241.6 m Dyke complex w/weak epidote alteration in seams and phenos	
		241.6 - 272.8 m Diorite/granodiorite med grained white/grey green w/weak epi altn	
		272.8 - 306.7 m Dyke complex fine grained to medium porphyritic	20 cn
306.7	309.1	Skarnoid contact zone. Hematite porous and vuggy qz-calcite strngs grey green to dark grey/black skarn	45 - 60 strgr
309.1	310.6	20 cm fault zone clay-rich and fractured in fine grained medium grey green mafic dyke fractured and broken core	45 shr
310.6	349.0	Diorite massive medium grained, grey to grey green w/broken contact zone	
	349.0	End of Hole	

NAD 83 ZONE 6

UTM 497646, 6720630



50m  
scale 1:2500

NORTH STAR  
DRILL SECTION  
NS-11-03  
NS-11-04

KLUANE DRILLING LTD.  
January, 2012  
RWS

Looking NORTHWEST  
315° AZ.

East UTM	North UTM	Drill NS-11-04	Angle (°)
497646	6720630	Nad 83 Zone 6 Elevation 836 m Depth 307.9	-67
From (m)	To (m)	Description	Core Angle °
0.0	4.8	Overburden	
4.8	14.3	Skarnified meta-seiments. Dark grey green, fine to medium grained. Pale green alteration along cross cutting fractures. Qz-gar strgrs interlayere fine and medium grained beds	70 bn
14.3	43.5	Feldspathic dyke. White to cream feldspar laths and coarse phenos (laths greater than 1 cm long) in fine grained dark grey green matrix (graphic texture). Rare qz-calcite stringer cross cutting and small light green altered xenoliths.	38 cn
43.5	51.5	Dioritized meta-seds. Light grey green to buff colored w/strgrs of light limey green epidote. Fine to meium grained bands. Pyrite coars to fine grained strgrs, disseminated and coarse grained clots (2 - 5 %).	
51.5	70.2	Mafic dyke. Dark green, meduium grained /light fine feldspar phenos and dark hbl'd grains	
		61.0 - 62.5 m sheared fracture clay-rich fault zone w/frags skarnoid limestone	
		67.5 - 69.6 m clay-rich shear zone w/calcite seams sub-parallel to core terminates w/ core angle	60 flt
70.2	73.9	Limestone and marble w/pale-yellow-lime-green epidote alteration. Shearing from upper contact to 71.5 m.	55 sh and 55 cn
73.9	79.0	Mafic dyke. light green, meduium grained /light feldspar phenos and dark hbl'd grains. Epidote alteration.	
		77.0 - 78.0 m epidote altered marble sheared and fractured sub parrallel to core axis	
79.0	90.3	Marble. White to buff light green w/skarified yl-lime-green epidote and brown garnet. Coarse grains of bornite w/pyrite and chalopyrite.	70 cn
		85.2 - 88.7 m 1-2% sulphides	
		85.6 - 86 m fractured w/clay-rich fault zone and hornfels frags.	
90.3	94.5	Hornfels Meta-sediments trace pyrite and rare chalcopyrite grains	74 bn
94.5	96.7	Dioritized meta-seds. Calcite strgrs and clay seams in fractures at lower contact zone	
96.7	130.0	Mafic Dyke. Medium dark green, fine to medium grained w/white feldspar and black hrbblend phenos. Abundant white calcite strgrs and veinlets cross-cutting to sub parallel. Local patchy light green alteration.	
130.0	139.0	Mafic 'graphic' dyke. Feldspar laths.	30 cn
139.0	146.8	Mafic Dyke. Medium dark green, fine to medium grained w/white feldspar and black hrbblend phenos. Abundant white calcite strgrs and veinlets cross-cutting to sub parallel. Local patchy light green alteration.	
146.8	153.9	Mafic 'graphic' dyke. Feldspar laths.	40 cn
153.9	221.5	Mafic dyke complex continued inter layered fine grained dark gree, 'graphic dyke', medium grained light grey, and medium grained w/ epidote alter feldspar phenos	
		197.0 - 197.5 m tq4n35 diopside skarn	
		200.5 - 201.6 m garnet skarn	
		202.6 - 203.5 m garnet-diopside skarn	30 cn
221.5	237.9	Skarn. Light pinkishbbrown to buff garnet-epidote-diopside.	45 cn
237.9	257.6	Diorite. Equigranular, medium grained, light grey green.	
257.6	274.6	Graphic Dyke. Skarnoid zone between diorite and dyke 0.5 m.	45 cn
274.6	298.5	Mafic Dyke. Fine grained, dark green	
298.5	307.9	Diorite. Equigranular, medium grained, light grey green.	
	307.9	End of Hole	

East UTM	North UTM	Drill NS-11-05	Angle (°)
497610	6720650	Nad 83 Zone 6 Elevation 836 m Depth 390.1	-75
From (m)	To (m)	Description	Core Angle °
0.0	3.0	Overburden	
3.0	6.7	Weathered diorite. 'rotten' granite	
6.7	11.9	Diorite. Equigranular, medium grained light grey geeen.	
11.9	38.1	Mafic dykes and dioite sills	
		24.4 - 25.3 m qz vnlets sub-parallel to core axis	
		27.4 - 30.2 m vuggy qz strgrs/veinlets in dyke sub-parallel to core axis 3 - 5% py and po.	
38.1	39.5	Hornfels and gar-epidote skarn	
39.5	73.2	Grey Limestone and white marble irregular contact	45 cn
73.2	82.3	Weak epidote-garnet skarn w/diorite sills	
82.3	92.4	Mafic dyke. Fine grained to finely porphyritic	
92.4	182.9	Meta-seds. Siltstone and dioritized seds patch weak skarnification epi-gar w/trace diss py.	62 cn
		171.9 - 176.8 m qz strgr stkwk zone irregular sb-parallel core angles	
182.9	208.8	Limestone. Skarnoid ar-epi-serp, green - pin - brown. Fine grained altered dyke w/endo skarnification.	
		205.6 - 208.8 m dis cpy-bornite w/epidote skarn	
208.8	211.8	Limestone and Marble.	
211.8	217.3	Serp-magnetite skarn. Black. Tr bornite and cpy.	60 bns
217.3	228.9	Interlayered grey limestone and white marble. Green - black or pink. Minor serp w/black skarn bands	
228.9	232.0	Garnet skarn. Coarse grained, pinkish brown.	
232.0	233.2	Mafic dyke. Fine grained, dark green	
233.2	236.2	Porphyritic dyke mafic, with garnet endo-skarn	
236.2	263.0	Diorite. Equigranular, medium grained light grey geeen. s/fine grained dark green mafic dykes	
263.0	310.3	Epidote-garnet skarn. Meta-seds	
		300.0 - 306.3 m epi-mag skarn w/bornite, cpy and py, 1 - 2 % diss.	
310.3	317.3	Limestone. Light grey, medium grained, crystalline.	
		315.2 - 315.8 m clay-rich fault zone	
		317.0 - 317.3 m weak gar-epi skarn w/2 - 4% diss py.	
317.3	347.8	Porphyritic dyke mafic. Light grey green.	34 cn
347.8	356.9	Epidote skarn. W/magnetite-chalcopyrite-bornite and pyrite	
356.9	390.1	Limestone and Marble. White w/magnetite skarn black.	
		359.5 - 361.2 m Black magnetite skarn w/diss cpy.	
		363.0 - 363.2 m Black magnetite skarn w/bornite and chalcopyrite up to 5%.	
		367.3 m 15 cm fine grained black dyke.	75 cn
		374.6 - 377.2 m Porphyritic dyke. Light grey green.	
	390.1	End of Hole	

NAD 83 ZONE 6  
UTM

497584, 6720622      497610, 6720650

NS-11-07      NS-11-05  
-70°      -75°

LST/  
SKARN

DIORITE

DYKE COMPLEX

META-SEDS  
w/LST/DYKE/SKARN

LST/SKARN  
w/DYKES  
0.5% Cu  
1.1% Cu  
0.89% Au  
0.19% Cu

2.2% Cu

SKARN/  
LST / MARBLE

TR Cu  
0.2% Cu  
TR Cu

DYKES

LST/MARBLE

META-SEDS  
SKARN  
0.5% Cu  
0.29% Au

LST/SKARN/MARBLE

LST/  
MARBLE  
0.9% Cu  
0.89% Au  
0.39% Au

0.99% Cu

NS-11-07  
354.2m

NS-11-05  
390.1m

DIORITE

NORTH STAR  
DRILL SECTION

NS-11-05

NS-11-07

NS-10-25

LOOKING NORTHWEST

315° AZ.

NS-10-25

50m

Scale 1:2500

KLUANE DRILLING LTD

January 2012

RWS



May 9 to May 17, 2011

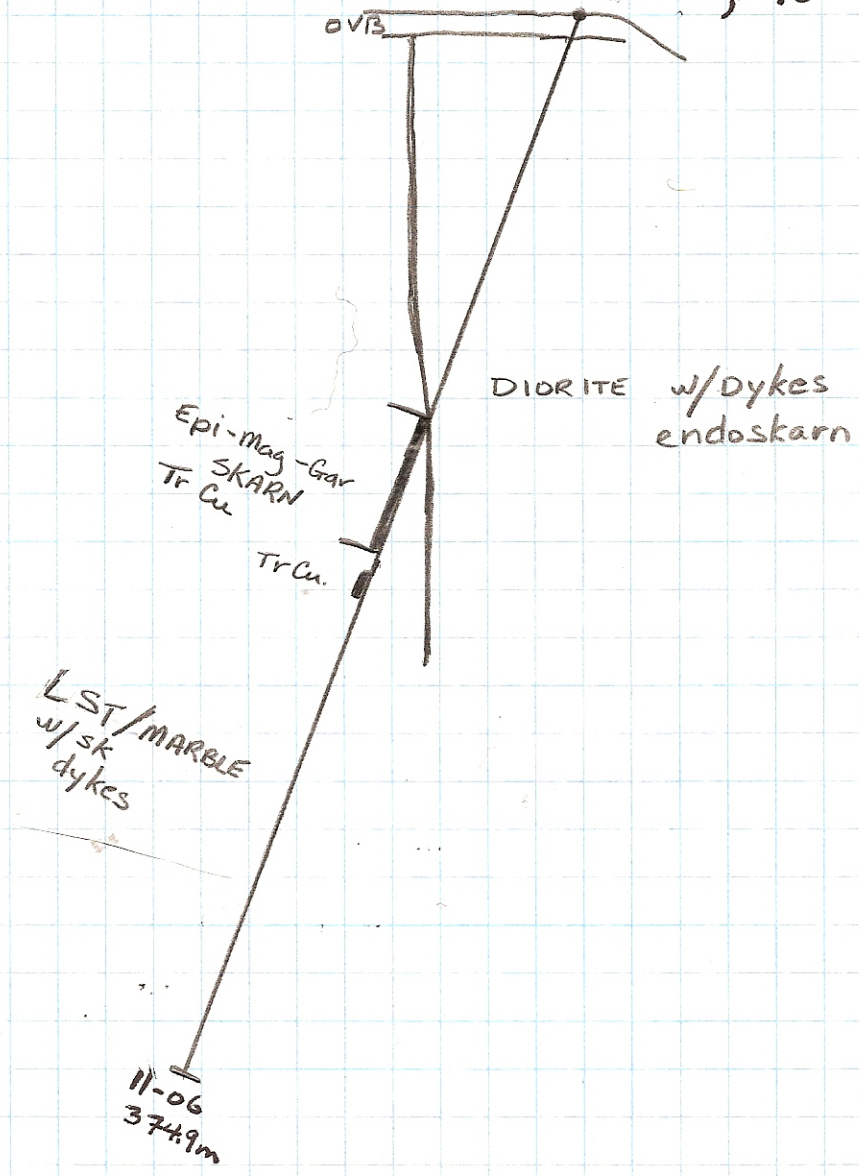
Kluane Drilling Ltd.  
North Star Diamond Drilling 2011

DDH NS-11-06

Logged by R. Stroshein

East UTM	North UTM	Drill NS-11-05	Angle (°)
497516	6720729	Nad 83 Zone 6 Elevation 842 m Depth 374.9	-70
From (m)	To (m)	Description	Core Angle °
0.0	9.6	Overburden	
9.6	70.1	Diorite skarnified. Equigranular, medium grained, light grey green	
70.1	110.6	Mafic dyke. Fine grained, dark green.	
110.6	134.1	Diorite skarnified. Equigranular, medium grained, light grey green	
134.1	144.5	Mafic dyke. Fine grained, dark green w/sills of diorite. Lower one meter contact skarnified.	
144.5	153.9	Epidote-garnet skarn. Pale grey green and light tan brown	
153.9	162.9	Epidote skarn. Green and black.	
162.9	176.3	Diorite skarnified. Equigranular, medium grained, light grey green	
176.3	182.6	Serpentine-magnetite skarn. Green and black.	
182.6	193.7	Limestone. Grey, crystalline. Weak light yellow-lime green.	
193.7	198.1	Diorite skarnified. Equigranular, medium grained, light grey green	
198.1	209.4	Epidote skarn w/minor garnet. Pale yellow-lime-green with brown garnet grains.	
209.4	239.4	White marble and grey crystalline limestone.	90 bn
		Mafic dykes at 222.9 - 2225.5 m and `231.6 - 231.9 m.	
239.4	282.5	Grey, crystalline Limestone w/marble bands	66 bn
282.5	293.8	Light grey porphyritic dyke. Feldspar phenos weakly altered to light grey in fine grained grey groundmass.	
293.8	295.0	Epidote skarn. Pale green	upper 20 cn lower 60 cn
295.0	374.9	Limestone. Grey, crystalline. w/white marble bns	45 bn
		Dark green fine grained mafic dykes at 296.1 - 296.3 m	34 cn
		and 299.6 - 301.1 m	50
		Fossiliferous 346.9 - 347.4 m	
	374.9	End of Hole	

NAD 83 ZONE 6  
UTM 497516, 6720729  
NS-11-06, -70°



50m  
scale 1:2500

NORTH STAR  
DRILL SECTION  
NS-11-06

KLVANE DRILLING LTD.  
January, 2012  
RWS

Looking NORTHWEST  
315° Az.

May 9 to May 15, 2011

Kluane Drilling Ltd.  
North Star Diamond Drilling 2011

DDH NS-11-07  
Logged by R. Stroshein

East UTM	North UTM	Drill NS-11-07	Angle (°)
497584	6720622	Nad 83 Zone 6 Elevation 844 m asl Depth 354.2	-70
From (m)	To (m)	Description	Core Angle °
0.0	3.0	Casing - Overburden	
3.0	7.3	Grey green porphyritic dyke. White feldspar phenos >1 cm common in fine grained ground mass.	45 cn
7.3	36.6	Limestone, marble and weak skarn zone. Interlayered black marble-epidote skarn, creamy light pale green epidote skarn, light brown garnet skarn, grey crystalline limestone and light creamy white marble.	
		13.9 - 14.9 m medium grained grey green diorite sill (?) w/ calcite stringers up to 2 cm.	20 strgr 85 cn
		15.7 - 16.3 m fine grained grey green porphyry dyke.	70 upper cn 45 lower cn
36.6	249.6	Multi-phase intrusive-dyke complex that includes: fine grained, light grey green mafic, medium grained grey green diorite, light grey green (spotted) porphyritic mafic dyke w/rounded feldspar phenos, coarse angular feldspar phenos in fine grained mafic groundmass and medium to dark grey green fine porphyritic mafic material.	
		228.1 240.2 m Skarnoid and limestone xenolith(?) green epidote or grey limestone	45 lower cn
249.6	251.8	Green epidote skarn.	
251.8	253.1	White crystalline marble w/epidote skarn band (20 cm) at lower contact.	45 lower cn
253.1	255.7	Porphyritic dyke. Coarse white feldspar phenos in grey green, fine grained mafic groundmass.	30 lower cn
255.7	260.0	Epidote-garnet skarn. Green and brown medium grained.	
260.0	263.7	Dyke. Fine grained, grey green, w/altered feldspar phenos in very fine grained mafic matrix.	
263.7	271.6	Epidote skarn. Green, medium grained w/bands of white marble and brown garnet skarn.	40 upper cn 10 lower cn
271.6	354.2	Limestone and marble. Grey crystalline limestone and light creamy white marble.	279m 60 bn 335 m 90 bn
		278.0 - 278.1 m fine grained green dyke	45 upper cn 60 lower cn
		320.5 - 321.7 m Porphyritic Dyke. 2 cm epidote skarn bands on contacts.	45 upper cn 60 lower cn
	354.2	End of Hole.	

**APPENDIX E**

**DIAMOND DRILLING 2011**

**NORTH STAR PROJECT**

**KLUANE DRILLING LTD.**

**ASSAY SUMMARY SHEETS**

DDH NS11-01

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width (m)</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>
164.7	167.6	2.9	K931557	<0.2	38.8
167.6	170.8	3.2	K931558	<0.2	197.5
208.7	211.8	3.1	K931559	<0.2	31.5
211.8	213.9	2.1	K931560	<0.2	397
300.8	302.1	1.3	K931561	<0.2	1150
302.7	303.4	0.7	K931562	<0.2	1020
303.6	304.6	1.0	K931563	<0.2	103.5
401.6	403.2	1.6	K931564	<0.2	2.7

DDH NS11-02

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width (m)</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>
28.2	30.5	2.3	K931509	<0.2	7.7
30.5	33.3	2.8	K931510	<0.2	10.2
173.7	175.1	1.4	K931511	<0.2	13.8
177.5	178.7	1.2	K931512	<0.2	9.4
178.7	181.5	2.8	K931513	<0.2	6.8
181.5	183.4	1.9	K931514	<0.2	93.3
183.4	185.5	2.1	K931515	<0.2	39.7
185.5	186.6	1.1	K931516	<0.2	823
186.6	189.0	2.4	K931517	<0.2	614
189.0	191.7	2.7	K931518	<0.2	1190
191.7	194.2	2.5	K931519	<0.2	514

DDH NS11-03

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>
42.4	44.2		K931549	<0.2	718
44.2	46.1		K931550	<0.2	96.9
46.1	47.8		K931551	<0.2	237
209.2	211.2		K931552	<0.2	635
211.2	213.5		K931553	<0.2	330
213.5	215.1		K931554	<0.2	32
215.1	216.8		K931555	<0.2	11.7
305.9	308.8		K931556	<0.2	200

DDH NS11-04

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width (m)</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>
43.5	45.5	2.0	K931501	<0.2	663
45.5	47.5	2.0	K931502	<0.2	163
47.5	49.5	2.0	K931503	<0.2	86
49.5	51.5	2.0	K931504	<0.2	90.9
85.4	88.3	2.9	K931505	0.4	8770
222.5	225.5	3.0	K931506	<0.2	69.4
225.5	228.6	3.1	K931507	<0.2	78.6
228.6	231.6	3.0	K931508	<0.2	26.4



DDH NS11-05

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width (m)</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>	<b>Cu %</b>
205.6	208.8	3.2	K931534	<0.2	5780	
211.8	214.9	3.1	K931535	1	>10000	1.245
214.9	217.4	2.5	K931536	0.5	>10000	1.01
220.6	222.8	2.2	K931537	<0.2	423	
222.8	223.9	1.1	K931538	<0.2	149.5	
223.9	226.0	2.1	K931539	0.2	4000	
226.0	227.7	1.7	K931540	<0.2	331	
227.7	228.5	0.8	K931541	<0.2	1335	
299.9	302.0	2.1	K931542	0.2	5830	
302.0	304.0	2.0	K931543	<0.2	2920	
304.0	306.0	2.0	K931544	0.3	4670	
353.4	355.1	1.7	K931545	<0.2	2600	
355.1	356.5	1.4	K931546	<0.2	9630	
359.5	361.2	1.7	K931547	0.3	8390	
363.0	363.2	0.2	K931548	0.8	9710	

DDH NS11-06

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width (m)</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>
140.7	143.7	3.0	K931520	<0.2	42.1
143.7	146.3	2.6	K931521	<0.2	568
146.3	149.4	3.1	K931522	<0.2	3.6
149.4	152.4	3.0	K931523	<0.2	7.5
152.4	155.5	3.1	K931524	<0.2	410
155.5	158.5	3.0	K931525	<0.2	205
158.5	161.5	3.0	K931526	<0.2	90.8
161.5	162.9	1.4	K931527	<0.2	47
176.3	177.9	1.7	K931528	<0.2	25.8
177.9	181.0	3.1	K931529	<0.2	27.7
181.0	182.5	1.5	K931530	<0.2	17.6
198.1	201.1	3.0	K931531	<0.2	265
201.1	204.2	3.1	K931532	<0.2	608
204.2	207.4	3.2	K931533	<0.2	119.5

DDH NS11-07

**Kluane Drilling Ltd.  
Whitehorse Copper Belt  
North Star Project  
Assay Sheet**

2011 Diamond Drilling Program

<b>From (m)</b>	<b>To (m)</b>	<b>Width (m)</b>	<b>Sample ID</b>	<b>Au ppm</b>	<b>Cu ppm</b>
7.3	9.1	1.8	K931565	<0.2	33.3
9.1	10.7	1.5	K931566	<0.2	23.8
10.7	12.2	1.5	K931567	<0.2	13
16.3	17.8	1.5	K931568	<0.2	372
17.8	19.8	2.0	K931569	<0.2	36.1
19.8	22.9	3.0	K931570	<0.2	38.9
22.9	25.0	2.1	K931571	<0.2	32.7
27.7	29.6	1.8	K931572	<0.2	29.2
29.6	32.0	2.4	K931573	<0.2	58.5
32.0	33.5	1.5	K931574	<0.2	64.7
249.6	251.8	2.1	K931575	<0.2	657
255.7	257.6	1.8	K931576	<0.2	271
257.6	259.7	2.1	K931577	<0.2	2190
264.6	266.9	2.3	K931578	<0.2	285
266.9	269.3	2.4	K931579	<0.2	271
269.3	271.6	2.3	K931580	<0.2	149