

**Ministry of Energy & Mines**  
Energy & Minerals Division  
Geological Survey Branch

**ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY**

<b>TITLE OF REPORT [type of survey(s)]</b> Report on the 2011 Diamond Drill Program + Geophysical Reports	<b>TOTAL COST</b> \$1, 270,536.24
--	--------------------------------------

AUTHOR(S) James M. Hutter

SIGNATURE(S) 



NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) MX-2-11

YEAR OF WORK 2011

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) Event 5282215

PROPERTY NAME Silver Queen

CLAIM NAME(S) (on which work was done) 516670, 516671, 516672, 525871, 704203, 704223, 704243, 704263, 704264, 704265, 704266, 704267, 704269, 704833, 754142, 754162, 851764, 851765, 853425, 853429, 853431, 853437, 853438

COMMODITIES SOUGHT Cu, Mo, Au

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 093L002, 093L162, 093L216

MINING DIVISION Omineca NTS 93L/2E

LATITUDE 54 ° 04 ' 35 " LONGITUDE 126 ° 42 ' 25 " (at centre of work)

OWNER(S)

1) New Nadina Explorations Ltd.

2) \_\_\_\_\_

MAILING ADDRESS

Box 130

Greenwood, BC V0H 1J0

OPERATOR(S) [who paid for the work]

1) New Nadina Explorations Ltd.

2) \_\_\_\_\_

MAILING ADDRESS

As above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Polymetallic veins, Tip Top Hill Volcanics, Upper Cretaceous, Kasalka Group,

Pyroclastic, Feldspar Porphyry, Microdiorite, Kaolinization, Pyritization

Copper, Molybdenum, Gold, Silicification, Fluorite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS 294, 421, 1133, 1184, 2272, 5304, 6456, 7343, 7612, 11659, 12009, 12876, 15742, 16715, 21741, 24568, 24899, 25370

(OVER)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping _____			
Photo interpretation _____			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic _____			
Electromagnetic _____			
Induced Polarization _____	Titan-24 DCIP/MT survey: 24.6 line-km	516670-672, 525871, 704203, 704223, 704243, 704263-267, 704269, 704833, 754142, 754162	\$234,777.77
Radiometric _____			
Seismic _____			
Other _____	Geophysical interpretation		\$42,090.00
Airborne _____	ZTEM & Magnetometer Survey: 708.4 line-km	516670-672, 525871, 704203, 704223, 704243, 704263-267, 704269, 704833, 754142, 754162	\$182,756.24
<b>GEOCHEMICAL</b> (number of samples analysed for ...)			
Soil _____			
Silt _____			
Rock _____			
Other _____			
<b>DRILLING</b> (total metres; number of holes, size)			
Core _____	4489.5 metres in 13 holes, NQ2 & HQ	516671	\$529,191.42
Non-core _____			\$217,183.10
<b>RELATED TECHNICAL</b>			
Sampling/assaying _____	967 assays		\$43,022.59
Petrographic _____			
Mineralographic _____			
Metallurgic _____			
<b>PROSPECTING (scale, area) _____</b>			
<b>PREPARATORY/PHYSICAL</b>			
Line/grid (kilometres) _____	24.6 line-km		\$21,515.12
Topographic/Photogrammetric (scale, area) _____			
Legal surveys (scale, area) _____			
Road, local access (kilometres)/trail _____			
Trench (metres) _____			
Underground dev. (metres) _____			
Other _____			
<b>TOTAL COST</b>			<b>\$1,270,536.24</b>

**REPORT ON THE  
2011 DIAMOND DRILLING PROGRAM,  
SILVER QUEEN PROPERTY**

**near Houston, B.C.**

**Tenure Numbers**

**516670, 516671, 516672, 525871, 704203, 704223,  
704243, 704263, 704264, 704265, 704266, 704267,  
704269, 704833, 754142, 754162, 851764, 851765,  
853425, 853429, 853431, 853437, 853438**

**OMINECA MINING DIVISION  
BRITISH COLUMBIA**

**BC Geological Survey  
Assessment Report  
33613a**

**BCGS: 093L.007**

**UTM: 650000E, 5994500N  
ZONE 9, NAD 83**

**Owner and Operator:  
New Nadina Explorations Ltd.  
Box 130, 298 Greenwood St.  
Greenwood, BC  
V0H 1J0**

**By**

**James M. Hutter, P. Geo  
Box 3048, 4407 Alfred Ave.  
Smithers, BC  
V0J 2N0**

**July 7, 2012**

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## **1.0 SUMMARY**

The Silver Queen Property of New Nadina Explorations has been explored intermittently since 1912 and briefly achieved production in 1972 and 1973. Polymetallic veins containing gold, silver, copper, lead and zinc have been the focus of most exploration efforts to date.

The property is located 36 km south of Houston BC and is 100% owned by New Nadina Explorations Limited. Exploration to date has been focussed mainly on vein deposits but the property has been considered to have potential for porphyry deposits, transitional porphyry deposits of the Equity type, or perhaps VMS deposits. Previous work directed at locating a porphyry deposit has encountered indications of such, but the actual deposit has proved elusive.

Recent advances in geophysical techniques and computer analysis have allowed imaging of anomalies in three dimensions and to much greater depths than previously possible. An aggressive geophysical work program was undertaken utilizing helicopter-borne ZTEM and magnetics with advanced analysis techniques followed up by a ground-based Titan 24 DCIP/MT survey. The geophysical results are presented in separate reports to accompany this diamond drilling report.

Drilling recommendations based on the geophysical work resulted in the discovery of the Itsit Porphyry, a copper-molybdenum-gold porphyry deposit.

Prior to the completion of this report, a second Titan 24 geophysical survey was undertaken on the property. Results of this survey will be used to guide further diamond drilling.

## **2.0 INTRODUCTION**

This report summarizes a diamond drill program conducted during the 2011 field season and has been prepared for New Nadina Explorations Limited.

A helicopter-borne ZTEM survey was flown by Geotech Ltd. with further interpretation of the magnetic data by Mira Geoscience Ltd. and a Titan 24 survey was conducted by Quantec Geoscience Ltd. Results of the geophysical surveys were used to plan the autumn drilling program. Lone Peak Drilling of Kimberley, BC was then contracted to complete a minimum of 4000 metres of NQ2 diamond drilling on the Silver Queen Property.

Work was based out of a camp established on the property during previous seasons. The camp is mostly containerized but also makes use of existing infrastructure remaining from previous work.

Drilling was conducted from September 1 to October 15, 2011 under the supervision of the writer.

### **3.0 RELIANCE ON OTHER EXPERTS**

All sources of information utilized for this report are referenced in Section 17 (References). No independent verification of historical geochemical, geophysical, drilling, or other technical data was undertaken.

Parts of this report are copied verbatim, or nearly so, from a 2011 report for New Nadina Explorations Ltd. by JDS Energy and Mining, authored by Garth Kirkham, P.Geo and James Hutter, P.Geo., and titled "Technical Report for the Silver Queen Property":

- 4 Property Description and Location (except figures)
- 5 Accessibility, Climate, Local Resources, Infrastructure and Physiography
- 6 History
- 7 Geological Setting
- 8 Deposit Types
- 9 Mineralization
- 11.1 Drilling Before 2011 (in part)
- 15 Adjacent Properties

#### **3.1 Disclaimer**

Both this report and the 2011 diamond drilling program were guided by reports and documents generated by the work done in previous programs. In the preparation of this report, the author has relied on information obtained through a review of public and private documents, reports and data. Although the author is satisfied that this data has been compiled by competent geoscientists and engineers, the author disclaims any responsibility for any errors or omissions that are a result of missing, inaccurate or incomplete information in those reports.

### **4.0 PROPERTY DESCRIPTION AND LOCATION**

The Silver Queen property (Fig. 4.1) is situated in central British Columbia, approximately 36 km south of Houston, and 30 km southwest of the Equity Silver Mine,

on NTS map Sheet 93L/2E. Most of the property is situated to the east of Owen Lake. Much of the property occupies a moderate southwest facing slope.

The Silver Queen property consists of 42 staked claims (Fig. 4.2) covering approximately 17,089 hectares and 17 Crown Granted mineral claims (Fig. 4.3). The Crown Grants have been over-staked by the staked claims, thereby allowing work done on the Crown Grants to be applied as assessment work on the staked claims.

Expiry dates of claims listed in Table 4.1 are dependent on acceptance of this report. Assessment work credits available from the 2011 program have been applied to all claims except those staked December 30, 2011.

**Table 4.1 - Details of New Nadina Silver Queen Staked Claims as of April 12, 2012**

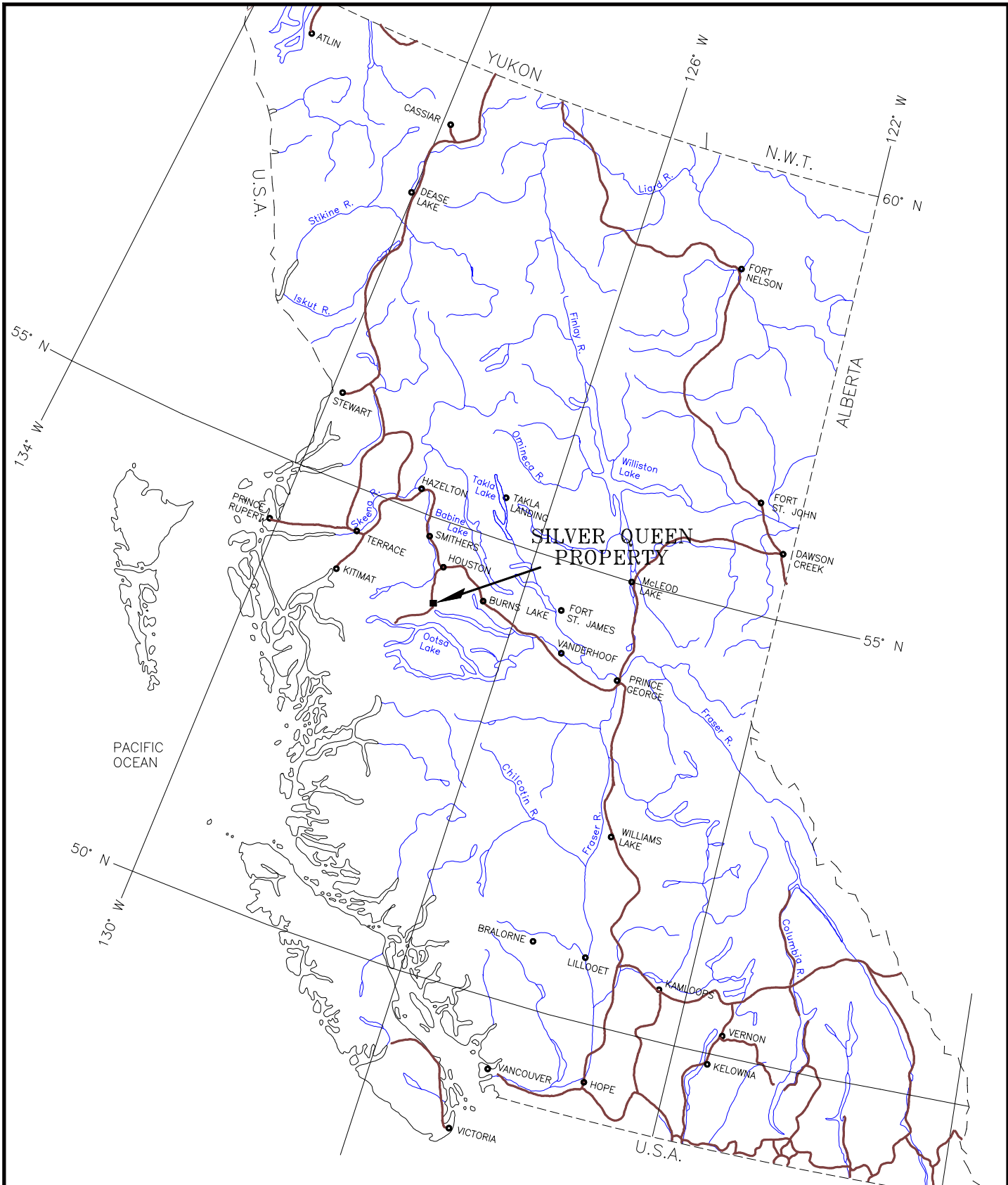
Claim Name	Record No.	Date Staked	Expiry	Area (ha)
	516670	Jul 11, 2005	Jun 30, 2022	1081.00
	516671	Jul 11, 2005	Jun 30, 2022	1005.58
	516672	Jul 11, 2005	Jun 30, 2021	1006.03
SQ CGS	525871	Jan 19, 2006	Jun 30, 2022	94.85
DQ1	704203	Jan 22, 2010	Jun 30, 2022	474.56
DQ2	704223	Jan 22, 2010	Jun 30, 2022	474.57
DQ3	704243	Jan 22, 2010	Jun 30, 2022	417.47
DQ4	704263	Jan 22, 2010	Jun 30, 2022	417.39
DQ5	704264	Jan 22, 2010	Jun 30, 2022	189.88
DQ6	704265	Jan 22, 2010	Jun 30, 2022	474.81
DQ7	704266	Jan 22, 2010	Jun 30, 2022	474.80
DQ8	704267	Jan 22, 2010	Jun 30, 2022	474.77
DQ9	704269	Jan 22, 2010	Jun 30, 2022	455.75
DQ10	704833	Jan 26, 2010	Jun 30, 2022	113.97
DQ11	754142	Apr 21, 2010	Jun 30, 2021	455.14
DQ12	754162	Apr 21, 2010	Jun 30, 2021	455.15
	851764	Apr 15, 2011	Jun 30, 2017	474.45
	851765	Apr 15, 2011	Jun 30, 2017	455.20
	853425	May 03, 2011	Jun 30, 2017	398.13
	853429	May 03, 2011	Jun 30, 2017	284.25
	853431	May 03, 2011	Jun 30, 2017	284.27
	853437	May 03, 2011	Jun 30, 2017	37.91
	853438	May 03, 2011	Jun 30, 2017	37.90
	939314	Dec 30, 2011	Dec 30, 2012	473.86
DQ13	939315	Dec 30, 2011	Dec 30, 2012	378.91
DQ14	939329	Dec 30, 2011	Dec 30, 2012	189.40
DQ15	939330	Dec 30, 2011	Dec 30, 2012	455.16
DQ16	939332	Dec 30, 2011	Dec 30, 2012	379.09
DQ17	939333	Dec 30, 2011	Dec 30, 2012	454.65
DQ18	939334	Dec 30, 2011	Dec 30, 2012	227.67
DQ19	939335	Dec 30, 2011	Dec 30, 2012	474.15
DQ20	939336	Dec 30, 2011	Dec 30, 2012	473.91
DQ21	939337	Dec 30, 2011	Dec 30, 2012	378.96



DQ22	939338	Dec 30, 2011	Dec 30, 2012	284.12
DQ23	939339	Dec 30, 2011	Dec 30, 2012	322.59
DQ24	939340	Dec 30, 2011	Dec 30, 2012	455.12
DQ25	939341	Dec 30, 2011	Dec 30, 2012	341.10
DQ26	939342	Dec 30, 2011	Dec 30, 2012	340.94
DQ27	939343	Dec 30, 2011	Dec 30, 2012	455.30
DQ28	939344	Dec 30, 2011	Dec 30, 2012	341.24
DQ29	939345	Dec 30, 2011	Dec 30, 2012	454.75
DQ30	939346	Dec 30, 2011	Dec 30, 2012	170.47
			Total Area:	17089.22

**Table 4.2 - Details of New Nadina Silver Queen Crown Granted Claims**

<b>Claim Name</b>	<b>Record #</b>	<b>CG/Located</b>	<b>Expiry Date</b>	<b>Units</b>
Silver King	L 6547	CG		1
Tyee	L 6548	CG		1
Silver Queen	L 6549	CG		1
Silver Tip	L 6550	CG		1
IXL	L 6551	CG		1
Earl No. 1	L 7399	CG		1
Earl No. 2	L 7400	CG		1
Earl No. 1 Fr	L 7401	CG		1
Earl No. 3	L 7402	CG		1
IXL No. 3	L 7403	CG		1
Lucy	L 7404	CG		1
Mary	L 7540	CG		1
Lily Fraction	L 7541	CG		1
Mary Fraction	L 7542	CG		1
Asta Fraction	L 7543	CG		1
Mae No. 1	L 7544	CG		1
Mae	L 7545	CG		1
			Total Area:	304.46 ha



<b>NEW NADINA EXPLORATIONS LTD.</b>		
SILVER QUEEN PROPERTY, OMINECA MINING DISTRICT, B.C.		
LOCATION MAP		
SCALE: AS SHOWN	DATE: JULY 7, 2012	<b>FIG. 4.1</b>
NTS: 93L/2E	DRAWN BY: J.M. HUTTER	

Figure 4.2 Silver Queen Staked Claims Map

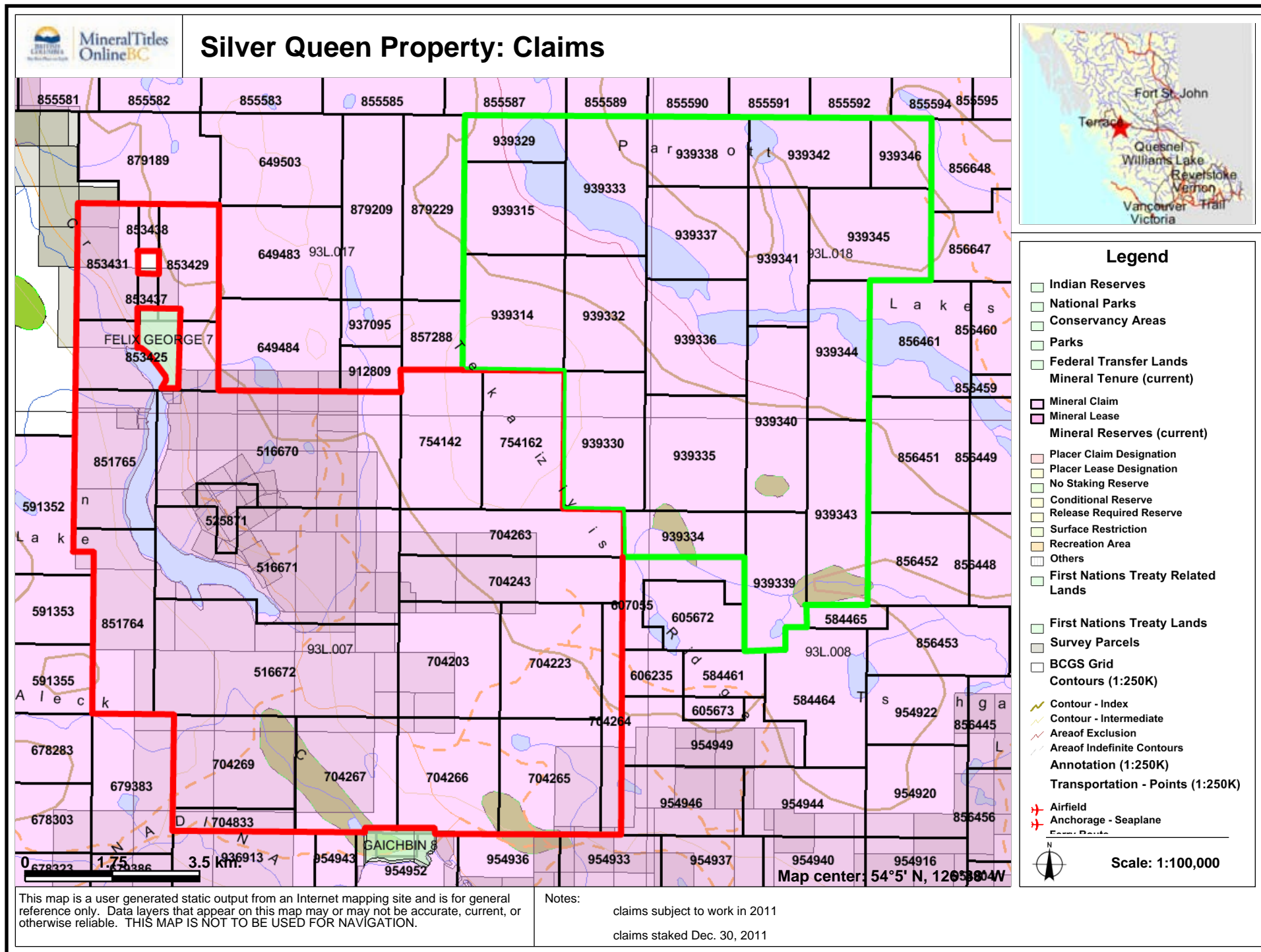
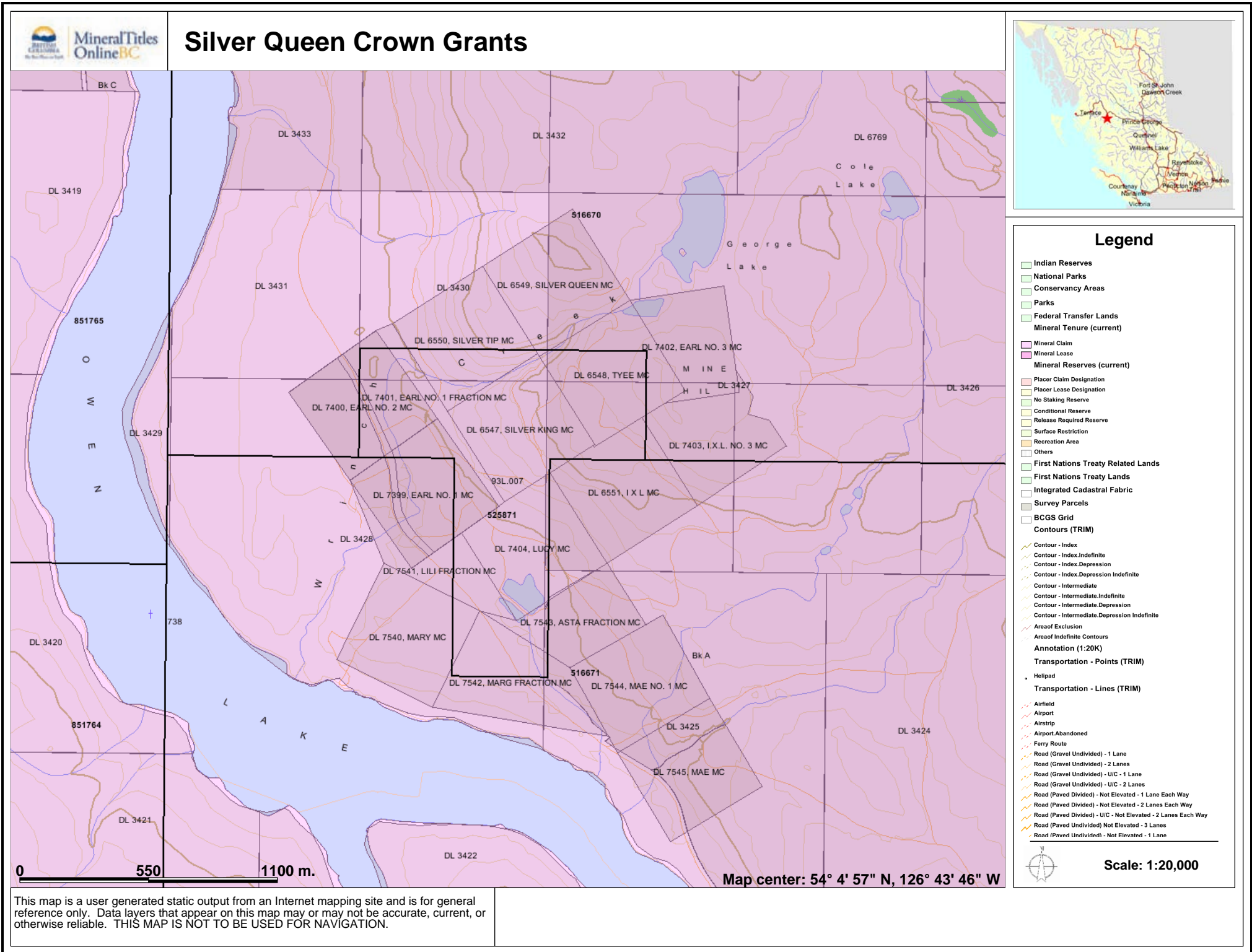


Figure 4.3 Silver Queen Crown Granted Claims Map



This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

## **5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

Houston, BC is the nearest town to Silver Queen and has a population of approximately 3700. It is accessible by Trans Canada Highway BC-16 via which access to the ports at Prince Rupert (410 km) and Kitimat (325 km) is possible. Smithers, which is 65 km north on Highway 16, is the closest commercial airport; however a local public aerodrome located 9 km north of Houston is available for charters. One helicopter service, Westland Helicopters, operates out of Houston and there is also regular VIA Rail and Greyhound bus service to the town. The main industries in the area are forestry, service and supply, and tourism.

Access to the property is south from Houston via the Morice-Owen Forest Service Road, which leaves Highway 16 about three kilometres west of Houston. The Morice-Owen is a well-maintained all-weather road in regular use by heavy industrial traffic. The road distance from Highway 16 to the site is 43.5 km. Further along the road is the Huckleberry Mine, a road distance of 78 Km beyond the Silver Queen.

The climate in central BC is generally cooler than much of the rest of the province, with summer temperatures averaging around 14.5°C and winter temperatures averaging -12.7°C. The annual rainfall in the region is 35cm per year, while average snowfall is 164cm per year.

The property is mainly situated to the east of Owen Lake. Much of the property occupies a moderate southwest facing slope. Close to Owen Lake and in the southeastern portion of the property, the ground is relatively flat. Vegetation is generally heavy, with poplar, willows and heavy ground cover and with local spruce and fir forest. Elevations range from 735 metres at Owen Lake to more than 1200 metres at the top of Tip Top Hill. The southwest facing slopes often lack tree cover and support a lush growth of grasses and other plants, making the area suitable for raising cattle.

New Nadina has granted Huckleberry Mines an easement over the Crown Grants for the power line to the Huckleberry Mine. Huckleberry has agreed to allow New Nadina the use of the power line if required, and has agreed to use commercially reasonable best efforts to assist New Nadina in obtaining such rights and consents necessary to obtain power from the Works, should New Nadina require power from the Works for mine purposes, including assisting New Nadina in its efforts to obtain access agreements over Crown Land, private lands and reserves affected by the Right of Way. [Powerline Right of Way Agreement, 1999]

## 6.0 HISTORY

The present Silver Queen property was historically comprised of two separate properties, the Silver Queen and the Cole Lake properties which were managed separately (except for the period 1928-43), until 1985. A considerable amount of exploration and development has been done on the property. A summary of this work is presented in point form below. For simplicity, the pre-1985 history of exploration of the two properties is discussed separately.

### Pre 1985 History - Silver Queen Property:

- 1912 – Mineralization discovered, three adits driven on the Wrinch vein system
- 1915 – 38 tons of ore (31% Pb and 6 oz Ag) shipped from two shallow shafts
- 1923 – optioned to Federal Mining and Smelting Co., more than 500 ft of drifting done from the three adits
- 1928 – Silver Queen and Cole Lake properties acquired by Owen Lake Mining and Development Company, Cole Shaft sunk, a 3,000 ft cross-cut driven
- 1941 – Canadian Exploration (now Placer Development) purchased Silver Queen claims, and optioned Cole Lake property; surface and underground mapping and sampling completed
- 1943 – The option on the Cole Lake ground dropped, work continued on Silver Queen veins until 1947
- 1963 – Nadina Explorations Ltd optioned Silver Queen claims; aggressive program of diamond drilling, trenching, and underground development on the No. 3 vein – traced Wrinch vein system south to the "Ruby Extension zone"
- 1966 – Nadina continued underground and surface work on the property
- 1967 – Property optioned to Kennco Explorations; geological mapping, soil sampling and IP survey done; several deep holes drilled to test for porphyry copper mineralization
- 1968 – Nadina continued work on Silver Queen veins; soil sampling, trenching, diamond drilling and underground mapping done 1969 - BC Ministry of Energy, Mines and Petroleum Resources mapped entire property in detail, as well as the area surrounding Owen Lake. Nadina completed 4,000 ft of drifting, 51 drill holes (both underground and surface) plus airborne geophysical surveys
- 1970 – Northgate Explorations optioned the property from Nadina; did extensive underground check sampling, 13,500 ft of surface drilling, 1,500 ft of underground drilling and 4,200 ft of drifting and raising
- 1971 – Bralorne Can-Fer Resources Limited and Pacific Petroleum Ltd. optioned the property, and formed the Bradina Joint Venture; feasibility study prepared by Dolmage Campbell and Associates, surface EM and IP surveys, 6,000 ft of surface drilling and 800 ft of drifting and raising done
- 1972 – Property put into production in March, 1972, using equipment from Bralorne's recently closed gold mine in southern B.C.

- 1973 – Operations ceased September, 1973 due to an over design of the mill and complex metallurgy. 200,000 tons of ore milled. Drill indicated reserves (Historical; not 43-101 compliant) on the Wrinch vein system at mine closure were 577,600 tonnes averaging 3.7 g/t Au, 257 g/t Ag, 6.53% Zn, 1.49% Pb, and 0.49% Cu. During 1972-73, 47 surface holes and 68 underground holes, totalling over 20,000 ft drilled.
- 1974 – 5,900 ft of drilling done, JV agreement terminated
- 1977 - Nadina purchased Silver Queen property outright in 1977; Placer retained backin right, which hampered the involvement of larger companies in the property. Property optioned by New Frontier Petroleum Ltd, the successor company to Frontier Explorations Ltd. which held the Cole Lake property. Limited deep surface drilling done and the option dropped in 1978.
- 1980 – Nadina reorganized as New Nadina Explorations Limited; a major program of backhoe trenching done, as well as surface drilling and rehabilitation of underground workings.
- 1981 – rehabilitation completed, additional drifting done, and 28 underground and 4 surface drill holes drilled (a total of over 8,000 ft).
- 1982 – Campbell Resources did detailed re-evaluation of the Silver Queen property in 1982, completed limited metallurgical testing
- 1983–84 - New Nadina completed 7,500 ft of surface diamond drilling in 15 holes

Pre 1985 History - Cole Lake Property:

- 1915 – Cole vein system staked as the Diamond Belle group
- 1928 – The property was acquired, along with the Silver Queen property, by the Owen Lake Mining and Development Company; Cole shaft sunk
- 1941 – Canadian Exploration optioned property, completed mapping and sampling. Option dropped in 1943.
- 1967 - Considerable trenching and some drilling was done on the Cole Lake veins by Frontier Explorations Ltd, who had acquired the ground in this area in 1960, and done minor work in the early 1960's
- 1972 – Frontier Explorations did EM survey, as well as percussion drilling and 1,500 ft of diamond drilling on George Lake Lineament Vein 1980 - backhoe trenching done by Frontier
- 1981 – New Frontier sold all its mining interests to Bulkley Silver Resources Ltd, who attempted to raise money to complete the Earl Adit which would intersect the Cole Vein system at depth. Insufficient funds were raised and only 100 feet of this drive was completed.

Post 1985 History:

- 1985 – Bulkley Silver optioned the New Nadina ground to put the entire camp under one management; a max-min EM survey and 6 diamond drill holes were completed.

- 1987 - JV formed between Houston Metals Corp, the successor to Bulkley Silver (later re-organized as Pacific Houston Resources Inc), and New Nadina. In excess of \$7,500,000 was spent on exploration on the property during 1987 and 1988, including 35,000 ft of diamond drilling and 8,100 ft of tunnelling, cross-cutting, and declining; minor metallurgical work done.
- 1988 – A pre- NI43-101 resource estimate of indicated reserves was published. Although total proven, probable and possible reserves for the veins have been published at 1.7 million tons (Houston Metals Corp, Annual Report 1988), this does not take mineralogical and metallurgical variations into consideration. (Note – this figure is not 43-101 compliant).
- 1989 – University of British Columbia became involved under NSERC grant; Numerous studies done including geological mapping, structural studies, 2 M.Sc. theses (mineralogy, ore reserves), 1 Ph.D. thesis (alteration) Non 43-101 compliant "in situ mining resource" determined for central and south areas.
- 1990 – Pacific Houston bankrupt, New Nadina assumed the debts and purchased the claims outright from Pacific Houston. Also in 1990, an agreement was reached with Placer, whereby Placer signed over all remaining rights to the property.
- 1991 - New Nadina addressed site remediation through a study by consultant Tom Higgs, to develop a system of treating zinc rich mine drainage prior to release into the environment.
- 1992 – A tailings pond/wetland passive treatment system was implemented to treat mine drainage.
- 1993 – Present  
Ongoing water sampling by New Nadina to test mine drainage, as required by the Ministry of Environment.
- 1995-1996  
New Nadina Explorations abandoned the old Silver 4 claim and re-staked the property as the current Owen 1 - 5 claims. An Explore BC Grant was obtained to assist in a thorough compilation project of previous data on the property, interpretation of this data and target generation based on the results. The metallurgy of the known ore was also to be addressed and further metallurgical testing to be done if warranted. This proved to be unnecessary. Sampling of water treated by the wetland option indicates that this treatment is working well, however contamination is occurring in the old mill site/waste dump areas. A significant reclamation program was undertaken to rectify this problem. This reclamation program has been filed for assessment. It is not part of the Explore BC Grant program described in this report. A combined program of satellite imagery analysis, Digital Elevation Modelling and regional aeromagnetism was done to identify regional controls for bulk tonnage mineralization. A re-evaluation of property scale geophysics was initiated to provide further control.
- 1996 – Spring Drill program, L. Caron (report #832) - Five NQ diamond drill holes were drilled in May, 1996, for a total of 3,041 feet and Fall Drill program, L.



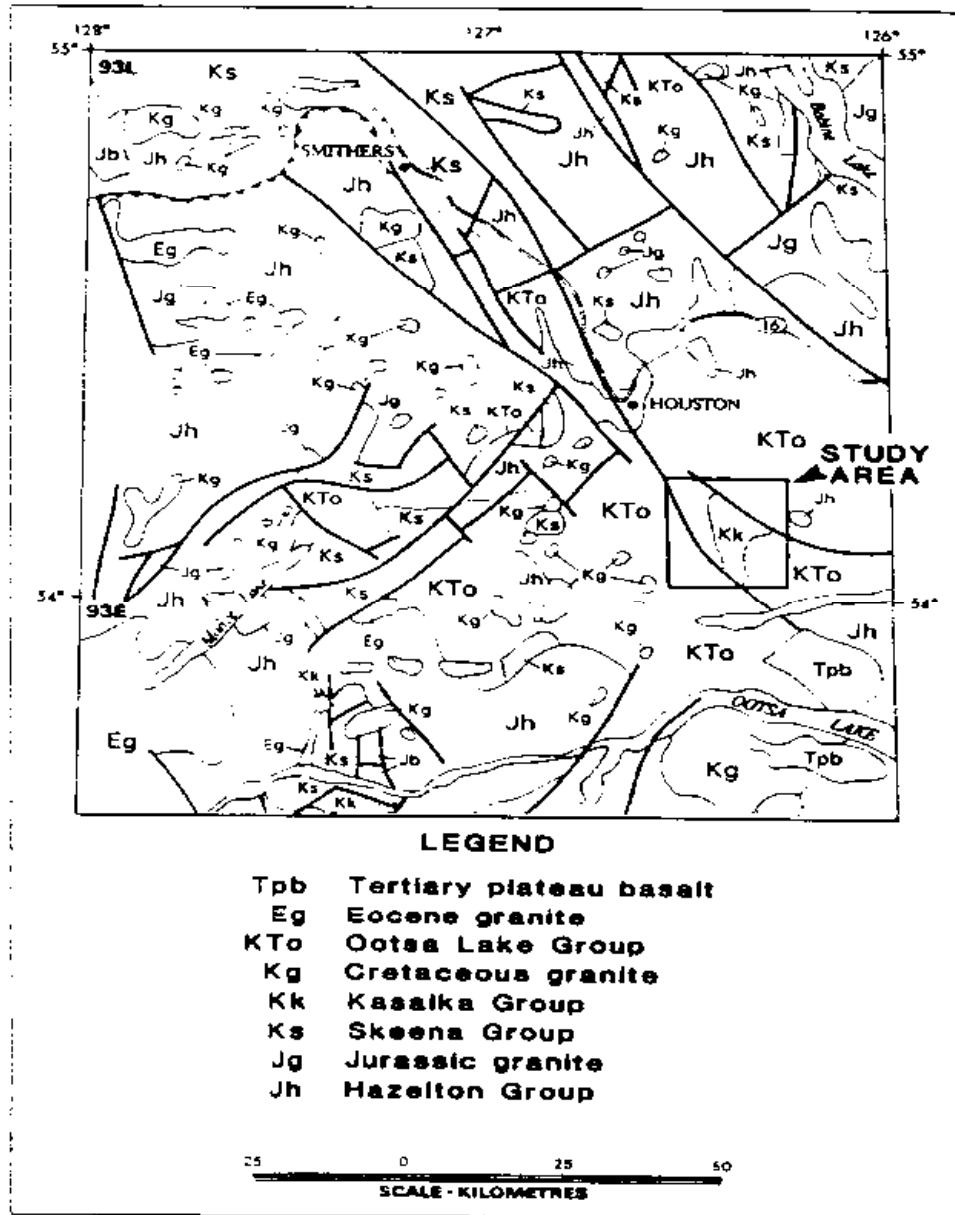
- Caron (report #865) - Five NQ diamond drill holes, a total of 3,027 feet, were drilled from November 16 to 27, 1996.
- 1997 – Drill core storage lists by J. Hutter (report #910)
- 1998 – PIMA short wave spectroscopy (#926), ERA Maptec structural report (#929), compiled by G. Stewart into report #1064
- 1999 – Reclamation, Trenching and Water Sample report #1211. During the period Nov 3 – 10/ 99, a 690 John Deere excavator was used to deepen the existing 75 metre long trench. The rocky knoll was drilled and blasted for a length of 10 metres, 3-4 metres wide and approximately 1.5 metres deep. The rock was removed.
- 2000 – Lab Physical Property Tests on Samples from Silver Queen, Quantec Geoscience, Apr 17, 2000 (report #1011)
- 2005 – GPS of claims by J. Hutter (report #1117), a 3-D, IP survey on 2 selected areas by SJ Geophysics (report #1126) and one hole drilled by Beaupre Drilling (report #1120). Sampling by J. Hutter.
- 2008 – Trench Reclamation conducted by local rancher.
- 2009 – Reclamation of trenches east of mine hill, raise covers installed, Cole Shaft covered, fences repaired around raises, cleaned site.
- 2010 – Re-sampled core for verification purposes, 10 person container camp installed complete with septic and water system, geophysics (EM16), soil sampling and 4106.5 metres of NQ2 diamond drilling in 26 holes.
- 2011 – Technical report by JDS Energy & Mining (G. Kirkham & J. Hutter); Diamond drilling (4490 metres in 13 holes) guided by ZTEM and Quantum 24 geophysical surveys lead to the discovery of the Itsit Porphyry, a porphyry copper-molybdenum-gold deposit.

## **7.0 GEOLOGICAL SETTING**

The following section has sourced a variety of previously published reports and government sources. These reports and sources are listed in Section 17 References.

The Silver Queen (Nadina, Bradina) mine of New Nadina Explorations Limited is near Owen Lake, 35 kilometres southeast of Houston, and 100 kilometres southeast of Smithers, in the Bulkley Valley region of central British Columbia (Figure 4.1).

Figure 7.1 - General geology of west-central British Columbia, showing the regional setting of the study area. MacIntyre (1985).



The geology of the 20 square kilometre area surrounding the deposit has been mapped (Figure 7.1), and results suggest that the stratified rocks hosting this epithermal gold-silver-zinc-lead-copper vein deposit (the Late Cretaceous Tip Top Hill volcanics: Church, 1971) may be correlative with rocks hosting the Equity Silver deposit, and are lithologically similar to the Kasaka Group of late-Early to early-Late Cretaceous age.

The geological mapping is part of a more extensive project dealing with the geology and origin of polymetallic vein deposits in the Owen Lake area.

### **7.1 Regional Geologic Setting**

West-central British Columbia lies within the Stikine Terrane, which includes submarine calcalkaline to alkaline immature volcanic island-arc rocks of the Late Triassic Takla Group sub-aerial to submarine calcalkaline volcanic, volcanoclastic and sedimentary rocks of the Early to Middle Jurassic Hazelton Group, Late Jurassic and Cretaceous successor basin sedimentary rocks of the Bowser Lake, Skeena and Sustut groups, and Cretaceous to Tertiary calcalkaline continental volcanic arc rocks of the Kasalka, Ootsa Lake and Endako groups (MacIntyre and Desjardins, 1988). The younger volcanic rocks occur sporadically throughout the area, mainly in downthrown fault blocks and grabens. Plutonic rocks of Jurassic, Cretaceous and Tertiary age form distinct intrusive belts (Carter, 1981), with which porphyry copper, stockwork molybdenum and mesothermal and epithermal base and precious metal veins are associated.

The Kasalka Group (Armstrong, 1988) is considered to be a late-Early (Armstrong, 1988) or early-Late Cretaceous (MacIntyre, 1985) continental volcanic succession that is predominantly porphyritic andesite and associated volcanoclastic rocks. It is well exposed in the Kasalka Range type section near Tahtsa Lake. In the type area, it includes a basal polymictic conglomerate that is strikingly red in colour and lies in angular unconformity on older rocks. The unit is generally between 5 and 10 metres thick (locally 50 metres in channel-fill deposits), and includes interfingering lenses of sandstone. The conglomerate is overlain by a felsic fragmental unit over 100 metres thick, consisting of grey to cream-coloured, variably welded siliceous pyroclastic rocks (lithic lapilli tuff, crystal and ash-flow tuff, minor breccia) with interbedded porphyritic flows. These fragmental rocks are in turn overlain by a major unit of columnar jointed, massive, greenish grey flows or sills of hornblende-feldspar-porphyritic andesite to dacite, at least 100 metres thick. The andesite flows are conformably overlain by a chaotic assemblage of volcanic debris flows (lahars), at least 200 metres thick, in which most clasts are identical to the underlying flows and sills. Rhyolite flows and tuffs and columnar jointed basalt flows, together more than 100 metres thick, cap the succession (the basalts may be significantly younger: MacIntyre, 1985).

A Mid to Late Cretaceous age is assigned to the Kasalka Group volcanic rocks because they unconformably overlie sedimentary rocks containing latest Early Cretaceous (Albian) fauna (Duffel, 1959). Dacitic lapilli tuffs near the base of the group give an isotopic age of 108 to 107 ± 5 Ma by K-Ar on whole rock, and intrusions dated at 87 ± 4 to 83.8 ± 2.8 Ma cut the stratified units (MacIntyre, 1985).

Volcanic rocks of similar age and lithology are not widely known in west-central British Columbia, but possible correlatives are rocks found in the Mount Cronin area northeast of Smithers (MacIntyre and Desjardins, 1988). The correlative rocks near Mount Cronin were formerly mapped as Brian Boru formation by Tipper and Richards (1976), and correlated to Brian Boru rocks as defined by Sutherland-Brown (1960) in the Rocher Deboule Range northwest of Smithers. In the Mount Cronin area, MacIntyre and Desjardins separate the Kasalka Group into lower and upper divisions. As in the Kasalka Range, the succession begins with a heterolithic, maroon basal conglomerate with interbedded sandstone, siltstone and mudstone. This is followed by thin-bedded tuffs and epiclastics, mafic flows, and pyroclastic rocks that include lapilli tuff and breccia, bedded lahar, and siliceous ash-flow tuff and breccia. The upper division comprises a thick section of poorly bedded volcanic breccia with angular clasts, grading upward to hornblende-feldspar crystal tuff and interbedded to overlying hornblende-feldspar-porphyrific andesite, most of which are flows but some intrusive stocks and sills may also be present.

In spite of very similar lithology, the Tip Top Hill volcanics of the Buck Creek basin in the Parrot Lake and Owen Lake area, and volcanic rocks hosting the Equity Silver deposit, cannot be correlated with the Kasalka Group on the basis of currently available isotopic dates.

## **7.2 Geology of the Buck Creek Basin**

The Buck Creek basin has been characterized as a resurgent caldera, with the important Equity Silver mine located within a window eroded into the central uplifted area (Church, 1985). The Silver Queen mine lies on the caldera rim or perimeter of this basin, which is roughly delineated by a series of rhyolite outliers and semicircular alignment of Upper Cretaceous and Eocene volcanic centres scattered between Francois Lake, Houston and Burns Lake (see Figure 59 of Church, 1985). A prominent lineament 30 kilometres long and trending east-northeasterly from the Silver Queen mine towards the central uplift hosting the Equity mine, appears to be a radial fracture coinciding with the eruptive axis of the Tip Top Hill (Kasalka Group) volcanics and a line of syenomonzonite stocks and feeder dikes to an assemblage of "moat" volcanics that include the Goosly Lake formation (Church, 1985). Block faulting is common in the basin, locally juxtaposing the various ages of volcanic rocks found within it.

In broad outline, a Mesozoic volcanic assemblage is overlain by a Tertiary volcanic succession. The oldest rocks exposed within the basin are at the Equity Silver and Silver Queen mines. The sequence at the Equity mine has been characterized by Church (1984) as Jurassic Hazelton Group rocks of the Telkwa formation overlain with angular unconformity by Lower Cretaceous Skeena Group sedimentary rocks. However, Wetherell *et al.* (1979) and Cyr *et al.* (1984) correlate the sequence hosting the Equity orebodies with the Upper Cretaceous Kasalka Group and Wojdak and Sinclair (1984) list

as possible correlatives the Lower Cretaceous Skeena Group, the Kasalka Group and the Brian Boru formation. The geology of the Equity mine area is obviously as yet imperfectly known.

Large areas of Upper Cretaceous rocks are exposed westwards from the Equity mine to the Owen Lake area, where they host the Silver Queen deposit (Church, 1984). These rocks, which have been dated at  $77.1 \pm 2.7$  to  $75.3 \pm 2.0$  Ma by K-Ar on whole rock (Church, 1973) are described by Church (1984) to consist of a lower, acid volcanic unit overlain by the Tip Top Hill formation andesites to dacites. This subdivision is based on "rhyolitic volcanic rocks below the Tip Top Hill formation in the Owen Lake area in extensive drill holes in the vicinity of the Silver Queen mine" (Church, 1973), which he considers to be "lateral equivalents of quartz porphyry intrusions exposed nearby on Okusyelda Hill" (Figure 7.2). Current mapping indicates that the lower volcanic unit exposed in the drill holes may in part be a strongly altered equivalent of the Tip Top Hill volcanics. The quartz porphyry of Okusyelda Hill could correlate with dacitic quartz porphyry sills, dikes and laccoliths common within the type Kasalka Group section in the Tahtsa Lake area. Late quartz feldspar porphyry dikes are also found at the Equity mine (Cyr *et al.*, 1984; Church, 1985), although these are dated at 50 Ma and thus belong to the younger Ootsa Lake Group.

The Upper Cretaceous rocks are overlain by the Eocene Ootsa Lake Group which includes the Goosly Lake and Buck Creek formations of Church (1984). The Goosly Lake andesitic to trachyandesitic volcanic rocks are dated at  $48.8 \pm 1.8$  Ma by K-Ar on whole rock, and this is supported by dates of  $49.6 \pm 3.0$  to  $50.2 \pm 1.5$  Ma for related syenomonzonite to gabbro stocks with distinctive bladed plagioclase crystals (Church, 1973) at Goosly and Parrot lakes. The Buck Creek andesitic to dacitic volcanic rocks, which directly overlie the Goosly Lake formation, are dated at  $48.1 \pm 1.6$  Ma by K-Ar on whole rock. These ages correlate with whole rock K-Ar ages of  $55.6 \pm 2.5$  Ma for dacite immediately north of Ootsa Lake (Woodsworth, 1982) and  $49.1 \pm 1.7$  Ma on biotite for Ootsa Lake Group rocks in the Whitesail Lake area immediately south of Tahtsa Lake (Diakow and Koyanagi, 1988).

Basalts of the upper part of the Buck Creek formation (Swans Lake member: Church, 1984) may correlate with the Endako Group of Eocene-Oligocene age. These rocks give whole rock K-Ar ages of  $41.7 \pm 1.5$  to  $31.3 \pm 1.2$  Ma on samples from the Whitesail Lake map area (Diakow and Koyanagi, 1988).

The youngest rocks in the Buck Creek basin are cappings of Miocene columnar olivine basalt, called the Poplar Buttes formation by Church (1984) and dated at  $21.4 \pm 1.1$  Ma by K-Ar on whole rock (Church, 1973).

### **7.3 *Geology of the Study Area***

The preliminary geology of the study area immediately surrounding the Silver Queen mine, as determined by fieldwork and petrological studies completed in 1989, is shown in Figure 7.2 (units are defined in Table 7.1). Relationships between the map units are shown diagrammatically in Figure 7.3. The succession is similar to that observed in the Kasalka Range and on Mount Cronin.

The rocks of the study area have been subdivided into five major units plus three dike types; Table 7.1 lists the map units defined to date. A basal reddish purple polymictic conglomerate (Unit 1) is overlain by fragmental rocks ranging from thick crystal tuff (Unit 2) to coarse lapilli tuff and breccia (Unit 3), and this is succeeded upwards by a thick feldspar-porphyrific andesite flow unit (Unit 4), intruded by microdiorite sills and other small intrusions (Unit 5). The stratified rocks form a gently northwest-dipping succession, with the oldest rocks exposed near Riddeck Creek to the south and the youngest exposed in Emil Creek to the north (Figure 7.2). All the units are cut by dikes that can be divided into three groups: amygdaloidal dikes (Unit 6), bladed feldspar porphyry dikes (Unit 7), and diabase dikes (Unit 8).

Figure 7.2 - Detailed property geology of the Silver Queen property. Owen Lake area, west central British Columbia. Units are defined in Table 7.1.

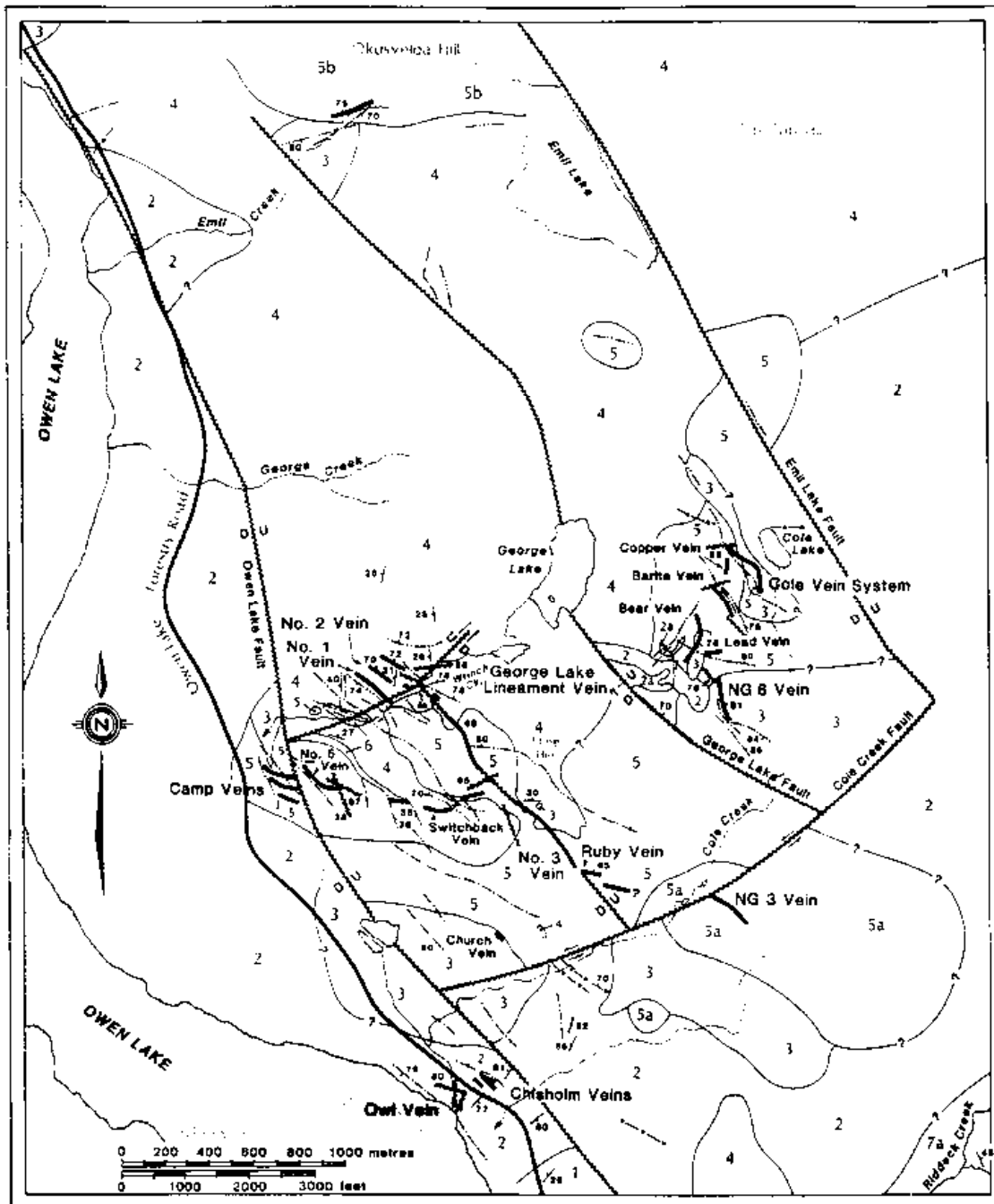
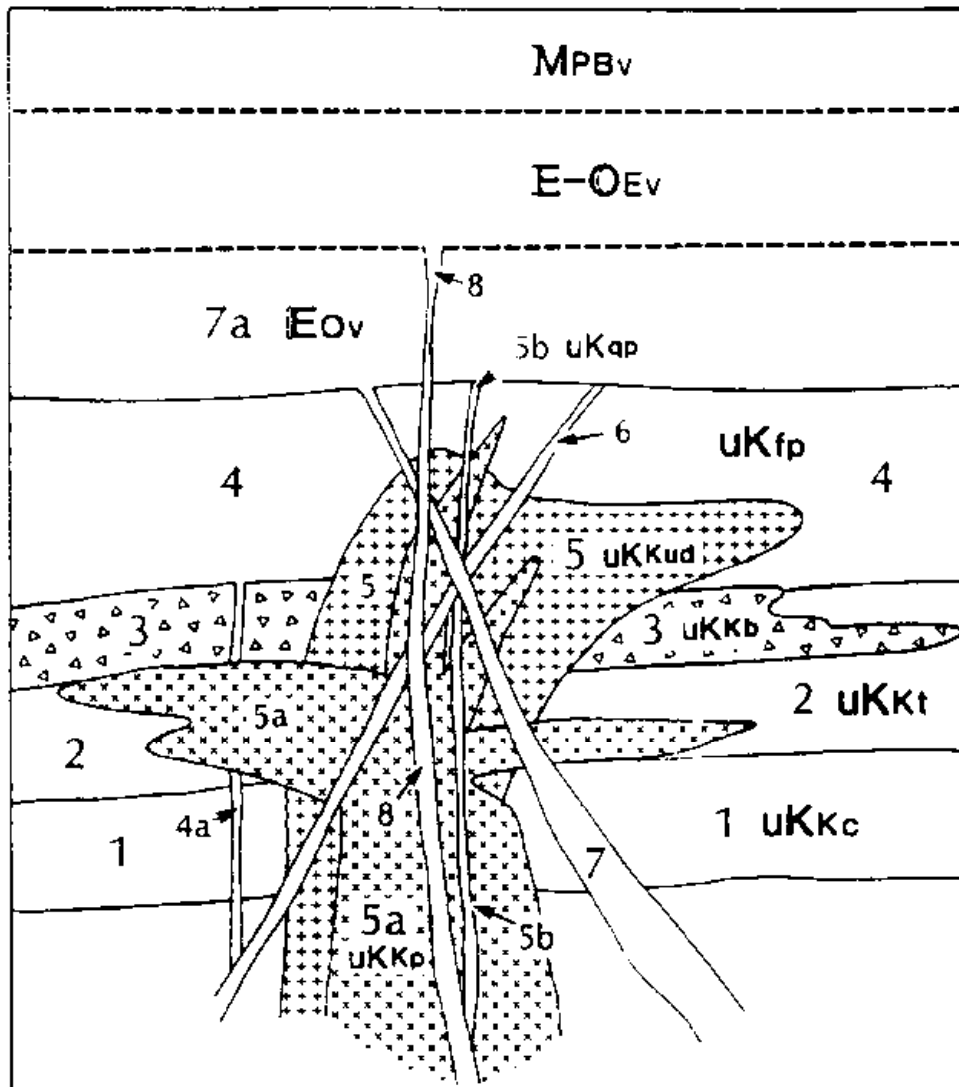


Figure 7.3 - Schematic diagram of stratigraphic and intrusive relationships, Owen Lake area, west-central British Columbia. Units are defined in Table 7.1





**Table 7.1 - Table of Formations, Owen Lake Area**

<i>Period</i>	<i>Epoch</i>	<i>Age (Ma)</i>	<i>Formation</i>	<i>Symbol</i>	<i>Unit</i>	<i>Lithology</i>
TERTIARY	Miocene	21	Poplar Buttes	<b>MPBv</b>		Olivine basalt
	Eocene-Oligocene	40-30	Endako Group	<b>EOEv</b>	<b>8</b>	Basalt, diabase dikes
	Eocene	56-47	Ootsa Lake Group	<b>EOv</b>	<b>7a</b> <b>7</b>	Trachyandesite, basalt Bladed feldspar porphyry dikes
			MINERALIZED VEINS			
					<b>6</b>	Amygdular dikes
CRETACEOUS	(Late)		"Okusyelda" Tip Top Hill Volcanics	<b>uKqp</b> <b>uKKp</b> <b>uKKud</b>	<b>5b</b> <b>5a</b> <b>5</b>	Quartz-eye rhyolite dikes, stock Intrusive porphyry sills, stocks "Mine Hill" microdiorite
		75				
		77		<b>uKKfp</b>	<b>4a</b> <b>4</b>	Feldspar biotite porphyry dikes "Tip Top Hill" feldspar porphyry (voluminous porphyritic andesite)
				<b>uKKb</b>	<b>3</b>	Medium to coarse tuff-breccia
				<b>uKKt</b>	<b>2</b> <b>2a</b>	Crystal tuff, local lapilli tuff Fine ash tuff
				<b>uKKc</b>	<b>1</b>	Polymictic basal conglomerate. Sandstone and shale interbeds

The succession is unconformably overlain by basaltic to possibly trachyandesitic volcanics that crop out in Riddeck Creek and farther south. These volcanics may be correlative with the Goosly Lake formation (Church, 1973). Vein mineralization on the property is mainly quartz-carbonate-barite-specularite veins, 1 to 2 metres thick, that contain disseminated to locally massive pyrite, sphalerite, galena, chalcopyrite, tennantite and argentian tetrahedrite. Locally, in chalcopyrite-rich samples, there is a diverse suite of Cu-Pb-Bi-Ag sulphosalts such as aikinite, matildite (in myrmekitic

intergrowth with galena), pearcite-arsenpolybasite. and possibly schirmerite (berryite, guettardite and meneghinite have also been reported but not yet confirmed). Native gold with unusually low fineness of 510 to 620 (actually electrum) is present in minor amounts. The veins are cut by the amygdaloidal, fine-grained plagioclase-rich dikes (Unit 6), and are cut by the series of dikes with bladed plagioclase crystals (Unit 7). It should be noted that these dikes caused problems during mining activities. Both these dike types are possibly correlative with the Ootsa Lake Group Goosly Lake volcanics of Eocene (approximately 50 Ma) age. The bladed feldspar porphyry dikes cut the amygdaloidal dikes, and both are cut by the diabase dikes that may correlate with Endako Group volcanism of Eocene-Oligocene (approximately 40 to 30 Ma) age.

### **TIP TOP HILL VOLCANICS**

Units 1 to 5, as defined in the map area, fall within the Tip Top Hill formation (Church, 1984), but correspond closely with the units defined in Kasalka Group rocks elsewhere. The units are described in detail below, to facilitate comparison with other, possibly correlative rocks.

#### **BASAL POLYMICTIC CONGLOMERATE (UNIT 1)**

The basal member of the succession is a reddish to purple, heterolithic, poorly sorted pebble conglomerate that contains rounded to subangular small white quartz and grey-brown to less commonly maroon tuff and porphyry clasts. Local interbeds of purplish sandstone with graded bedding are found within the unit, as are rare black shaly partings. The matrix is composed of fine sand, cemented by quartz, sericite and iron oxides. The best exposure is found in a roadcut at the southern tip of Owen Lake, where the unit is about 10 metres thick and dips 25° to the northwest. The base is not exposed and the unit is in presumed fault contact with the younger volcanic rocks of the Ootsa Lake Group (Goosly Lake formation; Unit 7) exposed at higher elevations farther south along the road. In drill holes farther north, near the centre of the property, the upper contact of the conglomerate with overlying porphyry is sharp and appears conformable, but the porphyry may be an intrusion rather than a flow.

#### **CRYSTAL-LITHIC TUFF (UNIT 2)**

In outcrop the next major unit is a sequence of mainly fragmental rocks that are mostly fine crystal tuffs with thin interbeds of laminated tuff, ash tuff, lapilli tuff, and less abundant breccia. The unit may be as much as 100 metres thick. The most widespread rock type is a massive, grey to white, strongly quartz-sericite-pyrite altered, fine crystal tuff that grades imperceptibly into a porphyry of similar appearance and composition; the latter may be partly flow, intrusive sill, or even a welded tuff. Only the presence of broken phenocrysts and rare interbeds of laminated or coarsely fragmental material suggest that the bulk of this unit is tuffaceous. In thin section, the rock is seen to be made up of 1 to 2-millimetre broken, altered plagioclase relics and 0.5 millimetre anhedral quartz grains (that may be partly to entirely secondary) in a fine matrix of secondary sericite, carbonate, pyrite and quartz. Drill-core exposures show that the basal contact of Unit 2

with the underlying conglomerate is commonly occupied by the porphyry rather than the tuff. The best exposures of Unit 2 are in the area of Cole Creek and the Chisholm vein (Figure 7.2), where thin (10 centimetre) interbedded laminated tuff bands occur, many with variable dips to near-vertical, although coarser lapilli tuff lenses, up to 1 metre thick, display gentle northerly dips. In drill core, sections of laminated tuffs with faint but discernible layering on a centimetre scale, may be up to 10 metres thick; angles with the core axis suggest a gentle dip for the banding.

Outcrops on the northeast side of the George Lake fault (Figure 7.2) have rare interbeds of a very fine, uniform "ash tuff" that are up to several metres thick (Unit 2a). Typically they are dark grey to medium grey-green and have a siliceous appearance. Locally they contain angular fragments of either mixed origins (heterolithic clasts) or of larger blocks that are only barely distinguishable from the matrix (monolithic clasts).

### **COARSE FRAGMENTAL UNIT (UNIT 3)**

A distinctive coarse fragmental unit overlies or in some places is interlayered with the upper part of Unit 2. It is composed of blocks and bombs(?) (*cf.* MacIntyre, 1985) of feldspar-porphyrific rock similar in appearance to both the underlying porphyry and the overlying porphyritic andesite. The clasts are mostly angular to subangular and about 2 to 5 centimetres in diameter, but some are much larger (up to 0.5 metre); the matrix makes up a widely variable percentage of the rock, from almost zero to 90 per cent, so that in places the rock has the appearance of an intrusive breccia with little or no rotation of fragments. In other places the fragments are clearly unrelated and "accidental" or unrelated clasts of chert or fine tuff are common, although still volumetrically minor; this has the appearance of a lahar.

In outcrop near the Cole veins (Figure 7.2), this breccia or lahar(?) unit forms discontinuous lenses generally less than 10 metres thick, with a suggestion of gentle northerly dips. The lenses appear to be conformable with the underlying or enclosing tuffs. In drill core, two distinctly different modes of occurrence are noted for this unit: in one, it appears to be conformably overlain by Unit 4 porphyritic andesites (the total thickness of the breccia unit is up to 30 metres); in the other, it appears to have subvertical contacts, implying it is an intrusive breccia. Good examples of the latter distribution are found in the Cole Lake area, the Camp vein system and around the southern end of Number 3 vein. There is thus a rough correlation between the subvertical breccia bodies and mineralized areas, just as there is between the microdiorite and mineralized areas (see below).

In thin section, the clasts of the breccia are seen to be composed of strongly altered feldspar porphyry, fine tuff and quartz or quartzo-feldspathic rocks, enclosed in a fine tuffaceous matrix. Alteration in the mine area is usually carbonate-sericite-quartz-pyrite.

#### **FELDSPAR PORPHYRY (UNIT 4)**

The fragmental rocks appear to be conformably overlain by a thick, massive unit of porphyritic andesite that outcrops over much of Mine Hill and is best developed north of Wrinch Creek (Figure 7.2). This unit is equivalent to the Tip Top Hill volcanics of Church (1970), although in most places on the property the porphyry is coarser and contains sparser phenocrysts than the exposures on Tip Top Hill. In exposures in Wrinch Creek canyon, a distinct flow lamination is developed by trachytic alignment of phenocrysts, best seen on weathered surfaces. This suggests that these porphyries are mostly flows, with gentle northerly to northwesterly dips. However, some of the coarsest material probably forms intrusive sills and stocks [*cf.* the type sections of MacIntyre and Desjardins (1988) and Macintyre (1985)] and in many places the porphyry grades into intrusive microdiorite (Unit 5).

Parts of this unit, particularly in Emil Creek, west of Emil Lake, and on Tip Top Hill itself (Figure 7.2), may actually be crystal tuffs. In these exposures, the feldspar phenocrysts are smaller, much more crowded and in places broken, and rare lithic fragments are visible.

This unit has been dated at  $77.1 \pm 2.7$  Ma by K-Ar on whole rock (Church, 1973) and  $78.3 \pm 2.7$  Ma by K-Ar on whole rock (Leitch et al., 1992). Rhyolite from Tsalit Mountain on the west side of Owen Creek valley, 10 kilometres northwest of the Silver Queen mine, gives a very similar isotopic date of  $77.8 \pm 3.0$  Ma, also by K-Ar on whole rock (Church, 1973). Church correlated this rhyolite with the "Okusyelda" quartz porphyry (Unit 5b of this study, thought to be slightly younger than Unit 5 microdiorite) found in Emil Creek and on Okusyelda Hill (Figure 7.2).

In thin section, the feldspar porphyry is seen to contain abundant 2 to 3-millimetre euhedral crystals of andesine. Oscillatory zoning is present, but with little overall change in composition within a given specimen from  $An_{45}$  to  $An_{35}$ . Mafic minerals include roughly equal amounts (about 5% each) of 1 to 2-millimetre clino-pyroxene and hornblende, though both are strongly altered to carbonate, hydrobiotite and apatite. Euhedral 1 to 2-millimetre biotite phenocrysts are generally less altered. The groundmass is an aphanitic mesh of intergrown feldspar with minor opaque grains: primary magnetite is abundant in the fresh specimens.

The average composition of the feldspar porphyry is between andesite and dacite, as indicated by arc-fusion determinations and chemical analyses (Church, 1973). Apart from lower potash content, the chemistry of the feldspar porphyry is remarkably similar to that of the microdiorite (Unit 5).

#### **BIOTITE FELDSPAR PORPHYRY DIKES (UNIT 4A)**

Rare, thin (1 metre or less) dikes with similar composition and appearance to the flows of Unit 4 probably represent feeders to overlying flows. They are distinguished by

prominent scattered books of black biotite up to 3 millimetres across, as well as abundant 1 to 2-millimetre plagioclase phenocrysts. These dikes have only been recognized near the north end of Cole Lake and on the highway at the north end of Owen Lake (Figure 7.2), but they may be more extensive (they are difficult to recognize because of their similarity to Unit 4). They are dated by K-Ar on whole rock at  $70.3 \pm 2.5$  Ma, indicating a possible 7-8 Ma span of Tip Top volcanic activity (Leitch et al., 1992), (Cheng 1995).

### **MICRODIORITE (UNIT 5)**

Microdiorite forms subvolcanic sills, dikes, and possibly small irregular stocks on the Silver Queen mine property. These intrusions are centrally located in the two main mineralized areas, the No. 3 Vein and Cole vein areas (Figure 7.2). Contacts with the feldspar porphyry are indistinct or gradational over about 1 metre, but dikes are seen cutting older units. The gradational contacts probably caused earlier workers such as Marsden (1985) to propose two divisions of microdiorite, one with quartz and biotite and one without. With further work, it can now be seen that the biotite-bearing phase belongs to the feldspar porphyry (Unit 4).

Typically the microdiorite is a medium to fine-grained, dark greenish grey equigranular to porphyritic rock characterized by small (1 millimetre, but locally glomeratic to 4 millimetres) plagioclase phenocrysts and 0.5-millimetre mafic relics in a phaneritic pink feldspathic groundmass. Primary magnetite is found in the less altered specimens. It is distinguished in outcrop by its relatively fine-grained, even-weathering texture, lacking flow structure compared to the feldspar porphyry. Because of the gradational relationship to the feldspar porphyry, mineralogical distinction is not reliable. In thin section, the plagioclase is the same as in the feldspar porphyry (oscillatory zoned andesine,  $An_{45-30}$ ), and euhedral clinopyroxene phenocrysts, partly altered to carbonate, are the most abundant mafic. Apparent hornblende relics are completely altered to chlorite. No biotite is seen, but rare scattered quartz phenocrysts, displaying late-stage overgrowths of quartz, are observable ranging up to 1 millimetre in size (these are not visible in hand specimen). The groundmass is composed of fine (0.1 millimetre) quartz, plagioclase and potassium feldspar.

Chemically, the microdiorite is the same as the feldspar porphyry (Church, 1970, 1971). This relationship is the same as that observed by MacIntyre (1985) in the Kasalka Range near Tahtsa Lake. The chemistry compares closely to that of an average augite andesite (Daly, 1933, cited in Church, 1970) or quartz-bearing latite andesites from Chile (Seigers *et al.*, 1969, cited in MacIntyre, 1985). Because of the relatively high  $K_2O$  content, both the microdiorite and the feldspar porphyry classify as latite-andesites or dacites by the scheme of Streckeisen (1967; *cf.* MacIntyre, 1985).

The microdiorite has been dated isotopically at  $75.3 \pm 2.0$  Ma by K-Ar on whole rock (Church, 1973) and  $75.3 \pm 2.0$  Ma (Leitch et al., 1992). The age of the microdiorite is

indistinguishable from the age of Unit 4 andesite, in agreement with the gradational contacts between these two rocks (Cheng 1995).

### **PORPHYRY (UNIT 5A)**

Large bodies of a coarsely feldspar-porphyritic rock, up to 1000 metres across, crop out in the vicinity of Cole Creek and are also found in drill core from the south end of the Number 3 vein system, where the porphyry body usually occurs between Units 1 and 3. The rock is composed of roughly 50 per cent variably saussuritized or sericitized plagioclase phenocrysts of up to 5 millimetres in diameter and 10 to 20 per cent smaller altered mafic relics in a fine feldspathic groundmass. The porphyry is distinguished from the feldspar porphyry, Unit 4, by its coarser texture and by the absence of flow textures. It probably represents subvolcanic or high-level intrusive bodies that were emplaced below or postdate the extrusive feldspar porphyry, but are related to the same magmatic event that produced it. Such subvolcanic intrusive bodies, with identical mineralogy to the extrusive porphyritic andesites, have also been noted in the Kasalka Group near Tahtsa Lake (MacIntyre, 1985). No K-Ar whole rock age data is determined for this rock unit because no fresh sample was found (the outcrops of this unit were variably saussuritized or sericitized) (Cheng 1995).

### **QUARTZ FELDSPAR PORPHYRY (UNIT 5B)**

Quartz feldspar porphyry that appears to be part of a subvolcanic intrusive stock crops out along Emil Creek and on Okusyelda Hill to the north of the creek. This unit was formerly called "Okusyelda" dacite (rhyolite) by Church (1970). Although its contact relationships are uncertain, it appears to intrude Unit 4 (Tip Top Hill volcanics). Church (1984) correlates the quartz porphyry intrusions on Okusyelda Hill with acid volcanic rocks in the Tchesinkut Lake and Bulkley Lake areas, and possibly with the Tsalit Mountain rhyolite of 77.8 Ma (see under Unit 4). However, in the Kasalka Range, MacIntyre (1985) found sills and dikes of quartz-porphyritic dacite and rhyolitic quartz-eye porphyry, commonly associated with mineralization, that cut stocks dated at approximately 76 Ma (Carter, 1981). Hence, the quartz porphyry is considered to be younger than the microdiorite/feldspar porphyry in the Owen Lake area. It is cut by thick calcite veins and quartz-sericite-pyrite alteration on the extension of the George Lake vein (Figure 7.2) and so is probably pre-mineral.

Thin sections show the quartz porphyry consists of 10 to 15 per cent 2-millimetre quartz phenocrysts and slightly smaller euhedral andesine plagioclase crystals, plus smaller relic mafic grains, in a microgranular groundmass of roughly equal amounts of quartz, plagioclase and potash feldspar. Quartz, and to a lesser extent plagioclase, also occur as angular fragments or shards.

### **AMYGDALOIDAL DIKES (UNIT 6)**

Units 1 to 5 are cut by a series of variably amygdaloidal dikes that are concentrated in the two main areas of mineralization (No. 3 vein and Cole vein areas). They generally

trend northwesterly parallel to the mineralized veins, but north, east and northeast-trending examples are known. Dips are either subvertical to steep or else gentle (as low as 20°). These dikes are irregular and anastomosing in some parts of the property, for example between the Camp and Switchback vein systems. Strongly altered examples are commonly found adjacent to and parallel to veins; elsewhere veins are cut by these dikes. These dikes have been referred to previously as "pulaskite" at both the Silver Queen and Equity deposits, but this is a highly inappropriate term, implying an alkali-rich mineralogy including soda orthoclase, alkali pyroxene or amphibole and feldspathoids.

In underground exposures the dikes range from dark grey-green where fresh, to pale green or creamy buff where strongly altered; they are purplish in weathered surface outcrops. They are typically fine grained and are characterized by amygdules filled by calcite or, less commonly, iron oxides, particularly at their chilled margins (dikes less than 2 metres wide may lack the amygdules). Flow orientations are generally parallel to the walls, and provide an indication of attitude in surface outcrops, but in the larger dikes (up to 10 metres thick) the flow orientations are random.

In thin section, the most striking feature of these dikes is the abundance of fine trachytic-textured feldspar microlites that average about 0.25 millimetre long. Alteration to carbonate and sericite is extensive, but the texture is generally preserved. This dyke has an Eocene K-Ar whole rock age of  $51 \pm 1.8$  Ma that reflects alteration, thus establishing a maximum but likely age of mineralization (Cheng 1995).

#### **BLADED FELDSPAR PORPHYRY DIKES (UNIT 7)**

Trachytic-textured porphyry dikes, 1 to 5 metres wide and characterized by coarse (up to 1 centimetre long) bladed plagioclase phenocrysts, cut and slightly offset the amygdaloidal dikes. The complete lack of alteration in the bladed feldspar porphyry dikes, and the fact that they distinctly crosscut mineralized veins (e.g., the Bear Vein, Cole Lake area: Figure 7.2), indicates that they postdate mineralization. Their spatial distribution is similar to that of the amygdaloidal dikes, with concentrations in the two main mineralized areas: orientations are also similar, with subvertical dips.

The similarity of these post-mineral bladed feldspar porphyries to the Goosly and Parrot Lake syenomonzonite stocks, and bladed feldspar andesite dikes at Equity dated at  $50.7 \pm 1.8$  Ma by K-Ar on whole rock, suggest that they are probably of the same age. The pre-mineral amygdaloidal dikes, although considerably finer grained also have similar characteristics (trachytic-textured feldspar), but their age is not yet established.

In thin section, the bladed feldspar porphyry dikes are seen to be composed of large (4 to 10 millimetres) plagioclase phenocrysts and rare to locally abundant clinopyroxene crystals up to 5 millimetre across, set in a dark purplish groundmass of feathery, interlocking plagioclase microlites with interstitial quartz, alkali feldspar, opaques and skeletal rutile(?). The plagioclase forms strongly zoned, oscillatory crystals that range

from cores of andesine (An<sub>50</sub>) to rims of oligoclase (An<sub>15</sub>). The pyroxene has a strong green colour and is probably iron-rich.

If the dikes of Unit 7 are feeders for the Goosly Lake volcanics or related to the Goosly and Parrot Lake syenomonzonite as postulated, then they probably have similar trachyandesite compositions (see analyses 3, 4 and 6 of Church, 1971).

### **DIABASE DIKES (UNIT 8)**

Black fine-grained dikes of probable basaltic composition cut all other units on the property. They are much more limited in distribution than the older dikes, with sub-vertical dips and northwest or east-west strikes. However, they still seem to be concentrated in areas of veining, and are sub-parallel to the veins: for example, where a vein strikes east, as in Emil Creek (Figure 7.2), a diabase dike has the same orientation.

It is likely that these dikes were feeders to a younger volcanic group such as the Endako Group of Eocene-Oligocene age (40 to 30 Ma), but the possibility cannot be ruled out that they are related to the Buck Creek volcanic unit (48 Ma). There is little possibility that they are related to the Miocene Poplar Buttes volcanic rocks (21 Ma), as they lack olivine. Thin sections show they are composed of diabasic-textured plagioclase in clinopyroxene, with accessory opaque minerals.

The K-Ar whole rock isotope age of these dikes is  $50.4 \pm 1.8$  Ma, only slightly younger than the dikes of Unit 6 and 7. It is likely that Unit 8 dikes are related to the basaltic Buck Creek Formation ( $48.1 \pm 1.6$  Ma; Church, 1973), (Cheng 1995)

### **STRUCTURE**

The structure of the Silver Queen mine area is dominated by a gently north to northwest-dipping homocline. There is no folding apparent at the scale mapped; the sequence presumably has been tilted 20° to 30° from the horizontal by block faulting. The average bedding plane is 032/25°NW and the most prominent joint set dips steeply, roughly perpendicular to the bedding at 057/7°SE (Leitch et al., 1991).

Two prominent sets of faults displace this homoclinal sequence, cutting it into a series of fault panels: a northwest-trending set and a northeast-trending set. The former predates or is contemporaneous with mineralization, whereas the latter is mainly post-mineral. Most of the mineralized veins and the dikes follow the northwest-trending faults, whereas veins are cut off and displaced by the northeast-trending set. The northwest-trending faults dip 60° to 80° to the northeast, and the northeast-trending set appears to be subvertical.

The sense of motion on the northwest-trending faults is such that each successive panel to the east is upthrown, leading to successively deeper levels of exposure to the east. Thus, in the panel between the George Lake and the Emil Lake faults (Figure 7.2), there



is considerably more of the lower fragmental rocks (Units 2 and 3) exposed than in the next panel to the west, between the Owen Lake and the George Lake faults. There does not seem to be much displacement across the No. 3 vein fault: slickensides seen underground on this structure suggest a reverse sense of movement.

The sense of motion on the northeast-trending faults appears to be south side down, with a small component of sinistral shear. Offsets of No. 1 and 2 veins across fault along Wrinch Creek (Figure 7.2) suggest a few metres of left-lateral displacement, but the displacement of an amygdaloidal dike near the portals of the 2880 level suggests the south side must have dropped as well. The boundaries of this fault zone, and its dip, are not well constrained; in outcrops in Wrinch Creek, it appears as a vaguely defined zone up to 10 metres wide, with segments that have possible shallow to moderate dips to the north. The Cole Creek fault is not well exposed at surface; a splay from it may cause the change in orientation of the No. 3 vein to the Ruby vein (Figure 7.2). A considerable left-lateral offset of perhaps as much as 200 metres is suggested by drill-hole intersections of the NG3 vein, which may be a faulted extension of the No. 3 vein south of the Cole Creek fault. Underground, this fault is exposed at the southernmost extent of drifting as a gouge zone 1 to 2 metres thick (Figure 7.2). Other examples of minor northeast-trending faults are seen underground.

Most of the dikes show similar orientations to the veins (310-325/60-85°NE), with the pre-mineral amygdaloidal dikes commonly found parallel and adjacent to the veins. Along the No. 3 vein, one such major dike causes significant dilution problems due to the incompetent nature of some of these soft, strongly clay-altered dikes near the veins. This gently dipping (323/33°SW) set of Unit 6 (pre-mineralization amygdaloidal dikes) is well-developed in the No. 3 vein, Camp and Cole Lake areas. This gently dipping set of roughly orthogonal to the main, steeply dipping fractures better mineralized and with stronger alteration surrounding them than the gently dipping fractures, is also observed in outcrops in Wrinch Creek. (Cheng 1995)

Further studies (Millar, 1998) suggest the property is situated within a ring structure, possibly developed around Two targets were identified, designated as Targets A and B. Target A was suggested to be related to vein type mineralization and Target B was consistent with porphyry style mineralization. Drill holes directed to Target A failed to intersect significant mineralization, however Target B proved to be a substantial Cu-Mo-Au porphyry deposit, named the "Itsit" deposit by New Nadina management. an intrusion at depth which acts as a source for the mineralizing fluids. It is proposed that the Cole Creek Fault and possibly the Chisholm Fault represent segments of ring fractures to this intrusion.

The intrusion is part of a much larger regional body within which the Silver Queen and the Silver Equity deposits both sit close to the margin.

The principal regional fault system strikes NNW with a series of secondary and tertiary NW and WNW structures associated with mineralization. The NW striking No. 3 Vein, the largest vein on the property, shows all the characteristics of sinistral (left-lateral) motion at the time of mineralization and can be modeled within an overall regional NNW sinistral system. WNW structures, such as the #5 Vein and the E/W inflection on the No. 3 Vein, will be highly dilational and potentially the thickest structures within this regime. However, the amount of dilation is not directly proportional to the grade.

The principal mineralized structures may be faulted to the northwest by a NE striking structure which crosscuts the ring fracture complex. Exploration potential may be terminated depending on the throw on this structure. However, exploration is open to the southeast in the "Three Corners Area" where the projection of the principal structures intersects the ring complex. A number of possible extensions to these structures have been interpreted on the geophysical data. This area is geochemically anomalous and highly fractured possibly reflecting these ring fractures as a pathway for fluids sourced in the intrusive.

## **8.0 DEPOSIT TYPES**

Most work on the Silver Queen has been directed towards vein deposits, although previous workers, as early as 1967, have postulated that the area was also prospective for porphyry deposits. A number of drill holes have returned indications of the proximity of a porphyry deposit, although until the 2011 campaign none had been able to conclusively demonstrate its existence.

The majority of the known Silver Queen veins are hosted in relatively brittle feldspar porphyry or microdiorite of the Upper Cretaceous Kasalka Group. Studies by Hood, (1991) and a comparison with mineralization at Equity Silver, identify that bulk tonnage type mineralization is more likely to occur in the permeable pyroclastic units, than in the more brittle rocks. As detailed above, structural and lithological permeabilities are the main ore controls for transitional porphyry-epithermal mineralization. All of the underground work at Silver Queen and about 95% of the surface drilling has been done in areas underlain by brittle rocks. Mineralization is known to be hosted in the pyroclastic rocks at Silver Queen (the Church, Owl and Chisholm veins and the Twinkle breccia zone), however exploration of these targets has been minimal and essentially no work has been done to test for "Equity type" mineralization.

Mineralogical zonation studies of the Silver Queen veins point to a heat source at depth, to the southeast of the main area of veining, with fluid movement from south to north (Hood, 1991). The age of mineralization is closely confined by pre- and post-mineral dyking at about 51 Ma, slightly younger than that at Equity (58 Ma) (Leitch, et al, 1992).

Alteration studies (Cheng, 1995) have shown an increase in alteration towards the south end of the No. 3 vein system, and towards the presumed heat source. Specifically this is depicted by an increase in the width of quartz-sericite-pyrite envelopes to veins, and in more widespread quartz-sericite-pyrite alteration in pyroclastic rocks.

The drilling program referenced in this report has encountered significant porphyry style mineralization within the area indicated above as being prospective for this type of deposit. The deposit, carrying values in copper, molybdenum and gold, is contained within a silica-pyrite stockwork zone within a feldspar porphyry body which may belong to Unit 5A.

The porphyry deposit is a blind deposit covered by a fault slice of essentially barren rocks which are in turn covered by extensive overburden. Recent advancements in geophysical technology have provided indications of the deposit and therefore the incentive to explore in this rather difficult area of the property.

## **9.0 MINERALIZATION**

Approximately 20 mineralized veins have been discovered. The main quartz vein systems are the Wrinch, Camp, Portal, Chisholm, George Lake and Cole systems. The average width of the veins is 0.9 to 1.2 metres with local increases up to about 4.6 metres. In general the veins occupy northwest striking fractures that cut the volcanics, the microdiorite and the felsite porphyry and the basalt dikes. Widespread alteration on the property is present. The alteration is manifested in the development of numerous limonite and jarosite gossans and appears to be the result of pervasive kaolinization-pyritization.

The main vein within the Wrinch system is the No. 3, which splits into the No. 1, No. 2, No. 3 veins in the north-western portion of the system. A Footwall Vein, sub-parallel to the No. 3, also exists in some locations. The No.3 structure is known to have certain complexities such as abrupt changes in strike or dip which often have associated splays, and possible en echelon structures. Historically areas of the No. 3 vein have had a number of names including Ruby Zone, Ruby Extension and No. 3 Extension, but these are parts of the same structure, if not the same vein. The structure is cut off at its southwest end by the Cole Fault and it is presumed that the NG-3 Vein is the faulted-off extension of this vein, indicating a displacement of approximately 150 metres to the northeast.

The Camp Vein System occurs under deep overburden within a topographic low and has no surface exposure. This area contains some of the highest silver grades found on the property in association with pyrargyrite ("ruby silver") in low-sulphide veins and also contains veins with sections of massive galena-sphalerite. Structure of the area is

complex and poorly understood and attempts to create a coherent and predictive model of the veins have been unsuccessful. Dr. G. Millar, in his 1998 structural study, suggests that the strike of the individual veins within the system may differ from the overall trend of the system. Exploration to the north was discontinued due to an apparent weakening of the system in that direction. It appears likely that the system has been slightly offset by the Wrinch Canyon Fault.

The Portal Veins strike roughly westerly and are generally narrow but high-grade. A small amount of ore was produced from Portal Vein stopes on the 2600 Level during the 1972-73 production period but the structure in this area is difficult to follow due to offsets by faulting. Limited drilling indicates that the vein may be lost due to faulting below the 2600 level, but very little effort has been expended in locating the continuation of the vein beyond the fault.

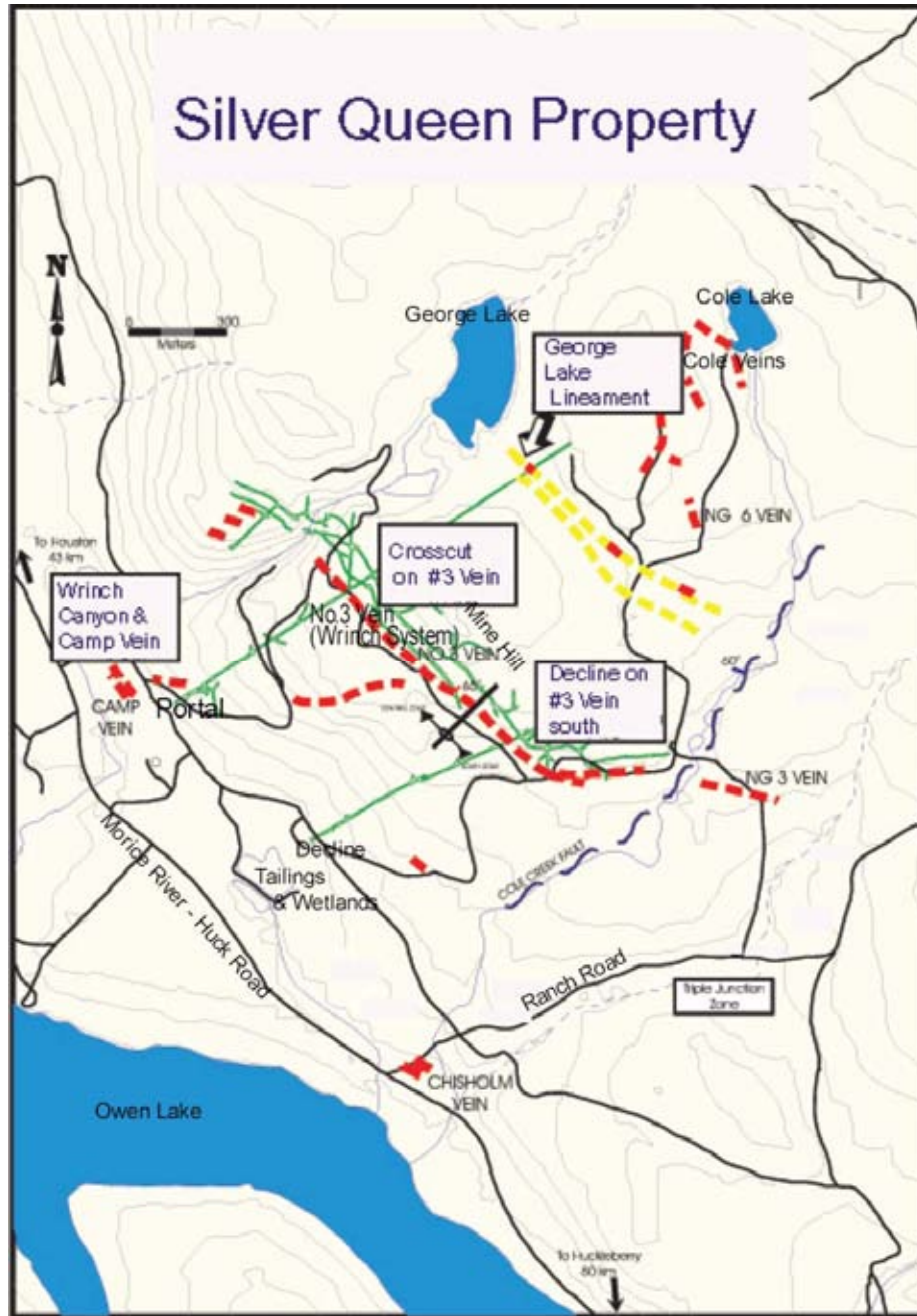
The Chisholm Veins (Minfile 093L 216) consist of three sub-parallel veins striking north-westerly and dipping to the north-east. A small amount of ore was shipped from this area in 1915.

The George Lake Vein occupies a topographic low known as the George Lake Lineament and is therefore obscured by overburden. The lineament is about 1100 metres long and is sub-parallel to the No. 3 Vein and about 700 metres to the northeast of it. The vein has been intersected underground by the Bulkley crosscut and has been the subject of limited underground and surface drilling in that area. The remainder of the lineament has not been systematically explored.

The Cole System includes the Cole Vein, Cole Shear, Bear Vein, Copper Vein, Barite Vein and NGF-6 Vein. All have northerly to north-westerly strikes. No underground work has been done in this area except for the sinking of the Cole Shaft in 1928.

Figure 9.1 shows the approximate locations of the major veins. This map is taken from the New Nadina Explorations website, [www.nadina.com](http://www.nadina.com).

Figure 9.1 - Location map of the Wrinch, Portal, Chisholm and Cole vein systems



Pyrite-sphalerite-chalcopryrite and sphalerite-galena are the two general types of sulphide mineralization occurring in the veins but there are gradations between the two types. Good gold and silver values are generally associated with the pyrite-sphalerite-chalcopryrite veins. Other sulphide minerals include tetrahedrite and tennantite. The gangue is mainly cherty quartz, carbonate minerals such as rhodochrosite and siderite, some barite and rarely pyrobitumen. Local intense alteration of wallrock along veins and

fissures has resulted in a mixture of clay and carbonate minerals, some chlorite, minor epidote and disseminated pyrite.

Concentrations of gallium, germanium and indium are also present. A recent resampling program returned average values of 22g/t gallium, 2.6g/t germanium and 23.35g/t indium.

The age of mineralization is thought to be Early Tertiary and probably Eocene.

The Wrinch vein system is the most important and has been the focus of most of the mining and development work. The overall strike of the veins is about 130 degrees and are traceable over a length of more than 1600 metres. These veins are generally banded with sphalerite as the predominant sulphide with pyrite, chalcopyrite and galena. The gangue minerals consist mainly of cherty quartz, carbonate minerals (rhodochrosite or manganese siderite) and barite. To date, a total of 3650 metres of adits and crosscuts plus 3700 metres of drifting and raises and 27,000 metres of diamond drilling have been completed on the Wrinch vein system.

The Portal vein system contains some of the most spectacular metal grades found on the property. The potential ore volume in this system appears small due to the position of the veins which are generally less than 30 vertical metres from surface. A quartz-chalcopyrite sample from Vein No. 5 assayed 9.6 grams per tonne gold, 829.7 grams per tonne silver, 7.2 per cent copper, 0.17 per cent lead, 0.17 per cent zinc, 0.11 per cent bismuth, and 0.01 per cent barium.

The Chisholm vein system (093L 216) consists of three subparallel veins located about 1200 metres south of Mine Hill. The veins strike about 125 degrees and dip northeast. The minerals are mainly argentiferous sphalerite, galena, pyrite and minor chalcopyrite. The host rocks consist of highly altered dacitic tuffs and tuff breccias. The veins are mainly the result of fissure-filling as indicated by their vuggy structure and the colloform banding of the ore minerals and gangue. The gangue constituents are mainly cherty quartz, rhodochrosite, siderite and some barite.

The Cole system lies to the west of Cole Lake. These veins uniformly carry low-temperature assemblages of sphalerite-pyrite-galena. [Minfile].

The spatial distribution of propylitically altered rock with superimposed carbonitization at the Silver Queen mine is widespread. Propylitic rocks with intense carbonitization occur at Goose Lake, about 10 kilometers southwest of the Silver Queen mine, but no vein mineralization was found nearby. The distribution pattern of the propylitic alteration with superimposed carbonitization at the Silver Queen mine is a wide irregular halo, unlike a restricted envelope that locally parallels the veins. In contrast, the intensity of carbonitization, more precisely the completeness of the replacement of epidote and

chlorite by carbonate, is weak in the northern segment of the No. 3 vein and stronger to the south.

The distribution pattern of propylitic alteration with superimposed carbonitization at the Silver Queen mine is likely controlled by a complicated fracture system rather than by the mineralized structure zone only. It is suggested that the propylitic alteration at Silver Queen mine might be related to the hydrothermal activities that immediately followed the volcanic eruption and intrusion of the early Late Cretaceous Kasalka Group equivalent rocks. Carbonitization superimposed on the early propylitic alteration halo may be a product of a CO<sub>2</sub> degassing process. This might be related to the hydrothermal activity associated with mineralization and controlled by a complicated fracture system. Even though the propylitic alteration with superimposed carbonitization at the Silver Queen mine is not an alteration envelope, the distribution pattern of propylitic alteration with superimposed carbonitization does indicate a broad CO<sub>2</sub> degassing halo that may be used to delineate the hydrothermal alteration anomaly associated with mineralization.

In summary, the following conclusions about hydrothermal alteration at the Silver Queen mine can be deduced based on observations:

Regional propylitic alteration is characterized by replacement of mainly primary mafic minerals initially by epidote and chlorite as well as minor amounts of carbonate and the partial replacement of plagioclase replaced by carbonate and sericite. This type of alteration is interpreted to be the product of hydrothermal activity followed by the initial stage of volcanism, which predates the mineralization.

Carbonitization superimposed on the early propylitic alteration halo may be the product of a CO<sub>2</sub> degassing process, which might be related to the hydrothermal activity associated with mineralization; it is controlled by a complicated fracture system. With increasing intensity of superimposed carbonitization on propylitic alteration at Silver Queen, more complete replacement of epidote and chlorite by abundant carbonates occur.

Hydrothermal activity associated with mineralization forms the outer alteration envelopes marked by complete replacement of plagioclase by sericite and kaolinite, chlorite by siderite and magnetite by pyrite or hematite.

Inner alteration envelopes are interpreted as a maximum stage hydrothermal alteration superimposed on the sericitic and argillic outer alteration envelope; it is marked by the replacement of sericite by quartz and direct precipitation of quartz, sulphide and carbonate. The close association between mineralization and the inner silicification envelope indicates that the ore-forming metals are transported as Si, S and C complexes, and that the precipitation of quartz, sulphide and carbonate through reaction with the wall rock and hydrothermal solution might trigger ore deposition (Cheng 1995).

Drilling in 2011 in the vicinity of the porphyry deposit encountered two dominant types of alteration, being widespread weak to intense argillization outside the deposit grading to moderate to intense silicification within the strongest areas of mineralization. Areas of strong mineralization are almost exclusively confined to the feldspar porphyry body. Disseminated pyrite is nearly ubiquitous, but is strongest in areas of intense argillic alteration in volcanic rocks outside the deposit. The argillic alteration may or may not be accompanied by chlorite.

Relative concentrations of copper, molybdenum and gold vary widely between the drill holes. This is likely indicative of zoning within the deposit, but insufficient drilling has been done to this point to define patterns of zonation. At some point the definition of zonation shells will likely become a useful exploration tool to direct further drilling.

Copper, molybdenum and gold are contained within a moderate to intense silica-pyrite stockwork. Copper mineralization is generally not obvious even where copper grades are significant. Presumably the copper is contained in fine chalcopyrite specks intimately mixed with pyrite. Areas of strong mineralization always carry copper which may be accompanied by either or both of gold and molybdenum, as seen in holes 11S-03, 11S-06 and 11S-13.

Strong mineralization is associated in some areas with development of potassic alteration evidenced by K-spar flooding or pervasive fine brown biotite.

Good molybdenum grades in hole 11S-13 were accompanied by strong silica-fluorite flooding, but similar grades in 11S-06 had much less fluorite.

Cross-cutting relationships have been observed in drill core which indicate a minimum of three episodes of mineralization.

## **10.0 EXPLORATION**

Many exploration programs have been carried out on the property since its initial discovery in 1912, as outlined above in the property history, Section 6. The Bradina JV took the property into production during 1972 – 1973. In the late 1980's an extensive development and exploration project was conducted consisting of surface and underground diamond drilling and lateral development on three levels.

In addition to the various diamond drilling campaigns and extensive underground development that has been completed, as outlined in Section 11.1, several geophysical surveys of varying extent have also been done, with one of the earliest being an airborne magnetometer and EM survey. A 3D IP survey in 2005 in the southern part of the



property indicated a break in the geology in the approximate area of Cole Creek. An area of high chargeability in the north-western part of the grid was tested in 2010 by drill hole 10S-01 which encountered a silica-pyrite stockwork carrying minor amounts of gold within feldspar porphyry. While DDH 10S-01 was not the only drill hole in the area to encounter indications of a porphyry system, its anomalous gold values provided some encouragement in the search for a porphyry deposit.

Due to the extensive overburden in the area, geophysics appeared to be the tool with the best chance of producing positive results. The program consisted of three major elements, being a ZTEM and magnetometer survey followed by advanced analysis of the magnetometer data and finally a Titan 24 deep imaging DCIP and MT survey.

In early May of 2011 Geotech Ltd. Was engaged to undertake a helicopter-borne geophysical survey totalling 708.4 line-km. Sensors included a Z-axis Tipper electromagnetic (ZTEM) system and a caesium magnetometer, supported by a GPS navigation system and a radar altimeter.

Mira Geoscience completed unconstrained modelling of the Geotech airborne magnetic data to generate a 3D magnetic susceptibility model in order to guide further exploration.

In July 2011 Quantec Geoscience Ltd undertook a ground-based Titan 24 DCIP and MT survey covering eight lines spaced about 300m apart and totalling approximately 24.6 line-km. Objectives of the survey were to locate favourable areas both for vein and porphyry style mineralization.

Two targets were identified, designated as Targets A and B. Target A was suggested to be related to vein type mineralization and Target B was consistent with porphyry style mineralization. Drill holes directed to Target A failed to intersect significant mineralization, however Target B proved to be a substantial Cu-Mo-Au porphyry deposit, named the "Itsit" deposit by New Nadina management.

## **11.0 DRILLING**

### **11.1 *Drilling Before 2011***

Records of the early drilling are incomplete, and for some of the early holes location data is missing or assay data has been lost. A total of about 51,000 metres of drilling are documented, being 34,000 metres of surface drilling in 246 holes and 17,000 metres of underground drilling in 223 holes, with the greatest part of the drilling being directed towards the No. 3 Vein and Camp Veins. Much of the remaining drilling was purely exploratory in nature by a number of different companies and was therefore scattered about the property in a rather haphazard fashion.

The No. 3 Vein has been traced for a distance of 1,600 metres by trenching, diamond drilling and underground work, and the NG-3 Vein, being the probable faulted-off extension of the No. 3 Vein, has been traced for a further 400 metres by drilling. There is no surface exposure of the NG-3 Vein. The No. 3 and NG-3 veins generally trend northwest to southeast. Underground workings at the northwest end of the vein show it to be an un-mineralized fault zone in that area. While the structure continues for an unknown distance to the northwest, indications are that the north-western extent of the mineralized area has been reached, although this has not been proven with certainty. Both the No. 3 and the NG-3 Veins remain open to depth, and the NG-3 Vein also remains open to the southeast. Exploration potential at depth is considered to be excellent, but the dip of the No. 3 Vein into a topographic high renders surface drilling difficult and expensive due to the excessive amount of drilling required in order to reach the vein. There is room for a limited amount of drilling on the NG-3 Vein before it too becomes hampered by this situation.

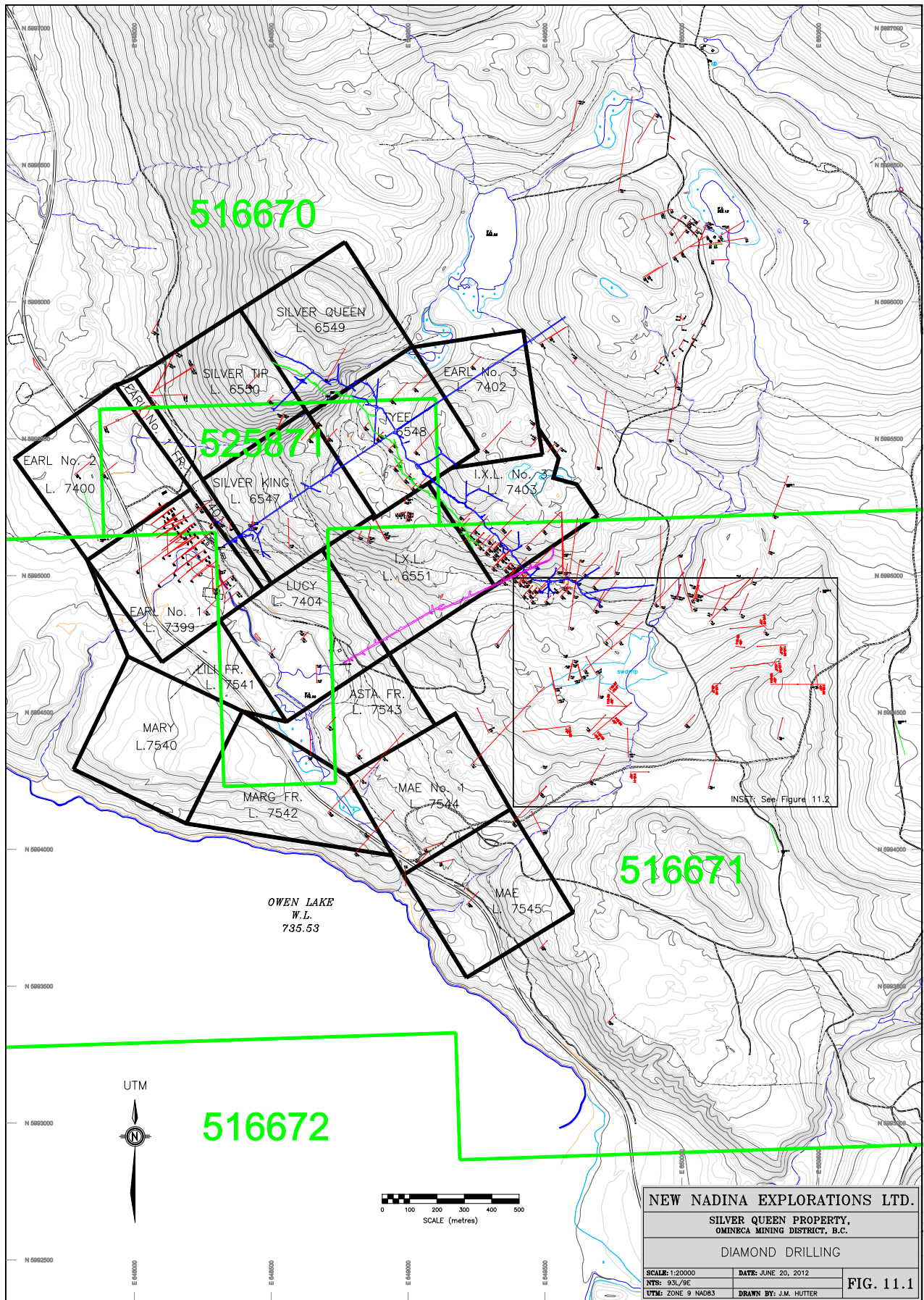
To date, a total of 3,650 metres of adits and crosscuts plus 3,700 metres of drifting and raises and 27,000 metres of diamond drilling have been completed on the Wrinch vein system.

Following discovery by drilling in 1987, the Camp Vein System received 6,241 metres of drilling over the next two years. These veins occur under deep overburden within a topographic low and have no surface exposure. Structure of the area is complex and poorly understood and attempts to create a coherent and predictive model of the veins have been unsuccessful. Dr. G. Millar, in his 1998 structural study, suggests that the strike of the individual veins within the system may differ from the overall trend of the system. This area contains some of the highest silver grades found on the property in association with pyrargyrite ("ruby silver") in low-sulphide veins and also contains veins with sections of massive galena-sphalerite. Exploration to the north was discontinued due to an apparent weakening of the system in that direction. It appears likely that the system has been slightly offset by the Wrinch Canyon Fault.

Historic drilling includes sporadic attempts to locate a porphyry deposit, beginning in 1967 when Kennco Explorations drilled five widely spaced but shallow holes. Northgate Explorations drilled several deep holes in 1970, of which DDH NG4, about 250 metres southwest of Target A, encountered porphyry indications in the form of a silica stockwork. The gold content is unknown, as samples from this hole were not routinely run for gold. Minor amounts of molybdenite and fluorite were noted. The next attempt was the 1971 "Dream Project" by the Bradina JV. DDH 71-1 was collared about 200 metres west of Target A, but was drilled in a westerly direction and failed to encounter porphyry indications.

The hole that came closest to encountering the porphyry deposit was DDH 81-4, which was drilled to test for the NG-3 Vein. This hole was drilled to 84 metres, at which point the rods became stuck and broke off in the hole. Work done in 2011 shows that this hole was just about to pass through the fault defining the upper boundary of the porphyry deposit, and if it had been able to continue it might well have encountered the deposit. Holes 96S-7 and 96S-10 were drilled in or near the present area of interest by New Nadina in 1996 as part of the porphyry search but were not deep enough to pass through the barren rock that overlies the deposit. To the south of NG-4, holes 96S-03 and 96S-04 reported silica-pyrite stockwork, but returned very low gold values. New Nadina drilled two further holes nearby in 2005 and 2010. Hole 05S-01 encountered heavily disseminated pyrite but no stockwork, and hole 10S-01 encountered an area of quartz-pyrite stockwork with anomalous gold values.

Figure 11.1 Plan of Diamond Drilling



## **11.2 2011 Drilling Program**

During September and October 2011, thirteen NQ2 sized core holes were drilled for a total of 4,489.5 metres. Difficulties were experienced in drilling due to the presence of numerous gouge-filled fault zones, including a thick zone of clay gouge just over the deposit with high pressure water trapped below it. These difficulties were eventually overcome by drilling down to and through this thick gouge zone with HQ rods, and then stepping down to NQ rods using the HQ as casing. This method worked well and was used for holes 11S-12 and 11S-13. As 11S-13 was stopped in mineralization, the HQ rods were left in place for future continuation of the hole.

The locations of the drill holes are shown in Figure 11.2. Plans and sections showing composite grades and geology are shown in Figures 11.3 to 11.6. Assays are summarized in Appendix B: 2011 DDH Assay Summaries.

Drill holes were planned based on geophysics and locations were supplied by Mira Geoscience.

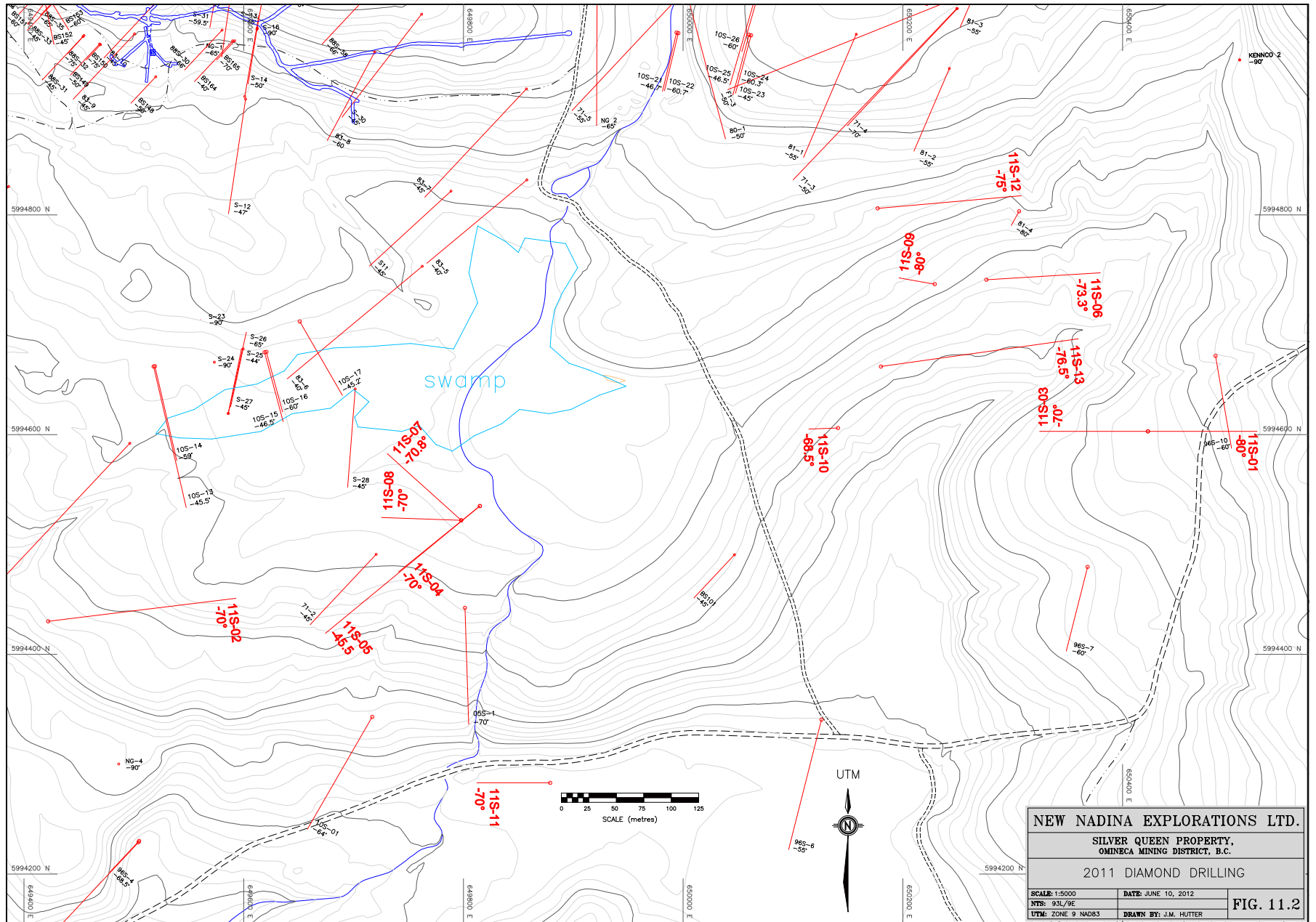
Two targets were identified, designated as Targets A and B. Target A was suggested to be related to vein type mineralization and Target B was consistent with porphyry style mineralization. Drill holes directed to Target A failed to intersect significant mineralization, however Target B proved to be a substantial Cu-Mo-Au porphyry deposit, named the "Itsit" deposit by New Nadina management.

Holes 11S-02, -04, -05, -07 and -08 were drilled to intersect Target A and the remainder were directed to Target B.

The Target A holes encountered occasional narrow intervals carrying weakly anomalous gold values but are not considered to have explained the underlying cause of the "A" anomaly.

Of the Target B holes, 11S-09, -10, -11 and -12 did not encounter the feldspar porphyry or only encountered narrow intersections of it. These four holes intersected only narrow mineralized intervals. Holes 11S-01, -03, -06 and -13 encountered continuous mineralization (except for occasional post-mineral dykes) from the Upper Bounding Fault to the bottom of the hole. All four of these holes bottomed in mineralization. Hole 11S-03 was terminated due to stuck rods, which were lost, and hole 11S-06 was abandoned due to difficult drilling conditions which also were threatening to seize the rods. The casing has been left in hole 11S-13 so that it may be re-entered and deepened.

Figure 11.2 2011 Diamond Drill Hole Locations



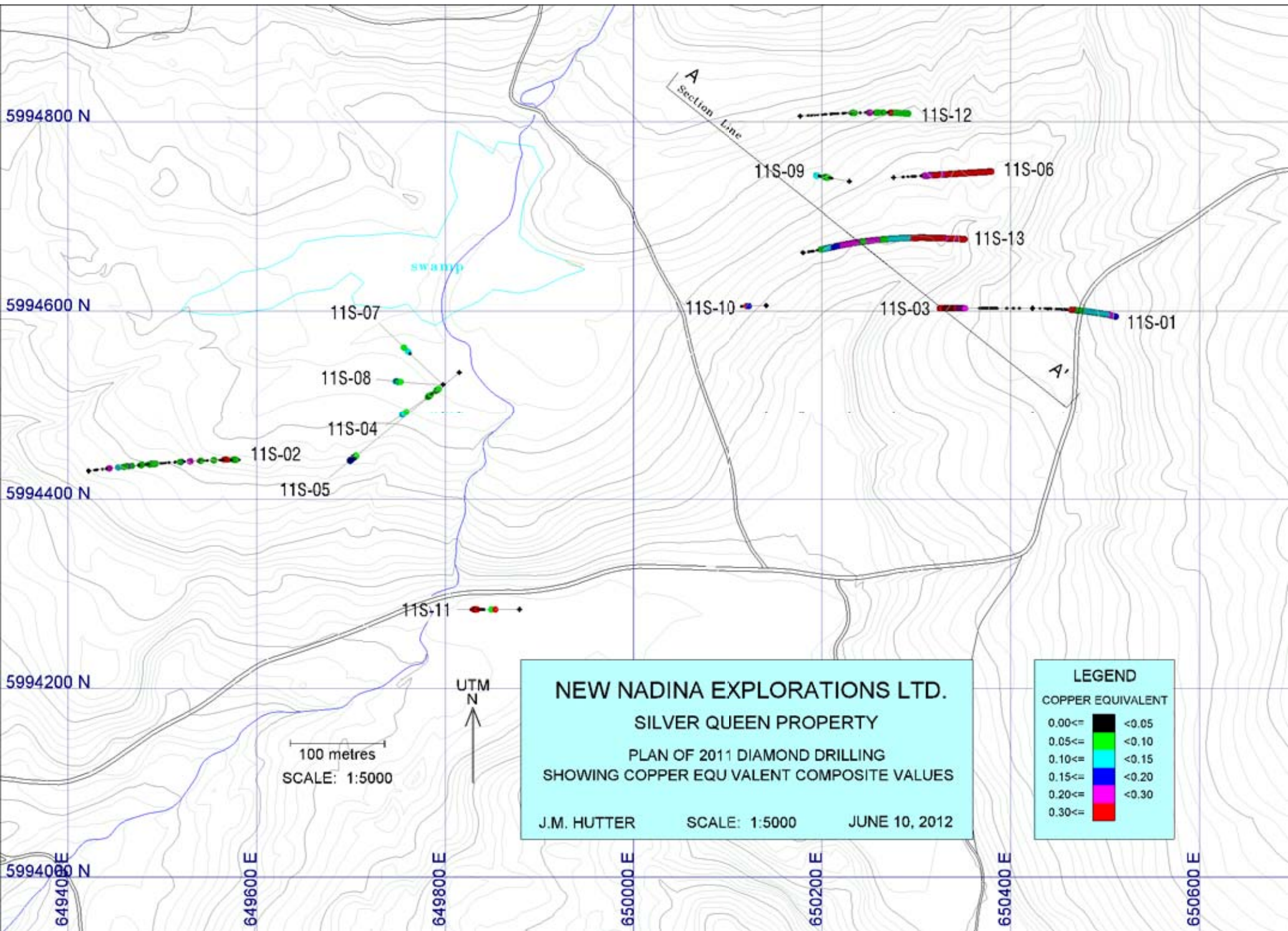


Figure 11.3 Plan of 2011 Diamond Drilling Showing Copper Equivalent Composite Values

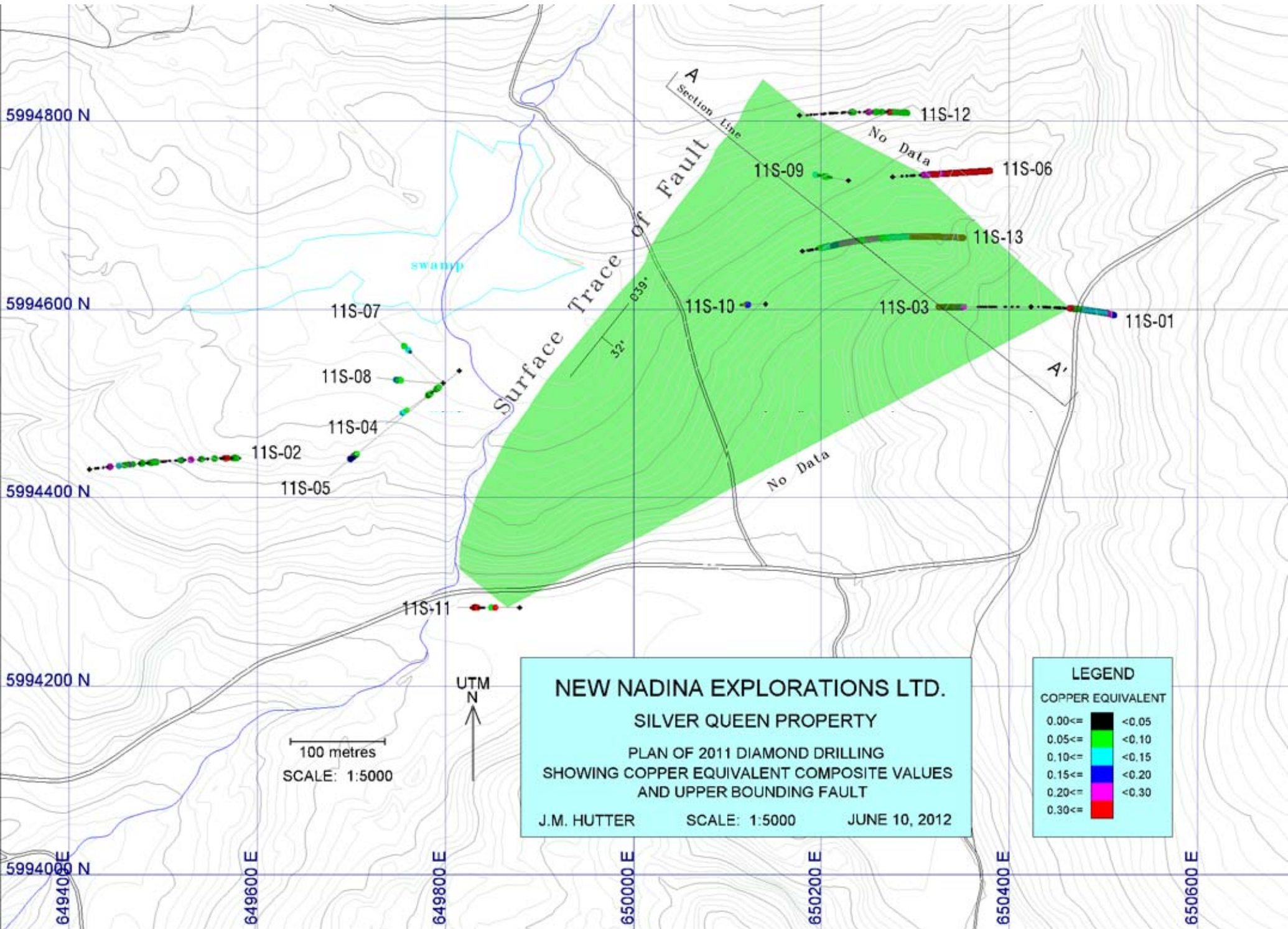


Figure 11.4 Plan of 2011 Diamond Drilling Showing Copper Equivalent Composite Values and Upper Bounding Fault



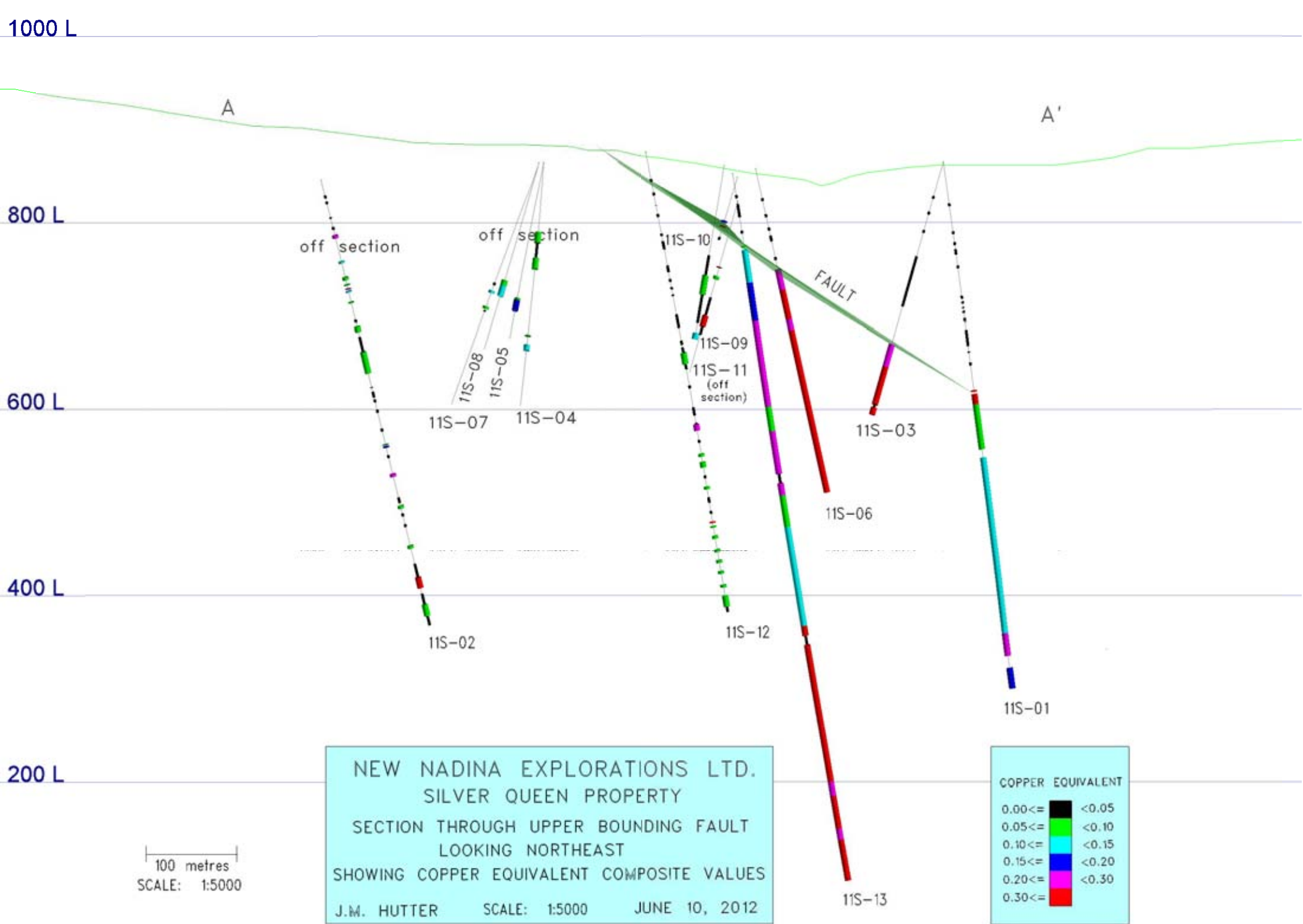


Figure 11.5 Section Through Upper Bounding Fault Looking Northeast  
Showing Copper Equivalent Composite Values

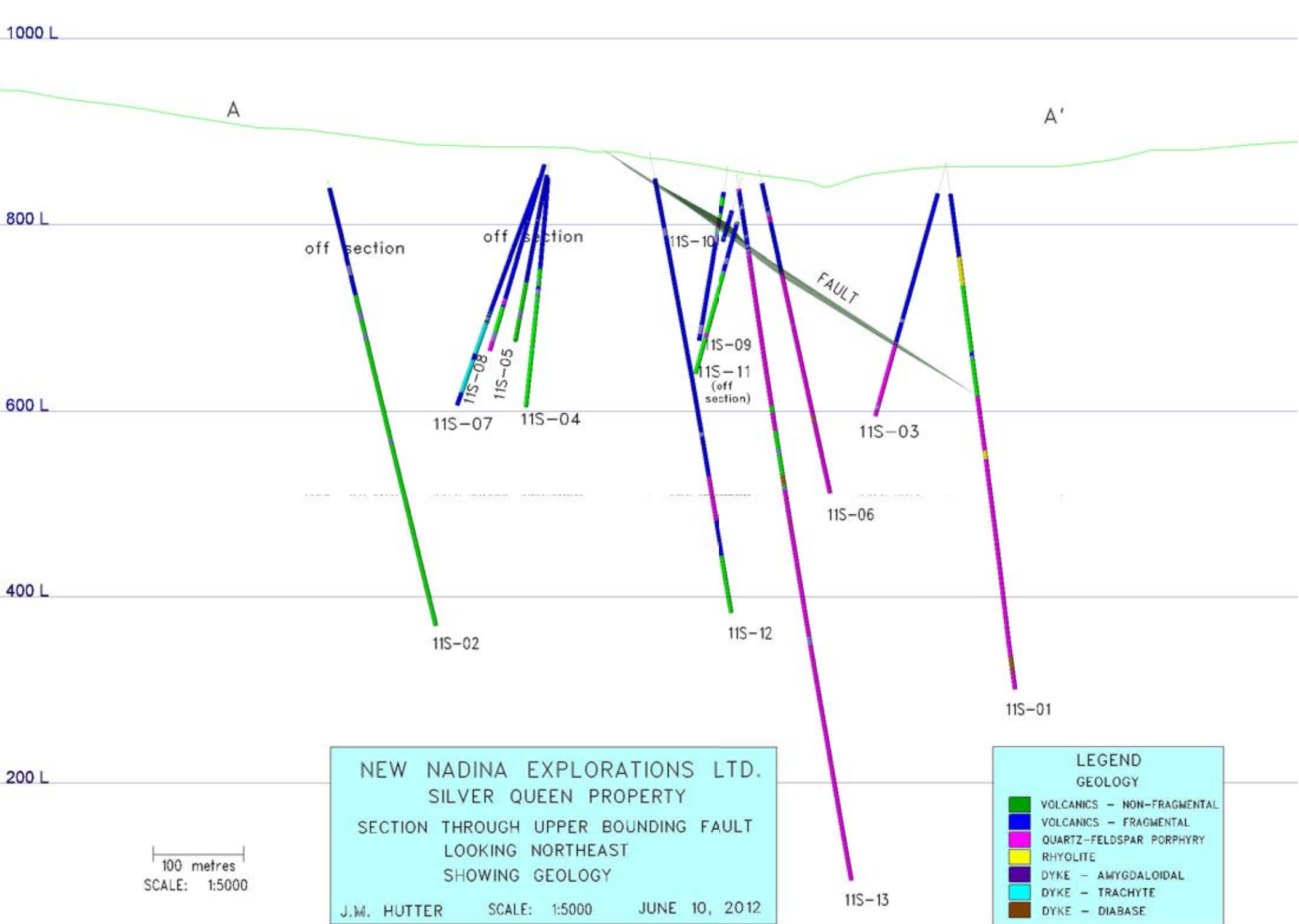


Figure 11.6 Section Through Upper Bounding Fault Looking Northeast Showing Geology

## **12.0 SAMPLING METHOD AND APPROACH**

Samples from all holes were split on-site with a diamond saw by persons contracted by the company and supervised by the author. Half of the split core was sent to the lab for analysis and the other half was retained as a permanent record. The retained part of the core is strapped on pallets and stored on the property in the vicinity of the old mill site.

## **13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY**

Samples of split core were placed in plastic sample bags identified with unique sample numbers and tied with plastic ladder ties. The bags were then placed into sacks and delivered by company employees to the SGS Minerals Services sample preparation facility in Telkwa.

At Telkwa, samples were weighed, dried at 105°C, then crushed to 75% passing 2mm. A 250g split was then pulverized to 85% passing 75µm. Sample pulps prepared at the Telkwa facility were forwarded to the SGS Lab at 8282 Sherbrooke Street, Vancouver for analysis.

Gold was fire assayed using a 30gm sample with an AAS finish. This procedure was coded as FAA303 by SGS.

Multi-element assays were done using a two-acid (2:1 HNO<sub>3</sub>:HCl) digestion followed by analysis by ICP-AES and ICP-MS finish. This was SGS procedure ICM14B.

Copper, molybdenum, lead and zinc over-limits from the multi-element assay were re-assayed by procedure ICP90Q, using a sodium peroxide fusion and ICP-AES analysis.

Silver over-limits were re-assayed either by procedure AAS42E or by FAG313. AAS42E used 2g of material in a four acid digest with AAS finish. FAG 313 was a 30g fire assay with gravimetric finish.

## **14.0 DATA VERIFICATION**

### **14.1 Drill Hole Locations**

Drill collars were surveyed by means of hand-held GPS. As tree cover was generally light to nil in the areas being investigated, GPS reception was good to excellent. The collar locations were surveyed by means of a Garmin Etrex Vista HCx. The use of the averaging function available with this instrument resulted in a stated accuracy of 1 metre or less for 12 of the 13 holes, and 2.3 metres for DDH 12S-02.

## 14.2 Downhole Surveys

Downhole surveys were performed by the drill crew using a compass-based Reflex instrument. This is a single-shot instrument which provides digital readouts on a small screen. The readouts of magnetic azimuth, inclination and magnetic field strength are recorded manually by the operator. A correction of 17.7 degrees was later added to the magnetic azimuth reading to convert to UTM Azimuth. All azimuths in this report use UTM North as 0 degrees. To convert UTM azimuths to azimuths based on True North, subtract 1.85 degrees from the UTM azimuth.

Readings of magnetic field strength that are significantly outside the norm indicate a magnetic disturbance, usually caused by the presence of magnetite, that could cause the azimuth reading to be unreliable. Of 60 readings taken, three were deemed unreliable and were therefore not used for plotting.

## 14.3 Verification of Assays

Except for holes 11S-01 and 11S-02, blanks and standards were inserted into the sample stream such that either a blank or a standard would be inserted at approximately every tenth sample, for a total of 37 blanks and 39 standards. White landscaping marble was used for blanks.

Most of the blanks (Table 14.1) do not indicate significant carry-over or contamination during the sample preparation process. Samples A0776 and A0794 indicate excessive carry-over of Cu and Mo during either the crushing or the pulverizing process. This is likely indicative of a failure of the cleaning process during sample preparation, as neither of these samples was preceded by a sample with higher than normal grade. However, the level of carry-over indicated by these samples, if continued on to following samples, would only introduce positive error in the order of one percent of the reported metal values. Due to the limited quantity and duration of the carry-over, it is not considered to be significant.

**Table 14.1 - Blank Samples**

DDH	Sample No.	Au (g/t)	Cu (ppm)	Mo (ppm)
11S-01	A0098	<0.01	2	0.14
11S-02	A0168	<0.01	<0.5	0.15
11S-02	A0173	<0.01	0.9	0.14
11S-02	A0194	<0.01	2.1	0.08
11S-03	A0214	<0.01	2.9	0.24
11S-03	A0236	<0.01	2.7	0.14
11S-03	A0261	<0.01	11.9	0.25
11S-04	A0506	<0.01	<0.5	0.27
11S-06	A0282	<0.01	2.4	1.18

11S-06	A0301	<0.01	6.8	2.69
11S-06	A0321	<0.01	3.7	2.58
11S-06	A0344	<0.01	4	1.2
11S-06	A0355	<0.01	7.8	1.06
11S-06	A0374	<0.01	3.9	1.95
11S-08	A0536	<0.01	<0.5	0.13
11S-09	A0392	<0.01	0.6	0.9
11S-09	A0408	<0.01	2	0.75
11S-11	A0431	<0.01	4.2	0.77
11S-12	A0434	<0.01	0.6	0.83
11S-12	A0448	<0.01	<0.5	0.17
11S-12	A0457	<0.01	0.6	0.31
11S-12	A0473	<0.01	<0.5	0.24
11S-13	A0557	<0.01	0.9	0.23
11S-13	A0575	<0.01	0.9	2.83
11S-13	A0595	<0.01	2.2	0.98
11S-13	A0614	<0.01	6.6	1.13
11S-13	A0634	<0.01	2.5	0.3
11S-13	A0655	<0.01	1.8	0.69
11S-13	A0679	<0.01	2.7	0.61
11S-13	A0694	<0.01	0.5	0.16
11S-13	A0713	<0.01	8.8	0.12
11S-13	A0734	<0.01	5.2	0.11
11S-13	A0755	<0.01	4.7	1.96
11S-13	A0776	<0.01	17.9	5.65
11S-13	A0794	<0.01	21.1	6.53
11S-13	A0813	<0.01	4.2	1.83
11S-13	A0834	<0.01	4.5	0.93

Standards were provided by Canadian Resource Laboratories Ltd, as indicated in Table 14.2. Three different standards were available for use. As the program progressed, it was determined that CDN-CM-11A was the most appropriate for use with this deposit due to the range of values being closest to those encountered and that the other two standards did not include molybdenum.

**Table 14.2 – Standards**

Standard	Variance	Au (g/t)	Cu (ppm)	Mo (ppm)
CDN-CGS-26	+3 Std Dev	1.805	16850	N/A
	max (+2 Std Dev)	1.75	16500	N/A
	recommended	1.64	15800	N/A
	min (-2 Std Dev)	1.53	15100	N/A
	-3 Std Dev	1.475	14750	N/A
CDN-FCM-6	max (+2 Std Dev)	2.31	13150	N/A
	recommended	2.15	12510	N/A

	min (-2 Std Dev)	1.99	11870	N/A
CDN-CM-11A	+3 Std Dev	1.173	3500	440
	max (+2 Std Dev)	1.120	3440	420
	recommended	1.014	3320	380
	min (-2 Std Dev)	0.908	3200	340
	-3 Std Dev	0.855	3140	320

Standard CDN-CGS-26 was inserted six times producing acceptable results in five assays. Sample A0598 produced a low assay for gold and a high assay for copper, both being just outside the acceptable range of two standard deviations (Table 14.3).

**Table 14.3 – Standard CDN-CGS-26**

DDH	Sample No.	Au (g/t)	Cu (ppm)	Mo (ppm)
11S-01	A0066	1.60	16300	N/A
11S-06	A0276	1.59	16100	N/A
11S-06	A0314	1.56	16100	N/A
11S-06	A0359	1.60	16300	N/A
11S-13	A0563	1.70	16400	N/A
11S-13	A0598	1.50	16600	N/A

Standard CDN-FCM-6 was only inserted twice and both times produced results within the acceptable range (Table 14.4).

**Table 14.4 – Standard CDN-FCM-6**

DDH	Sample No.	Au (g/t)	Cu (ppm)	Mo (ppm)
11S-04	A0520	2.14	12400	N/A
11S-07	A0541	2.04	13100	N/A

Standard CDN-CM-11A was inserted 31 times. Results are presented in Table 14.5, with assays outside two standard deviations from the expected value being highlighted in orange and those beyond three standard deviations highlighted in red.

Results for gold were within the recommended range except for two samples slightly outside the range and one sample result that appears to be a gross error, being far below the recommended value. This value is likely not the result of swapping sample numbers with another sample, as no other samples from this batch, with the exception of one other CDN-CM-11A standard, have results near the expected value of about 1 g/t.

Results for copper indicated that 9 of the 31 samples were outside of the acceptable range of two standard deviations, and 6 of those 9 were outside of three standard

deviations, all on the high side. The average copper assay of all samples fell within the acceptable range.

Results for molybdenum were almost all more than two standard deviations below the recommended value, with four assays exceeding three standard deviations. The average value was also beyond two standard deviations below the recommended value. This indicates that the molybdenum assays in general are probably in the order of 10-15% below their true value.

**Table 14.5 – Standard CDN-CM-11A**

DDH	Sample No.	Au (g/t)	Cu (ppm)	Mo (ppm)
11S-01	A0042	0.98	3410	330
11S-01	A0130	1.13	3340	358
11S-02	A0155	1.04	3520	329
11S-02	A0177	1.04	3270	329
11S-02	A0183	1.02	3470	311
11S-02	A0199	1.17	3330	331
11S-03	A0226	0.98	3340	330
11S-03	A0241	1.02	3580	328
11S-03	A0258	1.05	3610	318
11S-06	A0292	1.02	3450	354
11S-06	A0333	1.03	3430	350
11S-06	A0379	1.01	3360	337
11S-09	A0398	0.99	3480	316
11S-11	A0420	1.07	3390	333
11S-12	A0439	0.95	3310	337
11S-12	A0463	0.97	3320	331
11S-12	A0477	0.95	3400	335
11S-12	A0545	0.88	3490	336
11S-13	A0580	1.08	3310	360
11S-13	A0620	0.04	3200	335
11S-13	A0644	0.99	3280	327
11S-13	A0661	1	3280	331
11S-13	A0682	1	3480	321
11S-13	A0699	0.96	3490	351
11S-13	A0719	0.94	3690	341
11S-13	A0740	1.05	3470	324
11S-13	A0762	1.09	3390	329
11S-13	A0781	1	3360	313
11S-13	A0805	1.12	3540	332
11S-13	A0820	1.04	3400	333
11S-13	A0842	1.02	3560	323
	Average	0.988	3418	333

As a further check on assays, 108 assays were re-run by a second laboratory. Results are presented in Table 14.6. Of these repeat assays, there were 43 assays of both pulps and rejects from core samples (86 assays), six blank samples of pulps and rejects (12 assays), five CDN-CM-11A standards assayed with the pulp stream (5 assays), and five CDN-CM-11A standards assayed with the reject stream (5 assays). While there was often some variation between individual samples, average results between the labs corresponded reasonably well for gold and copper, although as previously noted the SGS molybdenum assays were low.

**Table 14.6 – Comparison of Assays by SGS and Acme Labs**

Sample No.			Au (g/t)			Cu (ppm)			Mo (ppm)		
SGS	Acme Pulps	Acme Rejects	SGS	Acme Pulps	Acme Rejects	SGS	Acme Pulps	Acme Rejects	SGS	Acme Pulps	Acme Rejects
A0020	454501	A0020	0.03	0.014	0.023	15.4	16	17.6	1.29	1.3	1.1
A0040	454502	A0040	0.02	0.026	0.035	1010	995.4	1053.7	4.49	5.2	4.3
A0042		A0042	0.98		1.008	3410		3413.7	330		369.1
A0060	454503	A0060	0.02	0.024	0.027	1270	1250.8	1270.9	11.6	12.5	12.4
A0080	454504	A0080	0.02	0.012	0.02	811	822.2	760.7	6	6.8	6.5
A0098	454505	A0098	<0.01	<0.005	0.009	2	2.2	3.6	0.14	<0.5	<0.5
A0100	454506	A0100	0.02	0.02	0.024	1200	1189.8	1220.9	15.4	16.2	12.9
A0120	454507	A0120	0.02	0.019	0.027	1280	1199.4	1202.8	6.9	5.8	5.9
A0130	454508		1.13	1.16		3340	3416.6		358	354.8	
A0140	454509	A0140	0.27	0.263	0.318	38.6	44.2	47.1	55.6	62.6	54.9
A0160	454510	A0160	0.04	0.043	0.045	56	76.9	72.1	4.43	5.8	5.5
A0177		A0177	1.04		1.014	3270		3468.3	329		372.3
A0180	454511	A0180	0.02	0.033	0.036	173	213	177.2	12.8	15.4	15.9
A0200	454512	A0200	0.02	0.028	0.023	14.9	19	17.9	10.8	11.5	8.1
A0220	454513	A0220	0.04	0.047	0.047	25.4	29.7	24.9	11.3	12.1	11.8
A0240	454514	A0240	0.15	0.165	0.156	2360	2130.6	2141.3	8.09	8.9	9.4
A0260	454515	A0260	0.09	0.097	0.097	1730	1527.8	1577.7	8.26	8.0	7.4
A0261	454516	A0261	<0.01	<0.005	0.012	11.9	11	6.6	0.25	<0.5	<0.5
A0280	454517	A0280	0.03	0.049	0.051	896	842.5	801.7	232	222.9	192.9
A0292		A0292	1.02		1.167	3450		3436.9	354		373.7
A0300	454518	A0300	0.07	0.067	0.085	1870	1696.7	1721.9	484	516.3	497.5
A0320	454519	A0320	0.12	0.043	0.062	675	671.8	709.9	906	905.1	919.9
A0333	454520		1.03	1.082		3430	3400.7		350	356.0	
A0340	454521	A0340	0.08	0.083	0.091	1360	1268.4	1261.6	348	349.4	383.2
A0360	454522	A0360	0.13	0.135	0.147	1860	1701	1850.1	261	253.8	238.6
A0380	454523	A0380	0.18	0.179	0.176	3600	3598.6	3572.1	352	370.8	426
A0400	454524	A0400	0.02	0.02	0.024	31.1	33	34.6	32.9	39.1	40.2
A0419	454525	A0419	0.03	0.034	0.041	57.4	66.1	75.3	8.07	9.8	9
A0439	454526		0.95	1.08		3310	3374.5		337	358.1	
A0440	454527	A0440	<0.01	0.016	0.032	10.9	11.8	12.7	8.03	8.2	8.8
A0460	454528	A0460	0.02	0.02	0.025	82.4	91.8	68.7	22.5	25.9	25
A0473	454529	A0473	<0.01	<0.005	0.011	<0.5	1.5	2.4	0.24	<0.5	1.1
A0481	454530	A0481	0.36	0.431	0.464	241	239.3	291.7	12.4	11.3	13.8
A0501	454531	A0501	0.2	0.19	0.189	113	119.6	110.5	4.06	3.8	4



A0518	454532	A0518	0.06	0.067	0.069	49.8	57.4	48.8	33.3	35.7	36.7
A0536	454533	A0536	<0.01	0.007	0.014	<0.5	1.7	1.9	0.13	<0.5	<0.5
A0539	454534	A0539	0.05	0.061	0.063	245	242.8	218.5	4	4.4	4
A0542	454535	A0542	<0.01	0.016	0.027	388	442.2	440.8	96.9	78.4	98.3
A0545		A0545	0.88		1.048	3490		3384.6	336		364.7
A0560	454536	A0560	0.05	0.056	0.068	70.9	69.6	82.4	86.6	85.1	92.8
A0581	454537	A0581	0.02	0.025	0.031	661	678.1	725.3	131	138.8	142
A0600	454538	A0600	0.07	0.081	0.085	1170	1172.4	1194.3	219	226.6	202.3
A0619	454539	A0619	0.07	0.084	0.074	815	808.6	782.3	100	122.1	109.1
A0620	454540		0.04	1.089		3200	3376.5		335	354.9	
A0640	454541	A0640	0.03	0.035	0.048	118	133.2	173.9	2.6	2.1	3
A0660	454542	A0660	0.09	0.083	0.096	1870	1853.2	1805.4	114	122.8	127.3
A0680	454543	A0680	0.01	0.015	0.027	246	258.4	278.1	2.96	3.0	3
A0700	454544	A0700	0.04	0.045	0.05	969	949	865.7	6.32	5.7	6.8
A0720	454545	A0720	0.04	0.045	0.046	367	391.6	380.9	2.09	2.8	2.7
A0734	454546	A0734	<0.01	<0.005	0.015	5.2	2.8	4.2	0.11	<0.5	<0.5
A0739	454547	A0739	<0.01	0.014	0.022	822	812.8	706.8	2.19	2.4	2.6
A0740		A0740	1.05		0.959	3470		3316.3	324		352.4
A0760	454548	A0760	0.05	0.049	0.054	1920	1747.4	1705.6	420	435.2	424.7
A0780	454549	A0780	0.03	0.026	0.036	2330	2395.1	2255.4	350	359.5	370.8
A0800	454550	A0800	0.03	0.021	0.031	1490	1348.7	1339	393	406.0	465.4
A0813	454551	A0813	<0.01	<0.005	0.017	4.2	0.7	3.7	1.83	<0.5	0.8
A0819	454552	A0819	0.02	0.032	0.049	2080	1874.4	1856.9	511	543.6	536.3
A0840	454553	A0840	0.02	0.023	0.031	1560	1449.3	1352.3	521	585.9	578
A0842	454554		1.02	1.069		3560	3399.8		323	377.0	
Core sample average			0.067	0.068	0.074	883	850	844	135	141	142
Average <b>CDN-CM-11A</b> (w/o A0620)			1.01	1.096	1.039	3393	3394	3403	338	360	366

	Blank
	CDN-CM-11A
	more than 2 standard deviations from recommended value
	more than 3 standard deviations from recommended value

Core duplicate samples (Table 14.7) were produced as 35 sets of quartered cores by splitting half cores into two. The purpose of core duplicates is to establish sample variance through the sampling, preparation and analysis processes, and may also be a measure of the variability of the mineralization over short distances, i.e., from one side of the core to the other. These duplicates are therefore quite coarse and less agreement is expected between two core duplicates than would be acceptable between two reject or two pulp duplicates. However, the weights of two core duplicates should be similar, as differing weights would indicate that the sample was not split down the centre of the core. Agreement between the samples in each set was generally acceptable, both as to weights and assay results.

**Table 14.7 – Duplicate Samples**

DDH	Sample No.	Weight (kg)	Au (g/t)	Cu (ppm)	Mo (ppm)
11S-01	A0102	4.0	0.03	1030	6.71
11S-01	A0103	3.6	0.02	1100	3.96
11S-02	A0145	3.2	0.04	53.7	11.8
11S-02	A0146	3.2	0.04	50.4	12.1
11S-02	A0170	3.4	0.03	387	12.2
11S-02	A0171	3.3	0.03	306	11.6
11S-02	A0186	3.7	0.02	36.7	3.99
11S-02	A0187	3.7	0.03	40.5	12.3
11S-02	A0202	3.8	0.03	83.5	10.4
11S-02	A0203	3.9	0.02	85.9	10
11S-03	A0229	3.74	0.02	64	4.93
11S-03	A0230	3.665	0.02	65.7	5.07
11S-03	A0247	3.465	0.1	1310	11.1
11S-03	A0248	3.38	0.1	1340	9.3
11S-03	A0266	2.565	0.01	21.7	3.26
11S-03	A0267	2.56	0.01	17.3	3.26
11S-05	A0526	2.7	0.07	97.3	9.08
11S-05	A0527	2.9	0.06	89.4	11.9
11S-06	A0287	3.565	0.04	957	186
11S-06	A0288	4.08	0.04	1100	172
11S-06	A0306	1.665	0.04	472	214
11S-06	A0307	1.785	0.04	398	226
11S-06	A0329	3.4	0.11	2180	444
11S-06	A0330	3.5	0.05	2910	417
11S-06	A0347	2.4	0.19	3120	886
11S-06	A0348	2.5	0.17	3090	1170
11S-06	A0362	3.5	0.18	2760	269
11S-06	A0363	3.4	0.17	2740	563
11S-09	A0385	3.4	<0.01	41.3	17.1
11S-09	A0386	3.5	0.01	43.2	32.5

11S-09	A0403	3.475	0.03	112	57.7
11S-09	A0404	3.405	0.02	62.5	62.1
11S-11	A0426	3.7	2.86	1120	69.7
11S-11	A0427	3.6	1.49	1250	83.7
11S-12	A0444	5.05	0.01	25.1	5.38
11S-12	A0445	5.15	<0.01	26.5	8.02
11S-12	A0468	5.73	0.04	22.4	15.9
11S-12	A0469	5.74	0.04	36.4	18.1
11S-12	A0479	3.045	0.01	25.3	20.2
11S-12	A0480	3.105	<0.01	29.3	16.5
11S-13	A0567	6.6	0.01	262	78
11S-13	A0568	6.4	0.01	188	62.5
11S-13	A0589	5.8	0.06	464	44.1
11S-13	A0590	5.9	0.05	597	49
11S-13	A0604	3.4	0.04	1480	149
11S-13	A0605	3.3	0.04	1820	186
11S-13	A0627	3.3	0.03	938	127
11S-13	A0628	3.4	0.04	856	117
11S-13	A0648	2.5	0.05	1380	87.1
11S-13	A0649	2.5	0.04	1290	128
11S-13	A0671	3	0.04	2330	367
11S-13	A0672	3	0.04	2310	401
11S-13	A0685	3.2	0.02	561	3.19
11S-13	A0686	3.3	0.02	458	3.2
11S-13	A0702	3.4	0.03	1120	4.44
11S-13	A0703	3.5	0.02	894	3.9
11S-13	A0722	3.7	0.02	526	3.59
11S-13	A0723	3.7	0.02	481	2.75
11S-13	A0745	3.5	<0.01	40.5	1.63
11S-13	A0746	3.6	<0.01	30.5	7.12
11S-13	A0767	2.8	0.06	2630	648
11S-13	A0768	2.9	0.06	2500	566

11S-13	A0786	3.7	0.04	2080	414
11S-13	A0787	3.8	0.03	2010	446
11S-13	A0810	3.7	0.04	1770	213
11S-13	A0811	3.7	0.02	1850	314
11S-13	A0828	3.4	0.01	1520	263
11S-13	A0829	3.4	0.01	1410	207
11S-13	A0848	3.4	0.03	2060	924
11S-13	A0849	3.5	0.03	1680	747

#### **14.4 Bulk Density**

Bulk density was measured for 220 samples using two different methods (Appendix H).

Samples were taken at intervals where the core was of sufficient quality that it could be cut and handled without losing fragments. The samples to be measured were cut by diamond saw into lengths of approximately 9 cm with the ends as square as possible. The samples were washed and then dried for 30 minutes in an ordinary kitchen oven at low heat and allowed to cool.

The length of the rock cylinders was measured with a vernier caliper for each quadrant of the cylinder and the lengths were averaged. The diameter of the cylinder was measured and the volume was calculated. The cylinder was then weighed while dry and the density was calculated as the Weight divided by the Volume.

The cylinder was then weighed while suspended in water. Weighing was done as quickly as possible in order to minimize any uptake of water by the sample. The density of the sample was then calculated as the Weight in Air divided by (Weight in Air minus Weight in Water).

The average density by each method was 2.79g/cm<sup>3</sup>.

The use of only competent samples for these measurements may have introduced a slight positive bias to the results, as it is expected that badly broken ground would have a lower density due to the presence of voids.

## **15.0 ADJACENT PROPERTIES**

Regionally there are many properties of interest, most of which would fall into either the vein or porphyry Cu +/- Mo categories. The Huckleberry Mine and the past-producing

Equity Silver Mine are notable. However the nearest property would be the Poplar property of Lions Gate Metals which is as yet in the exploration stage.

### **15.1 *Poplar Deposit – Lions Gate Metals***

Located 150 Kilometres south of Smithers, BC, (which is 65 Kilometers north of Houston) is the advanced Poplar Copper-Moly Project. Poplar is a large porphyry-style deposit and is wholly-owned by Lions Gate Metals. The Poplar Deposit has a published historical resource, however it does not comply with National Instrument 43-101 Standards of Disclosure for Mineral Projects.

The geology of the deposit is described on the Lions Gate Metals website ([www.lionsgatemetals.com](http://www.lionsgatemetals.com)) and is included below:

The Poplar porphyry deposit lies within the strongly mineralized Intermontane Belt east of the coast Crystalline belt which is underlain principally by Mesozoic volcanic and sedimentary rocks. These rocks are cut by numerous porphyritic intrusives of Jurassic, Cretaceous and early Tertiary age, which host several significant porphyry copper-gold-molybdenum deposits, such as Huckleberry, Whiting Creek, Berg, Ox Lake and others.

The Poplar copper-molybdenum deposit is centered on a differentiated calc-alkaline stock of Late Cretaceous age intruded into volcanic and sedimentary rocks of the Hazelton Group of Jurassic age. There are several stocks of differing composition outcropping within the claim block, all of the earlier drilling was carried out in the Poplar stock, in the Canyon Creek area, although the other stocks, such as the China Creek stock also have potential for porphyry mineralization. All the significant hydrothermal alteration and sulphide mineralization discovered to date is restricted to the Poplar stock and to the China Creek stock and their thermal aureoles. The Poplar stock is a classically altered porphyry with potassic alteration of the core grading outward through phyllic alteration to argillic and propylitic alteration.

### **15.2 *Huckleberry Project – Imperial Metals Corporation***

The producing Huckleberry mine is an open pit copper/molybdenum mine located in central British Columbia, 123 km southwest of Houston, and 40 kilometres from the above mentioned Poplar Project. The property is owned by Huckleberry Mines Ltd, in which Imperial Metals Corporation has a 50% interest.

The Huckleberry property consists of a mining lease covering approximately 1,911 hectares, and 34 mineral claims encompassing approximately 16,307 hectares. The project's proven and probable reserves, as of Sept 1, 2011, were 39.7 million tonnes ore grading 0.343% copper and 0.009% molybdenum. An expansion of the Main Zone pit, called the Main Zone Optimization (MZO) plan will provide ore until 2021.

Production in 2011 totalled 42.8 million lbs copper and 3,520 oz gold, 218,150 oz silver and 6,929 lbs molybdenum. In 2010, 45.5 million lbs copper, 3195 oz gold, 223,557 oz silver and 84,027 lbs molybdenum were produced (source: Imperial Metals Corporation website, <http://www.imperialmetals.com/s/HuckleberryMine.asp> ).

### **15.3 Equity Silver Mine**

Silver, copper and gold was produced from the Equity Silver deposit. In addition antimony and arsenic were leached from the concentrate and recovered as by-products; however, due to metallurgical difficulties this process was discontinued.

The mineral deposits are located within an erosional window of uplifted Cretaceous age sedimentary, pyroclastic and volcanic rocks near the midpoint of the Buck Creek Basin. Strata within the inlier strike 015 degrees with 45 degree west dips and are in part correlative with the Lower-Upper Skeena(?) Group. Three major stratigraphic units have been recognized. A lower clastic division is composed of basal conglomerate, chert pebble conglomerate and argillite. A middle pyroclastic division consists of a heterogeneous sequence of tuff, breccia and reworked pyroclastic debris. This division hosts the main mineral deposits. An upper sedimentary-volcanic division consists of tuff, sandstone and conglomerate. The inlier is flanked by flat-lying to shallow dipping Eocene andesitic to basaltic flows and flow breccias of the Francois Lake Group (Goosly Lake and Buck Creek formations).

Intruding the inlier is a small granitic intrusive (57.2 Ma) on the west side, and Eocene Goosly Intrusions gabbro-monzonite (48 Ma) on the east side.

The chief sulphides at the Equity Silver mine were pyrite, chalcopyrite, pyrrhotite and tetrahedrite with minor amounts of galena, sphalerite, argentite, minor pyrargyrite and other silver sulphosalts. These are accompanied by advanced argillic alteration clay minerals, chlorite, specularite and locally sericite, pyrophyllite, andalusite, tourmaline and minor amounts of scorzalite, corundum and dumortierite. The three known zones of significant mineralization are referred to as the Main zone, the Southern Tail zone and the more recently discovered Waterline zone. The ore mineralization is generally restricted to tabular fracture zones roughly paralleling stratigraphy and occurs predominantly as veins and disseminations with massive, coarse-grained sulphide replacement bodies present as local patches in the Main zone. Main zone ores are fine-grained and generally occur as disseminations with a lesser abundance of veins. Southern Tail ores are coarse-grained and occur predominantly as veins with only local disseminated sulphides. The Main zone has a thickness of 60 to 120 metres while the Southern Tail zone is approximately 30 metres thick. An advanced argillic alteration suite includes andalusite, corundum, pyrite, quartz, tourmaline and scorzalite. Other zones of mineralization include a zone of copper-molybdenum mineralization in a quartz

stockwork in and adjacent to the quartz monzonite stock and a large zone of tourmaline-pyrite breccia located to the west and northwest of the Main zone.

Alteration assemblages in the Goosly sequence are characterized by minerals rich in alumina, boron and phosphorous, and show a systematic spatial relationship to areas of mineral deposits. Aluminous alteration is characterized by a suite of aluminous minerals including andalusite, corundum, pyrophyllite and scorzalite. Boron-bearing minerals consisting of tourmaline and dumortierite occur within the ore zones in the hanging wall section of the Goosly sequence. Phosphorous-bearing minerals including scorzalite, apatite, augelite and svanbergite occur in the hanging wall zone, immediately above and intimately associated with sulphide minerals in the Main and Waterline zones. Argillic alteration is characterized by weak to pervasive sericite-quartz replacement. It appears to envelope zones of intense fracturing, with or without chalcopyrite/tetrahedrite mineralization.

The copper-silver-gold mineralization is epigenetic in origin. Intrusive activity resulted in the introduction of hydrothermal metal-rich solutions into the pyroclastic division of the Goosly sequence. Sulphides introduced into the permeable tuffs of the Main and Waterline zones formed stringers and disseminations which grade randomly into zones of massive sulphide. In the Southern Tail zone, sulphides formed as veins, fracture-fillings and breccia zones in brittle, less permeable tuff. Emplacement of post-mineral dikes into the sulphide-rich pyroclastic rocks has resulted in remobilization and concentration of sulphides adjacent to the intrusive contacts. Remobilization, concentration and contact metamorphism of sulphides occurs in the Main and Waterline zones at the contact with the post-mineral gabbro-monzonite complex.

The Equity Silver mine was British Columbia's largest producing silver mine.

The Southern Tail deposit has been mined out to the economic limit of an open pit. With its operation winding down, Equity Silver Mines does not expect to continue as an operating mine after current reserves are depleted. Formerly an open pit, Equity is mined from underground at a scaled-down rate of 1180 tonnes-per-day. Proven and probable ore reserves at the end of 1992 were about 286,643 tonnes grading 147.7 grams per tonne silver, 4.2 grams per tonne gold and 0.46 per cent copper, based on a 300 grams per tonne silver-equivalent grade. Equity has also identified a small open-pit resource at the bottom of the Waterline pit which, when combined with underground reserves, should provide mill feed through the first two months of 1994 (Northern Miner - May 10, 1993).

Equity Silver Mines Ltd. ceased milling in January 1994, after thirteen years of open pit and underground production. Production totalled 2,219,480 kilograms of silver, 15,802 kilograms of gold and 84,086 kilograms of copper, from over 33.8 Million tonnes mined

at an average grade of 0.4 per cent copper, 64.9 grams per tonne silver and 0.46 gram per tonne gold.

## **16.0 INTERPRETATION AND CONCLUSIONS**

Drill holes 11S-01, -03, -06 and -13 have encountered a significant new porphyry system with values in copper, molybdenum and gold. Although the boundaries are not yet defined, it appears that the system has the potential to be of considerable size. Mineralization to date is associated with a silica-pyrite stockwork with difficultly visible chalcopyrite with or without molybdenite and/or gold and is confined to a feldspar porphyry body of unknown dimensions which remains mostly untested.

Porphyry deposits typically exhibit concentric zoning patterns with regard to both mineralization and alteration, although insufficient work has been done to date to define these for this deposit. Variability of metal ratios that has been noted between drill holes of the 2011 program is likely the result of metal zonation.

## **17.0 RECOMMENDATIONS**

Subsequent to the 2011 drilling program, a further Titan 24 survey (the results of which are not included in this report) was conducted to extend the existing geophysical grid. Further drilling should be guided by this latest survey as well as previous survey work and the results of the 2011 drilling program. An initial 10,000 metre drilling program is recommended in order to begin defining the deposit. At an all-in cost of \$200 per metre this program will cost approximately 2 million dollars.



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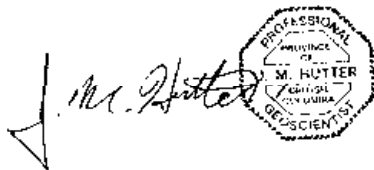
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## 19.0 CERTIFICATE OF AUTHOR

I, James M. Hutter, P. Geo., do hereby certify that:

- 1) I am a consulting geologist with an office at 4407 Alfred Avenue, Smithers, BC, Canada;
- 2) This certificate applies to the technical report entitled "Diamond Drilling Report on the Silver Queen Property" Dated July 7, 2012, prepared for New Nadina Explorations Ltd, Greenwood, B.C.;
- 3) I am a graduate of the University of British Columbia, in 1976, with a BSc in Geology.
- 4) I am a member in good standing of the Association of Professional Engineers and Geoscientists of BC;
- 5) I have practiced my profession continuously since 1976 in various capacities;
- 6) I have read National Instrument 43-101 and Form 43-101F1 and I am a Qualified Person for the purpose of NI 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 7) I, as the qualified person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;
- 8) I have attended the property at various times from September 1 to October 27, 2011;
- 9) I have been involved with the mineral property in question intermittently since 1972, and in the capacity of geologist at various times since 1978;
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I am not aware of any material fact or material change with respect to the subject matter of the technical report that is not reflected in the technical report, and that this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
- 12) I consent to the filing of the technical report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the technical report;

James M. Hutter, P. Geo



Dated this 7<sup>th</sup> day of July, 2012

## 20.0 APPENDICES

## APPENDIX A

### Statement of Costs

Statement of Costs							
Category	Payee	Description	Units	Quantity	Unit price	Subtotal	Total
Assays	SGS Mineral Services	assays	each	913		38,703.44	
Assays	Acme Labs	assays March 2012	each	54		4,319.15	
							43,022.59
Drilling	Lone Peak Drilling	Diamond drilling: metres plus costs	metres	4,489.5	116.98	525,191.42	
Drilling	Treeline Wood Products	2500 NQ2 & HQ Core boxes 4 foot	each	2,500	8.00	20,000.00	
Drilling	Owen Nisyok	Core Tech	days	52	150.00	7,800.00	
Drilling	Blue Moon Explorations	core sawing	days	42	250.00	10,500.00	
Drilling	Pothier Enterprises	Core saw blades	each	1	620.00	620.00	
Drilling	M. Ralph	geological services/ core logging	days	76	350.00	26,600.00	
Drilling	M. Ralph	travel expense	each	1	1,932.22	1,932.22	
Drilling	Foxy Creek Services	Bobcat use - 75% drilling-move core	each	1	7,215.65	7,215.65	
Drilling	J. Hutter	geological services	days	22	500.00	11,000.00	
Drilling	J. Hutter	vehicle and travel expense	each	1	1,618.22	1,618.22	
Drilling	New Nadina Expl.	4x4 truck & trailer	days	99	50.00	4,950.00	
Drilling	New Nadina Expl.	quad rental	days	99	30.00	2,970.00	
Drilling	E. Clements	project management	days	77	400.00	30,800.00	
Drilling	Les Szabo	general labour/driller support	days	75	200.00	15,000.00	
Drilling	R. Malkow	first aid and camp support	days	54	250.00	13,500.00	
Drilling	crew and drillers	camp allowance: person-days	days	468	75.00	35,100.00	
Drilling	New Nadina Expl.	generator rental - 100kw	month	4.3	1,500.00	6,400.00	
Drilling	Northwest Fuels	diesel fuel	each	1	7,646.01	7,646.01	
Drilling - Reclamation	Foxy Creek Services	Bobcat use - 25% drilling-reclamation	each	1	2,405.22	2,405.22	
Drilling - Reclamation	PV Bobcat	reclamation drill sites	each	1	1,100.00	1,100.00	
Drilling - Reclamation	Smithers Feed Store	reclamation - seed	each	1	1,933.24	1,933.24	
Drilling - Reclamation	Alpine Plant World	topsoil	each	1	292.55	292.55	
Drilling - Reclamation	E. Clements	reclamation/seeding	days	10	400.00	4,000.00	
Drilling - Reclamation	Les Szabo	labour - reclamation/seeding	days	10	200.00	2,000.00	
Drilling - Reclamation	New Nadina Expl.	4x4 truck & trailer	days	10	50.00	500.00	
Drilling - Reclamation	New Nadina Expl.	quad rental	days	10	30.00	300.00	
							741,374.52
Geophysics / Linecutting	Geotech	ZTEM airborne survey 2011	each	1	161,764.99	161,764.99	
Geophysics / Linecutting	Hendex Exploration	linecutters	each	1	21,515.12	21,515.12	
Geophysics / Linecutting	Quantec	Titan 24 DCIP & MT survey 2011 only	each	1	207,789.02	207,789.02	
Geophysics / Linecutting	Mira Geoscience	geophysics interpretation	each	1	42,090.00	42,090.00	
Geophysics / Linecutting	New Nadina Expl.	quad rental	days	41	30.00	1,230.00	
Geophysics / Linecutting	New Nadina Expl.	4x4 truck & trailer	days	41	50.00	2,050.00	
Geophysics / Linecutting	crew, geophysics	camp allowance: person-days	days	324	75.00	24,300.00	
Geophysics / Linecutting	R. Malkow	first aid and camp support	days	16	250.00	4,000.00	
Geophysics / Linecutting	E. Clements	project management	days	41	400.00	16,400.00	
							481,139.13
Report	J. Hutter	Report preparation		1	5,000.00	5,000.00	
							5,000.00
						<b>Total:</b>	<b>1,270,536.24</b>

## APPENDIX B

### 2011 Drill Program Assay Summary

**2011 DDH Assay Summaries:**

LEGEND		
Au (g/t)	Cu (%)	Mo (%)
0 to 0.05	0 to 0.05	0 to 0.005
>0.05 to 0.1	>0.05 to 0.1	>0.005 to 0.01
>0.1 to 0.15	>0.1 to 0.15	>0.01 to 0.02
>0.15 to 0.2	>0.15 to 0.2	>0.02 to 0.03
>0.2 to 0.3	>0.2 to 0.3	>0.03 to 0.05
>0.3	>0.3	>0.05

Cu Equivalent based on:

Au: \$55.00 USD/g

Cu: \$7.80 USD/kg

Mo: \$30.00 USD/kg

**Target A:**

From m	To m	Length m	Au g/t	Cu %	Mo %	Cu Equiv %
<b>11S-02</b>						
194.5	218.5	24	0.080	0.008	0.0007	0.067
449.5	461.5	12	0.434	0.016	0.0006	0.324
480	492.9	12.9	0.061	0.019	0.0015	0.068
<b>11S-04</b>						
80	92	12	0.094	0.007	0.0004	0.075
110	122	12	0.055	0.011	0.0011	0.054
209	215	6	0.104	0.029	0.0024	0.112
<b>11S-05</b>						
203	206	3	0.06	0.026	0.0004	0.069
206	218	12	0.13	0.098	0.0005	0.194
<b>11S-07</b> no significant values						
<b>11S-08</b>						
134	140	6	0.07	0.006	0.0005	0.058
140	152	12	0.20	0.004	0.0008	0.148



Target B:

From	To	Length	Au	Cu	Mo	Cu Equiv
m	m	m	g/t	%	%	%
<b>11S-01</b>						
252.3	263	10.7	0.023	0.274	0.0050	0.309
263	312.2	49.2	0.019	0.066	0.0015	0.085
321.17	512	190.83	0.029	0.121	0.0020	0.149
512	536.53	24.53	0.051	0.219	0.0026	0.265
549.65	572	22.35	0.025	0.116	0.0046	0.152
<b>11S-03</b>						
Rods stuck - lost hole at 288m.						
<b>208.4</b>	<b>288</b>	<b>79.6</b>	<b>0.123</b>	<b>0.230</b>	<b>0.0010</b>	<b>0.321</b>
including						
208.4	219	10.6	0.114	0.210	0.0010	0.294
219	234	15	0.076	0.162	0.0019	0.223
234	252	18	0.128	0.212	0.0005	0.304
252	264	12	0.198	0.321	0.0010	0.464
264	276.55	12.55	0.114	0.292	0.0009	0.376
276.55	280.3	3.75	0.008	0.002	0.0003	0.009
280.3	288	7.7	0.174	0.306	0.0011	0.432
<b>11S-06</b>						
Hole stopped at 361.7 due to squeezing clay.						
<b>112.79</b>	<b>361.7</b>	<b>248.91</b>	<b>0.12</b>	<b>0.197</b>	<b>0.041</b>	<b>0.435</b>
including:						
112.79	135	22.21	0.06	0.123	0.026	0.263
135	147	12	0.08	0.202	0.051	0.454
147	168	21	0.10	0.204	0.041	0.435
168	180	12	0.06	0.106	0.024	0.240
180	195	15	0.06	0.160	0.033	0.332
195	228	33	0.06	0.134	0.056	0.394
228	243	15	0.32	0.222	0.041	0.606
243	255	12	0.10	0.193	0.024	0.354
255	267	12	0.14	0.195	0.031	0.415
267	279.7	12.7	0.11	0.164	0.024	0.333
279.7	291	11.3	0.16	0.247	0.082	0.678
291	312	21	0.13	0.261	0.028	0.461
312	336	24	0.14	0.254	0.041	0.510
336	354	18	0.14	0.260	0.060	0.590
354	361.7	7.7	0.14	0.300	0.040	0.552
<b>11S-09</b>						
<b>98.1</b>	<b>172</b>	<b>73.9</b>	<b>0.028</b>	<b>0.010</b>	<b>0.007</b>	<b>0.054</b>
including:						
120	141	21	0.040	0.013	0.011	0.085

<b>From</b>	<b>To</b>	<b>Length</b>	<b>Au</b>	<b>Cu</b>	<b>Mo</b>	<b>Cu Equiv</b>
m	m	m	g/t	%	%	%
<b>11S-10</b>	abandoned at 72m due to excessive water flow. No significant values					
<b>11S-11</b>						
<b>110</b>	<b>152</b>	<b>42</b>	<b>0.20</b>	<b>0.022</b>	<b>0.002</b>	<b>0.170</b>
including:						
131	143	12	0.60	0.053	0.003	0.489
<b>11S-12</b>						
300.65	307.45	6.8	0.335	0.011	0.002	0.254
407.65	408.8	1.15	0.14	0.163	0.014	0.315
<b>11S-13</b>						
<b>84.35</b>	<b>330.55</b>	<b>246.2</b>	<b>0.054</b>	<b>0.099</b>	<b>0.016</b>	<b>0.198</b>
including:						
84.35	120	35.65	0.081	0.028	0.010	0.123
120	162	42	0.031	0.076	0.016	0.160
162	216	54	0.046	0.125	0.025	0.254
216	256.1	40.1	0.067	0.142	0.015	0.245
256.1	283.35	27.25	0.051	0.043	0.0013	0.084
283.35	330.55	47.2	0.055	0.137	0.019	0.249
<b>340.9</b>	<b>508.8</b>	<b>167.9</b>	<b>0.038</b>	<b>0.098</b>	<b>0.005</b>	<b>0.143</b>
including:						
340.9	354	13.1	0.029	0.124	0.036	0.282
354	388.55	34.55	0.040	0.046	0.0008	0.077
388.55	498	109.45	0.040	0.100	0.0004	0.130
498	508.8	10.8	0.026	0.207	0.025	0.321
<b>519</b>	<b>777</b>	<b>258</b>	<b>0.035</b>	<b>0.196</b>	<b>0.043</b>	<b>0.384</b>
including:						
519	564	45	0.053	0.189	0.044	0.395
564	585	21	0.050	0.255	0.051	0.485
585	645	60	0.041	0.233	0.039	0.412
645	669	24	0.025	0.164	0.042	0.341
669	684	15	0.022	0.152	0.029	0.280
684	696	12	0.025	0.200	0.033	0.343
696	720	24	0.020	0.169	0.059	0.409
720	732	12	0.013	0.135	0.027	0.250
732	756	24	0.027	0.215	0.045	0.406
756	777	21	0.026	0.159	0.045	0.351

## APPENDIX C

### Certificates of Analysis



## Certificate of Analysis

Work Order: TK110126

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Sep 16, 2011

P.O. No. : 1S-0198  
Project No. : -  
No. Of Samples : 1  
Date Submitted : Sep 08, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

### Comments:

Boron for information values only.

Certified By : \_\_\_\_\_  
Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Final : TK110126 Order: 1S-0198

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Element	WtKg	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K
Method	WGH79	FAA303	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.001	0.01	0.01	10	5	0.01	1	0.5	0.01	0.01
Units	kg	g/t	%	ppm	ppm	%	ppm	ppm	%	%
A00000003	0.415	0.02	0.25	50	40	1.01	3	1640	6.32	0.22

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Final : TK110126 Order: 1S-0198

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Element	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
Units	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm
A00000003	<1	0.38	2830	0.02	1.9	1040	>5	18.4	<0.01	4

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Final : TK110126 Order: 1S-0198

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A00000003	322	3.1	0.91	13	0.1	1.50	1.18	4.45	18.7	2.08

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Final : TK110126 Order: 1S-0198

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Element	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A00000003	1.0	<0.1	0.08	0.02	0.05	2.0	0.08	1.15	0.18	64.6

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Final : TK110126 Order: 1S-0198

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Element	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A00000003	10.8	1.03	0.8	3	<0.3	<0.05	0.18	0.54	2.7	0.16

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Final : TK110126 Order: 1S-0198

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Element	U	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm
A00000003	0.38	0.2	5.46	0.5

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# Certificate of Analysis

Work Order: TK110166

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Oct 14, 2011

P.O. No. : 1S-0226  
Project No. : -  
No. Of Samples : 46  
Date Submitted : Sep 19, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

### Comments:

Boron for information values only.

Certified By : \_\_\_\_\_  
Satpaul Gill  
QAQC Chemist

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0001	7.400	<0.01	0.38	30	73	3.48	44	14.2	4.33	0.21
A0002	7.200	<0.01	0.39	30	172	2.48	40	21.8	3.12	0.25
A0004	7.200	0.01	0.39	30	138	2.50	44	17.6	3.52	0.26
A0005	7.200	0.01	0.31	30	93	2.17	47	24.1	3.61	0.19
A0006	7.400	<0.01	0.33	30	64	2.34	44	24.3	3.73	0.18
A0007	6.900	0.02	0.37	30	101	2.20	42	10.8	3.54	0.22
A0008	6.900	0.01	0.43	30	65	1.93	33	21.0	5.17	0.27
A0009	7.000	0.02	0.36	30	55	0.54	34	121	5.18	0.24
A0010	0.540	0.02	0.37	30	54	1.37	43	41.8	5.02	0.24
A0011	2.600	<0.01	0.41	30	46	0.38	30	18.3	6.02	0.32
A0012	6.100	<0.01	0.38	30	80	0.77	34	7.8	4.45	0.28
A0013	8.100	0.01	0.40	40	44	0.31	38	26.4	7.41	0.33
A0014	0.990	0.09	0.34	40	22	0.23	63	90.4	13.1	0.24
A0015	0.970	0.06	0.33	30	21	0.20	48	55.2	9.41	0.28
A0016	5.400	0.02	0.42	40	57	0.63	42	13.7	6.86	0.33
A0017	7.700	0.03	0.42	30	48	0.58	39	16.9	6.33	0.33
A0018	7.900	0.04	0.43	30	36	0.51	35	19.5	7.87	0.34
A0019	7.600	0.02	0.45	30	59	0.93	31	7.0	6.71	0.34
A0020	7.800	0.03	0.42	30	52	1.04	35	15.4	5.95	0.31
A0021	7.600	0.02	0.39	30	45	0.83	32	12.4	6.23	0.28
A0022	3.500	0.01	0.42	30	58	1.11	46	7.5	6.95	0.33
A0023	7.500	<0.01	0.34	30	39	0.57	37	19.0	7.07	0.25
A0024	3.300	0.18	0.26	30	109	3.45	71	2020	3.24	0.19
A0025	4.200	0.09	0.32	40	49	0.49	92	>10000	6.23	0.25
A0026	7.200	<0.01	0.39	40	73	0.65	92	625	5.39	0.22
A0027	7.200	<0.01	0.37	30	70	0.80	87	637	4.75	0.20
A0028	6.400	0.02	0.48	30	63	1.55	77	804	4.63	0.22
A0029	7.400	0.06	0.48	30	35	2.06	66	933	7.02	0.24
A0030	7.500	0.01	0.41	40	57	1.05	80	273	5.80	0.20
A0031	7.400	<0.01	0.39	30	63	0.88	87	328	4.83	0.22
A0032	7.600	0.02	0.36	30	48	0.87	83	1640	5.26	0.21
A0033	8.300	0.01	0.35	30	50	0.68	92	524	4.63	0.18
A0034	2.800	0.02	0.30	40	15	0.41	96	423	14.1	0.20
A0035	3.500	<0.01	0.37	30	38	0.41	90	406	7.59	0.26
A0036	7.800	<0.01	0.42	30	62	0.93	80	523	5.04	0.20
A0037	8.200	0.02	0.35	40	44	1.35	93	478	7.28	0.21
A0038	7.800	<0.01	0.34	30	60	1.12	94	577	5.20	0.20
A0039	7.300	<0.01	0.38	30	59	0.83	95	783	4.74	0.21
A0040	7.400	0.02	0.43	30	56	1.65	74	1010	5.33	0.23
A0041	8.000	<0.01	0.38	40	79	1.36	87	627	4.35	0.19
A0042	0.075	0.98	1.11	30	119	0.60	31	3410	3.10	0.10
A0043	8.000	0.07	0.30	30	60	0.98	106	582	4.89	0.20
A0044	7.200	0.05	0.31	30	61	1.40	96	572	4.89	0.19

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Element	WtKg	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K
Method	WGH79	FAA303	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.001	0.01	0.01	10	5	0.01	1	0.5	0.01	0.01
Units	kg	g/t	%	ppm	ppm	%	ppm	ppm	%	%
A0045	7.200	<0.01	0.30	30	64	1.02	108	392	4.16	0.20
A0046	7.700	<0.01	0.37	40	52	1.47	88	742	6.09	0.23
A0047	3.000	0.02	0.31	40	24	1.26	82	841	7.91	0.23

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0001	3	0.87	5340	0.05	3.9	1420	4.72	81.3	<0.01	13
A0002	3	0.64	6310	0.04	3.4	1310	1.99	47.4	<0.01	8
A0004	2	0.71	6660	0.04	4.0	1180	2.83	43.8	<0.01	9
A0005	2	0.62	6340	0.04	4.9	1030	4.09	36.1	<0.01	4
A0006	2	0.70	4800	0.05	5.0	1180	4.25	37.6	<0.01	5
A0007	2	0.64	5840	0.04	3.6	1510	4.09	29.5	<0.01	5
A0008	2	0.61	>10000	0.04	2.9	1800	>5	25.7	<0.01	6
A0009	1	0.13	5700	0.03	2.2	1950	>5	25.3	<0.01	4
A0010	2	0.59	>10000	0.03	3.1	1590	>5	18.6	<0.01	9
A0011	1	0.11	4580	0.03	1.6	1610	>5	34.6	<0.01	3
A0012	1	0.51	>10000	0.02	2.5	1820	4.36	12.4	<0.01	11
A0013	<1	0.05	1530	0.02	1.7	1400	>5	17.6	<0.01	2
A0014	<1	0.03	423	0.02	1.0	850	>5	9.7	<0.01	<1
A0015	<1	0.03	582	0.02	1.1	900	>5	17.5	<0.01	<1
A0016	<1	0.37	4990	0.02	3.6	1310	>5	13.2	<0.01	4
A0017	2	0.50	8140	0.02	3.5	1350	>5	11.2	<0.01	6
A0018	<1	0.28	3500	0.02	2.3	1390	>5	12.9	<0.01	4
A0019	2	0.58	7860	0.02	2.7	1460	>5	14.1	<0.01	8
A0020	1	0.40	7270	0.02	2.9	1410	>5	15.3	<0.01	8
A0021	2	0.38	6010	0.02	3.0	1460	>5	12.6	<0.01	7
A0022	<1	0.31	2870	0.02	4.8	1460	>5	22.3	<0.01	6
A0023	2	0.60	4670	0.02	1.7	1530	>5	18.0	<0.01	8
A0024	<1	0.06	728	0.01	2.2	690	4.32	102	<0.01	3
A0025	<1	0.26	336	0.01	2.3	330	>5	13.3	<0.01	<1
A0026	1	0.30	511	0.01	2.6	350	>5	17.8	<0.01	2
A0027	1	0.33	416	0.01	2.4	490	>5	19.4	<0.01	2
A0028	2	0.57	523	0.01	2.4	850	>5	23.4	<0.01	7
A0029	3	0.77	682	0.01	2.0	980	>5	27.8	<0.01	24
A0030	1	0.44	437	0.02	2.5	500	>5	17.5	<0.01	6
A0031	1	0.37	524	0.01	2.7	450	>5	18.4	<0.01	2
A0032	1	0.35	608	0.01	2.4	510	>5	17.6	<0.01	2
A0033	1	0.29	308	0.01	2.8	400	>5	15.6	<0.01	2
A0034	<1	0.17	230	0.01	1.4	280	>5	11.7	<0.01	<1
A0035	<1	0.17	229	0.01	2.5	580	>5	17.9	<0.01	<1
A0036	1	0.28	333	0.01	2.3	430	>5	19.7	<0.01	3
A0037	<1	0.25	388	0.01	2.8	480	>5	26.3	<0.01	1
A0038	<1	0.35	313	0.02	2.6	450	>5	25.4	<0.01	3
A0039	<1	0.30	310	0.01	2.6	360	>5	19.1	<0.01	2
A0040	1	0.55	778	0.01	2.5	720	>5	27.1	<0.01	10
A0041	1	0.37	403	0.01	2.5	260	>5	24.7	<0.01	4
A0042	9	0.55	453	0.07	28.9	520	0.42	31.0	0.10	50
A0043	<1	0.24	375	0.02	3.1	160	>5	25.3	<0.01	2
A0044	<1	0.25	543	0.02	2.7	180	>5	32.7	<0.01	2

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Element	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
Units	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm
A0045	1	0.25	270	0.02	2.7	140	>5	31.7	<0.01	1
A0046	1	0.24	314	0.02	2.9	350	>5	33.6	<0.01	2
A0047	<1	0.16	394	0.01	3.3	300	>5	31.2	<0.01	<1

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0001	732	7.3	0.71	103	0.5	0.78	4.47	25.0	11.7	9.13
A0002	361	4.9	0.38	31	0.5	0.35	2.91	20.6	9.8	9.65
A0004	553	5.7	0.93	62	0.4	0.19	3.35	18.6	11.3	9.22
A0005	1320	5.2	2.13	88	0.5	0.30	7.69	14.7	7.4	6.09
A0006	392	5.2	0.77	43	0.4	0.33	1.98	17.3	8.7	7.92
A0007	195	7.6	1.75	99	0.4	0.63	1.08	18.8	12.0	7.28
A0008	1950	8.2	2.24	93	0.6	2.56	9.50	18.8	11.3	8.05
A0009	2740	9.2	6.57	98	0.6	13.1	13.8	13.0	12.0	8.33
A0010	3770	6.8	3.23	122	0.5	1.71	26.5	14.9	9.6	6.03
A0011	2540	9.1	4.84	59	0.4	9.90	16.6	6.69	10.6	5.20
A0012	257	6.7	0.64	29	0.5	1.76	0.85	16.1	10.8	6.49
A0013	1550	9.0	5.92	126	0.5	13.7	9.49	9.59	10.0	5.90
A0014	7060	11.1	>10	381	0.3	19.4	43.8	6.27	8.2	4.99
A0015	9450	10.5	6.77	234	0.4	12.7	65.9	9.53	10.1	6.79
A0016	315	9.5	5.00	108	0.7	11.7	1.82	8.40	10.8	6.96
A0017	1780	8.9	5.72	67	0.6	7.43	10.0	9.24	9.7	5.51
A0018	601	9.0	4.36	105	0.6	11.9	3.20	7.51	9.8	6.85
A0019	244	7.7	1.74	61	0.6	10.3	0.97	7.84	9.0	6.77
A0020	2810	7.0	5.05	56	0.6	11.2	16.7	8.89	10.3	5.42
A0021	1510	7.5	5.01	52	0.6	12.6	8.98	9.07	9.9	5.14
A0022	551	8.7	3.40	45	0.7	9.96	3.87	8.84	8.9	6.14
A0023	2940	7.4	4.59	92	0.5	11.1	17.9	10.7	10.1	4.62
A0024	64	3.1	0.61	74	0.2	2.10	0.61	13.6	14.0	2.82
A0025	134	3.9	>10	1180	0.2	23.7	0.58	2.83	9.7	2.11
A0026	33	3.9	0.51	32	0.2	1.00	0.17	2.89	10.8	2.21
A0027	65	3.6	0.47	44	0.2	2.41	0.34	3.08	9.8	1.94
A0028	31	4.2	0.44	33	0.3	0.69	0.15	5.15	9.9	3.16
A0029	34	6.3	0.46	31	0.3	5.16	0.08	5.49	10.6	3.89
A0030	19	4.0	0.19	9	0.2	0.70	0.10	3.09	12.9	1.85
A0031	107	3.6	0.34	14	0.2	0.96	0.62	2.42	8.9	2.21
A0032	256	3.7	1.27	36	0.2	2.85	1.45	3.04	9.7	1.95
A0033	24	3.4	0.49	7	0.2	0.97	0.13	3.05	9.5	1.56
A0034	45	9.0	0.59	25	0.1	2.46	0.27	3.42	29.0	1.31
A0035	356	4.5	1.11	10	0.2	5.70	1.96	5.84	11.2	1.76
A0036	27	3.6	0.27	6	0.2	0.60	0.16	3.85	9.1	1.82
A0037	367	4.6	0.56	8	0.2	1.63	2.05	3.56	18.0	1.99
A0038	38	3.4	0.34	7	0.2	0.75	0.21	3.51	10.0	2.05
A0039	123	3.3	0.88	12	0.2	1.12	0.70	2.77	9.1	2.02
A0040	64	4.2	1.10	8	0.3	2.01	0.22	4.09	9.3	3.41
A0041	37	3.2	0.28	17	0.1	0.65	0.18	2.80	7.8	2.27
A0042	56	9.2	1.56	12	0.1	0.47	0.44	9.94	7.6	0.37
A0043	27	3.1	0.28	10	<0.1	1.53	0.14	1.54	7.4	1.60
A0044	43	3.2	0.32	13	<0.1	2.17	0.19	1.95	10.0	2.16

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0045	28	2.8	0.09	7	0.1	0.49	0.12	1.64	7.7	2.43
A0046	24	4.4	0.25	22	0.2	1.08	0.08	2.43	8.9	2.45
A0047	91	5.4	1.04	34	0.1	11.9	0.35	2.30	13.0	1.57

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0001	1.2	<0.1	0.21	0.02	0.05	11.7	0.15	1.57	0.17	164
A0002	1.1	<0.1	0.13	0.02	0.04	9.5	0.13	0.87	0.11	61.5
A0004	1.1	<0.1	0.17	0.02	0.02	8.7	0.14	2.70	0.10	194
A0005	0.9	<0.1	0.13	0.04	0.08	6.7	0.11	3.21	0.10	235
A0006	0.9	<0.1	0.12	0.03	0.04	8.0	0.13	3.27	0.09	87.7
A0007	0.9	<0.1	0.17	<0.01	<0.02	8.2	0.12	2.71	0.07	63.0
A0008	1.2	<0.1	0.17	0.01	0.25	8.3	0.14	3.80	0.07	106
A0009	1.0	<0.1	0.22	0.03	0.45	5.5	0.05	2.42	0.07	177
A0010	1.2	<0.1	0.13	0.05	1.30	6.7	0.08	2.26	0.06	363
A0011	1.0	<0.1	0.18	0.06	0.73	3.1	0.03	1.23	0.07	1070
A0012	1.3	<0.1	0.12	<0.01	0.26	7.2	0.05	1.55	0.06	31.9
A0013	1.0	<0.1	0.19	0.05	0.51	4.3	0.02	1.15	0.09	696
A0014	0.8	0.1	0.15	0.26	1.98	2.9	0.05	3.31	0.16	691
A0015	1.2	<0.1	0.17	0.21	1.22	4.3	0.03	1.42	0.10	1810
A0016	1.1	<0.1	0.23	0.04	0.13	3.7	0.05	2.52	0.09	262
A0017	1.2	<0.1	0.22	0.07	0.61	4.2	0.04	1.24	0.07	146
A0018	1.1	<0.1	0.17	0.04	0.32	3.2	0.04	1.15	0.09	85.7
A0019	1.1	<0.1	0.15	<0.01	0.21	3.5	0.05	0.79	0.08	88.7
A0020	1.1	<0.1	0.14	0.11	1.02	4.0	0.05	1.29	0.05	860
A0021	1.0	<0.1	0.15	0.05	0.81	4.0	0.04	0.69	0.06	421
A0022	1.2	<0.1	0.22	0.01	0.20	3.9	0.04	1.87	0.08	316
A0023	1.0	<0.1	0.13	0.04	0.60	4.8	0.03	1.40	0.07	654
A0024	0.9	<0.1	0.05	0.04	0.16	6.2	0.06	785	0.07	17.2
A0025	0.9	<0.1	<0.05	1.04	0.31	1.3	0.02	7.77	0.06	132
A0026	0.8	<0.1	<0.05	0.04	0.05	1.3	0.03	17.8	0.06	8.7
A0027	0.8	<0.1	<0.05	0.06	0.05	1.3	0.03	12.7	<0.05	12.4
A0028	1.1	<0.1	0.06	0.09	0.03	2.0	0.09	142	0.06	4.5
A0029	1.5	<0.1	0.07	0.03	0.06	1.9	0.13	1.76	0.07	5.6
A0030	0.8	<0.1	<0.05	0.02	0.02	1.2	0.05	9.71	0.06	2.5
A0031	0.8	<0.1	<0.05	0.03	0.04	1.0	0.04	9.20	0.06	36.7
A0032	0.9	<0.1	<0.05	0.05	0.16	1.3	0.04	14.4	0.05	112
A0033	0.7	<0.1	<0.05	0.02	0.04	1.3	0.04	17.7	0.06	6.1
A0034	0.8	0.1	<0.05	0.04	0.03	1.4	0.03	65.4	0.15	21.7
A0035	0.9	<0.1	<0.05	0.04	0.05	2.7	0.03	31.5	0.08	113
A0036	0.8	<0.1	<0.05	0.02	0.04	1.6	0.04	14.5	0.05	5.3
A0037	0.8	<0.1	<0.05	0.02	0.05	1.5	0.04	33.3	0.08	16.3
A0038	0.7	<0.1	<0.05	<0.01	0.05	1.5	0.04	21.6	0.06	7.9
A0039	0.8	<0.1	<0.05	0.03	0.07	1.1	0.03	7.00	0.06	16.0
A0040	1.2	<0.1	<0.05	0.04	0.08	1.6	0.08	4.49	0.05	18.2
A0041	0.8	<0.1	<0.05	0.02	0.03	1.2	0.03	12.2	<0.05	4.9
A0042	3.8	<0.1	0.23	0.08	0.04	4.6	0.08	330	0.16	21.0
A0043	0.7	<0.1	<0.05	0.01	0.02	0.6	0.02	11.2	<0.05	4.6
A0044	0.7	<0.1	<0.05	<0.01	0.02	0.8	0.03	22.5	<0.05	13.0

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Element	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0045	0.6	<0.1	<0.05	<0.01	<0.02	0.7	0.02	10.3	<0.05	3.0
A0046	0.7	<0.1	<0.05	<0.01	0.04	1.0	0.03	6.56	<0.05	3.2
A0047	0.8	<0.1	<0.05	0.06	0.12	1.0	0.02	9.68	<0.05	25.0

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0001	9.4	1.18	3.0	<1	<0.3	<0.05	0.52	0.62	2.4	0.30
A0002	13.0	0.40	2.1	<1	<0.3	<0.05	0.40	0.16	2.6	0.36
A0004	13.3	0.99	2.1	<1	<0.3	<0.05	0.39	0.33	2.4	0.48
A0005	9.1	2.54	1.1	<1	<0.3	<0.05	0.30	2.85	2.2	0.55
A0006	8.8	2.07	1.9	<1	<0.3	<0.05	0.35	2.91	3.0	0.53
A0007	10.9	2.33	1.6	<1	<0.3	<0.05	0.43	1.70	2.2	0.60
A0008	11.5	3.58	1.8	1	<0.3	<0.05	0.43	1.96	2.2	0.48
A0009	10.9	11.8	1.2	1	0.4	<0.05	0.27	3.00	2.2	0.57
A0010	10.9	1.27	1.6	1	<0.3	<0.05	0.32	3.45	2.3	0.49
A0011	12.9	2.10	1.1	<1	<0.3	<0.05	0.22	2.65	2.0	0.53
A0012	12.6	0.61	1.9	<1	<0.3	<0.05	0.25	1.17	2.1	0.51
A0013	13.3	3.32	0.7	<1	<0.3	<0.05	0.16	2.30	2.2	0.47
A0014	10.4	10.1	0.6	2	<0.3	<0.05	0.10	3.40	1.3	3.17
A0015	11.6	4.46	0.7	2	0.4	<0.05	0.15	2.99	1.9	0.50
A0016	15.8	1.13	1.5	<1	<0.3	<0.05	0.21	4.97	2.1	0.58
A0017	15.3	1.08	1.3	<1	<0.3	<0.05	0.16	5.59	2.2	0.52
A0018	15.7	1.68	1.3	1	<0.3	<0.05	0.19	4.76	1.7	0.48
A0019	16.4	0.95	1.3	<1	<0.3	<0.05	0.18	2.69	1.8	0.59
A0020	13.9	1.31	1.5	<1	<0.3	<0.05	0.20	2.47	2.0	0.67
A0021	12.5	1.07	1.4	<1	<0.3	<0.05	0.17	2.19	1.8	0.45
A0022	14.4	0.60	1.5	1	<0.3	<0.05	0.20	2.75	2.4	0.42
A0023	11.1	1.12	1.1	<1	<0.3	<0.05	0.19	3.25	1.6	0.41
A0024	6.7	11.4	0.5	1	0.5	<0.05	0.23	0.72	2.1	0.19
A0025	8.2	97.0	0.4	2	2.0	<0.05	0.07	37.8	2.7	0.24
A0026	6.9	1.95	0.6	2	<0.3	<0.05	0.07	0.58	1.8	0.24
A0027	6.0	1.90	0.6	1	<0.3	<0.05	0.10	0.55	1.7	0.19
A0028	8.0	1.61	1.4	1	<0.3	<0.05	0.21	0.99	2.0	0.22
A0029	9.9	0.72	4.7	2	0.3	<0.05	0.28	1.81	1.1	0.26
A0030	6.4	0.38	1.4	2	<0.3	<0.05	0.11	0.40	2.1	0.12
A0031	6.6	0.90	0.7	2	<0.3	<0.05	0.09	0.51	2.0	0.12
A0032	6.8	1.88	0.8	2	0.3	<0.05	0.10	1.36	2.0	0.14
A0033	5.3	0.62	0.6	2	<0.3	<0.05	0.09	0.25	2.1	0.10
A0034	5.6	0.87	0.3	5	0.4	<0.05	0.08	0.56	1.6	0.20
A0035	7.8	1.03	0.4	3	<0.3	<0.05	0.10	1.14	2.5	0.14
A0036	6.0	0.84	0.7	2	<0.3	<0.05	0.10	0.28	2.3	0.10
A0037	6.6	1.02	0.6	3	<0.3	<0.05	0.12	0.50	2.0	0.11
A0038	6.1	0.52	0.7	2	<0.3	<0.05	0.10	0.21	2.4	0.11
A0039	6.3	1.17	0.6	2	<0.3	<0.05	0.08	0.74	1.8	0.11
A0040	8.4	0.61	2.6	2	<0.3	<0.05	0.18	1.75	1.9	0.16
A0041	6.0	0.87	0.9	<1	<0.3	<0.05	0.08	0.26	2.1	0.07
A0042	3.9	2.16	3.5	1	1.5	<0.05	0.23	0.16	1.0	0.07
A0043	5.7	0.61	0.5	1	<0.3	<0.05	0.05	0.37	1.9	0.08
A0044	5.6	0.71	0.6	2	<0.3	<0.05	0.06	0.20	2.0	0.07

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Element	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0045	5.7	0.38	0.3	1	<0.3	<0.05	0.05	0.13	2.2	0.07
A0046	6.7	0.67	0.4	2	<0.3	<0.05	0.09	0.27	2.0	0.08
A0047	7.3	2.23	0.2	3	1.0	<0.05	0.07	2.33	1.7	0.12

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Cu ICP90Q 0.01 %
A0001	0.79	<0.1	14.2	1.1	N.A.	N.A.
A0002	0.88	<0.1	11.2	0.9	N.A.	N.A.
A0004	0.79	<0.1	11.4	0.9	N.A.	N.A.
A0005	1.03	0.1	8.65	0.7	N.A.	N.A.
A0006	0.77	<0.1	9.62	0.9	N.A.	N.A.
A0007	0.87	<0.1	11.1	0.9	N.A.	N.A.
A0008	0.51	<0.1	11.7	1.0	N.A.	N.A.
A0009	0.68	<0.1	5.47	0.4	N.A.	N.A.
A0010	0.62	<0.1	7.82	0.6	N.A.	N.A.
A0011	0.55	<0.1	3.99	0.2	N.A.	N.A.
A0012	0.63	<0.1	4.81	0.4	N.A.	N.A.
A0013	0.52	<0.1	2.77	0.2	N.A.	N.A.
A0014	0.37	<0.1	2.22	0.3	17.0	N.A.
A0015	1.04	0.6	2.43	0.2	N.A.	N.A.
A0016	1.20	0.2	4.33	0.4	N.A.	N.A.
A0017	1.14	0.1	3.18	0.3	N.A.	N.A.
A0018	0.86	0.2	3.51	0.3	N.A.	N.A.
A0019	0.50	0.2	3.56	0.3	N.A.	N.A.
A0020	0.65	0.1	3.69	0.3	N.A.	N.A.
A0021	0.41	<0.1	3.19	0.3	N.A.	N.A.
A0022	0.70	0.1	3.85	0.3	N.A.	N.A.
A0023	0.38	0.1	3.10	0.2	N.A.	N.A.
A0024	0.45	0.5	5.83	0.4	N.A.	N.A.
A0025	0.33	0.5	1.45	0.1	16.7	1.36
A0026	0.26	0.1	2.00	0.2	N.A.	N.A.
A0027	0.27	0.2	2.40	0.2	N.A.	N.A.
A0028	0.47	0.4	6.17	0.6	N.A.	N.A.
A0029	0.73	0.2	8.68	0.9	N.A.	N.A.
A0030	0.31	0.1	3.27	0.3	N.A.	N.A.
A0031	0.28	0.2	2.51	0.2	N.A.	N.A.
A0032	0.32	0.2	2.75	0.3	N.A.	N.A.
A0033	0.26	0.1	2.29	0.2	N.A.	N.A.
A0034	0.27	0.3	1.99	0.2	N.A.	N.A.
A0035	0.33	0.2	2.31	0.2	N.A.	N.A.
A0036	0.32	<0.1	2.82	0.2	N.A.	N.A.
A0037	0.29	0.1	3.30	0.3	N.A.	N.A.
A0038	0.24	<0.1	2.70	0.2	N.A.	N.A.
A0039	0.26	0.4	2.19	0.2	N.A.	N.A.
A0040	0.48	0.2	5.37	0.5	N.A.	N.A.
A0041	0.21	<0.1	2.15	0.2	N.A.	N.A.
A0042	0.31	0.9	6.59	0.6	N.A.	N.A.
A0043	0.16	<0.1	1.43	0.1	N.A.	N.A.
A0044	0.15	<0.1	1.70	0.1	N.A.	N.A.

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Element	U	W	Y	Yb	Ag	Cu
Method	ICM14B	ICM14B	ICM14B	ICM14B	AAS42E	ICP90Q
Det.Lim.	0.05	0.1	0.05	0.1	0.3	0.01
Units	ppm	ppm	ppm	ppm	g/t	%
A0045	0.13	<0.1	1.34	0.1	N.A.	N.A.
A0046	0.26	<0.1	2.79	0.2	N.A.	N.A.
A0047	2.48	0.2	1.95	0.2	N.A.	N.A.

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# Certificate of Analysis

Work Order: TK110167

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Oct 18, 2011

P.O. No. : 1S-0227  
Project No. : -  
No. Of Samples : 40  
Date Submitted : Sep 20, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

### Comments:

Boron for information values only.

Certified By : \_\_\_\_\_  
Satpaul Gill  
QAQC Chemist

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0048	4.200	0.02	0.34	20	40	1.43	5	1390	6.74	0.23
A0049	7.200	0.01	0.34	20	32	1.28	97	810	7.14	0.26
A0050	7.400	0.01	0.30	20	36	1.05	9	1710	7.35	0.20
A0051	6.800	0.02	0.42	20	40	1.25	87	1260	6.46	0.22
A0052	7.200	0.02	0.33	20	42	1.73	8	755	6.56	0.20
A0053	7.000	0.06	0.30	20	40	0.98	98	1400	6.58	0.22
A0054	7.800	0.04	0.28	20	43	1.03	6	1240	5.97	0.18
A0055	6.500	0.04	0.37	20	42	1.40	99	980	6.39	0.16
A0056	6.800	0.02	0.26	20	49	1.03	7	1050	6.37	0.18
A0057	6.700	0.03	0.29	30	66	0.98	92	972	5.28	0.20
A0058	7.000	0.04	0.20	30	59	1.06	10	1500	4.68	0.17
A0059	7.200	0.03	0.33	30	59	1.01	101	1910	5.58	0.24
A0060	7.200	0.02	0.20	20	55	0.84	10	1270	5.45	0.15
A0061	7.100	0.03	0.32	20	48	0.98	99	1220	6.24	0.22
A0062	7.100	0.02	0.25	20	47	0.85	8	1050	5.69	0.20
A0063	6.900	0.04	0.31	30	49	0.75	94	1330	6.09	0.23
A0064	7.300	0.04	0.25	20	53	0.68	9	1340	5.75	0.20
A0065	7.000	0.05	0.30	20	61	0.70	95	1550	5.35	0.23
A0066	0.075	1.60	1.22	70	147	0.89	50	>10000	5.30	0.23
A0067	7.500	0.03	0.25	30	43	0.97	9	1370	6.85	0.20
A0068	7.400	0.03	0.31	20	43	1.29	81	872	6.06	0.24
A0069	7.200	0.03	0.24	20	45	1.09	8	1060	6.35	0.20
A0070	7.400	<0.01	0.25	20	43	0.69	104	1480	6.83	0.20
A0071	7.300	0.02	0.22	20	37	0.97	10	675	7.27	0.19
A0072	7.300	0.02	0.31	20	37	0.55	107	1080	7.50	0.24
A0073	7.200	0.02	0.24	20	44	0.59	9	1320	5.80	0.18
A0074	7.200	0.02	0.25	20	48	0.54	11	1150	6.64	0.20
A0075	6.700	0.02	0.24	30	57	0.50	12	1130	6.23	0.19
A0076	6.700	0.02	0.28	20	46	0.75	7	988	6.35	0.21
A0077	6.900	0.01	0.30	20	39	0.89	6	1060	6.82	0.23
A0078	7.000	0.12	0.29	30	36	0.76	6	1650	7.44	0.23
A0079	6.900	0.02	0.24	20	29	0.80	6	466	6.87	0.22
A0080	7.100	0.02	0.27	20	30	0.51	7	811	6.71	0.23
A0081	7.300	0.02	0.20	20	31	0.41	9	964	7.79	0.18
A0082	7.700	0.02	0.25	20	50	0.62	7	1010	6.46	0.22
A0083	7.800	0.08	0.26	20	23	0.57	7	804	9.85	0.21
A0084	7.700	0.02	0.27	20	35	1.00	8	984	7.40	0.19
A0085	7.200	0.02	0.29	20	25	1.41	6	1070	6.78	0.22
A0086	7.000	0.03	0.26	30	64	0.98	7	1010	5.88	0.18
A0087	7.000	0.02	0.26	20	46	1.06	7	1420	6.33	0.18

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0048	1	0.42	465	0.02	2.9	440	>5	26.0	<0.01	9
A0049	<1	0.33	204	0.02	2.8	510	>5	32.5	<0.01	8
A0050	1	0.27	184	0.02	3.4	430	>5	25.6	<0.01	8
A0051	2	0.21	189	0.02	2.7	420	>5	26.2	<0.01	6
A0052	1	0.20	269	0.02	2.4	430	>5	29.7	<0.01	4
A0053	<1	0.34	227	0.04	2.6	350	>5	26.1	<0.01	11
A0054	1	0.30	341	0.02	2.4	410	>5	21.2	<0.01	8
A0055	1	0.26	352	0.02	2.6	400	>5	24.7	<0.01	8
A0056	1	0.34	822	0.03	2.0	340	>5	21.3	<0.01	11
A0057	<1	0.39	266	0.03	2.8	210	>5	21.0	<0.01	11
A0058	<1	0.45	207	0.03	3.0	170	>5	18.9	<0.01	11
A0059	1	0.48	175	0.04	2.8	130	>5	24.9	<0.01	21
A0060	<1	0.39	120	0.04	2.4	110	>5	22.0	<0.01	12
A0061	<1	0.34	91	0.04	2.6	400	>5	29.3	<0.01	8
A0062	<1	0.35	134	0.03	2.9	410	>5	33.7	<0.01	9
A0063	<1	0.34	157	0.04	2.6	380	>5	30.4	<0.01	10
A0064	<1	0.29	139	0.03	2.0	300	>5	26.5	<0.01	6
A0065	<1	0.34	149	0.05	2.6	540	>5	64.0	<0.01	10
A0066	18	0.71	512	0.08	95.4	620	3.13	37.8	0.07	56
A0067	<1	0.31	158	0.04	3.2	580	>5	52.9	<0.01	8
A0068	<1	0.34	178	0.03	2.4	670	>5	116	<0.01	8
A0069	<1	0.35	152	0.03	1.9	590	>5	68.6	<0.01	9
A0070	<1	0.26	205	0.04	3.1	430	>5	50.2	<0.01	10
A0071	<1	0.26	144	0.03	3.4	450	>5	69.5	<0.01	7
A0072	<1	0.24	66	0.04	2.2	390	>5	68.5	<0.01	9
A0073	<1	0.25	152	0.03	2.4	380	>5	53.1	<0.01	8
A0074	<1	0.16	110	0.02	2.8	190	>5	82.6	<0.01	5
A0075	<1	0.21	181	0.02	5.8	160	>5	46.6	<0.01	7
A0076	<1	0.31	302	0.03	2.0	300	>5	30.1	<0.01	13
A0077	<1	0.30	333	0.02	2.5	520	>5	27.8	<0.01	6
A0078	<1	0.23	249	0.02	2.0	450	>5	23.1	<0.01	3
A0079	<1	0.17	202	0.01	2.3	190	>5	17.7	<0.01	3
A0080	<1	0.24	202	0.02	2.1	290	>5	14.5	<0.01	4
A0081	<1	0.14	174	0.02	2.6	180	>5	10.3	<0.01	4
A0082	<1	0.22	179	0.02	2.2	280	>5	13.2	<0.01	4
A0083	<1	0.17	165	0.01	2.3	350	>5	13.0	<0.01	4
A0084	<1	0.29	309	0.02	3.2	470	>5	16.4	<0.01	8
A0085	<1	0.34	378	0.02	2.4	330	>5	19.9	<0.01	7
A0086	<1	0.31	317	0.02	3.0	300	>5	19.7	<0.01	7
A0087	<1	0.32	550	0.02	2.5	340	>5	21.2	<0.01	6

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0048	26	4.1	0.35	29	0.4	1.86	0.08	1.56	14.6	4.41
A0049	20	3.0	0.27	17	0.2	2.08	0.08	1.82	16.7	2.75
A0050	23	3.2	0.31	18	0.1	1.08	0.10	2.34	12.8	2.19
A0051	24	3.3	0.33	10	0.2	1.19	0.12	2.19	12.1	2.12
A0052	37	3.3	0.42	11	0.2	2.79	0.15	1.96	11.4	1.91
A0053	162	3.0	0.42	5	0.1	7.44	0.78	2.41	7.5	2.07
A0054	58	3.1	0.37	16	0.1	3.10	0.18	2.04	8.5	2.26
A0055	83	3.0	0.38	9	0.1	1.20	0.23	1.65	12.6	1.48
A0056	54	3.0	0.43	12	0.1	0.69	0.14	3.22	15.3	2.26
A0057	23	2.5	0.30	10	0.2	0.48	0.10	2.32	9.1	1.97
A0058	23	2.4	0.32	3	0.1	0.44	0.10	3.10	9.7	2.10
A0059	29	2.9	0.32	<1	0.2	0.54	0.11	4.24	11.7	3.08
A0060	20	2.6	0.22	3	<0.1	0.57	0.10	2.54	10.3	2.00
A0061	18	3.0	0.25	<1	0.1	0.68	0.10	3.23	11.7	1.67
A0062	23	3.0	0.24	<1	0.1	0.59	0.13	2.67	10.1	1.84
A0063	24	3.0	0.27	2	0.1	0.74	0.12	2.24	8.8	1.46
A0064	17	2.8	0.32	4	0.1	1.28	0.06	1.97	8.3	1.34
A0065	26	2.5	0.38	<1	0.1	0.89	0.06	2.46	11.2	1.57
A0066	1660	7.8	7.15	281	0.2	2.34	9.00	15.1	12.3	1.53
A0067	21	3.0	0.45	<1	0.1	1.14	0.10	2.50	10.1	1.88
A0068	20	2.9	0.30	2	0.1	0.85	0.10	3.42	10.1	2.41
A0069	18	2.9	0.25	<1	0.1	0.91	0.06	3.43	9.0	2.38
A0070	92	2.8	0.41	<1	0.1	1.16	0.54	2.52	11.4	1.63
A0071	82	3.1	0.33	<1	0.1	1.20	0.47	3.06	12.7	1.65
A0072	12	3.1	0.34	<1	<0.1	1.63	0.06	2.20	13.4	1.47
A0073	41	2.6	0.46	1	<0.1	1.99	0.20	2.01	12.9	1.46
A0074	13	2.8	0.38	2	<0.1	1.31	0.06	1.59	12.8	1.36
A0075	87	2.6	0.42	5	<0.1	1.32	0.46	1.53	10.7	1.41
A0076	30	2.7	0.49	3	0.1	1.19	0.15	3.99	14.9	1.90
A0077	73	2.8	0.53	4	0.1	1.45	0.39	2.13	8.1	2.41
A0078	170	3.1	3.55	22	0.1	5.87	1.05	1.92	11.0	2.28
A0079	24	2.7	0.60	9	0.1	1.61	0.16	1.84	15.3	1.36
A0080	12	2.7	0.42	5	0.1	2.52	0.07	1.91	18.2	1.51
A0081	28	3.0	0.37	5	<0.1	1.85	0.17	1.43	15.2	1.02
A0082	12	2.6	0.25	<1	0.1	1.97	0.07	2.11	12.3	1.36
A0083	27	3.9	1.18	3	0.1	6.47	0.16	2.63	17.1	1.42
A0084	43	3.1	0.58	4	0.1	2.00	0.24	2.99	14.3	1.34
A0085	71	2.9	0.45	5	0.2	1.72	0.26	2.73	15.1	1.83
A0086	25	2.6	0.57	6	0.1	1.38	0.12	1.93	14.8	1.42
A0087	34	3.0	0.56	6	<0.1	1.10	0.16	3.30	22.0	1.77

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0048	1.2	<0.1	0.09	0.03	0.05	0.8	0.05	7.77	0.21	4.6
A0049	0.9	<0.1	<0.05	0.03	0.09	0.9	0.03	8.11	0.14	3.8
A0050	1.0	<0.1	<0.05	0.02	0.08	1.1	0.03	6.61	0.12	2.6
A0051	1.0	<0.1	<0.05	0.02	0.07	1.1	0.04	11.2	0.09	2.6
A0052	0.8	<0.1	<0.05	0.02	0.05	1.0	0.04	12.9	0.14	3.2
A0053	1.3	<0.1	<0.05	<0.01	0.04	1.2	0.03	3.75	0.08	40.1
A0054	0.9	<0.1	<0.05	0.03	0.08	1.0	0.04	6.09	0.09	4.8
A0055	0.8	<0.1	<0.05	0.01	0.08	0.8	0.03	6.61	0.07	8.9
A0056	0.7	<0.1	<0.05	0.02	0.05	1.6	0.03	16.6	0.13	11.9
A0057	0.7	<0.1	<0.05	0.01	0.04	1.2	0.02	33.8	0.05	2.7
A0058	0.7	<0.1	<0.05	<0.01	0.06	1.5	0.03	17.7	0.06	2.2
A0059	1.4	<0.1	<0.05	<0.01	0.07	2.1	0.03	13.6	0.07	1.9
A0060	0.7	<0.1	<0.05	<0.01	0.05	1.3	0.02	11.6	0.14	1.9
A0061	0.9	<0.1	<0.05	<0.01	0.05	1.6	0.04	11.1	0.06	1.9
A0062	0.8	<0.1	<0.05	<0.01	0.04	1.3	0.03	10.1	0.05	2.4
A0063	0.9	<0.1	<0.05	<0.01	0.05	1.1	0.04	10.2	0.05	3.9
A0064	0.9	<0.1	<0.05	<0.01	0.06	1.0	0.03	9.69	0.12	1.7
A0065	1.1	<0.1	<0.05	<0.01	0.05	1.2	0.05	9.71	<0.05	1.6
A0066	4.2	0.1	<0.05	0.85	0.23	7.1	0.07	93.0	0.41	682
A0067	0.9	<0.1	<0.05	<0.01	0.06	1.2	0.05	5.23	0.06	2.4
A0068	0.9	<0.1	<0.05	<0.01	0.03	1.6	0.06	6.32	<0.05	4.1
A0069	0.8	<0.1	<0.05	<0.01	0.04	1.6	0.05	3.07	0.12	2.0
A0070	0.8	<0.1	<0.05	<0.01	0.06	1.3	0.03	3.63	0.06	21.5
A0071	0.8	<0.1	<0.05	<0.01	0.03	1.5	0.04	17.4	0.06	7.4
A0072	1.1	<0.1	<0.05	<0.01	0.04	1.1	0.03	3.25	0.06	1.6
A0073	0.9	<0.1	<0.05	<0.01	0.05	1.0	0.03	47.5	0.14	6.5
A0074	0.8	<0.1	<0.05	<0.01	0.04	0.8	0.02	6.58	0.14	3.0
A0075	0.7	<0.1	<0.05	<0.01	0.04	0.8	0.02	7.58	<0.05	9.4
A0076	1.0	<0.1	<0.05	<0.01	0.03	2.0	0.03	63.3	0.11	11.2
A0077	1.0	<0.1	<0.05	<0.01	0.03	1.1	0.04	14.9	<0.05	18.0
A0078	0.8	<0.1	<0.05	0.01	0.07	0.9	0.03	3.56	0.09	92.7
A0079	0.6	<0.1	<0.05	<0.01	<0.02	0.9	0.02	47.4	<0.05	15.2
A0080	0.7	<0.1	<0.05	<0.01	0.03	1.0	0.02	6.00	0.10	6.5
A0081	0.6	<0.1	<0.05	<0.01	0.04	0.8	0.01	5.12	0.05	7.9
A0082	0.6	<0.1	<0.05	<0.01	0.04	1.1	0.02	12.5	0.09	2.8
A0083	0.8	<0.1	<0.05	<0.01	0.04	1.4	0.02	16.6	0.06	12.3
A0084	0.8	<0.1	<0.05	<0.01	0.05	1.5	0.04	44.5	<0.05	14.4
A0085	0.8	<0.1	<0.05	<0.01	0.05	1.4	0.03	11.8	0.10	10.3
A0086	0.8	<0.1	<0.05	<0.01	0.04	1.0	0.02	15.5	<0.05	5.2
A0087	0.8	<0.1	<0.05	<0.01	0.06	1.6	0.04	46.1	0.10	4.3

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0048	9.3	2.91	2.0	3	<0.3	<0.05	0.11	0.50	1.4	0.13
A0049	7.6	0.52	1.3	3	<0.3	<0.05	0.08	0.73	1.4	0.12
A0050	6.2	0.40	1.5	3	<0.3	<0.05	0.09	0.32	1.4	0.10
A0051	6.8	0.71	1.2	3	<0.3	<0.05	0.10	0.35	1.8	0.11
A0052	6.2	0.90	0.7	2	<0.3	<0.05	0.10	0.64	1.6	0.11
A0053	7.5	0.33	1.2	1	<0.3	<0.05	0.09	0.44	2.0	0.13
A0054	5.9	0.82	1.3	2	<0.3	<0.05	0.09	0.32	2.2	0.11
A0055	5.1	0.59	1.2	3	<0.3	<0.05	0.08	0.47	1.4	0.10
A0056	5.9	1.14	1.8	3	<0.3	<0.05	0.09	0.24	2.7	0.11
A0057	6.3	0.27	1.7	2	<0.3	<0.05	0.06	0.24	1.8	0.11
A0058	5.3	0.20	2.0	2	<0.3	<0.05	0.07	0.19	2.5	0.09
A0059	8.8	<0.05	2.9	2	<0.3	<0.05	0.07	0.21	3.3	0.13
A0060	5.4	<0.05	2.1	2	<0.3	<0.05	0.05	0.25	2.0	0.09
A0061	6.8	<0.05	1.3	2	<0.3	<0.05	0.10	0.27	2.4	0.11
A0062	6.0	<0.05	1.5	2	<0.3	<0.05	0.08	0.19	2.3	0.09
A0063	7.0	<0.05	1.5	3	<0.3	<0.05	0.08	0.24	2.0	0.11
A0064	6.3	0.09	0.7	3	<0.3	<0.05	0.06	0.39	2.0	0.10
A0065	7.4	<0.05	0.9	2	<0.3	<0.05	0.10	0.30	2.7	0.11
A0066	8.6	24.6	4.1	3	4.3	<0.05	0.24	0.60	2.1	1.02
A0067	6.7	<0.05	0.7	3	<0.3	<0.05	0.11	0.33	1.9	0.10
A0068	7.4	<0.05	1.1	2	<0.3	<0.05	0.15	0.32	1.8	0.11
A0069	6.6	<0.05	1.2	2	<0.3	<0.05	0.14	0.30	2.4	0.10
A0070	6.2	<0.05	1.4	4	<0.3	<0.05	0.08	0.34	2.1	0.10
A0071	5.7	<0.05	1.0	3	<0.3	<0.05	0.10	0.25	2.2	0.08
A0072	7.2	<0.05	1.1	3	<0.3	<0.05	0.07	0.44	1.9	0.11
A0073	6.0	<0.05	1.1	3	<0.3	<0.05	0.07	0.72	1.9	0.09
A0074	5.9	<0.05	0.7	4	<0.3	<0.05	0.04	0.31	1.5	0.09
A0075	5.6	<0.05	0.9	3	<0.3	<0.05	0.04	0.24	1.6	0.08
A0076	6.7	<0.05	2.0	3	<0.3	<0.05	0.07	0.25	2.2	0.10
A0077	7.4	<0.05	0.8	3	<0.3	<0.05	0.09	0.40	1.8	0.10
A0078	6.9	0.29	0.6	3	<0.3	<0.05	0.07	2.54	1.8	0.10
A0079	6.1	<0.05	0.4	3	<0.3	<0.05	0.05	0.42	2.0	0.08
A0080	6.9	0.05	0.5	3	<0.3	<0.05	0.05	0.58	1.8	0.09
A0081	5.2	0.13	0.4	3	<0.3	<0.05	0.03	0.46	1.5	0.07
A0082	6.7	<0.05	0.5	3	<0.3	<0.05	0.05	0.59	1.8	0.09
A0083	7.7	0.07	0.6	3	<0.3	<0.05	0.07	2.71	2.1	0.09
A0084	6.5	<0.05	1.1	3	<0.3	<0.05	0.09	0.52	1.5	0.09
A0085	7.3	0.13	1.2	3	<0.3	<0.05	0.07	0.44	1.7	0.10
A0086	6.2	0.16	1.3	3	<0.3	<0.05	0.06	0.45	1.6	0.09
A0087	7.0	0.13	1.0	3	<0.3	<0.05	0.09	0.35	1.5	0.12

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Cu ICP90Q 0.01 %
A0048	4.55	0.2	3.89	0.3	N.A.
A0049	0.48	0.2	2.59	0.2	N.A.
A0050	0.28	0.1	2.44	0.2	N.A.
A0051	0.55	0.1	2.89	0.3	N.A.
A0052	1.21	0.1	3.02	0.3	N.A.
A0053	0.58	<0.1	2.54	0.2	N.A.
A0054	0.84	0.1	2.68	0.2	N.A.
A0055	0.58	0.1	2.49	0.2	N.A.
A0056	0.56	<0.1	2.43	0.2	N.A.
A0057	0.26	0.1	1.78	0.2	N.A.
A0058	0.31	<0.1	1.86	0.2	N.A.
A0059	0.27	<0.1	1.77	0.2	N.A.
A0060	0.19	<0.1	1.51	0.2	N.A.
A0061	0.28	<0.1	2.84	0.3	N.A.
A0062	0.25	<0.1	2.38	0.2	N.A.
A0063	0.30	<0.1	2.24	0.2	N.A.
A0064	0.27	<0.1	1.96	0.2	N.A.
A0065	0.28	<0.1	3.25	0.3	N.A.
A0066	0.62	39.1	6.10	0.5	1.63
A0067	0.26	0.3	3.41	0.3	N.A.
A0068	0.33	0.2	4.44	0.4	N.A.
A0069	0.33	0.1	4.04	0.4	N.A.
A0070	0.22	<0.1	2.41	0.2	N.A.
A0071	0.24	0.1	2.75	0.2	N.A.
A0072	0.24	0.1	2.09	0.2	N.A.
A0073	0.25	0.1	1.92	0.2	N.A.
A0074	0.17	0.1	1.20	0.1	N.A.
A0075	0.16	0.1	1.15	0.1	N.A.
A0076	0.21	0.1	1.94	0.2	N.A.
A0077	0.24	0.1	2.79	0.2	N.A.
A0078	0.21	0.1	2.04	0.2	N.A.
A0079	0.16	0.2	1.91	0.1	N.A.
A0080	0.19	0.2	1.36	0.1	N.A.
A0081	0.16	0.2	0.97	<0.1	N.A.
A0082	0.24	0.2	1.43	0.1	N.A.
A0083	0.26	0.5	1.68	0.2	N.A.
A0084	0.27	0.2	2.55	0.3	N.A.
A0085	0.25	0.2	1.96	0.2	N.A.
A0086	0.18	<0.1	1.64	0.2	N.A.
A0087	0.28	<0.1	2.50	0.2	N.A.

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# Certificate of Analysis

Work Order: TK110179

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Oct 21, 2011

P.O. No. : 1S-0247, PO: SQ-04B-092311-ec  
Project No. : -  
No. Of Samples : 12  
Date Submitted : Sep 26, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

Certified By : \_\_\_\_\_  
Satpaul Gill  
QAQC Chemist

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A00088	7.200	0.02	0.33	30	25	0.49	99	752	9.51	0.26
A00089	8.100	0.17	0.28	20	15	2.04	101	2060	14.0	0.24
A00090	6.900	0.03	0.41	30	42	0.31	101	1760	6.81	0.35
A00091	7.500	0.02	0.49	30	52	1.22	86	1240	6.43	0.38
A00092	7.200	0.02	0.41	30	41	1.26	103	1170	7.06	0.32
A00093	7.300	0.02	0.41	30	40	1.61	104	1370	7.42	0.27
A00094	7.100	0.02	0.36	30	29	3.18	101	1140	8.47	0.24
A00095	7.000	0.02	0.40	30	82	1.20	108	1100	5.99	0.22
A00096	6.200	0.02	0.30	40	88	0.79	114	1360	5.62	0.22
A00097	7.800	0.02	0.36	30	54	1.05	108	1040	6.93	0.26
A00098	4.200	<0.01	0.03	30	15	>15	3	2.0	0.49	0.02
A00099	7.500	0.01	0.33	30	38	0.74	117	664	7.97	0.25

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A00088	<1	0.10	288	0.01	2.1	330	>5	11.7	<0.01	3
A00089	<1	0.08	2440	0.01	<0.5	250	>5	31.1	<0.01	1
A00090	<1	0.09	836	0.02	2.4	430	>5	11.6	<0.01	4
A00091	<1	0.43	2070	0.02	2.7	570	>5	20.1	<0.01	8
A00092	<1	0.17	1490	0.02	2.9	480	>5	24.9	<0.01	4
A00093	<1	0.33	682	0.02	3.0	370	>5	25.8	<0.01	5
A00094	<1	0.28	490	0.02	2.6	320	>5	37.1	<0.01	5
A00095	2	0.43	476	0.03	2.8	240	>5	21.4	<0.01	22
A00096	<1	0.38	237	0.04	2.9	320	>5	21.8	<0.01	13
A00097	<1	0.40	239	0.03	3.1	420	>5	44.0	<0.01	10
A00098	<1	13.6	229	<0.01	1.2	180	<0.01	41.0	<0.01	1
A00099	<1	0.30	187	0.03	2.6	410	>5	63.8	<0.01	7

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A00088	266	4.6	1.69	64	0.1	6.14	1.62	3.90	16.6	1.05
A00089	3690	6.3	>10	352	0.1	14.8	21.7	1.45	12.6	0.85
A00090	490	3.0	4.55	110	0.2	3.62	2.62	3.42	12.1	1.24
A00091	265	3.3	2.07	62	0.3	1.61	1.34	3.14	11.0	2.67
A00092	786	3.5	3.16	116	0.2	2.62	4.13	2.68	15.8	1.45
A00093	135	3.5	0.63	37	0.2	1.18	0.85	2.46	17.4	1.85
A00094	46	4.5	0.66	40	0.2	1.20	0.30	7.13	30.7	1.93
A00095	38	3.0	0.48	3	0.2	0.94	0.09	1.85	9.2	1.80
A00096	31	2.7	0.49	2	0.2	1.04	0.08	2.31	10.9	1.76
A00097	28	3.5	0.41	2	0.2	1.00	0.09	2.53	12.8	1.90
A00098	11	<0.5	0.01	<1	<0.1	<0.02	0.05	0.80	0.8	0.13
A00099	20	3.8	0.30	2	0.2	0.89	0.11	2.69	14.5	1.64

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A00088	0.8	<0.1	<0.05	0.03	0.10	2.2	0.02	26.1	0.11	74.1
A00089	1.1	<0.1	<0.05	0.36	1.38	0.8	0.02	9.94	0.14	458
A00090	1.3	<0.1	<0.05	0.04	0.11	1.8	0.02	5.26	0.09	143
A00091	1.6	<0.1	<0.05	0.03	0.05	1.5	0.05	48.1	0.07	50.3
A00092	1.2	<0.1	<0.05	0.05	0.09	1.4	0.04	95.1	0.07	176
A00093	1.0	<0.1	<0.05	0.02	0.06	1.3	0.04	15.1	0.08	23.0
A00094	0.9	<0.1	<0.05	0.02	0.04	3.4	0.06	14.7	0.10	7.8
A00095	2.0	<0.1	<0.05	0.01	0.04	0.9	0.03	6.57	0.06	3.1
A00096	1.1	<0.1	<0.05	<0.01	0.04	1.1	0.04	5.63	0.07	2.9
A00097	1.2	<0.1	<0.05	<0.01	0.03	1.2	0.05	29.0	0.07	5.0
A00098	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	0.14	0.07	1.4
A00099	1.0	<0.1	<0.05	<0.01	<0.02	1.3	0.04	30.9	0.09	5.8

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A00088	10.1	2.93	0.5	4	0.4	<0.05	0.06	1.99	1.9	0.12
A00089	9.8	643	0.5	6	0.6	<0.05	0.05	6.80	1.3	0.17
A00090	13.4	84.3	0.6	2	0.3	<0.05	0.07	1.90	2.7	0.18
A00091	18.2	28.9	1.1	2	<0.3	<0.05	0.13	0.41	2.0	0.25
A00092	14.0	37.1	0.6	3	<0.3	<0.05	0.09	0.88	1.8	0.19
A00093	9.6	3.93	0.8	3	<0.3	<0.05	0.09	0.27	1.5	0.14
A00094	7.5	1.37	1.0	4	<0.3	<0.05	0.16	0.26	1.2	0.13
A00095	8.7	0.39	1.5	2	<0.3	<0.05	0.07	0.19	1.9	0.16
A00096	8.4	0.11	1.1	2	<0.3	<0.05	0.08	0.21	2.0	0.14
A00097	9.4	0.13	1.2	2	<0.3	<0.05	0.11	0.18	1.9	0.14
A00098	0.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A00099	8.0	<0.05	1.2	3	<0.3	<0.05	0.09	0.17	1.6	0.12

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Final : TK110179 Order: 1S-0247, PO: SQ-04B-092311-ec

Page 7 of 7

Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t
A00088	0.35	0.6	1.36	0.1	N.A.
A00089	0.70	0.4	1.30	0.1	36.5
A00090	0.38	0.5	1.56	0.2	N.A.
A00091	0.35	0.3	3.70	0.3	N.A.
A00092	0.32	0.4	2.42	0.2	N.A.
A00093	0.31	0.2	2.65	0.3	N.A.
A00094	0.42	0.2	4.01	0.4	N.A.
A00095	0.23	0.3	2.19	0.2	N.A.
A00096	0.23	0.1	2.51	0.2	N.A.
A00097	0.28	0.2	3.25	0.3	N.A.
A00098	0.82	<0.1	0.76	<0.1	N.A.
A00099	0.34	0.2	2.83	0.3	N.A.

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## Certificate of Analysis

Work Order: TK110201

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Oct 31, 2011

P.O. No. : 1S-0260  
Project No. : -  
No. Of Samples : 55  
Date Submitted : Sep 30, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site  
Per client, use AAS42E for Ag over-limit in ICP/MS.

Certified By : \_\_\_\_\_  
Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0272	7.330	0.01	0.63	40	92	2.81	41	23.7	3.36	0.39
A0273	8.140	<0.01	0.87	50	639	2.98	34	25.4	3.84	0.42
A0274	6.880	<0.01	0.84	50	117	4.01	21	21.0	5.09	0.40
A0275	8.055	<0.01	0.80	40	113	3.01	30	20.5	4.96	0.37
A0276	0.125	1.59	1.44	90	200	0.95	56	>10000	5.56	0.26
A0277	7.325	<0.01	0.80	40	118	4.12	33	20.1	3.92	0.39
A0278	7.665	0.02	0.60	40	69	0.55	44	80.6	5.42	0.35
A0279	3.205	0.02	0.54	30	47	0.19	71	85.8	6.14	0.35
A0280	7.350	0.03	0.59	40	93	0.14	57	896	5.12	0.41
A0281	7.610	0.06	0.55	40	103	0.21	69	617	4.67	0.37
A0282	5.030	<0.01	0.03	40	38	>15	2	2.4	0.42	0.02
A0283	8.220	0.15	0.73	50	44	0.38	84	1830	4.95	0.42
A0284	8.630	0.08	0.71	50	70	0.45	96	1770	5.36	0.40
A0285	7.810	0.03	0.66	50	64	0.37	84	1590	4.15	0.38
A0286	6.920	0.03	0.61	50	76	0.27	93	1360	4.24	0.39
A0287	3.565	0.04	0.66	40	45	0.28	73	957	5.20	0.44
A0288	4.080	0.04	0.66	40	51	0.30	73	1100	4.94	0.44
A0289	6.975	0.07	0.55	50	81	0.19	99	2980	4.78	0.37
A0290	8.120	0.06	0.58	40	67	1.44	82	1600	4.79	0.37
A0291	6.000	0.06	0.50	30	48	1.45	98	1410	7.06	0.33
A0292	0.130	1.02	1.34	40	128	0.77	34	3450	3.48	0.13
A0293	8.465	0.12	0.67	40	60	3.60	72	2100	5.04	0.33
A0294	8.265	0.26	0.65	50	59	3.52	67	2220	4.78	0.35
A0295	8.435	0.04	0.82	50	89	3.64	61	2030	4.60	0.42
A0296	7.890	0.07	0.63	50	142	2.46	68	2320	3.86	0.31
A0297	8.065	0.13	0.59	40	58	1.34	86	2180	5.11	0.34
A0298	7.485	0.10	0.61	40	148	0.99	86	2130	3.00	0.31
A0299	7.290	0.05	0.55	40	55	0.44	92	1560	5.51	0.37
A0300	6.820	0.07	0.54	40	88	0.44	97	1870	3.99	0.36
A0301	6.420	<0.01	0.03	50	14	>15	3	6.8	0.47	0.02
A0302	6.405	0.12	0.55	50	136	0.71	85	2220	3.38	0.36
A0303	1.765	0.06	0.55	40	85	0.95	74	1350	3.67	0.34
A0304	5.110	0.02	0.72	60	661	4.51	37	235	4.15	0.40
A0305	5.265	0.04	0.61	40	29	1.58	93	312	8.37	0.39
A0306	1.665	0.04	0.56	50	50	1.24	81	472	4.95	0.37
A0307	1.785	0.04	0.56	50	72	1.18	89	398	4.88	0.38
A0308	7.515	0.04	0.54	50	61	1.45	96	1020	4.28	0.34
A0309	7.830	0.04	0.54	50	60	1.06	118	1180	4.82	0.35
A0310	7.565	0.04	0.56	50	56	0.93	86	1560	5.17	0.34
A0311	7.140	0.04	0.41	30	26	1.12	83	961	7.35	0.27
A0312	7.700	0.13	0.40	40	53	1.09	71	1930	4.30	0.28
A0313	7.320	0.07	0.40	40	52	1.16	82	2370	4.35	0.28
A0314	0.130	1.56	1.29	80	126	0.92	54	>10000	5.37	0.22

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0315	6.350	0.06	0.34	40	63	1.21	92	1290	3.46	0.25
A0316	7.910	0.07	0.36	40	51	1.50	92	1180	5.00	0.27
A0317	7.400	0.06	0.39	40	45	1.16	78	1840	4.93	0.29
A0318	7.265	0.05	0.38	30	34	0.61	89	1550	5.92	0.28
A0319	7.630	0.04	0.36	30	48	0.81	82	1460	4.71	0.27
A0320	7.835	0.12	0.37	30	31	0.55	94	675	5.95	0.27
A0321	4.980	<0.01	0.02	40	17	>15	4	3.7	0.46	0.02
A0322	8.135	0.05	0.42	40	54	0.55	90	1730	4.24	0.30
A0323	8.065	0.04	0.41	30	33	0.65	89	960	4.99	0.29
A0324	8.365	0.06	0.42	40	56	0.68	82	1570	4.54	0.31
A0325	8.440	0.06	0.44	30	35	1.04	91	1800	6.29	0.32
A0326	7.280	0.10	0.32	20	24	4.19	90	704	8.71	0.24

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0272	2	0.30	3740	0.04	0.9	1240	3.66	53.4	<0.01	7
A0273	7	1.05	3450	0.06	9.2	1290	1.13	67.9	<0.01	33
A0274	8	0.82	4200	0.04	1.0	1780	>5	50.0	<0.01	19
A0275	7	0.66	4330	0.04	0.7	2140	>5	45.9	<0.01	12
A0276	20	0.75	509	0.09	93.5	650	3.06	45.3	0.09	59
A0277	15	0.95	7090	0.04	0.9	1830	1.78	54.5	<0.01	23
A0278	2	0.18	621	0.02	1.3	1360	>5	29.5	<0.01	8
A0279	<1	0.04	59	0.02	1.1	970	>5	100	<0.01	5
A0280	<1	0.05	31	0.02	0.6	680	>5	38.4	<0.01	4
A0281	2	0.08	87	0.02	<0.5	600	>5	44.6	<0.01	5
A0282	<1	11.3	199	0.01	0.5	170	<0.01	36.9	<0.01	<1
A0283	11	0.15	121	0.02	1.1	1110	>5	26.7	<0.01	5
A0284	19	0.17	163	0.02	0.6	1000	>5	16.4	<0.01	6
A0285	15	0.14	128	0.02	0.7	910	>5	20.6	<0.01	5
A0286	9	0.11	97	0.02	0.7	710	>5	20.4	<0.01	5
A0287	3	0.14	85	0.02	1.1	710	>5	13.8	<0.01	5
A0288	2	0.15	94	0.02	1.1	730	>5	14.0	<0.01	5
A0289	2	0.06	42	0.02	<0.5	690	>5	28.2	<0.01	8
A0290	2	0.07	119	0.02	<0.5	730	>5	61.5	<0.01	5
A0291	1	0.05	181	0.02	1.0	670	>5	73.7	<0.01	6
A0292	9	0.65	441	0.10	30.2	570	0.47	41.7	0.13	59
A0293	2	0.06	217	0.02	<0.5	880	>5	91.8	<0.01	5
A0294	2	0.11	131	0.03	0.7	730	>5	131	<0.01	5
A0295	2	0.38	666	0.03	1.6	1000	>5	108	<0.01	19
A0296	2	0.10	620	0.02	<0.5	840	4.78	55.9	<0.01	6
A0297	1	0.06	327	0.02	1.3	700	>5	22.3	<0.01	6
A0298	2	0.07	355	0.02	<0.5	740	3.80	17.1	<0.01	6
A0299	1	0.14	334	0.02	<0.5	630	>5	13.6	<0.01	6
A0300	<1	0.16	777	0.03	0.8	1070	4.94	16.5	<0.01	6
A0301	1	11.4	211	0.01	<0.5	180	<0.01	42.3	<0.01	<1
A0302	<1	0.34	490	0.03	1.4	790	3.95	19.7	<0.01	9
A0303	1	0.36	321	0.03	1.1	1150	4.43	24.7	<0.01	8
A0304	7	1.12	1110	0.03	3.0	1730	0.84	76.1	<0.01	86
A0305	<1	0.19	185	0.02	1.9	680	>5	24.1	<0.01	7
A0306	<1	0.12	172	0.02	1.0	850	>5	25.1	<0.01	4
A0307	<1	0.11	161	0.02	1.1	750	>5	24.1	<0.01	5
A0308	1	0.07	199	0.02	0.7	720	>5	27.9	<0.01	5
A0309	<1	0.12	235	0.02	1.2	750	>5	26.6	<0.01	5
A0310	1	0.12	359	0.02	1.2	790	>5	20.7	<0.01	5
A0311	<1	0.14	373	0.01	1.3	1000	>5	21.6	<0.01	4
A0312	<1	0.16	383	0.01	1.0	920	>5	20.3	<0.01	3
A0313	<1	0.10	279	0.01	0.8	610	>5	20.8	<0.01	4
A0314	19	0.72	506	0.08	96.0	650	3.08	39.5	0.08	56

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0315	1	0.15	433	0.02	<0.5	510	4.31	22.7	<0.01	6
A0316	<1	0.15	463	0.02	1.5	550	>5	21.0	<0.01	6
A0317	<1	0.08	372	0.02	1.5	890	>5	30.6	<0.01	5
A0318	<1	0.06	745	0.02	0.9	530	>5	57.2	<0.01	5
A0319	<1	0.04	252	0.01	0.9	660	>5	20.5	<0.01	5
A0320	<1	0.05	176	0.01	<0.5	500	>5	18.3	<0.01	7
A0321	<1	13.0	219	<0.01	0.6	170	<0.01	40.0	<0.01	<1
A0322	<1	0.07	175	0.01	1.4	640	>5	23.8	<0.01	4
A0323	<1	0.06	179	0.01	0.9	490	>5	17.8	<0.01	6
A0324	<1	0.09	282	0.01	1.2	590	>5	27.2	<0.01	4
A0325	<1	0.07	218	0.01	0.8	710	>5	26.1	<0.01	5
A0326	<1	0.05	713	0.01	1.6	210	>5	42.3	<0.01	4

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0272	113	7.6	0.78	27	0.5	0.23	0.43	36.2	8.5	11.3
A0273	657	4.7	0.37	50	0.6	0.34	4.19	27.1	10.7	22.3
A0274	167	7.0	0.42	24	0.5	2.34	0.73	22.7	13.5	11.6
A0275	120	5.6	3.01	26	0.5	0.67	0.36	30.9	11.1	10.4
A0276	1600	8.4	7.01	283	0.2	2.32	9.10	18.8	12.6	1.66
A0277	140	3.6	0.21	52	0.5	0.10	0.09	34.9	11.4	13.1
A0278	303	6.0	5.82	70	0.4	16.3	2.19	5.34	10.3	7.64
A0279	10	4.4	0.12	21	0.3	2.45	0.10	10.4	20.9	2.40
A0280	43	4.0	0.13	278	0.2	0.60	0.19	13.9	17.6	0.87
A0281	16	4.3	0.10	196	0.2	0.86	0.09	7.46	18.3	2.46
A0282	10	<0.5	<0.01	<1	<0.1	<0.02	0.05	0.92	0.6	0.09
A0283	41	4.3	0.25	589	0.3	1.18	0.20	11.7	23.0	3.87
A0284	26	4.5	0.23	584	0.3	0.70	0.24	13.9	25.6	4.34
A0285	20	3.9	0.20	504	0.3	0.54	0.14	9.70	19.6	3.77
A0286	14	3.4	0.18	464	0.2	0.88	0.12	15.9	21.5	2.31
A0287	9	3.7	0.16	319	0.2	0.95	0.08	15.6	27.9	1.36
A0288	11	3.5	0.19	369	0.2	1.20	0.07	16.9	23.5	1.26
A0289	25	3.5	0.32	986	0.2	1.01	0.33	18.8	27.4	2.98
A0290	20	3.4	0.25	379	0.2	1.06	0.22	18.7	25.5	2.41
A0291	249	4.2	0.78	412	0.2	2.06	1.37	14.8	22.1	2.54
A0292	57	10.7	1.48	13	0.2	0.51	0.50	12.8	7.8	0.45
A0293	31	3.6	0.26	367	0.2	0.77	0.26	18.5	28.7	1.81
A0294	27	3.4	0.30	69	0.1	1.00	0.26	18.1	27.4	1.45
A0295	75	3.9	0.42	108	0.2	0.72	0.42	16.2	21.5	3.13
A0296	53	3.2	0.24	365	0.3	0.52	0.21	19.3	23.1	3.33
A0297	61	3.1	0.53	106	0.2	1.05	0.42	18.8	26.8	2.09
A0298	24	2.8	0.43	34	0.2	0.74	0.22	26.5	18.8	1.83
A0299	68	3.3	0.24	48	0.2	0.66	0.49	23.4	16.4	1.57
A0300	138	3.0	0.37	194	0.2	0.81	0.69	21.1	24.7	2.77
A0301	10	<0.5	<0.01	<1	<0.1	<0.02	0.06	0.99	0.7	0.16
A0302	46	3.6	0.17	19	0.2	0.55	0.23	23.0	20.0	3.22
A0303	18	3.4	0.13	42	0.3	0.48	0.09	20.6	21.5	2.38
A0304	44	4.3	0.06	30	0.6	0.13	0.11	19.5	10.5	12.8
A0305	11	4.1	0.10	57	0.2	0.45	0.08	11.9	21.8	1.94
A0306	20	3.3	0.13	104	0.2	0.53	0.12	16.8	23.7	2.55
A0307	19	3.2	0.11	84	0.2	0.54	0.11	17.5	23.6	2.24
A0308	20	3.3	0.20	55	0.3	0.70	0.16	13.6	24.5	3.78
A0309	27	3.3	0.18	45	0.2	0.52	0.12	12.4	24.1	3.57
A0310	63	3.8	0.19	37	0.4	0.48	0.12	12.7	27.5	3.46
A0311	57	4.1	0.20	25	0.4	0.54	0.15	8.40	23.9	3.13
A0312	338	3.1	1.72	142	0.4	4.02	2.15	11.0	21.6	4.36
A0313	36	2.8	0.45	66	0.3	1.21	0.30	12.7	26.2	3.22
A0314	1660	7.8	7.64	286	0.3	2.22	9.20	16.7	12.7	1.58

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0315	46	2.0	0.21	53	0.3	0.61	0.34	14.1	16.7	2.99
A0316	100	2.8	0.51	100	0.2	0.95	0.80	12.0	26.1	2.16
A0317	149	2.6	0.64	441	0.3	0.91	0.72	11.3	29.0	2.92
A0318	>10000	2.8	>10	521	0.2	5.50	68.4	5.81	23.9	1.24
A0319	282	2.6	2.18	542	0.2	2.33	1.67	8.20	23.9	2.18
A0320	299	2.8	0.85	247	0.2	2.76	1.81	9.73	24.3	1.41
A0321	12	<0.5	<0.01	1	<0.1	<0.02	0.07	0.86	0.7	0.15
A0322	254	2.5	1.42	626	0.3	1.15	0.97	10.2	21.5	2.56
A0323	168	2.8	0.86	363	0.3	1.72	0.92	11.8	25.9	2.08
A0324	189	2.9	0.59	557	0.4	0.89	0.54	11.9	32.7	3.98
A0325	206	3.3	0.96	665	0.3	1.39	0.64	11.3	46.3	2.23
A0326	174	3.9	2.65	252	0.2	6.16	1.19	4.06	48.1	1.01

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0272	1.6	<0.1	0.25	0.02	0.04	19.0	0.20	13.3	0.13	20.5
A0273	2.8	<0.1	0.14	0.02	0.08	13.0	0.14	2.78	0.10	215
A0274	2.0	<0.1	0.16	<0.01	0.06	9.8	0.17	22.0	0.09	17.9
A0275	1.8	<0.1	0.12	0.01	0.04	14.5	0.13	1.60	0.07	38.5
A0276	5.0	<0.1	<0.05	0.88	0.22	8.8	0.08	91.0	0.49	662
A0277	2.0	<0.1	0.08	0.01	0.03	16.8	0.13	0.76	0.08	9.2
A0278	2.4	<0.1	0.13	0.03	0.58	2.4	0.05	0.88	<0.05	43.9
A0279	0.9	<0.1	0.10	0.06	<0.02	5.7	0.04	119	0.07	19.6
A0280	1.1	<0.1	0.10	0.12	0.04	7.7	0.04	232	0.07	3.8
A0281	1.0	<0.1	0.10	0.03	0.03	4.0	0.03	236	0.06	2.8
A0282	<0.1	<0.1	<0.05	0.01	<0.02	0.4	0.01	1.18	0.06	0.8
A0283	1.2	<0.1	0.09	0.03	0.10	6.4	0.04	208	<0.05	5.1
A0284	1.1	<0.1	0.09	0.15	0.10	7.5	0.04	378	0.05	5.5
A0285	1.0	<0.1	0.09	0.39	0.07	5.2	0.04	237	<0.05	5.0
A0286	1.2	<0.1	0.08	0.43	0.07	8.9	0.05	394	<0.05	3.5
A0287	1.5	<0.1	0.07	0.27	0.05	8.4	0.04	186	0.06	2.9
A0288	1.5	<0.1	0.07	0.30	0.06	9.1	0.05	172	0.05	3.5
A0289	1.1	<0.1	0.07	0.78	0.11	10.2	0.05	823	<0.05	4.9
A0290	1.1	<0.1	0.06	0.22	0.05	9.8	0.05	404	<0.05	6.1
A0291	1.2	<0.1	0.06	0.59	0.14	7.8	0.04	399	0.06	54.3
A0292	4.7	<0.1	0.34	0.07	0.04	6.1	0.10	354	0.54	21.4
A0293	1.3	<0.1	0.06	0.07	0.08	9.7	0.07	421	0.05	7.6
A0294	1.3	<0.1	0.05	0.01	0.08	9.6	0.16	429	<0.05	11.6
A0295	1.9	<0.1	0.09	0.01	0.08	8.2	0.07	220	0.08	23.1
A0296	1.2	<0.1	0.05	0.08	0.09	10.1	0.07	427	<0.05	6.9
A0297	1.2	<0.1	<0.05	<0.01	0.12	10.4	0.08	393	<0.05	8.8
A0298	1.2	<0.1	0.06	<0.01	0.10	14.0	0.06	454	<0.05	5.9
A0299	1.2	<0.1	0.05	<0.01	0.06	12.2	0.06	465	0.07	26.6
A0300	1.2	<0.1	0.05	<0.01	0.07	11.4	0.08	484	<0.05	25.9
A0301	<0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	2.69	0.06	0.6
A0302	1.2	<0.1	0.10	<0.01	0.09	12.9	0.07	202	<0.05	4.9
A0303	1.2	<0.1	0.09	<0.01	0.06	11.2	0.08	158	<0.05	2.7
A0304	1.9	<0.1	0.07	<0.01	0.04	9.1	0.09	52.0	0.06	3.1
A0305	1.0	<0.1	0.06	<0.01	0.02	6.2	0.05	133	0.06	3.1
A0306	0.9	<0.1	0.06	<0.01	0.04	9.0	0.06	214	<0.05	4.0
A0307	0.9	<0.1	0.06	<0.01	0.03	9.4	0.05	226	<0.05	4.2
A0308	0.8	<0.1	0.05	<0.01	0.08	7.1	0.05	491	<0.05	3.1
A0309	0.9	<0.1	<0.05	<0.01	0.08	6.5	0.05	351	<0.05	3.8
A0310	0.8	<0.1	0.06	<0.01	0.11	6.7	0.05	269	<0.05	3.6
A0311	0.7	<0.1	0.08	<0.01	0.07	4.4	0.04	301	0.09	3.5
A0312	0.7	<0.1	0.07	<0.01	0.28	5.7	0.04	278	<0.05	42.7
A0313	0.7	<0.1	0.06	<0.01	0.13	7.1	0.04	449	<0.05	8.0
A0314	4.6	<0.1	<0.05	0.86	0.23	7.7	0.08	96.0	0.41	660

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0315	0.6	<0.1	<0.05	<0.01	0.06	8.1	0.04	901	<0.05	7.4
A0316	0.7	<0.1	<0.05	<0.01	0.10	6.6	0.04	778	0.05	10.5
A0317	0.6	<0.1	<0.05	0.04	0.08	6.3	0.04	541	<0.05	23.2
A0318	4.7	<0.1	<0.05	0.41	2.97	2.9	0.03	427	0.05	658
A0319	0.6	<0.1	<0.05	0.06	0.14	4.5	0.03	649	<0.05	70.0
A0320	0.8	<0.1	<0.05	0.01	0.33	5.6	0.03	906	<0.05	102
A0321	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	2.58	<0.05	1.3
A0322	0.7	<0.1	0.05	0.02	0.13	5.8	0.03	359	<0.05	21.7
A0323	0.7	<0.1	<0.05	0.01	0.10	7.0	0.03	566	<0.05	17.3
A0324	0.7	<0.1	0.05	0.03	0.11	7.1	0.03	328	<0.05	15.4
A0325	0.7	<0.1	0.05	0.04	0.11	6.7	0.03	388	<0.05	13.8
A0326	0.7	<0.1	<0.05	0.03	0.25	2.2	0.06	280	0.06	84.0

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Element Method Det.Lim. Units	Rb ICM14B	Sb ICM14B	Sc ICM14B	Se ICM14B	Sn ICM14B	Ta ICM14B	Tb ICM14B	Te ICM14B	Th ICM14B	Tl ICM14B
	0.2 ppm	0.05 ppm	0.1 ppm	1 ppm	0.3 ppm	0.05 ppm	0.02 ppm	0.05 ppm	0.1 ppm	0.02 ppm
A0272	19.1	1.21	2.1	<1	<0.3	<0.05	0.48	0.56	7.5	0.44
A0273	26.6	0.67	3.8	<1	<0.3	<0.05	0.46	0.15	2.4	0.58
A0274	19.8	0.50	3.6	1	<0.3	<0.05	0.53	1.47	2.8	0.56
A0275	17.7	0.97	2.7	<1	<0.3	<0.05	0.54	4.19	2.0	0.52
A0276	9.6	29.1	4.8	3	4.2	<0.05	0.26	0.63	2.0	1.01
A0277	19.4	0.63	3.4	<1	<0.3	<0.05	0.59	0.27	1.7	0.46
A0278	15.2	4.08	1.8	3	<0.3	<0.05	0.22	17.4	1.6	0.40
A0279	10.2	0.94	0.6	3	0.4	<0.05	0.19	0.25	2.6	0.70
A0280	11.4	7.85	0.6	3	0.3	<0.05	0.16	0.34	2.7	0.32
A0281	10.3	0.73	0.6	3	<0.3	<0.05	0.15	0.13	1.4	0.34
A0282	0.6	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0283	12.4	1.33	0.7	3	0.4	<0.05	0.19	0.18	2.6	0.23
A0284	12.1	2.58	0.8	3	<0.3	<0.05	0.20	0.56	3.0	0.22
A0285	11.1	5.05	0.7	3	<0.3	<0.05	0.19	0.35	2.5	0.21
A0286	10.8	5.98	0.6	2	<0.3	<0.05	0.20	0.25	2.7	0.20
A0287	11.9	3.77	0.6	3	0.5	<0.05	0.17	0.24	2.8	0.18
A0288	11.9	4.09	0.6	3	0.5	<0.05	0.19	0.25	3.1	0.19
A0289	10.1	11.1	0.5	3	<0.3	<0.05	0.28	0.32	2.0	0.25
A0290	9.8	8.71	0.6	3	0.4	<0.05	0.23	0.17	2.8	0.22
A0291	9.5	22.5	0.6	3	0.8	<0.05	0.19	0.84	2.6	0.24
A0292	5.1	2.80	4.9	1	1.7	<0.05	0.29	0.18	1.3	0.09
A0293	9.5	8.49	0.7	3	<0.3	<0.05	0.25	0.23	3.2	0.23
A0294	9.3	2.39	0.5	3	0.5	<0.05	0.24	0.11	2.7	0.14
A0295	16.5	2.69	3.0	3	0.4	<0.05	0.26	0.15	2.5	0.26
A0296	9.1	7.10	1.1	2	<0.3	<0.05	0.26	0.08	2.9	0.17
A0297	9.6	0.32	0.6	3	0.4	<0.05	0.21	0.11	2.9	0.15
A0298	10.0	0.28	0.9	2	<0.3	<0.05	0.28	0.09	3.5	0.15
A0299	10.4	2.84	0.8	3	0.5	<0.05	0.27	0.08	2.8	0.15
A0300	10.7	1.73	0.7	3	0.3	<0.05	0.28	0.09	3.7	0.20
A0301	0.9	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0302	10.6	0.07	1.8	2	<0.3	<0.05	0.27	0.07	3.1	0.18
A0303	9.8	0.21	1.7	2	0.3	<0.05	0.27	0.09	2.7	0.14
A0304	13.5	0.42	9.3	<1	0.3	<0.05	0.34	<0.05	3.4	0.26
A0305	9.7	0.34	0.7	4	0.3	<0.05	0.20	0.16	2.4	0.22
A0306	9.4	0.19	0.5	3	0.4	<0.05	0.23	0.19	3.2	0.13
A0307	9.3	0.32	0.6	2	<0.3	<0.05	0.22	0.17	3.0	0.14
A0308	9.1	<0.05	0.6	2	<0.3	<0.05	0.24	0.17	2.3	0.13
A0309	8.5	<0.05	0.7	3	<0.3	<0.05	0.22	0.14	2.3	0.14
A0310	8.8	<0.05	0.6	3	<0.3	<0.05	0.21	0.11	3.0	0.13
A0311	7.8	<0.05	0.6	3	0.3	0.06	0.18	0.12	2.1	0.14
A0312	9.3	1.55	0.5	2	0.4	<0.05	0.19	0.79	3.0	0.15
A0313	8.2	0.18	0.5	3	0.6	<0.05	0.20	0.40	2.6	0.13
A0314	9.0	25.9	4.6	3	4.6	<0.05	0.25	0.64	1.9	0.98

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0315	6.9	0.32	0.4	2	0.4	<0.05	0.19	0.14	2.1	0.11
A0316	7.5	0.34	0.5	3	0.6	<0.05	0.19	0.36	2.3	0.14
A0317	8.1	0.42	0.5	2	0.4	<0.05	0.19	0.18	2.3	0.16
A0318	7.7	86.4	0.6	3	1.6	<0.05	0.15	3.26	0.7	0.90
A0319	8.2	8.09	0.4	2	0.5	<0.05	0.16	1.48	1.6	0.18
A0320	7.5	3.54	0.5	3	0.8	<0.05	0.15	1.30	1.8	0.15
A0321	0.8	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0322	8.6	1.43	0.5	2	<0.3	<0.05	0.15	0.26	2.0	0.20
A0323	8.7	2.31	0.5	2	0.4	<0.05	0.15	0.40	2.5	0.18
A0324	9.4	0.63	0.5	2	<0.3	<0.05	0.14	0.36	2.5	0.20
A0325	9.4	1.78	0.4	4	0.4	<0.05	0.17	0.34	1.6	0.21
A0326	6.4	14.3	0.5	4	0.9	<0.05	0.19	1.87	0.8	0.14

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Cu ICP90Q 0.01 %	Zn ICP90Q 0.01 %
A0272	2.48	0.1	14.1	1.3	N.A.	N.A.	N.A.
A0273	0.96	<0.1	12.3	1.0	N.A.	N.A.	N.A.
A0274	0.64	<0.1	14.6	1.2	N.A.	N.A.	N.A.
A0275	0.47	0.1	13.2	1.0	N.A.	N.A.	N.A.
A0276	0.63	41.2	6.80	0.6	N.A.	1.61	N.A.
A0277	0.43	0.3	14.4	1.0	N.A.	N.A.	N.A.
A0278	0.76	0.1	4.79	0.3	N.A.	N.A.	N.A.
A0279	1.13	0.6	4.30	0.4	N.A.	N.A.	N.A.
A0280	1.35	0.7	3.40	0.3	N.A.	N.A.	N.A.
A0281	0.86	0.5	3.10	0.2	N.A.	N.A.	N.A.
A0282	0.57	<0.1	0.73	<0.1	N.A.	N.A.	N.A.
A0283	0.96	0.3	3.48	0.2	N.A.	N.A.	N.A.
A0284	1.02	0.3	3.73	0.3	N.A.	N.A.	N.A.
A0285	0.85	0.3	3.72	0.3	N.A.	N.A.	N.A.
A0286	0.95	0.5	4.15	0.3	N.A.	N.A.	N.A.
A0287	0.84	0.5	3.51	0.3	N.A.	N.A.	N.A.
A0288	0.92	0.6	3.69	0.3	N.A.	N.A.	N.A.
A0289	0.92	0.4	5.56	0.4	N.A.	N.A.	N.A.
A0290	0.83	0.3	4.69	0.4	N.A.	N.A.	N.A.
A0291	0.80	0.4	4.02	0.3	N.A.	N.A.	N.A.
A0292	0.40	1.0	8.43	0.7	N.A.	N.A.	N.A.
A0293	0.83	0.3	5.98	0.5	N.A.	N.A.	N.A.
A0294	0.62	0.4	5.86	0.5	N.A.	N.A.	N.A.
A0295	0.94	0.3	6.00	0.5	N.A.	N.A.	N.A.
A0296	0.90	0.2	5.85	0.5	N.A.	N.A.	N.A.
A0297	0.74	0.3	4.40	0.3	N.A.	N.A.	N.A.
A0298	0.82	0.2	5.55	0.4	N.A.	N.A.	N.A.
A0299	0.76	0.4	5.67	0.4	N.A.	N.A.	N.A.
A0300	0.99	0.3	6.07	0.5	N.A.	N.A.	N.A.
A0301	0.46	<0.1	0.74	<0.1	N.A.	N.A.	N.A.
A0302	1.40	0.5	6.00	0.5	N.A.	N.A.	N.A.
A0303	1.08	0.5	6.18	0.5	N.A.	N.A.	N.A.
A0304	0.96	0.3	7.72	0.6	N.A.	N.A.	N.A.
A0305	0.54	0.4	4.61	0.3	N.A.	N.A.	N.A.
A0306	0.71	0.4	4.80	0.4	N.A.	N.A.	N.A.
A0307	0.71	0.3	4.73	0.4	N.A.	N.A.	N.A.
A0308	0.68	0.3	5.14	0.4	N.A.	N.A.	N.A.
A0309	0.65	0.3	4.60	0.4	N.A.	N.A.	N.A.
A0310	0.61	0.3	4.34	0.3	N.A.	N.A.	N.A.
A0311	0.49	0.3	4.18	0.3	N.A.	N.A.	N.A.
A0312	0.58	0.2	4.05	0.3	N.A.	N.A.	N.A.
A0313	0.47	0.2	4.28	0.3	N.A.	N.A.	N.A.
A0314	0.61	40.4	6.40	0.6	N.A.	1.61	N.A.

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Cu ICP90Q 0.01 %	Zn ICP90Q 0.01 %
A0315	0.47	0.3	3.96	0.3	N.A.	N.A.	N.A.
A0316	0.55	0.3	3.97	0.3	N.A.	N.A.	N.A.
A0317	0.47	0.3	3.84	0.3	N.A.	N.A.	N.A.
A0318	0.54	0.4	2.85	0.2	17.2	N.A.	0.97
A0319	0.47	0.3	3.00	0.2	N.A.	N.A.	N.A.
A0320	0.45	0.4	2.75	0.2	N.A.	N.A.	N.A.
A0321	0.36	<0.1	0.72	<0.1	N.A.	N.A.	N.A.
A0322	0.50	0.3	2.70	0.2	N.A.	N.A.	N.A.
A0323	0.55	0.3	2.75	0.2	N.A.	N.A.	N.A.
A0324	0.50	0.2	2.62	0.2	N.A.	N.A.	N.A.
A0325	0.45	0.3	3.06	0.2	N.A.	N.A.	N.A.
A0326	0.65	0.4	5.00	0.4	N.A.	N.A.	N.A.

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## Certificate of Analysis

Work Order: TK110202

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Oct 27, 2011

P.O. No. : 1S-0261  
Project No. : -  
No. Of Samples : 32  
Date Submitted : Sep 30, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

### Comments:

Preparation of samples was performed off site  
Per client, use AAS42E for Ag over-limit in ICP/MS.  
Boron value in ICM14B informational only.

Certified By : \_\_\_\_\_  
Satpaul Gill  
QAQC Chemist

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0100	8.160	0.02	0.35	40	47	0.81	106	1200	5.93	0.26
A0101	8.195	0.02	0.35	40	49	0.80	111	982	6.60	0.26
A0102	3.980	0.03	0.33	50	45	0.73	90	1030	6.84	0.25
A0103	3.550	0.02	0.35	50	48	0.75	111	1100	6.53	0.26
A0104	8.175	0.02	0.34	40	51	0.93	111	1100	6.15	0.25
A0105	8.285	0.02	0.35	50	46	0.88	110	1590	5.80	0.26
A0106	7.975	0.03	0.35	50	39	0.72	116	1500	6.61	0.26
A0107	8.295	0.02	0.32	40	26	0.59	135	1300	7.04	0.23
A0108	8.115	0.03	0.31	40	40	0.64	121	1660	6.32	0.23
A0109	8.165	0.03	0.32	50	33	0.68	124	1350	6.44	0.24
A0110	8.375	0.02	0.27	50	60	0.59	130	1280	7.35	0.20
A0111	8.840	0.02	0.35	30	17	0.90	123	1430	10.6	0.25
A0112	8.165	0.03	0.38	40	27	1.21	114	1880	7.70	0.27
A0113	8.190	0.03	0.31	50	31	0.55	120	1400	8.37	0.23
A0114	8.135	0.01	0.33	30	38	0.51	133	955	7.37	0.24
A0115	8.670	0.03	0.35	40	25	0.49	122	2620	9.78	0.26
A0116	8.990	0.08	0.38	30	12	0.54	122	1840	12.4	0.28
A0117	8.460	0.04	0.43	40	25	0.90	107	1940	7.52	0.32
A0118	8.240	0.03	0.37	40	30	0.85	153	2090	6.92	0.27
A0119	9.215	0.03	0.30	30	25	0.44	127	1790	9.61	0.22
A0120	6.785	0.02	0.39	40	56	0.54	114	1280	7.60	0.27
A0121	7.735	0.04	0.34	40	28	0.69	117	3770	8.17	0.26
A0122	7.455	0.12	0.30	20	23	0.79	123	2130	8.33	0.24
A0123	3.675	0.13	0.36	20	16	0.99	112	2320	10.7	0.28
A0124	6.165	0.04	0.35	20	22	1.55	117	1400	8.96	0.28
A0125	8.780	0.02	0.37	40	41	0.89	126	1490	6.65	0.28
A0126	8.720	0.03	0.45	50	37	1.01	140	1410	6.44	0.31
A0127	8.740	0.03	0.31	50	28	0.64	134	1450	7.73	0.24
A0128	8.170	0.03	0.33	50	34	0.59	132	1140	7.53	0.25
A0129	8.175	0.02	0.28	50	31	0.64	157	1150	8.23	0.21
A0130	0.125	1.13	1.21	40	133	0.74	33	3340	3.39	0.11
A0131	8.110	0.02	0.35	30	31	0.56	165	701	7.74	0.27

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0100	<1	0.31	265	0.04	3.5	310	>5	73.6	<0.01	9
A0101	<1	0.38	180	0.05	3.0	470	>5	331	<0.01	13
A0102	<1	0.35	201	0.04	2.3	230	>5	401	<0.01	9
A0103	<1	0.35	205	0.04	2.9	230	>5	497	<0.01	10
A0104	<1	0.42	402	0.04	2.9	280	>5	49.3	<0.01	12
A0105	<1	0.39	477	0.05	3.1	360	>5	31.6	<0.01	13
A0106	<1	0.30	524	0.03	3.1	240	>5	32.1	<0.01	9
A0107	<1	0.30	366	0.03	2.9	160	>5	27.0	<0.01	11
A0108	<1	0.32	288	0.04	2.9	200	>5	28.0	<0.01	11
A0109	<1	0.39	440	0.03	2.7	220	>5	34.1	<0.01	13
A0110	<1	0.40	357	0.04	2.9	120	>5	28.0	<0.01	26
A0111	<1	0.38	473	0.02	3.2	160	>5	21.9	<0.01	12
A0112	<1	0.38	921	0.02	2.7	230	>5	23.1	<0.01	10
A0113	<1	0.39	366	0.03	3.1	360	>5	22.7	<0.01	19
A0114	<1	0.39	275	0.04	2.7	390	>5	23.9	<0.01	21
A0115	<1	0.28	451	0.02	3.4	400	>5	17.4	<0.01	11
A0116	<1	0.22	464	0.02	4.4	350	>5	18.1	<0.01	6
A0117	<1	0.34	1740	0.02	2.5	550	>5	22.6	<0.01	9
A0118	<1	0.34	1360	0.02	3.6	310	>5	22.7	<0.01	11
A0119	<1	0.32	428	0.02	3.7	210	>5	14.8	<0.01	19
A0120	1	0.48	699	0.02	3.2	360	>5	20.4	<0.01	21
A0121	<1	0.20	963	0.02	4.0	410	>5	22.8	<0.01	6
A0122	<1	0.05	179	0.01	2.7	270	>5	24.1	<0.01	4
A0123	<1	0.15	245	0.02	4.8	340	>5	28.1	<0.01	8
A0124	<1	0.07	108	0.02	3.8	260	>5	42.4	<0.01	5
A0125	<1	0.19	409	0.02	3.5	320	>5	25.6	<0.01	5
A0126	<1	0.30	333	0.03	2.7	500	>5	50.1	<0.01	8
A0127	<1	0.25	210	0.03	3.2	230	>5	52.8	<0.01	8
A0128	<1	0.25	184	0.04	3.2	290	>5	220	<0.01	11
A0129	<1	0.25	251	0.04	4.5	180	>5	184	<0.01	11
A0130	9	0.64	459	0.08	30.6	510	0.47	36.4	0.11	57
A0131	<1	0.24	365	0.03	4.0	140	>5	53.0	<0.01	9

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0100	34	2.8	0.38	6	0.1	0.96	0.14	2.35	13.3	1.86
A0101	27	3.2	0.39	1	0.1	1.03	0.04	2.65	13.9	1.78
A0102	28	3.1	0.66	1	0.1	1.89	0.08	2.72	13.3	1.57
A0103	26	3.1	0.55	1	0.1	1.58	0.07	2.79	14.1	1.66
A0104	56	3.3	0.59	2	0.2	1.15	0.17	4.53	19.2	2.07
A0105	131	3.0	0.66	1	0.2	0.99	0.54	3.10	12.6	1.71
A0106	181	3.1	0.98	2	0.1	1.89	0.85	2.59	14.4	1.34
A0107	93	2.9	0.78	2	0.1	1.38	0.49	2.83	21.5	1.32
A0108	55	2.7	0.67	2	0.1	1.07	0.17	2.52	17.1	1.48
A0109	512	2.8	0.67	2	0.2	1.13	2.70	2.55	10.4	1.69
A0110	74	2.9	0.51	3	0.1	0.94	0.13	1.58	13.6	1.47
A0111	77	4.2	1.03	2	0.1	8.04	0.43	3.00	23.8	1.43
A0112	560	3.2	1.71	29	0.1	4.74	3.41	2.69	14.9	1.50
A0113	375	3.3	0.77	21	0.2	1.44	2.19	2.44	15.1	1.72
A0114	43	2.8	0.49	3	0.2	1.19	0.08	2.91	14.2	1.64
A0115	41	3.7	2.21	2	0.1	4.90	0.11	3.76	20.9	1.48
A0116	170	4.6	1.88	2	0.1	9.28	1.23	2.87	33.2	1.34
A0117	240	3.1	1.27	5	0.2	2.67	1.53	3.44	13.5	2.07
A0118	166	2.7	0.79	11	0.2	1.48	1.13	2.56	12.0	2.12
A0119	38	3.6	0.82	3	0.1	1.83	0.09	1.87	22.1	1.48
A0120	61	2.9	0.94	2	0.2	1.91	0.11	2.96	10.6	2.05
A0121	288	3.3	5.11	184	0.2	12.2	1.81	4.54	19.5	2.39
A0122	>10000	3.2	>10	424	0.1	9.04	68.8	3.57	15.0	0.81
A0123	292	4.1	>10	109	0.2	63.3	2.01	3.16	19.0	1.62
A0124	6600	3.5	8.87	239	0.1	5.39	37.1	1.53	11.9	1.20
A0125	120	2.7	1.36	62	0.1	1.11	0.66	3.81	19.4	1.65
A0126	1740	2.8	1.95	27	0.2	1.51	8.66	4.06	17.4	1.78
A0127	33	3.2	0.59	3	<0.1	1.25	0.19	2.65	17.5	1.27
A0128	29	2.9	0.47	2	<0.1	1.12	0.13	2.71	19.2	1.19
A0129	298	3.2	0.53	2	<0.1	1.16	1.55	3.33	25.9	1.11
A0130	72	9.9	1.85	13	0.3	0.52	0.50	11.0	7.6	0.42
A0131	49	2.8	0.61	16	<0.1	1.52	0.33	1.90	18.2	1.04

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0100	1.0	<0.1	0.06	<0.01	0.04	1.1	0.04	15.4	0.15	9.6
A0101	1.3	<0.1	<0.05	<0.01	0.03	1.2	0.05	3.84	0.13	1.7
A0102	1.0	<0.1	<0.05	<0.01	0.04	1.3	0.03	6.71	0.11	3.5
A0103	1.2	<0.1	<0.05	<0.01	0.04	1.3	0.03	3.96	0.10	2.9
A0104	1.1	<0.1	<0.05	<0.01	0.03	2.1	0.05	65.5	0.09	10.4
A0105	1.3	<0.1	0.05	<0.01	0.07	1.4	0.05	69.5	0.09	3.6
A0106	1.2	<0.1	<0.05	<0.01	0.22	1.2	0.03	33.8	0.09	16.8
A0107	1.3	<0.1	<0.05	<0.01	0.12	1.3	0.02	96.4	0.09	5.5
A0108	1.3	<0.1	<0.05	<0.01	0.04	1.2	0.03	35.8	0.08	3.0
A0109	1.4	<0.1	<0.05	<0.01	0.15	1.2	0.03	2.29	0.08	5.7
A0110	2.8	<0.1	<0.05	<0.01	0.03	0.8	0.02	9.42	0.09	3.2
A0111	1.6	<0.1	<0.05	<0.01	0.04	1.4	0.03	9.79	0.10	8.0
A0112	1.5	<0.1	<0.05	0.04	0.83	1.3	0.03	20.7	0.07	85.6
A0113	2.2	<0.1	<0.05	0.02	0.20	1.0	0.03	7.52	0.08	12.5
A0114	1.9	<0.1	<0.05	<0.01	0.02	1.2	0.04	20.0	0.08	2.5
A0115	1.4	<0.1	<0.05	0.01	0.06	1.8	0.03	33.3	0.09	3.7
A0116	1.5	<0.1	<0.05	<0.01	0.12	1.3	0.02	14.2	0.11	7.6
A0117	1.7	<0.1	<0.05	<0.01	0.10	1.6	0.04	28.8	0.07	38.5
A0118	1.4	<0.1	<0.05	<0.01	0.10	1.1	0.03	16.5	0.06	27.3
A0119	2.1	<0.1	<0.05	<0.01	0.06	0.9	0.02	25.6	0.09	3.4
A0120	2.5	<0.1	<0.05	0.01	0.04	1.3	0.03	6.90	0.07	2.9
A0121	1.2	<0.1	<0.05	0.04	1.13	2.2	0.02	30.7	0.19	45.3
A0122	2.4	<0.1	<0.05	0.42	10.1	1.7	0.01	61.1	0.06	328
A0123	2.0	<0.1	<0.05	0.04	0.55	1.5	0.02	23.7	0.09	149
A0124	2.3	<0.1	<0.05	0.26	2.07	0.7	0.01	6.66	0.08	229
A0125	0.9	<0.1	<0.05	0.03	0.04	1.8	0.02	61.1	0.07	14.2
A0126	1.5	<0.1	<0.05	0.09	0.43	1.8	0.04	76.1	0.06	72.2
A0127	1.1	<0.1	<0.05	<0.01	0.04	1.2	0.02	108	0.08	3.3
A0128	1.2	<0.1	<0.05	<0.01	0.03	1.2	0.03	21.7	0.08	2.7
A0129	1.0	<0.1	<0.05	<0.01	0.05	1.6	0.02	45.0	0.10	2.8
A0130	4.4	<0.1	0.33	0.07	0.04	5.2	0.09	358	0.52	21.1
A0131	1.0	<0.1	<0.05	<0.01	0.03	1.0	0.02	15.0	0.07	4.3

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0100	8.6	<0.05	1.1	2	0.4	0.08	0.08	0.15	1.5	0.12
A0101	9.5	<0.05	1.1	2	<0.3	<0.05	0.11	0.20	2.0	0.13
A0102	9.3	<0.05	0.8	2	<0.3	<0.05	0.07	0.51	2.1	0.12
A0103	9.4	<0.05	0.9	2	0.3	<0.05	0.07	0.40	2.1	0.12
A0104	9.7	<0.05	1.6	3	<0.3	<0.05	0.10	0.25	2.3	0.13
A0105	9.2	<0.05	1.1	3	<0.3	<0.05	0.09	0.20	2.6	0.13
A0106	8.8	<0.05	0.7	2	<0.3	<0.05	0.07	0.35	2.1	0.12
A0107	8.8	<0.05	0.8	3	<0.3	<0.05	0.06	0.26	2.2	0.13
A0108	8.7	<0.05	1.0	3	<0.3	<0.05	0.07	0.28	2.3	0.13
A0109	9.2	<0.05	1.0	2	<0.3	<0.05	0.08	0.29	2.5	0.14
A0110	7.6	<0.05	1.1	2	<0.3	<0.05	0.04	0.27	2.2	0.11
A0111	10.9	0.13	0.8	3	0.3	<0.05	0.07	4.00	1.5	0.14
A0112	11.8	0.36	0.9	3	0.4	<0.05	0.07	1.18	1.5	0.15
A0113	9.9	0.21	0.9	2	<0.3	<0.05	0.09	0.44	1.7	0.16
A0114	10.1	0.15	1.0	2	<0.3	<0.05	0.11	0.44	1.7	0.15
A0115	12.4	0.16	0.7	3	0.4	<0.05	0.09	2.36	2.1	0.15
A0116	12.1	0.30	0.6	4	0.8	<0.05	0.07	5.33	1.8	0.14
A0117	14.3	0.15	0.8	2	0.4	<0.05	0.12	0.99	2.3	0.18
A0118	10.6	0.27	0.9	2	0.3	<0.05	0.08	0.50	2.0	0.16
A0119	8.9	0.15	0.8	3	0.3	<0.05	0.05	0.67	1.7	0.14
A0120	11.2	0.26	1.1	1	0.3	<0.05	0.10	0.68	2.9	0.17
A0121	10.4	4.00	0.6	3	0.8	<0.05	0.08	2.27	1.9	0.18
A0122	9.7	43.4	0.4	3	1.4	<0.05	0.07	9.33	1.3	0.16
A0123	12.6	12.8	0.5	3	2.0	<0.05	0.06	13.4	1.9	0.19
A0124	12.3	57.3	0.4	2	0.9	<0.05	0.05	12.4	1.4	0.20
A0125	10.1	2.74	0.5	3	0.3	<0.05	0.08	0.80	2.0	0.17
A0126	11.0	6.08	1.0	2	0.4	<0.05	0.14	1.24	2.4	0.16
A0127	8.9	0.25	0.7	2	0.3	<0.05	0.07	0.39	1.8	0.11
A0128	8.9	0.12	1.0	2	<0.3	<0.05	0.07	0.30	1.9	0.12
A0129	7.3	0.66	1.4	3	0.4	<0.05	0.07	0.33	1.7	0.11
A0130	4.5	2.81	4.4	<1	1.9	<0.05	0.27	0.20	1.2	0.09
A0131	9.5	1.44	1.2	3	0.3	<0.05	0.04	0.43	1.9	0.12

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Final : TK110202 Order: 1S-0261

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Zn ICP90Q 0.01 %
A0100	0.29	0.2	2.46	0.3	N.A.	N.A.
A0101	0.26	0.2	3.62	0.3	N.A.	N.A.
A0102	0.23	0.3	2.08	0.2	N.A.	N.A.
A0103	0.21	0.2	2.20	0.2	N.A.	N.A.
A0104	0.25	0.7	2.84	0.3	N.A.	N.A.
A0105	0.25	0.2	2.95	0.3	N.A.	N.A.
A0106	0.21	0.4	1.84	0.2	N.A.	N.A.
A0107	0.21	0.5	1.62	0.2	N.A.	N.A.
A0108	0.22	0.3	1.99	0.2	N.A.	N.A.
A0109	0.25	0.2	2.20	0.2	N.A.	N.A.
A0110	0.25	0.5	1.40	0.1	N.A.	N.A.
A0111	0.31	1.0	1.83	0.2	N.A.	N.A.
A0112	0.72	1.7	1.90	0.2	N.A.	N.A.
A0113	0.33	1.7	2.77	0.2	N.A.	N.A.
A0114	0.33	2.0	3.15	0.3	N.A.	N.A.
A0115	0.44	2.3	2.36	0.2	N.A.	N.A.
A0116	0.31	1.1	2.01	0.2	N.A.	N.A.
A0117	0.57	1.5	3.42	0.3	N.A.	N.A.
A0118	0.29	0.9	2.19	0.2	N.A.	N.A.
A0119	0.28	1.5	1.45	0.1	N.A.	N.A.
A0120	0.28	2.2	2.75	0.2	N.A.	N.A.
A0121	3.29	0.8	1.59	0.2	N.A.	N.A.
A0122	0.60	1.1	1.34	0.1	21.3	1.26
A0123	0.79	1.0	1.20	0.1	27.0	N.A.
A0124	0.64	1.1	1.08	<0.1	N.A.	N.A.
A0125	0.17	0.3	1.90	0.2	N.A.	N.A.
A0126	0.25	0.4	3.61	0.3	N.A.	N.A.
A0127	0.14	0.3	1.58	0.1	N.A.	N.A.
A0128	0.15	0.3	1.87	0.2	N.A.	N.A.
A0129	0.13	0.2	1.63	0.1	N.A.	N.A.
A0130	0.35	1.0	7.68	0.7	N.A.	N.A.
A0131	0.12	0.5	1.09	0.1	N.A.	N.A.

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# Certificate of Analysis

Work Order: TK110222

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 08, 2011

P.O. No. : 1S-0280  
Project No. : -  
No. Of Samples : 49  
Date Submitted : Oct 12, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site. Boron values informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0551	12.600	0.04	0.52	20	81	1.73	27	19.4	4.49	0.29
A0552	7.000	<0.01	1.06	20	829	5.75	88	70.7	4.96	0.06
A0553	6.800	<0.01	1.15	20	760	6.20	95	43.3	5.33	0.06
A0554	8.100	0.06	0.52	20	72	1.28	30	53.0	4.45	0.29
A0555	12.100	0.04	0.52	20	61	0.97	23	45.6	5.51	0.31
A0556	11.900	0.05	0.49	20	71	1.09	36	69.9	5.43	0.31
A0557	5.100	<0.01	0.07	30	18	>15	3	0.9	0.49	0.03
A0558	17.000	0.04	0.46	20	73	1.96	35	52.3	4.49	0.30
A0559	11.500	0.03	0.52	20	61	1.92	36	18.0	4.90	0.37
A0560	6.400	0.05	0.39	20	37	0.11	61	70.9	6.02	0.29
A0561	10.500	0.03	0.45	20	46	0.19	50	569	5.80	0.32
A0562	6.600	<0.01	0.88	10	333	4.01	46	38.5	5.61	0.34
A0563	0.075	1.70	1.31	70	187	1.02	57	>10000	5.65	0.24
A0564	9.700	0.01	0.48	30	58	0.16	54	44.5	4.99	0.33
A0565	7.800	0.02	0.53	20	55	0.25	56	182	5.83	0.37
A0566	12.100	0.06	0.45	20	48	0.21	53	47.9	5.94	0.32
A0567	6.600	0.01	0.54	20	59	0.23	49	262	5.97	0.38
A0568	6.400	0.01	0.52	20	62	0.21	45	188	5.47	0.37
A0569	3.300	0.01	0.85	<10	553	4.17	19	40.8	5.63	0.30
A0570	7.700	0.41	0.37	20	28	0.63	79	190	7.40	0.24
A0571	12.300	0.35	0.47	20	40	0.23	50	199	6.50	0.33
A0572	12.300	0.03	0.52	20	53	0.18	55	581	5.92	0.37
A0573	12.400	0.04	0.52	20	55	0.17	52	392	6.20	0.37
A0574	11.500	0.10	0.63	20	46	0.17	61	239	6.06	0.43
A0575	5.500	<0.01	0.04	30	16	>15	3	0.9	0.45	0.02
A0576	12.400	0.02	0.54	20	53	0.21	58	392	5.81	0.38
A0577	12.800	0.04	0.56	<10	29	0.68	79	434	8.13	0.32
A0578	12.800	0.04	0.46	20	43	0.19	66	663	5.89	0.34
A0579	13.000	0.03	0.41	10	32	0.31	90	115	8.34	0.30
A0580	0.075	1.08	1.19	30	128	0.72	34	3310	3.37	0.11
A0581	12.700	0.02	0.41	20	43	0.15	69	661	5.18	0.30
A0582	12.100	0.03	0.47	30	46	0.23	83	632	4.98	0.33
A0583	12.400	0.02	0.48	30	53	0.22	68	463	5.67	0.33
A0584	12.300	0.02	0.48	30	49	0.21	88	929	5.50	0.33
A0585	12.100	0.02	0.46	30	69	0.27	81	1090	5.01	0.34
A0586	12.100	0.03	0.53	30	56	0.59	92	1440	5.13	0.33
A0587	12.400	0.03	0.46	20	51	0.23	92	567	5.53	0.31
A0588	12.300	0.01	0.48	20	32	0.19	74	442	6.44	0.34
A0589	5.800	0.06	0.48	20	33	0.21	79	464	6.96	0.35
A0590	5.900	0.05	0.47	20	27	0.22	64	597	8.02	0.35
A0591	10.900	0.04	0.45	20	62	0.33	87	1060	4.68	0.32
A0592	12.600	0.04	0.42	20	48	0.31	73	910	5.14	0.32
A0593	11.400	0.05	0.41	50	52	0.28	93	1070	5.48	0.31

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Element	WtKg	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K
Method	WGH79	FAA303	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.001	0.01	0.01	10	5	0.01	1	0.5	0.01	0.01
Units	kg	g/t	%	ppm	ppm	%	ppm	ppm	%	%
A0594	11.900	0.06	0.47	50	47	0.45	75	1530	5.26	0.31
A0595	5.200	<0.01	0.04	40	12	>15	3	2.2	0.43	0.03
A0596	12.200	0.05	0.50	30	58	0.37	81	1440	4.53	0.29
A0597	12.000	0.05	0.45	30	61	0.23	81	1070	4.72	0.31
A0598	0.075	1.50	1.21	90	157	0.91	55	>10000	5.35	0.23
A0599	11.900	0.06	0.47	30	74	0.37	93	1080	4.15	0.29

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0551	1	0.43	5140	0.03	2.8	1380	4.91	42.6	<0.01	9
A0552	14	2.17	3080	0.03	63.1	1800	0.16	96.4	<0.01	145
A0553	16	2.29	3620	0.03	65.8	1790	0.27	99.4	<0.01	151
A0554	1	0.28	9710	0.03	2.7	1050	>5	45.9	<0.01	10
A0555	<1	0.22	4610	0.03	2.0	1460	>5	47.2	<0.01	10
A0556	<1	0.28	7310	0.03	2.7	1440	>5	28.0	<0.01	9
A0557	<1	12.8	239	0.01	1.0	180	<0.01	41.6	<0.01	2
A0558	<1	0.43	9280	0.02	2.1	1290	4.93	31.0	<0.01	9
A0559	1	0.52	8780	0.02	1.0	1600	>5	28.4	<0.01	12
A0560	<1	0.03	20	0.02	4.4	410	>5	38.5	<0.01	6
A0561	<1	0.06	51	0.02	4.7	540	>5	26.1	<0.01	6
A0562	10	1.52	3090	0.02	29.5	2450	0.39	84.9	<0.01	98
A0563	19	0.74	527	0.09	103	540	3.07	41.7	0.08	60
A0564	<1	0.04	39	0.02	4.2	600	>5	15.9	<0.01	6
A0565	<1	0.06	52	0.02	6.2	1040	>5	21.4	<0.01	6
A0566	<1	0.04	68	0.02	6.1	760	>5	16.7	<0.01	5
A0567	<1	0.08	79	0.02	6.4	780	>5	18.2	<0.01	6
A0568	<1	0.08	71	0.02	5.9	660	>5	15.6	<0.01	6
A0569	16	1.50	2300	0.02	11.8	2520	0.46	144	<0.01	96
A0570	<1	0.18	586	0.02	4.5	760	>5	98.2	<0.01	10
A0571	<1	0.07	115	0.02	5.4	630	>5	23.6	<0.01	6
A0572	<1	0.07	80	0.02	5.0	620	>5	15.0	<0.01	5
A0573	<1	0.07	84	0.02	4.3	590	>5	14.7	<0.01	7
A0574	<1	0.13	41	0.02	4.5	730	>5	17.0	<0.01	6
A0575	<1	12.6	214	<0.01	0.8	160	<0.01	42.3	<0.01	<1
A0576	<1	0.10	113	0.02	4.3	710	>5	16.9	<0.01	5
A0577	4	0.28	375	0.02	7.5	970	>5	33.6	<0.01	17
A0578	1	0.12	169	0.01	4.8	410	>5	38.6	<0.01	6
A0579	<1	0.11	343	0.02	4.5	600	>5	12.6	<0.01	5
A0580	8	0.57	423	0.08	29.8	500	0.45	35.5	0.11	55
A0581	3	0.08	175	0.01	5.5	320	>5	45.8	<0.01	4
A0582	3	0.13	334	0.01	5.8	390	>5	37.3	<0.01	5
A0583	5	0.09	177	0.01	4.7	630	>5	19.7	<0.01	4
A0584	4	0.08	177	0.01	5.3	570	>5	22.3	<0.01	5
A0585	3	0.11	335	0.01	5.1	630	>5	18.1	<0.01	5
A0586	14	0.11	344	0.01	5.7	750	>5	19.5	<0.01	5
A0587	8	0.08	123	0.01	6.2	630	>5	16.6	<0.01	5
A0588	1	0.08	108	0.01	5.8	600	>5	15.8	<0.01	6
A0589	<1	0.08	176	0.02	6.4	660	>5	15.0	<0.01	5
A0590	<1	0.08	187	0.01	6.8	710	>5	18.5	<0.01	5
A0591	6	0.10	492	0.01	7.8	790	>5	20.8	<0.01	4
A0592	2	0.08	382	0.01	5.2	840	>5	21.0	<0.01	4
A0593	1	0.08	493	0.02	4.8	670	>5	23.2	<0.01	4

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Element	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
Units	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm
A0594	6	0.17	817	0.02	4.5	730	>5	25.1	<0.01	7
A0595	<1	11.6	196	<0.01	0.8	180	<0.01	38.2	<0.01	<1
A0596	15	0.13	499	0.01	5.6	720	>5	23.5	<0.01	5
A0597	8	0.08	111	0.01	6.3	660	>5	27.9	<0.01	5
A0598	20	0.64	479	0.09	99.7	510	2.99	40.6	0.07	55
A0599	15	0.13	146	0.02	5.2	650	>5	28.7	<0.01	5

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0551	723	5.9	2.67	92	0.6	0.57	3.79	23.4	11.5	7.73
A0552	85	6.0	0.08	7	0.7	0.03	0.14	33.0	21.6	4.61
A0553	101	6.5	0.08	10	0.7	0.09	0.23	31.4	22.7	4.04
A0554	4420	7.9	4.89	83	0.7	2.31	24.6	23.2	8.5	9.21
A0555	3510	8.2	6.12	109	0.8	2.06	17.2	22.7	10.8	9.79
A0556	4120	7.8	5.72	113	0.8	1.36	20.9	21.6	11.0	9.28
A0557	16	<0.5	0.02	<1	<0.1	0.02	0.09	1.59	0.8	0.32
A0558	3570	6.6	4.68	76	0.7	1.21	19.0	24.8	9.6	7.95
A0559	405	4.4	1.29	93	0.6	1.94	2.21	30.9	9.6	9.93
A0560	283	4.7	0.39	33	0.2	1.15	1.20	9.20	16.8	0.89
A0561	318	5.1	2.09	177	0.2	2.03	1.60	7.85	15.1	0.61
A0562	100	12.5	0.12	21	1.0	0.11	0.23	33.4	20.8	14.1
A0563	1790	8.4	7.37	287	0.3	2.36	9.56	17.2	13.2	1.59
A0564	13	4.8	0.15	10	0.2	0.41	0.10	15.3	15.0	0.59
A0565	34	5.4	0.32	51	0.2	0.57	0.20	9.90	16.5	0.85
A0566	14	5.4	0.13	16	0.2	0.51	0.12	10.7	19.0	0.52
A0567	49	4.6	0.28	76	0.2	0.52	0.28	9.76	20.4	0.46
A0568	36	4.3	0.19	57	0.2	0.49	0.21	9.09	19.4	0.45
A0569	104	11.9	0.21	25	0.9	0.12	0.30	41.7	18.2	14.5
A0570	4430	5.0	6.37	91	0.2	3.29	20.9	9.00	14.9	0.90
A0571	376	5.0	1.21	59	0.2	0.95	2.33	13.9	20.7	0.62
A0572	104	4.5	0.76	206	0.2	1.19	0.60	12.9	19.5	0.74
A0573	62	5.0	0.14	132	0.2	1.00	0.36	15.4	25.4	0.64
A0574	242	5.5	0.98	75	0.2	0.82	1.35	11.2	19.4	0.65
A0575	10	<0.5	<0.01	<1	<0.1	0.02	0.07	1.44	0.8	0.22
A0576	84	5.0	0.51	133	0.2	0.70	0.50	6.90	21.1	1.15
A0577	81	7.7	0.13	147	0.3	0.72	0.54	11.0	30.7	2.63
A0578	128	5.1	0.10	243	0.2	0.52	0.73	9.88	27.4	1.11
A0579	12	5.3	0.05	51	0.2	0.43	0.12	14.1	37.9	0.51
A0580	59	10.1	1.55	13	0.2	0.52	0.47	11.7	7.9	0.38
A0581	83	5.2	0.27	246	0.3	0.71	0.36	11.6	24.7	1.88
A0582	40	4.9	0.14	239	0.3	0.54	0.19	11.7	28.4	1.91
A0583	31	5.4	0.14	159	0.3	0.44	0.14	14.0	18.3	1.94
A0584	50	5.3	0.17	330	0.3	0.48	0.16	15.4	23.5	2.00
A0585	45	4.8	0.19	395	0.3	0.57	0.17	12.3	23.8	2.10
A0586	25	5.7	0.22	531	0.3	0.58	0.15	11.4	20.3	2.87
A0587	15	5.3	0.11	204	0.3	0.56	0.08	12.0	19.1	1.89
A0588	45	4.9	0.15	163	0.3	0.92	0.27	19.8	29.5	1.23
A0589	184	4.7	0.44	163	0.2	1.81	1.15	19.6	23.6	1.12
A0590	328	5.2	0.54	218	0.2	2.18	2.02	17.1	29.1	1.22
A0591	138	5.1	0.48	387	0.2	0.71	0.56	11.8	22.6	2.38
A0592	120	5.1	0.83	332	0.2	0.95	0.65	10.1	21.6	2.22
A0593	861	4.5	2.10	390	0.3	2.79	3.50	13.8	22.4	2.25

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0594	2280	5.3	1.16	599	0.3	1.26	12.5	14.9	28.4	3.15
A0595	11	<0.5	<0.01	<1	<0.1	<0.02	0.07	1.38	0.7	0.18
A0596	232	5.0	0.53	548	0.4	0.62	1.75	11.1	25.3	3.49
A0597	141	4.7	0.18	423	0.3	0.55	0.49	12.2	24.7	2.50
A0598	1710	7.7	7.12	284	0.2	2.28	9.11	16.5	12.8	1.49
A0599	28	4.9	0.17	393	0.4	0.54	0.17	9.76	20.5	4.28

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0551	1.3	<0.1	0.15	0.02	0.04	10.3	0.12	5.39	<0.05	211
A0552	3.0	<0.1	0.15	0.01	0.05	14.8	0.13	0.80	<0.05	6.5
A0553	3.1	<0.1	0.16	0.02	0.05	14.1	0.12	0.79	<0.05	7.7
A0554	1.5	<0.1	0.25	0.11	0.45	10.8	0.14	16.9	<0.05	772
A0555	1.4	<0.1	0.21	0.09	0.41	10.1	0.12	6.80	<0.05	627
A0556	1.4	<0.1	0.19	0.07	0.46	9.5	0.12	7.58	<0.05	638
A0557	0.2	<0.1	<0.05	<0.01	<0.02	0.6	<0.01	0.23	0.06	2.6
A0558	1.3	<0.1	0.17	0.05	0.28	11.1	0.12	7.58	<0.05	213
A0559	1.4	<0.1	0.11	0.03	0.25	13.9	0.19	4.29	<0.05	92.7
A0560	1.1	<0.1	0.11	0.06	0.04	4.8	0.03	86.6	<0.05	28.4
A0561	1.1	<0.1	0.12	0.10	<0.02	3.9	0.04	34.5	<0.05	85.2
A0562	2.6	<0.1	0.18	0.04	0.06	12.6	0.12	1.58	<0.05	43.1
A0563	4.8	0.1	<0.05	0.96	0.24	7.8	0.08	92.4	0.36	693
A0564	0.9	<0.1	0.12	0.06	<0.02	8.3	0.04	71.9	<0.05	7.7
A0565	0.9	<0.1	0.15	0.06	<0.02	5.1	0.05	62.8	<0.05	10.4
A0566	0.9	<0.1	0.15	0.05	<0.02	5.7	0.05	108	<0.05	13.5
A0567	0.8	<0.1	0.12	0.06	<0.02	5.1	0.04	78.0	<0.05	9.7
A0568	0.8	<0.1	0.12	0.05	<0.02	4.8	0.03	62.5	<0.05	8.7
A0569	2.6	<0.1	0.38	0.04	0.06	16.2	0.13	2.63	0.07	13.8
A0570	1.1	<0.1	0.14	0.29	0.27	4.3	0.05	241	0.07	785
A0571	0.9	<0.1	0.16	0.05	0.04	7.4	0.05	111	0.05	125
A0572	0.8	<0.1	0.14	0.08	0.07	6.8	0.03	43.5	<0.05	12.8
A0573	0.9	<0.1	0.14	0.07	0.04	8.3	0.04	394	<0.05	8.0
A0574	1.1	<0.1	0.16	0.07	0.05	6.1	0.03	78.5	0.05	52.2
A0575	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	2.83	0.08	1.2
A0576	0.8	<0.1	0.15	0.04	0.04	3.7	0.03	39.5	<0.05	26.1
A0577	1.2	<0.1	0.18	0.05	0.05	5.0	0.06	67.7	0.07	19.4
A0578	0.8	<0.1	0.13	0.06	0.06	4.9	0.05	280	<0.05	8.8
A0579	0.7	<0.1	0.12	0.02	<0.02	7.8	0.06	160	0.06	5.6
A0580	4.4	<0.1	0.31	0.09	0.04	5.4	0.09	360	0.35	22.1
A0581	0.7	<0.1	0.14	0.05	0.09	6.3	0.04	131	<0.05	11.2
A0582	0.8	<0.1	0.12	0.02	0.08	6.2	0.04	244	<0.05	6.3
A0583	0.7	<0.1	0.13	0.03	0.05	7.7	0.03	104	<0.05	5.7
A0584	0.8	<0.1	0.14	0.04	0.06	8.3	0.03	236	<0.05	6.7
A0585	0.8	<0.1	0.11	0.02	0.09	6.8	0.03	172	<0.05	6.6
A0586	0.8	<0.1	0.13	0.03	0.08	5.7	0.04	146	<0.05	6.7
A0587	0.7	<0.1	0.13	0.03	0.03	6.2	0.04	80.4	<0.05	4.1
A0588	0.8	<0.1	0.11	0.02	0.03	10.9	0.05	270	<0.05	7.1
A0589	1.0	<0.1	0.10	0.04	0.07	11.3	0.04	44.1	<0.05	120
A0590	1.1	<0.1	0.12	0.04	0.15	9.6	0.04	49.0	<0.05	101
A0591	0.7	<0.1	0.13	0.10	0.09	6.4	0.03	104	<0.05	11.2
A0592	0.7	<0.1	0.13	0.12	0.11	5.2	0.03	179	<0.05	18.5
A0593	0.8	<0.1	0.11	0.12	0.22	7.3	0.04	148	<0.05	242

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Element	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0594	0.8	<0.1	0.13	0.11	0.31	8.0	0.05	400	<0.05	165
A0595	0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	0.98	0.06	1.4
A0596	0.7	<0.1	0.12	0.05	0.10	5.6	0.05	170	<0.05	18.4
A0597	0.7	<0.1	0.12	0.06	0.07	6.4	0.04	229	<0.05	4.1
A0598	4.5	0.1	<0.05	0.96	0.23	7.6	0.08	89.0	0.30	667
A0599	0.7	<0.1	0.11	0.09	0.06	4.9	0.05	278	<0.05	3.9

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0551	13.2	1.65	1.8	<1	<0.3	<0.05	0.48	2.99	3.2	1.26
A0552	5.4	0.33	16.4	<1	<0.3	<0.05	0.47	<0.05	2.5	0.31
A0553	4.8	0.52	15.8	<1	<0.3	<0.05	0.48	<0.05	2.4	0.38
A0554	13.2	2.36	1.5	<1	0.7	<0.05	0.40	1.85	5.4	0.51
A0555	14.1	2.95	1.5	<1	0.4	<0.05	0.45	3.72	3.2	0.91
A0556	13.9	2.50	1.5	<1	0.4	<0.05	0.46	3.32	2.9	0.69
A0557	1.4	<0.05	0.3	<1	<0.3	<0.05	0.03	<0.05	<0.1	<0.02
A0558	12.8	2.24	1.8	<1	0.3	<0.05	0.47	2.99	2.7	0.65
A0559	16.3	2.09	1.9	<1	<0.3	<0.05	0.54	1.10	3.5	1.45
A0560	7.4	1.53	0.6	3	0.5	<0.05	0.15	0.29	1.8	0.37
A0561	8.1	29.3	0.6	3	0.6	<0.05	0.14	0.66	1.7	0.24
A0562	16.4	1.36	14.7	<1	0.5	<0.05	0.61	0.07	3.9	0.36
A0563	9.0	24.4	5.0	4	4.5	<0.05	0.26	0.65	2.0	1.02
A0564	8.3	1.62	0.6	3	<0.3	<0.05	0.16	0.12	2.4	0.19
A0565	9.6	5.63	0.6	3	0.3	<0.05	0.19	0.24	2.3	0.24
A0566	8.1	1.33	0.7	3	0.4	<0.05	0.17	0.22	2.5	0.32
A0567	9.5	6.70	0.7	4	0.3	<0.05	0.17	0.26	2.8	0.18
A0568	9.2	4.69	0.6	4	<0.3	<0.05	0.15	0.23	2.6	0.18
A0569	14.5	1.69	13.4	<1	0.4	<0.05	0.67	0.06	4.8	0.30
A0570	6.6	22.8	1.6	4	0.8	<0.05	0.26	2.38	1.4	0.65
A0571	8.6	9.09	0.7	4	0.4	<0.05	0.21	0.56	2.4	0.25
A0572	9.6	13.0	0.7	5	<0.3	<0.05	0.17	0.53	2.4	0.22
A0573	9.4	7.05	0.7	5	0.5	<0.05	0.18	0.61	2.3	0.29
A0574	11.3	10.4	0.6	4	0.4	<0.05	0.14	0.83	2.5	0.35
A0575	1.2	0.06	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0576	10.3	10.6	0.7	4	<0.3	<0.05	0.14	0.31	2.2	0.31
A0577	9.6	10.2	2.5	5	0.4	<0.05	0.23	0.40	2.4	0.55
A0578	8.9	20.8	0.7	4	<0.3	<0.05	0.14	0.28	1.7	0.45
A0579	7.3	1.15	0.6	6	0.3	<0.05	0.18	0.26	2.6	0.70
A0580	4.3	2.04	4.7	1	1.8	<0.05	0.27	0.17	1.2	0.09
A0581	8.4	7.29	0.6	4	<0.3	<0.05	0.13	0.42	1.4	0.37
A0582	9.4	2.04	0.8	4	<0.3	<0.05	0.14	0.21	1.6	0.38
A0583	8.9	1.03	0.7	4	<0.3	<0.05	0.13	0.28	2.2	0.20
A0584	8.9	1.24	0.6	4	<0.3	<0.05	0.15	0.28	2.1	0.21
A0585	9.1	0.97	0.7	4	<0.3	<0.05	0.14	0.38	1.9	0.23
A0586	9.3	0.62	0.8	4	<0.3	<0.05	0.19	0.17	2.0	0.19
A0587	8.4	0.26	0.7	3	<0.3	<0.05	0.18	0.11	1.6	0.18
A0588	9.2	1.19	0.7	5	<0.3	<0.05	0.21	0.49	2.3	0.24
A0589	9.1	2.17	0.7	4	0.4	<0.05	0.17	1.19	2.9	0.19
A0590	9.1	3.35	0.7	5	0.5	<0.05	0.17	1.46	2.9	0.20
A0591	9.4	1.61	0.7	3	<0.3	<0.05	0.15	0.82	2.3	0.20
A0592	9.4	7.33	0.6	4	<0.3	<0.05	0.15	1.33	2.4	0.22
A0593	8.7	15.3	0.6	4	0.3	<0.05	0.16	2.01	2.3	0.33

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Element	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0594	9.2	5.04	1.0	3	0.3	<0.05	0.19	1.01	1.8	0.26
A0595	1.0	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0596	8.5	0.97	0.8	3	<0.3	<0.05	0.19	0.28	1.9	0.19
A0597	8.3	0.58	0.6	3	<0.3	<0.05	0.17	0.22	2.0	0.16
A0598	8.5	22.7	4.8	4	4.6	<0.05	0.25	0.57	1.9	0.99
A0599	8.5	0.62	0.8	3	<0.3	<0.05	0.19	0.15	1.8	0.18

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Cu ICP90Q 0.01 %
A0551	0.72	<0.1	11.1	0.8	N.A.
A0552	0.23	<0.1	11.5	0.8	N.A.
A0553	0.38	<0.1	11.2	0.8	N.A.
A0554	1.83	0.1	10.2	1.0	N.A.
A0555	0.95	<0.1	11.0	0.9	N.A.
A0556	0.83	<0.1	11.1	0.8	N.A.
A0557	0.44	<0.1	0.81	<0.1	N.A.
A0558	0.73	0.1	11.5	0.9	N.A.
A0559	1.34	0.3	14.0	1.3	N.A.
A0560	1.16	0.3	3.58	0.3	N.A.
A0561	1.11	0.3	3.30	0.3	N.A.
A0562	6.69	0.5	12.0	0.8	N.A.
A0563	0.64	41.6	6.30	0.6	1.64
A0564	1.52	0.5	3.62	0.3	N.A.
A0565	1.41	0.4	4.63	0.4	N.A.
A0566	1.42	0.5	4.24	0.3	N.A.
A0567	1.33	0.4	3.82	0.3	N.A.
A0568	1.23	0.4	3.34	0.2	N.A.
A0569	4.33	0.6	13.3	0.9	N.A.
A0570	1.48	0.4	5.34	0.4	N.A.
A0571	1.42	0.4	4.88	0.4	N.A.
A0572	1.32	0.3	3.45	0.2	N.A.
A0573	1.40	0.4	3.88	0.3	N.A.
A0574	1.48	0.4	3.07	0.3	N.A.
A0575	0.47	<0.1	0.73	<0.1	N.A.
A0576	1.11	0.4	3.15	0.2	N.A.
A0577	2.65	0.5	5.37	0.4	N.A.
A0578	1.06	0.3	3.85	0.4	N.A.
A0579	1.38	0.4	4.76	0.5	N.A.
A0580	0.36	0.9	7.41	0.7	N.A.
A0581	1.32	0.2	3.26	0.3	N.A.
A0582	1.10	0.3	3.64	0.3	N.A.
A0583	1.19	0.4	2.91	0.2	N.A.
A0584	1.16	0.3	3.33	0.3	N.A.
A0585	1.12	0.2	2.96	0.2	N.A.
A0586	1.14	0.2	3.77	0.3	N.A.
A0587	0.85	0.2	3.63	0.3	N.A.
A0588	1.05	0.3	4.75	0.4	N.A.
A0589	1.05	0.3	3.58	0.3	N.A.
A0590	1.13	0.3	3.87	0.3	N.A.
A0591	1.10	0.2	3.16	0.2	N.A.
A0592	0.94	0.2	3.13	0.2	N.A.
A0593	1.09	0.3	3.34	0.3	N.A.

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Final : TK110222 Order: 1S-0280

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Element	U	W	Y	Yb	Cu
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICP90Q
Det.Lim.	0.05	0.1	0.05	0.1	0.01
Units	ppm	ppm	ppm	ppm	%
A0594	1.11	0.3	4.84	0.4	N.A.
A0595	0.49	<0.1	0.69	<0.1	N.A.
A0596	0.73	0.2	4.08	0.4	N.A.
A0597	0.74	0.2	3.86	0.3	N.A.
A0598	0.59	40.8	5.91	0.6	1.66
A0599	0.76	0.3	4.55	0.4	N.A.

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# Certificate of Analysis

Work Order: TK110232

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 08, 2011

P.O. No. : 1S-0281/PO#SQ 07B-101111 ec  
Project No. : -  
No. Of Samples : 55  
Date Submitted : Oct 12, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site  
Per client, use AAS42E for Ag over-limit in ICP/MS.  
Per client, add ICP90Q for Base Metal over-limit.  
Boron values informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0327	3.800	2.00	0.28	<10	7	2.91	116	2430	>15	0.17
A0328	4.600	0.09	0.36	40	33	1.01	116	1240	6.91	0.28
A0329	3.400	0.11	0.40	40	31	1.19	84	2180	6.14	0.30
A0330	3.500	0.05	0.40	40	45	1.10	116	2910	5.21	0.30
A0331	7.300	0.15	0.40	50	40	1.31	91	1730	6.68	0.29
A0332	7.200	0.13	0.30	50	48	3.02	107	2380	4.81	0.23
A0333	0.075	1.03	1.22	50	127	0.74	35	3430	3.46	0.12
A0334	7.500	0.13	0.27	40	44	3.82	83	2550	4.21	0.19
A0335	8.700	0.06	0.34	50	56	3.52	101	1580	3.72	0.24
A0336	8.200	0.14	0.32	50	48	3.49	74	2290	4.88	0.24
A0337	6.600	0.12	0.55	40	60	3.60	79	2190	3.79	0.41
A0338	7.800	0.16	1.00	60	72	3.11	87	2290	3.57	0.77
A0339	7.000	0.15	0.37	50	73	3.63	97	1940	2.74	0.27
A0340	7.100	0.08	0.31	50	76	3.40	111	1360	2.53	0.23
A0341	7.400	0.18	0.32	50	68	3.96	92	2210	2.83	0.20
A0342	7.100	0.16	0.35	50	61	3.29	97	1950	4.13	0.25
A0343	7.200	0.14	0.39	40	46	4.51	105	2280	4.75	0.28
A0344	5.900	<0.01	0.02	50	12	>15	5	4.0	0.46	0.01
A0345	6.200	0.16	0.64	50	48	3.69	106	2590	4.52	0.35
A0346	8.700	<0.01	0.96	50	639	3.64	55	102	3.95	0.41
A0347	2.400	0.19	1.22	60	58	3.96	77	3120	4.15	0.88
A0348	2.500	0.17	1.19	50	62	3.36	105	3090	3.96	0.82
A0349	6.600	0.16	1.22	50	60	3.92	86	2540	3.51	0.82
A0350	7.000	0.17	0.89	50	63	3.97	94	2090	3.13	0.58
A0351	6.200	0.14	0.53	50	58	3.80	94	2310	3.80	0.33
A0352	6.600	0.11	0.62	50	66	4.23	102	2770	3.25	0.39
A0353	6.700	0.12	0.51	40	37	4.75	94	2840	4.22	0.35
A0354	6.900	0.18	0.74	50	85	3.57	113	2980	2.67	0.49
A0355	6.200	<0.01	0.03	50	43	>15	4	7.8	0.48	0.02
A0356	7.500	0.16	0.41	40	63	3.24	107	3350	3.46	0.30
A0357	7.900	0.09	0.36	50	63	3.49	106	2320	3.44	0.28
A0358	7.900	0.13	0.34	50	75	3.60	99	2150	2.50	0.25
A0359	0.075	1.60	1.27	90	181	0.94	56	>10000	5.54	0.23
A0360	7.700	0.13	0.40	50	68	2.96	107	1860	3.34	0.27
A0361	7.600	0.14	0.35	50	64	3.88	95	2370	3.76	0.24
A0362	3.500	0.18	0.40	50	97	3.15	112	2760	2.29	0.26
A0363	3.400	0.17	0.44	50	101	2.70	115	2740	2.75	0.28
A0364	7.700	0.09	0.47	50	63	2.86	98	2430	4.26	0.31
A0365	7.800	0.10	0.37	50	68	3.00	125	2380	4.06	0.26
A0366	7.800	0.19	0.24	30	71	2.88	83	2740	2.22	0.19
A0367	7.400	0.15	0.23	50	71	3.56	96	2740	1.88	0.19
A0368	7.800	0.11	0.26	30	66	3.77	84	2030	2.19	0.21
A0369	7.800	0.17	0.26	50	69	3.50	81	2910	2.07	0.22

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0370	7.700	0.22	0.21	30	62	3.61	74	2540	2.46	0.18
A0371	7.900	0.15	0.24	30	62	3.89	81	2620	1.98	0.20
A0372	7.900	0.07	0.30	20	57	3.33	71	2340	2.84	0.23
A0373	7.700	0.05	0.24	30	67	3.41	89	2080	2.01	0.20
A0374	7.900	<0.01	0.03	60	18	>15	3	3.9	0.48	0.02
A0375	7.900	0.10	0.25	20	50	4.48	83	2900	2.96	0.19
A0376	8.100	0.27	0.25	30	48	4.27	113	3110	4.44	0.21
A0377	7.700	0.09	0.26	20	57	4.15	70	2880	2.77	0.20
A0378	7.900	0.17	0.24	30	48	4.03	84	2770	3.80	0.19
A0379	0.075	1.01	1.18	30	124	0.66	33	3360	3.41	0.11
A0380	4.600	0.18	0.21	30	73	3.89	71	3600	2.09	0.16
A0498	8.300	0.08	0.21	40	40	3.14	85	1660	5.69	0.18

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0327	<1	0.04	427	0.01	2.9	670	>5	62.9	<0.01	4
A0328	<1	0.03	188	0.02	1.9	520	>5	22.3	<0.01	5
A0329	<1	0.05	246	0.02	1.7	560	>5	35.2	<0.01	5
A0330	<1	0.04	243	0.02	2.2	490	>5	42.0	<0.01	5
A0331	<1	0.04	276	0.02	2.2	700	>5	30.4	<0.01	5
A0332	<1	0.15	194	0.02	2.2	640	>5	210	<0.01	5
A0333	9	0.65	438	0.09	29.9	540	0.47	35.8	0.12	55
A0334	1	0.18	152	0.02	2.3	600	>5	226	<0.01	7
A0335	1	0.24	218	0.03	2.5	970	>5	200	<0.01	7
A0336	<1	0.19	64	0.03	2.6	680	>5	270	<0.01	6
A0337	2	0.46	98	0.04	2.7	950	>5	265	0.02	20
A0338	4	1.08	113	0.06	6.9	1030	>5	224	0.07	45
A0339	1	0.30	90	0.04	2.1	630	>5	260	<0.01	10
A0340	1	0.23	69	0.04	1.8	400	>5	222	<0.01	7
A0341	1	0.23	124	0.03	2.3	470	>5	258	<0.01	7
A0342	<1	0.20	560	0.03	3.0	620	>5	229	<0.01	6
A0343	1	0.23	325	0.02	3.2	590	>5	343	<0.01	9
A0344	<1	13.1	203	0.01	1.0	160	<0.01	38.8	<0.01	<1
A0345	3	0.53	155	0.03	4.4	790	>5	271	0.02	21
A0346	7	1.41	769	0.05	5.3	1870	0.19	288	0.04	70
A0347	7	1.31	137	0.04	9.1	1100	>5	476	0.09	59
A0348	6	1.17	130	0.04	8.3	1050	>5	423	0.08	53
A0349	5	1.22	86	0.04	3.9	910	>5	287	0.08	50
A0350	4	0.81	72	0.04	5.0	820	>5	267	0.05	36
A0351	2	0.39	84	0.04	4.1	700	>5	263	0.01	18
A0352	2	0.44	682	0.04	4.7	690	>5	318	0.01	17
A0353	1	0.31	2840	0.04	5.1	940	>5	316	<0.01	13
A0354	3	0.59	1380	0.05	5.4	890	>5	207	0.02	24
A0355	<1	13.2	205	0.01	1.0	180	<0.01	40.8	<0.01	<1
A0356	1	0.30	102	0.04	4.1	660	>5	206	<0.01	11
A0357	<1	0.19	100	0.03	2.6	660	>5	261	<0.01	7
A0358	<1	0.23	121	0.04	1.9	930	>5	259	<0.01	7
A0359	18	0.72	478	0.08	96.7	600	3.10	38.6	0.08	53
A0360	1	0.24	141	0.04	2.6	870	>5	207	<0.01	6
A0361	<1	0.25	181	0.04	1.4	660	>5	255	<0.01	8
A0362	1	0.38	957	0.05	2.0	810	>5	193	<0.01	8
A0363	1	0.38	825	0.05	1.7	850	>5	164	<0.01	10
A0364	<1	0.34	2810	0.05	2.3	810	>5	191	<0.01	6
A0365	<1	0.18	292	0.04	2.2	650	>5	169	<0.01	6
A0366	<1	0.26	147	0.03	1.5	780	>5	187	<0.01	6
A0367	<1	0.28	100	0.04	1.7	660	>5	221	<0.01	7
A0368	<1	0.29	113	0.03	1.1	580	>5	244	<0.01	8
A0369	1	0.31	120	0.04	1.3	760	>5	230	<0.01	8

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A0370	<1	0.27	117	0.03	0.7	720	>5	229	<0.01	6
A0371	<1	0.35	292	0.04	1.1	900	>5	216	<0.01	10
A0372	<1	0.25	734	0.04	1.6	1540	>5	218	<0.01	6
A0373	<1	0.22	186	0.03	<0.5	690	>5	228	<0.01	8
A0374	<1	13.3	213	0.01	<0.5	250	<0.01	42.7	<0.01	<1
A0375	<1	0.20	209	0.03	1.8	710	>5	276	<0.01	5
A0376	<1	0.17	289	0.03	1.3	710	>5	269	<0.01	6
A0377	<1	0.17	307	0.03	1.3	590	>5	305	<0.01	4
A0378	<1	0.13	119	0.03	1.3	560	>5	252	<0.01	5
A0379	8	0.63	427	0.08	29.2	540	0.51	33.7	0.11	54
A0380	<1	0.20	129	0.03	1.0	700	>5	218	<0.01	4
A0498	<1	0.10	92	0.02	2.3	750	>5	231	<0.01	3

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Element Method	Zn ICM14B	Zr ICM14B	Ag ICM14B	As ICM14B	Be ICM14B	Bi ICM14B	Cd ICM14B	Ce ICM14B	Co ICM14B	Cs ICM14B
Det.Lim. Units	1 ppm	0.5 ppm	0.01 ppm	1 ppm	0.1 ppm	0.02 ppm	0.01 ppm	0.05 ppm	0.1 ppm	0.05 ppm
A0327	>10000	9.4	>10	476	0.2	245	58.9	1.74	31.7	3.07
A0328	260	3.4	3.11	421	0.2	7.96	1.77	6.51	44.4	1.39
A0329	96	3.3	1.25	463	0.2	5.55	0.62	11.1	32.1	1.73
A0330	127	3.1	1.64	634	0.2	7.23	0.78	11.4	25.6	1.99
A0331	12	3.4	0.85	10	0.2	9.17	0.21	16.7	28.6	1.19
A0332	10	2.8	0.49	8	0.1	3.58	0.21	14.4	22.9	1.24
A0333	58	9.6	1.61	13	0.2	0.53	0.48	11.4	8.0	0.39
A0334	13	2.7	0.41	6	0.1	0.80	0.25	15.7	31.2	1.37
A0335	19	2.8	0.47	5	0.2	3.37	0.21	17.2	21.3	1.82
A0336	8	2.9	0.39	2	0.2	0.92	0.14	15.2	39.4	0.81
A0337	10	2.9	0.31	2	0.2	0.45	0.12	17.9	34.7	1.37
A0338	16	4.6	0.30	1	0.4	0.56	0.14	15.7	24.9	2.37
A0339	15	2.3	0.27	1	0.2	0.43	0.19	18.3	21.4	1.02
A0340	10	1.7	0.21	<1	0.2	0.27	0.16	18.1	29.8	0.84
A0341	15	1.8	0.28	<1	0.2	0.47	0.17	18.6	29.8	1.03
A0342	71	1.9	0.58	45	0.3	3.00	0.41	14.7	20.6	1.46
A0343	31	2.9	0.51	29	0.2	3.35	0.28	20.0	30.6	1.47
A0344	10	<0.5	<0.01	<1	<0.1	0.02	0.06	0.92	0.9	0.11
A0345	19	2.9	0.41	5	0.3	0.77	0.21	22.2	21.1	3.19
A0346	82	5.6	0.12	6	0.9	0.05	0.12	36.9	13.3	15.6
A0347	18	3.7	0.54	4	0.5	1.38	0.37	19.6	43.0	3.51
A0348	16	3.7	1.03	9	0.4	1.37	0.45	20.6	42.6	3.44
A0349	17	3.5	0.39	1	0.3	0.41	0.39	19.4	33.1	1.62
A0350	13	3.7	0.33	1	0.3	0.36	0.24	20.7	20.8	1.08
A0351	8	3.1	0.45	1	0.3	1.90	0.26	18.8	28.5	0.81
A0352	364	3.1	1.19	219	0.3	0.48	1.65	16.7	30.4	2.00
A0353	90	3.3	1.44	108	0.2	0.72	0.44	19.0	30.5	3.24
A0354	364	3.1	0.95	188	0.3	0.96	1.65	16.3	16.4	3.33
A0355	11	<0.5	0.01	<1	<0.1	0.02	0.06	0.95	0.9	0.15
A0356	14	2.4	0.58	2	0.2	0.70	0.24	16.5	22.4	0.76
A0357	18	2.1	0.63	7	0.1	1.52	0.25	16.3	27.1	0.65
A0358	20	1.5	0.51	4	0.2	4.64	0.19	18.8	14.1	0.91
A0359	1590	8.0	6.51	274	0.2	2.19	8.46	15.5	12.4	1.38
A0360	18	1.6	0.35	7	0.2	0.68	0.20	15.4	21.4	0.67
A0361	16	1.8	0.47	15	0.1	0.48	0.42	20.8	28.5	0.79
A0362	43	2.2	0.54	157	0.3	0.89	0.31	19.5	20.0	2.17
A0363	47	2.4	0.59	155	0.3	1.10	0.39	19.1	19.4	2.20
A0364	151	3.4	0.61	245	0.4	0.75	0.74	16.8	26.8	3.08
A0365	18	1.8	0.48	21	0.2	1.43	0.24	16.6	15.4	0.85
A0366	14	1.3	0.45	2	0.1	0.81	0.32	16.5	17.5	0.65
A0367	14	1.3	0.45	<1	0.1	0.61	0.26	20.6	10.5	0.62
A0368	21	1.3	0.44	<1	0.1	1.70	0.32	22.1	17.0	0.69
A0369	20	1.3	0.64	<1	0.1	5.32	0.26	18.4	18.9	0.71

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0370	9	1.5	0.69	<1	0.1	2.75	0.36	20.2	13.8	0.61
A0371	18	1.6	0.58	1	0.1	0.81	0.37	22.8	17.0	0.97
A0372	33	1.6	0.85	37	0.1	4.13	0.33	16.8	20.8	1.14
A0373	20	1.3	0.39	<1	0.1	1.20	0.49	17.7	15.8	0.73
A0374	9	<0.5	0.01	<1	<0.1	0.05	0.06	0.95	0.8	0.21
A0375	16	1.9	0.54	2	0.1	0.89	0.26	23.8	21.9	0.83
A0376	25	2.2	0.73	11	0.2	4.20	0.60	24.5	24.6	1.18
A0377	26	1.8	0.43	14	0.1	0.91	0.30	23.8	20.0	0.86
A0378	8	2.2	0.46	<1	0.1	0.93	0.26	20.5	28.0	0.63
A0379	56	9.4	1.55	12	0.2	0.55	0.49	11.6	7.7	0.37
A0380	21	1.6	0.70	1	0.1	5.68	0.32	20.1	17.8	0.81
A0498	23	2.8	0.43	2	0.1	3.00	0.22	11.0	35.6	0.69

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Element Method	Ga ICM14B	Ge ICM14B	Hf ICM14B	Hg ICM14B	In ICM14B	La ICM14B	Lu ICM14B	Mo ICM14B	Nb ICM14B	Pb ICM14B
Det.Lim. Units	0.1 ppm	0.1 ppm	0.05 ppm	0.01 ppm	0.02 ppm	0.1 ppm	0.01 ppm	0.05 ppm	0.05 ppm	0.2 ppm
A0327	6.3	0.2	0.09	0.82	3.39	0.8	0.06	282	0.13	1730
A0328	0.9	<0.1	0.06	0.06	0.17	3.9	0.03	493	0.05	61.6
A0329	0.8	<0.1	0.06	0.04	0.20	6.2	0.03	444	<0.05	12.4
A0330	0.8	<0.1	0.06	0.04	0.24	6.5	0.03	417	<0.05	14.2
A0331	0.8	<0.1	0.06	<0.01	0.12	8.8	0.04	377	0.05	7.8
A0332	0.6	<0.1	0.06	<0.01	0.12	7.9	0.06	378	0.05	3.4
A0333	4.4	0.1	0.31	0.09	0.04	5.5	0.09	350	0.37	22.5
A0334	0.6	<0.1	0.06	<0.01	0.11	8.7	0.06	494	0.05	2.0
A0335	0.8	<0.1	0.08	<0.01	0.09	9.7	0.07	276	0.06	4.1
A0336	0.8	<0.1	0.06	<0.01	0.11	8.0	0.08	218	0.06	1.5
A0337	1.8	<0.1	0.08	<0.01	0.09	9.2	0.09	200	0.12	1.9
A0338	3.4	<0.1	0.13	<0.01	0.07	8.0	0.10	324	0.26	1.2
A0339	1.0	<0.1	0.06	<0.01	0.07	9.8	0.08	325	0.07	3.0
A0340	0.8	<0.1	<0.05	<0.01	0.05	9.7	0.08	348	0.06	2.3
A0341	0.8	<0.1	<0.05	<0.01	0.08	9.8	0.09	247	<0.05	3.5
A0342	0.8	<0.1	<0.05	<0.01	0.08	7.8	0.07	290	<0.05	9.5
A0343	1.0	<0.1	<0.05	0.01	0.07	10.8	0.08	429	0.07	7.7
A0344	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	1.20	0.06	1.1
A0345	2.0	<0.1	0.06	<0.01	0.09	11.1	0.09	276	0.16	3.5
A0346	4.0	<0.1	0.15	0.01	0.04	17.1	0.10	6.74	0.10	6.9
A0347	5.1	0.1	0.10	<0.01	0.13	9.6	0.13	886	0.44	3.0
A0348	4.6	<0.1	0.09	0.02	0.13	10.2	0.12	1170	0.34	6.6
A0349	4.6	<0.1	0.09	<0.01	0.08	10.1	0.13	988	0.32	3.5
A0350	3.2	<0.1	0.10	<0.01	0.06	10.8	0.11	668	0.20	2.2
A0351	1.8	<0.1	0.07	<0.01	0.09	9.9	0.08	659	0.12	3.4
A0352	2.0	<0.1	0.08	0.07	0.22	8.7	0.07	279	0.13	160
A0353	1.4	<0.1	0.07	0.02	0.09	9.9	0.10	254	0.10	32.6
A0354	2.5	<0.1	0.08	0.04	0.18	8.3	0.10	180	0.14	121
A0355	<0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	1.06	0.06	1.3
A0356	1.2	<0.1	<0.05	<0.01	0.15	8.6	0.08	356	0.09	1.5
A0357	1.0	<0.1	<0.05	<0.01	0.11	8.2	0.07	402	0.10	2.9
A0358	0.9	<0.1	<0.05	<0.01	0.11	9.7	0.10	235	0.06	7.4
A0359	4.3	0.1	<0.05	0.91	0.21	7.2	0.07	86.5	0.37	648
A0360	0.9	<0.1	0.14	<0.01	0.07	7.9	0.08	261	0.06	3.9
A0361	0.9	<0.1	0.09	<0.01	0.09	10.9	0.10	793	0.06	3.7
A0362	1.1	<0.1	0.08	0.01	0.10	9.8	0.10	269	<0.05	8.9
A0363	1.2	<0.1	0.07	0.02	0.10	9.7	0.10	563	<0.05	9.6
A0364	1.1	<0.1	0.08	0.01	0.10	8.3	0.09	208	<0.05	32.6
A0365	0.9	<0.1	0.06	<0.01	0.11	8.7	0.07	369	0.06	4.0
A0366	0.7	<0.1	<0.05	<0.01	0.10	8.3	0.08	452	<0.05	2.1
A0367	0.7	<0.1	<0.05	<0.01	0.10	10.3	0.09	386	0.06	1.7
A0368	0.9	<0.1	<0.05	<0.01	0.10	10.8	0.10	315	0.06	2.4
A0369	0.8	<0.1	<0.05	<0.01	0.12	9.2	0.10	318	0.06	4.9

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0370	0.6	<0.1	<0.05	<0.01	0.11	9.7	0.09	606	<0.05	1.7
A0371	0.9	<0.1	<0.05	<0.01	0.08	11.2	0.13	561	0.06	2.2
A0372	0.8	<0.1	<0.05	<0.01	0.12	8.1	0.12	282	<0.05	6.4
A0373	0.7	<0.1	<0.05	<0.01	0.07	8.9	0.08	871	0.05	2.0
A0374	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	1.95	0.10	1.3
A0375	0.7	<0.1	<0.05	<0.01	0.10	12.6	0.10	352	<0.05	1.9
A0376	0.7	<0.1	0.14	<0.01	0.11	13.1	0.08	906	0.07	5.7
A0377	0.7	<0.1	0.08	<0.01	0.09	12.6	0.09	340	<0.05	6.1
A0378	0.6	<0.1	0.06	<0.01	0.08	10.6	0.09	483	0.05	1.5
A0379	4.1	<0.1	0.31	0.07	0.04	5.3	0.09	337	0.37	22.6
A0380	0.6	<0.1	0.06	<0.01	0.12	10.1	0.11	352	<0.05	4.4
A0498	0.4	<0.1	0.06	<0.01	0.10	5.7	0.06	246	0.05	3.0

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0327	6.1	256	0.8	5	6.5	<0.05	0.22	13.0	0.4	0.93
A0328	9.8	4.32	0.5	3	0.6	<0.05	0.14	1.94	1.2	0.16
A0329	8.7	0.77	0.6	3	0.6	<0.05	0.16	0.87	2.1	0.17
A0330	8.8	0.91	0.6	3	0.7	<0.05	0.16	1.02	2.2	0.18
A0331	8.6	0.11	0.5	3	0.6	<0.05	0.19	0.93	2.6	0.14
A0332	6.6	0.18	0.5	2	0.4	<0.05	0.21	0.38	2.5	0.10
A0333	4.4	2.11	4.9	1	1.8	<0.05	0.27	0.18	1.1	0.09
A0334	5.9	<0.05	1.0	3	0.4	<0.05	0.26	0.16	1.8	0.10
A0335	9.4	0.15	1.4	2	0.4	<0.05	0.28	0.43	2.2	0.13
A0336	7.2	<0.05	0.7	3	0.4	<0.05	0.27	0.20	2.1	0.10
A0337	17.1	<0.05	2.1	3	0.5	<0.05	0.31	0.15	2.1	0.23
A0338	39.8	<0.05	5.0	2	0.7	<0.05	0.32	0.12	2.1	0.50
A0339	9.5	<0.05	1.2	2	0.3	<0.05	0.26	0.07	2.2	0.14
A0340	7.9	<0.05	0.9	2	<0.3	<0.05	0.27	0.06	2.1	0.11
A0341	7.2	<0.05	1.0	2	<0.3	<0.05	0.29	0.15	2.4	0.11
A0342	8.2	0.68	0.8	2	0.3	<0.05	0.22	1.66	2.6	0.12
A0343	10.4	0.58	1.1	3	0.4	<0.05	0.29	1.92	2.0	0.15
A0344	0.6	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0345	15.5	0.17	2.8	3	0.7	<0.05	0.34	0.08	2.1	0.23
A0346	14.4	0.19	8.4	<1	0.4	<0.05	0.43	<0.05	2.1	0.19
A0347	49.5	0.07	5.9	3	1.1	<0.05	0.37	0.21	1.7	0.59
A0348	43.9	0.13	5.4	2	1.0	<0.05	0.36	0.26	1.8	0.65
A0349	44.4	<0.05	5.3	2	0.9	<0.05	0.34	0.10	1.9	0.53
A0350	29.6	<0.05	3.8	2	0.6	<0.05	0.34	0.09	2.3	0.36
A0351	13.6	0.32	1.9	2	0.6	<0.05	0.30	0.32	2.9	0.17
A0352	16.0	10.6	2.1	2	0.6	<0.05	0.26	1.42	2.8	0.27
A0353	14.9	15.4	1.6	3	0.5	<0.05	0.33	1.72	2.4	0.24
A0354	24.4	5.21	3.0	2	0.7	<0.05	0.30	0.92	3.1	0.37
A0355	0.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0356	10.9	<0.05	1.3	2	0.5	<0.05	0.26	0.14	3.1	0.14
A0357	9.0	0.25	0.9	2	0.5	0.07	0.26	0.24	2.9	0.10
A0358	9.3	0.13	1.1	1	0.4	<0.05	0.30	0.38	3.2	0.11
A0359	8.0	28.2	4.5	3	4.2	<0.05	0.23	0.57	1.8	0.94
A0360	7.6	<0.05	0.9	1	0.3	<0.05	0.25	0.15	3.8	0.10
A0361	7.6	<0.05	1.0	2	0.3	<0.05	0.32	0.15	3.3	0.10
A0362	10.2	0.26	1.3	2	0.3	<0.05	0.32	0.28	3.7	0.16
A0363	10.6	0.29	1.3	2	<0.3	<0.05	0.30	0.33	3.8	0.17
A0364	11.4	1.53	1.2	3	0.4	<0.05	0.29	0.27	3.1	0.20
A0365	7.9	0.08	0.8	2	0.4	<0.05	0.24	0.25	3.0	0.11
A0366	6.0	<0.05	1.1	1	<0.3	<0.05	0.25	0.13	3.4	0.08
A0367	6.1	<0.05	1.3	1	<0.3	<0.05	0.33	0.08	2.5	0.09
A0368	7.3	<0.05	1.3	1	<0.3	<0.05	0.35	0.31	2.6	0.10
A0369	7.3	<0.05	1.3	1	0.3	<0.05	0.33	0.60	2.9	0.10

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0370	5.8	<0.05	0.9	1	<0.3	<0.05	0.34	0.37	2.6	0.08
A0371	7.3	<0.05	1.7	1	<0.3	<0.05	0.40	0.09	2.9	0.11
A0372	7.7	0.89	0.9	1	<0.3	<0.05	0.33	0.73	2.3	0.13
A0373	6.4	<0.05	0.8	1	<0.3	<0.05	0.27	0.09	1.9	0.10
A0374	1.2	<0.05	0.2	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02
A0375	6.2	<0.05	0.6	2	0.4	<0.05	0.36	0.13	2.4	0.09
A0376	7.1	0.27	0.5	2	0.8	<0.05	0.32	0.23	2.5	0.10
A0377	5.6	0.36	0.4	2	<0.3	<0.05	0.31	0.16	2.7	0.08
A0378	5.1	<0.05	0.5	2	<0.3	<0.05	0.30	0.10	2.8	0.07
A0379	4.0	2.49	4.2	1	1.8	<0.05	0.26	0.24	1.2	0.09
A0380	4.8	0.06	0.6	1	<0.3	<0.05	0.32	0.36	2.5	0.08
A0498	5.4	0.11	0.3	3	0.5	<0.05	0.21	0.72	1.8	0.08

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Cu ICP90Q 0.01 %	Zn ICP90Q 0.01 %
A0327	0.68	0.8	4.64	0.4	129	N.A.	1.13
A0328	0.58	0.5	2.82	0.2	N.A.	N.A.	N.A.
A0329	0.53	0.3	3.23	0.3	N.A.	N.A.	N.A.
A0330	0.56	0.3	3.15	0.2	N.A.	N.A.	N.A.
A0331	0.42	0.3	3.70	0.3	N.A.	N.A.	N.A.
A0332	0.36	0.2	5.56	0.4	N.A.	N.A.	N.A.
A0333	0.36	0.9	7.56	0.7	N.A.	N.A.	N.A.
A0334	0.35	0.2	6.37	0.5	N.A.	N.A.	N.A.
A0335	0.53	0.2	6.84	0.5	N.A.	N.A.	N.A.
A0336	0.48	0.2	6.91	0.6	N.A.	N.A.	N.A.
A0337	0.59	0.2	7.58	0.6	N.A.	N.A.	N.A.
A0338	0.66	0.1	7.74	0.7	N.A.	N.A.	N.A.
A0339	0.38	0.1	6.81	0.6	N.A.	N.A.	N.A.
A0340	0.30	0.1	6.99	0.6	N.A.	N.A.	N.A.
A0341	0.40	0.2	7.30	0.6	N.A.	N.A.	N.A.
A0342	0.50	0.3	5.42	0.5	N.A.	N.A.	N.A.
A0343	0.35	0.2	7.37	0.6	N.A.	N.A.	N.A.
A0344	0.47	<0.1	0.65	<0.1	N.A.	N.A.	N.A.
A0345	0.38	0.2	8.24	0.7	N.A.	N.A.	N.A.
A0346	0.47	<0.1	9.03	0.7	N.A.	N.A.	N.A.
A0347	0.59	0.1	9.47	0.9	N.A.	N.A.	N.A.
A0348	0.61	0.1	9.07	0.8	N.A.	N.A.	N.A.
A0349	0.46	0.2	8.83	0.8	N.A.	N.A.	N.A.
A0350	0.47	0.2	9.02	0.8	N.A.	N.A.	N.A.
A0351	0.60	0.2	7.59	0.6	N.A.	N.A.	N.A.
A0352	0.62	0.2	6.37	0.5	N.A.	N.A.	N.A.
A0353	0.58	0.2	8.33	0.7	N.A.	N.A.	N.A.
A0354	0.63	0.1	7.90	0.7	N.A.	N.A.	N.A.
A0355	0.31	<0.1	0.68	<0.1	N.A.	N.A.	N.A.
A0356	0.41	0.2	6.70	0.5	N.A.	N.A.	N.A.
A0357	0.44	0.3	6.90	0.5	N.A.	N.A.	N.A.
A0358	0.86	0.3	8.05	0.7	N.A.	N.A.	N.A.
A0359	0.56	39.4	5.66	0.5	N.A.	1.63	N.A.
A0360	0.65	0.2	6.34	0.6	N.A.	N.A.	N.A.
A0361	0.54	0.2	8.15	0.7	N.A.	N.A.	N.A.
A0362	0.83	0.1	7.99	0.7	N.A.	N.A.	N.A.
A0363	0.83	0.1	7.39	0.7	N.A.	N.A.	N.A.
A0364	0.74	0.2	7.26	0.6	N.A.	N.A.	N.A.
A0365	0.58	0.2	6.24	0.5	N.A.	N.A.	N.A.
A0366	0.65	0.1	6.43	0.6	N.A.	N.A.	N.A.
A0367	0.53	0.1	8.37	0.6	N.A.	N.A.	N.A.
A0368	0.68	0.1	9.10	0.7	N.A.	N.A.	N.A.
A0369	0.95	0.1	8.50	0.7	N.A.	N.A.	N.A.

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Cu ICP90Q 0.01 %	Zn ICP90Q 0.01 %
A0370	0.83	0.1	8.72	0.7	N.A.	N.A.	N.A.
A0371	0.78	0.1	10.3	0.9	N.A.	N.A.	N.A.
A0372	1.08	0.2	8.65	0.8	N.A.	N.A.	N.A.
A0373	0.79	0.2	7.10	0.6	N.A.	N.A.	N.A.
A0374	0.49	<0.1	0.74	<0.1	N.A.	N.A.	N.A.
A0375	0.57	0.2	9.13	0.7	N.A.	N.A.	N.A.
A0376	0.57	0.3	8.17	0.6	N.A.	N.A.	N.A.
A0377	0.51	0.2	8.11	0.6	N.A.	N.A.	N.A.
A0378	0.67	0.2	8.06	0.7	N.A.	N.A.	N.A.
A0379	0.37	0.9	7.23	0.6	N.A.	N.A.	N.A.
A0380	0.77	0.2	8.57	0.7	N.A.	N.A.	N.A.
A0498	0.33	0.2	5.35	0.4	N.A.	N.A.	N.A.

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# Certificate of Analysis

Work Order: TK110233

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 14, 2011

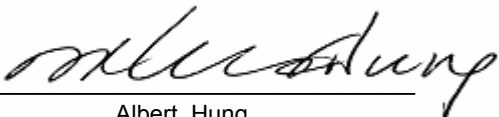
P.O. No. : 1S-0291  
Project No. : -  
No. Of Samples : 61  
Date Submitted : Oct 17, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :   
Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0600	11.400	0.07	0.92	70	37	0.47	17	1170	5.11	0.53
A0601	7.200	0.03	0.83	60	38	0.50	4	666	4.25	0.50
A0602	6.900	<0.01	0.65	60	28	0.58	7	460	4.51	0.43
A0603	7.200	0.03	0.66	60	25	0.57	5	1310	5.09	0.42
A0604	3.400	0.04	0.58	60	39	2.68	4	1480	5.31	0.36
A0605	3.300	0.04	0.68	70	35	3.51	5	1820	5.56	0.41
A0606	7.300	0.03	0.53	60	54	2.74	6	1390	4.33	0.34
A0607	7.300	0.03	0.73	70	37	2.71	5	1560	5.13	0.39
A0608	7.300	0.03	0.59	70	43	1.69	6	1140	5.25	0.39
A0609	6.800	0.04	0.66	60	40	1.30	6	1210	4.66	0.45
A0610	7.000	0.04	0.52	60	54	0.99	6	1280	4.10	0.37
A0611	6.700	0.03	0.64	70	61	1.78	7	1230	3.55	0.43
A0612	7.200	0.03	0.61	70	42	2.37	5	1500	4.74	0.37
A0613	7.200	0.10	0.62	60	37	2.81	7	1390	5.47	0.36
A0614	4.500	<0.01	0.03	50	15	>15	<1	6.6	0.47	0.02
A0615	7.000	0.07	0.60	60	45	2.25	6	1410	4.41	0.42
A0616	6.800	0.03	0.66	60	64	2.13	5	1320	4.41	0.41
A0617	7.200	0.03	0.60	60	93	2.75	5	1020	3.80	0.35
A0618	6.600	0.02	0.50	60	57	3.21	9	1340	3.36	0.33
A0619	7.600	0.07	0.45	70	38	3.38	5	815	5.97	0.33
A0620	0.080	0.04	1.26	50	123	0.73	31	3200	3.27	0.12
A0621	7.000	0.17	0.51	50	42	3.30	10	1830	4.65	0.34
A0622	7.400	0.13	0.44	70	30	4.57	8	2640	7.47	0.31
A0623	7.100	0.13	0.61	50	40	2.93	10	2700	4.65	0.41
A0624	7.800	0.07	0.50	60	30	3.12	7	1990	5.93	0.35
A0625	7.100	0.05	0.40	50	37	3.03	10	1080	4.32	0.29
A0626	8.000	0.04	0.41	50	31	3.01	7	1210	4.75	0.29
A0627	3.300	0.03	0.52	60	35	2.66	9	938	5.83	0.34
A0628	3.400	0.04	0.50	60	31	2.75	7	856	6.52	0.33
A0629	7.200	0.02	0.51	50	30	2.15	12	299	6.69	0.35
A0630	4.400	0.03	0.50	60	28	1.45	7	562	6.58	0.34
A0631	5.300	0.12	0.61	50	52	1.89	2	2120	4.16	0.39
A0632	5.300	0.11	0.73	70	62	1.87	3	908	4.38	0.49
A0633	4.800	0.10	0.74	50	40	1.90	3	721	5.84	0.47
A0634	4.700	<0.01	0.05	60	16	>15	<1	2.5	0.51	0.03
A0635	4.900	0.08	0.72	50	48	2.17	2	1060	4.58	0.48
A0636	5.000	0.07	0.60	40	39	2.01	4	445	4.70	0.42
A0637	7.400	0.05	0.62	60	46	1.74	2	673	4.25	0.44
A0638	7.400	0.04	0.56	60	47	1.45	4	211	4.80	0.42
A0639	6.900	0.03	0.63	50	63	2.02	2	156	4.09	0.44
A0640	7.300	0.03	0.58	50	64	1.97	4	118	3.61	0.39
A0641	7.500	0.02	0.59	50	80	1.95	4	122	3.82	0.41
A0642	6.600	0.04	0.59	50	71	2.04	3	386	3.68	0.40

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A0643	4.300	0.04	0.50	60	32	2.54	9	404	7.41	0.36
A0644	0.080	0.99	1.32	50	124	0.77	32	3280	3.37	0.13
A0645	4.000	0.04	0.49	80	63	4.31	6	1090	3.33	0.32
A0646	7.200	0.03	0.45	60	58	3.86	9	1270	3.79	0.30
A0647	6.600	0.07	0.37	70	58	4.11	6	2060	3.32	0.26
A0648	2.500	0.05	0.43	60	66	4.63	7	1380	2.77	0.29
A0649	2.500	0.04	0.43	60	46	4.52	6	1290	3.31	0.30
A0650	2.100	0.24	0.47	50	19	4.46	7	2380	8.21	0.34
A0651	6.500	0.06	0.43	50	46	5.00	6	1220	3.21	0.30
A0652	6.900	0.05	0.43	60	48	5.07	9	969	4.43	0.29
A0653	4.300	0.04	0.40	50	53	4.58	6	897	2.80	0.27
A0654	5.600	<0.01	0.70	60	870	5.02	56	59.6	4.15	0.39
A0655	6.100	<0.01	0.03	60	15	>15	<1	1.8	0.45	0.02
A0656	5.000	<0.01	0.84	60	572	5.16	60	89.4	4.04	0.44
A0657	4.600	0.06	0.49	60	55	4.65	4	888	3.97	0.33
A0658	7.300	0.06	0.39	50	41	4.49	71	1250	3.21	0.27
A0659	6.900	0.07	0.33	50	44	4.72	47	1510	2.21	0.23
A0660	7.400	0.09	0.40	50	40	3.57	65	1870	3.24	0.28

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0600	17	0.20	171	0.02	14.1	890	>5	26.6	<0.01	6
A0601	11	0.20	305	0.02	6.2	890	>5	24.4	<0.01	5
A0602	7	0.22	553	0.02	7.2	830	>5	24.3	<0.01	4
A0603	6	0.21	604	0.02	7.0	840	>5	29.8	<0.01	5
A0604	5	0.26	1080	0.02	6.8	1000	>5	37.8	<0.01	6
A0605	6	0.28	1320	0.02	6.6	1090	>5	44.4	<0.01	6
A0606	3	0.20	745	0.02	6.0	840	>5	37.7	<0.01	6
A0607	6	0.24	647	0.02	5.1	1040	>5	42.7	<0.01	5
A0608	9	0.23	708	0.02	4.8	920	>5	32.1	<0.01	4
A0609	6	0.21	504	0.02	2.2	840	>5	25.9	<0.01	4
A0610	3	0.27	707	0.02	3.3	870	4.98	22.2	<0.01	3
A0611	4	0.27	516	0.02	2.1	770	4.62	27.3	<0.01	3
A0612	3	0.28	471	0.02	3.2	950	>5	32.3	<0.01	4
A0613	5	0.34	654	0.02	2.7	950	>5	35.3	<0.01	6
A0614	1	13.3	193	0.01	1.6	170	0.03	38.1	<0.01	1
A0615	3	0.29	1060	0.02	3.1	700	>5	27.9	<0.01	6
A0616	12	0.29	904	0.02	3.8	940	>5	31.7	<0.01	6
A0617	10	0.43	641	0.02	5.6	960	3.96	103	<0.01	23
A0618	2	0.35	207	0.03	4.6	840	>5	164	<0.01	9
A0619	2	0.26	328	0.02	5.8	790	>5	257	<0.01	4
A0620	8	0.59	401	0.09	29.5	710	0.49	34.9	0.12	54
A0621	1	0.35	1190	0.04	6.1	940	>5	199	<0.01	9
A0622	2	0.46	1240	0.03	8.7	800	>5	364	<0.01	23
A0623	2	0.62	404	0.04	5.6	940	>5	151	<0.01	19
A0624	2	0.45	226	0.04	7.1	900	>5	192	<0.01	14
A0625	1	0.27	141	0.03	4.6	690	>5	168	<0.01	9
A0626	1	0.24	192	0.02	6.4	670	>5	244	<0.01	6
A0627	1	0.28	1000	0.03	6.0	840	>5	158	<0.01	7
A0628	1	0.26	949	0.03	7.0	780	>5	148	<0.01	7
A0629	<1	0.17	229	0.03	5.4	800	>5	117	<0.01	6
A0630	<1	0.24	297	0.04	6.2	770	>5	167	<0.01	8
A0631	1	0.70	697	0.07	0.8	1800	>5	116	<0.01	14
A0632	1	0.64	514	0.05	1.2	1780	>5	143	<0.01	11
A0633	1	0.33	437	0.03	1.1	1270	>5	602	<0.01	6
A0634	<1	14.0	216	0.01	1.7	190	0.02	42.7	<0.01	1
A0635	1	0.56	592	0.03	1.1	1390	>5	83.8	<0.01	7
A0636	1	0.59	830	0.03	1.9	1130	>5	120	<0.01	5
A0637	1	0.48	2750	0.02	1.6	1100	>5	47.0	<0.01	5
A0638	<1	0.34	1730	0.02	2.3	1080	>5	24.8	<0.01	3
A0639	1	0.57	3440	0.02	1.7	1140	>5	32.3	<0.01	5
A0640	<1	0.48	1220	0.03	2.3	1120	4.67	356	<0.01	5
A0641	1	0.48	278	0.04	1.4	1060	4.55	146	<0.01	6
A0642	1	0.59	1690	0.04	2.3	1390	4.97	201	<0.01	7

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0643	1	0.17	367	0.03	3.8	660	>5	242	<0.01	4
A0644	9	0.61	415	0.10	30.6	720	0.50	37.1	0.13	53
A0645	1	0.23	2080	0.03	5.5	1020	>5	388	<0.01	4
A0646	1	0.21	561	0.03	5.6	770	>5	264	<0.01	6
A0647	<1	0.23	384	0.03	6.9	950	>5	360	<0.01	7
A0648	<1	0.28	379	0.04	4.3	960	>5	291	<0.01	7
A0649	1	0.26	374	0.03	5.8	1010	>5	281	<0.01	7
A0650	<1	0.35	3740	0.02	5.5	770	>5	463	<0.01	4
A0651	1	0.30	301	0.04	4.1	960	>5	303	<0.01	7
A0652	<1	0.29	442	0.05	3.0	960	>5	340	<0.01	7
A0653	<1	0.37	341	0.04	4.4	830	>5	338	<0.01	11
A0654	4	1.94	985	0.07	45.1	1510	0.37	372	<0.01	97
A0655	1	12.8	195	0.01	1.4	170	0.02	39.7	<0.01	<1
A0656	8	1.88	742	0.11	45.6	1560	0.58	259	0.02	97
A0657	1	0.31	145	0.04	4.3	860	>5	320	<0.01	7
A0658	1	0.35	286	0.04	3.1	880	>5	241	<0.01	10
A0659	<1	0.34	379	0.04	2.2	840	>5	292	<0.01	9
A0660	<1	0.34	773	0.03	3.0	1020	>5	290	<0.01	5

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A0600	42	4.1	0.26	357	0.4	0.62	0.29	14.5	22.8	4.36
A0601	50	3.5	0.16	244	0.4	0.43	0.26	15.0	21.0	3.17
A0602	108	3.2	0.30	169	0.4	0.76	0.65	12.7	22.8	2.84
A0603	214	3.6	2.37	437	0.4	0.55	1.25	12.2	23.9	4.40
A0604	81	3.4	0.25	529	0.5	0.54	0.23	8.61	25.7	5.56
A0605	100	3.7	0.31	621	0.5	0.55	0.30	7.54	28.1	5.87
A0606	36	3.2	0.30	498	0.4	0.60	0.41	13.2	24.6	5.59
A0607	16	3.3	0.33	519	0.5	0.54	0.10	10.8	24.7	5.39
A0608	59	3.4	0.32	397	0.6	0.82	0.29	10.4	25.3	5.52
A0609	30	2.8	0.31	428	0.4	1.43	0.20	11.3	23.5	2.80
A0610	133	3.2	5.01	444	0.4	0.48	0.95	11.0	21.3	4.27
A0611	64	2.5	0.47	446	0.5	1.17	0.36	13.3	16.4	4.22
A0612	60	3.1	0.66	431	0.5	1.01	0.39	10.5	21.4	5.42
A0613	317	2.8	0.79	453	0.5	0.78	1.91	8.46	23.0	5.88
A0614	11	<0.5	<0.01	2	<0.1	<0.02	0.06	0.91	0.7	0.15
A0615	1710	2.4	1.53	546	0.4	1.61	9.87	14.3	14.3	3.05
A0616	115	3.1	0.39	430	0.5	0.68	0.37	9.26	21.3	6.05
A0617	49	2.9	0.26	386	0.5	0.49	0.29	13.3	17.0	8.22
A0618	23	2.7	0.31	102	0.3	0.57	0.17	12.2	17.1	4.28
A0619	18	3.2	0.46	8	0.3	2.33	0.15	11.9	17.4	2.86
A0620	52	9.3	1.47	12	0.3	0.53	0.47	11.0	8.1	0.41
A0621	44	3.2	0.71	8	0.3	1.01	0.26	11.6	22.4	3.93
A0622	141	3.6	0.91	7	0.4	0.81	0.56	11.7	28.5	5.26
A0623	18	2.8	0.56	3	0.4	1.09	0.10	10.6	19.5	5.23
A0624	75	3.1	0.57	5	0.2	6.23	0.53	9.99	21.7	3.45
A0625	11	2.6	0.28	7	0.2	0.49	0.13	11.2	21.0	2.75
A0626	17	2.5	0.65	9	0.2	2.99	0.19	9.77	24.5	2.61
A0627	573	3.0	1.06	22	0.2	1.36	3.15	8.85	20.9	2.72
A0628	569	2.9	1.00	22	0.2	1.24	3.33	8.91	21.5	2.50
A0629	29	3.3	0.41	11	0.3	1.21	0.18	8.36	23.2	1.92
A0630	21	3.8	0.48	19	0.3	1.31	0.14	8.34	27.4	2.40
A0631	190	7.0	0.63	56	0.5	2.53	1.04	18.0	1.9	4.12
A0632	75	7.4	0.42	33	0.4	2.56	0.41	17.7	1.5	4.43
A0633	16	7.8	0.26	12	0.5	2.06	0.09	7.92	9.0	4.91
A0634	10	<0.5	<0.01	<1	<0.1	0.02	0.05	0.92	0.8	0.40
A0635	17	8.5	0.27	15	0.5	3.17	0.05	16.6	5.5	5.13
A0636	36	7.0	0.22	32	0.5	2.71	0.16	14.4	5.1	5.57
A0637	448	6.0	0.91	101	0.5	3.58	2.38	14.8	4.3	6.31
A0638	103	5.8	0.35	67	0.4	2.27	0.48	20.2	12.9	4.51
A0639	105	5.6	0.34	56	0.6	1.67	0.50	16.4	7.6	6.29
A0640	27	6.6	0.18	33	0.5	1.55	0.17	16.6	9.8	5.58
A0641	8	7.4	0.06	4	0.5	0.99	0.03	15.0	10.3	4.62
A0642	88	8.3	0.79	61	0.5	1.35	0.55	16.7	6.9	5.30

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0643	7	3.1	0.16	10	0.3	1.17	0.10	8.27	34.0	2.35
A0644	54	9.3	1.53	12	0.4	0.54	0.48	11.4	8.1	0.42
A0645	18	2.3	0.30	22	0.4	0.55	0.16	10.8	16.2	5.86
A0646	11	2.4	0.24	7	0.3	0.52	0.19	12.1	18.6	2.58
A0647	27	2.7	0.73	11	0.3	0.82	0.20	12.7	21.6	2.42
A0648	33	2.7	0.55	35	0.3	0.36	0.24	11.3	15.6	2.72
A0649	36	2.6	0.52	35	0.3	0.39	0.27	11.6	19.6	2.50
A0650	9030	3.4	>10	106	0.6	15.7	50.9	5.30	15.5	5.77
A0651	53	2.8	0.60	38	0.3	0.63	0.32	13.0	16.7	2.89
A0652	63	2.6	0.30	13	0.3	0.39	0.37	13.1	21.4	2.67
A0653	119	2.7	0.31	25	0.4	0.32	0.95	13.6	11.3	4.35
A0654	96	2.6	0.32	9	0.9	0.11	0.26	17.2	20.6	17.8
A0655	10	<0.5	<0.01	<1	<0.1	<0.02	0.06	0.81	0.7	0.37
A0656	61	4.7	0.10	9	0.9	0.09	0.13	18.9	21.2	20.1
A0657	24	3.5	0.39	16	0.3	0.56	0.16	12.6	15.0	2.45
A0658	91	3.1	0.54	6	0.3	0.68	0.53	12.9	16.2	2.77
A0659	51	2.5	0.45	6	0.3	0.39	0.36	14.8	15.8	3.00
A0660	109	2.5	0.60	173	0.3	0.66	0.60	9.14	19.5	4.27

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0600	1.5	<0.1	0.32	0.06	0.06	7.6	0.06	219	0.17	5.9
A0601	1.2	<0.1	0.21	0.03	0.04	8.0	0.06	125	0.09	4.4
A0602	0.9	<0.1	0.15	0.06	0.06	6.9	0.06	239	0.07	38.7
A0603	1.0	<0.1	0.14	0.10	0.06	6.4	0.06	339	0.08	52.8
A0604	0.9	<0.1	0.13	0.08	0.07	4.0	0.09	149	<0.05	9.1
A0605	1.0	<0.1	0.12	0.07	0.08	3.4	0.10	186	0.08	10.8
A0606	0.9	<0.1	0.10	<0.01	0.09	6.6	0.08	630	0.05	7.9
A0607	1.1	<0.1	0.09	<0.01	0.08	5.4	0.07	82.8	0.06	5.9
A0608	0.9	<0.1	0.10	0.01	0.10	5.4	0.07	162	<0.05	9.5
A0609	1.2	<0.1	0.09	0.02	0.09	5.7	0.05	278	0.07	5.4
A0610	0.9	<0.1	0.09	0.02	0.08	5.6	0.05	284	<0.05	28.9
A0611	1.0	<0.1	0.07	0.02	0.13	6.9	0.06	240	<0.05	5.4
A0612	1.0	<0.1	0.08	<0.01	0.08	5.4	0.06	179	<0.05	9.6
A0613	0.9	<0.1	0.06	0.02	0.10	4.1	0.08	183	0.05	32.0
A0614	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	1.13	0.09	0.5
A0615	1.0	<0.1	0.06	0.04	0.26	7.5	0.08	303	0.08	146
A0616	0.9	<0.1	0.06	0.13	0.08	4.9	0.06	132	<0.05	7.9
A0617	1.1	<0.1	0.05	0.04	0.05	6.9	0.06	143	0.05	9.0
A0618	0.9	<0.1	0.07	<0.01	0.08	6.2	0.07	139	0.08	4.2
A0619	1.0	<0.1	0.07	<0.01	0.06	5.9	0.06	100	0.05	8.0
A0620	4.2	<0.1	0.29	0.07	0.04	5.2	0.09	335	0.53	21.3
A0621	1.0	<0.1	0.06	<0.01	0.08	5.8	0.07	122	0.09	25.2
A0622	2.1	<0.1	0.06	<0.01	0.12	5.8	0.09	125	0.07	48.6
A0623	1.5	<0.1	<0.05	<0.01	0.13	5.2	0.07	138	0.13	1.2
A0624	1.3	<0.1	0.06	<0.01	0.12	4.9	0.07	193	0.08	11.0
A0625	1.0	<0.1	<0.05	<0.01	0.06	5.7	0.06	196	0.13	1.5
A0626	0.9	<0.1	<0.05	<0.01	0.12	4.9	0.05	313	<0.05	5.7
A0627	1.0	<0.1	<0.05	<0.01	0.12	4.4	0.05	127	0.11	61.4
A0628	1.1	<0.1	<0.05	<0.01	0.10	4.5	0.05	117	<0.05	58.8
A0629	1.0	<0.1	<0.05	<0.01	0.04	4.3	0.04	97.7	0.12	10.1
A0630	1.1	<0.1	0.07	<0.01	0.05	4.0	0.05	165	<0.05	7.3
A0631	1.9	<0.1	0.23	<0.01	0.20	8.0	0.10	3.94	<0.05	4.6
A0632	1.7	<0.1	0.25	<0.01	0.07	8.4	0.10	2.28	<0.05	10.1
A0633	1.5	<0.1	0.19	<0.01	0.05	3.5	0.08	33.1	<0.05	2.7
A0634	0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	0.30	0.11	0.4
A0635	1.6	<0.1	0.28	<0.01	0.06	8.0	0.11	2.32	<0.05	3.0
A0636	1.4	<0.1	0.25	<0.01	0.03	6.7	0.11	5.71	<0.05	8.9
A0637	1.6	<0.1	0.20	0.02	0.24	7.1	0.09	4.78	<0.05	43.5
A0638	1.3	<0.1	0.21	<0.01	<0.02	10.5	0.08	3.44	<0.05	23.5
A0639	1.3	<0.1	0.33	<0.01	0.02	8.5	0.10	2.37	0.05	19.3
A0640	1.3	<0.1	0.28	<0.01	0.02	8.7	0.11	2.60	<0.05	6.5
A0641	1.4	<0.1	0.28	<0.01	<0.02	8.1	0.12	2.97	<0.05	1.8
A0642	1.4	<0.1	0.29	<0.01	0.03	8.5	0.13	2.01	<0.05	17.1

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0643	1.1	<0.1	0.07	<0.01	0.03	4.1	0.06	134	0.11	3.9
A0644	4.2	<0.1	0.28	0.07	0.04	5.4	0.09	327	0.48	21.6
A0645	0.9	<0.1	0.05	<0.01	0.05	5.3	0.08	153	<0.05	5.4
A0646	0.8	<0.1	<0.05	<0.01	0.06	6.1	0.07	501	0.10	3.7
A0647	0.9	<0.1	<0.05	<0.01	0.13	6.2	0.09	194	<0.05	7.9
A0648	0.9	<0.1	<0.05	0.01	0.06	5.4	0.10	87.1	0.10	8.8
A0649	1.0	<0.1	<0.05	<0.01	0.05	5.5	0.10	128	<0.05	10.3
A0650	3.4	<0.1	0.05	0.27	6.31	2.2	0.08	55.7	0.11	2850
A0651	1.0	<0.1	0.05	0.01	0.07	6.0	0.11	83.9	<0.05	17.5
A0652	1.0	<0.1	<0.05	<0.01	0.07	6.1	0.10	139	0.10	21.6
A0653	1.0	<0.1	<0.05	<0.01	0.03	6.6	0.11	163	<0.05	18.3
A0654	2.0	<0.1	<0.05	<0.01	0.05	7.2	0.07	11.7	0.06	7.4
A0655	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	0.69	0.11	0.5
A0656	2.5	<0.1	0.10	<0.01	0.04	7.8	0.07	28.4	0.22	4.2
A0657	1.1	<0.1	0.05	<0.01	0.04	5.8	0.10	210	0.09	4.9
A0658	1.0	<0.1	0.08	<0.01	0.06	6.0	0.12	134	<0.05	12.3
A0659	0.8	<0.1	<0.05	<0.01	0.06	7.0	0.12	226	<0.05	13.8
A0660	0.7	<0.1	<0.05	0.04	0.06	4.3	0.10	114	<0.05	15.2

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0600	15.0	0.67	1.1	3	0.4	<0.05	0.23	0.17	3.2	0.32
A0601	12.8	0.54	1.1	3	0.4	<0.05	0.21	0.12	2.9	0.27
A0602	11.2	2.97	1.0	3	0.3	<0.05	0.20	0.32	2.3	0.26
A0603	12.2	29.0	1.1	3	0.3	<0.05	0.21	0.72	2.1	0.36
A0604	10.7	2.51	1.2	3	<0.3	<0.05	0.32	0.18	2.5	0.21
A0605	11.6	3.08	1.4	3	<0.3	<0.05	0.36	0.20	2.4	0.24
A0606	10.3	0.32	1.0	3	<0.3	<0.05	0.32	0.31	2.5	0.19
A0607	11.5	0.19	1.2	3	<0.3	<0.05	0.21	0.19	2.7	0.20
A0608	11.0	5.59	1.1	3	<0.3	<0.05	0.23	0.33	2.3	0.24
A0609	11.7	2.52	0.7	3	0.4	<0.05	0.21	0.50	2.4	0.20
A0610	11.3	62.7	0.6	2	<0.3	<0.05	0.20	0.24	2.1	0.21
A0611	11.9	2.40	0.8	2	<0.3	<0.05	0.24	0.25	2.4	0.23
A0612	11.3	0.68	0.8	3	<0.3	<0.05	0.21	0.28	2.7	0.20
A0613	11.2	0.79	1.2	3	<0.3	<0.05	0.25	0.25	2.5	0.22
A0614	0.8	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0615	12.3	7.38	1.1	2	0.4	<0.05	0.28	0.27	2.1	0.24
A0616	12.6	33.2	1.8	2	<0.3	<0.05	0.21	0.19	2.0	0.22
A0617	11.4	2.39	3.7	2	<0.3	<0.05	0.23	0.18	2.3	0.22
A0618	9.9	1.03	2.1	2	<0.3	<0.05	0.23	0.21	2.2	0.17
A0619	9.0	0.19	0.9	2	0.4	<0.05	0.21	0.62	2.2	0.14
A0620	4.3	2.52	5.0	1	1.8	<0.05	0.26	0.19	1.0	0.09
A0621	10.6	0.33	1.7	3	<0.3	<0.05	0.23	0.37	2.4	0.19
A0622	11.0	0.17	2.0	4	<0.3	<0.05	0.26	0.82	1.7	0.21
A0623	15.3	0.05	2.9	3	0.4	<0.05	0.23	0.42	1.9	0.25
A0624	12.1	0.15	2.3	3	0.4	<0.05	0.24	0.40	1.8	0.19
A0625	9.3	<0.05	2.0	3	0.4	<0.05	0.22	0.25	1.7	0.15
A0626	9.0	0.10	0.9	2	0.3	<0.05	0.19	0.77	2.1	0.14
A0627	10.3	0.26	1.1	3	0.4	<0.05	0.18	0.54	2.6	0.18
A0628	10.0	0.27	1.0	3	0.4	<0.05	0.18	0.48	2.7	0.18
A0629	10.3	0.07	0.8	3	0.6	<0.05	0.16	0.59	2.6	0.17
A0630	11.1	0.10	1.2	3	0.4	<0.05	0.17	0.61	2.5	0.19
A0631	14.9	0.15	1.8	<1	<0.3	<0.05	0.38	2.03	1.2	0.27
A0632	18.7	0.23	1.6	<1	<0.3	<0.05	0.33	1.93	1.2	0.31
A0633	15.5	0.14	1.3	<1	0.4	<0.05	0.22	1.45	1.9	0.25
A0634	1.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0635	18.0	0.17	1.3	<1	<0.3	<0.05	0.29	1.84	1.8	0.30
A0636	15.7	0.72	1.1	<1	<0.3	<0.05	0.29	1.75	2.0	0.25
A0637	16.7	4.03	1.0	<1	<0.3	<0.05	0.26	1.46	2.3	0.29
A0638	14.4	0.88	0.7	<1	<0.3	<0.05	0.26	1.46	2.6	0.26
A0639	15.3	0.90	1.0	<1	<0.3	<0.05	0.29	1.12	3.1	0.31
A0640	14.0	0.65	1.0	<1	<0.3	<0.05	0.29	1.27	2.7	0.27
A0641	14.3	<0.05	1.0	<1	<0.3	<0.05	0.26	0.70	2.7	0.25
A0642	15.3	22.9	1.3	<1	<0.3	<0.05	0.31	0.98	2.1	0.27

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Element Method Det.Lim. Units	Rb ICM14B	Sb ICM14B	Sc ICM14B	Se ICM14B	Sn ICM14B	Ta ICM14B	Tb ICM14B	Te ICM14B	Th ICM14B	Tl ICM14B
	0.2 ppm	0.05 ppm	0.1 ppm	1 ppm	0.3 ppm	0.05 ppm	0.02 ppm	0.05 ppm	0.1 ppm	0.02 ppm
A0643	10.0	0.16	0.8	3	0.4	<0.05	0.18	0.45	3.0	0.18
A0644	4.4	2.73	5.1	<1	1.8	<0.05	0.27	0.22	1.1	0.09
A0645	10.8	1.04	0.8	2	<0.3	<0.05	0.26	0.21	2.9	0.20
A0646	8.9	0.23	0.8	2	0.3	<0.05	0.24	0.21	2.9	0.16
A0647	8.1	0.69	1.1	2	0.4	<0.05	0.32	0.28	3.0	0.16
A0648	9.4	3.32	1.2	2	0.3	<0.05	0.39	0.10	2.8	0.18
A0649	9.4	2.79	1.0	2	0.3	<0.05	0.39	0.10	2.9	0.18
A0650	12.1	20.4	1.8	4	1.2	<0.05	0.26	9.48	1.4	0.75
A0651	9.3	1.01	1.2	2	0.3	<0.05	0.38	0.23	2.9	0.18
A0652	8.6	0.86	1.3	2	0.4	<0.05	0.33	0.12	2.4	0.17
A0653	9.0	0.27	1.9	1	0.4	<0.05	0.32	0.08	2.2	0.16
A0654	14.0	0.15	13.0	<1	0.4	<0.05	0.29	<0.05	2.0	0.26
A0655	1.6	<0.05	0.2	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02
A0656	16.6	0.24	12.2	<1	0.6	<0.05	0.29	<0.05	2.0	0.23
A0657	9.0	0.81	1.0	2	0.4	<0.05	0.38	0.36	2.4	0.15
A0658	9.4	0.29	1.7	2	<0.3	<0.05	0.44	0.19	2.9	0.16
A0659	8.0	0.16	1.7	2	<0.3	<0.05	0.43	0.11	2.4	0.15
A0660	9.1	6.65	1.0	2	<0.3	<0.05	0.28	0.18	2.5	0.20

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Final : TK110233 Order: 1S-0291

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t
A0600	0.86	0.4	4.87	0.4	N.A.
A0601	0.97	0.3	4.62	0.4	N.A.
A0602	0.81	0.2	4.81	0.4	N.A.
A0603	0.85	0.2	4.62	0.4	N.A.
A0604	1.27	0.2	7.16	0.6	N.A.
A0605	1.31	0.2	8.39	0.7	N.A.
A0606	1.15	0.2	6.95	0.6	N.A.
A0607	0.80	0.2	4.86	0.5	N.A.
A0608	0.92	0.2	5.03	0.5	N.A.
A0609	0.89	0.3	4.19	0.4	N.A.
A0610	0.79	0.2	4.10	0.4	N.A.
A0611	0.89	0.2	5.25	0.5	N.A.
A0612	0.69	0.1	4.96	0.4	N.A.
A0613	0.89	0.2	6.24	0.6	N.A.
A0614	0.49	<0.1	0.68	<0.1	N.A.
A0615	0.93	0.2	6.61	0.6	N.A.
A0616	0.59	0.2	4.86	0.4	N.A.
A0617	0.72	0.6	5.24	0.4	N.A.
A0618	0.66	0.1	5.63	0.5	N.A.
A0619	0.74	0.2	5.33	0.5	N.A.
A0620	0.38	1.0	7.42	0.6	N.A.
A0621	0.75	0.1	5.63	0.5	N.A.
A0622	0.77	0.1	6.98	0.6	N.A.
A0623	0.70	0.1	5.51	0.5	N.A.
A0624	0.75	0.2	5.96	0.5	N.A.
A0625	0.57	0.1	5.42	0.4	N.A.
A0626	0.55	0.2	4.79	0.4	N.A.
A0627	0.56	0.2	4.50	0.4	N.A.
A0628	0.54	0.2	4.57	0.4	N.A.
A0629	0.54	0.2	3.74	0.3	N.A.
A0630	0.56	0.3	3.97	0.3	N.A.
A0631	0.92	<0.1	7.74	0.8	N.A.
A0632	0.72	<0.1	7.26	0.7	N.A.
A0633	0.57	0.2	5.82	0.5	N.A.
A0634	0.45	<0.1	0.68	<0.1	N.A.
A0635	1.11	<0.1	7.19	0.7	N.A.
A0636	1.56	0.1	7.60	0.7	N.A.
A0637	1.27	0.2	6.66	0.6	N.A.
A0638	1.77	0.1	5.80	0.6	N.A.
A0639	1.33	0.1	7.37	0.7	N.A.
A0640	1.52	0.1	7.64	0.8	N.A.
A0641	1.93	<0.1	7.71	0.8	N.A.
A0642	1.23	<0.1	8.84	0.8	N.A.

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t
A0643	0.45	0.2	4.82	0.4	N.A.
A0644	0.36	1.0	7.40	0.7	N.A.
A0645	0.65	0.2	6.43	0.6	N.A.
A0646	0.52	0.2	5.82	0.5	N.A.
A0647	0.77	0.1	8.34	0.7	N.A.
A0648	0.58	0.2	9.92	0.8	N.A.
A0649	0.58	0.2	10.2	0.8	N.A.
A0650	1.09	0.7	6.73	0.6	18.7
A0651	0.70	0.2	10.0	0.8	N.A.
A0652	0.57	0.2	8.11	0.7	N.A.
A0653	0.67	0.1	8.09	0.8	N.A.
A0654	0.33	<0.1	5.95	0.5	N.A.
A0655	0.36	<0.1	0.66	<0.1	N.A.
A0656	0.32	<0.1	6.14	0.5	N.A.
A0657	0.71	0.2	9.11	0.7	N.A.
A0658	0.73	0.2	10.9	0.9	N.A.
A0659	0.62	0.1	10.7	0.9	N.A.
A0660	0.97	0.1	7.43	0.7	N.A.

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# Certificate of Analysis

Work Order: TK110234

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 14, 2011

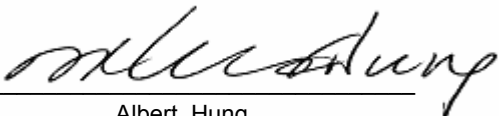
P.O. No. : 1S-0292/PO: SQ-09B-101411-ec  
Project No. : -  
No. Of Samples : 12  
Date Submitted : Oct 17, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :   
Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0661	0.080	1.00	1.32	50	128	0.79	32	3280	3.36	0.12
A0662	7.000	0.14	0.46	60	49	3.06	70	2170	4.06	0.31
A0663	6.500	0.04	0.44	60	43	2.20	67	868	3.40	0.32
A0664	5.300	0.04	0.43	50	30	1.42	55	2180	5.16	0.33
A0665	3.600	0.02	0.46	60	19	1.89	71	2200	8.42	0.32
A0666	5.800	0.03	0.43	50	46	1.62	76	2220	3.49	0.32
A0667	5.400	0.06	0.65	50	366	3.19	43	98.1	3.16	0.43
A0668	5.000	<0.01	0.92	50	614	3.17	58	43.7	4.15	0.32
A0669	5.000	<0.01	1.05	70	202	2.40	88	37.0	3.79	0.31
A0670	6.600	0.01	0.59	40	449	2.92	42	11.5	2.30	0.38
A0671	3.000	0.04	0.38	50	17	2.36	69	2330	9.53	0.30
A0672	3.000	0.04	0.34	50	15	2.52	63	2310	11.1	0.27

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0661	9	0.63	418	0.10	31.0	730	0.50	37.1	0.13	55
A0662	<1	0.25	2770	0.02	4.7	1130	>5	228	<0.01	8
A0663	<1	0.14	2030	0.02	3.9	1050	>5	242	<0.01	6
A0664	<1	0.08	1030	0.02	3.1	930	>5	188	<0.01	2
A0665	1	0.12	885	0.02	3.9	750	>5	251	<0.01	2
A0666	<1	0.24	1420	0.02	3.8	890	>5	135	<0.01	4
A0667	2	1.08	2470	0.04	17.0	1340	1.34	314	<0.01	28
A0668	10	1.85	967	0.08	44.2	1870	0.74	157	0.01	73
A0669	12	1.16	886	0.15	32.9	1680	0.20	149	0.21	103
A0670	4	0.48	2050	0.04	3.5	980	0.41	157	<0.01	19
A0671	<1	0.08	1390	0.02	2.3	770	>5	454	<0.01	<1
A0672	<1	0.07	989	0.02	2.2	750	>5	437	<0.01	<1

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0661	55	9.3	1.47	12	0.4	0.53	0.54	11.5	8.1	0.41
A0662	9490	2.7	>10	612	0.5	4.96	56.6	9.91	18.9	5.75
A0663	1810	2.8	8.56	277	0.5	2.07	9.63	9.63	16.8	5.04
A0664	2940	2.7	9.76	633	0.4	3.07	15.8	6.89	22.7	4.85
A0665	111	2.8	1.12	450	0.4	1.23	0.71	8.47	41.2	4.84
A0666	1750	1.4	4.08	420	0.4	1.14	14.3	12.7	22.9	5.41
A0667	78	2.2	0.39	68	1.0	0.52	0.12	30.1	12.3	12.6
A0668	93	3.7	0.17	84	1.0	0.13	0.24	60.9	21.5	12.5
A0669	75	19.8	0.07	44	1.0	0.19	0.09	52.9	16.5	6.24
A0670	65	3.0	0.04	17	0.8	0.16	0.05	23.9	6.4	9.23
A0671	416	3.1	3.40	157	0.2	45.0	2.63	9.10	38.1	2.49
A0672	584	3.3	3.77	146	0.2	34.2	3.23	7.98	43.6	2.36

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0661	4.3	<0.1	0.26	0.08	0.04	5.4	0.09	331	0.48	21.9
A0662	2.8	<0.1	0.06	0.62	1.88	4.5	0.08	372	<0.05	3330
A0663	1.1	<0.1	0.05	0.13	1.21	4.4	0.07	62.9	<0.05	327
A0664	1.3	<0.1	<0.05	0.22	1.59	3.3	0.04	161	<0.05	375
A0665	0.9	<0.1	<0.05	0.05	0.08	4.0	0.05	219	<0.05	32.5
A0666	2.9	<0.1	<0.05	0.10	1.49	6.4	0.06	530	<0.05	176
A0667	1.6	<0.1	<0.05	0.04	0.03	13.7	0.10	8.51	<0.05	13.9
A0668	4.1	<0.1	0.09	0.06	0.05	28.6	0.14	3.30	0.17	22.4
A0669	4.5	<0.1	0.61	<0.01	0.04	23.9	0.17	2.50	0.97	5.1
A0670	1.6	<0.1	0.09	<0.01	0.02	11.2	0.11	1.58	0.07	4.8
A0671	0.8	<0.1	<0.05	0.04	0.24	4.2	0.05	367	0.07	192
A0672	0.7	<0.1	<0.05	0.04	0.22	3.8	0.05	401	0.06	217

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0661	4.3	2.63	5.2	1	1.8	<0.05	0.27	0.19	1.0	0.09
A0662	12.0	125	2.0	2	3.1	<0.05	0.28	2.34	2.4	0.39
A0663	12.8	30.2	1.2	1	0.4	<0.05	0.24	0.69	2.3	0.28
A0664	12.3	48.0	0.5	2	0.4	<0.05	0.18	1.08	1.8	0.30
A0665	10.1	4.06	0.4	4	0.3	<0.05	0.19	0.55	2.7	0.23
A0666	11.1	11.9	0.5	2	0.5	<0.05	0.21	0.62	3.0	0.58
A0667	18.4	1.26	4.7	<1	<0.3	<0.05	0.41	0.25	2.5	0.84
A0668	14.7	2.16	10.3	<1	0.4	<0.05	0.61	0.32	4.2	0.38
A0669	20.6	0.80	8.2	<1	0.8	<0.05	0.64	0.07	4.1	0.27
A0670	18.3	0.35	2.8	<1	<0.3	<0.05	0.38	0.12	1.5	0.39
A0671	9.8	14.8	0.4	4	0.6	<0.05	0.20	1.59	2.2	0.19
A0672	9.1	17.1	0.3	5	0.5	<0.05	0.18	2.04	1.8	0.19

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Final : TK110234 Order: 1S-0292/PO: SQ-09B-101411-ec

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Element	U	W	Y	Yb	Ag
Method	ICM14B	ICM14B	ICM14B	ICM14B	AAS42E
Det.Lim.	0.05	0.1	0.05	0.1	0.3
Units	ppm	ppm	ppm	ppm	g/t
A0661	0.40	1.0	7.51	0.7	N.A.
A0662	0.86	0.3	7.00	0.6	40.0
A0663	0.64	0.3	5.83	0.5	N.A.
A0664	0.63	0.3	3.40	0.3	N.A.
A0665	0.60	0.2	4.12	0.4	N.A.
A0666	0.90	0.2	4.52	0.4	N.A.
A0667	0.88	0.2	9.02	0.7	N.A.
A0668	0.66	<0.1	13.2	1.0	N.A.
A0669	1.49	0.1	15.0	1.2	N.A.
A0670	0.85	0.1	9.23	0.7	N.A.
A0671	0.56	0.3	4.37	0.4	N.A.
A0672	0.54	0.3	4.00	0.3	N.A.

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# Certificate of Analysis

Work Order: TK110241

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 18, 2011

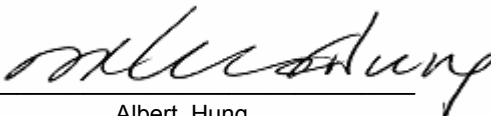
P.O. No. : 1S-0299  
Project No. : -  
No. Of Samples : 47  
Date Submitted : Oct 18, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :   
Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0673	6.800	<0.01	1.09	50	961	4.12	5	25.8	3.53	0.60
A0674	4.200	0.03	0.70	40	76	3.07	7	1370	3.85	0.42
A0675	4.600	0.05	0.45	40	101	5.10	9	1260	2.36	0.29
A0676	7.100	0.03	0.54	40	69	3.32	6	1440	3.29	0.33
A0677	6.600	0.05	1.00	40	38	1.46	4	1270	5.94	0.63
A0678	1.600	<0.01	2.76	40	907	5.03	12	42.9	5.01	0.51
A0679	4.900	<0.01	0.04	40	16	>15	<1	2.7	0.43	0.02
A0680	5.600	0.01	0.87	30	70	1.75	3	246	3.27	0.52
A0681	7.600	0.02	0.67	40	64	1.63	3	399	3.50	0.45
A0682	0.080	1.00	1.28	40	121	0.75	32	3480	3.11	0.12
A0683	7.100	0.03	0.88	30	59	1.50	3	885	3.55	0.58
A0684	6.800	0.12	0.72	30	41	1.96	5	401	5.98	0.47
A0685	3.200	0.02	0.92	40	60	1.69	4	561	6.14	0.57
A0686	3.300	0.02	0.72	40	66	1.76	4	458	5.47	0.47
A0687	6.500	0.02	0.70	30	55	1.98	5	389	4.80	0.45
A0688	6.700	0.02	0.66	40	72	2.17	5	391	4.25	0.45
A0689	6.800	0.02	0.67	40	61	2.21	6	157	4.80	0.46
A0690	2.700	0.22	0.67	40	90	2.02	3	205	3.19	0.50
A0691	6.500	0.03	0.57	40	39	1.90	4	172	5.97	0.39
A0692	5.700	0.03	0.59	30	44	1.45	4	441	5.04	0.40
A0693	2.400	0.09	0.80	40	131	1.26	2	429	2.71	0.56
A0694	5.300	<0.01	0.03	40	11	>15	<1	0.5	0.46	0.02
A0695	3.100	0.03	0.82	40	51	1.85	4	534	5.12	0.54
A0696	6.200	0.02	0.78	40	69	1.65	4	1100	4.68	0.53
A0697	6.500	0.05	0.76	40	42	1.92	5	595	7.13	0.51
A0698	6.600	0.03	0.86	40	70	1.86	4	458	4.66	0.56
A0699	0.080	0.96	1.30	40	124	0.79	32	3490	3.33	0.13
A0700	6.900	0.04	0.79	40	49	1.84	5	969	5.49	0.52
A0701	7.200	<0.01	0.65	40	73	2.06	4	386	4.84	0.46
A0702	3.400	0.03	0.78	40	35	1.38	4	1120	5.35	0.54
A0703	3.500	0.02	0.74	40	37	1.85	4	894	4.75	0.50
A0704	7.300	0.03	0.71	40	54	1.34	4	2380	4.69	0.51
A0705	6.500	0.03	0.92	40	62	1.01	3	842	3.85	0.60
A0706	7.500	0.11	0.65	40	44	0.95	4	744	4.31	0.43
A0707	7.100	0.06	0.80	40	57	1.28	4	846	4.66	0.55
A0708	4.300	0.05	0.92	40	222	2.52	3	1780	3.40	0.67
A0709	5.400	0.12	0.99	40	270	2.42	2	2570	3.37	0.70
A0710	7.800	0.15	0.92	40	75	1.92	3	1450	4.25	0.64
A0711	7.400	0.06	0.72	40	118	2.10	2	3090	3.44	0.53
A0712	7.300	0.05	0.87	40	93	2.20	2	628	4.05	0.60
A0713	5.000	<0.01	0.04	40	16	>15	<1	8.8	0.45	0.03
A0714	7.000	0.04	0.86	40	43	1.55	4	1130	4.91	0.56
A0715	7.300	0.02	0.78	40	66	1.63	2	809	3.93	0.54

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Element	WtKg	Au	Al	B	Ba	Ca	Cr	Cu	Fe	K
Method	WGH79	FAA303	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.001	0.01	0.01	10	5	0.01	1	0.5	0.01	0.01
Units	kg	g/t	%	ppm	ppm	%	ppm	ppm	%	%
A0716	7.200	0.03	0.66	40	133	1.90	5	1250	3.36	0.45
A0717	7.300	0.05	0.71	40	93	2.09	6	1300	3.85	0.47
A0718	7.000	0.03	0.93	40	124	2.08	8	1040	3.58	0.55
A0719	7.000	0.94	1.39	50	130	0.84	34	3690	3.52	0.13

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0673	4	1.45	977	0.09	5.1	1880	0.09	388	0.01	72
A0674	3	0.20	296	0.05	3.5	820	>5	270	<0.01	6
A0675	2	0.22	281	0.05	2.3	740	>5	351	<0.01	8
A0676	1	0.25	627	0.04	2.8	950	>5	227	<0.01	5
A0677	<1	0.28	1320	0.03	1.4	1320	>5	56.7	<0.01	6
A0678	24	2.07	3090	0.08	18.9	2790	0.25	358	0.08	133
A0679	<1	13.2	215	<0.01	1.4	180	0.02	38.5	<0.01	1
A0680	2	0.52	8990	0.03	3.5	1250	4.13	126	<0.01	12
A0681	<1	0.49	6380	0.02	2.3	1090	4.73	84.8	<0.01	5
A0682	9	0.60	440	0.09	30.6	760	0.46	34.2	0.13	53
A0683	<1	0.33	7010	0.02	1.9	1120	>5	137	<0.01	6
A0684	<1	0.07	1680	0.03	2.6	840	>5	175	<0.01	4
A0685	<1	0.09	1510	0.03	2.0	860	>5	153	<0.01	5
A0686	<1	0.08	1430	0.03	2.2	820	>5	166	<0.01	4
A0687	<1	0.14	2960	0.03	2.0	890	>5	173	<0.01	3
A0688	<1	0.20	4670	0.02	2.5	1110	>5	160	<0.01	3
A0689	<1	0.11	1170	0.02	2.0	950	>5	134	<0.01	3
A0690	<1	0.57	5040	0.02	2.2	950	4.03	143	<0.01	5
A0691	<1	0.13	1100	0.02	1.8	850	>5	250	<0.01	3
A0692	<1	0.14	2110	0.02	2.4	850	>5	185	<0.01	3
A0693	<1	0.39	>10000	0.02	2.2	950	3.51	41.3	<0.01	6
A0694	<1	12.9	252	<0.01	1.3	170	0.02	37.4	<0.01	<1
A0695	<1	0.19	2410	0.02	1.5	920	>5	117	<0.01	3
A0696	<1	0.23	2120	0.02	1.7	1000	>5	88.5	<0.01	4
A0697	<1	0.15	3530	0.02	2.8	920	>5	153	<0.01	3
A0698	<1	0.29	2010	0.02	1.8	960	>5	123	<0.01	4
A0699	9	0.60	448	0.09	30.1	730	0.48	37.4	0.14	56
A0700	<1	0.16	2840	0.02	2.9	930	>5	196	<0.01	4
A0701	<1	0.25	1230	0.02	1.8	970	>5	126	<0.01	3
A0702	<1	0.17	7660	0.02	2.8	1120	>5	92.4	<0.01	4
A0703	<1	0.16	7270	0.02	2.1	980	>5	134	<0.01	4
A0704	<1	0.28	4390	0.03	2.4	1140	>5	110	<0.01	5
A0705	<1	0.26	>10000	0.03	2.6	1070	>5	98.7	<0.01	6
A0706	<1	0.13	>10000	0.03	3.0	920	>5	144	<0.01	5
A0707	<1	0.32	8980	0.03	2.0	1050	>5	61.8	<0.01	6
A0708	<1	0.80	3580	0.04	1.7	1180	1.54	44.4	<0.01	21
A0709	2	0.78	2490	0.05	1.0	1200	1.85	65.3	<0.01	19
A0710	<1	0.56	2370	0.03	1.4	1130	4.49	79.7	<0.01	11
A0711	1	0.70	1800	0.04	1.8	1240	2.82	77.3	<0.01	15
A0712	<1	0.70	2270	0.04	1.2	1000	4.17	101	<0.01	12
A0713	<1	12.6	223	<0.01	1.7	170	<0.01	36.9	<0.01	1
A0714	<1	0.53	1390	0.05	1.9	1090	>5	80.1	<0.01	14
A0715	<1	0.50	1190	0.03	1.4	1060	4.91	75.2	<0.01	10

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Element	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
Units	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm
A0716	<1	0.60	859	0.06	2.2	1120	3.50	73.3	<0.01	19
A0717	<1	0.60	775	0.07	2.6	1190	3.79	164	<0.01	22
A0718	2	0.59	608	0.08	6.6	1150	3.20	178	<0.01	25
A0719	9	0.63	470	0.10	32.1	770	0.50	39.4	0.15	59

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0673	77	3.9	0.07	3	0.7	0.06	0.20	29.5	11.7	22.8
A0674	51	2.1	0.66	9	0.3	4.47	0.42	13.4	18.5	2.90
A0675	48	1.7	0.37	5	0.2	0.67	0.83	21.9	14.4	2.27
A0676	100	2.9	0.69	8	0.3	1.55	0.67	17.5	25.4	3.18
A0677	199	13.3	1.76	35	0.3	6.00	1.01	12.1	8.7	3.05
A0678	119	3.5	0.10	14	1.3	0.11	0.15	60.9	19.3	10.8
A0679	11	<0.5	<0.01	<1	<0.1	0.04	0.06	0.98	0.7	0.18
A0680	311	10.4	0.92	36	0.6	1.89	1.42	19.1	8.2	6.18
A0681	529	9.9	1.08	42	0.4	1.62	2.43	14.7	4.4	5.53
A0682	55	9.2	1.50	12	0.3	0.53	0.63	10.8	7.5	0.41
A0683	4980	10.4	3.93	200	0.4	3.26	28.6	13.4	3.7	3.95
A0684	6130	12.2	5.69	89	0.2	3.23	29.1	6.38	9.2	1.24
A0685	1190	12.7	2.86	118	0.2	2.27	5.10	11.1	16.9	1.36
A0686	1310	11.9	2.49	96	0.2	2.14	5.46	10.1	13.0	1.26
A0687	535	11.5	1.19	83	0.2	1.60	2.43	10.4	8.2	1.36
A0688	368	11.1	1.22	104	0.2	1.73	1.69	10.5	10.3	2.11
A0689	461	11.1	0.70	23	0.2	1.51	2.02	11.6	10.6	1.40
A0690	1640	5.9	0.63	30	0.5	1.29	7.83	20.8	8.0	5.65
A0691	1310	11.6	1.07	28	0.2	1.85	6.13	8.70	9.0	1.57
A0692	1260	12.0	2.15	32	0.3	2.63	5.42	10.5	8.3	1.95
A0693	1150	6.2	2.98	36	0.7	2.41	5.04	18.7	6.2	7.01
A0694	15	<0.5	<0.01	<1	<0.1	0.02	0.07	0.74	0.7	0.16
A0695	371	12.3	1.53	9	0.4	4.31	1.78	14.5	5.3	2.33
A0696	142	11.2	1.62	50	0.4	7.78	0.79	14.4	8.3	2.39
A0697	1050	11.9	2.91	151	0.3	3.68	5.25	11.0	36.1	1.98
A0698	145	12.0	1.01	43	0.4	2.87	0.77	12.1	12.8	2.47
A0699	54	9.7	1.63	13	0.3	0.54	0.48	12.0	8.2	0.45
A0700	1620	11.9	3.07	191	0.3	3.67	7.43	10.4	12.1	1.80
A0701	190	10.2	0.59	37	0.4	2.81	0.88	10.7	10.7	2.39
A0702	2040	9.9	3.69	329	0.4	8.18	14.0	11.7	12.2	3.36
A0703	3140	9.3	3.30	277	0.4	5.24	22.0	10.0	11.7	3.31
A0704	705	7.5	3.94	717	0.4	4.20	4.02	13.8	5.0	4.38
A0705	682	7.5	2.32	262	0.5	1.46	3.25	14.9	1.7	4.58
A0706	>10000	7.2	9.73	212	0.5	3.36	77.8	9.94	5.5	4.94
A0707	1090	7.3	4.23	211	0.4	4.23	5.13	15.1	6.2	5.10
A0708	115	4.1	0.82	12	0.6	16.0	0.28	18.1	4.9	6.52
A0709	189	3.8	1.28	20	0.7	23.3	0.73	17.2	6.5	6.67
A0710	345	5.9	1.46	26	0.6	21.1	1.59	15.1	7.7	5.77
A0711	305	3.4	0.81	18	0.7	12.5	1.30	16.1	7.1	5.54
A0712	459	4.7	0.49	14	0.6	6.81	2.01	15.4	6.8	4.80
A0713	12	<0.5	<0.01	1	<0.1	0.07	0.07	0.91	0.8	0.23
A0714	56	8.1	0.90	6	0.6	7.44	0.24	12.6	14.8	4.07
A0715	53	7.6	0.51	4	0.5	4.69	0.25	16.9	4.8	4.73

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0716	29	7.1	0.52	4	0.5	6.15	0.05	15.7	2.7	4.46
A0717	35	7.8	0.74	6	0.5	3.33	0.06	18.4	6.8	4.58
A0718	45	7.2	0.65	5	0.7	8.29	0.14	17.8	7.0	6.39
A0719	58	10.3	1.46	13	0.3	0.55	0.43	12.3	8.1	0.45

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0673	3.2	<0.1	0.24	0.04	0.04	13.9	0.08	1.15	0.11	4.1
A0674	1.4	<0.1	0.12	0.01	0.08	7.0	0.08	242	0.08	15.5
A0675	1.1	<0.1	0.12	<0.01	0.07	11.3	0.13	1080	0.20	7.9
A0676	1.2	<0.1	0.13	<0.01	0.11	8.6	0.11	272	0.06	12.4
A0677	2.0	<0.1	0.38	<0.01	0.12	5.8	0.09	12.8	0.09	55.0
A0678	10.1	<0.1	0.18	0.07	0.05	29.5	0.12	1.96	0.13	7.5
A0679	<0.1	<0.1	0.05	<0.01	<0.02	0.5	<0.01	0.61	0.09	0.5
A0680	2.2	<0.1	0.35	<0.01	0.05	9.1	0.13	2.96	0.05	92.9
A0681	1.6	<0.1	0.32	<0.01	0.07	7.3	0.13	2.76	<0.05	136
A0682	4.2	<0.1	0.33	0.09	0.04	5.2	0.09	321	0.47	20.3
A0683	3.3	<0.1	0.34	0.19	3.31	6.7	0.12	3.74	<0.05	633
A0684	2.9	<0.1	0.39	0.17	1.21	3.4	0.09	3.90	0.07	1590
A0685	2.7	<0.1	0.39	0.02	0.11	5.5	0.08	3.19	0.10	310
A0686	2.2	<0.1	0.36	<0.01	0.12	5.0	0.08	3.20	0.06	289
A0687	1.6	<0.1	0.36	<0.01	0.11	5.4	0.08	2.96	0.09	112
A0688	1.6	<0.1	0.34	0.03	0.14	5.5	0.09	3.31	0.05	74.5
A0689	1.5	<0.1	0.33	<0.01	0.09	5.7	0.08	9.36	0.09	120
A0690	1.7	<0.1	0.19	0.01	0.34	10.0	0.10	2.32	0.06	66.6
A0691	1.3	<0.1	0.36	<0.01	0.18	4.3	0.08	21.8	0.10	293
A0692	1.5	<0.1	0.40	<0.01	0.21	5.2	0.09	24.9	0.05	306
A0693	2.4	<0.1	0.18	<0.01	0.45	9.1	0.10	2.01	0.06	127
A0694	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	0.16	0.10	1.2
A0695	2.1	<0.1	0.41	<0.01	0.28	6.9	0.11	3.68	0.10	130
A0696	2.0	<0.1	0.38	<0.01	0.40	7.3	0.11	3.89	0.08	81.9
A0697	2.0	<0.1	0.37	<0.01	0.20	5.6	0.09	4.15	0.08	300
A0698	2.1	<0.1	0.37	<0.01	0.16	6.2	0.11	4.88	0.07	53.7
A0699	4.6	<0.1	0.34	0.08	0.05	5.7	0.11	351	0.59	22.6
A0700	2.1	<0.1	0.36	<0.01	0.24	5.6	0.09	6.32	0.07	377
A0701	1.6	<0.1	0.31	<0.01	0.13	5.4	0.10	6.01	0.07	48.6
A0702	2.2	<0.1	0.29	0.01	0.38	5.8	0.09	4.44	<0.05	347
A0703	2.1	<0.1	0.29	0.02	0.50	4.9	0.09	3.90	0.06	388
A0704	2.1	<0.1	0.24	0.04	0.37	6.8	0.09	3.30	<0.05	160
A0705	3.0	<0.1	0.24	<0.01	0.15	7.2	0.09	2.59	<0.05	182
A0706	3.5	<0.1	0.23	0.28	0.65	4.8	0.08	19.0	<0.05	3150
A0707	2.5	<0.1	0.23	0.01	0.22	7.5	0.10	3.90	<0.05	317
A0708	2.7	<0.1	0.10	<0.01	0.30	8.6	0.09	1.42	0.06	21.1
A0709	3.2	<0.1	<0.05	0.15	0.45	8.1	0.09	1.79	0.06	22.3
A0710	2.8	<0.1	0.16	<0.01	0.29	7.1	0.09	2.07	0.06	24.1
A0711	2.4	<0.1	0.06	<0.01	0.50	7.7	0.09	1.86	0.05	15.9
A0712	2.2	<0.1	0.17	<0.01	0.28	7.3	0.09	1.96	0.07	8.7
A0713	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.12	0.06	0.4
A0714	2.9	<0.1	0.24	<0.01	0.10	6.0	0.10	1.93	0.06	7.1
A0715	2.3	<0.1	0.25	<0.01	0.11	8.2	0.11	2.84	<0.05	3.7

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Element	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0716	2.3	<0.1	0.23	<0.01	0.10	7.5	0.12	2.99	<0.05	4.2
A0717	2.4	<0.1	0.23	<0.01	0.07	8.4	0.12	2.88	0.06	4.8
A0718	3.0	<0.1	0.22	<0.01	0.10	8.0	0.13	5.38	<0.05	5.8
A0719	4.7	<0.1	0.35	0.02	0.04	5.9	0.10	341	0.55	21.7

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0673	23.5	0.16	8.8	<1	0.3	<0.05	0.39	<0.05	2.2	0.27
A0674	12.8	0.27	0.9	2	0.4	<0.05	0.25	0.16	3.5	0.19
A0675	9.7	<0.05	0.9	2	<0.3	<0.05	0.42	0.08	2.6	0.15
A0676	11.3	0.09	0.8	2	<0.3	<0.05	0.37	0.29	2.9	0.19
A0677	22.0	3.44	0.9	1	0.8	<0.05	0.25	2.14	2.6	0.33
A0678	23.6	0.45	11.6	<1	1.0	<0.05	0.68	<0.05	3.1	0.32
A0679	1.1	<0.05	0.3	<1	<0.3	<0.05	0.02	<0.05	0.1	<0.02
A0680	21.3	3.75	1.8	<1	<0.3	<0.05	0.31	0.99	3.6	0.44
A0681	17.7	6.53	1.1	<1	<0.3	<0.05	0.28	0.73	3.3	0.37
A0682	4.3	2.51	4.7	1	1.7	<0.05	0.27	0.20	1.2	0.09
A0683	22.1	19.4	1.4	<1	0.3	<0.05	0.26	2.11	3.2	0.50
A0684	14.4	37.1	0.8	2	0.7	<0.05	0.19	2.40	2.9	0.47
A0685	16.7	25.8	0.9	1	0.8	<0.05	0.21	1.58	3.1	0.27
A0686	13.8	19.9	0.8	1	0.6	<0.05	0.20	1.36	2.9	0.20
A0687	13.1	7.65	0.6	<1	0.4	<0.05	0.19	1.25	3.3	0.21
A0688	14.7	11.5	0.7	<1	<0.3	<0.05	0.21	0.99	3.4	0.26
A0689	13.2	4.03	0.7	<1	0.4	<0.05	0.20	0.80	2.8	0.20
A0690	22.0	0.34	1.1	<1	<0.3	<0.05	0.33	0.98	1.9	0.55
A0691	11.7	1.48	0.7	<1	0.4	<0.05	0.20	1.09	2.5	0.29
A0692	13.4	4.26	0.8	<1	0.3	<0.05	0.20	1.57	2.9	0.24
A0693	27.7	1.11	1.5	<1	<0.3	<0.05	0.31	2.08	1.5	0.72
A0694	1.2	<0.05	0.3	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02
A0695	19.5	1.03	1.0	<1	0.3	<0.05	0.25	1.10	3.3	0.31
A0696	18.8	3.89	0.9	<1	0.3	<0.05	0.24	1.71	3.6	0.30
A0697	18.5	9.60	0.9	1	0.4	<0.05	0.22	1.75	3.2	0.30
A0698	19.4	1.71	0.9	<1	0.3	<0.05	0.24	1.13	3.5	0.31
A0699	4.9	2.59	5.3	1	1.9	<0.05	0.30	0.20	1.3	0.09
A0700	17.7	16.7	1.0	1	0.6	<0.05	0.22	2.18	3.2	0.28
A0701	17.0	1.41	0.8	<1	0.3	<0.05	0.23	0.50	3.1	0.28
A0702	22.5	9.30	0.9	<1	0.7	<0.05	0.21	1.39	3.0	0.41
A0703	21.8	8.62	0.9	<1	0.6	<0.05	0.20	1.41	2.9	0.41
A0704	22.2	8.97	1.1	<1	0.4	<0.05	0.23	0.98	2.7	0.45
A0705	25.2	22.3	1.3	<1	0.3	<0.05	0.24	0.91	2.6	0.58
A0706	19.3	64.8	1.2	1	0.5	<0.05	0.22	2.92	2.1	0.79
A0707	27.0	59.1	1.4	<1	0.4	<0.05	0.26	1.63	2.9	0.53
A0708	37.1	0.56	2.8	<1	<0.3	<0.05	0.33	0.24	1.4	0.58
A0709	38.8	0.40	2.6	<1	0.4	<0.05	0.32	1.22	1.4	0.61
A0710	29.7	0.23	1.7	<1	0.4	<0.05	0.33	4.30	1.9	0.57
A0711	24.6	0.29	1.9	<1	0.4	<0.05	0.31	0.63	1.5	0.45
A0712	26.2	0.09	1.6	<1	<0.3	<0.05	0.30	1.42	2.2	0.44
A0713	1.4	<0.05	0.4	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0714	24.4	0.14	2.2	<1	0.8	<0.05	0.24	2.40	2.8	0.41
A0715	24.2	<0.05	1.7	<1	0.5	<0.05	0.28	1.49	3.4	0.37

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Element	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0716	19.2	0.06	2.7	<1	0.4	<0.05	0.28	1.09	3.4	0.32
A0717	19.5	0.13	3.1	<1	0.5	<0.05	0.31	1.14	3.4	0.51
A0718	21.8	0.05	3.6	<1	0.5	<0.05	0.32	2.36	3.4	0.36
A0719	5.0	2.63	5.2	1	1.8	<0.05	0.30	0.20	1.3	0.10

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Zn ICP90Q 0.01 %
A0673	0.31	<0.1	7.91	0.5	N.A.
A0674	0.58	0.3	6.14	0.6	N.A.
A0675	0.62	0.3	11.4	1.0	N.A.
A0676	0.95	0.2	8.71	0.8	N.A.
A0677	1.25	0.4	5.79	0.6	N.A.
A0678	0.72	0.3	12.9	0.8	N.A.
A0679	0.63	<0.1	0.74	<0.1	N.A.
A0680	2.18	0.3	8.27	0.8	N.A.
A0681	2.06	0.2	7.59	0.8	N.A.
A0682	0.35	0.9	7.53	0.7	N.A.
A0683	2.21	0.4	6.81	0.7	N.A.
A0684	2.89	0.7	5.23	0.6	N.A.
A0685	1.43	0.5	4.93	0.5	N.A.
A0686	1.38	0.4	4.69	0.5	N.A.
A0687	2.19	0.4	5.06	0.5	N.A.
A0688	2.18	0.3	5.80	0.6	N.A.
A0689	1.67	0.4	5.34	0.5	N.A.
A0690	1.57	0.3	7.92	0.7	N.A.
A0691	2.04	0.4	5.17	0.5	N.A.
A0692	2.68	0.4	5.43	0.6	N.A.
A0693	2.36	0.5	7.60	0.6	N.A.
A0694	0.48	<0.1	0.69	<0.1	N.A.
A0695	3.15	0.5	6.07	0.7	N.A.
A0696	2.55	0.5	6.28	0.7	N.A.
A0697	2.35	0.6	5.64	0.6	N.A.
A0698	2.60	0.4	6.46	0.7	N.A.
A0699	0.41	1.0	8.24	0.7	N.A.
A0700	2.20	0.5	5.82	0.6	N.A.
A0701	2.00	0.4	6.08	0.6	N.A.
A0702	2.33	0.6	5.23	0.5	N.A.
A0703	2.11	0.6	5.22	0.5	N.A.
A0704	2.24	0.6	5.54	0.5	N.A.
A0705	2.05	0.5	5.95	0.6	N.A.
A0706	1.88	0.6	5.06	0.5	1.22
A0707	1.33	0.6	6.28	0.6	N.A.
A0708	1.38	2.5	7.85	0.6	N.A.
A0709	1.72	40.0	7.94	0.6	N.A.
A0710	2.09	1.6	7.55	0.6	N.A.
A0711	1.32	7.4	7.40	0.6	N.A.
A0712	1.53	0.7	7.21	0.6	N.A.
A0713	0.53	<0.1	0.74	<0.1	N.A.
A0714	2.97	1.0	6.17	0.6	N.A.
A0715	2.02	0.5	6.46	0.7	N.A.

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Element	U	W	Y	Yb	Zn
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICP90Q
Det.Lim.	0.05	0.1	0.05	0.1	0.01
Units	ppm	ppm	ppm	ppm	%
A0716	2.50	0.7	7.31	0.8	N.A.
A0717	2.06	2.5	7.60	0.8	N.A.
A0718	1.86	0.7	8.08	0.8	N.A.
A0719	0.63	0.9	8.37	0.7	N.A.

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# Certificate of Analysis

Work Order: TK110242

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 18, 2011

P.O. No. : 1S-0300/PO: SQ-11B-101711-78-02  
Project No. : -  
No. Of Samples : 61  
Date Submitted : Oct 18, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests  
I.S. = Insufficient Sample  
-- = No result

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0132	7.200	0.04	0.53	50	40	0.39	46	35.2	7.99	0.44
A0133	6.000	0.02	0.51	40	54	0.50	42	81.2	5.25	0.41
A0134	3.100	0.01	0.49	40	81	0.35	40	5.3	4.28	0.40
A0135	7.300	0.04	0.55	40	62	0.37	44	108	6.22	0.46
A0136	7.800	0.37	0.42	40	36	0.22	50	128	7.56	0.34
A0137	5.000	0.12	0.65	40	63	0.45	43	523	7.15	0.37
A0138	8.300	0.08	0.45	40	22	0.25	48	61.5	11.9	0.36
A0139	2.400	0.10	0.46	40	42	0.37	59	155	11.5	0.39
A0140	1.500	0.27	0.42	40	21	0.49	48	38.6	13.9	0.35
A0141	3.500	0.18	0.38	30	19	2.00	68	101	13.2	0.29
A0142	2.000	0.07	0.40	40	42	1.35	54	38.7	7.24	0.34
A0143	8.000	0.03	0.50	40	68	0.70	58	62.0	5.06	0.41
A0144	7.600	0.07	0.54	40	60	0.92	54	116	4.92	0.44
A0145	3.200	0.04	0.59	30	95	0.98	46	53.7	4.56	0.42
A0146	3.200	0.04	0.60	40	113	1.12	56	50.4	4.95	0.42
A0147	6.000	0.02	0.53	30	87	0.98	45	22.8	4.20	0.42
A0148	6.400	0.03	0.55	40	55	0.79	58	25.8	5.01	0.40
A0149	7.600	0.02	0.52	40	61	0.57	49	66.7	5.08	0.37
A0150	8.100	0.03	0.52	40	69	0.61	56	130	5.03	0.39
A0151	7.900	0.04	0.47	30	83	0.42	49	40.1	5.39	0.37
A0152	7.900	0.04	0.51	30	42	0.77	60	136	6.53	0.39
A0153	6.700	0.07	0.50	40	44	0.46	53	126	5.93	0.39
A0154	7.600	0.09	0.56	40	55	0.73	58	144	6.33	0.43
A0155	0.065	1.04	1.25	40	121	0.72	32	3520	3.34	0.12
A0156	6.800	0.10	0.50	40	59	0.61	48	57.2	6.93	0.41
A0157	7.700	0.07	0.51	40	64	0.62	59	34.1	5.23	0.42
A0158	7.400	0.07	0.51	40	66	0.80	50	42.3	6.23	0.39
A0159	6.700	0.04	0.56	40	100	0.55	56	6.2	5.94	0.44
A0160	6.900	0.04	0.51	30	88	1.05	48	56.0	4.41	0.36
A0161	7.000	0.05	0.51	40	48	0.56	56	30.0	7.70	0.41
A0162	6.100	0.04	0.50	30	56	1.82	50	6.4	4.99	0.33
A0163	7.300	0.03	0.56	40	46	0.68	49	17.9	7.38	0.41
A0164	1.400	0.09	0.44	40	16	0.24	58	70.8	12.7	0.31
A0165	2.800	0.12	0.39	40	15	0.21	64	1010	>15	0.28
A0166	7.500	0.02	0.48	50	55	1.08	44	27.7	5.00	0.37
A0167	6.900	0.25	0.44	40	41	0.84	68	468	6.50	0.33
A0168	6.400	<0.01	0.04	40	14	>15	3	<0.5	0.44	0.03
A0169	7.600	0.01	0.40	40	102	0.57	72	73.1	3.45	0.31
A0170	3.400	0.03	0.42	30	61	0.36	54	387	4.82	0.35
A0171	3.300	0.03	0.51	30	51	0.41	99	306	6.37	0.41
A0172	7.400	0.04	0.42	30	72	0.85	71	474	4.09	0.32
A0173	6.500	<0.01	0.03	40	13	>15	5	0.9	0.42	0.02
A0174	6.900	0.02	0.42	30	83	0.57	58	105	3.62	0.33

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A0175	7.000	0.03	0.43	30	62	0.28	59	69.0	4.77	0.35
A0176	7.200	0.04	0.49	30	65	0.62	63	187	5.19	0.33
A0177	0.080	1.04	1.16	40	125	0.66	31	3270	3.07	0.11
A0178	8.000	0.08	0.35	30	19	0.46	68	139	12.3	0.27
A0179	3.100	0.27	0.35	30	17	0.27	86	673	>15	0.25
A0180	5.800	0.02	0.38	30	50	0.37	73	173	6.96	0.30
A0181	6.900	0.04	0.47	30	74	0.31	58	12.6	5.59	0.36
A0182	6.600	0.02	0.47	30	46	0.47	92	19.8	7.79	0.35
A0183	0.075	1.02	1.24	40	125	0.74	32	3470	3.25	0.12
A0184	7.700	0.02	0.51	40	123	0.33	79	23.4	6.78	0.36
A0185	7.600	1.49	0.40	40	24	0.66	90	220	13.5	0.30
A0186	3.700	0.02	0.44	40	72	0.91	63	36.7	5.75	0.32
A0187	3.700	0.03	0.44	40	71	0.70	79	40.5	5.70	0.33
A0188	2.700	0.63	0.30	30	8	0.33	92	1230	>15	0.20
A0189	5.600	0.03	0.43	30	40	0.34	83	34.4	7.83	0.32
A0190	7.300	0.03	0.48	40	50	0.36	76	31.5	5.68	0.36
A0191	1.000	0.03	0.44	40	70	0.33	92	39.4	5.85	0.32
A0192	5.300	0.04	0.47	40	70	0.32	73	81.2	5.05	0.33

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0132	<1	0.11	585	0.01	1.1	1120	>5	8.4	<0.01	5
A0133	<1	0.17	2690	0.01	1.3	1220	>5	7.9	<0.01	5
A0134	<1	0.08	476	0.01	1.4	1190	>5	8.2	<0.01	5
A0135	<1	0.09	475	0.01	1.3	1160	>5	8.3	<0.01	5
A0136	<1	0.06	185	0.01	2.3	350	>5	67.2	<0.01	3
A0137	4	0.30	342	0.02	2.2	1080	>5	79.0	<0.01	13
A0138	<1	0.04	128	0.01	0.8	1040	>5	14.7	<0.01	<1
A0139	<1	0.08	322	0.01	0.9	1110	>5	820	<0.01	1
A0140	<1	0.06	310	0.01	1.7	670	>5	14.6	<0.01	2
A0141	<1	0.06	581	0.01	1.1	600	>5	28.9	<0.01	<1
A0142	<1	0.06	998	0.02	1.4	760	>5	106	<0.01	2
A0143	<1	0.12	2360	0.02	1.9	900	>5	86.7	<0.01	4
A0144	<1	0.15	416	0.02	3.0	1280	>5	192	<0.01	5
A0145	<1	0.30	473	0.02	7.5	1310	>5	377	<0.01	13
A0146	2	0.36	546	0.02	9.2	1360	>5	405	<0.01	17
A0147	<1	0.23	2090	0.02	2.6	1240	>5	251	<0.01	5
A0148	<1	0.19	2120	0.02	2.0	1330	>5	131	<0.01	5
A0149	1	0.13	2060	0.01	1.5	1220	>5	116	<0.01	4
A0150	<1	0.17	1190	0.01	1.6	1240	>5	149	<0.01	4
A0151	<1	0.13	1160	0.01	1.5	1150	>5	34.3	<0.01	4
A0152	<1	0.17	1940	0.01	2.2	1100	>5	24.1	<0.01	4
A0153	<1	0.11	1480	0.02	2.4	1080	>5	27.5	<0.01	4
A0154	<1	0.10	1080	0.02	1.8	1230	>5	18.3	<0.01	5
A0155	8	0.59	440	0.09	30.3	730	0.48	33.8	0.12	54
A0156	<1	0.07	657	0.02	1.6	1310	>5	14.0	<0.01	4
A0157	<1	0.14	2110	0.02	1.8	1200	>5	11.1	<0.01	5
A0158	<1	0.09	1760	0.02	1.6	1100	>5	17.8	<0.01	5
A0159	<1	0.13	961	0.02	1.9	1290	>5	1550	<0.01	4
A0160	2	0.16	1640	0.02	2.1	1270	>5	188	<0.01	9
A0161	<1	0.10	1000	0.02	2.4	1090	>5	25.1	<0.01	4
A0162	6	0.33	888	0.02	1.7	1190	>5	778	<0.01	5
A0163	<1	0.12	614	0.02	1.3	950	>5	21.7	<0.01	3
A0164	1	0.03	100	0.02	2.2	1050	>5	22.4	<0.01	2
A0165	<1	0.04	122	0.02	4.0	700	>5	18.0	<0.01	<1
A0166	4	0.21	1180	0.02	2.0	1170	>5	28.5	<0.01	6
A0167	<1	0.15	1040	0.02	1.6	1120	>5	19.3	<0.01	2
A0168	<1	12.2	200	<0.01	1.3	170	0.01	37.2	<0.01	1
A0169	1	0.19	983	0.02	2.7	640	4.29	16.3	<0.01	1
A0170	<1	0.10	484	0.02	1.9	780	>5	11.5	<0.01	2
A0171	<1	0.12	635	0.02	2.8	820	>5	14.6	<0.01	2
A0172	1	0.13	920	0.02	2.2	730	>5	32.1	<0.01	2
A0173	<1	11.9	192	<0.01	1.4	150	<0.01	42.0	<0.01	1
A0174	1	0.17	749	0.02	1.7	510	4.83	24.9	<0.01	2

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0175	<1	0.06	160	0.02	1.7	760	>5	17.5	<0.01	2
A0176	3	0.16	669	0.02	2.5	1140	>5	20.2	<0.01	6
A0177	9	0.56	409	0.08	27.6	660	0.47	34.5	0.11	52
A0178	<1	0.08	3390	0.02	1.7	580	>5	16.3	<0.01	<1
A0179	<1	0.03	618	0.02	1.1	230	>5	20.8	<0.01	<1
A0180	<1	0.08	464	0.02	2.0	590	>5	23.6	<0.01	1
A0181	<1	0.04	111	0.02	1.8	850	>5	22.7	<0.01	2
A0182	<1	0.05	158	0.02	2.0	740	>5	169	<0.01	1
A0183	9	0.58	438	0.09	31.0	740	0.46	35.6	0.13	55
A0184	<1	0.08	191	0.03	3.4	840	>5	2440	<0.01	2
A0185	1	0.04	334	0.02	1.5	770	>5	31.5	<0.01	<1
A0186	<1	0.04	339	0.02	2.1	1030	>5	29.8	<0.01	3
A0187	<1	0.04	251	0.02	2.3	1010	>5	21.6	<0.01	3
A0188	1	0.01	191	0.02	1.0	170	>5	17.9	<0.01	<1
A0189	<1	0.05	141	0.02	1.9	890	>5	12.5	<0.01	2
A0190	<1	0.07	173	0.02	2.4	1120	>5	14.4	<0.01	3
A0191	<1	0.07	157	0.03	2.8	980	>5	18.3	<0.01	2
A0192	<1	0.06	176	0.02	2.3	970	>5	22.0	<0.01	3

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Element Method Det.Lim. Units	Zn ICM14B	Zr ICM14B	Ag ICM14B	As ICM14B	Be ICM14B	Bi ICM14B	Cd ICM14B	Ce ICM14B	Co ICM14B	Cs ICM14B
	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0132	373	7.9	4.30	27	0.3	8.17	2.62	10.2	8.3	2.45
A0133	5050	7.7	3.18	30	0.4	3.54	36.4	17.5	8.3	2.56
A0134	21	8.3	0.53	7	0.3	1.46	0.13	25.5	10.4	2.28
A0135	494	9.2	3.06	43	0.3	7.33	3.25	22.9	10.1	3.04
A0136	>10000	8.7	>10	126	0.4	7.35	65.6	4.35	12.9	2.01
A0137	6130	10.4	>10	124	0.9	3.67	36.7	13.7	9.0	11.2
A0138	268	9.5	4.68	85	0.2	13.3	2.21	3.01	7.9	1.44
A0139	448	9.6	>10	102	0.2	30.1	2.79	3.00	6.5	1.81
A0140	52	8.0	>10	186	0.2	29.8	0.45	2.30	14.3	0.92
A0141	1150	11.9	>10	84	0.4	20.6	7.52	2.22	6.8	2.78
A0142	438	8.5	2.54	29	0.3	4.99	2.73	3.43	6.0	1.21
A0143	540	8.2	2.25	22	0.3	6.42	3.78	3.22	4.9	1.78
A0144	1320	8.7	2.27	53	0.3	7.02	8.03	16.1	10.2	3.09
A0145	361	7.4	1.64	35	0.4	3.86	4.63	14.8	15.6	4.67
A0146	393	7.5	1.32	33	0.4	3.90	2.62	16.8	16.1	4.84
A0147	659	9.1	0.97	35	0.3	4.47	3.83	12.9	11.3	3.23
A0148	576	10.9	1.48	22	0.4	4.15	3.59	16.3	8.3	2.82
A0149	895	11.3	1.87	31	0.3	4.94	5.95	13.5	6.0	2.91
A0150	189	9.8	2.52	48	0.3	7.91	1.15	13.8	10.7	2.83
A0151	306	10.1	1.36	19	0.4	5.89	1.79	14.5	7.9	2.76
A0152	296	8.6	2.38	63	0.3	10.1	2.02	10.3	10.5	2.95
A0153	338	9.0	1.88	53	0.4	8.37	2.32	10.3	7.8	3.32
A0154	1120	9.1	3.18	70	0.4	12.6	6.90	17.7	7.2	3.58
A0155	57	9.3	1.54	13	0.3	0.53	0.49	10.4	7.7	0.44
A0156	881	10.6	2.36	54	0.4	8.94	5.36	11.0	8.9	3.72
A0157	569	8.0	1.19	34	0.3	4.49	3.57	16.0	8.0	3.92
A0158	223	10.9	2.35	44	0.4	9.17	1.74	12.7	5.7	3.25
A0159	46	7.4	0.65	25	0.3	3.45	0.18	9.22	17.7	2.15
A0160	207	7.4	1.08	35	0.4	3.45	1.37	9.55	17.1	2.32
A0161	102	8.1	1.34	31	0.3	8.37	1.20	10.5	20.7	2.14
A0162	198	7.9	0.28	3	0.3	1.06	1.52	8.70	8.7	4.21
A0163	144	8.2	1.02	12	0.2	3.03	1.54	3.47	9.1	1.09
A0164	1990	7.0	6.78	80	<0.1	16.6	14.8	2.91	15.9	0.73
A0165	753	8.0	>10	401	<0.1	140	14.0	2.55	19.6	0.72
A0166	894	7.9	0.58	14	0.3	1.91	5.99	10.6	14.8	2.79
A0167	757	7.5	2.58	178	0.4	17.1	5.44	7.91	4.9	2.33
A0168	13	<0.5	<0.01	<1	<0.1	0.05	0.05	1.01	0.7	0.33
A0169	1200	6.5	0.86	23	0.3	2.14	6.80	5.83	8.0	1.91
A0170	317	6.0	3.46	146	0.3	6.01	5.25	8.27	21.2	1.93
A0171	322	6.6	3.31	133	0.2	6.78	4.82	8.37	23.8	1.91
A0172	474	6.7	4.24	187	0.3	4.83	4.34	19.3	10.5	3.06
A0173	11	<0.5	<0.01	<1	<0.1	0.03	0.07	0.83	0.8	0.19
A0174	811	5.7	0.72	33	0.3	3.46	5.24	7.47	6.4	1.35

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0175	197	7.0	1.85	25	0.3	4.54	2.72	10.3	8.0	1.72
A0176	376	7.8	1.36	71	0.4	4.00	4.54	7.35	11.7	1.91
A0177	51	9.1	1.61	13	0.3	0.59	0.50	11.2	8.0	0.41
A0178	1170	7.1	7.51	57	0.2	14.8	9.00	7.29	9.3	1.25
A0179	5060	7.2	>10	259	0.2	33.5	41.6	5.94	8.0	1.15
A0180	343	8.2	2.14	71	0.3	5.48	4.61	7.72	7.8	1.61
A0181	134	8.7	0.79	4	0.3	2.45	1.67	7.01	10.2	1.94
A0182	59	6.0	0.47	9	0.2	1.35	0.58	9.64	12.9	1.28
A0183	54	9.8	1.53	11	0.2	0.52	0.46	11.6	7.5	0.41
A0184	35	6.0	0.22	6	0.2	1.56	0.22	15.9	12.0	1.27
A0185	665	7.5	>10	84	0.2	32.3	7.55	6.59	9.9	1.59
A0186	250	7.1	1.37	12	0.2	3.99	2.45	6.89	9.8	1.57
A0187	292	6.5	1.47	12	0.2	4.00	3.19	8.66	8.8	1.50
A0188	>10000	9.3	>10	470	0.1	26.6	104	3.69	9.7	1.85
A0189	268	6.0	1.46	14	0.2	3.22	3.40	7.29	9.9	1.40
A0190	206	6.1	1.05	8	0.2	3.42	2.20	6.77	11.6	1.33
A0191	32	5.9	0.20	12	0.2	2.02	0.37	3.10	18.3	1.11
A0192	70	7.4	0.35	24	0.2	3.18	0.92	6.37	9.5	1.36

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0132	1.4	<0.1	0.32	<0.01	0.14	4.8	0.04	2.67	0.07	172
A0133	1.4	<0.1	0.32	<0.01	0.59	8.5	0.04	2.57	<0.05	725
A0134	1.4	<0.1	0.37	<0.01	<0.02	13.2	0.04	8.09	<0.05	32.4
A0135	1.5	<0.1	0.36	<0.01	0.26	11.7	0.05	9.50	0.09	56.3
A0136	3.6	<0.1	0.31	0.69	3.77	2.0	0.05	23.3	0.06	1950
A0137	2.4	<0.1	0.27	0.03	1.70	6.5	0.06	21.3	<0.05	450
A0138	1.3	<0.1	0.35	<0.01	0.25	1.3	0.03	6.44	0.09	103
A0139	1.3	<0.1	0.36	<0.01	0.59	1.4	0.04	11.1	0.11	128
A0140	1.0	<0.1	0.27	<0.01	0.15	1.2	0.03	55.6	0.14	76.5
A0141	1.3	<0.1	0.50	0.04	0.32	1.2	0.04	5.79	0.10	491
A0142	1.0	<0.1	0.33	<0.01	0.20	1.7	0.09	6.52	0.08	39.7
A0143	1.3	<0.1	0.34	<0.01	0.40	1.6	0.04	5.11	0.05	59.6
A0144	1.3	<0.1	0.34	<0.01	0.40	7.9	0.05	8.73	0.07	34.5
A0145	1.4	<0.1	0.27	<0.01	0.22	7.1	0.05	11.8	0.05	21.2
A0146	1.4	<0.1	0.27	<0.01	0.27	8.0	0.06	12.1	0.06	21.5
A0147	1.2	<0.1	0.35	<0.01	0.48	6.3	0.05	5.16	0.06	9.8
A0148	1.2	<0.1	0.43	<0.01	0.22	7.9	0.05	4.82	0.06	43.4
A0149	1.2	<0.1	0.41	<0.01	0.38	6.6	0.05	4.70	0.05	94.9
A0150	1.2	<0.1	0.39	<0.01	0.20	6.9	0.05	10.4	0.06	43.6
A0151	1.2	<0.1	0.42	<0.01	0.17	7.5	0.05	5.35	0.08	18.4
A0152	1.2	<0.1	0.34	<0.01	0.30	5.1	0.05	7.01	0.08	62.5
A0153	1.2	<0.1	0.33	<0.01	0.23	5.1	0.05	4.69	0.09	31.0
A0154	1.4	<0.1	0.33	<0.01	0.51	8.8	0.05	5.30	0.06	48.3
A0155	4.3	<0.1	0.31	0.07	0.04	4.9	0.09	329	0.55	21.3
A0156	1.2	<0.1	0.39	<0.01	0.56	5.1	0.05	5.55	0.09	28.7
A0157	1.3	<0.1	0.32	<0.01	0.65	7.4	0.05	5.71	0.06	18.9
A0158	1.3	<0.1	0.41	<0.01	0.20	5.9	0.06	11.3	0.07	58.6
A0159	1.4	<0.1	0.25	<0.01	0.09	4.4	0.05	5.57	<0.05	9.2
A0160	1.3	<0.1	0.25	<0.01	0.15	4.5	0.06	4.43	<0.05	29.8
A0161	1.1	<0.1	0.25	<0.01	0.12	5.0	0.06	10.6	0.07	42.0
A0162	1.1	<0.1	0.33	0.03	<0.02	3.7	0.10	3.75	0.08	26.3
A0163	1.1	<0.1	0.37	0.08	0.15	1.6	0.04	34.2	0.11	41.6
A0164	1.2	0.1	0.28	0.17	0.10	1.1	0.04	22.9	0.12	813
A0165	1.1	0.1	0.28	0.25	0.62	1.1	0.03	11.7	0.14	1040
A0166	1.1	<0.1	0.26	0.02	0.18	4.6	0.09	9.44	0.05	23.4
A0167	1.0	<0.1	0.30	0.05	0.38	3.6	0.08	12.3	0.07	55.8
A0168	0.1	<0.1	<0.05	0.04	<0.02	0.5	<0.01	0.15	0.09	1.2
A0169	0.7	<0.1	0.24	0.04	0.55	2.7	0.04	10.6	0.10	30.2
A0170	1.0	<0.1	0.23	0.03	0.42	3.9	0.03	12.2	0.06	64.6
A0171	1.2	<0.1	0.21	0.02	0.40	3.9	0.03	11.6	0.07	63.0
A0172	1.1	<0.1	0.21	0.05	0.24	9.5	0.05	26.3	0.06	120
A0173	<0.1	<0.1	<0.05	0.02	<0.02	0.4	<0.01	0.14	0.07	0.9
A0174	0.9	<0.1	0.20	0.03	0.22	3.5	0.05	13.0	0.06	21.6

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0175	1.0	<0.1	0.25	<0.01	0.10	5.0	0.05	13.1	0.11	43.9
A0176	1.2	<0.1	0.25	<0.01	0.14	3.1	0.07	11.3	0.06	37.3
A0177	4.3	0.1	0.31	0.09	0.04	5.3	0.09	329	0.52	21.5
A0178	1.1	<0.1	0.22	0.02	0.28	3.5	0.04	6.80	0.08	398
A0179	1.1	0.1	0.16	0.18	0.94	3.0	0.02	7.87	0.12	1040
A0180	1.0	<0.1	0.29	<0.01	0.07	3.9	0.03	12.8	0.05	237
A0181	1.2	<0.1	0.30	<0.01	0.05	3.4	0.03	14.2	<0.05	74.6
A0182	1.1	<0.1	0.21	<0.01	0.04	4.5	0.04	50.9	0.07	21.8
A0183	4.3	0.1	0.31	0.11	0.04	5.4	0.09	311	0.53	20.5
A0184	1.3	<0.1	0.20	<0.01	<0.02	7.5	0.03	15.0	0.06	9.4
A0185	1.0	<0.1	0.21	0.11	0.11	3.0	0.03	6.63	0.09	145
A0186	1.1	<0.1	0.20	0.06	0.07	3.3	0.03	3.99	<0.05	112
A0187	1.1	<0.1	0.20	0.03	0.06	4.1	0.03	12.3	0.05	134
A0188	2.0	0.2	0.20	0.67	4.40	1.8	0.01	7.68	0.15	1940
A0189	1.0	<0.1	0.19	0.02	0.05	3.4	0.03	2.60	0.06	120
A0190	1.2	<0.1	0.22	0.06	0.06	3.2	0.04	4.64	<0.05	50.9
A0191	0.9	<0.1	0.21	0.04	<0.02	1.5	0.04	53.5	0.05	27.3
A0192	1.1	<0.1	0.25	0.01	0.03	3.0	0.05	9.94	0.05	40.9

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0132	17.6	4.10	1.2	<1	<0.3	<0.05	0.16	2.18	2.8	0.30
A0133	16.0	6.30	1.1	<1	<0.3	<0.05	0.19	1.72	3.2	0.37
A0134	14.5	0.15	1.1	<1	<0.3	<0.05	0.23	0.48	3.7	0.33
A0135	16.9	5.62	1.2	<1	<0.3	<0.05	0.22	3.50	3.5	0.34
A0136	12.7	29.2	1.0	2	0.6	<0.05	0.10	4.09	1.2	3.02
A0137	13.5	3.99	3.1	1	0.6	<0.05	0.24	0.46	3.3	0.73
A0138	11.9	3.68	0.9	1	0.5	<0.05	0.10	2.41	2.0	1.21
A0139	12.6	8.73	1.1	1	0.4	<0.05	0.09	3.17	1.5	0.27
A0140	11.7	4.05	1.1	1	0.5	<0.05	0.09	2.69	1.2	0.23
A0141	8.5	9.67	0.9	2	1.3	<0.05	0.09	7.03	1.8	0.78
A0142	10.8	0.84	1.0	<1	0.3	<0.05	0.18	1.31	1.7	0.19
A0143	12.7	1.05	1.1	<1	<0.3	<0.05	0.10	0.68	2.0	0.28
A0144	14.4	3.13	1.2	<1	<0.3	<0.05	0.21	2.84	3.6	0.53
A0145	13.2	1.30	2.3	<1	<0.3	<0.05	0.24	1.00	3.2	0.55
A0146	12.8	1.30	2.5	<1	<0.3	<0.05	0.25	0.98	3.2	0.61
A0147	12.9	0.14	1.2	<1	<0.3	<0.05	0.21	0.70	3.0	0.31
A0148	12.4	0.34	1.0	<1	<0.3	<0.05	0.21	0.86	2.7	0.28
A0149	11.3	1.22	1.1	<1	<0.3	<0.05	0.20	0.98	2.4	0.33
A0150	11.8	0.41	1.0	<1	<0.3	<0.05	0.17	1.68	3.3	0.37
A0151	11.0	0.26	1.0	<1	<0.3	<0.05	0.17	1.17	3.0	0.36
A0152	12.0	5.20	1.0	<1	<0.3	<0.05	0.16	2.01	2.8	0.37
A0153	11.8	3.47	1.1	<1	<0.3	<0.05	0.17	1.18	2.6	0.92
A0154	13.5	4.53	1.3	<1	<0.3	<0.05	0.22	1.89	3.2	1.34
A0155	4.4	2.84	4.7	1	1.8	<0.05	0.26	0.18	1.2	0.09
A0156	14.4	1.40	1.0	<1	0.6	<0.05	0.18	2.30	3.1	0.65
A0157	15.6	1.47	1.1	<1	<0.3	<0.05	0.20	0.96	3.2	0.57
A0158	13.1	2.22	1.2	<1	<0.3	<0.05	0.22	1.63	2.9	0.70
A0159	15.4	0.12	1.2	1	<0.3	<0.05	0.17	0.56	5.2	0.29
A0160	13.0	2.53	1.4	1	<0.3	<0.05	0.21	0.65	4.0	0.28
A0161	13.4	1.53	1.1	2	<0.3	<0.05	0.17	0.97	2.9	0.61
A0162	9.5	0.24	1.1	2	<0.3	<0.05	0.26	0.23	3.1	0.22
A0163	14.0	2.14	0.8	1	0.4	<0.05	0.11	0.89	2.6	0.28
A0164	10.5	11.5	0.6	2	0.7	<0.05	0.10	3.10	2.0	3.41
A0165	9.2	134	0.6	2	0.7	<0.05	0.09	14.8	2.1	3.99
A0166	13.7	1.38	1.1	1	<0.3	<0.05	0.24	0.49	2.8	0.38
A0167	11.1	4.31	0.9	1	0.5	<0.05	0.21	8.10	3.0	0.32
A0168	1.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0169	10.5	2.21	0.6	<1	<0.3	<0.05	0.12	0.86	4.7	0.32
A0170	12.8	15.1	0.6	1	<0.3	<0.05	0.12	2.37	5.9	0.74
A0171	14.1	11.6	0.7	2	0.3	<0.05	0.12	2.66	5.8	1.14
A0172	11.2	9.73	0.7	<1	<0.3	<0.05	0.20	2.76	5.9	0.52
A0173	1.1	0.07	0.3	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0174	10.5	1.77	0.6	<1	<0.3	<0.05	0.14	1.61	5.3	0.26

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0175	11.9	2.09	0.7	1	0.5	0.06	0.16	2.22	4.4	0.32
A0176	11.5	4.47	1.6	<1	0.5	<0.05	0.23	2.92	2.7	0.30
A0177	4.4	2.65	4.7	<1	1.8	<0.05	0.26	0.18	1.2	0.09
A0178	8.9	11.0	0.9	2	0.9	<0.05	0.12	4.89	3.1	0.23
A0179	8.1	73.0	0.4	3	1.3	<0.05	0.07	8.99	2.3	0.35
A0180	9.1	5.02	0.6	2	0.4	<0.05	0.11	1.96	4.0	0.21
A0181	10.5	0.63	0.7	2	0.4	<0.05	0.10	0.82	2.7	0.21
A0182	10.1	1.38	0.5	3	<0.3	<0.05	0.13	0.67	5.3	0.21
A0183	4.4	2.40	4.6	1	1.8	<0.05	0.27	0.18	1.2	0.09
A0184	10.7	0.62	0.5	2	<0.3	<0.05	0.16	0.71	7.4	0.22
A0185	10.0	9.21	0.7	3	0.7	<0.05	0.13	23.8	3.5	0.25
A0186	10.0	2.98	0.9	1	0.4	<0.05	0.17	1.29	3.1	0.23
A0187	10.1	3.67	0.8	1	0.4	<0.05	0.18	1.28	2.9	0.22
A0188	6.2	81.3	0.5	4	1.9	<0.05	0.05	19.3	1.4	0.31
A0189	9.2	3.85	0.7	1	0.4	<0.05	0.11	1.21	3.4	0.24
A0190	10.6	1.55	0.8	1	0.4	<0.05	0.13	1.12	3.6	0.22
A0191	9.0	0.95	0.7	2	<0.3	<0.05	0.12	0.96	3.0	0.17
A0192	9.9	1.82	0.8	2	0.4	<0.05	0.15	1.35	2.8	0.24

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Zn ICP90Q 0.01 %
A0132	0.85	0.2	2.86	0.3	N.A.	N.A.
A0133	0.71	0.1	3.11	0.3	N.A.	N.A.
A0134	1.08	0.3	3.08	0.3	N.A.	N.A.
A0135	1.25	0.4	3.17	0.3	N.A.	N.A.
A0136	1.19	0.5	3.13	0.3	13.0	1.01
A0137	1.91	0.2	4.69	0.4	13.4	N.A.
A0138	1.00	0.4	2.02	0.2	N.A.	N.A.
A0139	1.11	0.4	2.06	0.2	14.0	N.A.
A0140	0.94	1.2	2.36	0.2	11.6	N.A.
A0141	1.13	0.3	2.14	0.2	9.7	N.A.
A0142	1.32	0.2	4.19	0.4	N.A.	N.A.
A0143	0.96	0.2	2.30	0.2	N.A.	N.A.
A0144	1.16	0.2	3.62	0.3	N.A.	N.A.
A0145	1.10	0.2	4.42	0.3	N.A.	N.A.
A0146	1.05	0.2	4.62	0.4	N.A.	N.A.
A0147	1.02	0.3	3.59	0.3	N.A.	N.A.
A0148	1.03	0.2	3.71	0.3	N.A.	N.A.
A0149	0.95	0.4	3.63	0.3	N.A.	N.A.
A0150	1.09	0.3	3.29	0.3	N.A.	N.A.
A0151	1.22	0.4	2.93	0.3	N.A.	N.A.
A0152	1.10	0.4	3.10	0.3	N.A.	N.A.
A0153	1.10	0.6	3.17	0.3	N.A.	N.A.
A0154	1.10	0.4	3.69	0.3	N.A.	N.A.
A0155	0.36	1.0	7.54	0.6	N.A.	N.A.
A0156	1.13	0.8	3.59	0.3	N.A.	N.A.
A0157	1.00	0.5	3.62	0.3	N.A.	N.A.
A0158	1.63	0.9	4.23	0.4	N.A.	N.A.
A0159	1.12	0.3	3.95	0.3	N.A.	N.A.
A0160	0.95	0.7	4.66	0.4	N.A.	N.A.
A0161	0.89	0.7	3.74	0.4	N.A.	N.A.
A0162	0.73	0.3	6.20	0.6	N.A.	N.A.
A0163	0.77	0.5	2.62	0.2	N.A.	N.A.
A0164	0.65	0.4	2.92	0.3	N.A.	N.A.
A0165	0.95	0.6	2.13	0.2	14.3	N.A.
A0166	1.10	0.4	6.24	0.6	N.A.	N.A.
A0167	0.78	0.2	4.82	0.5	N.A.	N.A.
A0168	0.44	<0.1	0.79	<0.1	N.A.	N.A.
A0169	0.68	0.1	2.70	0.3	N.A.	N.A.
A0170	0.92	0.2	2.34	0.2	N.A.	N.A.
A0171	0.97	0.2	2.61	0.2	N.A.	N.A.
A0172	1.59	0.2	3.95	0.3	N.A.	N.A.
A0173	0.54	<0.1	0.73	<0.1	N.A.	N.A.
A0174	1.51	0.4	2.94	0.3	N.A.	N.A.

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Zn ICP90Q 0.01 %
A0175	1.15	0.2	3.63	0.3	N.A.	N.A.
A0176	0.98	0.3	5.31	0.5	N.A.	N.A.
A0177	0.35	1.0	7.63	0.6	N.A.	N.A.
A0178	1.37	0.3	2.42	0.2	N.A.	N.A.
A0179	3.92	0.4	1.73	0.2	25.0	N.A.
A0180	1.51	0.3	2.28	0.2	N.A.	N.A.
A0181	1.36	0.2	2.21	0.2	N.A.	N.A.
A0182	1.27	0.2	3.09	0.3	N.A.	N.A.
A0183	0.37	0.9	7.58	0.7	N.A.	N.A.
A0184	1.50	0.4	3.05	0.2	N.A.	N.A.
A0185	1.23	0.2	2.74	0.2	17.1	N.A.
A0186	1.14	0.2	3.04	0.2	N.A.	N.A.
A0187	1.00	0.2	2.97	0.2	N.A.	N.A.
A0188	0.99	1.4	1.02	<0.1	21.3	1.35
A0189	1.08	0.3	2.06	0.2	N.A.	N.A.
A0190	0.85	0.2	3.15	0.3	N.A.	N.A.
A0191	0.80	0.2	3.06	0.3	N.A.	N.A.
A0192	1.14	0.2	3.77	0.3	N.A.	N.A.

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# Certificate of Analysis

Work Order: TK110243

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 21, 2011

P.O. No. : 1S-0301/PO: SQ-11B-101711-78-02  
Project No. : -  
No. Of Samples : 17  
Date Submitted : Oct 18, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
-- = No result

\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0193	7.800	0.03	0.43	50	35	0.41	66	66.5	6.07	0.31
A0194	5.000	<0.01	0.03	50	21	>15	3	2.1	0.47	0.02
A0195	7.200	0.03	0.43	40	41	0.76	63	272	5.18	0.30
A0196	7.800	0.02	0.47	60	59	0.99	74	97.9	4.76	0.33
A0197	1.300	0.02	0.52	60	48	0.62	61	11.6	4.61	0.36
A0198	7.300	0.33	0.46	70	12	0.20	88	557	12.9	0.32
A0199	0.075	1.17	1.28	60	112	0.77	28	3330	3.28	0.12
A0200	7.400	0.02	0.51	60	37	0.40	59	14.9	4.90	0.37
A0201	7.600	0.01	0.50	60	53	0.85	73	131	4.10	0.35
A0202	3.800	0.03	0.51	60	38	0.56	52	83.5	4.99	0.37
A0203	3.900	0.02	0.50	50	40	0.45	66	85.9	5.19	0.37
A0204	2.700	0.03	0.46	60	41	0.36	62	19.2	5.81	0.37
A0205	1.200	0.37	0.44	60	10	0.23	80	893	14.2	0.31
A0206	3.300	0.01	0.50	60	32	0.48	57	12.0	6.46	0.37
A0207	7.700	<0.01	0.48	70	63	0.31	79	438	3.74	0.36
A0208	7.500	<0.01	0.47	60	55	0.36	57	159	3.49	0.34
A0209	7.500	<0.01	0.50	60	46	0.26	70	23.2	4.24	0.37

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0193	<1	0.09	316	0.02	2.3	1110	>5	17.1	<0.01	4
A0194	<1	13.1	240	0.01	1.2	170	<0.01	41.3	<0.01	1
A0195	<1	0.11	557	0.03	1.9	1150	>5	16.4	<0.01	4
A0196	<1	0.16	701	0.03	2.0	1210	>5	24.1	<0.01	4
A0197	<1	0.08	220	0.03	2.0	940	>5	34.6	<0.01	3
A0198	<1	0.05	151	0.03	0.9	580	>5	35.2	<0.01	3
A0199	8	0.59	516	0.09	31.4	520	0.46	35.4	0.13	60
A0200	<1	0.09	633	0.02	2.2	1190	>5	16.9	<0.01	4
A0201	<1	0.30	2150	0.03	2.4	1220	>5	18.3	<0.01	5
A0202	<1	0.13	2000	0.03	2.0	1210	>5	14.7	<0.01	4
A0203	<1	0.09	2000	0.03	2.5	1260	>5	13.4	<0.01	5
A0204	<1	0.07	253	0.03	2.4	940	>5	15.5	<0.01	3
A0205	<1	0.07	274	0.02	2.0	660	>5	15.4	<0.01	3
A0206	<1	0.08	318	0.03	2.3	1030	>5	19.9	<0.01	3
A0207	<1	0.09	3030	0.03	2.5	920	4.63	27.6	<0.01	3
A0208	<1	0.09	1230	0.02	2.1	920	4.36	27.9	<0.01	3
A0209	<1	0.08	786	0.03	2.5	810	>5	40.5	<0.01	3

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0193	102	6.8	0.60	25	0.2	2.93	1.43	5.39	12.9	1.30
A0194	12	<0.5	<0.01	<1	<0.1	0.03	0.06	1.00	0.7	0.12
A0195	102	6.1	0.40	91	0.2	2.82	1.12	6.01	11.1	1.23
A0196	61	5.9	0.18	34	0.2	2.35	0.35	5.61	14.1	1.23
A0197	129	5.8	0.59	5	0.2	2.95	1.35	4.50	8.1	1.03
A0198	>10000	10.3	>10	193	0.2	11.0	90.5	3.01	6.6	1.40
A0199	61	10.1	1.51	12	0.3	0.53	0.58	12.3	7.4	0.39
A0200	202	6.4	0.78	8	0.3	3.12	1.88	9.64	10.6	1.26
A0201	169	6.1	0.80	43	0.2	3.95	1.26	11.3	9.1	1.65
A0202	574	7.0	1.51	29	0.3	3.00	3.64	11.2	10.1	1.55
A0203	358	7.3	1.65	25	0.3	3.76	2.37	11.6	9.4	1.62
A0204	660	5.7	1.13	11	0.2	2.05	4.26	5.93	10.9	0.81
A0205	>10000	9.9	>10	218	0.2	19.9	81.3	1.48	26.2	1.05
A0206	285	6.2	0.88	7	0.2	3.29	3.36	5.18	13.7	0.80
A0207	412	5.3	2.05	168	0.3	4.28	3.08	17.7	5.6	1.11
A0208	215	5.1	0.75	58	0.2	3.02	1.70	9.22	7.8	0.99
A0209	405	4.9	0.41	8	0.2	2.24	2.39	6.57	8.9	0.77

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0193	0.9	<0.1	0.21	<0.01	0.04	2.6	0.05	7.84	0.07	28.3
A0194	<0.1	<0.1	<0.05	0.07	<0.02	0.5	<0.01	0.08	0.08	<0.2
A0195	0.9	<0.1	0.18	<0.01	0.05	2.9	0.06	8.17	<0.05	19.3
A0196	1.0	<0.1	0.19	<0.01	0.03	2.8	0.05	3.53	<0.05	9.6
A0197	1.0	<0.1	0.18	<0.01	0.03	2.2	0.04	2.63	<0.05	46.2
A0198	1.5	<0.1	0.24	0.63	2.16	1.3	0.03	2.96	0.09	>10000
A0199	4.3	<0.1	0.32	0.10	0.04	5.8	0.10	331	0.44	22.4
A0200	1.1	<0.1	0.23	0.01	0.05	4.7	0.05	10.8	<0.05	65.5
A0201	1.1	<0.1	0.23	0.05	0.08	5.5	0.08	8.73	<0.05	47.2
A0202	1.2	<0.1	0.24	0.07	0.09	5.4	0.06	10.4	<0.05	108
A0203	1.2	<0.1	0.24	<0.01	0.07	5.6	0.06	10.0	<0.05	108
A0204	0.9	<0.1	0.17	0.07	0.21	2.8	0.03	63.3	<0.05	117
A0205	3.7	<0.1	0.22	0.89	9.54	0.7	0.02	82.3	0.07	454
A0206	1.0	<0.1	0.17	<0.01	0.06	2.6	0.03	44.9	<0.05	95.4
A0207	1.2	<0.1	0.19	0.04	0.13	8.3	0.04	29.9	<0.05	63.3
A0208	1.0	<0.1	0.19	0.05	0.06	4.4	0.04	20.8	<0.05	48.8
A0209	1.0	<0.1	0.15	<0.01	0.04	3.2	0.03	21.3	<0.05	67.2

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0193	8.7	1.45	0.7	2	<0.3	<0.05	0.14	1.35	3.3	0.20
A0194	0.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0195	8.7	8.54	0.7	1	<0.3	<0.05	0.17	1.64	4.0	0.21
A0196	10.1	2.72	0.7	1	<0.3	<0.05	0.16	1.13	4.5	0.20
A0197	10.8	0.58	0.6	1	<0.3	<0.05	0.13	0.78	3.0	0.20
A0198	11.0	70.6	0.5	4	0.8	<0.05	0.11	8.17	2.1	0.38
A0199	4.3	2.38	4.5	1	1.7	<0.05	0.28	0.17	1.2	0.09
A0200	12.1	0.78	0.7	<1	<0.3	<0.05	0.17	1.06	3.6	0.23
A0201	11.5	4.92	0.8	<1	<0.3	<0.05	0.24	1.37	3.5	0.24
A0202	12.5	6.13	0.8	1	<0.3	<0.05	0.21	1.43	4.1	0.24
A0203	12.4	7.79	0.8	1	<0.3	<0.05	0.20	1.73	4.2	0.24
A0204	11.5	0.95	0.5	1	<0.3	<0.05	0.12	0.96	5.2	0.23
A0205	8.2	159	0.5	4	0.8	<0.05	0.08	8.84	3.9	0.23
A0206	10.4	0.87	0.6	2	<0.3	<0.05	0.11	1.07	5.3	0.21
A0207	10.5	17.2	0.7	1	<0.3	<0.05	0.19	1.24	6.6	0.25
A0208	9.5	4.90	0.6	1	<0.3	<0.05	0.13	0.55	5.9	0.21
A0209	10.0	0.43	0.5	1	<0.3	<0.05	0.11	0.66	4.7	0.21

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Final : TK110243 Order: 1S-0301/PO: SQ-11B-101711-78-02

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Pb ICP90Q 0.01 %	Zn ICP90Q 0.01 %
A0193	1.14	0.1	3.36	0.3	N.A.	N.A.	N.A.
A0194	0.54	<0.1	0.87	<0.1	N.A.	N.A.	N.A.
A0195	1.07	0.2	4.55	0.4	N.A.	N.A.	N.A.
A0196	1.13	0.1	4.03	0.4	N.A.	N.A.	N.A.
A0197	0.77	<0.1	3.28	0.3	N.A.	N.A.	N.A.
A0198	1.19	0.4	2.80	0.2	20.6	1.10	1.50
A0199	0.37	0.8	7.76	0.7	N.A.	N.A.	N.A.
A0200	0.78	0.1	3.63	0.3	N.A.	N.A.	N.A.
A0201	0.82	0.2	5.56	0.6	N.A.	N.A.	N.A.
A0202	1.09	0.2	4.58	0.4	N.A.	N.A.	N.A.
A0203	1.05	0.2	4.43	0.4	N.A.	N.A.	N.A.
A0204	1.92	0.2	2.46	0.2	N.A.	N.A.	N.A.
A0205	1.21	1.2	1.64	0.1	28.2	N.A.	1.19
A0206	1.78	0.2	2.10	0.2	N.A.	N.A.	N.A.
A0207	1.70	0.2	3.38	0.3	N.A.	N.A.	N.A.
A0208	1.75	0.1	2.70	0.2	N.A.	N.A.	N.A.
A0209	1.73	0.1	2.37	0.2	N.A.	N.A.	N.A.

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# Certificate of Analysis

Work Order: TK110244

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 17, 2011

P.O. No. : 1S-0308/PO: SQ-12B-102111-75-13  
Project No. : -  
No. Of Samples : 61  
Date Submitted : Oct 24, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable

I.S. = Insufficient Sample  
-- = No result

\*INF = Composition of this sample makes detection impossible by this method

M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted

Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0720	7.800	0.04	0.38	30	87	1.69	55	367	3.36	0.28
A0721	8.200	0.04	0.36	40	97	1.53	55	1070	3.95	0.27
A0722	3.700	0.02	0.41	40	85	1.74	52	526	3.99	0.30
A0723	3.700	0.02	0.43	40	80	1.70	62	481	3.93	0.31
A0724	7.900	0.05	0.38	40	69	1.70	39	700	3.92	0.28
A0725	7.200	0.03	0.39	40	78	1.76	58	622	3.49	0.29
A0726	8.600	0.06	0.39	40	61	1.78	52	915	4.35	0.29
A0727	8.200	0.03	0.40	40	82	1.79	56	690	4.38	0.31
A0728	8.100	0.04	0.38	40	54	1.79	56	295	4.87	0.28
A0729	7.800	0.03	0.38	30	70	1.76	67	652	4.36	0.29
A0730	7.900	0.02	0.38	30	74	1.80	45	1300	4.39	0.28
A0731	8.200	0.03	0.39	30	70	1.76	68	826	4.21	0.27
A0732	8.200	0.02	0.37	30	77	1.87	69	1190	4.14	0.26
A0733	7.700	0.03	0.42	30	80	1.98	62	2340	4.51	0.30
A0734	5.700	<0.01	0.02	30	15	>15	2	5.2	0.47	0.02
A0735	7.900	<0.01	0.45	30	67	2.05	72	689	4.08	0.31
A0736	7.800	<0.01	0.37	30	82	2.49	53	591	3.69	0.24
A0737	7.300	0.03	0.47	30	56	2.87	41	446	4.82	0.30
A0738	7.100	0.02	0.46	30	53	3.12	36	531	4.21	0.31
A0739	7.700	<0.01	0.38	30	57	2.77	38	822	3.48	0.27
A0740	0.135	1.05	1.08	40	114	0.56	31	3470	3.19	0.10
A0741	8.300	0.02	0.40	30	75	3.57	53	2200	3.14	0.31
A0742	8.400	0.04	0.38	30	46	2.91	52	2670	5.75	0.29
A0743	5.200	0.05	0.35	40	43	2.73	85	2930	6.89	0.28
A0744	3.500	<0.01	0.51	30	478	1.89	60	96.7	2.87	0.23
A0745	3.500	<0.01	0.74	40	609	2.44	52	40.5	2.73	0.28
A0746	3.600	<0.01	0.68	40	511	2.37	54	30.5	2.66	0.26
A0747	7.700	<0.01	0.74	30	608	2.74	42	46.5	2.69	0.30
A0748	4.600	<0.01	0.58	30	543	2.24	39	71.0	2.79	0.28
A0749	3.500	0.04	0.46	30	65	2.22	61	1690	4.60	0.33
A0750	6.500	0.03	0.40	30	59	3.53	52	2220	3.08	0.29
A0751	8.200	0.04	0.43	40	44	3.59	49	1710	4.89	0.32
A0752	8.000	0.06	0.41	30	63	4.25	52	1510	1.69	0.33
A0753	8.100	0.09	0.50	40	61	4.40	63	2340	2.25	0.31
A0754	8.400	0.05	0.44	40	64	3.66	52	1730	2.78	0.29
A0755	4.800	<0.01	0.03	30	12	>15	2	4.7	0.47	0.02
A0756	7.700	0.06	0.60	40	68	3.85	56	1470	2.24	0.37
A0757	8.200	0.05	0.52	40	84	3.97	61	2160	3.12	0.34
A0758	8.300	0.08	0.49	40	64	3.34	74	2410	3.33	0.33
A0759	8.200	0.04	0.43	40	49	3.71	47	1380	4.43	0.29
A0760	8.000	0.05	0.45	40	61	4.36	51	1920	3.03	0.30
A0761	8.200	0.05	0.52	40	60	4.28	44	2100	2.32	0.34
A0762	0.075	1.09	1.08	40	113	0.59	30	3390	3.18	0.10

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Element Method Det.Lim. Units	WtKg WGH79 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0763	7.900	0.06	0.46	30	60	3.81	50	2200	2.86	0.29
A0764	8.600	0.04	0.44	40	61	3.64	45	1860	3.11	0.29
A0765	7.300	0.05	0.50	40	65	3.39	51	1720	2.94	0.33
A0766	7.300	0.05	0.43	40	59	3.89	42	1690	4.31	0.28
A0767	2.800	0.06	0.40	30	51	3.11	50	2630	3.08	0.30
A0768	2.900	0.06	0.40	30	55	3.21	48	2500	2.72	0.30
A0769	8.000	0.05	0.41	40	50	3.64	47	3200	4.26	0.31
A0770	8.100	0.03	0.43	30	65	2.93	57	1520	3.36	0.33
A0771	8.100	0.04	0.43	30	80	3.63	49	1760	2.89	0.32
A0772	7.700	0.03	0.37	40	57	3.43	63	1880	3.45	0.29
A0773	8.000	0.08	0.32	40	46	3.01	59	3800	5.18	0.27
A0774	8.200	0.06	0.37	40	59	2.98	67	3100	3.93	0.30
A0775	7.800	0.04	0.39	40	55	3.18	53	2000	4.33	0.30
A0776	5.900	<0.01	0.03	30	13	>15	3	17.9	0.47	0.02
A0777	7.900	0.03	0.31	40	60	3.12	55	2310	3.62	0.25
A0778	8.000	0.04	0.32	30	52	3.00	59	2640	3.57	0.26
A0779	7.900	0.03	0.35	40	44	2.60	57	2480	4.74	0.28
A0780	7.800	0.03	0.34	30	43	2.84	61	2330	4.14	0.25

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0720	<1	0.40	499	0.05	2.0	1030	3.99	105	<0.01	15
A0721	<1	0.46	1990	0.04	1.8	1050	4.92	76.4	<0.01	9
A0722	<1	0.51	3360	0.04	1.8	1060	4.99	85.1	<0.01	9
A0723	<1	0.49	3210	0.04	1.9	1030	4.89	82.9	<0.01	9
A0724	<1	0.49	892	0.04	1.6	1050	>5	99.8	<0.01	11
A0725	<1	0.53	821	0.05	1.7	1070	4.65	113	<0.01	12
A0726	<1	0.52	2040	0.04	1.6	990	>5	99.2	<0.01	11
A0727	<1	0.48	1350	0.04	1.7	990	>5	107	<0.01	8
A0728	<1	0.50	1020	0.04	1.7	1040	>5	111	<0.01	12
A0729	<1	0.48	1700	0.03	2.0	1070	>5	114	<0.01	10
A0730	<1	0.46	689	0.03	1.4	1070	>5	142	<0.01	9
A0731	<1	0.51	717	0.04	1.9	1060	>5	128	<0.01	12
A0732	<1	0.51	1120	0.04	1.6	1120	>5	151	<0.01	10
A0733	<1	0.47	1520	0.03	1.6	1080	>5	167	<0.01	5
A0734	1	11.3	218	<0.01	0.8	160	<0.01	41.9	<0.01	<1
A0735	<1	0.40	910	0.03	1.9	1050	>5	164	<0.01	6
A0736	<1	0.59	821	0.04	1.5	1170	>5	147	<0.01	11
A0737	<1	0.50	494	0.05	<0.5	1670	>5	169	<0.01	7
A0738	<1	0.47	953	0.04	0.5	1640	>5	199	<0.01	8
A0739	<1	0.53	4610	0.03	1.0	1350	>5	149	<0.01	4
A0740	8	0.59	405	0.08	28.9	520	0.45	30.2	0.09	50
A0741	<1	0.43	7310	0.02	2.1	1310	>5	294	<0.01	5
A0742	<1	0.29	2550	0.02	1.6	1250	>5	247	<0.01	5
A0743	<1	0.26	482	0.02	3.8	720	>5	272	<0.01	6
A0744	5	0.73	849	0.10	9.1	1250	0.17	292	0.01	55
A0745	8	0.75	855	0.10	8.9	1170	0.03	228	0.01	56
A0746	8	0.72	814	0.09	8.8	1120	0.05	200	0.01	55
A0747	8	0.79	924	0.10	7.9	1160	0.03	253	0.01	55
A0748	5	0.76	984	0.10	8.1	1260	0.18	253	<0.01	53
A0749	1	0.31	976	0.04	6.3	980	>5	249	<0.01	10
A0750	1	0.32	270	0.03	4.3	980	>5	298	<0.01	10
A0751	1	0.34	113	0.04	4.3	830	>5	254	0.01	16
A0752	1	0.44	93	0.04	3.3	840	>5	256	0.02	24
A0753	2	0.49	90	0.05	4.9	1480	>5	272	0.02	26
A0754	2	0.41	77	0.05	4.2	810	>5	231	0.01	18
A0755	<1	12.9	213	<0.01	1.4	180	<0.01	40.6	<0.01	1
A0756	3	0.62	76	0.05	4.4	1000	>5	241	0.03	30
A0757	2	0.45	123	0.04	4.1	830	>5	250	0.02	21
A0758	2	0.51	108	0.05	5.3	800	>5	204	0.02	28
A0759	2	0.29	45	0.03	4.6	720	>5	290	<0.01	14
A0760	2	0.39	62	0.04	5.1	640	>5	284	0.02	19
A0761	3	0.51	66	0.04	4.2	790	>5	271	0.03	27
A0762	8	0.55	411	0.08	30.1	530	0.48	29.8	0.10	51

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0763	2	0.41	84	0.03	3.6	720	>5	252	0.01	19
A0764	2	0.34	114	0.03	3.9	880	>5	276	<0.01	14
A0765	2	0.42	72	0.04	4.7	930	>5	249	0.02	23
A0766	2	0.31	75	0.03	4.4	910	>5	309	<0.01	13
A0767	1	0.32	117	0.03	3.4	880	>5	230	<0.01	16
A0768	1	0.35	126	0.03	3.5	900	>5	234	0.01	17
A0769	<1	0.19	87	0.03	4.1	820	>5	281	<0.01	9
A0770	1	0.32	123	0.04	4.4	870	>5	201	0.01	15
A0771	2	0.37	249	0.04	4.5	810	>5	221	0.01	20
A0772	<1	0.27	225	0.03	5.2	1090	>5	226	<0.01	12
A0773	<1	0.22	1110	0.02	6.6	840	>5	202	<0.01	8
A0774	1	0.37	185	0.03	4.8	790	>5	191	<0.01	15
A0775	1	0.36	88	0.04	5.7	820	>5	197	<0.01	15
A0776	<1	12.6	216	<0.01	1.5	170	<0.01	41.4	<0.01	<1
A0777	1	0.36	106	0.04	5.0	750	>5	171	<0.01	13
A0778	1	0.42	129	0.04	6.1	820	>5	167	<0.01	14
A0779	1	0.43	246	0.04	7.1	950	>5	134	<0.01	16
A0780	<1	0.43	409	0.04	6.5	810	>5	126	<0.01	12

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0720	19	8.1	0.19	1	0.5	0.86	0.03	10.2	11.1	3.91
A0721	141	8.6	0.99	109	0.5	8.72	0.69	10.7	7.9	3.62
A0722	148	8.8	0.50	54	0.5	1.22	0.60	11.8	6.7	3.63
A0723	135	9.0	0.51	57	0.5	1.44	0.56	11.6	7.3	3.47
A0724	14	8.2	0.36	6	0.5	2.99	0.05	13.0	20.8	2.77
A0725	15	8.7	0.24	4	0.4	1.70	0.05	12.8	11.6	2.43
A0726	37	9.0	0.50	45	0.5	3.53	0.15	11.8	7.7	2.53
A0727	30	9.2	0.31	3	0.4	5.17	0.12	12.8	7.1	2.47
A0728	53	8.6	0.61	2	0.5	2.91	0.23	10.4	5.8	2.40
A0729	129	8.6	0.77	3	0.6	8.20	0.49	12.2	6.9	2.94
A0730	68	8.9	0.77	<1	0.4	6.67	0.34	9.28	4.9	2.47
A0731	93	7.5	0.45	1	0.5	4.41	0.46	10.3	4.7	2.55
A0732	60	7.8	0.54	3	0.4	2.70	0.26	9.36	6.3	2.38
A0733	235	7.9	1.44	31	0.4	7.26	1.04	10.3	5.1	2.13
A0734	12	<0.5	<0.01	<1	<0.1	0.04	0.05	1.01	0.7	0.19
A0735	70	8.7	0.46	8	0.6	2.15	0.25	10.4	8.0	2.01
A0736	155	6.6	0.34	34	0.5	1.21	0.65	12.2	11.0	2.21
A0737	40	10.7	0.31	8	0.5	4.48	0.16	10.4	4.1	1.90
A0738	62	9.9	0.34	16	0.5	3.10	0.27	10.1	3.1	1.74
A0739	298	7.4	0.91	93	0.5	4.88	0.78	10.9	8.4	2.36
A0740	54	9.2	1.58	13	0.3	0.53	0.41	10.0	7.9	0.39
A0741	387	4.7	2.01	202	0.6	1.70	1.29	12.7	14.2	2.43
A0742	206	5.5	2.32	147	0.4	14.5	0.98	10.4	13.1	2.02
A0743	88	3.6	1.66	99	0.3	13.5	0.59	12.8	20.1	1.92
A0744	131	5.2	0.22	5	0.7	0.18	0.21	18.3	11.2	6.71
A0745	194	4.5	0.15	3	0.9	0.10	0.62	23.9	9.8	7.24
A0746	160	4.4	0.12	2	1.0	0.09	0.36	23.0	9.1	7.09
A0747	114	4.3	0.12	2	1.1	0.09	0.22	22.7	8.9	7.24
A0748	140	4.6	0.23	7	0.8	0.16	0.28	19.7	10.6	7.97
A0749	450	3.7	2.25	230	0.5	6.76	2.48	9.65	23.1	2.63
A0750	27	1.8	0.57	2	0.3	1.01	0.14	11.8	19.4	1.39
A0751	82	2.6	0.53	1	0.2	0.61	0.42	13.8	26.1	0.96
A0752	24	2.0	0.29	2	0.3	0.55	0.14	20.5	12.0	1.00
A0753	20	1.9	0.40	1	0.3	0.30	0.15	22.5	19.5	0.71
A0754	16	1.9	0.32	<1	0.4	1.85	0.07	19.0	21.2	0.87
A0755	11	<0.5	<0.01	<1	<0.1	0.02	0.06	1.13	0.8	0.30
A0756	17	2.2	0.30	<1	0.3	0.45	0.14	21.6	20.3	0.77
A0757	19	2.1	0.62	2	0.3	3.08	0.16	27.5	20.4	0.94
A0758	22	2.8	0.52	2	0.3	1.21	0.14	21.5	27.0	0.91
A0759	8	2.5	0.42	<1	0.3	6.42	0.11	17.1	23.6	0.54
A0760	12	2.0	0.43	<1	0.3	1.07	0.10	20.6	28.2	0.61
A0761	13	1.9	0.36	1	0.3	0.41	0.11	22.5	25.7	0.58
A0762	53	8.9	1.59	12	0.3	0.54	0.42	10.0	8.2	0.40

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0763	13	1.9	0.61	2	0.3	3.22	0.08	21.4	22.3	0.57
A0764	19	2.0	0.49	3	0.4	2.99	0.14	20.0	22.3	0.74
A0765	13	2.1	0.32	<1	0.3	0.60	0.08	21.1	27.2	0.53
A0766	8	2.1	0.43	<1	0.4	2.01	0.04	20.0	34.2	0.61
A0767	33	1.9	0.80	2	0.3	24.8	0.19	16.7	18.3	0.76
A0768	35	1.8	0.68	<1	0.3	29.6	0.21	17.1	15.7	0.79
A0769	33	2.8	0.95	1	0.3	5.13	0.21	14.4	19.2	0.73
A0770	22	2.2	0.65	2	0.3	1.56	0.10	16.9	28.3	0.80
A0771	52	2.3	0.50	<1	0.3	1.14	0.30	19.0	31.2	0.87
A0772	12	2.4	0.46	3	0.2	2.61	0.06	17.7	38.5	0.77
A0773	83	3.1	3.58	158	0.3	9.41	0.53	14.9	38.9	1.16
A0774	11	2.3	0.73	<1	0.3	4.29	0.02	15.1	27.5	1.03
A0775	11	2.6	0.53	1	0.2	1.48	0.03	15.1	38.2	1.06
A0776	12	<0.5	<0.01	<1	<0.1	0.04	0.06	1.13	0.8	0.17
A0777	14	2.4	0.65	<1	0.2	1.73	0.13	17.8	33.7	0.96
A0778	14	2.3	0.96	2	0.3	3.11	0.07	15.5	33.7	1.33
A0779	21	2.7	0.81	1	0.3	3.37	0.13	14.4	40.7	1.52
A0780	18	2.5	0.80	7	0.2	5.08	0.08	12.5	35.5	1.48

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0720	1.1	<0.1	0.29	0.06	0.02	4.6	0.11	2.09	0.08	2.6
A0721	1.1	<0.1	0.28	0.07	0.10	5.0	0.11	2.93	0.07	35.1
A0722	1.1	<0.1	0.28	0.06	0.03	5.6	0.11	3.59	0.06	35.1
A0723	1.2	<0.1	0.27	0.07	0.02	5.6	0.12	2.75	0.05	44.0
A0724	1.2	<0.1	0.24	0.07	0.04	6.5	0.11	3.41	<0.05	3.7
A0725	1.2	<0.1	0.27	0.07	0.04	6.0	0.11	2.78	<0.05	3.9
A0726	1.2	<0.1	0.28	0.06	0.05	5.5	0.11	3.07	<0.05	8.0
A0727	1.2	<0.1	0.27	0.03	0.05	6.1	0.10	5.53	0.05	11.3
A0728	1.2	<0.1	0.24	0.04	<0.02	4.9	0.11	2.70	<0.05	30.9
A0729	1.2	<0.1	0.24	0.06	0.04	5.9	0.11	2.84	<0.05	46.9
A0730	1.0	<0.1	0.23	0.04	0.08	4.6	0.11	2.01	<0.05	27.4
A0731	1.1	<0.1	0.22	0.04	0.06	5.0	0.10	2.71	<0.05	10.2
A0732	1.1	<0.1	0.20	0.07	0.09	4.5	0.09	8.47	<0.05	15.9
A0733	1.1	<0.1	0.21	0.09	0.20	5.2	0.10	2.59	<0.05	59.5
A0734	<0.1	<0.1	<0.05	0.08	<0.02	0.4	<0.01	0.11	0.06	1.2
A0735	1.2	<0.1	0.25	0.03	0.07	5.1	0.10	2.41	<0.05	11.6
A0736	1.0	<0.1	0.17	0.04	0.07	5.6	0.12	7.43	<0.05	8.1
A0737	1.1	<0.1	0.23	0.04	0.05	4.1	0.12	2.48	<0.05	8.4
A0738	1.1	<0.1	0.22	0.05	0.07	4.1	0.11	2.92	<0.05	7.8
A0739	0.9	<0.1	0.18	0.06	0.11	4.8	0.13	2.19	<0.05	69.7
A0740	4.0	<0.1	0.28	0.12	0.04	4.7	0.09	324	0.44	21.7
A0741	0.9	<0.1	0.10	0.10	0.12	5.6	0.13	216	<0.05	91.6
A0742	1.1	<0.1	0.09	0.10	0.13	4.7	0.10	413	<0.05	79.8
A0743	0.9	<0.1	<0.05	0.08	0.16	6.1	0.09	449	<0.05	24.2
A0744	2.2	<0.1	0.16	0.05	0.04	8.0	0.07	14.8	0.13	11.8
A0745	3.6	<0.1	0.14	0.05	0.08	10.9	0.09	1.63	0.16	13.8
A0746	3.3	<0.1	0.16	0.05	0.05	10.3	0.09	7.12	0.21	12.4
A0747	3.4	<0.1	0.15	0.04	0.03	10.1	0.09	0.86	0.13	12.6
A0748	2.5	<0.1	0.15	0.05	0.04	8.6	0.07	10.9	0.12	12.2
A0749	1.3	<0.1	0.07	0.08	0.08	4.8	0.10	197	<0.05	221
A0750	1.0	<0.1	<0.05	0.04	0.08	5.9	0.11	357	<0.05	3.2
A0751	1.3	<0.1	<0.05	0.05	0.06	6.8	0.11	307	0.08	2.3
A0752	1.6	<0.1	0.06	0.05	0.05	10.2	0.16	403	0.10	1.8
A0753	1.9	<0.1	0.06	0.09	0.07	11.1	0.18	597	0.12	2.8
A0754	1.6	<0.1	<0.05	0.05	0.05	9.4	0.14	267	0.08	2.3
A0755	<0.1	<0.1	<0.05	0.04	<0.02	0.5	<0.01	1.96	0.11	1.1
A0756	2.3	<0.1	0.07	0.03	0.03	11.3	0.16	347	0.13	2.0
A0757	1.9	<0.1	<0.05	0.03	0.08	14.0	0.17	580	0.10	3.6
A0758	2.1	<0.1	0.06	0.02	0.07	11.0	0.15	639	0.13	2.4
A0759	1.2	<0.1	0.16	0.06	0.06	8.7	0.10	558	0.11	2.2
A0760	1.7	<0.1	0.09	0.03	0.06	10.5	0.13	420	0.11	1.6
A0761	2.1	<0.1	0.09	0.04	0.05	11.8	0.15	398	0.13	2.1
A0762	4.1	<0.1	0.29	0.12	0.04	4.8	0.09	329	0.44	21.8

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0763	1.8	<0.1	0.06	0.06	0.08	11.0	0.14	335	0.09	3.1
A0764	1.4	<0.1	<0.05	0.04	0.06	10.5	0.14	571	0.06	4.3
A0765	1.7	<0.1	0.05	0.05	0.05	11.4	0.14	323	0.10	2.2
A0766	1.3	<0.1	<0.05	<0.01	0.05	10.3	0.12	486	0.07	1.5
A0767	1.4	<0.1	<0.05	<0.01	0.11	8.5	0.11	648	0.10	19.1
A0768	1.4	<0.1	<0.05	<0.01	0.10	8.8	0.11	566	0.09	22.1
A0769	1.2	<0.1	<0.05	<0.01	0.13	7.4	0.09	517	0.06	4.5
A0770	1.3	<0.1	0.05	0.03	0.06	9.1	0.10	220	0.06	2.3
A0771	1.4	<0.1	0.06	0.06	0.06	9.8	0.12	390	0.07	8.4
A0772	1.1	<0.1	0.06	0.03	0.07	9.1	0.12	526	0.06	2.6
A0773	0.9	<0.1	0.05	0.02	0.12	7.5	0.10	662	<0.05	19.9
A0774	1.2	<0.1	<0.05	<0.01	0.11	7.7	0.10	631	0.07	1.4
A0775	1.2	<0.1	0.05	<0.01	0.07	7.6	0.11	208	0.08	1.0
A0776	<0.1	<0.1	<0.05	0.03	<0.02	0.5	<0.01	5.65	0.06	1.3
A0777	1.0	<0.1	0.06	<0.01	0.12	9.0	0.12	393	0.08	1.1
A0778	1.0	<0.1	0.06	<0.01	0.16	7.8	0.12	366	0.06	1.7
A0779	1.1	<0.1	<0.05	<0.01	0.13	7.6	0.13	383	0.07	2.4
A0780	1.0	<0.1	<0.05	0.01	0.10	6.6	0.10	350	<0.05	4.6

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0720	11.0	<0.05	2.2	<1	<0.3	<0.05	0.26	0.33	2.7	0.21
A0721	10.9	1.07	1.4	<1	0.3	<0.05	0.26	2.68	2.8	0.20
A0722	11.5	0.52	1.3	<1	<0.3	<0.05	0.28	0.52	3.1	0.23
A0723	11.7	0.65	1.3	<1	<0.3	<0.05	0.27	0.61	3.1	0.23
A0724	10.4	0.24	1.3	<1	<0.3	<0.05	0.29	1.99	2.9	0.17
A0725	10.7	0.18	1.3	<1	<0.3	<0.05	0.28	0.63	2.9	0.18
A0726	10.6	1.93	1.2	<1	<0.3	<0.05	0.29	1.86	2.8	0.17
A0727	11.8	0.68	0.9	<1	<0.3	<0.05	0.27	2.65	2.7	0.19
A0728	10.2	0.21	1.2	<1	<0.3	<0.05	0.27	2.11	2.8	0.18
A0729	10.6	0.33	1.2	<1	<0.3	<0.05	0.28	4.19	3.0	0.20
A0730	9.8	0.11	1.0	<1	<0.3	<0.05	0.25	3.64	2.9	0.17
A0731	9.4	0.29	1.2	<1	<0.3	<0.05	0.25	2.69	3.0	0.16
A0732	8.9	1.25	1.0	<1	<0.3	<0.05	0.26	1.51	2.8	0.16
A0733	10.5	1.68	0.7	<1	0.4	<0.05	0.26	2.37	3.1	0.20
A0734	1.1	<0.05	0.1	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0735	9.7	0.56	0.8	<1	0.5	<0.05	0.26	0.88	3.0	0.17
A0736	8.1	0.55	1.2	<1	<0.3	<0.05	0.35	0.43	2.7	0.16
A0737	9.8	0.49	0.9	<1	<0.3	<0.05	0.40	1.47	1.5	0.16
A0738	10.4	0.74	0.9	<1	<0.3	<0.05	0.39	1.20	1.4	0.17
A0739	10.2	12.1	0.8	<1	0.3	<0.05	0.41	1.31	2.1	0.19
A0740	3.9	2.88	4.0	1	1.8	<0.05	0.25	0.19	1.1	0.09
A0741	11.0	37.4	0.7	1	<0.3	<0.05	0.41	0.75	2.0	0.22
A0742	10.7	4.09	0.5	2	0.9	<0.05	0.30	4.91	1.9	0.17
A0743	11.5	2.03	0.5	2	1.3	<0.05	0.28	3.60	2.2	0.17
A0744	10.1	0.56	7.3	<1	0.4	<0.05	0.32	<0.05	1.5	0.16
A0745	11.0	0.43	7.2	<1	0.5	<0.05	0.33	<0.05	2.0	0.11
A0746	10.3	1.33	6.8	<1	0.4	<0.05	0.32	<0.05	1.9	0.11
A0747	11.1	0.42	7.2	<1	0.4	<0.05	0.33	<0.05	1.9	0.12
A0748	11.2	0.48	7.4	<1	0.4	<0.05	0.32	<0.05	1.5	0.16
A0749	12.7	9.15	1.4	2	0.5	<0.05	0.23	1.69	2.9	0.20
A0750	10.3	0.14	1.2	2	<0.3	<0.05	0.26	0.25	2.6	0.14
A0751	11.7	0.06	2.1	2	0.4	<0.05	0.28	0.22	2.6	0.15
A0752	14.2	0.12	2.8	1	0.3	<0.05	0.41	0.15	3.0	0.18
A0753	14.2	0.06	2.6	2	0.3	<0.05	0.46	0.07	2.9	0.17
A0754	12.1	<0.05	2.2	2	<0.3	<0.05	0.38	0.75	3.5	0.15
A0755	1.2	<0.05	0.1	<1	<0.3	<0.05	0.02	<0.05	0.1	<0.02
A0756	18.2	<0.05	3.4	1	0.3	<0.05	0.40	0.10	3.6	0.21
A0757	14.4	0.08	2.5	2	0.4	<0.05	0.47	0.72	3.6	0.18
A0758	14.5	0.21	2.8	2	0.3	<0.05	0.40	0.30	3.7	0.19
A0759	10.0	<0.05	1.2	2	0.3	<0.05	0.36	2.72	2.9	0.12
A0760	11.9	<0.05	2.0	2	0.3	<0.05	0.41	0.23	3.1	0.14
A0761	15.0	<0.05	2.8	2	0.3	<0.05	0.45	0.09	3.1	0.18
A0762	4.1	2.75	4.1	1	1.9	<0.05	0.25	0.19	1.1	0.09

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0763	11.6	0.05	2.1	1	0.3	<0.05	0.40	0.88	3.4	0.14
A0764	10.5	0.26	1.4	2	0.3	<0.05	0.39	0.61	3.4	0.13
A0765	14.0	<0.05	2.5	2	0.3	<0.05	0.38	0.12	3.3	0.16
A0766	9.9	<0.05	1.2	2	0.3	<0.05	0.38	0.46	2.9	0.12
A0767	11.5	0.11	1.7	1	0.6	<0.05	0.34	1.61	2.9	0.14
A0768	11.8	0.08	1.8	1	0.6	<0.05	0.34	1.51	2.8	0.14
A0769	10.0	0.17	1.0	2	0.7	<0.05	0.30	1.02	2.6	0.12
A0770	12.0	<0.05	1.9	1	0.3	<0.05	0.30	0.37	2.8	0.15
A0771	13.1	<0.05	2.2	2	0.4	<0.05	0.36	0.16	2.8	0.16
A0772	11.1	0.06	1.3	2	0.3	<0.05	0.38	0.74	2.4	0.14
A0773	10.0	3.60	0.7	2	0.6	<0.05	0.31	2.56	2.1	0.13
A0774	11.4	0.10	1.6	2	0.4	<0.05	0.33	1.12	2.8	0.14
A0775	10.7	<0.05	1.9	2	<0.3	<0.05	0.34	0.29	2.4	0.13
A0776	1.0	<0.05	0.1	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0777	9.1	<0.05	1.9	2	<0.3	<0.05	0.36	0.21	2.4	0.12
A0778	9.5	<0.05	2.2	2	<0.3	<0.05	0.35	0.51	2.6	0.13
A0779	10.5	<0.05	2.2	3	0.3	<0.05	0.32	0.82	2.8	0.14
A0780	8.7	0.09	2.0	2	0.3	<0.05	0.29	0.79	2.3	0.12

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm
A0720	1.51	0.2	7.49	0.8
A0721	1.70	0.2	7.30	0.7
A0722	2.05	0.2	7.73	0.8
A0723	1.94	0.2	7.51	0.8
A0724	1.63	0.2	7.39	0.7
A0725	1.81	0.1	7.64	0.8
A0726	2.24	0.2	7.53	0.7
A0727	2.48	0.2	7.54	0.7
A0728	1.47	0.1	7.34	0.7
A0729	2.77	0.3	7.67	0.8
A0730	1.96	0.2	7.16	0.7
A0731	2.03	0.4	7.05	0.7
A0732	1.81	0.3	7.04	0.7
A0733	1.47	0.3	7.26	0.7
A0734	0.32	<0.1	0.72	<0.1
A0735	1.46	0.3	7.15	0.7
A0736	0.85	0.2	9.26	0.8
A0737	1.02	0.3	10.1	0.9
A0738	0.93	0.3	9.81	0.8
A0739	0.93	0.5	10.6	1.0
A0740	0.32	1.1	6.92	0.6
A0741	0.72	0.7	11.0	1.0
A0742	1.17	1.2	7.79	0.7
A0743	0.75	0.5	7.33	0.7
A0744	0.30	0.2	6.66	0.5
A0745	0.28	0.1	7.89	0.6
A0746	0.26	0.1	7.51	0.6
A0747	0.25	0.1	7.75	0.6
A0748	0.28	0.1	6.85	0.5
A0749	1.25	1.1	6.05	0.7
A0750	0.54	0.2	7.42	0.7
A0751	0.52	0.2	8.30	0.8
A0752	0.56	0.1	12.5	1.2
A0753	0.64	0.2	13.4	1.3
A0754	0.76	0.2	10.7	1.0
A0755	0.67	<0.1	0.76	<0.1
A0756	0.69	0.2	11.2	1.1
A0757	0.85	0.6	13.1	1.2
A0758	0.68	0.2	10.9	1.1
A0759	0.51	0.3	9.25	0.8
A0760	0.55	0.2	11.0	1.0
A0761	0.66	0.1	12.2	1.1
A0762	0.32	1.0	7.04	0.6

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Element	U	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm
A0763	0.55	1.9	11.2	1.0
A0764	0.79	1.3	10.8	1.0
A0765	0.72	0.2	11.0	1.0
A0766	0.65	0.4	10.1	0.9
A0767	0.79	0.8	8.91	0.8
A0768	0.84	1.1	9.04	0.8
A0769	0.68	0.6	8.27	0.7
A0770	0.72	0.3	8.10	0.7
A0771	0.64	0.3	9.88	0.9
A0772	0.69	0.5	9.56	0.9
A0773	0.91	1.1	7.99	0.7
A0774	0.68	1.4	8.61	0.8
A0775	0.53	0.3	8.88	0.8
A0776	0.41	<0.1	0.79	<0.1
A0777	0.56	0.2	9.57	0.9
A0778	0.57	0.1	9.32	0.8
A0779	0.72	0.2	9.21	0.9
A0780	0.77	0.5	7.76	0.7

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# Certificate of Analysis

Work Order: TK110245

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 17, 2011

P.O. No. : 1S-0309/SQ-12B-102111-75-13  
Project No. : -  
No. Of Samples : 14  
Date Submitted : Oct 24, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests  
I.S. = Insufficient Sample  
-- = No result

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Element Method Det.Lim. Units	WtKg WGH79 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0781	0.080	1.00	1.18	20	121	0.69	32	3360	3.38	0.11
A0782	7.900	0.05	0.51	30	70	3.56	13	2370	3.79	0.34
A0783	7.800	0.03	0.76	30	63	2.65	10	3050	4.54	0.47
A0784	8.100	0.03	0.50	30	81	3.44	9	1850	4.29	0.34
A0785	7.700	0.02	0.39	30	75	3.05	65	1810	3.11	0.29
A0786	3.700	0.04	0.84	20	93	2.79	11	2080	3.22	0.48
A0787	3.800	0.03	0.52	30	78	2.71	68	2010	3.05	0.34
A0788	8.000	0.07	0.65	30	73	2.99	10	2260	3.57	0.43
A0789	7.900	0.05	0.44	30	61	3.01	65	2400	3.52	0.32
A0790	7.700	0.03	0.60	30	67	3.01	9	2080	3.66	0.41
A0791	8.300	0.05	0.39	30	52	3.03	70	2470	4.06	0.29
A0792	7.800	0.04	0.55	30	80	2.91	10	2180	2.83	0.42
A0793	8.300	0.07	0.45	40	71	2.78	64	2490	3.38	0.34
A0794	5.300	<0.01	0.03	40	16	>15	<1	21.1	0.44	0.02

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0781	8	0.58	414	0.08	32.1	750	0.51	32.6	0.12	53
A0782	1	0.32	419	0.04	10.7	880	>5	217	<0.01	11
A0783	1	0.37	226	0.03	7.4	970	>5	131	<0.01	10
A0784	1	0.29	154	0.03	5.9	810	>5	213	<0.01	11
A0785	1	0.35	88	0.03	4.8	840	>5	189	<0.01	13
A0786	2	0.56	189	0.06	5.6	1070	>5	113	0.01	24
A0787	2	0.49	154	0.04	4.8	930	>5	121	0.01	18
A0788	2	0.48	117	0.06	5.7	950	>5	195	0.01	22
A0789	2	0.46	114	0.04	4.9	930	>5	180	<0.01	15
A0790	<1	0.29	136	0.05	4.9	820	>5	192	<0.01	11
A0791	1	0.34	106	0.03	5.4	930	>5	209	<0.01	10
A0792	1	0.38	496	0.05	4.7	770	>5	210	0.01	17
A0793	1	0.48	244	0.04	4.4	1020	>5	195	0.01	17
A0794	1	12.3	203	<0.01	1.4	170	0.06	41.1	<0.01	1

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0781	60	9.3	1.49	13	0.3	0.53	0.57	10.6	8.1	0.41
A0782	634	2.2	1.26	5	0.2	2.18	4.00	18.7	34.6	1.58
A0783	11	2.4	0.80	<1	0.3	9.33	0.19	15.4	33.3	1.57
A0784	159	2.0	1.23	7	0.2	2.35	1.17	18.9	30.6	1.44
A0785	20	1.6	0.53	1	0.2	2.01	0.28	19.8	33.8	1.15
A0786	18	2.5	0.54	<1	0.4	3.32	0.22	21.6	25.5	1.59
A0787	16	2.2	0.59	<1	0.2	3.06	0.21	18.1	31.3	1.38
A0788	16	2.3	0.54	<1	0.3	1.55	0.13	20.9	34.8	1.62
A0789	13	1.9	0.59	1	0.3	2.75	0.17	19.1	32.1	1.75
A0790	12	2.0	0.61	16	0.3	2.23	0.24	18.9	38.4	1.38
A0791	9	2.0	0.60	1	0.2	5.27	0.19	17.9	41.6	1.07
A0792	24	2.1	1.10	10	0.3	2.51	0.36	19.9	25.7	1.17
A0793	21	2.0	0.77	<1	0.2	1.97	0.22	22.5	34.3	1.42
A0794	10	<0.5	<0.01	<1	<0.1	0.03	0.06	1.00	0.9	0.17

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0781	4.3	<0.1	0.31	0.11	0.04	5.0	0.09	313	0.51	20.9
A0782	1.5	<0.1	0.06	0.01	0.17	9.6	0.14	400	0.10	6.9
A0783	1.9	<0.1	0.06	<0.01	0.16	7.9	0.11	347	0.15	2.0
A0784	1.5	<0.1	<0.05	<0.01	0.15	9.9	0.11	581	0.09	40.9
A0785	1.3	<0.1	0.05	0.02	0.07	10.4	0.12	280	0.09	0.9
A0786	2.5	<0.1	0.08	0.03	0.08	10.7	0.14	414	0.18	1.5
A0787	1.7	<0.1	0.06	<0.01	0.07	9.0	0.14	446	0.09	1.5
A0788	2.2	<0.1	0.06	0.01	0.06	10.3	0.13	260	0.11	1.9
A0789	1.5	<0.1	<0.05	0.03	0.08	9.5	0.13	344	0.08	1.0
A0790	1.6	<0.1	<0.05	0.01	0.09	9.5	0.12	574	0.11	0.5
A0791	1.2	<0.1	<0.05	0.01	0.10	8.9	0.12	399	0.07	1.2
A0792	1.8	<0.1	0.05	0.02	0.08	9.8	0.12	583	0.10	6.2
A0793	1.5	<0.1	0.06	<0.01	0.07	11.3	0.15	383	0.10	2.1
A0794	<0.1	<0.1	<0.05	0.07	<0.02	0.5	0.01	6.53	0.08	0.5

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0781	4.2	2.67	4.8	<1	1.9	<0.05	0.27	0.21	1.1	0.09
A0782	12.5	0.18	2.0	2	0.4	<0.05	0.37	0.81	2.7	0.16
A0783	17.0	0.17	1.6	2	0.7	<0.05	0.30	2.77	3.2	0.19
A0784	11.5	1.70	1.9	2	0.5	<0.05	0.32	0.39	2.4	0.13
A0785	10.5	<0.05	2.6	2	<0.3	<0.05	0.35	0.52	2.7	0.12
A0786	18.6	0.40	3.3	2	0.6	<0.05	0.39	0.72	3.3	0.23
A0787	13.6	<0.05	2.9	2	0.3	<0.05	0.38	0.76	3.1	0.17
A0788	16.9	<0.05	2.9	2	0.4	<0.05	0.38	0.33	3.4	0.20
A0789	12.6	0.07	2.5	2	0.3	<0.05	0.37	0.59	3.0	0.16
A0790	12.5	0.10	2.2	2	0.5	<0.05	0.34	0.51	2.5	0.15
A0791	10.1	<0.05	1.9	2	0.3	<0.05	0.35	0.81	3.0	0.12
A0792	15.2	0.24	2.6	1	0.8	<0.05	0.35	0.59	3.4	0.18
A0793	13.6	<0.05	2.7	2	0.5	<0.05	0.38	0.39	3.6	0.17
A0794	1.0	<0.05	0.3	<1	<0.3	<0.05	0.03	<0.05	<0.1	<0.02

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Final : TK110245 Order: 1S-0309/SQ-12B-102111-75-13

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Element	U	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm
A0781	0.36	1.0	7.47	0.7
A0782	0.79	0.4	9.91	0.9
A0783	0.90	0.8	7.96	0.7
A0784	0.73	0.7	8.92	0.8
A0785	0.67	0.2	9.35	0.8
A0786	0.77	0.5	10.3	0.9
A0787	0.65	0.5	10.1	0.9
A0788	0.71	0.6	10.1	0.9
A0789	0.93	0.4	10.1	0.9
A0790	0.75	0.4	8.89	0.8
A0791	0.86	1.7	8.99	0.9
A0792	0.69	0.6	9.25	0.8
A0793	0.77	0.3	10.2	1.0
A0794	0.44	<0.1	0.79	<0.1

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## Certificate of Analysis

Work Order: TK110251

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 29, 2011

P.O. No. : 1S-0310/SQ-13B-102511-57-13  
Project No. : -  
No. Of Samples : 56  
Date Submitted : Oct 26, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0795	7.600	0.04	0.57	50	52	3.50	58	2300	4.02	0.40
A0796	7.900	0.02	0.58	50	51	3.86	53	2310	3.82	0.41
A0797	7.900	0.05	0.60	50	50	3.07	58	2520	5.08	0.44
A0798	7.700	0.06	0.53	40	56	2.87	90	2740	4.12	0.39
A0799	7.700	0.02	0.47	50	61	3.07	57	1620	3.78	0.36
A0800	7.500	0.03	0.47	40	55	4.18	74	1490	3.22	0.35
A0801	6.900	0.01	0.48	40	69	3.08	76	1600	2.78	0.35
A0802	7.300	0.01	0.43	40	95	3.39	69	1540	1.94	0.31
A0803	7.300	0.03	0.39	40	59	4.39	68	1780	2.83	0.31
A0804	7.300	0.02	0.39	40	60	3.33	89	2050	2.50	0.29
A0805	0.130	1.12	1.23	50	123	0.65	31	3540	3.46	0.12
A0806	8.100	0.04	0.44	40	64	2.96	72	1690	2.30	0.32
A0807	7.800	0.04	0.46	40	92	3.17	80	1360	1.79	0.32
A0808	8.000	0.02	0.49	40	72	2.71	73	1570	2.76	0.35
A0809	8.000	0.02	0.48	50	67	3.41	68	1550	3.24	0.35
A0810	3.700	0.04	0.48	40	82	3.38	70	1770	2.36	0.35
A0811	3.700	0.02	0.48	50	77	3.67	66	1850	2.33	0.34
A0812	7.900	0.02	0.42	40	68	3.46	72	1350	2.28	0.30
A0813	6.400	<0.01	0.03	50	14	>15	3	4.2	0.48	0.02
A0814	8.200	0.02	0.48	50	39	2.74	62	1300	5.26	0.37
A0815	7.900	0.02	0.39	40	62	3.15	64	1620	2.48	0.31
A0816	7.900	0.02	0.38	40	48	3.05	82	2370	4.03	0.30
A0817	8.000	0.01	0.45	40	76	2.61	71	1680	3.13	0.34
A0818	7.900	0.05	0.46	40	60	3.70	74	2340	3.11	0.31
A0819	7.700	0.02	0.56	40	78	3.52	66	2080	2.42	0.33
A0820	0.120	1.04	1.24	50	125	0.69	32	3400	3.48	0.12
A0821	8.000	0.02	0.58	50	77	4.14	65	1750	2.41	0.32
A0822	7.900	0.02	0.45	40	66	3.08	80	1470	3.49	0.33
A0823	8.000	0.02	0.39	50	59	5.99	66	1690	3.89	0.30
A0824	7.800	0.02	0.47	40	65	3.82	79	1340	2.42	0.35
A0825	8.000	0.02	0.53	40	64	3.37	66	1470	3.50	0.36
A0826	7.500	0.02	0.51	40	57	3.51	65	1730	3.31	0.35
A0827	7.300	0.02	0.42	50	38	3.94	71	2020	5.42	0.32
A0828	3.400	0.01	0.58	50	83	3.39	63	1520	2.71	0.39
A0829	3.400	0.01	0.60	40	79	3.25	65	1410	2.77	0.40
A0830	7.600	0.01	0.60	40	53	2.79	85	1760	4.31	0.43
A0831	7.700	0.01	0.49	50	37	1.92	84	1230	7.97	0.38
A0832	8.200	0.02	0.44	60	32	1.98	93	954	9.64	0.35
A0833	7.400	0.02	0.43	50	49	3.44	80	2660	3.69	0.34
A0834	6.500	<0.01	0.02	50	26	>15	1	4.5	0.47	0.02
A0835	7.800	0.04	0.70	50	62	3.40	82	2510	4.05	0.48
A0836	7.400	0.02	0.47	40	63	3.32	104	2140	3.00	0.35
A0837	8.000	<0.01	0.49	40	61	2.78	90	1340	3.16	0.36

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0838	7.500	0.03	0.49	40	100	2.35	94	1990	2.83	0.37
A0839	8.000	0.04	0.45	50	63	2.59	100	2590	3.39	0.34
A0840	7.500	0.02	0.50	40	91	3.04	89	1560	2.33	0.37
A0841	7.600	0.04	0.63	50	75	2.46	75	2420	3.22	0.42
A0842	0.130	1.02	1.30	50	124	0.70	32	3560	3.42	0.12
A0843	8.000	0.03	0.62	50	63	3.27	90	1270	3.84	0.44
A0844	7.800	<0.01	0.61	50	74	3.10	74	1390	3.04	0.45
A0845	7.300	0.03	0.75	50	76	3.03	82	1590	3.01	0.52
A0846	7.700	0.04	0.66	50	68	3.15	92	1720	3.56	0.45
A0847	7.100	0.03	0.62	50	39	3.23	105	2070	5.97	0.42
A0848	3.400	0.03	0.64	40	68	4.13	79	2060	3.13	0.44
A0849	3.500	0.03	0.73	60	70	3.84	103	1680	3.32	0.48
A0850	7.100	0.02	0.67	50	61	2.60	84	1230	4.23	0.47

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0795	2	0.50	120	0.05	5.0	850	>5	225	0.01	23
A0796	2	0.35	220	0.04	4.1	900	>5	266	<0.01	17
A0797	1	0.34	333	0.04	4.6	790	>5	192	<0.01	16
A0798	2	0.34	395	0.04	4.4	760	>5	166	<0.01	15
A0799	1	0.23	925	0.03	2.2	910	>5	213	<0.01	7
A0800	1	0.30	386	0.04	2.6	940	>5	258	<0.01	11
A0801	1	0.30	256	0.05	2.6	850	>5	210	<0.01	11
A0802	1	0.32	904	0.05	2.3	800	>5	236	<0.01	8
A0803	<1	0.26	1090	0.04	2.9	720	>5	382	<0.01	7
A0804	1	0.35	1250	0.04	3.0	710	>5	228	<0.01	8
A0805	9	0.57	462	0.09	29.4	480	0.48	36.0	0.11	56
A0806	<1	0.34	151	0.04	2.2	860	>5	204	<0.01	9
A0807	1	0.39	116	0.06	2.5	880	4.45	208	<0.01	12
A0808	1	0.32	101	0.04	2.4	850	>5	214	<0.01	8
A0809	1	0.22	86	0.03	2.0	770	>5	275	<0.01	9
A0810	2	0.33	133	0.04	2.6	910	>5	230	<0.01	10
A0811	2	0.34	134	0.05	2.4	960	>5	243	<0.01	11
A0812	1	0.31	196	0.04	2.2	910	>5	209	<0.01	8
A0813	<1	13.0	237	0.01	1.2	160	<0.01	43.1	<0.01	1
A0814	<1	0.11	202	0.02	1.8	790	>5	220	<0.01	7
A0815	<1	0.31	254	0.04	1.8	750	>5	200	<0.01	8
A0816	<1	0.28	159	0.04	3.0	770	>5	206	<0.01	8
A0817	1	0.32	158	0.04	2.3	900	>5	203	<0.01	7
A0818	2	0.34	138	0.05	3.0	890	>5	253	<0.01	13
A0819	2	0.44	142	0.04	2.1	890	>5	246	<0.01	15
A0820	9	0.58	469	0.09	30.3	490	0.48	36.8	0.12	57
A0821	3	0.48	176	0.05	2.2	1110	>5	263	<0.01	18
A0822	1	0.22	139	0.04	2.5	840	>5	251	<0.01	9
A0823	1	0.18	127	0.03	2.9	730	>5	426	<0.01	9
A0824	1	0.32	212	0.04	2.6	760	>5	265	<0.01	11
A0825	2	0.37	162	0.04	2.6	870	>5	250	<0.01	13
A0826	1	0.29	254	0.03	2.3	820	>5	297	<0.01	9
A0827	1	0.19	201	0.03	2.8	650	>5	319	<0.01	13
A0828	3	0.39	234	0.04	2.6	760	>5	270	<0.01	14
A0829	3	0.39	230	0.04	2.4	760	>5	259	<0.01	13
A0830	2	0.32	166	0.03	3.9	870	>5	198	<0.01	13
A0831	1	0.15	105	0.02	5.0	800	>5	158	<0.01	10
A0832	<1	0.11	51	0.02	4.4	770	>5	155	<0.01	10
A0833	1	0.25	108	0.04	5.4	800	>5	228	<0.01	11
A0834	<1	12.9	226	<0.01	1.2	170	<0.01	42.0	<0.01	1
A0835	2	0.49	107	0.05	6.8	850	>5	219	0.01	21
A0836	1	0.32	156	0.04	3.9	720	>5	205	<0.01	14
A0837	<1	0.27	196	0.04	2.5	750	>5	210	<0.01	8

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0838	<1	0.38	169	0.05	2.9	760	>5	155	<0.01	12
A0839	1	0.32	173	0.05	3.5	740	>5	181	<0.01	11
A0840	1	0.33	182	0.05	2.6	740	>5	216	<0.01	12
A0841	2	0.50	163	0.05	3.4	950	>5	183	0.01	20
A0842	9	0.59	478	0.09	28.4	500	0.49	37.3	0.13	59
A0843	1	0.35	105	0.04	4.8	800	>5	250	<0.01	18
A0844	2	0.49	116	0.05	4.9	910	>5	202	0.02	27
A0845	2	0.51	109	0.05	5.5	970	>5	207	0.02	30
A0846	2	0.44	197	0.05	5.1	920	>5	181	<0.01	19
A0847	<1	0.32	175	0.04	5.0	750	>5	213	<0.01	15
A0848	2	0.39	196	0.05	4.2	870	>5	254	<0.01	21
A0849	1	0.40	196	0.05	3.9	830	>5	241	<0.01	20
A0850	2	0.35	234	0.04	4.9	800	>5	217	<0.01	16

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0795	26	2.4	0.64	2	0.3	1.78	0.26	24.2	33.9	1.48
A0796	20	2.1	0.59	1	0.3	1.98	0.23	23.9	31.4	1.49
A0797	55	2.4	0.96	2	0.4	5.00	0.42	22.4	26.3	1.71
A0798	29	2.0	0.79	4	0.3	6.13	0.30	23.1	17.9	1.65
A0799	447	2.0	1.13	61	0.3	3.94	2.42	20.3	15.3	1.47
A0800	29	1.7	0.66	37	0.3	4.83	0.25	22.7	16.8	1.44
A0801	29	1.4	0.55	43	0.3	7.08	0.24	19.2	19.7	1.22
A0802	50	1.2	0.72	110	0.2	3.96	0.40	21.4	14.6	1.60
A0803	1220	1.4	1.94	164	0.3	2.44	7.13	18.3	16.6	1.43
A0804	84	1.5	1.49	108	0.3	4.56	0.74	16.8	13.5	1.70
A0805	54	9.2	1.56	13	0.2	0.55	0.50	10.8	7.3	0.36
A0806	12	1.4	0.39	2	0.3	1.84	0.20	18.6	13.1	1.19
A0807	19	1.3	0.34	<1	0.3	0.88	0.19	23.0	14.2	1.40
A0808	17	1.6	0.42	<1	0.3	2.27	0.13	18.8	15.9	1.00
A0809	18	1.7	0.39	1	0.2	3.42	0.24	20.3	13.4	0.83
A0810	21	1.4	0.46	<1	0.2	1.10	0.17	21.7	18.4	0.99
A0811	22	1.4	0.45	<1	0.2	0.94	0.17	22.8	20.4	0.98
A0812	18	1.3	0.40	2	0.2	2.57	0.16	18.3	16.1	1.13
A0813	12	<0.5	<0.01	<1	<0.1	0.02	0.06	1.07	0.7	0.12
A0814	46	2.2	1.30	14	0.2	7.06	0.42	15.1	17.0	0.61
A0815	16	1.4	0.63	4	0.2	3.12	0.25	16.7	18.6	0.86
A0816	15	1.9	1.05	17	0.2	3.72	0.17	17.2	24.3	0.83
A0817	16	1.7	0.52	8	0.3	2.37	0.12	16.6	23.0	0.88
A0818	17	1.8	0.71	4	0.2	0.83	0.20	24.7	27.0	1.06
A0819	18	1.5	0.49	2	0.2	4.89	0.19	32.3	17.2	0.97
A0820	57	9.5	1.57	13	0.3	0.55	0.49	11.4	7.2	0.37
A0821	19	1.6	0.44	2	0.2	0.90	0.20	36.4	19.1	0.91
A0822	26	1.9	0.45	5	0.3	1.51	0.29	21.5	25.7	0.73
A0823	10	1.8	0.56	3	0.2	4.71	0.20	29.7	24.1	0.78
A0824	18	1.5	0.40	<1	0.2	1.85	0.13	25.4	14.7	0.78
A0825	19	1.8	0.40	<1	0.3	1.04	0.18	22.5	19.3	0.79
A0826	17	1.8	0.52	1	0.2	1.28	0.17	21.4	19.1	0.53
A0827	115	2.4	1.14	<1	0.2	4.27	1.13	25.2	31.0	0.57
A0828	16	1.8	0.49	1	0.2	1.13	0.11	23.9	23.2	0.74
A0829	17	1.8	0.45	1	0.3	1.17	0.09	23.7	28.9	0.77
A0830	14	2.2	0.61	<1	0.3	2.67	0.10	17.2	23.6	0.85
A0831	14	3.5	0.57	2	0.2	6.44	0.14	11.7	26.8	0.79
A0832	14	3.9	0.76	2	0.2	4.48	0.17	14.2	28.4	0.67
A0833	14	1.9	0.57	1	0.2	1.44	0.14	23.4	30.1	0.72
A0834	11	<0.5	<0.01	<1	<0.1	0.05	0.06	1.01	0.7	0.12
A0835	16	2.3	0.61	1	0.3	1.06	0.19	22.0	33.7	1.13
A0836	16	1.9	0.61	3	0.2	1.09	0.25	21.4	25.2	1.01
A0837	808	1.7	0.69	8	0.2	1.24	4.91	16.1	16.1	1.00

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0838	16	1.7	0.49	2	0.3	0.72	0.11	20.4	22.8	1.08
A0839	22	2.0	0.75	2	0.3	1.19	0.29	22.6	25.8	1.04
A0840	95	1.7	0.56	<1	0.3	0.99	0.74	24.2	16.0	1.06
A0841	20	2.4	0.55	<1	0.3	1.53	0.20	20.2	23.7	1.08
A0842	55	10.0	1.56	13	0.3	0.56	0.47	11.9	7.3	0.39
A0843	13	2.5	0.35	<1	0.3	0.96	0.16	19.5	21.0	0.73
A0844	14	2.4	0.38	<1	0.3	0.74	0.17	21.9	22.6	0.92
A0845	15	2.5	0.38	<1	0.3	0.59	0.11	20.9	21.6	1.23
A0846	54	2.1	0.89	5	0.4	1.85	0.39	22.6	20.8	1.70
A0847	90	2.9	0.81	24	0.2	2.10	0.67	17.0	21.8	1.38
A0848	16	2.0	0.51	1	0.3	0.51	0.28	25.0	25.4	1.32
A0849	16	2.2	0.44	<1	0.3	0.53	0.22	25.5	22.8	1.25
A0850	271	2.5	0.64	1	0.3	1.27	1.68	16.3	28.7	1.03

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0795	1.7	<0.1	0.12	<0.01	0.07	12.2	0.15	332	0.13	3.8
A0796	1.6	<0.1	0.06	<0.01	0.06	11.8	0.15	308	0.08	1.9
A0797	1.5	<0.1	<0.05	0.01	0.07	11.0	0.13	280	0.07	12.8
A0798	1.4	<0.1	<0.05	0.01	0.08	11.1	0.13	620	0.06	4.4
A0799	1.0	<0.1	<0.05	0.03	0.07	10.0	0.13	345	<0.05	183
A0800	1.2	<0.1	<0.05	0.01	0.06	10.9	0.15	393	0.05	5.0
A0801	1.2	<0.1	<0.05	0.02	0.05	9.2	0.14	637	<0.05	5.2
A0802	1.0	<0.1	<0.05	0.03	0.05	10.4	0.15	408	<0.05	29.2
A0803	1.3	<0.1	<0.05	0.10	0.32	9.0	0.13	263	<0.05	273
A0804	0.9	<0.1	<0.05	0.04	0.07	8.0	0.13	493	<0.05	40.1
A0805	4.0	<0.1	0.28	0.08	0.04	5.2	0.09	332	0.35	22.7
A0806	1.0	<0.1	<0.05	<0.01	0.05	8.6	0.14	456	<0.05	2.6
A0807	1.3	<0.1	<0.05	<0.01	0.04	11.0	0.16	328	0.05	3.8
A0808	1.1	<0.1	<0.05	<0.01	0.05	9.6	0.12	220	<0.05	2.6
A0809	1.1	<0.1	<0.05	<0.01	0.05	10.3	0.11	483	<0.05	2.7
A0810	1.2	<0.1	<0.05	<0.01	0.05	10.9	0.13	213	<0.05	1.3
A0811	1.2	<0.1	<0.05	<0.01	0.06	11.3	0.14	314	<0.05	1.4
A0812	1.0	<0.1	<0.05	<0.01	0.05	9.2	0.14	230	<0.05	2.1
A0813	<0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	1.83	<0.05	0.9
A0814	0.9	<0.1	<0.05	<0.01	0.06	7.6	0.10	273	<0.05	15.2
A0815	0.9	<0.1	<0.05	<0.01	0.06	8.3	0.11	488	<0.05	1.8
A0816	0.9	<0.1	<0.05	<0.01	0.09	8.7	0.12	283	<0.05	1.9
A0817	1.0	<0.1	<0.05	<0.01	0.07	8.3	0.12	167	<0.05	2.5
A0818	1.3	<0.1	<0.05	<0.01	0.05	11.9	0.16	367	0.06	2.7
A0819	1.7	<0.1	<0.05	0.01	0.05	17.5	0.16	511	<0.05	4.8
A0820	4.1	<0.1	0.28	0.08	0.04	5.4	0.09	333	0.40	22.8
A0821	2.0	<0.1	<0.05	<0.01	0.04	19.0	0.21	483	0.06	2.8
A0822	1.0	<0.1	<0.05	<0.01	0.04	10.6	0.12	590	<0.05	4.3
A0823	1.0	<0.1	<0.05	<0.01	0.05	14.1	0.17	608	<0.05	3.1
A0824	1.2	<0.1	<0.05	<0.01	0.03	12.4	0.15	359	0.06	2.5
A0825	1.3	<0.1	<0.05	<0.01	0.04	11.0	0.15	440	0.06	2.3
A0826	1.1	<0.1	<0.05	<0.01	0.04	10.6	0.14	477	<0.05	3.0
A0827	1.0	<0.1	<0.05	<0.01	0.06	12.5	0.14	1230	<0.05	22.0
A0828	1.6	<0.1	<0.05	<0.01	0.04	12.1	0.14	263	<0.05	2.9
A0829	1.6	<0.1	<0.05	<0.01	0.03	12.0	0.14	207	<0.05	2.8
A0830	1.6	<0.1	<0.05	<0.01	0.04	8.4	0.12	258	<0.05	2.7
A0831	1.2	<0.1	<0.05	<0.01	0.03	5.8	0.08	266	<0.05	5.0
A0832	1.1	<0.1	<0.05	<0.01	0.02	7.1	0.08	336	<0.05	3.0
A0833	1.2	<0.1	<0.05	<0.01	0.06	12.0	0.13	367	<0.05	1.8
A0834	<0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.93	<0.05	1.0
A0835	2.0	<0.1	0.06	<0.01	0.05	11.0	0.13	372	0.08	1.5
A0836	1.2	<0.1	<0.05	<0.01	0.05	11.0	0.12	700	0.06	1.8
A0837	1.0	<0.1	<0.05	<0.01	0.11	8.1	0.10	340	<0.05	10.4

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0838	1.4	<0.1	<0.05	<0.01	0.04	10.2	0.12	204	<0.05	1.6
A0839	1.1	<0.1	<0.05	<0.01	0.06	11.7	0.12	564	<0.05	9.0
A0840	1.4	<0.1	<0.05	<0.01	0.03	12.4	0.13	521	<0.05	12.8
A0841	1.9	<0.1	<0.05	<0.01	0.05	9.7	0.14	510	0.06	2.2
A0842	4.2	<0.1	0.30	0.06	0.04	5.7	0.10	323	0.41	22.8
A0843	1.5	<0.1	<0.05	<0.01	0.03	9.4	0.12	506	0.06	2.4
A0844	1.8	<0.1	<0.05	<0.01	0.03	10.6	0.14	500	0.08	1.9
A0845	2.2	<0.1	0.05	<0.01	0.03	9.9	0.14	336	0.08	1.5
A0846	1.9	<0.1	<0.05	<0.01	0.09	10.6	0.15	326	<0.05	8.9
A0847	1.4	<0.1	<0.05	<0.01	0.06	8.2	0.11	480	<0.05	11.9
A0848	1.6	<0.1	<0.05	<0.01	0.03	11.9	0.15	924	0.06	2.1
A0849	1.6	<0.1	<0.05	<0.01	0.02	12.2	0.14	747	0.06	2.2
A0850	1.7	<0.1	0.06	<0.01	<0.02	8.3	0.11	165	<0.05	16.7

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Element Method Det.Lim. Units	Rb ICM14B	Sb ICM14B	Sc ICM14B	Se ICM14B	Sn ICM14B	Ta ICM14B	Tb ICM14B	Te ICM14B	Th ICM14B	Tl ICM14B
	0.2 ppm	0.05 ppm	0.1 ppm	1 ppm	0.3 ppm	0.05 ppm	0.02 ppm	0.05 ppm	0.1 ppm	0.02 ppm
A0795	15.6	<0.05	2.3	2	0.3	<0.05	0.44	0.40	3.7	0.19
A0796	14.9	<0.05	1.6	2	0.5	<0.05	0.41	0.37	3.4	0.18
A0797	16.3	<0.05	1.5	2	0.5	<0.05	0.37	0.66	3.2	0.20
A0798	15.2	0.07	1.4	1	0.4	<0.05	0.36	0.46	3.2	0.19
A0799	11.3	2.06	0.7	1	0.4	<0.05	0.35	0.47	3.7	0.16
A0800	11.9	0.15	1.1	1	0.4	<0.05	0.45	0.87	3.4	0.17
A0801	11.3	0.32	1.0	1	0.3	<0.05	0.39	0.32	3.4	0.16
A0802	9.6	1.69	0.9	1	<0.3	<0.05	0.38	0.37	3.4	0.16
A0803	9.3	2.91	0.8	2	0.3	<0.05	0.36	0.62	2.8	0.21
A0804	8.3	2.19	0.9	1	0.3	<0.05	0.35	0.68	2.3	0.14
A0805	4.2	2.45	4.0	1	1.8	<0.05	0.26	0.19	1.1	0.09
A0806	9.3	<0.05	0.9	1	<0.3	<0.05	0.39	0.20	2.8	0.13
A0807	9.8	<0.05	1.4	<1	<0.3	<0.05	0.42	0.12	3.5	0.13
A0808	9.6	<0.05	0.9	1	<0.3	<0.05	0.34	0.28	3.5	0.12
A0809	9.7	<0.05	0.8	1	0.4	<0.05	0.35	0.52	3.4	0.12
A0810	10.4	<0.05	1.2	1	<0.3	<0.05	0.37	0.16	3.4	0.13
A0811	10.3	<0.05	1.3	1	<0.3	<0.05	0.39	0.16	3.4	0.13
A0812	8.9	<0.05	1.1	1	<0.3	<0.05	0.37	0.22	3.2	0.12
A0813	0.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0814	9.8	1.12	0.4	1	0.4	<0.05	0.30	0.89	2.3	0.12
A0815	8.9	0.07	1.0	1	<0.3	<0.05	0.33	0.27	3.1	0.12
A0816	8.7	0.33	0.8	2	<0.3	<0.05	0.33	0.24	2.6	0.11
A0817	10.1	0.18	0.7	2	<0.3	<0.05	0.32	0.25	3.6	0.13
A0818	9.4	0.23	1.1	2	<0.3	<0.05	0.44	0.11	3.6	0.13
A0819	10.7	<0.05	1.3	1	<0.3	<0.05	0.46	0.11	4.0	0.13
A0820	4.2	2.51	4.1	1	1.9	<0.05	0.26	0.19	1.2	0.10
A0821	11.0	<0.05	1.5	1	<0.3	<0.05	0.60	0.08	3.8	0.14
A0822	9.1	0.12	0.7	2	<0.3	<0.05	0.36	0.17	3.6	0.12
A0823	8.5	0.26	0.5	2	0.4	<0.05	0.60	0.25	2.8	0.10
A0824	11.6	<0.05	1.2	1	<0.3	<0.05	0.46	0.13	3.3	0.14
A0825	11.4	<0.05	1.1	2	<0.3	<0.05	0.43	0.12	3.7	0.15
A0826	9.2	0.07	0.7	2	<0.3	<0.05	0.41	0.17	3.6	0.12
A0827	9.3	<0.05	0.5	2	0.4	<0.05	0.45	0.46	3.3	0.11
A0828	13.2	0.14	1.4	1	0.4	<0.05	0.43	0.13	3.5	0.16
A0829	13.6	0.11	1.4	1	<0.3	<0.05	0.41	0.11	3.4	0.16
A0830	15.3	<0.05	1.3	2	0.4	<0.05	0.34	0.29	3.7	0.17
A0831	12.7	<0.05	0.6	2	0.4	<0.05	0.23	0.86	3.1	0.14
A0832	10.8	<0.05	0.5	2	0.4	<0.05	0.25	0.72	2.6	0.11
A0833	11.7	<0.05	1.0	2	<0.3	<0.05	0.38	0.17	3.1	0.13
A0834	0.7	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	0.1	<0.02
A0835	16.6	<0.05	2.2	2	0.4	<0.05	0.41	0.19	3.0	0.19
A0836	10.8	<0.05	1.4	2	0.3	<0.05	0.36	0.17	2.9	0.13
A0837	10.0	<0.05	0.9	1	<0.3	<0.05	0.28	0.21	3.0	0.12

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0838	11.1	<0.05	1.6	1	<0.3	<0.05	0.32	0.11	3.6	0.13
A0839	10.4	<0.05	1.1	2	0.4	<0.05	0.35	0.21	3.4	0.12
A0840	12.0	<0.05	1.3	1	<0.3	<0.05	0.39	0.18	3.4	0.14
A0841	15.3	<0.05	2.1	1	0.4	<0.05	0.38	0.38	3.9	0.18
A0842	4.5	2.22	4.3	1	1.8	<0.05	0.28	0.18	1.2	0.09
A0843	14.3	<0.05	1.7	1	0.3	<0.05	0.37	0.20	3.4	0.16
A0844	17.5	<0.05	2.6	1	0.3	<0.05	0.40	0.13	3.6	0.20
A0845	19.7	<0.05	2.9	1	0.4	<0.05	0.41	0.10	3.8	0.22
A0846	17.8	<0.05	2.3	1	0.4	<0.05	0.43	0.28	3.2	0.20
A0847	13.9	0.24	1.4	2	0.5	<0.05	0.34	0.39	2.5	0.15
A0848	14.8	<0.05	2.2	2	0.7	<0.05	0.48	0.09	3.1	0.17
A0849	14.9	<0.05	2.2	2	0.6	<0.05	0.46	0.10	3.4	0.17
A0850	17.0	<0.05	1.8	2	0.4	<0.05	0.32	0.21	3.3	0.17

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm
A0795	0.75	0.3	11.4	1.1
A0796	0.85	1.2	11.0	1.1
A0797	1.27	1.9	9.71	0.9
A0798	1.02	1.2	9.62	0.9
A0799	0.94	0.7	9.38	0.9
A0800	0.91	0.6	12.4	1.1
A0801	0.79	1.0	10.9	1.0
A0802	0.80	0.4	10.8	1.0
A0803	0.93	0.5	10.4	0.9
A0804	0.79	0.5	9.75	0.9
A0805	0.36	0.9	7.24	0.6
A0806	0.93	1.1	10.5	1.0
A0807	0.80	0.2	11.9	1.1
A0808	0.91	0.4	9.06	0.9
A0809	0.74	0.5	9.29	0.8
A0810	0.84	0.3	10.0	0.9
A0811	0.82	0.3	10.8	1.0
A0812	0.68	0.4	10.6	1.0
A0813	0.44	<0.1	0.75	<0.1
A0814	0.55	0.6	7.66	0.7
A0815	0.73	0.4	8.88	0.8
A0816	0.70	0.5	8.60	0.8
A0817	0.91	0.4	8.65	0.9
A0818	0.87	0.3	11.9	1.2
A0819	0.96	0.4	12.2	1.2
A0820	0.39	1.0	7.51	0.7
A0821	0.99	0.3	15.8	1.4
A0822	0.82	0.4	9.27	0.9
A0823	0.84	0.6	15.1	1.3
A0824	0.76	0.5	12.3	1.1
A0825	0.90	0.4	11.9	1.1
A0826	0.90	0.4	10.9	1.0
A0827	1.34	0.8	11.8	1.0
A0828	1.39	0.7	11.3	1.0
A0829	1.47	0.7	10.8	1.0
A0830	0.89	0.7	9.33	0.9
A0831	0.90	3.9	6.16	0.6
A0832	0.89	1.2	6.31	0.6
A0833	0.81	0.6	10.1	0.9
A0834	0.42	0.4	0.74	<0.1
A0835	0.69	0.6	10.9	0.9
A0836	0.87	0.8	9.81	0.9
A0837	0.85	0.6	7.55	0.7

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Final : TK110251 Order: 1S-0310/SQ-13B-102511-57-13

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Element	U	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm
A0838	1.10	0.4	8.64	0.8
A0839	1.20	0.8	8.96	0.9
A0840	1.12	0.4	10.4	0.9
A0841	1.14	0.5	10.4	1.0
A0842	0.37	1.0	7.73	0.7
A0843	0.80	0.6	9.86	0.8
A0844	0.88	0.6	10.8	1.0
A0845	0.83	0.5	11.0	1.0
A0846	0.80	0.9	11.4	1.1
A0847	0.78	1.6	8.49	0.8
A0848	0.79	0.5	12.8	1.1
A0849	0.74	0.6	12.2	1.0
A0850	0.85	1.2	8.94	0.8

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## Certificate of Analysis

Work Order: TK110252

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Nov 25, 2011

P.O. No. : 1S-0311/SQ-15B-102511-42-9,10,11  
Project No. : -  
No. Of Samples : 42  
Date Submitted : Oct 25, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

### Distribution of unused material:

Store:

### Comments:

Preparation of samples was performed off site.  
Boron value are informational only.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0381	10.100	0.03	0.50	80	35	0.37	61	79.2	8.07	0.35
A0382	7.400	0.02	0.53	70	57	0.22	59	36.5	5.27	0.36
A0383	7.400	0.03	0.57	80	52	0.26	46	42.6	5.64	0.37
A0384	7.900	0.01	0.62	70	43	0.21	66	42.3	6.62	0.40
A0385	3.400	<0.01	0.54	70	48	0.34	69	41.3	5.12	0.35
A0386	3.500	0.01	0.52	70	44	0.37	47	43.2	5.47	0.34
A0387	7.100	<0.01	0.46	80	28	0.25	67	39.0	8.15	0.28
A0388	7.400	0.03	0.48	70	26	0.28	55	113	6.89	0.31
A0389	7.100	0.03	0.54	70	44	0.17	97	151	5.38	0.36
A0390	8.100	0.08	0.43	70	54	0.17	72	219	5.49	0.29
A0391	7.100	0.05	0.48	60	52	0.13	76	73.2	4.93	0.32
A0392	7.200	<0.01	0.04	60	15	>15	3	0.6	0.49	0.02
A0393	7.400	0.03	0.55	70	42	0.12	64	57.1	5.76	0.36
A0394	7.600	0.03	0.48	70	43	0.08	52	72.8	5.57	0.33
A0395	7.300	0.03	0.54	70	46	0.13	53	324	4.88	0.34
A0396	7.700	0.03	0.56	70	43	0.17	71	43.4	5.20	0.35
A0397	7.900	0.02	0.50	70	61	0.20	56	47.9	4.49	0.32
A0398	0.075	0.99	1.18	70	122	0.72	33	3480	3.42	0.11
A0399	8.000	0.01	0.53	70	50	0.24	56	34.4	5.10	0.34
A0400	8.000	0.02	0.45	70	56	0.27	63	31.1	4.87	0.29
A0412	2.800	0.24	0.26	110	<5	0.02	123	157	>15	0.15
A0413	1.600	0.50	0.38	90	6	0.04	83	91.6	>15	0.18
A0414	5.800	0.03	0.55	60	44	0.04	59	53.4	6.04	0.33
A0415	0.570	0.80	0.23	90	18	1.51	87	>10000	>15	0.09
A0416	7.100	0.05	0.69	80	75	1.20	104	153	6.11	0.42
A0417	7.300	0.03	0.62	70	51	1.14	67	179	6.19	0.27
A0418	7.100	0.09	0.64	60	43	0.72	98	103	7.43	0.32
A0419	7.100	0.03	0.58	60	54	0.72	82	57.4	6.11	0.31
A0420	0.075	1.07	1.17	70	124	0.70	33	3390	3.35	0.11
A0421	7.200	0.02	0.66	70	56	2.00	87	146	5.56	0.25
A0422	7.100	0.03	0.64	50	65	2.39	84	95.8	4.41	0.17
A0423	7.200	0.05	0.64	50	58	1.24	98	132	5.17	0.21
A0424	6.900	0.04	0.46	60	31	0.63	66	70.3	6.54	0.28
A0425	6.800	0.05	0.58	60	36	1.55	91	93.0	6.59	0.26
A0426	3.700	2.86	0.48	80	19	0.71	92	1120	11.3	0.29
A0427	3.600	1.49	0.56	80	25	0.75	77	1250	10.9	0.33
A0428	7.500	0.14	0.58	70	52	2.04	65	606	6.64	0.35
A0429	7.200	0.04	0.62	60	63	2.51	55	228	4.58	0.30
A0430	6.900	0.04	0.59	70	36	1.29	77	40.2	7.76	0.37
A0431	5.400	<0.01	0.04	60	14	>15	4	4.2	0.51	0.03
A0432	7.000	0.03	0.65	70	60	2.11	68	81.0	5.90	0.37
A0433	7.000	0.04	0.53	70	57	2.35	61	30.9	4.70	0.26

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0381	<1	0.12	325	0.02	5.4	740	>5	15.3	<0.01	9
A0382	<1	0.04	44	0.02	4.7	920	>5	13.4	<0.01	7
A0383	<1	0.05	91	0.03	4.1	1040	>5	12.7	<0.01	7
A0384	2	0.04	57	0.03	4.8	920	>5	16.4	<0.01	8
A0385	2	0.08	306	0.03	4.3	940	>5	12.2	<0.01	7
A0386	1	0.09	366	0.03	3.9	1010	>5	11.7	<0.01	7
A0387	3	0.06	161	0.03	2.9	890	>5	17.6	<0.01	8
A0388	2	0.05	172	0.03	3.9	990	>5	20.6	<0.01	8
A0389	1	0.04	181	0.03	4.9	710	>5	16.3	<0.01	7
A0390	<1	0.04	604	0.02	4.0	480	>5	33.4	<0.01	8
A0391	<1	0.04	89	0.02	4.4	470	>5	35.5	<0.01	6
A0392	<1	12.8	227	0.01	1.3	190	<0.01	42.1	<0.01	1
A0393	<1	0.04	41	0.03	5.4	340	>5	37.8	<0.01	7
A0394	<1	0.03	17	0.02	5.1	340	>5	37.3	<0.01	7
A0395	1	0.03	23	0.03	5.1	560	>5	54.9	<0.01	6
A0396	2	0.03	24	0.03	6.4	800	>5	16.4	<0.01	8
A0397	1	0.05	54	0.03	5.4	830	>5	13.8	<0.01	6
A0398	9	0.58	452	0.09	31.3	520	0.47	34.8	0.12	55
A0399	<1	0.05	89	0.03	6.3	950	>5	17.0	<0.01	7
A0400	2	0.06	179	0.03	6.1	860	>5	26.1	<0.01	6
A0412	<1	0.03	12	0.01	2.7	170	>5	68.5	<0.01	15
A0413	<1	0.03	9	0.02	5.0	460	>5	249	<0.01	14
A0414	2	0.04	9	0.02	4.6	280	>5	155	<0.01	8
A0415	<1	0.39	6130	0.02	<0.5	1130	>5	110	<0.01	14
A0416	<1	0.47	621	0.04	2.6	1150	>5	21.5	<0.01	10
A0417	12	0.41	475	0.05	5.2	1480	>5	20.4	<0.01	16
A0418	8	0.25	480	0.05	5.8	1490	>5	18.4	<0.01	15
A0419	6	0.22	268	0.04	5.5	1530	>5	16.1	<0.01	14
A0420	9	0.63	449	0.09	32.1	530	0.48	34.6	0.12	56
A0421	7	0.69	547	0.05	6.0	1520	>5	26.4	<0.01	20
A0422	4	0.75	448	0.04	5.4	1600	>5	28.4	<0.01	27
A0423	4	0.42	1360	0.05	5.5	1470	>5	22.4	<0.01	26
A0424	<1	0.15	557	0.03	5.2	1320	>5	19.7	<0.01	13
A0425	2	0.30	709	0.05	5.9	1450	>5	23.1	<0.01	18
A0426	<1	0.09	114	0.03	3.5	1300	>5	11.0	<0.01	12
A0427	<1	0.09	114	0.03	2.9	1350	>5	11.8	<0.01	13
A0428	1	0.18	190	0.04	2.3	900	>5	18.2	<0.01	9
A0429	4	0.35	286	0.04	4.5	1410	>5	22.5	<0.01	15
A0430	2	0.05	163	0.03	5.2	1380	>5	14.6	<0.01	13
A0431	<1	13.3	229	0.01	1.2	190	0.01	42.6	<0.01	1
A0432	4	0.07	241	0.03	5.0	1530	>5	16.0	<0.01	14
A0433	4	0.09	641	0.03	2.7	1100	>5	16.1	<0.01	10

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0381	12	6.6	0.15	36	0.2	1.26	0.11	14.5	14.9	0.64
A0382	46	5.6	0.07	8	0.2	0.62	0.15	10.6	10.5	0.70
A0383	175	5.9	0.14	8	0.2	0.76	0.45	11.1	10.3	0.57
A0384	13	5.8	0.06	10	0.2	0.51	0.07	8.11	12.4	0.79
A0385	10	5.0	0.04	7	0.2	0.39	0.05	9.53	10.0	0.65
A0386	13	5.4	0.04	9	0.2	0.36	0.06	9.30	10.2	0.66
A0387	8	5.9	0.05	16	0.2	0.42	0.06	7.43	15.9	0.91
A0388	319	6.9	0.66	58	0.2	1.34	1.14	5.73	15.6	1.43
A0389	1050	5.9	0.87	60	0.2	1.37	3.47	7.85	12.4	1.76
A0390	1120	6.6	1.48	106	0.2	2.79	4.37	6.49	12.7	2.32
A0391	49	5.0	0.11	54	0.2	0.43	0.23	4.14	13.8	0.68
A0392	14	<0.5	0.01	<1	<0.1	0.03	0.06	0.94	0.8	0.25
A0393	66	4.8	0.10	19	0.2	0.39	0.35	3.79	13.8	0.64
A0394	80	5.1	0.10	30	0.2	0.43	0.40	4.31	15.1	0.64
A0395	53	4.6	0.07	99	0.2	0.37	0.30	5.62	15.3	0.62
A0396	9	5.2	0.04	11	0.2	0.40	0.06	10.3	16.6	0.67
A0397	8	5.1	0.03	9	0.2	0.37	0.05	7.59	12.5	0.62
A0398	59	9.9	1.94	12	0.3	0.54	0.49	10.9	7.5	0.40
A0399	9	5.5	0.04	10	0.2	0.33	0.04	7.62	13.0	0.49
A0400	11	5.2	0.03	6	0.2	0.41	0.05	5.15	15.8	0.98
A0412	65	12.7	0.69	73	<0.1	16.0	0.61	3.26	7.6	1.78
A0413	361	14.2	1.54	215	<0.1	8.21	2.82	3.44	9.4	3.80
A0414	44	5.5	0.26	21	0.1	1.19	0.22	6.89	9.9	0.76
A0415	>10000	11.1	>10	7110	0.1	1490	260	4.90	1.9	1.74
A0416	120	8.2	0.81	91	0.3	2.83	0.66	15.3	4.8	1.70
A0417	103	5.9	0.23	23	0.4	2.24	0.65	8.53	18.4	2.29
A0418	113	6.2	1.99	30	0.3	5.89	0.62	13.7	16.4	2.26
A0419	33	5.5	0.19	8	0.3	2.04	0.13	11.8	16.0	2.56
A0420	61	10.1	1.48	13	0.2	0.55	0.52	10.7	7.8	0.39
A0421	59	5.7	0.18	6	0.3	2.03	0.17	9.88	17.6	2.52
A0422	78	5.8	0.25	5	0.4	1.82	0.18	7.66	17.0	2.65
A0423	66	5.2	0.14	6	0.4	1.71	0.14	8.40	14.8	2.61
A0424	212	5.0	1.21	16	0.3	1.78	1.07	6.33	15.3	1.92
A0425	172	5.7	0.88	14	0.4	3.09	0.99	7.39	21.6	2.01
A0426	37	7.5	2.79	97	0.2	7.54	0.26	7.85	13.8	1.13
A0427	31	7.2	3.73	73	0.2	5.93	0.24	8.75	13.0	1.27
A0428	22	6.4	0.33	13	0.2	2.17	0.15	9.45	12.7	1.57
A0429	37	5.3	0.13	39	0.3	2.04	0.13	8.24	14.1	1.75
A0430	18	6.1	0.23	20	0.3	2.65	0.15	9.87	14.8	1.75
A0431	15	<0.5	0.01	<1	<0.1	0.05	0.07	0.99	0.8	0.22
A0432	24	5.7	0.14	20	0.3	1.92	0.12	10.7	14.2	1.78
A0433	42	8.1	0.19	13	0.3	3.17	0.16	7.87	10.3	1.57

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0381	1.0	<0.1	0.22	0.02	0.02	7.9	0.08	68.3	0.09	8.9
A0382	1.0	<0.1	0.19	0.04	<0.02	5.3	0.04	38.0	0.06	9.6
A0383	1.0	<0.1	0.19	0.04	0.03	5.5	0.04	20.9	0.07	25.7
A0384	1.0	<0.1	0.17	0.04	<0.02	4.1	0.03	31.3	<0.05	7.2
A0385	1.0	<0.1	0.17	0.04	<0.02	4.7	0.04	17.1	<0.05	2.9
A0386	0.9	<0.1	0.18	0.04	<0.02	4.6	0.04	32.5	<0.05	3.1
A0387	0.8	<0.1	0.15	0.07	<0.02	4.0	0.04	61.3	0.07	3.8
A0388	0.8	<0.1	0.18	0.05	0.06	2.9	0.04	44.5	<0.05	37.0
A0389	1.0	<0.1	0.13	0.05	0.09	4.3	0.03	109	0.05	154
A0390	0.9	<0.1	0.17	0.10	0.25	3.5	0.03	232	<0.05	215
A0391	0.9	<0.1	0.13	0.08	<0.02	2.2	0.02	66.6	<0.05	21.4
A0392	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.90	<0.05	1.5
A0393	0.9	<0.1	0.15	0.03	<0.02	2.0	0.03	60.2	<0.05	17.0
A0394	0.9	<0.1	0.15	0.03	0.02	2.3	0.02	71.2	<0.05	15.6
A0395	0.9	<0.1	0.13	0.11	<0.02	3.0	0.03	99.8	<0.05	3.7
A0396	1.0	<0.1	0.19	0.02	<0.02	6.1	0.03	155	0.09	3.0
A0397	0.9	<0.1	0.14	0.07	<0.02	4.0	0.03	36.4	<0.05	2.5
A0398	4.1	<0.1	0.30	0.11	0.04	5.2	0.09	316	0.49	21.2
A0399	0.8	<0.1	0.17	0.07	<0.02	4.0	0.04	26.5	<0.05	4.7
A0400	0.7	<0.1	0.15	0.05	<0.02	2.7	0.03	32.9	<0.05	3.3
A0412	0.6	0.3	0.09	0.27	0.04	1.4	<0.01	14.4	0.29	30.4
A0413	0.8	0.3	0.25	0.33	0.09	1.3	0.02	29.2	0.23	215
A0414	1.1	<0.1	0.12	0.09	0.05	3.5	0.03	11.7	<0.05	9.4
A0415	4.0	0.4	0.10	21.1	4.81	1.1	0.05	3.49	0.16	>10000
A0416	1.2	<0.1	0.18	0.16	0.06	8.1	0.04	14.2	<0.05	36.6
A0417	1.4	<0.1	0.15	0.07	0.07	3.6	0.04	4.34	<0.05	11.2
A0418	1.5	<0.1	0.14	0.07	0.04	6.0	0.05	8.01	<0.05	81.1
A0419	1.4	<0.1	0.16	0.03	0.03	5.3	0.04	8.07	<0.05	6.7
A0420	4.3	<0.1	0.31	0.09	0.04	5.2	0.09	333	0.49	22.7
A0421	1.5	<0.1	0.13	0.02	0.05	4.3	0.05	16.7	<0.05	5.7
A0422	1.7	<0.1	0.14	0.02	0.04	3.2	0.07	9.29	<0.05	10.2
A0423	1.5	<0.1	0.15	0.02	0.04	3.6	0.07	4.99	<0.05	4.2
A0424	1.3	<0.1	0.13	0.05	0.03	2.9	0.03	48.1	<0.05	137
A0425	1.4	<0.1	0.13	0.05	0.03	3.2	0.04	10.0	<0.05	44.4
A0426	1.2	<0.1	0.15	0.03	0.13	3.5	0.04	69.7	0.08	12.0
A0427	1.3	<0.1	0.15	0.05	0.12	4.0	0.04	83.7	0.06	10.2
A0428	1.1	<0.1	0.18	0.03	0.11	4.4	0.05	23.2	<0.05	3.7
A0429	1.4	<0.1	0.15	0.03	0.06	3.6	0.05	24.3	<0.05	2.7
A0430	1.5	<0.1	0.13	0.02	0.04	4.3	0.04	24.1	<0.05	6.2
A0431	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.77	0.07	1.1
A0432	1.6	<0.1	0.13	<0.01	0.05	4.7	0.05	11.6	<0.05	3.2
A0433	1.3	<0.1	0.22	<0.01	0.06	3.6	0.05	2.09	<0.05	6.7

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Element Method Det.Lim. Units	Rb ICM14B	Sb ICM14B	Sc ICM14B	Se ICM14B	Sn ICM14B	Ta ICM14B	Tb ICM14B	Te ICM14B	Th ICM14B	Tl ICM14B
	0.2 ppm	0.05 ppm	0.1 ppm	1 ppm	0.3 ppm	0.05 ppm	0.02 ppm	0.05 ppm	0.1 ppm	0.02 ppm
A0381	10.1	1.99	0.9	4	0.5	<0.05	0.27	0.41	2.3	0.46
A0382	9.8	0.69	0.6	2	0.4	<0.05	0.15	0.15	2.9	0.20
A0383	10.3	1.29	0.7	3	0.4	<0.05	0.16	0.18	3.4	0.19
A0384	10.7	0.97	0.7	3	<0.3	<0.05	0.13	0.19	2.5	0.22
A0385	10.1	0.62	0.8	2	<0.3	<0.05	0.16	0.07	2.7	0.22
A0386	9.6	0.68	0.8	2	<0.3	<0.05	0.16	0.08	2.6	0.25
A0387	8.9	0.97	0.7	4	0.3	<0.05	0.12	0.21	1.7	0.35
A0388	9.3	6.79	1.0	3	0.4	<0.05	0.13	0.57	1.9	0.44
A0389	10.9	7.65	0.7	2	0.4	<0.05	0.10	0.56	2.0	0.44
A0390	9.4	12.1	1.1	2	0.5	<0.05	0.10	0.91	1.4	1.00
A0391	9.5	3.55	0.7	3	<0.3	<0.05	0.07	0.23	1.0	1.70
A0392	1.3	0.07	0.3	<1	<0.3	<0.05	0.02	<0.05	0.1	<0.02
A0393	9.5	3.05	0.6	2	<0.3	<0.05	0.07	0.17	0.9	0.35
A0394	9.2	2.63	0.5	3	<0.3	<0.05	0.08	0.18	1.2	0.42
A0395	9.0	16.2	0.5	2	<0.3	<0.05	0.11	0.14	1.8	0.23
A0396	9.6	0.86	0.5	2	0.3	<0.05	0.12	0.09	2.5	0.26
A0397	9.3	1.21	0.7	2	0.3	<0.05	0.13	0.11	2.7	0.19
A0398	4.2	2.68	4.4	<1	1.8	<0.05	0.26	0.29	1.1	0.09
A0399	9.3	1.70	0.8	2	0.3	<0.05	0.15	0.13	2.9	0.24
A0400	8.5	0.86	0.8	2	<0.3	<0.05	0.12	0.10	2.2	0.24
A0412	5.8	4.85	0.1	7	0.7	<0.05	0.05	9.20	1.1	1.59
A0413	7.0	9.73	0.2	4	0.7	<0.05	0.14	3.41	0.7	1.98
A0414	10.0	1.60	0.6	2	0.3	<0.05	0.11	0.41	1.2	0.52
A0415	3.5	4370	0.8	5	9.5	<0.05	0.70	55.1	0.3	12.7
A0416	12.7	7.25	1.1	1	0.4	<0.05	0.20	0.58	2.4	0.72
A0417	10.9	1.83	1.7	2	0.4	<0.05	0.23	0.72	1.8	0.25
A0418	12.9	8.59	1.6	2	0.4	<0.05	0.25	0.61	2.3	0.30
A0419	12.7	0.95	1.5	2	0.5	<0.05	0.23	0.57	2.1	0.28
A0420	4.3	2.54	4.6	<1	1.7	<0.05	0.26	0.20	1.2	0.09
A0421	10.8	0.57	1.6	2	<0.3	<0.05	0.25	0.64	2.1	0.26
A0422	9.1	0.70	2.3	1	<0.3	<0.05	0.29	0.43	2.0	0.20
A0423	9.5	0.36	2.5	1	<0.3	<0.05	0.26	0.52	2.3	0.22
A0424	9.8	4.21	1.2	2	0.5	<0.05	0.19	0.85	1.7	0.27
A0425	10.4	5.19	1.5	1	0.3	<0.05	0.21	1.46	2.4	0.26
A0426	10.4	4.96	0.8	3	0.9	<0.05	0.17	2.98	2.1	0.25
A0427	11.3	6.58	0.9	2	0.9	<0.05	0.18	2.09	2.3	0.28
A0428	11.0	1.62	0.9	1	0.6	<0.05	0.21	0.75	2.9	0.24
A0429	11.4	0.70	1.7	1	0.3	<0.05	0.23	0.65	2.2	0.27
A0430	12.7	0.90	1.4	2	0.6	<0.05	0.21	0.88	2.3	0.30
A0431	1.2	0.07	0.3	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0432	12.8	0.78	1.5	2	0.4	<0.05	0.25	0.64	2.5	0.32
A0433	9.0	0.35	0.9	<1	0.4	<0.05	0.18	0.80	1.9	0.22

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Final : TK110252 Order: 1S-0311/SQ-15B-102511-42-9,10,11

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Cu ICP90Q 0.01 %	Pb ICP90Q 0.01 %	Zn ICP90Q 0.01 %	Ag FAG313 5 g/t
A0381	1.26	0.5	7.52	0.6	N.A.	N.A.	N.A.	N.A.
A0382	1.05	0.4	3.01	0.2	N.A.	N.A.	N.A.	N.A.
A0383	1.53	0.5	3.40	0.3	N.A.	N.A.	N.A.	N.A.
A0384	1.04	0.4	2.88	0.3	N.A.	N.A.	N.A.	N.A.
A0385	0.96	0.4	3.24	0.3	N.A.	N.A.	N.A.	N.A.
A0386	0.99	0.4	3.45	0.3	N.A.	N.A.	N.A.	N.A.
A0387	0.95	0.5	3.12	0.3	N.A.	N.A.	N.A.	N.A.
A0388	0.90	0.4	3.28	0.3	N.A.	N.A.	N.A.	N.A.
A0389	1.41	0.5	2.52	0.2	N.A.	N.A.	N.A.	N.A.
A0390	0.82	0.5	2.63	0.2	N.A.	N.A.	N.A.	N.A.
A0391	0.61	0.5	1.98	0.2	N.A.	N.A.	N.A.	N.A.
A0392	0.88	<0.1	0.76	<0.1	N.A.	N.A.	N.A.	N.A.
A0393	0.61	0.4	1.92	0.2	N.A.	N.A.	N.A.	N.A.
A0394	0.52	0.5	1.93	0.2	N.A.	N.A.	N.A.	N.A.
A0395	0.67	0.5	2.75	0.2	N.A.	N.A.	N.A.	N.A.
A0396	0.92	0.6	2.72	0.2	N.A.	N.A.	N.A.	N.A.
A0397	0.94	0.4	2.70	0.2	N.A.	N.A.	N.A.	N.A.
A0398	0.35	0.9	7.31	0.6	N.A.	N.A.	N.A.	N.A.
A0399	1.05	0.4	3.62	0.3	N.A.	N.A.	N.A.	N.A.
A0400	0.88	0.3	2.73	0.2	N.A.	N.A.	N.A.	N.A.
A0412	0.31	0.3	0.80	<0.1	N.A.	N.A.	N.A.	N.A.
A0413	0.62	0.3	2.10	0.1	N.A.	N.A.	N.A.	N.A.
A0414	0.99	5.0	2.57	0.2	N.A.	N.A.	N.A.	N.A.
A0415	2.61	3.6	7.88	0.4	3.02	3.56	4.10	947
A0416	0.70	0.1	3.77	0.3	N.A.	N.A.	N.A.	N.A.
A0417	0.68	0.1	4.10	0.3	N.A.	N.A.	N.A.	N.A.
A0418	0.71	0.1	4.26	0.3	N.A.	N.A.	N.A.	N.A.
A0419	0.73	0.1	3.88	0.3	N.A.	N.A.	N.A.	N.A.
A0420	0.35	0.9	7.39	0.6	N.A.	N.A.	N.A.	N.A.
A0421	0.81	0.1	4.78	0.4	N.A.	N.A.	N.A.	N.A.
A0422	0.71	<0.1	6.37	0.5	N.A.	N.A.	N.A.	N.A.
A0423	0.64	0.2	5.19	0.4	N.A.	N.A.	N.A.	N.A.
A0424	0.61	0.2	3.12	0.2	N.A.	N.A.	N.A.	N.A.
A0425	0.84	0.2	3.83	0.3	N.A.	N.A.	N.A.	N.A.
A0426	0.62	0.2	3.43	0.3	N.A.	N.A.	N.A.	N.A.
A0427	0.68	0.2	3.47	0.3	N.A.	N.A.	N.A.	N.A.
A0428	0.88	0.3	4.49	0.3	N.A.	N.A.	N.A.	N.A.
A0429	0.73	0.1	4.79	0.4	N.A.	N.A.	N.A.	N.A.
A0430	0.72	0.2	3.89	0.3	N.A.	N.A.	N.A.	N.A.
A0431	0.39	<0.1	0.71	<0.1	N.A.	N.A.	N.A.	N.A.
A0432	0.80	0.3	4.33	0.3	N.A.	N.A.	N.A.	N.A.
A0433	1.25	0.2	3.78	0.3	N.A.	N.A.	N.A.	N.A.

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## Certificate of Analysis

Work Order: TK110253

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Dec 01, 2011

P.O. No. : 1S-0312/SQ-14A-102511-41-3,4,7,8  
Project No. : -  
No. Of Samples : 41  
Date Submitted : Oct 26, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0501	0.288	0.20	0.42	50	43	0.15	47	113	6.24	0.30
A0502	0.625	2.30	0.29	50	8	0.03	54	1610	11.6	0.16
A0503	3.900	0.08	0.40	50	34	0.03	34	49.8	6.86	0.27
A0504	7.600	0.03	0.37	40	55	0.03	45	53.9	5.80	0.28
A0505	7.300	0.04	0.41	50	44	0.03	42	47.3	6.89	0.28
A0506	5.500	<0.01	0.03	40	25	>15	3	<0.5	0.52	0.02
A0507	7.100	0.03	0.44	40	34	0.05	49	66.4	8.72	0.30
A0508	7.300	0.03	0.41	40	50	0.07	51	42.0	7.10	0.30
A0509	7.100	0.03	0.45	40	37	0.03	39	15.9	6.63	0.32
A0510	7.800	0.04	0.43	30	32	0.04	48	77.6	8.41	0.30
A0511	4.400	0.03	0.41	40	36	0.03	43	118	8.24	0.28
A0512	2.000	0.07	0.36	40	21	0.03	51	749	10.3	0.26
A0513	7.600	0.02	0.40	40	59	0.03	43	67.1	5.46	0.29
A0514	7.700	0.05	0.37	40	51	0.02	48	38.7	6.47	0.27
A0515	7.500	0.04	0.42	40	61	0.03	45	151	5.90	0.30
A0516	7.700	0.03	0.42	40	36	0.02	44	184	7.15	0.29
A0517	7.300	0.09	0.45	40	43	0.02	55	61.7	7.04	0.31
A0518	7.500	0.06	0.42	40	46	0.03	50	49.8	6.98	0.30
A0519	7.800	0.07	0.51	40	121	0.29	43	63.0	6.74	0.35
A0520	0.075	2.14	0.35	30	9	1.70	14	>10000	>15	0.07
A0521	5.500	0.41	0.25	30	<5	0.18	79	1810	>15	0.14
A0522	2.600	0.04	0.51	40	55	0.30	54	48.7	6.77	0.34
A0523	7.200	0.06	0.44	40	54	0.13	48	85.4	5.92	0.30
A0524	6.400	0.10	0.46	40	54	0.18	45	101	6.12	0.30
A0525	8.390	0.09	0.46	40	29	0.07	53	168	6.86	0.30
A0526	2.700	0.07	0.49	40	31	0.16	56	97.3	6.92	0.33
A0527	2.900	0.06	0.52	40	33	0.17	58	89.4	7.61	0.35
A0528	1.800	0.98	0.18	40	<5	0.06	100	>10000	>15	0.09
A0529	7.800	0.12	0.54	40	29	0.15	50	142	7.82	0.33
A0530	7.300	0.10	0.47	40	77	0.03	62	83.1	5.17	0.32
A0531	7.600	0.04	0.47	40	64	0.02	51	43.5	6.02	0.32
A0532	8.100	0.06	0.43	30	14	0.03	66	33.7	11.5	0.29
A0533	7.700	0.15	0.46	40	34	0.03	55	49.5	9.31	0.31
A0534	7.700	0.17	0.43	40	50	0.03	48	28.9	6.89	0.29
A0535	7.700	0.42	0.40	40	16	0.06	58	57.5	11.3	0.28
A0536	5.300	<0.01	0.05	50	19	>15	3	<0.5	0.51	0.03
A0537	8.100	0.02	0.48	30	14	0.03	66	14.0	8.71	0.23
A0538	7.700	0.15	0.52	40	40	0.04	57	26.0	6.52	0.20
A0539	6.900	0.05	0.51	40	52	0.03	50	245	6.12	0.29
A0540	3.500	0.03	0.41	40	84	0.03	55	12.9	4.62	0.27
A0541	7.500	2.04	0.33	40	12	1.65	14	>10000	>15	0.06

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0501	<1	0.11	18	0.01	7.5	60	>5	33.2	<0.01	5
A0502	<1	0.03	40	0.01	3.4	<50	>5	71.9	<0.01	6
A0503	<1	0.03	9	0.01	2.9	60	>5	29.1	<0.01	5
A0504	<1	0.03	11	0.01	2.5	70	>5	28.5	<0.01	5
A0505	<1	0.03	11	0.02	2.7	100	>5	53.7	<0.01	6
A0506	<1	13.4	221	<0.01	1.2	180	0.01	43.0	<0.01	1
A0507	<1	0.04	15	0.02	3.2	80	>5	56.9	<0.01	6
A0508	<1	0.05	13	0.01	2.7	80	>5	42.6	<0.01	6
A0509	<1	0.03	11	0.01	2.6	80	>5	46.3	<0.01	7
A0510	<1	0.03	13	0.01	2.8	90	>5	43.2	<0.01	6
A0511	<1	0.02	11	0.01	2.4	70	>5	34.0	<0.01	6
A0512	<1	0.02	11	0.01	3.9	90	>5	25.1	<0.01	7
A0513	<1	0.03	11	0.01	2.5	80	>5	31.5	<0.01	6
A0514	<1	0.02	12	0.01	2.6	60	>5	24.6	<0.01	5
A0515	<1	0.03	10	0.02	5.5	60	>5	21.4	<0.01	5
A0516	<1	0.02	11	0.02	6.4	100	>5	52.4	<0.01	7
A0517	<1	0.03	13	0.02	4.9	140	>5	85.9	<0.01	6
A0518	<1	0.02	14	0.02	4.2	120	>5	62.0	<0.01	5
A0519	<1	0.18	1410	0.02	3.0	980	>5	64.1	<0.01	11
A0520	3	0.80	381	0.01	59.7	380	>5	32.6	<0.01	21
A0521	<1	0.19	>10000	0.01	1.5	280	>5	33.7	<0.01	9
A0522	<1	0.04	106	0.02	4.0	1210	>5	43.8	<0.01	7
A0523	<1	0.04	95	0.02	2.2	480	>5	22.4	<0.01	5
A0524	<1	0.04	46	0.03	6.5	740	>5	48.0	<0.01	10
A0525	1	0.04	24	0.02	15.5	280	>5	59.5	<0.01	9
A0526	<1	0.04	53	0.02	4.6	660	>5	31.4	<0.01	8
A0527	<1	0.04	58	0.02	4.8	750	>5	35.1	<0.01	8
A0528	<1	0.01	50	0.01	<0.5	310	>5	49.6	<0.01	6
A0529	<1	0.03	41	0.02	6.3	670	>5	45.7	<0.01	10
A0530	<1	0.02	16	0.01	2.1	310	>5	88.4	<0.01	5
A0531	<1	0.03	12	0.02	2.2	220	>5	60.1	<0.01	5
A0532	<1	0.03	17	0.01	1.8	100	>5	43.6	<0.01	6
A0533	<1	0.03	16	0.02	1.7	120	>5	57.5	<0.01	7
A0534	<1	0.02	14	0.02	2.3	190	>5	59.5	<0.01	6
A0535	<1	0.03	28	0.01	1.7	140	>5	36.7	<0.01	8
A0536	<1	13.0	219	0.01	1.5	180	<0.01	42.6	<0.01	2
A0537	7	0.02	15	0.02	7.2	<50	>5	21.3	<0.01	4
A0538	10	0.02	14	0.02	1.2	<50	>5	13.7	<0.01	3
A0539	<1	0.02	12	0.01	4.8	380	>5	45.6	<0.01	8
A0540	<1	0.03	10	0.01	2.9	100	>5	32.2	<0.01	4
A0541	3	0.85	378	0.01	58.4	370	>5	32.7	<0.01	20

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0501	340	6.5	2.88	14	<0.1	9.81	2.10	4.46	6.1	1.04
A0502	>10000	9.4	>10	364	<0.1	108	392	0.83	7.3	2.16
A0503	753	7.0	1.97	13	<0.1	3.46	4.12	4.38	7.3	1.65
A0504	87	7.9	0.50	16	<0.1	1.65	0.84	4.58	7.9	1.12
A0505	43	8.5	0.44	30	0.1	1.43	0.78	4.39	6.5	0.93
A0506	21	<0.5	0.02	<1	<0.1	0.05	0.09	1.46	0.8	0.23
A0507	36	9.9	0.39	31	<0.1	1.12	0.99	4.20	7.8	0.99
A0508	39	8.7	0.37	28	<0.1	1.22	0.83	4.53	7.8	1.15
A0509	74	8.3	0.46	24	0.1	1.30	1.47	4.26	9.4	1.44
A0510	109	9.7	0.42	32	0.1	1.78	2.32	4.35	8.3	1.67
A0511	82	8.5	0.35	22	0.1	1.29	2.04	4.17	7.0	1.17
A0512	72	8.5	1.86	71	<0.1	4.44	1.24	3.78	6.5	0.95
A0513	31	8.3	0.35	24	<0.1	1.21	0.44	4.24	8.2	1.22
A0514	105	8.1	0.48	31	<0.1	2.17	1.03	4.48	5.7	1.18
A0515	561	8.2	0.38	23	<0.1	1.38	3.07	3.71	6.4	0.99
A0516	184	8.9	0.37	32	0.1	1.58	1.38	3.27	8.9	1.18
A0517	17	8.9	0.21	21	0.1	2.30	0.15	3.81	8.2	1.36
A0518	12	8.2	0.16	28	0.1	1.84	0.13	4.61	7.0	1.22
A0519	1450	7.5	2.26	216	0.3	5.53	8.98	7.62	15.5	2.00
A0520	>10000	10.0	>10	951	0.1	63.0	522	5.14	23.3	0.32
A0521	>10000	11.7	>10	1010	0.2	48.7	105	4.68	2.8	2.01
A0522	734	8.0	0.96	30	0.3	2.86	5.53	11.9	7.3	2.46
A0523	149	9.3	0.60	29	0.3	4.86	1.06	6.06	7.5	2.30
A0524	120	7.0	1.01	31	0.5	4.69	1.47	4.64	14.9	3.45
A0525	395	7.5	1.66	60	0.3	5.25	3.12	2.64	19.8	2.66
A0526	327	7.9	1.36	29	0.4	6.27	2.15	3.69	10.0	3.69
A0527	262	8.3	1.47	28	0.4	7.85	1.77	3.79	10.7	3.77
A0528	>10000	11.6	>10	4180	0.1	339	245	0.34	3.7	1.23
A0529	2030	7.8	4.09	43	0.4	4.32	13.6	2.79	9.6	2.49
A0530	109	8.9	1.68	32	0.3	3.65	1.23	4.85	5.1	1.94
A0531	92	8.6	0.50	23	0.2	2.09	4.60	4.64	6.4	1.76
A0532	88	10.9	0.68	22	0.1	2.85	2.31	3.81	5.2	1.67
A0533	95	9.9	1.48	30	0.3	4.98	2.58	4.78	7.0	1.90
A0534	86	9.9	0.75	22	0.3	3.81	1.99	3.90	6.7	2.31
A0535	92	11.3	1.78	22	0.3	8.27	2.48	5.11	5.5	2.34
A0536	12	<0.5	0.03	<1	<0.1	0.05	0.07	0.97	0.8	0.36
A0537	19	7.2	0.11	6	0.1	1.12	0.31	2.74	7.2	1.88
A0538	19	7.2	0.07	15	<0.1	0.87	0.17	3.57	3.7	1.31
A0539	232	11.9	0.54	82	0.3	2.56	5.97	7.06	6.2	2.56
A0540	24	6.7	0.17	12	0.2	1.98	0.30	5.66	3.0	1.47
A0541	>10000	9.9	>10	935	0.1	62.5	530	4.67	22.9	0.32

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0501	0.8	<0.1	0.21	0.15	0.07	2.3	0.03	4.06	0.11	139
A0502	7.8	0.2	0.19	23.7	4.05	0.2	0.01	2.56	0.12	>10000
A0503	1.1	<0.1	0.20	0.45	0.16	2.2	0.02	5.12	0.09	171
A0504	1.1	<0.1	0.23	0.14	0.06	2.3	0.03	4.00	0.07	66.7
A0505	1.0	<0.1	0.25	0.09	0.09	2.2	0.03	4.49	0.07	87.9
A0506	<0.1	<0.1	<0.05	0.04	<0.02	0.5	<0.01	0.27	0.09	3.7
A0507	0.8	<0.1	0.26	0.06	0.04	1.9	0.03	4.16	0.07	83.7
A0508	0.9	<0.1	0.22	0.06	0.05	2.0	0.03	13.1	0.07	72.2
A0509	0.9	<0.1	0.21	0.06	0.03	1.9	0.04	3.37	0.06	98.6
A0510	0.9	<0.1	0.26	0.06	0.03	1.9	0.03	5.02	0.06	84.0
A0511	1.1	<0.1	0.21	0.06	0.06	1.8	0.02	3.95	0.07	53.6
A0512	1.3	<0.1	0.21	0.09	0.09	1.6	0.03	7.87	0.09	171
A0513	0.9	<0.1	0.27	0.05	0.04	1.8	0.03	4.83	0.05	53.0
A0514	0.8	<0.1	0.25	0.04	0.04	2.0	0.02	3.72	0.08	26.4
A0515	1.3	<0.1	0.23	0.09	0.06	1.6	0.03	3.98	0.09	36.1
A0516	1.4	<0.1	0.23	0.06	0.07	1.4	0.03	3.64	0.05	41.2
A0517	1.2	<0.1	0.23	0.05	0.06	1.6	0.03	4.96	0.05	11.1
A0518	1.0	<0.1	0.20	0.05	0.04	2.1	0.03	33.3	0.05	7.3
A0519	1.3	<0.1	0.16	0.29	0.05	3.5	0.06	39.8	<0.05	144
A0520	7.0	<0.1	0.08	21.1	6.73	2.7	0.04	35.1	0.36	>10000
A0521	1.9	0.1	0.09	1.75	1.28	2.0	0.05	13.7	0.14	5750
A0522	1.3	<0.1	0.21	0.14	0.03	5.8	0.05	6.19	0.05	126
A0523	0.9	<0.1	0.27	0.04	0.04	2.9	0.02	3.69	<0.05	38.0
A0524	1.0	<0.1	0.15	0.04	0.05	1.9	0.04	1.92	0.05	42.8
A0525	0.9	<0.1	0.13	0.07	0.06	1.0	0.04	2.85	<0.05	46.1
A0526	1.1	<0.1	0.16	0.08	0.04	1.6	0.03	9.08	<0.05	54.5
A0527	1.1	<0.1	0.16	0.08	0.05	1.6	0.03	11.9	0.06	54.4
A0528	0.9	0.1	0.07	14.5	0.96	0.3	0.01	2.65	0.12	>10000
A0529	1.1	<0.1	0.22	0.36	0.13	1.1	0.03	4.83	0.09	458
A0530	0.9	<0.1	0.27	0.10	0.05	2.2	0.02	4.03	0.08	54.6
A0531	1.0	<0.1	0.23	0.06	0.06	2.0	0.02	5.88	0.08	84.7
A0532	0.9	<0.1	0.23	0.03	0.03	1.7	0.03	7.56	0.11	58.1
A0533	1.0	<0.1	0.24	0.04	0.05	2.2	0.03	18.9	0.08	48.6
A0534	0.8	<0.1	0.26	0.03	0.04	1.7	0.03	3.60	<0.05	61.7
A0535	1.0	<0.1	0.26	0.02	0.05	2.3	0.04	3.25	0.08	70.5
A0536	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.13	0.09	2.2
A0537	0.3	<0.1	0.11	0.06	<0.02	1.2	<0.01	5.43	0.07	5.6
A0538	0.4	<0.1	0.20	0.05	<0.02	1.7	0.01	7.14	0.07	3.3
A0539	1.3	<0.1	0.31	0.26	0.20	3.1	0.03	4.00	0.06	80.7
A0540	0.8	<0.1	0.17	0.07	0.05	2.6	0.02	5.13	0.06	6.9
A0541	6.8	0.1	0.08	21.3	6.87	2.4	0.04	34.8	0.35	>10000

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Element Method Det.Lim. Units	Rb ICM14B	Sb ICM14B	Sc ICM14B	Se ICM14B	Sn ICM14B	Ta ICM14B	Tb ICM14B	Te ICM14B	Th ICM14B	Tl ICM14B
	0.2 ppm	0.05 ppm	0.1 ppm	1 ppm	0.3 ppm	0.05 ppm	0.02 ppm	0.05 ppm	0.1 ppm	0.02 ppm
A0501	9.6	5.45	0.5	1	0.5	<0.05	0.08	2.75	0.9	0.30
A0502	6.2	386	0.2	7	5.4	<0.05	0.03	18.9	0.2	2.03
A0503	9.5	2.10	0.5	1	0.5	<0.05	0.07	0.65	1.1	0.29
A0504	10.0	1.77	0.6	1	0.4	<0.05	0.09	0.49	1.0	0.23
A0505	9.2	1.97	0.6	1	0.4	<0.05	0.10	0.61	1.2	0.21
A0506	1.2	0.11	0.3	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0507	8.5	0.84	0.6	2	0.5	<0.05	0.10	0.63	1.2	0.23
A0508	9.2	0.94	0.6	1	0.4	<0.05	0.10	0.55	1.3	0.22
A0509	10.0	0.84	0.6	1	0.5	<0.05	0.11	0.46	1.1	0.28
A0510	9.3	0.86	0.6	2	0.4	<0.05	0.08	0.70	1.4	0.24
A0511	9.1	1.03	0.6	2	0.4	<0.05	0.07	0.64	1.4	0.21
A0512	8.3	4.58	0.6	2	0.5	<0.05	0.09	2.91	1.1	0.34
A0513	9.2	1.11	0.6	1	0.4	<0.05	0.08	0.43	1.2	0.22
A0514	8.3	0.89	0.5	2	0.5	<0.05	0.06	0.45	1.4	0.22
A0515	9.2	1.09	0.8	1	0.6	<0.05	0.10	0.62	1.2	0.33
A0516	9.1	1.59	0.9	2	0.5	<0.05	0.11	0.85	0.9	0.28
A0517	9.6	0.61	0.7	2	0.4	<0.05	0.10	1.47	1.2	0.23
A0518	9.2	0.50	0.6	2	0.4	<0.05	0.08	1.06	1.3	0.21
A0519	12.4	5.28	1.4	1	0.5	<0.05	0.31	0.20	2.0	1.13
A0520	2.2	218	0.7	165	105	<0.05	0.14	0.76	0.5	32.3
A0521	5.1	180	1.4	3	1.1	<0.05	0.17	5.60	0.5	1.71
A0522	11.9	4.86	0.9	1	1.0	<0.05	0.33	0.82	2.7	0.40
A0523	9.6	3.06	0.5	1	0.3	<0.05	0.11	2.03	2.3	0.30
A0524	10.1	4.21	1.1	1	<0.3	<0.05	0.17	1.95	0.8	0.30
A0525	10.1	9.16	1.0	1	0.3	<0.05	0.15	2.69	0.6	0.39
A0526	11.6	5.62	0.8	2	0.6	<0.05	0.13	2.05	1.1	0.44
A0527	12.3	6.03	0.9	2	0.6	<0.05	0.14	2.27	1.2	0.42
A0528	3.3	6610	0.2	3	2.8	<0.05	0.08	12.1	<0.1	10.5
A0529	11.2	20.3	1.0	1	0.6	<0.05	0.16	1.39	1.0	0.45
A0530	9.9	14.7	0.6	1	0.4	<0.05	0.11	1.46	1.4	0.23
A0531	9.9	3.61	0.6	1	0.4	<0.05	0.10	0.83	1.5	0.24
A0532	9.3	2.71	0.6	2	0.5	<0.05	0.08	1.67	1.3	0.21
A0533	9.8	1.97	0.6	2	0.4	<0.05	0.10	2.85	1.2	0.23
A0534	9.0	1.41	0.6	2	0.3	<0.05	0.09	1.68	1.2	0.22
A0535	8.8	1.11	0.7	3	0.3	<0.05	0.13	3.59	1.1	0.22
A0536	1.7	0.32	0.3	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0537	6.8	0.70	0.3	2	0.5	<0.05	<0.02	0.47	0.7	0.21
A0538	6.1	0.64	0.3	1	0.5	<0.05	0.03	0.78	0.9	0.46
A0539	9.2	4.99	1.0	<1	0.5	<0.05	0.18	1.96	1.6	0.38
A0540	8.0	0.73	0.5	<1	<0.3	<0.05	0.05	0.72	1.4	0.20
A0541	2.0	226	0.7	162	107	<0.05	0.13	0.74	0.5	32.5

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Ag FAG313 5 g/t	Cu ICP90Q 0.01 %	Pb ICP90Q 0.01 %	Zn ICP90Q 0.01 %
A0501	0.75	0.2	2.41	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0502	0.54	0.4	0.69	<0.1	129	N.A.	N.A.	1.57	9.34
A0503	0.72	0.3	2.07	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0504	0.86	0.2	2.57	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0505	0.93	0.2	2.75	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0506	0.59	<0.1	0.79	<0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0507	0.88	0.2	3.18	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0508	0.89	0.3	3.05	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0509	0.98	0.2	3.36	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0510	0.83	0.3	2.06	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0511	0.78	0.2	1.84	0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0512	1.08	0.3	2.62	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0513	0.76	0.2	2.24	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0514	0.66	0.4	1.75	0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0515	0.83	0.3	3.13	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0516	0.86	0.4	3.05	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0517	0.89	0.3	2.85	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0518	0.79	0.3	2.21	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0519	2.07	0.6	7.20	0.5	N.A.	N.A.	N.A.	N.A.	N.A.
A0520	3.06	1.0	3.50	0.3	145	N.A.	1.24	1.55	8.98
A0521	0.87	3.3	3.88	0.3	38.9	N.A.	N.A.	N.A.	1.76
A0522	1.46	0.4	6.20	0.4	N.A.	N.A.	N.A.	N.A.	N.A.
A0523	0.94	0.2	2.36	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0524	0.83	0.3	4.00	0.3	N.A.	N.A.	N.A.	N.A.	N.A.
A0525	1.00	0.3	3.99	0.3	N.A.	N.A.	N.A.	N.A.	N.A.
A0526	1.08	0.3	2.90	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0527	1.28	0.3	3.25	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0528	0.39	0.6	1.42	<0.1	N.A.	569	1.93	1.23	2.78
A0529	0.74	0.4	2.60	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0530	0.74	0.2	1.97	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0531	0.87	0.2	2.33	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0532	0.65	0.3	2.12	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0533	0.86	0.2	2.47	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0534	0.78	0.2	2.27	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0535	0.88	0.2	3.60	0.3	N.A.	N.A.	N.A.	N.A.	N.A.
A0536	0.60	<0.1	0.77	<0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0537	0.34	0.3	0.39	<0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0538	0.34	0.2	0.72	<0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0539	1.78	0.4	3.07	0.2	N.A.	N.A.	N.A.	N.A.	N.A.
A0540	0.65	0.1	0.91	<0.1	N.A.	N.A.	N.A.	N.A.	N.A.
A0541	3.05	1.0	3.41	0.3	147	N.A.	1.31	1.65	9.61

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# Certificate of Analysis

Work Order: TK110260

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Dec 01, 2011

P.O. No. : 1S-0317/SQ-17B-102811-11-09  
Project No. : -  
No. Of Samples : 11  
Date Submitted : Oct 31, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests  
I.S. = Insufficient Sample  
-- = No result

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0401	7.625	0.03	1.04	60	58	0.23	4	229	6.87	0.59
A0402	7.980	0.03	1.00	50	47	0.19	4	61.1	5.41	0.57
A0403	3.475	0.03	0.56	60	37	0.30	48	112	6.71	0.36
A0404	3.405	0.02	0.93	60	29	0.25	2	62.5	7.48	0.54
A0405	7.245	0.03	0.58	60	54	0.21	45	183	5.72	0.39
A0406	7.480	0.03	0.98	60	44	0.23	3	149	5.73	0.59
A0407	7.110	0.03	0.17	30	48	0.12	44	151	1.01	0.23
A0408	6.475	<0.01	0.05	60	13	>15	<1	2.0	0.51	0.03
A0409	9.490	0.03	0.52	50	41	0.19	47	96.9	5.24	0.35
A0410	8.930	0.05	0.46	60	34	0.19	56	250	5.86	0.31
A0411	8.190	0.10	0.89	60	30	0.15	2	55.9	5.96	0.53

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0401	<1	0.09	180	0.05	3.9	560	>5	42.5	<0.01	10
A0402	<1	0.07	89	0.04	4.1	780	>5	22.8	<0.01	9
A0403	<1	0.07	132	0.02	5.7	1020	>5	17.4	<0.01	7
A0404	<1	0.07	137	0.03	5.0	880	>5	19.2	<0.01	11
A0405	<1	0.04	37	0.03	5.4	840	>5	23.0	<0.01	6
A0406	<1	0.07	108	0.03	4.8	890	>5	54.6	<0.01	9
A0407	<1	0.05	48	0.01	5.0	920	>5	12.4	<0.01	3
A0408	1	12.9	237	0.01	0.6	170	<0.01	42.9	<0.01	<1
A0409	<1	0.05	74	0.02	5.1	680	>5	29.7	<0.01	6
A0410	<1	0.06	111	0.02	10.1	390	>5	37.4	<0.01	6
A0411	<1	0.04	35	0.03	3.0	690	>5	44.0	<0.01	9

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Element	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs
Method	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A0401	37	5.5	0.07	67	0.2	0.43	0.23	6.96	19.0	0.77
A0402	16	5.4	0.05	29	0.2	0.44	0.14	11.3	16.3	0.81
A0403	64	6.1	0.12	40	0.2	0.60	0.35	9.10	15.6	0.59
A0404	82	6.0	0.08	24	0.2	0.50	0.31	7.52	14.8	0.59
A0405	66	5.1	0.53	48	0.2	1.33	0.37	7.57	11.7	0.58
A0406	94	5.7	0.44	38	0.3	0.96	0.41	6.68	11.7	1.00
A0407	134	5.3	1.64	142	0.2	1.17	0.86	9.41	12.0	0.70
A0408	10	<0.5	<0.01	<1	<0.1	0.03	0.07	1.04	0.7	0.22
A0409	701	5.1	0.43	64	0.2	0.71	1.87	7.89	14.4	0.75
A0410	343	5.1	1.09	142	0.2	2.35	1.66	6.85	16.2	0.65
A0411	6	5.0	0.07	9	0.2	0.51	0.10	6.23	9.4	0.53

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0401	1.6	<0.1	0.18	0.07	<0.02	3.7	0.04	109	0.08	4.7
A0402	1.9	<0.1	0.18	0.03	<0.02	6.0	0.04	80.5	0.05	8.5
A0403	1.1	<0.1	0.18	0.05	0.02	4.9	0.04	57.7	0.05	16.2
A0404	1.6	<0.1	0.17	0.05	<0.02	4.0	0.04	62.1	0.06	22.5
A0405	1.0	<0.1	0.16	0.07	0.02	4.2	0.04	27.2	<0.05	24.5
A0406	1.6	<0.1	0.17	0.06	0.03	3.5	0.04	63.0	<0.05	24.4
A0407	1.2	<0.1	0.17	0.14	0.04	5.1	0.04	39.4	<0.05	15.1
A0408	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.75	<0.05	0.9
A0409	1.0	<0.1	0.15	0.11	0.03	4.4	0.04	21.5	<0.05	212
A0410	1.0	<0.1	0.15	0.10	0.12	3.8	0.04	92.9	<0.05	32.6
A0411	2.1	<0.1	0.13	0.10	<0.02	3.3	0.05	74.9	<0.05	3.5

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0401	16.5	13.2	1.1	3	0.5	<0.05	0.11	0.16	2.3	0.44
A0402	16.9	2.76	0.9	2	0.5	<0.05	0.12	0.10	3.2	0.31
A0403	11.5	8.20	0.7	3	0.5	<0.05	0.12	0.18	3.1	0.26
A0404	16.4	4.02	0.9	3	0.7	<0.05	0.11	0.18	2.8	0.33
A0405	12.2	22.8	0.5	3	<0.3	<0.05	0.10	0.40	2.7	0.24
A0406	18.0	19.0	0.8	3	0.6	<0.05	0.11	0.45	2.5	0.36
A0407	13.3	87.5	0.6	2	<0.3	<0.05	0.11	0.61	2.8	0.43
A0408	1.3	0.27	0.3	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0409	10.6	11.2	0.6	2	<0.3	<0.05	0.10	0.49	2.4	0.86
A0410	9.8	27.4	0.7	2	0.3	<0.05	0.10	0.51	1.6	0.81
A0411	15.1	1.50	0.8	3	0.5	<0.05	0.13	1.13	1.9	0.30

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Final : TK110260 Order: 1S-0317/SQ-17B-102811-11-09

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Element	U	W	Y	Yb
Method	ICM14B	ICM14B	ICM14B	ICM14B
Det.Lim.	0.05	0.1	0.05	0.1
Units	ppm	ppm	ppm	ppm
A0401	0.83	0.8	2.93	0.3
A0402	1.13	0.8	2.77	0.3
A0403	1.08	0.7	3.04	0.3
A0404	0.95	1.1	2.75	0.3
A0405	0.98	0.5	2.95	0.2
A0406	1.02	0.7	2.94	0.2
A0407	1.25	0.4	2.98	0.2
A0408	0.57	<0.1	0.79	<0.1
A0409	1.32	0.4	2.64	0.2
A0410	0.84	0.8	2.81	0.2
A0411	2.13	2.4	4.13	0.4

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## Certificate of Analysis

Work Order: TK110261

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Dec 01, 2011

P.O. No. : 1S-0318/PO: SQ-18B-102811-34-12  
Project No. : -  
No. Of Samples : 35  
Date Submitted : Oct 31, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site

Certified By :

Albert Hung  
Senior Chemist & Coordinator

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A0434	5.980	<0.01	0.06	40	36	>15	<1	0.6	0.51	0.03
A0435	11.895	<0.01	0.36	40	32	0.06	35	16.4	6.47	0.25
A0436	12.490	<0.01	0.73	40	32	0.17	2	19.1	6.62	0.41
A0437	1.115	0.02	0.37	40	23	0.13	45	12.8	8.33	0.25
A0438	12.530	<0.01	0.73	40	29	0.14	3	17.4	7.57	0.42
A0439	0.075	0.95	1.16	40	124	0.68	33	3310	3.50	0.11
A0440	9.835	<0.01	0.34	40	43	0.04	45	10.9	6.26	0.25
A0441	12.305	<0.01	0.71	40	45	0.02	3	10.2	5.42	0.42
A0442	12.375	<0.01	0.37	40	42	0.03	37	12.5	5.31	0.26
A0443	13.010	<0.01	0.73	30	43	0.04	2	14.2	5.55	0.45
A0444	5.050	0.01	0.40	40	34	0.03	40	25.1	6.26	0.27
A0445	5.150	<0.01	0.66	30	33	0.03	2	26.5	6.36	0.40
A0446	4.255	<0.01	0.36	40	30	0.02	42	24.3	6.82	0.24
A0447	10.680	<0.01	0.63	40	29	0.02	3	14.3	7.51	0.38
A0448	5.565	<0.01	0.03	40	11	>15	2	<0.5	0.49	0.02
A0449	10.090	<0.01	0.68	40	30	0.02	3	17.1	6.77	0.41
A0450	11.920	<0.01	0.67	40	33	0.07	4	19.3	6.37	0.40
A0451	9.865	0.01	0.37	40	28	0.09	53	29.2	7.25	0.25
A0452	5.925	<0.01	0.60	50	35	0.03	6	27.7	6.22	0.32
A0453	12.650	<0.01	0.39	40	34	0.11	42	22.1	6.63	0.27
A0454	12.785	0.01	0.66	40	45	0.05	4	29.3	5.85	0.43
A0455	12.785	0.02	0.40	40	35	0.14	39	110	6.24	0.28
A0456	12.375	0.02	0.38	40	40	0.17	53	44.8	4.93	0.25
A0457	5.495	<0.01	0.03	40	15	>15	2	0.6	0.55	0.02
A0458	12.230	0.02	0.37	40	35	0.11	52	18.3	5.62	0.25
A0459	5.850	0.04	0.41	40	29	0.20	55	263	6.58	0.27
A0460	12.420	0.02	0.42	40	42	0.12	46	82.4	5.01	0.28
A0461	12.700	0.02	0.45	40	38	0.18	39	64.1	5.83	0.30
A0462	12.905	0.01	0.42	40	31	0.09	46	57.2	6.11	0.28
A0463	0.075	0.97	1.18	50	127	0.69	33	3320	3.48	0.11
A0464	5.145	0.03	0.42	40	36	0.05	44	21.4	6.62	0.29
A0465	1.535	1.17	0.33	50	13	0.05	77	157	13.1	0.22
A0466	5.680	0.07	0.38	40	36	0.02	47	19.3	6.18	0.28
A0467	12.575	0.06	0.36	40	63	0.04	47	123	4.45	0.26
A0468	5.730	0.04	0.36	40	39	0.02	44	22.4	5.13	0.26

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A0434	<1	13.0	213	<0.01	1.3	180	0.02	41.1	<0.01	1
A0435	<1	0.04	11	0.02	4.1	190	>5	50.3	<0.01	5
A0436	2	0.04	39	0.05	3.4	620	>5	32.5	<0.01	8
A0437	<1	0.02	23	0.02	5.2	590	>5	31.1	<0.01	7
A0438	<1	0.03	35	0.05	6.2	630	>5	75.7	<0.01	11
A0439	8	0.64	425	0.08	28.9	590	0.46	32.6	0.10	55
A0440	<1	0.02	12	0.02	6.0	140	>5	33.7	<0.01	5
A0441	1	0.02	15	0.04	6.3	90	>5	83.0	<0.01	8
A0442	<1	0.02	9	0.03	6.8	80	>5	34.6	<0.01	5
A0443	<1	0.02	15	0.04	5.7	140	>5	43.3	<0.01	8
A0444	3	0.02	35	0.02	5.2	70	>5	51.6	<0.01	6
A0445	4	0.03	45	0.03	5.1	100	>5	75.8	<0.01	9
A0446	3	0.02	16	0.02	6.5	70	>5	49.7	<0.01	5
A0447	6	0.02	18	0.03	5.5	90	>5	79.3	<0.01	8
A0448	<1	13.1	211	<0.01	1.3	190	0.08	41.0	<0.01	1
A0449	3	0.02	42	0.03	4.5	120	>5	64.5	<0.01	9
A0450	4	0.03	20	0.03	5.4	240	>5	78.4	<0.01	8
A0451	1	0.03	35	0.02	7.4	400	>5	29.8	<0.01	6
A0452	14	0.02	23	0.02	5.2	70	>5	55.5	<0.01	7
A0453	2	0.02	21	0.02	5.5	490	>5	23.1	<0.01	6
A0454	2	0.03	55	0.03	6.0	230	>5	47.9	<0.01	8
A0455	<1	0.03	81	0.02	7.7	520	>5	25.3	<0.01	6
A0456	2	0.02	65	0.03	7.9	680	>5	23.8	<0.01	5
A0457	<1	13.3	218	<0.01	1.3	180	<0.01	39.5	<0.01	1
A0458	1	0.04	84	0.03	7.1	310	>5	27.3	<0.01	5
A0459	2	0.02	105	0.02	7.8	890	>5	17.9	<0.01	6
A0460	3	0.03	92	0.02	7.2	460	>5	36.4	<0.01	5
A0461	<1	0.05	62	0.02	7.1	800	>5	21.0	<0.01	6
A0462	2	0.02	32	0.02	8.6	390	>5	28.0	<0.01	6
A0463	8	0.63	423	0.08	29.3	570	0.47	33.4	0.11	57
A0464	1	0.02	11	0.02	8.5	210	>5	32.5	<0.01	6
A0465	2	0.02	14	0.01	6.7	<50	>5	42.8	<0.01	7
A0466	1	0.02	8	0.01	7.1	60	>5	30.6	<0.01	5
A0467	2	0.02	13	0.02	4.6	110	>5	26.6	<0.01	5
A0468	<1	0.02	7	0.01	4.7	60	>5	21.4	<0.01	5

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0434	10	<0.5	<0.01	<1	<0.1	0.03	0.05	1.01	0.9	0.13
A0435	27	6.5	0.12	17	0.1	0.56	0.41	2.89	7.8	0.59
A0436	29	7.7	0.10	10	0.2	0.63	0.20	5.17	8.6	0.85
A0437	20	8.0	0.15	11	0.1	0.61	0.10	5.18	7.2	0.48
A0438	176	7.9	0.22	14	0.2	0.73	0.68	5.83	11.3	0.65
A0439	56	8.9	1.57	13	0.2	0.57	0.46	10.9	7.8	0.39
A0440	9	6.6	0.09	13	0.1	0.37	0.06	12.6	6.7	1.27
A0441	28	6.2	0.08	4	0.2	0.41	0.14	6.76	8.0	0.62
A0442	107	6.7	0.10	4	0.2	0.47	0.46	7.16	9.4	0.59
A0443	15	6.8	0.10	9	0.2	0.43	0.09	9.73	7.5	0.67
A0444	12	7.1	0.06	5	0.2	0.41	0.06	2.26	9.1	0.51
A0445	19	7.3	0.06	6	0.2	0.39	0.06	2.78	10.1	0.55
A0446	13	7.6	0.09	5	0.2	0.44	0.07	2.01	9.4	0.57
A0447	22	7.3	0.08	7	0.2	0.40	0.07	2.62	11.9	0.54
A0448	10	<0.5	<0.01	<1	<0.1	<0.02	0.05	0.86	0.7	0.09
A0449	30	6.8	0.11	9	0.2	0.34	0.08	6.02	9.9	0.58
A0450	16	6.4	0.10	5	0.2	0.37	0.08	7.31	13.3	0.61
A0451	26	6.5	0.08	21	0.1	0.52	0.12	6.93	16.9	0.36
A0452	91	6.2	0.10	14	0.2	0.37	0.36	2.60	9.6	1.19
A0453	32	6.2	0.10	16	0.2	0.52	0.13	6.38	8.7	0.45
A0454	20	5.4	0.06	6	0.2	0.34	0.06	5.06	12.0	0.49
A0455	47	6.1	0.09	22	0.2	0.42	0.14	4.77	10.0	0.54
A0456	21	5.6	0.08	7	0.2	0.32	0.08	4.23	13.2	0.96
A0457	11	<0.5	<0.01	<1	<0.1	<0.02	0.06	0.93	0.8	0.10
A0458	16	5.7	0.04	4	0.2	0.35	0.05	4.25	19.1	0.88
A0459	84	5.7	0.51	83	0.2	0.49	0.32	3.29	19.0	0.50
A0460	32	4.8	0.21	21	0.2	0.30	0.09	2.40	9.6	0.51
A0461	98	6.0	0.55	17	0.2	0.73	0.44	3.50	11.3	0.42
A0462	18	5.6	0.10	17	0.2	0.46	0.07	4.58	11.9	0.49
A0463	57	9.6	1.63	13	0.2	0.57	0.48	11.2	7.8	0.39
A0464	22	5.4	0.18	13	0.2	0.45	0.14	2.40	15.7	0.54
A0465	471	8.4	>10	53	0.2	48.7	2.69	1.11	16.9	3.00
A0466	51	5.3	1.09	10	0.1	2.60	0.23	1.76	11.3	1.02
A0467	126	4.3	1.05	45	0.2	1.90	0.62	2.23	11.1	0.64
A0468	681	4.7	1.01	12	0.2	4.36	2.99	2.18	7.7	0.49

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0434	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.83	0.05	1.1
A0435	0.7	<0.1	0.20	0.05	<0.02	1.4	0.03	10.7	0.05	5.9
A0436	1.2	<0.1	0.22	0.04	<0.02	2.3	0.05	5.42	0.06	5.6
A0437	0.7	<0.1	0.21	0.02	<0.02	2.4	0.04	8.27	0.06	6.8
A0438	1.4	<0.1	0.22	0.05	<0.02	3.0	0.08	10.1	0.06	10.9
A0439	4.2	0.1	0.28	0.07	0.04	5.3	0.09	337	0.35	22.5
A0440	0.6	<0.1	0.19	0.06	<0.02	7.0	0.04	8.03	<0.05	4.8
A0441	1.2	<0.1	0.18	<0.01	<0.02	3.3	0.03	9.01	<0.05	5.2
A0442	0.7	<0.1	0.21	0.02	<0.02	3.9	0.06	6.50	<0.05	3.9
A0443	1.2	<0.1	0.21	0.01	<0.02	5.1	0.06	5.75	<0.05	4.2
A0444	0.7	<0.1	0.21	<0.01	<0.02	1.2	0.02	5.38	<0.05	3.0
A0445	1.3	<0.1	0.20	0.01	<0.02	1.6	0.02	8.02	0.06	3.2
A0446	0.6	<0.1	0.21	0.01	<0.02	1.1	0.02	11.8	<0.05	4.0
A0447	1.2	<0.1	0.18	<0.01	<0.02	1.3	0.02	14.0	0.06	5.2
A0448	<0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.17	<0.05	1.1
A0449	1.2	<0.1	0.18	0.01	<0.02	3.3	0.04	9.48	0.05	4.6
A0450	1.2	<0.1	0.18	0.03	<0.02	3.7	0.05	15.1	0.05	5.3
A0451	0.8	<0.1	0.18	0.01	<0.02	3.7	0.03	31.9	0.05	4.4
A0452	0.8	<0.1	0.19	0.04	<0.02	1.5	0.03	9.45	0.06	5.1
A0453	0.7	<0.1	0.19	0.01	<0.02	3.4	0.04	7.75	<0.05	6.7
A0454	1.2	<0.1	0.16	0.01	<0.02	2.6	0.04	8.05	0.05	3.4
A0455	0.7	<0.1	0.19	0.05	<0.02	2.3	0.04	12.6	<0.05	3.7
A0456	0.6	<0.1	0.19	0.06	<0.02	2.1	0.03	9.27	<0.05	3.3
A0457	<0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.31	<0.05	1.0
A0458	0.6	<0.1	0.17	0.05	<0.02	2.2	0.03	8.30	<0.05	2.8
A0459	0.7	<0.1	0.16	0.08	<0.02	1.7	0.05	75.7	<0.05	6.3
A0460	0.7	<0.1	0.15	0.05	<0.02	1.2	0.03	22.5	<0.05	2.8
A0461	0.9	<0.1	0.18	0.07	<0.02	1.8	0.03	23.3	<0.05	3.6
A0462	0.8	<0.1	0.17	0.06	<0.02	2.2	0.03	35.7	<0.05	3.4
A0463	4.3	<0.1	0.28	0.09	0.04	5.5	0.09	331	0.38	22.4
A0464	0.8	<0.1	0.15	0.03	<0.02	1.2	0.03	9.35	<0.05	5.8
A0465	1.6	<0.1	0.22	0.16	0.15	0.4	0.02	30.8	0.07	117
A0466	0.9	<0.1	0.15	0.06	<0.02	0.9	0.02	10.2	<0.05	14.8
A0467	0.8	<0.1	0.14	0.09	0.05	1.1	<0.01	13.7	<0.05	27.6
A0468	0.8	<0.1	0.15	0.11	0.22	1.1	0.01	15.9	<0.05	81.8

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0434	1.2	0.06	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0435	8.6	0.82	0.5	3	<0.3	<0.05	0.09	0.13	1.5	0.34
A0436	14.4	1.12	0.7	2	<0.3	<0.05	0.23	0.14	1.2	0.38
A0437	9.0	0.48	0.5	5	<0.3	<0.05	0.18	0.17	1.1	0.23
A0438	14.8	0.97	0.8	4	0.4	<0.05	0.24	0.13	1.1	0.44
A0439	4.1	2.47	4.1	1	1.8	<0.05	0.27	0.18	1.1	0.09
A0440	8.2	0.49	0.5	2	<0.3	<0.05	0.16	0.11	0.8	0.23
A0441	13.7	0.29	0.7	2	0.4	<0.05	0.12	0.06	0.7	0.28
A0442	8.3	0.47	0.4	2	<0.3	<0.05	0.19	0.11	0.9	0.20
A0443	14.0	0.44	0.7	2	0.4	<0.05	0.21	0.11	1.1	0.38
A0444	8.6	1.37	0.5	3	<0.3	<0.05	0.04	0.11	0.8	0.19
A0445	13.7	1.40	0.8	3	0.3	<0.05	0.04	0.14	0.8	0.28
A0446	7.8	0.64	0.4	3	<0.3	<0.05	0.04	0.09	0.9	0.17
A0447	13.4	0.61	0.6	3	0.3	<0.05	0.06	0.11	0.9	0.32
A0448	0.6	<0.05	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0449	14.1	0.50	0.7	2	0.4	<0.05	0.12	0.13	0.9	0.37
A0450	13.5	0.58	0.7	3	0.4	<0.05	0.16	0.09	1.1	0.27
A0451	8.1	1.28	0.4	3	<0.3	<0.05	0.12	0.14	1.2	0.22
A0452	10.6	2.22	0.5	3	<0.3	<0.05	0.08	0.19	0.8	0.33
A0453	8.4	0.70	0.4	3	<0.3	<0.05	0.17	0.16	1.5	0.22
A0454	13.2	1.10	0.7	3	0.3	<0.05	0.14	0.11	1.2	0.23
A0455	8.6	12.7	0.6	3	<0.3	<0.05	0.17	0.13	1.7	0.18
A0456	7.5	4.75	0.5	2	<0.3	<0.05	0.14	0.12	1.7	0.17
A0457	0.6	0.06	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0458	7.4	1.17	0.5	3	<0.3	<0.05	0.10	0.11	1.3	0.20
A0459	8.6	11.8	0.6	3	<0.3	<0.05	0.22	0.25	1.9	0.18
A0460	8.4	3.39	0.5	2	<0.3	<0.05	0.14	0.11	1.5	0.17
A0461	8.9	4.96	0.6	2	0.4	<0.05	0.13	0.31	1.8	0.17
A0462	8.5	1.98	0.5	3	<0.3	<0.05	0.14	0.12	1.7	0.17
A0463	4.2	2.72	4.3	<1	1.9	<0.05	0.27	0.17	1.1	0.10
A0464	8.8	0.75	0.4	3	0.3	<0.05	0.10	0.10	1.1	0.20
A0465	8.8	5.62	0.3	4	0.9	<0.05	0.04	1.24	0.2	0.50
A0466	9.5	1.11	0.4	2	<0.3	<0.05	0.04	0.14	0.7	0.22
A0467	7.9	8.54	0.4	2	<0.3	<0.05	0.03	0.20	0.9	0.96
A0468	7.7	1.52	0.4	2	0.3	<0.05	0.03	0.32	0.9	0.17

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Final : TK110261 Order: 1S-0318/PO: SQ-18B-102811-34-12

Page 7 of 7

Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t
A0434	0.54	<0.1	0.77	<0.1	N.A.
A0435	0.65	0.3	2.87	0.2	N.A.
A0436	1.09	0.6	5.69	0.4	N.A.
A0437	0.92	0.9	4.54	0.3	N.A.
A0438	1.73	0.7	7.27	0.5	N.A.
A0439	0.34	1.0	7.39	0.6	N.A.
A0440	1.05	0.3	4.08	0.3	N.A.
A0441	0.78	0.6	2.55	0.2	N.A.
A0442	1.53	0.4	5.64	0.4	N.A.
A0443	1.02	0.6	5.86	0.5	N.A.
A0444	0.60	0.8	1.11	0.1	N.A.
A0445	0.62	1.3	1.21	0.1	N.A.
A0446	0.45	1.4	0.99	<0.1	N.A.
A0447	0.69	0.7	1.61	0.1	N.A.
A0448	0.47	<0.1	0.71	<0.1	N.A.
A0449	0.75	0.7	3.49	0.3	N.A.
A0450	1.02	0.6	4.49	0.4	N.A.
A0451	0.75	0.4	2.93	0.2	N.A.
A0452	0.64	0.4	2.76	0.2	N.A.
A0453	0.93	0.3	4.55	0.3	N.A.
A0454	0.84	0.5	3.99	0.3	N.A.
A0455	1.13	0.3	4.22	0.3	N.A.
A0456	0.71	0.3	2.64	0.2	N.A.
A0457	0.59	<0.1	0.76	<0.1	N.A.
A0458	0.67	0.3	2.33	0.2	N.A.
A0459	0.97	0.3	5.23	0.4	N.A.
A0460	0.61	0.3	3.28	0.2	N.A.
A0461	0.81	0.4	3.19	0.2	N.A.
A0462	0.84	0.4	3.13	0.2	N.A.
A0463	0.36	1.0	7.59	0.6	N.A.
A0464	0.61	0.3	2.74	0.2	N.A.
A0465	0.38	0.4	1.05	0.1	14.7
A0466	0.36	0.3	1.02	0.1	N.A.
A0467	0.41	0.3	0.71	<0.1	N.A.
A0468	0.28	0.4	0.85	<0.1	N.A.

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# Certificate of Analysis

Work Order: TK110262

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Dec 03, 2011

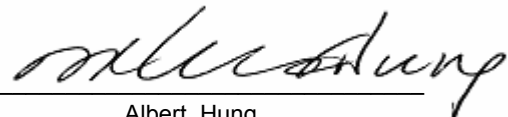
P.O. No. : 1S-0316/PO: SQ-16b-102811-62-03  
Project No. : -  
No. Of Samples : 62  
Date Submitted : Oct 31, 2011  
Report Comprises : Pages 1 to 13  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site  
Per client, use AAS42E for Ag over-limit in ICP/MS.  
Per client, add ICP90Q for Base Metal over-limit.

Certified By :   
Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Element Method Det.Lim. Units	WtKg WGH79 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0210	7.400	<0.01	0.51	30	80	3.83	41	20.3	4.79	0.26
A0211	7.155	<0.01	0.47	30	94	3.36	54	26.1	4.07	0.31
A0212	7.285	<0.01	0.56	30	105	2.47	38	23.4	3.95	0.31
A0213	6.940	<0.01	0.44	30	95	1.44	25	9.6	4.35	0.30
A0214	4.710	<0.01	0.04	40	13	>15	1	2.9	0.48	0.02
A0215	6.550	<0.01	0.43	40	61	0.89	19	19.2	4.96	0.28
A0216	6.650	<0.01	0.44	30	66	1.01	18	20.6	4.62	0.28
A0217	7.020	<0.01	0.46	30	82	1.55	20	15.6	4.41	0.28
A0218	6.620	0.01	0.42	30	61	2.35	25	31.6	4.69	0.25
A0219	6.940	0.03	0.46	30	58	1.96	30	24.6	5.01	0.26
A0220	7.180	0.04	0.50	30	49	0.99	19	25.4	4.74	0.25
A0221	6.870	<0.01	0.51	30	56	1.34	21	22.3	4.80	0.26
A0222	6.835	<0.01	0.51	30	57	1.30	19	22.0	4.52	0.27
A0223	6.320	0.01	0.58	40	81	2.37	37	15.8	4.15	0.32
A0224	3.080	0.06	0.44	30	29	0.69	34	575	7.62	0.26
A0225	1.805	0.18	0.16	20	<5	0.92	83	2890	>15	0.07
A0226	0.065	0.98	1.22	40	128	0.72	32	3340	3.45	0.11
A0227	2.910	0.04	0.50	30	54	2.64	21	85.6	4.89	0.31
A0228	7.305	0.03	0.51	40	43	1.53	33	59.4	6.21	0.33
A0229	3.740	0.02	0.55	30	35	1.02	21	64.0	7.26	0.34
A0230	3.665	0.02	0.54	30	39	1.03	29	65.7	7.55	0.34
A0231	6.370	0.03	0.47	30	42	0.54	38	59.1	6.68	0.33
A0232	7.095	0.04	0.48	40	42	0.52	43	54.6	8.45	0.34
A0233	6.525	0.02	0.53	40	38	0.94	33	42.8	6.40	0.38
A0234	7.500	<0.01	0.55	40	48	0.88	48	35.3	6.74	0.37
A0235	6.730	0.02	0.55	40	34	1.07	47	67.2	7.21	0.36
A0236	4.020	<0.01	0.03	40	15	>15	2	2.7	0.51	0.02
A0237	7.405	0.01	0.58	40	43	1.84	38	56.3	6.41	0.32
A0238	4.180	0.08	0.62	40	60	1.82	58	1760	5.48	0.30
A0239	7.335	0.12	0.53	40	41	1.56	77	2010	6.49	0.31
A0240	7.035	0.15	0.58	40	74	1.70	61	2360	5.93	0.28
A0241	0.080	1.02	1.26	50	130	0.72	33	3580	3.62	0.11
A0242	7.000	0.09	0.54	30	53	1.61	74	2100	5.40	0.30
A0243	7.125	0.08	0.51	40	44	1.41	66	1960	5.77	0.33
A0244	5.950	0.08	0.55	40	65	1.82	71	1870	4.71	0.34
A0245	8.195	0.04	0.55	40	56	2.19	71	1600	5.30	0.33
A0246	8.650	0.08	0.53	40	39	1.97	96	1340	6.84	0.31
A0247	3.465	0.10	0.59	40	62	2.24	67	1310	5.05	0.31
A0248	3.380	0.10	0.58	40	82	2.37	76	1340	4.97	0.30
A0249	7.295	0.13	0.59	40	37	1.85	81	1920	7.28	0.33
A0250	6.195	0.21	0.52	40	41	1.68	75	2960	5.70	0.27
A0251	6.955	0.09	0.56	40	53	2.20	65	1610	4.86	0.26
A0252	7.190	0.08	0.53	40	57	2.76	80	1880	4.79	0.26

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Element Method Det.Lim. Units	WtKg WGH79 kg	Au FAA303 g/t	Al ICM14B %	B ICM14B ppm	Ba ICM14B ppm	Ca ICM14B %	Cr ICM14B ppm	Cu ICM14B ppm	Fe ICM14B %	K ICM14B %
A0253	7.625	0.15	0.46	40	40	3.22	82	3050	5.88	0.30
A0254	6.905	0.11	0.50	40	45	2.98	86	1250	5.98	0.26
A0255	7.685	0.15	0.56	40	40	2.72	76	2520	6.85	0.33
A0256	7.045	0.30	0.57	40	74	2.42	69	3910	4.49	0.25
A0257	7.400	0.19	0.51	40	46	2.55	80	3070	6.23	0.29
A0258	0.080	1.05	1.26	40	130	0.69	31	3610	3.38	0.11
A0259	7.460	0.15	0.42	40	31	1.66	98	3330	6.36	0.29
A0260	7.375	0.09	0.36	40	26	1.11	101	1730	8.13	0.26
A0261	7.355	<0.01	0.03	40	19	>15	<1	11.9	0.49	0.02
A0262	7.530	0.06	0.34	40	39	1.31	123	4610	5.61	0.26
A0263	7.050	0.22	0.35	40	26	1.72	109	2810	9.70	0.25
A0264	5.255	0.10	0.36	40	32	2.73	100	2440	7.11	0.24
A0265	3.735	0.08	0.38	40	39	2.18	120	2820	4.97	0.24
A0266	2.565	0.01	0.39	30	214	0.82	70	21.7	0.50	0.27
A0267	2.560	0.01	0.39	30	196	0.72	68	17.3	0.46	0.27
A0268	2.835	<0.01	0.48	30	206	0.80	37	33.8	0.34	0.27
A0269	4.115	0.38	0.40	40	44	1.55	98	4470	5.27	0.22
A0270	6.940	0.19	0.38	40	44	3.77	116	3490	5.11	0.22
A0271	7.080	0.04	0.37	40	56	2.69	103	1820	3.94	0.24

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0210	7	0.88	2710	0.06	2.0	1330	3.88	114	<0.01	19
A0211	3	0.54	3840	0.06	4.1	1060	2.59	64.3	<0.01	17
A0212	3	0.73	4090	0.06	3.3	1110	2.58	55.1	<0.01	11
A0213	2	0.53	>10000	0.06	1.0	1420	3.33	40.8	<0.01	10
A0214	<1	12.9	218	<0.01	0.7	170	<0.01	42.6	<0.01	<1
A0215	1	0.27	4760	0.05	2.1	1440	>5	41.3	<0.01	8
A0216	<1	0.27	3000	0.05	3.6	1470	>5	46.9	<0.01	8
A0217	1	0.48	4730	0.05	1.9	1500	4.36	41.3	<0.01	10
A0218	2	0.69	7850	0.05	2.2	1250	>5	45.3	<0.01	8
A0219	1	0.52	9060	0.05	2.0	1490	>5	45.3	<0.01	7
A0220	1	0.26	2260	0.05	0.7	1610	>5	40.2	<0.01	4
A0221	2	0.35	3640	0.05	<0.5	1570	>5	42.0	<0.01	4
A0222	1	0.37	2860	0.04	0.8	1650	>5	40.7	<0.01	5
A0223	3	0.68	9400	0.05	0.7	1500	4.62	45.7	<0.01	7
A0224	<1	0.14	1760	0.04	1.6	1510	>5	55.2	<0.01	7
A0225	<1	0.32	3390	0.02	14.1	280	>5	25.0	<0.01	8
A0226	8	0.62	428	0.09	27.6	490	0.45	35.5	0.12	57
A0227	2	0.78	9780	0.04	0.7	1500	>5	54.0	<0.01	11
A0228	2	0.49	7370	0.04	<0.5	1480	>5	39.4	<0.01	12
A0229	1	0.37	7070	0.04	<0.5	1330	>5	54.4	<0.01	12
A0230	1	0.35	7400	0.04	<0.5	1390	>5	52.0	<0.01	12
A0231	<1	0.15	4650	0.03	1.9	1180	>5	30.8	<0.01	9
A0232	<1	0.15	2570	0.03	1.5	1300	>5	29.0	<0.01	10
A0233	<1	0.30	4470	0.03	1.6	1380	>5	35.0	<0.01	9
A0234	<1	0.29	4480	0.03	2.2	1290	>5	30.0	<0.01	9
A0235	2	0.39	6170	0.03	1.6	1330	>5	42.9	<0.01	10
A0236	<1	13.3	237	<0.01	0.8	170	<0.01	43.1	<0.01	<1
A0237	6	0.68	7930	0.03	3.6	1360	>5	31.9	<0.01	13
A0238	2	0.66	963	0.02	1.4	910	>5	32.5	<0.01	14
A0239	2	0.50	2030	0.03	1.9	860	>5	34.8	<0.01	11
A0240	3	0.63	1020	0.03	1.2	920	4.34	32.4	<0.01	31
A0241	9	0.66	447	0.09	29.4	500	0.46	37.0	0.12	58
A0242	2	0.54	690	0.02	1.8	910	>5	31.6	<0.01	11
A0243	1	0.50	1900	0.01	1.5	950	>5	28.4	<0.01	9
A0244	2	0.63	2140	0.01	1.7	970	>5	32.4	<0.01	11
A0245	2	0.64	1950	0.02	1.8	890	>5	42.8	<0.01	8
A0246	2	0.43	1790	0.02	3.7	940	>5	49.5	<0.01	13
A0247	2	0.57	868	0.03	1.6	740	>5	50.1	<0.01	14
A0248	2	0.57	918	0.03	1.7	820	>5	50.8	<0.01	16
A0249	2	0.46	2520	0.02	1.6	850	>5	41.7	<0.01	9
A0250	2	0.52	1440	0.02	<0.5	930	>5	35.8	<0.01	12
A0251	3	0.47	826	0.02	<0.5	740	>5	41.5	<0.01	9
A0252	2	0.52	2170	0.01	<0.5	920	>5	49.3	<0.01	12

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0253	1	0.39	3200	0.01	<0.5	1040	>5	60.2	<0.01	10
A0254	2	0.40	2120	0.01	<0.5	760	>5	62.1	<0.01	8
A0255	2	0.47	2260	0.01	<0.5	860	>5	46.2	<0.01	10
A0256	3	0.62	1110	0.02	<0.5	790	4.51	37.1	<0.01	18
A0257	2	0.57	2420	0.02	<0.5	780	>5	43.4	<0.01	17
A0258	9	0.58	479	0.09	28.5	510	0.47	38.2	0.12	58
A0259	<1	0.34	2890	0.02	<0.5	600	>5	31.9	<0.01	8
A0260	<1	0.11	2260	0.02	<0.5	340	>5	26.2	<0.01	7
A0261	1	12.7	257	<0.01	<0.5	180	<0.01	43.0	<0.01	1
A0262	<1	0.13	3290	0.01	<0.5	350	>5	27.1	<0.01	7
A0263	<1	0.08	3310	0.02	<0.5	470	>5	37.2	<0.01	8
A0264	<1	0.22	5030	0.02	<0.5	550	>5	45.3	<0.01	9
A0265	1	0.29	2160	0.02	<0.5	190	>5	36.5	<0.01	13
A0266	1	0.13	1290	0.02	<0.5	<50	0.06	28.8	<0.01	<1
A0267	1	0.10	1180	0.02	<0.5	<50	0.05	28.2	<0.01	<1
A0268	<1	0.08	700	0.02	<0.5	<50	0.07	37.2	<0.01	<1
A0269	1	0.51	1060	0.02	<0.5	350	>5	28.4	<0.01	15
A0270	<1	0.37	2070	0.02	<0.5	970	>5	58.7	<0.01	11
A0271	<1	0.43	2220	0.02	<0.5	1230	>5	45.7	<0.01	8

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0210	114	4.9	0.14	35	0.3	0.76	0.17	30.2	9.3	9.23
A0211	110	4.2	0.38	45	0.4	0.34	0.21	32.3	7.8	7.23
A0212	269	3.7	0.58	34	0.5	0.39	1.27	26.5	8.5	8.74
A0213	96	5.3	1.03	59	0.4	0.25	0.04	26.4	7.8	7.42
A0214	11	<0.5	<0.01	<1	<0.1	0.02	0.05	1.21	0.7	0.20
A0215	69	5.5	1.19	92	0.5	0.74	0.23	21.7	13.1	8.43
A0216	65	4.9	0.72	80	0.5	0.77	0.21	21.4	12.0	8.53
A0217	57	4.9	0.55	77	0.4	1.00	0.03	22.0	11.7	8.26
A0218	912	4.8	1.92	40	0.4	0.71	4.50	20.3	13.1	6.98
A0219	1060	7.2	2.09	40	0.5	0.35	6.01	25.2	8.8	7.66
A0220	1040	8.9	2.07	46	0.5	0.44	6.16	23.1	6.5	7.44
A0221	826	8.1	1.54	48	0.5	0.58	4.97	25.9	6.0	7.79
A0222	776	8.2	1.39	55	0.5	0.49	4.71	25.9	7.0	8.75
A0223	724	6.9	1.52	90	0.5	0.50	4.20	31.0	7.2	9.55
A0224	>10000	6.6	>10	159	0.3	19.2	137	13.1	15.8	8.20
A0225	712	11.3	>10	139	<0.1	35.9	4.92	0.95	46.0	1.50
A0226	51	9.6	1.55	12	0.2	0.59	0.43	11.7	7.5	0.40
A0227	830	6.2	3.38	70	0.5	1.48	5.05	22.8	11.7	12.1
A0228	3910	6.8	4.32	95	0.5	2.32	20.3	24.0	10.4	12.4
A0229	4610	8.4	5.55	71	0.5	7.31	25.0	13.3	10.7	10.7
A0230	4420	8.5	6.37	73	0.5	7.84	23.8	13.1	11.3	10.1
A0231	1720	7.0	5.12	166	0.4	11.7	12.5	12.5	8.5	5.60
A0232	1390	7.7	6.75	230	0.4	13.5	8.23	11.1	9.8	6.02
A0233	2050	6.6	4.70	89	0.5	10.5	12.0	12.3	10.9	6.77
A0234	1750	6.9	3.46	63	0.5	8.87	10.7	15.1	8.9	5.99
A0235	2450	7.4	4.30	75	0.4	11.3	14.6	12.9	10.0	6.11
A0236	14	<0.5	0.03	<1	<0.1	0.07	0.09	0.89	0.7	0.18
A0237	4370	6.7	3.30	51	0.4	8.40	26.1	14.8	11.0	5.52
A0238	41	3.4	0.46	9	0.3	0.42	0.18	8.46	8.0	3.80
A0239	450	3.9	5.84	49	0.2	2.18	2.34	8.52	10.6	3.64
A0240	36	4.1	0.55	9	0.3	1.42	0.13	12.4	11.9	4.23
A0241	57	9.8	1.61	13	0.2	0.58	0.43	11.7	7.9	0.41
A0242	30	3.3	0.42	6	0.2	0.41	0.14	8.84	10.1	3.03
A0243	96	3.3	1.68	86	0.3	20.2	0.54	9.20	8.2	3.73
A0244	76	3.0	0.68	38	0.3	1.72	0.35	10.7	9.0	4.41
A0245	155	3.2	0.86	11	0.3	1.28	0.79	10.1	10.8	4.05
A0246	609	4.5	3.69	125	0.3	8.20	3.18	9.71	11.1	4.22
A0247	29	3.1	0.23	6	0.3	0.38	0.12	10.1	9.2	3.34
A0248	32	3.1	0.23	5	0.3	0.38	0.13	11.0	9.3	3.39
A0249	1140	3.9	3.80	170	0.3	8.58	5.85	8.49	9.4	4.02
A0250	549	3.2	5.63	460	0.2	10.2	3.28	7.94	7.4	3.16
A0251	31	3.0	0.41	7	0.2	0.40	0.17	8.92	6.8	2.33
A0252	369	3.2	2.83	48	0.3	3.03	1.74	8.91	7.4	3.81

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0253	560	3.3	5.16	84	0.4	5.58	2.64	7.87	11.2	5.03
A0254	447	3.4	3.53	79	0.3	2.15	2.29	6.01	9.0	3.74
A0255	502	3.7	1.79	99	0.2	4.48	2.78	9.07	11.0	3.73
A0256	40	3.0	0.55	9	0.3	0.40	0.11	10.2	10.7	3.26
A0257	41	3.6	0.59	28	0.3	3.81	0.12	8.66	10.6	4.08
A0258	53	10.0	1.54	13	0.2	0.57	0.45	12.6	8.0	0.43
A0259	349	3.0	3.71	652	0.3	9.13	2.07	5.92	10.5	4.77
A0260	1690	3.1	5.46	568	0.1	19.9	7.98	4.33	11.0	1.17
A0261	13	<0.5	0.01	2	<0.1	0.07	0.07	0.94	0.7	0.18
A0262	853	2.4	8.52	1370	0.2	5.58	5.36	5.75	13.5	1.94
A0263	>10000	3.9	>10	689	0.1	21.3	218	3.49	9.9	1.34
A0264	1030	3.1	>10	218	0.3	0.83	5.93	4.06	13.1	2.41
A0265	373	2.8	1.38	36	0.4	1.08	1.34	4.09	8.4	3.12
A0266	202	2.8	0.19	2	0.5	0.46	0.42	10.2	0.7	6.11
A0267	131	2.8	0.11	1	0.5	0.40	0.20	10.1	2.8	6.21
A0268	25	2.4	0.07	<1	0.7	0.44	0.12	11.9	1.8	7.28
A0269	25	2.7	0.47	6	0.2	0.41	0.13	4.76	9.9	2.92
A0270	324	2.8	1.13	459	0.2	0.58	2.19	6.67	6.7	3.19
A0271	234	2.1	0.84	188	0.2	0.40	1.32	11.5	9.4	3.10

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0210	1.4	<0.1	0.21	0.01	0.04	14.7	0.16	1.22	0.07	18.3
A0211	1.4	<0.1	0.17	0.02	0.03	16.6	0.17	2.67	0.07	24.4
A0212	1.4	<0.1	0.13	<0.01	0.03	13.6	0.14	4.65	<0.05	156
A0213	1.2	<0.1	0.20	0.02	<0.02	12.3	0.13	2.54	<0.05	18.7
A0214	0.1	<0.1	<0.05	<0.01	<0.02	0.6	<0.01	0.24	0.07	1.3
A0215	1.0	<0.1	0.17	0.02	0.02	9.9	0.12	3.80	<0.05	47.8
A0216	1.0	<0.1	0.16	0.01	0.02	9.7	0.11	3.99	<0.05	36.7
A0217	1.1	<0.1	0.15	<0.01	<0.02	9.9	0.13	3.85	<0.05	20.6
A0218	1.1	<0.1	0.15	0.02	0.06	9.5	0.12	6.75	<0.05	32.2
A0219	1.1	<0.1	0.24	0.02	0.08	11.8	0.16	6.85	<0.05	264
A0220	1.0	<0.1	0.29	0.03	0.06	10.3	0.13	11.3	<0.05	402
A0221	1.1	<0.1	0.27	0.05	0.07	12.0	0.14	5.58	<0.05	325
A0222	1.1	<0.1	0.27	0.02	0.09	11.7	0.12	3.93	<0.05	268
A0223	1.4	<0.1	0.25	0.01	0.06	15.1	0.18	3.55	0.06	131
A0224	6.1	0.1	0.14	0.36	7.73	6.4	0.04	3.00	<0.05	367
A0225	0.5	0.2	0.07	0.02	0.34	0.4	0.03	2.07	0.18	356
A0226	4.3	0.1	0.28	0.07	0.04	5.7	0.09	330	0.41	21.4
A0227	1.3	<0.1	0.15	<0.01	0.17	10.9	0.16	3.54	<0.05	81.6
A0228	1.4	<0.1	0.14	0.04	1.78	11.3	0.12	3.57	<0.05	87.1
A0229	1.5	<0.1	0.20	0.04	1.84	6.0	0.07	4.93	<0.05	222
A0230	1.5	<0.1	0.19	0.04	1.64	5.9	0.07	5.07	<0.05	283
A0231	1.2	<0.1	0.19	0.07	0.62	6.2	0.05	2.44	<0.05	612
A0232	1.2	<0.1	0.18	0.05	0.45	5.3	0.05	2.91	0.06	395
A0233	1.3	<0.1	0.17	0.05	0.51	5.8	0.07	2.11	<0.05	448
A0234	1.4	<0.1	0.21	0.07	0.97	7.4	0.06	2.97	<0.05	316
A0235	1.4	<0.1	0.20	0.08	1.21	6.2	0.07	3.19	<0.05	327
A0236	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.14	<0.05	2.2
A0237	1.4	<0.1	0.19	0.12	1.02	7.2	0.08	2.06	<0.05	114
A0238	1.6	<0.1	0.08	0.04	0.06	3.7	0.11	7.71	<0.05	4.8
A0239	1.4	<0.1	0.07	0.03	0.08	3.6	0.09	10.9	0.06	84.3
A0240	2.0	<0.1	0.07	0.02	0.08	5.2	0.12	8.09	0.09	4.0
A0241	4.4	0.1	0.30	0.08	0.04	5.8	0.09	328	0.40	23.3
A0242	1.4	<0.1	0.07	0.02	0.07	4.0	0.09	11.5	<0.05	2.7
A0243	1.5	<0.1	0.07	0.06	0.21	4.2	0.09	16.1	<0.05	30.3
A0244	1.4	<0.1	0.07	0.04	0.10	4.8	0.10	8.28	<0.05	10.8
A0245	1.3	<0.1	0.06	0.02	0.10	4.5	0.08	13.7	<0.05	26.2
A0246	1.3	<0.1	0.07	0.07	0.25	4.4	0.07	45.7	0.06	93.1
A0247	1.6	<0.1	0.05	<0.01	0.04	4.4	0.08	11.1	<0.05	4.2
A0248	1.5	<0.1	0.06	0.01	0.05	4.8	0.09	9.30	0.06	4.6
A0249	1.6	<0.1	0.06	0.10	0.28	3.9	0.07	7.04	<0.05	273
A0250	1.5	<0.1	0.10	0.23	0.21	3.5	0.08	4.62	0.07	98.2
A0251	1.4	<0.1	0.07	0.02	0.06	3.9	0.07	9.33	0.05	6.8
A0252	1.5	<0.1	0.08	0.04	0.18	3.8	0.09	3.12	<0.05	75.0

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0253	1.6	<0.1	0.06	0.06	0.26	3.1	0.09	3.87	0.06	133
A0254	1.4	<0.1	0.06	0.09	0.09	2.5	0.07	4.15	0.06	91.3
A0255	1.7	<0.1	0.06	0.05	0.14	4.2	0.07	15.7	0.06	89.8
A0256	1.7	<0.1	0.05	0.01	0.12	4.5	0.09	8.69	<0.05	3.7
A0257	1.6	<0.1	0.05	0.01	0.12	3.8	0.08	6.23	0.06	6.1
A0258	4.5	0.1	0.30	0.07	0.05	6.2	0.10	318	0.46	22.7
A0259	1.4	<0.1	<0.05	0.11	0.24	2.7	0.05	8.63	0.06	127
A0260	1.5	<0.1	<0.05	0.15	0.14	1.9	0.03	8.26	0.07	411
A0261	0.1	<0.1	<0.05	<0.01	<0.02	0.5	<0.01	0.25	0.05	2.2
A0262	1.3	<0.1	<0.05	0.23	0.35	2.6	0.03	5.25	0.06	132
A0263	3.5	<0.1	<0.05	1.56	4.26	1.6	0.03	10.3	0.09	4550
A0264	1.3	<0.1	<0.05	0.11	0.12	1.8	0.03	8.07	0.07	139
A0265	1.2	<0.1	<0.05	0.02	0.14	2.0	0.06	13.3	0.08	24.0
A0266	1.1	<0.1	0.18	0.02	<0.02	5.0	0.07	3.26	0.18	25.4
A0267	1.1	<0.1	0.18	0.02	<0.02	5.0	0.06	3.26	0.19	18.3
A0268	1.2	<0.1	0.18	<0.01	<0.02	6.2	0.05	1.50	0.13	15.9
A0269	1.3	<0.1	0.05	<0.01	0.14	2.1	0.03	12.1	0.07	6.7
A0270	1.2	<0.1	<0.05	0.05	0.13	2.7	0.06	7.31	0.06	70.8
A0271	1.1	<0.1	<0.05	0.02	0.09	4.8	0.08	13.5	0.06	54.6

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0210	11.5	0.90	2.9	<1	<0.3	<0.05	0.56	0.32	2.5	0.34
A0211	12.6	0.82	2.6	<1	<0.3	<0.05	0.49	0.27	3.3	0.35
A0212	14.0	1.37	1.6	<1	0.5	<0.05	0.45	0.23	3.0	0.45
A0213	12.9	1.57	1.8	<1	<0.3	<0.05	0.50	1.40	2.6	0.71
A0214	1.0	<0.05	0.2	<1	<0.3	<0.05	0.03	<0.05	0.2	<0.02
A0215	12.5	2.35	1.7	<1	0.4	<0.05	0.49	2.19	2.5	0.84
A0216	12.2	2.14	1.6	<1	<0.3	<0.05	0.47	1.97	2.6	0.98
A0217	12.2	1.93	1.7	<1	0.4	<0.05	0.47	1.77	2.9	1.11
A0218	10.5	1.57	1.9	<1	0.4	<0.05	0.44	2.24	2.3	0.54
A0219	10.4	1.29	1.7	<1	0.5	<0.05	0.52	1.86	2.8	0.47
A0220	10.3	1.39	1.1	<1	0.4	<0.05	0.46	1.70	3.5	0.58
A0221	10.7	1.07	1.0	<1	0.4	<0.05	0.51	1.54	3.3	0.43
A0222	11.3	1.40	1.0	<1	0.6	<0.05	0.47	1.60	3.1	0.57
A0223	13.5	1.12	1.7	<1	0.5	<0.05	0.55	1.35	2.9	0.63
A0224	11.0	51.8	1.0	3	1.1	<0.05	0.30	12.3	1.7	1.61
A0225	3.1	26.8	0.4	4	0.4	<0.05	0.09	44.0	0.3	1.28
A0226	4.2	2.43	4.2	1	1.7	<0.05	0.27	0.22	1.2	0.09
A0227	14.5	2.84	1.7	<1	0.8	<0.05	0.48	4.28	2.9	0.63
A0228	14.6	2.40	1.6	<1	0.6	<0.05	0.46	4.78	2.9	0.76
A0229	14.4	3.04	1.7	<1	1.0	<0.05	0.29	4.29	2.7	0.69
A0230	14.4	3.81	1.7	1	1.1	<0.05	0.29	4.63	2.8	0.72
A0231	13.4	5.23	1.2	1	0.5	<0.05	0.20	3.76	2.5	0.68
A0232	14.1	3.19	1.1	1	0.4	<0.05	0.22	3.59	2.2	0.72
A0233	16.3	2.70	1.3	<1	0.4	<0.05	0.27	2.76	2.5	0.67
A0234	16.0	2.12	1.2	1	0.3	<0.05	0.26	2.28	2.9	0.53
A0235	15.4	2.94	1.5	<1	0.6	<0.05	0.26	3.36	3.0	0.57
A0236	0.9	0.08	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0237	13.4	0.98	1.7	<1	0.4	<0.05	0.27	2.95	3.0	0.46
A0238	12.2	0.71	1.7	1	0.3	<0.05	0.28	0.15	2.9	0.23
A0239	12.9	45.4	1.4	2	0.3	<0.05	0.24	0.25	2.9	0.22
A0240	13.5	7.29	2.1	1	<0.3	<0.05	0.32	0.15	3.4	0.34
A0241	4.3	2.41	4.3	1	1.8	<0.05	0.28	0.19	1.2	0.10
A0242	11.2	0.84	1.2	2	0.4	<0.05	0.24	0.11	2.8	0.23
A0243	13.5	3.25	1.0	2	0.5	<0.05	0.24	1.90	2.6	0.31
A0244	14.8	2.07	1.4	1	<0.3	<0.05	0.28	0.19	2.9	0.34
A0245	12.9	1.19	1.2	2	0.3	<0.05	0.25	0.28	2.4	0.23
A0246	12.6	12.5	1.4	2	0.6	<0.05	0.23	2.38	2.2	0.36
A0247	11.3	0.84	1.5	1	0.5	<0.05	0.24	0.12	3.2	0.21
A0248	11.5	0.80	1.5	1	0.5	<0.05	0.26	0.14	3.2	0.21
A0249	13.0	24.4	1.0	2	0.6	<0.05	0.22	0.91	3.0	0.26
A0250	11.2	11.0	1.2	1	1.0	<0.05	0.23	1.91	2.9	0.25
A0251	9.1	0.71	1.1	1	0.4	<0.05	0.21	0.09	2.9	0.17
A0252	11.1	3.07	1.3	1	0.5	<0.05	0.29	0.58	3.1	0.29

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0253	13.0	4.78	1.1	1	0.5	<0.05	0.28	1.38	2.7	0.49
A0254	10.3	14.9	0.9	2	0.5	<0.05	0.20	1.30	2.0	0.27
A0255	13.2	19.9	1.2	3	0.5	<0.05	0.22	0.82	2.7	0.23
A0256	12.0	1.04	1.9	1	0.5	<0.05	0.25	0.14	3.1	0.25
A0257	12.5	0.61	1.6	2	0.5	<0.05	0.24	0.36	2.5	0.26
A0258	4.5	2.44	4.5	1	1.8	<0.05	0.29	0.15	1.3	0.10
A0259	12.4	43.3	0.8	2	0.9	<0.05	0.16	4.23	2.0	0.35
A0260	8.8	36.6	0.5	2	1.1	<0.05	0.10	8.56	1.7	0.26
A0261	0.9	0.17	0.2	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0262	9.5	48.0	0.5	1	1.0	<0.05	0.11	2.43	2.2	0.21
A0263	7.9	228	0.8	4	2.4	<0.05	0.12	15.4	1.7	0.34
A0264	9.5	192	0.9	3	0.7	<0.05	0.14	1.03	1.7	0.25
A0265	9.3	3.54	1.7	2	1.5	<0.05	0.15	0.18	1.9	0.15
A0266	9.6	0.79	1.7	<1	0.7	<0.05	0.20	<0.05	7.6	0.18
A0267	9.8	0.26	1.6	<1	0.9	<0.05	0.19	<0.05	8.2	0.18
A0268	11.1	0.35	1.4	<1	0.8	<0.05	0.16	<0.05	8.3	0.16
A0269	8.9	0.41	2.0	2	0.6	<0.05	0.14	0.15	1.7	0.16
A0270	9.3	24.9	1.4	2	1.1	<0.05	0.21	0.62	2.5	0.21
A0271	9.8	8.16	1.4	1	1.2	<0.05	0.30	0.18	2.9	0.27

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Final : TK110262 Order: 1S-0316/PO: SQ-16b-102811-62-03

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Zn ICP90Q 0.01 %
A0210	0.84	<0.1	14.7	1.1	N.A.	N.A.
A0211	1.11	<0.1	13.3	1.1	N.A.	N.A.
A0212	0.92	<0.1	12.2	1.0	N.A.	N.A.
A0213	0.65	<0.1	12.6	0.9	N.A.	N.A.
A0214	0.45	<0.1	0.85	<0.1	N.A.	N.A.
A0215	0.57	<0.1	12.2	0.8	N.A.	N.A.
A0216	0.61	<0.1	11.2	0.8	N.A.	N.A.
A0217	0.65	<0.1	12.3	0.9	N.A.	N.A.
A0218	0.61	<0.1	11.5	0.8	N.A.	N.A.
A0219	0.79	<0.1	13.4	1.1	N.A.	N.A.
A0220	1.20	<0.1	11.0	0.9	N.A.	N.A.
A0221	0.93	<0.1	12.1	1.0	N.A.	N.A.
A0222	0.77	<0.1	10.9	0.8	N.A.	N.A.
A0223	1.36	<0.1	15.0	1.2	N.A.	N.A.
A0224	1.43	0.2	4.42	0.3	19.5	2.14
A0225	0.75	0.2	2.87	0.2	57.8	N.A.
A0226	0.36	1.0	7.73	0.6	N.A.	N.A.
A0227	1.51	<0.1	13.0	1.1	N.A.	N.A.
A0228	0.88	<0.1	11.1	0.8	N.A.	N.A.
A0229	0.74	<0.1	5.98	0.4	N.A.	N.A.
A0230	0.78	<0.1	5.74	0.4	N.A.	N.A.
A0231	0.81	<0.1	3.45	0.3	N.A.	N.A.
A0232	0.84	<0.1	4.12	0.3	N.A.	N.A.
A0233	0.95	<0.1	5.41	0.4	N.A.	N.A.
A0234	0.76	<0.1	4.85	0.4	N.A.	N.A.
A0235	0.96	<0.1	5.31	0.4	N.A.	N.A.
A0236	0.45	<0.1	0.73	<0.1	N.A.	N.A.
A0237	1.15	0.1	5.83	0.5	N.A.	N.A.
A0238	0.68	0.1	7.74	0.7	N.A.	N.A.
A0239	0.63	0.1	6.41	0.6	N.A.	N.A.
A0240	0.79	0.1	8.97	0.8	N.A.	N.A.
A0241	0.36	1.0	7.71	0.6	N.A.	N.A.
A0242	0.71	0.1	6.51	0.6	N.A.	N.A.
A0243	0.73	0.2	6.59	0.6	N.A.	N.A.
A0244	0.79	0.2	7.58	0.6	N.A.	N.A.
A0245	0.62	0.3	6.34	0.5	N.A.	N.A.
A0246	0.71	2.0	5.95	0.5	N.A.	N.A.
A0247	0.69	<0.1	6.41	0.5	N.A.	N.A.
A0248	0.73	<0.1	6.92	0.6	N.A.	N.A.
A0249	0.83	0.4	5.60	0.4	N.A.	N.A.
A0250	0.95	0.2	6.14	0.5	N.A.	N.A.
A0251	0.57	0.1	5.48	0.4	N.A.	N.A.
A0252	0.79	0.1	7.38	0.6	N.A.	N.A.

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Zn ICP90Q 0.01 %
A0253	0.61	0.2	7.30	0.6	N.A.	N.A.
A0254	0.56	0.2	5.45	0.4	N.A.	N.A.
A0255	0.71	0.2	5.54	0.4	N.A.	N.A.
A0256	0.73	0.1	6.71	0.6	N.A.	N.A.
A0257	0.80	0.2	6.29	0.5	N.A.	N.A.
A0258	0.38	1.0	8.04	0.7	N.A.	N.A.
A0259	0.76	0.3	3.99	0.3	N.A.	N.A.
A0260	0.48	0.4	2.43	0.2	N.A.	N.A.
A0261	0.42	<0.1	0.77	<0.1	N.A.	N.A.
A0262	0.49	0.3	2.40	0.2	N.A.	N.A.
A0263	1.02	0.5	2.77	0.2	35.4	3.29
A0264	0.34	0.2	3.38	0.2	17.0	N.A.
A0265	0.80	0.1	4.46	0.4	N.A.	N.A.
A0266	3.09	0.1	5.02	0.4	N.A.	N.A.
A0267	2.98	0.1	4.53	0.4	N.A.	N.A.
A0268	2.29	0.1	3.77	0.3	N.A.	N.A.
A0269	0.47	<0.1	3.03	0.2	N.A.	N.A.
A0270	0.56	0.1	5.40	0.4	N.A.	N.A.
A0271	0.77	0.1	6.99	0.5	N.A.	N.A.

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# Certificate of Analysis

Work Order: TK110263

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Dec 06, 2011

P.O. No. : 1S-0319/PO: SQ-19B-103111-39-12  
Project No. : -  
No. Of Samples : 39  
Date Submitted : Oct 31, 2011  
Report Comprises : Pages 1 to 7  
(Inclusive of Cover Sheet)

**Distribution of unused material:**

Store:

**Comments:**

Preparation of samples was performed off site  
Per client, use AAS42E for Ag over-limit in ICP/MS.  
Per client, add ICP90Q for Base Metal over-limit.

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer:

L.N.R. = Listed not received  
n.a. = Not applicable  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests  
I.S. = Insufficient Sample  
-- = No result

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Element Method Det.Lim. Units	WtKg WGH79 0.001 kg	Au FAA303 0.01 g/t	Al ICM14B 0.01 %	B ICM14B 10 ppm	Ba ICM14B 5 ppm	Ca ICM14B 0.01 %	Cr ICM14B 1 ppm	Cu ICM14B 0.5 ppm	Fe ICM14B 0.01 %	K ICM14B 0.01 %
A0469	5.740	0.04	0.47	40	44	0.04	56	36.4	6.17	0.32
A0470	12.585	0.02	0.52	50	55	0.06	48	26.8	6.39	0.34
A0471	12.535	0.03	0.52	40	44	0.14	56	25.3	5.28	0.32
A0472	12.015	0.02	0.48	50	46	0.13	52	49.6	6.75	0.31
A0473	8.060	<0.01	0.03	50	20	>15	<1	<0.5	0.47	0.02
A0474	12.630	<0.01	0.47	50	70	0.19	50	63.0	4.87	0.31
A0475	12.390	0.02	0.46	50	76	0.08	50	101	3.71	0.31
A0476	12.135	0.02	0.44	40	82	0.15	54	24.7	3.88	0.29
A0477	0.080	0.95	1.22	50	131	0.75	30	3400	3.43	0.11
A0478	4.505	<0.01	0.41	30	48	0.30	53	43.6	3.05	0.29
A0479	3.045	0.01	0.55	50	72	0.09	43	25.3	3.97	0.35
A0480	3.105	<0.01	0.54	50	82	0.13	47	29.3	4.30	0.35
A0481	12.310	0.36	0.36	50	15	0.38	110	241	>15	0.21
A0482	11.140	0.04	0.50	50	56	0.13	45	21.3	4.87	0.33
A0483	7.655	0.70	0.74	40	92	0.60	80	48.4	3.82	0.45
A0484	12.500	<0.01	0.48	50	92	0.13	43	36.3	3.51	0.32
A0485	7.705	0.02	0.55	50	73	0.50	54	529	4.26	0.34
A0486	7.740	0.02	0.54	50	66	0.38	46	583	4.23	0.34
A0487	7.990	<0.01	0.51	50	52	0.73	56	70.5	4.82	0.29
A0488	8.060	<0.01	0.46	50	75	1.47	62	269	4.47	0.30
A0489	7.620	0.02	0.65	60	79	3.40	53	231	5.02	0.32
A0490	8.040	0.02	0.51	50	37	2.61	59	129	6.14	0.32
A0491	7.720	0.01	0.55	60	64	1.94	76	203	4.56	0.34
A0492	7.920	<0.01	0.49	50	31	2.08	77	111	5.95	0.29
A0493	3.400	0.14	0.49	50	51	6.81	61	1630	7.16	0.32
A0494	4.280	0.01	0.49	50	29	3.19	98	104	7.21	0.32
A0495	11.250	0.05	0.53	50	38	3.06	78	338	5.37	0.34
A0496	8.605	0.02	0.50	50	55	3.16	80	474	5.72	0.34
A0497	8.640	0.01	0.53	50	56	3.53	81	198	4.16	0.34
708808	0.670	0.08	0.41	110	17	0.35	88	1790	5.65	0.28
A0542	9.110	<0.01	0.41	50	48	3.50	65	388	4.48	0.27
A0543	8.230	0.02	0.60	50	44	3.43	73	482	5.51	0.32
A0544	8.115	0.07	0.46	50	45	2.95	68	195	4.61	0.31
A0545	0.080	0.88	1.30	50	140	0.81	32	3490	3.48	0.12
A0546	8.305	0.05	0.46	50	34	5.77	76	442	6.59	0.32
A0547	8.430	0.04	0.48	50	39	3.64	77	581	5.67	0.31
A0548	8.435	<0.01	0.53	50	69	3.88	64	162	4.65	0.33
A0549	8.250	0.02	0.55	50	63	3.30	74	199	5.11	0.35
A0550	8.465	0.03	0.54	40	60	3.74	60	163	4.39	0.39

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Element Method Det.Lim. Units	Li ICM14B 1 ppm	Mg ICM14B 0.01 %	Mn ICM14B 2 ppm	Na ICM14B 0.01 %	Ni ICM14B 0.5 ppm	P ICM14B 50 ppm	S ICM14B 0.01 %	Sr ICM14B 0.5 ppm	Ti ICM14B 0.01 %	V ICM14B 1 ppm
A0469	1	0.03	14	0.02	3.3	70	>5	30.3	<0.01	7
A0470	1	0.03	12	0.02	4.1	280	>5	35.6	<0.01	8
A0471	3	0.03	25	0.02	4.1	670	>5	35.9	<0.01	7
A0472	1	0.02	22	0.02	2.3	640	>5	35.3	<0.01	7
A0473	1	13.2	230	0.01	<0.5	170	<0.01	41.9	<0.01	1
A0474	1	0.05	116	0.03	1.9	610	>5	18.3	<0.01	6
A0475	<1	0.03	55	0.03	<0.5	230	4.60	32.4	<0.01	6
A0476	1	0.03	119	0.03	0.7	360	>5	26.9	<0.01	6
A0477	9	0.59	470	0.08	28.5	550	0.48	36.2	0.12	59
A0478	<1	0.06	296	0.02	1.8	380	3.70	17.4	<0.01	5
A0479	<1	0.03	15	0.02	1.6	420	>5	27.3	<0.01	7
A0480	<1	0.03	25	0.02	<0.5	380	>5	26.5	<0.01	7
A0481	<1	0.08	138	0.01	<0.5	200	>5	30.5	<0.01	11
A0482	<1	0.03	31	0.02	<0.5	530	>5	39.8	<0.01	5
A0483	4	0.19	212	0.02	<0.5	940	4.00	36.1	<0.01	7
A0484	<1	0.03	36	0.02	<0.5	470	4.49	8.2	<0.01	4
A0485	1	0.13	269	0.02	0.6	890	>5	21.5	<0.01	6
A0486	2	0.08	122	0.02	<0.5	890	>5	16.4	<0.01	6
A0487	4	0.10	248	0.02	<0.5	980	>5	21.0	<0.01	6
A0488	3	0.17	1110	0.02	<0.5	910	>5	27.3	<0.01	5
A0489	8	0.17	645	0.02	<0.5	1460	>5	34.2	<0.01	5
A0490	2	0.06	584	0.02	<0.5	760	>5	30.9	<0.01	6
A0491	3	0.06	376	0.02	<0.5	940	>5	49.4	<0.01	5
A0492	2	0.06	342	0.02	<0.5	800	>5	34.4	<0.01	5
A0493	1	0.11	3140	0.02	<0.5	1180	>5	270	<0.01	7
A0494	<1	0.15	1830	0.02	3.1	710	>5	179	<0.01	7
A0495	1	0.25	206	0.04	1.1	820	>5	263	<0.01	7
A0496	<1	0.19	278	0.04	1.8	1030	>5	266	<0.01	7
A0497	2	0.27	168	0.04	1.5	800	>5	270	<0.01	6
708808	8	0.14	186	0.03	2.2	640	>5	25.4	<0.01	170
A0542	<1	0.24	165	0.05	2.2	860	>5	223	<0.01	9
A0543	2	0.35	140	0.05	3.0	970	>5	255	<0.01	11
A0544	1	0.36	1760	0.05	2.1	1070	>5	215	<0.01	12
A0545	9	0.62	502	0.09	30.6	570	0.47	38.6	0.13	62
A0546	<1	0.14	2490	0.03	1.4	820	>5	427	<0.01	7
A0547	1	0.21	475	0.04	1.5	790	>5	268	<0.01	7
A0548	2	0.21	147	0.04	<0.5	900	>5	320	<0.01	7
A0549	1	0.23	224	0.05	1.7	920	>5	258	<0.01	7
A0550	<1	0.18	501	0.04	<0.5	1000	>5	307	<0.01	6

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Element Method Det.Lim. Units	Zn ICM14B 1 ppm	Zr ICM14B 0.5 ppm	Ag ICM14B 0.01 ppm	As ICM14B 1 ppm	Be ICM14B 0.1 ppm	Bi ICM14B 0.02 ppm	Cd ICM14B 0.01 ppm	Ce ICM14B 0.05 ppm	Co ICM14B 0.1 ppm	Cs ICM14B 0.05 ppm
A0469	1420	5.2	2.04	12	0.2	8.94	6.11	3.53	8.0	0.60
A0470	55	5.6	0.27	19	0.2	1.06	0.24	6.76	12.9	0.63
A0471	265	5.2	0.13	15	0.2	0.58	1.40	6.72	12.5	0.69
A0472	66	6.0	0.11	18	0.3	0.45	0.19	5.81	12.8	0.66
A0473	12	<0.5	<0.01	<1	<0.1	<0.02	0.06	0.95	0.6	0.21
A0474	33	5.2	0.09	15	0.2	0.44	0.17	5.31	8.4	0.61
A0475	1380	4.2	1.30	19	0.3	0.46	8.44	3.88	10.4	0.72
A0476	595	4.3	0.21	7	0.2	0.40	2.57	5.22	11.6	0.55
A0477	58	10.0	1.56	12	0.2	0.56	0.56	12.0	7.3	0.42
A0478	127	3.9	0.19	6	0.2	0.27	0.29	5.02	10.6	0.65
A0479	88	4.1	0.25	9	0.2	0.47	0.31	3.65	12.5	0.44
A0480	88	4.1	0.28	10	0.2	0.54	0.30	4.29	13.6	0.50
A0481	2160	8.5	3.15	69	<0.1	9.18	8.69	1.88	8.3	0.42
A0482	9	4.1	0.09	8	0.2	0.57	0.05	3.49	12.3	0.43
A0483	60	4.0	0.19	55	0.3	0.25	0.13	7.71	8.4	1.29
A0484	20	4.2	0.05	10	0.2	0.39	0.08	5.41	16.3	0.53
A0485	103	6.3	0.26	184	0.4	0.50	0.33	5.43	16.3	0.92
A0486	138	5.4	0.49	205	0.4	3.07	0.54	3.83	12.5	0.68
A0487	9	6.2	0.04	20	0.4	0.34	0.06	3.51	14.7	0.63
A0488	93	5.6	0.42	94	0.4	0.59	0.46	6.85	13.0	1.54
A0489	31	5.4	0.09	73	0.4	0.38	0.12	10.2	15.9	0.92
A0490	929	4.9	2.87	36	0.3	2.25	4.60	12.2	9.8	0.68
A0491	111	4.9	0.36	63	0.3	0.46	0.28	13.5	11.6	1.13
A0492	19	4.3	0.06	31	0.3	0.26	0.12	20.8	23.4	1.36
A0493	>10000	6.6	>10	502	0.3	9.58	75.0	8.99	22.4	2.05
A0494	1080	4.2	0.55	19	0.3	0.57	4.29	13.0	28.8	1.49
A0495	68	3.7	0.77	25	0.4	2.34	0.42	13.2	14.2	1.58
A0496	146	4.5	0.37	15	0.4	1.56	0.86	13.4	20.9	1.89
A0497	15	3.4	0.18	7	0.4	0.26	0.12	13.4	18.2	1.55
708808	52	5.4	0.30	588	0.3	1.13	4.06	9.40	26.5	4.16
A0542	16	3.5	0.11	5	0.4	0.71	0.09	15.0	19.1	1.08
A0543	48	4.0	0.17	3	0.4	0.71	0.25	14.9	20.1	0.81
A0544	200	3.6	0.42	32	0.4	1.59	0.82	18.6	11.0	3.42
A0545	62	10.7	1.55	12	0.3	0.57	0.44	13.4	7.5	0.44
A0546	1950	4.4	3.00	67	0.3	3.01	9.30	13.3	22.0	4.12
A0547	82	4.0	0.55	7	0.4	8.58	0.43	17.7	24.4	1.97
A0548	30	3.6	0.10	2	0.4	0.55	0.20	21.9	16.3	1.02
A0549	73	3.8	0.18	2	0.5	0.91	0.41	14.3	13.9	1.00
A0550	84	3.6	0.44	4	0.5	2.43	0.46	13.5	14.5	2.02

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Element Method Det.Lim. Units	Ga ICM14B 0.1 ppm	Ge ICM14B 0.1 ppm	Hf ICM14B 0.05 ppm	Hg ICM14B 0.01 ppm	In ICM14B 0.02 ppm	La ICM14B 0.1 ppm	Lu ICM14B 0.01 ppm	Mo ICM14B 0.05 ppm	Nb ICM14B 0.05 ppm	Pb ICM14B 0.2 ppm
A0469	1.0	<0.1	0.17	0.20	0.33	1.6	0.02	18.1	<0.05	188
A0470	1.0	<0.1	0.17	0.07	0.03	3.1	0.03	26.3	<0.05	8.4
A0471	1.0	<0.1	0.17	0.06	0.06	3.0	0.03	11.1	<0.05	6.3
A0472	0.8	<0.1	0.18	0.05	<0.02	2.9	0.04	27.7	<0.05	7.8
A0473	<0.1	<0.1	<0.05	<0.01	<0.02	0.4	<0.01	0.24	<0.05	0.7
A0474	0.8	<0.1	0.16	0.04	<0.02	2.5	0.02	13.3	<0.05	7.7
A0475	2.0	<0.1	0.13	0.26	2.39	1.9	0.02	15.2	<0.05	213
A0476	0.9	<0.1	0.12	0.08	0.16	2.5	0.02	48.4	<0.05	43.3
A0477	4.3	0.1	0.33	0.08	0.05	5.6	0.10	335	0.38	22.9
A0478	0.8	<0.1	0.14	0.03	<0.02	2.5	0.03	22.7	<0.05	10.0
A0479	1.1	<0.1	0.11	0.06	0.02	2.1	0.02	20.2	<0.05	14.2
A0480	1.1	<0.1	0.12	0.05	0.02	2.4	0.02	16.5	<0.05	16.0
A0481	1.4	0.1	0.10	0.44	0.59	1.0	0.03	12.4	0.08	52.3
A0482	0.9	<0.1	0.11	0.06	<0.02	2.0	0.02	18.7	<0.05	3.3
A0483	1.4	<0.1	0.09	0.06	<0.02	4.4	0.03	31.5	<0.05	13.3
A0484	0.9	<0.1	0.10	0.02	<0.02	3.3	0.02	34.0	<0.05	5.0
A0485	1.0	<0.1	0.19	0.03	0.04	3.0	0.03	29.1	<0.05	7.8
A0486	1.0	<0.1	0.15	0.02	0.06	2.0	0.04	53.8	<0.05	19.1
A0487	0.8	<0.1	0.16	<0.01	<0.02	1.9	0.05	42.6	<0.05	3.8
A0488	0.7	<0.1	0.17	0.02	0.02	3.2	0.08	28.2	<0.05	24.0
A0489	1.0	<0.1	0.14	0.01	<0.02	5.0	0.13	74.7	<0.05	4.5
A0490	1.1	<0.1	0.13	0.03	0.15	5.5	0.11	20.1	<0.05	313
A0491	1.0	<0.1	0.17	0.02	<0.02	6.2	0.06	81.2	<0.05	30.8
A0492	0.8	<0.1	0.10	0.05	<0.02	10.3	0.05	29.2	<0.05	4.9
A0493	2.8	0.1	0.14	0.57	3.33	4.5	0.06	138	<0.05	1060
A0494	0.9	<0.1	0.08	0.05	0.04	6.5	0.07	114	<0.05	211
A0495	1.0	<0.1	0.07	<0.01	0.06	6.6	0.05	52.9	<0.05	11.0
A0496	1.0	<0.1	0.10	0.01	0.09	6.5	0.08	45.1	<0.05	17.0
A0497	1.0	<0.1	0.08	<0.01	<0.02	6.7	0.06	83.3	<0.05	2.5
708808	0.8	<0.1	0.09	0.15	0.14	5.0	0.05	>10000	0.05	6.4
A0542	1.0	<0.1	0.07	<0.01	<0.02	7.3	0.08	96.9	<0.05	2.2
A0543	1.4	<0.1	0.07	<0.01	0.02	6.9	0.10	66.1	<0.05	4.8
A0544	1.1	<0.1	0.08	0.01	0.05	8.5	0.10	13.2	<0.05	15.3
A0545	4.4	0.1	0.34	0.08	0.05	6.3	0.11	336	0.45	22.8
A0546	1.3	<0.1	0.09	0.10	0.36	5.7	0.09	62.1	<0.05	356
A0547	1.1	<0.1	0.08	<0.01	0.07	7.5	0.08	48.8	<0.05	11.8
A0548	1.0	<0.1	0.08	<0.01	<0.02	9.8	0.10	127	<0.05	4.2
A0549	1.0	<0.1	0.07	<0.01	<0.02	6.1	0.08	18.4	<0.05	8.0
A0550	1.0	<0.1	0.07	<0.01	0.06	5.7	0.08	24.6	<0.05	13.9

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Element Method Det.Lim. Units	Rb ICM14B 0.2 ppm	Sb ICM14B 0.05 ppm	Sc ICM14B 0.1 ppm	Se ICM14B 1 ppm	Sn ICM14B 0.3 ppm	Ta ICM14B 0.05 ppm	Tb ICM14B 0.02 ppm	Te ICM14B 0.05 ppm	Th ICM14B 0.1 ppm	Tl ICM14B 0.02 ppm
A0469	10.2	3.50	0.5	2	0.6	<0.05	0.04	0.50	1.3	0.25
A0470	10.7	1.43	0.6	3	<0.3	<0.05	0.14	0.14	1.7	0.22
A0471	10.1	1.03	0.6	2	<0.3	<0.05	0.13	0.11	2.2	0.22
A0472	9.5	2.91	0.5	3	<0.3	<0.05	0.17	0.17	2.5	0.19
A0473	1.2	<0.05	0.3	<1	<0.3	<0.05	0.02	<0.05	<0.1	<0.02
A0474	9.5	7.90	0.7	2	<0.3	<0.05	0.11	0.17	2.1	0.17
A0475	9.4	14.0	0.5	2	<0.3	<0.05	0.06	0.39	1.1	0.20
A0476	8.7	2.65	0.5	1	<0.3	<0.05	0.07	0.13	1.5	0.21
A0477	4.6	2.47	4.0	1	1.8	<0.05	0.29	0.18	1.2	0.10
A0478	8.3	4.55	0.6	1	<0.3	<0.05	0.09	0.08	1.5	0.19
A0479	10.3	2.01	0.6	2	0.3	<0.05	0.04	0.19	1.6	0.22
A0480	10.2	2.25	0.5	2	<0.3	<0.05	0.05	0.20	1.5	0.21
A0481	6.6	9.08	0.4	10	0.6	<0.05	0.09	3.31	0.7	0.94
A0482	9.4	0.33	0.4	2	<0.3	<0.05	0.08	0.42	2.5	0.29
A0483	13.1	2.18	0.7	2	0.4	<0.05	0.09	1.40	5.2	1.18
A0484	8.8	0.37	0.4	2	<0.3	<0.05	0.05	0.11	2.6	0.19
A0485	10.0	3.05	0.7	2	<0.3	<0.05	0.10	0.16	1.9	0.25
A0486	10.0	3.78	0.6	2	<0.3	<0.05	0.11	0.80	1.8	0.23
A0487	8.0	0.18	0.6	2	<0.3	<0.05	0.14	0.11	1.6	0.18
A0488	10.5	3.12	0.5	2	<0.3	<0.05	0.26	0.16	2.1	0.29
A0489	9.1	0.55	0.5	3	<0.3	<0.05	0.39	0.12	2.8	0.16
A0490	9.4	12.8	0.6	3	<0.3	<0.05	0.48	0.48	2.6	0.14
A0491	10.0	3.15	0.4	2	<0.3	<0.05	0.32	0.20	3.1	0.17
A0492	8.0	1.18	0.3	3	<0.3	<0.05	0.22	0.11	1.7	0.15
A0493	11.5	64.6	0.6	4	2.3	<0.05	0.26	7.84	1.8	0.44
A0494	10.1	4.00	0.4	4	<0.3	<0.05	0.26	0.33	1.6	0.20
A0495	10.9	0.58	0.6	3	<0.3	<0.05	0.23	2.36	2.0	0.17
A0496	10.6	0.09	0.7	3	<0.3	<0.05	0.29	0.79	2.5	0.16
A0497	8.5	0.42	0.7	2	<0.3	<0.05	0.25	0.09	2.0	0.13
708808	9.4	1.59	0.5	7	<0.3	<0.05	0.18	0.86	2.1	0.24
A0542	7.9	<0.05	0.9	2	<0.3	<0.05	0.32	0.20	3.0	0.12
A0543	10.3	<0.05	0.9	3	<0.3	<0.05	0.32	0.16	3.4	0.16
A0544	14.1	0.32	1.3	2	<0.3	<0.05	0.38	0.42	2.7	0.59
A0545	5.0	2.45	4.6	<1	1.8	<0.05	0.32	0.19	1.4	0.10
A0546	15.0	21.4	0.7	3	0.3	<0.05	0.40	1.47	2.2	0.33
A0547	11.8	0.19	0.8	3	0.3	<0.05	0.35	0.91	2.7	0.20
A0548	10.3	<0.05	0.9	2	<0.3	<0.05	0.40	0.15	3.3	0.16
A0549	11.4	<0.05	0.8	3	<0.3	<0.05	0.34	0.21	3.4	0.17
A0550	16.7	0.16	0.7	2	<0.3	<0.05	0.37	0.71	3.9	0.24

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Element Method Det.Lim. Units	U ICM14B 0.05 ppm	W ICM14B 0.1 ppm	Y ICM14B 0.05 ppm	Yb ICM14B 0.1 ppm	Ag AAS42E 0.3 g/t	Zn ICP90Q 0.01 %
A0469	0.39	0.5	0.97	<0.1	N.A.	N.A.
A0470	1.22	0.7	2.86	0.2	N.A.	N.A.
A0471	0.74	0.5	2.45	0.2	N.A.	N.A.
A0472	1.07	0.4	3.57	0.3	N.A.	N.A.
A0473	1.47	<0.1	0.77	<0.1	N.A.	N.A.
A0474	0.71	0.5	2.13	0.2	N.A.	N.A.
A0475	0.48	0.4	1.85	0.2	N.A.	N.A.
A0476	0.56	0.5	1.90	0.2	N.A.	N.A.
A0477	0.40	1.0	7.92	0.7	N.A.	N.A.
A0478	0.63	0.3	2.08	0.2	N.A.	N.A.
A0479	0.48	0.6	0.94	<0.1	N.A.	N.A.
A0480	0.50	0.5	1.06	<0.1	N.A.	N.A.
A0481	0.95	0.6	2.52	0.2	N.A.	N.A.
A0482	0.82	0.5	1.87	0.2	N.A.	N.A.
A0483	1.19	0.8	2.05	0.2	N.A.	N.A.
A0484	0.76	0.5	1.11	0.1	N.A.	N.A.
A0485	1.03	0.5	2.35	0.2	N.A.	N.A.
A0486	0.86	0.4	2.70	0.2	N.A.	N.A.
A0487	0.89	0.4	3.80	0.3	N.A.	N.A.
A0488	1.58	0.3	6.92	0.5	N.A.	N.A.
A0489	2.09	0.4	9.45	0.9	N.A.	N.A.
A0490	1.83	0.5	10.4	0.7	N.A.	N.A.
A0491	1.31	0.5	5.52	0.4	N.A.	N.A.
A0492	1.02	0.4	4.42	0.3	N.A.	N.A.
A0493	0.97	0.7	6.50	0.4	12.4	1.27
A0494	0.44	0.5	6.06	0.5	N.A.	N.A.
A0495	0.64	0.5	5.35	0.4	N.A.	N.A.
A0496	0.76	0.5	7.25	0.6	N.A.	N.A.
A0497	0.76	0.3	6.20	0.4	N.A.	N.A.
708808	0.84	7.1	4.16	0.3	N.A.	N.A.
A0542	0.87	0.3	7.29	0.6	N.A.	N.A.
A0543	1.03	0.3	7.98	0.7	N.A.	N.A.
A0544	0.93	0.2	8.11	0.7	N.A.	N.A.
A0545	0.42	0.9	8.47	0.7	N.A.	N.A.
A0546	0.81	0.4	9.40	0.6	N.A.	N.A.
A0547	0.89	0.7	7.38	0.6	N.A.	N.A.
A0548	1.14	0.6	8.84	0.7	N.A.	N.A.
A0549	1.09	0.5	7.50	0.6	N.A.	N.A.
A0550	1.09	0.4	7.77	0.6	N.A.	N.A.

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## Certificate of Analysis

Work Order: TK110263A

To: **ELLEN CLEMENTS**  
Director, President and Chief Executive Officer  
**NEW NADINA EXPLORATION INC**  
BOX 130, 298 GREENWOOD ST  
GREENWOOD BC V0H 1J0

Date: Dec 12, 2011

P.O. No. : 1S-0319/PO: SQ-19B-103111-39-12  
Project No. : -  
No. Of Samples : 39  
Date Submitted : Dec 07, 2011  
Report Comprises : Pages 1 to 2  
(Inclusive of Cover Sheet)

Certified By :

Albert Hung  
Senior Chemist & Coordinator

**SGS Minerals Services Geochemistry, Vancouver, BC is ISO 9001:2008 certified.**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

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Final : TK110263A Order: 1S-0319/PO: SQ-19B-103111-39-12

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Element Method Det.Lim. Units	Mo ICP90Q 0.01 %
A0469	N.A.
A0470	N.A.
A0471	N.A.
A0472	N.A.
A0473	N.A.
A0474	N.A.
A0475	N.A.
A0476	N.A.
A0477	N.A.
A0478	N.A.
A0479	N.A.
A0480	N.A.
A0481	N.A.
A0482	N.A.
A0483	N.A.
A0484	N.A.
A0485	N.A.
A0486	N.A.
A0487	N.A.
A0488	N.A.
A0489	N.A.
A0490	N.A.
A0491	N.A.
A0492	N.A.
A0493	N.A.
A0494	N.A.
A0495	N.A.
A0496	N.A.
A0497	N.A.
708808	3.91
A0542	N.A.
A0543	N.A.
A0544	N.A.
A0545	N.A.
A0546	N.A.
A0547	N.A.
A0548	N.A.
A0549	N.A.
A0550	N.A.

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Acme Analytical Laboratories (Vancouver) Ltd.

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Client: New Nadina Exploration Limited

Box 130, 298 Greenwood Street  
Greenwood BC V0H 1J0 Canada

Submitted By: Ellen Clements  
Receiving Lab: Canada-Smithers  
Received: February 22, 2012  
Report Date: March 23, 2012  
Page: 1 of 3

# CERTIFICATE OF ANALYSIS

# SMI12000010.1

## CLIENT JOB INFORMATION

Project: Silver Queen  
Shipment ID:  
P.O. Number  
Number of Samples: 54

## SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps  
PICKUP-RJT Client to Pickup Rejects

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: New Nadina Exploration Limited  
Box 130, 298 Greenwood Street  
Greenwood BC V0H 1J0  
Canada

CC: Jim Hutter

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
No Prep	54	Sorting of samples on arrival and labeling			SMI
G601	54	Lead Collection Fire - Assay Fusion - AAS Finish	30	Completed	VAN
7AX1	54	1:1:1 Aqua Regia digestion ICP-ES/ICP-MS analysis	1	Completed	VAN

## ADDITIONAL COMMENTS



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. \*\* asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Client: **New Nadina Exploration Limited**

Box 130, 298 Greenwood Street  
Greenwood BC V0H 1J0 Canada

Project: Silver Queen

Report Date: March 23, 2012

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# CERTIFICATE OF ANALYSIS

## SMI12000010.1

Method	Analyte	G6	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX
		Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit	MDL	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.005	0.5	0.5	0.5	5	0.5	0.5	0.5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001	
454501	Rock Pulp	0.014	1.3	16.0	922.2	2683	6.5	2.6	12.2	7760	6.32	84	0.9	2.8	19	18.9	2.5	14.9	12	1.10	0.134
454502	Rock Pulp	0.026	5.2	995.4	23.5	73	1.4	2.6	9.8	819	5.67	9	0.6	2.5	34	<0.5	1.2	2.7	14	1.77	0.066
454503	Rock Pulp	0.024	12.5	1251	8.6	32	<0.5	5.3	11.7	138	5.53	<5	<0.5	2.4	29	<0.5	<0.5	0.7	10	0.90	0.009
454504	Rock Pulp	0.012	6.8	822.2	7.7	15	<0.5	2.2	21.9	242	6.89	7	<0.5	2.4	22	<0.5	<0.5	3.0	<10	0.56	0.033
454505	Rock Pulp	<0.005	<0.5	2.2	1.0	13	<0.5	2.0	0.6	268	0.48	<5	0.7	<0.5	45	<0.5	<0.5	<0.5	<10	20.18	0.014
454506	Rock Pulp	0.020	16.2	1190	12.5	28	<0.5	3.3	14.5	277	5.98	7	<0.5	1.8	90	<0.5	<0.5	1.1	<10	0.77	0.030
454507	Rock Pulp	0.019	5.8	1199	4.0	57	1.2	4.4	11.7	747	7.62	<5	<0.5	3.5	24	<0.5	<0.5	2.3	20	0.59	0.036
454508	Rock Pulp	1.160	354.8	3417	26.1	63	2.0	31.9	8.7	536	3.48	13	<0.5	1.5	45	<0.5	4.6	0.7	53	0.82	0.049
454509	Rock Pulp	0.263	62.6	44.2	96.5	59	15.5	4.1	16.9	394	14.33	234	1.1	1.7	24	<0.5	5.8	36.1	<10	0.51	0.068
454510	Rock Pulp	0.043	5.8	76.9	43.3	298	1.7	3.4	23.5	2168	5.07	51	1.3	5.8	280	1.9	4.6	4.7	16	1.30	0.150
454511	Rock Pulp	0.033	15.4	213.0	319.4	438	2.8	2.9	9.0	603	7.70	95	1.7	5.1	32	6.0	7.0	6.7	<10	0.39	0.067
454512	Rock Pulp	0.028	11.5	19.0	97.4	229	1.2	3.7	14.6	746	5.03	13	1.0	5.5	28	2.9	2.4	4.2	<10	0.46	0.129
454513	Rock Pulp	0.047	12.1	29.7	445.0	1054	2.7	3.0	8.0	2540	4.65	53	1.5	4.6	54	6.4	2.4	0.5	<10	1.05	0.170
454514	Rock Pulp	0.165	8.9	2131	5.2	45	0.7	2.4	13.2	1152	5.88	8	1.0	4.3	38	<0.5	11.7	1.5	29	1.79	0.089
454515	Rock Pulp	0.097	8.0	1528	441.0	1800	6.7	3.9	12.6	2231	8.16	608	0.7	2.3	36	8.7	57.9	22.5	<10	1.27	0.039
454516	Rock Pulp	<0.005	<0.5	11.0	3.0	16	<0.5	1.7	0.7	289	0.50	<5	0.7	<0.5	44	<0.5	<0.5	<0.5	<10	20.42	0.016
454517	Rock Pulp	0.049	222.9	842.5	5.9	50	<0.5	2.4	22.1	41	5.00	366	1.7	3.4	40	0.5	11.2	0.9	<10	0.18	0.072
454518	Rock Pulp	0.067	516.3	1697	31.8	133	<0.5	3.1	29.5	914	4.15	217	1.1	4.7	21	<0.5	2.4	1.0	<10	0.46	0.096
454519	Rock Pulp	0.043	905.1	671.8	128.9	327	1.1	4.0	27.8	224	6.12	291	0.7	2.8	29	1.4	4.9	3.5	<10	0.60	0.046
454520	Rock Pulp	1.082	356.0	3401	27.2	63	2.0	32.5	9.4	568	3.51	15	<0.5	1.5	45	0.7	5.1	0.6	54	0.84	0.048
454521	Rock Pulp	0.083	349.4	1268	2.3	12	<0.5	3.1	32.1	86	2.60	<5	<0.5	2.7	241	<0.5	<0.5	<0.5	<10	3.56	0.040
454522	Rock Pulp	0.135	253.8	1701	3.8	17	<0.5	4.4	24.9	183	3.37	8	0.8	4.6	230	<0.5	<0.5	0.8	<10	2.92	0.086
454523	Rock Pulp	0.179	370.8	3599	5.1	26	0.9	3.6	20.8	162	2.16	<5	1.1	3.7	245	<0.5	<0.5	6.6	<10	4.21	0.067
454524	Rock Pulp	0.020	39.1	33.0	4.7	8	<0.5	7.4	19.7	228	4.91	11	1.3	3.3	37	<0.5	1.4	0.6	<10	0.30	0.086
454525	Rock Pulp	0.034	9.8	66.1	8.5	36	<0.5	6.6	20.4	357	6.53	12	1.0	3.8	23	<0.5	1.2	2.8	17	0.77	0.163
454526	Rock Pulp	1.080	358.1	3374	27.0	62	2.0	32.4	8.5	535	3.49	16	<0.5	1.4	43	0.6	4.6	0.6	53	0.83	0.051
454527	Rock Pulp	0.016	8.2	11.8	5.3	10	<0.5	6.5	7.8	17	6.10	21	1.5	1.4	55	<0.5	0.8	<0.5	<10	0.05	0.014
454528	Rock Pulp	0.020	25.9	91.8	3.3	35	<0.5	8.0	11.6	125	5.10	35	0.8	2.0	56	<0.5	5.4	<0.5	<10	0.13	0.051
454529	Rock Pulp	<0.005	<0.5	1.5	1.2	13	<0.5	0.8	0.7	253	0.46	<5	0.6	<0.5	41	<0.5	<0.5	<0.5	<10	19.86	0.013
454530	Rock Pulp	0.431	11.3	239.3	59.8	2134	3.8	4.4	11.2	157	19.03	74	0.9	0.7	31	8.5	12.2	9.4	<10	0.36	0.018

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Report Date: March 23, 2012

Page: 2 of 3 Part 2

CERTIFICATE OF ANALYSIS

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Method Analyte Unit MDL	7AX La ppm	7AX Cr ppm	7AX Mg %	7AX Ba ppm	7AX Ti %	7AX Al %	7AX Na %	7AX K %	7AX W ppm	7AX Hg ppm	7AX Sc ppm	7AX Ti ppm	7AX S %	7AX Ga ppm	7AX Se ppm
454501	Rock Pulp	17.9	41.4	0.46	116	0.003	0.80	0.02	0.47	<0.5	0.19	0.9	0.8	6.96	<5
454502	Rock Pulp	2.8	91.2	0.59	128	0.002	0.70	<0.01	0.35	<0.5	0.05	2.2	<0.5	6.08	<5
454503	Rock Pulp	2.1	10.2	0.42	123	0.001	0.31	0.05	0.20	<0.5	<0.05	1.3	<0.5	5.88	3
454504	Rock Pulp	3.0	7.0	0.26	278	0.001	0.46	0.01	0.32	<0.5	<0.05	<0.5	<0.5	7.86	4
454505	Rock Pulp	0.5	2.2	12.70	16	<0.001	0.03	<0.01	0.02	<0.5	<0.05	<0.5	<0.5	<0.05	<5
454506	Rock Pulp	1.6	129.0	0.33	241	0.002	0.50	0.04	0.32	<0.5	<0.05	<0.5	<0.5	6.66	3
454507	Rock Pulp	2.0	134.3	0.48	158	0.002	0.53	0.02	0.36	2.2	<0.05	<0.5	<0.5	5.88	2
454508	Rock Pulp	7.1	32.6	0.61	138	0.142	1.33	0.10	0.14	1.0	0.10	3.3	<0.5	0.41	<5
454509	Rock Pulp	2.9	62.0	0.07	188	0.002	0.70	<0.01	0.46	1.3	<0.05	<0.5	<0.5	17.77	<5
454510	Rock Pulp	10.2	69.7	0.24	207	0.003	1.05	0.01	0.60	<0.5	<0.05	0.8	<0.5	5.48	2
454511	Rock Pulp	8.6	95.6	0.10	214	0.002	0.66	0.01	0.43	<0.5	<0.05	<0.5	<0.5	9.23	<5
454512	Rock Pulp	10.3	78.9	0.11	367	0.002	0.87	0.02	0.51	<0.5	<0.05	<0.5	<0.5	5.74	<5
454513	Rock Pulp	19.6	24.6	0.30	507	0.001	0.80	0.04	0.35	<0.5	<0.05	0.7	0.6	5.40	2
454514	Rock Pulp	7.6	73.7	0.66	278	0.004	0.80	0.02	0.38	<0.5	<0.05	1.5	<0.5	3.88	<5
454515	Rock Pulp	3.3	127.8	0.13	164	0.002	0.63	0.01	0.35	0.5	0.17	<0.5	<0.5	9.88	<5
454516	Rock Pulp	<0.5	2.6	12.64	18	<0.001	0.03	<0.01	0.02	<0.5	<0.05	<0.5	<0.5	<0.05	<5
454517	Rock Pulp	10.7	59.0	0.05	171	0.003	0.90	0.02	0.48	0.9	0.12	<0.5	<0.5	5.89	2
454518	Rock Pulp	14.4	90.2	0.15	485	0.002	0.57	0.02	0.36	<0.5	<0.05	<0.5	<0.5	4.69	3
454519	Rock Pulp	12.2	103.1	0.05	400	0.002	0.56	<0.01	0.35	<0.5	<0.05	<0.5	<0.5	7.30	<5
454520	Rock Pulp	7.5	35.1	0.61	138	0.145	1.36	0.10	0.14	1.1	0.06	4.1	<0.5	0.41	<5
454521	Rock Pulp	16.6	106.7	0.24	131	0.005	0.40	0.04	0.25	<0.5	<0.05	<0.5	<0.5	5.45	<5
454522	Rock Pulp	15.4	114.6	0.27	128	0.003	0.59	0.05	0.33	6.6	<0.05	<0.5	<0.5	5.57	<5
454523	Rock Pulp	18.9	91.0	0.22	119	0.002	0.39	0.05	0.24	<0.5	<0.05	<0.5	<0.5	5.35	<5
454524	Rock Pulp	5.7	78.6	0.08	188	0.002	0.80	0.03	0.45	0.6	0.06	<0.5	<0.5	5.70	<5
454525	Rock Pulp	13.1	104.6	0.26	121	0.003	1.05	0.05	0.46	<0.5	<0.05	1.1	<0.5	7.48	<5
454526	Rock Pulp	7.1	34.5	0.60	135	0.145	1.36	0.10	0.14	1.1	0.06	4.6	<0.5	0.41	<5
454527	Rock Pulp	15.4	62.1	0.02	126	0.001	0.60	0.02	0.37	<0.5	0.06	0.7	<0.5	7.17	4
454528	Rock Pulp	2.0	62.1	0.04	147	0.002	0.69	0.03	0.40	<0.5	<0.05	0.8	<0.5	5.90	<5
454529	Rock Pulp	<0.5	2.4	12.42	19	<0.001	0.03	<0.01	0.02	<0.5	<0.05	<0.5	<0.5	<0.05	<5
454530	Rock Pulp	1.0	117.6	0.05	35	0.002	0.39	0.01	0.24	0.6	0.48	<0.5	0.7	23.41	11

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Report Date: March 23, 2012

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# SMI12000010.1

Method		G6	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX
Analyte		Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.005	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001
454531	Rock Pulp	0.190	3.8	119.6	180.1	353	3.8	3.5	7.5	17	6.16	32	1.0	1.2	45	2.7	7.9	11.9	<10	0.06	0.005
454532	Rock Pulp	0.067	35.7	57.4	8.7	14	<0.5	5.7	8.8	19	7.11	39	0.9	1.8	73	<0.5	0.6	2.3	<10	0.03	0.013
454533	Rock Pulp	0.007	<0.5	1.7	1.8	15	<0.5	1.3	0.7	246	0.53	<5	<0.5	<0.5	41	<0.5	<0.5	<0.5	<10	19.94	0.018
454534	Rock Pulp	0.061	4.4	242.8	82.9	247	<0.5	6.1	7.6	14	6.02	104	1.8	1.8	45	6.4	6.4	2.7	<10	0.16	0.037
454535	Rock Pulp	0.016	78.4	442.2	2.3	22	<0.5	5.9	25.5	184	4.73	<5	1.0	3.8	242	<0.5	<0.5	0.7	<10	3.59	0.078
454536	Rock Pulp	0.056	85.1	69.6	27.1	263	<0.5	5.7	17.1	18	5.71	40	1.2	2.0	39	1.0	2.8	1.1	<10	0.10	0.037
454537	Rock Pulp	0.025	138.8	678.1	11.6	80	<0.5	6.2	26.6	202	5.36	277	1.6	1.9	52	<0.5	13.7	<0.5	<10	0.14	0.032
454538	Rock Pulp	0.081	226.6	1172	6.2	46	<0.5	9.4	27.1	200	5.83	503	1.1	2.8	32	<0.5	1.0	<0.5	<10	0.41	0.078
454539	Rock Pulp	0.084	122.1	808.6	8.7	24	<0.5	7.0	19.0	374	6.11	11	1.0	3.2	275	<0.5	<0.5	1.6	<10	3.43	0.071
454540	Rock Pulp	1.089	354.9	3377	22.6	58	1.6	29.8	8.6	474	3.46	14	<0.5	1.3	36	<0.5	4.4	<0.5	54	0.79	0.048
454541	Rock Pulp	0.035	2.1	133.2	8.2	31	<0.5	2.7	11.0	1431	4.03	45	1.8	3.5	445	<0.5	0.9	1.1	<10	2.19	0.109
454542	Rock Pulp	0.083	122.8	1853	15.3	120	0.6	4.6	20.2	899	3.58	208	1.1	3.2	325	<0.5	8.8	<0.5	<10	3.91	0.093
454543	Rock Pulp	0.015	3.0	258.4	103.7	324	0.9	3.4	8.7	8912	3.55	54	2.5	3.6	150	1.4	5.6	1.6	13	1.76	0.114
454544	Rock Pulp	0.045	5.7	949.0	434.0	1762	3.4	2.4	13.5	3030	6.07	256	2.4	3.5	231	7.5	23.1	3.5	<10	2.05	0.087
454545	Rock Pulp	0.045	2.8	391.6	4.9	21	<0.5	2.4	12.4	579	3.67	<5	1.9	3.2	158	<0.5	<0.5	0.6	17	1.92	0.099
454546	Rock Pulp	<0.005	<0.5	2.8	1.1	18	<0.5	1.6	0.5	253	0.51	<5	<0.5	<0.5	41	<0.5	<0.5	<0.5	<10	20.63	0.017
454547	Rock Pulp	0.014	2.4	812.8	74.1	350	0.8	1.7	9.4	5075	3.84	119	1.0	2.7	165	0.8	16.0	4.5	<10	3.14	0.128
454548	Rock Pulp	0.049	435.2	1747	1.8	17	<0.5	6.8	30.1	67	3.20	<5	0.7	3.8	295	<0.5	<0.5	0.8	19	4.71	0.056
454549	Rock Pulp	0.026	359.5	2395	4.1	23	0.7	7.6	36.7	446	4.45	9	0.9	3.1	148	<0.5	<0.5	4.7	12	3.19	0.079
454550	Rock Pulp	0.021	406.0	1349	4.3	34	0.6	3.2	20.2	388	3.18	44	1.1	4.1	253	<0.5	<0.5	4.4	<10	4.33	0.087
454551	Rock Pulp	<0.005	<0.5	0.7	0.7	16	<0.5	2.5	<0.5	222	0.46	<5	0.6	<0.5	35	<0.5	<0.5	<0.5	<10	19.45	0.015
454552	Rock Pulp	0.032	543.6	1874	4.8	21	<0.5	1.7	20.0	144	2.46	<5	1.2	4.7	237	<0.5	<0.5	4.0	12	3.61	0.084
454553	Rock Pulp	0.023	585.9	1449	14.5	120	0.7	3.0	20.1	187	2.35	<5	1.2	4.1	212	0.7	<0.5	1.2	<10	3.20	0.092
454554	Rock Pulp	1.069	377.0	3400	25.3	59	2.0	32.0	9.0	473	3.43	13	<0.5	1.2	36	0.6	4.4	0.7	55	0.75	0.057



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**Project:** Silver Queen  
**Report Date:** March 23, 2012

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# CERTIFICATE OF ANALYSIS

SMI12000010.1

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	
Analyte	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.5	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	
454531	Rock Pulp	3.8	48.5	0.07	234	0.001	0.59	<0.01	0.39	<0.5	0.17	<0.5	<0.5	7.33	<5	<2
454532	Rock Pulp	3.0	57.5	0.03	156	0.002	0.57	0.01	0.37	<0.5	0.10	<0.5	<0.5	8.40	<5	<2
454533	Rock Pulp	1.5	4.8	12.17	20	0.001	0.05	<0.01	0.02	<0.5	<0.05	0.7	<0.5	<0.05	<5	<2
454534	Rock Pulp	3.5	51.9	0.03	68	0.002	0.56	<0.01	0.30	<0.5	0.30	1.5	<0.5	7.08	<5	3
454535	Rock Pulp	13.8	76.2	0.28	176	0.005	0.55	0.06	0.32	<0.5	<0.05	2.1	<0.5	7.84	<5	3
454536	Rock Pulp	6.1	60.3	0.03	42	0.002	0.49	<0.01	0.31	<0.5	0.09	1.4	<0.5	6.57	<5	4
454537	Rock Pulp	10.6	70.9	0.10	268	0.002	0.55	<0.01	0.35	<0.5	0.08	1.3	<0.5	6.20	<5	4
454538	Rock Pulp	10.0	11.3	0.18	382	0.002	0.96	0.01	0.51	<0.5	0.07	1.8	<0.5	6.60	<5	5
454539	Rock Pulp	11.0	6.9	0.25	174	0.002	0.51	0.01	0.34	<0.5	<0.05	1.6	<0.5	8.85	<5	5
454540	Rock Pulp	6.1	31.7	0.60	134	0.139	1.27	0.09	0.12	1.4	0.09	4.8	<0.5	0.39	<5	<2
454541	Rock Pulp	16.0	6.1	0.49	617	0.001	0.69	0.02	0.43	<0.5	<0.05	1.6	<0.5	4.19	<5	<2
454542	Rock Pulp	7.5	77.0	0.39	416	0.002	0.52	0.02	0.35	<0.5	0.06	1.6	<0.5	5.72	<5	2
454543	Rock Pulp	14.5	4.8	0.49	559	0.005	0.89	0.02	0.51	<0.5	<0.05	1.9	0.6	3.61	<5	2
454544	Rock Pulp	9.1	6.3	0.17	336	0.003	0.82	0.02	0.53	0.5	0.07	1.7	<0.5	7.96	<5	<2
454545	Rock Pulp	11.5	67.7	0.48	802	0.001	0.61	0.06	0.41	<0.5	<0.05	2.9	<0.5	3.82	<5	3
454546	Rock Pulp	0.6	3.8	12.67	17	<0.001	0.03	<0.01	0.01	<0.5	<0.05	0.5	<0.5	0.22	<5	<2
454547	Rock Pulp	11.7	47.1	0.57	141	0.002	0.62	0.03	0.37	0.9	0.06	1.4	<0.5	5.40	<5	<2
454548	Rock Pulp	16.4	68.5	0.46	103	0.020	0.63	0.04	0.35	<0.5	<0.05	2.8	<0.5	6.84	<5	<2
454549	Rock Pulp	14.5	82.1	0.46	221	0.005	0.51	0.04	0.31	0.6	<0.05	3.2	<0.5	6.52	<5	5
454550	Rock Pulp	15.6	85.8	0.33	166	0.004	0.62	0.04	0.38	0.6	<0.05	2.1	<0.5	6.33	<5	3
454551	Rock Pulp	0.5	3.8	11.84	14	<0.001	0.02	<0.01	<0.01	<0.5	<0.05	0.6	<0.5	0.21	<5	<2
454552	Rock Pulp	22.7	77.4	0.45	180	0.008	0.69	0.05	0.35	<0.5	<0.05	2.3	<0.5	4.76	<5	2
454553	Rock Pulp	20.2	100.8	0.32	195	0.006	0.53	0.04	0.43	0.6	<0.05	1.6	<0.5	4.60	<5	<2
454554	Rock Pulp	6.7	32.4	0.58	137	0.134	1.28	0.09	0.14	1.4	0.08	4.8	<0.5	0.43	5	<2





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Project: Silver Queen

Report Date: March 23, 2012

Page: 1 of 2 Part 1

# QUALITY CONTROL REPORT

SMI12000010.1

Method		G6	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	
Analyte		Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.005	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001
Pulp Duplicates																					
454508	Rock Pulp	1.160	354.8	3417	26.1	63	2.0	31.9	8.7	536	3.48	13	<0.5	1.5	45	<0.5	4.6	0.7	53	0.82	0.049
REP 454508	QC	1.013																			
454526	Rock Pulp	1.080	358.1	3374	27.0	62	2.0	32.4	8.5	535	3.49	16	<0.5	1.4	43	0.6	4.6	0.6	53	0.83	0.051
REP 454526	QC	353.9 3378 25.7 62 1.9 29.9 9.1 545 3.49 14 <0.5 1.4 42 <0.5 4.5 0.6 54 0.84 0.050																			
454532	Rock Pulp	0.067	35.7	57.4	8.7	14	<0.5	5.7	8.8	19	7.11	39	0.9	1.8	73	<0.5	0.6	2.3	<10	0.03	0.013
REP 454532	QC	0.061																			
454545	Rock Pulp	0.045	2.8	391.6	4.9	21	<0.5	2.4	12.4	579	3.67	<5	1.9	3.2	158	<0.5	<0.5	0.6	17	1.92	0.099
REP 454545	QC	0.043																			
454549	Rock Pulp	0.026	359.5	2395	4.1	23	0.7	7.6	36.7	446	4.45	9	0.9	3.1	148	<0.5	<0.5	4.7	12	3.19	0.079
REP 454549	QC	366.0 2366 4.5 23 0.7 8.5 37.8 444 4.44 7 1.0 3.2 146 <0.5 <0.5 4.8 12 3.18 0.083																			
Reference Materials																					
STD OXH82	Standard	1.294																			
STD OXH82	Standard	1.278																			
STD OXH82	Standard	1.283																			
STD OXK79	Standard	3.673																			
STD OXK79	Standard	3.459																			
STD OXK79	Standard	3.373																			
STD SF-3A	Standard	292.5	7643	8190	10584	50.6	3364	181.8	3848	7.74	45	3.4	3.0	59	49.6	9.3	4.1	105	2.63	0.056	
STD SF-3A	Standard	286.7	7441	7942	10367	48.4	3261	177.3	3707	7.56	43	3.2	3.6	56	46.1	9.4	4.3	101	2.55	0.052	
STD SF-3A	Standard	308.8	7715	8144	10842	52.0	3414	187.1	3981	7.91	45	3.3	3.6	64	49.7	10.2	5.2	105	2.59	0.053	
STD SF-3A	Standard	300.2	7688	8225	10791	51.9	3396	183.7	3953	7.81	49	3.7	3.7	70	50.8	11.2	5.0	105	2.58	0.053	
STD SF-3A	Standard	320.7	7792	8564	10792	55.2	3482	185.2	3852	7.70	44	3.0	2.8	56	50.7	8.8	4.2	105	2.60	0.055	
STD SF-3A	Standard	303.2	7629	8187	10550	55.1	3403	180.5	3709	7.44	42	3.0	2.8	53	46.8	8.0	4.2	104	2.50	0.052	
STD OXH82 Expected		1.278																			
STD OXK79 Expected		3.532																			
STD SF-3A Expected		308	7705	8715	10750	54	3420	183	4100	7.75	46	3.3	2.8	58	50	10	4.6	102	2.59	0.055	
BLK	Blank	<0.005																			
BLK	Blank	0.006																			

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 Greenwood BC V0H 1J0 Canada

Project: Silver Queen  
 Report Date: March 23, 2012

Page: 1 of 2 Part 2

# QUALITY CONTROL REPORT

SMI12000010.1

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	
Analyte	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	
Unit	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
MDL	0.5	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	
Pulp Duplicates																
454508	Rock Pulp	7.1	32.6	0.61	138	0.142	1.33	0.10	0.14	1.0	0.10	3.3	<0.5	0.41	<5	<2
REP 454508	QC															
454526	Rock Pulp	7.1	34.5	0.60	135	0.145	1.36	0.10	0.14	1.1	0.06	4.6	<0.5	0.41	<5	<2
REP 454526	QC	7.0	35.0	0.61	135	0.145	1.35	0.10	0.14	1.1	0.06	4.3	<0.5	0.43	<5	<2
454532	Rock Pulp	3.0	57.5	0.03	156	0.002	0.57	0.01	0.37	<0.5	0.10	<0.5	<0.5	8.40	<5	<2
REP 454532	QC															
454545	Rock Pulp	11.5	67.7	0.48	802	0.001	0.61	0.06	0.41	<0.5	<0.05	2.9	<0.5	3.82	<5	3
REP 454545	QC															
454549	Rock Pulp	14.5	82.1	0.46	221	0.005	0.51	0.04	0.31	0.6	<0.05	3.2	<0.5	6.52	<5	5
REP 454549	QC	14.7	83.4	0.49	221	0.005	0.52	0.04	0.31	0.6	<0.05	3.2	<0.5	6.45	<5	5
Reference Materials																
STD OXH82	Standard															
STD OXH82	Standard															
STD OXH82	Standard															
STD OXK79	Standard															
STD OXK79	Standard															
STD OXK79	Standard															
STD SF-3A	Standard	9.8	175.2	4.21	269	0.117	0.99	0.51	0.94	3.2	0.52	3.8	2.6	4.99	<5	11
STD SF-3A	Standard	8.9	169.0	4.10	262	0.112	0.96	0.50	0.91	2.9	0.62	3.6	2.7	4.83	<5	9
STD SF-3A	Standard	10.7	178.9	4.27	280	0.120	1.06	0.57	1.01	3.4	0.51	2.4	2.4	5.23	<5	6
STD SF-3A	Standard	11.2	181.3	4.24	282	0.121	1.06	0.57	1.00	3.2	0.59	2.6	2.3	5.15	<5	8
STD SF-3A	Standard	9.2	175.4	4.29	268	0.116	1.01	0.53	1.03	3.2	0.55	3.1	2.6	5.21	<5	6
STD SF-3A	Standard	8.6	172.9	4.15	261	0.113	0.98	0.51	1.01	2.9	0.51	3.0	2.7	4.98	<5	9
STD OXH82 Expected																
STD OXK79 Expected																
STD SF-3A Expected		8.9	172	4.27	260	0.117	1.02	0.5	1.04	3.2	0.6	3	2.7	5	4	8.5
BLK	Blank															
BLK	Blank															

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Project: Silver Queen

Report Date: March 23, 2012

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QUALITY CONTROL REPORT

SMI12000010.1

		G6	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	
		Au	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
BLK	Blank	0.008				5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001
BLK	Blank	<0.005																			
BLK	Blank	<0.005																			
BLK	Blank	<0.005																			
BLK	Blank		<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.01	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<10	<0.01	<0.001
BLK	Blank		<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.01	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<10	<0.01	<0.001
BLK	Blank		<0.5	2.0	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.01	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<10	<0.01	0.001

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Report Date: March 23, 2012

Page: 2 of 2 Part 2

QUALITY CONTROL REPORT

SMI12000010.1

		7AX La ppm 0.5	7AX Cr ppm 0.5	7AX Mg % 0.01	7AX Ba ppm 5	7AX Ti % 0.001	7AX Al % 0.01	7AX Na % 0.01	7AX K % 0.01	7AX W ppm 0.5	7AX Hg ppm 0.05	7AX Sc ppm 0.5	7AX Tl ppm 0.5	7AX S % 0.05	7AX Ga ppm 5	7AX Se ppm 2
BLK	Blank															
BLK	Blank															
BLK	Blank															
BLK	Blank															
BLK	Blank	<0.5	<0.5	<0.01	<5	<0.001	<0.01	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2
BLK	Blank	<0.5	<0.5	<0.01	<5	<0.001	<0.01	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2
BLK	Blank	<0.5	<0.5	<0.01	<5	<0.001	<0.01	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2



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Submitted By: Ellen Clements  
Receiving Lab: Canada-Smithers  
Received: February 22, 2012  
Report Date: March 23, 2012  
Page: 1 of 3

# CERTIFICATE OF ANALYSIS

# SMI12000011.1

## CLIENT JOB INFORMATION

Project: Silver Queen  
Shipment ID:  
P.O. Number  
Number of Samples: 54

## SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps  
PICKUP-RJT Client to Pickup Rejects

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: New Nadina Exploration Limited  
Box 130, 298 Greenwood Street  
Greenwood BC V0H 1J0  
Canada

CC: Jim Hutter

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
No Prep	54	Sorting of samples on arrival and labeling			SMI
P200	49	Pulverize to 85% passing 200 mesh			VAN
7AX1	54	1:1:1 Aqua Regia digestion ICP-ES/ICP-MS analysis	1	Completed	VAN
G601	54	Lead Collection Fire - Assay Fusion - AAS Finish	30	Completed	VAN

## ADDITIONAL COMMENTS



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Project: Silver Queen  
Report Date: March 23, 2012

Page: 2 of 3 Part 1

## CERTIFICATE OF ANALYSIS

SMI12000011.1

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001	0.5	
A0020	Core Reject	1.1	17.6	1143	2784	5.6	2.6	12.0	7591	6.65	89	0.8	2.3	19	19.1	2.9	14.1	21	1.04	0.140	14.1
A0040	Core Reject	4.3	1054	21.1	71	1.0	3.5	10.3	784	5.65	11	0.5	2.0	31	<0.5	1.5	3.1	19	1.70	0.065	2.5
A0042	Core Pulp	369.1	3414	22.1	63	1.4	30.9	8.2	481	3.39	14	<0.5	1.1	39	<0.5	4.4	0.9	53	0.72	0.052	5.7
A0060	Core Reject	12.4	1271	2.8	25	<0.5	2.4	12.4	120	5.87	<5	<0.5	2.1	27	<0.5	<0.5	0.9	19	0.83	0.009	2.1
A0080	Core Reject	6.5	760.7	5.9	18	<0.5	3.6	23.5	212	7.27	6	<0.5	2.0	20	<0.5	<0.5	2.6	13	0.51	0.031	2.2
A0098	Core Reject	<0.5	3.6	0.7	19	<0.5	1.2	0.7	244	0.51	<5	<0.5	<0.5	43	<0.5	<0.5	<0.5	<10	21.20	0.016	0.6
A0100	Core Reject	12.9	1221	10.2	29	<0.5	2.9	14.6	255	6.19	6	<0.5	1.4	76	<0.5	<0.5	1.0	14	0.72	0.031	1.1
A0120	Core Reject	5.9	1203	2.7	57	0.6	3.3	11.5	708	7.71	<5	<0.5	2.7	22	<0.5	<0.5	1.5	28	0.56	0.036	1.6
0140	Core Reject	54.9	47.1	75.2	64	11.7	3.0	17.0	356	14.50	236	0.9	1.3	21	<0.5	5.2	28.7	25	0.50	0.070	2.3
0160	Core Reject	5.5	72.1	34.0	268	1.0	3.7	20.8	1939	5.01	48	1.0	4.4	252	1.3	3.9	4.6	19	1.25	0.133	6.9
A0177	Core Pulp	372.3	3468	21.8	62	1.4	30.9	8.4	493	3.44	14	<0.5	1.3	36	<0.5	4.3	1.2	54	0.73	0.052	5.5
0180	Core Reject	15.9	177.2	275.5	388	2.1	2.6	8.6	519	7.92	86	1.7	4.2	30	4.8	6.1	6.0	13	0.40	0.064	6.0
0200	Core Reject	8.1	17.9	61.9	168	0.6	2.9	12.4	562	4.68	9	0.9	4.2	22	1.5	1.8	3.3	<10	0.36	0.120	7.1
0220	Core Reject	11.8	24.9	456.5	1064	2.0	1.6	7.3	2525	4.68	54	1.3	3.7	49	7.7	2.2	0.6	<10	0.99	0.165	15.4
0240	Core Reject	9.4	2141	5.0	46	<0.5	2.4	14.0	983	5.85	11	0.8	3.4	34	<0.5	12.2	1.0	34	1.61	0.089	6.0
0260	Core Reject	7.4	1578	395.5	1599	5.3	1.9	11.2	2225	7.92	610	<0.5	2.0	32	8.3	47.9	19.2	13	1.13	0.033	2.8
0261	Core Reject	<0.5	6.6	2.5	17	<0.5	1.0	0.7	254	0.53	<5	0.7	<0.5	41	<0.5	<0.5	<0.5	<10	21.67	0.017	<0.5
A0280	Core Reject	192.9	801.7	4.4	48	<0.5	1.6	21.4	44	5.04	346	1.3	2.7	32	<0.5	9.3	1.1	<10	0.26	0.063	8.1
A0292	Core Pulp	373.7	3437	21.9	62	1.3	30.6	8.9	492	3.42	15	<0.5	1.2	40	<0.5	4.1	0.7	55	0.74	0.051	6.2
A0300	Core Reject	497.5	1722	25.3	143	<0.5	2.9	27.6	850	4.13	220	1.0	3.9	19	<0.5	2.4	0.8	<10	0.46	0.100	11.5
A0320	Core Reject	919.9	709.9	121.1	347	0.7	4.5	29.0	229	6.70	312	0.6	2.2	27	<0.5	5.2	2.9	11	0.60	0.049	8.9
0340	Core Reject	383.2	1262	3.6	20	<0.5	4.0	39.5	91	3.16	<5	<0.5	2.1	262	<0.5	<0.5	<0.5	<10	3.77	0.038	13.2
0360	Core Reject	238.6	1850	3.6	29	<0.5	2.9	22.5	186	3.22	9	0.7	3.9	213	<0.5	<0.5	<0.5	<10	2.77	0.082	12.2
0380	Core Reject	426.0	3572	4.9	29	0.7	3.7	20.1	168	2.39	<5	0.9	3.1	240	<0.5	<0.5	5.8	<10	4.07	0.075	16.3
0400	Core Reject	40.2	34.6	3.7	10	<0.5	6.3	19.9	217	5.00	8	1.1	2.8	28	<0.5	1.2	0.5	11	0.28	0.080	4.5
0419	Core Reject	9.0	75.3	5.3	37	<0.5	6.4	19.4	347	7.06	10	0.9	2.6	18	<0.5	0.9	1.8	21	0.75	0.164	8.6
A0440	Core Reject	8.8	12.7	4.7	16	<0.5	7.4	7.9	24	6.91	22	1.3	1.4	50	<0.5	0.7	<0.5	13	0.05	0.016	12.8
A0460	Core Reject	25.0	68.7	2.3	34	<0.5	8.6	11.7	130	5.28	26	0.7	1.6	46	<0.5	3.6	<0.5	11	0.12	0.049	2.1
0473	Core Reject	1.1	2.4	1.1	19	<0.5	1.5	0.7	244	0.51	<5	<0.5	<0.5	42	<0.5	<0.5	<0.5	<10	21.47	0.016	0.8
0481	Core Reject	13.8	291.7	60.1	2526	4.1	3.7	12.5	179	24.35	97	1.0	0.6	31	10.2	12.8	9.9	37	0.43	0.019	0.9

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Project: Silver Queen  
 Report Date: March 23, 2012

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## CERTIFICATE OF ANALYSIS

SMI12000011.1

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	G6
Analyte	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Au	
Unit	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	0.005	
A0020	Core Reject	1.9	0.46	94	0.003	0.59	0.02	0.38	<0.5	0.11	2.1	0.8	7.14	<5	<2	0.023
A0040	Core Reject	3.5	0.55	113	0.001	0.45	<0.01	0.26	<0.5	0.09	3.0	<0.5	5.93	<5	<2	0.035
A0042	Core Pulp	30.6	0.56	130	0.129	1.26	0.10	0.12	1.3	0.07	4.7	<0.5	0.42	<5	<2	1.008
A0060	Core Reject	7.3	0.42	135	0.001	0.28	0.05	0.18	<0.5	<0.05	2.3	<0.5	6.17	<5	4	0.027
A0080	Core Reject	6.5	0.26	264	0.001	0.40	0.01	0.29	<0.5	<0.05	1.2	<0.5	8.07	<5	5	0.020
A0098	Core Reject	<0.5	12.00	19	<0.001	0.03	<0.01	0.01	<0.5	<0.05	0.6	<0.5	<0.05	<5	<2	0.009
A0100	Core Reject	7.6	0.30	217	0.001	0.32	0.03	0.22	<0.5	<0.05	1.4	<0.5	6.53	<5	4	0.024
A0120	Core Reject	8.3	0.44	147	0.001	0.36	0.02	0.30	2.2	<0.05	1.6	<0.5	5.57	<5	<2	0.027
0140	Core Reject	3.3	0.08	169	0.002	0.48	<0.01	0.36	1.0	<0.05	1.4	<0.5	16.48	<5	<2	0.318
0160	Core Reject	3.5	0.19	151	0.021	0.62	0.01	0.43	<0.5	<0.05	1.5	<0.5	5.25	<5	<2	0.045
A0177	Core Pulp	31.0	0.56	129	0.129	1.27	0.09	0.12	1.3	0.07	4.6	<0.5	0.43	<5	<2	1.014
0180	Core Reject	4.4	0.08	174	<0.001	0.48	0.01	0.36	<0.5	<0.05	0.9	<0.5	8.95	<5	<2	0.036
0200	Core Reject	4.1	0.08	274	0.002	0.55	0.01	0.40	<0.5	<0.05	1.1	<0.5	5.18	<5	<2	0.023
0220	Core Reject	1.4	0.30	423	0.001	0.62	0.04	0.28	<0.5	<0.05	1.4	0.6	5.20	<5	<2	0.047
0240	Core Reject	4.5	0.59	257	0.003	0.58	0.02	0.30	<0.5	<0.05	2.6	<0.5	3.98	<5	<2	0.156
0260	Core Reject	7.0	0.11	195	0.001	0.39	0.01	0.26	<0.5	0.14	0.9	<0.5	9.12	<5	<2	0.097
0261	Core Reject	0.5	12.08	17	<0.001	0.02	<0.01	0.02	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2	0.012
A0280	Core Reject	3.2	0.03	146	0.002	0.63	0.01	0.37	0.7	0.15	0.8	<0.5	5.66	<5	4	0.051
A0292	Core Pulp	31.3	0.56	129	0.131	1.27	0.10	0.13	1.1	0.07	4.6	<0.5	0.42	<5	<2	1.167
A0300	Core Reject	7.1	0.15	441	0.001	0.48	0.02	0.32	<0.5	<0.05	0.8	<0.5	4.42	<5	2	0.085
A0320	Core Reject	8.4	0.04	358	0.001	0.45	<0.01	0.31	<0.5	<0.05	0.7	<0.5	7.55	<5	3	0.062
0340	Core Reject	7.1	0.23	122	0.004	0.31	0.03	0.21	<0.5	<0.05	0.7	<0.5	6.33	<5	2	0.091
0360	Core Reject	5.4	0.26	115	0.002	0.45	0.05	0.27	<0.5	<0.05	0.8	<0.5	5.26	<5	<2	0.147
0380	Core Reject	7.1	0.22	122	0.001	0.34	0.04	0.22	<0.5	<0.05	1.1	<0.5	5.43	<5	2	0.176
0400	Core Reject	4.0	0.06	167	0.001	0.62	0.03	0.38	<0.5	0.06	1.2	<0.5	5.51	<5	4	0.024
0419	Core Reject	7.5	0.24	83	0.002	0.63	0.04	0.31	0.8	<0.05	1.6	<0.5	7.78	<5	2	0.041
A0440	Core Reject	4.4	0.02	136	0.002	0.54	0.02	0.34	<0.5	0.07	0.7	<0.5	7.89	<5	4	0.032
A0460	Core Reject	6.4	0.02	128	0.002	0.51	0.02	0.32	<0.5	<0.05	0.7	<0.5	5.79	<5	3	0.025
0473	Core Reject	<0.5	11.82	21	0.001	0.03	<0.01	0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2	0.011
0481	Core Reject	8.0	0.03	29	0.001	0.32	<0.01	0.19	<0.5	0.37	0.8	1.0	28.03	<5	12	0.464

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Project: Silver Queen

Report Date: March 23, 2012

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**CERTIFICATE OF ANALYSIS**

**SMI12000011.1**

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	La
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm
MDL	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001	0.5	0.5
0501	Core Reject	4.0	110.5	137.0	364	2.6	4.5	7.3	25	6.48	28	0.7	0.9	36	2.4	6.3	8.7	13	0.02	0.006	2.8
0518	Core Reject	36.7	48.8	7.4	17	<0.5	4.1	8.6	27	7.07	40	0.9	1.4	64	<0.5	0.7	2.0	14	0.05	0.011	2.5
0536	Core Reject	<0.5	1.9	1.0	17	<0.5	1.2	0.6	256	0.53	<5	<0.5	<0.5	41	<0.5	<0.5	<0.5	<10	21.56	0.019	0.7
0539	Core Reject	4.0	218.5	71.7	245	<0.5	4.4	7.2	28	6.37	94	1.6	1.4	40	6.0	6.1	2.3	13	0.11	0.033	2.9
0542	Core Reject	98.3	440.8	3.8	26	<0.5	6.3	26.8	188	5.38	5	0.9	3.4	243	<0.5	<0.5	<0.5	14	3.34	0.083	12.4
A0545	Core Pulp	364.7	3385	22.1	60	1.3	27.8	8.4	489	3.39	13	<0.5	1.2	36	<0.5	3.8	<0.5	55	0.72	0.049	5.6
0560	Core Reject	92.8	82.4	29.4	303	<0.5	5.7	17.8	39	5.88	41	1.3	1.8	40	1.5	2.7	2.3	<10	0.09	0.044	6.2
0581	Core Reject	142.0	725.3	14.5	92	<0.5	8.1	30.3	240	6.37	308	1.7	2.0	48	<0.5	13.5	1.6	<10	0.17	0.042	10.6
0600	Core Reject	202.3	1194	6.7	46	<0.5	7.3	26.8	196	5.90	489	0.9	2.5	27	<0.5	0.7	1.3	<10	0.41	0.093	8.4
0619	Core Reject	109.1	782.3	9.9	30	0.5	6.1	19.1	358	6.33	9	0.9	2.8	301	<0.5	<0.5	3.1	<10	3.53	0.080	11.1
0640	Core Reject	3.0	173.9	10.3	41	<0.5	2.4	11.6	1456	4.26	60	1.6	2.8	549	<0.5	1.3	2.3	<10	2.16	0.119	14.2
0660	Core Reject	127.3	1805	20.2	132	0.8	4.9	21.6	901	3.82	241	1.0	2.8	346	0.7	10.6	1.1	<10	4.06	0.098	7.0
0680	Core Reject	3.0	278.1	123.9	365	1.3	1.6	9.2	8730	3.51	60	2.2	3.2	154	1.7	6.1	2.4	<10	1.65	0.122	13.1
0700	Core Reject	6.8	865.7	492.5	1716	3.8	3.2	12.0	3044	5.54	227	2.2	3.1	246	8.4	19.2	4.3	<10	2.00	0.090	7.8
0720	Core Reject	2.7	380.9	4.0	21	<0.5	2.5	11.0	573	3.50	<5	1.9	3.0	163	<0.5	<0.5	1.0	15	1.85	0.116	10.7
0734	Core Reject	<0.5	4.2	1.7	14	<0.5	<0.5	<0.5	250	0.45	<5	<0.5	<0.5	43	<0.5	<0.5	<0.5	<10	19.78	0.015	0.5
0739	Core Reject	2.6	706.8	79.0	316	1.0	1.4	9.3	5101	3.73	110	1.0	2.6	170	1.0	14.4	3.7	<10	3.03	0.134	10.6
A0740	Core Pulp	352.4	3316	23.8	59	1.9	30.4	8.3	467	3.36	15	<0.5	1.0	38	<0.5	3.8	0.7	50	0.73	0.055	6.4
0760	Core Reject	424.7	1706	1.7	13	<0.5	6.0	30.5	81	3.19	<5	0.7	3.4	303	<0.5	<0.5	1.2	17	4.67	0.061	17.1
0780	Core Reject	370.8	2255	5.5	24	0.9	6.9	36.7	450	4.34	12	0.9	2.9	145	<0.5	<0.5	5.1	10	3.05	0.086	13.9
0800	Core Reject	465.4	1339	5.1	26	0.8	2.5	18.7	384	3.23	41	1.1	3.3	249	<0.5	<0.5	4.3	<10	4.16	0.089	14.5
0813	Core Reject	0.8	3.7	1.1	13	<0.5	1.4	<0.5	244	0.43	<5	<0.5	<0.5	40	<0.5	<0.5	<0.5	<10	20.58	0.012	0.5
0819	Core Reject	536.3	1857	5.6	17	<0.5	1.7	22.1	144	2.77	<5	1.1	4.0	240	<0.5	<0.5	5.2	10	3.47	0.088	22.8
0840	Core Reject	578.0	1352	14.3	99	<0.5	2.9	20.4	202	2.79	<5	1.1	3.6	210	<0.5	<0.5	1.4	<10	3.24	0.071	18.7





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CERTIFICATE OF ANALYSIS

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Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	G6	
Analyte	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Au	
Unit	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	0.005	
0501	Core Reject	5.8	0.04	208	<0.001	0.47	<0.01	0.32	<0.5	0.13	<0.5	<0.5	7.22	<5	<2	0.189
0518	Core Reject	5.5	0.04	167	0.001	0.58	0.01	0.38	<0.5	<0.05	0.9	<0.5	8.17	<5	3	0.069
0536	Core Reject	0.8	12.00	18	<0.001	0.04	<0.01	0.02	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2	0.014
0539	Core Reject	4.5	<0.01	71	0.001	0.55	<0.01	0.32	<0.5	0.31	1.4	<0.5	7.01	<5	3	0.063
0542	Core Reject	5.3	0.26	179	0.002	0.49	0.08	0.28	<0.5	<0.05	0.7	<0.5	8.60	<5	2	0.027
A0545	Core Pulp	31.0	0.56	129	0.130	1.27	0.09	0.13	1.1	<0.05	4.3	<0.5	0.42	<5	<2	1.048
0560	Core Reject	4.4	0.03	44	0.001	0.36	<0.01	0.28	<0.5	<0.05	<0.5	<0.5	6.54	<5	3	0.068
0581	Core Reject	5.5	0.08	271	0.001	0.46	<0.01	0.34	<0.5	<0.05	<0.5	<0.5	7.38	<5	5	0.031
0600	Core Reject	4.7	0.15	329	0.001	0.48	<0.01	0.31	<0.5	<0.05	<0.5	<0.5	6.85	<5	5	0.085
0619	Core Reject	5.2	0.22	189	0.001	0.38	<0.01	0.29	<0.5	<0.05	0.6	<0.5	9.51	<5	4	0.074
0640	Core Reject	3.1	0.47	586	0.002	0.49	0.02	0.36	<0.5	<0.05	0.7	<0.5	4.51	<5	<2	0.048
0660	Core Reject	5.2	0.35	399	0.001	0.41	0.02	0.31	<0.5	<0.05	0.7	<0.5	6.03	<5	2	0.096
0680	Core Reject	2.7	0.44	539	0.002	0.48	0.01	0.36	<0.5	<0.05	1.1	<0.5	3.91	<5	<2	0.027
0700	Core Reject	4.3	0.11	281	0.001	0.46	0.01	0.33	<0.5	<0.05	0.6	<0.5	7.62	<5	<2	0.050
0720	Core Reject	3.3	0.42	765	0.001	0.47	0.05	0.37	<0.5	<0.05	1.8	<0.5	3.67	<5	<2	0.046
0734	Core Reject	<0.5	12.07	16	<0.001	0.02	<0.01	0.01	<0.5	<0.05	<0.5	<0.5	0.23	<5	<2	0.015
0739	Core Reject	3.1	0.55	136	0.001	0.52	0.03	0.37	<0.5	<0.05	0.8	<0.5	5.29	<5	<2	0.022
A0740	Core Pulp	31.0	0.58	129	0.130	1.20	0.08	0.12	1.0	0.07	3.5	<0.5	0.41	<5	<2	0.959
0760	Core Reject	9.3	0.41	105	0.018	0.57	0.04	0.36	<0.5	<0.05	1.5	<0.5	6.99	<5	<2	0.054
0780	Core Reject	8.2	0.44	198	0.004	0.42	0.03	0.30	1.0	<0.05	1.5	<0.5	6.50	<5	<2	0.036
0800	Core Reject	5.4	0.29	148	0.003	0.43	0.04	0.32	0.5	<0.05	1.0	<0.5	6.41	<5	<2	0.031
0813	Core Reject	<0.5	12.69	14	<0.001	0.02	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	0.22	<5	<2	0.017
0819	Core Reject	6.9	0.41	185	0.007	0.52	0.04	0.31	<0.5	<0.05	1.0	<0.5	5.21	<5	<2	0.049
0840	Core Reject	13.2	0.32	171	0.005	0.46	0.04	0.34	<0.5	<0.05	0.7	<0.5	5.03	<5	<2	0.031



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Report Date: March 23, 2012

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# QUALITY CONTROL REPORT

SMI12000011.1

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	0.5	0.5	0.5	5	0.5	0.5	0.5	5	0.01	5	0.5	0.5	5	0.5	0.5	0.5	10	0.01	0.001	0.5	
Pulp Duplicates																					
A0040 Core Reject	4.3	1054	21.1	71	1.0	3.5	10.3	784	5.65	11	0.5	2.0	31	<0.5	1.5	3.1	19	1.70	0.065	2.5	
REP A0040 QC	5.2	1061	16.4	69	1.0	2.6	9.8	794	5.72	9	0.5	1.9	32	<0.5	1.5	2.6	19	1.70	0.063	2.5	
0220 Core Reject	11.8	24.9	456.5	1064	2.0	1.6	7.3	2525	4.68	54	1.3	3.7	49	7.7	2.2	0.6	<10	0.99	0.165	15.4	
REP 0220 QC																					
0542 Core Reject	98.3	440.8	3.8	26	<0.5	6.3	26.8	188	5.38	5	0.9	3.4	243	<0.5	<0.5	<0.5	14	3.34	0.083	12.4	
REP 0542 QC																					
0760 Core Reject	424.7	1706	1.7	13	<0.5	6.0	30.5	81	3.19	<5	0.7	3.4	303	<0.5	<0.5	1.2	17	4.67	0.061	17.1	
REP 0760 QC	435.9	1724	1.7	11	0.5	5.7	30.2	81	3.20	<5	0.8	3.5	309	<0.5	<0.5	1.1	18	4.69	0.062	16.5	
Reference Materials																					
STD OXH82 Standard																					
STD OXH82 Standard																					
STD OXK79 Standard																					
STD OXK94 Standard																					
STD OXK94 Standard																					
STD SF-3A Standard	318.7	7813	8731	11059	54.0	3540	187.7	4042	7.70	48	3.3	3.0	61	48.9	10.2	4.6	113	2.58	0.053	9.3	
STD SF-3A Standard	309.6	7700	8584	10901	55.6	3534	183.3	4014	7.65	46	3.2	2.9	61	47.8	10.3	4.5	114	2.57	0.052	9.2	
STD SF-3A Standard	283.0	7603	8494	10751	52.9	3341	184.0	4015	7.72	46	3.4	2.9	62	48.5	10.0	4.3	105	2.55	0.054	10.2	
STD SF-3A Standard	290.1	7605	8445	10821	52.3	3349	180.8	4056	7.75	43	3.4	2.9	62	47.2	9.8	4.6	103	2.57	0.054	9.4	
STD OXH82 Expected																					
STD OXK79 Expected																					
STD OXK94 Expected																					
STD SF-3A Expected	308	7705	8715	10750	54	3420	183	4100	7.75	46	3.3	2.8	58	50	10	4.6	102	2.59	0.055	8.9	
BLK Blank																					
BLK Blank																					
BLK Blank	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.01	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<10	<0.01	<0.001	<0.5	
BLK Blank	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.01	<5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<10	<0.01	<0.001	<0.5	

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



Acme Analytical Laboratories (Vancouver) Ltd.

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 Phone (604) 253-3158 Fax (604) 253-1716

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Client: **New Nadina Exploration Limited**  
 Box 130, 298 Greenwood Street  
 Greenwood BC V0H 1J0 Canada

Project: Silver Queen  
 Report Date: March 23, 2012

Page: 1 of 1 Part 2

QUALITY CONTROL REPORT

SMI12000011.1

Method	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	7AX	G6
Analyte	Cr	Mg	Ba	Ti	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Au
Unit	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
MDL	0.5	0.01	5	0.001	0.01	0.01	0.01	0.5	0.05	0.5	0.5	0.05	5	2	0.005
Pulp Duplicates															
A0040 Core Reject	3.5	0.55	113	0.001	0.45	<0.01	0.26	<0.5	0.09	3.0	<0.5	5.93	<5	<2	0.035
REP A0040 QC	3.7	0.56	117	0.001	0.46	<0.01	0.25	<0.5	0.09	2.7	<0.5	5.99	<5	<2	
0220 Core Reject	1.4	0.30	423	0.001	0.62	0.04	0.28	<0.5	<0.05	1.4	0.6	5.20	<5	<2	0.047
REP 0220 QC															0.048
0542 Core Reject	5.3	0.26	179	0.002	0.49	0.08	0.28	<0.5	<0.05	0.7	<0.5	8.60	<5	2	0.027
REP 0542 QC															0.025
0760 Core Reject	9.3	0.41	105	0.018	0.57	0.04	0.36	<0.5	<0.05	1.5	<0.5	6.99	<5	<2	0.054
REP 0760 QC	7.9	0.43	103	0.019	0.57	0.04	0.35	<0.5	<0.05	1.9	<0.5	7.02	<5	2	
Reference Materials															
STD OXH82 Standard															1.316
STD OXH82 Standard															1.240
STD OXK79 Standard															3.465
STD OXK94 Standard															3.394
STD OXK94 Standard															3.490
STD SF-3A Standard	176.2	4.27	288	0.113	1.01	0.52	0.99	3.2	0.56	3.3	2.8	5.09	5	9	
STD SF-3A Standard	174.4	4.25	275	0.113	1.01	0.52	0.95	3.3	0.48	3.0	2.7	4.99	<5	8	
STD SF-3A Standard	175.1	4.22	276	0.116	0.98	0.51	1.00	3.2	0.57	2.4	2.5	5.07	<5	7	
STD SF-3A Standard	172.7	4.23	266	0.116	0.99	0.50	1.02	3.1	0.53	2.4	2.6	5.12	<5	8	
STD OXH82 Expected															1.278
STD OXK79 Expected															3.532
STD OXK94 Expected															3.562
STD SF-3A Expected	172	4.27	260	0.117	1.02	0.5	1.04	3.2	0.6	3	2.7	5	4	8.5	
BLK Blank															0.006
BLK Blank															0.010
BLK Blank	<0.5	<0.01	<5	<0.001	<0.01	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2	
BLK Blank	<0.5	<0.01	<5	<0.001	<0.01	<0.01	<0.01	<0.5	<0.05	<0.5	<0.5	<0.05	<5	<2	

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

## APPENDIX D

### Reference Materials

# CDN Resource Laboratories Ltd.

#2, 20148 - 102nd Avenue, Langley, B.C., Canada, V1M 4B4, Ph: 604-882-8422 Fax: 604-882-8466  
(www.cdnlabs.com)

## REFERENCE MATERIAL: CDN-CGS-26

Recommended values and the "Between Lab" Two Standard Deviations

*Copper concentration: 1.58 ± 0.07 %*

*Gold concentration: 1.64 ± 0.11 g/t*

**PREPARED BY:** CDN Resource Laboratories Ltd.

**CERTIFIED BY:** Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia

**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., P. Geo.

**DATE OF CERTIFICATION:** July 5, 2010

### **METHOD OF PREPARATION:**

Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone blender. Splits were taken and sent to 15 laboratories for round robin assaying.

### **ORIGIN OF REFERENCE MATERIAL:**

This standard is made from a combination of Au / Cu ores and 27 kg of a copper concentrate.

### **Approximate chemical composition (by whole rock analysis) is as follows:**

	Percent			Percent
SiO <sub>2</sub>	66.6		MgO	1.7
Al <sub>2</sub> O <sub>3</sub>	9.6		K <sub>2</sub> O	1.7
Fe <sub>2</sub> O <sub>3</sub>	9.0		TiO <sub>2</sub>	0.4
CaO	2.5		LOI	3.4
Na <sub>2</sub> O	1.7		S	2.7

### **Statistical Procedures:**

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean ±2 standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual "between-laboratory" standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

**REFERENCE MATERIAL CDN-CGS-26**

**Results from round-robin assaying:**

**Assay Procedures:**    **Au:** Fire assay pre-concentration, AA or ICP finish (30g sub-sample).  
                                   **Cu:** 4-acid digestion, AA or ICP finish.

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
SAMPLE	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
CGS-26-1	1.59	1.69	1.58	1.57	1.54	1.45	1.66	1.66	1.61	1.64	1.72	1.72	1.68	1.70	1.67
CGS-26-2	1.79	1.69	1.56	1.63	1.57	1.38	1.62	1.67	1.65	1.63	1.78	1.72	1.68	1.67	1.67
CGS-26-3	1.57	1.72	1.59	1.65	1.53	1.53	1.59	1.63	1.58	1.54	1.64	1.65	1.69	1.67	1.66
CGS-26-4	1.79	1.66	1.64	1.64	1.55	1.47	1.64	1.67	1.55	1.51	1.76	1.65	1.68	1.70	1.62
CGS-26-5	1.70	1.60	1.65	1.59	1.55	1.62	1.69	1.60	1.66	1.56	1.63	1.70	1.66	1.63	1.68
CGS-26-6	1.69	1.64	1.57	1.61	1.58	1.50	1.63	1.65	1.65	1.56	1.63	1.74	1.71	1.63	1.69
CGS-26-7	1.74	1.60	1.66	1.62	1.54	1.48	1.59	1.64	1.54	1.58	1.75	1.70	1.72	1.63	1.67
CGS-26-8	1.66	1.67	1.66	1.63	1.56	1.43	1.58	1.63	1.64	1.57	1.70	1.78	1.75	1.67	1.60
CGS-26-9	1.58	1.66	1.63	1.56	1.57	1.55	1.78	1.64	1.58	1.66	1.74	1.78	1.67	1.67	1.62
CGS-26-10	1.53	1.65	1.66	1.60	1.62	1.46	1.62	1.67	1.65	1.54	1.62	1.68	1.69	1.63	1.60
Mean	1.66	1.66	1.62	1.61	1.56	1.49	1.64	1.65	1.61	1.58	1.70	1.71	1.69	1.66	1.65
Std. Dev'n	0.0950	0.0382	0.0406	0.0303	0.0268	0.0673	0.0592	0.0227	0.0453	0.0489	0.0617	0.0443	0.0271	0.0283	0.0335
%RSD	5.72	2.31	2.50	1.88	1.72	4.53	3.61	1.38	2.81	3.09	3.63	2.59	1.60	1.70	2.03
	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %	Cu %
CGS-26-1	1.56	1.53	1.61	1.62	1.56	1.56	1.63	1.60	1.60	1.56	1.65	1.63	1.56	1.61	1.54
CGS-26-2	1.56	1.52	1.59	1.68	1.59	1.56	1.67	1.60	1.59	1.59	1.64	1.60	1.53	1.60	1.55
CGS-26-3	1.56	1.52	1.56	1.64	1.56	1.52	1.68	1.60	1.60	1.58	1.63	1.57	1.49	1.59	1.54
CGS-26-4	1.56	1.54	1.61	1.63	1.57	1.54	1.84	1.60	1.61	1.57	1.66	1.60	1.55	1.57	1.52
CGS-26-5	1.56	1.53	1.62	1.63	1.59	1.54	1.65	1.58	1.61	1.56	1.63	1.63	1.49	1.62	1.54
CGS-26-6	1.54	1.53	1.60	1.62	1.59	1.53	1.71	1.57	1.61	1.59	1.63	1.62	1.51	1.58	1.55
CGS-26-7	1.54	1.55	1.62	1.64	1.60	1.55	1.59	1.55	1.60	1.60	1.64	1.59	1.52	1.61	1.52
CGS-26-8	1.59	1.55	1.61	1.59	1.60	1.53	1.69	1.54	1.59	1.59	1.62	1.58	1.52	1.63	1.54
CGS-26-9	1.58	1.52	1.59	1.61	1.60	1.53	1.63	1.57	1.60	1.57	1.65	1.62	1.52	1.58	1.55
CGS-26-10	1.57	1.53	1.59	1.62	1.58	1.60	1.68	1.58	1.61	1.58	1.68	1.61	1.49	1.61	1.54
Mean	1.56	1.53	1.60	1.63	1.58	1.55	1.68	1.58	1.60	1.58	1.64	1.61	1.52	1.60	1.54
Std. Dev'n	0.0158	0.0101	0.0183	0.0247	0.0169	0.0232	0.0665	0.0217	0.0072	0.0140	0.0177	0.0202	0.0256	0.0187	0.0090
%RSD	1.01	0.66	1.14	1.52	1.07	1.50	3.97	1.37	0.45	0.89	1.08	1.26	1.69	1.17	0.58

**Note:** Au data from Lab 6 was removed for failing the t test.

**STANDARD REFERENCE MATERIAL CDN-CGS-26**

**Participating Laboratories:**

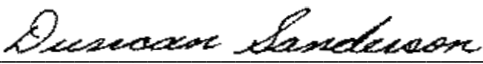
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, B.C., Canada  
Actlabs, Ancaster, Ontario, Canada  
Actlabs, Thunder Bay, Ontario, Canada  
ALS Chemex Laboratories, North Vancouver, B.C., Canada  
Alaska Assay Laboratories, Alaska, USA  
Alex Stewart Argentina SA  
Assayers Canada Ltd., Vancouver, B.C., Canada  
Eco Tech Laboratory Ltd., Kamloops, B.C., Canada  
Genalysis Laboratory Services Pty. Ltd., Australia  
International Plasma Laboratories, Richmond, B.C., Canada  
Labtium Laboratory, Finland  
OMAC Laboratories Ltd., Ireland  
Skyline Assayers & Laboratories, Arizona, USA  
TSL Laboratories, Saskatoon, Canada  
Ultra Trace Analytical Laboratories, Australia


**Legal Notice:**

This certificate and the reference material described in it have been prepared with due care and attention. However CDN Resource Laboratories Ltd. or Barry Smee accept no liability for any decisions or actions taken following the use of the reference material. Our liability is limited solely to the cost of the reference material.

Certified by

  
Duncan Sanderson, Certified Assayer of B.C.

Geochemist

  
Dr. Barry Smee, Ph.D., P. Geo.

# CDN Resource Laboratories Ltd.

#2, 20148 – 102<sup>nd</sup> Ave, Langley, B.C., Canada, V1M 4B4, 604-882-8422, Fax: 604-882-8466 (www.cdnlabs.com)

## REFERENCE MATERIAL: CDN-FCM-6

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>2.15 g/t ± 0.16 g/t</i>	<i>Certified value</i>
<i>Silver</i>	<i>156.8 g/t ± 7.9 g/t</i>	<i>Certified value</i>
<i>Copper</i>	<i>1.251 % ± 0.064 %</i>	<i>Certified value</i>
<i>Lead</i>	<i>1.52 % ± 0.06 %</i>	<i>Certified value</i>
<i>Zinc</i>	<i>9.27 % ± 0.44 %</i>	<i>Certified value</i>

**Note:** Standards with an RSD of near or less than 5% are certified; RSD's of between 5% and 15% are Provisional; RSD's over 15% are Indicated. Provisional and Indicated values cannot be used to monitor accuracy with a high degree of certainty.

**PREPARED BY:** CDN Resource Laboratories Ltd.  
**CERTIFIED BY:** Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia  
**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., P. Geo.  
**DATE OF CERTIFICATION:** May 22, 2011

### **METHOD OF PREPARATION:**

Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone mixer. Splits were taken and sent to 15 laboratories for round robin assaying.

### **ORIGIN OF REFERENCE MATERIAL:**

The ore was supplied by Farallon Resources from their Campo Morado property in Mexico. The Campo Morado precious-metal-bearing, volcanogenic massive sulphide deposits occur in a lower Cretaceous bimodal, calc-alkaline volcanic sequence. Most deposits occur in the upper part of a sequence of felsic flows and heterolithic volcanoclastic rocks or at its contact with overlying chert and argillite. Gold, silver, zinc, and lead are associated with pyrite, quartz, ankerite, sphalerite, chalcopyrite and galena, with minor tennantite-freibergite, arsenopyrite, and pyrrhotite.

**Approximate chemical composition (from whole rock analysis) is as follows:**

	Percent		Percent
SiO <sub>2</sub>	36.3	MgO	1.4
Al <sub>2</sub> O <sub>3</sub>	2.5	K <sub>2</sub> O	0.5
Fe <sub>2</sub> O <sub>3</sub>	23.5	TiO <sub>2</sub>	<0.1
CaO	2.4	LOI	13.8
Na <sub>2</sub> O	<0.1	S	24.3

### **Statistical Procedures:**

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean  $\pm 2$  standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual “between-laboratory” standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

### **Assay Procedures:**

**Au:** Fire assay pre-concentration, AA or ICP finish (30g sub-sample).  
**Ag, Cu, Pb, Zn:** 4-acid digestion, AA or ICP finish.



## **REFERENCE MATERIAL CDN-FCM-6**

### **Results from round-robin assaying:**

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
FCM6-1	2.26	2.22	2.13	2.20	2.00	2.23	2.08	2.02	2.01	2.21	2.16	2.02	2.23	2.26	2.10
FCM6-2	2.29	2.13	2.01	2.07	1.97	2.27	2.19	2.14	2.14	2.10	2.16	2.06	2.19	2.19	2.14
FCM6-3	2.11	2.14	2.18	2.15	1.94	2.24	2.16	2.19	2.09	2.12	2.20	2.02	2.10	2.26	2.15
FCM6-4	2.28	2.11	2.24	2.14	1.95	2.21	2.12	2.12	2.05	2.11	2.19	2.13	2.11	2.12	2.14
FCM6-5	2.26	2.16	2.49	2.08	2.06	2.32	2.05	1.98	1.96	2.18	2.20	2.06	2.20	2.23	2.11
FCM6-6	2.29	2.19	2.67	2.13	2.02	2.27	2.24	2.18	2.04	2.14	2.18	2.13	2.08	2.22	2.18
FCM6-7	2.25	2.15	2.43	2.02	2.03	2.34	2.08	2.08	2.13	2.19	2.16	1.99	2.13	2.24	2.17
FCM6-8	2.18	2.14	2.34	2.31	2.01	2.26	2.20	2.14	2.09	2.28	2.15	1.92	2.05	2.21	2.08
FCM6-9	2.09	2.24	2.46	2.15	2.00	2.28	2.06	2.05	2.14	2.26	2.12	1.92	2.20	2.24	2.13
FCM6-10	2.15	2.26	2.26	2.05	1.94	2.26	2.09	2.18	2.02	2.19	2.17	2.13	2.22	2.14	2.14
Mean	2.22	2.17	2.32	2.13	1.99	2.27	2.13	2.11	2.07	2.18	2.17	2.04	2.15	2.21	2.13
Std. Devn.	0.0778	0.0508	0.1960	0.0835	0.0421	0.0391	0.0665	0.0727	0.0611	0.0614	0.0266	0.0797	0.0658	0.0479	0.0315
% RSD	3.51	2.34	8.44	3.92	2.11	1.72	3.13	3.45	2.96	2.82	1.23	3.91	3.06	2.17	1.47
	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t	Ag g/t
FCM6-1	161	155	143	168	153.7	154	154.2	153	160	158	163	155.8	174.2	157	151
FCM6-2	158	159	149	162	154.7	152	154.1	154	161	157	166	152.4	174.9	162	156
FCM6-3	160	158	158	157	154.9	149	156.7	152	161	158	164	152.4	174.1	164	150
FCM6-4	163	158	149	157	155.1	153	153.5	154	158	156	168	156.5	174.3	161	150
FCM6-5	161	156	152	159	155.1	146	154.0	156	160	156	167	154.8	174.8	162	154
FCM6-6	158	157	153	162	155.3	154	156.4	152	162	155	166	158.1	174.5	153	154
FCM6-7	162	158	155	161	155.1	149	153.0	152	163	161	161	158.0	172.2	153	152
FCM6-8	164	156	151	156	157.2	153	155.2	158	158	157	167	160.0	172.1	158	154
FCM6-9	164	161	155	161	155.1	149	158.7	154	164	159	165	158.7	174.2	158	155
FCM6-10	163	155	156	158	156.2	151	158.1	155	162	157	167	156.6	173.5	160	155
Mean	161.4	157.3	152.1	160.1	155.2	151.0	155.4	154.0	160.9	157.4	165.4	156.3	173.9	158.8	153.1
Std. Devn.	2.2211	1.8886	4.3576	3.5418	0.9089	2.6667	1.9824	1.9437	1.9692	1.7127	2.1313	2.5447	0.9908	3.7357	2.1833
% RSD	1.38	1.20	2.86	2.21	0.59	1.77	1.28	1.26	1.22	1.09	1.29	1.63	0.57	2.35	1.43

**Note:** Au results from Laboratory 3 were removed for failing the “t” test.  
Ag results from Laboratory 13 were removed for failing the “t” test.



**REFERENCE MATERIAL CDN-FCM-6**

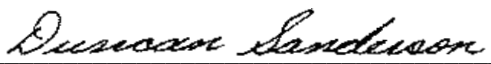
**Participating Laboratories:**


(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver  
Actlabs-Ancaster, Ontario, Canada  
Actlabs-Thunder Bay, Ontario, Canada  
ALS Chemex Laboratories, North Vancouver  
American Assay Laboratory, Nevada, USA  
Genalysis Laboratory, Australia  
Inspectorate, Richmond, B.C., Canada  
Omac Laboratories Ltd., Ireland  
Skyline Assayers and Laboratories, Arizona, USA  
SGS – Vancouver, B.C., Canada  
SGS – Lima, Peru  
Stewart Group, Kamloops, B.C., Canada  
Alex Stewart Argentina SA  
TSL Laboratories Ltd., Saskatoon  
Ultra Trace Analytical Laboratories, Australia

Legal Notice:

This certificate and the reference material described in it have been prepared with due care and attention. However CDN Resource Laboratories Ltd. or Barry Smee accept no liability for any decisions or actions taken following the use of the reference material. Our liability is limited solely to the cost of the reference material.

Certified by   
Duncan Sanderson, Certified Assayer of B.C.

Geochemist   
Dr. Barry Smee, Ph.D., P. Geo.

# CDN Resource Laboratories Ltd.

#2, 20148 – 102<sup>nd</sup> Avenue, Langley, B.C., Canada, V1M 4B4, 604-882-8422, Fax: 604-882-8466 (www.cdnlabs.com)

## STANDARD REFERENCE MATERIAL: CDN-CM-11A

Recommended values and the “Between Lab” Two Standard Deviations

<i>Gold</i>	<i>1.014 g/t ± 0.106 g/t</i>	<i>Certified value</i>
<i>Copper</i>	<i>0.332 % ± 0.012 %</i>	<i>Certified value</i>
<i>Molybdenum</i>	<i>0.038 % ± 0.004 %</i>	<i>Certified value</i>

**Note:** Standards with an RSD of near or less than 5% are certified; RSD's of between 5% and 15% are provisional; RSD's over 15% are indicated. Provisional and indicated values cannot be used to monitor accuracy with a high degree of certainty.

**PREPARED BY:** CDN Resource Laboratories Ltd.

**CERTIFIED BY:** Duncan Sanderson, B.Sc., Licensed Assayer of British Columbia

**INDEPENDENT GEOCHEMIST:** Dr. Barry Smee., Ph.D., P. Geo.

**DATE OF CERTIFICATION:** May 10, 2011

### **ORIGIN OF REFERENCE MATERIAL:**

Standard CDN-CM-11A was prepared using a North American calc-alkalic copper-gold-molybdenum porphyry ore. It is derived from altered granodiorite, mafic to intermediate volcanic and volcanoclastic sedimentary rocks. Mineralization is principally pyrite, chalcopyrite and molybdenite that occurs in veins, stockworks and disseminations. 705 kg of this ore was blended with 8 kg of a Cu-Au-Mo concentrate.

### **METHOD OF PREPARATION:**

Reject ore material was dried, crushed, pulverized and then passed through a 270 mesh screen. The +270 material was discarded. The -270 material was mixed for 5 days in a double-cone blender. Splits were taken and sent to 15 commercial laboratories for round robin assaying.

**Approximate chemical composition (by whole rock analysis) is as follows:**

	Percent			Percent
SiO <sub>2</sub>	74.1		MgO	1.3
Al <sub>2</sub> O <sub>3</sub>	9.8		K <sub>2</sub> O	1.1
Fe <sub>2</sub> O <sub>3</sub>	5.3		TiO <sub>2</sub>	0.4
CaO	2.3		LOI	1.7
Na <sub>2</sub> O	2.7		S	0.4
C	0.1			

### **Statistical Procedures:**

The final limits were calculated after first determining if all data was compatible within a spread normally expected for similar analytical methods done by reputable laboratories. Data from any one laboratory was removed from further calculations when the mean of all analyses from that laboratory failed a t test of the global means of the other laboratories. The means and standard deviations were calculated using all remaining data. Any analysis that fell outside of the mean  $\pm 2$  standard deviations was removed from the ensuing data base. The mean and standard deviations were again calculated using the remaining data. This method is different from that used by Government agencies in that the actual “between-laboratory” standard deviation is used in the calculations. This produces upper and lower limits that reflect actual individual analyses rather than a grouped set of analyses. The limits can therefore be used to monitor accuracy from individual analyses, unlike the Confidence Limits published on other standards.

**STANDARD REFERENCE MATERIAL CDN-CM-11A**

**Assay Procedures:** Au: Fire assay pre-concentration, AA or ICP finish (30g sub-sample).  
Cu, Mo: 4-acid digestion, AA or ICP finish.

**Results from round-robin assaying:**

	Lab 1	Lab 2	Lab 3	Lab 4	Lab 5	Lab 6	Lab 7	Lab 8	Lab 9	Lab 10	Lab 11	Lab 12	Lab 13	Lab 14	Lab 15
	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t	Au g/t
CM-11A-1	0.955	1.02	0.925	1.04	1.03	1.03	1.040	1.07	1.08	1.11	0.93	1.08	0.994	1.03	1.039
CM-11A-2	1.006	1.07	0.925	1.02	1.04	1.00	0.932	1.03	1.03	1.10	0.90	1.05	0.945	1.10	0.916
CM-11A-3	0.949	1.04	0.903	0.95	1.04	1.03	0.943	1.02	1.09	1.10	0.95	1.04	0.968	1.08	1.003
CM-11A-4	0.920	1.01	0.891	0.97	0.97	1.05	0.998	1.02	1.15	1.05	0.95	1.04	1.046	1.03	0.975
CM-11A-5	0.952	1.03	0.899	0.99	1.07	1.04	1.050	1.10	1.06	1.10	0.96	1.00	1.007	1.06	0.918
CM-11A-6	0.973	0.98	0.951	0.98	1.05	1.05	0.971	1.04	0.99	1.03	1.00	1.07	1.006	1.03	1.056
CM-11A-7	0.921	1.01	0.876	0.98	0.99	1.05	1.050	1.07	0.99	1.09	0.99	1.06	0.810	1.10	1.044
CM-11A-8	0.944	0.98	0.922	0.99	1.04	1.05	0.964	1.02	1.01	1.06	0.97	1.05	1.086	1.05	0.990
CM-11A-9	1.065	1.08	0.859	1.04	0.98	0.99	1.090	1.06	1.08	1.07	0.97	1.04	1.025	1.08	0.923
CM-11A-10	0.939	0.94	0.971	0.95	1.08	1.02	0.983	1.00	1.00	1.06	0.95	1.06	1.047	1.10	1.059
Mean	0.962	1.014	0.912	0.989	1.029	1.031	1.002	1.043	1.048	1.077	0.957	1.048	0.993	1.066	0.992
Std. Devn.	0.0438	0.0422	0.0337	0.0331	0.0373	0.0202	0.0527	0.0309	0.0545	0.0267	0.0287	0.0230	0.0761	0.0292	0.0577
% RSD	4.55	4.16	3.70	3.35	3.62	1.96	5.26	2.97	5.20	2.48	3.00	2.20	7.66	2.74	5.81
	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu	% Cu
CM-11A-1	0.324	0.326	0.34	0.33	0.33	0.34	0.331	0.319	0.338	0.324	0.341	0.332	0.343	0.332	0.34
CM-11A-2	0.329	0.327	0.33	0.32	0.32	0.34	0.328	0.340	0.334	0.328	0.329	0.327	0.356	0.338	0.34
CM-11A-3	0.327	0.327	0.31	0.33	0.33	0.34	0.330	0.339	0.336	0.335	0.342	0.333	0.352	0.333	0.33
CM-11A-4	0.329	0.317	0.32	0.32	0.33	0.33	0.330	0.336	0.335	0.334	0.341	0.336	0.343	0.337	0.34
CM-11A-5	0.335	0.330	0.34	0.33	0.33	0.34	0.323	0.338	0.344	0.329	0.335	0.333	0.357	0.335	0.33
CM-11A-6	0.335	0.329	0.35	0.32	0.33	0.33	0.328	0.337	0.321	0.338	0.339	0.333	0.343	0.334	0.33
CM-11A-7	0.338	0.330	0.34	0.32	0.33	0.34	0.324	0.324	0.330	0.338	0.341	0.332	0.343	0.337	0.34
CM-11A-8	0.336	0.329	0.32	0.33	0.33	0.33	0.329	0.325	0.327	0.334	0.338	0.335	0.348	0.336	0.34
CM-11A-9	0.339	0.328	0.33	0.33	0.33	0.33	0.324	0.333	0.327	0.331	0.339	0.333	0.342	0.337	0.33
CM-11A-10	0.334	0.342	0.34	0.32	0.33	0.33	0.327	0.326	0.331	0.326	0.334	0.328	0.347	0.333	0.33
Mean	0.333	0.329	0.332	0.325	0.329	0.335	0.327	0.332	0.332	0.332	0.338	0.332	0.347	0.335	0.335
Std. Devn.	0.0050	0.0061	0.0123	0.0053	0.0032	0.0053	0.0028	0.0075	0.0065	0.0050	0.0041	0.0028	0.0058	0.0020	0.0053
% RSD	1.51	1.84	3.70	1.62	0.96	1.57	0.87	2.27	1.97	1.50	1.21	0.85	1.67	0.58	1.57
	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo	% Mo
CM-11A-1	0.037	0.035	0.030	0.030	0.037	0.034	0.039	0.038	0.037	0.040	0.040	0.037	0.037	0.036	0.037
CM-11A-2	0.036	0.034	0.030	0.030	0.038	0.034	0.039	0.039	0.039	0.039	0.039	0.037	0.037	0.037	0.038
CM-11A-3	0.037	0.035	0.030	0.040	0.036	0.034	0.038	0.038	0.038	0.040	0.041	0.038	0.038	0.036	0.038
CM-11A-4	0.036	0.034	0.040	0.030	0.037	0.034	0.039	0.037	0.039	0.039	0.041	0.039	0.039	0.036	0.038
CM-11A-5	0.037	0.035	0.040	0.030	0.037	0.035	0.038	0.036	0.039	0.039	0.041	0.037	0.037	0.036	0.037
CM-11A-6	0.036	0.034	0.040	0.040	0.037	0.034	0.037	0.038	0.037	0.038	0.042	0.038	0.038	0.036	0.038
CM-11A-7	0.037	0.035	0.040	0.040	0.037	0.034	0.039	0.038	0.037	0.039	0.040	0.038	0.038	0.036	0.038
CM-11A-8	0.037	0.035	0.040	0.040	0.036	0.033	0.040	0.038	0.037	0.039	0.041	0.038	0.038	0.037	0.037
CM-11A-9	0.036	0.034	0.040	0.040	0.036	0.034	0.038	0.038	0.038	0.039	0.041	0.039	0.039	0.037	0.038
CM-11A-10	0.037	0.036	0.040	0.040	0.037	0.034	0.039	0.039	0.039	0.039	0.040	0.037	0.037	0.036	0.037
Mean	0.037	0.035	0.037	0.036	0.037	0.034	0.039	0.038	0.038	0.039	0.041	0.038	0.038	0.036	0.038
Std. Devn.	0.0005	0.0007	0.0048	0.0052	0.0006	0.0005	0.0008	0.0009	0.0009	0.0005	0.0008	0.0007	0.0007	0.0005	0.0005
% RSD	1.41	2.00	13.06	14.34	1.72	1.39	2.18	2.31	2.48	1.34	2.06	1.80	1.80	1.28	1.37

**STANDARD REFERENCE MATERIAL CDN-CM-11A**

**Participating Laboratories:**

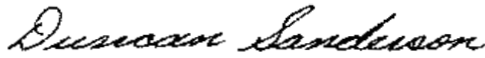
(not in same order as listed in table of results)

Acme Analytical Laboratories Ltd., Vancouver, B.C., Canada  
Activation Laboratories, Ancaster, Ontario, Canada  
Activation Laboratories, Thunder Bay, Ontario, Canada  
Alex Stewart, Kamloops, B.C., Canada  
Alex Stewart Assayers, Mendoza, Argentina  
ALS Chemex, North Vancouver, B.C., Canada  
American Assay Labs., Nevada, USA  
Genalysis, Perth, Australia  
Inspectorate, Richmond, B.C., Canada  
Omac, Ireland  
SGS, Vancouver, B.C., Canada  
SGS, Lima, Peru  
Skyline Laboratory, Arizona, USA  
TSL Laboratories Ltd., Saskatoon, SK, Canada  
Ultra Trace, Perth, Australia

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Certified by



Duncan Sanderson, Certified Assayer of B.C.

Geochemist



Dr. Barry Smee, Ph.D., P. Geo.

## APPENDIX E

### Summary of 2011 Drilling

New Nadina Explorations Ltd.															
Silver Queen Diamond Drilling 2011															
DDH	East	North	Elev	Az	Incl	Depth	OVB	Start	Complete	Test at	Az	Incl	Mag	Comments	
	(m)	(m)	(m)	(UTM)		(m)	(m)			(m)	(UTM)				
11S-01	650423	5994603	865.5	90	-80	572	33	3-Sep-11	12-Sep-11	42	91.5	-80.1	5641		
	+/- 1			Az/Incl at collar not field measured							172	92.7	-80.8	5649	
										272	97.7	-80.7	5062	query az, use 95.2	
										372	97.7	-81.5	5640		
										472	99.1	-82.1	5637		
										572	105.0	-81.5	5647		
11S-02	649422	5994430	846	83	-70	503.5	7.5	28-Sep-11	5-Oct-11	100	83.8	-70.9	5634		
	+/- 2.3			Az/Incl at collar not field measured							200	84.9	-71.4	5635	
										300	86.5	-71.7	5635		
										400	87.6	-72.0	5638		
										503.5	89.7	-72.4	5634		
11S-03	650423	5994603	865.5	270	-70	288	34.5	12-Oct-11	18-Oct-11						
	+/- 1			Az/Incl at collar not field measured, stuck rods, no downhole surveys											
11S-04	649815	5994535	865	231	-70	278	16	14-Sep-11	16-Sep-11	100	233.3	-69.0	5646		
	+/- 0.8			Az/Incl at collar not field measured							200	235.4	-69.5	5641	
										278	236.1	-69.7	5642		
11S-05	649815	5994535	865	230.5	-45.5	260	18	16-Sep-11	18-Sep-11	41	231.5	-45.7	5643		
	+/- 0.8			Az/Incl at collar field measured							71	230.8	-46.1	5642	
										101	230.4	-46.3	5641		
										131	231.2	-46.7	5641		
										161	230.7	-47.0	5639		
										191	231.0	-47.3	5639		
										221	231.1	-47.5	5637		
										251	230.8	-48.0	5634		
11S-06	650276	5994741	858	86.5	-73.3	361.5	15	18-Sep-11	22-Sep-11						
	+/- 1			Az/Incl at collar field measured											
11S-07	649798	5994522	864.5	312	-70.8	275	15	18-Sep-11	20-Sep-11	32	312.2	-69.1	5656		
	+/- 1			Az/Incl at collar field measured							62	313.4	-69.5	5652	
										92	313.6	-69.7	5647		
										122	314.1	-69.8	5645		
										152	314.2	-70	5645		
										182	314.6	-70.2	5668		
										212	314.3	-70.3	5653		
										242	312.7	-70.4	5603		
										272	316.0	-70.5	5657		
11S-08	649798	5994522	864.5	272	-70	212	15	20-Sep-11	22-Sep-11	50	273.4	-70.4	5645		
	+/- 1			Az/Incl at collar not field measured							100	274.8	-70.4	5649	
										150	276.0	-70.4	5649		
										212	331.4	-70.3	4223	query az, use 277	
11S-09	650229	5994737	861.5	280	-80	189.2	27	22-Sep-11	27-Sep-11	50	280.1	-78.9	5666		
	+/- 1			Az/Incl at collar field measured							153	279.7	-79	5667	



DDH	East (m)	North (m)	Elev (m)	Az (UTM)	Incl	Depth (m)	OVB (m)	Start	Complete	Test at (m)	Az (UTM)	Incl	Mag	Comments	
11S-10	650141	5994606	849	268	-68.5	72	37	22-Sep-11	24-Sep-11						
	+/- 1			Az/Incl at collar field measured											
11S-11	649879	5994283	823.5	270	-70	195	22	25-Sep-11	28-Sep-11						
	+/- 1			Az/Incl at collar not field measured											
11S-12	650177	5994806	876	85	-75	507	27	28-Sep-11	5-Oct-11	51	40.1	-75.2	3393	query az, use 85.7	
	+/- 1			Az/Incl at collar not field measured						102	86.3	-75.6	5660		
										150	86.8	-75.9	5663		
										200	88.3	-76.4	5660		
										300	89.0	-77.2	5640		
										354	89.9	-77.8	5640		
										399	91.3	-78.1	5637		
										450	92.5	-78.2	5630		
										500	94.4	-78.2	5632		
11S-13	650180	5994662	853	82	-76.5	777	15	6-Oct-11	15-Oct-11	51	79.2	-76.4	5655		
	+/- 1			Az/Incl at collar field measured						102	77.9	-76.6	5660		
										150	78.4	-76.8	5661		
										200				no test	
										250	80.8	-76.9	5647		
										300	83.3	-77.1	5643		
										350	84.0	-77.3	5640		
										400	85.9	-77.2	5633		
										450	87.2	-77.5	5634		
										500	88.0	-77.5	5639		
										550	89.5	-77.4	5641		
										600	91.3	-77.4	5645		
										650	91.9	-77.8	5642		
										700	91.5	-77.7	5641		
										750	93.5	-77.5	5641		

## APPENDIX F

### Diamond Drill Logs

## Drill Log Abbreviations:

ab	albite	mag	magnetite, magnetic
abund	abundant	med	medium
alt'd	altered	mfc	mafic
alt'n	alteration	mg	medium-grained
anhy	anhydrite	min'l	mineral
approx	approximately	min'l'n	mineralization
arg	argillic	mo	molybdenite
assoc'd	associated	mod	moderate, moderately
atca	angle to core axis	mm	millimetre
bi	biotite	mnr	minor
blk	black	nrw	narrow
bn	bornite	occ'l	occasional
brn	brown	or	orthoclase
bx	breccia	ori	orientation
bx'd	brecciated	overp	overprinting
bx'n	brecciation	overp'd	overprinted
ca, calc	calcite	oxid'd	oxidized
carb	carbonate	oxid'n	oxidation
cg	coarse-grained	perv	pervasive
chl	chlorite, chloritic	pheno	phenocryst
cm	centimetre	po	pyrrhotite
cmn	common	porph	porphyritic
cp	chalcopyrite	poss	possible
ct	contact	prev	previous
d	degrees	py	pyrite
diff	diffuse	qz	quartz
discont	discontinuous	rem	remnant
dissem	disseminated	rhy	rhyolite
dtca	degrees to core axis	scatd	scattered
dk	dark	ser	sericite
eoh	end of hole	shr	shear
ep	epidote	slvg	selvage
esp	especially	sil	silica
fec, fecarb	iron carbonate	silic'n	silicification
fg	fine-grained	slicks	slickensides
flt	fault	sp	sphalerite
fol'd	foliated	str	strong
fol'n	foliation	struc	structure
frac	fracture	stwk	stockwork
frac'd	fractured	subp	subparallel
frag	fragment	tca	to core axis
fs	feldspar	tr	trace
ga	galena	uc	upper contact
gm	groundmass	unalt'd	unaltered
gn	green	unk	unknown
grad	gradational	v	very
gy	grey	vfg	very fine-grained
hrln	hairline	volc	volcanic
hem	hematite	vn	vein
int	intermediate	vning	veining
irreg	irregular	vnlt	veinlet
kspar	potassium feldspar	w/	with
lc	lower contact	w/o	without
loc	local, locally	wht	white
lt	light	wk	weak
ltd	limited	wkly	weakly
m	metre	xtal	crystal

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)											
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other				
New Nadina Explorations Limited    DDH #: 11S-01    UTM E (NAD 83): 650430E    Target: B    Date Collared: Sept 3 2011    Logged By: J Mark Ralph Silver Queen Property    Dip: -80 Az: 90    UTM N (NAD83): 599600N    Drill Number: 1    Date Completed: Sept 12 2011 Fall 2011    Total Depth: 572m    Elevation: 870m    Drill Contractor: Lone Peak    Date Logged: Sept 6-12 2011    Core Size: NQ2																													
0	33						<b>Overburden</b>																						
33	41.33						<b>Andesite - Flow Breccia</b> Polymictic matrix supported flow breccia. Generally blue grey. Clasts comprise > 70% of core volume except where very large clasts rest. Clasts range from mm to over 30cm along CA, are generally angular to sub angular with rare subrounded clasts. Some clasts were derived from a previous flow bx and themselves contain a variety of clasts within. Most notable is the presence rounded semi-massive Sx clasts of py. Clasts consists of (from most to least common) - <b>1</b> - Felsic ash tuff with 1% anhedral vfg py. Some of these clasts exceed 30cm and are largest in the lower portion of the middle of the section. <b>2</b> - Blue grey massive subangular clasts between 5mm and 2cm with minor vfg py <b>3</b> - Pale green sub rounded aphanitic clasts. <b>4</b> - sub angular 1-5cm polymictic clasts from a previous flow. <b>5</b> - off white plag phyruc 1mm to 1cm angular clasts with 1-2% dissem py +/- Mo and <b>6</b> - rounded semi-massive py+-/other Sx (1% of total). Groundmass is blue grey, plag phyruc, locally siliceous and contains 2-5% dissem py on grain boundaries (<0.5% of total volume). Alteration consists of moderate white clay replacing plag and other (?) with lesser silica flooding. Clasts show a variety of alteration styles with the primary clasts altered to clay. Sx - interstitial brassy fg dissem py within the ground mass. Dissem vfg often euhedral crystals of py within most of the clasts. One clast type (6) may contain fg anhedral Mo.																						
							Lower contact is moderately laminated over 10cm into the next section and likely represents a flow front. .																						
41.33	53.6	LC					<b>Andesite - Flow Breccia</b> Pale green massive lithic tuff grading to a darker but still pale green poly lithic flow breccia dh. Upper section contains minor small dark angular fragments up 1/2cm with other minor or incidental fragments which increase in concentration and size dh. As we move dh larger fragments become increasingly common. Many of these clasts appear very similar to the upper most section within this section. This suggests that the ash fall event was contemporaneous with the flow. Clasts dh begin to show more variety in composition with some clasts similar to the next unit dh appearing near the base of the section. Clasts in this section are moderately similar to the previous section. The most notable differences are the density of clasts (lower here), and the presence of abundant dark clasts of semi massive, net textured py in a plag phyruc porphyry. . Clasts: <b>1</b> - Pale green sub rounded 1-2cm with 1% dissem py <b>2</b> - Pale white angular 1-4cm clasts of felsic volc <b>3</b> - dark plag phyruc host with semi massive to net textured py. Veining is rare with only two minor veinlets noted. These veinlets consist of py with minor Mo? Or other sx.																						
		Vein																											
		Vein																											
		Fault					Minor zones of broken gougey rock were noted. These zones are generally cataclastic in nature and never exceed 20cm. Gouge within these zones is white clay rich. The lower contact is a fault contact.																						
		Con					Sulfides are common in all element (clasts, matrix, faults and veins) to various amounts Sx is dominated by fg anhedral and euhedral py. Occasional pyritohedron were noted. Trace Mo? was noted in several locations. Another Sx was seen within the minor veinlets observed. Difficult to assess the total content as the py is so highly variable within the core.																						
53.6	72.6						<b>Rhyo-Dacite flow breccia</b> Pale pink ground mass with up to 50% matrix supported clasts. Two dominant clast types. 1 - abundant large (up to 30cm adv 5cm) off white felsic ash tuff. Angular and containing up to 10% dissem Sx (py +/- trace mo? And other). These clast make up > 40% of this section. 2 - soft, small (<1cm) dark Sx (py) rich clasts. Some clasts appear to be a dark gypsum. Groundmass is pink (hem?) with abundant (>50%) rounded clay altered plag. Rare thin veinlets of py +/- tr ga. local zones of cataclastite Sharp - possible flow boundary.																						
		vein																											
		Con					Sulfides are common in all element (clasts, matrix, faults and veins) to various amounts Sx is dominated by fg anhedral and euhedral py. Occasional pyritohedron were noted. Trace Mo was noted in several locations. Another Sx was seen within the minor veinlets (ga?),																						
72.6	87.6						<b>Andesitic Lithic Tuff</b> Light green with localized lighter green patches related to alteration. Lithic fragments form up to 5% of the total core volume and consist primarily of angular to subangular 2mm-1cm fragments (aphanitic light green, dark grey, and white with lesser light green phaneritic plag phyruc porphyritc lapilli.) Ground mass consists dominantly of <1mm plag (30% in an aphanitic mass.																						

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other		
New Nadina Explorations Limited DDH #: 11S-01 UTM E (NAD 83): 650430E Target: B Date Collared: Sept 3 2011 Logged By: J Mark Ralph Silver Queen Property Dip: -80 Az: 90 UTM N (NAD83): 599600N Drill Number: 1 Date Completed: Sept 12 2011 Fall 2011 Total Depth: 572m Elevation: 870m Drill Contractor: Lone Peak Date Logged: Sept 6-12 2011 Core Size: NQ2																											
							<b>Alteration:</b> This section is generally moderately altered with localized patches of higher alteration. Not quite but almost mottled. The most pervasive alt is a weak to locally moderate sericite overprint. Following this is a weak to mod clay replacement of plag. Small 1-2mm spots of hematite were also noted but never form in any abundance. Carb is absent.		3								2						1				
80.45	80.55	Fault					<b>Structure:</b> Several minor structures exists within this unit. These consist mainly of narrow clay rich seams with minor cataclastic characteristics in the FW. One example is given.																				
							<b>Mineralization:</b> Py is the dominant form of sulphide in this unit. Characterized by fg euhedral dissem grains and minor clots/masses of anhedral clusters. Less common are hairs of py with rims of black sphalerite, dissem sphalerite, and possible AsPy.											0.01			1					aspy .001	
84.55	85.35	con					<b>Dikes:</b> Aphanitic, pale green with minor localized carbonate replaced amygdules. This is cut by convoluted veins of gypsum-carb. This dike is void of sulfides.																				
		con																									
87.6	91.1						<b>Andesitic Flow Breccia</b>																				
							This units most outstanding feature is the presence of large angular fragments which almost form a jigsaw fit. These fragments form over 30% of the rock volume overall with some minor sections exceeding 70%. The dominant clast is a light green plag phyric porphyry with dissem py >> sp > other Sx - up to 1% Sx in total. A less common clast type consists of dark crystal rich, sulphide rich, rounded to subangular fragments. Other incidental fragments do not form a significant portion of the rock volume. Lower contact appears to be a flow contact.																				
							<b>Alteration:</b> The largest clasts have undergone mod sericite alteration which was likely pre flow. The ground mass is blue grey - likely due to mod silica flooding - and is crowded with rounded, broken and partially consumed plag which has been replace with white clay and less commonly carb.		2	3							2										
90.6	90.7	Fault					<b>Structure:</b> Several thin isolated gouge rich faults with angles ranging from sub parallel to CA to 50deg. The only real definitive fault is a 2cm wide grey gouge rich zone.																				
							<b>Mineralization:</b> Variable within clasts and matrix. Clasts carry dissem py >> sp > other. Matrix carries py >> sp > ga and possible others. Total ranges from 0.5% within the larger clasts to >20% within the darker clasts to ~3% within the matrix.											0.01		0.01	4					0.001	
91.1	95.2						<b>Andesitic flow breccia to lapilli tuff</b>																				
							Highly erratic in clast composition, clast density and distribution. Generally as per prev section but with << clasts.																				
							<b>Alteration:</b> The largest clasts have undergone mod sericite alteration which was likely pre flow. The ground mass is blue grey - likely due to mod silica flooding - and is crowded with rounded, broken and partially consumed plag which has been replace with white clay and less commonly carb.		2	3			1				2										
95.2	95.2	con					<b>Structure:</b> The lower 2m of this unit have undergone partial grading to complete cataclasis. The lower contact is sharp and defines the lower limit of this unit.																				
							<b>Mineralization:</b> Variable within clasts and matrix. Clasts carry dissem py >> sp > other. Matrix carries py >> sp > ga and possible others. Total ranges from 0.5% within the larger clasts to >20% within the darker clasts to ~3% within the matrix.											0.01		0.001	4					0.001	
95.2	101.3						<b>Dacitic lithic tuff</b>																				
							Blue grey to grey, dirty. Appear almost like a greywacke and approaching a lapilli tuff. Dense with fragments - clast supported. Clasts range from crystal fragments <1mm to 1cm with rare clasts up to 2cm. Not graded. Larger fragments are off white sub-rounded and likely rhyolitic in origin. Variety increases with decreasing size. Smaller clasts include several shades of hard sub rounded fragments, small white plag phyric porphyritic fragments. This looks more and more like a greywacke.																				
							<b>Alteration:</b> Weak. Selective clay, pervasive sericite. Clasts may have been silicified prior to transport. Chlorite is pervasive and weak near the top and increasing in strength dh.		2	2	1						2										
99.5	99.5	Bed					<b>Structure:</b> Weak banding, especially near the base, suggests bedding. Likely water lain. This is the first unit to show good evidence of such. Unit grades to a more typical section for this hole and begins to flow bx characteristics near the LC. Lower contact is a fault.																				
101.3	101.3	Fault					This fault is cataclastic in nature and forma a sharp break with the underlying unit.																				
							<b>Mineralization:</b> Dominated by dark or dirty anhedral py with << sp (honey and black jack) and galena. All Sx is dissem anhedral and dispersed in all elements.												0.01		0.001	2					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other	
New Nadina Explorations Limited DDH #: 11S-01 UTM E (NAD 83): 650430E Target: B Date Collared: Sept 3 2011 Logged By: J Mark Ralph																										
Silver Queen Property Dip: -80 Az: 90 UTM N (NAD83): 599600N Drill Number: 1 Date Completed: Sept 12 2011																										
Fall 2011 Total Depth: 572m Elevation: 870m Drill Contractor: Lone Peak Date Logged: Sept 6-12 2011 Core Size: NQ2																										
101.3	104.67						<b>Rhyolite</b>																			
							Pale pink, aphanitic, locally mottled with trace localized banding. Fragmental near the UC. Disrupted and broken near the UC and for ~150cm dh from there. Also within this upper section is a number of thin convoluted calcite hairs/veinlets with a very low ATCA. Rhyolite may be limited to a 1m section near the lower limits of the unit.																			
							<b>Alteration:</b> Pervasive localized silica flooding, possible intense pervasive k-spar??, trace selective albite, trace very weak localized magnetite.			2	2			3								1				
104.65	104.67	Fault					<b>Structure:</b> Lower contact is ground and consists of a 2cm wide zone of intensely crushed (but not pulverized) rock. Minor thin zones up to 5cm away.																			
104.67	104.67	Con					<b>Mineralization:</b> Dense clusters of anhedral py within the more fragmental sections. Aphanitic sections display vfg dissem py. No other Sx observed.														1					
104.67	134.7						<b>Andesitic Lithic Tuff</b>																			
							Broad zone of broken and crushed rock with lesser gouge. Generally green with chunks different lithologies including andesite flow breccia, rhyolite, and tuff. Crystal tuff becomes increasingly common within the last 3m of the section. Small splays continue into the underlying rock for up to an additional 15m. Weak carb veining also becomes common within the lower 3m of the section.																			
							<b>Alteration:</b> Dominated by spotty pervasive mod chlorite with localized mod clay and trace spotty localized carb. Sericite is also mod spotty. Other alteration facies exists within clasts and are highly variable. These constitute a less significant contribution to the overall picture and will be ignored for now.	2	2				1				3									
108	108	Fault					<b>Structure:</b> Though not completely broken this entire section is ~ 50% faulted and broken and constitutes a major brittle upper level fault system. The lower cutoff was determined based on the 1. lack of volcanic rocks - exclusively intrusive rocks except for xenoliths and 2 - Density of structures falling below 25%. Variable core angles were noted however only the major core angle was recorded. Subsequent hole will help determine the true geometric affinity of this feature.																			
							<b>Mineralization:</b> Pyrite once again dominates as the primary mineralizing sulphide. Py is as highly variable in both concentration and character as the lithology here. Though no other sulphides were observed they are suspected. A test sample was laid out.														3					
134.7	169.35						<b>Dacitic Crystal Tuff</b>																			
							Grey, generally porphyritic with aphanitic sections. Locally intensely altered resulting the broad destruction of primary igneous textures. Sulphides are seen throughout as fine euhedral disseminations, clusters up to 1cm across and as rare hairs line associated with veinlets. Locally broken and crushed. Locally mottled (sections generally less than 1m). Locally brecciated and healed.																			
							<b>Alteration:</b> The overall alteration style is variable and spotty over short distances. This makes it difficult to log the variability of alteration without introducing to much complexity. Since mineralization is likely tied to alteration I will attempt to break the alteration and mineralization out into discrete sections and log each section accordingly.																			
134.7	151.25	vnlt					Mod spotty to pervasive chlorite, locally selective replacement of fs. Strong localized, often fault bound(?) silica. Mod selective spotty white clay replacement of fs. Trace localized spotty sericite as specks. Py mineralization is ubiquitous and consists of dissem vfg dark euhedral py within most elements, localized poikilitic py clusters within some clasts, localized clusters of py, py stringers, py > sp > ga stringers (rare), and dissem ga in association with Fe carb.	3	1	2						1	3	0.01		0.01	2					
151.25	169.35	Chl Seams					Weak pervasive to spotty pervasive fecarb overprint. Weak sericite overprint. Weak pervasive chlorite. Trace spotty silica. Possible albite. Spotty selective chlorite or white clay replacement of fs. Locally brecciated and healed with Silica. Localized rare porphyllite. Chlorite seams (1/2cm thick) every 3m. Minor vnlt of Fecarb + py > sp > ga - slightly more common than overlying section.	2	2	1	1					2	1									
157.2	158	Chl Seams					narrow 1cm black chl seam																			
158.5	158.6	vnlt					poly metallic + fecarb veinlets											0.1		0.1	1					
158.5	159	vnlt					poly metallic + fecarb veinlets											0.1		0.1	1					
154.3	154.8	Fault					10 cm wide chl rich cataclastite.																			
159.2	159.4						1mm wide banded Fecarb vnlt + py + ga + sp (honey)											0.1		0.1	0.1					
169.35	169.35	con					Upper contact to a significant cataclastic fault. Used to define the lower contact of this section.																			
169.35	176.75						<b>Dacitic Crystal Tuff</b>																			

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other	
							Blue grey to pale blue grey, locally mottled, locally patchy. Bands likely related to alteration fronts. Patchy areas have preserved some of the primary igneous textures. Darker areas are intensely flooded with silica and primary igneous textures have been deeply eroded or completely destroyed. Mineralization is sporadic, locally intense and dominated by py. Rare sp, cp and ga within more intensely mineralized areas. Minor veinlets with Sx are common, sometimes poly metallic especially in areas with robust micro veining. Moderate patches of albite are common. Section becomes less silicified dh where clays and chlorite replace sil as the primary alteration product and the core exhibits cataclasis. Mineralization also decreases dh. Patchy FeCarb replaces fs where fs have survived.	3	1	3	2						1	2	0.01	0.01	0.01	3				
173	173.1	Vein					6cm poly metallic semi massive Sx vein												0.1	0.1	60					
172	172.4	Veinlet					1/2 cm - pale white soft - ???																			
174.28	174.35	Vein					Poly metallic (sp-py-black Sx of unk affinity poss cp). 5cm Dark grey sil vein is imbricated and banded.												0.1		10				0.1 unk	
174.5	176.75	Fault					Though several narrow cataclastic fault sections were noted in this section this lower unit is by far the most disrupted. The major fabric in all of these structures sits at 50deg.																			
176.75	204.9						<b>Dacitic Crystal Tuff</b>																			
		fol					Blue grey to light orange brown (due to weakly oxidized fecarb which has replace fs) and increasingly so dh, mottled. Rare exotic patches of contorted poikilitic clasts(?) with a pale green rind and an inner ring of grey quartz(?). Darker areas are intensely flooded with silica and primary igneous textures have been deeply eroded or completely destroyed. Sericite is common throughout and but never very strong. Chlorite is also weakly apparent. Mineralization is strongest in these darker areas. Locally py has completely replaced the groundmass leaving the fs either untouched or imparting a weak poikilitic texture on the odd grain. Veining begins to develop after 188m as does a weak foliation. Veining intensifies to a weak stwk after 194. Generally this veining is more like an alteration band with minor hairs of Sx included within, which dh becomes more Sx rich and narrower. Hair lines of Sx are polymetallic with blackjack sphalerite, py and poss cp and ga. These hairs never get very dense with an over all average of 2/m. Two different set of these veinlets are apparent, however, crosscutting relationships were not observed.	2	2	2	1					2		0.1	0.01	0.01	5					
195	201.2	Vnlt					Sphalerite micro veinlets - blackjack - +/- FeCarb. 2/m																			
196	204.9	Vnlt					Sphalerite - Black Jack - plus other Sx. 1/m																			
204.9	208.25						<b>Dacitic Lapilli Tuff</b>																			
							Blue grey with rare localized pale grey sections. Locally brecciated with extensive dark phaneritic py rich sections and clasts within a porphyritic matrix. Matrix supported. Clasts comprise up to 30% of section. Rare jigsaw fit. Py is generally dirty, especially within darker sections. Brighter py common as clots within matrix (cp?). Moderate patchy pervasive silica flooding and chlorite. Minor pervasive spotty sericite. Trace carbonate. Minor aplite dyke between 207.23 and 207.43m. Minor 1-3mm carb veinlets within 1m uh and 40cm dh of dike. Incidental fragments of massive py. Rare thin cataclastic seams.	3	2	3			1									5				
207.23	207.43						Aplite dike - vfg to aphanitic. fg white flattened 1mm x 2mm or less calcite amygdules. Sub mm semi translucent semi flattened grain. 0.1% very vfg dissem black specks. Rare, thin colloform py + black gangue veinlets with a dark 1cm halo. Sharp upper contact, convoluted lower contact.														0.1					
208.25	211.28						<b>Aplite Dike</b>																			
							Aplite dike - hard vfg to aphanitic. Fg white flattened 2mm x 4mm or less calcite amygdules. Sub mm semi translucent semi flattened grain. 0.1% very vfg dissem black specks. Rare, thin colloform py + black gangue veinlets with a dark 1cm to 2cm silica halo sitting at either 50 (uh) or 30 (dh) deg. Rare 1cm light blue mod hard clasts with irregular calcite inclusions. Rare irregular calcite veinlets. Weak foliation changing from 50 to 30deg dh. Irregular upper and lower contact.			3											0.1					
209	209	fol	50																							
210.5	210.5	fol	30																							
209	209	vnlt					Sx + carb vnlt																			
210.5	210.5	vnlt					Sx + carb vnlt																			
211.28	246.85						<b>Dacitic Lapilli Tuff</b>																			

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)																	
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other										
New Nadina Explorations Limited		DDH #: 11S-01		UTM E (NAD 83): 650430E		Target: B		Date Collared: Sept 3 2011		Logged By: J Mark Ralph		Silver Queen Property		Dip: -80 Az: 90		UTM N (NAD83): 599600N		Drill Number: 1		Date Completed: Sept 12 2011		Fall 2011		Total Depth: 572m		Elevation: 870m		Drill Contractor: Lone Peak		Date Logged: Sept 6-12 2011		Core Size: NQ2			
		LC					Extensive zone of broken/healed fault breccia with minor localized deeply clay altered zones, especially near the LC. Color grades from a blue grey to a light blue grey thru the whole section. Spectacular example of gradational alteration facies change. Upper section contains clasts and minor sections (up to 20cm) of silicified tuff with minor gouge/clay seams. Lower section contains very few competent clasts or sections, is deeply altered to clay, very incompetent, and a lighter grey then above. One py vein from 234.30-234.50m is badly broken. Lower contact is a sharp chlorite gouge.																												
211.28	232						Alteration	3	3	3						2	2																		
232	246.85						Alteration	2	3	2						1	4																		
246.85	252.3						<b>Shear Zone</b>																												
246.85	247.35	shr					Intense shearing crushing and pulverization of host tuff. Local seams of dark green chlorite are common and range from mm scale to 15cm wide. Alteration consists of intense white clay and carbonate between rare competent sections and narrow chlorite schists. Other minor fragments that have survived are rounded and fragmented. Sulphides are primarily as dissem anhedral vfg py crystals which are of rounded. Dissem very vfg anhedral py was seen within the chlorite schists. Some of these crystals may be cp but are far to fine to define. Several seams of a dark submetallic mineral were noted and within these seams a vfg dark blue grey dissem Sx was seen. This may be galena but again these crystals are too small to define.	4	3				3				4				2													0.1	
		LC					Sharp LC is a narrow chlorite schist																												
252.3	312.2						<b>Feldspar Porphyry - Stwk zone</b>																												
							Quartz + py +/- cp +/- other stockwork within the felspar porphyry. Because of the length of this section it will be broken down by either alteration facies, mineralization changes or significant changes in the stockwork pattern. Following this cell will be a brief description of the felspar porphyry package itself which will be added to as the section is logged.													1		6													
							Feldspar porphyry: 60:40 albite:plag. Albite (2-6mm) crystals are generally larger than the plag(1-3mm). GM is generally silicified and grey. 20:80 GM:Modal Min. Porphyritic. No free quartz observed. Locally igneous textures have been destroyed. Fs are replaced with white clay.			3						2																			
252.3	261.7						Stwk: 3 primary, 2 minor vein types. 1 - low ATCA of 2-5mm grey quartz with dissem py +/- cp. 2 - 1-2mm grey quartz + dissem py +/- cp(?) @ 50 deg TCA. This vein set is cut by set 1. 3 - Rare black hard 2mm banded + py @ 25 deg TCA. 4 - 2-4mm Grey quartz + py core @ 50 dTCA. 5 - Vuggy 2-4mm py @ 50 - 60 dTCA.																												
							Sulphides are almost exclusively within the veins. Disseminated sulphides up to 3% are most common within sections where the primary igneous textures have been preserved.																												
261.7	266.35						Zone of intense alteration. Primary igneous structures are nearly completely destroyed. Alteration fronts are merging and producing a mottled patchy appearance. Clays are generally absent and have been replaced with a pervasive patchy silica/siderite facies. Dark patches contain up to 50% dirty fg py, whereas veins contain a bright slightly yellow py. Two phases of mineralization.			4						1																			
266.35	312.2						Main Stwk zone																												
278.4	279.7						High aTCA (20 dTCA) massive py vein over 7cm wide																												
298.2	298.5						Weak disseminated magnetite																												
312.2	321.17						<b>Aplite Dyke</b>																												
		UC					Pale green, mod hard, laminated, especially near the contacts. Patches of trace very vfg dissem black specks and black discontinuous hairs which appear to follow irregular cracks. Minor pervasive carbonate and lesser low aTCA white carb veins, locally with very well developed calcite crystals. Some of these veins are 60 dTCA. Upper and lower contacts appear clay altered. One minor grey sil vein near the upper contact (barren) 40dTCA.						2			1																			
		LC																																	
321.17	356.0						<b>Feldspar Porphyry - Stwk zone</b>																												



FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other		
							A significant change in the stwk from the prev stwk section. This section shows no signs of intense silica flooding or the intense texture destruction as was seen in the above stwk section, however the GM is silicified. Alteration of the host rock is weaker with a selective clay replacement of fs. Veining is less complex. The veining itself shows 2 primary and 2 minor vein types 1 - dark grey silica, primarily low angle with many other erratic angles. This set forms the main network of the stockwork. Generally not mineralized but where mineralized py forms a core to larger veins. On the cored surface py forms distinct patches with the sulphide portion. Py is anhedral. 2 - Py +/- cp veins up to 1 cm thick and @ 20dTCA. This set cuts the first set. 3 - Thin erratic py hairs 4 - Minor to rare 2-3mm carbonate veins.											2		0.1		4					
356.0	423.45						<b>Feldspar Porphyry - Stwk zone</b>																				
356							The intensity of sulphides has dropped since the prev section, however, the ratio of py to cp is similar. We are also seeing a small amount of mo in the #2 vein set. Feldspars are often less clay altered, but locally cored with pyrophyllite. Grain boundaries are often ghosted.			2							1		0.05		3			0.01			
420.8	421.14	vein					2 x 3mm Py + cp veins plus several small hairs. One vein runs along the margin of a 1cm carbonate vein. This section is especially enriched. cp was also noted for several meters above and one meter below.												2		3						
420.5	421	vein																									
417	422						enriched section												1		3						
430							some feldspars are being cored or completely replace with a light green pyrophyllite																				
423.45	439.75						<b>Feldspar Porphyry - Stwk zone</b>																				
							Sulphide, silica, and clay alteration of fs increases here. Pyrophyllite still cores some fs but now also completely replaces some. #1 vein set is offset by #2 Sx veins. Primary igneous textures are largely preserved. Veins show no halos.			3							2		0.5		4						
429.03	429.3						Unusual dark narrow hard seam with a smaller breccia(?) Seam. Clasts within this breccia are rounded and overall matrix supported. Minor sulphides noted within this minor seam.																				
439.75	453.6						<b>Feldspar Porphyry - Stwk zone</b>																				
							Similar stwk as above. Over all color is paler, almost off white. Appears pervasively albitized but almost to soft to be so. This style of alteration has been noted UH. In short this style of alteration is pervasive and patchy in the sections whereby its been observed but those sections are patchy in the drill string. These sections are never very long (< ~10m) but they are also never less then several meters. Association with mineralization is still ambiguous. This section also contains narrow darker silicified intervals. Sericite is apparent but never dominant. +/- pervasive chlorite. Trace carb.	1	1	2	1		1				2		0.01	0.5		4					
439.75	440.1	Vein					Py vein on the margins of a cataclastic fault zone. Minor Cp intergrown on the margins of the py. Fecarb veinlets within sometimes contain trace Sp (blackjack). Py >>cp>sp												0.1	0.5					35		
441	441.9	Vein					Brecciated Sx (py>>sp>cp) + grey quartz + carb + fe carb vein. Upper portion is broken and healed with silica + carbonates.												1	0.5					40		
442.75	443.1	Vein					4cm banded white and grey mod hard calcite (mod hard but strong rxn to HCL) vein. Trace dissem vfg py within.																				
451.9							Narrow irregular cataclastic zone with mod white clays and gouge.																				
453.6	536.53						<b>Feldspar Porphyry - Stwk zone</b>																				
536.53		LC					Very long section of albitized fs porph stwk. Albite ranges from off white to pale green. Pyrophyllite/clay alt remains similiar to prev. Gm is still consistently silicified. Stwk consists of grey quartz with minor associated sx and even less dissem py. Overall stwk is between 20-50% of the overall core and sits between 0 and 20 with minor erratic veins in all orientations. Quartz veins within stwk are cut by pure to almost pure Sx veins which are less abundant and sit at a similar aTCA. Locally veins are vuggy (but this is rare). Rare calcite veins and white quartz + sulphide. Significant decrease in cp and sp throughout. Minor (<.1%) dissem py thru host. Black fg magnetite, sometimes replaced with red hematite, appears in isolated sections, the largest and most intense of which lies between 496-500.7 and 508.5-512.3m Dissem sphalerite was noted along several low angle py vein margins between 506 and 508.			2	2						2		0.01	0.1		4					
504.36	504.43	Vein					1/2 wide calcite vein																				
505.3	505.7	Vein					White quartz + carb + Sx (py>>cp on margin) 1-2 cm wide.																		10		
454.9	455.4	Vein					Two calcite/pyrite veins - one 16 cm wide the other 6cm wide. The first vein is a spectacular example of very well developed calcite crystals within a single vug. Minor cp within the py of the first vein. Other Sx of uncertain affinity - likely sphalerite. Possible pyrolusite.												0.1	0.5		10					
466.2	466.4						Section of relatively little stwk and minor dissem black 1mm hem specks.																	0.5			
525.25	529.3						Zone of moderately strong spotty magnetite mineralization.																		5		

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)							
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py	Mag	Hem	Mo	Other
527.93	532						Broken, rubblely zone.			5															
527.93	536.53						Darker section - intense silicification - significant destruction of primary textures. Green tint.																		
535.4	535.7	Vein					8cm Py + Sp +/- Cp (other) + intergrown carbonate vein. Banded, sugary, py>sp>>cp (other). Sp core. 1cm cataclastite band on upper contact. Calcite is not easily observed but this vein is rich in calcite. Several sulphide bands along this angle 30 cm dh.																		
536.53	549.65	LC					<b>Mafic Dyke</b>																		
		UC					Two plag phyrlic porphyritic to very vfg dark grey except near contacts. Fs replaced with calcite. Feathery GM. Mod magnetism. Phenos exceptionally small - generally <1mm x 2mm. No Sx observed. Olive drab alteration for up to 1/2m from UC and 10cm from LC and as <1/2cm halos around calcite veinlets within 1/2m of LC. 1% quartz/carb erratic veinlets decreasing to trace dh. Away from contacts these veinlets exhibit a thin bleached halo (<1/2cm).						2									3			
538	538.9	con					Two 20cm deeply fractured zones with minor carbonate veinlets.																		
541.05	543	25					Section of >70% crushed rock with minor carbonate veinlets. Competent rock is pitted.																		
549.65	552.12						<b>Feldspar Porphyry - Stwk zone</b>																		
							Darker then prev stwk. More Sx then prev. Py is very yellow but does not appear to be Cp. Intergrown sp is quite strong relative to prev sections. Silicified and mod spotty carbonate altered.			3	1							0.5	0.1		6				
552.12	553.67	Fol					<b>Mafic Dyke</b>																		
		UC					Very fg phaneritic dark green (lighter then prev dyke). Narrow olive drab bleached zones (1cm or less) near UC and LC. 1% irregular shaped off white 2-5mm phenos. 1% elongate dark green mod hard 2mm long phenos - aligned possibly defining a foliation @ 40 dTCA. Pervasive mod carbonate altered. No Sx observed. Sim magnetism to prev dyke (mod). LC is missing and may be on the drill shack floor.																		
553.67	572.0						<b>Feldspar Porphyry - Stwk zone</b>																		
							Tight Stwk - up to 40% grey quartz. Sx veins at a zero aTCA are often cp rich, where as other veins are predominantly py. Rich in cp compared to other sections. No other Sx observed.			3										1		5			
572.0	572.0						<b>EOH</b>																		

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited DDH # 11S-02 UTM E (NAD 83): 650175 Target: Titan 'B' Date Collared: Sept 28 2011 Logged By: J. Mark Ralph																											
Silver Queen Property Dip: -75 Az: 90 UTM N (NAD83): 5994800 Drill Number: 1 Date Completed: Oct 5 2011																											
Fall 2011 Total Depth: 501m Elevation (m): 877m Drill Contractor: Lone Peak Date Logged: Oct 14 2011 Core Size: NQ2																											
0	7.5						<b>Casing</b>																				
7.5	65.85						<b>Dacitic Fragmental Tuff</b>																				
		Alt'n banding	30-50				Sections of Grey - Blue Grey - Light Greenish grey. All fs have been altered to either chlorite, or a soft tan clay, or white clay or have been partially to completely destroyed. Overall chlorite, unk alt, and clays are weak to mod selective pervasive. Alteration changes every few meters and is therefore patchy and selectively pervasive. GM is commonly feathery and likely mod pervasively sericite altered. Section starts with weak pervasive silica which increases to mod pervasive silica after 33m. Clasts are generally isolated, monomictic over short intervals, angular, and large (lapilli?). Localized sections, especially toward the LC, display a tight matrix supported monomict.	3	3	2		2						2-white clay and unk clay					2				
							Texture indicative of a autobreccia or intrusive breccia. Clasts change character over several meters but rarely mix. The upper section contains the most exotic clasts overall with highly angular poikilitic clasts occurring every few cm to >10cm. Composition of these upper clasts is ambiguous. Narrow sections display alteration bands which can often appear like flow banding. Alteration fronts can also impart a pseudo breccia texture overprinting the actual breccia.																				
							Sulphides are generally as dissem dirty anhedral py within the GM, dissem anhedral/euhedral grains within poikilitic clasts and rare hairs and veinlets of py. Occasional fg sections contain a blue grey submetallic anhedral mineral - affinity unk. Localized narrow patches of convoluted py and imbricated disrupted veins of py + grey quartz.																				
51.45	51.65	Fault	25				The only notable structures are one narrow 40cm cataclastite centered at 47.5m and one 20cm chlorite/gouge seam centered at 51.55m. The lower contact is gradational over 30cm.																				
65.85	83.6						<b>Dacitic Crystal Tuff / Fragmental Tuff</b>																				
							Pale green, aphanitic to very vfg with rare megacrystic sections, locally brecciated. Strong dissem dirty py and rounded clasts of py. Rare localized boudined py veinlets with thin dark halos. Some sections are so dense with py veinlets as to form a net texture. Weak laminations defined by py. Sharp localized contacts between aphanitic unit and coarser unit. Mod to strong pervasive sericite.		3												3	1					
73.2	73.2	Con	40				Sharp contact between internal igneous flow bands.																				
73.7	73.7	Con	40				Sharp contact between internal igneous flow bands.																				
69.3	69.55	Vein	20				1cm py + carb + white quartz vein.																				
83.6	94.3						<b>Dacitic Fragmental Tuff</b>																				
		UC	60				Blue grey to green, hard. Significant monomict clasts near the UC and scattered throughout - deeply altered and eroded. Localized white clays. Mod pervasive biotite near the LC. Mottled. Somewhat broken, especially relative to the upper portion of this hole. Lower 2m is deeply alt, silicified and brecciated. Spotty small 1mm soft purple/black specks with a white streak (chl?). Patchy mod pervasive sericite. Pyrite is mainly as dissem dirty specks. Less common in veinlets and as clots or clusters of clots.	2	3	3		2									2	2					
85.85	89.0	Veinlet	25				1/2cm veinlet of dark grey translucent quartz with minor dissem py within and a thin 1mm rusty mod hard vein margin.																				
94.05	94.3	Vein	20				2-3cm convoluted dark vein with patchy dark dirty py, magnetite and small 2-3mm irregular patches of honey sphalerite. Chunks of carb and white quartz - likely a breccia.																				
94.3	105.47	UC	30				<b>Amygdaloidal Dike</b>																				
94.3	94.5	Vein	20				Dark purple with tan to pale green patches, especially near veins and contacts. Porphyritic with amygdules of white fs (?). One convoluted carb + sil patch 3 x 7cm @ 96.5m. Weak foliation throughout - 60 dTCA. One x 1cm xenolith of fs porph at 104.7m. Barren except for one 3mm carb vein @ 95.3-95.4m with a dark brown rim and - banded and trace py within the bottom 1m. Also one sub mm black crack cuts this unit and into lower unit (post dike?). Carbonate rich.			2			3								0.1						
94.3	105.47	fol	60																								
105.47	105.47	LC	80				Sharp - no chill margin																				
105.47	127.8						<b>Dacitic Fragmental Tuff</b>																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
105.47	127.8	fol	50				Green locally brecciated. Igneous textures are either eroded or destroyed and the rock exhibits a recrystallized texture. Modal composition is difficult due to this intense alteration. Alteration consists of selective pervasive chlorite, sericite with a mod silica over print. disseminated py is also pervasive and locally can exceed 50%. Less common are narrow veins of py. Brecciated sections display clots and clusters of clots of py. Overall a weak foliation in the unbrecciated sections. Also patches of intense to complete grey silica flooding. LC is sharp and is a cataclastite.	2	3	3											5	1					
111.7	112.75						Zone of intense py mineralization																				
118.85	119.5	Vein	5				Slightly convoluted 1/2 cm low aTCA py vein.																				
121.3	121.35	Vein	30				1/2 cm py vein																				
126.1	127.25	Vein	5				1/2 cm py + intergrown carb vein with a significant blowout on the UH side.																				
123.4	124	Veins	50				Several veins from mm to 2cm wide - py with distinct crystal patches and intense py in GM																				
127.8	147.8						<b>Dacitic Crystal / Ash Tuff</b>																				
127.8	147.8	fol	20				Very similar to prev section except no breccia sections. Foliation is also at a much lower aTCA.	2	3	3											5	1					
129.85	130.35	fault	25				Low aTCA chlorite schist with several narrow (1cm) py veins																				
135.25	135.45	Vein	30				4cm py + intergrown carbonate vein.																				
138.85	138.9						Patch of intense py + carb + clear gypsum.																				
147.8	147.8	LC	20				Moderately convoluted sharp contact.																				
147.8	156.15						<b>Amygdaloidal Dike</b>																				
147.8	156.15	fol	0-30				Dark purple with tan to pale green patches, especially near veins and contacts. Porphyritic with amygdals of white fs(?). One convoluted carb + sil patch 2x4cm @ 152.85m. Weak foliation near UC - 30 dTCA and LC - 5 dTCA. Barren except for disseminated py within thin 1mm convoluted fracture pattern carb veinlets (1% of unit). Weak pervasive carbonate in the darker sections near the UC. Lower contact in very convoluted and looks like a fleur de lyse.						1														
156.15	163.05						<b>Dacitic Crystal / Ash Tuff</b>																				
156.15	163.05	Fol	30				Green with local grey bands up to 2cm wide (~ 5% of section). Bands are rich with vfg disseminated py and are soft (chlorite?). GM in main unit is feathery. Overall texture is equigranular, with a very weak foliation parallel to darker bands which sit at 30 dTCA. Minor section of Gypsum flooding and veinlets between 161 and 163. Trace very vfg disseminated dark grey sub metallic specks are common throughout. Pervasive mod sericite, weak pervasive chlorite, trace pervasive sil. trace localized discrete gypsum flooding. disseminated fg anhedral dirty to yellowish py evenly distributed throughout except in dark bands as noted above. Lesser py clots up to 1cm.	2	3	2											3						
163.05	163.05	LC	20				Sharp - no chill margin with underlying dike																				
163.05	166.35						<b>Amygdaloidal Dike</b>																				
163.05	164	Fol	20				Dark purple with tan to pale green patches, especially near veins and contacts. Porphyritic with amygdals of white fs(?). Several small convoluted carb + sil patches with a brown rind between 163.90-164.5m. Weak foliation near UC - 20 dTCA and LC - 5 dTCA. Barren except for disseminated py within thin 1mm convoluted fracture pattern carb veinlets (<1% of unit). No pervasive carbonate noted beyond veinlets and patches. Lower contact is sharp.						1														
164	166.35	Fol	5																								
166.35	166.35	LC	30				Sharp lower contact. No chill margin into tuff.																				
166.35	171.9						<b>Dacitic Crystal / Ash Tuff</b>																				
166.75	171.9	LC	55				Green with local grey bands up to 2cm wide (~ 5% of section). Bands are rich with vfg disseminated py and are soft (chlorite?). GM in main unit is feathery. Overall texture is equigranular, with a very weak foliation parallel to darker bands which sit at 0-30 dTCA. Minor localized disseminated <1mm hematite, especially near the LC. One minor dike between 170.35 - 170.6m. Trace very vfg disseminated dark grey sub metallic specks are common throughout. Pervasive mod sericite, weak pervasive chlorite, trace pervasive sil. trace localized discrete gypsum flooding. disseminated fg anhedral dirty to yellowish py evenly distributed throughout except in dark bands as noted above. Lesser py clots up to 1cm.	2	3	2							2 gyp				3				0.5		

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m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
New Nadina Explorations Limited DDH # 11S-02 UTM E (NAD 83): 650175 Target: Titan 'B' Date Collared: Sept 28 2011 Logged By: J. Mark Ralph																												
Silver Queen Property Dip: -75 Az: 90 UTM N (NAD83): 5994800 Drill Number: 1 Date Completed: Oct 5 2011																												
Fall 2011 Total Depth: 501m Elevation (m): 877m Drill Contractor: Lone Peak Date Logged: Oct 14 2011 Core Size: NQ2																												
171.9	177.9						<b>Amygdaloidal Dike</b>																					
176.9	177.9	fol	20				Dark purple with tan to pale green patches, especially near veins and contacts. Porphyritic with amygdules of white fs(?). Several small convoluted carb + sil patches with a brown rind scattered throughout. Foliation absent in the upper portions, weak foliation near LC - 20 dTCA. Barren except for dissem py within thin 1mm convoluted fracture pattern carb veinlets (<1% of unit). No pervasive carbonate noted beyond veinlets and patches. Lower contact is convoluted but sits at about 25 dTCA.						1								0.1							
177.9	206.5						<b>Dacitic Crystal / Ash Tuff</b>																					
177.9	206.5	fol	20				Green with local grey bands up to 1cm wide (~10-30% of section) which decrease in intensity dh - Lower contact defines the loss of these bands. Primary igneous textures are eroded to locally destroyed. Fs rarely replaced with a light green clay. Bands are rich with vfg dissem py, are commonly soft (chlorite, gypsum?) and sometimes cored with gypsum. Locally these bands can be somewhat harder suggesting a rare siliceous component. GM in main unit is feathery. Overall texture is equigranular, with a very weak foliation parallel to darker bands which sit at 0-30 dTCA. Minor localized disseminated <1mm hematite, especially near the LC. Rare specks of sphalerite on the rim of py clots. Trace very vfg dissem dark grey sub metallic specks are common throughout (hem?). Pervasive mod sericite, weak pervasive chlorite, trace pervasive sil. Trace localized discrete gypsum flooding. Dissem fg anhedral dirty to yellowish py evenly distributed throughout except in dark bands as noted above. Lesser py clots up to 1cm. A significant structure kicks in between 194.7 -203m and is described as narrow 2-5cm intervals of cataclastite (25% of core) of with core angle of 20 dTCA.	2	3	2								2 gyp	0			4			1			
194.7	203.0	Fault	20																									
206.5	221.22						<b>Dacitic Crystal / Ash Tuff</b>																					
206.5	221.22	fol	50				Green with rare grey bands/patches up to 1cm wide (~ 5% of section) which increases in intensity dh - Lower contact defines the significant reemergence of these bands. Primary igneous textures are eroded to locally destroyed. Fs rarely replaced with a light green clay. Bands are rich with vfg dissem py, are commonly soft (chlorite, gypsum?). Locally these bands can be somewhat harder suggesting a rare siliceous component. GM in main unit is feathery. Overall texture is equigranular, with a very weak foliation parrallel to darker bands which sit at 50 dTCA. Minor localized disseminated <1mm hematite associated with thin low aTCA py hairs. Trace very vfg dissem dark grey sub metallic specks are rare throughout (hem?). Pervasive mod sericite, weak pervasive chlorite, trace pervasive sil, trace localized discrete gypsum flooding. Dissem fg anhedral dirty to yellowish py evenly distributed throughout except in dark bands as noted above. Lesser py clots up to 1cm. A significant structure continues from prev section down to 211m and is described as narrow 2-5cm intervals of cataclastite (25% of core) with ore angle of 20 dTCA.	2	3	2								2 gyp				3			0.5			
215.6	216.1	Fault	10				3cm cataclastite																					
206.5	221.22	Vnlts	5				rare thin py hairs. Two phases of py.																					
221.22	230.0						<b>Dacitic Crystal / Ash Tuff</b>																					
221.22	230	fol	50				Green with rare grey bands/patches up to 1cm wide (~ 10% of section) and are patchy thru this section. Primary igneous textures are eroded to locally destroyed. Fs rarely replaced with a light green clay. Bands are rich with vfg dis py, are commonly soft (chlorite, gypsum?). Locally these bands can be somewhat harder suggesting a rare siliceous component. GM in main unit is feathery. Overall texture is equigranular, with a very weak foliation parallel to darker bands which sit at 50 dTCA. Minor localized disseminated <1mm hematite associated with thin low aTCA py hairs. Trace very vfg dissem dark grey sub metallic specks are rare throughout (hem?). Pervasive mod sericite, weak pervasive chlorite, trace pervasive sil. dissem fg anhedral dirty to yellowish py evenly distributed throughout except in dark bands as noted above. Also rare 1cm py veins at 70 dTCA. Lesser py clots up to 1cm.	2	3	1							2 gyp				3	0.1		0.1				
221.22	230	veins	70																									
230.0	277.6						<b>Dacitic Crystal / Ash Tuff</b>																					
230	277.6	fol	60				Light green with an apple green patches likely due to talc (harder than pyrophyllite). Py content has also increased and locally appears broken. Several locations exhibit a breccia texture with jigsaw fit angular clasts and rounded clasts. Some of these broken py could be disrupted veins. Erratic textures are common but difficult to see due to overprinting alteration. Talc in this unit is surprisingly hard possibly due to alteration hitting only the fs or local silica flooding. Py is also less commonly seen as fg dirty and dissem (up to 2%). Overall py sits around 4%. Locally weakly vuggy. Some vein fragments are rimmed with a very hard deep blue to jet black silicate. Rarely this material sits on its own, again as vein fragments.	2	2	2							3 talc				4	1						
230.0	277.6	vnlts	35				Py veinlets 1mm - 3mm wide +/- grey quartz. Py is in the core of quartz when present. Often shows a bleached halo. <1% of core.																					
259.7	260.25	UC	45				Minor Dike. Similar to the other dikes except only the tanish green portion. Narrow. Upper contact is sharp, LC is sharp and irregular.																					
230.0	277.6						Rare low angle py + carb + grey quartz veins																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited DDH # 11S-02 UTM E (NAD 83): 650175 Target: Titan 'B' Date Collared: Sept 28 2011 Logged By: J. Mark Ralph																											
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277.6	287.2						<b>Dacitic Ash Tuff</b>																				
							Unusual Unit - very light green (mod hard) to very pale green/blue (harder), often mottled GM with 10% round to colliform sometimes concentric 1mm - 1cm clusters of py. Localized silica flooding as mottled patches. Clusters are either invaded by GM or have grown in groups and contain up to 10% white clay. Clusters are often connected by thin discontinuous veinlets of py of a similar texture. These discontinuous veinlets are often connected by thin pale (but darker than GM) hairs of unk affinity. GM is fg and locally contains deeply altered, and sometimes ghosted fragments and crystals. Crystal textures are similar to Feldspar Porphyry noted UH.		2	3								3				5					
							UC is gradational and narrow.																				
287.2	291.42						<b>Dacitic Ash Tuff</b>																				
287.2	291.42	UC	45				Green, fg, massive. Feathery GM. Primary textures heavily eroded or destroyed. Moderately mottled. Disseminated dirty py up to 1mm. Local patches rich in py up to 10% and rare broken veinlets of py. Overall 3% py. Trace incidental green talc replaced clasts. Significant drop in silica flooding except near LC. Near LC - harder deeper green mottled. Ground core at 291.5m. UC is sharp @ 45 dTCA.		2	2								3				3					
291.42	291.42	LC	75																								
291.42	296.1						<b>Amygdaloidal Dike</b>																				
291.42	296.1	fol	70				Dark purple with patchy tanish pale green, especially near veins and contacts. Porphyritic with amygdals of carb. one 3 x 3cm convoluted carb + sil patches with a brown rind at 295m. Weak foliation throughout 70 dTCA. Barren except for dissem py within thin 1mm convoluted fracture pattern carb veinlets (<1% of unit). No pervasive carbonate noted beyond veinlets and patches. Lower contact is sharp and faulted and sits at 75 dTCA.						1								0.1						
296.1	310.3	UC	75				<b>Dacitic Ash Tuff</b>																				
							Unusual Unit (very similar to unit above overlying dike) - very light green (mod hard) to very pale green/blue (harder), often mottled GM with 10% round to colliform sometimes concentric 1mm - 1cm clusters of py. Py clusters are very much less apparent near the upper contact with the dike. Localized silica flooding as mottled patches. Clusters are either invaded by GM or have grown in groups and contain up to 10% white clay. Clusters are often connected by thin discontinuous veinlets of py of a similar texture. These discontinuous veinlets are often connected by thin pale (but darker than GM) hairs of unk affinity. GM is fg and locally contains deeply altered, and sometimes ghosted fragments and crystals. Crystal textures are similar to feldspar porphyry noted UH. Lower contact is gradational.		w	m								m				5					
310.3	347.5						<b>Feldspar Porphyry</b>																				
							Light green, with slightly darker mottled sections, mod soft with rare harder sections. Mod pervasive sericite. Patchy py clusters, and fg dissem py. Rare py veins up to 1cm. 1 x 5cm wide py rich bx at 230.25-230.35m. Deeply eroded thru alteration. Local patches with sharp contacts appear to be related to alteration fronts. very vfg dissem submetallic grey specks in narrow locations.		3	2												5	0.1		0.1		
230.25	230.35	Bx	40				20% 1/2cm angular frags within a pyritic rich matrix																				
334.45	334.9	Vein	10				1cm py > spec hem > carb vein.																				
347.5	358.65						<b>Dacitic Crystal / Ash Tuff</b>																				
							Light green with a subtle pink overtone, fg, equigranular, minor trace stwk of py > grey quartz > black submetallic unk (hem?). Primary igneous textures are largely preserved, but can be locally eroded to destroyed. Significant drop in Py clusters, patches and dissem grains since last section. Trace very small patches of a dark purple silicate - likely fluorite. Some py veinlets have significant bluish to white silica halos up to 500% beyond the veinlet width. Minor 1/2cm quartz carb veins cut low angle veinlets which cut localized patches. LC is gradational.		3	1							3					2	0.5		0.5		
347.5	358.65	Vnlts	5	1			py veinlets - discontinuous, somewhat convoluted. Many other orientations - somewhat erratic.																				
357.87	357.97	Vein	30	80			Grey 15cm wide py vein consisting of 1mm euhedral crystals of py.																				
358.65	397.9						<b>Dacitic Crystal / Ash Tuff</b>																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other
							Light grey to pale greenish grey/blue grey. Fg, equigranular. Weak patchy alteration. Moderate increase in vnlst stwk from prev section. Igneous textures are more commonly preserved. Significant drop in dissem py. Possible trace sphalerite associated with some veinlets. LC is gradational.		2	2							3	0			1	1				
358.65	397.9	Vnlts	5	2			py veinlets - Continuous, somewhat convoluted. Many other orientations - somewhat erratic but less so then prev section.																			
368.5	368.9						Broken, bx quartz healed																			
397.9	411.87						<b>Dacitic Crystal / Ash Tuff</b>																			
							Green, locally pale, mottled, somewhat soft with harder sections. Slight increase in dissem py. Slight decrease in stwk vnlts. Increased sericite. Clays are similar. Igneous textures are eroded but preserved. LC is gradational.		3	1							2				2	0.1				
397.9	411.87	Vnlts	5	1			py veinlets - Continuous, somewhat convoluted. Many other orientations - somewhat erratic.																			
411.87	427.7						<b>Dacitic Crystal / Ash Tuff</b>																			
							Blue grey, mottled, deep erosion of primary igneous fabric with rare patches with less eroded textures. Fg dissem py similar to prev section. Several 1cm internally imbricated py + hem veins.		4												2	0.1		0.1		
411.87	427.7	Vein	5	0.1			1cm Py + Hem veins																			
411.87	427.7	Vein	45	0.1			1cm Py + Hem veins																			
427.87	455.65						<b>Dacitic Crystal / Ash Tuff</b>																			
							Patchy blue grey to green grey, Patchy mottled. Variable preservation of primary textures. Highly erratic planar pyritic veinlets. Significant increase o py clasts, broken veins, clusters and dissem crystals. Several large pyrite veins within cataclastic zones. Mod patchy sericite, silica. Trace carbonate, especially near and within large py veins.		3	3			1				3				4	3				
435.05	436.0	Vein	80	70			90cm wide py, cataclastic, clay rich zone.																			
437.65	438.6	Vein	40	60			90cm wide py, cataclastic, clay rich zone.																			
451.25	451.9	Vein	35	70			55cm wide py, cataclastic, clay rich zone.																			
454.85	455.65	Vein	40	60			110cm wide py, cataclastic, clay rich zone.																			
455.65	488.5						<b>Dacitic Crystal / Ash Tuff</b>																			
							Equigranular, mottled, primary igneous textures are largely preserved with only minor erosion of fs grains. GM is patchy green to blue grey. Py is common as dissem clusters and crystals. Minor veining by py. Rare grey quartz + py >> mo - mo as 0.1-1mm dissem crystals within 1cm vein noted at 468.35-468.38m sitting at 80 dTCA. Other similar veins in this section are not very common. Other py veins at lower angles (10-30 dTCA) were noted but never carry much weight to the overall section. One major py + sp + ga vein with broken quartz was noted between 480 and 480.6m sitting at 25 dTCA - upper contact has been ground away by the drill so some vein material has been lost. Weak patchy sericite, silica and clay alteration. Gradational UC and LC.		2	2							2	1		1	3	1			0.001	
468.35	468.37	Vein	80	90			Grey quartz + py >> mo															8			0	
480	480.6	Vein	25	70			Py = sp = ga > quartz vein. See description above											25		25		25				
488.5	503.5						<b>Dacitic Crystal / Ash Tuff</b>																			
							Blue grey with lighter grey sections. Mottled. Igneous textures are generally eroded to completely destroyed. Significant silica flooding in patches. Weak sericite, and clay replacement of fs. Py as large patches or even broken fragments (possible fracture/vug filling) and as lesser dissem crystals. Minor veinlets generally at a low aTCA. 1 major py > sp > quartz vein between 492.5 - 492.9m at 50 dTCA.		2	3							1				2	3				
492.5	492.9	Vein	50				Grey disrupted py > sp > quartz vein.											10				40				
503.5	503.5						<b>EOH</b>																			

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
0.0		34.5					<b>Casing</b>																					
34.5		54.3					<b>Dacitic Lapilli Tuff</b>																					
54.3	54.3	LC	30				Polymictic matrix supported flow breccia to lapilli tuff. Pale green over the upper 1/2 grading to a darker pale pink in the lower 1/2. Clasts comprise > 70% of the core volume except where very large clasts rest in which case clasts form < 70%. Clast range from mm to over 30cm along long axis. Discrete localized beds(?) are likely very large clasts or bombs. Some clasts were likely derived from a previous flow/fall and as such contain clasts within. Most notable clasts in this unit are rounded semi-massive clasts of pyrite. Clasts consists of (from most to least common) - 1 - Felsic ash tuff with 1% anhedral vfg pyrite. Some of these clasts exceed 30cm and are largest in the lower portion of the middle of the section. 2 - Blue grey massive sub angular clasts between 5mm and 2cm with minor vfg pyrite 3 - Pale green sub rounded aphanitic clasts. 4 - sub angular 1-5cm polymictic clasts from a previous flow. 5 - off white plag phyric 1mm to 1cm angular clasts with 1-2% disseminated pyrite +/- Mo and 6 - rounded semi massive pyrite +/- other Sx (1% of total). Groundmass is blue grey, plag phyric, locally siliceous and contains 2-5% disseminated pyrite on grain boundaries (<0.5% of total). Alteration consists of moderate white clay replacing plag. Trace carbonate. Clasts show a variety of alteration assemblages which are generally confined to silica, clay and sericite. Sx appears in many forms due to the variety of clasts. Brassy fg interstitial pyrite is common in the GM. Disseminated euhedral bright pyrite is seen in most clasts. Broken or discontinuous veinlets of pyrite are generally rare but seen in a number of spots. Fg disseminated grey sub metallic Sx (sulfosalt?). These sulfosalts are very common around hydrothermal hematite spots and reaction rims and around common broken or discontinuous/space filling ankerite. Lower contact is sharp at 30 dTCA	1	1			1				1	3					1	0.1		0.5			0.01 unk
54.3		82.2					<b>Dacitic lithic/ash Tuff</b>																					
54.3	82.2	bed	80				Locally pale green and massive with erratic lithic fragments to locally bedded. Lithic sections contain a hard dark grey fragments which stands out from other similar units. Beds range from cm scale to 1-2m in width. Dozens of beds over the length of the section. Graded beds are common and display a FUS. Section becomes lithic rich, darker and ash beds generally disappear after 70m. Some contacts are gouge rich and may have evolved as part of the major fault dh. Beds are commonly sharp and well defined. LC is gradational. No pyrite veins noted. Trace hem as reaction rims on fragments and as lesser spots are often associated with a fg disseminated grey sub metallic Sx (sulfosalt?). These sulfosalts are very common around hydrothermal hematite spots and reaction rims and around common broken or discontinuous/space filling ankerite and are more common than the previous section.	3	2							2	3				1			1			0.1 unk	
54.3	82.2	faults	40	1/m			Narrow, grey to greenish grey, locally white and clay rich, generally gouge rich with lesser fragments to fragmental or mechanically broken.																					
82.2		203.95					<b>Dacitic Lapilli Tuff</b>																					
203.95	203.95	LC	70				Green to dark green. This unit begins to show a substantial change in color and mechanical destruction from the previous section. Clays and gouge sections become ever more common dh - mechanical destruction is nearly complete between 186 and 203.95m. Fragments of the tuff (or clast rich sections) are often spared imparting a brecciated appearance to the section. Rare sections of generally undamaged material become increasingly uncommon dh. Py as fg disseminated euhedral crystals within matrix of tuff units and in matrix and lithics of lithic units. Trace hem as reaction rims on fragments and as lesser spots is less common then previous section. Rare fg disseminated grey sub metallic Sx (sulfosalt?). These sulfosalts are very common around hydrothermal hematite spots and reaction rims (less common then previous sections) and around common broken or discontinuous/space filling ankerite which are more common than the previous section.	3	1						2	3					1	4		0.5		0.1 unk		
112.0	153.0						This sub unit defines a section of significant broken dark green/brassy pyrite with a similar broken pyrite vein at the core. This section also defines a substantial increase in the grey submetallic sulfosalt salt noted above. Note that pyrite vein interval is defined below.																					
139.3	140.0						Py vein.																					
177.5		181.7					<b>Amygdaloidal Dike</b>																					
177.5	177.5	UC	70				Pale tan to reddish pink, locally mottled. UC and LC clay rich faults at 70 and 50 dTCA respectively. Minor pyrite veinlets and hard white erratic and broken veinlets.														1							
181.7	181.7	LC	50																									
203.95		205.65					<b>Amygdaloidal Dike</b>																					
205.65	205.65	LC	75				Pale tan to reddish pink, mottled, locally broken and sheared. Similar to all other amyg dikes seen so far except for this penetrative structural element.																					



FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
205.65		288.0					<b>Feldspar Porphyry - Stwk zone</b>																				
205.65	208.4	Fault	75				Porphyritic with albite crystals up to 1/2cm within a mass of feldspars crystals generally less than 2mm. Blue grey to pale tan with a blue grey GM. Grey 1mm to 1cm quartz stwk throughout - locally cored with pyrite, but never more than 10% of veins and often veins are barren. Most commonly at a very low aTCA. Cut by a thinner 1-3mm grey quartz +/- pyrite typically at a higher aTCA than previous veins. Which in turn is cut by 1-5mm, often convoluted, Sx veinlets and veins +/- grey quartz +/- soft dark purple erratic and convoluted halo. All of these elements are cut by 1mm planar pyrite veinlets. Finally a rare light grey/white quartz + carb + FeCarb + pyrite + sp + other Sx(?) veins occur at 25 dTCA. These last veins have flooded the core with sil resulting in total destruction of igneous textures. Often imbricated, banded and of variable character (not all aspects listed are present in all veins). Upper section, down to 208.4m is deeply crushed and pulverized with local chloritic seams @ 75 dTCA and patches. Immediately below this pulverized section the unit is pitted and vuggy over a 3m interval. Primary igneous textures are largely preserved with small lo	3		4						2	3		0.1	0.5		2	4				
205.65	288.0	Veins	35				Clay alteration is strong near the top of the section and decreases dh. Cp seems to become stronger after this decrease in clays. Cp so far appears to be most concentrated in veins that sit between 30 and 40 dTCA and is generally strongest in narrow veinlets. Thicker veins generally contain either all pyrite or pyrite > cp with cp intergrown with pyrite. There may be an association between vein intersections and cp mineralization. Where cp was seen in veins it was also noted as fg disseminated in the host rock vein halos. Concentration is variable.																				
222.25	262.0						Localized spotty pervasive epidote with less common albite and green clays between 222.25 and 237.5m then weak spotty pervasive to 262m. After 262m core is generally moderately to locally intensely silicified with lesser albite patches.				2				3												
236.8	287.0	Faults	20				Narrow sections (1-5cm) of clay rich fracture zones between 236.8 and 287m (1% of core volume) with aTCA sitting at 20 and 50 dTCA and generally decreasing dh. White planar to convoluted often vuggy carbonate veins are seen sporadically through this section. These veins are sometimes cored or rimmed with a very dark green hard dark green streak mineral. These carb veins cut all aspects of the section.						2														
236.8	287.0	Faults	50																								
245.65	252.0						This interval is characterized as a deeply disturbed, convoluted and brecciated section of feldspar porphyry. Broken and brecciated cp was noted.												1								
276.55	280.3	UC	60				Pale convoluted Dike												0								
280.3	280.3	LC	40				This dikes most notable characteristic is its contorted or folded laminations. Very complex. UC and LC are faulted. Dike is a pale to buff green and somewhat massive. Barren.																				
288.0	288.0						<b>EOH</b>																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION %									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
0.0	16.0						<b>Casing</b>																				
16	120.6						<b>Dacite Tuff, Fragmental</b> Lt gy fragmental tuff. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm.																				
							Alteration: Type 1 clasts are strongly clay-alt'd with the surface pitted due to wash-out while drilling. Matrix and other clasts are only weakly clay alt'd. Occ'l silic'd intervals up to 0.5m.			1						4											
							Mineralization: Overall 3-5% finely dissem py. Py content is much higher (5-30%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or more concentrated towards rim. Other clasts have very little py. Silic'd intervals may carry up to 10% py. Open fracs common 16.0-53.0 and 81.4-132.9; below 81.4 these often carry py and sometimes some bornite.														5	2					bn tr
		vn	50-70				Veins: 81.2-81.4: Bx'd rock frags-py-sp-ba(?) - minor ga in py-sp matrix, shearing at contacts and within vein at 50-70d.																				
		vn	50				82.1: 2 sheared 1-2cm py-sp vns at 50d, with scattered sp grains to 5mm in wall rock.																				
		vn	20-60				Scattered semi-massive to massive py vns to 2cm at 20-60d, also occ'l py as matrix in narrow bx.																				
		ct	45				LC sharp and irreg at about 45d.																				
							<b>Sample 80-122</b>																				
120.6	132.8						<b>Dacite Crystal Tuff</b> Lt gy dacite crystal tuff. Equigranular, close-packed 1-2mm fs xtals in fg slightly darker matrix. Contains scattered frags of the same rock to 3cm with slightly diffuse to very diffuse boundaries.																				
							Alteration: Mod clay alt'n of feldspars. Loc wkly silic'd intervals to 40cm. Wk perv sericite.		1	2						3											
		vn	20-60				Mineralization: 3-5% fine py dissem and in clots, more concentrated in fragments. Occ'l qz-py vns to 2mm at 20-60d.														5						
		ct	40				LC 2cm gouge at about 40d.																				
132.8	135.5						<b>Amygdaloidal Dyke</b> Alt'd to beige. Irreg 1-5mm white amygdules. Lower 50 cm weakly crushed.										2										
		sh ct	20				LC narrow shear at 20d.																				
135.5	140.3						<b>Dacite Crystal Tuff</b> Lt gy dacite crystal tuff. Equigranular, close-packed 1-2mm fs xtals in fg slightly darker matrix. Contains scattered frags of the same rock to 3cm with slightly diffuse to very diffuse boundaries.																				
							Alteration: Mod clay alt'n of feldspars. Loc wkly silic'd intervals to 20cm. Wk perv sericite.		1	2						3											
		vn	20-60				Mineralization: 3-5% fine py dissem and in clots, more concentrated in fragments. Occ'l qz-py vns to 2mm at 20-60d.														5						
		ct	45				LC sharp and irreg at about 45d.																				

FROM			TO			STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION %								
m			m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other
140.3	143.55							<b>Dacite Tuff, Fragmental</b>																				
								Common lt gy diffuse frags in slightly darker and more fine grained but not aphanitic matrix.																				
								Alteration: Mod clay alt'n of feldspars.										3										
								Mineralization: 3-5% fine py dissem and in clots, more concentrated in fragments.														5						
		vn ct		40				LC 6mm calc vn at 40d.																				
143.55	149.5							<b>Amygdaloidal Dyke</b>																				
		vn		45				Purplish, alt'd to beige near contacts, vns and frags. 1-5mm ragged amygdules. Scattered vns of calc and other white carb to 5mm, most at 45d.										2										
								LC sharp and very irreg.																				
149.5	150.6							<b>Dacite Tuff</b>																				
								Med gy fg dacite tuff.																				
								Alteration: Wk perv clay alt'n.										2										
								Mineralization: 5% fine py evenly distributed throughout.														5						
								LC sharp and very irreg.																				
150.6	155.3							<b>Amygdaloidal Dyke</b>																				
								Purplish, alt'd to beige near contacts, vns and frags. 1-5mm ragged amygdules. Rare calc vns to 2mm.										2										
		sh ct		60				LC sheared at 60d.																				
155.3	156.5							<b>Dacite Tuff</b>																				
								Lt gy mg dacite tuff with occ'l ghosty frags.																				
								Alteration: Wk perv clay alt'n.										2										
								Mineralization: 3% fine py more concentrated in ghosty frags.														3						
		sh ct		45				LC 5cm shear at 45d.																				
156.5	157.9							<b>Amygdaloidal Dyke</b>																				
								Purplish, alt'd to beige near contacts. 1-5mm ragged amygdules. Rare calc vns to 2mm.																				
		sh ct		60				LC sheared at 60d.										1										
157.9	169.5							<b>Dacite Tuff</b>																				
								Lt gy mg dacite tuff with occ'l ghosty frags.																				
								Alteration: Wk perv clay alt'n. Upper 2m crushed and broken with irreg silicification.							1			2										

FROM		TO		STRUC		ORI		Density		DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION %									
m		m									Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
										Mineralization: 5-7% disseminations and irregular vein pyrite in upper 2m decreasing down to 3-5%. Common irregular pyrite veins to 2mm. Scattered pyritic shears at 45-70d.														5	2					
				sh ct	70					LC narrow shear at 70d.																				
169.5	172.7									<b>Dacite Tuff</b>																				
										As above, but texture largely lost due to weak pervasively silicification.																				
										Alteration: weak pervasively silicification.									2											
										Mineralization: 5% pyrite finely disseminated and in scattered hairline veins.													4	1						
										Structure: weakly broken core throughout.																				
				sh ct	65					LC narrow shear at 65d.																				
172.7	173.7									<b>Amygdaloidal Dyke</b>																				
										Completely altered to beige. 1-2mm ragged amygdules in lower part of dyke.										3										
										LC sharp and irregular.																				
173.7	207.7									<b>Dacite Tuff</b>																				
										Locally fragmental, locally silicified. Mottled appearance in some locations due to combination of fragments and silicification.																				
										Alteration: weak locally pervasively silicification. Locally weak selective clay alteration of feldspars, but less than seen uphole.			1						2											
										Mineralization: common pyrite on fracture surfaces, scattered pyrite veins to 5mm at 5-40d, occasionally irregular massive pyrite veins and patches to 3cm more common in lower													3	3						
										Structure: weakly broken core to 188m.																				
										LC crushed dyke.																				
207.7	208.8									<b>Amygdaloidal Dyke</b>																				
										Completely altered to beige. Ragged amygdules to 1mm scattered throughout. No veins.										3										
										UC strongly crushed for 10cm.																				
				sh ct	45					LC narrow shear at 45d.																				
208.8	212.0									<b>Dacite Tuff</b>																				
										Locally fragmental, locally silicified. Texture locally lost due to weak silicification and veining.																				
										Alteration: weak patchy silicification in upper 1.3m. Weak pervasively clay alteration.			1						2											
				vn	30					Mineralization: magnetite in narrow veins to 2mm at 10d, also as narrow discontinuous veins to 4mm at 30d, also as very irregular angular patches to 8mm x 25mm, all the result of complete filling of void spaces. Rock is locally up to 5% magnetite. Pyrite as fine disseminations, clumps and occasionally narrow veins, avg 2-3%. 20cm interval of poorly defined wispy silica-pyrite.															2	1	3			
				vn ct	25					LC is quartz-pyrite vein at 25d.																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION %								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
							Sample 209-212																				
212	212.8	vn	30-40d				<b>Vein</b>																				
		vn	30				Upper 40 cm is irreg banded qz-py-mag, avg 30d, followed by 20cm massive py, then 4cm sp band at 40d with py clasts to 15mm, then 16cm wkly crushed rock with 1cm py vn at 30d.										5				20	5					
		sh ct	40				LC is narrow shear at 40d.																				
							Sample 212-212.8																				
212.8	250.9						<b>Dacite Tuff</b>																				
							Lt gy mg dacite tuff with occ'l ghosty frags.																				
							Alteration: Wk perv clay alt'n. Loc wk perv silic'n.			1						2											
		vn	0-30				Mineralization: 3-5% finely dissem py. Scattered 1cm py vns at 0-30d; scattered hairline to 2mm py vns at 30-60d.													4	2						
		vn	30-60				LC broken and lost.																				
							Sample 212.8-215																				
250.9	261.8						<b>Dacite Tuff, Non-fragmental</b>																				
							Med gy dacite tuff, more fine-grained and uniform than interval above.																				
							Alteration: wk perv clay alt'n.									2											
		vn	30				Mineralization: 5% finely dissem py, usually evenly distributed. Occ'l hairline to 2mm py vns at 30d													5	1						
		bnd	60				Structure: local wk banding at 60d, probably primary.																				
							LC diffuse and irreg.																				
261.8	278.0						<b>Dacite Tuff, Non-fragmental</b>																				
							Med gy dacite tuff, fine-grained and uniform.																				
							Alteration: wk perv clay alt'n, v wk perv chl lends v wk green tint.	1								2											
		vn	10-30				Mineralization: abundant 1-3mm py clots create spotted appearance. Common hairline py vns at 10-30d.													4	2						
							LC: eoh																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
0.0	18.0						<b>Casing</b>																					
18.0	68.4						<b>Dacite Tuff, Fragmental</b> Lt gy fragmental tuff, gradually becoming med gy with increasing depth. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm.																					
							Alteration: Type 1 clasts are strongly clay-alt'd with the surface pitted due to wash-out while drilling. Matrix and other clasts are only weakly clay alt'd. Occ'l wkly silic'd intervals up to 0.5m.			1							3											
							Mineralization: Overall 3-5% finely dissem py. Py content is much higher (5-30%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or more concentrated towards rim. Other clasts have very little py. Occ'l zones up to 10cm with open fracs, but no min'l'n noted except for a little py.														4							
				flt	45		Fault: 48.1-48.35 Pyritic clay/gravel gouge at 45d. Wkly silic'd for 0.5m in both walls.																					
				ct	60		LC sharp and irreg at 60d.																					
68.4	68.8						<b>Amygdaloidal Dyke</b> "Amygdaloidal" type dyke without amygdules.																					
							Alt'n: entirely clay-alt'd to lt gy.										4											
				ct shr	30		LC narrow shear at 30d.																					
68.8	85.2						<b>Dacite Tuff, Fragmental</b> Med gy fragmental tuff. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm.																					
							Alteration: Type 1 clasts are mod clay-alt'd. Matrix and other clasts are only weakly clay alt'd. Occ'l wkly silic'd intervals up to 0.5m, assoc'd with broken or sheared core.			1							3											
				vn	30-45		Mineralization: Overall 3-5% finely dissem py. Py content is much higher (5-30%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or more concentrated towards rim. Other clasts have very little py. Occ'l zones up to 30cm with open fracs, but no min'l'n noted except for a little py. Occ'l py vns to 1cm at 30-45d.														4	1						
							Faults: Some broken core, but no evidence of movement.																					
							LC 10cm irreg shear.																					
85.2	87.0						<b>Amygdaloidal Dyke</b> "Amygdaloidal" type dyke without amygdules.																					
							Alt'n: entirely clay-alt'd to lt greenish gy.										4											
				ct shr	50		LC narrow shear at 50d.																					

New Nadina Explorations Limited Silver Queen Property Fall 2011																DDH #: 11S-05 Dip: -45.5 Az: 230.5 Total Depth: 260m				UTM E (NAD 83): 649815 UTM N (NAD83): 5994535 Elevation (m): 865m				Target: A Drill Number: 2 Drill Contractor: Lone Peak			Date Collared: Sept 16 2011 Date Completed: Sept 18 2011 Date Logged: Sept 21 2011			Logged By: J.M. Hutter Core Size: NQ2		
FROM m	TO m	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)								MINERALIZATION (%)																		
						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other								
87.0	177.0				<b>Dacite Tuff, Fragmental</b> Med gy fragmental tuff, as above.  Alteration: Type 1 clasts are mod clay-alt'd . Matrix and other clasts are only weakly clay alt'd.  Mineralization: Overall 3-5% finely disseminated py. Py content is much higher (5-30%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or more concentrated towards rim. Other clasts have very little py. Some open frac before 105m but no min'l'n noted except for a little py.  Faults: Broken and sheared to 100m with a few short gouge or strong crush intervals  LC 10cm irreg shear.																											
177.0	203.4				<b>Dacite Crystal Tuff</b> Lt gy dacite crystal tuff. Equigranular, close-packed 1-2mm fs xtals in fg slightly darker matrix. Contains rare frags of the same rock to 2cm with slightly diffuse to very diffuse boundaries.  Alteration: Mod clay alt'n of feldspars. Wk perv sericite. Wk patchy to perv silic'n 178-186.6  Mineralization: 3-5% fine py dissem. Common py vns at 30d, 45d, 60d usually less than 5mm, one massive py vn at 30d is 5cm wide.  LC gradational over 30cm.																											
		vn	30,45,60																			3	3									
203.4	217.7				<b>Dacite Crystal Tuff, Silic'd</b> Crystal tuff, as above, but has been subjected to texture-destructive wk silic'n. A few unalt'd "windows" show original rock type. 203.4-205.4 banded due to v well healed (sil-py) subp fracs, and some bx'n evident. 205.4 to 206.6 healed bx, silic'd. 206.6-208.4 healed wk bx, silic'd. 208.4-210.7 silic'd, some indistinct bx'n. 210.7-211.4 bx'd and later "crackled" with filling of fg dark rock, all wkly silic'd. 211.4-212.0 strongly bx'd w/ matrix of fg dk rock, also contains occ'l imported clasts. Mostly not silic'd. 212.0-214.37 healed bx, silic'd. 214.37-214.9 vein: py-sp-qz-ba, UC nrw shear at 80d, LC sharp at 70d. 214.9-217.7 healed wk bx, silic'd. 3% finely disseminated py, 3% py in nrw irreg veins.																											
		vn	70,80																													
					Sample 203-218																											
217.7	219.6				<b>Dacite Crystal Tuff</b> Lt gy dacite crystal tuff. Equigranular, close-packed 1-2mm fs xtals in fg slightly darker matrix.  Alteration: Mod clay alt'n of feldspars. Wk perv sericite. Wk patchy to perv silic'n 178-186.6  Mineralization: 5% fine disseminated py. Occ'l py vns to 1mm.  LC 10cm gouge at 80d.																											
		ct gg	80																													
219.6	228.8				<b>Amygdaloidal Dyke</b> Purplish-brn to beige. Common calc-carb vns to 1cm, most at 40d.																											

New Nadina Explorations Limited		DDH #: 11S-05		UTM E (NAD 83): 649815		Target: A		Date Collared: Sept 16 2011		Logged By: J.M. Hutter															
Silver Queen Property		Dip: -45.5 Az: 230.5		UTM N (NAD83): 5994535		Drill Number: 2		Date Completed: Sept 18 2011																	
Fall 2011		Total Depth: 260m		Elevation (m): 865m		Drill Contractor: Lone Peak		Date Logged: Sept 21 2011		Core Size: NQ2															
FROM	TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)							MINERALIZATION (%)												
m	m					Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
					Alt'n: Loc clay-alt'd to beige.										2										
		ct shr	80		LC narrow shear at 80d.																				
228.8	260.0				<b>Dacite Crystal Tuff</b>																				
					Lt gy dacite crystal tuff. Equigranular, close-packed 1-2mm fs xtals in fg slightly darker matrix.																				
					Alteration: Wk clay alt'n of feldspars. Wk perv sericite. Wk perv silic'n 237.8-238.7		1	1							2										
					Mineralization: 3% fine disseminated py, up to 8% fine disseminated py in silicified zone. Scattered to common py vns to 1mm.														4	1					
					LC: eoh																				



FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited Silver Queen Property Fall 2011						DDH #: 11S-06 Dip:-73.3 Az: 86.5 Total Depth: 361.5m	UTM E (NAD 83): 650276 UTM N (NAD83): 5994741 Elevation (m): 858m	Target: B Drill Number: 1 Drill Contractor: Lone Peak	Date Collared: Sept 18 2011 Date Completed: Sept 22 2011 Date Logged: Sept 2011	Logged By: J. Mark Ralph Core Size: NQ2																
0	15					<b>Casing</b>																				
15	88.05					<b>Dacitic Volcanic ash Tuffs, Fragmentals (flow breccia), Autobreccias.</b> Section is locally broken and faulted, brecciated, contains several dykes and is generally highly variable in color, texture, and exhibits highly variable degrees of cataclasis and shearing. Volcanic sections tend to be green whereas dikes range from buff to dark grey to almost black where sheared. Sx content is also variable, most commonly disseminated or as filling within open spaces of breccias. Rare Mo was noted between 66.70 and 72m.																				
15	29.7					<b>Dacitic Fragmental Tuff with lesser Ash Tuff.</b> Green, mod spotty pervasive chlorite, weak spotty pervasive sericite, weak selective clay. Py ranges between 1% and up to 5% over narrow intervals. Py appears dirty, euhedral and often in small clusters and as an interstitial fill. Clasts, where present, are generally rounded and range between 3mm and 5cm with rare clasts exceeding 20cm. Generally monomictic. Rare hard, 2mm-5mm black angular clasts in the upper half.	3	2								2				2	0.1					
15	29.7	Faults	30-60	30		Structures consist of small 1cm cataclastites to larger intervals of broken core or deeply altered and damaged sections up to 1m in length. The larger sections contain significant clays and gouge and rarely contain fragments over 1cm.																				
29.7	40.15	LC	30			<b>Auto Breccia</b> This section displays a jigsaw fit breccia pattern that, is in many cases, very tight. Filling is hematitic in the upper portion and silicic in the lower portions. Clast supported. Matrix is pyrite rich - up to 5% vfg euhedral disseminated pyrite. Clasts are feldspar porphyritic, often altered to a light green to med green clay and very similar to the underlying unit. Lower 35 cm is a clay/gouge rich fault zone which contains trace 1-2mm mo crystals over 1cm in the core of the fault. Locally biotite rich.	2	2	2		2					3				3	0.1		0.5	0.001		
40.15	50.9	LC	80			<b>Amygdaloidal Dikes - Dacitic Volcanics</b> 75% amygdaloidal Dikes. Section is deeply crushed and sheared in the upper 1/2 (see below). Dikes are deeply mottled and altered with colors ranging from buff to pink to olive drab to tan. One section is salmon pink, highly disrupted and likely K-spar altered. Localized disrupted irregular carb hairs (1%). Rare thin dark colloform stringers of unk affinity.	3						2													
40.95	45.48	Fault	40	90		Fault Zone - Zone of intense crushing and localized weak shearing. Rare competent rock remains. Dark grey soft chloritic seams between 44.55 and 45.37m.	4																			
50.9	57.55	LC	55			<b>Feldspar Porphyry</b> Grey-green grading to mottled green with ~ 50 feldspars between 1-3mm. Feldspars are often rimmed with a pale green clay, completely altered to this pale green clay, eroded to locally obliterated. Fine disseminated vfg black specks up to 1% (hematite?). Locally weakly pitted. Locally disrupted. Disseminated black (possibly purple - hard to see in this light) Sx - trace, very vfg. Rare calcite veinlets contain vfg pyrite => unk slight purple (not bn) Sx => sphalerite and commonly sit at ~40 dTCA. Rare 1-2cm siliceous breccia(?) zones - appear polymictic, clasts < 20%, sitting at 20 dTCA. 2% vfg disseminated bright euhedral pyrite. Buff rounded clasts noted near disrupted sections and near LC. Somewhat hard - maybe epidote altered(?), locally silicified with a weak sericitic overprint. LC is a fault.		2	3			1		3		1	0.1			1						.01 unk
50.9	57.55	veins	40			Calcite veinlets with Sx.																				
50.9	57.55	breccia	20			Siliceous breccia zones.																				
57.55	57.55	Fault																								
57.55	88.05					<b>Dacitic Fragmental/Ash Tuff</b> Green to blue grey, variable (10 to 80%) lapilli, lesser ash tuff. Locally silicified. Local hematitic overprint. Hematitic section contains rare spots of K-feldspar. Fragmental sections are moderately alter to a soft green clay. Ash layers contain significant disseminated pyrite. Trace mo associated with small patches of carbonate. Strong cataclasis over the upper 2m then spotty narrow sections of moderately to intense cataclasis with localized narrow (<10cm) gouge rich sections. Spotty moderate pervasive selective sericite, spotty moderate pervasive chlorite, spotty strong pervasive silicification.	2	2	3		1	1	1			3				1					0.01	

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited Silver Queen Property Fall 2011							DDH #: 11S-06 Dip:-73.3 Az: 86.5 Total Depth: 361.5m	UTM E (NAD 83): 650276 UTM N (NAD83): 5994741 Elevation (m): 858m	Target: B Drill Number: 1 Drill Contractor: Lone Peak	Date Collared: Sept 18 2011 Date Completed: Sept 22 2011 Date Logged: Sept 2011							Logged By: J. Mark Ralph Core Size: NQ2										
74.6	84						More intense cataclasis than other intervals in this section. Upper portion is moderately crushed and locally brecciated and filled with either a red sem translucent red streak GM which grades into a fragmental with a pink hematitic GM with rare K-Spar spots and a weak biotite overprint. Trace vfg disseminated euhedral pyrite. Trace localized erratic carb veinlets.		1			1	1	1			3 hem				1						
88.05	112.6	LC	45				<b>Dacitic Fragmental/Ash Tuff</b>																				
							Deeply altered to chlorite. Dark green, blue green. Primary textures barely apparent. Clasts are sub rounded. Sometimes clast supported. Clasts, on occasion, are rimmed with a soft pale cream clay. Py is very vfg and disseminated throughout, euhedral (it appears so anyway). Up to 2%. Generally spotty cataclastics over 1cm to 1/2m intervals except for between 106 and 113.75m (see below).	4	2								2				2						
106	112.6	Fault	45	90			Intense cataclastic interval. Crushed with 70% flattened sub angular to sub rounded clasts. Appears to be a crushed Amygdaloidal dike from 112.05 to 112.50m. From 112.5 to 112.60 is a black chloritic seam.																				
112.6	144						<b>Feldspar Porphyry - Stwk zone.</b>																				
							Blue grey, porphyritic with 4-5mm phenos of albite amongst 1-2mm pheno of feldspars, locally silica flooded and pervasively silicified GM and around pyrite and quartz pyrite veinlets. Weak clay overprint on all feldspars. Some feldspars have a light brown coating due to oxidation since coring (fecart alteration?). Locally pitted. Locally feldspars are eroded, rarely primary igneous structures are obliterated. Possible albitization of feldspars dh. Weak stwk (see below). Py is commonly disseminated in host and sometimes associated with a dark sulphide or sulfosalt. Water marker in core @ 137.5m.			3	2					2	2										
112.5	144	STWK	5 to 45	20			STWK: ~ 20% of core volume. Several events. Proceeding from oldest to youngest based on cross-cutting relationships - <b>1st</b> weak thin veinlets of pale quartz with only trace Sx - Often floods surrounding host up to 1cm. Generally between 20 and 40 dTCA. <b>2nd</b> up to 1cm wide grey quartz +/- pyrite +/- mo. Rarely floods host. Cuts 1st set. Dominant set. Generally between 5 and 25 dTCA. <b>3rd</b> - Pyritiferous veins - commonly associated with grey veins but also as higher aTCA than other sets. Ranges from 5-45 dTCA. Main contributor of Sx to the system appears to be the 45 dTCA sets. Mo is most common around the lower aTCA veins, especially set number 2.													0.1	1	2			0.01	.1 unk	
112.5	113.9	Fault	45	90			Structure: Several narrow sections of cataclastic rock, especially near the UC. Deeply damaged over the upper 1.4m then sporadic intervals of less than 20cm. Last 20 cm is deeply pitted, vuggy and pyrite rich with what appears to be a 1-5cm low angle undulating vein of bright anhedral pyrite with spotty intense mo in vein margins and into host. This section largely defines the dh limit of these structures.																				
137.5	137.5	Water					Water marker in core @ 137.5m.																				
144	162						<b>Feldspar Porphyry - Stwk zone.</b>																				
							Blue grey, porphyritic with 4-5mm phenos of albite amongst 1-2mm pheno of feldspars, locally silica flooded and pervasively silicified GM and around pyrite and quartz pyrite veinlets. Strong clay replacement on all feldspars with significant Mo mineralization within these crystals and along crystal margins. Local pitting can be quite intense. Locally feldspars are eroded, rarely primary igneous structures are obliterated. Possible rare albitization of feldspars. Moderate stwk (see below). Py is commonly disseminated in host and sometimes associated with a dark sulphide or sulfosalt. Possible Cp disseminated around vein margins.			3	1					3		0.5	1	2				0.05	.1 unk		
144	162	STWK	5 to 45	30			STWK: ~ 30% of core volume. Several events. Proceeding from oldest to youngest based on cross-cutting relationships - <b>1st</b> weak thin veinlets of pale quartz with only trace Sx - Often floods surrounding host up to 1cm. Generally between 20 and 40 dTCA. <b>2nd</b> up to 1cm wide grey quartz +/- pyrite +/- mo. Rarely floods host. Cuts 1st set. Dominant set. Generally between 5 and 25 dTCA. <b>3rd</b> - Pyritiferous veins - commonly associated with grey veins but also as higher aTCA than other sets. Ranges from 5-45 dTCA. Main contributor of Sx to the system appears to be the 45 dTCA sets. Mo is most common around the lower aTCA veins, especially set number 2.																				
144	162						Structure: Largely devoid of cataclastic rock. This section largely defines an interval of competent core.																				
162	172	LC	70				<b>Feldspar Porphyry - Stwk zone.</b>																				
							Blue grey, porphyritic with 4-5mm phenos of albite amongst 1-2mm pheno of feldspars, locally silica flooded and pervasively silicified GM and around pyrite and quartz pyrite veinlets. Strong clay replacement on all feldspars with significant Mo mineralization within these crystals and along crystal margins. Local pitting can be quite intense. Locally feldspars are eroded, rarely primary igneous structures are obliterated. Common pale green to green patchy clay - affinity unk. Possible rare albitization of feldspars. Moderate stwk (see below). Py is commonly disseminated in host and sometimes associated with a dark sulphide or sulfosalt. Cp disseminated around vein margins. Heavily broken but very little gouge or isolated clay sections - this unit was isolated based on this feature.			3	1					3		1.0	1	2				0.05	.1 unk		

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m		m					Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited DDH #: 11S-06 UTM E (NAD 83): 650276 Target: B Date Collared: Sept 18 2011 Logged By: J. Mark Ralph						Silver Queen Property Dip:-73.3 Az: 86.5 UTM N (NAD83): 5994741 Drill Number: 1 Date Completed: Sept 22 2011						Fall 2011 Total Depth: 361.5m Elevation (m): 858m Drill Contractor: Lone Peak Date Logged: Sept 2011 Core Size: NQ2														
162	172	STWK	5 to 45	30		STWK: ~ 30% of core volume. Several events. Proceeding from oldest to youngest based on cross-cutting relationships - <b>1st</b> weak thin veinlets of pale quartz with only trace Sx - Often floods surrounding host up to 1cm. Generally between 20 and 40 dTCA. <b>2nd</b> up to 1cm wide grey quartz +/- pyrite +/- mo. Rarely floods host. Cuts 1st set. Dominant set. Generally between 5 and 25 dTCA. <b>3rd</b> - Pyritiferous veins - commonly associated with grey veins but also as higher aTCA then other sets. Ranges from 5-45 dTCA. Main contributor of Sx to the system appears to be the 45 dTCA sets. Mo is most common around the lower aTCA veins, especially set number 2.																				
162	172					Structure: Largely void of cataclastic rock, however, this section largely defines an interval of very broken core.																				
172	173.7	LC	85			<b>Amygdaloidal Dike</b>																				
172	173.7	fol	80	w		Two small Amygdaloidal Dikes between 172 - 172.75m and 173.15 - 173.7m. Section of feldspars porphyry in middle as above and below section. Buff green with minor purple patches. Trace erratic low aTCA carb + gypsum hairs. Weak fol @80 dTCA. No Sx noted.					1															
173.7	207					<b>Feldspar Porphyry - Stwk zone.</b>																				
						Blue grey, porphyritic with 4-5mm phenos of albite amongst 1-2mm pheno of feldspars, locally silica flooded and pervasively silicified GM and around pyrite and quartz pyrite veinlets. Mod clay replacement on all feldspars with significant Mo mineralization within these crystals and along crystal margins. Local pitting is less common previous intervals. Locally feldspars are eroded, rarely primary igneous structures are obliterated. Common pale green soft clay replacing feldspars - talc or pyrophyllite - especially near the UC. Localized patches of albitization. Weak stwk (see below). Py is commonly disseminated in host and sometimes associated with a dark sulphide or sulfosalt. Cp appears rare. Mo is stronger near the UC but appears to become spotty down. High grade mo vein between 196.5 and 197.5m.			3	1						3		0.5	1	2				0.1	.1	unk
173.7	207	STWK	5 to 45	15		STWK: ~ 15% of core volume. Several events. Proceeding from oldest to youngest based on cross-cutting relationships - <b>1st</b> weak thin veinlets of pale quartz with only trace Sx - Often floods surrounding host up to 1cm. Generally between 20 and 40 dTCA. <b>2nd</b> up to 1cm wide grey quartz +/- pyrite +/- mo. Rarely floods host. Cuts 1st set. Dominant set. Generally between 5 and 25 dTCA. Sometimes with calcite. <b>3rd</b> - Pyritiferous veins - commonly associated with grey veins but also as higher aTCA then other sets. Ranges from 5-45 dTCA. Main contributor of Sx to the system appears to be the 45 dTCA sets. Mo is most common around the lower aTCA veins, especially set number 2.																				
205.2	205.6					Poly metallic low aTCA grey quartz vein with Sx = 50% sp, 20% pyrite 30% other.											50				20				30	unk
180	180					Water marker.																				
207	222					<b>Feldspar Porphyry - Stwk zone.</b>																				
						Blue grey, porphyritic with 4-5mm phenos of albite amongst 1-2mm pheno of feldspars, locally silica flooded and pervasively patchy silicified GM and around pyrite and quartz pyrite veinlets. Localized 10-30 cm intervals of gypsum veins, flooding and clasts(?) with a significant increase in Mo and other dark Sx - unk most intense near the core of the interval. Mod clay replacement on all feldspars, Mo mineralization within these crystals and along crystal margins has all but vanished. Local pitting is rare. Locally feldspars are eroded, primary igneous structures are commonly obliterated, especially near gypsum. Uncommon pale green soft clay replacing feldspars - talc or pyrophyllite. Significant drop in albitization. moderate stwk (see below). Py is commonly disseminated in host and sometimes associated with a dark sulphide or sulfosalt. Cp appears rare. Mo is strongest within talc/gypsum floods and locally can exceed 1%.			3	1		2				3		0.1	1	3				0.1	.1	unk
207	222	STWK	5 to 45	15		STWK: ~ 15% of core volume. Several events. Proceeding from oldest to youngest based on cross-cutting relationships - <b>1st</b> weak thin veinlets of pale quartz with only trace Sx - Often floods surrounding host up to 1cm. Generally between 20 and 40 dTCA. <b>2nd</b> up to 1cm wide grey quartz +/- pyrite +/- mo. Rarely floods host. Cuts 1st set. Dominant set. Generally between 5 and 25 dTCA. Sometimes with calcite. <b>3rd</b> - Pyritiferous veins - commonly associated with grey veins but also as higher aTCA then other sets. Ranges from 5-45 dTCA. Main contributor of Sx to the system appears to be the 45 dTCA sets. Mo is most common around the lower aTCA veins, especially set number 2 but is also broadly disseminated in host.																				
207	222					Gypsum																				
222	232.4	LC	20			<b>Feldspar Porphyry - Stwk zone.</b>																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited Silver Queen Property Fall 2011							DDH #: 11S-06 Dip:-73.3 Az: 86.5 Total Depth: 361.5m	UTM E (NAD 83): 650276 UTM N (NAD83): 5994741 Elevation (m): 858m	Target: B Drill Number: 1 Drill Contractor: Lone Peak	Date Collared: Sept 18 2011 Date Completed: Sept 22 2011 Date Logged: Sept 2011								Logged By: J. Mark Ralph Core Size: NQ2									
							Blue grey, porphyritic with 4-5mm phenos of albite amongst 1-2mm pheno of feldspars, locally silica flooded and pervasively patchy silicified GM and around pyrite and quartz pyrite veinlets. Gypsum veins and flooding have vanished. Significant increase in Py veins which are now commonly weakly convoluted. Calcite is more common than previous section within veins and forms several large patches directly above a large pyrite breccia. A large pyrite + other Sx + chl breccia/cataclastite between 227.6 and 229.22m. Convoluted and disrupted above and below this breccia. Sharp LC @ 20 dTCA. Mod clay replacement on all feldspars. Local pitting is rare. Locally feldspars are eroded, rarely primary igneous structures are obliterated. Moderate stwk (see below). Py is commonly disseminated in host and sometimes associated with a dark sulphide or sulfosalt. Cp appears rare.	1		3			1							0.1	1	4				0.1	
222	232.4	STWK	5 to 45	20			STWK: ~ 20% of core volume. Several events. Proceeding from oldest to youngest based on cross-cutting relationships - <b>1st</b> weak thin veinlets of pale quartz with only trace Sx - Often floods surrounding host up to 1cm. Generally between 20 and 40 dTCA. <b>2nd</b> up to 1cm wide grey quartz +/- pyrite +/- mo. Rarely floods host. Cuts 1st set. Dominant set. Generally between 5 and 25 dTCA. Sometimes with calcite. <b>3rd</b> - Pyritiferous veins - commonly associated with grey veins but also as higher aTCA than other sets. Ranges from 5-45 dTCA. Main contributor of Sx to the system appears to be the 45 dTCA sets. Mo is most common around the lower aTCA veins, especially set number 2 but is also broadly disseminated in host.																				
227.6	229.22	Fault	20	60			Py + calcite + chlorite + other Sx breccia and gouge. Trace Mo noted in breccia.																				
232.4	276.2						<b>Feldspar Porphyry - Stwk zone.</b>																				
							Greenish blue grey, porphyritic with 4-5mm phenos of albite amongst rare 1-2mm phenos of feldspars which are likely rare due to complete erosion by alteration. Mottled. All albite crystals are eroded and locally destroyed. GM is pervasively weakly altered to chlorite and moderately flooded with silica and may contain minor weak patches of biotite. Abundant gypsum fracture filling, and flooding with up to 3% gypsum throughout. Gypsum clasts were noted in the upper portion of this interval. Mo commonly coats the vein margins of these gypsum veinlets. Gypsum veinlets often show a strong perfect cleavage. Gypsum veinlets become very dark toward the LC. Mo is commonly disseminated throughout and can be seen as shotgun disseminated in some locations. Mo also forms thin hair lines in the drill core and coats fracture surfaces. Silica veins are convoluted, less common than in any other interval noted so far, and sit in two dominant orientations (see below). Disseminated Py has fallen to lowest levels yet (0.5%).	1		3		2					2		0.5	0.5	1				0.5	.1 unk	
							Larger pyrite veins are also far less common and contain up to 5-10% intergrown Cp. Cp may also be present as fg disseminated within the GM. Overall Sx content is 2%. A light pink rhodochrosite was noted. An earthy or olive green soft clay may be montmorillonite?????. Slight increase in biotite over the last 1m.																				
232.4	276.2	STWK	5 to 45	15			STWK: ~15% of core: 4 Types of stwk veins: <b>1st</b> : low aTCA grey convoluted quartz veins which decrease dh, <b>2nd</b> : High aTCA grey planar quartz veins + pyrite, <b>3rd</b> : erratic, convoluted Sx veins, <b>4th</b> : erratic fracture filling translucent, to grey gypsum veins.																				
255	257.8						Zone of increased biotite alteration. Problem - slight pinkish hue.					3															
232.4	276.2						Gypsum																				
274.05	274.3						<b>Amygdaloidal Dike</b>																				
276.2	279.7						<b>Mafic Dike</b>																				
276.2	279.7	fol	55	w			Brown (biotite?) with 1/2mm to 3mm calcite filled amygduals (5% of core volume). 2% disseminated magnetite. Rare convoluted calcite hairs. Weak fol @ 55dTCA. UC and LC are problematic.				3	2											2.0				
279.7	304.35						<b>Feldspar Porphyry - Stwk zone.</b>																				
							Green to brownish green, porphyritic with 4-5mm phenos of albite amongst rare 1-2mm pheno of feldspars which are likely rare due to complete erosion by alteration. Mottled. Locally recrystallized. All albite crystals are either deeply eroded and locally destroyed. GM is pervasively weakly altered to chlorite and moderately flooded with silica and may contain minor weak patches of biotite. Abundant gypsum fracture filling, and flooding with up to 3% gypsum dropping to trace near LC. Mo commonly coats the vein margins of these gypsum veinlets. Gypsum veinlets often show a strong perfect cleavage. Gypsum veinlets are both whitish and semi transparent to dark. Mo is commonly disseminated throughout and can be seen as a shotgun disseminated in some locations. Mo also forms thin hair lines in the drill core and coats fracture surfaces. Mo is decreasing dh. Silica veins are convoluted, less common than the previous interval, appear recrystallized, and sit in two dominant orientations (see below). Disseminated Py remains low. Larger pyrite veins are also far less common and contain up to 5-10% intergrown Cp, which drop to trace by the LC.	2	1	1		1							0.01	0.5	0.5	1				0.5	

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
						Cp may also be present as fgr disseminated within the GM. Sp was noted at 293m within a quartz/carb/gypsum(?) vein. Overall Sx content is 2%. Minor fluorite veins @ 50 dTCA. Alteration, mineralization and recrystallization decrease dh. The lower contact is gradational and chosen to reflect the re-emergence of primary igneous texture as a dominant textural feature. Local narrow brecciated veins.																				
279.7	304.35	STWK	5 to 45	15		STWK: ~15% of core: 4 Types of stwk veins: <b>1st</b> : low aTCA grey convoluted quartz veins which decrease dh, <b>2nd</b> : High aTCA grey planar quartz veins + pyrite, <b>3rd</b> : erratic, convoluted Sx veins which are replace with fluorite veins dh, <b>4th</b> : erratic fracture filling translucent, to grey gypsum veins.																				
279.7	304.35	veins	50	1		Fluorite veinlets.																				
279.7	304.35					Gypsum																				
304.35	361.5					<b>Feldspar Porphyry - Stwk zone.</b>																				
						Greenish to blue grey, porphyritic with 4-5mm phenos of albite amongst rare 1-2mm pheno of feldspars which are likely rare due to moderate erosion by alteration. Mottled. Albite crystals locally weakly eroded to locally destroyed. GM is pervasively weakly altered to chlorite and moderately flooded with silica and may contain minor weak patches of biotite. Trace gypsum fracture filling. Mo remains disseminated throughout and rarely can be seen as shotgun disseminated in some locations. Mo rarely forms thin hair lines in the drill core and coats fracture surfaces. Silica veins are convoluted, and sit in two dominant orientations (see below). Disseminated Py remains low. Larger pyrite veins are also far less common. Cp may also be present as fg disseminated within the GM but none was observed. Overall Sx content is 1%. Minor veinlets of fluorite are increasingly common dh and reach up to 1cm with pyrite at one point. Well formed xtals at that location (near EOH.).	1		1		1					1		0.1		0.1	1				0.01	
304.35	361.5	STWK	5 to 45	15		STWK: ~15% of core: 4 Types of stwk veins: <b>1st</b> : low aTCA grey convoluted quartz veins, <b>2nd</b> : High aTCA grey planar quartz veins + pyrite, <b>3rd</b> : planar fluorite veins, <b>4th</b> : erratic fracture filling translucent, to grey gypsum veins.																				
304.35	361.5					Fluorite veinlets and floods.																				
304.35	361.5					Gypsum.																				
361.5	361.5					<b>EOH</b>																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)							
m	m	Chl	Ser					Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited      DDH #: 11S-07      UTM E (NAD 83): 649798      Target: A      Date Collared: Sept 18, 2011      Logged By: J.M. Hutter Silver Queen Property      Dip: -70.8 Az: 312      UTM N (NAD83): 5994522      Drill Number: 2      Date Completed: Sept 20, 2011 Fall 2011      Total Depth: 275m      Elevation (m): 864.5      Drill Contractor: Lone Peak      Date Logged: Sept 22, 2011      Core Size: NQ2																									
0.0	15.0						<b>Casing</b>																		
15.0	118.0						<b>Dacite Tuff, Fragmental</b>																		
				bedding	45		Lt gy fragmental tuff. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm. More fine grained interval 114-114.7 shows bedding at 45d.																		
							Alteration: Type 1 clasts are strongly clay-alt'd with the surface pitted due to wash-out while drilling. Matrix and other clasts are only weakly clay alt'd. Wkly silic'd 114.7-115.2.				1							3							
							Mineralization: Overall 3-5% finely dissem py. Py content is much higher (5-30%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or more concentrated towards rim. Other clasts have very little py. Zones with open frac's 23.0-75.0, but no min'l'n noted except for a little py. Vns absent to rare.													4					
							Faults: Intervals of broken core w/ minor gouge: 27.5-31, 33-34.5, 37.8-38.1, 43.3-44.5, 46.5-49. Soft clay gouge 75-76.1.																		
							LC arbitrary.																		
118.0	132.0						<b>Dacite Tuff, Mixed Fragmental and Non-fragmental</b>																		
							As above, but includes some fg felsic intervals																		
							Alteration: Wk clay alt'n of type 1 frags. Very little alt'n of fg felsic rock.													1					
							Mineralization: Fragmental tuff 3% dissem py. Fg felsic 0.5% dissem py.													2					
							LC at end of fg felsic interval.																		
132.0	167.8						<b>Dacite Tuff, Fragmental</b>																		
							Lt gy fragmental tuff, heterolithic																		
							Alteration: Wk perv silic'n.				2														
				vn	20-40		Mineralization: Py in clumps, may be semi-massive to massive in matrix but seldom in clasts, except for scattered soft white clasts which may be up to 20% py. Occ'l py vns up to 1cm at 20-40d.													7					
				ct shr	20		LC narrow shear at 20d.																		
Sample 137-140, 146-149, 164-167																									
167.8	168.5						<b>Trachyte Dyke</b>																		
							Completely alt'd to beige. Common hrl'n frac's w/ blk alt'n.													3					
				ct shr	40		LC narrow shear at 40d.																		
169.5	170.6						<b>Dacite Tuff, Fragmental</b>																		
							as 132-167.8																		

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other			
							Alteration: Wk perv silic'n.			2																			
							Mineralization: 2% finely disseminated py, occ'l clumps and small vugs lined w/ py.														2								
		ct	15				LC slightly undulating at about 15d.																						
170.6	172.1						<b>Dacite Ash Tuff</b>																						
							Med gy, fg ash tuff.																						
							Alteration: Wk perv silic'n.			2																			
		vn	20				Mineralization: 3% finely disseminated py, one 4mm qz-py vn at 20d.														3								
		ct	45				LC irreg at about 45d.																						
172.1	174.0						<b>Dacite Tuff, Fragmental</b>																						
							as 132-167.8																						
							Alteration: wk clay alt'n of type 1 clasts, v wk perv silic'n in lower 0.5m of interval.			1							1												
							Mineralization: 2% finely disseminated py.														2								
		ct shr	70				LC 2cm gouge at 70d.																						
174.0	178.4						<b>Amygdaloidal Dyke</b>																						
							Scattered white amygdules, not calc, mostly less than 2mm.																						
							Alteration: completely clay alt'd to beige. Fracs have 1-5mm alt'd blk selvages.										3												
		ct shr	40				LC nrw shear at 40d.																						
178.4	180.0						<b>Dacite Tuff, Fragmental</b>																						
							as 132-167.8																						
							Alteration: wk perv silic'n.										2												
							Mineralization: 5% py as disseminated, patches and nrw irreg vns to 3mm.														5	1							
		ct	5				LC slightly undulating at 5d.																						
180.0	182.0						<b>Dacite Ash Tuff</b>																						
		dyke	55				Med gy, fg ash tuff. Lower 30cm wkly bx'd w/ darker matrix. 3cm trachyte dyke at 181.6 at 55d.																						
							Alteration: Wk perv silic'n.			1																			
							Mineralization: 5% finely disseminated py, loc common irreg py vns to 1mm.														5	1							
		ct	80				LC irreg at about 80d.																						

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION (%)							
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other
182.0	216.1						<b>Trachyte Dyke</b>																			
							Med-dk gy, loc alt'd to tan. Randomly oriented to wkly aligned in fg med to dk gy matrix. Laths loc absent. Common elongate to round 2-5mm white amygdules. Loc common 1-4mm ragged beige crystals. Intervals up to 2m of soft, friable rock alternate w/ intervals 2-5m of hard, competent rock.																			
							Alteration: Loc mod clay alt'n, esp near contacts. Common talc on frags. Non calcareous.										2									
		ct shr	30				LC irreg nrw shear at 30d.																			
216.1	223.0						<b>Dacite Tuff</b>																			
							Med gy mg ash tuff, locally fragmental.																			
							Alteration: wk perv silic'n.			1																
		shr	35				Mineralization: 5% finely dissem py, occ'l py vns ay 0d or 30d. 3cm py gouge at 35d at 220.1m. 6cm massive py vn at 30-40d at 222.7m.														5	2				
		vn	30-40																							
		ct shr	40				LC narrow shear at 40d.																			
223.0	260.2						<b>Trachyte Dyke</b>																			
							Med-dk gy, alt'd to tan near contacts. Randomly oriented to wkly aligned in fg med to dk gy matrix. Laths more pronounced in alt'd areas. Common elongate to round 2-5mm white amygdules. Loc common 1-4mm ragged beige crystals. Most of interval is hard and competent.																			
							Alteration: Loc mod clay alt'n, esp near contacts. Common talc on frags. Non calcareous.										1									
		ct shr	45				LC irreg nrw shear at 45d.																			
260.2	275.0						<b>Dacite Tuff</b>																			
							Med gy. Variable texture. Matrix mostly fg but loc mg. Frags vary from scattered to crowded, are usually less than 2cm, sub-round to sub-angular. Type 1 frags are still present but in much less abundance, and are only slightly clay-alt'd.																			
							Alteration: wk clay-alt'n of type 1 clasts. Wk perv silic'n.			2						1										
							Mineralization: 1-4% finely dissem py, occ'l irreg discont py vns to 2mm.														2	1				
							LC: eoh																			



FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
New Nadina Explorations Limited		DDH #: 11S-08		UTM E (NAD 83): 649798		Target: A		Date Collared: Sept 20, 2011		Logged By: J.M. Hutter																	
Silver Queen Property		Dip: -70 Az: 270		UTM N (NAD83): 5994522		Drill Number: 2		Date Completed: Sept 22, 2011																			
Fall 2011		Total Depth: 212m		Elevation (m): 864.5		Drill Contractor: Lone Peak		Date Logged: Sept 23, 2011																			
0	15						<b>Casing</b>																				
15	64.95						<b>Dacite Tuff, Fragmental</b> Lt gy fragmental tuff. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm.																				
							Alteration: Type 1 clasts are mod clay-alt'd with the surface sometimes pitted due to wash-out while drilling. Matrix and other clasts are only weakly										2										
							Mineralization: Overall 3% finely dissem py. Py content is much higher (5-10%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or in clumps. Other clasts have very little py. Py vns absent to rare. Occ'l open frac are not min'l'd.														3						
		ct shr	35				LC nrw shear at 35d.																				
64.95	65.75						<b>Amygdaloidal Dyke</b> "Amygdaloidal" type dyke w/o amygdules.																				
							Alteration: completely clay alt'd to v lt gy.										4										
		ct shr	35				LC nrw shear at 35d.																				
65.75	73.2						<b>Dacite Tuff, Fragmental</b> Lt gy fragmental tuff. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm.																				
							Alteration: Type 1 clasts are mod clay-alt'd with the surface sometimes pitted due to wash-out while drilling. Matrix and other clasts are only weakly										2										
							Mineralization: Overall 3% finely dissem py. Py content is much higher (5-10%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or in clumps. Other clasts have very little py. Py vns absent to rare.														3						
		ft					Fault: Clay and gravel gouge to 70m, some broken core in remainder of interval.																				
		ct shr	40				LC nrw shear at 40d.																				
73.2	73.45						<b>Dyke</b> Dyke of indeterminate type, fg, alt'd to uniform gy. Too hard to be amygdaloidal dyke.										2										
							LC broken and lost.																				
73.45	119						<b>Dacite Tuff, Fragmental</b> Lt gy fragmental tuff. Clasts range from mm to 5cm and rarely up to 10cm. Clast types: (1) most common clasts are sub-round to sub-angular lt gy mg in slightly darker matrix. These clasts form 30-50% of the rock volume. (2) Scattered sub-angular lt gy fg clasts. (3) Rare hard sub-angular to angular med gy fg clasts up to 1cm.																				
							Alteration: Type 1 clasts are mod clay-alt'd with the surface sometimes pitted due to wash-out while drilling. Matrix and other clasts are only weakly										2										

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
		vn	20				Mineralization: Overall 3% finely dissem py. Py content is much higher (5-10%) in type 1 clasts than in matrix and may be evenly distributed throughout clast or in clumps or as rims around clasts. Other clasts have very little py. Rare py vns to 8mm at 20d.																					
							LC: alt'n contact, gradational over 50cm.																					
119	153						<b>Dacite Tuff, Fragmental</b>																					
							Med gy fragmental tuff, composition as above, but variably silic'd. Some bx'd intervals below 134, w/ py matrix. Bxs contain more than one type of clast, as host is a heterolithic fragmental.																					
							Alteration: Wkly silic'd intervals to 134, then mod silic'd intervals w/ increased py content. V wk clay alt'n of some clasts where not silic'd.			3							1											
							Mineralization: 3% finely dissem py over whole interval, additional 3% below 134 as irreg vns and bx fillings. Common vugs lined w/ py.															3						
							Sample: 134-152															3	3					
		ct	15				LC undulating at about 15d.																					
153	154.1						<b>Amygdaloidal Dyke</b>																					
							Amygdules made soft by alt'n and washed away in drilling, leaving empty vesicles.																					
							Alteration: completely clay alt'd to beige, blk alt'n around some frags.											3										
		ct shr	55				LC sheared at 55d.																					
154.1	160.2						<b>Feldspar Porphyry</b>																					
							Feldspar phenos to 5mm in med gy fg to mg groundmass. Crystals within groundmass are indistinct.																					
							Alteration: Phenos are wkly pyrophyllite and/or wkly clay alt'd. Groundmass is wkly clay-alt'd and v wkly silic'd.			1							2											
							Min: 3-5% finely dissem py. Rare hrln py vns.															5						
							Faults: gouge or strong crush at 154.1-154.5, 155.25-155.35, 155.75-156.15																					
							UC is fault zone.																					
		ct	55				LC is sharp at 55d. 10cm chilled margin in feldspar porphyry.																					
160.2	162						<b>Dacite Tuff, Fragmental</b>																					
							Med gy fragmental tuff, as 119-153, wkly silic'd.																					
							Alteration: Wk perv silic'n.			2																		
							Mineralization: 3% finely dissem py, sometimes in clumps or rimming clast boundaries.																3					
							LC is irreg and indistinct.																					
162	191.1						<b>Ash Tuff</b>																					
							Med gy fg ash tuff.																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
							Alteration: Variable wk perv silic'n. Intervals of slightly lighter gy, slightly coarser grained material have been subjected to less texture-destructive silic'n or could be original texture.			2																		
		vn	30-60				Min: 3% finely dissem py, 3% py in irreg vns to 3cm, most less than 3mm, at 30-60d. At least two generations of py vning. Py vning is stronger in more silic'd intervals. Py vning decreasing after 185m.														3	3						
							Faults: wkly broken core 188.6-190.6, no gouge.																					
		ct shr	65				LC nrw shear at 65d.																					
191.1	201.1						<b>Amygdaloidal Dyke</b>																					
							Lt gy to beige amygdaloidal dyke. Abundant sub-round white amygdules to 4mm. Abundant ragged cream-colored xtals to 2mm.																					
							Alteration: completely clay alt'd to lt gy to beige, blk alt'n around some frags.										3											
							Min: Vuggy dolomite vning to 3cm subp tca.																					
		ct shr	65				LC nrw shear at 65d.																					
201.1	212						<b>Feldspar Porphyry</b>																					
							Feldspar phenos to 5mm in med gy fg to mg groundmass. Crystals within groundmass are indistinct.																					
							Alteration: Phenos are wkly pyrophyllite and/or wkly clay alt'd. Groundmass is wkly clay-alt'd and v wkly silic'd. Intervals of slightly more intense partially texture-destructive silic'n.			2						1												
		shr	25				Min: 3-5% finely dissem py. Rare hrln py vns. Talc on some frags. 3cm shear at 25d at 206.35 with minor sp.														5							
		ft	45-60				Faults: soft clay gouge at 45-60d 206.55-206.9, broken core 203-203.3 and 211-211.4.																					
							LC eoh.																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION (%)							
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other
0.0		27.0					<b>Casing</b>																			
27.0		33.1					<b>Dacite Tuff, Fragmental</b> Scattered to common fragments comprising 10-30% of rock volume in med gy mg matrix. In decreasing order of abundance: 1) lt gy mg clasts to 5cm, sub-round to sub-angular, 2) dk gy fg sub-round clasts to 4cm, 3) lt gy fg sub-angular clasts to 1cm.																			
							Alteration: mod perv clay alt'n in solid rock, gouge zones completely transformed to clay.									3										
							Mineralization: 2% v finely dissem py.													2						
							Faults: Fault zone. Soft clay gouge w/ embedded rock frags 29-31 and 31.9-32.4, broken core 32.4-33.0.																			
							LC: unbroken, v irreg.																			
33.1		42.6					<b>Dacite Tuff, Non-fragmental</b> Lt gy-gn crystal to ash tuff, bx'd w/ dk gy matrix. Some bx'd clasts contain hrln to 1mm qz-py vns that were emplaced pre-bx'n. (photo)																			
							Alteration: mod perv clay alt'n. V wk perv chl, esp below 36.3m.	1								3										
							Mineralization: 0.5-1.0% finely dissem py. Scattered py clots to 5mm.													1						
				ct flt	30-45		Faults: Str crush 33.3-33.8m, str crush and gouge 36.15-37.4m. LC 15 cm gouge at 30-45d.																			
							LC: 15 cm gouge at 30-45d.																			
42.6		50.3					<b>Dacite Tuff, Fragmental</b> Med gy heterolithic fragmental tuff. In large part may be hydrothermal bx w' transported clasts. Clasts are fg to mg, lt gy to med gy, in dk gy matrix. Some of the larger clasts (5cm) are well-rounded, smaller clasts (up to 2cm) are sub-angular to angular.																			
							Alteration: mod perv clay alt'n.									3										
							Mineralization: 0.5-1.0% finely dissem py.													1						
							Faults: scattered zones of wk to mod crush.																			
							LC: sharp and irreg.																			
50.3		56.25					<b>Dacite Crystal Tuff</b> Crowded feldspars to 2mm in fg wkly hematitic matrix, overall color med gy. Occ'l bx'd intervals to 30cm that are v similar to bx in the preceding																			
							Alteration: mod perv clay alt'n.									3										
							Mineralization: 0.5% v finely dissem py.													0.5						
				flt	55		Faults: wk crush 54-54.8, gouge 56.1-56.25 at 55d.																			
							LC: at end of gouge zone.																			

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)													MINERALIZATION (%)							
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
New Nadina Explorations Limited Silver Queen Property Fall 2011		DDH # 11S-09 Dip: -80 Az: 270.5 Total Depth: 189.2m		UTM E (NAD 83): 650229 UTM N (NAD83): 5994737 Elevation (m): 861.5m		Target: B Drill Number: 1 Drill Contractor: Lone Peak		Date Collared: Sept 22 2011 Date Completed: Sept 27 2011 Date Logged: Sept 30 2011		Logged By: J.M. Hutter Core Size: NQ2																		
56.25	67.1						<b>Feldspar Porphyry</b> Lt gy-gn feldspar porphyry. Most feldspar 2-3mm, some up to 5mm, not as crowded as above unit. Fg Lt gy-gn groundmass. Alteration: mod perv clay alt'n, wk perv chl. Mineralization: Tr py in solid rock, 0.5% py in gouge.	1							3													
		flt	60				Faults: Fault zone. Str crush and gouge 56.25-59.9 and 63-63.55. Dk gy clay gouge 63.55-64.6 at 60d includes 5cm frag of alt'd dyke and 2cm calc pebble. Str crush and gouge w/ occ'l intervals of solid rock 64.6-67.1. LC: marked by slight color change in gouge.												0.1									
67.1	69.0						<b>Porphyritic Crystal Tuff</b> Med gy mg crystal tuff w/ common porphyritic feldspars to 5mm. Crystals are indistinct. Alteration: mod perv clay alt'n. Mineralization: 3% finely dissem py, 1% py in vns to 5mm at low angle tca. LC: gradational over 10cm.								3													
		vn	5																3	1								
69.0	70.8						<b>Porphyritic Crystal Tuff</b> Med gy mg crystal tuff w/ common porphyritic feldspars to 5mm. Probably the same rock as unit above, but w/ different alt'n. Alteration: wk perv clay alt'n. Large phenos are med gn, chl-clay alt'd. Mineralization: tr finely dissem py. LC: narrow shear at 75d.	1							2													
		ct shr	75																									
70.8	81.9						<b>Amygdaloidal Dyke</b> Purplish gy alt'd to tan or beige near contacts. Common whitish amygdules to 6mm, common ragged crystals to 2mm. Alteration: wk clay alt'n near contacts and some vns. Mineralization: occ'l calc vns to 3mm at 30d and 10mm at 70d. LC: nrw shear at 70d.								1													
		vn	30, 70																									
		LC	70																									
81.9	92.0						<b>Porphyritic Crystal Tuff</b> Med gy mg crystal tuff w/ common porphyritic feldspars to 5mm. Alteration: wk perv clay alt'n. Large phenos are med gn, chl-clay alt'd. Chl alt'n gradually decreasing down hole. Mineralization: 0.5-1.0% finely dissem py. LC: at approx beginning of ash tuff interval	1							2													

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
92.0		98.1					<b>Porphyritic Crystal Tuff</b>																					
							Mainly porphyritic crystal tuff, as above, w/ intervals of ash tuff or fragmental tuff. Longest interval is mainly ash tuff from 92.0 to 93.2. Boundaries between porph crystal tuff and ash/fragmental tuff are irregular and indistinct.																					
							Alteration: wk clay alt'n of phenos and also of some clasts. Little alt'n of groundmass.										1											
							Mineralization: 1-3% finely dissem py. Rare hrln py vns.														2							
				band	40		Structure: loc wk banding of crystal tuff at 40d.																					
							LC: sharp and undulating at about 35d, with nrw shear at 30d near contact.																					
98.1		112.4					<b>Crystal/Ash Tuff, Sparsely Fragmental</b>																					
							Lt gy crystal/ash tuff, w/ sparse fragments to 1cm. Unit is quite alt'd and clasts are difficult to distinguish.																					
							Alteration: mod perv clay alt'n of feldspar phenos and crystals and some frags, wk perv silic'n of groundmass and some frags.			1						3												
				vn	30, 70		Mineralization: 3% dissem py, 2% vn py. Wk to mod qz-py stwk vning is dramatically different from unit above which is virtually devoid of vning. Qz-py vns to 5mm at all angles, but 30 and 70d most common. Crosscutting relationships show at least three generations of qz-py vning. Minor mo with qz-py vns.														3	2						
							LC: irreg and diffuse.																					
							Sample: 98.1-112.4																					
112.4		119.5					<b>Porphyritic Crystal/Ash Tuff</b>																					
							Feldspar phenos to 5mm. Scattered to loc common frags to 2cm.																					
							Alteration: mod perv clay alt'n of feldspar phenos and crystals and some frags, wk perv silic'n of groundmass and some frags.			1						3												
							Mineralization: 2% dissem py, 1% vn py. Qz-py vning is decreased from above unit but is still present.														2	1						
				LC	45		LC: sheared at 45d.																					
							Sample: 112.4-119.5																					
119.5		120.8					<b>Hydrothermal Breccia</b>																					
							Shear and partly healed breccia. Several different types of transported rock represented in clasts, most are sub-round to sub-angular and range in size up to 6cm.																					
							Alteration: mod perv clay alt'n.										3											
							Mineralization: finely to coarsely dissem py in matrix.														3							
				flt	45		Faults: 7cm gouge at 45d at UC, partly sheared 120-120.5																					
							LC: sharp and irreg, partly broken.																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other
New Nadina Explorations Limited							DDH # 11S-09	UTM E (NAD 83): 650229	Target: B	Date Collared: Sept 22 2011					Logged By: J.M. Hutter											
Silver Queen Property							Dip: -80 Az: 270.5	UTM N (NAD83): 5994737	Drill Number: 1	Date Completed: Sept 27 2011																
Fall 2011							Total Depth: 189.2m	Elevation (m): 861.5m	Drill Contractor: Lone Peak	Date Logged: Sept 30 2011					Core Size: NQ2											
							<b>Sample: 119.5-120.8</b>																			
120.8	123.7						<b>Crystal/Ash Tuff, Sparsely Fragmental</b>																			
							Lt gy crystal/ash tuff, w/ sparse fragments to 1cm. Unit is quite alt'd and clasts are difficult to distinguish.																			
							Alteration: mod perv clay alt'n of feldspar phenos and crystals and some frags, wk perv silic'n of groundmass and some frags.		1							3										
							Mineralization: 3% disseminated py, 2% vn py. Wk to mod qz-py stwk vning. Qz-py vns to 5mm at all angles. Minor mo with qz-py vns.													3	2					
							LC: shear at 45d.																			
							<b>Sample: 120.8-123.7</b>																			
123.7	124.3						<b>Hydrothermal Breccia</b>																			
							Shear and partly healed breccia. Several different types of transported rock represented in clasts, most are sub-round to sub-angular and range in size up to 6cm.																			
							Alteration: mod perv clay alt'n.									3										
							Mineralization: finely to coarsely disseminated py in matrix.													3						
							Faults: 20cm gouge at 25-45d at LC.																			
							LC: 20cm gouge at 25-45d.																			
							<b>Sample: 123.7-124.3</b>																			
124.3	172.0						<b>Crystal/Ash Tuff, Sparsely Fragmental</b>																			
							Lt gy crystal/ash tuff, w/ scattered fragments to 1cm and sometimes as large as 5cm. Unit is quite alt'd and clasts are difficult to distinguish.																			
							Alteration: mod perv clay alt'n of feldspar phenos and crystals and some frags, wk perv silic'n of groundmass and some frags.		1							3										
							Mineralization: 3% disseminated py, 2% vn py. Wk to mod qz-py stwk vning. Qz-py vns to 1cm at all angles. Minor mo with qz-py vns.													3	2				0.02	
							LC: sheared at 40d.																			
							<b>Sample: 124.3-172.0</b>																			
172.0	182.3						<b>Amygdaloidal Dyke</b>																			
							Purplish, almost entirely alt'd to tan or beige. Scattered whitish amygdules to 6mm and common ragged crystals to 2mm partly obscured by alt'n. Remnant of tuff 176.25-176.55.																			
							Alteration: mod perv clay alt'n. Later blk alt'n near frags and vns.									3										
							Mineralization: occ'l irreg carb vns to 3mm.																			

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
		flt	70			Faults: gouge at 70d 174.1-174.3, 15cm gouge at LC.																				
		ct flt	30			LC: 15cm gouge at 30d.																				
182.3	189.2					<b>Crystal/Ash Tuff, Sparsely Fragmental</b>																				
						Lt gy crystal/ash tuff, w/ scattered fragments to 1cm and sometimes as large as 4cm. Unit is quite alt'd and clasts are difficult to distinguish.																				
						Alteration: mod perv clay alt'n of feldspar phenos and crystals and some frags, wk perv silic'n of groundmass and some frags.			1							3										
		vn	various			Mineralization: 3% disseminated py, 2% vn py. Wk to mod qz-py stwk vning. Qz-py vns to 1cm at all angles. Minor mo with qz-py vns.														3	2					
						Sample: 182.3-189.2																				
						LC: eoh																				



FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
New Nadina Explorations Limited Silver Queen Property Fall 2011							DDH #: 11S-10 Dip: -68.5 Az: 268 Total Depth: 72m	UTM E (NAD 83): 650141 UTM N (NAD83): 5994606 Elevation (m): 849m	Target: A Drill Number: 2 Drill Contractor: Lone Peak	Date Collared: Sept 22 2011 Date Completed: Sept 24 2011 Date Logged: Sept 26 2011	Logged By: J.M. Hutter Core Size: NQ2																	
0	37.0						<b>Casing</b>																					
37.0	41.15						<b>Crystal / Ash Tuff, Sparsely Fragmental</b> Lt gy crystal/ash tuff, w/ scattered fragments to 1cm and sometimes as large as 4cm. Unit is quite alt'd and clasts may be difficult to distinguish. Clasts are, in decreasing order of both abundance and size: 1) lt gy mg w/ diffuse boundaries, 2) lt gy fg sub-angular w/ sharp boundaries, 3) dk gy fg sub-angular to angular w/ sharp boundaries.  Alteration: mod perv clay alt'n of feldspar crystals and type 1 frags, wk perv silic'n of groundmass and some frags.  Mineralization: 3% dissem py. Rare qz-py vns to 0.5mm. One 1x3cm py clot in gouge.  Faults: broken core and gouge through entire interval.  ct shr 50 LC: within gouge zone, shearing at 50d.																					
41.15	41.75						<b>Amygdaloidal Dyke</b> Entire dyke is gouge w/ a few small pebbles up to 2cm. Alt'd to beige or blk. No amygdules noted, but alt'n is typical of amygdular type dykes.  Alteration: Str clay alt'n.  ct flt 60 Faults: entire interval is soft clay gouge w/ a few small pebbles up to 2cm. Gouge loc banded at 60d.  LC: within gouge zone at 60d.																					
41.75	68.1						<b>Crystal / Ash Tuff, Sparsely Fragmental</b> Lt gy crystal/ash tuff, w/ scattered fragments to 1cm and sometimes as large as 4cm. Unit is quite alt'd and clasts may be difficult to distinguish. Clasts are, in decreasing order of both abundance and size: 1) lt gy mg w/ diffuse boundaries, 2) lt gy fg sub-angular w/ sharp boundaries, 3) dk gy fg sub-angular to angular w/ sharp boundaries.  Alteration: mod perv clay alt'n of feldspar crystals and type 1 frags, wk perv silic'n of groundmass and some frags.  Mineralization: 3% dissem py. Common qz-py vns esp in upper 5m of interval. Local short bx'd intervals (eg: 45.85-46.1, where crosscutting veins within clasts plus py in matrix indicates three episodes of mineralization). Sheared py vn (UC at 30d but vn appears subp tca) and soft py gouge 50.4-51.5, soft py gouge (sheared vn) 56.6-56.9, both vns at low angle tca. Some frags remain open.  vn 0-30  shr vn 5 Faults: sheared py vn and soft py gouge 50.4-51.5, soft py gouge (sheared vn) 56.6-56.9, both vns at low angle tca, soft clay gouge 68.1-68.25. Most of interval is weakly broken core.  LC: lost in broken core, probably gradational.  Samples: 50.4-51.5, 56.3-57.0																					
68.1	69.3						<b>Crystal / Ash Tuff, Porphyritic</b> Common lt gy indistinct feldspars to 4mm in med gy fg groundmass w/ abundant feldspars to 2mm. Rare lt gy mg frags to 15mm.  Alteration: mod perv clay alt'n of feldspar crystals and frags, wk perv silic'n of groundmass.																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION (%)								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
							Mineralization: 3% dissem py, 1% py in vns to 2mm.															3	1				
							Faults: all of interval is wkly broken core.																				
							LC: lost in broken core, probably gradational.																				
69.3	72.0						<b>Crystal / Ash Tuff, Sparsely Fragmental</b>																				
							Lt gy crystal/ash tuff, w/ scattered fragments to 1cm and sometimes as large as 4cm. Unit is quite alt'd and clasts may be difficult to distinguish. Clasts are, in decreasing order of both abundance and size: 1) lt gy mg w/ diffuse boundaries, 2) lt gy fg sub-angular w/ sharp boundaries, 3) dk gy fg sub-angular to angular w/ sharp boundaries.																				
							Alteration: mod perv clay alt'n of feldspar crystals and type 1 frags, wk perv silic'n of groundmass and some frags.			1							3										
							Mineralization: 3% dissem py, 3% py in vns usually less than 5mm. Loc wk bx'n w/ some frags remaining open. Py gouge 68.5-68.65m.															3	3				
							Faults: Py gouge 68.5-68.65m.																				
							LC: eoh																				
							Sample: 69.0-72.0																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)								
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other
0		22.0					<b>Casing</b>	1																		
22.0		22.4					<b>Dacite Crystal Tuff</b> Med gy mg crystal tuff. Recovery 35%. Alteration: texture-destructive mod silic'n Mineralization: 3% finely disseminated py. LC: lost in broken core.			3											3					
22.4		23.0					<b>Dyke</b> First part of interval is lt gy fg alt'd dyke. Last part of interval is dk gy fg dyke w/ abundant round white amygdules to 3mm. Recovery 35%.										1									
23.0		24.5					<b>Dacite Crystal Tuff</b> Med gy mg crystal tuff. Recovery 93%. Alteration: texture-destructive mod silic'n in frags, str clay alt'n in gouge. Mineralization: 3% finely disseminated py. Faults: Entire interval is soft clay gouge w/ scattered rock frags. LC: lost in broken gouge			3						4					3					
24.5		25.45					<b>Feldspar Porphyry</b> Whitish phenos to 5mm in lt gy fg matrix. Alteration: mod to str clay alt'n, increasing downhole such that both feldspars and matrix become alt'd. Wk silic'n of matrix, decreasing to nil downhole. Mineralization: Tr finely disseminated py. Faults: Entire interval is soft clay gouge w/ scattered rock frags. LC: shearing at 60d within gouge zone.			1						3					0.5					
25.45		63.2					<b>Dacite Tuff, Fragmental</b> Med gy mg variably fragmental tuff. Clasts range from sparse to common, up to 5cm in size. Clast boundaries often diffuse due to alteration. Loc wkly bx'd intervals w/ some open frags. Loc wk banding (prob bedding) at 50d. Core recovery: 26-29m 20%, 29-32m 5%, 32-35m 70%, 35-38m 55%. Alteration: wk to mod texture-destructive perv silic'n; loc wk perv clay alt'n; str perv clay alt'n in gouge zone. Mineralization: 2-5% finely disseminated py, 1% py in occ'l irreg vns and small patches. Faults: mostly soft clay gouge to 38m w/ embedded rock frags.			2						3					4	1				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
		ct shr	85				LC: narrow shear at 85d.																				
63.2	69.9						<b>Amygdaloidal Dyke</b> Purplish brown, alt'd to beige or gy near contacts. Scattered white amygdules to 5mm; abundant ragged crystals mostly 1-3mm.																				
							Alteration: loc wk perv clay alt'n.									1											
		vn	40				Mineralization: loc gypsum on frags; one 2mm carb vn at 40d w/ minor py.																				
		ct shr	60				LC: 3cm gouge at 60d.																				
69.9	78.1						<b>Dacite Tuff, Fragmental</b>																				
		band	50				Med gy mg variably fragmental tuff. Clasts range from sparse to common, up to 5cm in size. Clast boundaries often diffuse due to alteration. Loc wk banding (prob bedding) at 50d.																				
							Alteration: wk to mod texture-destructive perv silic'n; loc wk perv clay alt'n.			2						1											
		vn	45				Mineralization: 3% finely dissem py, 2% py in scattered vns to 5mm and small patches. Massive py-sp-ga vn 75.5-75.65m at 45d.														3	2					
							Sample: 75.5-75.65m																				
		ct shr	85				LC: narrow shear at 85d.																				
78.1	80.7						<b>Amygdaloidal Dyke</b> Entirely alt'd to beige or gy. Occ'l white amygdules to 5mm; sparse to common ragged crystals mostly 1-3mm.																				
							Alteration: wk perv clay alt'n.									2											
							Mineralization: scattered carb +/- py vns to 5mm, some open frags.																				
		ct shr	60				LC: 20 cm partly healed gouge at 60d.																				
80.7	148.85						<b>Dacite Ash Tuff</b> Med gy mg ash tuff.																				
							Alteration: wk perv clay alt'n, wk perv silic'n.			2						2											
		vn	various				Mineralization: scattered nrw qz-py vning gradually increasing to wk stwk w/ tr mo at about 107m, and weakening after about 137.2. Patchy py w/ lesser cp at 137m. Three different vein sets <b>1st</b> - Thickest set - 2-4mm somewhat convoluted grey quartz with irregular boundaries which are often ghosted. These veins sit most commonly at 45 dTCA but can, at rare times, sit at higher aTCA. Generally poor in Sx except in the larger veins closer to the LC. Here veins are associated with large grey quartz + Sx (py +/- cp) floods. Contains the majority of vein material in core. <b>2nd</b> - Thin 1-2mm py rich generally with grey quartz but not always. Planar to fracture filling. Cuts 1st set. Variable aTCA. Most common vein type wrt the number of veins. <b>3rd</b> - rare white calcite veinlets cut all other veins and can, at times, activate along previous vein margins giving the older veins a more intense pseudo banded appearance. Locally these veins can be vuggy. Another vfg Sx or sulfosalt makes a rare appearance throughout this section. This Sx/Sf is grey small anhedral and impossible to identify. Trace.																				
							Samples: 75.5-75.65m, 86-89m, 110-152m																				

New Nadina Explorations Limited		DDH #: 11S-11		UTM E (NAD 83): 649879		Target: A		Date Collared: Sept 25 2011		Logged By: J.M. Hutter, J.M. Ralph															
Silver Queen Property		Dip: -70 Az: 270		UTM N (NAD83): 5994283		Drill Number: 2		Date Completed: Sept 28 2011																	
Fall 2011		Total Depth: 195m		Elevation (m): 823.5m		Drill Contractor: Lone Peak		Date Logged: Sept 29 - Oct 8 2011		Core Size: NQ2															
FROM	TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)							MINERALIZATION (%)												
m	m					Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
		ct	45		LC: Sharp @ 45d																				
148.85	195.0				<b>Feldspar Porphyry</b>																				
					Grey with a slight blueish tint to greenish grey around narrow chlorite rich sections. Porphyritic with albite crystals up to 1/2cm. Albite phenos are generally eroded, to locally partially to completely replaced with clay or calcite or quartz/chlorite dh. Locally igneous texture is deeply damaged. Often pitted. Generally very broken but increasingly competent toward EOH. Spotty Mo, especially around spotty intense chlorite alteration. Weak selective carbonate to 170m.	1								2				2							
					Veining has decreased dramatically. Most intense near UC and EOH but still very weak. Py between 1-2%. Trace Mo.																				
					LC: eoh																				

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)											MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
0		27.0					<b>Casing</b>																					
27.0		32.15					<b>Shear Zone - Fragmental Dacitic Tuff/Plag phyrical crystal tuff</b>																					
27.0	30.1	shear	40				Banded with banding changing from a white/light grey with << dark green to a dark green chlorite rich << white/light grey. Intensely crushed and sheared. Crushed at the upper portion grading to intense chloritic schist with the final 20cm being mainly crushed. CA changes from 40 to 60 between these two zones and this change is fairly rapid. Original rock type is likely Feldspar Porphyry or Dacitic Tuff, however, clay alteration is so intense and complete that definitive classification is impossible at this scale. 2% fgr anhedral (perhaps rounded) dissem Py. This suggests that Py mineralization, at least, is pre-tectonic.	3									4				2	0.5						
30.1	32.15	shear	60																									
32.15		82.15		LC	80		<b>Fragmental Dacitic Tuff/Plag phyrical crystal tuff</b>																					
							Greenish grey to blue grey, locally mottled and patchy or spotted. Generally appears to be a porphyritic Dacite with common incidental fragments throughout. Upper 5m is brecciated and healed with Py. Below here this section is 'spotted' with what appears to be silica replacement of feldspars, however, in some intervals the silica appears to have preserved this texture without selective alteration of the feldspars. Difficult to fully assess due in part to the pervasiveness and intensity of alteration. Alteration is generally moderate to strong pervasive to selectively pervasive wrt to silica and/or selectively pervasive wrt to clay altering feldspars. Minor sericite is also evident but is never really well developed. Py appears as an evenly distributed disseminated overprint over all elements and may, in some instances, replace clasts. Py veins are not common but do appear through the entire section. Overall disseminated Py is between 2-3% while veins add an additional 0.5% to the rock mass.		2	3								3				2	0.5					
82.15		90.7		LC	75	sharp	<b>Amygdaloidal Dike</b>																					
		Fol	50	w			Buff near contacts and around veins, otherwise dark pink to locally mottled with several salmon pink patches. Locally trachytic texture. Amygdals are locally common. Fine black blade like 1-2mm crystals are common but < 1% of core. Likely chlorite replaced hbl. Weak fol at 50 dTCA. Narrow <1cm white quartz veins are common, sit at a low aTCA and are barren. One small vein appear to offset certain elements within this dike (veins and alteration) which suggests the possibility of two different events affecting this section. Very vfr trace disseminated bright Sx - affinity unk.	1																			t unk	
82.15	90.7	veins	10				Quartz veinlets.																					
90.7		130.5					<b>Fragmental Dacitic Tuff/Plag phyrical crystal tuff</b>																					
							Green, mottled, locally igneous textures are destroyed. Locally flooded with silica but overall silica is weak. Weak to locally moderate pervasive chlorite. Feldspars are often completely altered to white clay. Fragments are often altered to a light green clay. Fragments are generally not common but where observed can be larger than 5cm. Generally fragments comprise 5% of the core or possibly more as some may have been consumed by alteration. Py is common throughout, and often appears as narrow veinlets, and larger veins. Most of the veinlets are between 5 and 30 dTCA, increasing in density and variability in ATCA dh. The thickest veins are between 30 and 45 dTCA. Disseminated Py up to 2% is anhedral fgr and evenly distributed.	3		2								3				2	0.5					
90.7	130.5	veins	15				Py veins																					
90.7	130.5	veins	40				Thickest py veins																					
120.0	120.0						Drillers block says making water and loss of return																					
130.5		307.45		LC	40		<b>Fragmental Dacitic Tuff/Plag phyrical crystal tuff</b>																					
							Green, mottled, locally igneous textures are destroyed. Locally flooded with weak to mod silica. Weak to locally moderate pervasive chlorite. Feldspars are often completely altered to white clay. Fragments are often altered to a light green clay. Fragments are more common than previous section and were observed range between .5 and 2cm. Generally fragments comprise 30% of the core or possibly more as some may have been consumed by alteration. Py is common throughout, and often appears as narrow veinlets, and larger veins. Most of the veinlets are between 5 and 30 dTCA, increasing in density and variability in aTCA dh. The thickest veins are between 30 and 45 dTCA. Disseminated Py up to 2% is anhedral fgr and evenly distributed. Generally very little change in this section from the previous section.	3		2								3				2	0.5					
131.7	132.5						1cm 5 dTCA Py + Cpy(?) vein																					
141.0	141.0	water					Block says more water																					

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
150.0	150.3	vein	20			Grey 3cm quartz + Py vein.																				
151.85	152.25	vein	40			Grey 3cm quartz + Py vein and predominate Py vein converging 10 dTCA and 40dTCA respectively.																				
153.3	153.5	vein	40			2cm yellowish Py vein. Well form pyritohedrons/dodecahedrans																				
159.0	159.5					Intense silica flooding + Py																				
167.7	169.0	vein				Breccia plus minor Py veins 1-2cm wide. LC is a fault with minor gouge and fragments.																				
168.8	169.0	Fault	35																							
171.0	180.0					Slight increase in Py veins - 3% of volume																				
180.0	195.0					Slight increase in Py veins - 5% of volume																				
195.0	209.4					Slight decrease in Py veins - 2% of volume																				
209.4	210.6	vein	10			3 cm grey quartz with Py + possible cp.																				
223.2	223.5	vein	25			2 cm grey quartz with Py vein. LC is fault gouge.																				
223.5	225.5					Section with broken rock - gouge and with white clay.																				
226.0	226.4					Breccia healed with silica and Py. Sharp UC at 40 dTCA. Polymetallic?																				
228.0	243.0					Mod broken with up to 5% Py veins.																				
298.3	298.45	Fault	35			Broken almost brecciated 3 cm wide with Py on the UC																				
300.65	302.7	Breccia	5			Sub brecciated over the 1st 40cm and healed/flooded with a chalcedonic quartz + convoluted veinlets and connected clots and rare broken(?) 1-5mm clasts of carbonate. Somewhat vuggy. Very unusual texture. After this point the vein blows out to a thick Py rich + white and grey quartz. LC sits at ~25 dTCA and vein appears narrower.																				
302.7	304.27	Veins	25			Immediately below the vein uh sits two other 1-2 cm veins of Py > grey quartz. Within this section is a significant increase in Py veinlets and erratic grey quartz veinlets. This section is not a stockwork. Note that these veinlets cut grey silica replaced clasts. Disseminated Py overprints all elements except Py veinlets. Rare grey unk Sx can be seen on the vein margins of the Py veinlets. The vein are somewhat vuggy and the veinlets are occasionally somewhat vuggy.																				
306.0	307.45					At this point a sudden appearance of small dark green specks becomes apparent. These specks increase to larger clasts(?) toward the LC. These clasts(?) are hard and have a dark, almost black streak. Under the lens they look submetallic. They are non magnetic. Interestingly on a fracture at the UC has a druse of mod magnetic material - could this be from the drill? - appear to be Py(?) or a mix of contamination from drill and cuttings.																				
307.45	312.0	LC	?			<b>Amygdaloidal Dike</b>																				
						Dark brown with bands of buff, tan, or pink, especially near LC and within the core of the section. Amygduals are common and form up to 5% of overall volume, are elongated along the weak foliation plane and are replaced with either carbonate or silica - rarely rimmed with carb with a white quartz core. Very vfg disseminated Sx - likely Py - up to 0.5%. Very rare veinlets of boudined or discontinuous carb. LC is ambiguous as it was cut at the end of a drill run and is severely broken.			1			1								0.5						
312.0	413.8					<b>Plag phytic crystal tuff/Fragmental Dacitic Tuff</b>																				
						Light green, generally porphyritic with rare fragments (which are often completely replaced with grey quartz) which decrease in regularity dh. Locally pitted, locally mottled. White clay replaced feldspars, local ankerite floods and convoluted veins with a slight pink stain commonly with minor Mo along margins (Mo <.01% of total mass), trace grey quartz hairs +/- Py with < Sx (very fgr dark submetallic - not Mo(?)) and decreasing dh. Rare (<.01%) disseminated Mo in matrix and lesser plating frags also decreasing dh. Weak to locally mod pervasive silica flooding. Mod patchy albite floods? Py sits at 3% as disseminated and fine hairs and veinlets and rare veins. Trace gypsum hairs and veinlets begin appearing after 387m and increase dh. Gypsum veinlets are rarely associated with Sx. One thought is that these dark specks could be two different minerals (pyrobitumen and chalcocite). LC is gradational.			3	2					2	2								t		.1 unk
330.35	330.35					Core reduced from HQ to NQ2 (~6cm to ~5cm)																				
396.9	397.4	Vein	20			Several 1-3cm veins of Py + pink stained carb and grey quartz.																				
397.6	398	Vein	20			Py + gypsum + carb vein. Gypsum is the main element in this vein. Carb sits as broken 1/2cm - 1 cm fragments within the gypsum. No apparent																				
407.65	408.8	Vein	10			Thick carb > sphalerite = Py >> galena(?) vein. Sphalerite is light brown and forms as clots or fragments near the UC and within the core of the vein. Margins are chloritic with Py on the outermost margin.																				
413.4	413.6	Vein	20			2cm wide Py + fluorite banded vein with Py in the core and fluorite on the margins. Planar.																				
413.75	413.9	Vein	30			2cm wide Py + fluorite + gypsum vein with scattered Py clasts within vein (up to 30 %). Generally defines the LC for this unit.																				

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity (1 to 5)										MINERALIZATION (%)									
m	m						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other	
413.8	507.0					<b>Feldspar Porphyry/Plag Phyric Crystal Tuff</b>																				
						Green to blue grey with an increasingly fleshy overprint dh, especially past 441m - white clays have largely disappeared. Increasingly hard dh. Igneous textures are destroyed in patchy sections and largely eroded in others. Gypsum continues to be weakly present in veins and less commonly in patches. Minor gypsum and/or fluorite veins. Minor Sx other than Py commonly noted in some fluorite bearing veins (dark grey, possibly Ga). Very rare Mo noted near some veins and coating slips. Larger Py veins tend to sit at 10-20 dTCA and far less commonly up to 45 dTCA. Py is often brassy yellow on cored surface. On rare occasions Py can be a greenish yellow similar to Cpy but XRF suggests otherwise. Py, on occasions, be a silvery white on freshly broken surfaces - no rotten egg smell however. Py can also, on occasion, take a deeper brassy yellow colour. 1-2% (locally up to 4% over 1/2m) Py is commonly disseminated throughout the section. Finally Py can form as relatively large patches which may simply be low angle veins turning away at the cored surface. Rare localized soft brown patches. Evidence for occasional incidental fragments were noted but are very rare. Str			3		1		?			1					2	1				0.01
425.8	426.0					Py patch up to 10% Py																				
432.0	432.1	Breccia	30			Breccia with Py clasts up to 1/4 cm and Mo on UC.																				
439.15	441.0	Vein	30	10		Enriched zone of Py veining with total Py up to 5%.																				
450.4	450.9	Vein	20			Cataclastic - weakly broken(?) with mod gypsum flooding and veining. Could the gypsum have caused the appearance of mechanical breaking due to dissolution during drilling?																				
452.8	456.0	Vein	15			Enriched zone of Py veining (10 dTCA) and grey quartz + Py veining (35 dTCA) with total Py up to 3%.																				
455.0	477.0					Enriched zone of mod hard to hard fleshy pervasive patchy overprint. Could this be K-spar (don't think so).																				
477.0	491.25					Deeply altered with most primary igneous fabrics completely destroyed. Sig drop in Py content with disseminated Py up to 1% and almost no veins. LC is an irregular breccia/fault contact.																				
491.25	492.7					Breccia grading into an unusual fragmental unit. Possibly a narrow disrupted amygdaloidal dike. Amygduals are both angular (unlike other Amyg dikes) and rounded - replaced with gypsum. Interval is weakly veined with gypsum and lesser carbonate. 2-3% disseminated Py.																				
493.7	495.3	Vein	20			Py rich zone with a significant white quartz + fluorite + gypsum vein. Py overall up to 5%. UC is a 3mm gypsum vein at 30dTCA.																				
496.5	497.0	Vein	20			Fluorite + silica + Py band ~ 2-3cm wide.																				
						This hole sure looks nice near the EOH. However the XRF says other wise.																				
507.0	507.0					<b>EOH</b>																				



FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)												
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other				
New Nadina Explorations Limited      DDH #: 11S-13      UTM E (NAD 83): 650180      Target: B      Date Collared: Oct 6 2011      Logged By: J. Mark Ralph Silver Queen Property      Dip: -76.5 Az: 85      UTM N (NAD83): 5994662      Drill Number: 2      Date Completed: Oct 15 2011 Fall 2011      Total Depth: 777m      Elevation: 853m      Drill Contractor: Lone Peak Drilling      Date Logged: Oct 25 2011      Core size: HQ to 177.45, NQ2 after 177.45																														
0	15.0						<b>Casing</b>																							
15.0	17.55	LC	60				<b>Feldspar Porphyry</b> Buff with 3-5mm broken and subrounded phenocrysts of albite within a light greenish matrix. Matrix contains smaller broken and rounded feldspars all within a greenish moderately hard matrix. Matrix is generally aphanitic but locally looks feathery and speckled. Fg to mg euhedral dark disseminated Py up to 1%. Weak oxide coating on fractures. LC is a fault contact.															1								
17.05	17.55	Fault	30				Sharp UC (upper contact). Moderately cataclastite.																							
17.55	26.45						<b>Dacitic Lapilli Tuff</b> Dark greenish grey, polymictic with a highly variable clast size ranging from <1/2cm to over 7cm. Matrix supported. Clasts comprise 10-30% of core. Clasts tend to be either deeply white clay altered or chlorite altered. White clay altered clasts show a high range in size and tend to be the largest clasts in the interval. Darker chlorite rich clasts are generally smaller, rich in Py, angular, and often poikilitic. Less common are smaller subrounded dark green clasts. Between 23.7 and 24.7m are some very unusual very round 2-3mm zoned amygdules. Dark disseminated anhedral and brighter euhedral Py in GM (ground mass) and locally in clasts - up to 2% total. This unit is generally broken and with isolated gouge rich sections. LC is a fault and ambiguous due to grinding from the drill.																2							
26.45	32.75						<b>Breccia - Dacite</b> Green with a dark green matrix, clast supported with clasts comprising 70-90% of the interval. Clasts form a jigsaw fit. Clasts are rich in green sericite and poor in Py whereas the matrix is rich in dark green chlorite and Py. Locally broken, vuggy and pitted, especially near the LC. Broken zones tend to have low aTCA (angle to core axis). The LC is a fault contact and is defined largely on the basis of where the underlying dike becomes apparent.																							
32.75	37.05	LC	60				<b>Amygdaloidal Dike</b> Pale tan with very pale pink bands. Vfg to aphanitic. Phenocrysts were only noted near the LC. GM is feathery and likely altered to sericite. Moderately hard. Thin dark veinlets are common, often contain a halo and may contain a dark grey sulfosalt. Near the LC the veinlets become banded and can even display several bands. Vfg disseminated Py up to 1% near the UC and decreasing to < 0.1% near the LC. LC is sharp and is a fault.																1							
37.05	75.85						<b>Dacitic Fragmental/Lapilli Tuff</b> Dark green, polymictic, locally monomictic. Generally crushed and broken (>80% of core). Fragmental portions exhibit intense alteration (crushing or green clay replacement) of groundmass. Fragments or clasts are often less altered, commonly rounded but locally angular, and vary in degree of mechanical erosion. This interval also contains some minor sections of ash tuff (never more than 1m). Moderate to strong sericite overprint with lesser chlorite. Trace carbonate as convoluted veins and veinlets. Mo was noted within some clasts and possibly locally within the matrix. Sphalerite was seen in several locations within the upper 1/2 of the section and was generally seen as broken fragments no more the 1/2cm in size. Py is common within the matrix as dark vfg disseminated euhedral crystals and as lesser clusters, veinlets and hairs. Minor amygdaloidal dikes (?) were intensely crushed and filled with gouge between fragments. Several locations are deeply pulverized and reduced to thick sections of gouge with very small rounded grains of host rock and contain up to 5% vfg disseminated Py (see below). The LC of this section is one of these intense fault gouge intervals.																5							
58.24	58.4	Fault	55				Moderately crushed with thin dark green gouge sections. Fragments of Sx just above UC.																							
68.83	74.1	Fault	50				Dark green, deeply modified to gouge with only very small sub mm equigranular rounded fragments of host remaining which comprise up to 50% of the section or more. Very vfg disseminated Py is equally spread throughout section - 5%. Weakly fol @ 50 dTCA.															5								
74.1	75.85	Fault	45				Deeply mechanically damaged section. Minor amygdaloidal dike.																							
75.85	79.7						<b>Amygdaloidal Dike</b>																							

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)											
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other			
							Tan near contacts and veins, dull pink in other areas. Minor amygdaloidal dike with more abundant phenocrysts of feldspar blades. Trace veinlets of Py with dark halos in tan sections. Irregular LC.																						
79.7	81.25	LC	20				<b>Dacitic Crystal Tuff Breccia</b> Green grey GM with porphyritic crystal tuff clasts. Clasts form a jigsaw fit and are monomictic. Clast supported. Feldspars in clasts are white clay altered. 1mm anhedral disseminated Py evenly distributed over all elements. 1mm within clasts, up to 3mm in GM. Possible Mo.																						
81.25	84.35						<b>Amygdaloidal Dike</b> Entire dike is light green which is unusual so far for these dikes. Minor clay replace amygdules. 1-2mm round slighter darker green, soft eyes form up to 3% of core near UC and decrease to 0% within 50cm. No Py. One low angle wedge of previous section with undulating contact just dh from UC. LC is convoluted and sharp. Over all unit is soft.															0							
84.35	86.9	LC	35				<b>Feldspar Porphyry/Dacite Fragmental</b> Green, porphyritic with minor fragments of grey siliceous clasts. Minor grey quartz + Py veins - very weakly developed stwk (stockwork). Disseminated Py up to 3%. Minor disseminated Mo (<0.01%). Feldspars altered to clay. Moderately pervasive sericite.															3							
86.9	88.6	LC	30				<b>Amygdaloidal Dike</b> Entire dike is light green which is unusual so far for these dikes (note dike between 81.25 - 84.35m - this may be the same dike?). Minor clay replace amyg. 1-2mm round slighter darker green, soft eyes form up to 3% of core near UC and decrease to 0% within 50cm. No Py. One clast or xenolith of previous section dh from UC. LC is convoluted and sharp. Over all unit is soft.															0							
88.6	99.35	LC	85				<b>Feldspar Porphyry/Fragmental - Weak Stwk</b> Pale green to weak blue grey. Generally a feldspar porphyry with minor fragments (never more than 5% of core). Porphyritic GM. Weak to moderately pervasive sericite, selective white clay replacement of feldspars, weak to moderately pervasive silica. Disseminated Py throughout - up to 3%. Grey quartz veins are common at all angle with the thicker ones (>1cm) generally sitting between 45-70 dTCA. Smaller grey quartz veinlets are erratic in orientation and cut and often offset these larger veins. Py veinlets cut all quartz veins. Many veinlets are vuggy, and weakly convoluted. Mo is commonly seen on one or both margins of the larger quartz veins, and rarely as fine disseminations within the host (overall <0.01%). Another fg disseminated dark greyish black anhedral to feathery submetallic mineral was noted but not identified - not mag - no Mo. Trace magnetite in one location.																3						
99.35	100.3	LC	15				<b>Amygdaloidal Dike</b> Entire dike is light green except for a weak darkening near the Xenolith and LC. Minor clay replaced amygdules. No Py. One clast or xenolith of previous section uh from LC contains semi massive Py. LC is sharp. Over all unit is soft.															0							
100.3	126.85						<b>Feldspar Porphyry/Fragmental - Weak Stwk</b> Pale green to weak blue grey. Generally a feldspar porphyry with minor fragments (never more than 5% of core) which are often replaced with grey silica. Porphyritic GM. Weak pervasive sericite, selective white clay replacement of feldspars has weakened since last similar section, weak to moderately pervasive silica. Locally a pale green soft clay is observed replacing feldspars. Disseminated Py throughout up to 2-3% - weaker than last section. Grey quartz veins are common at all angles with the thicker ones (>1cm) generally sitting between 10 and 40 dTCA. Smaller grey quartz veinlets are erratic in orientation and cut and often offset these larger veins. Py veinlets cut all quartz veins and is now common in thicker low aTCA grey quartz veins - also intergrown with Mo in these veins. Many veinlets are vuggy, and weakly convoluted. Mo is commonly seen on one or both margins of the larger quartz veins, and commonly as fine disseminations within the host (overall <0.05%) especially near lower aTCA grey quartz veins. Mo is now commonly seen as thin hairs penetrating into the host around these veins. Mo content is on a significant rise. The fg disseminated dark greyish black anhedral to feathery submetallic mineral noted earlier has declined but is still apparent and still not identified - not mag - not Mo (tennantite?). Interval is harder than last similar interval.																	3					
100.55	102.25	Vein	10				10 cm thick grey quartz + Py >> Mo > other Sx. Internally mottled, disrupted and exhibits many contacts with host along section suggesting that this vein is not planar. Py generally as large patches with Mo distributed within the vein as small disseminations and stringers/plating along vein margin, unknown Sx as small clusters within quartz.																						

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)											
m		m					Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other			
New Nadina Explorations Limited Silver Queen Property Fall 2011							DDH #: 11S-13 Dip: -76.5 Az: 85 Total Depth: 777m		UTM E (NAD 83): 650180 UTM N (NAD83): 5994662 Elevation: 853m			Target: B Drill Number: 2 Drill Contractor: Lone Peak Drilling			Date Collared: Oct 6 2011 Date Completed: Oct 15 2011 Date Logged: Oct 25 2011			Logged By: J. Mark Ralph Core size: HQ to 177.45, NQ2 after 177.45										
109.1	111.45	Vein	10			2-10 cm thick grey quartz + Py > = Mo > other Sx. Internally mottled, disrupted and exhibits many contacts with host along section suggesting that this vein is not planar (possibly the same as the vein noted between 100.55 - 102.25m). Py generally as smaller patches then previous vein with Mo distributed within the vein as small disseminations and stringers/plating along vein margin and intergrown with the Py, unknown Sx as small clusters within quartz.																						
118	118.5	UC	50			Entire dike is light green except for a weak darkening near the LC. Minor clay replaced amygdules. No Py. LC is sharp undulating and very irregular. Over all unit is soft.														0								
122.05	126.85					Zone of increased grey quartz and brecciation. Sulphide content is about double the average for this section. Veins are broken and new fine grey quartz hairs cut all elements. Frags form a jigsaw fit, especially between 123 and 126.2m. UC and LC are gradational.																						
126.85	159.7	LC	15			<b>Feldspar Porphyry/Fragmental - Weak Stwk</b>																						
						Pale green to weak blue grey. Generally a feldspar porphyry with minor fragments (never more then 5% of core) which are replaced with a soft brown to grey alteration (biotite + other?) and contain 1% disseminated Py, 1% disseminated black unknown Sx and trace Mo. This alteration feature defines the UC as it was not seen above this point. Porphyritic GM - igneous texture either locally deeply eroded or destroyed. Trace pervasive sericite, selective white clay replacement of feldspars has weakened since last section, weak to moderately pervasive silica. Disseminated Py throughout up to 2-3% - weaker then last section. Grey quartz veins are common at all angles with the thicker ones (>1cm) generally sitting between 10 and 40 dTCA. Smaller grey quartz veinlets are erratic in orientation and cut and often offset these larger veins. Py veinlets cut all quartz veins and is now common in thicker low aTCA grey quartz veins - also intergrown with Mo in these veins. All veins are more common then previous interval. Many veinlets are vuggy, and weakly convoluted.																						
						Mo is commonly seen on one or both margins of the larger quartz veins, and commonly as fine disseminations within the host (overall <0.08%) especially near lower aTCA grey quartz veins. Mo is now commonly seen as thin hairs penetrating into the host around these veins. Mo content continues to rise. The fg disseminated dark greyish black anhedral to feathery submetallic mineral noted earlier has come back up in intensity and is locally very strong (>1-2%) and still not identified - not mag - not Mo (tantallite?). LC is a fault.																						
152.1	152.75	Vein	15			1-2cm wide with a olive green pasty metallic (?) smear on the uh contact. Pitted vuggy, internally broken.																						
159.7	179.35					<b>Feldspar Porphyry/Fragmental</b>																						
						Blue grey locally mottled. Local destruction of Igneous texture is complete, otherwise textures are deeply eroded. Significant increase in fragments and fragment size. Fragments are similar to previous section in that they are altered to a mottled soft brown and grey alteration (biotite + chlorite?) and contain 1% dark grey submetallic mineral + minor Mo. Are these fragments or intense patches of chlorite/biotite alteration - note that the edges of these frags/patches are very irregular and contorted. Also a significant increase in grey quartz veins which are generally convoluted, broken and almost always mineralized with Py + Mo + dark grey submetallic mineral (tennantite?). In matrix Py = Mo + dark grey submetallic mineral (tent?), Sx = 2%. Mo is also present as huge clots of which one (@ 172.6m) is 6cm x 2cm in a teardrop shape. Several other clots were also observed. Overall Mo content ranges from 0.1 - 1% - outstanding. Sericite intensity has come up and is now weak and pervasive, silica has fallen to weak spotty, chlorite appears to dominant as moderately pervasive and white clays still replace remaining feldspars.																						
						It would appear that biotite is definitely developed, especially within the core of the section (are the fragments actually intense biotization?). Deeply contorted section. LC is gradational and is defined primarily by the nearly complete disappearance of these chloritic/biotized fragments.																						
177.45	177.45					Change from HQ to NQ																						
179.35	198.12	LC	60			<b>Feldspar Porphyry/Fragmental</b>																						
						Blue grey to green, generally mottled with rare coarse fragmental sections with igneous textures still intact becoming increasingly common dh. Minor smaller fragments near the UC are replaced with a soft brown clay or clay + biotite(?) which cease after 181m. Fresher fragments become increasingly common dh. Moderately hard. Minor veinlets with Mo = Py = dark grey Sx are common and can, rarely, exceed 2-3cm. Most of these are noted below. Trace carbonate in host past 188m. After 194m several grey quartz veins now host carbonate or pink carbonate in equal amounts - these veins are planar and sit at between 20 - 40 dTCA, contain trace Sx including Mo. Feldspars and frags are altered to white clay or to a light green clay, whereas the GM is generally altered to silica or a pale tan soft clay. Mo has decreased from previous section to 0.05% and appears as fg disseminated xtals, wisps in veins and along vein boundaries and as rare thin hairs. Py has increased to 2% and is now commonly rimmed by the black Sx mentioned previous - appears as 1mm disseminated clusters and primarily in the siliceous phase.																2						

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity											MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
New Nadina Explorations Limited							DDH #: 11S-13	UTM E (NAD 83): 650180	Target: B	Date Collared: Oct 6 2011							Logged By: J. Mark Ralph											
Silver Queen Property							Dip: -76.5 Az: 85	UTM N (NAD83): 5994662	Drill Number: 2	Date Completed: Oct 15 2011																		
Fall 2011							Total Depth: 777m	Elevation: 853m	Drill Contractor: Lone Peak Drilling	Date Logged: Oct 25 2011							Core size: HQ to 177.45, NQ2 after 177.45											
							Py is still common as hairs and veinlets that cut all other elements. Small black unknown Sx is still generally present in similar amounts as before and locally enriched. Feldspars can, at times, appear as cusped structures or atoll structures which places some uncertainty as to their affinity and relationship to the alteration (i.e. are they an alteration feature as opposed to a primary feature?).																					
182.2	182.3	Fault	30				Thin minor crush zone.																					
186.9	187.23	Vein	15				Unusual vein style - looks more like a micro breccia. Sx rich with Mo + Py + unknown																					
190.2	190.9	Vein	10				2-5cm wide low aTCA undulating banded vein rich in Py > Mo + unknown - appears very disrupted (?)																					
194.5	194.55	Vein	45				White carb > grey quartz vein - planar with trace Sx on margins.																					
196.75	197.06	Vein					Broken and disrupted, likely two veins intersecting. Pink carbonate + Py and grey quartz near LC																					
197.4	198.12	Fault	70				Moderately broken and crushed zone - significant change in alt/rx dh.																					
198.12	220.2	LC	50				<b>Feldspar Porphyry</b>																					
							Crowded porphyritic light greenish grey. Feldspars up to 8mm comprise between 30-40% of the core. Feldspars variably altered - weak white clay or light green to cream clay which changes to a weak carbonate alteration after ~ 200m, or relatively unaltered. Some sections show ghosted grains. Igneous textures are largely preserved except in areas with moderately silica flooding. Weak pervasive sericite and silica in the GM, trace carbonate in GM and increasingly common dh. Veining is minimal and generally limited to thin Py hairs and minor grey quartz veins. Mo has fallen off - still found as fg disseminated in host and along vein margins <0.01%. Black Sx is still apparent but also less common - 0.1%. Py is also down to 1% and found as fine disseminated within the GM (very little in feldspars) and is commonly rimmed by the black Sx mentioned previous, and as fine veins. Grey quartz has dropped to 1/2 the previous section and are generally less disrupted. LC may be a faulted.																					
203.35	203.48	Vein	50				Grey quartz + Py >> mo. Planar																					
203.9	204.55	Stwk					Variable orientations of veins - weak - polymetallic low aTCA vein cuts this interval, is highly disrupted and contains white quartz.																					
211.0	220.2						Significantly more disrupted than upper portion of unit.																					
217.55	217.7	Fault	80				Grey gouge within an intensely crushed zone. Minor narrow crushed seams between here and LC																					
220.2	220.85	LC	60				<b>Amygdaloidal Dike</b>																					
		Fol	75				Cream with a pinkish core and darker pink around one veinlet and near the UC and LC. Vein is banded dark pink with a sharp transition to a gradational change into the cream color (nice). Amygdules are elongate, siliceous with a minor amount of calcite and define a weak foliation. Calcite within GM is very weak. No Sx observed.																					
220.85	253.9	LC	20				<b>Feldspar Porphyry</b>																					
							Blue grey to greenish blue grey, hard, mottled. Feldspars appear to be as common as above section but here they are deeply eroded, or consumed by alteration. White clays have fallen off significantly and are now only apparent in rare localized patches. Weak patchy albite is now commonly seen especially toward the LC where it becomes moderately patchy. Silica has come up and is now dominant, pervasive and strong but decreases where albite is most intense. Weak to moderately patchy biotite and trace localized patchy k-spar within the silicified section. Gypsum veinlets are increasingly common especially within the core of the interval. One patch of epidote(?) was noted around 245.5m. 1-2cm grey quartz veins are not very common, contain minor Mo > Py and commonly sit @ 40 dTCA are planar yet often discontinuous. Low aTCA Py + gypsum + grey quartz + trace Mo lose their gypsum component toward the LC, are generally rare, cut larger higher aTCA 1-2 quartz veins and gypsum veinlets.																					
							One low angle patch or vein from 232.65 to 233.1m with disrupted magnetite fragments + Py + other(?) - golden stain on some portions of the Py (other Sx?). Moderate biotite around this vein. Also a patchy weak green feathery moderately soft mineral within host rock around this vein. Several hairline grey quartz + Cp +/- Py veinlets with a 1/2cm moderately hard halo with irregular contacts noted between 222 and 237m. Trace disseminated Mo, Mo in veins, and hairs of Mo - overall <0.01%. Minor Cp in veins and intergrown with Py in veins and lesser disseminated crystals. Py in veins and as disseminated - 1%. Other Sx? LC is relatively sharp and undulating.																					
222.0	237.0						Elevated Cp veinlets																					
232.65	233.1						Mag + Py + other patch/vein																					
239.0	240.5	Vein	5				Low aTCA 1-2cm Py vein																					
247.5	249.7	Vein	5				Low aTCA <1cm Py vein																					

FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity												MINERALIZATION (%)								
m	m						Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
New Nadina Explorations Limited Silver Queen Property Fall 2011						DDH #: 11S-13 Dip: -76.5 Az: 85 Total Depth: 777m	UTM E (NAD 83): 650180 UTM N (NAD83): 5994662 Elevation: 853m	Target: B Drill Number: 2 Drill Contractor: Lone Peak Drilling	Date Collared: Oct 6 2011 Date Completed: Oct 15 2011 Date Logged: Oct 25 2011	Logged By: J. Mark Ralph Core size: HQ to 177.45, NQ2 after 177.45																	
253.9	281.75	LC	60			<b>Dacitic Crystal Tuff - Feldspar+J176 Porphyry Dike?</b> Light green with the upper and lower sections being fg to aphanitic with phenocrysts of rounded Py up to 2mm likely replacing eroded feldspars and chlorite replaced rounded feldspars up to 2mm (sometimes with both). The core of this section is mg, generally porphyritic with two feldspars (1st likely albite up to 5mm, 2nd likely plag blades up to 3mm long), and crowded with feldspars making up to 70% of the rock. In the core, feldspars are altered to a green very soft clay - possibly Pyrophyllite, and slightly ghosted. Moderate pervasive sericite and weak selective to GM silica throughout. Minor sections up to 30cm within this unit are similar to upper unit and may represent a xenolith or be a result of an imbricated/parallel dike set and lay strictly in the upper 2m of this section and generally contact @ 40-55 dTCA. Minor dark bands sitting at 15 dTCA and increasing to 30 dTCA dh. Some of these bands contain thin 1mm Py veinlets. Also Py veinlets (~1/5m) up to 1mm @ 15 dTCA and increasing to 30 dTCA dh show no halo. Py as dark disseminated clusters up to 2mm throughout (1% overall) - may contain minor intergrown Cp.																					
						Local dark disseminated very vfg specks (<0.01) - affinity unknown. Weak fol @ 15 dTCA increasing to 30 dTCA dh. One 1/2 cm hard Hem + Py + calcite vein at 273.35m @ 35 dTCA (quite different then other veinlets and bands near here). Locally pitted. Rare narrow crush zones never more then 1cm wide with one exception - a weak broad broken clay filled zone between 271.85 and 272.35m with an apparent aTCA of 25. Two minor gypsum veinlets past 280m @ 30 dTCA with a slightly darker halo up to 3cm into host. LC is sharp and undulating.																					
281.75	302.0	LC	70			<b>Feldspar Porphyry</b> Greenish grey, hard, mottled. Feldspars appear to be deeply eroded, or consumed by alteration. Trace localized albite. Silica appears strong but the color of the core does not support this. Section is relatively hard. Weak to moderately patchy biotite and trace localized patchy k-spar. Gypsum veinlets are common throughout and form as thin erratic fracture fills - looks almost like the section was weakly fractured and infilled with gypsum. Trace Mo was observed in one of these veinlets - did it form here or was it picked up. 1-2cm grey quartz veins are not very common, contain minor Mo > Py, sit @ a variety of aTCA are generally planar yet often discontinuous. Low aTCA Py + other vein set has largely disappeared or changed? New vein type - 3-4cm wide 40 dTCA fluorite(?) Py + mo. Appears recrystallized and somewhat planar. Py forms a core with Mo disseminated throughout and rarely intergrown with Py. Vfg disseminated black or dark grey submetallic specks throughout section, but up to 3% over short intervals. Py = 2%, Mo = 0.01%, Cpy = 0.1%, black disseminated unknown = 1%.															2						
285.85	286.0	Vein	40			3-4cm wide 40 dTCA fluorite(?) Py + Mo. Recrystallized somewhat planar. Py forms a core with Mo disseminated throughout and rarely intergrown with Py.																					
293.35	294.1	UC	10			Polymictic breccia. No less then 6 different types of clasts ranging from angular to well rounded. These include but are not limited to 3cm polymic breccia with small clasts, 2-3mm aphanitic tan rounded clasts, 3-6mm sub rounded Py + other Sx clasts, 1 X 3cm laminated dark clast. Matrix supported. Matrix is rich in Sx including Cp. Sharp UC @ 10 dTCA and LC @ 15 dTCA.																					
293.35	294.1	LC	15			LC to upper Breccia.																					
302.0	307.0	LC				<b>Amygdaloidal Dike</b>																					
302.0	307.0	fol	25			Dark pink with tan patches and bands near contacts and around veins. 1-4mm white to cream amygdules, often with a clear gypsum core and a carbonate rim make up 5% of the section, are often flattened and appear to define a weak foliation. Also present are small (<1mm) irregular soft green clasts. No Py. Bands tend to be erratic in orientation. Foliation also appears somewhat erratic but tends from 5 to 40 dTCA.																					
307.0	330.55	LC	45			<b>Feldspar Porphyry</b> Grey to blue grey, mottled, broken. Generally igneous textures are destroyed. Progressively more broken dh until at the LC the unit is deeply crushed and pulverized. Alteration includes patchy moderate silicification, local selective pale green clay replacing feldspars, white clays around structure and as fracture fills, weak localized gypsum veinlets. Trace disseminated Mo and Mo within veinlets. Mo = 0.01%. Py as fragments, disseminated, wisps and veinlets - Py up to 2%. Grey quartz veinlets have largely disappeared, only thin rare hairs remain. Some of the vfg disseminated black unknown Sx has been identified as hem - this may hold for much of the UH material too fine to test. Generally very similar to previous feldspar porphyry section. Several Py veins below the dike mentioned in this section - many of which contain variable amounts of fluorite and Mo.															2						
320.83	321.2	LC	15			<b>Amygdaloidal Dike</b>																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity											MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
							Dull green, aphanitic, trace amygdules. No patches like other dikes of this type. Minor gypsum veinlets. No Sx. Dark brown hard opaque layer in host UH and DH from dike - not quartz.															0						
323.43	324.65	LC	30				<b>Fragmental Dike</b> Grey green - diff then all other units seen so far. Appears to contain small 1-3mm phenocrysts of variable types - angular to rounded - at least 4 diff lithotypes. Aphanitic near contacts (chill margin?). Pheno make this appear like a porphyry - but more like a fragmental tuff. Pheno's are chlorite altered. Disseminated Py throughout GM and lesser in pheno's. Minor hairs of Py @ 30 dTCA. Weak pervasive sericite, and chlorite. Intense cataclasis?																					
330.55	335.35						<b>Hornblende - plagioclase phyric Porphyry Dike</b> Grey green - Similar to dike seen immediately UH from here. Appears to contain small 1-3mm phenocrysts of variable types - angular to rounded - all chlorite altered. Also, locally packed with vfg chlorite altered blades. Aphanitic near contacts (chill margin?) and in variable sections throughout. Phenocrysts make this appear like a porphyry - but rounded phenocrysts give this unit an appearance more like a fragmental tuff. Weak to well developed patchy brecciation from 331.55 to 335.35m. Spotty, disseminated Py throughout GM and lesser in pheno's. Minor hairs of Py @ 30 dTCA. Weak to moderately pervasive sericite, and chlorite.																					
330.55	335.35	veinlets	30																									
335.35	337.75	LC	30				<b>Mafic Dike</b> Dark grey, fg to vfg - porphyritic. Pheno's include fg brownish black 1mm biotite, and fg white subrounded phenocrysts. Trace disseminated Py in vfg shotgun clusters. Moderately magnetic. This Dike appears to cut the UH and DH dike which is likely the same unit.																					
337.75	340.9	LC	30				<b>Hbl-plag phyric Porphyry Dike</b> Grey green - similar to dike seen immediately UH from the mafic dike except less altered, and not brecciated. Appears to contain small 1-2mm phenocrysts of variable types - angular to rounded - all chlorite altered in the first 50cm. Below here phenocrysts are small, 2-4mm, euhedral, show good cleavage, and are sometime poikilitic. Becomes mottled after 338m. Likely porphyritic. Trace disseminated vfg hem. Slight pinkish hue in GM (k-spar?). Trace Py.																					
340.9	343.65	LC	65				<b>Feldspar Porphyry</b> Grey, porphyritic, brecciated. Fragments of Py. Well developed stwk. Massive low aTCA Py vein + fluorite appears broken and discontinuous. Feldspars altered to white clay. Trace Mo with Py vein and as thin wisps, locally disseminated = 0.01%. This narrow section is bound by two dikes. Localized moderately patchy biotite. Trace sericite.																					
343.65	346.85	LC	50				<b>Amygdaloidal Dike</b> Dark pink with tan patches near UC and LC. Significant hard white amygdules within darker portions - generally rounded very little flattening as observed in other Amyg dikes. Minor low aTCA carb veinlets. Thin low aTCA quartz with a minor tan halo. No Py or Sx observed. Upper 40cm appears laminated.																					
346.85	356.8	LC	25				<b>Feldspar Porphyry</b> Soft light green phenocrysts in a blue grey matrix. Rare white moderately soft phenocrysts. Weakly mottled, locally intense igneous texture destruction. Phenocrysts are generally eroded. Phenocrysts make up 40% of the rock mass. Weak pervasive silicification, trace pervasive sericite, possible selective intense pyrophyllite alteration of feldspars. Veinlets of grey quartz are common, generally at a very low aTCA, are convoluted and locally broken, imbricated and/or discontinuous, contain variable amounts of Mo with lesser Py. Another set of Py rich veinlets (<=1mm of Py) also at a low aTCA commonly contain a siliceous halo and rarely contain fg intergrown Cp. Possible Mo in these veinlets. A third grey quartz vein set is very rare, often between 70 and 80 dTCA, are cut by the two previous sets. This set often contains fg disseminated Cp at the intersections of the low aTCA quartz veins and rare disseminated Py throughout. Finally gypsum veinlets (<1% of volume) cut all other elements, are generally barren, sometimes form floods, and have erratic aTCA. Pitted after 355m.															0.5	1					
							Mo is weakly disseminated throughout (<0.01% tot), Py is moderately disseminated throughout as disseminated crystals - 0.5% and as veinlets and hairs and wisps - 1%. Py becomes significantly more concentrated after 355.4m and begins to form large interstitial patches and thick 1-2cm veins. Cp is most common in the aforementioned veins and is rarely disseminated (<0.1% total).																					

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
New Nadina Explorations Limited DDH #: 11S-13 UTM E (NAD 83): 650180 Target: B Date Collared: Oct 6 2011 Logged By: J. Mark Ralph																												
Silver Queen Property Dip: -76.5 Az: 85 UTM N (NAD83): 5994662 Drill Number: 2 Date Completed: Oct 15 2011																												
Fall 2011 Total Depth: 777m Elevation: 853m Drill Contractor: Lone Peak Drilling Date Logged: Oct 25 2011 Core size: HQ to 177.45, NQ2 after 177.45																												
356.8	357.75	LC	30				<b>Mafic Dike</b>																					
356.8	357.75	fol	15				Dark green phaneritic with rare elongate rounded white carbonate amygdules up to 4mm. One of these contains a hematitic ring within. Vfg chlorite replaced Hornblende(?). Disseminated magnetite, and chlorite replaced round phenocrysts all <1mm in a very fg chlorite altered GM. Barren. Weak foliation @ 15-20 dTCA. Soft.																					
357.75	407.7						<b>Feldspar Porphyry</b>																					
							Pale green, porphyritic, mottled generally moderately soft. Feldspars up to 1/2 cm are generally deeply eroded, ghosted and/or locally destroyed. Feldspars tend to be green, or zoned with a green core and a white rim all soft and become completely green toward LC. Finer grained crystals include small pale green blades and silky white blades with a perfect cleavage in one direction - rare. Appears almost recrystallized. Weak patchy color, but generally very homogeneous. Rare veins of Py which appear broken or brecciated and infilled with a hard dark brown material (not magnetic) sometimes with sphalerite - typically @ 15 to 20 dTCA. Also rare gypsum veinlets at all aTCA make up <1% of core. Disseminated black mineral is, in some cases, hematite, and in others - unknown. 0.1% of each. Py generally appears as interstitial growths up to 3mm, is locally very rich, and rarely appears within phenocrysts (although it does look like it completely replaces them in narrow sections). Several narrow feldspar Porphyry dikes - see below. Weak pervasive chlorite, white clays, sericite. Trace silica.																					
365.9	366.2	Vein	20				Py + hard dark brown/black material (not quartz not mag).																					
368.95	369.3						Enriched Py section																					
372.4	372.6						Enriched Py section																					
378.7	379.85	Vein	15				Convoluted, broken gypsum > quartz = Py +/- sp vein undulating between 0 and 20 dTCA. Possible Cp.																					
381.2	382.1	UC	30				Dike - feldspars Porphyry with 5cm - 20 cm chill margin. Very similar to host except - exotic grains with perfect cleavage and white silky sheen are twice as large, darker overall, higher chlorite alt, no clays, smaller phenocrysts. Note similar 10cm dike ~ 1m dh from here.																					
382.1	382.1	LC	50				LC for dike																					
383.0	384.0	Vein	10				Convoluted, broken gypsum > quartz = Py +/- Sp vein undulating between 0 and 20 dTCA. Possible Cp.																					
387.0	388.55	Vein	10				Convoluted, broken gypsum > quartz = Py +/- Sp vein undulating between 0 and 20 dTCA. Possible Cp. Locally brecciated in FW and forms the UC of a dike - feldspar porphyry with 5cm - 20 cm chill margin. Very similar to host except - exotic grains with perfect cleavage and white silky sheen are twice as large, darker overall, higher chlorite alt, no clays, smaller phenocrysts.																					
387.5	387.5	UC	10				UC for Dike																					
388.55	388.55	LC	50				LC for dike																					
392.0	392.0	Fol	60				Weak fol																					
394.5	395.7						Enriched Py section																					
399.3	399.4	Vein	20				Convoluted, broken gypsum > quartz = Py +/- Sp vein undulating between 15 and 25 dTCA. Possible Cp.																					
401.6	401.7	Vein	25				Convoluted, broken gypsum > quartz = Py +/- Sp vein undulating between 20 and 300 dTCA. Possible Cp.																					
407.15	407.7	Vein	30				Convoluted, broken gypsum > quartz = Py +/- Sp vein undulating between 25 and 35 dTCA. Possible Cp.																					
407.7	419.25	LC	15				<b>Feldspar Porphyry</b>																					
							Green, dark green, with lesser blue green - grey green sections. Porphyritic with lesser equigranular sections or patches. Porphyritic texture is highly variable and is unlike other Porphyry seen in this hole - perhaps similar to some sections closer to here and UH. Textures range from coarse grained 1/2cm feldspars with irregular crystal faces (alteration erosion?) with smaller bladed phenocrysts in an aphanitic to mgr GM to angular 2-3mm phenocrysts of almost entirely the same size again in an aphanitic GM. Second phase almost appears fragmental. Alteration styles also change between these phases with the 1st exhibiting soft white to light green clay alteration of feldspar phenocrysts. 2nd texture is almost exclusively alt to a darker green soft clay. Some phenocrysts are rimmed - often with a light green core with a darker green rim. These changes make the core look patchy or locally banded. The second texture is dominant - >70%. Could the larger phenocrysts be albitization retrograded to clay? Small localized patches have undergone complete igneous textural destruction.																					

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New Nadina Explorations Limited							DDH #: 11S-13	UTM E (NAD 83): 650180	Target: B	Date Collared: Oct 6 2011							Logged By: J. Mark Ralph												
Silver Queen Property							Dip: -76.5 Az: 85	UTM N (NAD83): 5994662	Drill Number: 2	Date Completed: Oct 15 2011																			
Fall 2011							Total Depth: 777m	Elevation: 853m	Drill Contractor: Lone Peak Drilling	Date Logged: Oct 25 2011							Core size: HQ to 177.45, NQ2 after 177.45												
							Moderately pervasive epidote toward the LC and possibly within the GM in the upper section. Weak very localized silica. Moderately to strong, selective to feldspar chlorite alteration. Weak to moderately selective clay alteration of feldspars. Trace fg disseminated specular hematite specks. Rare incidental clasts(?) sometimes cut and offset by micro fractures. Several hairline Py veinlets with an irregular dark halo up to 3mm into host. Rare polymetallic veins with Py + Sp + hard dark brown/black material + trace Sp + broken gypsum @ 10 dTCA. Minor gypsum veinlets @ a variety of aTCA - increasing towards LC. Rare narrow polymetallic breccia similar to aforementioned polymetallic veins. Py is common as fragments(?) or as replacements of angular crystals (1%) and can, at times, be rimmed with hematite. Less common as a vfg to fg disseminated variety which generally does not appear in feldspars except towards LC (0.5%). Rare Py veinlets and hairs (0.1%). LC appears sharp.																						
410.7	410.9	Vein	15				Polymetallic vein with dark halo.																						
413.8	414.2						Narrow irregular crush + gouge zone.																						
414.3	414.5	Vein	15				Polymetallic vein with dark halo.																						
419.25	438.7						<b>Feldspar Porphyry/Dike Swarm</b>																						
							Pale green, porphyritic with an aphanitic groundmass with vfg hairs/blades of a pale cream mineral. Could this be a dike swarm or an unusual alteration facies within the feldspar porphyry. Phenocrysts include a green hexagonal 3-7mm x 2-3mm soft white streak mineral - possibly altered beryl or apatite? (3%), rounded dark grey hard 2-3mm frags/crystals (quartz eyes?), soft pink granular 1mm specks (rhodochrosite?) (1%), vfg disseminated hem (<0.1%), angular to sometimes square on the cored surface hard 2-3mm crystals increasing dh (2%) and possibly others. Locally foliated or laminated (see below). Local crenulated cleavage (see below). Multiple contacts within this feldspar porphyry - could these be alteration fronts, or could this be a convoluted dike swarm thru the feldspar porphyry with the upper portion of this section being that of the primary dike material only?																						
							Py is rare and generally only appears as super fg <<1mm bright euhedral crystals (0.1%) or within the GM of the feldspar porphyry as clusters of dark Py and rarely as Py => intergrown Cp up to 3mm (3% within the dike, material 0.5% overall) and as rare hairs and veinlets (0.1%) often with dark halos or intergrown Cp>Py as 1-3mm veinlets @ 10-15 dTCA (0.5% Cp + Py) or Py>>Cp @ 20-35 dTCA (0.1%) with halos up to 3cm into the host. No Mo observed. K-spar was noted as rims around feldspars within the feldspar porphyry and as a weak pervasive overprint within the feldspar porphyry. The 'dike' material phenocrysts are selectively pervasively moderately altered to chlorite. Also noted within the dike material is a moderate pervasive epidote(?) alteration to the GM. Lower contact is gradational and was chosen to show the major transition to a pure feldspar porphyry.																						
420.8	432.0						Enriched Cp in veins and as fg disseminated specks.																						
424.3	425.6	Fol	20				Weak fol or laminations																						
427.7	430.0	Cleavag	35				Crenulated cleavage and cleavage // contacts.																						
438.7	478.5						<b>Feldspar Porphyry</b>																						
							Green with a pink hue to pale green with a fleshy hue - porphyritic, locally mottled. Igneous textures are evident but generally eroded to locally destroyed especially around grey bands and veins with halos (see below). Phenocrysts of feldspars up to 1cm, locally crowded with phenocrysts. GM has been moderately to strongly pervasively altered to a hard cream to pale green facies (possibly albite) the locally overprinted by a moderately hard off pink alteration mineral (weak pervasive k-spar?). Phenocrysts are commonly rimmed with clay and are generally completely altered to a soft green silky facies (chlorite???) or soft cream clays or pale white poikilitic soft clays or rarely, but over significant sections, k-spar. Generally appears consistent but shows great variety within phenocrysts - i.e. patchy phenocrysts alteration. Py resides almost exclusively in the GM or along grain boundaries as fg disseminates or clusters of fg disseminated (0.5%) crystals. Less commonly appears as veinlets with thin halos (often soft and dark grey but also dark grey and hard) up to 1/2cm in GM (0.1%) which increases dh to over 3cm.																						
							These thicker halos often contain white clay altered feldspar phenocrysts. Cp appears within 1-2mm veinlets generally @ 25 dTCA with a dark halo up to 3cm into GM - Near UC these veinlets are Cp>Py which change to Py>Cp dh and becomes rare after 443m. Possible trace amounts disseminated in GM. Overall 0.1%. Mo is rare and was only noted in very isolated places and appears associated with Cp. Overall <0.01%. fine disseminated black specks throughout may be hematite but some may be super fine Mo - 0.1%. Trace gypsum veinlets. LC is gradational and defined by the re-emergence of cream feldspars and an overall change in the overall color - less pink.																						
438.7	442.2						3 veinlets with Cp + Py or Py + Cp and a 3cm halo. Seems like halo is required to produce Cp.																						
444.0	444.55						Amygdaloidal Dike																						



FROM		TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)											
m		m					Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other			
New Nadina Explorations Limited Silver Queen Property Fall 2011						DDH #: 11S-13 Dip: -76.5 Az: 85 Total Depth: 777m	UTM E (NAD 83): 650180 UTM N (NAD83): 5994662 Elevation: 853m	Target: B Drill Number: 2 Drill Contractor: Lone Peak Drilling	Date Collared: Oct 6 2011 Date Completed: Oct 15 2011 Date Logged: Oct 25 2011	Logged By: J. Mark Ralph Core size: HQ to 177.45, NQ2 after 177.45																		
478.5	490.75	Veins	15			<b>Feldspar Porphyry</b> Green grey to grey. Porphyritic with phenocrysts of feldspars up to 1/2cm amongst 1-3mm feldspars in an aphanitic GM. Feldspars are variably altered to cream or green clays and at times contain a red hematite spot within the core. Often zoned and/or rimmed with more intense clay alt. Phenocrysts never contain Sx. GM is generally green to fleshy colored with a patchy pink hue. Moderately hard. Likely a weak pervasive albitization with a weak patchy k-spar overprint. Py disseminated in GM as brassy fg specks and clusters, sometimes takes on a deeper color or even appears slightly green (Cp?) - these hues are never very abundant (1%). Py also appears as thin veinlets 1-5mm wide with a significant 2-4cm dark envelope which is hard, likely siliceous, contain up to 5x the interval average of Py and contains feldspars altered to a brittle white clay (0.1%). Larger Py veins can contain minor gypsum. Veins and veinlets sit between 5 and 20 dTCA and rarely up to 45 dTCA. One hair line contains weak mag. LC is gradational.																						
490.75	508.8	LC	25			<b>Feldspar Porphyry</b> Blue grey to with patchy bleached sections. Generally porphyritic - where not section has undergone complete destruction of igneous textures. With the exception of two small intervals all phenocrysts have undergone significant to intense erosion and are altered to a green clay. Silicification is way up and is now moderately patchy and pervasive to intense and pervasive and is the main alteration product in the GM. Dark grey quartz veins are common between 504m and LC and consist of broken vein fragments, continuous 2-3cm veins, and minor veinlets - these veins and vein fragments are cut by the major Py veins in this interval. Weak pervasive sericite. Py is very common as individual disseminations, clusters, and rims around feldspars (5%). Rarely within feldspars. Also as wisps and veinlets and lesser veins with lesser gypsum between 506m and LC (1%). Cp may be present as vfg disseminations but is generally very rare (<0.1%). Mo appears as rare disseminations and within some veins (<0.01%) especially within dark grey quartz. From 503m to LC section is broken or brecciated and healed, and contains minor convoluted gypsum veinlets. Evidence of minor dikes from 503 to 506m. LC is sharp.															5							
508.8	517.7	fol	30			<b>Amygdaloidal Dike</b> Dark purple with tan sections around contacts and veins. Amygdules are relatively sparse, cored with a light green clay and rimmed with a lighter green clay - this has not been noted before. Upper 20cm is laminated and convoluted and contains small xeno of host. GM contains abundant (5%) vfg white needles <0.1x3mm - also has not been seen before. These phenocrysts define a variable foliation ranging from 20 to 40 dTCA. LC is wildly undulating. Veinlets are white 1mm erratic and contain minor carbonate and major white quartz.																						
517.7	567.68					<b>Feldspar Porphyry - biotite/k-spar alt zone - FPBK</b> Blue grey to light blue with dark brown, purple and salmon pink patches. The UC consists of a 40cm wide breccia, of which the LC is lost. Moderately pervasive silicification with localized patchy brown biotite overprint and a lesser patchy salmon pink k-spar overprint. Locally bleached and altered to clay in narrow zones. Biotite and k-spar overprint has a blocky to banded texture where veins have cut the host. Several veining events imparting a complex cross cutting pattern 1st - 1-3cm grey quartz veins +/- Py +/- Mo. 2nd - Fluorite + Mo veins exhibit a crystalline appearance with patches and disseminated Mo. Almost all purple patches contain both species in various amounts. Often convoluted discontinuous, broken and cut by Sx veins. 3rd - grey quartz + Py +/- Cp with a broad bleached soft envelope. This set cuts all other elements. Alteration changes dh - biotite decreases and becomes patchy, k-spar becomes dominant then it to decreases and becomes patchy. Overall Mo = 0.1%, Cp 0.1% and Py 2-3%.																3						
517.7	518.1					The UC consists of a 40cm wide breccia, LC is lost - BX consists of fragments of what appears to be a polymictic composition but may in fact be variably altered feldspar porphyry. Fragments often form a jig saw fit but can also be jumbled. Fragments are generally angular but smaller fragments are rounded. Dense with Sx including Cp and Mo. Py as dark green fragments and disseminations, Cp as fragments and rare disseminations and Mo as fragments. Somewhat similar to BX noted UH.																						
567.68	644.4					<b>Feldspar Porphyry - k-spar alt/biotite zone - FPKB</b>																						

FROM	TO	STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)											
m	m					Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other			
					Blue grey to light blue with pink to salmon pink overprint with localized brown patches. A broad pink hue with localized patchy brown biotite overprint. Locally bleached and altered to clay in narrow zones but far less so then previous section. Biotite and k-spar over print has a blocky to banded texture where veins have cut the host and is far less common then previous interval. Several veining events are less intense then previous section and locally impart a complex cross cutting pattern - These veins include 1st - 1-3cm grey quartz veins +/- Py +/- Mo, 2nd - Fluorite + Mo veins - crystalline appearance with purple patches and disseminated Mo. Almost all purple patches contain both species in various amounts. Generally less broken and cut by Sx veins then previous section. And 3rd - grey quartz + Py +/- Cp with a broad bleached soft envelope. This set cuts all other elements. Finally, minor gypsum veinlets cuts all other elements. Overall Mo = 0.05%, Cp 0.1-0.5% Py 2%.															2							
644.4	660.0	LC	20		<b>Feldspar Porphyry</b>																						
					Blue grey to grey with a greenish tint. Porphyritic. Pink and brown overprint has suddenly become weak and destruction of igneous textures has weakened, however feldspars are still eroded and sometimes ghosted. Phenocrysts of feldspars up to 1/2 cm are once again abundant and make up ~ 30-40% of the core, are generally cream to pale green in color and moderately hard. Rare 1x3mm chlorite replaced blades. UC appears to be a low aTCA line - not a fault - the only defining feature is a sharp alteration front @ 10 dTCA. Feldspar phenocrysts above this line generally do not exist whereas dh from this line are the main textural feature in the core. This interval appears to be moderately pervasive silicified with a weak pervasive sericite overprint. Locally this interval is albitized. Locally this interval may display a spotty weak k-spar and biotite alteration. Rare localize square black biotite (soft perfect cleavage with a brown streak) replaced phenocrysts were noted. Veining includes 1-2cm grey quartz + Mo @ 45 dTCA, 1-2mm grey quartz + Mo @ 70 dTCA, convoluted grey quartz + Py + Mo @ a variety of low aTCA, rare 2-3mm Py + trace quartz @ 30 dTCA.																1	0.5					
					Finally a 3cm thick fluorite + white quartz + Py vein appears just above the LC @ 20 dTCA and contains minor Mo + trace sphalerite on the LC. The re-emergence of biotite and rare k-spar following a narrow fault define the LC @ 660m. Overall Mo as fg disseminated crystals in host = 0.01% and disseminated within veins and hairs = 0.01%. Cp is commonly associated with disseminated Mo and grades to 0.05% and locally up to 1% over short intervals. Py is generally low, as disseminated crystals - 1% and rare hairs, veinlets and veins 0.5%.																						
659.8	660.0	Vein	30		White quartz + fluorite + Mo + sphalerite vein.																						
660.0	660.55	Fault	20		10cm broken gouge rich zone.																						
660.0	728.9				<b>Feldspar Porphyry</b>																						
					Blue grey to grey with a pinkish to purplish hue. Porphyritic. GM is now distinctly more pinkish then the previous section with a more prominent purple in some locations, especially below 708m. Feldspars are still eroded and sometimes ghosted, perhaps slightly more then prev. Pheno of feldspars up to 1/2 cm are abundant and make up ~ 30-40% of the core, are generally cream with a tan rim or cream with a pink rim or tan with a pink rim. Variation in this alteration is subtle and very spotty. Feldspars remain moderately hard. Rare small (<15cm) patches, generally around Py + quartz veins, contain a hard white feldspars which commonly appears broken due to alteration. Likely albitized. Rare 1x3mm chlorite replaced blades were not observed. UC appears to be a low aTCA line - not a fault - the only defining feature is a sharp alteration front @ 10 dTCA. Feldspar phenocrysts below this line generally do not exist whereas uh from this line feldspars have be largely destroyed. This interval appears to be weakly to moderately pervasive silicified with trace pervasive sericite and is rarely locally albitized.																						
					This interval may display a weak to moderately pervasive k-spar alteration (but may be relic primary k-spar?) with a spotty moderately selective k-spar reaction rims to feldspars. Biotite alteration remains rare, patchy and weak. Localized square black biotite (soft perfect cleavage with a brown streak) replaced phenocrysts were noted (wolframite(?)), are more common then previous section and appear to be randomly concentrated.																						
660.0	728.9	vein	15		Veining: Veining within this section is weak to moderate with fluorite which makes up the bulk of the vein material. Fluorite veins are generally sitting @ 5 to 25 dTCA with minor variations up to 90 dTCA. The thicker veins tend to have a lower aTCA. These veins range from 3cm for the low aTCA sets to 2mm for the higher aTCA sets. There is often some fluorite flooding into the GM around these veins. Veining increases in density past 704m but never exceeds more then 10% of the core. Mo is always associated with fluorite veins and floods and appears as perfect euhedral grains or masses within the veins and floods and within the GM immediately around the veins. Mo also appears well away from any fluorite veins however it's impossible to determine if any fluorite veins were near within the wall of the drill hole. Cp is also strongly associated with fluorite and appears both within the veins and within the GM near the veins. Cp may be more constrained. Opal was noted within one of these veins. Fluorite veins almost always appear sugary and are rarely planar, often being somewhat convoluted and imbricated.																						
					Some fluorite veins, especially after 704m, contain up to 40% Py. Mo hairs and minor veinlets commonly emanate from these veins.																						

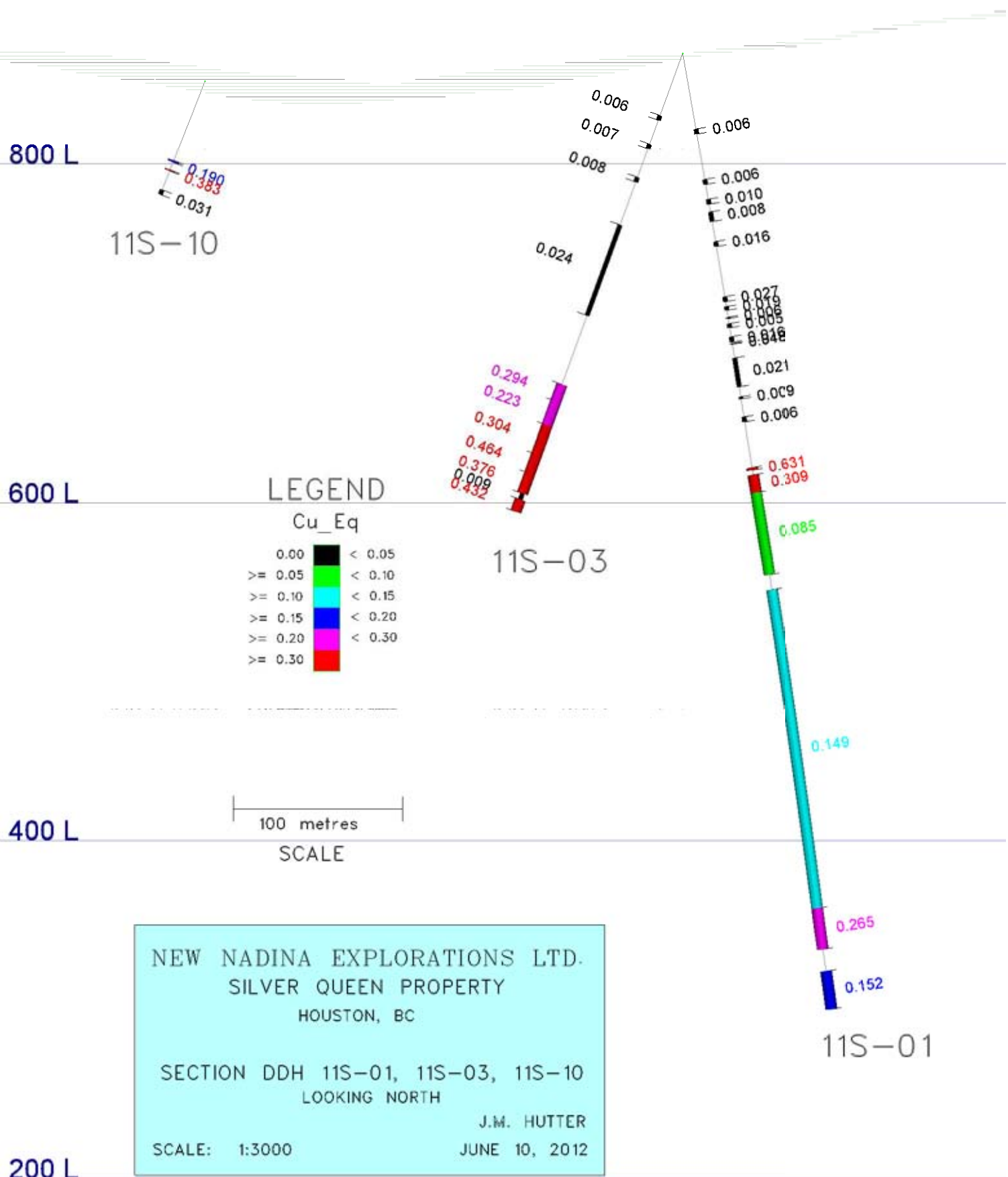
FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity										MINERALIZATION (%)												
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other				
New Nadina Explorations Limited Silver Queen Property Fall 2011							DDH #: 11S-13 Dip: -76.5 Az: 85 Total Depth: 777m	UTM E (NAD 83): 650180 UTM N (NAD83): 5994662 Elevation: 853m	Target: B Drill Number: 2 Drill Contractor: Lone Peak Drilling	Date Collared: Oct 6 2011 Date Completed: Oct 15 2011 Date Logged: Oct 25 2011							Logged By: J. Mark Ralph Core size: HQ to 177.45, NQ2 after 177.45													
660.0	728.9	vein	30				Veining: The other dominant vein type consists of 1-3mm grey quartz commonly @ 20-40 dTCA. +/- Py sometimes with irregular contacts.																							
							Veining: Sulphide dominant hairs, veins and patches - mostly Py with minor quartz and minor MO. Often with a bleached halo.																							
							Mineralization: Overall this section is well mineralized with Mo and moderately mineralized with Cp. Mo sits primarily within FI veins, FI vein walls, within and near FI floods and as minor thin hairs of Mo emanating from FI veins and floods and, to a lesser extent, as disseminated crystals within the GM of the host, especially near the FI veins. Cp is also found with the FI veins, floods and within the GM of the host as disseminated fg crystals and rarely as discontinuous hairs. Cp does not form veins. Overall Mo = 0.1% with local variation of 0.01-0.5%. Overall Cp = <0.1% - 0.5% with local variations up to 1% over 1/2m. Py is seen as fg disseminated clusters, hairs and wisps interstitial to the feldspars within the GM up to 1%. Less common as disseminated, clots and veins within the FI veins = 0.5%. Finally as discrete Py veins = 0.5%. One grain of bornite was noted @ ~685m intergrown with Cp. Other Sx were not observed but XRF data suggests W, Zn and Ge - species unknown.																1.5	0.5						
680.6	680.8	Fault	35				Two narrow (2cm) crush plus gouge zones with a thin gypsum vein.																							
705.0	708.3						Section of higher veining and a low aTCA FI vein - super high grade.																							
708.3	728.9						Higher than average veining for section.																							
728.9	738.0						<b>Feldspar Porphyry</b>																							
							Blue grey, purple grey with pink, brown and off white patches. Locally mottled. Moderately hard to hard. Porphyritic texture is only rarely apparent as almost all of the feldspars phenocrysts have been destroyed. Alteration fronts are sharp to soft and ghosted, erratic to planar, and generally complex. Locally exhibits a weak stwk texture, brecciated texture, and/or convoluted and disrupted texture. Appears to grade from an intensely silicified section to a silicified section with a k-spar over print to a mix of k-spar/biotite/fluorite alteration. Except for the silica (which appears to be moderate to strong and pervasive) this section exhibits a broad suite of patchy weak to strong k-spar > biotite with lesser patchy weak to moderate albite.																							
							Veining: Grey quartz is generally planar and rarely contains Sx and when it does it's primarily Py and, in some cases appears to have mobilized into the vein during a later event. Grey quartz is erratic in its aTCA and often forms a very weak stwk (5-10%). Fluorite is also erratic, up to 3cm across, less abundant than the grey quartz, mineralized with disseminated Mo and rare clots of Mo, plus lesser Cp as disseminated crystals. Fluorite also floods the surrounding GM which in turn is also mineralized. Fluorite veins are generally not found with grey quartz veins so cross cutting could not be established. Sx veins are erratic but generally sit between 5 and 30 dTCA (rare higher angles) are no more than 3mm wide (except one - see below), cut the grey quartz, may cut the Fluorite veins but may also be contemporaneous. Sx veins contain Py > Cp. Locally these veins have flooded the GM with abundant Py (see below). Note one vein @ 732.5m appears to have a Fluorite vein and a Grey quartz vein // to one another.																							
							Mineralization: Disseminated Py from 2% to 4% over narrow intervals. Common as wisps and veinlets and lesser veins commonly at 10 dTCA but can be higher. Cp is commonly disseminated and often intergrown with Py. (0.5% overall with rare 1% narrow <0.5m intervals). Mo is commonly weakly disseminated and within quartz and/or fluorite veins. Weaker than other sections noted to date. Likely < 0.1% overall but may be as high as 0.1% in some intervals. Unevenly distributed. W, and Zn were detected with the XRF but not observed in core.																	3						
728.9	729.0	Vein	15				Significant increase in Py veining and Py +/- Cp within GM. Somewhat softer than other intervals in this section.																							
729.5	729.55	Vein	80				90% Sx (Py - possible other) with grey quartz and minor Mo in quartz.																							
738.0	756.0						<b>Feldspar Porphyry</b>																							
							Dull pink with purplish patches with minor dull greenish grey intervals. Locally mottled. Porphyritic. GM is distinctly more pinkish than the previous section. Feldspars are still eroded and sometimes ghosted and remain very distinct throughout. Phenocrysts of feldspars up to 1/2 cm are abundant and make up ~ 30-40% of the core, are generally a lighter dull pink than the GM to with rare sections of creamy colored or white phenocrysts. Trace 1-3mm spots with gradational boundaries of deep salmon pink alteration within the GM. Phenocrysts are barely zoned. Variation in this alteration suite is subtle and very spotty. Feldspars remain moderately hard. Rare small (<5cm) patches, generally around Py + quartz veins, contain a moderately soft white feldspars which commonly appears broken due to alteration. Likely kaolinized (similar to 2 sections above in appearance but softer). UC appears to be a low aTCA line - not a fault - the only defining feature is a sharp alteration front @ 10 dTCA. Feldspar phenocrysts above this line generally do not exist whereas below from this line feldspars remain largely intact.																							

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity											MINERALIZATION (%)										
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other			
							This interval appears to be weakly silicified with trace white feathery vfgr overprinting mineral and is rarely locally albitized. The primary alteration facies appears to be a broad pervasive moderately to locally strong k-spar alteration ([perhaps with some relic k-spar(?) in GM with a spotty moderately selective pervasive k-spar alteration of feldspars. Biotite alteration remains rare, patchy and weak but can be moderately intense in very narrow intervals. Localized square black biotite (soft perfect cleavage with a brown streak) replaced phenocrysts were noted (illmenite?), are more common then previous section and appear to be randomly concentrated.																						
							Veining: Veining within this section is weak to moderate with fluorite making up the bulk of the vein material. Fluorite veins are generally sitting @ 40 to 50 dTCA with minor variations at all but the lowest orientations. The thicker veins tend to have a 40-50 dTCA attitude. This is somewhat different then the interval 2 sections above. These veins range from 3cm for the 40-50 dTCA sets to 2mm for the highly variable aTCA sets. There is rarely any fluorite flooding into the GM around these veins. Fluorite veining never exceeds more then 5% of the core. Mo is always associated with Fluorite veins and rarely appears as perfect euhedral grains - more often as masses within the veins and GM. Mo also appears well away from any Fluorite veins however it's impossible to determine if any Fluorite veins were near by within the wall of the drill hole. Cp is also strongly associated with Fluorite and appears both within the veins and within the GM near the veins. Cp may be less constrained and more abundant then the interval 2 sections above.																						
							Fluorite veins almost always appear sugary and are often planar (especially thicker veins) but can also appear somewhat convoluted and imbricated. Some Fluorite veins rarely contain Py. Mo hairs and minor veinlets commonly emanate from these Fluorite veins.																						
							Veining: The other dominant vein type, but far less common then Fluorite veins, consists of 1-3mm light grey to grey quartz commonly @ 50-80 dTCA (especially the thicker sets) and rarely at a variety of other aTCA. +/- Py sometimes with irregular contacts.																						
							Veining: Sulphide dominant hairs, veins and patches - mostly Py +/- Cp with minor quartz and minor Mo. Significantly more Cp then interval 2 sections above. Often with a bleached halo.																						
							Mineralization: Overall this section is moderately mineralized with Mo and well mineralized with Cp. Mo sits primarily within Fluorite veins, and within Fluorite vein walls and as minor thin hairs of Mo emanating from Fluorite veins. Less commonly appears as disseminated crystals within the GM of the host. Cp is also found within the Fluorite veins and within the GM of the host as disseminated fg crystals and rarely as discontinuous hairs. Cp does not form veins. This is the richest section of Cp noted yet. Overall Mo = 0.05% with local variation of 0.01-0.5%. Overall Cp >0.1% and may even exceed 0.5% Local variations up to 1% over 1/2m were noted. Py is seen as fg disseminations, clusters, hairs and wisps interstitial to the feldspars and within the GM up to 0.5%. Less common as disseminated, clots and veins within the Fluorite veins = 0.1%. Finally as discrete Py veins = 0.5%. Py:Cp is approaching 1.																0.5						
756.0	777.0						<b>Feldspar Porphyry - K-spar/Biotite alt zone - FPKB</b>																						
							Brown, pink, bluish white patches and bands. Locally mottled. Locally bleached. Igneous textures are largely destroyed with small 5-10cm patches of deeply eroded feldspars still evident. Biotite common as small isolated patches, replacement after feldspars, and broad weak pervasive overprints. K-spar generally as broad pervasive selective to feldspars and moderately pervasive to GM. Bluish white bands and patches related to veining and far more common then previous few sections. Changes in alteration are often sharp for biotite, and bluish white bands/patches but subtle for k-spar. Vfg feather off white specked overprint over entire mass. Generally quite hard. Biotite weakens towards LC or EOH. UC is defined as an alteration front whereby phenocrysts are largely destroyed dh, but very evident uh. Substantially more veining then previous section, locally a weak stwk has developed.																						
							Veining: Fluorite veins have increased from last section and now comprise between 5-10% of the core mass. Fluorite veins range from 5 to 80 dTCA but tend to be around 20-30 dTCA. Fluorite veins are also larger and tend to carry far more Mo and Cp + other Sx then previous section - should produce some higher grade intervals. Mo is less evident in the GM but now forms a substantial portion of the Fluorite veins - smaller veinlets can exceed 90% Mo and these veinlets (commonly <1mm) are far more common then previous sections. Cp appears in similar amounts as it did within other Fluorite veins uh.																						
							Veining: Quartz in two primary forms - grey small (<1mm-1mm) erratic +/- trace Py/mo crosscutting networks forming a weak stwk which crosscut all other elements - Does not commonly produce halos. And 2-3mm very rare pale grey/white 80 dTCA planar veins +/- trace Py/mo. Other quartz veining systems may exist.																						
							Veining: Sx veining is poorly developed compared to other sections, generally contain Py>Cp +/- Mo. Larger veins often contain a pale grey/white mottled quartz such as the 1cm vein @ 759m 10 dTCA. Often produces a bleached halo up to 2cm into host.																						
							Veining: Hairlines possibly gypsum cored with broad halos up to 2cm into host. May be related to previous set.																						

FROM		TO		STRUC	ORI	Density	DESCRIPTION	ALTERATION Intensity											MINERALIZATION (%)									
m	m							Chl	Ser	Sil	Ab	Bi	Ca	Or	Ep	FeC	Clay	Sp	Cp	Ga	Py-d	Py-v	Mag	Hem	Mo	Other		
							Mineralization: Mo is heavily concentrated within Fluorite veins and Fluorite veins are very common. Mo also weakly disseminated into host and forms as thin hairs with Fluorite. Overall Mo 0.5% with localized intervals up to 1%. Cp within Fluorite veins is never very strong. Disseminated Cp in host is weaker compared to the previous section, and Py:Cp ratio appears to have fallen. Overall Cp >0.1% and may even exceed 0.5%. Local variations rarely up to 1% over <1/2m were noted. Py is seen as fg disseminations, clusters, hairs and wisps interstitial to the feldspars with the GM up to 1%. Less common as disseminations, clots and veins within the Fluorite veins = 0.1%. Finally as discrete Py veins = 0.5%. Py:Cp has fallen to 0.5.																1	0.5				
777.0	777.0						EOH																					

## APPENDIX G

### Diamond Drill Sections



800 L

600 L

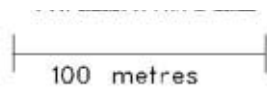
400 L

200 L

### LEGEND

Cu\_Eq

0.00	<	0.05
>= 0.05	<	0.10
>= 0.10	<	0.15
>= 0.15	<	0.20
>= 0.20	<	0.30
>= 0.30		

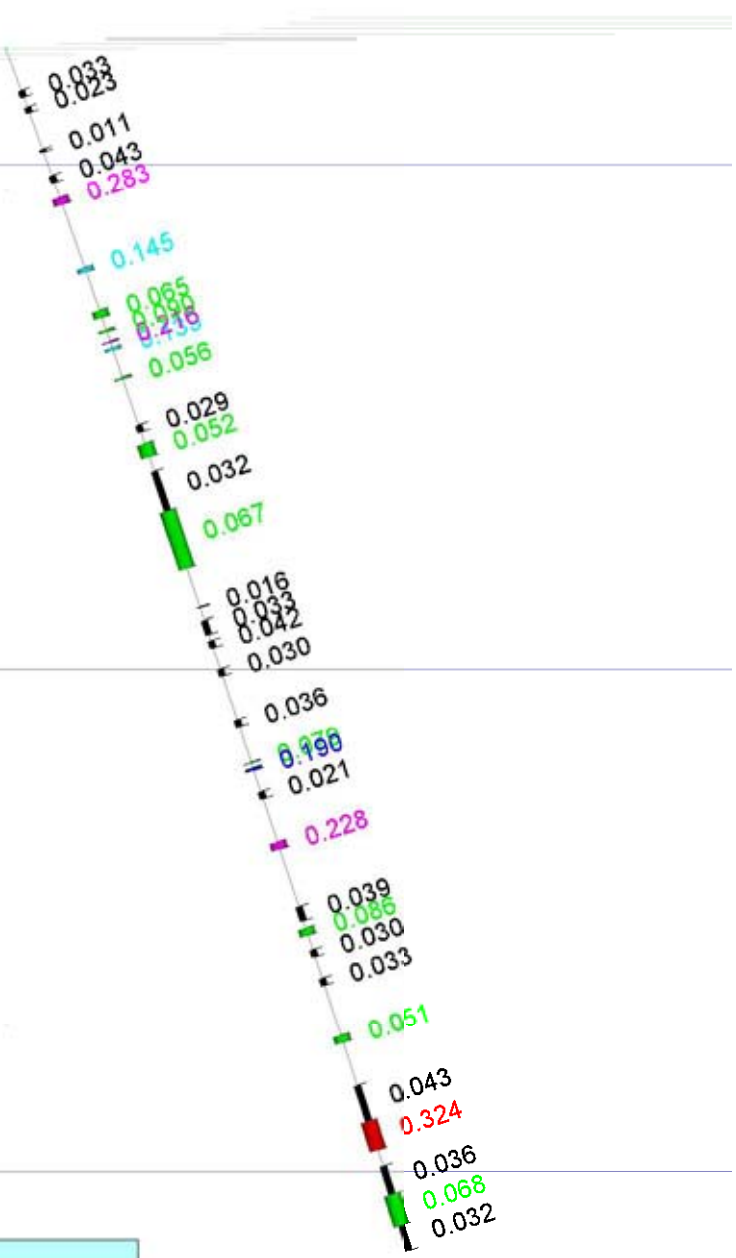


SCALE

NEW NADINA EXPLORATIONS LTD.  
 SILVER QUEEN PROPERTY  
 HOUSTON, BC

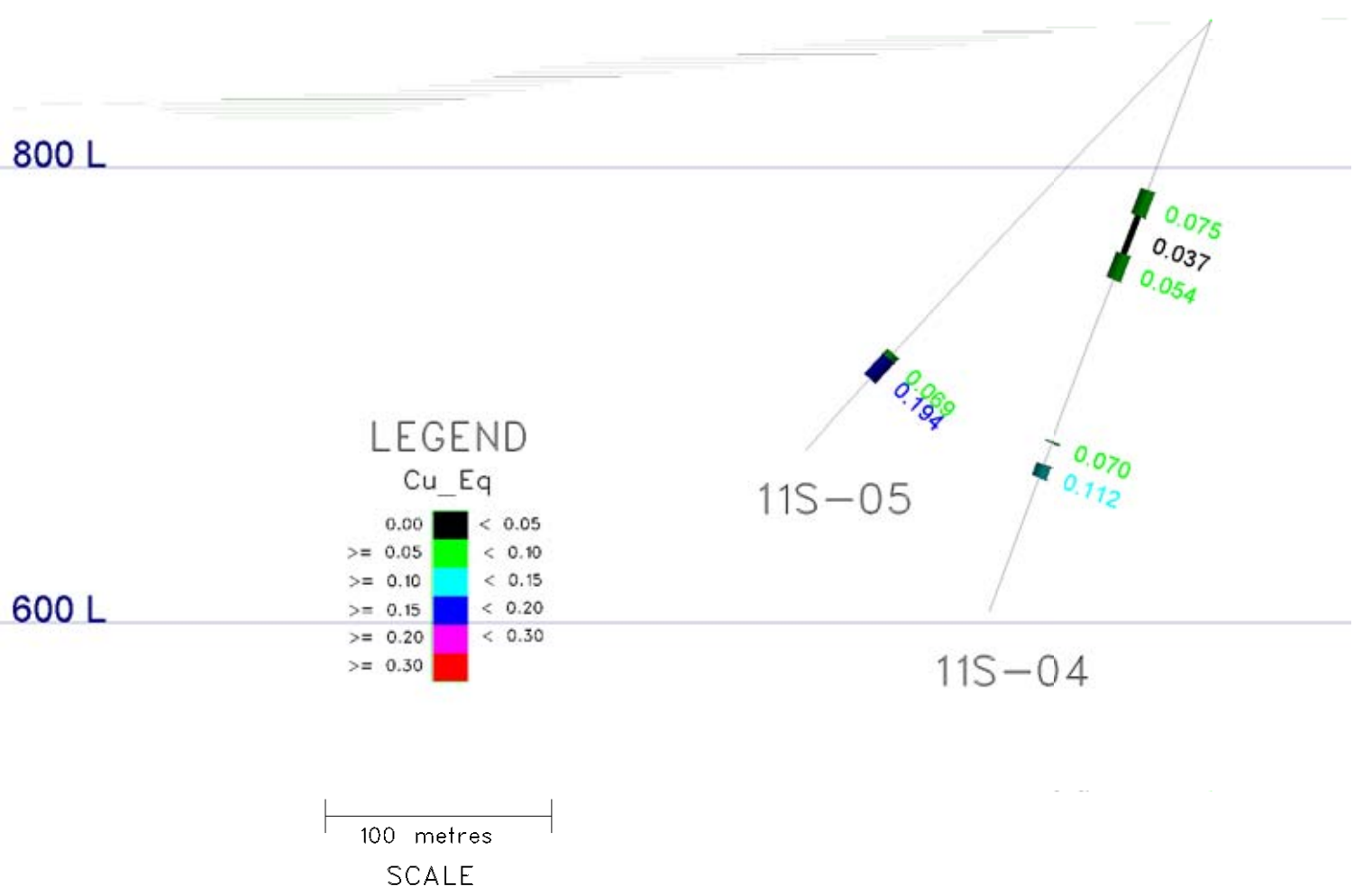
SECTION DDH 11S-02  
 LOOKING NORTH

J.M. HUTTER  
 SCALE: 1:3000  
 JUNE 10, 2012



11S-02

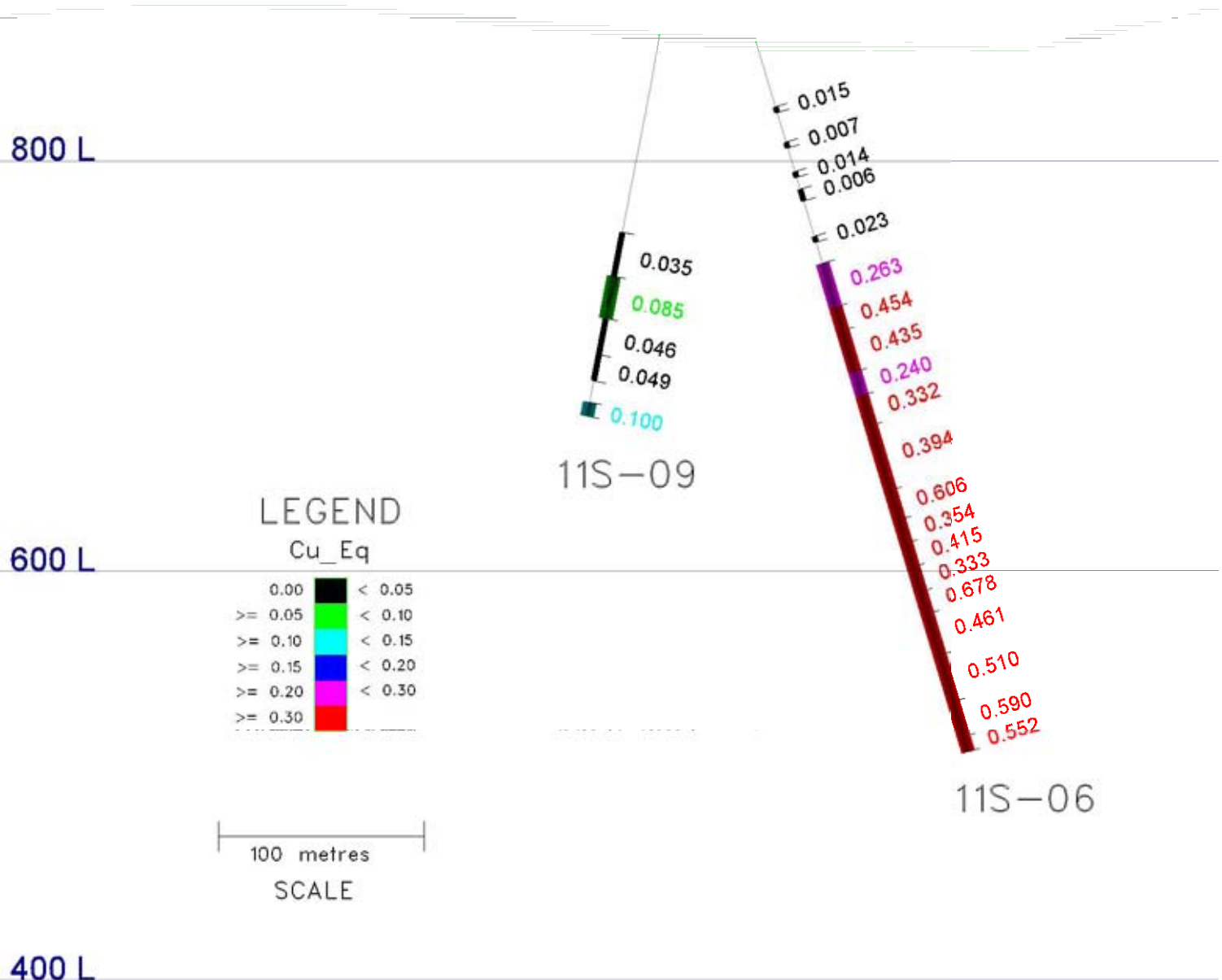




NEW NADINA EXPLORATIONS LTD.  
SILVER QUEEN PROPERTY  
HOUSTON, BC

SECTION DDH 11S-04, 11S-05  
LOOKING NORTHWEST

J.M. HUTTER  
SCALE: 1:3000  
JUNE 10, 2012

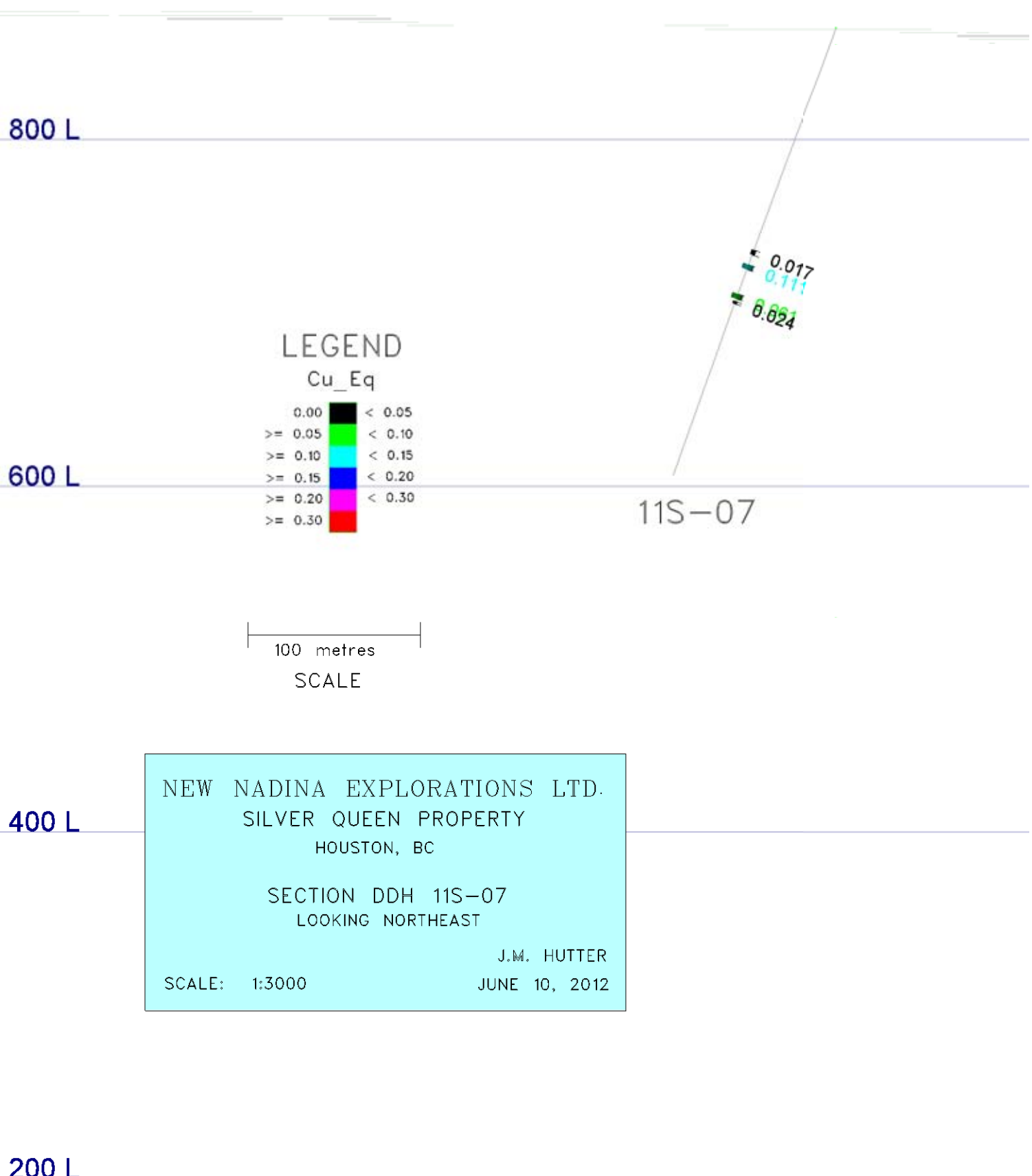


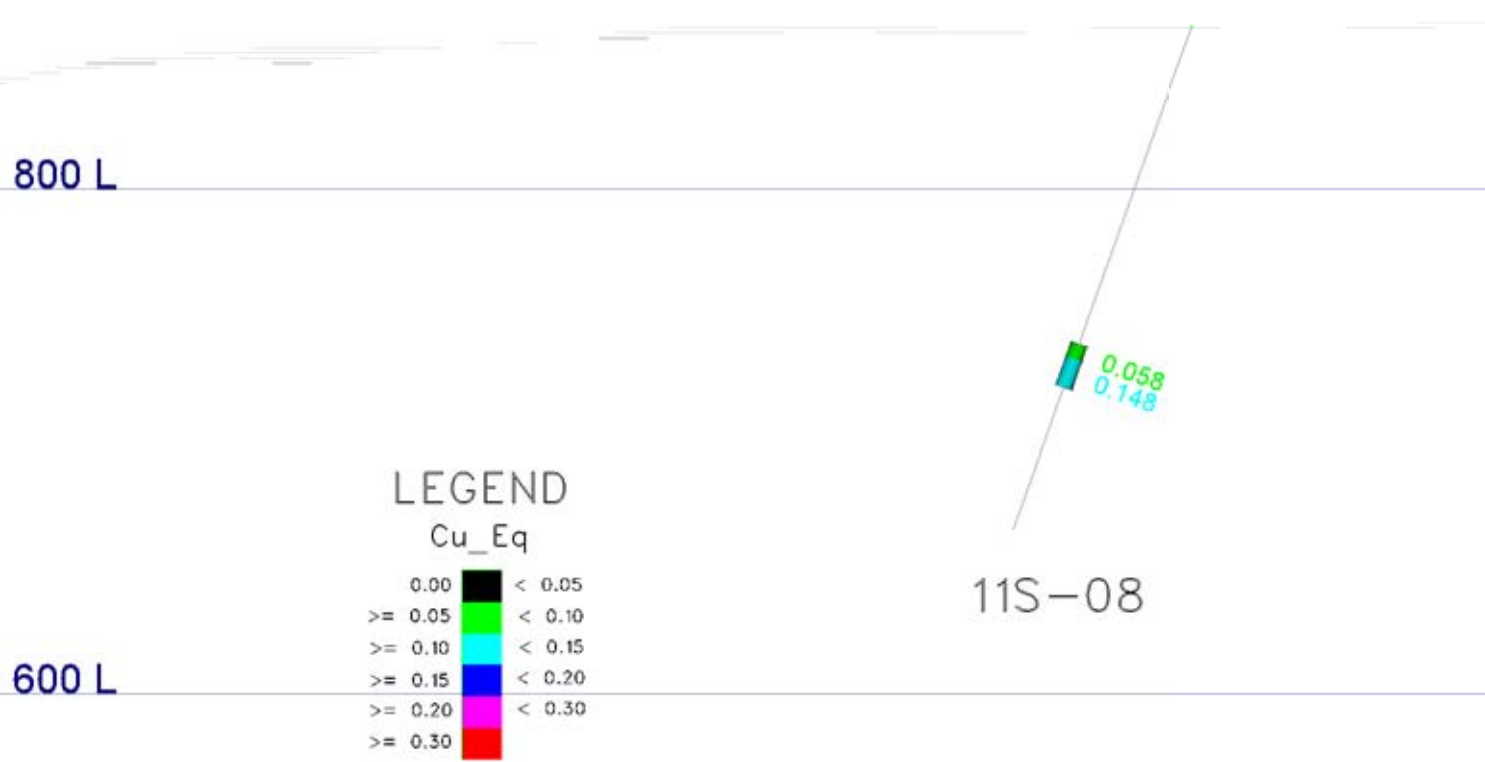
NEW NADINA EXPLORATIONS LTD.  
SILVER QUEEN PROPERTY  
HOUSTON, BC

SECTION DDH 11S-06, 11S-09  
LOOKING NORTH

J.M. HUTTER  
SCALE: 1:3000  
JUNE 10, 2012





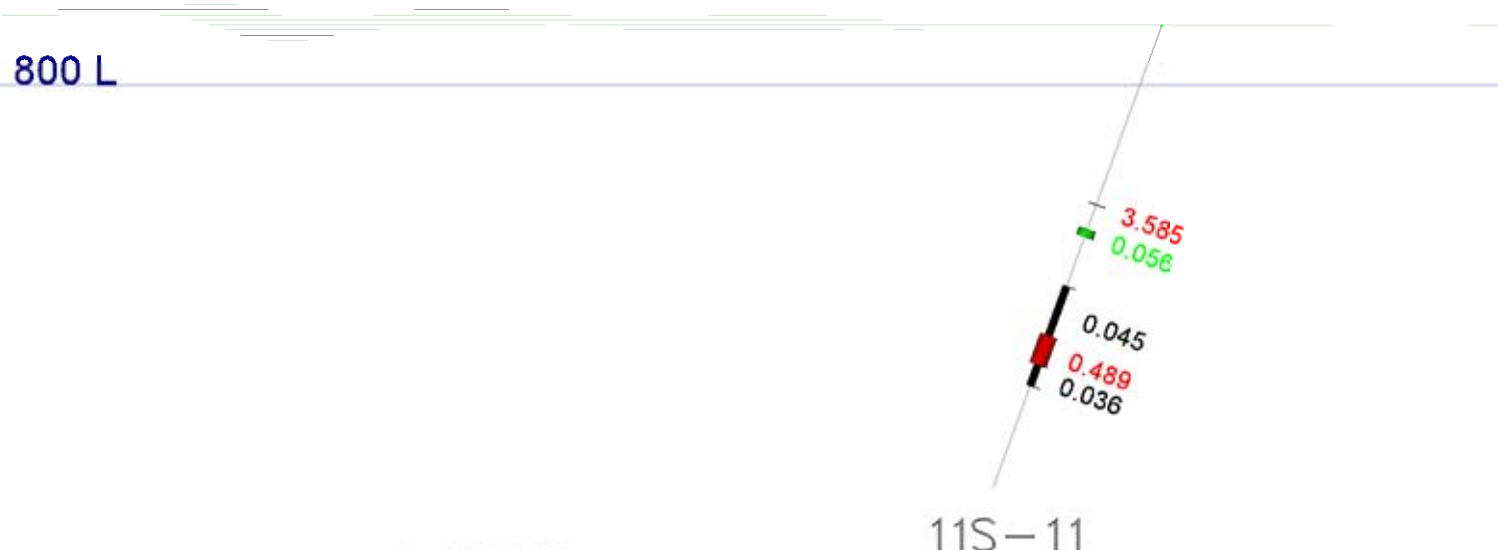


NEW NADINA EXPLORATIONS LTD.  
SILVER QUEEN PROPERTY  
HOUSTON, BC

SECTION DDH 11S-08  
LOOKING NORTH

J.M. HUTTER

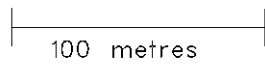
SCALE: 1:3000  
JUNE 10, 2012



LEGEND

Cu\_Eq

0.00	█	< 0.05
>= 0.05	█	< 0.10
>= 0.10	█	< 0.15
>= 0.15	█	< 0.20
>= 0.20	█	< 0.30
>= 0.30	█	



SCALE

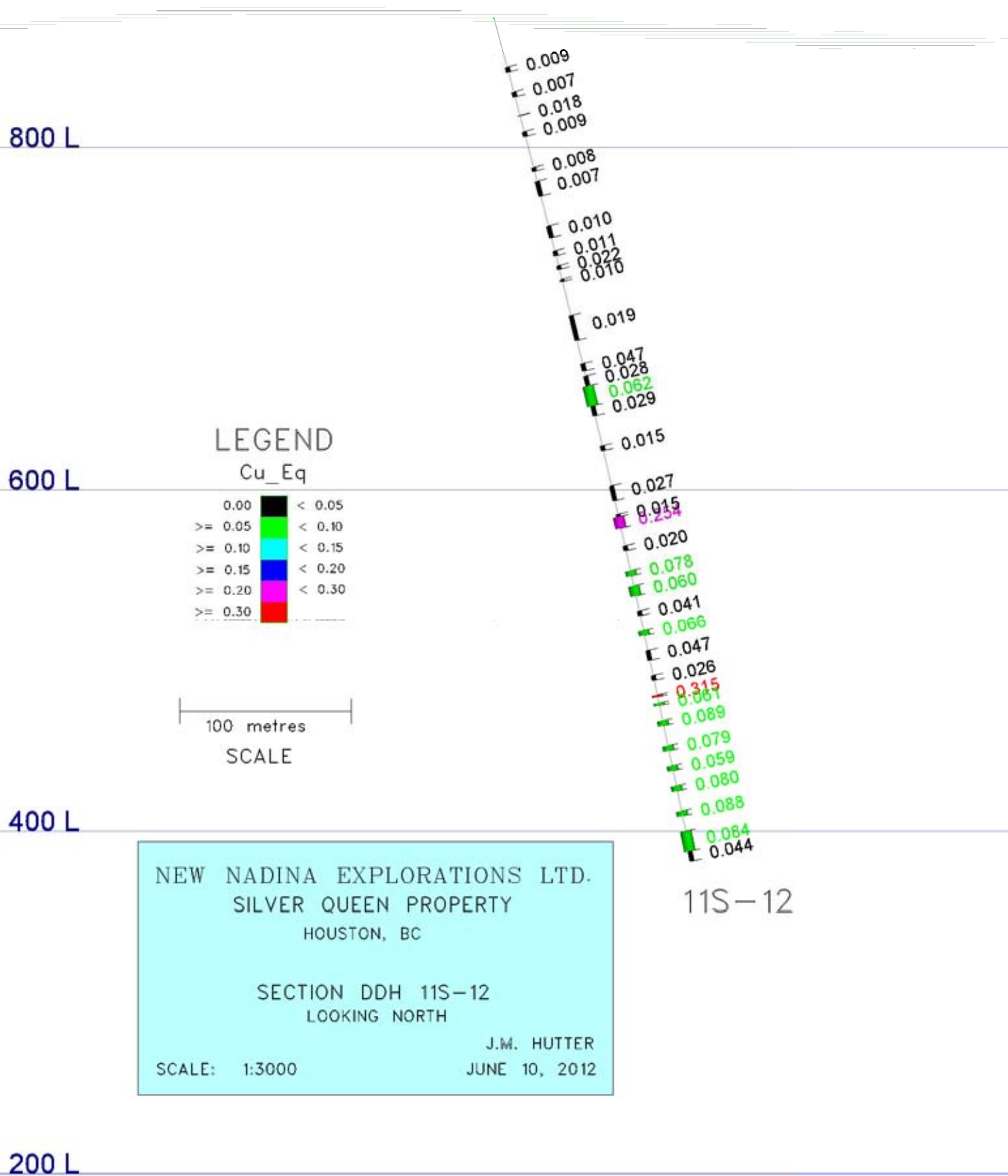
NEW NADINA EXPLORATIONS LTD.  
 SILVER QUEEN PROPERTY  
 HOUSTON, BC

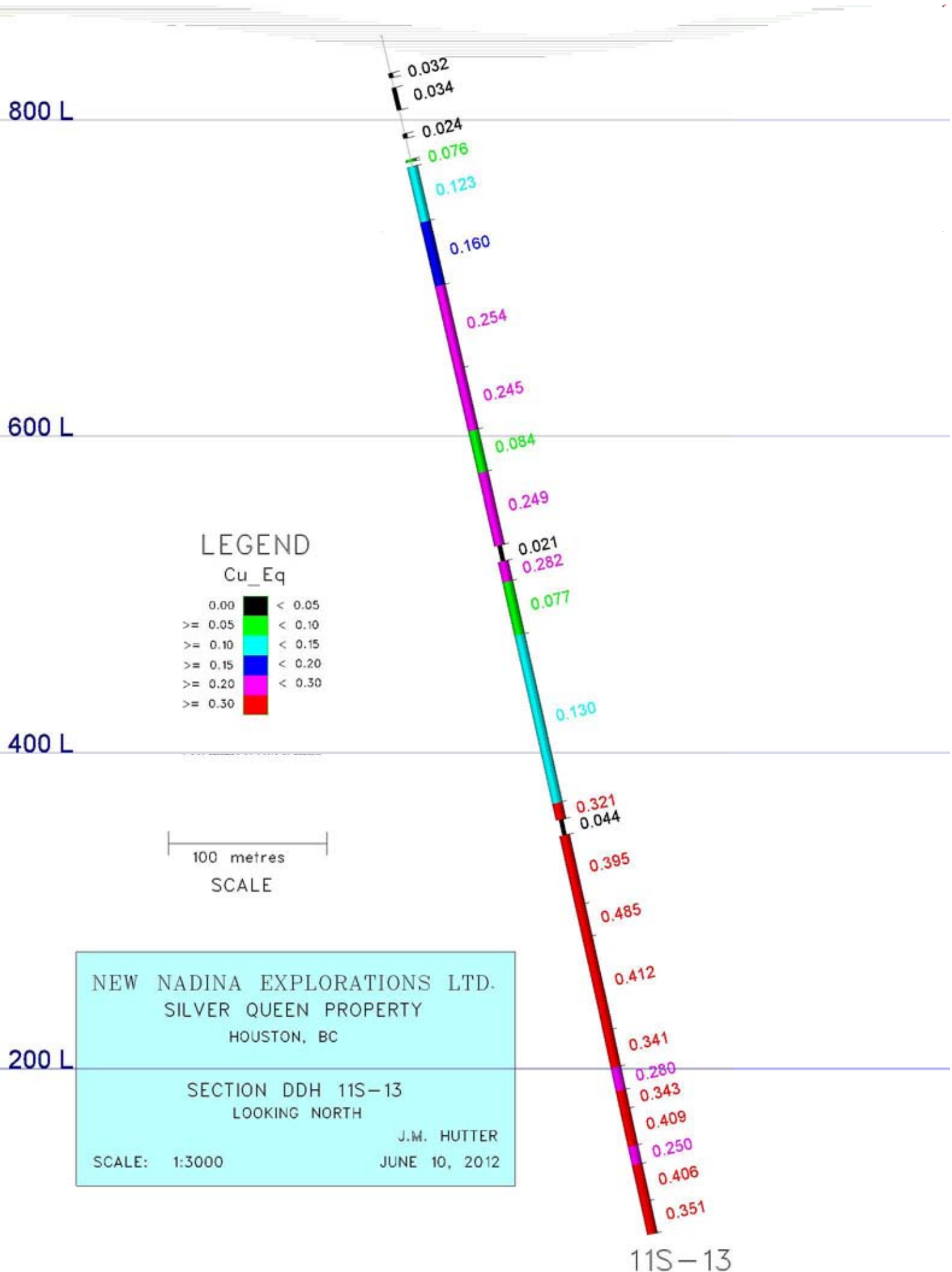
SECTION DDH 11S-11  
 LOOKING NORTH

J.M. HUTTER

SCALE: 1:3000

JUNE 10, 2012





## APPENDIX H

### Specific Gravity Measurements



DDH	Cu Equiv %	Sampler	Sample No.	Wgt Air g	Wgt H2O g	SG by Water	SG by Volume	Method Difference	L1 cm	L2 cm	L3 cm	L4 cm	L Avg cm	Dia cm	Radius cm	Vol cm3
11S-01	0.149	Jim	A000104	487.65	310.76	2.76	2.76	0.002	8.84	8.83	8.835	8.84	8.83625	5.05	2.525	176.9866
11S-01	0.184	Jim	106	466.29	299.65	2.80	2.80	-0.002	8.3	8.31	8.32	8.325	8.31375	5.05	2.525	166.5211
11S-01	0.157	Jim	109	475.68	301.10	2.72	2.72	0.004	8.775	8.75	8.76	8.765	8.7625	5.04	2.52	174.815
11S-01	0.217	Jim	112	505.40	321.90	2.75	2.75	0.002	9.26	9.24	9.225	9.24	9.24125	5.03	2.515	183.6353
11S-01	0.296	Jim	115	511.11	336.59	2.93	2.93	-0.002	8.895	8.905	8.95	8.92	8.9175	4.99	2.495	174.3949
11S-01	0.236	Jim	118	508.39	335.1	2.93	2.93	0.005	9.125	9.13	9.13	9.135	9.13	4.92	2.46	173.5763
11S-01	0.417	Jim	121	500.2	328.9	2.92	2.92	0.002	8.625	8.65	8.68	8.62	8.64375	5.025	2.5125	171.4209
11S-01	0.171	Jim	124	563.68	375.94	3.00	2.99	0.010	9.41	9.445	9.54	9.525	9.48	5.03	2.515	188.3796
11S-01	0.208	Jim	127	495.3	319.05	2.81	2.80	0.006	8.88	8.86	8.89	8.92	8.8875	5.03	2.515	176.6059
11S-01	0.090	Jim	131	451.67	281.35	2.65	2.64	0.014	8.62	8.59	8.6	8.52	8.5825	5.04	2.52	171.2239
11S-02	0.078	Jim	156	550.80	361.80	2.91	2.93	-0.011	9.340	9.465	9.490	9.385	9.42	5.045	2.5225	188.3054
11S-02	0.058	Jim	158	518.56	336.77	2.85	2.87	-0.017	9.095	9.055	9.000	9.005	9.03875	5.045	2.5225	180.6842
11S-02	0.036	Jim	160	550.69	358.93	2.87	2.89	-0.020	9.515	9.510	9.525	9.560	9.5275	5.045	2.5225	190.4543
11S-02	0.030	Jim	162	505.30	325.12	2.80	2.82	-0.016	8.935	8.925	8.950	9.045	8.96375	5.045	2.5225	179.185
11S-02	0.079	Jim	164	562.69	375.87	3.01	3.03	-0.021	9.260	9.240	9.265	9.290	9.26375	5.05	2.525	185.5492
11S-02	0.021	Jim	166	510.80	325.94	2.76	2.77	-0.010	9.210	9.260	9.260	9.200	9.2325	5.04	2.52	184.1916
11S-02	0.018	Jim	169	512.67	324.47	2.72	2.73	-0.006	9.395	9.400	9.420	9.430	9.41125	5.04	2.52	187.7578
11S-02	0.086	Jim	172	516.00	327.31	2.73	2.75	-0.014	9.400	9.420	9.425	9.400	9.41125	5.04	2.52	187.7578
11S-02	0.030	Jim	174	526.58	332.62	2.71	2.71	0.007	9.715	9.725	9.685	9.715	9.71	5.05	2.525	194.4874
11S-02	0.051	Jim	176	530.14	342.73	2.83	2.83	0.002	9.370	9.310	9.315	9.380	9.34375	5.055	2.5275	187.5224
11S-02	0.073	Jim	178	558.22	368.89	2.95	2.94	0.005	9.450	9.450	9.450	9.450	9.45	5.055	2.5275	189.6547
11S-02	0.036	Jim	180	522.44	340.72	2.87	2.87	0.003	9.070	9.050	9.070	9.070	9.065	5.055	2.5275	181.928
11S-02	0.036	Jim	182	485.50	305.03	2.69	2.69	0.004	8.980	8.995	9.035	9.015	9.00625	5.055	2.5275	180.749
11S-02	1.075	Jim	185	517.62	333.61	2.81	2.82	-0.010	9.130	9.160	9.175	9.150	9.15375	5.05	2.525	183.3459
11S-02	0.026	Jim	189	499.39	324.77	2.86	2.86	0.004	9.030	9.105	9.095	9.040	9.0675	4.955	2.4775	174.8495
11S-02	0.040	Jim	192	525.58	335.10	2.76	2.76	0.000	9.540	9.520	9.520	9.540	9.53	5.045	2.5225	190.5043
11S-02	0.051	Jim	195	502.37	319.31	2.74	2.74	0.004	9.155	9.210	9.150	9.170	9.17125	5.045	2.5225	183.3329
11S-02	0.016	Jim	197	547.35	351.61	2.80	2.79	0.007	9.780	9.800	9.820	9.870	9.8175	5.045	2.5225	196.2514
11S-02	0.020	Jim	200	529.99	341.35	2.81	2.81	0.000	9.470	9.430	9.445	9.475	9.455	5.04	2.52	188.6306
11S-02	0.030	Jim	202	527.31	339.50	2.81	2.80	0.003	9.355	9.395	9.395	9.400	9.38625	5.05	2.525	188.0028
11S-02	0.059	Jim	207	524.04	340.95	2.86	2.86	0.007	9.180	9.145	9.185	9.210	9.18	5.045	2.5225	183.5078
11S-02	0.014	Jim	209	524.01	332.11	2.73	2.73	0.000	9.585	9.585	9.575	9.580	9.58125	5.05	2.525	191.9086
11S-03	0.013	Jim	237	511.41	330.57	2.83	2.83	-0.001	9.13	9.12	9.1	9.11	9.115	5.025	2.5125	180.7667
11S-03	0.290	Jim	239	484.89	301.9	2.65	2.64	0.005	9.24	9.225	9.25	9.265	9.245	5.025	2.5125	183.3448
11S-03	0.278	Jim	242	488.3	302.63	2.63	2.62	0.014	9.43	9.435	9.44	9.415	9.43	5.02	2.51	186.6417
11S-03	0.259	Owen	243	599.68	409.55	3.15	3.16	-0.006	9.44	9.43	9.455	9.495	9.455	5.055	2.5275	189.7551
11S-03	0.193	Jim	245	497.46	301.4	2.54	2.52	0.012	9.915	9.93	9.9	9.915	9.915	5.03	2.515	197.0236
11S-03	0.286	Jim	249	561.06	379.49	3.09	3.09	0.003	9.295	9.295	9.28	9.235	9.27625	4.995	2.4975	181.7745
11S-03	0.228	Jim	251	513.3	326.52	2.75	2.74	0.007	9.55	9.56	9.565	9.55	9.55625	4.995	2.4975	187.2613
11S-03	0.412	Jim	253	482.51	302.7	2.68	2.67	0.009	9.175	9.19	9.19	9.195	9.1875	5	2.5	180.396

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11S-03	0.364	Jim	255	499.5	312.1	2.67	2.65	0.020	9.62	9.61	9.605	9.625	9.615	5	2.5	188.7899
11S-03	0.443	Jim	257	568.75	378.6	2.99	2.98	0.009	9.71	9.735	9.725	9.69	9.715	5	2.5	190.7534
11S-03	0.240	Jim	260	502.02	322.42	2.80	2.79	0.001	9.145	9.155	9.165	9.14	9.15125	5	2.5	179.6842
11S-03	0.505	Jim	262	520.8	331.58	2.75	2.75	0.002	9.63	9.675	9.655	9.615	9.64375	5	2.5	189.3544
11S-03	0.344	Jim	265	485.15	298.7	2.60	2.59	0.012	9.525	9.54	9.55	9.545	9.54	5	2.5	187.3173
11S-03	0.720	Jim	269	466.89	291.15	2.66	2.66	-0.004	8.925	8.94	8.955	8.93	8.9375	5	2.5	175.4873
11S-03	0.215	Jim	271	495.27	310.9	2.69	2.68	0.003	9.42	9.395	9.38	9.4	9.39875	5	2.5	184.5439
11S-06	0.478	Jim	345	522.43	324.71	2.64	2.66	-0.015	9.84	9.82	9.805	9.87	9.83375	5.045	2.5225	196.5762
11S-06	0.747	Jim	349	463.23	289.59	2.67	2.68	-0.017	8.68	8.68	8.65	8.65	8.665	5.035	2.5175	172.527
11S-06	0.585	Jim	356	559.05	359.98	2.81	2.80	0.013	9.99	9.96	9.91	9.92	9.945	5.06	2.53	199.984
11S-06	0.378	Jim	360	523.25	330.40	2.71	2.71	0.007	9.62	9.615	9.625	9.598	9.6145	5.06	2.53	193.338
11S-06	0.386	Jim	364	500.81	316.2	2.71	2.70	0.009	9.195	9.18	9.199	9.2	9.1935	5.065	2.5325	185.2377
11S-06	0.450	Jim	365	516.45	324.85	2.70	2.69	0.003	9.535	9.56	9.54	9.52	9.53875	5.06	2.53	191.8148
11S-06	0.528	Jim	367	533.5	339.16	2.75	2.73	0.012	9.835	9.8	9.815	9.765	9.80375	5.035	2.5175	195.2004
11S-06	0.642	Jim	370	508.35	319.6	2.69	2.69	0.004	9.42	9.385	9.419	9.445	9.41725	5.055	2.5275	188.9974
11S-06	0.392	Jim	372	531.51	337.09	2.73	2.72	0.011	9.755	9.78	9.685	9.69	9.7275	5.055	2.5275	195.2239
11S-06	0.482	Jim	377	516.65	327.75	2.74	2.72	0.017	9.47	9.42	9.43	9.42	9.435	5.065	2.5325	190.1036
11S-06	0.622	Jim	380	531.14	338.05	2.75	2.76	-0.008	9.64	9.63	9.645	9.61	9.63125	5.045	2.5225	192.5283
11S-09	0.055	Jim	381	518.10	332.44	2.79	2.78	0.015	9.410	9.425	9.420	9.390	9.41125	5.025	2.5125	186.6418
11S-09	0.032	Jim	382	528.04	338.69	2.79	2.79	0.002	9.56	9.555	9.555	9.55	9.555	5.025	2.5125	189.4926
11S-09	0.033	Jim	383	504.35	320.90	2.75	2.75	0.000	9.270	9.290	9.300	9.290	9.2875	5.015	2.5075	183.4553
11S-09	0.023	Jim	384	514.18	331.74	2.82	2.82	-0.005	9.185	9.155	9.195	9.195	9.1825	5.025	2.5125	182.1053
11S-09	0.019	Jim	385	503.71	322.05	2.77	2.78	-0.004	9.170	9.165	9.160	9.170	9.16625	5.02	2.51	181.4215
11S-09	0.031	Jim	387	509.74	330.00	2.84	2.84	-0.001	9.150	9.060	9.025	9.150	9.09625	5.015	2.5075	179.6775
11S-09	0.050	Jim	388	468.4	298.51	2.76	2.75	0.004	8.595	8.575	8.57	8.575	8.57875	5.025	2.5125	170.1319
11S-09	0.078	Jim	389	491.65	312.34	2.74	2.73	0.008	9.035	9.065	9.1	9.07	9.0675	5.025	2.5125	179.8246
11S-09	0.168	Jim	390	505.01	318.43	2.71	2.70	0.010	9.445	9.44	9.44	9.445	9.4425	5.025	2.5125	187.2616
11S-09	0.068	Jim	391	542.96	358.5	2.94	2.92	0.025	9.4	9.345	9.37	9.405	9.38	5.025	2.5125	186.0221
11S-09	0.050	Jim	393	497.72	315.68	2.73	2.73	0.004	9.2	9.22	9.22	9.2	9.21	5.02	2.51	182.2874
11S-09	0.056	Jim	394	526.54	338.1	2.79	2.78	0.010	9.555	9.505	9.52	9.56	9.535	5.025	2.5125	189.096
11S-09	0.092	Jim	395	527.28	334.37	2.73	2.73	0.003	9.755	9.745	9.755	9.775	9.7575	5.02	2.51	193.1237
11S-09	0.085	Jim	396	436.25	279.26	2.78	2.77	0.014	7.935	7.965	8.015	7.97	7.97125	5.02	2.51	157.7696
11S-09	0.033	Jim	397	527.34	336.45	2.76	2.75	0.013	9.68	9.695	9.68	9.63	9.67125	5.025	2.5125	191.7981
11S-09	0.021	Jim	399	503.13	321.86	2.78	2.76	0.014	9.225	9.17	9.215	9.205	9.20375	5.02	2.51	182.1637
11S-09	0.030	Jim	400	514.32	328.1	2.76	2.75	0.008	9.415	9.415	9.415	9.425	9.4175	5.025	2.5125	186.7658
11S-09	0.086	Jim	401	418.44	265.36	2.73	2.73	0.003	7.72	7.67	7.72	7.805	7.72875	5.025	2.5125	153.2749
11S-09	0.058	Jim	402	503.43	317.71	2.71	2.71	0.003	9.36	9.38	9.4	9.36	9.375	5.025	2.5125	185.9229
11S-09	0.050	Jim	405	498.91	316.43	2.73	2.73	0.000	9.2	9.18	9.21	9.21	9.2	5.025	2.5125	182.4524
11S-09	0.060	Jim	406	509.03	327.12	2.80	2.78	0.019	9.255	9.255	9.25	9.26	9.255	5.02	2.51	183.178
11S-09	0.051	Jim	407	499.2	314.25	2.70	2.71	-0.009	9.031	9.345	9.385	9.345	9.2765	5.03	2.515	184.3358

DDH	Cu Equiv %	Sampler	Sample No.	Wgt Air g	Wgt H2O g	SG by Water	SG by Volume	Method Difference	L1 cm	L2 cm	L3 cm	L4 cm	L Avg cm	Dia cm	Radius cm	Vol cm3
11S-09	0.039	Jim	409	481.2	304.18	2.72	2.71	0.003	8.935	8.95	8.94	8.925	8.9375	5.025	2.5125	177.2465
11S-09	0.096	Jim	410	525.36	335.4	2.77	2.78	-0.012	9.57	9.565	9.505	9.505	9.53625	5.025	2.5125	189.1208
11S-09	0.105	Jim	411	541.5	348.31	2.80	2.80	0.006	9.83	9.79	9.79	9.79	9.8	5.015	2.5075	193.5787
11S-04	0.154	Jim	501	537.55	347.6	2.83	2.82	0.006	9.48	9.52	9.525	9.49	9.50375	5.05	2.525	190.3563
11S-04	0.063	Jim	503	520.94	333.5	2.78	2.78	0.000	9.35	9.335	9.345	9.405	9.35875	5.05	2.525	187.452
11S-04	0.023	Jim	504	515.82	327.93	2.75	2.74	0.010	9.395	9.42	9.44	9.4	9.41375	5.05	2.525	188.5536
11S-04	0.035	Jim	505	514.13	326.69	2.74	2.74	0.002	9.36	9.35	9.36	9.385	9.36375	5.05	2.525	187.5522
11S-04	0.029	Jim	507	487.31	308	2.72	2.71	0.011	8.975	8.99	8.975	9.01	8.9875	5.05	2.525	180.016
11S-04	0.030	Jim	508	521.64	329.82	2.72	2.71	0.008	9.605	9.635	9.6	9.58	9.605	5.05	2.525	192.3843
11S-04	0.024	Jim	509	534.13	339.47	2.74	2.74	0.000	9.7	9.665	9.715	9.8	9.72	5.05	2.525	194.6877
11S-04	0.038	Jim	510	560.02	368.39	2.92	2.92	0.000	9.565	9.545	9.595	9.57	9.56875	5.05	2.525	191.6582
11S-04	0.034	Jim	511	543.93	359.6	2.95	2.95	0.003	9.2	9.22	9.21	9.22	9.2125	5.05	2.525	184.5227
11S-04	0.023	Jim	513	521.5	331.7	2.75	2.75	0.000	9.51	9.47	9.45	9.47	9.475	5.05	2.525	189.7805
11S-04	0.041	Jim	514	528.12	344.42	2.87	2.87	0.000	9.175	9.17	9.17	9.17	9.17125	5.05	2.525	183.6965
11S-04	0.045	Jim	515	521.4	334.23	2.79	2.78	0.006	9.37	9.345	9.35	9.395	9.365	5.05	2.525	187.5772
11S-04	0.041	Jim	516	514.5	327.18	2.75	2.74	0.003	9.355	9.37	9.375	9.355	9.36375	5.05	2.525	187.5522
11S-04	0.072	Jim	517	472.46	309.49	2.90	2.90	0.000	8.13	8.16	8.155	8.1	8.13625	5.05	2.525	162.9658
11S-04	0.060	Jim	518	522.89	341.84	2.89	2.89	0.003	9.075	9.035	9.03	9.055	9.04875	5.05	2.525	181.2428
11S-04	0.071	Jim	519	499.51	318.43	2.76	2.76	0.001	9.04	9.06	9.025	9.045	9.0425	5.05	2.525	181.1177
11S-04	0.035	Jim	522	531.12	341.19	2.80	2.79	0.002	9.5	9.5	9.48	9.48	9.49	5.05	2.525	190.0809
11S-12	0.103	Jim	546	588.85	409.01	3.27	3.27	0.007	8.985	8.995	9.025	8.985	8.9975	5.05	2.525	180.2163
11S-12	0.069	Jim	548	506.80	324.64	2.78	2.78	-0.002	9.060	9.005	9.150	9.135	9.0875	5.05	2.525	182.019
11S-12	0.047	Jim	550	542.40	348.43	2.80	2.80	-0.001	9.705	9.700	9.715	9.680	9.7	5.045	2.5225	193.9026
11S-13	0.219	Jim	658	537.52	345.90	2.81	2.82	-0.019	9.525	9.550	9.510	9.505	9.5225	5.045	2.5225	190.3544
11S-13	0.294	Jim	660	530.88	339.30	2.77	2.79	-0.017	9.510	9.510	9.490	9.510	9.505	5.05	2.525	190.3813
11S-13	0.139	Jim	663	547.62	348.60	2.75	2.77	-0.020	9.850	9.885	9.870	9.855	9.865	5.05	2.525	197.592
11S-13	0.318	Jim	665	529.19	351.74	2.98	2.98	0.002	8.820	8.845	8.835	8.820	8.83	5.06	2.53	177.5625
11S-13	0.055	Jim	667	514.58	323.89	2.70	2.72	-0.017	9.435	9.450	9.490	9.475	9.4625	5.05	2.525	189.5301
11S-13	0.009	Jim	668	433.09	274.82	2.74	2.76	-0.021	7.820	7.900	7.895	7.815	7.8575	5.045	2.5225	157.0711
11S-13	0.008	Jim	669	496.70	315.32	2.74	2.76	-0.020	8.980	9.020	8.990	8.970	8.99	5.05	2.525	180.0661
11S-13	0.007	Owen	673	506.52	321.05	2.73	2.73	0.000	9.240	9.175	9.230	9.250	9.22375	5.06	2.53	185.4804
11S-13	0.577	Owen	675	530.80	340.75	2.79	2.80	-0.009	9.460	9.475	9.470	9.430	9.45875	5.05	2.525	189.455
11S-13	0.167	Owen	677	482.31	308.55	2.78	2.79	-0.010	8.52	8.51	8.515	8.495	8.51	5.09	2.545	173.1628
11S-13	0.111	Owen	683	547.33	352.9	2.82	2.81	0.010	9.7	9.675	9.61	9.595	9.645	5.075	2.5375	195.103
11S-13	0.054	Owen	688	546.09	351.4	2.80	2.80	0.004	9.69	9.65	9.62	9.675	9.65875	5.07	2.535	194.9963
11S-13	0.177	Owen	690	533.99	343.82	2.81	2.82	-0.014	9.4	9.385	9.43	9.43	9.41125	5.06	2.53	189.2509
11S-13	0.075	Owen	692	515.38	326.55	2.73	2.74	-0.011	9.335	9.33	9.36	9.38	9.35125	5.06	2.53	188.0443
11S-13	0.076	Owen	695	508.83	329.15	2.83	2.85	-0.015	8.835	8.92	8.94	8.855	8.8875	5.06	2.53	178.7188
11S-13	0.096	Owen	697	541.35	354.12	2.89	2.89	0.004	9.285	9.3	9.26	9.3	9.28625	5.07	2.535	187.4761

DDH	Cu Equiv %	Sampler	Sample No.	Wgt Air g	Wgt H2O g	SG by Water	SG by Volume	Method Difference	L1 cm	L2 cm	L3 cm	L4 cm	L Avg cm	Dia cm	Radius cm	Vol cm3
11S-13	0.128	Owen	700	525.32	338.46	2.81	2.81	0.004	9.25	9.28	9.26	9.28	9.2675	5.07	2.535	187.0975
11S-13	0.260	Owen	704	541.3	348.52	2.81	2.81	-0.002	9.535	9.575	9.555	9.51	9.54375	5.07	2.535	192.6746
11S-13	0.159	Owen	706	507.92	327.55	2.82	2.82	-0.009	8.92	8.975	8.93	8.94	8.94125	5.06	2.53	179.7996
11S-13	0.214	Owen	708	528.99	340.97	2.81	2.81	0.001	9.26	9.31	9.39	9.31	9.3175	5.07	2.535	188.1069
11S-13	0.252	Owen	710	520.65	331.3	2.75	2.76	-0.008	9.51	9.445	9.445	9.46	9.465	5.04	2.52	188.8301
11S-13	0.099	Owen	712	498.85	315.7	2.72	2.74	-0.013	9.1	9.1	9.12	9.16	9.12	5.045	2.5225	182.3084
11S-13	0.142	Owen	714	508.45	325.95	2.79	2.78	0.009	9.06	9.045	9.07	9.1	9.06875	5.07	2.535	183.085
11S-13	0.147	Jim	716	505.32	321.75	2.75	2.76	-0.003	9.110	9.110	9.125	9.125	9.1175	5.06	2.53	183.3438
11S-13	0.127	Jim	718	511.18	322.00	2.70	2.71	-0.010	9.400	9.390	9.395	9.380	9.39125	5.055	2.5275	188.4756
11S-13	0.136	Owen	721	517.25	330.95	2.78	2.78	0.000	9.28	9.28	9.28	9.295	9.28375	5.055	2.5275	186.3182
11S-13	0.107	Owen	724	480.13	305.33	2.75	2.75	-0.001	8.73	8.73	8.715	8.725	8.725	5.05	2.525	174.7583
11S-13	0.135	Owen	726	537.55	342.91	2.76	2.77	-0.006	9.695	9.745	9.73	9.7	9.7175	5.045	2.5225	194.2524
11S-13	0.059	Owen	728	540.91	346.53	2.78	2.78	0.007	9.66	9.71	9.74	9.73	9.71	5.055	2.5275	194.8727
11S-13	0.145	Owen	730	544.95	352.93	2.84	2.84	-0.002	9.53	9.54	9.58	9.59	9.56	5.055	2.5275	191.8623
11S-13	0.136	Owen	732	530.9	342.11	2.81	2.80	0.014	9.44	9.5	9.495	9.45	9.47125	5.05	2.525	189.7053
11S-13	0.065	Owen	736	510.7	327.45	2.79	2.78	0.011	9.16	9.16	9.175	9.17	9.16625	5.055	2.5275	183.9601
11S-13	0.068	Owen	738	549.55	356.4	2.85	2.84	0.001	9.68	9.68	9.69	9.69	9.685	5.04	2.52	193.2192
11S-13	0.317	Owen	741	499.6	323.7	2.84	2.84	0.001	8.72	8.76	8.78	8.74	8.75	5.06	2.53	175.9538
11S-13	0.501	Owen	743	599.68	409.55	3.15	3.16	-0.006	9.44	9.43	9.455	9.495	9.455	5.055	2.5275	189.7551
11S-13	0.009	Owen	747	555.4	350.81	2.71	2.71	0.004	10.25	10.24	10.31	10.28	10.27	5.04	2.52	204.8901
11S-13	0.273	Owen	749	522.05	336.69	2.82	2.82	-0.002	9.46	9.44	9.42	9.42	9.435	5	2.5	185.2556
11S-13	0.380	Owen	750	537	344.45	2.79	2.79	-0.001	9.6	9.68	9.67	9.645	9.64875	5.04	2.52	192.496
11S-13	0.317	Owen	751	545.75	349.2	2.78	2.78	-0.004	9.8	9.81	9.79	9.8	9.8	5.05	2.525	196.2901
11S-13	0.348	Owen	752	514.82	318.4	2.62	2.62	0.000	9.755	9.79	9.8	9.8	9.78625	5.055	2.5275	196.403
11S-13	0.527	Owen	753	523.59	335.9	2.79	2.78	0.013	9.34	9.435	9.43	9.375	9.395	5.055	2.5275	188.5509
11S-13	0.311	Owen	754	536.3	340.12	2.73	2.74	-0.002	9.76	9.8	9.8	9.79	9.7875	5.05	2.525	196.0397
11S-13	0.323	Owen	756	531.9	343.21	2.82	2.82	-0.005	9.395	9.37	9.4	9.38	9.38625	5.055	2.5275	188.3753
11S-13	0.474	Owen	757	509.89	322.8	2.73	2.73	0.000	9.37	9.34	9.35	9.375	9.35875	5.045	2.5225	187.081
11S-13	0.543	Owen	758	553.04	350.2	2.73	2.71	0.013	10	10.3	10	10.4	10.175	5.05	2.525	203.8012
11S-13	0.381	Owen	759	532.45	339.09	2.75	2.77	-0.015	9.62	9.58	9.585	9.62	9.60125	5.05	2.525	192.3092
11S-13	0.389	Owen	760	540.1	347.63	2.81	2.81	0.000	9.6	9.62	9.66	9.64	9.63	5.045	2.5225	192.5033
11S-13	0.398	Owen	761	545.09	348.3	2.77	2.77	0.001	9.88	9.88	9.875	9.92	9.88875	5.035	2.5175	196.8928
11S-13	0.391	Owen	763	400.49	252.1	2.70	2.70	-0.004	7.39	7.4	7.4	7.4	7.3975	5.05	2.525	148.169
11S-13	0.434	Owen	764	525.67	338.75	2.81	2.81	0.005	9.32	9.35	9.38	9.35	9.35	5.05	2.525	187.2768
11S-13	0.331	Owen	765	519	328.8	2.73	2.72	0.004	9.49	9.49	9.5	9.49	9.4925	5.055	2.5275	190.5077
11S-13	0.391	Owen	766	458.4	294.09	2.79	2.80	-0.009	8.16	8.2	8.2	8.145	8.17625	5.05	2.525	163.767
11S-13	0.554	Owen	769	524.4	332.5	2.73	2.73	0.001	9.58	9.6	9.62	9.62	9.605	5.045	2.5225	192.0035
11S-13	0.258	Owen	770	566.82	370.2	2.88	2.89	-0.004	9.75	9.78	9.76	9.76	9.7625	5.06	2.53	196.3141
11S-13	0.354	Owen	771	550.8	354.6	2.81	2.81	-0.004	9.84	9.8	9.81	9.83	9.82	5.04	2.52	195.9125
11S-13	0.411	Owen	772	499.9	316.5	2.73	2.74	-0.012	9.12	9.13	9.12	9.1	9.1175	5.05	2.525	182.6199
11S-13	0.691	Owen	773	558.5	364.01	2.87	2.87	-0.003	9.7	9.7	9.7	9.7	9.7	5.05	2.525	194.2871
11S-13	0.595	Owen	774	456.25	294.2	2.82	2.81	0.009	8.1	8.2	8.22	8.08	8.15	5.04	2.52	162.5954

DDH	Cu Equiv %	Sampler	Sample No.	Wgt Air g	Wgt H2O g	SG by Water	SG by Volume	Method Difference	L1 cm	L2 cm	L3 cm	L4 cm	L Avg cm	Dia cm	Radius cm	Vol cm3
11S-13	0.308	Owen	775	536.5	339.44	2.72	2.72	0.005	9.91	9.91	9.92	9.92	9.915	5.035	2.5175	197.4155
11S-13	0.403	Owen	777	534.78	343.06	2.79	2.80	-0.011	9.55	9.53	9.54	9.52	9.535	5.05	2.525	190.9822
11S-13	0.433	Owen	778	546.22	349.54	2.78	2.78	-0.001	9.78	9.8	9.8	9.81	9.7975	5.055	2.5275	196.6288
11S-13	0.416	Owen	779	514.49	332.4	2.83	2.83	-0.002	9.03	9.03	9.06	9.08	9.05	5.06	2.53	181.9865
11S-13	0.389	Owen	780	535.32	342.75	2.78	2.78	-0.005	9.6	9.6	9.6	9.59	9.5975	5.05	2.525	192.2341
11S-13	0.426	Owen	782	531.19	346.3	2.87	2.88	-0.007	9.17	9.195	9.2	9.2	9.19125	5.055	2.5275	184.4618
11S-13	0.460	Owen	783	534.85	344.05	2.80	2.81	-0.002	9.48	9.51	9.5	9.51	9.5	5.055	2.5275	190.6582
11S-13	0.430	Owen	784	531.62	341.8	2.80	2.81	-0.007	9.44	9.48	9.45	9.44	9.4525	5.05	2.525	189.3298
11S-13	0.303	Owen	785	524.05	334.55	2.77	2.77	-0.005	9.4	9.44	9.48	9.46	9.445	5.05	2.525	189.1796
11S-13	0.375	Owen	788	539.61	347.9	2.81	2.82	-0.003	9.56	9.55	9.56	9.58	9.5625	5.05	2.525	191.533
11S-13	0.408	Owen	789	524.23	336.75	2.80	2.81	-0.014	9.31	9.29	9.28	9.3	9.295	5.055	2.5275	186.544
11S-13	0.450	Owen	790	534.6	341.5	2.77	2.77	-0.004	9.61	9.64	9.64	9.62	9.6275	5.05	2.525	192.835
11S-13	0.436	Owen	791	493.77	318.09	2.81	2.81	0.002	8.8	8.82	8.8	8.76	8.795	5.045	2.5225	175.8117
11S-13	0.470	Owen	792	522.77	332.15	2.74	2.74	0.004	9.5	9.56	9.54	9.52	9.53	5.05	2.525	190.8821
11S-13	0.446	Owen	793	526.45	334.52	2.74	2.74	0.004	9.55	9.58	9.64	9.62	9.5975	5.05	2.525	192.2341
11S-13	0.386	Owen	795	502.4	319.4	2.75	2.75	-0.009	9.09	9.1	9.12	9.05	9.09	5.055	2.5275	182.4298
11S-13	0.364	Jim	796	560.21	363.6	2.85	2.85	0.000	9.82	9.79	9.765	9.805	9.795	5.055	2.5275	196.5786
11S-13	0.395	Jim	797	514.66	333.14	2.84	2.83	0.008	9.085	9.075	9.115	9.08	9.08875	5.05	2.525	182.044
11S-13	0.555	Jim	798	526.7	333.26	2.72	2.72	0.001	9.645	9.655	9.66	9.69	9.6625	5.05	2.525	193.536
11S-13	0.309	Jim	799	522.23	331.69	2.74	2.74	0.003	9.54	9.54	9.46	9.48	9.505	5.055	2.5275	190.7585
11S-13	0.321	Jim	800	529.35	346.69	2.90	2.90	-0.007	9.115	9.135	9.005	9.065	9.08	5.055	2.5275	182.2291
11S-13	0.318	Jim	802	534.27	340.6	2.76	2.76	0.003	9.7	9.695	9.635	9.69	9.68	5.05	2.525	193.8865
11S-13	0.300	Jim	803	485.64	306.33	2.71	2.71	-0.003	8.995	8.97	8.975	8.975	8.97875	5.04	2.52	179.1292
11S-13	0.409	Jim	804	509.78	322.29	2.72	2.72	0.000	9.36	9.355	9.36	9.365	9.36	5.05	2.525	187.4771
11S-13	0.373	Jim	806	520.09	330.3	2.74	2.74	-0.003	9.515	9.525	9.525	9.515	9.52	5.035	2.5175	189.5507
11S-13	0.290	Jim	807	524.85	329.81	2.69	2.69	-0.002	9.75	9.78	9.775	9.77	9.76875	5.04	2.52	194.89
11S-13	0.256	Jim	808	515.81	330.49	2.78	2.79	-0.002	9.28	9.275	9.3	9.275	9.2825	5.04	2.52	185.1892
11S-13	0.355	Jim	809	538.73	347.32	2.81	2.81	0.002	9.54	9.55	9.6	9.56	9.5625	5.05	2.525	191.533
11S-13	0.238	Jim	812	507.91	320.32	2.71	2.71	-0.002	9.37	9.385	9.435	9.4	9.3975	5.04	2.52	187.4834
11S-13	0.249	Jim	814	546.19	359.32	2.92	2.92	0.004	9.345	9.36	9.37	9.365	9.36	5.045	2.5225	187.106
11S-13	0.364	Jim	815	513.73	325.42	2.73	2.73	0.001	9.415	9.4	9.45	9.43	9.42375	5.045	2.5225	188.3804
11S-13	0.360	Jim	816	536.38	344.21	2.79	2.79	0.000	9.6	9.59	9.635	9.625	9.6125	5.045	2.5225	192.1535
11S-13	0.239	Jim	817	524.21	335.8	2.78	2.78	0.002	9.485	9.465	9.46	9.47	9.47	5.035	2.5175	188.5552
11S-13	0.410	Jim	818	506.89	325.55	2.80	2.80	-0.005	9.07	9.055	9.05	9.05	9.05625	5.045	2.5225	181.034
11S-13	0.419	Jim	819	517.21	327.46	2.73	2.73	-0.005	9.465	9.48	9.48	9.48	9.47625	5.045	2.5225	189.4298
11S-13	0.375	Jim	821	522.75	330.12	2.71	2.72	-0.009	9.6	9.61	9.62	9.585	9.60375	5.045	2.5225	191.9785
11S-13	0.388	Jim	822	525.36	339.64	2.83	2.82	0.005	9.3	9.305	9.325	9.305	9.30875	5.045	2.5225	186.0815
11S-13	0.417	Jim	823	514.62	331.98	2.82	2.82	-0.003	9.11	9.1	9.105	9.115	9.1075	5.05	2.525	182.4196
11S-13	0.286	Jim	824	527.52	340.03	2.81	2.81	0.000	9.355	9.38	9.405	9.375	9.37875	5.045	2.5225	187.4808
11S-13	0.330	Jim	825	526.53	333.65	2.73	2.73	-0.002	9.63	9.635	9.65	9.655	9.6425	5.045	2.5225	192.7532
11S-13	0.371	Jim	826	482.49	311.89	2.83	2.83	-0.003	8.64	8.66	8.6	8.61	8.6275	5.015	2.5075	170.4184
11S-13	0.689	Jim	827	546.06	359.04	2.92	2.92	0.000	9.4	9.44	9.415	9.39	9.41125	5.03	2.515	187.0134

DDH	Cu Equiv %	Sampler	Sample No.	Wgt Air g	Wgt H2O g	SG by Water	SG by Volume	Method Difference	L1 cm	L2 cm	L3 cm	L4 cm	L Avg cm	Dia cm	Radius cm	Vol cm3
11S-13	0.282	Jim	830	500.86	316	2.71	2.71	-0.005	9.265	9.245	9.225	9.255	9.2475	5.04	2.52	184.4909
11S-13	0.232	Jim	831	564.52	372.8	2.94	2.94	0.002	9.665	9.66	9.65	9.65	9.65625	5.03	2.515	191.8819
11S-13	0.239	Jim	832	571.53	371.23	2.85	2.85	0.002	10.09	10.08	10.075	10.105	10.0875	5.03	2.515	200.4514
11S-13	0.421	Jim	833	518.03	327.68	2.72	2.72	-0.001	9.565	9.57	9.575	9.59	9.575	5.03	2.515	190.2673
11S-13	0.422	Jim	835	527.35	336.76	2.77	2.77	0.000	9.58	9.565	9.575	9.575	9.57375	5.035	2.5175	190.6209
11S-13	0.497	Jim	836	523.57	333.77	2.76	2.77	-0.007	9.51	9.48	9.475	9.5	9.49125	5.04	2.52	189.3538
11S-13	0.268	Jim	837	508.85	323.3	2.74	2.75	-0.006	9.275	9.27	9.285	9.29	9.28	5.04	2.52	185.1393
11S-13	0.299	Jim	838	515.84	324.81	2.70	2.70	0.002	9.575	9.575	9.585	9.595	9.5825	5.04	2.52	191.1743
11S-13	0.504	Jim	839	511.04	321.53	2.70	2.69	0.004	9.51	9.5	9.515	9.525	9.5125	5.04	2.52	189.7777
11S-13	0.370	Jim	840	520.59	328.5	2.71	2.71	-0.004	9.62	9.62	9.61	9.61	9.615	5.04	2.52	191.8226
11S-13	0.466	Jim	841	523.38	333.12	2.75	2.75	-0.002	9.515	9.53	9.53	9.54	9.52875	5.04	2.52	190.1019
11S-13	0.343	Jim	843	506.7	321.19	2.73	2.73	-0.003	9.26	9.27	9.275	9.275	9.27	5.045	2.5225	185.3069
11S-13	0.335	Jim	844	519.46	331.51	2.76	2.76	0.000	9.38	9.4	9.43	9.395	9.40125	5.045	2.5225	187.9306
11S-13	0.309	Jim	845	505.45	322.5	2.76	2.77	-0.003	9.145	9.14	9.14	9.15	9.14375	5.045	2.5225	182.7832
11S-13	0.326	Jim	846	519.31	333.02	2.79	2.78	0.004	9.34	9.33	9.32	9.345	9.33375	5.045	2.5225	186.5813
11S-13	0.413	Jim	847	540.54	347.9	2.81	2.81	-0.003	9.615	9.59	9.65	9.645	9.625	5.045	2.5225	192.4033
11S-13	0.201	Jim	850	566.12	378.75	3.02	3.02	0.001	9.35	9.365	9.4	9.39	9.37625	5.045	2.5225	187.4308
					<b>Average:</b>	<b>2.79</b>	<b>2.79</b>									