

2004 ARD Management Report

for
The Regal Ridge Project Area,
Yukon Territory, Canada

submitted in partial fulfillment of
ARD Management Program
to
Yukon Mining Recorder
YTG Energy, Mines and Resources
Watson Lake, Yukon Territory



October 31, 2004

True North Gems Inc.
500-602 West Hastings Street
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2004 ARD Management Program and Summary of Results

Introduction

True North Gems Inc. continued its scoping program for monitoring and evaluating the potential effects of acid rock drainage as an integral part of its in-house environmental studies during exploration in the Regal Ridge Project area.

The program collected samples representative of the main ore and host rock types from areas of activity including surface trenches, diamond drill core and underground exploration; additionally the program included water sampling from the regional drainages, property water sources and ground water collected in the underground exploration areas. The sampling and analytical procedures followed during the 2004 field season are summarized and the results are tabulated.

Operational Protocols

It is True North's intention to perform all environmental testing at Regal Ridge to strict industry standards. Any testing of water or rock will be done by accredited laboratories. Any problems encountered (changing water sample results, rocks with high ARD potential) will be dealt with quickly and efficiently, and to standard industry protocols.

Water sample analysis will be performed in a similar fashion from year to year. The samples will be taken at three times throughout the summer – once at the beginning (beginning of June), once in the middle (end of July, beginning of August), and once at the end (end of September). The locations of the samples will be identical from year to year, however, additional sampling sites will be added pending changes in the areas of exploration and other sites can be added in future years, if requested, following submission of the contained report.

Acid base accounting tests were done on rocks collected during the field season. Representative samples of significant rock types were sent to ALS Chemex for acid base accounting tests.

Mitigation Protocols

If water sampling results begin to show a degradation of water quality, the first course of action will be to determine where the water samples begin to change, and whether the activities at Regal Ridge are impacting

the water quality. This will be best determined by taking water samples at tighter intervals up the watercourse. Results would show where the change occurs, and would also indicate if the change is natural or not. If it is found that True North activities are responsible, action will be taken immediately to remove the source problem and minimize further impact. If a direct cause cannot be determined, further testing will be performed.

If waste rock is brought to surface that contains >5 % sulphides, then that rock will be immediately separated and isolated from other rocks and watercourses at Regal Ridge. It will be covered and sealed to minimize water penetration. The material will be kept on stable ground (bedrock if possible) on a tear-resistant tarp so that the material will not shift or move with time. It will be kept separate until such a time when it can be deposited in a suitable location.

Water that is contaminated by ARD will be contained and treated with lime to neutralize the acid. Any sludge produced will be disposed of by True North in accordance with a mutually agreed upon solution developed in consultation with Mining Lands.

Final abandonment measures for acid generating/metal leaching waste rock will be to return the rock to its original location, or as the situation dictates, a 'best practices' solution will be agreed upon with Mining Lands and True North will implement the remediation.

Sampling Protocols – Water Sources

During the field season, water samples were collected on three separate occasions, early season (mid-June), mid-season (early August) and before demobilization (mid-September). These samples were chosen based on proximity to the Property, any runoff from the Property and any water sources that could potentially come in contact with activities associated with mining/exploration on or surrounding the Property. All sample locations were identical to those sampled in 2003.

The samples were to be tested for metals, and pH paper was used to get a preliminary indication of the water acidity levels.

Water sample bottles and nitric acid samples were provided by ALS Environmental (nitric acid is used to preserve the sample until analysis at the laboratory facility). The water samples were collected at each site by dipping the bottle into the water until it was almost full, and then putting in the entire vial of nitric acid to fill the bottle to the top. The samples were then sealed and placed into a cooler for transport to Whitehorse and Vancouver by charter and scheduled air services. The

sample pails were delivered to ALS Chemex Environmental Services in Vancouver for analysis.

The specific analytical protocols (CCME total metals and TSS total suspended solids) are summarized on the appended ALS Chemex reports and further details can be provided upon request.

The process was completed so that the samples would be able to arrive in Vancouver for testing within the time frame specified (the samples are only viable for a limited period of time). The sampling protocols were maintained for the spring and fall collection periods, and all samples were collected by the same person.

Sampling Protocols – Rock

Representative samples (8) of the principal host rock (highly sheared and foliated chlorite schist) and ore material (quartz-tourmaline veins) have been selected from surface trenches (4), drill core (2), and fine and coarse plant tailings (2) for acid base accounting tests.

The samples were packaged into sealed plastic bags and sealed 20litre plastic pails for transport to Whitehorse and Vancouver by charter and scheduled air services. The sample pails were delivered to ALS Chemex Environmental Services in Vancouver for Total Sulphur, Paste pH, and basic ABA accounting. The analytical protocols are summarized on the ALS Chemex website and are outlined as follows.

Acid Generation Potential Evaluation

Natural oxidation of sulphide minerals in rocks and tailings by a combination of chemical and biological weathering can result in the formation of sulfuric acid, thus lowering pH and causing increased levels of dissolved trace metals. The rate of acid generation is extremely complex and is affected by such variables as pH, temperature, humidity, oxygenation, particle size and sulphide mineral species. In addition, the rate of acid generation is accelerated by certain bacterial species such as *Thiobacillus ferrooxidans*. The degree of bacterial action depends in turn upon such factors as pH, population density and growth, and nutrient concentrations.

Acid-generating minerals include the various mineral forms of pyrite as well as other common sulphide minerals such as arsenopyrite and chalcopyrite. However other species in the waste rock frequently include alkaline minerals such as calcite as well. These alkaline minerals can effectively

neutralize acid which has been generated. Numerous tests have been developed to assess the interaction between these acid-generating and alkaline materials, both in the short term and over extended periods of time. Depending on the amount of alkaline material present, the sulfuric acid may be partially or completely neutralized. If the production of sulfuric acid exceeds its neutralization by alkaline materials, then the result is acid rock drainage.

ALS Chemex offers different methods to assess the acid generating potential of your waste piles, both in the short term (Static Test) and over extended periods of time (Humidity Cells).

Static Test (Acid-Base Accounting)

Our acid rock drainage static test has been designed to measure the balance between potentially acid-generating minerals (maximum potential acidity) and acid-neutralizing minerals (neutralization potential) in a sample. This procedure, known as Acid-Base Accounting (ABA), yields a figure known as Net Neutralization Potential (NNP), which determines whether a particular sample will theoretically generate acidity over time. Depending on the parameters included, there are different options of the static test.

Field observations and core logging results indicate that sulphide content of the rocks at Regal Ridge is very low (<<1%).

ABA Accounting Criteria for ARD

If a rock has a neutralization potential (NP) to acid potential (AP) ratio greater than 2 and a sulphide sulphur content less than 1%, it will not be considered to have an ARD potential.

2004 Testing and Results

Water Sampling

During the 2004 field season, three sets of water samples were taken from twelve stations throughout the Regal Ridge property and the surrounding area.

The stations are numbered WS Station 1 through WS Station 12 inclusive and are located in the appended summary water report with contained tabulation (shown in UTM NAD83 Zone 9 coordinates) and topographic map (Appendix 1). The sample collected at site #12 (underground exploration portal) was only recovered in August due to snow cover in June and no runoff in September following an extremely dry field season.

Water samples were taken on June 23, 2004, August 10, 2004 and September 15, 2004. All water samples are tested for CCME total metals and WS Station 6 through WS Station 12 inclusive were tested for total suspended solids. The results of analysis for all the samples for 2004 are provided on the appended certificates from ALS Chemex (Appendix 2).

All results indicate water quality meeting the required guidelines with no changes during the field season.

ARD Sampling

During the 2004 field season, a total of 8 samples were taken for ARD testing, representing the principal host rock (highly sheared and foliated chlorite schist) and ore material (quartz-tourmaline veins) were selected from surface trenches (4), drill core (2), and fine and coarse plant tailings (2); the latter two samples were not site specific but represented a split of the typical bulk sample material of altered chlorite schist and associated quartz-tourmaline veins.

Initially the plan was to collect two samples from the underground adit, two samples from diamond drill hole core samples and two from the processing plant waste pile (rocks from various locations throughout the sampling area on the Property, principally representing the focussed exploration area of the Summit Zone on Regal Ridge proper). The actual samples were collected from the representative rock types in trenches and drill core adjacent to the underground workings; lack of availability to the latter was due to security/safety screens to prohibit access to personnel. No underground exploration was completed during the 2004 field season.

The location are shown on the appended map and tabulation (Appendix 3). The results of analysis for all the samples for 2004 are attached (see Appendix 4).

The preliminary results indicated $\text{pH} > 7$ for all but two samples at 4.8 and 5.4, sulphur $< 0.22\%$ to below detection limits of 0.01% (all but one sample $< 0.12\% \text{S}$), and on the whole, a low acid generation potential.

Future Sampling Plans

The underground exploration program was completed in 2003 and no further underground development was carried out during the 2004 field season. However, monitoring of the area will continue and the 2005 sampling program will include, as conditions allow, collection of water samples from the adit. Due to safety concerns, primarily potential loose rock conditions, the entrance to the adit has been closed with plywood covers; therefore direct access to the adit is limited. Water draining from the adit will be sampled if available at the entrance.

Surface exploration will continue in the area of the adit and is expected to access the U/G workings from the overlying and adjacent removal of mini-bulk sample material by trenching.

Additionally, samples of drill core, plant tailings and surface trench material will be collected on an ongoing basis during the 2004 program.

Further analysis of specific rock types and their potential for acid rock drainage may be warranted as exploration progresses and required sampling will be evaluated pending results of the ongoing drill core examination and surficial mapping programs.

Respectfully submitted,
October 31, 2004

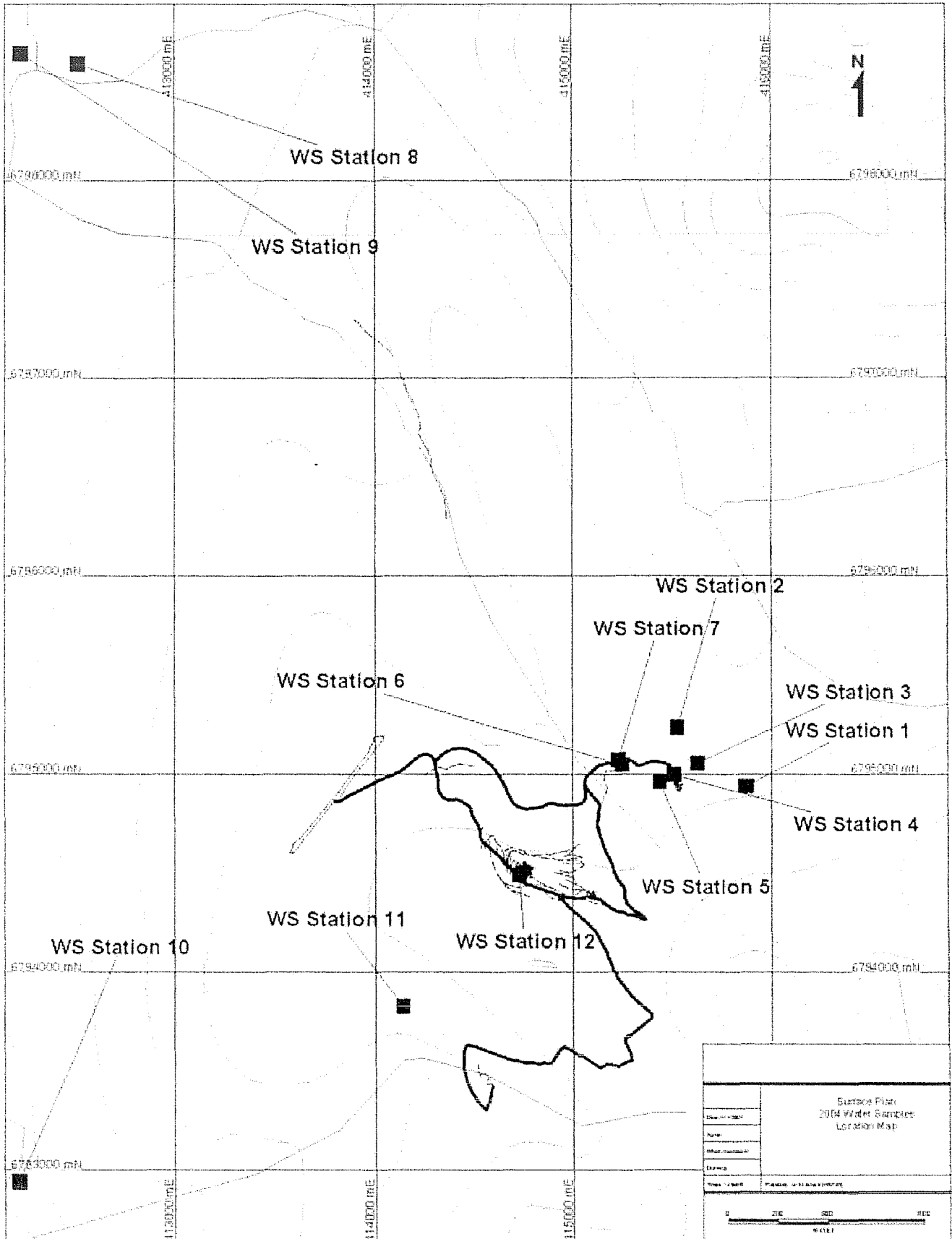


Greg Davison, P.Geo.
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Twila Skinner
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Appendix 1
Water Sample List and Location Map



Appendix 2
Water Samples – ALS Chemex Analytical Certificates

CHEMICAL ANALYSIS REPORT

Date: July 13, 2004

ALS File No. U4976

Report On: Regal Ridge Water Analysis

Report To: **True North Gems Inc.**
Suite 500-602 West Hastings St.
Vancouver, BC
V6B 1P2

Attention: **Ms. Bonnie Pemberton**

Received: June 26, 2004

ALS ENVIRONMENTAL

per:

Scott P. Hoekstra, B.Sc. - Project Chemist
Brent C. Mack, B.Sc. - Section Coordinator

File No. U4976

RESULTS OF ANALYSIS - Water

Sample ID	WS04-01	WS04-02	WS04-03	WS04-04	WS04-05
Sample Date	04-06-23	04-06-23	04-06-23	04-06-23	04-06-23
Sample Time	08:23	08:47	08:37	09:00	09:10
ALS ID	1	2	3	4	5
<hr/>					
Physical Tests					
Hardness CaCO3	37.7	16.9	25.6	22.3	21.8
Total Suspended Solids	-	-	-	-	-

Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID		WS04-01	WS04-02	WS04-03	WS04-04	WS04-05
Sample Date		04-06-23	04-06-23	04-06-23	04-06-23	04-06-23
Sample Time		08:23	08:47	08:37	09:00	09:10
ALS ID		1	2	3	4	5
Total Metals						
Aluminum	T-Al	0.0120	0.0317	0.0130	0.0092	0.0266
Antimony	T-Sb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Barium	T-Ba	0.101	<0.020	0.054	0.038	<0.020
Beryllium	T-Be	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	T-Bi	<0.20	<0.20	<0.20	<0.20	<0.20
Boron	T-B	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium	T-Ca	9.02	4.87	5.82	5.41	5.60
Chromium	T-Cr	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt	T-Co	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Copper	T-Cu	<0.0010	<0.0010	<0.0010	<0.0010	0.0032
Iron	T-Fe	0.045	<0.030	<0.030	<0.030	<0.030
Lead	T-Pb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	3.69	1.15	2.70	2.14	1.91
Manganese	T-Mn	0.0130	0.00071	0.00082	<0.00030	0.00062
Mercury	T-Hg	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel	T-Ni	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.20	1.25	1.04	1.19	1.49
Silver	T-Ag	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.188	0.0209	0.118	0.0850	0.0372
Thallium	T-Tl	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.00092	0.00034	0.00053	<0.00020	<0.00020
Vanadium	T-V	<0.030	<0.030	<0.030	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

File No. U4976

RESULTS OF ANALYSIS - Water

Sample ID	WS04-06	WS04-07	WS04-08	WS04-09	WS04-10
Sample Date	04-06-23	04-06-23	04-06-23	04-06-23	04-06-23
Sample Time	09:20	09:28	15:39	15:33	15:25
ALS ID	6	7	8	9	10

Physical Tests

Hardness	CaCO3	18.8	18.8	32.8	41.4	30.2
Total Suspended Solids		4.7	<3.0	<3.0	<3.0	<3.0

Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID		WS04-06	WS04-07	WS04-08	WS04-09	WS04-10
Sample Date		04-06-23	04-06-23	04-06-23	04-06-23	04-06-23
Sample Time		09:20	09:28	15:39	15:33	15:25
ALS ID		6	7	8	9	10
Total Metals						
Aluminum	T-Al	0.0511	0.0243	0.0187	0.0361	0.0199
Antimony	T-Sb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Barium	T-Ba	<0.020	<0.020	0.021	0.042	<0.020
Beryllium	T-Be	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	T-Bi	<0.20	<0.20	<0.20	<0.20	<0.20
Boron	T-B	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050	<0.000050	0.000109	<0.000050
Calcium	T-Ca	4.88	4.90	7.55	10.6	7.62
Chromium	T-Cr	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt	T-Co	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Copper	T-Cu	0.0013	<0.0010	0.0020	<0.0010	0.0012
Iron	T-Fe	<0.030	<0.030	<0.030	<0.030	<0.030
Lead	T-Pb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	1.60	1.59	3.39	3.62	2.71
Manganese	T-Mn	0.00120	0.00182	0.00038	0.00930	0.00044
Mercury	T-Hg	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel	T-Ni	<0.0010	<0.0010	0.0017	0.0043	<0.0010
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.06	1.06	2.23	2.35	2.64
Silver	T-Ag	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0361	0.0361	0.0494	0.0605	0.0361
Thallium	T-Tl	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	<0.00020	<0.00020	<0.00020	0.00178	0.00361
Vanadium	T-V	<0.030	<0.030	<0.030	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050	<0.0050	0.0150	<0.0050

Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

File No. U4976

RESULTS OF ANALYSIS - Water

Sample ID WS04-11

Sample Date 04-06-23
Sample Time 14:30
ALS ID 11

Physical Tests

Hardness	CaCO ₃	28.4
Total Suspended Solids		<3.0

Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

File No. U4976

RESULTS OF ANALYSIS - Water

Sample ID WS04-11

Sample Date 04-06-23
Sample Time 14:30
ALS ID 11

Total Metals

Aluminum	T-Al	0.0272
Antimony	T-Sb	<0.00050
Arsenic	T-As	<0.00050
Barium	T-Ba	<0.020
Beryllium	T-Be	<0.0010
Bismuth	T-Bi	<0.20
Boron	T-B	<0.10
Cadmium	T-Cd	<0.000050
Calcium	T-Ca	7.18
Chromium	T-Cr	<0.0010
Cobalt	T-Co	<0.00030
Copper	T-Cu	0.0010
Iron	T-Fe	<0.030
Lead	T-Pb	<0.00050
Lithium	T-Li	<0.0050
Magnesium	T-Mg	2.54
Manganese	T-Mn	0.00142
Mercury	T-Hg	<0.000050
Molybdenum	T-Mo	<0.0010
Nickel	T-Ni	<0.0010
Phosphorus	T-P	<0.30
Potassium	T-K	<2.0
Selenium	T-Se	<0.0010
Silicon	T-Si	2.25
Silver	T-Ag	<0.000020
Sodium	T-Na	<2.0
Strontium	T-Sr	0.0371
Thallium	T-Tl	<0.00020
Tin	T-Sn	<0.00050
Titanium	T-Ti	<0.010
Uranium	T-U	0.00399
Vanadium	T-V	<0.030
Zinc	T-Zn	<0.0050

Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

Appendix 1 - METHODOLOGY

Outlines of the methodologies utilized for the analysis of the samples submitted are as follows

Conventional Parameters in Water

These analyses are carried out in accordance with procedures described in "Methods for Chemical Analysis of Water and Wastes" (USEPA), "Manual for the Chemical Analysis of Water, Wastewaters, Sediments and Biological Tissues" (BCMOE), and/or "Standard Methods for the Examination of Water and Wastewater" (APHA). Further details are available on request.

Metals in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotplate or microwave oven, or filtration (EPA Method 3005A). Instrumental analysis is by atomic absorption/emission spectrophotometry (EPA Method 7000 series), inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B), and/or inductively coupled plasma - mass spectrometry (EPA Method 6020).

Recommended Holding Time:

Sample:	6 months
Reference:	EPA
For more detail see:	ALS "Collection & Sampling Guide"

Mercury in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedure involves a cold-oxidation of the acidified sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).

Recommended Holding Time:

Sample:	28 days
Reference:	EPA
For more detail see	ALS Environmental "Collection & Sampling Guide"

Solids in Water

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total dissolved solids (TDS) and total suspended solids (TSS) are determined by filtering a sample

File No. U4976

Appendix 1 - METHODOLOGY - Continued

through a glass fibre filter, TDS is determined by evaporating the filtrate to dryness at 180 degrees celsius, TSS is determined by drying the filter at 104 degrees celsius. Total solids are determined by evaporating a sample to dryness at 104 degrees celsius. Fixed and volatile solids are determined by igniting a dried sample residue at 550 degrees celsius.

Recommended Holding Time:

Sample: 7 days

Reference: APHA

For more detail see ALS Environmental "Collection & Sampling Guide"

Results contained within this report relate only to the samples as submitted.

This Chemical Analysis Report shall only be reproduced in full, except with the written approval of ALS Environmental.

End of Report



CHEMICAL ANALYSIS REPORT

Date: August 26, 2004

ALS File No. U6857

Report On: Regal Ridge Water Analysis

Report To: **True North Gems Inc.**
Suite 500-602 West Hastings St.
Vancouver, BC
V6B 1P2

Attention: **Ms. Twila Skinner**

Received: August 12, 2004

ALS ENVIRONMENTAL

per:

Scott P. Hoekstra, B.Sc. - Project Chemist
Heather A. Ross-Easton, B.Sc. - Project Chemist

RESULTS OF ANALYSIS - Water



Sample ID	WS04-12	WS04-13	WS04-14	WS04-15	WS04-16
Sample Date	04-08-23	04-08-23	04-08-23	04-08-23	04-08-23
Sample Time	20:42	21:03	20:55	21:11	21:30
ALS ID	1	2	3	4	5

Physical Tests

Hardness	CaCO ₃	71.4	51.7	64.5	56.9	38.8
Total Suspended Solids		-	-	-	-	-

Total Metals

Aluminum	T-Al	0.0055	0.0188	0.0092	0.0411	0.0179
Antimony	T-Sb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Barium	T-Ba	0.152	<0.020	0.109	0.112	0.023
Beryllium	T-Be	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron	T-B	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium	T-Ca	16.5	14.8	14.0	12.9	9.79
Chromium	T-Cr	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt	T-Co	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Copper	T-Cu	<0.0010	<0.0010	<0.0010	0.0013	0.0084
Iron	T-Fe	<0.030	<0.030	<0.030	<0.030	<0.030
Lead	T-Pb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	7.33	3.56	7.20	5.98	3.48
Manganese	T-Mn	0.00542	0.00250	<0.00030	0.00236	0.00152
Mercury	T-Hg	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010	0.0011	<0.0010	<0.0010
Nickel	T-Ni	<0.0010	<0.0010	0.0010	<0.0010	0.0044
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver	T-Ag	<0.000020	<0.000020	<0.000020	0.000037	<0.000020
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Thallium	T-Tl	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.00245	0.00210	0.00291	0.00073	0.00024
Vanadium	T-V	<0.030	<0.030	<0.030	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS -Water



Sample ID	WS04-17	WS04-17A	WS04-18	WS04-18A	WS04-19
Sample Date	04-08-23	04-08-23	04-08-23	04-08-23	04-08-23
Sample Time	21:42	21:42	21:48	21:48	17:54
ALS ID	6	7	8	9	10

Physical Tests

Hardness	CaCO ₃	43.8	-	51.1	-	56.3
Total Suspended Solids		-	<3.0	-	4.6	-

Total Metals

Aluminum	T-Al	0.0097	-	0.0150	-	0.0096
Antimony	T-Sb	<0.00050	-	<0.00050	-	<0.00050
Arsenic	T-As	<0.00050	-	<0.00050	-	<0.00050
Barium	T-Ba	0.031	-	0.025	-	0.030
Beryllium	T-Be	<0.0010	-	<0.0010	-	<0.0010
Boron	T-B	<0.10	-	<0.10	-	<0.10
Cadmium	T-Cd	<0.000050	-	<0.000050	-	<0.000050
Calcium	T-Ca	11.7	-	14.3	-	13.3
Chromium	T-Cr	<0.0010	-	<0.0010	-	<0.0010
Cobalt	T-Co	<0.00030	-	<0.00030	-	<0.00030
Copper	T-Cu	0.0021	-	0.0017	-	<0.0010
Iron	T-Fe	<0.030	-	0.039	-	<0.030
Lead	T-Pb	<0.00050	-	<0.00050	-	<0.00050
Lithium	T-Li	<0.0050	-	<0.0050	-	<0.0050
Magnesium	T-Mg	3.55	-	3.76	-	5.61
Manganese	T-Mn	0.00489	-	0.00535	-	<0.00030
Mercury	T-Hg	<0.000050	-	<0.000050	-	<0.000050
Molybdenum	T-Mo	<0.0010	-	<0.0010	-	<0.0010
Nickel	T-Ni	0.0013	-	<0.0010	-	0.0014
Potassium	T-K	<2.0	-	<2.0	-	<2.0
Selenium	T-Se	<0.0010	-	<0.0010	-	<0.0010
Silver	T-Ag	<0.000020	-	<0.000020	-	<0.000020
Sodium	T-Na	<2.0	-	<2.0	-	<2.0
Thallium	T-Tl	<0.00020	-	<0.00020	-	<0.00020
Tin	T-Sn	<0.00050	-	<0.00050	-	<0.00050
Titanium	T-Ti	<0.010	-	<0.010	-	<0.010
Uranium	T-U	0.00038	-	0.00036	-	<0.00020
Vanadium	T-V	<0.030	-	<0.030	-	<0.030
Zinc	T-Zn	<0.0050	-	<0.0050	-	<0.0050

Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water



Sample ID	WS04-19A	WS04-20	WS04-20A	WS04-21	WS04-21A
Sample Date	04-08-23	04-08-23	04-08-23	04-08-23	04-08-23
Sample Time	17:54	17:45	17:45	17:40	17:40
ALS ID	11	12	13	14	15

Physical Tests

Hardness	CaCO ₃	-	69.2	-	50.0	-
Total Suspended Solids		<3.0	-	9.3	-	14.6

Total Metals

Aluminum	T-Al	-	0.0235	-	0.0184	-
Antimony	T-Sb	-	<0.00050	-	<0.00050	-
Arsenic	T-As	-	<0.00050	-	<0.00050	-
Barium	T-Ba	-	0.065	-	<0.020	-
Beryllium	T-Be	-	<0.0010	-	<0.0010	-
Boron	T-B	-	<0.10	-	<0.10	-
Cadmium	T-Cd	-	0.000138	-	<0.000050	-
Calcium	T-Ca	-	18.0	-	13.0	-
Chromium	T-Cr	-	<0.0010	-	<0.0010	-
Cobalt	T-Co	-	<0.00030	-	<0.00030	-
Copper	T-Cu	-	<0.0010	-	0.0012	-
Iron	T-Fe	-	<0.030	-	<0.030	-
Lead	T-Pb	-	<0.00050	-	<0.00050	-
Lithium	T-Li	-	<0.0050	-	<0.0050	-
Magnesium	T-Mg	-	5.88	-	4.28	-
Manganese	T-Mn	-	0.00751	-	0.00108	-
Mercury	T-Hg	-	<0.000050	-	<0.000050	-
Molybdenum	T-Mo	-	<0.0010	-	<0.0010	-
Nickel	T-Ni	-	0.0051	-	<0.0010	-
Potassium	T-K	-	<2.0	-	<2.0	-
Selenium	T-Se	-	<0.0010	-	<0.0010	-
Silver	T-Ag	-	<0.000020	-	<0.000020	-
Sodium	T-Na	-	<2.0	-	<2.0	-
Thallium	T-Tl	-	<0.00020	-	<0.00020	-
Tin	T-Sn	-	<0.00050	-	<0.00050	-
Titanium	T-Ti	-	<0.010	-	<0.010	-
Uranium	T-U	-	0.00383	-	0.00988	-
Vanadium	T-V	-	<0.030	-	<0.030	-
Zinc	T-Zn	-	0.0175	-	<0.0050	-

Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water



Sample ID	WS04-22	WS04-22A	WS04-23
Sample Date	04-08-23	04-08-23	04-08-24
Sample Time	17:18	17:18	11:05
ALS ID	16	17	18

Physical Tests

Hardness	CaCO ₃	60.9	-	333
Total Suspended Solids		-	<3.0	-

Total Metals

Aluminum	T-Al	0.0071	-	0.776
Antimony	T-Sb	<0.00050	-	0.00077
Arsenic	T-As	<0.00050	-	<0.00050
Barium	T-Ba	<0.020	-	<0.020
Beryllium	T-Be	<0.0010	-	<0.0010
Boron	T-B	<0.10	-	<0.10
Cadmium	T-Cd	<0.000050	-	0.000070
Calcium	T-Ca	15.9	-	85.9
Chromium	T-Cr	<0.0010	-	0.0089
Cobalt	T-Co	<0.00030	-	0.0291
Copper	T-Cu	0.0011	-	0.0423
Iron	T-Fe	<0.030	-	0.652
Lead	T-Pb	<0.00050	-	0.00248
Lithium	T-Li	<0.0050	-	0.0537
Magnesium	T-Mg	5.15	-	28.7
Manganese	T-Mn	0.00106	-	0.290
Mercury	T-Hg	<0.000050	-	<0.000050
Molybdenum	T-Mo	0.0015	-	0.0017
Nickel	T-Ni	<0.0010	-	0.0872
Potassium	T-K	<2.0	-	3.2
Selenium	T-Se	<0.0010	-	0.0022
Silver	T-Ag	<0.000020	-	0.000026
Sodium	T-Na	<2.0	-	15.0
Thallium	T-Tl	<0.00020	-	<0.00020
Tin	T-Sn	<0.00050	-	<0.00050
Titanium	T-Ti	<0.010	-	0.010
Uranium	T-U	0.0193	-	0.00074
Vanadium	T-V	<0.030	-	<0.030
Zinc	T-Zn	<0.0050	-	0.0092

Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates



Water	WS04-13	WS04-13
	04-08-23 21:03	QC # 400691

Physical Tests

Hardness	CaCO ₃	51.7	52.5
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Total Metals

Aluminum	T-Al	0.0188	0.0184
Antimony	T-Sb	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050
Barium	T-Ba	<0.020	<0.020
Beryllium	T-Be	<0.0010	<0.0010
Boron	T-B	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050
Calcium	T-Ca	14.8	15.1
Chromium	T-Cr	<0.0010	<0.0010
Cobalt	T-Co	<0.00030	<0.00030
Copper	T-Cu	<0.0010	<0.0010
Iron	T-Fe	<0.030	<0.030
Lead	T-Pb	<0.00050	<0.00050
Lithium	T-Li	<0.0050	<0.0050
Magnesium	T-Mg	3.56	3.57
Manganese	T-Mn	0.00250	0.00247
Mercury	T-Hg	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010
Nickel	T-Ni	<0.0010	<0.0010
Potassium	T-K	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010
Silver	T-Ag	<0.000020	<0.000020
Sodium	T-Na	<2.0	<2.0
Thallium	T-Tl	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010
Uranium	T-U	0.00210	0.00218
Vanadium	T-V	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050

Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

Appendix 2 - METHODOLOGY



Outlines of the methodologies utilized for the analysis of the samples submitted are as follows

Conventional Parameters in Water

These analyses are carried out in accordance with procedures described in "Methods for Chemical Analysis of Water and Wastes" (USEPA), "Manual for the Chemical Analysis of Water, Wastewaters, Sediments and Biological Tissues" (BCMOE), and/or "Standard Methods for the Examination of Water and Wastewater" (APHA). Further details are available on request.

Metals in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotplate or microwave oven, or filtration (EPA Method 3005A). Instrumental analysis is by atomic absorption/emission spectrophotometry (EPA Method 7000 series), inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B), and/or inductively coupled plasma - mass spectrometry (EPA Method 6020).

Recommended Holding Time:

Sample:	6 months
Reference:	EPA
For more detail see:	ALS "Collection & Sampling Guide"

Mercury in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedure involves a cold-oxidation of the acidified sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).

Recommended Holding Time:

Sample:	28 days
Reference:	EPA
For more detail see	ALS Environmental "Collection & Sampling Guide"

Solids in Water

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total dissolved solids (TDS) and total suspended solids (TSS) are determined by filtering a sample

File No. U6857

Appendix 2 - METHODOLOGY - Continued



through a glass fibre filter, TDS is determined by evaporating the filtrate to dryness at 180 degrees celsius, TSS is determined by drying the filter at 104 degrees celsius. Total solids are determined by evaporating a sample to dryness at 104 degrees celsius. Fixed and volatile solids are determined by igniting a dried sample residue at 550 degrees celsius.

Recommended Holding Time:

Sample: 7 days

Reference: APHA

For more detail see ALS Environmental "Collection & Sampling Guide"

Results contained within this report relate only to the samples as submitted.

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End of Report



CHEMICAL ANALYSIS REPORT

Date: October 6, 2004

ALS File No. U8295

Report On: Regal Ridge Water Analysis

Report To: **True North Gems Inc.**
Suite 500-602 West Hastings St.
Vancouver, BC
V6B 1P2

Attention: **Ms. Twila Skinner**

Received: September 17, 2004

ALS ENVIRONMENTAL

per:

Brent C. Mack, B.Sc. - Section Coordinator
Scott P. Hoekstra, B.Sc. - Project Chemist

File No. U8295

REMARKS



Please note that the detection limits for certain Total Metals have been increased for some of the samples reported in the following data tables due to sample matrix interferences.

RESULTS OF ANALYSIS - Water



Sample ID	WS04-24	WS04-25	WS04-26	WS04-27	WS04-28
Sample Date	04-09-15	04-09-15	04-09-15	04-09-15	04-09-15
Sample Time	13:42	13:58	13:29	14:41	14:35
ALS ID	1	2	3	4	5

Physical Tests

Hardness	CaCO ₃	78.0	51.6	63.5	57.7	43.4
Total Suspended Solids		-	-	-	-	-

Total Metals

Aluminum	T-Al	<0.0050	0.0058	0.0614	0.0696	0.0113
Antimony	T-Sb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Barium	T-Ba	0.163	<0.020	0.090	0.088	<0.020
Beryllium	T-Be	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron	T-B	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Calcium	T-Ca	17.6	14.6	13.2	12.4	9.98
Chromium	T-Cr	<0.0010	<0.0010	0.0019	0.0016	<0.0010
Cobalt	T-Co	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Copper	T-Cu	<0.0010	<0.0010	<0.0010	0.0011	0.0024
Iron	T-Fe	<0.030	<0.030	0.061	0.038	<0.030
Lead	T-Pb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00065
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	8.28	3.66	7.44	6.46	4.49
Manganese	T-Mn	0.00286	0.00080	0.00102	0.00176	<0.00030
Mercury	T-Hg	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010	0.0012	0.0011	<0.0010
Nickel	T-Ni	<0.0010	<0.0010	0.0014	<0.0010	0.0019
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver	T-Ag	<0.000020	<0.000020	0.000049	0.000027	<0.000020
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Thallium	T-Tl	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.00279	0.00207	0.00511	0.00209	0.00040
Vanadium	T-V	<0.030	<0.030	<0.030	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water



Sample ID	WS04-29	WS04-30	WS04-31	WS04-32	WS04-33
Sample Date	04-09-15	04-09-15	04-09-15	04-09-15	04-09-15
Sample Time	14:24	14:14	11:17	11:11	11:02
ALS ID	6	7	8	9	10

Physical Tests

Hardness	CaCO ₃	44.5	53.3	53.4	70.5	49.5
Total Suspended Solids		13.3	5.3	<3.0	<3.0	9.3

Total Metals

Aluminum	T-Al	0.0083	0.0279	0.0103	0.0161	0.0805
Antimony	T-Sb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Barium	T-Ba	0.035	0.022	0.025	0.060	<0.020
Beryllium	T-Be	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron	T-B	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050	<0.000050	0.000137	<0.000050
Calcium	T-Ca	11.7	14.9	12.3	18.1	12.7
Chromium	T-Cr	<0.0010	<0.0010	<0.0010	<0.0010	0.0011
Cobalt	T-Co	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Copper	T-Cu	0.0014	0.0015	<0.0010	<0.0010	0.0028
Iron	T-Fe	<0.030	0.085	<0.030	<0.030	0.110
Lead	T-Pb	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	3.72	3.91	5.52	6.12	4.33
Manganese	T-Mn	0.00400	0.00580	<0.00030	0.0103	0.00757
Mercury	T-Hg	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Nickel	T-Ni	<0.0010	<0.0010	0.0015	0.0056	<0.0010
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver	T-Ag	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Thallium	T-Tl	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.00046	0.00044	<0.00020	0.00462	0.0173
Vanadium	T-V	<0.030	<0.030	<0.030	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050	<0.0050	0.0209	<0.0050

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates



Water	WS04-31	WS04-31
	04-09-15 11:17	QC # 406968

Physical Tests

Hardness	CaCO3	53.4	52.6
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Total Metals

Aluminum	T-Al	0.0103	0.0099
Antimony	T-Sb	<0.00050	<0.00050
Arsenic	T-As	<0.00050	<0.00050
Barium	T-Ba	0.025	0.022
Beryllium	T-Be	<0.0010	<0.0010
Boron	T-B	<0.10	<0.10
Cadmium	T-Cd	<0.000050	<0.000050
Calcium	T-Ca	12.3	12.0
Chromium	T-Cr	<0.0010	<0.0010
Cobalt	T-Co	<0.00030	<0.00030
Copper	T-Cu	<0.0010	<0.0010
Iron	T-Fe	<0.030	<0.030
Lead	T-Pb	<0.00050	<0.00050
Lithium	T-Li	<0.0050	<0.0050
Magnesium	T-Mg	5.52	5.46
Manganese	T-Mn	<0.00030	<0.00030
Mercury	T-Hg	<0.000050	<0.000050
Molybdenum	T-Mo	<0.0010	<0.0010
Nickel	T-Ni	0.0015	0.0015
Potassium	T-K	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010
Silver	T-Ag	<0.000020	<0.000020
Sodium	T-Na	<2.0	<2.0
Thallium	T-Tl	<0.00020	<0.00020
Tin	T-Sn	<0.00050	<0.00050
Titanium	T-Ti	<0.010	<0.010
Uranium	T-U	<0.00020	<0.00020
Vanadium	T-V	<0.030	<0.030
Zinc	T-Zn	<0.0050	<0.0050

Remarks regarding the analyses appear at the beginning of this report.
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Outlines of the methodologies utilized for the analysis of the samples submitted are as follows

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Metals in Water

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Recommended Holding Time:

Sample:	6 months
Reference:	EPA
For more detail see:	ALS "Collection & Sampling Guide"

Mercury in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedure involves a cold-oxidation of the acidified sample using bromine monochloride prior to reduction of the sample with stannous chloride. Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry (EPA Method 245.7).

Recommended Holding Time:

Sample:	28 days
Reference:	EPA
For more detail see	ALS Environmental "Collection & Sampling Guide"

Solids in Water

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total dissolved solids (TDS) and total suspended solids (TSS) are determined by filtering a sample

File No. U8295

Appendix 2 - METHODOLOGY - Continued



through a glass fibre filter, TDS is determined by evaporating the filtrate to dryness at 180 degrees celsius, TSS is determined by drying the filter at 104 degrees celsius. Total solids are determined by evaporating a sample to dryness at 104 degrees celsius. Fixed and volatile solids are determined by igniting a dried sample residue at 550 degrees celsius.

Recommended Holding Time:

Sample: 7 days

Reference: APHA

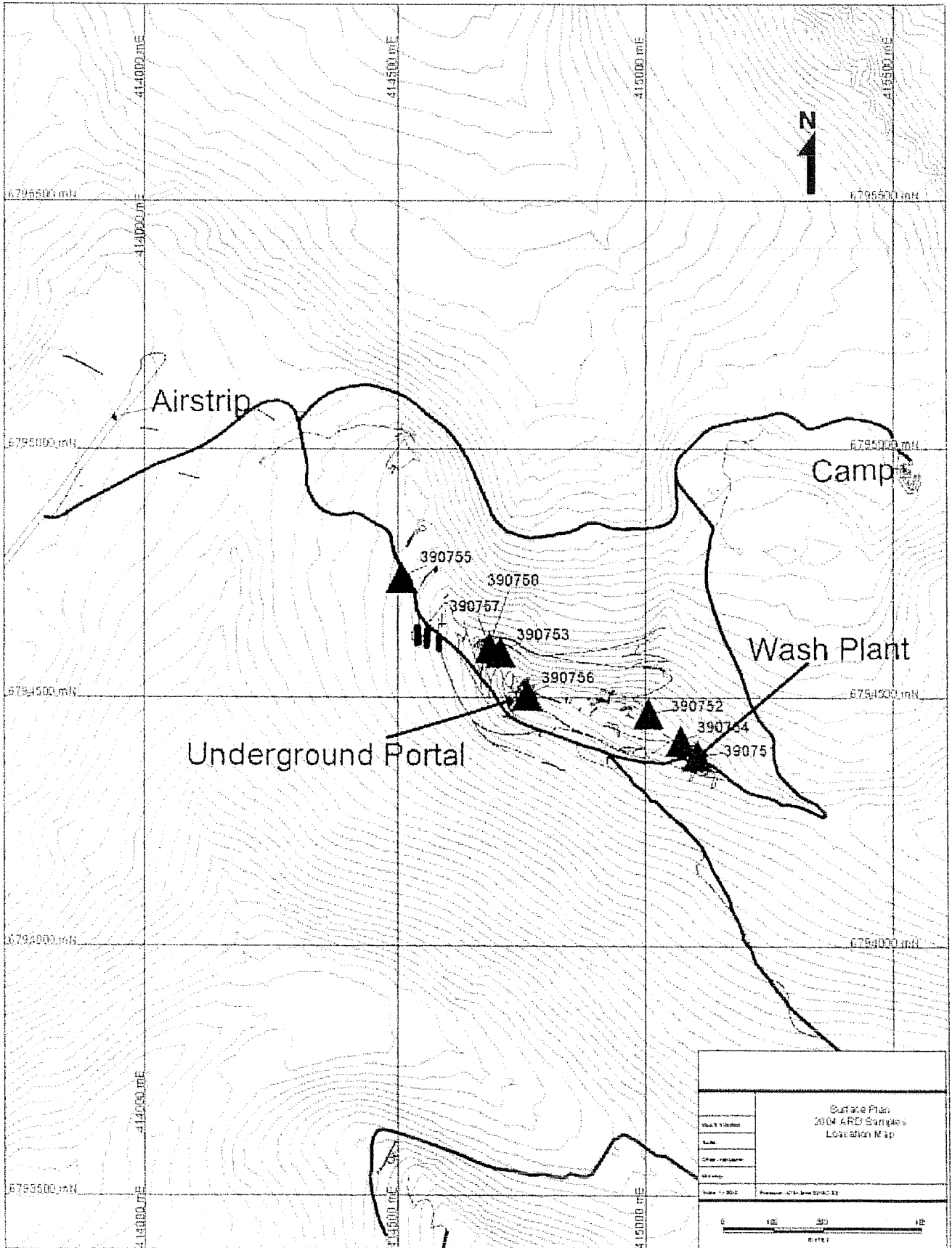
For more detail see ALS Environmental "Collection & Sampling Guide"

Results contained within this report relate only to the samples as submitted.

This Chemical Analysis Report shall only be reproduced in full, except with the written approval of ALS Environmental.

End of Report

Appendix 3
ARD Sample List and Location Map



Appendix 4
ARD Samples – ALS Chemex Analytical Certificates



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue

North Vancouver BC V7J 2C1 Canada

Phone: 604 984 0221 Fax: 604 984 0218

TO: TRUE NORTH GEMS
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

Page: 1

Finalized Date: 9-OCT-2004

This copy reported on 18-OCT-2004

Account: THR

CERTIFICATE VA04065164

Project: Regal Ridge

P.O. No.:

This report is for 8 Rock samples submitted to our lab in Vancouver, BC, Canada on 22-SEP-2004.

The following have access to data associated with this certificate:

GREG DAVISON

BONNIE PEMBERTON

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
S-IR08	Total Sulphur (Leco)	LECO
OA-ELE07	Paste pH	
OA-VOL08	Basic Acid Base Accounting	

To: TRUE NORTH GEMS
ATTN: BONNIE PEMBERTON
500-602 W HASTINGS ST
VANCOUVER BC V6B 1P2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.
 212 Brooksbank Avenue
 North Vancouver BC V7J 2C1 Canada
 Phone: 604 984 0221 Fax: 604 984 0218

3: TRUE NORTH GEMS
 500-602 W HASTINGS ST
 VANCOUVER BC V6B 1P2

Page: 2 - A
 Total # Pages: 2 (A)
 Finalized Date: 9-OCT-2004
 Account: THR

Project: Regal Ridge

CERTIFICATE OF ANALYSIS VA04065164

Method Analyte Units LOR	WEL-21 Recvd Wt. kg	OA-VOL08 FIZZ RAT Unity	OA-VOL08 NNP t CaCO3/ 10	OA-VOL08 NP t CaCO3/ 10	OA-ELE07 pH Unity	OA-VOL08 MPA t CaCO3/ 10	OA-VOL08 Ratio (N) Unity	S-IR08 S %
Sample Description	0.02	1	1	1	0.1	0.5	0.01	0.01
M390751	1.76	1	8	10	7.6	2.5	4.00	0.08
M390752	1.22	1	-6	1	5.4	6.9	0.15	0.22
M390753	1.58	1	0	3	4.8	3.1	0.96	0.10
M390754	3.48	1	7	9	8.0	1.9	4.80	0.06
M390755	1.62	1	4	7	7.0	3.1	2.24	0.10
M390756	3.28	1	6	8	7.6	2.5	3.20	0.08
M390757	1.32	1	0	4	7.9	3.8	1.07	0.12
M390758	0.98	1	7	7	9.0	<0.5	44.80	<0.01