

Anvil Range Mine 2006 Groundwater Monitoring Draft Report



Prepared for
Deloitte & Touche Inc.
(acting as court-appointed Interim Receiver for
Anvil Range Mining Corporation

Submitted by
Gartner Lee Limited

January 2007

Anvil Range Mine 2006 Groundwater Monitoring Draft Report

Prepared for

Deloitte & Touche Inc.
(acting as court-appointed Interim
Receiver for Anvil Range Mine)

January 2007

Reference: **GLL 60601**

Distribution:

e Deloitte & Touche
e Faro Mine Closure Planning Office
e Gartner Lee Limited

January 31, 2007

Valerie Chort
Deloitte and Touche Inc.
Via email: *vchort@deloitte.ca*

Dear Ms. Chort:

Re: 60-601– Anvil Range Mine, Rose Creek Tailings Facility, 2006 Groundwater Monitoring Report, Draft Report

We are pleased to present you with a copy of our draft report. Please review at your earliest convenience and contact me to discuss your comments and revisions. Table 2 outlining the construction details of the monitoring wells will be included in the final report. The data included in this report will also undergo further QA/QC prior to finalizing the report.

Please do not hesitate to contact me at ext. 24 or Jennifer Funston at ext. 32, should you have any questions. We thank you for the opportunity to work on this project and look forward to the upcoming 2007 season.

Yours very truly,
GARTNER LEE LIMITED

Martin Guilbeault, M.Sc., P.Eng
Senior Hydrogeologist

c.c.: Faro Mine Closure Planning Office c/o Roger Payne

JF:jf

January 31, 2007

Valerie Chort
Deloitte and Touche Inc.
Via email: *vchort@deloitte.ca*

privileged and confidential
draft for discussion

Dear Ms. Chort:

Re: 60-601 – Issuance of Draft Reports

A DRAFT is a rough copy of a report. The intent in issuing it is to allow other knowledgeable people associated with the project an opportunity to review the style and content prior to final issuance.

Since the FINAL report may differ from the draft, we think it only prudent to collect all of the DRAFT reports prior to issuance of the FINAL report. We would appreciate it if you would see that all copies of the DRAFT are returned to us and then we will issue our FINAL report.

We thank you in advance for your cooperation.

Yours very truly,
GARTNER LEE LIMITED

A handwritten signature in black ink, appearing to read "E. Grant Anderson". The signature is fluid and cursive, with the first name "E. Grant" and last name "Anderson" clearly distinguishable.

E. Grant Anderson, P.Eng.
President

EGA:mm
Attach.

Table of Contents

Executive Summary

	Page
1. Introduction.....	1
2. Quality Assurance and Quality Control	2
2.1 General QA/QC Measures	3
2.1.1 Chain of Custody Reports	4
2.2 Water Quality.....	4
2.2.1 Field Replicates and Split Samples.....	4
2.2.2 Laboratory Duplicates.....	5
2.3 Relative Percent Difference Analysis	5
2.3.1 Relative Percent Difference – Field QA/QC Samples	5
2.3.2 Relative Percent Difference – Lab QA/QC Samples	6
3. 2006 Water Levels.....	6
4. 2006 Groundwater Quality Data	6
5. Field Logistics and Sampling Issues.....	7
5.1 Original Tailings Impoundment.....	7
5.2 Second Impoundment Southeast Corner.....	7
5.3 Second Impoundment – Northern Section	8
5.4 Intermediate Impoundment.....	8
5.5 Toe of Intermediate Dam	9
5.6 Down Gradient of the Cross Valley Dam	10
5.7 Faro Rock Dump Area	10
5.8 Vangorda Rock Dump Area.....	12
5.9 Grum Rock Dump Area	12
6. Recommendations.....	13
6.1 General Care and Maintenance	13
6.2 Surveying	14
6.3 Decommissioning of Wells.....	14
6.4 Discontinue Sampling.....	14
6.5 General Data Assessment	15
7. Closure	15
8. Acknowledgements	16

List of Figures (back of report)

Figure 1.	Faro Mine Site, Faro, Yukon.....	18
Figure 2.	Area 1. Rose Creek Tailings Area, Faro, Yukon.....	18
Figure 3.	Area 2. Faro Rock Dump Area, Faro, Yukon.....	18
Figure 4.	Area 3. Grum and Vangorda Area, Faro, Yukon.....	18

List of Tables (back of report)

Table 1.	Summary of 2006 Sampling Activities	20
Table 2.	Summary of Conventional and Multi-Level Well Construction Details	20
Table 3.	Summary of 2006 Quality Assurance (QA/QC) Samples	20
Table 4.	Summary of 2006 Water Level Elevations for Multi-Level Wells, Faro Mine, Yukon.....	20
Table 5.	Summary of 2006 Water Levels for Conventional Wells, Faro Mine, Yukon.....	20
Table 6.	2006 Ground Water Quality Data, Faro Mine.....	20

Appendices

- A. Original Laboratory Reports
- B. Quality Assurance (QA/QC) of Samples 2006
- C. Well Maintenance and Issue Memos

Executive Summary

The Anvil Range Mine produced lead and zinc concentrates from 1969 to 1998, when it closed permanently. The mine facilities include 3 large open pits, rock piles, tailing impoundments, processing plant and the entire associated infrastructure. A comprehensive network of groundwater monitoring wells are installed within and downgradient of rock piles and tailings impoundments. The monitoring wells are a requirement of the Water License and also provide valuable information for reclamation planning.

All of the monitoring wells that are named in the Water License are routinely monitored at least twice per year (spring and fall) as required. Additional monitoring is also completed to meet the needs of reclamation planning projects and, also, of the Adaptive Management Plan that forms part of the Water License.

A total of four groundwater monitoring programs were completed by Gartner Lee:

1. Routine bi-annual groundwater sampling (June and September) of all Water License wells; and
2. Adaptive Management Plan (AMP) sampling of select wells (August and November).

In addition to the above, other wells related to reclamation planning were sampled at the request of various project managers. The field and laboratory data for all of the above are included in this report.

The summary results of the 2006 monitoring programs are as follows:

- Wells were monitored as required or requested;
- QA/QC results of the laboratory analyses are acceptable, with some specific follow up for 2007 recommended (Section 6.1);
- Various observations were recorded regarding the physical condition of the wells; and
- Several items are recommended for 2007, which include general maintenance of the physicals condition of the wells, surveying, and follow up to QA/QC results.

1. Introduction

The Anvil Range mine, located in the central Yukon approximately 200 km NNE of the City of Whitehorse, was an open pit lead and zinc mine that produced lead and zinc mineral concentrates. Mining and milling activities were suspended in January 1998 and the owner, Anvil Range Mining Corporation, entered into receivership in April 1998. Since that time, the site has been under the management of Deloitte & Touche Inc., acting as court-appointed Interim Receiver for Anvil Range Mining Corporation (the “Interim Receiver”).

The mine facilities include 3 large open pits, rock piles, tailing impoundments, processing plant and the entire associated infrastructure. A comprehensive network of groundwater monitoring wells are installed within and downgradient of rock piles and tailings impoundments. The monitoring wells are a requirement of the Water License and also provide valuable information for reclamation planning.

All of the monitoring wells that are named in the Water License are routinely monitored at least twice per year (spring and fall) as required. Additional monitoring is also completed to meet the needs of reclamation planning projects and, also, of the Adaptive Management Plan that forms part of the Water License.

The locations of all monitoring wells at the site are shown on Figure 1, Figure 2, Figure 3 and Figure 4.

The oldest monitoring wells on the site that remain operable were installed in 1981. Replacement wells were installed in 1996 for some damaged or lost wells. In 2001, a comprehensive hydrogeological and geochemical investigation of the Rose Creek Tailings facility was conducted that resulted in the installation of twenty-two groundwater monitoring wells at eleven locations in and downgradient of the tailings impoundments. In 2003, a drilling and coring investigation was undertaken using sonic drilling technology to obtain detailed stratigraphic information from ground surface down to bedrock. As part of this program, 76 additional groundwater sampling points were installed at nine locations within and downgradient of the tailings impoundments.

In 2004 and 2005, new groundwater monitoring wells were installed by others (SRK and Robertson GeoConsultants) as part of a series of reclamation planning studies. Some of these wells were added to the list of routinely monitored groundwater wells while others were targeted for a single round of sampling. Gartner Lee Limited collected groundwater samples from these wells on request of the various project managers and the analytical results have been included in this summary report. All the wells monitored by Gartner Lee in 2006 are specifically listed in Table 1 and their locations are shown on Figure 2, Figure 3 and Figure 4.

In 2006, routine Water License groundwater sampling occurred during two field visits: one between June 5th and June 16th and the other between Sept 17th to 24th. Wells X24-96 and X25-96, and P03-04, P03-08, and P03-09 also included in the spring and fall sampling, are required for additional sampling as part of an Adaptive Management Plan (AMP). These wells were sampled four times in 2006: June, August, September and early November. Another well SRK05-09 (Moosew2) was also sampled by mine staff as part of the AMP component for the Vangorda mine assessment. The summer AMP sampling occurred from August 1st to 3rd and the “winter/fall” sampling was done between October 31st and November 2nd. Data from the AMP sampling are presented in this report and described more thoroughly through reporting on the AMP Program. A summary of field activities and a list of wells that were sampled are included in Table 1. Available well construction details are summarized in Table 2. All of the available groundwater quality data collected by Gartner Lee is maintained electronically and is available upon request and upon approval of the Interim Receiver.

This report is a factual report which provides a summary of the 2006 field activities and data. This report is not intended to provide an assessment of trends or variances in the data. Consequently, users of the data are cautioned to assess the data for anomalies that may emerge as trend and variance analyses are undertaken. Any potential anomalies in the data that were observed during the preparation of this report have been identified herein, as an aid to users of the data.

2. Quality Assurance and Quality Control

The definition of quality assurance (QA) is “a system of activities whose purpose is to provide the producer or user of a product or service the assurance that it meets defined standards of quality with a stated level of confidence”. Separate QA programs exist for both the field sampling procedures (collection, preservation, filtration, and shipping components) and analytical procedures (laboratory component). Therefore, QA is essentially the management system that operates to ensure credible results. The QC component of this system is a set of activities intended to control the quality of the data from collection through to analysis. It consists of the adherence to written protocols; up-to-date and suitable training of personnel; the use of reliable, well maintained and properly calibrated equipment; the regular use of QC samples (blanks, reference samples, spikes and replicates); and diligent record keeping.

The field QA program is a series of basic precautions that are necessary to maximize the accuracy by reducing introduced variability to ensure the program’s success. These precautions are generally a matter of ensuring the field staff maintain consistency and they are diligent while in the process of collecting, preserving, filtering and shipping samples. The QC component is incorporated to minimize potential imprecision and bias in the data.

QC samples collected during the 2006 field program consist of the following:

- ♦ Field Replicate – assessment of field variability in co-located samples
- ♦ Field Split – assessment of laboratory repeatability
- ♦ Laboratory Duplicates – assessment of analytical precision

QA/QC results are discussed in the following sections. Additionally, the reader is referred to the original analytical reports in Appendix A.

2.1 General QA/QC Measures

The following quality assurance and quality control (QA/QC) procedures were incorporated into the 2006 sampling events:

1. Wells were purged to remove standing water from the well prior to sampling and to ensure sampling of fresh formation water. This consisted of either pumping the well dry or removing approximately three well volumes from conventional wells and at least one well volume from small diameter multi-level bundle wells. In most cases, field parameters were monitored as the well was purged. A comparison of samples collected from multi-level wells (either by Environment Canada or GLL) after one to three well volumes revealed that one well volume was sufficient purge volume for the multi-levels, as described in the 2005 groundwater sampling report.
2. To reduce the risk of cross-contamination, samples were collected in order of least potentially contaminated to most potentially contaminated, as practical. In areas of nested monitors, deeper monitors screened in the aquifer were purged and sampled prior to monitors in tailings.
3. All samples collected for dissolved metals analyses were filtered and preserved in the field, immediately after sampling. New, sterile disposable 0.45-micron filters were used to filter each sample immediately after collection.
4. Field measurements of pH, conductivity and temperature were recorded. The pH and conductivity probes were calibrated daily. Calibration was verified periodically in the field.
5. Extreme caution was exercised when handling sampling equipment and working at sites with exposed tailings at surface to minimize the risk of possible contamination from tailings during sample collection and handling.
6. Field replicates and split samples were collected. Replicates were collected by using the same sampling procedures in addition to clean and new sampling equipment such as filters and bottles. Results from replicate samples can be used to assess field variability. Split samples are collected using the same filtering equipment and by splitting the sampling stream between individual bottles to obtain two or more identical samples. This was done to verify laboratory repeatability.
7. Following sample collection, all samples were stored in a cooler with ice packs and transported by courier to the laboratory within the allotted transport periods. ALS Environmental of Vancouver, BC (ALS), a member of the Canadian Association for Environmental Analytical Laboratories (CAEAL), conducted all water analyses.

8. Internal laboratory QA/QC procedures were also maintained by ALS (as reported in the laboratory reports provided in Appendix A).

2.1.1 Chain of Custody Reports

Chain of Custody Reports are completed for the samples submitted for analysis for the purpose of tracking the samples collected and to ensure that the parties involved were properly informed as to the nature of the samples. These reports were made up prior to delivering the samples to the laboratory and normally include the following information: project number; sample numbers, type of analysis required, sampling date and time, matrix sampled, sampler's name, and Project Manager's name. The QA/QC samples are placed in coolers with ice and submitted to the analytical laboratory along with the Chain of Custody forms. Copies of the Chain of Custody forms are retained in GLL's project files and are used by the lab as a guide to complete the analytical laboratory reports.

2.2 Water Quality

2.2.1 Field Replicates and Split Samples

Field replicates and split samples were collected and analyzed for approximately 10% of groundwater samples collected in the field (see item no.6 in section 2.1 for a description of the collection method and function of each sample type). Analysis of field QA/QC samples are summarized in Appendix B and include the determination of the Relative Percent Difference (discussed later in section 2.3) between samples. The field QA/QC sample collection for the 2006 season is summarized below:

- During the June 2006 (spring) groundwater sampling event, 145 samples including 10 replicate samples were collected from 135 monitors. The entire sample set, in this case, included samples from the Rose Creek Tailings Facility, including the multilevel wells and all conventional wells in the Rose Creek Tailings Impoundment, and groundwater monitoring wells across the remainder of the property (Table 1, Table 3).
- During the August 2006 (summer AMP) groundwater sampling event, 23 samples including 1 split sample were collected from 22 monitors, some of which could not be sampled in June.
- During the September 2006 (fall) groundwater sampling event, a total of 153 samples including 10 split samples were collected from 143 monitors. The sample set during the fall 2006 sampling event included most conventional wells constructed prior to 2001, the multilevel wells constructed in 2003 and some of the new wells installed in 2004 and 2005.

- During the November 2006 (fall/winter AMP) groundwater sampling, 25 samples including 2 split samples were collected from 23 monitors. This also included P03-05, which was not sampled during the fall routine event.

2.2.2 Laboratory Duplicates

One or two groundwater samples from each analytical laboratory report were analysed in duplicate by the laboratory. Laboratory duplicates are samples analysed randomly by the laboratory for their own internal QA/QC. The purpose of these samples is to determine the precision and reproducibility of the laboratory sample analyses. Analysis of laboratory duplicated data for groundwater samples are summarized in Appendix B and includes the determination of Relative Percent Difference (RPD) between samples (a discussion of these results can be found in section 2.3.2).

2.3 Relative Percent Difference Analysis

To assess analytical variability, split samples were used to calculate the relative percent difference (RPD). RPD is defined as the following:

$$\%RPD = \frac{2(X_1 - X_2)}{(X_1 + X_2)} * 100$$

Where: X_1 = The concentration of the first sample;
 X_2 = The concentration of the second sample (i.e. the split sample).

The Relative Percent Difference (RPD) is the difference between the sample result and replicate (or split) result, divided by the average of the sample result and replicate result. An RPD of <50% can be used as a benchmark whereby an RPD of greater than 50% warrants further consideration, so long as both results being compared are greater than the Practical Quantitation Limit (PQL), where PQL is 5 times the Method Detection Limit (MDL). If one or both of the results are less than PQL, then RPD is not useful.

2.3.1 Relative Percent Difference – Field QA/QC Samples

Appendix B contains quality assurance data collected during each field episode. As shown in Appendix B, of the twenty three field QA/QC samples only 3 reported RPD results greater than 50%. These samples were collected in June at P96-9A and P03-01-01 and split sample P03-08-08 collected in September. Of these, the concentrations under consideration were less than PQL, therefore further analysis is not required.

In 2005, an RPD value of greater than 50% was calculated for either sulfate or alkalinity in replicate samples collected at BH12A and BH14B in May. Values of alkalinity in May 2005 for BH12A were 67 mg/L and 200 mg/L for the sample and replicate respectively. In September 2006, alkalinity values at BH12A were reported as 188 mg/L and 178 mg/L in the split sample. This coincides with the replicate sample concentration of 200 mg/L collected the previous spring. May 2005 values for sulfate at BH14B (20 mg/L and 1570 mg/L in split sample) varied more than 2 orders of magnitude. The sulfate concentrations reported at BH14B in September 2006 were 1760 mg/L and 1790 mg/L in the sample and split sample respectively. The 2004 result was also greater than 1000 mg/L.

2.3.2 Relative Percent Difference – Lab QA/QC Samples

An outline of Laboratory QA/QC analysis can also be found in Appendix B. Of the 39 samples analyzed, 2 contained RPD values of greater than 50%. Both of these samples were collected during the September sampling event. The sulphate concentrations for X21A-96 were both greater than PQL, therefore further investigation is considered warranted. This monitor should be targeted for replicate sampling in the spring of 2007 to investigate any consistency to this finding. Monitor P03-02-03 contained an RPD for zinc concentrations of greater than 50%. However, both concentrations under analysis were less than PQL, rendering the RPD value to be insignificant (ie. further investigation is not necessary).

3. 2006 Water Levels

All water level data available to Gartner Lee at the time of writing of this report are included in Table 4 and Table 5. Gartner Lee collected most of these data during routine and AMP sampling; however, other data were also collected by Environment Canada during other sampling events. All water levels were measured prior to sampling of the wells.

4. 2006 Groundwater Quality Data

Analytical results, including field parameters for 2006 groundwater sampling are presented in Table 6. In 2006, Environment Canada continued monitoring of a conservative bromide tracer injection at location P01-09. As part of this study, Gartner Lee and Environment Canada collected samples from surrounding multi-level wells throughout 2006. Samples collected by Gartner Lee as part of the tracer study monitoring are presented in this report.

5. Field Logistics and Sampling Issues

The following provides a summary of 2006 major observations and maintenance activities. In addition, more detailed information is provided in memos found in Appendix C. A map showing the location of the current network monitored by Gartner Lee is presented in Figure 2, Figure 3 and Figure 4.

5.1 Original Tailings Impoundment

The wells which were monitored in the original tailings impoundment are P03-07 and NA05-11A (Figure 2). Well NA05-11A was monitored in September 2006 as requested by SRK personnel and is not proposed to be included in future routine monitoring. TH86-17 is located directly to the east of the original tailings impoundment. Conditions in 2006 were as follows:

- **P03-07** – As recommended in the 2005 Faro Groundwater Monitoring Report, the physical condition of the well was investigated in 2006. These observations are summarized in a memo in Appendix C. In summary, points P03-07-02 and P03-07-05 were sampled in 2006. All other monitors are suspected to be permanently frozen. The condition of each monitor at this location is described in Appendix C. It is recommended that water levels be routinely verified at this well and that any non-frozen monitoring point be sampled.

5.2 Second Impoundment Southeast Corner

The wells monitored in the southeast corner of the second impoundment are multi-level wells P03-01, P03-02 and P03-03. In addition, well NA05-9S and NA05-9D were also sampled in September as a special request from SRK personnel. Groundwater quality at P03-03 is currently under review for possible effects from P01-09 wells which were decommissioned in the fall of 2005 and this should be considered when using this data. Wells P03-01, P03-02 and P03-03 were sampled in June and September of 2006. Wells P03-03 and P01-09 were also sampled throughout 2006 by Environment Canada to monitor the evolution of a bromide tracer experiment. Sampling data from Environment Canada was not available at the time of writing this report.

- **P03-01-07** – Well was sampled in both June and September; however, chemical analysis was not completed for the June sample. Field chemistry was collected and recorded and is included in this report (Table 6).
- **P03-03-07** – degassing of the formation or production of gas occurred for over eight hours immediately following sampling in May of 2005. Bubbling of gas up the sample tube caused airlifting of groundwater to the top of the tube and out of the protective steel casing. The cause

for this has not been determined. For health and safety reasons, the well was therefore not sampled in 2006 and it is recommended that this monitor not be sampled in the future.

- **P03-02-06** - degassing of the formation or production of gas also occurred at this location during sampling in June. Bubbling of gas up the sample tube caused airlifting of groundwater to the top of the tube and out of the protective steel casing. As recommended for P03-03-07, this well should not be sampled in the future or at least until the cause of gas production has been determined.
- **NA05-9S** – well was targeted for sampling in September at the request of SRK; however, it was dry.

5.3 Second Impoundment – Northern Section

The monitoring wells in the northern section of the Second Impoundment include multi-level well P03-04 (on the secondary dam) and multi-levels P03-05 and P03-06.

- **P03-04-09** – this point is screened in the tailings and has slow recharge and therefore yielded enough volume for general chemistry analysis only (no dissolved metals analysis) in September.
- **P03-05** – This multilevel was not sampled during the September field program due to time constraints. It was therefore sampled during the following event (fall/winter AMP) in November.
- **P03-05-04** – this monitoring point could not be sampled as plastic shavings from the sampling tube clogged the foot valve.
- **P03-06-06** – a sample could not be collected during the September sampling event due to problems lowering the sample tubing into the well. This was possibly due to a constriction or frozen conditions in the well.
- **P03-06-07** – This point was dry during the June sampling event and was dry during the September event.

5.4 Intermediate Impoundment

The monitoring wells in the Intermediate Impoundment are X21-96 A/B/C, and multi-level well P03-08.

- **X21C-96** – It was noted in 2004, 2005 and again in 2006 that this well produces tailings. (see memo in Appendix C). This issue was brought to the attention of the Faro Closure Office by Gartner Lee Ltd during a meeting on October 20th, 2006. A technical determination should now be made of the appropriateness of continued monitoring of this well. Data for this well should be applied with caution until such a determination is finalized. We note that this well is listed in the Water License. Further issues are discussed in a memo in Appendix C.
- **P03-08-07** – monitoring point is screened in the tailings and has slow recharge; it is usually purged dry prior to sampling.

- **P03-08-08** - monitoring point is screened in the tailings and has slow recharge; it is usually purged dry prior to sampling.

5.5 Toe of Intermediate Dam

The monitoring wells at the toe of the Intermediate Dam (up-gradient of the Cross-Valley Pond) are X24-96 A/B/C/D, X25-96 A/B, P01-03 and P01-04 A/B. All wells were targeted for sampling in June and September 2006. Wells X24-96 and X25-96 were also sampled in August and November for the AMP program.

- **X24-96 A/B/C** – Details of well maintenance issues at this location are listed in a memo in Appendix C. Below is a summary of major observations and recommendations.
- **X24A-96** – (see memo in Appendix C). Well was sampled in June, September and November. The well has a 1 m thick sand layer at the bottom and the foot valve sometimes gets clogged. This occurred in August.
- **X24B-96** - (see memo in Appendix C). Sand has accumulated in the well to 3.7 m below top of casing (above the water table), which was confirmed by down-hole video camera in 2005 and in August 2006. It is not known what mechanism has caused sand to accumulate to above the screen. Consequently, the well could not be sampled in 2005 or 2006. Data collected to date for this well should be applied with caution until it is determined what has caused sand to accumulate in the well. It is recommended that this well be removed from the routine groundwater monitoring program and that the AMP be modified accordingly. We note that this well is listed in the Water License. Investigative activities at this location are described in a memo in Appendix C.
- **X24C-96** – (see memo in Appendix C). Well was blocked at a depth of approximately 12 m (bottom of well should be approx. 17 m). Foot valve quickly gets clogged with sand preventing collection of a sample. It was not possible to sample this well in 2006. Data collected to date for this well should be applied with caution until it is determined what has caused sand to accumulate in the well. It is recommended that this well be removed from the routine groundwater monitoring program and that the AMP be modified accordingly. We note that this well is listed in the Water License. Investigative activities at this location are described in a memo in Appendix C.
- **X25-96 A/B** – Details of well maintenance issues at this location are listed in a memo in Appendix C. Below is a summary of observations and recommendations.
- **X25A-96** – (see memo in Appendix C). The stickup at this location was shortened by 11.5 cm to facilitate sampling by allowing use of the Hydrolift system. It is recommended that all well construction details and modifications be included in the well geological database (to complete in 2006/2007) to account for the change in casing height. Water levels should be re-surveyed and referenced accordingly.

- **X25B-96** - (see memo in Appendix C). The stickup at this location was shortened by 5.5 cm to facilitate sampling by allowing use of the Hydrolift system. It is recommended that all well construction details and modifications be included in the well geological database (to complete in 2006/2007) to account for the change in casing height. Water levels should be re-surveyed and referenced accordingly.
- **P01-04 A/B** – Both wells were frozen in June. The wells were sampled in September.

5.6 Down Gradient of the Cross Valley Dam

The following wells are located downgradient of the Cross-Valley dam (down-gradient of the entire tailings impoundment): P01-01 A/B, P01-02 A/B, P03-09, P01-11, X16 A/B, X17 A/B and X18 A/B. In addition, a series of new wells (P05-01, P05-02, P05-03, MW1, MW2, PW1 and PW2) were installed in August 2005 by RGC at the toe of the dam (Figure 2). These wells were originally installed as pumping wells and monitoring wells for a long-term pumping test. Gartner Lee designed and installed multi-level well P05-01 and assisted RGC during the installation of some of the other wells. Wells P05-01, P05-02 and P05-03 were sampled in 2006.

- **P01-01 A/B** – (see memo in Appendix C). The stickup on well P01-01A was shortened by 0.30 m to 0.74 m above ground surface. A protective steel casing was installed around the nested wells.
- **P01-11** – (see memo in Appendix C). The concrete at the base of the protective steel casing is cracked and the steel casing to be moved back and forth manually. The ground around the well also appears to be eroding here, likely due to surface runoff from the Dam. The PVC well extends above the protective steel casing, therefore the steel cover does not close to prevent meteoric water from entering the casing. The well stickup should be shortened to allow the steel lid to close, and it should also be determined if the well was originally completed in this manner or if modifications or ground movement has resulted in the present state of the protective steel casing.
- **X18A** – (see memo in Appendix C). A down-hole camera was used in 2005 to identify a piece of sampling tubing at approximately 9.5 m btoc. This does not interfere with sampling, however it should be removed if possible.
- **P05-01** – Points 1 through 5 (of a total of six points) were frozen in June. All monitoring points were sampled during the summer AMP and again in September.

5.7 Faro Rock Dump Area

The wells located at the base of the Faro Rock Dumps (Figure 3) are P96-6, P96-7, P96-8 A/B, P05-04, S1 A/B, S2 A/B, S3, BH1, BH2, BH4, BH5, BH6, BH7 S/D, BH10 A/B, BH12 A/B, BH13 A/B, BH14 A/B, BH05-01 and DP1 through DP6. New wells (SRK04-2 A/B, SRK04-3 A/B, SRK04-4, SRK05-ETA-BR 1/2, and ETA-05-04) were installed by SRK in 2004 and 2005 to supplement the monitoring

network associated with the Faro Rock Dump area. Wells SRK04-2 A/B are nested wells which are inoperable and were suspected to be broken. These wells should have since been decommissioned, however, this was not confirmed by Gartner Lee. A new transect of wells (SRK-SP-1 to SRK-SP-6) were also installed in 2005 in the vicinity of the “S” series wells (Figure 3).

- **P96-8 A/B** – Both wells were frozen in June.
- **S2A** – (see memo in Appendix C). Well has a joint with a coupling at ground surface which can be removed. It is not known whether the well was originally completed in this manner or if the top stickup portion of the well has become loose. Although this facilitates sampling, it also provides a possible pathway for infiltration of surface runoff into the well. It is recommended that this coupling be glued and sealed.
- **S3** – (see memo in Appendix C). An extra stickup piece sits on top of this well and protects the sampling tubing. The top of the well casing reference point is taken to be the bottom of the casing extension (stickup = 1.12 m above ground surface). The casing extension was labeled and clearly marked to avoid future confusion. The area around the well is usually wet suggesting an area of groundwater discharge.
- **BH1** – (see memo in Appendix C). Well is broken as a result of shearing at ground surface. The stickup of the 1” diameter well is currently only 7 cm. A steel drum covers the well for protection, but it should be properly fixed by installing a surface stickup in 2007.
- **BH7 S/D** – Neither of these wells have protective steel casings. Water/ground staining lines are evident at the base of both wells within approximately 0.50 m of ground surface. It is suspected that frost jacking has compromised these wells. Details of well maintenance issues at this location are listed in a memo in Appendix C. Below is a summary of major observations and recommendations.
- **BH7S** – (see memo in Appendix C). Well appeared to be in good condition but well is slightly inclined away from waste rock slope. Frost-jacking marks are evident at the base of the well where a black line depicts the current (September 2006) elevation of ground surface.
- **BH7D** – (see memo in Appendix C). The PVC well appears slightly brittle and cracked and is slightly inclined away from the waste rock slope. Evidence suggests that the well may have been compromised by frost jacking and ground movement and as such currently provides a possible pathway for potentially contaminated soil and/or groundwater to flow from the shallow zone near the compromised/open joint, to the deeper groundwater system below the shallow waste soil material. This could affect data from wells downgradient. Both wells at BH7 should be decommissioned in 2007.
- **BH10 A/B** – (see memo in Appendix C). Protective steel casing and wells are inclined at ground surface at an angle of approximately 34 degrees (from vertical). If the wells are inclined due to frost/ground movement issues they should be removed from the monitoring network and properly decommissioned. A sample could not be collected from either of these wells in September.
- **BH13 A/B** – Both wells were frozen in June. In September, BH13A was purged dry and was not sampled due to very slow recharge.

- **BH05-01** – This well is not part of the routine groundwater sampling network of wells, it was installed in 2005 to monitor shallow aquifer response during a pumping test. The well has been dry since installation.
- **DP3** – Drive point piezometer was installed by SRK in 2005 and is currently angled.
- **DP4** – Drive point piezometer was installed by SRK in 2005 and is angled.
- **DP6** – Drive-point is located in the streambed of the North Fork of Rose Creek. It does not have sampling tubing; however, water levels were collected at this location during the spring and fall sampling events.
- **SRK04-3A** – This well was sampled in both June and September. During the September sampling, the foot-valve came off during purging and was lost down the well. Although this does not interfere with sampling of the well, the foot-valve should be retrieved if possible.
- **SRK05-SP-6** – Well was dry in both June and September.

5.8 Vangorda Rock Dump Area

The wells located near the Vangorda Rock Dump (Figure 4) are P01-51 and P01-52 A/B (previously referred to as P2001-01A and P2001-02A/B respectively), V34, V35, V36 and V37.

There were no sampling or maintenance issues with any of the Vangorda wells during the 2006 monitoring period. All wells in this area were flagged, labeled, repainted with red marking paint and photographed in September 2006.

5.9 Grum Rock Dump Area

The wells located near the Vangorda Rock Dump (Figure 4) are P96-9A, SRK04-5 A/B, SRK05-05C, SRK05-06, SRK05-07, SRK05-08, SRK05-09 and BH05-9B-R. Well BH05-9B-R is a replacement well for well P96-9B which is now inoperable. The following issues were identified during the 2006 season:

- **P96-9A** – (see memo in Appendix C). In August 2006, sample tubing was removed from the well and the foot-valve was clogged with what appeared to be silica sand. This well could still be sampled in both June and September 2006. The protective steel casing and well stickup at P96-9A and P96-9B is slightly tilted.
- **P96-9B** – (see memo in Appendix C). The down-hole camera was used to examine an obstruction at 2.40 m btoc. The well is completely pinched shut and therefore inoperable.
- **SRK04-5 A/B** – These wells are artesian and mechanical packers have been installed by SRK to prevent overflow of water. These packers are removed and reinstalled each time the wells are sampled. In September 2006, both packers were reinstalled a few meters deeper in each well to allow field staff to reach the top of the packers without having to back-up a vehicle close to the well for higher access.

- **SRK05-05C** – This well was not sampled during the June event due to erroneous survey coordinates.
- **SRK05-07** – Well yielded insufficient volume for a sample to be collected in June 2006.
- **BH05-9B-R** – This well was frozen in June.

6. Recommendations

Various recommendations for implementation in 2007 are provided throughout the report and are summarized in this section.

6.1 General Care and Maintenance

In general, the physical condition of each monitoring well should be inspected during each sampling event; minor maintenance requirements should either be dealt with immediately if possible or planned for the next field program; serious maintenance or repairs should be communicated to the Interim Receiver with a recommended plan for resolution. Some maintenance and general due diligence activities include:

- **BH1** – fix well by installing small diameter PVC stickup and a protective steel casing if necessary
- **BH7 D/S** - document any changes in position and elevation of wells relative to ground surface and properly decommission wells. Both wells at BH7 should be examined and conditions documented with a down-hole camera if possible prior to decommissioning.
- **BH10 A/B** should be removed from the monitoring network and properly decommissioned. It is currently not recommended that these wells be sampled or measured for water levels to prevent field equipment from getting stuck in the inclined well.
- **P01-11** - stickup should be shortened to allow the steel lid to close. It should also be determined if possible whether the well was originally completed in this manner or if modifications or ground movement has affected the protective steel casing.
- **P96-9A** - should be examined with down-hole camera in 2007 to investigate presence of silica sand in well.
- **S2A** - requires coupling at ground surface to be glued/sealed
- **TH86-17** has an obstruction / joint at 10.17 m btoc which sometimes prevents sampling tubing from extending to bottom of well. This could be further investigated with a down-hole camera.
- **X17 A/B** - flagging and brushing the access trail to the well and perhaps completing an ATV access trail
- **X18A** - efforts should be made to remove section of tubing stuck at 9.5 m depth

- **X21A-96** – This well should be targeted for replicate sampling in spring 2007 to verify sulfate concentrations at this location.
- **X24A-96** - The condition of this well should be investigated further in 2007 and purging and sampling efforts should attempt to remove sediment from the well.

6.2 Surveying

- it is recommended that surveying be completed at the following wells (as convenient when surveyors are on-site) in 2007: BH1, P01-01 A/B, P01-02 A/B, P01-11, S2A, S3, X16B and X25-96 A/B, wells at the Vangorda and Grum site which have not been surveyed and any other well which is identified as part of an on-going review of site data by Gartner Lee.
- Once finalized, the database containing well location and construction details should be updated with latest well construction details and modifications and new survey data once a recent survey has been completed.

6.3 Decommissioning of Wells

The following wells are recommended for decommissioning in 2007 due to observations noted herein:

- BH7 D/S (wells are suspected to be impacted by frost jacking)
- BH10 A/B (wells and casing are angled and suspected to be compromised)
- P96-9B (pinched shut near top, condition of entire well not known)
- SRK04-02 A/B (if it has not been completed to date)

6.4 Discontinue Sampling

Sampling should be discontinued at the following locations based on observations listed herein: BH7 D, BH7 S, BH10 A, BH10B, X24-96 B, X24-96 C, P03-03-07, P03-02-06

We note that some wells which are recommended for action are included in the current water license. Should these wells be removed from the routine groundwater monitoring program, the water license references should be updated accordingly. We also note that wells at X24-96 are recommended for action and are included in the site Adaptive Management Plan (AMP). Consequently, the AMP should be updated to reflect any changes made to the site sampling program and account for potentially inoperable wells at location X24-96

It was noted during a meeting on October 20th, 2006 with the Faro Closure Office to review the groundwater monitoring program that data from BH7 S/D and BH10 A/B wells may have been used by

other consultants to interpret hydrogeological conditions in the area. Possible conclusions and recommendations based on this data should be reviewed and re-evaluated based on these findings to ensure accuracy of the conclusions.

6.5 General Data Assessment

This report is not intended to provide an assessment of trends or variances in the data. Consequently, users of the data are cautioned to assess the data for anomalies that may emerge as trend and variance analyses are undertaken. The following potential anomalies in the data were observed during the preparation of this report and are summarized as follows, as an aid to users of the data:

- BH2 and BH12 A/B exhibited significant variable concentrations of dissolved metals, anions and general chemistry parameters between sampling episodes. In general, concentrations were frequently higher during the spring (May) as compared to the fall (September).
- P96-9A, P03-01-01 and P03-08-08 replicates provide RPD values (aluminum, lead and zinc respectively) of >50%; however, all concentrations were lower than the PQL and therefore no further investigation is warranted. (Appendix B)
- Odours were noted at the following wells:
 - sulphur odour: BH13A, P01-04A and P03-08-03
 - hydrocarbon odour: P96-8A and ETA-05-4
- P03-02-04 and P03-02-05 are screened in the aquifer; however, sample water was noted to be black in colour (June) or dark grey (September), it was not confirmed whether the sediment was natural or tailings material.
- X21-96 C has tailings in monitoring well

7. Closure

The report is meant to provide a summary of 2006 groundwater monitoring activities and data collected by Gartner Lee, per the approved work-plan, as well as data provided by others. Some groundwater data collected as part of other studies at the site may not be presented herein.

8. Acknowledgements

Gartner Lee would like to thank the following individuals for facilitating access to the site, assisting during the field episodes and providing useful information: Deloitte & Touche Inc. (acting as court-appointed Interim Receiver for Anvil Range Mining Corporation), Anvil Range Mining Corporation (Interim Receivership) Care and Maintenance Personnel, Faro Mine Closure Planning Office, and Environment Canada, Environmental Protection Branch.

Report Prepared By:

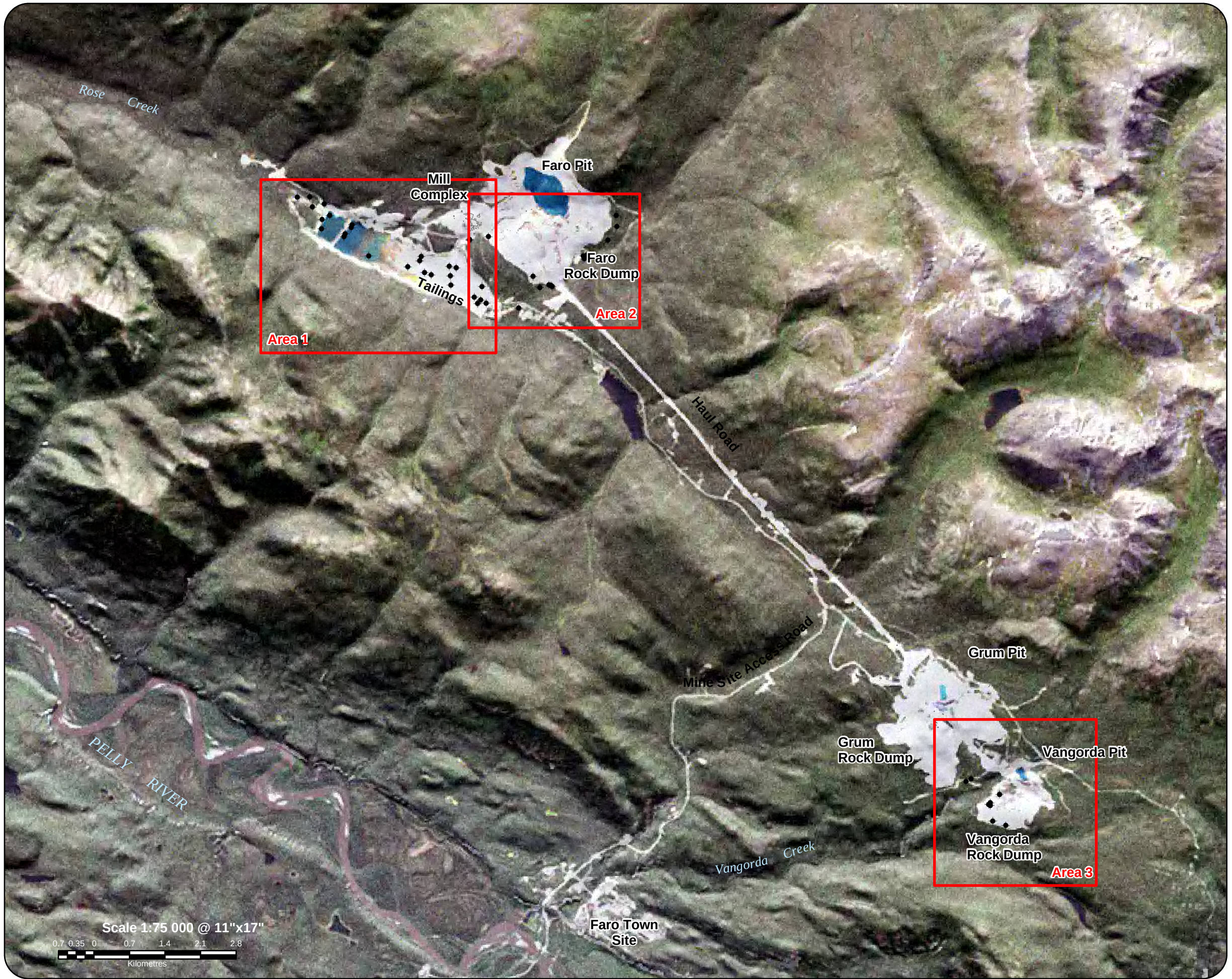
Martin Guilbeault, M.Sc., P.Eng.
Senior Hydrogeologist

Report Reviewed By:

Eric Denholm, P.Eng.
Senior Mining Consultant

Jennifer Funston, B.Sc.,
Hydrogeologist

Figures



DATA SOURCES AND DISCLAIMERS:
Basemap: Orthoshop, Calgary, AB, November 2003. Prepared for SRK Consulting. Based on August 2003 aerial photography .
Shaded relief colour orthorectified image at 15m resolution compiled by Yukon Territorial Government, Dept. of Infrastructure, Yukon Geomatics, from Landsat 7 image 59-16, bands 3, 2, & 1.
Projection: UTM Zone 8 NAD27
Created By: GS
Reviewed By: MG
Date Issued: December 2006
Project Number: 60601
File Name: Fig1_60601_rpt_Dec13_2006.mxd
Revision: 0

Deloitte & Touche Inc.
2006 Groundwater Sampling

Faro Mine Site
Faro, Yukon



- Legend**
- Drive Points
 - Conventional Well (2005)
 - Conventional Well (<2005)
 - Decommissioned (2005)
 - Multilevel Well (2005)
 - Multilevel Well (<2005)

- Well Access Routes**
- Foot
 - ATV
 - Truck
 - Index Contours (10m)
 - Impoundment (original)

DATA SOURCES AND DISCLAIMERS:

Basemap: Orthoshop, Calgary, AB, November 2003. Prepared for SRK Consulting. Based on August 2003 aerial photography.

Projection: UTM Zone 8 NAD27

Created By: GS

Reviewed By: MG

Date Issued: December 2006

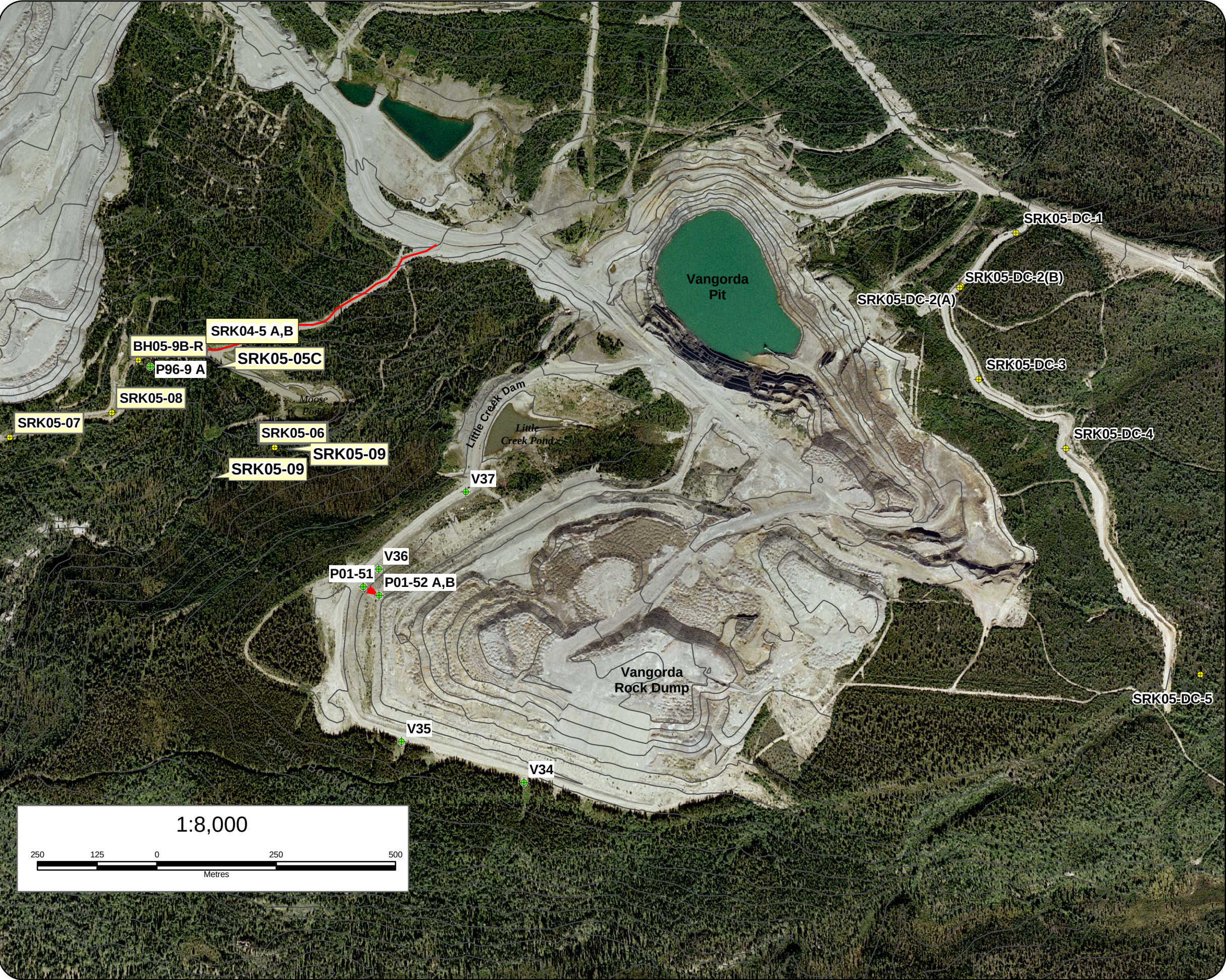
Project Number: 60601

File Name: Fig3_60601_rpt_Dec13.mxd

Revision: 1

Deloitte & Touche Inc.
2006 Groundwater Sampling

Area 2 – Faro Rock Dump Area
Faro, Yukon



- Legend**
- Drive Points
 - Conventional Well (2005)
 - Conventional Well (<2005)
 - Decommissioned (2005)
 - Multilevel Well (2005)
 - Multilevel Well (<2005)

- Well Access Routes**
- Foot
 - ATV
 - Truck
 - Index Contours (10m)
 - Impoundment (original)

DATA SOURCES AND DISCLAIMERS:
Basemap: Orthoshop, Calgary, AB, November 2003. Prepared for SRK Consulting. Based on August 2003 aerial photography .
Projection: UTM Zone 8 NAD27
Created By: GS
Reviewed By: MG
Date Issued: December 2006
Project Number: 60601
File Name: Fig4_60601_rpt_Dec13.mxd
Revision: 1

Deloitte & Touche Inc.
2006 Groundwater Sampling

Area 3 – Grum and Vangorda Area
Faro, Yukon

Tables

Table 2. Summary of Conventional and Multi-level Well Construction Details
(pending – to be included in final report)

Table 1. Summary of 2006 Sampling Activities

Sampling Date Well ID	June June 5 - 16	August * August 1 - 3	September Sept 17 - 24	November * Oct 31 - Nov 2
P01-01A	X		X	
P01-01B	X		X	
P01-02A	X		X	
P01-02B	X		X	
P01-03	X		X - S	
P01-04A	frozen		X	
P01-04B	frozen		X	
P01-11	X		X	
P01-51	X		X	
P01-52A	X		X	
P01-52B	X		X	
X16A	X		X	
X16B	X		X	
X17A	X		X	
X17B	X - R		X	
X18A	X		X	
X18B	X		X	
X21A-96	X		X	
X21B-96	X		X	
X21C-96	X		X	
X24A-96	X	NS - clogged ft-valve	X	X
X24B-96	NS - sand heave	NS - sand heave	NS - sand heave	NS - sand heave
X24C-96	NS - blocked	NS - blocked	NS - blocked	NS - water froze in tube
X24D-96	X - R	X	X	X
X25A	X	X	X	X
X25B	X	X	X	X
BH1	X		X	
BH2	X		X	
BH4	X		X	
BH6			X	
BH7S			X - casing shifting	
BH7D			NS - blocked	
BH10A			NS - angled, valve clog	
BH10B			NS - angled, valve clog	
BH12A	X		X - S	
BH12B	X		X	
BH13A	frozen		NS - no recharge	
BH13B	frozen		X	
BH14A	X		X	
BH14B	X		X - S	
BH05-01	dry		dry	
BH05-9B-R	frozen	X	X	
P96-6	X		X	
P96-7	X		X	
P96-8A	frozen		X	
P96-8B	frozen		X	
P96-9A	X - R		X - S	
P96-9B	X			
V34	X		X	
V35	X		X	
V36	X		X	
V37	X		X	

Table 1. Summary of 2006 Sampling Activities

Sampling Date	June	August *	September	November *
Well ID	June 5 - 16	August 1 - 3	Sept 17 - 24	Oct 31 - Nov 2
S1A	X		X	
S1B	X		X	
S2A	X		X	
S2B	X		X	
S3	X		X	
TH86-17	X		X	
P05-02	X		X	
P05-03	X		X	
P05-04	X - R		X	
SRK04-3A	X - R		X - S - valve in well	
SRK04-3B	X		X	
SRK04-05A	X - artesian		X - artesian	
SRK04-05B	X - artesian		X - artesian	
SRK05-SP-1A	X		X	
SRK05-SP-1B	X		X	
SRK05-SP-2	X		X	
SRK05-SP-3A	X - R		X	
SRK05-SP-3B	X		X	
SRK05-SP-4A	X		X	
SRK05-SP-4B	X		X - S	
SRK05-SP-5	X		X	
SRK05-SP-6	dry		dry	
SRK05-ETA-BR1	X		X	
SRK05-ETA-BR2	X		X	
ETA-05-4	X		X	
SRK05-05C	NS		X	
SRK05-06	X		X	
SRK05-07	insuff. Volume		X	
SRK05-08	X		X	
SRK05-09	X		X	
NA05-2S			X	
NA05-2D			X	
NA05-9S			dry	
NA05-9D			X	
NA05-11A			X	
DP4	X		X	
DP5	X		X	
DP6			NS - wL's only	
P03-01-01	X - R		X	
P03-01-02	X		X	
P03-01-03	X		X	
P03-01-04	X		X	
P03-01-05	X		X	
P03-01-06	X		X	
P03-01-07	X - no chem. analysis		X - S	
P03-01-08	X		X	
P03-01-09	X		X	
P03-02-01	X		X	
P03-02-02	X		X	
P03-02-03	X		X	
P03-02-04	X		X	
P03-02-05	X		X	

Table 1. Summary of 2006 Sampling Activities

Sampling Date Well ID	June June 5 - 16	August * August 1 - 3	September Sept 17 - 24	November * Oct 31 - Nov 2
P03-02-06	X - chemical rxn		NS	
P03-02-07	X		X	
P03-02-08	X		X	
P03-02-09	X		X	
P03-03-01	X - R		X	
P03-03-02	X		X	
P03-03-03	X		X - S	
P03-03-04	X		X	
P03-03-05	X		X	
P03-03-06	X		X	
P03-03-07	NS - previous chem rxn		NS	
P03-03-08	X		X	
P03-03-09	X		X	
P03-04-01	X		X	
P03-04-02	X	X	X	X
P03-04-03	X		X	
P03-04-04	X	X	X	X - S
P03-04-05	X		X	
P03-04-06	X	X	X	X
P03-04-07	X		X	
P03-04-08	X		X	
P03-04-09	X		X - GC only (~250 mL)	
P03-05-01	X		NS	X
P03-05-02	X		NS	X
P03-05-03	X		NS	X
P03-05-04	X		NS	NS
P03-05-05	X		NS	X
P03-05-06	X		NS	X
P03-05-07	X		NS	X
P03-05-08	X		NS	X
P03-06-01	X		X	
P03-06-02	X - R		X	
P03-06-03	X		X	
P03-06-04	X		X	
P03-06-05	X		X	
P03-06-06	X		NS - waterra blocked	
P03-06-07	frozen/dry?		dry	
P03-07-01	NS		NS	
P03-07-02	X		X	
P03-07-03	NS		NS	
P03-07-04	NS		NS	
P03-07-05	NS		X - S	
P03-07-06	NS		NS	
P03-07-07	NS		NS	
P03-07-08	NS		NS	
P03-08-01	X		X	
P03-08-02	X	X	X	X
P03-08-03	X	X - S	X	X - S
P03-08-04	X	X	X	X
P03-08-05	X	X	X	X
P03-08-06	X		X	
P03-08-07	X		X	

Table 1. Summary of 2006 Sampling Activities

Sampling Date	June	August *	September	November *
Well ID	June 5 - 16	August 1 - 3	Sept 17 - 24	Oct 31 - Nov 2
P03-08-08	X		X - S	
P03-09-01	X		X	
P03-09-02	X	X	X	X
P03-09-03	X		X	
P03-09-04	X	X	X	X
P03-09-05	X - R		X	
P03-09-06	X	X	X	X
P03-09-07	X	X	X	X
P03-09-08	X		X	
P03-09-09	X	X	X	X
P05-01-01	frozen	X	X	
P05-01-02	frozen	X	X	
P05-01-03	frozen	X	X	
P05-01-04	frozen	X	X	
P05-01-05	frozen	X	X	
P05-01-06	X	X	X	

* = sampling for adaptive management plan (AMP)

X = well was sampled

NS = well not sampled

Bold = well screened in tailings

R = replicate sample

S = split sample

Table 3. Summary of 2006 Quality Assurance (QA/QC) Samples

Sample ID	Sampling Date	Sampling Time	pH	Specific Conductance (uS/cm)	Temp C	Sample Type
X17B-R	08-Jun-06	17:14	6.98	918	4.2	Replicate
X24D-96-R	09-Jun-06	11:47	6.56	2825	5.5	Replicate
P96-9A-R	07-Jun-06	16:50	6.86	2518	7.2	Replicate
SRK05-SP-3A-R	06-Jun-06	13:00	5.92	562	2.2	Replicate
P05-04-R	05-Jun-06	12:18	5.94	163	1.2	Replicate
SRK-04-3A-R	14-Jun-06	9:30	5.8	6600	6.1	Replicate
P03-01-01	09-Jun-06	9:30	7.05	362.1	7.4	Replicate
P03-03-01	15-Jun-06	13:55	6.74	2466	11.1	Replicate
P03-06-02	07-Jun-06	15:31	7.00	1663	7.5	Replicate
P03-09-05	06-Jun-06	12:30	6.92	546	5.9	Replicate
P03-08-03	02-Aug-06	10:20	7.22	339	5.4	Split
P01-03-S	21-Sep-06	14:53	6.73	2680	6.8	Split
BH12A-S	18-Sep-06	14:51	7.51	467.1	3.6	Split
BH14B-S	18-Sep-06	13:25	7.12	3283	7.8	Split
P96-9A-S	19-Sep-06	14:47	6.72	2870	7.5	Split
SRK-04-3A-S	22-Sep-06	16:05	6.85	706	5.7	Split
SRK05-SP4B-S	20-Sep-06	13:30	5.84	5370	5.7	Split
P03-01-07-S	21-Sep-06	15:20	6.72	1303	6.2	Split
P03-03-03-S	22-Sep-06	12:15	6.70	317.9	4.6	Split
P03-07-05-S	20-Sep-06	12:40	6.61	654	5.7	Split
P03-08-08-S	20-Sep-06	10:15	7.14	420.5	5.8	Split
P03-04-04-S	02-Nov-06	15:00	7.45	1220	1.9	Split
P03-08-03-S	01-Nov-06	16:25	7.40	730	1.4	Split

Notes:

* a replicate sample is collected as a separate sample immediately after the original sample and using new filtering equipment

* a split sample is collected by splitting the sampling stream between 2 bottles and using the same filtering equipment

Table 4. Summary of 2006 Water Level Elevations for Multi-Level Wells, Faro Mine, Yukon

Well ID	Stickup (m)	Ground Elevation (m asl)	Date	Time	Water Level Below top of Casing (m)	Water Level Elevation (m asl)
P03-01-01	0.53	1060.581	09/06/2006	8:30	5.84	1055.27
P03-01-01	0.53	1060.581	21/09/2006	16:00	6.11	1055.00
P03-01-02	0.53	1060.5872	09/06/2006	8:31	5.89	1055.23
P03-01-02	0.53	1060.5872	21/09/2006	16:01	6.145	1054.97
P03-01-03	0.53	1060.581	09/06/2006	8:32	5.88	1055.23
P03-01-03	0.53	1060.581	21/09/2006	16:02	6.135	1054.98
P03-01-04	0.53	1060.581	09/06/2006	8:33	5.89	1055.22
P03-01-04	0.53	1060.581	21/09/2006	16:03	6.15	1054.96
P03-01-05	0.53	1060.581	09/06/2006	8:34	5.91	1055.20
P03-01-05	0.53	1060.581	21/09/2006	16:05	6.16	1054.95
P03-01-06	0.53	1060.581	09/06/2006	8:35	5.88	1055.23
P03-01-06	0.53	1060.581	21/09/2006	16:06	6.145	1054.97
P03-01-07	0.53	1060.581	21/09/2006	16:07	6.13	1054.98
P03-01-08	0.53	1060.581	09/06/2006	8:37	5.98	1055.13
P03-01-08	0.53	1060.581	21/09/2006	16:08	5.99	1055.12
P03-01-09	0.53	1060.581	09/06/2006	8:38	6.00	1055.11
P03-01-09	0.53	1060.581	21/09/2006	16:10	6.01	1055.10
P03-02-01	0.69	1059.905	08/06/2006	14:05	6.01	1054.59
P03-02-01	0.69	1059.905	21/09/2006	14:30	6.24	1054.36
P03-02-02	0.69	1059.905	08/06/2006	14:06	6.01	1054.59
P03-02-02	0.69	1059.905	21/09/2006	14:30	6.23	1054.37
P03-02-03	0.69	1059.905	08/06/2006	14:07	6.01	1054.59
P03-02-03	0.69	1059.905	22/09/2006	14:31	6.24	1054.36
P03-02-04	0.69	1059.905	08/06/2006	14:08	6.02	1054.58
P03-02-04	0.69	1059.905	22/09/2006	14:32	6.24	1054.36
P03-02-05	0.69	1059.905	08/06/2006	14:09	6.07	1054.53
P03-02-05	0.69	1059.905	22/09/2006	14:33	6.31	1054.29
P03-02-06	0.69	1059.905	08/06/2006	14:10	6.07	1054.53
P03-02-07	0.69	1059.905	08/06/2006	14:11	5.57	1055.03
P03-02-07	0.69	1059.905	22/09/2006	14:34	5.78	1054.82
P03-02-08	0.69	1059.905	08/06/2006	14:12	5.63	1054.97
P03-02-08	0.69	1059.905	22/09/2006	14:35	5.68	1054.92
P03-02-09	0.69	1059.905	08/06/2006	14:13	5.63	1054.97
P03-02-09	0.69	1059.905	22/09/2006	14:35	5.64	1054.96
P03-03-01	0.82	1060.672	15/06/2006	10:50	7.10	1054.39
P03-03-01	0.82	1060.672	22/09/2006	14:38	7.36	1054.13
P03-03-02	0.82	1060.672	15/06/2006	10:51	7.20	1054.29
P03-03-02	0.82	1060.672	22/09/2006	14:39	7.465	1054.03
P03-03-03	0.82	1060.672	15/06/2006	10:52	7.15	1054.34
P03-03-03	0.82	1060.672	22/09/2006	14:40	7.40	1054.09
P03-03-04	0.82	1060.672	15/06/2006	10:53	7.16	1054.33
P03-03-04	0.82	1060.672	22/09/2006	14:41	7.40	1054.09
P03-03-05	0.82	1060.672	15/06/2006	10:54	7.16	1054.33
P03-03-05	0.82	1060.672	22/09/2006	14:43	7.42	1054.08
P03-03-06	0.82	1060.672	15/06/2006	10:55	7.19	1054.30
P03-03-06	0.82	1060.672	22/09/2006	14:45	7.41	1054.08
P03-03-08	0.82	1060.672	15/06/2006	10:57	7.00	1054.49

Table 4. Summary of 2006 Water Level Elevations for Multi-Level Wells, Faro Mine, Yukon

Well ID	Stickup (m)	Ground Elevation (m asl)	Date	Time	Water Level Below top of Casing (m)	Water Level Elevation (m asl)
P03-03-08	0.82	1060.672	22/09/2006	14:49	7.13	1054.36
P03-03-09	0.82	1060.672	15/06/2006	10:58	6.98	1054.51
P03-03-09	0.82	1060.672	22/09/2006	14:52	7.135	1054.36
P03-04-01	0.78	1060.429	07/06/2006	8:30	12.57	1048.64
P03-04-01	0.78	1060.429	20/09/2006	14:20	12.47	1048.74
P03-04-02	0.78	1060.429	07/06/2006	8:31	12.52	1048.69
P03-04-02	0.78	1060.429	02/08/2006	11:37	12.460	1048.75
P03-04-02	0.78	1060.429	20/09/2006	14:22	12.51	1048.70
P03-04-02	0.78	1060.429	02/11/2006	13:54	12.600	1048.61
P03-04-03	0.78	1060.429	07/06/2006	8:32	12.47	1048.74
P03-04-03	0.78	1060.429	20/09/2006	14:23	12.39	1048.82
P03-04-04	0.78	1060.429	07/06/2006	8:33	12.89	1048.32
P03-04-04	0.78	1060.429	02/08/2006	11:40	12.770	1048.44
P03-04-04	0.78	1060.429	20/09/2006	14:24	12.77	1048.44
P03-04-04	0.78	1060.429	02/11/2006	13:58	12.890	1048.32
P03-04-05	0.78	1060.429	07/06/2006	8:34	12.87	1048.34
P03-04-05	0.78	1060.429	20/09/2006	14:26	12.76	1048.45
P03-04-06	0.78	1060.429	07/06/2006	8:35	12.99	1048.22
P03-04-06	0.78	1060.429	02/08/2006	11:42	12.800	1048.41
P03-04-06	0.78	1060.429	21/09/2006	14:27	12.72	1048.49
P03-04-06	0.78	1060.429	02/11/2006	14:02	12.830	1048.38
P03-04-07	0.78	1060.429	07/06/2006	8:36	13.00	1048.21
P03-04-07	0.78	1060.429	21/09/2006	14:28	12.72	1048.49
P03-04-08	0.78	1060.429	07/06/2006	8:37	13.00	1048.21
P03-04-08	0.78	1060.429	21/09/2006	14:30	12.75	1048.46
P03-04-09	0.78	1060.429	07/06/2006	8:38	13.00	1048.21
P03-04-09	0.78	1060.429	21/09/2006	14:31	12.74	1048.47
P03-05-01	0.84	1059.588	15/06/2006	8:23	8.67	1051.76
P03-05-01	0.84	1059.588	02/11/2006	9:05	8.850	1051.58
P03-05-02	0.84	1059.588	15/06/2006	8:24	8.66	1051.77
P03-05-02	0.84	1059.588	02/11/2006	9:07	8.840	1051.59
P03-05-03	0.84	1059.588	15/06/2006	8:26	8.71	1051.72
P03-05-03	0.84	1059.588	02/11/2006	9:08	8.860	1051.57
P03-05-04	0.84	1059.588	15/06/2006	8:28	8.85	1051.58
P03-05-05	0.84	1059.588	15/06/2006	8:30	8.85	1051.58
P03-05-05	0.84	1059.588	02/11/2006	9:12	9.000	1051.43
P03-05-06	0.84	1059.588	15/06/2006	8:31	8.73	1051.70
P03-05-06	0.84	1059.588	02/11/2006	9:13	8.85	1051.58
P03-05-07	0.84	1059.588	15/06/2006	8:33	8.77	1051.66
P03-05-07	0.84	1059.588	02/11/2006	9:15	8.79	1051.64
P03-05-08	0.84	1059.588	15/06/2006	8:34	8.66	1051.77
P03-05-08	0.84	1059.588	02/11/2006	9:16	8.720	1051.71
P03-06-01	0.87	1061.925	07/06/2006	14:27	12.55	1050.25
P03-06-01	0.87	1061.925	21/09/2006	11:11	12.53	1050.27
P03-06-02	0.87	1061.925	07/06/2006	14:28	12.56	1050.24
P03-06-02	0.87	1061.925	21/09/2006	11:12	12.50	1050.30
P03-06-03	0.87	1061.925	07/06/2006	14:29	12.54	1050.26

Table 4. Summary of 2006 Water Level Elevations for Multi-Level Wells, Faro Mine, Yukon

Well ID	Stickup (m)	Ground Elevation (m asl)	Date	Time	Water Level Below top of Casing (m)	Water Level Elevation (m asl)
P03-06-03	0.87	1061.925	21/09/2006	11:14	12.53	1050.27
P03-06-04	0.87	1061.925	07/06/2006	14:30	12.54	1050.26
P03-06-04	0.87	1061.925	21/09/2006	11:15	12.55	1050.25
P03-06-05	0.87	1061.925	07/06/2006	14:31	12.54	1050.26
P03-06-05	0.87	1061.925	21/09/2006	11:16	12.51	1050.29
P03-06-06	0.87	1061.925	07/06/2006	14:32	12.58	1050.22
P03-07-02	0.78	1064.207	07/06/2006	16:44	13.290	1051.70
P03-07-02	0.78	1064.207	20/09/2006	11:16	13.290	1051.70
P03-07-05	0.78	1064.207	20/09/2006	11:21	13.290	1051.70
P03-08-01	0.88	1047.474	06/06/2006	15:31	8.62	1039.73
P03-08-01	0.88	1047.474	19/09/2006	15:15	8.33	1040.02
P03-08-02	0.88	1047.474	06/06/2006	15:33	8.62	1039.73
P03-08-02	0.88	1047.474	02/08/2006	9:16	8.380	1039.97
P03-08-02	0.88	1047.474	19/09/2006	15:17	8.33	1040.02
P03-08-02	0.88	1047.474	01/11/2006	15:32	8.450	1039.90
P03-08-03	0.88	1047.474	06/06/2006	15:35	8.44	1039.91
P03-08-03	0.88	1047.474	02/08/2006	9:18	8.150	1040.20
P03-08-03	0.88	1047.474	19/09/2006	15:18	8.12	1040.23
P03-08-03	0.88	1047.474	01/11/2006	15:34	8.260	1040.09
P03-08-04	0.88	1047.474	06/06/2006	15:37	8.44	1039.91
P03-08-04	0.88	1047.474	02/08/2006	9:20	7.930	1040.42
P03-08-04	0.88	1047.474	19/09/2006	15:19	8.12	1040.23
P03-08-04	0.88	1047.474	01/11/2006	15:36	8.260	1040.09
P03-08-05	0.88	1047.474	06/06/2006	15:38	8.21	1040.14
P03-08-05	0.88	1047.474	02/08/2006	9:23	7.920	1040.43
P03-08-05	0.88	1047.474	19/09/2006	15:20	7.92	1040.43
P03-08-05	0.88	1047.474	01/11/2006	15:37	8.080	1040.27
P03-08-06	0.88	1047.474	06/06/2006	15:39	7.79	1040.56
P03-08-06	0.88	1047.474	19/09/2006	15:22	7.51	1040.84
P03-08-07	0.88	1047.474	06/06/2006	15:40	5.70	1042.65
P03-08-07	0.88	1047.474	20/09/2006	15:24	5.68	1042.67
P03-08-08	0.88	1047.474	06/06/2006	15:42	5.53	1042.82
P03-08-08	0.88	1047.474	20/09/2006	15:21	5.56	1042.79
P03-09-01	0.69	1017.822	06/06/2006	10:27	4.65	1013.86
P03-09-01	0.69	1017.822	19/09/2006	12:33	2.78	1015.73
P03-09-02	0.69	1017.822	06/06/2006	10:30	6.48	1012.03
P03-09-02	0.69	1017.822	02/08/2006	15:48	3.000	1015.51
P03-09-02	0.69	1017.822	19/09/2006	12:34	3.09	1015.42
P03-09-02	0.69	1017.822	01/11/2006	12:56	3.080	1015.43
P03-09-03	0.69	1017.822	06/06/2006	10:31	3.47	1015.04
P03-09-03	0.69	1017.822	19/09/2006	12:35	3.15	1015.36
P03-09-04	0.69	1017.822	06/06/2006	10:32	4.28	1014.23
P03-09-04	0.69	1017.822	02/08/2006	15:50	3.360	1015.15
P03-09-04	0.69	1017.822	19/09/2006	12:36	3.42	1015.09
P03-09-04	0.69	1017.822	01/11/2006	12:58	3.440	1015.07
P03-09-05	0.69	1017.822	06/06/2006	10:33	4.24	1014.27
P03-09-05	0.69	1017.822	19/09/2006	12:37	3.45	1015.06
P03-09-06	0.69	1017.822	06/06/2006	10:36	4.57	1013.94

Table 4. Summary of 2006 Water Level Elevations for Multi-Level Wells, Faro Mine, Yukon

Well ID	Stickup (m)	Ground Elevation (m asl)	Date	Time	Water Level Below top of Casing (m)	Water Level Elevation (m asl)
P03-09-06	0.69	1017.822	02/08/2006	15:52	3.405	1015.11
P03-09-06	0.69	1017.822	19/09/2006	12:38	3.47	1015.04
P03-09-06	0.69	1017.822	01/11/2006	13:01	3.490	1015.02
P03-09-07	0.69	1017.822	06/06/2006	10:38	6.71	1011.80
P03-09-07	0.69	1017.822	02/08/2006	15:53	3.560	1014.95
P03-09-07	0.69	1017.822	19/09/2006	12:39	3.62	1014.89
P03-09-07	0.69	1017.822	01/11/2006	13:02	3.620	1014.89
P03-09-08	0.69	1017.822	06/06/2006	10:40	5.36	1013.15
P03-09-08	0.69	1017.822	19/09/2006	12:40	3.67	1014.84
P03-09-09	0.69	1017.822	06/06/2006	10:42	5.75	1012.76
P03-09-09	0.69	1017.822	02/08/2006	15:54	3.960	1014.55
P05-01-01	0.68	1017.32	02/08/2006	14:21	3.150	1014.85
P05-01-01	0.68	1017.32	19/09/2006	9:30	1.81	1016.19
P05-01-02	0.68	1017.32	02/08/2006	14:23	3.335	1014.67
P05-01-02	0.68	1017.32	19/09/2006	9:31	1.78	1016.22
P05-01-03	0.68	1017.32	02/08/2006	14:24	3.300	1014.70
P05-01-03	0.68	1017.32	19/09/2006	9:31	1.92	1016.08
P05-01-04	0.68	1017.32	02/08/2006	14:25	3.250	1014.75
P05-01-04	0.68	1017.32	19/09/2006	9:32	1.97	1016.03
P05-01-05	0.68	1017.32	02/08/2006	14:26	3.690	1014.31
P05-01-05	0.68	1017.32	19/09/2006	9:34	2.27	1015.73
P05-01-06	0.68	1017.32	14/06/2006	13:40	3.09	1014.91
P05-01-06	0.68	1017.32	02/08/2006	14:26	2.330	1015.67
P05-01-06	0.68	1017.32	19/09/2006	9:34	2.33	1015.67

Table 5. Summary of 2006 Water Levels for Conventional Wells, Faro Mine, Yukon

Well ID	Date	Time	Water Level Below Top of Casing (m)
BH1	05/06/2006	11:56	3.18
BH1	18/09/2006	13:50	3.50
BH2	05/06/2006	10:54	4.62
BH2	18/09/2006	15:37	4.93
BH4	05/06/2006	13:52	2.35
BH4	18/09/2006	13:10	2.54
BH6	18/09/2006	12:15	3.52
BH7S	18/09/2006	14:20	5.99
BH12A	05/06/2006	13:00	2.91
BH12A	18/09/2006	14:32	2.65
BH12B	05/06/2006	13:10	3.43
BH12B	18/09/2006	14:20	2.62
BH13B	18/09/2006	15:10	3.21
BH14A	05/06/2006	12:00	4.00
BH14A	18/09/2006	13:37	4.19
BH14B	05/06/2006	11:45	4.17
BH14B	18/09/2006	13:13	4.48
BH05-9B-R	03/08/2006	10:20	frozen
BH05-9B-R	19/09/2006	14:19	0.70
DP4	05/06/2006	12:00	-
DP5	05/06/2006	12:00	-
ETA-05-4	14/06/2006	11:16	2.90
ETA-05-4	22/09/2006	16:05	2.63
NA05-11A	23/09/2006	11:46	13.09
NA05-2D	23/09/2006	10:16	5.37
NA05-2S	23/09/2006	10:15	5.49
NA05-9D	23/09/2006	10:45	6.80
P01-01A	08/06/2006	15:15	3.93
P01-01A	22/09/2006	9:40	3.88
P01-01B	08/06/2006	15:16	3.65
P01-01B	22/09/2006	9:17	3.78
P01-02A	09/06/2006	9:49	0.85
P01-02A	22/09/2006	12:11	2.28
P01-02B	09/06/2006	9:48	2.43
P01-02B	22/09/2006	12:13	0.72
P01-03	08/06/2006	12:00	-
P01-03	21/09/2006	14:35	4.32
P01-04A	21/09/2006	9:30	3.41
P01-04B	21/09/2006	9:35	3.63
P01-11	09/06/2006	9:20	1.08
P01-11	21/09/2006	15:53	1.12
P01-51	07/06/2006	10:17	>30 m
P01-51	19/09/2006	11:20	>30 m
P01-52A	07/06/2006	10:21	4.74
P01-52A	19/09/2006	10:40	4.87
P01-52B	07/06/2006	10:23	4.83
P01-52B	19/09/2006	10:45	4.96

Table 5. Summary of 2006 Water Levels for Conventional Wells, Faro Mine, Yukon

Well ID	Date	Time	Water Level Below Top of Casing (m)
P05-02	13/06/2006	15:26	1.93
P05-02	22/09/2006	12:00	1.93
P05-03	09/06/2006	8:43	4.72
P05-03	21/09/2006	16:17	4.66
P05-04	05/06/2006	11:45	2.91
P05-04	18/09/2006	11:30	3.24
P96-6	05/06/2006	10:25	9.82
P96-7	05/06/2006	15:51	8.50
P96-7	20/09/2006	9:40	6.21
P96-8A	22/09/2006	14:03	2.87
P96-8B	22/09/2006	14:01	2.97
P96-9A	07/06/2006	16:06	5.35
P96-9A	19/09/2006	14:24	5.74
S1A	05/06/2006	17:00	3.91
S1A	20/09/2006	11:45	4.30
S1B	05/06/2006	17:47	3.53
S1B	20/09/2006	11:48	3.86
S2A	06/06/2006	9:20	4.40
S2A	20/09/2006	11:00	4.64
S2B	06/06/2006	9:20	4.48
S2B	20/09/2006	11:00	4.89
S3	05/06/2006	18:10	2.46
S3	20/09/2006	11:28	1.96
SRK04-05A	19/09/2006	17:11	artesian
SRK04-05B	19/09/2006	17:12	artesian
SRK04-3A	14/06/2006	8:57	6.85
SRK04-3A	22/09/2006	15:44	6.35
SRK04-3B	14/06/2006	8:59	6.90
SRK04-3B	22/09/2006	15:46	6.42
SRK04-5A	07/06/2006	17:15	flowing over t.o.p. @ 0.76 m
SRK04-5B	07/06/2006	17:30	flowing over t.o.p. @ 0.78 m
SRK05-05C	21/09/2006	9:45	2.00
SRK05-06	08/06/2006	10:14	1.54
SRK05-06	19/09/2006	15:36	2.35
SRK05-07	19/09/2006	13:33	6.19
SRK05-08	07/06/2006	14:52	5.41
SRK05-08	19/09/2006	13:36	5.92
SRK05-09	08/06/2006	10:36	2.10
SRK05-09	19/09/2006	16:15	3.38
SRK05-ETA-BR1	14/06/2006	12:02	7.74
SRK05-ETA-BR1	22/09/2006	14:47	6.62
SRK05-ETA-BR2	14/06/2006	10:41	5.74
SRK05-ETA-BR2	22/09/2006	15:15	4.00
SRK05-SP-1A	06/06/2006	10:40	6.80
SRK05-SP-1A	20/09/2006	13:02	7.12
SRK05-SP-1B	06/06/2006	10:40	6.98
SRK05-SP-1B	20/09/2006	15:20	7.29

Table 5. Summary of 2006 Water Levels for Conventional Wells, Faro Mine, Yukon

Well ID	Date	Time	Water Level Below Top of Casing (m)
SRK05-SP-2	06/06/2006	10:50	1.75
SRK05-SP-2	20/09/2006	15:45	2.03
SRK05-SP-3A	06/06/2006	10:30	4.47
SRK05-SP-3A	20/09/2006	13:56	4.82
SRK05-SP-3B	06/06/2006	10:30	3.67
SRK05-SP-3B	20/09/2006	13:57	4.00
SRK05-SP-4A	06/06/2006	10:20	3.84
SRK05-SP-4A	20/09/2006	13:22	4.20
SRK05-SP-4B	06/06/2006	10:20	1.35
SRK05-SP-4B	20/09/2006	13:20	1.73
SRK05-SP-5	05/06/2006	16:15	5.79
SRK05-SP-5	20/09/2006	10:20	6.17
TH86-17	06/06/2006	18:30	7.00
TH86-17	20/09/2006	16:36	8.24
V34	07/06/2006	9:01	6.46
V34	19/09/2006	9:45	6.31
V35	07/06/2006	9:33	8.88
V35	18/09/2006	10:17	8.42
V36	07/06/2006	10:27	8.81
V36	19/09/2006	11:51	9.31
V37	07/06/2006	14:16	9.05
V37	19/09/2006	12:06	8.72
X16A	08/06/2006	13:50	3.50
X16A	21/09/2006	13:12	3.66
X16B	08/06/2006	13:51	3.86
X16B	21/09/2006	13:10	3.72
X17A	08/06/2006	16:37	2.21
X17A	22/09/2006	10:44	2.24
X17B	08/06/2006	16:38	2.75
X17B	22/09/2006	10:42	2.79
X18A	08/06/2006	17:56	4.53
X18A	22/09/2006	11:26	4.64
X18B	08/06/2006	17:58	4.29
X18B	22/09/2006	11:28	4.41
X21A-96	13/06/2006	16:40	5.02
X21A-96	23/09/2006	9:11	4.90
X21B-96	13/06/2006	16:38	5.04
X21B-96	23/09/2006	9:08	4.96
X21C-96	13/06/2006	16:37	5.09
X21C-96	23/09/2006	9:05	5.01
X24A-96	09/06/2006	11:01	5.21
X24A-96	21/09/2006	15:04	5.48
X24A-96	01/11/2006	8:55	4.710
X24D-96	09/06/2006	11:00	5.01
X24D-96	02/08/2006	14:55	5.040
X24D-96	21/09/2006	15:00	5.27
X24D-96	01/11/2006	9:00	4.520

Table 5. Summary of 2006 Water Levels for Conventional Wells, Faro Mine, Yukon

Well ID	Date	Time	Water Level Below Top of Casing (m)
X25A-96	09/06/2006	12:32	4.47
X25A-96	02/08/2006	17:32	4.520
X25A-96	21/09/2006	10:47	4.76
X25A-96	01/11/2006	11:08	3.840
X25B-96	09/06/2006	12:33	4.29
X25B-96	02/08/2006	17:34	4.330
X25B-96	21/09/2006	10:44	4.54
X25B-96	01/11/2006	11:10	3.74

Notes:

t.o.p. = top of PVC pipe

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	General Chemistry							Anions		Metals									
				pH (Field)	pH (Lab)	Sp. Cond. (Field)	Sp. Cond. (Lab)	Temp. (Field)	Hardness (CaCO3)	Alkalinity (Total) as CaCO3	Bromide	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt
				pH unit	pH unit	µS/cm	µS/cm	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
BH1	05/06/2006	10:00	M	6.19	7.37	3.6	389	7.1	200	142		51.3	0.0884	<0.00050	<0.00050	0.047	<0.0010	<0.10	0.00443	56.7	<0.0010	0.00284
BH1	18/09/2006	14:05	M	5.64	6.84	341.3	341	4.2	175	152		50.5	0.0652	<0.00050	<0.00050	0.043	<0.0010	<0.10	0.00559	49.1	<0.0010	0.00288
BH2	05/06/2006	11:10	M	5.88	6.83	805	767	2.2	415	91.8		23.0	0.647	<0.0025	<0.0025	0.043	<0.0050	<0.10	0.0412	112	<0.0050	0.0046
BH2	18/09/2006	16:00	M	5.81	6.81	393.1	399	4.9	189	117		94.6	0.138	<0.00050	<0.00050	0.058	<0.0010	<0.10	0.0182	49.5	<0.0010	0.00071
BH4	05/06/2006	10:27	M	5.52	7.04	213.4	432	1.4	222	130		261	0.289	<0.00050	<0.00050	0.030	<0.0010	<0.10	0.00451	64.4	<0.0010	0.0144
BH4	18/09/2006	13:30	M	5.63	6.68	395.4	387	4.8	226	103		108	0.218	<0.00050	<0.00050	0.022	<0.0010	<0.10	0.00322	64.4	<0.0010	0.00928
BH6	18/09/2006	12:35	M	5.96	6.63	442.1	426	3.3	225	102		129	0.0454	<0.00050	<0.00050	0.043	<0.0010	<0.10	0.00193	59.6	<0.0010	0.0452
BH7S	18/09/2006	15:25	M	6.03	7.06	297.5	289	4.6	162	140		25.6	0.0187	<0.00050	<0.00050	<0.020	<0.0010	<0.10	0.00213	46.1	<0.0010	<0.00030
BH12A	05/06/2006	13:20	M	7.82	7.35	1236	2550	3.3	1650	230		135	0.174	<0.0050	<0.0050	0.084	<0.010	<0.10	0.00095	408	<0.010	<0.0030
BH12A	18/09/2006	14:51	M	7.51	7.62	467.1	917	3.6	565	188		307	<0.010	<0.0010	<0.0010	0.036	<0.0020	<0.10	0.000198	124	<0.0020	<0.00060
BH12A	18/09/2006	14:51	SP		7.63		919		541	178		303	<0.010	<0.0010	<0.0010	0.036	<0.0020	<0.10	0.000226	119	<0.0020	<0.00060
BH12B	05/06/2006	13:30	M	7.64	7.50	1065	2490	3.8	1620	230		133	0.201	<0.0050	<0.0050	0.079	<0.010	<0.10	0.00081	391	<0.010	<0.0030
BH12B	18/09/2006	15:00	M	7.27	7.67	388.5	871	4.3	506	187		285	<0.010	<0.0010	<0.0010	0.036	<0.0020	<0.10	0.000222	110	<0.0020	<0.00060
BH13B	18/09/2006	15:30	M	6.43	7.45	1233.0	1330	7.12	819	93.5		584	0.012	<0.0010	<0.0010	0.042	<0.0020	<0.10	0.000090	211	<0.0020	0.00124
BH14A	05/06/2006	12:06	M	7.40	7.65	761	3700	2.9	2750	411		201	0.202	<0.0050	<0.0050	<0.020	<0.010	<0.10	<0.00017	706	<0.010	<0.0030
BH14A	18/09/2006	13:45	M	6.96	7.58	3466.0	3730	5.7	2430	422		1920	<0.050	<0.0050	<0.0050	<0.020	<0.010	<0.10	0.00031	588	<0.010	<0.0030
BH14B	05/06/2006	12:20	M	7.60	7.77	1311	3440	3.7	2170	393		182	0.100	<0.0050	<0.0050	<0.020	<0.010	<0.10	<0.00017	553	<0.010	<0.0030
BH14B	18/09/2006	13:25	M	7.12	7.70	3283.0	3510	7.8	2100	441		1760	<0.050	<0.0050	<0.0050	<0.020	<0.010	<0.10	0.00018	509	<0.010	<0.0030
BH14B	18/09/2006	13:25	SP		7.70		3500		2080	419		1790	<0.050	<0.0050	<0.0050	<0.020	<0.010	<0.10	0.00018	504	<0.010	<0.0030
BH05-9B-R	03/08/2006	11:20	M	7.80	8.21	584	617	5.0	226	149		160	0.0119	<0.00050	0.0186	0.022	<0.0010	<0.10	<0.000017	50.9	<0.0010	<0.00030
BH05-9B-R	19/09/2006	15:12	M	8.13	8.11	555	602	6.3	213	155		161	0.0230	0.00063	0.0471	0.022	<0.0010	<0.10	0.000020	46.4	<0.0010	0.00067
DP4	05/06/2006	12:00	M		6.90		6510		-	198		5390		-	-	-	-	-	-	-	-	-
DP5	05/06/2006	12:00	M		7.54		544		321	222		80.5	0.0324	<0.00050	0.00230	0.106	<0.0010	<0.10	0.000063	90.3	<0.0010	0.00433
ETA-05-4	14/06/2006	11:55	M	5.5	6.05	6470	6360	5.2	3890	46.8		5390	1.13	<0.050	<0.050	<0.040	<0.10	<0.20	0.0323	411	<0.10	0.630
ETA-05-4	22/09/2006	16:26	M	6.93	5.76	714	6430	6.0	3340	120		5350	4.48	<0.050	<0.050	<0.040	<0.10	<0.20	0.0465	458	<0.10	0.804
NA05-11A	23/09/2006	12:00	M	-	7.27	1254	1220	5.3	693	256		487	<0.025	<0.0025	<0.0025	0.041	<0.0050	<0.10	0.00452	137	<0.0050	0.0632
NA05-2D	23/09/2006	10:40	M	-	6.74	382	2140	3.4	1230	168		1230	<0.025	<0.0025	0.0029	0.028	<0.0050	<0.10	0.000100	330	<0.0050	0.0444
NA05-2S	23/09/2006	10:42	M	-	3.76	840	17400	3.0	9300	13.6		18100	<0.50	<0.050	<0.050	<0.20	<0.10	<1.0	<0.0017	412	<0.10	<0.030
NA05-9D	23/09/2006	11:07	M	-	6.33	1537	1360	3.3	375	64.3		785	<0.025	<0.0025	0.0026	<0.020	<0.0050	<0.10	0.000186	110	<0.0050	0.0187
P01-01A	08/06/2006	15:40	M	7.31	7.96	1352	1360	5.9	759	250		505	<0.025	<0.0025	<0.0025	0.090	<0.0050	<0.10	0.0000403	224	<0.0050	<0.0015
P01-01A	22/09/2006	10:23	M	7.86	7.84	1180	1510	3.4	850	256		617	<0.025	<0.0025	<0.0025	0.102	<0.0050	<0.10	0.000551	254	<0.0050	<0.0015
P01-01B	08/06/2006	16:30	M	7.35	8.02	1070	1070	5.0	601	242		289	<0.025	<0.0025	0.0035	0.074	<0.0050	<0.10	<0.000085	180	<0.0050	<0.0015
P01-01B	22/09/2006	10:07	M	7.93	8.02	1565	1110	3.2	588	246		367	0.028	<0.0010	0.0037	0.080	<0.0020	<0.10	<0.000034	177	<0.0020	<0.00060
P01-02A	09/06/2006	10:30	M	7.70	8.14	499	621	4.9	324	215		124	<0.0050	<0.00050	0.00063	0.060	<0.0010	<0.10	0.000086	92.3	<0.0010	0.00048
P01-02A	22/09/2006	12:25	M	7.40	8.17	645	628	4.7	333	234		124	<0.0050	<0.00050	0.00066	0.065	<0.0010	<0.10	0.000067	95.5	<0.0010	0.00042
P01-02B	09/06/2006	10:49	M	7.64	8.15	626	495	4.8	263	185		94.6	<0.0050	<0.00050	0.00380	0.033	<0.0010	<0.10	<0.000017	64.2	<0.0010	<0.00030
P01-02B	22/09/2006	12:43	M	7.40	8.17	524	507	4.1	262	180		94.4	<0.0050	<0.00050	0.00426	0.035	<0.0010	<0.10	<0.000017	64.4	<0.0010	<0.00030
P01-03	08/06/2006	12:00	M		7.52		2560		1520	351		1090	<0.050	<0.0050	<0.0050	<0.020	<0.010	<0.10	0.00208	445	<0.010	0.0583
P01-03	21/09/2006	14:53	M	6.73	7.43	6.8	2620	2680	1540	358		1570	0.227	<0.0025	<0.0050	<0.020	<0.0050	<0.10	0.00167	446	<0.0025	0.0568
P01-03	21/09/2006	14:53	SP		7.47		2620		1400	354		1570	<0.050	<0.0025	<0.0050	<0.020	<0.0050	<0.10	0.00174	403	<0.0025	0.0574
P01-04A	21/09/2006	11:20	M	6.95	7.49	1346	1090	3.4	467	643		34.0	<0.020	<0.0010	<0.0020	0.425	<0.0050	<0.10	<0.00010	118	<0.0010	<0.0010
P01-04B	21/09/2006	10:34	M	7.21	7.86	1283	1380	3.8	682	299		555	0.052	<0.0010	<0.0020	0.029	<0.0050	<0.10	<0.00010	217	<0.0010	<0.0010
P01-11	09/06/2006	9:38	M	7.15	7.80	2065	2010	4.7	1120	334		941	<0.025	<0.0025	0.0318	0.051	<0.0050	<0.10	<0.000085	347	<0.0050	

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
BH1	05/06/2006	10:00	M	0.0044	<0.030	0.00379	0.0156	14.3	0.536	<0.000020	<0.0010	0.0093	<2.0	<0.0010	<0.000020	4.7	<0.00020	<0.00050	<0.010	0.00098	<0.030	1.37
BH1	18/09/2006	14:05	M	0.0051	<0.030	0.00141	0.0148	12.8	0.358	<0.000020	<0.0010	0.0126	<2.0	<0.0010	<0.000020	3.8	<0.00020	<0.00050	<0.010	0.00036	<0.030	2.09
BH2	05/06/2006	11:10	M	<0.0050	<0.030	<0.0025	<0.025	32.7	0.474	<0.000020	<0.0050	0.116	2.8	<0.0050	<0.00010	6.2	<0.0010	<0.0025	<0.010	<0.0010	<0.030	24.0
BH2	18/09/2006	16:00	M	0.0022	0.060	0.00198	0.0116	15.9	0.0197	<0.000020	<0.0010	0.0410	<2.0	<0.0010	<0.000020	4.0	<0.00020	<0.00050	<0.010	<0.00020	<0.030	10.5
BH4	05/06/2006	10:27	M	0.0133	0.036	<0.00050	0.0167	14.9	0.189	<0.000020	<0.0010	0.0238	<2.0	<0.0010	<0.000020	4.8	<0.00020	<0.00050	<0.010	<0.00020	<0.030	2.37
BH4	18/09/2006	13:30	M	0.0096	0.050	0.00062	0.0212	15.9	0.105	<0.000020	<0.0010	0.0165	<2.0	<0.0010	<0.000020	4.6	<0.00020	<0.00050	<0.010	<0.00020	<0.030	1.32
BH6	18/09/2006	12:35	M	<0.0010	8.36	0.00077	0.0254	18.4	1.94	<0.000020	<0.0010	0.0426	<2.0	<0.0010	<0.000020	4.9	<0.00020	<0.00050	<0.010	0.00025	<0.030	5.51
BH7S	18/09/2006	15:25	M	0.0010	0.129	0.00094	0.0104	11.4	0.00475	<0.000020	<0.0010	0.0023	<2.0	<0.0010	<0.000020	3.4	<0.00020	<0.00050	<0.010	<0.00020	<0.030	0.593
BH12A	05/06/2006	13:20	M	<0.010	<0.030	<0.0050	<0.050	154	<0.0030	<0.000020	<0.010	0.028	4.7	<0.010	<0.00020	10.9	<0.0020	<0.0050	<0.010	0.0092	<0.030	0.558
BH12A	18/09/2006	14:51	M	0.0020	<0.030	<0.0010	0.018	61.7	0.0155	<0.000020	<0.0020	0.0077	2.4	<0.0020	<0.000040	5.6	<0.00040	<0.0010	<0.010	0.00451	<0.030	0.150
BH12A	18/09/2006	14:51	SP	0.0021	<0.030	<0.0010	0.018	58.9	0.0156	<0.000020	<0.0020	0.0080	2.4	<0.0020	<0.000040	5.4	<0.00040	<0.0010	<0.010	0.00443	<0.030	0.155
BH12B	05/06/2006	13:30	M	<0.010	<0.030	<0.0050	<0.050	156	<0.0030	<0.000020	<0.010	0.031	4.8	<0.010	<0.00020	10.9	<0.0020	<0.0050	<0.010	0.0092	<0.030	0.683
BH12B	18/09/2006	15:00	M	0.0021	<0.030	<0.0010	0.017	56.0	0.00737	<0.000020	<0.0020	0.0088	2.4	<0.0020	<0.000040	5.2	<0.00040	<0.0010	<0.010	0.00469	<0.030	0.175
BH13B	18/09/2006	15:30	M	0.0046	<0.030	<0.0010	0.011	70.9	0.0101	<0.000020	0.0040	0.0088	2.8	0.0102	<0.000040	6.7	<0.00040	<0.0010	<0.010	0.00153	<0.030	0.011
BH14A	05/06/2006	12:06	M	<0.010	<0.030	<0.0050	0.058	240	<0.0030	<0.000020	<0.010	<0.010	4.3	<0.010	<0.00020	18.7	<0.0020	<0.0050	<0.010	0.139	<0.030	0.097
BH14A	18/09/2006	13:45	M	<0.010	<0.030	<0.0050	0.056	234	<0.0030	<0.000020	<0.010	<0.010	3.5	<0.010	<0.00020	19.0	<0.0020	<0.0050	<0.010	0.143	<0.030	0.550
BH14B	05/06/2006	12:20	M	<0.010	<0.030	<0.0050	0.053	192	<0.0030	<0.000020	<0.010	<0.010	4.6	<0.010	<0.00020	16.3	<0.0020	<0.0050	<0.010	0.146	<0.030	0.155
BH14B	18/09/2006	13:25	M	<0.010	<0.030	<0.0050	<0.050	201	<0.0030	<0.000020	<0.010	<0.010	3.3	<0.010	<0.00020	14.4	<0.0020	<0.0050	<0.010	0.156	<0.030	0.386
BH14B	18/09/2006	13:25	SP	<0.010	<0.030	<0.0050	<0.050	199	0.0030	<0.000020	<0.010	<0.010	3.3	<0.010	<0.00020	14.3	<0.0020	<0.0050	<0.010	0.147	<0.030	0.391
BH05-9B-R	03/08/2006	11:20	M	<0.0010	0.738	0.00572	0.0191	24.0	0.103	<0.000020	0.0112	<0.0010	2.2	<0.0010	<0.00020	51.6	<0.00020	<0.00050	<0.010	0.00085	<0.030	0.0051
BH05-9B-R	19/09/2006	15:12	M	<0.0020	0.510	0.0146	0.0214	23.6	0.0993	<0.000020	0.0120	0.0012	<2.0	<0.0010	<0.000020	50.0	<0.00020	<0.00050	<0.010	0.00175	<0.030	0.0072
DP4	05/06/2006	12:00	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DP5	05/06/2006	12:00	M	<0.0010	2.83	<0.00050	0.0308	23.3	0.326	<0.000020	<0.0010	0.0091	2.5	<0.0010	<0.000020	7.4	<0.00020	<0.00050	<0.010	0.00279	<0.030	0.420
ETA-05-4	14/06/2006	11:55	M	<0.10	502	0.062	<0.50	695	74.2	<0.000020	<0.10	1.03	9.0	<0.10	<0.0020	55.3	<0.020	<0.050	<0.020	<0.020	0.065	393
ETA-05-4	22/09/2006	16:26	M	<0.10	852	0.089	<0.50	533	73.6	0.000026	<0.10	1.06	11.4	<0.10	<0.0020	55.8	<0.020	<0.050	<0.020	<0.020	0.119	548
NA05-11A	23/09/2006	12:00	M	<0.0050	20.4	<0.0025	<0.025	84.8	26.6	<0.000020	<0.0050	0.246	2.7	<0.0050	<0.00010	10.6	<0.0010	<0.0025	<0.010	0.0058	<0.025	22.6
NA05-2D	23/09/2006	10:40	M	<0.0050	107	<0.0025	<0.025	99.3	34.4	<0.000020	<0.0050	0.0182	4.9	<0.0050	<0.00010	44.4	<0.0010	<0.0025	<0.010	0.0059	<0.025	0.333
NA05-2S	23/09/2006	10:42	M	<0.10	7780	0.483	<0.50	2010	485	<0.000020	<0.10	<0.10	<2.0	<0.10	<0.0020	28	<0.020	<0.050	<0.10	<0.020	2.09	8.68
NA05-9D	23/09/2006	11:07	M	<0.0050	373	<0.0025	<0.025	24.3	8.81	<0.000020	<0.0050	0.0217	3.9	<0.0050	<0.00010	14.0	<0.0010	<0.0025	<0.010	0.0013	<0.025	16.2
P01-01A	08/06/2006	15:40	M	<0.0050	<0.030	<0.0025	<0.025	48.2	3.36	<0.000020	<0.0050	0.0051	4.8	<0.0050	<0.00010	21.7	<0.0010	<0.0025	<0.010	0.0076	<0.030	0.062
P01-01A	22/09/2006	10:23	M	<0.0050	<0.030	<0.0025	<0.025	52.2	4.72	<0.000020	<0.0050	0.0059	5.6	<0.0050	<0.00010	24.7	<0.0010	<0.0025	<0.010	0.0086	<0.030	<0.025
P01-01B	08/06/2006	16:30	M	<0.0050	0.721	<0.0025	<0.025	36.8	0.103	<0.000020	<0.0050	<0.0050	3.4	<0.0050	<0.00010	24.3	<0.0010	<0.0025	<0.010	0.0061	<0.030	0.061
P01-01B	22/09/2006	10:07	M	<0.0020	0.774	<0.0010	0.011	35.4	0.119	<0.000020	<0.0020	<0.0020	3.4	<0.0020	<0.000040	24.4	<0.00040	<0.0010	<0.010	0.00635	<0.030	<0.010
P01-02A	09/06/2006	10:30	M	<0.0010	<0.030	<0.00050	0.0060	22.7	1.01	<0.000020	0.0017	0.0021	2.2	<0.0010	<0.000020	11.8	<0.00020	<0.00050	<0.010	0.00251	<0.030	<0.0050
P01-02A	22/09/2006	12:25	M	<0.0010	<0.030	<0.00050	0.0056	23.1	0.925	<0.000020	0.0018	0.0019	2.3	<0.0010	<0.000020	10.1	<0.00020	<0.00050	<0.010	0.00232	<0.030	0.0054
P01-02B	09/06/2006	10:49	M	<0.0010	0.499	<0.00050	0.0062	24.9	0.144	<0.000020	<0.0010	0.0010	2.0	<0.0010	<0.000020	11.0	<0.00020	<0.00050	<0.010	0.00229	<0.030	<0.0050
P01-02B	22/09/2006	12:43	M	<0.0010	0.672	<0.00050	0.0057	24.5	0.137	<0.000020	<0.0010	<0.0010	<2.0	<0.0010	<0.000020	10.5	<0.00020	<0.00050	<0.010	0.00214	<0.030	0.0056
P01-03	08/06/2006	12:00	M	<0.010	0.277	<0.0050	<0.050	98.7	46.7	<0.000020	<0.010	0.125	5.2	<0.010	<0.00020	39.3	<0.0020	<0.0050	<0.010	0.0071	<0.030	0.335
P01-03	21/09/2006	14:53	M	<0.0050	0.236	<0.0050	<0.050	103	48.4	<0.000020	<0.0050	0.116	-	<0.0050	<0.00025	41.1	<0.0010	<0.0050	0.0071	0.047	<0.030	0.0175
P01-03	21/09/2006	14:53	SP	<0.0050	0.225	<0.0050	<0.050	94.9	48.6	<0.000020	<0.0050	0.117	-	<0.0050	<0.00025	41.7	<0.0010	<0.0050	0.0070	<0.030	0.0186	
P01-04A	21/09/2006	11:20	M	<0.0020	0.610	<0.0020	0.146	42.1	0.223	<0.000020	<0.0020	<0.010	-	<0.0020	0.00027	71.4	<0.00040	<0.0050	<0.00040	<0.030	<0.0050	
P01-04B	21/09/2006	10:34	M	<0.0020	4.95	<0.0020	<0.050	34.3	1.35	<0.000020	<0.0020	<0.010	-	<0.0020	<0.00010	43.2	<0.00040	<0.0050	0.00369	<0.030	<0.0050	
P01-11	09/06/2006	9:38	M	<0.0050	22.5	<0.0025	<0.025	61.9	14.7	<0.000020	<0.0050	<0.0050	6.1	<0.0050	<0.00010	48.9	<0.0010	<0.0025	<0.010	0.0048	<0.030	0.064
P01-11	21/09/2006	16:05	M	<0.0050	22.2	<0.0050	<0.050	57.8	15.5	<0.000020	<0.0050	<0.025	-	<0.0050	<0.00025	44.6	<0.0010	<0.0050	0.0047	<0.030	0.0050	
P01-51	07/06/2006	11:35	M	<0.0020	<0.030	<0.0010	0.011	41.8	0.00679	<0.000020	0.0719	<0.0020	2.7	<0.0020	<0.000040	100	<0.00040	<0.0010	0.00207	<0.030	0.0052	
P01-51	19/09/2006	11:45	M	0.0069	0.178	0.0024	0.012	47.0	0.137	<0.000020	0.0768	0.0031	3.2	<0.0020	<0.000040	120	<0.00040	<0.0010	0.00233	<0.030	0.039	
P01-52A	07/06/2006	12:30	M	<0.0020	1.71	<0.0010																

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	General Chemistry							Anions		Metals									
				pH (Field)	pH (Lab)	Sp. Cond. (Field)	Sp. Cond. (Lab)	Temp. (Field)	Hardness (CaCO3)	Alkalinity (Total) as CaCO3	Bromide	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt
				pH unit	pH unit	µS/cm	µS/cm	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
P03-01-08	09/06/2006	10:10	M	5.69	3.46	1388	19300	6.8	2550	10.2		21000	<2.5	<0.25	<0.25	<0.40	<0.50	<2.0	<0.0085	302	<0.50	<0.15
P03-01-08	21/09/2006	15:30	M	6.00	3.31	2760	25800	9.6	3930	<2.0		32400	<5.0	<0.25	<0.50	<0.50	<0.12	<2.5	<0.025	429	<0.25	<0.25
P03-01-09	09/06/2006	11:00	M	4.61	3.04	1907	31400	13.5	4020	<2.0		46300	<5.0	<0.50	<0.50	<1.0	<1.0	<5.0	<0.017	475	<1.0	<0.30
P03-01-09	21/09/2006	15:40	M	5.59	2.97	3178	32900	9.2	4100	<2.0		51900	<5.0	<0.25	<0.50	<0.60	<0.15	<3.0	<0.025	441	<0.25	<0.25
P03-02-01	08/06/2006	15:20	M	6.81	7.98	460.1	350	7.1	187	164		30.4	0.0084	<0.0050	0.00061	0.089	<0.0010	<0.10	<0.000017	58.9	<0.0010	0.00048
P03-02-01	21/09/2006	16:00	M	7.18	7.34	415.0	407	5.2	198	168		66.9	<0.010	<0.0050	<0.0010	0.097	<0.0050	<0.10	<0.000050	62.6	<0.0050	<0.00050
P03-02-02	08/06/2006	15:35	M	6.65	7.86	219.1	266	6.7	136	104		31.8	0.0063	<0.0050	<0.00050	0.094	<0.0010	<0.10	0.000029	41.6	<0.0010	<0.00030
P03-02-02	21/09/2006	16:10	M	7.29	7.48	297.5	368	4.8	169	102		102	<0.010	<0.0050	<0.0010	0.125	<0.0050	<0.10	<0.000050	50.5	<0.0050	<0.00050
P03-02-03	08/06/2006	16:00	M	6.97	7.87	178.1	255	7.6	127	97.9		30.4	0.0141	<0.0050	<0.00050	0.099	<0.0010	<0.10	<0.000017	38.7	<0.0010	<0.00030
P03-02-03	22/09/2006	9:55	M	7.01	7.56	202.8	399	4.2	198	97.4		125	<0.010	<0.0050	<0.0010	0.147	<0.0050	<0.10	<0.000050	60.1	<0.0050	<0.00050
P03-02-04	08/06/2006	16:35	M	7.02	7.28	292	386	7.3	155	42.7		136	0.0213	0.00100	0.00374	0.044	<0.0010	<0.10	0.00112	48.2	<0.0010	0.00367
P03-02-04	22/09/2006	9:50	M	7.20	6.95	275	653	4.2	304	43.4		295	<0.010	<0.0050	<0.0010	0.056	<0.0050	<0.10	0.00107	93.8	<0.0050	0.00496
P03-02-05	08/06/2006	15:30	M	5.77	5.01	5005	6960	15.6	2220	23.2		5350	<0.10	<0.010	0.021	<0.10	<0.020	<0.50	<0.00034	367	<0.020	0.0095
P03-02-05	22/09/2006	10:10	M	6.98	4.00	791	8290	5.0	2460	10.8		7360	<0.50	<0.025	<0.050	<0.10	<0.025	<0.50	<0.0025	400	<0.025	<0.025
P03-02-06	08/06/2006	16:10	M	6.45	4.15	2164	8120	8.4	2520	17.0		6570	<0.25	<0.025	<0.025	<0.10	<0.050	<0.50	<0.00085	397	<0.050	<0.015
P03-02-07	08/06/2006	17:10	M	6.26	3.70	2238	10300	15.1	2790	15.2		9250	<0.25	<0.025	<0.025	<0.10	<0.050	<0.50	<0.00085	404	<0.050	<0.015
P03-02-07	22/09/2006	10:15	M	6.85	3.72	795	10500	4.8	3060	13.0		10300	17.8	<0.025	<0.050	<0.10	<0.025	<0.50	0.0034	455	<0.025	<0.025
P03-02-08	08/06/2006	17:00	M	5.60	3.41	3157	15300	14.1	2720	11.0		16100	<0.50	<0.050	<0.050	<0.20	<0.10	<1.0	<0.0017	389	<0.10	<0.030
P03-02-08	22/09/2006	10:30	M	6.58	3.27	1087	16300	5.1	2690	<2.0		18700	<1.0	<0.050	<0.10	<0.20	<0.050	<1.0	<0.0050	373	<0.050	<0.050
P03-02-09	08/06/2006	17:25	M	6.13	3.27	2290	19200	18.0	2030	2.6		21000	<1.0	<0.10	<0.10	<0.40	<0.20	<2.0	<0.0034	396	<0.20	<0.060
P03-02-09	22/09/2006	10:45	M	5.94	3.17	1171	20900	4.5	2240	<2.0		29500	<1.0	<0.050	<0.10	<0.40	<0.10	<2.0	<0.0050	392	<0.050	<0.050
P03-03-01	15/06/2006	13:55	M	6.74	8.08	2466	495	11.1	270	287	<0.050	3.46	<0.0050	<0.00050	0.00855	0.254	<0.0010	<0.10	<0.000017	78.6	<0.0010	0.00151
P03-03-01	15/06/2006	13:55	REP		8.01		493		257	284	<0.050	3.33	<0.0050	<0.00050	0.00838	0.255	<0.0010	<0.10	<0.000017	76.5	<0.0010	0.00153
P03-03-01	22/09/2006	11:50	M	7.73	8.03	269.5	483	4.9		282		5.3	-	-	-	-	-	-	-	-	-	-
P03-03-02	15/06/2006	13:40	M	4.52	4.46	2484	2710	12.4	556	6.9	<5.0	2010	2.90	<0.025	<0.025	<0.020	<0.050	<0.10	0.0143	133	<0.050	0.179
P03-03-02	22/09/2006	11:45	M	6.63	5.12	586	2170	5.3	436	7.7		1470	2.09	<0.010	<0.010	<0.020	<0.020	<0.10	0.0131	107	<0.020	0.157
P03-03-03	15/06/2006	15:50	M	5.29	5.94	596	751	10.0	320	6.6	<0.050	380	0.139	<0.0025	<0.0025	<0.020	<0.0050	<0.10	0.00792	93.7	<0.0050	0.172
P03-03-03	22/09/2006	12:15	M	6.70	5.63	317.9	906	4.6	405	8.2		469	0.200	<0.0010	<0.0010	<0.020	<0.0020	<0.10	0.0111	122	<0.0020	0.211
P03-03-03	22/09/2006	12:15	SP		5.59		906		412	9.0		466	0.201	<0.0010	<0.0010	<0.020	<0.0020	<0.10	0.0111	124	<0.0020	0.213
P03-03-04	15/06/2006	14:30	M	6.29	6.49	535	776	10.0	318	21.3	<0.050	381	<0.025	<0.0025	0.0027	0.056	<0.0050	<0.10	0.00275	93.7	<0.0050	0.133
P03-03-04	22/09/2006	12:00	M	7.08	6.35	336.6	994	4.6	453	30.9		499	0.018	<0.0010	0.0030	0.070	<0.0020	<0.10	0.00354	136	<0.0020	0.147
P03-03-05	15/06/2006	14:55	M	6.19	7.08	482.5	987	12.7	451	87.5	<0.050	457	0.051	<0.0050	0.0101	0.133	<0.010	<0.10	<0.00017	133	<0.010	0.0369
P03-03-05	22/09/2006	12:30	M	7.34	6.75	338.1	1100	4.3	557	76.0		550	<0.010	<0.0010	0.0092	<0.20	<0.0020	<1.0	0.000043	168	<0.0020	0.0472
P03-03-06	15/06/2006	15:05	M	6.37	6.11	1174	2520	12.1	1060	14.6	<5.0	1800	<0.025	<0.0025	<0.0025	<0.020	<0.0050	<0.10	<0.000085	281	<0.0050	<0.0015
P03-03-06	22/09/2006	12:35	M	7.09	6.09	418.3	1780	4.6	801	17.4		1090	<0.025	<0.0025	<0.0025	<0.020	<0.0050	<0.10	<0.000085	217	<0.0050	<0.0015
P03-03-08	15/06/2006	15:30	M		3.66		9870		1150	3.0	<50	10300	<0.50	<0.050	<0.050	<0.10	<0.10	<0.50	<0.0017	101	<0.10	<0.030
P03-03-08	22/09/2006	12:45	M	-	3.56	-	9190	-	2010	2.4		8640	<0.25	<0.025	<0.025	<0.10	<0.050	<0.50	<0.00085	262	<0.050	<0.015
P03-03-09	15/06/2006	15:25	M		3.62		7860		1420	<2.0	<50	7230	<0.25	<0.025	<0.025	<0.10	<0.050	<0.50	<0.00085	150	<0.050	<0.015
P03-03-09	22/09/2006	12:50	M	-	3.35	-	17300	-	3490	<2.0		21900	<0.50	<0.050	<0.050	<0.20	<0.10	<1.0	<0.0017	347	<0.10	<0.030
P03-04-01	07/06/2006	10:30	M	7.26	7.86	896	1870	6.3	905	278		894	0.097	<0.0025	<0.0025	<0.020	<0.0050	<0.10	<0.000085	285	<0.0050	<0.0015
P03-04-01	20/09/2006	16:10	M	6.93	7.73	1034	1860	6.9	994	286		912	<0.025	<0.0025	<0.0025	<0.020	<0.0050	<0.10	<0.000085	321	<0.0050	<0.0015
P03-04-02	07/06/2006	10:35	M	6.19	7.26	715	1490	7.8	780	107		696	0.027	<0.0025	<0.0025	<0.020	<0.0050	<0.10	0.000181	227	<0.0050	0.0893
P03-04-02	02/08/2006</																					

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
P03-01-08	09/06/2006	10:10	M	<0.50	12200	<0.25	<2.5	436	75.7	<0.000020	<0.50	<0.50	70	<0.50	<0.010	654	<0.10	<0.25	<0.20	<0.10	<0.60	1250
P03-01-08	21/09/2006	15:30	M	<0.50	17500	0.59	<1.2	694	115	<0.00020	<0.50	<2.5		<0.50	<0.025	576	<0.10		<1.2	<0.10	0.91	2050
P03-01-09	09/06/2006	11:00	M	<1.0	24000	1.40	<5.0	687	178	<0.000020	<1.0	<1.0	<100	<1.0	<0.020	290	<0.20	<0.50	<0.20	<1.5	3350	
P03-01-09	21/09/2006	15:40	M	<0.50	26400	1.63	<1.5	729	189	<0.00020	<0.50	<2.5		<0.50	<0.025	308	<0.10		<1.5	<0.10	<0.90	3750
P03-02-01	08/06/2006	15:20	M	<0.0010	0.133	0.00102	<0.0050	9.56	0.384	<0.000020	0.0021	0.0011	<2.0	<0.0010	<0.000020	3.0	<0.00020	<0.00050	<0.010	0.00174	<0.030	<0.0050
P03-02-01	21/09/2006	16:00	M	<0.0010	0.308	<0.0010	<0.0050	10.2	0.486	<0.00020	0.0018	<0.0050		<0.0010	<0.000050	2.4	<0.00020		<0.050	0.00191	<0.030	0.0167
P03-02-02	08/06/2006	15:35	M	<0.0010	<0.030	0.00068	<0.0050	7.94	0.00119	<0.000020	<0.0010	<2.0		<0.0010	<0.000020	2.6	<0.00020	<0.00050	<0.010	0.00080	<0.030	<0.0050
P03-02-02	21/09/2006	16:10	M	<0.0010	<0.030	0.00010	<0.0050	10.5	<0.010	<0.00020	<0.0010	<0.0050		<0.0010	<0.000050	2.4	<0.00020		<0.050	0.00061	<0.030	0.0079
P03-02-03	08/06/2006	16:00	M	<0.0010	0.049	0.00514	<0.0050	7.34	0.00374	<0.000020	<0.0010	<0.0010	<2.0	<0.0010	<0.000020	2.4	<0.00020	<0.00050	<0.010	0.00067	<0.030	<0.0050
P03-02-03	22/09/2006	9:55	M	<0.0010	0.035	<0.0010	<0.0050	11.6	<0.010	<0.00020	<0.0010	<0.0050		<0.0010	<0.000050	2.5	<0.00020		<0.050	0.00059	<0.030	0.0165
P03-02-04	08/06/2006	16:35	M	<0.0010	0.425	0.00083	0.0367	8.53	7.03	<0.000020	0.0021	0.0793	<2.0	<0.0010	<0.000020	7.4	<0.00020	<0.00050	<0.010	<0.00020	<0.030	0.268
P03-02-04	22/09/2006	9:50	M	<0.0010	0.718	<0.0010	<0.0050	16.9	18.2	<0.00020	<0.0010	0.179		<0.0010	<0.000050	6.9	<0.00020		<0.050	<0.00020	<0.030	1.18
P03-02-05	08/06/2006	15:30	M	<0.020	1790	<0.010	0.21	317	27.3	<0.00020	<0.020	<0.020	46	<0.020	<0.00040	345	<0.040	<0.010	<0.050	<0.040	<0.15	0.051
P03-02-05	22/09/2006	10:10	M	<0.050	2560	<0.050	<0.25	354	27.5	<0.00020	<0.050	<0.25		<0.050	<0.0025	400	<0.010		<0.25	<0.010	<0.15	0.418
P03-02-06	08/06/2006	16:10	M	<0.050	2360	<0.025	0.25	370	27.9	<0.000020	<0.050	<0.050	62	<0.050	<0.0010	405	<0.010	<0.025	<0.050	<0.010	<0.15	0.051
P03-02-07	08/06/2006	17:10	M	<0.050	3770	0.086	0.34	433	35.2	<0.000020	<0.050	<0.050	73	<0.050	<0.0010	288	<0.010	<0.025	<0.050	<0.010	<0.15	0.270
P03-02-07	22/09/2006	10:15	M	0.093	4290	2.18	0.33	468	36.6	<0.00020	<0.050	<0.25		<0.050	<0.0025	364	<0.010		<0.25	<0.010	0.18	2.09
P03-02-08	08/06/2006	17:00	M	<0.10	9220	1.23	<0.50	424	58.5	<0.000020	<0.10	<0.10	54	<0.10	<0.0020	182	<0.020	<0.050	<0.10	<0.020	<0.30	38.8
P03-02-08	22/09/2006	10:30	M	<0.10	9180	1.73	<0.50	426	56.5	<0.00020	<0.10	<0.50		<0.10	<0.00050	189	<0.020		<0.50	<0.020	0.65	32.0
P03-02-09	08/06/2006	17:25	M	<0.20	13400	1.16	<1.0	253	77.8	<0.000020	<0.20	<0.20	<40	<0.20	<0.0040	<40	<0.040	<0.10	<0.20	<0.040	<0.60	496
P03-02-09	22/09/2006	10:45	M	<0.10	15200	<0.10	<1.0	306	94.9	<0.00020	<0.10	<0.50		<0.10	<0.0050	<40	<0.020		<1.0	<0.020	<0.60	680
P03-03-01	15/06/2006	13:55	M	<0.0010	3.40	<0.00050	0.0170	17.9	0.123	<0.000020	0.0023	<0.0010	2.3	<0.0010	<0.000020	10.2	<0.00020	<0.00050	<0.010	0.00047	<0.030	<0.0050
P03-03-01	15/06/2006	13:55	REP	<0.0010	3.34	<0.00050	0.0164	16.1	0.126	<0.000020	0.0021	<0.0010	2.1	<0.0010	<0.000020	9.9	<0.00020	<0.00050	<0.010	0.00046	<0.030	0.0077
P03-03-01	22/09/2006	11:50	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P03-03-02	15/06/2006	13:40	M	0.050	644	<0.025	<0.25	54.6	17.0	<0.000020	<0.050	0.242	4.7	<0.050	<0.0010	14.4	<0.010	<0.025	<0.010	<0.010	<0.030	135
P03-03-02	22/09/2006	11:45	M	0.036	511	<0.010	<0.10	41.0	15.3	<0.000020	<0.020	0.211	5.1	<0.020	<0.00040	12.4	<0.040	<0.010	<0.010	<0.040	<0.080	122
P03-03-03	15/06/2006	15:50	M	<0.0050	22.3	0.0030	0.030	21.0	11.4	<0.000020	<0.0050	0.200	2.5	<0.0050	<0.00010	7.4	<0.0010	<0.0025	<0.010	<0.0010	<0.030	9.28
P03-03-03	22/09/2006	12:15	M	<0.0020	40.7	<0.0010	0.034	24.5	15.8	<0.000020	<0.0020	0.243	3.5	<0.0020	<0.00040	9.1	<0.00040	<0.0010	<0.010	<0.00040	<0.030	14.6
P03-03-03	22/09/2006	12:15	SP	<0.0020	41.5	<0.0010	0.034	24.9	16.0	<0.000020	<0.0020	0.243	3.6	<0.0020	<0.00040	9.2	<0.00040	<0.0010	<0.010	<0.00040	<0.030	14.7
P03-03-04	15/06/2006	14:30	M	<0.0050	29.6	<0.0025	0.034	20.3	15.2	<0.000020	<0.0050	0.134	2.5	<0.0050	<0.00010	13.6	<0.0010	<0.0025	<0.010	<0.0010	<0.030	4.80
P03-03-04	22/09/2006	12:00	M	<0.0020	39.8	<0.0010	0.034	27.3	26.0	<0.000020	<0.0020	0.147	3.6	<0.0020	<0.00040	18.1	<0.00040	<0.0010	<0.010	<0.00040	<0.030	6.19
P03-03-05	15/06/2006	14:55	M	<0.010	24.8	<0.0050	<0.050	28.8	30.7	<0.000020	<0.010	0.030	2.9	<0.010	<0.00020	31.6	<0.0020	<0.0050	<0.010	<0.0020	<0.030	0.202
P03-03-05	22/09/2006	12:30	M	<0.0020	29.8	<0.0010	0.025	33.3	43.8	<0.000020	<0.0020	0.0345	<20	<0.0020	<0.00040	30	<0.00040	<0.0010	<0.010	0.00046	<0.30	0.303
P03-03-06	15/06/2006	15:05	M	<0.0050	287	<0.0025	0.032	85.9	16.6	<0.000020	<0.0050	<0.0050	5.1	<0.0050	<0.00010	98.6	<0.0010	<0.0025	<0.010	<0.0010	<0.030	<0.025
P03-03-06	22/09/2006	12:35	M	<0.0050	195	<0.0025	0.029	62.8	17.2	<0.000020	<0.0050	<0.0050	5.7	<0.0050	<0.00010	75.9	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.044
P03-03-08	15/06/2006	15:30	M	<0.10	4240	1.11	<0.50	218	67.8	<0.000020	<0.10	<0.10	<10	<0.10	<0.0020	68	<0.020	<0.050	<0.020	<0.15	360	
P03-03-08	22/09/2006	12:45	M	<0.050	3490	<0.025	<0.25	329	51.6	<0.000020	<0.050	<0.050	50	<0.050	<0.0010	399	<0.010	<0.025	<0.050	<0.010	<0.20	134
P03-03-09	15/06/2006	15:25	M	<0.050	3190	0.071	<0.25	254	43.1	<0.000020	<0.050	<0.050	21	<0.050	<0.0010	164	<0.010	<0.025	<0.050	<0.010	<0.15	145
P03-03-09	22/09/2006	12:50	M	<0.10	9340	2.23	<0.50	637	143	<0.000020	<0.10	<0.10	55	<0.10	<0.0020	417	<0.020	<0.050	<0.10	<0.020	<1.1	629
P03-04-01	07/06/2006	10:30	M	<0.0050	4.63	<0.0025	<0.025	47.0	1.37	<0.000020	<0.0050	<0.0050	4.2	<0.0050	<0.00010	99.1	<0.0010	<0.0025	<0.010	0.0058	<0.030	<0.0050
P03-04-01	20/09/2006	16:10	M	<0.0050	4.75	<0.0025	<0.025	46.6	1.53	<0.000020	<0.0050	<0.0050	5.4	<0.0050	<0.00010	99.4	<0.0010	<0.0025	<0.010	0.0078	<0.030	<0.025
P03-04-02	07/06/2006	10:35	M	<0.0050	0.252	<0.0025	<0.025	51.6	30.6	<0.000020	<0.0050	0.140	3.1	<0.0050	<0.00010	33.5	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.0610
P03-04-02	02/08/2006	12:55	M	<0.0050	0.075	<0.0025	<0.025	59.8	34.5	<0.000020	<0.0050	0.139	3.3	<0.0050	<0.00010	32.5	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.066
P03-04-02	20/09/2006	15:40	M	<0.0050	0.075	<0.0025	<0.025	68.9	35.9	<0.000020	<0.0050	0.170	4.4	<0.0050	<0.00010	35.8	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.079
P03-04-02	02/11/2006	14:40	M	<0.020	0.258	<0.010	<0.10	63.8	39.0	<0.000020	<0.020	0.198	4.1	<0.020	<0.00040	34.9	<0.040	<0.010	<0.020	<0.040	<0.060	<0.10
P03-04-03	07/06/2006	11:10	M	<0.0050	0.315	<0.0025	<0.025	48.8	30.1	<0.000020	<0.0050	0.109	3.2	<0.0050	<0.00010	33.1	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.0553
P03-04-03	20/09/2006	16:20	M	<0.0050	0.270	<0.0025	<0.025	62.2	32.3	<0.000020	<0.0050	0.101	4.1	<0.0050	<0.00010	31.0	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.086
P03-04-04	07/06/2006	11:05																				

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	General Chemistry							Anions		Metals									
				pH (Field)	pH (Lab)	Sp. Cond. (Field)	Sp. Cond. (Lab)	Temp. (Field)	Hardness (CaCO3)	Alkalinity (Total) as CaCO3	Bromide	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt
				pH unit	pH unit	µS/cm	µS/cm	°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
P03-05-01	02/11/2006	10:10	M	7.19	7.52	1500	1570	1.2	956	195		835	<0.050	<0.0050	<0.0050	<0.040	<0.010	<0.20	<0.00017	296	<0.010	<0.0030
P03-05-02	15/06/2006	9:27	M	6.97	7.56	1115	1100	13.1	615	139	<0.25	513	0.034	<0.0025	0.0047	0.139	<0.050	<0.10	<0.00085	186	<0.050	0.0105
P03-05-02	02/11/2006	9:55	M	7.05	7.22	860	1040	0.4	567	132		474	<0.050	<0.0050	0.0054	0.129	<0.010	<0.20	<0.00017	173	<0.010	0.0139
P03-05-03	15/06/2006	10:14	M	7.42	7.80	912	970	11.7	526	152	<0.050	396	<0.025	<0.0025	<0.0025	0.184	<0.050	<0.10	<0.00085	160	<0.050	0.0048
P03-05-03	02/11/2006	10:15	M	6.95	7.40	930	913	0.5	473	155		361	<0.050	<0.0050	<0.0050	0.164	<0.010	<0.20	<0.00017	146	<0.010	0.0051
P03-05-04	15/06/2006	10:10	M	7.13	7.76	808	983	10.9	525	161	<0.050	410	<0.025	<0.0025	<0.0025	0.190	<0.050	<0.10	<0.00085	161	<0.050	0.0051
P03-05-05	15/06/2006	10:43	M	6.93	6.33	1594	1520	10.6	665	27.9	<5.0	881	<0.025	<0.0025	0.0129	0.027	<0.050	<0.10	<0.00085	172	<0.050	0.0087
P03-05-05	02/11/2006	11:45	M	7.01	6.14	1790	1630	2.1	725	89.1		1010	<0.050	<0.0050	0.0098	<0.040	<0.010	<0.20	<0.00017	192	<0.010	0.0119
P03-05-06	15/06/2006	10:47	M	7.30	7.84	2432	2490	9.6	760	147	<0.25	1270	<0.010	<0.0010	<0.0010	<0.020	<0.0020	<0.10	<0.000034	128	<0.0020	<0.00060
P03-05-06	02/11/2006	11:57	M	8.07	7.27	2780	2620	2.5	930	142		1440	<0.050	<0.0050	<0.0050	<0.040	<0.010	<0.20	<0.00017	163	<0.010	<0.0030
P03-05-07	15/06/2006	11:15	M	5.86	4.24	6540	7700	9.9	2860	10.0	<50	6480	<0.10	<0.010	<0.010	<0.10	<0.020	<0.50	<0.00034	332	<0.020	<0.0060
P03-05-07	02/11/2006	12:11	M	7.56	5.32	3790	7440	2.2	2590	18.3		6560	<0.25	<0.025	<0.025	<0.040	<0.050	<0.20	<0.00085	293	<0.050	<0.015
P03-05-08	15/06/2006	11:12	M	6.17	4.21	6310	6950	11.6	2610	12.8	<50	5550	<0.10	<0.010	<0.010	<0.10	<0.020	<0.50	<0.00034	322	<0.020	<0.0060
P03-05-08	02/11/2006	12:20	M	5.89	4.46	6840	6770	2.3	2450	19.0		5880	<0.25	<0.025	<0.025	<0.040	<0.050	<0.20	<0.00085	286	<0.050	<0.015
P03-06-01	07/06/2006	15:05	M	7.20	7.61	1475	1810	7.7	999	181		959	<0.025	<0.0025	<0.0025	0.066	<0.050	<0.10	0.000115	271	<0.050	0.0349
P03-06-01	21/09/2006	12:15	M	6.53	7.45	503	1850	7.3	920	188		932	0.118	<0.0025	<0.0025	0.060	<0.050	<0.10	0.000491	251	<0.050	0.0397
P03-06-02	07/06/2006	15:31	M	7.00	7.63	1663	1760	7.5	1010	181		855	<0.025	<0.0025	<0.0025	0.078	<0.050	<0.10	0.000334	280	<0.050	0.0291
P03-06-02	07/06/2006	15:31	REP		7.61		1760		998	182		921	<0.025	<0.0025	<0.0025	0.072	<0.050	<0.10	0.000420	277	<0.050	0.0293
P03-06-02	21/09/2006	13:40	M	6.62	7.00	518	1930	5.9	991	128		1020	<0.025	<0.0025	<0.0025	0.052	<0.050	<0.10	0.00196	268	<0.050	0.0995
P03-06-03	07/06/2006	15:05	M	7.00	7.11	1458	1890	8.3	1060	155		1070	<0.050	<0.0050	<0.0050	0.032	<0.010	<0.10	0.0106	293	<0.010	0.216
P03-06-03	21/09/2006	13:30	M	6.62	6.70	672	2310	5.3	1300	115		1460	<0.025	<0.0025	<0.0025	0.027	<0.050	<0.10	0.0162	350	<0.050	0.369
P03-06-04	07/06/2006	15:05	M	7.15	7.19	1017	1190	8.8	631	118		538	<0.025	<0.0025	<0.0025	0.067	<0.050	<0.10	0.000110	176	<0.050	0.0254
P03-06-04	21/09/2006	13:45	M	6.94	7.41	432	1260	5.1	639	171		609	<0.010	<0.0010	<0.0010	0.069	<0.0020	<0.10	0.000166	179	<0.0020	0.0232
P03-06-05	07/06/2006	15:31	M	6.67	6.44	1427	1600	10.5	600	27.5		851	<0.050	<0.0050	0.0089	<0.020	<0.010	<0.10	<0.00017	81.1	<0.010	0.0185
P03-06-05	21/09/2006	12:00	M	6.52	6.11	519	2040	10.7	849	23.2		1340	<0.025	<0.0025	0.0078	<0.020	<0.050	<0.10	<0.00085	127	<0.050	0.0093
P03-06-06	07/06/2006	15:45	M	6.37	6.17	4486	11600	15.1	8260	38.2		9510	<1.0	<0.10	<0.10	<0.10	<0.20	<0.50	<0.0034	357	<0.20	0.305
P03-07-02	07/06/2006	17:20	M	7.03	7.12	2295	2710	6.3	1570	209		1560	<0.050	<0.0050	<0.0050	<0.020	<0.010	<0.10	<0.00017	442	<0.010	0.269
P03-07-02	20/09/2006	12:30	M	6.18	6.94	1286	2840	4.8	1680	207		1800	<0.025	<0.0025	<0.0025	<0.020	<0.050	<0.10	<0.00085	471	<0.050	0.262
P03-07-05	20/09/2006	12:40	M	6.61	7.67	654	1220	5.7	672	204		504	<0.010	0.0022	0.0032	<0.020	<0.0020	<0.10	<0.000034	185	<0.0020	<0.00060
P03-07-05	20/09/2006	12:40	SP		7.74		1220		685	193		501	0.124	0.0023	0.0033	<0.020	<0.0020	<0.10	<0.000034	188	<0.0020	<0.00060
P03-08-01	06/06/2006	16:46	M	7.38	8.06	356.8	483	6.3	258	257		29.2	<0.0050	<0.00050	<0.00050	0.078	<0.010	<0.10	<0.000017	63.5	<0.010	<0.00030
P03-08-01	19/09/2006	16:00	M	7.19	8.06	394.1	477	-	266	263		35.9	<0.0050	<0.00050	<0.00050	0.084	<0.010	<0.10	0.000020	64.5	<0.010	<0.00030
P03-08-02	06/06/2006	16:53	M	6.79	7.90	413.9	642	6.1	322	270		106	0.0132	<0.00050	<0.00050	0.221	<0.010	<0.10	0.000050	90.4	<0.010	0.00084
P03-08-02	02/08/2006	9:50	M	7.24	7.84	277	533	6.2	299	225		70.2	0.0054	<0.00050	<0.00050	0.193	<0.010	<0.10	0.000082	82.2	<0.010	0.00061
P03-08-02	19/09/2006	15:50	M	6.81	7.81	456	548	5.8	300	245		76.7	0.0075	<0.00050	<0.00050	0.205	<0.010	<0.10	0.000122	82.8	<0.010	0.00066
P03-08-02	01/11/2006	16:00	M	7.16	6.97	600	590	2.1	302	267		91.2	<0.025	<0.0025	<0.0025	0.204	<0.050	<0.20	0.000189	82.8	<0.050	<0.015
P03-08-03	06/06/2006	17:14	M	6.68	7.96	420.6	708	5.9	366	296		125	0.018	0.0012	0.0012	0.136	<0.0020	<0.10	0.000226	102	<0.0020	<0.00060
P03-08-03	02/08/2006	10:20	M	7.22	7.95	339	530	5.4	308	228		67.7	<0.010	<0.0010	<0.0010	0.196	<0.0020	<0.10	0.000119	85.3	<0.0020	0.00061
P03-08-03	02/08/2006	10:20	SP		7.99		533		291	236		68.2	<0.010	<0.0010	<0.0010	0.185	<0.0020	<0.10	0.000127	80.9	<0.0020	0.00062
P03-08-03	19/09/2006	16:25	M	6.97	7.93	530	720	5.3	392	289		153	<0.010	<0.0010	<0.0010	0.140	<0.0020	<0.10	0.000096	110	<0.0020	<0.00060
P03-08-03	01/11/2006	16:25	M	7.40	7.64	730	741	1.4	409	302		153	<0.025	<0.0025	<0.0025	0.136	<0.050	<0.20	0.000220	117	<0.050	<0.015
P03-08-03	01/11/2006	16:25	SP		7.78		742		413	295		152	<0.025	<0.0025	<0.0025	0.136	<0.050	<0.20	0.0001			

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
P03-05-01	02/11/2006	10:10	M	<0.010	5.82	<0.0050	<0.050	52.5	0.914	<0.000020	<0.010	<0.010	<4.0	<0.010	<0.00020	31.0	<0.0020	<0.0050	<0.020	<0.0020	<0.060	<0.050
P03-05-02	15/06/2006	9:27	M	<0.0050	7.98	<0.0025	<0.025	36.3	13.5	<0.000020	<0.0050	0.0193	2.1	<0.0050	<0.00010	12.9	<0.0010	<0.0025	<0.010	0.0039	<0.030	<0.025
P03-05-02	02/11/2006	9:55	M	<0.010	7.81	<0.0050	<0.050	32.8	16.8	<0.000020	<0.010	0.025	<4.0	<0.010	<0.00020	12.3	<0.0020	<0.0050	<0.020	0.0039	<0.060	<0.050
P03-05-03	15/06/2006	10:14	M	<0.0050	1.36	<0.0025	<0.025	30.7	11.0	<0.000020	<0.0050	<0.0050	<2.0	<0.0050	<0.00010	12.8	<0.0010	<0.0025	<0.010	0.0052	<0.030	<0.025
P03-05-03	02/11/2006	10:15	M	<0.010	1.22	<0.0050	<0.050	26.3	10.9	<0.000020	<0.010	<0.010	<4.0	<0.010	<0.00020	12.1	<0.0020	<0.0050	<0.020	0.0049	<0.060	<0.050
P03-05-04	15/06/2006	10:10	M	<0.0050	0.133	<0.0025	<0.025	29.6	12.5	<0.000020	<0.0050	<0.0050	<2.0	<0.0050	<0.00010	11.9	<0.0010	<0.0025	<0.010	0.0052	<0.030	<0.025
P03-05-05	15/06/2006	10:43	M	<0.0050	163	<0.0025	<0.025	57.3	16.4	<0.000020	<0.0050	<0.0050	<5.0	<0.0050	<0.00010	39.1	<0.0010	<0.0025	<0.010	0.0015	<0.030	<0.025
P03-05-05	02/11/2006	11:45	M	<0.010	167	<0.0050	<0.050	59.6	22.0	<0.000020	<0.010	<0.010	5.8	<0.010	<0.00020	38.6	<0.0020	<0.0050	<0.020	<0.0020	<0.060	<0.050
P03-05-06	15/06/2006	10:47	M	<0.0020	6.16	<0.0010	<0.010	107	0.0685	<0.000020	0.0047	<0.0020	31.4	<0.0020	<0.000040	305	<0.00040	<0.0010	<0.010	<0.00040	0.043	<0.010
P03-05-06	02/11/2006	11:57	M	<0.010	9.35	<0.0050	<0.050	127	0.111	<0.000020	<0.010	<0.010	33.9	<0.010	<0.00020	300	<0.0020	<0.0050	<0.020	<0.0020	<0.060	<0.050
P03-05-07	15/06/2006	11:15	M	<0.020	2120	0.021	0.11	492	32.1	<0.000020	<0.020	<0.020	57	<0.020	<0.00040	252	<0.0040	<0.010	<0.050	<0.0040	<0.15	<0.10
P03-05-07	02/11/2006	12:11	M	<0.050	1790	<0.025	<0.25	452	39.4	<0.000020	<0.050	<0.050	62.1	<0.050	<0.0010	224	<0.010	<0.025	<0.020	<0.010	<0.30	<0.25
P03-05-08	15/06/2006	11:12	M	<0.020	1660	0.040	<0.10	439	27.4	<0.000020	<0.020	<0.020	56	<0.020	<0.00040	252	<0.0040	<0.010	<0.050	<0.0040	<0.15	<0.10
P03-05-08	02/11/2006	12:20	M	<0.050	1430	0.226	<0.25	421	33.6	<0.000020	<0.050	<0.050	61.0	<0.050	<0.0010	226	<0.010	<0.025	<0.020	<0.010	<0.30	<0.25
P03-06-01	07/06/2006	15:05	M	<0.0050	2.00	<0.0025	<0.025	78.3	24.9	<0.000020	<0.0050	0.0482	2.4	<0.0050	<0.00010	38.6	<0.0010	<0.0025	<0.010	0.0132	<0.030	1.55
P03-06-01	21/09/2006	12:15	M	<0.0050	0.768	<0.0025	<0.025	71.1	26.5	<0.000020	<0.0050	0.0547	2.3	<0.0050	<0.00010	35.6	<0.0010	<0.0025	<0.010	0.0128	0.034	0.900
P03-06-02	07/06/2006	15:31	M	<0.0050	0.549	<0.0025	<0.025	75.9	23.8	<0.000020	<0.0050	0.0301	2.4	<0.0050	<0.00010	39.4	<0.0010	<0.0025	<0.010	0.0129	<0.030	0.358
P03-06-02	07/06/2006	15:31	REP	<0.0050	0.655	<0.0025	<0.025	74.4	23.6	<0.000020	<0.0050	0.0307	2.3	<0.0050	<0.00010	38.2	<0.0010	<0.0025	<0.010	0.0127	<0.030	0.357
P03-06-02	21/09/2006	13:40	M	<0.0050	31.5	<0.0025	<0.025	78.3	30.6	<0.000020	<0.0050	0.116	2.7	<0.0050	<0.00010	36.1	<0.0010	<0.0025	<0.010	0.0069	0.030	0.731
P03-06-03	07/06/2006	15:05	M	<0.010	45.4	<0.0050	<0.050	80.9	31.3	<0.000020	<0.010	0.339	3.1	<0.010	<0.00020	29.8	<0.0020	<0.0050	<0.010	0.0074	<0.030	0.93
P03-06-03	21/09/2006	13:30	M	<0.0050	91.9	<0.0025	0.036	103	49.7	<0.000020	<0.0050	0.610	4.0	<0.0050	<0.00010	25.0	<0.0010	<0.0025	<0.010	0.0045	0.049	1.81
P03-06-04	07/06/2006	15:05	M	<0.0050	42.1	<0.0025	<0.025	46.5	12.2	<0.000020	<0.0050	0.0406	2.1	<0.0050	<0.00010	19.9	<0.0010	<0.0025	<0.010	0.0296	<0.030	3.36
P03-06-04	21/09/2006	13:45	M	<0.0020	15.2	<0.0010	0.011	46.7	14.1	<0.000020	0.0031	0.0318	2.2	<0.0020	<0.00040	19.2	<0.00040	<0.0010	<0.010	0.0325	<0.030	2.11
P03-06-05	07/06/2006	15:31	M	<0.010	228	<0.0050	<0.050	96.4	24.0	<0.000020	<0.010	0.080	2.5	<0.010	<0.00020	26.2	<0.0020	<0.0050	<0.010	<0.0020	<0.030	42.3
P03-06-05	21/09/2006	12:00	M	<0.0050	240	0.0025	0.029	129	32.0	<0.000020	<0.0050	0.0364	2.4	<0.0050	<0.00010	27.9	<0.0010	<0.0025	<0.010	0.0041	0.038	34.7
P03-06-06	07/06/2006	15:45	M	<0.20	428	0.55	<1.0	1790	391	<0.000020	<0.20	1.58	16	<0.20	<0.0040	110	<0.040	<0.10	<0.050	<0.040	<0.15	755
P03-07-02	07/06/2006	17:20	M	<0.010	42.7	<0.0050	<0.050	113	49.1	<0.000020	<0.010	0.350	4.7	<0.010	<0.00020	26.2	<0.0020	<0.0050	<0.010	0.0045	<0.030	0.678
P03-07-02	20/09/2006	12:30	M	<0.0050	40.2	<0.0025	0.030	122	50.0	<0.000020	<0.0050	0.371	5.2	<0.0050	<0.00010	26.8	<0.0010	<0.0025	<0.010	0.0049	0.051	0.644
P03-07-05	20/09/2006	12:40	M	<0.0020	19.5	<0.0010	<0.010	50.8	5.18	<0.000020	0.0069	<0.0020	3.2	<0.0020	<0.000040	33.0	<0.00040	<0.0010	<0.010	0.00811	<0.030	<0.010
P03-07-05	20/09/2006	12:40	SP	<0.0020	19.9	<0.0010	<0.010	52.2	5.28	<0.000020	0.0070	<0.0020	3.4	<0.0020	<0.000040	34.7	<0.00040	<0.0010	<0.010	0.00831	<0.030	0.011
P03-08-01	06/06/2006	16:46	M	<0.0010	0.171	<0.00050	0.0086	24.1	0.0462	<0.000020	<0.0010	0.0023	<2.0	<0.0010	<0.000020	2.3	<0.00020	<0.00050	<0.010	0.00344	<0.030	<0.0050
P03-08-01	19/09/2006	16:00	M	<0.0010	0.044	<0.00050	0.0088	25.4	0.0326	<0.000020	<0.0010	0.0020	<2.0	<0.0010	<0.000020	2.1	<0.00020	<0.00050	<0.010	0.00342	<0.030	0.0070
P03-08-02	06/06/2006	16:53	M	0.0028	0.096	<0.00050	<0.0050	23.4	4.56	<0.000020	<0.0010	0.0248	<2.0	<0.0010	<0.000020	11.5	<0.00020	<0.00050	<0.010	0.00281	<0.030	0.0062
P03-08-02	02/08/2006	9:50	M	0.0026	0.034	<0.00050	<0.0050	22.8	3.92	<0.000020	0.0010	0.0192	<2.0	<0.0010	<0.000020	7.8	<0.00020	<0.00050	<0.010	0.00259	<0.030	0.0059
P03-08-02	19/09/2006	15:50	M	0.0028	0.045	<0.00050	<0.0050	22.7	4.10	<0.000020	<0.0010	0.0201	<2.0	<0.0010	<0.000020	7.9	<0.00020	<0.00050	<0.010	0.00259	<0.030	0.0077
P03-08-02	01/11/2006	16:00	M	<0.0050	0.094	<0.0025	<0.025	23.3	4.17	<0.000020	<0.0050	0.0223	<4.0	<0.0050	<0.00010	9.3	<0.0010	<0.0025	<0.020	0.0028	<0.060	<0.025
P03-08-03	06/06/2006	17:14	M	0.0027	0.104	0.0104	<0.010	26.9	5.88	<0.000020	0.0044	0.0254	<2.0	<0.0020	<0.000040	12.2	<0.00040	<0.0010	<0.010	0.00423	<0.030	0.0075
P03-08-03	02/08/2006	10:20	M	0.0026	0.030	<0.0010	<0.010	23.0	3.88	<0.000020	<0.0020	0.0194	<2.0	<0.0020	<0.000040	7.9	<0.00040	<0.0010	<0.010	0.00256	<0.030	<0.010
P03-08-03	02/08/2006	10:20	SP	0.0025	<0.030	<0.0010	<0.010	21.8	3.83	<0.000020	<0.0020	0.0197	<2.0	<0.0020	<0.000040	7.4	<0.00040	<0.0010	<0.010	0.00254	<0.030	0.013
P03-08-03	19/09/2006	16:25	M	0.0024	0.136	<0.0010	<0.010	28.6	6.68	<0.000020	0.0040	0.0231	<2.0	<0.0020	<0.000040	11.6	<0.00040	<0.0010	<0.010	0.00425	<0.030	0.019
P03-08-03	01/11/2006	16:25	M	<0.0050	0.088	<0.0025	<0.025	28.7	6.68	<0.000020	<0.0050	0.0265	<4.0	<0.0050	<0.00010	13.0	<0.0010	<0.0025	<0.020	0.0045	<0.060	<0.025
P03-08-03	01/11/2006	16:25	SP	<0.0050	0.076	<0.0025	<0.025	28.8	6.73	<0.000020	<0.0050	0.0262	<4.0	<0.0050	<0.00010	13.0	<0.0010	<0.0025	<0.020	0.0044	<0.060	<0.025
P03-08-04	06/06/2006	17:30	M	<0.0020	28.0	0.0024	<0.010	44.8	2.66	<0.000020	0.0121	<0.0020	2.8	<0.0020	<0.000040	40.5	<0.00040	<0.0010	<0.010	0.00732	<0.030	0.0202
P03-08-04	02/08/2006	10:00	M	<0.0020	38.9	<0.0010	<0.010	49.5	2.89	<0.000020	0.0105	<0.0020	3.0	<0.0020	<0.000040	45.5	<0.00040	<0.0010	<0.010	0.00767	<0.030	0.013
P03-08-04	19/09/2006	16:45	M	<0.0020	38.7	<0.0010	<0.010	48.9	3.13	<0.000020	0.0104	<0.0020	3.1	<0.0020	<0.000040	47.7	<0.00040	<0.0010	<0.010	0.00822	<0.030	0.023
P03-08-04	01/11/2006																					

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	General Chemistry							Anions		Metals									
				pH (Field)	pH (Lab)	Sp. Cond. (Field)	Sp. Cond. (Lab)	Temp. (Field)	Hardness (CaCO3)	Alkalinity (Total) as CaCO3	Bromide mg/L	Sulphate mg/L	Aluminum mg/L	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Boron mg/L	Cadmium mg/L	Calcium mg/L	Chromium mg/L	Cobalt mg/L
				pH unit	pH unit	µS/cm	µS/cm	°C	mg/L	mg/L												
P03-09-04	06/06/2006	12:10	M	6.85	7.99	574	1010	7.6	515	262		286	<0.010	<0.0010	<0.0010	0.039	<0.0020	<0.10	0.000037	156	<0.0020	0.00397
P03-09-04	02/08/2006	16:10	M	6.33	7.90	603	1180	5.6	661	263		406	<0.010	<0.0010	<0.0010	0.049	<0.0020	<0.10	0.000284	199	<0.0020	0.00343
P03-09-04	19/09/2006	13:30	M	6.93	8.10	985	1260	5.4	690	281		447	<0.010	<0.0010	<0.0010	0.055	<0.0020	<0.10	0.000262	208	<0.0020	0.00393
P03-09-04	01/11/2006	13:45	M	7.22	7.60	1280	1220	5.3	663	284		458	<0.025	<0.0025	<0.0025	0.046	<0.0050	<0.20	0.000413	203	<0.0050	0.0033
P03-09-05	06/06/2006	12:30	M	6.92	7.99	546	1010	5.9	505	261		272	0.014	<0.0010	<0.0010	0.039	<0.0020	<0.10	<0.000034	152	<0.0020	0.00403
P03-09-05	06/06/2006	12:30	REP		7.97		1010		510	259		270	<0.010	<0.0010	<0.0010	0.039	<0.0020	<0.10	0.000039	154	<0.0020	0.00411
P03-09-05	19/09/2006	14:05	M	6.91	8.11	991	1270	6.0	714	277		454	0.013	<0.0010	<0.0010	0.058	<0.0020	<0.10	0.000066	217	<0.0020	0.00487
P03-09-06	06/06/2006	13:00	M	7.12	8.02	623	1110	9.4	572	277		355	0.015	<0.0010	<0.0010	0.063	<0.0020	<0.10	<0.000034	171	<0.0020	0.00097
P03-09-06	02/08/2006	16:45	M	7.02	7.90	311	1090	4.6	598	267		331	<0.010	<0.0010	<0.0010	0.062	<0.0020	<0.10	0.000196	177	<0.0020	0.00100
P03-09-06	19/09/2006	13:55	M	6.85	8.12	966	1220	5.1	668	279		416	<0.010	<0.0010	<0.0010	0.074	<0.0020	<0.10	0.000239	197	<0.0020	0.00100
P03-09-06	01/11/2006	14:15	M	7.17	7.60	1280	1250	1.6	682	295		469	<0.025	<0.0025	<0.0025	0.065	<0.0050	<0.20	0.000325	205	<0.0050	<0.0015
P03-09-07	06/06/2006	12:50	M	7.04	7.98	624	1150	6.1	609	183		382	<0.010	<0.0010	<0.0010	0.059	<0.0020	<0.10	<0.000034	185	<0.0020	0.00132
P03-09-07	02/08/2006	16:40	M	7.01	7.90	548	1170	5.2	655	260		405	<0.010	<0.0010	<0.0010	0.060	<0.0020	<0.10	0.000208	198	<0.0020	0.00134
P03-09-07	19/09/2006	14:15	M	6.87	8.09	1035	1340	4.8	735	274		488	<0.010	<0.0010	<0.0010	0.073	<0.0020	<0.10	0.000175	224	<0.0020	0.00139
P03-09-07	01/11/2006	14:25	M	7.15	7.55	1420	1360	1.4	764	298		544	<0.050	<0.0050	<0.0050	0.066	<0.010	<0.20	0.00019	234	<0.010	<0.0030
P03-09-08	06/06/2006	13:12	M	6.91	7.95	603	799	7.7	540	178		248	<0.010	<0.0010	<0.0010	0.060	<0.0020	<0.10	0.000037	164	<0.0020	0.00249
P03-09-08	19/09/2006	14:40	M	6.98	7.88	1047	1280	6.2	690	269		471	<0.010	<0.0010	<0.0010	0.074	<0.0020	<0.10	0.000064	209	<0.0020	0.00250
P03-09-09	06/06/2006	13:30	M	6.96	8.03	319.8	802	12.0	341	176		250	<0.010	<0.0010	<0.0010	0.040	<0.0020	<0.10	0.000110	102	<0.0020	0.00175
P03-09-09	02/08/2006	16:55	M	7.02	7.89	549	1170	4.8	660	261		379	<0.010	<0.0010	<0.0010	0.067	<0.0020	<0.10	0.000086	200	<0.0020	0.00210
P03-09-09	19/09/2006	14:30	M	6.87	7.84	1030	1280	4.6	682	280		474	<0.010	<0.0010	<0.0010	0.072	<0.0020	<0.10	0.000116	208	<0.0020	0.00240
P03-09-09	01/11/2006	14:45	M	7.17	7.58	1370	1330	1.0	743	297		532	<0.050	<0.0050	<0.0050	0.066	<0.010	<0.20	0.00017	228	<0.010	<0.0030
P05-01-01	02/08/2006	14:15	M	6.27	7.71	1618	1910	5.3	1000	405		717	<0.025	<0.0025	<0.0025	0.073	<0.0050	<0.10	<0.000085	270	<0.0050	<0.0015
P05-01-01	19/09/2006	9:55	M	6.59	7.83	1389	1780	4.5	833	492		549	<0.025	<0.0025	<0.0025	0.071	<0.0050	<0.10	<0.000085	208	<0.0050	<0.0015
P05-01-02	02/08/2006	14:30	M	6.24	7.76	1969	2100	5.9	1350	289		1030	<0.025	<0.0025	<0.0025	0.041	<0.0050	<0.10	<0.000085	416	<0.0050	<0.0015
P05-01-02	19/09/2006	10:00	M	6.77	7.89	1596	2090	4.5	1200	299		965	<0.025	<0.0025	<0.0025	0.042	<0.0050	<0.10	<0.000085	361	<0.0050	<0.0015
P05-01-03	02/08/2006	14:55	M	6.79	7.81	1278	2060	7.0	1320	287		998	<0.025	<0.0025	<0.0025	0.038	<0.0050	<0.10	<0.000085	406	<0.0050	<0.0015
P05-01-03	19/09/2006	10:35	M	6.72	7.88	1578	2020	4.7	1160	290		925	<0.025	<0.0025	<0.0025	0.038	<0.0050	<0.10	<0.000085	350	<0.0050	<0.0015
P05-01-04	02/08/2006	15:00	M	6.74	7.87	1621	2100	7.6	1340	288		1010	<0.025	<0.0025	<0.0025	0.027	<0.0050	<0.10	<0.000085	408	<0.0050	<0.0015
P05-01-04	19/09/2006	10:40	M	6.76	7.84	1552	2040	4.8	1200	298		979	<0.025	<0.0025	<0.0025	0.028	<0.0050	<0.10	<0.000085	361	<0.0050	<0.0015
P05-01-05	02/08/2006	15:23	M	6.83	7.85	1714	1830	4.9	1130	242		854	<0.025	<0.0025	<0.0025	0.028	<0.0050	<0.10	<0.000085	342	<0.0050	0.0062
P05-01-05	19/09/2006	11:00	M	6.74	7.89	1398	1840	4.4	1130	262		831	<0.025	<0.0025	<0.0025	0.030	<0.0050	<0.10	<0.000085	335	<0.0050	0.0063
P05-01-06	14/06/2006	14:05	M	6.55	7.72	10.8	1780	1766.0	1030	280		884	<0.025	<0.0025	<0.0025	0.035	<0.0050	<0.10	0.00132	306	<0.0050	0.0096
P05-01-06	02/08/2006	15:26	M	6.81	7.84	1472	1830	5.3	1150	247		851	<0.025	<0.0025	<0.0025	0.031	<0.0050	<0.10	<0.000085	347	<0.0050	0.0073
P05-01-06	19/09/2006	10:50	M	6.73	7.89	1413	1840	4.8	1070	245		850	<0.025	<0.0025	<0.0025	0.032	<0.0050	<0.10	<0.000085	318	<0.0050	0.0070
P05-02	13/06/2006	15:45	M	6.93	7.80	1958	2000	3.5	1190	332		949	<0.025	<0.0025	0.0079	0.056	<0.0050	<0.10	0.000111	361	<0.0050	0.0077
P05-02	22/09/2006	12:08	M	8.09	7.76	2030	2040	6.1	1160	304		929	<0.025	<0.0025	0.0088	0.057	<0.0050	<0.10	0.000116	347	<0.0050	0.0086
P05-03	09/06/2006	9:10	M	7.25	7.98	1246	1240	4.2	642	263		444	<0.010	<0.0010	0.0017	0.174	<0.0020	<0.10	0.000141	196	<0.0020	0.00193
P05-03	21/09/2006	16:26	M	6.24	7.88	5.3	1050	1124	548	256		363	<0.020	<0.0010	<0.0020	0.160	<0.0050	<0.10	<0.00010	166	<0.0010	0.0016
P05-04	05/06/2006	12:19	M	5.94	7.16	163	379	1.2	191	152		47.8	0.0402	<0.00050	<0.00050	0.045	<0.0010	<0.10	0.00259	53.1	<0.0010	0.00061
P05-04	05/06/2006	12:19	REP		7.11		379		188	161		45.6	0.0414	<0.00050	<0.00050	0.045	<0.0010	<0.10	0.00257	51.8	<0.0010	0.00061
P05-04	18/09/2006	12:00	M	6.09	6.86	410.8	406	3.0	233	165		70.8	0.0450	<0.00050	<0.00050	0.054	<0.0010	<0.10	0.00269	65.8	<0.0010	0.00172
P96-6	05/06/2006	10:55	M	6.78	6.72	366.7	1210	1.5	698	432		298	0.078	<0.0025	<0.0025	0.025	<0.0050	<0.10	0			

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
P03-09-04	06/06/2006	12:10	M	<0.0020	0.097	<0.0010	<0.010	30.7	5.41	<0.000020	<0.0020	0.0089	3.0	<0.0020	<0.000040	25.8	<0.00040	<0.0010	<0.010	0.00602	<0.030	<0.0050
P03-09-04	02/08/2006	16:10	M	<0.0020	<0.030	<0.0010	<0.010	40.0	6.41	<0.000020	<0.0020	0.0090	3.7	<0.0020	<0.000040	32.5	<0.00040	<0.0010	<0.010	0.00659	<0.030	<0.010
P03-09-04	19/09/2006	13:30	M	<0.0020	<0.030	<0.0010	0.010	41.8	7.16	<0.000020	<0.0020	0.0099	3.9	<0.0020	<0.000040	36.8	<0.00040	<0.0010	<0.010	0.00672	<0.030	0.012
P03-09-04	01/11/2006	13:45	M	<0.0050	<0.060	<0.0025	<0.025	38.2	6.25	<0.000020	<0.0050	0.0099	4.2	<0.0050	<0.00010	32.1	<0.0010	<0.0025	<0.020	0.0066	<0.060	<0.025
P03-09-05	06/06/2006	12:30	M	<0.0020	<0.030	<0.0010	<0.010	30.5	5.47	<0.000020	<0.0020	0.0093	2.9	<0.0020	<0.000040	25.1	<0.00040	<0.0010	<0.010	0.00609	<0.030	0.0069
P03-09-05	06/06/2006	12:30	REP	<0.0020	<0.030	<0.0010	<0.010	30.1	5.53	<0.000020	<0.0020	0.0092	3.0	<0.0020	<0.000040	25.1	<0.00040	<0.0010	<0.010	0.00618	<0.030	<0.010
P03-09-05	19/09/2006	14:05	M	<0.0020	0.134	0.0015	0.010	42.0	7.72	<0.000020	<0.0020	0.0114	3.9	<0.0020	<0.000040	36.4	<0.00040	<0.0010	<0.010	0.00685	<0.030	0.013
P03-09-06	06/06/2006	13:00	M	<0.0020	0.161	<0.0010	0.014	35.1	5.26	<0.000020	<0.0020	0.0073	3.1	<0.0020	<0.000040	31.6	<0.00040	<0.0010	<0.010	0.00470	<0.030	0.0080
P03-09-06	02/08/2006	16:45	M	<0.0020	0.068	<0.0010	0.016	37.8	5.74	<0.000020	<0.0020	0.0072	3.4	<0.0020	<0.000040	33.5	<0.00040	<0.0010	<0.010	0.00471	<0.030	<0.010
P03-09-06	19/09/2006	13:55	M	<0.0020	0.048	<0.0010	0.015	43.0	6.48	<0.000020	<0.0020	0.0076	3.8	<0.0020	<0.000040	37.4	<0.00040	<0.0010	<0.010	0.00483	<0.030	<0.010
P03-09-06	01/11/2006	14:15	M	<0.0050	<0.060	<0.0025	<0.025	41.3	6.69	<0.000020	<0.0050	0.0090	4.3	<0.0050	<0.00010	33.8	<0.0010	<0.0025	<0.020	0.0054	<0.060	<0.025
P03-09-07	06/06/2006	12:50	M	<0.0020	0.073	<0.0010	0.011	35.4	6.06	<0.000020	<0.0020	0.0080	3.3	<0.0020	<0.000040	31.7	<0.00040	<0.0010	<0.010	0.00551	<0.030	<0.010
P03-09-07	02/08/2006	16:40	M	<0.0020	<0.030	<0.0010	0.011	38.8	6.84	<0.000020	<0.0020	0.0082	3.6	<0.0020	<0.000040	33.4	<0.00040	<0.0010	<0.010	0.00554	<0.030	<0.010
P03-09-07	19/09/2006	14:15	M	<0.0020	0.039	<0.0010	0.012	42.6	8.27	<0.000020	<0.0020	0.0090	3.9	<0.0020	<0.000040	35.8	<0.00040	<0.0010	<0.010	0.00608	<0.030	<0.010
P03-09-07	01/11/2006	14:25	M	<0.010	<0.060	<0.0050	<0.050	43.4	8.51	<0.000020	<0.010	0.011	4.5	<0.010	<0.00020	34.1	<0.0020	<0.0050	<0.020	0.0070	<0.060	<0.050
P03-09-08	06/06/2006	13:12	M	<0.0020	0.465	<0.0010	<0.010	31.7	5.50	<0.000020	0.0024	0.0140	2.9	<0.0020	<0.000040	28.3	<0.00040	<0.0010	<0.010	0.00467	<0.030	<0.010
P03-09-08	19/09/2006	14:40	M	<0.0020	0.744	<0.0010	0.011	40.8	8.45	<0.000020	<0.0020	0.0078	3.7	<0.0020	<0.000040	34.0	<0.00040	<0.0010	<0.010	0.00620	<0.030	0.011
P03-09-09	06/06/2006	13:30	M	<0.0020	0.043	<0.0010	<0.010	21.1	3.40	<0.000020	<0.0020	0.0117	<2.0	<0.0020	<0.000040	19.7	<0.00040	<0.0010	<0.010	0.00322	<0.030	<0.010
P03-09-09	02/08/2006	16:55	M	<0.0020	0.135	<0.0010	0.011	39.2	6.55	<0.000020	<0.0020	0.0080	3.6	<0.0020	<0.000040	34.1	<0.00040	<0.0010	<0.010	0.00537	<0.030	<0.010
P03-09-09	19/09/2006	14:30	M	<0.0020	0.076	<0.0010	0.012	39.5	8.04	<0.000020	<0.0020	0.0091	3.6	<0.0020	<0.000040	33.3	<0.00040	<0.0010	<0.010	0.00598	<0.030	<0.010
P03-09-09	01/11/2006	14:45	M	<0.010	0.065	<0.0050	<0.050	42.0	8.05	<0.000020	<0.010	0.011	4.4	<0.010	<0.00020	33.6	<0.0020	<0.0050	<0.020	0.0069	<0.060	<0.050
P05-01-01	02/08/2006	14:15	M	<0.0050	6.78	<0.0025	0.235	79.9	4.43	<0.000020	<0.0050	<0.0050	8.3	<0.0050	<0.00010	118	<0.0010	<0.0025	<0.010	<0.0010	<0.030	<0.025
P05-01-01	19/09/2006	9:55	M	<0.0050	6.14	<0.0025	0.289	76.4	1.44	<0.000020	<0.0050	<0.0050	6.6	<0.0050	<0.00010	142	<0.0010	<0.0025	<0.010	<0.0010	<0.030	0.034
P05-01-02	02/08/2006	14:30	M	<0.0050	14.2	<0.0025	0.026	76.2	15.6	<0.000020	<0.0050	<0.0050	8.0	<0.0050	<0.00010	48.1	<0.0010	<0.0025	<0.010	0.0018	<0.030	<0.025
P05-01-02	19/09/2006	10:00	M	<0.0050	14.6	<0.0025	0.027	72.4	17.4	<0.000020	<0.0050	<0.0050	6.3	<0.0050	<0.00010	52.8	<0.0010	<0.0025	<0.010	0.0017	<0.030	0.033
P05-01-03	02/08/2006	14:55	M	<0.0050	16.4	<0.0025	0.026	75.0	14.1	<0.000020	<0.0050	<0.0050	8.1	<0.0050	<0.00010	46.0	<0.0010	<0.0025	<0.010	0.0018	<0.030	<0.025
P05-01-03	19/09/2006	10:35	M	<0.0050	15.6	<0.0025	0.027	69.2	15.8	<0.000020	<0.0050	<0.0050	6.1	<0.0050	<0.00010	48.5	<0.0010	<0.0025	<0.010	0.0017	<0.030	0.031
P05-01-04	02/08/2006	15:00	M	<0.0050	20.0	<0.0025	<0.025	76.5	16.1	<0.000020	<0.0050	<0.0050	7.7	<0.0050	<0.00010	45.7	<0.0010	<0.0025	<0.010	0.0014	<0.030	<0.025
P05-01-04	19/09/2006	10:40	M	<0.0050	20.2	<0.0025	<0.025	72.3	17.7	<0.000020	<0.0050	<0.0050	6.0	<0.0050	<0.00010	50.0	<0.0010	<0.0025	<0.010	0.0014	<0.030	0.032
P05-01-05	02/08/2006	15:23	M	<0.0050	4.83	<0.0025	<0.025	68.0	14.1	<0.000020	<0.0050	0.0057	7.2	<0.0050	<0.00010	37.8	<0.0010	<0.0025	<0.010	0.0027	<0.030	<0.025
P05-01-05	19/09/2006	11:00	M	<0.0050	5.26	<0.0025	<0.025	72.2	15.7	<0.000020	<0.0050	0.0051	5.9	<0.0050	<0.00010	41.0	<0.0010	<0.0025	<0.010	0.0028	<0.030	<0.025
P05-01-06	14/06/2006	14:05	M	<0.0050	<0.030	<0.0025	<0.025	64.7	14.0	<0.000020	<0.0050	0.0146	5.4	<0.0050	<0.00010	36.0	<0.0010	<0.0025	<0.010	0.0039	<0.030	<0.025
P05-01-06	02/08/2006	15:26	M	<0.0050	3.91	<0.0025	<0.025	69.6	14.6	<0.000020	<0.0050	0.0058	7.1	<0.0050	<0.00010	37.3	<0.0010	<0.0025	<0.010	0.0029	<0.030	<0.025
P05-01-06	19/09/2006	10:50	M	<0.0050	4.21	<0.0025	<0.025	68.3	16.6	<0.000020	<0.0050	0.0062	5.8	<0.0050	<0.00010	40.2	<0.0010	<0.0025	<0.010	0.0030	<0.030	<0.025
P05-02	13/06/2006	15:45	M	<0.0050	5.40	<0.0025	<0.025	69.1	11.3	<0.000020	<0.0050	0.0087	5.6	<0.0050	<0.00010	49.1	<0.0010	<0.0025	<0.010	0.0035	<0.030	0.029
P05-02	22/09/2006	12:08	M	<0.0050	4.64	<0.0025	<0.025	72.5	15.1	<0.000020	<0.0050	0.0099	5.9	<0.0050	<0.00010	45.7	<0.0010	<0.0025	<0.010	0.0047	<0.030	0.039
P05-03	09/06/2006	9:10	M	<0.0020	1.57	<0.0010	<0.010	37.2	8.55	<0.000020	0.0033	0.0029	2.8	<0.0020	<0.000040	27.3	<0.00040	<0.0010	<0.010	0.00796	<0.030	0.021
P05-03	21/09/2006	16:26	M	<0.0020	1.81	<0.0020	<0.050	32.3	6.83	<0.000020	0.0037	<0.010		<0.0020	<0.00010	24.1	<0.00040	<0.050	0.00656	<0.030	0.0125	
P05-04	05/06/2006	12:19	M	<0.0010	<0.030	<0.00050	0.0158	14.3	0.0118	<0.000020	<0.0010	0.0092	<2.0	<0.0010	<0.000020	5.1	<0.00020	<0.00050	<0.010	0.00083	<0.030	1.54
P05-04	05/06/2006	12:19	REP	<0.0010	0.030	<0.00050	0.0158	14.3	0.0111	<0.000020	<0.0010	0.0093	<2.0	<0.0010	<0.000020	5.2	<0.00020	<0.00050	<0.010	0.00086	<0.030	1.49
P05-04	18/09/2006	12:00	M	<0.0010	<0.030	<0.00050	0.0164	16.6	0.0318	<0.000020	<0.0010	0.0122	<2.0	<0.0010	<0.000020	4.8	<0.00020	<0.00050	<0.010	0.00077	<0.030	2.00
P96-6	05/06/2006	10:55	M	<0.0050	0.068	<0.0025	0.043	61.1	0.0920	<0.000020	<0.0050	0.0214	3.7	<0.0050	<0.00010	8.2	<0.0010	<0.0025	<0.010	0.0185	<0.030	0.840
P96-7	05/06/2006	16:45	M	<0.010	<0.030	<0.0050	<0.050	128	<0.0030	<0.000020	<0.010	<0.010	4.9	<0.010	<0.00020	15.1	<0.0020	<0.0050	<0.010	0.0249	<0.030	0.015
P96-7	20/09/2006	9:56	M	<0.0050	<0.030	<0.0025	0.026	114	0.0083	<0.000020	<0.0050	<0.0050	6.3	<0.0050	<0.00010	24.0	<0.0010	<0.0025	<0.010	0.0253	<0.030	0.033
P96-8A	22/09/2006	14:17	M	<0.050	6.45	<0.025	<0.25	852	74.4	<0.000020	<0.050	0.709	15.1	<0.050	<0.0010	57.2	<0.010	<0.025	<0.			

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	General Chemistry							Anions		Metals									
				pH (Field)	pH (Lab)	Sp. Cond. (Field)	Sp. Cond. (Lab)	Temp. (Field)	Hardness (CaCO3)	Alkalinity (Total) as CaCO3	Bromide	Sulphate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt
				pH unit	pH unit	µS/cm	µS/cm	°C	mg/L	mg/L												
SRK04-3A	22/09/2006	16:05	SP		5.78		7150		4000	114		5930	3.58	<0.050	<0.050	0.045	<0.10	<0.20	0.0327	417	<0.10	0.650
SRK04-3B	14/06/2006	10:10	M	4.13	3.36	4940	15100	6.1	4020	<2.0		18500	6.3	<0.10	<0.10	<0.20	<0.20	<1.0	<0.0034	420	<0.20	0.268
SRK04-3B	22/09/2006	16:10	M	6.75	4.40	918	11000	6.7	3850	22.8		10500	5.47	<0.050	<0.050	<0.10	<0.10	<0.50	0.0057	420	<0.10	0.523
SRK04-5A	07/06/2006	17:40	M	8.00	8.08	434.9	448	3.9	197	144		98.4	0.0120	<0.00050	0.0126	0.056	<0.0010	<0.10	0.000024	53.8	<0.0010	<0.00030
SRK04-5B	07/06/2006	17:30	M	7.75	8.06	219.8	430	4.8	206	140		89.0	<0.0050	<0.00050	0.00593	0.031	<0.0010	<0.10	0.000021	55.5	<0.0010	0.00033
SRK05-05C	21/09/2006	10:10	M	6.81	7.94	1175	1040	5.9	592	240		387	<0.020	<0.0010	0.0053	0.170	<0.0050	<0.10	<0.00010	143	<0.0010	0.0037
SRK05-06	08/06/2006	10:30	M	7.61	8.13	1453	1260	4.3	790	246		450	<0.025	<0.0025	<0.0025	0.044	<0.0050	<0.10	<0.000085	163	<0.0050	<0.0015
SRK05-06	19/09/2006	15:58	M	7.48	-	1531	-	8.4	-	-		-	<0.025	<0.0025	<0.0025	0.055	<0.0050	<0.10	0.000425	226	<0.0050	<0.0015
SRK05-07	19/09/2006	13:40	M	6.71	7.79	2580	2560	6.2	1790	765		1080	0.033	0.0032	0.0266	0.141	<0.0050	<0.10	<0.000085	340	<0.0050	0.0146
SRK05-08	07/06/2006	15:25	M	7.04	7.89	876	1510	4.5	916	500		458	0.016	<0.0010	<0.0010	0.057	<0.0020	<0.10	0.000042	194	<0.0020	0.00128
SRK05-08	19/09/2006	13:36	M	7.30	7.78	1501	1600	5.2	975	516		494	<0.025	<0.0025	<0.0025	0.032	<0.0050	<0.10	<0.000085	212	<0.0050	<0.0015
SRK05-09	08/06/2006	10:50	M	7.44	8.06	1312	1310	3.1	830	239		480	<0.025	<0.0025	<0.0025	0.061	<0.0050	<0.10	0.000113	171	<0.0050	<0.0015
SRK05-09	19/09/2006	16:25	M	7.12	7.86	1526	1630	5.7	1030	332		676	<0.025	<0.0025	<0.0025	0.082	<0.0050	<0.10	0.000293	224	<0.0050	<0.0015
SRK05-ETA-BR1	14/06/2006	12:20	M	5.58	5.98	6280	6230	6.1	3560	46.9		5250	<0.50	<0.050	<0.050	<0.40	<0.10	<0.20	0.0180	418	<0.10	0.610
SRK05-ETA-BR1	22/09/2006	15:06	M	7.05	5.63	698	6750	5.5	3480	114		5750	1.68	<0.050	<0.050	<0.40	<0.10	<0.20	0.0269	432	<0.10	0.723
SRK05-ETA-BR2	14/06/2006	11:02	M	6.82	7.00	2183	2130	7.1	1260	119		1360	<0.025	<0.0025	<0.0025	0.065	<0.0050	<0.10	<0.000085	368	<0.0050	0.0189
SRK05-ETA-BR2	22/09/2006	15:37	M	7.43	6.71	449.5	2250	5.3	1460	112		1410	<0.025	<0.0025	<0.0025	0.069	<0.0050	<0.20	0.000132	444	<0.0050	0.0235
SRK05-SP-1A	06/06/2006	16:05	M	3.00	6.59	1232	1190	2.1	595	263		446	0.157	<0.0010	0.0062	0.028	0.0028	<0.10	0.000048	147	<0.0020	0.00674
SRK05-SP-1A	20/09/2006	13:25	M	5.73	6.37	1096	1160	3.1	668	249		457	0.096	<0.0010	0.0049	0.030	0.0023	<0.10	<0.000034	166	<0.0020	0.00557
SRK05-SP-1B	06/06/2006	16:25	M	6.12	7.07	1146	1110	2.3	638	405		276	0.022	<0.0010	0.0094	0.038	<0.0020	<0.10	0.000246	164	<0.0020	0.00523
SRK05-SP-1B	20/09/2006	15:37	M	6.23	6.85	898	959	2.8	593	354		217	0.015	<0.0010	0.0113	0.049	<0.0020	<0.10	0.000176	150	<0.0020	0.00391
SRK05-SP-2	06/06/2006	16:55	M	6.25	7.23	331	333	3.0	167	141		40.4	0.0104	<0.00050	<0.00050	0.055	<0.0010	<0.10	0.000142	46.1	<0.0010	0.00233
SRK05-SP-2	20/09/2006	16:00	M	6.21	6.96	315.1	339	2.5	192	156		44.6	0.0124	<0.00050	<0.00050	0.062	<0.0010	<0.10	0.000105	51.5	<0.0010	0.00216
SRK05-SP-3A	06/06/2006	13:00	M	5.92	7.01	562	960	2.2	505	316		268	0.046	<0.0010	0.0021	0.027	<0.0020	<0.10	<0.000034	118	<0.0020	0.00404
SRK05-SP-3A	06/06/2006	13:00	REP																			
SRK05-SP-3A	20/09/2006	14:33	M	5.97	6.65	920	958	2.2	611	324		239	0.039	<0.0010	0.0021	0.033	<0.0020	<0.10	0.000041	143	<0.0020	0.00382
SRK05-SP-3B	06/06/2006	15:20	M	5.86	6.97	530	920	2.0	511	283		263	0.037	<0.0010	0.0010	0.023	<0.0020	<0.10	0.000075	124	<0.0020	0.00536
SRK05-SP-3B	20/09/2006	14:52	M	5.89	6.63	886	945	2.4	610	332		257	0.027	<0.0010	<0.0010	0.027	<0.0020	<0.10	0.000087	148	<0.0020	0.00500
SRK05-SP-4A	06/06/2006	11:30	M	5.96	6.92	758	730	3.1	382	254		179	0.045	<0.0010	0.0050	0.028	<0.0020	<0.10	<0.000034	93.7	<0.0020	0.00976
SRK05-SP-4A	20/09/2006	14:00	M	5.97	6.61	707	723	3.4	518	254		173	0.033	<0.0010	0.0048	0.037	<0.0020	<0.10	<0.000034	127	<0.0020	0.00885
SRK05-SP-4B	06/06/2006	11:50	M	5.92	6.94	3690	6250	2.4	4520	171		4790	<0.50	<0.050	<0.050	<0.40	<0.10	<0.20	0.0595	406	<0.10	<0.030
SRK05-SP-4B	20/09/2006	13:30	M	5.84	6.66	5370	6140	5.7	4830	203		3660	<0.50	<0.050	<0.050	<0.60	<0.10	<0.30	0.0722	497	<0.10	<0.030
SRK05-SP-4B	20/09/2006	13:30	SP		6.72		6160		4870	208		5080	<0.50	<0.050	<0.050	<0.60	<0.10	<0.30	0.0719	500	<0.10	<0.030
SRK05-SP-5	05/06/2006	16:45	M	6.83	6.66	2103	6170	5.7	4510	235		480	0.81	<0.025	<0.025	<0.40	<0.050	<0.20	0.0219	511	<0.050	0.017
SRK05-SP-5	20/09/2006	10:45	M	5.86	6.93	5650	6000	3.3	4830	240		4360	<0.25	<0.025	<0.025	<0.60	<0.050	<0.30	0.0227	581	<0.050	0.020
TH86-17	06/06/2006	18:55	M	7.23	7.82	166.5	166	2.5	85.6	73.8		13.6	0.0051	<0.00050	<0.00050	0.046	<0.0010	<0.10	<0.000017	24.9	<0.0010	<0.00030
TH86-17	20/09/2006	16:53	M	7.08	7.69	156	170	6.3	86.3	86.4		14.7	0.0067	<0.00050	<0.00050	0.050	<0.0010	<0.10	<0.000017	25.0	<0.0010	<0.00030
V34	07/06/2006	9:15	M	7.70	8.06	7.9	844	812.0	504	483		61.4	0.0082	<0.00050	0.00139	0.109	<0.0010	<0.10	<0.000017	73.3	<0.0010	0.00041
V34	19/09/2006	10:10	M	7.30	8.05	794	863	4.4	534	460		71.6	0.0050	<0.00050	0.00167	0.108	<0.0010	<0.10	<0.000017	78.0	<0.0010	0.00052
V35	07/06/2006	9:55	M	7.35	7.84	2037	2800	6.4	1910	643		1480	<0.025	<0.0025	<0.0025	<0.20	<0.0050	<0.10	0.000148	398	<0.0050	<0.0015
V35	18/09/2006	10:40	M	7.01	7.72	2723	2940	3.3	2230	655		1480	<0.025	<0.0025	<0.0025	<0.20	<0.0050	<0.10	0.000201	471	<0.0050	<0.0015
V36	07/06/2006	14:05	M	7.18	7.84	1498	1520	4.7	960	443		558	<0.025	<0.0025	0.0061	<0.20	<0.0050	<0.10	0.000208	200	<0.0050	<0.0015
V36	19/09/2006	12:10	M	7.42	7.72	1420	1520	3.1	1020	425		530	<0.010	<0.0010	0.0057	<0.						

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
SRK04-3A	22/09/2006	16:05	SP	<0.10	846	0.280	<0.50	718	75.6	0.000028	<0.10	1.12	13.4	<0.10	<0.0020	55.8	<0.020	<0.050	0.082	<0.020	<0.080	438
SRK04-3B	14/06/2006	10:10	M	<0.20	7700	<0.10	<1.0	721	78.3	<0.000020	<0.20	0.50	<2.0	<0.20	<0.0040	57	<0.040	<0.10	<0.40	<0.30	<0.30	754
SRK04-3B	22/09/2006	16:10	M	<0.10	3800	0.118	<0.50	680	76.8	<0.000020	<0.10	0.90	<10	<0.10	<0.0020	58	<0.020	<0.050	<0.050	<0.020	0.32	628
SRK04-5A	07/06/2006	17:40	M	<0.0010	1.27	0.00138	0.0078	15.3	0.0887	<0.000020	0.0199	<0.0010	<2.0	<0.0010	<0.000020	19.5	<0.00020	<0.00050	<0.010	0.00117	<0.030	0.0530
SRK04-5B	07/06/2006	17:30	M	<0.0010	1.42	0.00064	0.0101	16.3	0.0536	<0.000020	0.0174	<0.0010	<2.0	<0.0010	<0.000020	18.6	<0.00020	<0.00050	<0.010	0.00142	<0.030	0.402
SRK05-05C	21/09/2006	10:10	M	<0.0020	1.24	<0.0020	<0.050	56.7	3.97	<0.000020	0.0123	<0.010		<0.0020	<0.00010	13.6	<0.00040		<0.050	0.00337	<0.030	0.0195
SRK05-06	08/06/2006	10:30	M	<0.0050	<0.030	<0.0025	<0.025	92.9	0.0504	<0.000020	<0.0050	2.1	<0.0050	<0.00010	7.0	<0.0010	<0.0025	<0.010	0.0157	<0.030	0.131	
SRK05-06	19/09/2006	15:58	M	0.0092	<0.030	0.0041	<0.025	124	0.0316	<0.000020	<0.0050	<0.0050	3.5	<0.0050	<0.00010	10.0	<0.0010	<0.0025	<0.010	0.0253	<0.030	0.055
SRK05-07	19/09/2006	13:40	M	<0.0050	1.82	<0.0025	<0.025	227	1.15	<0.000020	0.0188	0.0715	3.2	<0.0050	<0.00010	13.4	<0.0010	<0.0025	<0.010	0.0160	<0.030	<0.025
SRK05-08	07/06/2006	15:25	M	<0.0020	<0.030	<0.0010	0.011	105	0.0161	<0.000020	<0.0020	<0.0020	<2.0	<0.0020	<0.000040	7.4	<0.00040	<0.0010	<0.010	0.0132	<0.030	0.0092
SRK05-08	19/09/2006	13:36	M	<0.0050	<0.030	<0.0025	<0.025	108	0.0198	<0.000020	<0.0050	<0.0050	<2.0	<0.0050	<0.00010	7.2	<0.0010	<0.0025	<0.010	0.0143	<0.030	0.052
SRK05-09	08/06/2006	10:50	M	<0.0050	<0.030	<0.0025	<0.025	97.9	0.0039	<0.000020	<0.0050	<0.0050	2.2	<0.0050	<0.00010	7.3	<0.0010	<0.0025	<0.010	0.0173	<0.030	0.064
SRK05-09	19/09/2006	16:25	M	<0.0050	<0.030	<0.0025	<0.025	114	0.0143	<0.000020	<0.0050	<0.0050	3.0	<0.0050	<0.00010	8.3	<0.0010	<0.0025	<0.010	0.0213	<0.030	0.067
SRK05-ETA-BR1	14/06/2006	12:20	M	<0.10	742	<0.050	<0.50	610	65.1	<0.000020	<0.10	0.76	8.3	<0.10	<0.0020	60.1	<0.020	<0.050	<0.020	<0.020	<0.060	317
SRK05-ETA-BR1	22/09/2006	15:06	M	<0.10	961	<0.050	<0.50	583	75.4	<0.000020	<0.10	1.01	9.7	<0.10	<0.0020	71.4	<0.020	<0.050	<0.020	<0.020	0.122	424
SRK05-ETA-BR2	14/06/2006	11:02	M	<0.0050	43.0	<0.0025	<0.025	83.1	3.69	<0.000020	<0.0050	0.0283	3.0	<0.0050	<0.00010	26.2	<0.0010	<0.0025	<0.010	0.0011	<0.030	11.5
SRK05-ETA-BR2	22/09/2006	15:37	M	<0.0050	44.9	<0.0025	<0.025	85.1	5.14	<0.000020	<0.0050	0.0342	<4.0	<0.0050	<0.00010	25.6	<0.0010	<0.0025	<0.020	0.0013	<0.060	15.3
SRK05-SP-1A	06/06/2006	16:05	M	<0.0020	44.1	<0.0010	0.073	55.4	1.60	<0.000020	<0.0020	0.0213	3.8	<0.0020	<0.000040	15.0	<0.00040	<0.0010	<0.010	<0.00040	<0.030	1.59
SRK05-SP-1A	20/09/2006	13:25	M	<0.0020	50.1	<0.0010	0.068	61.6	1.43	<0.000020	<0.0020	0.0176	5.4	<0.0020	<0.000040	17.6	<0.00040	<0.0010	<0.010	<0.00040	<0.030	1.41
SRK05-SP-1B	06/06/2006	16:25	M	<0.0020	12.8	<0.0010	0.038	55.6	0.981	<0.000020	<0.0020	0.0150	4.2	<0.0020	<0.000040	11.5	<0.00040	<0.0010	<0.010	0.00276	<0.030	0.243
SRK05-SP-1B	20/09/2006	15:37	M	<0.0020	12.8	<0.0010	0.034	53.0	0.722	<0.000020	<0.0020	0.0107	5.3	<0.0020	<0.000040	11.5	<0.00040	<0.0010	<0.010	0.00165	<0.030	0.272
SRK05-SP-2	06/06/2006	16:55	M	<0.0010	<0.030	<0.00050	0.0118	12.7	0.946	<0.000020	<0.0010	0.0042	<2.0	<0.0010	<0.000020	6.4	<0.00020	<0.00050	<0.010	0.00079	<0.030	0.129
SRK05-SP-2	20/09/2006	16:00	M	<0.0010	<0.030	<0.00050	0.0114	15.3	0.930	<0.000020	<0.0010	0.0037	<2.0	<0.0010	<0.000020	7.1	<0.00020	<0.00050	<0.010	0.00062	<0.030	0.126
SRK05-SP-3A	06/06/2006	13:00	REP	<0.0020	20.1	<0.0010	0.050	50.9	0.850	<0.000020	<0.0020	0.0133	3.4	<0.0020	<0.000040	10.3	<0.00040	<0.0010	<0.010	0.00166	<0.030	1.02
SRK05-SP-3A	20/09/2006	14:33	M	<0.0020	25.1	<0.0010	0.049	61.8	0.849	<0.000020	<0.0020	0.0120	4.4	<0.0020	<0.000040	12.4	<0.00040	<0.0010	<0.010	0.00170	<0.030	1.02
SRK05-SP-3B	06/06/2006	15:20	M	<0.0020	9.01	<0.0010	0.049	48.9	0.843	<0.000020	<0.0020	0.0137	4.5	<0.0020	<0.000040	9.3	<0.00040	<0.0010	<0.010	0.00179	<0.030	0.757
SRK05-SP-3B	20/09/2006	14:52	M	<0.0020	11.4	<0.0010	0.049	58.4	0.847	<0.000020	<0.0020	0.0131	5.4	<0.0020	<0.000040	10.3	<0.00040	<0.0010	<0.010	0.00188	<0.030	0.750
SRK05-SP-4A	06/06/2006	11:30	M	<0.0020	18.9	<0.0010	0.060	36.0	1.12	<0.000020	<0.0020	0.0219	3.6	<0.0020	<0.000040	9.7	<0.00040	<0.0010	<0.010	<0.00040	<0.030	1.04
SRK05-SP-4A	20/09/2006	14:00	M	<0.0020	27.1	<0.0010	0.055	48.8	1.06	<0.000020	<0.0020	0.0195	4.8	<0.0020	<0.000040	12.3	<0.00040	<0.0010	<0.010	<0.00040	<0.030	0.995
SRK05-SP-4B	06/06/2006	11:50	M	<0.10	<0.060	<0.050	<0.50	852	95.9	<0.000020	<0.10	2.58	10.3	<0.10	<0.0020	29.9	<0.020	<0.050	<0.020	<0.020	<0.060	362
SRK05-SP-4B	20/09/2006	13:30	M	<0.10	<0.090	<0.050	<0.50	871	132	<0.000020	<0.10	2.69	12.1	<0.10	<0.0020	23.5	<0.020	<0.050	<0.030	<0.020	0.097	373
SRK05-SP-4B	20/09/2006	13:30	SP	<0.10	<0.090	<0.050	<0.50	880	133	<0.000020	<0.10	2.69	12.8	<0.10	<0.0020	24.7	<0.020	<0.050	<0.030	<0.020	0.107	371
SRK05-SP-5	05/06/2006	16:45	M	<0.050	<0.060	<0.025	<0.25	786	75.6	<0.000020	<0.050	1.70	9.2	<0.050	<0.0010	36.3	<0.010	<0.025	<0.020	0.011	<0.060	211
SRK05-SP-5	20/09/2006	10:45	M	<0.050	<0.090	<0.025	<0.25	819	82.9	<0.000020	<0.050	1.66	10.3	<0.050	<0.0010	39.0	<0.010	<0.025	<0.030	0.010	0.090	218
TH86-17	06/06/2006	18:55	M	0.0013	0.178	<0.00050	<0.0050	5.68	0.00525	<0.000020	<0.0010	0.0025	<2.0	<0.0010	<0.000020	2.1	<0.00020	<0.00050	<0.010	0.00078	<0.030	0.0123
TH86-17	20/09/2006	16:53	M	<0.0010	0.206	<0.00050	<0.0050	5.83	0.00776	<0.000020	<0.0010	0.0013	<2.0	<0.0010	<0.000020	<2.0	<0.00020	<0.00050	<0.010	0.00021	<0.030	0.0156
V34	07/06/2006	9:15	M	<0.0010	0.553	<0.00050	0.0124	77.9	0.0739	<0.000020	0.0033	<0.0010	3.2	<0.0010	<0.000020	5.2	<0.00020	<0.00050	<0.010	0.00644	<0.030	0.0103
V34	19/09/2006	10:10	M	<0.0010	0.686	<0.00050	0.0148	82.4	0.0883	<0.000020	0.0031	<0.0010	3.6	<0.0010	<0.000020	5.6	<0.00020	<0.00050	<0.010	0.00809	<0.030	0.0088
V35	07/06/2006	9:55	M	<0.0050	<0.030	<0.0025	0.026	221	0.0693	<0.000020	<0.0050	0.0059	4.0	<0.0050	<0.00010	9.3	<0.0010	<0.0025	<0.010	0.104	<0.030	0.030
V35	18/09/2006	10:40	M	<0.0050	<0.030	0.0036	0.030	256	0.104	<0.000020	<0.0050	0.0070	5.5	<0.0050	<0.00010	10.5	<0.0010	<0.0025	<0.010	0.125	<0.030	0.113
V36	07/06/2006	14:05	M	<0.0050	<0.030	<0.0025	0.029	112	0.104	<0.000020	<0.0050	0.0083	3.3	<0.0050	<0.00010	5.9	<0.0010	<0.0025	<0.010	0.0210	<0.030	0.042
V36	19/09/2006	12:10	M	<0.0020	<0.030	0.0013	0.032	120	0.118	<0.000020	<0.0020	0.0064	4.3	<0.0020	<0.000040	6.6	<0.00040	<0.0010	<0.010	0.0245	<0.030	0.047
V37	07/06/2006	14:30	M	<0.0010	1.45	<0.00050	0.0220	68.3	0.0806	<0.000020	0.0190	<0.0010	4.9	<0.0010	<0.000020	23.5	<0.00020	<0.00050	<0.010	0.00035	<0.030	<0.0050
V37	19/09/2006	12:30	M	<0.0010	0.382	<0.00050	0.0257	75.8	0.0363	<0.000020	0.0188	<0.0010	6.1	<0.0010	<0.000020	25.5	<0.00020	<0.00050	<0.010	0.00074	<0.030	0.0076
X16A	08/06/2006	14:07	M	<0.0010	<0.030	<0.00050	<0.0050	12.6	0.00174	<0.000020	0.0023	<0.0010	<2.0	0.0011	<0.000020	2.2	<0.00020	<0.00050	<0.010	0.00173	<0.030	0.0120
X16A	21/09/2006	14:25	M	<0.0010	<0.030	<0.0010	<0.050	13.1	<0.010	<0.000020	0.0023											

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	General Chemistry							Anions		Metals									
				pH (Field)	pH (Lab)	Sp. Cond. (Field)	Sp. Cond. (Lab)	Temp. (Field)	Hardness (CaCO ₃)	Alkalinity (Total) as CaCO ₃	Bromide mg/L	Sulphate mg/L	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt
				pH unit	pH unit	µS/cm	µS/cm	°C	mg/L	mg/L			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
X24A-96	21/09/2006	13:45	M	6.79	7.56	2570	2510	7.0	1460	355		1400	<0.050	<0.0025	<0.0050	0.020	<0.0050	<0.10	<0.00025	419	<0.0025	0.0287
X24A-96	01/11/2006	9:50	M	6.54	7.09	2500	2430	0.0	1570	363		1400	0.22	<0.010	<0.010	<0.040	<0.020	<0.20	0.00101	469	<0.020	0.0430
X24D-96	09/06/2006	11:47	M	6.56	7.58	2825	2710	5.5	1640	399		1410	<0.050	<0.0050	<0.0050	0.024	<0.010	<0.10	0.00295	487	<0.010	0.0414
X24D-96	09/06/2006	11:47	REP		7.65		2730		1670	405		1370	<0.050	<0.0050	<0.0050	0.022	<0.010	<0.10	0.00273	496	<0.010	0.0430
X24D-96	02/08/2006	15:50	M	6.42	7.44	2758	2780	3.9	1780	356		1650	<0.050	<0.0050	<0.0050	0.023	<0.010	<0.10	0.00253	513	<0.010	0.0407
X24D-96	21/09/2006	15:22	M	6.29	7.37	2900	2800	6.6	1810	394		1710	<0.050	<0.0025	<0.0050	0.022	<0.0050	<0.10	0.00268	527	<0.0025	0.0420
X24D-96	01/11/2006	10:50	M	6.57	7.13	170	2850	0.0	1850	396		1700	<0.10	<0.010	<0.010	<0.040	<0.020	<0.20	0.00251	555	<0.020	0.0469
X25A-96	09/06/2006	13:10	M	7.20	7.92	593	977	3.9	472	246		260	<0.010	<0.0010	<0.0010	0.038	<0.0020	<0.10	0.000321	137	<0.0020	0.00507
X25A-96	02/08/2006	17:55	M	7.33	7.91	983	983	5.4	504	250		289	<0.010	<0.0010	<0.0010	0.039	<0.0020	<0.10	0.000301	145	<0.0020	0.00463
X25A-96	21/09/2006	12:08	M	7.75	7.86	1073	967	3.3	504	258		326	<0.020	<0.0010	<0.0020	0.042	<0.0050	<0.10	0.00027	145	<0.0010	0.0046
X25A-96	01/11/2006	11:40	M	7.32	7.60	600	967	0.0	495	271		296	<0.025	<0.0025	<0.0025	<0.040	<0.0050	<0.20	0.000226	142	<0.0050	0.0038
X25B-96	09/06/2006	12:54	M	7.50	8.03	1110	1080	4.6	512	269		274	<0.010	<0.0010	<0.0010	0.027	<0.0020	<0.10	0.000035	158	<0.0020	<0.00060
X25B-96	02/08/2006	17:59	M	7.41	8.03	1080	1110	4.2	547	257		359	<0.010	<0.0010	<0.0010	0.027	<0.0020	<0.10	<0.000034	168	<0.0020	<0.00060
X25B-96	21/09/2006	11:09	M	7.35	8.02	895	1090	4.1	521	269		388	<0.020	<0.0010	<0.0020	0.027	<0.0050	<0.10	<0.00010	162	<0.0010	<0.0010
X25B-96	01/11/2006	11:51	M	7.56	7.90	910	1080	0.6	540	278		363	<0.025	<0.0025	<0.0025	<0.040	<0.0050	<0.20	<0.000085	169	<0.0050	<0.0015

Table 6. 2006 Ground Water Quality Data, Faro Mine, Yukon

Well ID	Sample Date	Sample Time	Sample Class ^(a)	Copper mg/L	Iron mg/L	Lead mg/L	Lithium mg/L	Magnesium mg/L	Manganese mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Potassium mg/L	Selenium mg/L	Silver mg/L	Sodium mg/L	Thallium mg/L	Tin mg/L	Titanium mg/L	Uranium mg/L	Vanadium mg/L	Zinc mg/L
X24A-96	21/09/2006	13:45	M	<0.0050	<0.030	<0.0050	<0.050	99.5	24.4	<0.00020	<0.0050	0.113		<0.0050	<0.00025	35.4	<0.0010		<0.050	0.0085	0.036	<0.0050
X24A-96	01/11/2006	9:50	M	<0.020	1.00	<0.010	<0.10	97.8	41.4	<0.000020	<0.020	0.072	6.5	<0.020	<0.00040	37.2	<0.0040	<0.010	<0.020	0.0081	<0.060	1.84
X24D-96	09/06/2006	11:47	M	<0.010	<0.030	<0.0050	<0.050	102	44.7	<0.000020	<0.010	0.177	6.4	<0.010	<0.00020	49.3	<0.0020	<0.0050	<0.010	0.0053	<0.030	0.290
X24D-96	09/06/2006	11:47	REP	<0.010	<0.030	<0.0050	<0.050	104	45.6	<0.000020	<0.010	0.184	6.0	<0.010	<0.00020	45.5	<0.0020	<0.0050	<0.010	0.0056	<0.030	0.290
X24D-96	02/08/2006	15:50	M	<0.010	<0.030	<0.0050	<0.050	121	48.5	<0.000020	<0.010	0.177	6.7	<0.010	<0.00020	49.0	<0.0020	<0.0050	<0.010	0.0053	<0.030	0.068
X24D-96	21/09/2006	15:22	M	<0.0050	<0.030	<0.0050	<0.050	120	50.5	<0.00020	<0.0050	0.177		<0.0050	<0.00025	46.9	<0.0010		<0.050	0.0050	0.060	0.0926
X24D-96	01/11/2006	10:50	M	<0.020	<0.060	<0.010	<0.10	112	50.0	<0.000020	<0.020	0.196	7.2	<0.020	<0.00040	46.1	<0.0040	<0.010	<0.020	0.0054	<0.060	<0.10
X25A-96	09/06/2006	13:10	M	0.0037	0.049	<0.0010	<0.010	31.8	5.43	<0.000020	<0.0020	0.0084	2.9	<0.0020	<0.000040	24.2	<0.00040	<0.0010	<0.010	0.00894	<0.030	0.041
X25A-96	02/08/2006	17:55	M	0.0032	<0.030	<0.0010	<0.010	34.5	5.26	<0.000020	<0.0020	0.0082	3.4	<0.0020	<0.000040	25.1	<0.00040	<0.0010	<0.010	0.00892	<0.030	<0.010
X25A-96	21/09/2006	12:08	M	0.0030	<0.030	<0.0020	<0.050	34.5	4.33	<0.00020	<0.0020	<0.010		<0.0020	<0.00010	27.1	<0.00040		<0.050	0.00885	<0.030	0.0132
X25A-96	01/11/2006	11:40	M	<0.0050	<0.060	<0.0025	<0.025	33.8	3.89	<0.000020	<0.0050	0.0071	4.2	<0.0050	<0.00010	26.5	<0.0010	<0.0025	<0.020	0.0093	<0.060	<0.025
X25B-96	09/06/2006	12:54	M	<0.0020	0.622	<0.0010	<0.010	28.4	0.169	<0.000020	<0.0020	<0.0020	2.5	<0.0020	<0.000040	49.4	<0.00040	<0.0010	<0.010	0.00531	<0.030	0.030
X25B-96	02/08/2006	17:59	M	<0.0020	0.680	<0.0010	<0.010	30.7	0.157	<0.000020	<0.0020	<0.0020	2.7	<0.0020	<0.000040	51.2	<0.00040	<0.0010	<0.010	0.00494	<0.030	<0.010
X25B-96	21/09/2006	11:09	M	<0.0020	0.686	<0.0020	<0.050	28.2	0.163	<0.00020	<0.0020	<0.010		<0.0020	<0.00010	48.4	<0.00040		<0.050	0.00508	<0.030	<0.0050
X25B-96	01/11/2006	11:51	M	<0.0050	0.622	<0.0025	<0.025	28.3	0.176	<0.000020	<0.0050	<0.0050	<4.0	<0.0050	<0.00010	48.2	<0.0010	<0.0025	<0.020	0.0052	<0.060	<0.025

Notes:

^(a) Denotes Quality Control Samples: REP - replicate sample; SP - split sample

Appendices

Appendix A

(hard-copy only – to be included in final report)

Original Laboratory Reports

ALS Environmental Laboratories

ALS X6957 – June 23, 2006

ALS X7082 – June 27, 2006

ALS X7083 – June 27, 2006

ALS X7084 – July 4, 2006

ALS X7089 – July 4, 2006

ALS X7094 – June 29, 2006

ALS X7095 – July 5, 2006

ALS X7433 – July 5, 2006

ALS X7471 – July 10, 2006

ALS X9793 – August 21, 2006

ALS X9794 – August 17, 2006

ALS Z3051 – October 10, 2006

ALS Z3052 – October 10, 2006

ALS Z3053 – October 10, 2006

ALS Z3054 – October 10, 2006

ALS Z3064 – October 12, 2006

ALS Z3072 – October 12, 2006

ALS Z3083 – October 13, 2006

ALS Z3084 – October 12, 2006

ALS Z3085 – October 12, 2006

ALS Z3086 – INTERIM

ALS L451213 – November 23, 2006

Appendix B

Quality Assurance (QA/QC) of Samples 2006

Appendix B. Summary of QA/AC Field Duplicates

June 2006 Sampling

ALS Report ID	X6957	X6957		X7082	X7082		X7082	X7082		X7083	X7083		X7084	X7084	
Date submitted	08/06/2006	08/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006	
Date of report	23/06/2006	23/06/2006		27/06/2006	27/06/2006		27/06/2006	27/06/2006		27/06/2006	27/06/2006		04/07/2006	04/07/2006	
RESULTS OF ANALYSIS															
	sample	replicate	RPD (%)	sample	replicate	RPD (%)	sample	replicate	RPD (%)	sample	replicate	RPD (%)	sample	replicate	RPD (%)
Sample ID	P05-04	P05-04-R		P96-9A	P96-9A-R		SRK05-SP-3A	SRK05-SP-3A-R		P03-06-02	P03-06-02-R		P03-09-05	P03-09-05-R	
Date Sampled	05/06/2006	05/06/2006		07/06/2006	07/06/2006		06/06/2006	06/06/2006		07/06/2006	07/06/2006		06/06/2006	06/06/2006	
Time Sampled	12:18	12:18		16:50	16:55		13:00	15:20		15:31	15:32		12:30	12:35	
ALS Sample ID	5	6		4	5		15	17		2	3		13	18	
Physical Tests															
Conductivity (uS/cm)	379	379	0.0	2550	2570	0.8	960	957	0.3	1760	1760	0.0	1010	1010	0.0
Hardness CaCO3	191	188	1.6	1690	1730	2.3	505	517	2.3	1010	998	1.2	505	510	1.0
pH	7.16	7.11	0.7	7.74	7.78	0.5	7.01	6.96	0.7	7.63	7.61	0.3	7.99	7.97	0.3
Dissolved Anions															
Alkalinity-Total CaCO3	152	161	5.8	443	389	13.0	316	317	0.3	181	182	0.6	261	259	0.8
Bromide Br	-	-		-	-		-	-		-	-		-	-	
Sulphate SO4	47.8	45.6	4.7	1400	1400	0.0	268	267	0.4	855	921	7.4	272	270	0.7
Dissolved Metals															
Aluminum D-Al	0.0402	0.0414	2.9	0.026	0.127	132.0	0.046	0.050	8.3	<0.025	<0.025		0.014	<0.010	
Antimony D-Sb	<0.00050	<0.00050		<0.0025	<0.0025		<0.0010	<0.0010		<0.0025	<0.0025		<0.0010	<0.0010	
Arsenic D-As	<0.00050	<0.00050		<0.0025	<0.0025		0.0021	0.0022	4.7	<0.0025	<0.0025		<0.0010	<0.0010	
Barium D-Ba	0.045	0.045	0.0	0.046	0.048	4.3	0.027	0.028	3.6	0.078	0.072	8.0	0.039	0.039	0.0
Beryllium D-Be	<0.0010	<0.0010		<0.0050	<0.0050		<0.0020	<0.0020		<0.0050	<0.0050		<0.0020	<0.0020	
Boron D-B	<0.10	<0.10		<0.10	<0.10		<0.10	<0.10		<0.10	<0.10		<0.10	<0.10	
Cadmium D-Cd	0.00259	0.00257	0.8	0.000614	0.000614	0.0	<0.000034	0.000044		0.000334	0.000420	22.8	<0.000034	0.000039	
Calcium D-Ca	53.1	51.8	2.5	301	307	2.0	118	121	2.5	280	277	1.1	152	154	1.3
Chromium D-Cr	<0.0010	<0.0010		<0.0050	<0.0050		<0.0020	<0.0020		<0.0050	<0.0050		<0.0020	<0.0020	
Cobalt D-Co	0.00061	0.00061	0.0	<0.0015	<0.0015		0.00404	0.00414	2.4	0.0291	0.0293	0.7	0.00403	0.00411	2.0
Copper D-Cu	<0.0010	<0.0010		<0.0050	0.0056		<0.0020	<0.0020		<0.0050	<0.0050		<0.0020	<0.0020	
Iron D-Fe	<0.030	0.030		<0.030	<0.030		20.1	20.8	3.4	0.549	0.655	17.6	<0.030	<0.030	
Lead D-Pb	<0.00050	<0.00050		<0.0025	<0.0025		<0.0010	<0.0010		<0.0025	<0.0025		<0.0010	<0.0010	
Lithium D-Li	0.0158	0.0158	0.0	<0.025	<0.025		0.050	0.049	2.0	<0.025	<0.025		<0.010	<0.010	
Magnesium D-Mg	14.3	14.3	0.0	229	235	2.6	50.9	52.0	2.1	75.9	74.4	2.0	30.5	30.1	1.3
Manganese D-Mn	0.0118	0.0111	6.1	0.118	0.116	1.7	0.850	0.876	3.0	23.8	23.6	0.8	5.47	5.53	1.1
Mercury D-Hg	<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020	
Molybdenum D-Mo	<0.0010	<0.0010		<0.0050	<0.0050		<0.0020	<0.0020		<0.0050	<0.0050		<0.0020	<0.0020	
Nickel D-Ni	0.0092	0.0093	1.1	0.0091	0.0092	1.1	0.0133	0.0135	1.5	0.0301	0.0307	2.0	0.0093	0.0092	1.1
Potassium D-K	<2.0	<2.0		3.3	3.4	3.0	3.4	3.5	2.9	2.4	2.3	4.3	2.9	3.0	3.4
Selenium D-Se	<0.0010	<0.0010		<0.0050	<0.0050		<0.0020	<0.0020		<0.0050	<0.0050		<0.0020	<0.0020	
Silver D-Ag	<0.000020	<0.000020		<0.00010	<0.00010		<0.000040	<0.000040		<0.00010	<0.00010		<0.000040	<0.000040	
Sodium D-Na	5.1	5.2	1.9	12.3	12.8	4.0	10.3	10.6	2.9	39.4	38.2	3.1	25.1	25.1	0.0
Thallium D-Tl	<0.00020	<0.00020		<0.0010	<0.0010		<0.00040	<0.00040		<0.0010	<0.0010		<0.00040	<0.00040	
Tin D-Sn	<0.00050	<0.00050		<0.0025	<0.0025		<0.0010	<0.0010		<0.0025	<0.0025		<0.0010	<0.0010	
Titanium D-Ti	<0.010	<0.010		<0.010	<0.010		<0.010	<0.010		<0.010	<0.010		<0.010	<0.010	
Uranium D-U	0.00083	0.00086	3.6	0.0268	0.0273	1.8	0.00166	0.00170	2.4	0.0129	0.0127	1.6	0.00609	0.00618	1.5
Vanadium D-V	<0.030	<0.030		<0.030	<0.030		<0.030	<0.030		<0.030	<0.030		<0.030	<0.030	
Zinc D-Zn	1.54	1.49	3.3	0.0255	0.0247	3.2	1.02	1.05	2.9	0.358	0.357	0.3	0.0069	<0.010	

does not satisfy PQL, therefore RPD not useful

Appendix B. Summary of QA/AC Field Duplicates

June 2006 Sampling

ALS Report ID	X7089	X7089		X7094	X7094		X7095	X7095		X7433	X7433		X7471	X7471	
Date submitted	12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006		19/06/2006	19/06/2006		19/06/2006	19/06/2006	
Date of report	04/07/2006	04/07/2006		29/06/2006	29/06/2006		05/07/2006	05/07/2006		05/07/2006	05/07/2006		10/07/2006	10/07/2006	
RESULTS OF ANALYSIS															
	sample	replicate	RPD (%)	sample	replicate	RPD (%)	sample	replicate	RPD (%)	sample	replicate	RPD (%)	sample	replicate	RPD (%)
Sample ID	X24D-96-R	X24D-96-R		X17B	X17B-R		P03-01-01	P03-01-01-R		P03-03-01	P03-03-01-R		SRK-04-3A	SRK-04-3A-R	
Date Sampled	09/06/2006	09/06/2006		08/06/2006	08/06/2006		09/06/2006	09/06/2006		15/06/2006	15/06/2006		14/06/2006	14/06/2006	
Time Sampled	11:47	11:47		17:19	17:20		9:00	8:30		13:55	13:55		9:30	9:30	
ALS Sample ID	16	17		4	5		2	1		1	9		6	7	
Physical Tests															
Conductivity (uS/cm)	2710	2730	0.7	894	897	0.3	417	418	0.2	495	493	0.4	6530	6540	0.2
Hardness CaCO3	1640	1670	1.8	474	479	1.0	222	204	8.5	270	257	4.9	3950	4000	1.3
pH	7.58	7.65	0.9	7.96	7.99	0.4	8.14	8.12	0.2	8.08	8.01	0.9	6.12	6.09	0.5
Dissolved Anions															
Alkalinity-Total CaCO3	399	405	1.5	454	424	6.8	218	219	0.5	287	284	1.1	48.2	43.6	10.0
Bromide Br	-	-		-	-		-	-		<0.050	<0.050		-	-	
Sulphate SO4	1410	1370	2.9	111	109	1.8	20.4	22.6	10.2	3.46	3.33	3.8	5510	5660	2.7
Dissolved Metals															
Aluminum D-Al	<0.050	<0.050		<0.010	<0.010		<0.005	0.0107		<0.0050	<0.0050		0.73	0.64	13.1
Antimony D-Sb	<0.0050	<0.0050		<0.0010	<0.0010		<0.00050	<0.00050		<0.00050	<0.00050		<0.050	<0.050	
Arsenic D-As	<0.0050	<0.0050		<0.0010	<0.0010		0.00524	0.00480	8.8	0.00855	0.00838	2.0	<0.050	<0.050	
Barium D-Ba	0.024	0.022	8.7	0.255	0.256	0.4	0.113	0.109	3.6	0.254	0.255	0.4	<0.040	<0.040	
Beryllium D-Be	<0.010	<0.010		<0.0020	<0.0020		<0.0010	<0.0010		<0.0010	<0.0010		<0.10	<0.10	
Boron D-B	<0.10	<0.10		<0.10	<0.10		<0.10	<0.10		<0.10	<0.10		<0.20	<0.20	
Cadmium D-Cd	0.00295	0.00273	7.7	<0.000034	<0.000034		<0.000017	<0.000017		<0.000017	<0.000017		0.0144	0.0170	16.6
Calcium D-Ca	487	496	1.8	128	130	1.6	66.0	60.6	8.5	78.6	76.5	2.7	399	395	1.0
Chromium D-Cr	<0.010	<0.010		<0.0020	<0.0020		<0.0010	<0.0010		<0.0010	<0.0010		<0.10	<0.10	
Cobalt D-Co	0.0414	0.0430	3.8	<0.00060	<0.00060		<0.00030	<0.00030		0.00151	0.00153	1.3	0.437	0.433	0.9
Copper D-Cu	<0.010	<0.010		<0.0020	<0.0020		<0.0010	0.0101		<0.0010	<0.0010		<0.10	<0.10	
Iron D-Fe	<0.030	<0.030		2.67	2.72	1.9	5.02	5.75	13.6	3.40	3.34	1.8	694	688	0.9
Lead D-Pb	<0.0050	<0.0050		<0.0010	<0.0010		0.00072	0.0269	189.6	<0.00050	<0.00050		<0.050	<0.050	
Lithium D-Li	<0.050	<0.050		0.032	0.032	0.0	0.0148	0.0140	5.6	0.0170	0.0164	3.6	<0.50	<0.50	
Magnesium D-Mg	102	104	1.9	37.3	37.6	0.8	13.9	12.8	8.2	17.9	16.1	10.6	718	732	1.9
Manganese D-Mn	44.7	45.6	2.0	0.413	0.415	0.5	0.161	0.178	10.0	0.123	0.126	2.4	66.7	64.5	3.4
Mercury D-Hg	<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020	
Molybdenum D-Mo	<0.010	<0.010		<0.0020	<0.0020		0.0033	0.0031	6.3	0.0023	0.0021	9.1	<0.10	<0.10	
Nickel D-Ni	0.177	0.184	3.9	<0.0020	<0.0020		<0.0010	<0.0010		<0.0010	<0.0010		0.74	0.73	1.4
Potassium D-K	6.4	6.0	6.5	2.6	2.6	0.0	<2.0	<2.0		2.3	2.1	9.1	8.7	8.7	0.0
Selenium D-Se	<0.010	<0.010		<0.0020	<0.0020		<0.0010	<0.0010		<0.0010	<0.0010		<0.10	<0.10	
Silver D-Ag	<0.00020	<0.00020		<0.000040	<0.000040		<0.000020	0.000022		<0.000020	<0.000020		<0.0020	<0.0020	
Sodium D-Na	49.3	45.5	8.0	34.6	34.7	0.3	7.9	7.2	9.3	10.2	9.9	3.0	54.9	55.4	0.9
Thallium D-Tl	<0.0020	<0.0020		<0.00040	<0.00040		<0.00020	<0.00020		<0.00020	<0.00020		<0.020	<0.020	
Tin D-Sn	<0.0050	<0.0050		<0.0010	<0.0010		<0.00050	<0.00050		<0.00050	<0.00050		<0.050	<0.050	
Titanium D-Ti	<0.010	<0.010		<0.010	<0.010		<0.010	<0.010		<0.010	<0.010		<0.020	<0.020	
Uranium D-U	0.0053	0.0056	5.5	0.00164	0.00167	1.8	0.00027	0.00026	3.8	0.00047	0.00046	2.2	<0.020	<0.020	
Vanadium D-V	<0.030	<0.030		<0.030	<0.030		<0.030	<0.030		<0.030	<0.030		<0.060	<0.060	
Zinc D-Zn	0.290	0.290	0.0	0.0407	0.0401	1.5	<0.0050	0.127		<0.005	0.0077		291	288	1.0

does not satisfy PQL, therefore RPD not useful

Appendix B. Summary of QA/QC Field Duplicates

August 2006 Sampling

ALS Report ID	X9793	X9793	
Date submitted	08/08/2006	08/08/2006	
Date of report	21/08/2006	21/08/2006	
RESULTS OF ANALYSIS			
	sample	split	RPD(%)
Sample ID	P03-08-03	P03-08-03-S	
Date Sampled	02/08/2006	02/08/2006	
Time Sampled	10:20	10:20	
ALS Sample ID	8	16	
Physical Tests			
Conductivity (uS/cm)	530	533	0.6
Hardness CaCO3	308	291	5.7
pH	7.95	7.99	0.5
Dissolved Anions			
Alkalinity-Total CaCO3	228	236	3.4
Sulphate SO4	67.7	68.2	0.7
Dissolved Metals			
Aluminum D-Al	<0.010	<0.010	
Antimony D-Sb	<0.0010	<0.0010	
Arsenic D-As	<0.0010	<0.0010	
Barium D-Ba	0.196	0.185	5.8
Beryllium D-Be	<0.0020	<0.0020	
Boron D-B	<0.10	<0.10	
Cadmium D-Cd	0.000119	0.000127	6.5
Calcium D-Ca	85.3	80.9	5.3
Chromium D-Cr	<0.0020	<0.0020	
Cobalt D-Co	0.00061	0.00062	1.6
Copper D-Cu	0.0026	0.0025	3.9
Iron D-Fe	0.030	<0.030	
Lead D-Pb	<0.0010	<0.0010	
Lithium D-Li	<0.010	<0.010	
Magnesium D-Mg	23.0	21.8	5.4
Manganese D-Mn	3.88	3.83	1.3
Mercury D-Hg	<0.000020	<0.000020	
Molybdenum D-Mo	<0.0020	<0.0020	
Nickel D-Ni	0.0194	0.0197	1.5
Potassium D-K	<2.0	<2.0	
Selenium D-Se	<0.0020	<0.0020	
Silver D-Ag	<0.000040	<0.000040	
Sodium D-Na	7.9	7.4	6.5
Thallium D-Tl	<0.00040	<0.00040	
Tin D-Sn	<0.0010	<0.0010	
Titanium D-Ti	<0.010	<0.010	
Uranium D-U	0.00256	0.00254	0.8
Vanadium D-V	<0.030	<0.030	
Zinc D-Zn	<0.01	0.013	

Appendix B. Summary of QA/QC Field Duplicates

September 2006 Sampling

ALS Report ID	Z3051	Z3051		Z3054	Z3054		Z3054	Z3054		Z3064	Z3064		Z3072	Z3072		Z3083	Z3083		Z3083
Date submitted	27/09/2006	27/09/2006		26/09/2006	26/09/2006		26/09/2006	26/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006
Date of report	12/10/2006	12/10/2006		10/10/2006	10/10/2006		10/10/2006	10/10/2006		12/10/2006	12/10/2006		12/10/2006	12/10/2006		13/10/2006	13/10/2006		13/10/2006
RESULTS OF ANALYSIS																			
	sample	split	RPD (%)	sample	split	RPD (%)	sample	split	RPD (%)	sample	split	RPD (%)	sample	split	RPD (%)	sample	split	RPD (%)	sample
Sample ID	SRK04-3A	SRK04-3A-S		P03-07-05	P03-07-05-S		P03-08-08	P03-08-08-S		P01-03	P01-03-S		P03-01-07	P03-01-07-S		BH-12A	BH-12A-S		BH-14B
Date Sampled	22/09/2006	22/09/2006		20/09/2006	20/09/2006		20/09/2006	20/09/2006		21/09/2006	21/09/2006		21/09/2006	21/09/2006		18/09/2006	18/09/2006		18/09/2006
Time Sampled																			
ALS Sample ID	12	13		7	8		10	11		7	8		7	8		2	3		6
Physical Tests																			
Conductivity (uS/cm)	7360	7150	2.9	1220	1220	0.0	494	493	0.2	2620	2620	0.0	6140	6280	2.3	917	919	0.2	3510
Hardness CaCO3	4270	4000	6.5	672	685	1.9	83.8	80.2	4.4	1540	1400	9.5	814	818	0.5	565	541	4.3	2100
pH	5.92	5.78	2.4	7.67	7.74	0.9	7.74	7.90	2.0	7.43	7.47	0.5	4.64	4.32	7.1	7.62	7.63	0.1	7.70
Dissolved Anions																			
Alkalinity-Total CaCO3	117	114	2.6	204	193	5.5	121	131	7.9	358	354	1.1	17.2	16.6	3.6	188	178	5.5	441
Sulphate SO4	6190	5930	4.3	504	501	0.6	114	113	0.9	1570	1570	0.0	4900	5020	2.4	307	303	1.3	1760
Dissolved Metals																			
Aluminum D-Al	3.83	3.58	6.7	<0.010	0.124		<0.0050	<0.0050		0.227	<0.050		<0.50	<0.50		<0.010	<0.010		<0.050
Antimony D-Sb	<0.050	<0.050		0.0022	0.0023	4.4	0.00147	0.00135	8.5	<0.0025	<0.0025		<0.025	<0.025		<0.0010	<0.0010		<0.0050
Arsenic D-As	<0.050	<0.050		0.0032	0.0033	3.1	0.00103	0.00099	4.0	<0.0050	<0.0050		<0.050	<0.050		<0.0010	<0.0010		<0.0050
Barium D-Ba	0.071	0.045	44.8	<0.020	<0.020		0.022	0.021	4.7	<0.020	<0.020		<0.10	<0.10		0.036	0.036	0.0	<0.020
Beryllium D-Be	<0.10	<0.10		<0.0020	<0.0020		<0.0010	<0.0010		<0.0050	<0.0050		<0.025	<0.025		<0.0020	<0.0020		<0.010
Boron D-B	<0.30	<0.20		<0.10	<0.10		<0.10	<0.10		<0.10	<0.10		<0.50	<0.50		<0.10	<0.10		<0.10
Cadmium D-Cd	0.0320	0.0327	2.2	<0.000034	<0.000034		0.000037	<0.000017		0.00167	0.00174	4.1	<0.0025	<0.0025		0.000198	0.000226	13.2	0.00018
Calcium D-Ca	456	417	8.9	185	188	1.6	18.4	17.6	4.4	446	403	10.1	101	102	1.0	124	119	4.1	509
Chromium D-Cr	<0.10	<0.10		<0.0020	<0.0020		<0.0010	<0.0010		<0.0025	<0.0025		<0.025	<0.025		<0.0020	<0.0020		<0.010
Cobalt D-Co	0.690	0.650	6.0	<0.00060	<0.00060		0.00132	0.00131	0.8	0.0568	0.0574	1.1	<0.025	<0.025		<0.00060	<0.00060		<0.0030
Copper D-Cu	<0.10	<0.10		<0.0020	<0.0020		<0.0010	<0.0010		<0.0050	<0.0050		<0.050	<0.050		0.0020	0.0021	4.9	<0.010
Iron D-Fe	913	846	7.6	19.5	19.9	2.0	<0.030	<0.030		0.236	0.225	4.8	2620	2650	1.1	<0.030	<0.030		<0.030
Lead D-Pb	0.335	0.280	17.9	<0.0010	<0.0010		0.00094	0.00089	5.5	<0.0050	<0.0050		<0.050	<0.050		<0.0010	<0.0010		<0.0050
Lithium D-Li	<0.50	<0.50		<0.010	<0.010		0.0140	0.0144	2.8	<0.050	<0.050		<0.25	<0.25		0.018	0.018	0.0	<0.050
Magnesium D-Mg	760	718	5.7	50.8	52.2	2.7	9.17	8.81	4.0	103	94.9	8.2	137	137	0.0	61.7	58.9	4.6	201
Manganese D-Mn	78.7	75.6	4.0	5.18	5.28	1.9	0.0350	0.0338	3.5	48.4	48.6	0.4	18.0	18.6	3.3	0.0155	0.0156	0.6	<0.0030
Mercury D-Hg	0.000026	0.000028	7.4	<0.000020	<0.000020		<0.000020	<0.000020		<0.00020	<0.00020		<0.00020	<0.00020		<0.000020	<0.000020		<0.000020
Molybdenum D-Mo	<0.10	<0.10		0.0069	0.0070	1.4	0.0339	0.0326	3.9	<0.0050	<0.0050		0.133	0.138	3.7	<0.0020	<0.0020		<0.010
Nickel D-Ni	1.15	1.12	2.6	<0.0020	<0.0020		<0.0010	<0.0010		0.116	0.117	0.9	<0.25	<0.25		0.0077	0.0080	3.8	<0.010
Potassium D-K	11.6	13.4	14.4	3.2	3.4	6.1	10.1	9.6	5.1	-	-		-	-		2.4	2.4	0.0	3.3
Selenium D-Se	<0.10	<0.10		<0.0020	<0.0020		<0.0010	<0.0010		<0.0050	<0.0050		<0.050	<0.050		<0.0020	<0.0020		<0.010
Silver D-Ag	<0.0020	<0.0020		<0.000040	<0.000040		<0.000020	<0.000020		<0.00025	<0.00025		<0.0025	<0.0025		<0.000040	<0.000040		<0.00020
Sodium D-Na	58.2	55.8	4.2	33.0	34.7	5.0	75.1	72.9	3.0	41.1	41.7	1.4	465	469	0.9	5.6	5.4	3.6	14.4
Thallium D-Tl	<0.020	<0.020		<0.00040	<0.00040		<0.00020	<0.00020		<0.0010	<0.0010		<0.010	<0.010		<0.00040	<0.00040		<0.0020
Tin D-Sn	<0.050	<0.050		<0.0010	<0.0010		<0.00050	<0.00050		-	-		-	-		<0.0010	<0.0010		<0.0050
Titanium D-Ti	0.063	0.082	26.2	<0.010	<0.010		<0.010	<0.010		<0.050	<0.050		<0.25	<0.25		<0.010	<0.010		<0.010
Uranium D-U	<0.020	<0.020		0.00811	0.00831	2.4	<0.00020	<0.00020		0.0071	0.0070	1.4	<0.010	<0.010		0.00451	0.00443	1.8	0.156
Vanadium D-V	0.128	<0.080		<0.030	<0.030		<0.030	<0.030		0.047	<0.030		<0.15	<0.15		<0.030	<0.030		<0.030
Zinc D-Zn	455	438	3.8	<0.010	0.011		0.0057	0.0113	65.9	0.0175	0.0186	6.1	227	233	2.6	0.150	0.155	3.3	0.386

does not satisfy PQL, therefore RPD not useful

Appendix B. Summary of QA/QC Field Duplicates

September 2006 Sampling

ALS Report ID	Z3083		Z3084	Z3084		Z3085	Z3085		Z3086	Z3086	
Date submitted	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006	
Date of report	13/10/2006		12/10/2006	12/10/2006		12/10/2006	12/10/2006		INTERIM	INTERIM	
RESULTS OF ANALYSIS											
	split	RPD (%)	sample	split	RPD (%)	sample	split	RPD (%)	sample	split	RPD (%)
Sample ID	BH-14B-S		SRK05-SP-4B	SRK05-SP-4B-S		P96-9A	P96-9A-S		P03-03-03	P03-03-03-S	
Date Sampled	18/09/2006		20/09/2006	20/09/2006		19/09/2006	19/09/2006		22/09/2006	22/09/2006	
Time Sampled											
ALS Sample ID	7		15	16		7	9		3	4	
Physical Tests											
Conductivity (uS/cm)	3500	0.3	6140	6160	0.3	3070	3080	0.3	906	906	0.0
Hardness CaCO3	2080	1.0	4830	4870	0.8	2250	2160	4.1	405	412	1.7
pH	7.70	0.0	6.66	6.72	0.9	7.56	7.57	0.1	5.63	5.59	0.7
Dissolved Anions											
Alkalinity-Total CaCO3	419	5.1	203	208	2.4	509	507	0.4	8.2	9.0	9.3
Sulphate SO4	1790	1.7	3660	5080	32.5	1700	1690	0.6	469	466	0.6
Dissolved Metals											
Aluminum D-Al	<0.050		<0.50	<0.50		<0.025	<0.025		0.200	0.201	0.5
Antimony D-Sb	<0.0050		<0.050	<0.050		<0.0025	<0.0025		<0.0010	<0.0010	
Arsenic D-As	<0.0050		<0.050	<0.050		<0.0025	<0.0025		<0.0010	<0.0010	
Barium D-Ba	<0.020		<0.060	<0.060		0.077	0.068	12.4	<0.020	<0.020	
Beryllium D-Be	<0.010		<0.10	<0.10		<0.0050	<0.0050		<0.0020	<0.0020	
Boron D-B	<0.10		<0.30	<0.30		<0.10	<0.10		<0.10	<0.10	
Cadmium D-Cd	0.00018	0.0	0.0722	0.0719	0.4	0.000692	0.000597	14.7	0.0111	0.0111	0.0
Calcium D-Ca	504	1.0	497	500	0.6	395	382	3.3	122	124	1.6
Chromium D-Cr	<0.010		<0.10	<0.10		<0.0050	<0.0050		<0.0020	<0.0020	
Cobalt D-Co	<0.0030		<0.030	<0.030		<0.0015	<0.0015		0.211	0.213	0.9
Copper D-Cu	<0.010		<0.10	<0.10		<0.0050	<0.0050		<0.0020	<0.0020	
Iron D-Fe	<0.030		<0.090	<0.090		0.040	<0.030		40.7	41.5	1.9
Lead D-Pb	<0.0050		<0.050	<0.050		<0.0025	<0.0025		<0.0010	<0.0010	
Lithium D-Li	<0.050		<0.50	<0.50		<0.025	<0.025		0.034	0.034	0.0
Magnesium D-Mg	199	1.0	871	880	1.0	306	292	4.7	24.5	24.9	1.6
Manganese D-Mn	0.0030		132	133	0.8	0.0738	0.0652	12.4	15.8	16.0	1.3
Mercury D-Hg	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020		<0.000020	<0.000020	
Molybdenum D-Mo	<0.010		<0.10	<0.10		<0.0050	<0.0050		<0.0020	<0.0020	
Nickel D-Ni	<0.010		2.69	2.69	0.0	0.0073	0.0072	1.4	0.243	0.243	0.0
Potassium D-K	3.3	0.0	12.1	12.8	5.6	5.7	5.2	9.2	3.5	3.6	2.8
Selenium D-Se	<0.010		<0.10	<0.10		<0.0050	<0.0050		<0.0020	<0.0020	
Silver D-Ag	<0.00020		<0.0020	<0.0020		<0.00010	<0.00010		<0.000040	<0.000040	
Sodium D-Na	14.3	0.7	23.5	24.7	5.0	16.7	14.5	14.1	9.1	9.2	1.1
Thallium D-Tl	<0.0020		<0.020	<0.020		<0.0010	<0.0010		<0.00040	<0.00040	
Tin D-Sn	<0.0050		<0.050	<0.050		<0.0025	<0.0025		<0.0010	<0.0010	
Titanium D-Ti	<0.010		<0.030	<0.030		<0.010	<0.010		<0.010	<0.010	
Uranium D-U	0.147	5.9	<0.020	<0.020		0.0399	0.0387	3.1	<0.00040	<0.00040	
Vanadium D-V	<0.030		0.097	0.107	9.8	<0.030	<0.030		<0.030	<0.030	
Zinc D-Zn	0.391	1.3	373	371	0.5	0.091	0.061	39.5	14.6	14.7	0.7

Appendix B. Summary of QA/QC Field Duplicates

November 2006 Sampling

ALS Report ID	L451213	L451213		L451213	L451213	
Date submitted	06-Nov-06	06-Nov-06		06-Nov-06	06-Nov-06	
Date of report	23-Nov-06	23-Nov-06		23-Nov-06	23-Nov-06	
RESULTS OF ANALYSIS						
	sample	split	RPD (%)	sample	split	RPD (%)
Sample ID	P03-04-04	P03-04-04-S		P03-08-03	P03-08-03-S	
Date Sampled	02-Nov-06	02-Nov-06		01-Nov-06	01-Nov-06	
Time Sampled						
ALS Sample ID	L451213-6	L451213-7		L451213-10	L451213-11	
Physical Tests						
Conductivity (uS/cm)	503	505	0.4	409	413	1.0
Hardness CaCO3	1180	1180	0.0	741	742	0.1
pH	7.56	7.63	0.9	7.64	7.78	1.8
Dissolved Anions						
Alkalinity-Total CaCO3	222	221	0.5	302	295	2.3
Sulphate SO4	459	464	1.1	153	152	0.7
Dissolved Metals						
Aluminum D-Al	<0.025	<0.025		<0.025	<0.025	
Antimony D-Sb	<0.0025	<0.0025		<0.0025	<0.0025	
Arsenic D-As	0.0056	0.0057	1.8	<0.0025	<0.0025	
Barium D-Ba	0.060	0.062	3.3	0.136	0.136	0.0
Beryllium D-Be	<0.0050	<0.0050		<0.0050	<0.0050	
Boron D-B	<0.20	<0.20		<0.20	<0.20	
Cadmium D-Cd	<0.000085	<0.000085		0.000220	0.000152	36.6
Calcium D-Ca	162	163	0.6	117	118	0.9
Chromium D-Cr	<0.0050	<0.0050		<0.0050	<0.0050	
Cobalt D-Co	0.0054	0.0056	3.6	<0.0015	<0.0015	
Copper D-Cu	<0.0050	<0.0050		<0.0050	<0.0050	
Iron D-Fe	5.43	5.48	0.9	0.088	0.076	14.6
Lead D-Pb	<0.0025	<0.0025		<0.0025	<0.0025	
Lithium D-Li	<0.025	<0.025		<0.025	<0.025	
Magnesium D-Mg	23.6	24.0	1.7	28.7	28.8	0.3
Manganese D-Mn	5.82	6.05	3.9	6.68	6.73	0.7
Mercury D-Hg	<0.000020	<0.000020		<0.000020	<0.000020	
Molybdenum D-Mo	<0.0050	<0.0050		<0.0050	<0.0050	
Nickel D-Ni	<0.0050	<0.0050		0.0265	0.0262	1.1
Potassium D-K	<4.0	<4.0		<4.0	<4.0	
Selenium D-Se	<0.0050	<0.0050		<0.0050	<0.0050	
Silver D-Ag	<0.00010	<0.00010		<0.00010	<0.00010	
Sodium D-Na	85.1	86.2	1.3	13.0	13.0	0.0
Thallium D-Tl	<0.0010	<0.0010		<0.0010	<0.0010	
Tin D-Sn	<0.0025	<0.0025		<0.0025	<0.0025	
Titanium D-Ti	<0.020	<0.020		<0.020	<0.020	
Uranium D-U	0.0026	0.0028	7.4	0.0045	0.0044	2.2
Vanadium D-V	<0.060	<0.060		<0.060	<0.060	
Zinc D-Zn	<0.025	<0.025		<0.025	<0.025	

Appendix B. Summary of QA/QC Laboratory Duplicates

June 2006 Sampling

ALS Report ID	X6957	X6957		X6957	X6957		X7082	X7082		X7082	X7082		X7083	X7083	
Date submitted	08/06/2006	08/06/2006		08/06/2006	08/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006	
Date of report	23/06/2006	23/06/2006		23/06/2006	23/06/2006		27/06/2006	27/06/2006		27/06/2006	27/06/2006		27/06/2006	27/06/2006	
RESULTS OF ANALYSIS															
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	P05-041	P05-041		BH12A	BH12A		P01-52B	P01-52B		SRK05- SP4A	SRK05- SP4A		P03-06- 02	P03-06- 02	
Date Sampled	05/06/2006	QC# 505493		05/06/2006	QC# 505494		07/06/2006	QC# 506240		06/06/2006	QC# 506241		07/06/2006	QC# 506260	
Time Sampled	12:18			13:20			12:54			11:30			15:31		
ALS Sample ID	6			12			3			18			2		
Physical Tests															
Conductivity (uS/cm)	379	378	0.264	2550	2550	0	1230	1220	0.816	730	727	0.412	1760	1760	0
Hardness CaCO3	-	-	-	1650	1620	1.83	-	-	-	-	-	-	-	-	-
pH	7.11	7.10	0.141	7.35	7.47	1.62	8.05	8.02	0.373	6.92	6.92	0	7.63	7.61	0.262
Dissolved Anions															
Alkalinity-Total CaCO3	161	150	7.07	230	234	1.72	492	490	0.407	254	259	1.95	181	179	1.11
Bromide Br	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphate SO4	45.6	44.5	2.44	135	136	0.738	294	275	6.68	179	182	1.66	855	834	2.49
Dissolved Metals															
Aluminum D-Al	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antimony D-Sb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic D-As	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium D-Ba	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium D-Be	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron D-B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium D-Cd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium D-Ca	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium D-Cr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt D-Co	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper D-Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron D-Fe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead D-Pb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithium D-Li	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium D-Mg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese D-Mn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury D-Hg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum D-Mo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel D-Ni	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium D-K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium D-Se	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver D-Ag	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium D-Na	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thallium D-Tl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tin D-Sn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanium D-Ti	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Uranium D-U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium D-V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc D-Zn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B. Summary of QA/QC Laboratory Duplicates

June 2006 Sampling

ALS Report ID	X7083	X7083		X7084	X7084		X7084	X7084		X7089	X7089		X7089	X7089	
Date submitted	12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006		12/06/2006	12/06/2006	
Date of report	27/06/2006	27/06/2006		04/07/2006	04/07/2006		04/07/2006	04/07/2006		04/07/2006	04/07/2006		04/07/2006	04/07/2006	
RESULTS OF ANALYSIS															
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	P03-06- 04	P03-06- 04		P03-09- 04	P03-09- 04		P03-09- 09	P03-09- 09		P03-01- 09	P03-01- 09		X24D-96	X24D-96	
Date Sampled	07/06/2006	QC# 506261		06/06/2006	QC# 506262		06/06/2006	QC# 506263			QC# 506267		09/06/2006	QC# 506268	
Time Sampled	15:31			12:10			13:30						11:47		
ALS Sample ID	5			12			17			10			16		
Physical Tests															
Conductivity (uS/cm)	1190	1190	0	1010	1010	0	802	804	0.249	31400	31500	0.318	2710	2720	0.368
Hardness CaCO3	-	-	-	515	486	5.79	341	350	2.6	4020	4180	3.9	1640	1610	1.85
pH	7.19	7.24	0.693	7.99	8.00	0.125	8.03	8.01	0.249	3.04	3.05	0.328	7.58	7.60	0.264
Dissolved Anions															
Alkalinity-Total CaCO3	118	116	1.71	262	260	0.766	176	184	4.44	<2.0	<2.0	0	399	401	0.5
Bromide Br	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphate SO4	538	539	0.186	286	286	0	250	240	4.08	46300	46100	0.433	1410	1380	2.15
Dissolved Metals															
Aluminum D-Al	-	-	-	<0.010	<0.010	0	<0.010	<0.010	0	<5.0	<5.0	0	<0.050	<0.050	0
Antimony D-Sb	-	-	-	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.50	<0.50	0	<0.0050	<0.0050	0
Arsenic D-As	-	-	-	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.50	<0.50	0	<0.0050	<0.0050	0
Barium D-Ba	-	-	-	0.039	0.038	2.6	0.040	0.039	2.53	<1.0	<1.0	0	0.024	0.022	8.7
Beryllium D-Be	-	-	-	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<1.0	<1.0	0	<0.010	<0.010	0
Boron D-B	-	-	-	<0.10	<0.10	0	<0.10	<0.10	0	<5.0	<5.0	0	<0.10	<0.10	0
Cadmium D-Cd	-	-	-	0.000037	0.000057	42.6	0.000110	0.000092	17.8	<0.017	<0.017	0	0.00295	0.00284	3.8
Calcium D-Ca	-	-	-	156	145	7.31	102	106	3.85	475	491	3.31	487	481	1.24
Chromium D-Cr	-	-	-	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<1.0	<1.0	0	<0.010	<0.010	0
Cobalt D-Co	-	-	-	0.00397	0.00409	2.98	0.00175	0.00182	3.92	<0.30	<0.30	0	0.0414	0.0410	0.971
Copper D-Cu	-	-	-	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<1.0	<1.0	0	<0.010	<0.010	0
Iron D-Fe	-	-	-	0.097	0.089	8.6	0.043	0.046	6.74	24000	25000	4.08	<0.030	<0.030	0
Lead D-Pb	-	-	-	<0.0010	<0.0010	0	<0.0010	<0.0010	0	1.40	1.35	3.64	<0.0050	<0.0050	0
Lithium D-Li	-	-	-	<0.010	<0.010	0	<0.010	<0.010	0	<5.0	<5.0	0	<0.050	<0.050	0
Magnesium D-Mg	-	-	-	30.7	29.8	2.98	21.1	20.6	2.4	687	717	4.27	102	100	1.98
Manganese D-Mn	-	-	-	5.41	5.50	1.65	3.40	3.38	0.59	178	175	1.7	44.7	45.2	1.11
Mercury D-Hg	-	-	-	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0
Molybdenum D-Mo	-	-	-	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<1.0	<1.0	0	<0.010	<0.010	0
Nickel D-Ni	-	-	-	0.0089	0.0091	2.22	0.0117	0.0120	2.53	<1.0	<1.0	0	0.177	0.180	1.68
Potassium D-K	-	-	-	3.0	2.9	3.39	<2.0	<2.0	0	<100	<100	0	6.4	5.9	8.13
Selenium D-Se	-	-	-	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<1.0	<1.0	0	<0.010	<0.010	0
Silver D-Ag	-	-	-	<0.000040	<0.000040	0	<0.000040	<0.000040	0	<0.020	<0.020	0	<0.00020	<0.00020	0
Sodium D-Na	-	-	-	25.8	25.2	2.35	19.7	19.3	2.05	290	300	3.39	49.3	45.3	8.46
Thallium D-Tl	-	-	-	<0.00040	<0.00040	0	<0.00040	<0.00040	0	<0.20	<0.20	0	<0.0020	<0.0020	0
Tin D-Sn	-	-	-	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.50	<0.50	0	<0.0050	<0.0050	0
Titanium D-Ti	-	-	-	<0.010	<0.010	0	<0.010	<0.010	0	<0.50	<0.50	0	<0.010	<0.010	0
Uranium D-U	-	-	-	0.00602	0.00601	0.166	0.00322	0.00328	1.85	<0.20	<0.20	0	0.0053	0.0053	0
Vanadium D-V	-	-	-	<0.030	<0.030	0	<0.030	<0.030	0	<1.5	<1.5	0	<0.030	<0.030	0
Zinc D-Zn	-	-	-	<0.0050	<0.0050	0	<0.010	<0.010	0	3350	3280	2.11	0.290	0.288	0.692

Appendix B. Summary of QA/QC Laboratory Duplicates

June 2006 Sampling

ALS Report ID	X7094	X7094		X7095	X7095		X7433	X7433		X7471	X7471		X7471	X7471	
Date submitted	12/06/2006	12/06/2006		12/06/2006	12/06/2006		19/06/2006	19/06/2006		19/06/2006	19/06/2006		19/06/2006	19/06/2006	
Date of report	29/06/2006	29/06/2006		05/07/2006	05/07/2006		05/07/2006	05/07/2006		10/07/2006	10/07/2006		10/07/2006	10/07/2006	
RESULTS OF ANALYSIS															
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	X18B	X18B		P03-01-05	P03-01-05		P03-03-02	P03-03-02		X21B-96	X21B-96		ETA-05-4	ETA-05-4	
Date Sampled	08/06/2006	QC# 506242		09/06/2006	QC# 506246		15/06/2006	QC# 507019		13/06/2006	QC# 506733		14/06/2006	QC# 506734	
Time Sampled	18:18			11:00			13:40			17:31			11:55		
ALS Sample ID	7			6			2			3			11		
Physical Tests															
Conductivity (uS/cm)	1400	1400	0	554	553	0.181	2710	2740	1.1	1360	1380	1.46	6360	6330	0.473
Hardness CaCO3	820	829	1.09	-	-	-	556	534	4.04	650	665	2.28	3890	3880	0.257
pH	8.00	7.97	0.376	7.49	7.48	0.134	-	-	-	7.37	7.53	2.15	6.05	6.07	0.33
Dissolved Anions															
Alkalinity-Total CaCO3	250	257	2.76	64.4	48.5	28.2	6.9	5.2	28.1		166	0.604	46.8	47.7	1.9
Bromide Br	-	-	-	-	-	-	<5.0	<5.0	0	165	-	-	-	-	-
Sulphate SO4	539	532	1.31	191	198	3.6	2010	1970	2.01	590	588	0.34	5390	5430	0.739
Dissolved Metals															
Aluminum D-Al	<0.025	<0.025	0	-	-	-	2.90	3.14	7.95	<0.025	<0.025	0	1.13	0.94	18.4
Antimony D-Sb	<0.0025	<0.0025	0	-	-	-	<0.025	<0.025	0	<0.0025	<0.0025	0	<0.050	<0.050	0
Arsenic D-As	<0.0025	<0.0025	0	-	-	-	<0.025	<0.025	0	0.0049	0.0048	2.06	<0.050	<0.050	0
Barium D-Ba	0.153	0.154	0.651	-	-	-	<0.020	<0.020	0	0.022	0.022	0	<0.040	<0.040	0
Beryllium D-Be	<0.0050	<0.0050	0	-	-	-	<0.050	<0.050	0	<0.0050	<0.0050	0	<0.10	<0.10	0
Boron D-B	<0.10	<0.10	0	-	-	-	<0.10	<0.10	0	<0.10	<0.10	0	<0.20	<0.20	0
Cadmium D-Cd	0.000374	0.000279	29.1	-	-	-	0.0143	0.0164	13.7	<0.000085	<0.000085	0	0.0323	0.0325	0.617
Calcium D-Ca	232	234	0.858	-	-	-	133	128	3.83	192	198	3.08	411	411	0
Chromium D-Cr	<0.0050	<0.0050	0	-	-	-	<0.050	<0.050	0	<0.0050	<0.0050	0	<0.10	<0.10	0
Cobalt D-Co	<0.0015	<0.0015	0	-	-	-	0.179	0.197	9.57	0.0076	0.0074	2.67	0.630	0.632	0.317
Copper D-Cu	<0.0050	<0.0050	0	-	-	-	0.050	0.058	14.8	<0.0050	<0.0050	0	<0.10	<0.10	0
Iron D-Fe	0.085	0.087	2.33	-	-	-	644	630	2.2	42.4	42.0	0.948	502	505	0.596
Lead D-Pb	<0.0025	<0.0025	0	-	-	-	<0.025	<0.025	0	<0.0025	<0.0025	0	0.062	0.060	3.28
Lithium D-Li	<0.025	<0.025	0	-	-	-	<0.25	<0.25	0	<0.025	<0.025	0	<0.50	<0.50	0
Magnesium D-Mg	58.5	59.4	1.53	-	-	-	54.6	52.3	4.3	41.4	41.3	0.242	695	694	0.144
Manganese D-Mn	2.41	2.38	1.25	-	-	-	17.0	18.7	9.52	14.2	13.7	3.58	74.2	74.2	0
Mercury D-Hg	<0.000020	<0.000020	0	-	-	-	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0
Molybdenum D-Mo	<0.0050	<0.0050	0	-	-	-	<0.050	<0.050	0	<0.0050	<0.0050	0	<0.10	<0.10	0
Nickel D-Ni	0.0148	0.0145	2.05	-	-	-	0.242	0.273	12	0.0094	0.0090	4.35	1.03	1.02	0.976
Potassium D-K	5.3	5.3	0	-	-	-	4.7	4.6	2.15	3.5	3.6	2.82	9.0	9.0	0
Selenium D-Se	<0.0050	<0.0050	0	-	-	-	<0.050	<0.050	0	<0.0050	<0.0050	0	<0.10	<0.10	0
Silver D-Ag	<0.00010	<0.00010	0	-	-	-	<0.0010	<0.0010	0	<0.00010	<0.00010	0	<0.0020	<0.0020	0
Sodium D-Na	21.4	21.6	0.93	-	-	-	14.4	14.4	0	69.8	70.9	1.56	55.3	55.7	0.721
Thallium D-Tl	<0.0010	<0.0010	0	-	-	-	<0.010	<0.010	0	<0.0010	<0.0010	0	<0.020	<0.020	0
Tin D-Sn	<0.0025	<0.0025	0	-	-	-	<0.025	<0.025	0	<0.0025	<0.0025	0	<0.050	<0.050	0
Titanium D-Ti	<0.010	<0.010	0	-	-	-	<0.010	<0.010	0	<0.010	<0.010	0	<0.020	<0.020	0
Uranium D-U	0.0107	0.0107	0	-	-	-	<0.010	<0.010	0	0.0029	0.0028	3.51	<0.020	<0.020	0
Vanadium D-V	<0.030	<0.030	0	-	-	-	<0.030	<0.030	0	<0.030	<0.030	0	0.065	0.064	1.55
Zinc D-Zn	0.110	0.110	0	-	-	-	135	144	6.45	0.160	0.156	2.53	393	392	0.255

Appendix B. Summary of QA/QC Laboratory Duplicates

August 2006 Sampling

ALS Report ID	X9793	X9793		X9793	X9793		X9794	X9794	
Date submitted	08/08/2006	08/08/2006		08/08/2006	08/08/2006		08/08/2006	08/08/2006	
Date of report	21/08/2006	21/08/2006		21/08/2006	21/08/2006		17/08/2006	17/08/2006	
RESULTS OF ANALYSIS									
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	X24D-96	X24D-96		P03-09- 09	P03-09- 09		P05-01- 06	P05-01- 06	
Date Sampled	02/08/2006	QC# 515420		01/08/2006	QC# 515421		01/08/2006	QC# 515478	
Time Sampled	15:50			16:55			15:26		
ALS Sample ID	1			15			6		
Physical Tests									
Conductivity (uS/cm)	2780	2770	0.36	1170	1160	0.858	1830	1830	0
Hardness CaCO3	1780	1700	4.6	660	655	0.76	1150	1140	0.873
pH	7.44	7.47	0.402	7.89	7.88	0.127	7.84	7.83	0.128
Dissolved Anions									
Alkalinity-Total CaCO3	356	381	6.78	261	245	6.32	247	250	1.21
Sulphate SO4	1650	1480	10.9	379	396	4.39	851	848	0.353
Dissolved Metals									
Aluminum D-Al	<0.050	<0.050	0	<0.010	<0.010	0	<0.025	<0.025	0
Antimony D-Sb	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0025	<0.0025	0
Arsenic D-As	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0025	<0.0025	0
Barium D-Ba	0.023	<0.020	14	0.067	0.065	3.03	0.031	0.031	0
Beryllium D-Be	<0.010	<0.010	0	<0.0020	<0.0020	0	<0.0050	<0.0050	0
Boron D-B	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0
Cadmium D-Cd	0.00253	0.00287	12.6	0.000086	0.000088	2.3	<0.000085	<0.000085	0
Calcium D-Ca	513	490	4.59	200	199	0.501	347	343	1.16
Chromium D-Cr	<0.010	<0.010	0	<0.0020	<0.0020	0	<0.0050	<0.0050	0
Cobalt D-Co	0.0407	0.0427	4.8	0.00210	0.00210	0	0.0073	0.0073	0
Copper D-Cu	<0.010	<0.010	0	<0.0020	<0.0020	0	<0.0050	0.0050	0.0000
Iron D-Fe	<0.030	<0.030	0	0.135	0.135	0	3.91	3.99	2.03
Lead D-Pb	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0025	<0.0025	0
Lithium D-Li	<0.050	<0.050	0	0.011	0.010	9.52	<0.025	<0.025	0
Magnesium D-Mg	121	115	5.08	39.2	38.0	3.11	69.6	68.6	1.45
Manganese D-Mn	48.5	50.4	3.84	6.55	6.56	0.153	14.6	14.7	0.683
Mercury D-Hg	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0
Molybdenum D-Mo	<0.010	<0.010	0	<0.0020	<0.0020	0	<0.0050	<0.0050	0
Nickel D-Ni	0.177	0.188	6.03	0.0080	0.0081	1.24	0.0058	0.0067	14.4
Potassium D-K	6.7	5.7	16.1	3.6	3.5	2.82	7.1	7.3	2.78
Selenium D-Se	<0.010	<0.010	0	<0.0020	<0.0020	0	<0.0050	<0.0050	0
Silver D-Ag	<0.00020	<0.00020	0	<0.000040	<0.000040	0	<0.00010	<0.00010	0
Sodium D-Na	49.0	42.2	14.9	34.1	33.2	2.67	37.3	38.6	3.43
Thallium D-Tl	<0.0020	<0.0020	0	<0.00040	<0.00040	0	<0.0010	<0.0010	0
Tin D-Sn	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0025	<0.0025	0
Titanium D-Ti	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0
Uranium D-U	0.0053	0.0054	1.87	0.00537	0.00533	0.748	0.0029	0.0030	3.39
Vanadium D-V	<0.030	<0.030	0	<0.030	<0.030	0	<0.030	<0.030	0
Zinc D-Zn	0.068	0.072	5.71	<0.010	<0.010	0	<0.025	<0.025	0

Appendix B. Summary of QA/QC Laboratory Duplicates

September 2006 Sampling

ALS Report ID	Z3051	Z3051		Z3051	Z3051		Z3052	Z3052		Z3052	Z3052		Z3054	Z3054		Z3064	Z3064	
Date submitted	27/09/2006	27/09/2006		27/09/2006	27/09/2006		26/09/2006	26/09/2006		26/09/2006	26/09/2006		26/09/2006	26/09/2006		27/09/2006	27/09/2006	
Date of report	12/10/2006	12/10/2006		12/10/2006	12/10/2006		10/10/2006	10/10/2006		10/10/2006	10/10/2006		10/10/2006	10/10/2006		12/10/2006	12/10/2006	
RESULTS OF ANALYSIS																		
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	P01-01A	P01-01A		ETA-05-04	ETA-05-04		P05-01-06	P05-01-06		P03-09-04	P03-09-04		P03-06-05	P03-06-05		X21A-96	X21A-96	
Date Sampled	22/09/2006	QC# 524270		22/09/2006	QC# 524271		19/09/2006	QC# 524274		19/09/2006	QC# 524275		21/09/2006	QC# 524283		21/09/2006	QC# 524462	
Time Sampled																		
ALS Sample ID	1			16			6			10			5			14		
Physical Tests																		
Conductivity (uS/cm)	1510	1510	0	6430	6410	0.312	1840	1830	0.545	1260	1270	0.791	2040	2040	0	12500	12500	0
Hardness CaCO3	850	820	3.59	3340	3210	3.97	1070	1090	1.85	690	722	4.53	849	822	3.23	4930	4990	1.21
pH	7.84	7.96	1.52	5.76	5.78	0.347	7.89	7.89	0	8.10	8.13	0.37	6.11	6.04	1.15	-	-	-
Dissolved Anions																		
Alkalinity-Total CaCO3	256	268	4.58	120	119	0.837	245	257	4.78	281	280	0.357	23.2	23.6	1.71	12.8	13.8	7.52
Sulphate SO4	617	618	0.162	5350	5370	0.373	850	847	0.354	447	451	0.891	1340	1340	0	13800	7550	58.5
Dissolved Metals																		
Aluminum D-Al	<0.025	<0.025	0	4.48	4.55	1.55	<0.025	<0.025	0	-	-	-	<0.025	<0.025	0	<1.0	<1.0	0
Antimony D-Sb	<0.0025	<0.0025	0	<0.050	<0.050	0	<0.0025	<0.0025	0	-	-	-	<0.0025	<0.0025	0	<0.050	<0.050	0
Arsenic D-As	<0.0025	<0.0025	0	<0.050	<0.050	0	<0.0025	<0.0025	0	-	-	-	0.0078	0.0078	0	<0.10	<0.10	0
Barium D-Ba	0.102	0.099	2.99	<0.040	<0.040	0	0.032	0.032	0	0.055	0.059	7.02	<0.020	<0.020	0	<0.20	<0.20	0
Beryllium D-Be	<0.0050	<0.0050	0	<0.10	<0.10	0	<0.0050	<0.0050	0	-	-	-	<0.0050	<0.0050	0	<0.050	<0.050	0
Boron D-B	<0.10	<0.10	0	<0.20	<0.20	0	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0	<1.0	<1.0	0
Cadmium D-Cd	0.000551	0.000532	3.51	0.0465	0.0443	4.85	<0.000085	<0.000085	0	-	-	-	<0.000085	<0.000085	0	<0.0050	<0.0050	0
Calcium D-Ca	254	243	4.43	458	442	3.56	318	322	1.25	208	217	4.24	127	123	3.2	329	374	12.8
Chromium D-Cr	<0.0050	<0.0050	0	<0.10	<0.10	0	<0.0050	<0.0050	0	-	-	-	<0.0050	<0.0050	0	<0.050	<0.050	0
Cobalt D-Co	<0.0015	<0.0015	0	0.804	0.807	0.372	0.0070	0.0073	4.2	-	-	-	0.0093	0.0090	3.28	<0.050	<0.050	0
Copper D-Cu	<0.0050	<0.0050	0	<0.10	<0.10	0	<0.0050	<0.0050	0	-	-	-	<0.0050	<0.0050	0	<0.10	<0.10	0
Iron D-Fe	<0.030	<0.030	0	852	843	1.06	4.21	4.28	1.65	<0.030	<0.030	0	240	247	2.87	4900	5550	12.4
Lead D-Pb	<0.0025	<0.0025	0	0.089	0.089	0	<0.0025	<0.0025	0	-	-	-	0.0025	0.0025	0	<0.10	<0.10	0
Lithium D-Li	<0.025	<0.025	0	<0.50	<0.50	0	<0.025	<0.025	0	-	-	-	0.029	0.027	7.14	<0.50	<0.50	0
Magnesium D-Mg	52.2	51.8	0.769	533	512	4.02	68.3	68.8	0.729	41.8	43.8	4.67	129	125	3.15	997	984	1.31
Manganese D-Mn	4.72	4.46	5.66	73.6	74.8	1.62	16.6	17.0	2.38	-	-	-	32.0	31.0	3.17	446	476	6.51
Mercury D-Hg	<0.000020	<0.000020	0	0.000026	0.000024	8	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0
Molybdenum D-Mo	<0.0050	<0.0050	0	<0.10	<0.10	0	<0.0050	<0.0050	0	-	-	-	<0.0050	<0.0050	0	<0.10	<0.10	0
Nickel D-Ni	0.0059	0.0059	0	1.06	1.06	0	0.0062	0.0060	3.28	-	-	-	0.0364	0.0364	0	<0.50	<0.50	0
Potassium D-K	5.6	5.4	3.64	11.4	11.2	1.77	5.8	5.8	0	3.9	4.1	5	2.4	2.6	8	-	-	-
Selenium D-Se	<0.0050	<0.0050	0	<0.10	<0.10	0	<0.0050	<0.0050	0	-	-	-	<0.0050	<0.0050	0	<0.10	<0.10	0
Silver D-Ag	<0.00010	<0.00010	0	<0.0020	<0.0020	0	<0.00010	<0.00010	0	-	-	-	<0.00010	<0.00010	0	<0.0050	<0.0050	0
Sodium D-Na	24.7	24.3	1.63	55.8	54.8	1.81	40.2	39.9	0.749	36.8	39.1	6.06	27.9	29.0	3.87	<20	22	9.52
Thallium D-Tl	<0.0010	<0.0010	0	<0.020	<0.020	0	<0.0010	<0.0010	0	-	-	-	<0.0010	<0.0010	0	<0.020	<0.020	0
Tin D-Sn	<0.0025	<0.0025	0	<0.050	<0.050	0	<0.0025	<0.0025	0	-	-	-	<0.0025	<0.0025	0	-	-	-
Titanium D-Ti	<0.010	<0.010	0	<0.020	<0.020	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.50	<0.50	0
Uranium D-U	0.0086	0.0083	3.55	<0.020	<0.020	0	0.0030	0.0031	3.28	-	-	-	0.0041	0.0039	5	<0.020	<0.020	0
Vanadium D-V	<0.030	<0.030	0	0.119	0.117	1.69	<0.030	<0.030	0	<0.030	<0.030	0	0.038	0.045	16.9	1.42	0.90	44.8
Zinc D-Zn	<0.025	<0.025	0	548	555	1.27	<0.025	<0.025	0	-	-	-	34.7	33.9	2.33	59.3	58.3	1.7

RPD >50%; PQL satisfied, therefore further investigation required

Appendix B. Summary of QA/QC Laboratory Duplicates

September 2006 Sampling

ALS Report ID	Z3064	Z3064		Z3072	Z3072		Z3072	Z3072		Z3083	Z3083		Z3083	Z3083		Z3084	Z3084		Z3084
Date submitted	27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006
Date of report	12/10/2006	12/10/2006		12/10/2006	12/10/2006		12/10/2006	12/10/2006		13/10/2006	13/10/2006		13/10/2006	13/10/2006		12/10/2006	12/10/2006		12/10/2006
RESULTS OF ANALYSIS																			
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample
Sample ID	X21C-96	X21C-96		P03-01- 04	P03-01- 04		P03-02- 03	P03-02- 03		P96-6	P96-6		BH-12AS	BH-12AS		S2B	S2B		SRK05- SP-4B-S
Date Sampled	21/09/2006	QC# 524463		21/09/2006	QC# 524460		21/09/2006	QC# 524461		18/09/2006	QC# 524477		18/09/2006	QC# 524478		20/09/2006	QC# 524483		20/09/2006
Time Sampled																			
ALS Sample ID	16			4			13			1			3			4			16
Physical Tests																			
Conductivity (uS/cm)	337	330	2.1	201	201	0	399	393	1.52	900	905	0.554	919	918	0.109	4330	4300	0.695	6160
Hardness CaCO3	169	169	0	90.1	87.9	2.47	198	191	3.6	537	560	4.19	541	536	0.929	3110	3040	2.28	4870
pH	7.97	8.12	1.86	7.26	7.21	0.691	7.56	7.52	0.531	7.24	7.23	0.138	7.63	7.64	0.131	6.72	6.71	0.149	6.72
Dissolved Anions																			
Alkalinity-Total CaCO3	189	190	0.528	64.5	62.4	3.31	97.4	96.6	0.825	279	285	2.13	178	174	2.27	199	195	2.03	208
Sulphate SO4	11.9	12.0	0.837	50.0	48.7	2.63	125	125	0	268	274	2.21	303	303	0	3230	3200	0.933	5080
Dissolved Metals																			
Aluminum D-Al	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.10	<0.10	0	<0.50
Antimony D-Sb	<0.00050	<0.00050	0	<0.00050	<0.00050	0	<0.00050	<0.00050	0	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.010	<0.010	0	<0.050
Arsenic D-As	0.0236	0.0234	0.851	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.010	<0.010	0	<0.050
Barium D-Ba	0.197	0.195	1.02	0.047	0.046	2.15	0.147	0.140	4.88	<0.020	<0.020	0	0.036	0.035	2.82	0.046	0.042	9.09	<0.060
Beryllium D-Be	<0.0050	<0.0050	0	<0.0050	<0.0050	0	<0.0050	<0.0050	0	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<0.020	<0.020	0	<0.10
Boron D-B	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0	<0.30
Cadmium D-Cd	<0.000050	<0.000050	0	0.000660	0.000683	3.43	<0.000050	0.000052	3.92	0.000085	0.000105	21.1	0.000226	0.000206	9.26	0.00201	0.00210	4.38	0.0719
Calcium D-Ca	52.1	51.9	0.385	27.8	27.1	2.55	60.1	58.1	3.38	143	148	3.44	119	119	0	702	694	1.15	500
Chromium D-Cr	<0.00050	<0.00050	0	<0.00050	<0.00050	0	<0.00050	<0.00050	0	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<0.020	<0.020	0	<0.10
Cobalt D-Co	<0.00050	<0.00050	0	0.00143	0.00146	2.08	<0.00050	<0.00050	0	<0.00060	<0.00060	0	<0.00060	<0.00060	0	0.0125	0.0121	3.25	<0.030
Copper D-Cu	<0.0010	<0.0010	0	0.0010	0.0010	0	<0.0010	<0.0010	0	<0.0020	<0.0020	0	0.0021	<0.0020	4.88	<0.020	<0.020	0	<0.10
Iron D-Fe	0.523	0.507	3.11	<0.030	<0.030	0	0.035	0.032	8.96	0.044	<0.030	37.8	<0.030	<0.030	0	119	112	6.06	<0.090
Lead D-Pb	0.0017	0.0016	6.06	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.010	<0.010	0	<0.050
Lithium D-Li	<0.050	<0.050	0	<0.050	<0.050	0	<0.050	<0.050	0	0.029	0.030	3.39	0.018	0.016	11.8	<0.10	<0.10	0	<0.50
Magnesium D-Mg	9.54	9.46	0.842	5.04	4.93	2.21	11.6	11.1	4.41	43.6	46.0	5.36	58.9	58.2	1.2	330	317	4.02	880
Manganese D-Mn	0.232	0.231	0.432	2.05	1.99	2.97	<0.010	<0.010	0	0.0156	0.0158	1.27	0.0156	0.0157	0.639	23.5	23.3	0.855	133
Mercury D-Hg	<0.00020	<0.00020	0	<0.00020	<0.00020	0	<0.00020	<0.00020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020
Molybdenum D-Mo	0.0036	0.0037	2.74	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.0020	<0.0020	0	<0.0020	<0.0020	0	<0.020	<0.020	0	<0.10
Nickel D-Ni	<0.0050	<0.0050	0	0.0837	0.0860	2.71	<0.0050	<0.0050	0	0.0077	0.0079	2.56	0.0080	0.0081	1.24	0.209	0.208	0.48	2.69
Potassium D-K	-	-	-	-	-	-	-	-	-	3.0	3.1	3.28	2.4	2.3	4.26	5.1	4.8	6.06	12.8
Selenium D-Se	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.0010	<0.0010	0	0.0038	0.0040	5.13	<0.0020	<0.0020	0	<0.020	<0.020	0	<0.10
Silver D-Ag	<0.000050	<0.000050	0	<0.000050	<0.000050	0	<0.000050	<0.000050	0	<0.000040	<0.000040	0	<0.000040	<0.000040	0	<0.00040	<0.00040	0	<0.0020
Sodium D-Na	2.2	2.1	4.65	2.3	2.3	0	2.5	2.4	4.08	4.7	4.8	2.11	5.4	5.4	0	23.1	21.1	9.05	24.7
Thallium D-Tl	<0.00020	<0.00020	0	<0.00020	<0.00020	0	<0.00020	<0.00020	0	<0.00040	<0.00040	0	<0.00040	<0.00040	0	<0.0040	<0.0040	0	<0.020
Tin D-Sn	-	-	-	-	-	-	-	-	-	<0.0010	<0.0010	0	<0.0010	<0.0010	0	<0.010	<0.010	0	<0.050
Titanium D-Ti	<0.050	<0.050	0	<0.050	<0.050	0	<0.050	<0.050	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.030
Uranium D-U	<0.00020	0.00020	0.0000	<0.00020	<0.00020	0	0.00059	0.00058	1.71	0.0171	0.0172	0.583	0.00443	0.00431	2.75	<0.0040	<0.0040	0	<0.020
Vanadium D-V	<0.030	<0.030	0	<0.030	<0.030	0	<0.030	<0.030	0	<0.030	<0.030	0	<0.030	<0.030	0	<0.060	<0.060	0	0.107
Zinc D-Zn	0.0061	0.0058	5.04	0.732	0.718	1.93	0.0165	0.0095	53.8	0.219	0.224	2.26	0.155	0.152	1.95	29.0	29.1	0.344	371

does not satisfy PQL, therefore RPD not useful

Appendix B. Summary of QA/QC Laboratory Duplicates

September 2006 Sampling

ALS Report ID	Z3084		Z3085	Z3085		Z3085	Z3085		Z3086	Z3086		Z3086	Z3086	
Date submitted	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006		27/09/2006	27/09/2006	
Date of report	12/10/2006		12/10/2006	12/10/2006		12/10/2006	12/10/2006		INTERIM	INTERIM		INTERIM	INTERIM	
RESULTS OF ANALYSIS														
	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	SRK05- SP-4B-S		SRK05-06	SRK05-06		P03-08-1	P03-08-1		P03-03- 06	P03-03- 06		P03-04- 06	P03-04- 06	
Date Sampled	QC# 524485		19/09/2006	QC# 524487		19/09/2006	QC# 524488		22/09/2006	QC# 524489		21/09/2006	QC# 524490	
Time Sampled														
ALS Sample ID			11			17			7			15		
Physical Tests														
Conductivity (uS/cm)	6180	0.324	-	-	-	477	476	0.21	1780	1790	0.56	5820	5810	0.172
Hardness CaCO3	5000	2.63	-	-	-	266	282	5.84	801	805	0.498	1840	1860	1.08
pH	6.75	0.445	-	-	-	8.06	8.05	0.124	6.09	6.11	0.328	-	-	-
Dissolved Anions														
Alkalinity-Total CaCO3	226	8.29	-	-	-	263	239	9.56	17.4	18.4	5.59	16.3	16.7	2.42
Sulphate SO4	5180	1.95	-	-	-	35.9	34.1	5.14	1090	1080	0.922	-	-	-
Dissolved Metals														
Aluminum D-Al	<0.50	0	<0.025	<0.025	0	<0.0050	0.0051	1.98	<0.025	<0.025	0	<0.25	<0.25	0
Antimony D-Sb	<0.050	0	<0.0025	<0.0025	0	<0.00050	<0.00050	0	<0.0025	<0.0025	0	<0.025	<0.025	0
Arsenic D-As	<0.050	0	<0.0025	<0.0025	0	<0.00050	<0.00050	0	<0.0025	<0.0025	0	<0.025	<0.025	0
Barium D-Ba	<0.060	0	0.055	0.057	3.57	0.084	0.089	5.78	<0.020	<0.020	0	<0.20	<0.20	0
Beryllium D-Be	<0.10	0	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0050	<0.0050	0	<0.050	<0.050	0
Boron D-B	<0.30	0	<0.10	<0.10	0	<0.10	<0.10	0	<0.10	<0.10	0	<1.0	<1.0	0
Cadmium D-Cd	0.0718	0.139	0.000425	0.000384	10.1	0.000020	<0.000017	16.2	<0.000085	<0.000085	0	<0.00085	<0.00085	0
Calcium D-Ca	516	3.15	226	235	3.9	64.5	68.2	5.58	217	218	0.46	501	508	1.39
Chromium D-Cr	<0.10	0	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0050	<0.0050	0	<0.050	<0.050	0
Cobalt D-Co	<0.030	0	<0.0015	<0.0015	0	<0.00030	<0.00030	0	<0.0015	<0.0015	0	0.057	0.055	3.57
Copper D-Cu	<0.10	0	0.0092	0.0091	1.09	<0.0010	<0.0010	0	<0.0050	<0.0050	0	0.069	0.067	2.94
Iron D-Fe	<0.090	0	<0.030	<0.030	0	0.044	0.049	10.8	195	199	2.03	2150	2170	0.926
Lead D-Pb	<0.050	0	0.0041	0.0040	2.47	<0.00050	<0.00050	0	<0.0025	<0.0025	0	<0.025	<0.025	0
Lithium D-Li	<0.50	0	<0.025	<0.025	0	0.0088	0.0087	1.14	0.029	0.026	10.9	<0.25	<0.25	0
Magnesium D-Mg	902	2.47	124	128	3.17	25.4	27.1	6.48	62.8	63.2	0.635	142	143	0.702
Manganese D-Mn	130	2.28	0.0316	0.0316	0	0.0326	0.0317	2.8	17.2	16.5	4.15	20.6	20.0	2.96
Mercury D-Hg	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0	<0.000020	<0.000020	0
Molybdenum D-Mo	<0.10	0	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0050	<0.0050	0	<0.050	<0.050	0
Nickel D-Ni	2.64	1.88	<0.0050	<0.0050	0	0.0020	0.0020	0	<0.0050	<0.0050	0	0.133	0.129	3.05
Potassium D-K	12.7	0.784	3.5	3.7	5.56	<2.0	<2.0	0	5.7	5.8	1.74	<20	<20	0
Selenium D-Se	<0.10	0	<0.0050	<0.0050	0	<0.0010	<0.0010	0	<0.0050	<0.0050	0	<0.050	<0.050	0
Silver D-Ag	<0.0020	0	<0.00010	<0.00010	0	<0.000020	<0.000020	0	<0.00010	<0.00010	0	<0.0010	<0.0010	0
Sodium D-Na	24.5	0.813	10.0	10.5	4.88	2.1	2.2	4.65	75.9	77.0	1.44	110	110	0
Thallium D-Tl	<0.020	0	<0.0010	<0.0010	0	<0.00020	<0.00020	0	<0.0010	<0.0010	0	<0.010	<0.010	0
Tin D-Sn	<0.050	0	<0.0025	<0.0025	0	<0.00050	<0.00050	0	<0.0025	<0.0025	0	<0.025	<0.025	0
Titanium D-Ti	<0.030	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.010	<0.010	0	<0.10	<0.10	0
Uranium D-U	<0.020	0	0.0253	0.0245	3.21	0.00342	0.00335	2.07	<0.0010	<0.0010	0	<0.010	<0.010	0
Vanadium D-V	0.160	39.7	<0.030	<0.030	0	<0.030	<0.030	0	-	-	-	<0.30	<0.30	0
Zinc D-Zn	363	2.18	0.055	0.055	0	0.0070	0.0070	0	0.044	0.044	0	3.78	3.63	4.05

Appendix B. Summary of QA/QC Laboratory Duplicates

November 2006 Sampling

ALS Report ID	L451213	L451213		L451213	L451213		L451213	L451213		L451213	L451213	
Date submitted	06-Nov-06	06-Nov-06		06-Nov-06	06-Nov-06		06-Nov-06	06-Nov-06		06-Nov-06	06-Nov-06	
Date of report	23-Nov-06	23-Nov-06		23-Nov-06	23-Nov-06		23-Nov-06	23-Nov-06		23-Nov-06	23-Nov-06	
RESULTS OF ANALYSIS												
	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %	sample	QC	RPD %
Sample ID	X24A-96	X24A-96		P03-08-03	P03-08-03		P03-08-03-S	P03-08-03-S		P03-09-09	P03-09-09	
Date Sampled	01-Nov-06			01-Nov-06			01-Nov-06			01-Nov-06		
Time Sampled												
ALS Sample ID	L451213-1			L451213-10			L451213-11			L451213-18		
Physical Tests												
Conductivity (uS/cm)	2430	2430	0	-	-	-	-	-	-	-	-	-
pH	7.09	7.12	0.41	-	-	-	-	-	-	-	-	-
Dissolved Anions	-	-	-	-	-	-	-	-	-	-	-	-
Alkalinity-Total CaCO3	-	-	-	302	310	2.4	-	-	-	297	294	0.99
Sulphate SO4	-	-	-	-	-	-	152	152	0.25	-	-	-

Appendix C

Well Maintenance and Issue Memos



to: Memo to file
from: Martin Guilbeault
Cc:
date: November 14, 2006
ref: 60601
re: **Faro Groundwater Monitoring - Condition of wells at location X24-96**

Between August 1st, 2006 and August 3rd, 2006, Gartner Lee Limited staff conducted groundwater sampling for the summer Adaptive Management Plan (AMP) and for the routine groundwater wells that could not be sampled during the spring event due to frozen conditions. An investigation of wells at location X24-96 was also conducted at this time using a down-hole camera to determine the cause of previous sampling difficulties and determine the present condition of the wells. This memo outlines the major observations from the 2006 sampling and also from previous sampling events.

Well X24-96 Investigation

Conditions at these wells in August 2006 were as follows:

- **X24-96 A,B,C**
 - all wells are nested in same borehole
 - well X24C is a small diameter (1") PVC well
 - wells X24A-96 and X24B-96 are standard 2" PVC wells
 - there is silica sand filling the annular space between the wells and the protective steel casing
- **X24A-96**
 - bottom is soft at 6.5m (should be 7.5m)
 - used camera, too turbid on Aug. 2nd
 - foot valve had rock in it which clogged the ball valve
 - small rock in foot valve larger should be retained by well screen, well or well-screen may be compromised to allow larger sand or small rocks to enter well
- **X24D-96**
 - well is standard 2" PVC in a single borehole with protective steel casing
 - dipped well, bottom near 29m
 - well can be sampled without any observable issues



- **X24B-96 July 2005 investigation results**

- investigation with down-hole camera revealed sand which has heaved up to 3.69 m btoc
- total depth of well is reportedly 12.05 m

August 2006 investigation results

- investigation with down-hole camera revealed sand which has heaved above the water table to a depth of 3.70 m btoc (photos attached)

- **X24C-96**

- 1" diameter well, down-hole camera does not fit in well
- 11.96m depth to bottom btoc (should be approx. 17m)
- bottom feels soft
- pulled up foot valve, it had sand clogging it (photos attached)
- a change in resistance at approximately 7.4 m below top of pipe during lowering of the sample tube suggests a joint at this depth

Recommendations

The following recommendations are offered based on the observations noted above:

- Well X24A-96 can presently be sampled, however, the presence of 1m thick sand / sediment at the bottom of the well may suggest that the well has been compromised or that sediment is accumulating in the well. The condition of this well should be investigated further in 2007 and purging and sampling efforts should attempt to remove sediment from the well.
- Discontinue sampling of X24B-96 and remove from routine groundwater monitoring program.
- Discontinue sampling of X24C-96 and remove from routine groundwater monitoring program.
- We also note that wells X24-96 are included in the current water license. Should these wells be removed from the routine groundwater monitoring program, the water license references should be updated accordingly.
- We also note that wells at X24-96 are included in the site Adaptive Management Plan (AMP). Consequently, the AMP should be updated to reflect any changes made to the site sampling program and account for potentially inoperable wells at location X24-96



Data from wells X24B-96 and X24C-96 should be used with caution and water quality data should be properly reviewed prior to interpretation. Should these wells be investigated further, it may be possible to flush out sand within the casing by jetting of water or air under pressure. These wells should be properly decommissioned if it is deemed that these wells are to be inoperable in the long term.

These observations should also be reported in the 2006 Faro Mine Groundwater Monitoring Report.



Photograph 1. X24B-96 – Sand heave at 3.69 m (photo from July 2005)



Photograph 2. X24B-96 – Sand heave at 3.70 m (photo from August 2006)



Photograph 3. X24A-96 – sand / sediment at bottom of well within screen, 6.5 m btoc. (August 2006)



Photograph 4. X24C-96 – small rocks and sand clogging foot valve (August 2006)



Photograph 5. X24-96 A,B,C – Wells are nested (July 2005)



to: Memo to file
from: Martin Guilbeault
Cc:
date: November 20, 2006
ref: 60601
re: **Faro Groundwater Monitoring – Well Maintenance at location X25-96**

On September 21st, 2006, Gartner Lee Limited staff conducted well maintenance activities at location X25-96. This memo outlines modifications that were made at location X25-96.

Well X25-96 Investigation

Conditions at these wells in September 2006 were as follows:

- **X25-96 A,B**
 - both wells are nested in same borehole
 - both wells X25A-96 and X25B-96 are standard 2" PVC wells
 - there is silica sand filling the annular space between the wells and the protective steel casing
 - to facilitate sampling efficiency and allow use of the Hydrolift system, stickup on both wells was shortened
- **X25A-96**
 - stickup was shortened by 11.5 cm
- **X25B-96**
 - stickup was shortened by 5.5 cm

Recommendations

The following recommendations are offered based on the observations noted above:

- Well construction details and modifications at X25-96 should be included in the well geological database (to complete in 2006/2007) to account for the change in casing height, and water levels should be re-surveyed and referenced accordingly.

These observations should also be reported in the 2006 Faro Mine Groundwater Monitoring Report.



Photograph 1. Wells X25-96 prior to shortening the stickup (Sept. 21, 2006).



Photograph 2. Wells X25-96 after shortening stickup (Sept 21, 2006).



to: Memo to file
from: Martin Guilbeault
Cc:
date: November 20, 2006
ref: 60601
re: **Faro Groundwater Monitoring - Condition of wells at location BH7**

On September 18th 2006, Gartner Lee Limited staff conducted routine groundwater sampling at the Faro Mine. As part of this sampling event, it was requested that wells BH7 S,D be examined and monitored for water levels and water quality. Some important information was collected regarding the condition of these wells. It was also noted during a meeting on October 20th with the Faro Closure Office to review the groundwater monitoring program, that data from wells BH7 S,D may have been used to make interpretations about hydrogeology of the area. These interpretations may be affected by observations stated herein. This memo outlines the major observations from the 2006 investigation.

Well BH7 Investigation

Conditions at these wells on September 18th, 2006 were as follows:

- **BH7 S,D**
 - wells are installed in separate boreholes
 - both wells BH7S and BH7D are standard 2" PVC wells
 - neither of the wells have protective steel casings
 - water/ground staining lines are evident on both wells within approximately 0.50 m of ground surface
- **BH7S**
 - stickup of well as measured prior to sampling efforts: 1.41 m above ground
 - well appeared to be in good condition but well is slightly inclined away from waste rock slope
 - frost-jacking marks at base of well
 - a black mark was put at base of well at ground surface
- **BH7D**
 - stickup of well as measured prior to sampling efforts: 0.95 m above ground
 - PVC well appears slightly brittle and cracked and is slightly inclined away from waste rock slope



- sampling tubing present in the well was pulled up as it was shorter than the top of the well and the foot valve was replaced
- the new foot valve immediately got clogged with sand, it was removed, cleaned and re-inserted into the well, however it was no longer possible to insert it to the bottom of the well
- upon examining the inside of the well with a flashlight, soil was visible along the interior of the well casing within a few meters of ground surface
- the well casing was found to be loose within the ground and the top section of PVC (1.82 m in length) was pulled up, leaving a hole in the ground (relevant photos are attached)
- it appeared from looking down the well / hole that it deviated within a few meters of ground surface
- no rubber O-ring was present on the section that was removed from the ground
- The shape of the well at the joint was slightly oval and the joint appeared to have been subjected to tension. The joint was cleaned, photographed and the section of casing was re-inserted into the hole as far down as possible but could not be re-threaded onto well.
- stickup after re-insertion of well section: 0.76 m above ground (19 cm lower than stickup prior to investigation).
- evidence suggests that well may have been compromised by frost jacking and ground movement (see photographs)
- ***Well currently provides a possible pathway for contaminated soil and/or groundwater to flow from the shallow zone near the compromised/open joint, to the deeper groundwater system below the shallow waste soil material. Both wells at BH7 should be decommissioned in 2007.***

Recommendations

The following recommendations are offered based on the observations noted above:

- Well BH7D currently provides a possible pathway for contaminated soil and/or groundwater to flow from the shallow zone near the compromised/open joint, to the deeper groundwater system below the shallow waste soil material. Both wells at BH7 should be decommissioned in 2007. Well BH7D should be examined and conditions documented with a down-hole camera prior to decommissioning.
- The mark at ground surface and well stickup should be monitored at both wells in 2007 to document any changes in position of well relative to ground surface
- It was noted during a meeting on October 20th, 2006 with the Faro Closure Office to review the groundwater monitoring program that data from BH7 wells may have been used by other consultants to interpret hydrogeological conditions in the area. Possible conclusions and recommendations based on this data should be



reviewed and re-evaluated based on these findings to ensure accuracy of the conclusions.

These observations should also be reported in the 2006 Faro Mine Groundwater Monitoring Report.



Photograph 1. Wells BH7S (tallest) and BH7D (shortest) – prior to investigation



Photograph 2. Wells BH7S (tallest) and BH7D (shortest) – prior to investigation



Photograph 3. Frost jacking lines at base of well BH7S



Photograph 4. Well BH7D after top section pulled out of ground leaving open hole down to well in ground. Foot valve clogged with soil.



Photograph 5. Top section of well casing at BH7D after it was removed from ground and cleaned.



Photograph 6. Well BH7S showing frost jacking lines at base of well



Photograph 7. Top section of well casing at BH7D after it was removed from ground. Joint is no longer circular and appears to have been strained



Photograph 8. Wells BH7S (tallest) and BH7D (shortest) – after investigation and BH7D pushed deeper



Photograph 9. Wells BH7S (tallest) and BH7D (shortest) – after investigation and BH7D pushed deeper



to: Memo to file
from: Martin Guilbeault
Cc:
date: November 20, 2006
ref: 60601
re: **Faro Groundwater Monitoring - Condition of wells at location P96-9**

Between August 1st, 2006 and August 3rd, 2006, Gartner Lee Limited staff conducted groundwater sampling for the summer adaptive management plan (AMP) and for the routine groundwater wells that could not be sampled during the spring event due to frozen conditions. During this time, a few issues were documented at location P96-9 which has 2 nested monitors (A and B). Well P96-9B which had become inoperable, was replaced by a new well BH05-09-Br installed by SRK in 2005. A down-hole camera was used to examine the old well and document its conditions as it might relate to sampling difficulties at other locations throughout the site. This memo outlines observations from the 2006 sampling.

Well P96-9 Investigation

Conditions at these wells in August 2006 were as follows:

P 96-9 A/B

- Both wells are nested in same borehole
- Both wells are standard 2" PVC wells
- there is no silica sand filling the annular space between the wells and the protective steel casing
- protective steel casing and wells are tilted

P96-9A

- water level is 5.71 m btoc
- bottom is soft at 9.30 m btoc
- foot valve on sampling tubing is clogged with what appears to be mostly uniform rounded silica sand.
- Conditions in the well were too turbid in P96-9A to examine with down-hole camera

P96-9B

- water level is 1.33 m btoc
- down-hole camera was used to examine obstruction at 2.40 m btoc. Well is completely pinched shut and is inoperable.

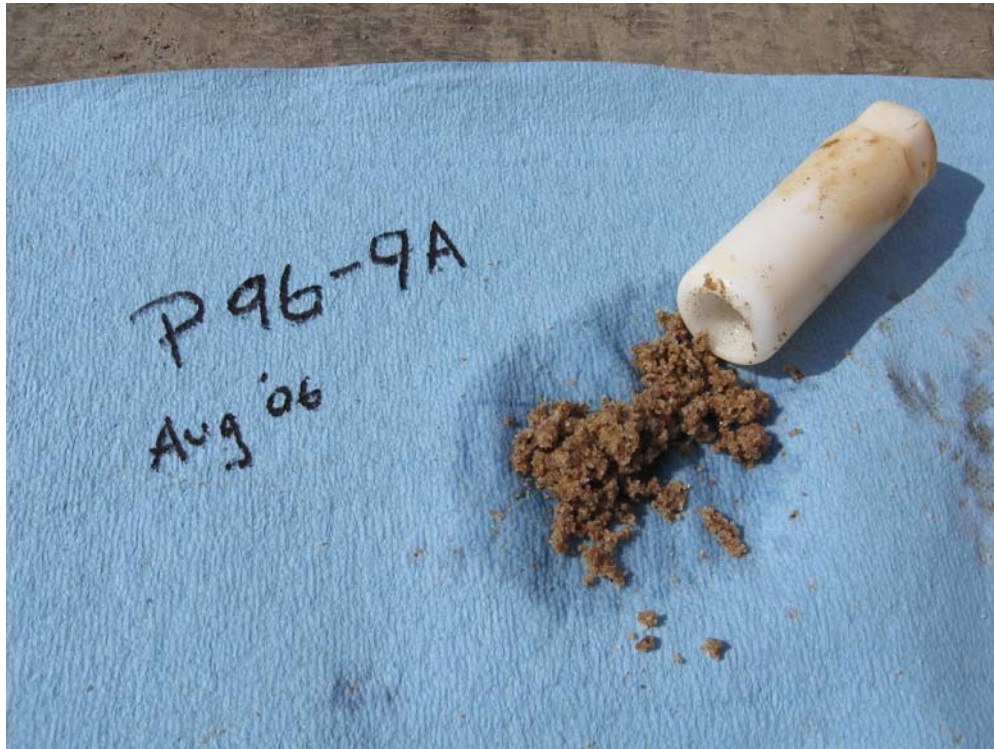


Recommendations

The following recommendations are offered based on the observations noted above:

- Well P96-9B should be properly decommissioned.
- Well P96-9A should be examined with down-hole camera in 2007 to investigate presence of silica sand in well.
- We note that well P96-9B is included in the current water license. Now that the well has been replaced by well BH05-09-Br, the water license should be updated accordingly.

These observations should also be reported in the 2006 Faro Mine Groundwater Monitoring Report.



Photograph 1. Coarse sand clogging foot valve during sampling at P96-9A. Appears to be mostly rounded silica sand.



Photograph 2. Protective casing and nested wells at P96-9A/B. Wells and steel casing are tilted.



Photograph 3. Wells at P96-9 A/B. Well P96-9B was capped and taped shut because it is inoperable



Photograph 4. Replacement well BH05-09-Br with wells P96-9 in background



Photograph 5. Well P96-9B is pinched shut at 2.4 m below top of casing.



to: Memo to file
from: Martin Guilbeault
Cc:
date: November 21, 2006
ref: 60601
re: **Faro Groundwater Monitoring – General Observations Related to Well Conditions and Maintenance at Faro Mine, 2006**

During 2006, Gartner Lee Limited staff routinely conducted well maintenance activities at well locations at time of sampling. This memo outlines general maintenance and issues related to wells at the Faro Mine. High priority issues at wells BH7, P03-07, P96-9, X24-96 and X25-96 are documented in separate memorandums. Photos relevant to the wells and issues identified in this memo are attached.

General Well Maintenance and Issues

- **X18A/B**
 - both wells are black ABS plastic wells, 1 1/2" ID
 - no protective casing
 - both wells are nested in the same borehole
 - well X18A usually goes dry after approx. 14L using a suction pump
 - In 2005, it was identified using a down-hole camera that there is a piece of sampling tubing at approximately 9.5m btoc. Although it does not interfere with sampling of the well, this obstruction should be removed if possible to facilitate sampling.
- **P01-11**
 - well is a single 2" PVC well at base of Cross-Valley Dam
 - concrete at the base of the protective steel casing is broken and ground has eroded likely from surface runoff from Dam
 - protective steel casing can be moved back and forth manually
 - the PVC well extends past the top of the steel casing and therefore the steel cover does not close to prevent meteoric water from entering the casing
 - The well stickup should be shortened to allow the steel lid to close. It should also be determined if possible whether the well was originally completed in this manner or if modifications or ground movement has affected the protective steel casing.



- **X21-96 A,B,C**
 - all three monitors are in the same borehole, they have a protective steel casing with the annular space filled with silica sand
 - X21A-96 is a small diameter 1.5" PVC well
 - X21B-96 and X21C-96 are standard 2" PVC monitoring wells
 - In 2005 and 2004, the presence of what appears to be tailings was noted in well X21C-96. In 2005, this was discussed Mr. Christoph Wells of Robertson GeoConsultants personnel responsible for the initial installation and it was noted that this has likely been an issue since installation and that water quality does not seem to be impacted by the presence of tailings. Furthermore, Mr. Wells recalled that analytical tests which may have been performed on the grey material which did confirm that the sediments are tailings. It has not been possible thus far to flush out the tailings material from the well.
- **BH1**
 - well is broken / sheared at ground surface, stickup is 7 cm
 - well is small diameter well with steel drum over it for protection
 - should be fixed by installing a surface stickup (small diameter PVC) in 2007
- **BH10-A/B**
 - both wells are 1" PVC and nested in the same borehole
 - protective steel casing (3.5") and wells are inclined at ground surface at an angle of approximately 34 degrees (from vertical)
 - water levels could be measured in September, 2007
 - both wells have sand in the sample tubing in the wells
 - foot valves clogged with sand and wells could not be sampled or purged
 - if wells are inclined due to frost / ground movement issues they should be removed from the monitoring network and properly decommissioned
- **SRK04-05 A/B**
 - both wells are artesian wells and are nested in the same borehole
 - there is no protective steel casing over the wells
 - There are currently mechanical packers installed in both wells to prevent water from flowing over the top of the casings. These are removed each time the wells are sampled and re-installed after sampling.
 - in September, 2006 both packers were re-installed deeper in each well to allow field staff to reach the top of the packers without having to back-up a vehicle close to the well for higher access



- **S2 A/B**
 - both wells are nested in the same borehole
 - there is no protective casing at this location
 - wells appear to be grey 2" plastic wells
 - Well S2A has a joint with a coupling at ground surface which can be removed. Although this facilitates sampling, it also provides a possible pathway for infiltration of surface runoff into the well. It is recommended that this coupling be glued and sealed.
- **S3**
 - well is 2" grey plastic with a total depth of 6.02m
 - there is an extra stickup piece with a coupling which sits on top of the well and protects the sampling tubing
 - The top of well casing reference point is taken to be the bottom of the casing extension. Reference point stickup = 1.12m above ground surface.
 - the casing extension was labeled and clearly marked to avoid future confusion
 - the area around the well is usually wet suggesting an area of groundwater discharge
- **DP3**
 - drive point piezometer installed by SRK in 2005
 - the device is installed on an angle
- **DP4**
 - drive point piezometer installed by SRK in 2005
 - the device is installed on an angle
 - the device has sample tubing and can be sampled
- **TH86-17**
 - well has a steel casing and water from well is usually rusty and turbid
 - Well has an obstruction / joint at 10.17 m btoc which sometimes prevents sampling tubing from extending to bottom of well. This could be further investigated with a down-hole camera in 2007.
- **P01-01 A,B**
 - both wells are nested in the same borehole
 - The wells and protective steel casing had been sheared at ground surface by snow removal equipment in 2004 and were partially rehabilitated in 2005 to allow sampling. This involved removing sand from the wells, removing stuck tubing and replacing the broken stickups.



- In September 2006, stickup on P01-01A was shortened by 0.30 m to allow installation of a protective steel casing. (see photos). The new stickup on well P01-01A is 0.74 m.

Recommendations

The following recommendations are offered based on the observations noted above:

- Well **X18A** currently has a section of tubing at a depth of approximately 9.5m btoc. Efforts should be made to remove the obstruction to facilitate sampling.
- Well **BH1** should be fixed by installing a small diameter PVC stickup and protective steel casing if the well is identified for long-term monitoring.
- If wells **BH10 A/B** are inclined due to frost / ground movement issues (and were not originally installed inclined which is not likely) suggesting they have been subjected to ground movement, they should be removed from the monitoring network and properly decommissioned. It is currently not recommended that these wells be sampled or measured for water levels to prevent field equipment from getting stuck in the inclined well.
- The well stickup on **P01-11** should be shortened to allow the steel lid to close. It should also be determined if possible whether the well was originally completed in this manner or if modifications or ground movement has affected the protective steel casing.
- Well **X21C-96** has reportedly produced tailings during sampling since the time of installation. Tailings material often clogs the foot valve and causes sampling difficulties. Data from this well should be evaluated carefully. We note that this well is included in the site Water License and therefore should it be removed from routine monitoring, the water license references should be updated accordingly.
- Well **S2A** has a joint with a coupling at ground surface which can be removed. Although this facilitates sampling, it also provides a possible pathway for infiltration of surface runoff into the well. It is recommended that this coupling be glued and sealed.
- Well **TH86-17** has an obstruction / joint at 10.17 m btoc which sometimes prevents sampling tubing from extending to bottom of well. This could be further investigated with a down-hole camera in 2007.



- Wells **P01-01A** and **P01-01B** should be targeted for re-surveying in 2007 to account for changes in well stick-up.
- All relevant well maintenance observations listed in the memo should also be reported in the 2006 Faro Mine Groundwater Monitoring Report.



Photograph 1. X18A – Tubing at 9.5 m below TOC (2005)



Photograph 2. Well P01-11 at base of Cross-Valley Dam. Concrete around base of well is broken, steel casing is loose and can be moved back and forth manually



Photograph 3. Well X21-96. Wells are nested, silica sand in annular space. X21A-96 is small diameter.
(September, 2006)



Photograph 4. Well X21C-96, foot valve clogged with what appears to be tailings tailings (July, 2005)



Photograph 5. Well BH11 broken at ground surface (September, 2006)



Photograph 6. Well BH10 A,B, well and steel casing are inclined at ground surface. (September, 2006)



Photograph 7. Well SRK04-05 A,B. Nested artesian wells with mechanical packers. (Sept. 2006)



Photograph 8. Wells S2 A,B. Nested Wells. Well S2A has loose coupling at ground surface and top section of well can be removed



Photograph 9. Well S3 with top part of well casing extension removed. Top of well taken as top of section with tubing sticking out.



Photograph 10. Well S3 with top part of well casing extension. Top of well taken as top of section below white coupling.



Photograph 11. Drive Point Piezometer DP3. (Sept. 2006)



Photograph 12. Drive Point Piezometer DP4. (Sept. 2006)



Photograph 13. Well TH86-17, 2" steel well with obstruction / joint at 10.17 m btoc which sometimes prevents lowering of sample tubing to bottom of well at 15.10 m btoc.



Photograph 14. Well P01-01A (shortest) and P01-01B (longest) prior to rehabilitation. (Sept. 2006)



Photograph 15. Well P01-01 A,B during rehabilitation. 0.30 m was cut from stickup at P01-01B.



Photograph 16. P01-01 A,B during rehabilitation, well stick-up was shortened, protective steel casing was installed, ground was leveled. (Sept. 2006). New stick-ups from ground surface are : P01-01A = 0.74 m , P01-01B = 0.65 m)



to: Memo to file
from: Martin Guilbeault
Cc:
date: November 27, 2006
ref: 60601
re: **Faro Groundwater Monitoring - Condition of multi-level well P03-07**

During 2006, Gartner Lee Limited staff conducted groundwater sampling for the Adaptive Management Plan (AMP) and for the routine groundwater sampling. As recommended in the 2005 Faro Mine Groundwater Monitoring Report, an investigation of multi-level well P03-07 was conducted to establish the condition of the sampling monitors at that location. This memo outlines activities and major observations undertaken at P03-07 during the 2006 sampling. Observations from previous sampling events are also summarized to assist in the evaluation.

Conditions at the well were noted in June, August and September 2006.

Condition of Multi-Level P03-07

As recommended in 2005, the condition of multi-level well P03-07 was examined by measuring water levels and attempting to sample open monitoring points. Only two points (#2 and #3) at this location had open tubes with water that wasn't frozen during the summer/fall of 2006. Point #2 is the monitoring point that has been sampled most often thus far. All other tubes are now suspected to be permanently frozen. Ice crystals were observed on the water level meter in points that were blocked suggesting the presence of ice in the monitoring point. Perma-frost conditions are suspected to exist within the tailings at this location based on observations during drilling. An ice lense was observed in the tailings at this location during drilling (see photos). Previous difficulties in sampling monitoring points at this location could be attributed to the presence of ice in the wells. Other factors such as the possible presence of bentonite in some of the sampling points are discussed in the 2004 Groundwater Monitoring Report.



Assessment of P03-07 based on observations up to 2006

- **P03-07-01**
 - monitoring point suspected to be permanently frozen (within frozen tailings zone)
- **P03-07-02**
 - point can be sampled during summer months (only point that can be sampled consistently to date)
- **P03-07-03**
 - point could be sampled if not frozen, well usually frozen
- **P03-07-04**
 - monitoring point suspected to be permanently frozen (within frozen tailings zone)
- **P03-07-05**
 - point sometimes can be sampled during summer months
- **P03-07-06**
 - monitoring point suspected to be permanently frozen (within frozen tailings zone)
- **P03-07-07**
 - monitoring point suspected to be permanently frozen (within frozen tailings zone)
- **P03-07-08**
 - monitoring point suspected to be permanently frozen (within frozen tailings zone)

Recommendations

- Water levels should be verified in all sampling points again in 2007 during all monitoring events to provide further data for determining long-term usefulness of monitoring points at this location.
- Any not-frozen monitoring point, especially within the aquifer (such as P03-07-02) should continue to be monitored.



Photograph 1. Frozen tailings (perma-frost) zone at depth of approximately 38.5 - 40 ft (11.7 – 12.2 m bgs) during installation (photo from Sept. 1, 2003)



Photograph 2. Detailed view of frozen tailings (perma-frost) zone at depth of approximately 38.5 - 40 ft (11.7 – 12.2 m bgs) during installation (photo from Sept. 1, 2003)

Summary of Activities and Observations at Multi-Level Well Location P03-07

Fall 2003 *	
P03-07-01	not sampled
P03-07-02	sampled
P03-07-03	not sampled
P03-07-04	not sampled
P03-07-05	not sampled
P03-07-06	not sampled
P03-07-07	not sampled
P03-07-08	not sampled
10-Jun-04	
P03-07-01	water level at 13.02 m btoc
P03-07-02	water level at 13.07 m btoc, sampled
P03-07-03	water level at 13.1 m btoc, sampled, long time to filter (bentonite?)
P03-07-04	water level at 13.11 m btoc, sampled, long time to filter (bentonite?)
P03-07-05	blocked or frozen
P03-07-06	blocked or frozen
P03-07-07	blocked or frozen
P03-07-08	water level at 12.71 m btoc, sampled
07-Jun-06	
P03-07-01	blocked or frozen at 12.9 m btoc
P03-07-02	water level at 13.29 m btoc, sampled
P03-07-03	slush in tubing at 13.32 m btoc
P03-07-04	** blocked or frozen at 13.20 m btoc
P03-07-05	** blocked or frozen at 13.30 m
P03-07-06	** blocked or frozen at 13.1 m btoc
P03-07-07	** blocked or frozen at 13.3 m btoc
P03-07-08	** blocked or frozen at 12.8 m btoc
14-Jun-06	
P03-07-01	blocked or frozen at 13.05 m btoc
P03-07-02	
P03-07-03	water level at 13.29 m btoc
P03-07-04	blocked or frozen at 13.33 m btoc
P03-07-05	blocked or frozen at 13.35 m btoc
P03-07-06	blocked or frozen at 13.13 m btoc
P03-07-07	blocked or frozen at 13.36 m btoc
P03-07-08	blocked or frozen at 12.91 m btoc
Aug-03	
P03-07-01	blocked or frozen at 13.02 m btoc.
P03-07-02	water level at 13.31 m btoc, tubing open to > 32 m btoc
P03-07-03	water level at 13.32 m btoc, tubing open to 29.82 m btoc
P03-07-04	blocked or frozen at 13.30 m btoc
P03-07-05	blocked or frozen at 12.11 m btoc
P03-07-06	blocked or frozen at 13.11 m btoc
P03-07-07	blocked or frozen at 13.36 m btoc
P03-07-08	blocked or frozen at 12.90 m btoc
20-Sep-06	
P03-07-01	blocked or frozen at 13.04 m btoc
P03-07-02	water level at 13.29 m btoc, sampled
P03-07-03	water level at 13.30 m btoc, no sample
P03-07-04	blocked or frozen at 13.29 m btoc
P03-07-05	water level at 13.29 m btoc, sampled, slow to filter, took split sample
P03-07-06	blocked or frozen at 13.11 m btoc
P03-07-07	blocked or frozen at 13.32 m btoc
P03-07-08	blocked or frozen at 12.89 m btoc

Notes:

* data from 2003 collected shortly after well installation

** depths are approximate

stickup of centre stalk at P03-07 is equal to 0.78 m

frozen tailings identified in core in zone (12.5 – 13.7 m bgs) (13.28 - 14.48 m btoc) applies to all monitoring points (1 through 8)