Faro Mine Closure
Fermeture de la mine Faro

Faro Mine Complex 2010 Waste Rock and Seepage Monitoring Report

FINAL

Prepared for:

Yukon Government,
Assessment and Abandoned Mines

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2010 Waste Rock and Seepage Monitoring Report

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Executive Summary

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Objectives and Primary Findings:

This report summarizes the waste rock and seepage monitoring results from the 2010 monitoring program and compares the current year's results with results from previous monitoring.

Water quality at toe seepage and select routine monitoring stations indicates that water quality in drainage from the Faro and Vangorda waste rock dumps appears generally to have stabilized year-over-year, with considerable seasonal variation evident at several monitoring stations. At Faro, seepage at X23 demonstrated increasing trends in sulphate and zinc concentrations over 2008 and 2009. However, sulphate and zinc concentrations have decreased slightly since 2009 peak concentrations to levels similar to those observed in 2008. Surface water at X23 represents the largest known source of loading from the Faro waste dumps.

Grum Dump toe seepage water quality also appears to be reasonably stable, although sulphate concentrations at several stations have shown gradual increase over the 2002 through 2010 period. Dissolved zinc concentrations at most stations have been typically within stable ranges of up to 7 mg/L over the past several years, although isolated ephemeral samples have returned dissolved zinc concentrations up to 139 mg/L (May 2008). The partial diversion of water from station V15 to station V2A via the Grum Creek diversion appears to have been successful in controlling the amount of zinc reporting to station V2; however, concentrations at Station V2A in Grum Creek have begun to increase in corresponding fashion. In 2006 through early 2008, dissolved zinc concentrations at V2A have typically been below 0.2 mg/L, but since June 2008, zinc concentrations have increased dramatically to between 0.7 and 2 mg/L, zinc levels remain elevated through 2010 and highest sulphate concentrations were recorded in August and September 2010 (1400 mg/L)

Future Work Recommendations:

It is recommended that waste rock and seepage monitoring be continued at the same level as carried out since 2005.

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1 Introduction

Waste rock and pit seepage surveys and monitoring of waste rock thermal conditions and pore gas oxygen concentrations were continued in 2010. In addition, routine monitoring of selected waste rock and pit seepage stations was carried out by site environmental staff.

This report presents the results of the 2010 seepage monitoring data, a review of trends in seepage concentration over time, and the results of the 2010 thermal and oxygen monitoring. This work was completed as part of the ongoing technical investigations in support of closure planning for the Anvil Range Mining Complex.

2 Methods

2.1 Waste Rock Seepage Surveys

Waste rock seepage surveys have been completed on a regular basis since 2002. Sampling stations were first located and established by walking or slowly driving along the toes of all waste rock dumps where the rock rests on original ground. The main criteria for establishing a sampling station was flowing water, or water that was inferred to have been flowing based on observations of moisture along flow paths or based on ponded water surfaces that were at the elevation of pond spill points. In general, stagnant water was avoided.

In subsequent surveys, established sampling locations were revisited and sampled as appropriate, and areas where there was reasonable potential for new or intermittent seeps were re-examined, with new stations established at some locations. Some stations were also dropped from the program after establishing that they were not contributing to the overall understanding of water quality from the dumps. There have been a number of other small adjustments to the program over time, as documented in Table 1. The methods used in 2010 are detailed as follows.

Samples were collected for analyses of routine parameters (pH, conductivity, acidity, alkalinity, chloride and sulphate), and dissolved metals (dissolved metals by ICP-MS/OES). The samples were filtered and preserved in the field according to standard methods for collection of environmental samples. Field pH, conductivity, redox, and temperature measurements were taken at each station using a WTW meter. Flow estimates were made using the bucket and stopwatch method, by estimating the velocity and cross sectional area of the seep, or by visual estimation.

The sampling locations were marked for later reference with flagging tape and were surveyed using a hand-held GPS. The locations are shown in Figures 1 and 2. Photographs were taken to document the general appearance of the station, as well as any precipitates along the flow paths.

Table 1: Changes in the Waste Rock Seepage Monitoring Program over Time

Date	Activity
	Waste Rock Seepage Surveys
Spring 2002	Regular spring and fall seepage surveys covering all of the waste rock dumps at Faro, Vangorda and Grum were initiated.
Fall 2002, to Fall 2004	Stations established in June 2002 were revisited and sampled as appropriate, and some new intermittent seeps were located during the follow-up surveys. Approximately 80 seep locations were sampled at least once during the 2002-2004 waste rock seepage monitoring program (SRK 2006a).
Spring 2005 to Fall 2006	Prior to the 2005 surveys, SRK carried out a review of previously-sampled seepage stations to assess which stations should continue to be monitored on a twice-yearly basis. Summaries of the rationale for maintaining or eliminating each station from the monitoring program were compiled in memorandum (see Appendix A in SRK 2006b). Some provision for collection and testing of additional samples that daylight only under ideal flow conditions was maintained. Several sites where waste rock seepage stations coincided with water license sampling stations were identified for elimination pending review of sampling practices employed by site staff. It was found that field filtration of dissolved metal samples was not being carried out as part of the water license; therefore, it was decided that the water license would continue to be sampled as part of the waste rock seepage monitoring program. Sites identified for continued monitoring were visited and samples were collected as flow conditions permitted. The total number of seeps monitored during this period was approximately 50.
Spring 2007 through Fall 2009	A need was identified to obtain lower detection limits for several trace parameters, and the testing laboratory started using a combination of ICP-OES and ICP-MS to analyze the samples. Sample sites identified for continued monitoring were visited and samples were collected as flow conditions permitted.
Fall 2009 to Fall 2010	Due to extremely dry conditions during the 2010 spring freshet, a full seep survey was not completed. Instead, a small number of high priority seeps were identified by SRK and sampled (where possible) by Denison Environmental Services (DES). During the April 2010 Seepage and Groundwater review meeting, it was agreed that there would be further coordination between SRK and DES to eliminate some of the stations that are covered by both the routine programs and the seepage programs. During the Fall 2010 seepage survey, the duplication was discussed in further detail and several sites were eliminated from the SRK program. These include: • The Vangorda Drains (SRK Stations VD-02, VD03, VD04, VD05, and VD10). • Faro Valley Dump Seep (SRK Station FD-40)*. • Pit Seep FD-26. • Guardhouse Creek FD-16 and FD-18. SRK will also drop GD-01 from Grum Creek at the toe of the Grum Dump if DES is able to add this to their monthly monitoring program. Decisions regarding FD-31 and FD-12 in the original Faro Creek channel will be made following the 2011 sampling program. **SRK will continue to visit the site during the fall surveys to observe any changes to the precipitates*

Duplicates and field blanks were collected for every ten samples as a check on the quality of the field methods and laboratory results. Overall, there was very little difference between duplicates. A small number of parameters had greater than 20% relative percent difference between samples, these values were confirmed by the laboratory and indicate natural field variability or analytical imprecision at very low levels.

In fall 2010, two duplicate samples were sent to different analytical laboratories to test duplication results between facilities. Duplication was very good between the two labs. However, it was difficult to evaluate many low level parameters due to detection limit differences.

Ion balances were calculated for all samples to ensure total anions were in balance with total cations in solution; this has been standard practice over the history of the Anvil Range waste rock seepage surveys. Ion balances were very good (less than 10% difference between cations and anions) for all 2010 samples.

2.2 Pit Seepage Surveys

During the April 2010 monitoring meeting, it was decided that the pit seepage surveys would not be conducted in 2010. The two main reasons for this were that it was felt that the objective of establishing a snapshot of what the walls were contributing to overall pit chemistry has been met. Additionally, there are safety concerns to do with accessing the pit. Pit seepage surveys will not be discussed further in this report.

2.3 Routine Monitoring

In 2009, the historical water quality database was transferred to an emLine platform for distribution of results to other users. The development of the database was coordinated by Denison Environmental Services (DES). Quality assurance and validation of reported historical monitoring results is undertaken as issues are raised.

2.4 Temperature and Oxygen Monitoring of Waste Rock

Pore gas oxygen content was measured directly using a Servomex Oxygen Analyser. This instrument was calibrated on a daily basis using ambient air (20.9% oxygen) and pure nitrogen gas (0% oxygen). The instrument was connected to each monitoring tube by means of silicone tubing, and pore gas was drawn through the instrument by means of an integrated pump within the instrument. The oxygen analyser produced a direct real-time readout of oxygen content which was then manually recorded.

Temperature measurements were collected by connecting an Omega thermistor reader to a switch box at the terminal end of each installed RST Instruments thermistor string. Temperature at individual monitoring points was collected by selecting the appropriate channel on the switch box. The calculated temperature was then displayed on a digital readout, and was manually recorded.

Monitoring of pore gas oxygen content and waste rock temperature was carried out in March 2010, September 2010 and February 2011. The Grum stations were destroyed during the Grum Sulphide Cell Cover construction activities, and monitoring was discontinued after the March 2010 readings were collected.

3 Results

3.1 Waste Rock Seepage Surveys

The results of the 2002 through 2010 waste rock seepage surveys are provided in Appendix A. Locations and select parameters (ranges of pH, conductivity, flow, sulphate and zinc concentrations for the period of record) are presented in Figures 1 and 2.

3.2 Routine Monitoring

Locations of the routine seepage monitoring stations are shown in Figures 1 and 2. Analytical data for the routine monitoring stations are stored on the emLine water quality database and are not reproduced here. Summary results of the historical seepage monitoring are provided in Figures 5 through 16. The time series shown in these figures provide a graphical summary of the data that allows trends to be easily identified.

3.3 Temperature and Oxygen Monitoring of Waste Rock

The results of temperature and oxygen monitoring are provided in Appendix B.

Vacuum testing of all individual sampling ports has indicated that several oxygen monitoring ports are blocked. For the Faro bulk intermediate waste rock (30M-1) all monitoring ports up to 2.8 m depth are typically blocked. At the Vangorda monitoring locations, several blocked ports had a paired port at the same elevation that remained functional at the time of testing. However, most recent data from 2011 shows an increase in the number of blocked ports. Since 2006 nearly all of the ports at the Grum monitoring locations have been blocked. The instrumentation at Grum was destroyed during construction of the cover, and monitoring was discontinued after the March 2010 sampling round.

All thermal monitoring instruments continue to function adequately.

There were no significant changes in temperature or oxygen monitoring data from the previous years (see SRK 2009). Trends identified in the 2009 monitoring report continue through 2010 therefore no additional interpretation of the data has been conducted – see SRK 2010c for a detailed review of thermal and pore gas monitoring.

4 Discussion

4.1 2002 to 2009 Waste Rock Seepage Surveys

4.1.1 Sampling Conditions

In 2010, conditions during the spring seepage survey were reported to be extremely dry in comparison with previous years. As a result, the spring survey was scaled back to include only high priority locations selected by SRK. DES collected these samples during the third week of June, which was after the freshet.

The fall waste rock survey took place during the last week of September. Runoff and precipitation during the time of the survey were typical for the site. One new seep was identified during the survey. The station is FD56 located along the toe of the Intermediate Dump (see Figure 1 for sample locations).

In the fall 2010 survey, sites SRK GD-11, 17, 19, 20 and 22 could not be safely accessed due to active construction of the Grum waste rock cover. It is expected that these areas will be safe to visit in spring 2011.

4.1.2 Faro Waste Rock Dumps

Water Types

The previously-developed grouping of seeps into water types continue to be a useful tool for summarizing the monitoring results and for tracking the evolution of dump seepage chemistry. However, some further division of water types was made in 2009 to more closely align them with the classifications used for waste rock water quality predictions, and some seeps were removed from the statistical summaries because they are diluted by large flows originating upstream of the waste rock, and do not reflect true source concentrations.

Seeps from the Faro Waste Rock Dumps were divided into three distinct types on the basis of pH and zinc concentrations. The type 2 and type 3 seeps were further divided to separate seeps that are in contact with ore, waste, or mixed ore + waste. Typical characteristics of each type of seep were as follows:

- Type 1 seeps typically had pHs greater than 6.5, and zinc concentrations less than 6 mg/L. Other trace metals (e.g. aluminum, iron, manganese) were low or below detection limits.
- Type 2 seeps had pHs typically between 6 and 7 and zinc concentrations of greater than 2 mg/L. Cadmium, cobalt, iron, manganese, and nickel were also elevated in several of the samples.
  - Type 2 waste seeps had zinc concentrations from 2.4 to 408 mg/L.
  - Type 2 ore+waste seeps had zinc concentrations from 14 to 655 mg/L.

- Type 3 seeps had pHs of less than 6 and zinc concentrations typically greater than 10 mg/L. Aluminum, cadmium, cobalt, copper, iron, manganese, and nickel concentrations were also high in several of these samples. Samples with zinc concentrations greater than 900 mg/L are sourced from oxide fines, ore stockpiles, or the immediate area around the mill.
  - Type 3 waste seeps had zinc concentrations ranging from 2.2 mg/L to 4480 mg/L.
  - Type 3 ore seeps had zinc concentrations ranging from 99 to 35,000 mg/L.
  - Type 3 ore + waste seeps had zinc concentrations ranging from 580 to 1300 mg/L.

These seepage classifications for each of the individual samples in the database are provided in Appendix A. Figures 1, 2 and Appendix C show the seepage types by station.

A statistical summary for key parameters in the database by water type is provided in Table 2. Seeps that are considered to be highly diluted by an upstream flow were removed from the statistics as the diluted seeps do not reflect source concentrations. Seeps that are used to represent specific components of the site are also used to represent the general water type they belong with. For example, FD19 is used to specifically represent chemistry from the Northwest Dump, but is also a good example of a Type 2 seep, and is therefore used in the statistics for both Type 2 water and for the specific FD19 water. A statistical summary for key parameters for individual water types is provided in Table 3.

Appendix A includes a complete set of statistics, including statistics for individual water types that are used in the water quality predictions. The statistics were calculated using a modified data set. Where values were reported as less than detection, the detection limit was inserted as the analytical value for the purposes of the statistical calculations. Method detection limits are listed in Table 2; these limits were taken from the non-detect results of blank submissions. Any non-detect result that specified a detection limit more than 10X the minimum method detection limit was excluded from the statistical calculations. The need for this exclusion arose in cases where samples had high ionic strength, and in cases where detection limits changed significantly over time. The variation in the number of samples used in the statistical summary is a reflection of this exclusion.

The Type 1 seeps included samples from below the Upper Parking Lot dump (FD02), along the toe of the Northeast Dump (FD05, 06, and 07), a seep entering the pit below the Northeast Dumps FD 26), the Zone II East Dump (FD50) and the Ramp Zone Dump (FD14). According to the inventory of rock types presented in the 1996 ICAP report (RGI, 1996), these dumps generally contained relatively low proportions of sulphide waste rock, and higher proportions of calc-silicate or intrusive rock compared to other parts of the Faro Dump. The Intermediate Dump contains higher proportions of sulphide material. The seepage chemistry reflects some buffering by reactive carbonate minerals, which help to maintain neutral pH conditions.

The Type 2 waste seeps have included samples from several different areas, including the Main Dump West (FD30), the Main Dump East (FD08), the Intermediate Dump (FD44, 48 and 49), the Lower Northwest Dump (FD19), seeps entering the pit below the Northeast Dumps (FD21, 22, 23, 24, 26 and 27) the Ramp Zone Dump (FD14), and seeps from below the Faro Valley Dumps

(FD40). Two of the new seeps identified in 2009, FD53 and FD55 (located below the Intermediate Dump), were also classified as Type 2 waste seeps. A common element of all these areas is the presence of sulphides or oxidized schist. Although the pH is typically in the pH 6 to 7 range, it is clear that this drainage is strongly influenced by oxidation of sulphide minerals. However, many of these seeps contain high levels of calcium and magnesium, suggesting that there are still some carbonates present in the source materials.

The Type 2 waste+ore seeps have included seeps from ore and low grade ore stockpiles (FD01, 09, 10, 12, 31 and 38) and seeps in the mill area (FD32 and 35). Samples from below the Main Dump West (FD12 and FD31) typically contain the highest zinc concentrations of Type 2 seeps and are likely influenced in part by ore stockpiles upgradient of this location.

The Type 3 waste seeps have included samples from, the West Main Dump (FD30 and 36), the Intermediate Dump (FD13, 47 and 49), the Faro Creek Diversion dyke (FD20), and, on occasion, seeps entering the pit below the Faro Valley Dump (FD40),or the Northeast Dumps (FD21, 22, 23, 24 and 27). One of the new seeps indentified in 2009, FD54 (located below the Intermediate Dump), was also classified as Type 3 waste. Portions of the waste rock or pit benches in all of the above areas contained sulphides or oxidized schist. The seepage quality indicates very little to no availability of neutralizing minerals to control the pH and metal concentrations in these seeps.

The Type 3 waste+ore seeps have included seeps from below the Main Dump West (FD12 and FD31).

The Type 3 ore seeps have included seeps from the Oxide Fines Stockpile (FD04 and 46), low grade ore stockpiles (FD38), the Medium Grade Stockpile (FD37), and the mill area (FD33, 34 and 35).

Trends in Seepage Chemistry

Trends in seepage chemistry are now being systematically evaluated for all seeps where there is sufficient data. Temporary graphs of pH, sulphate and zinc were constructed using Excel's filter feature, and any noteworthy trends were recorded in a seepage review checklist, as presented in Appendix C. Most stations either showed no appreciable trends over time, or did not have sufficient data to allow an evaluation of trends. Stations that did show changes over time are summarized in Table 4, and are discussed as follows. The list of stations that did show changes remain unchanged from 2009, with the exception of FD-14 that was added to this list in 2010. Also, two of the stations (SRK-FD18, and SRK FD26) were dropped from the program and are therefore not included in the discussion.

Lower Northwest Dump (SRK-FD19)

This site was one of the high priority seeps sampled during the spring 2010 survey, but was not flowing during the fall survey. Seepage from this station has consistently been classified as Type 2 water. The lowest pH values at this station were recorded in May of 2008 and 2009 (pH 6.3). Sulphate and zinc concentrations have started to demonstrate increasing trends since 2008. The

highest sulphate concentrations were recorded in 2010 (5900 mg/L) and the highest zinc concentrations were reported in 2009 (204 mg/L).

Northeast Dumps Towards Pit (SRK-FD23 and 24)

Seepage from SRK-FD24 has usually been classified as Type 2 water, but occasionally has demonstrated Type 3 water characteristics. pH, sulphate and zinc concentrations appear to be stable within a consistent range.

Seepage from SRK-FD23 has typically been classified as Type 3 water. The highest recorded sulphate and zinc concentrations at this station were recorded in September 2008; however, the lowest recorded pH (3.3) was recorded in September 2009. Sulphate and zinc concentrations at this station are demonstrating slightly increasing trends, while pH has shown an appreciable decrease over time.

Ore and Low Grade Stockpiles (SRK-FD01)

Seepage collected from this station has consistently been classified as Type 2 water. Since monitoring began in 2002, pH has tended to fluctuate between 6.5 and 7.3. pH in the 2010 samples were within the typical range. Sulphate concentrations at this station have demonstrated a slightly increasing trend over time with the highest concentrations observed in 2009 and 2010 samples (3500 and 3900 mg/L). Zinc concentrations have also demonstrated an increasing trend from approximately 30 mg/L when monitoring began to a peak concentration of nearly 100 mg/L in the September 2008 sample. Samples in 2009 and 2010 demonstrated strong seasonal variation with spring samples having concentrations of 92 mg/L and 88 mg/L and fall concentrations being much lower, 45 mg/L and 28 mg/L. Several elements were elevated in the spring 2010 sample including: iron (83 mg/L) and manganese (6.2 mg/L). These are anomalous values and likely are related to sample timing which occurred after freshet.

Ore and Low Grade Stockpiles; West Main Dump (SRK-FD12 and 31)

Station SRK-FD12 was originally classified as a Type 2 seep, but has developed into a Type 3 seep since 2008. The most recent measurement can be classified as transitional between type 2 and 3 seeps with high zinc and a field pH of 5.97. Sulphate and zinc concentrations continue to demonstrate increasing trends with the highest concentrations recorded for 2009 samples (8300 and 1240 mg/L, respectively); however, pH was in the same range as it was in 2008 samples (about 5.9). Sulphate continues to remain elevated in 2010 samples while zinc has decreased to more historic values (770 mg/L). Station SRK-FD 31 has followed a similar pattern to SRK-FD12 however the most recent sample is classifies as a type 2 seep with the highest recorded field pH of 7.1.

Station SRK-FD31 was also originally classified as a Type 2 seep, but has developed into a Type 3 seep since 2008. Following the 2009 monitoring season sulphate and zinc have returned to normal values of 8100 mg/L and 760 mg/L respectively. However, the field pH was the highest recorded at 7.1 in September 2010 with a lab pH of 6.4, changing the classification to a Type 2 seep.

West Main Dump (SRK-FD30)

This station was originally classified as a Type 2 seep, but since 2005 it has usually been classified as a Type 3 seep. pH has demonstrated a slightly decreasing trend with pH in range of 5.5 in 2008 and 2009 samples. Zinc concentrations appear to have peaked at 53 mg/L in May 2007, ranging from 26 to 45 mg/L in 2009 samples. Sulphate concentrations have been demonstrating a decreasing trend since monitoring began with the lowest concentrations (960 to 1300 mg/L) being recorded in 2008 and 2009 samples. This station was one of the high priority seeps sampled in spring 2010 and yielded somewhat anomalous results with a pH of 6.46, a sulphate concentration of 3300 mg/L and zinc concentration of 111 mg/L as well as several other elevated metals in comparison to previous years.

Intermediate Dump (SRK-FD13)

Seepage from SRK-FD13 has consistently been classified as Type 3 water. pH at this site has been erratic, but generally decreasing with the lowest pH (2.1) recorded in September 2008. The highest sulphate and zinc concentrations were also recorded in 2008 samples. Only one sample was collected from this station in September 2010. pH, sulphate and zinc concentrations appear to have decreased from the 2008 high levels but remain slightly elevated when compared to 2009 concentrations.

Ramp Zone Dump (SRK-FD-14)

Seepage from this site has consistently been classified as Type 1 water. pH at this site has been stable with seasonally increasing SO_4 and zinc concentrations with highest values being recorded in the fall. The highest concentrations for both sulphate and zinc were recorded in September 2010 with values of 3,900 mg/L and 18.6 mg/L respectively.

Medium Grade Stockpile (SRK-FD37)

No samples from station SRK-FD-37 were taken in 2010. Seepage from station SRK-FD37 has consistently been classified as Type 3 water. Sulphate and zinc concentrations demonstrated increasing trends until September 2008 (peak values of 67,200 and 34,800 mg/L, respectively). Concentrations in 2009 samples ranged from 16,000 to 41,000 mg/L sulphate and 8100 to 20,000 mg/L zinc.

Table 2: Characteristics of Faro Water Types

Water Type	Statistic	Field pH	Acidity to pH 8.3	Alkalinity-Total	Chloride	Sulphate	Calcium	Magnesium	Potassium	Sodium	Aluminum	Cadmium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Zinc
	Units	s.u.	mgCaCO3/L	mgCaCO3/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	mg/L	mg/L
Minimum Method Detection Limit			1	0.5	0.5	0.5	0.05	0.1	0.05	2	0.002	0.00002	0.00003	0.0005	0.0002	0.0002	0.005	0.00002	0.005
1	Average	7.2	13	180	1.4	760	140	130	6.4	23	0.031	0.0057	0.012	0.0077	0.067	0.0087	0.27	0.055	3.3
	Median	7.2	12	190	1.3	590	130	110	4.3	7.7	0.004	0.0035	0.0019	0.004	0.014	0.00028	0.049	0.051	2.4
	Min	5.4	0.5	40	0.5	190	54	27	2.2	2.2	0.0016	0.00046	0.000056	0.0011	0.002	0.000033	0.00005	0.0069	0.045
	Max	8.2	51	320	2.7	3900	320	670	25	150	0.35	0.037	0.18	0.06	0.89	0.15	7.7	0.24	19
	N	60	60	60	57	60	60	60	60	60	24	26	28	27	22	25	60	36	60
2 - waste	Average	6.7	98	130	1.3	2300	290	360	8	14	0.37	0.044	0.12	0.094	2.6	0.038	11	0.34	50
	Median	6.7	64	51	1.1	1300	220	160	7.8	6	0.073	0.03	0.061	0.035	0.26	0.01	3.7	0.18	30
	Min	5.5	5.8	0.5	0.5	290	49	28	0.2	2	0.002	0.0025	0.0016	0.0031	0.008	0.00076	0.037	0.011	2.4
	Max	7.6	760	450	5	11000	710	2300	25	160	3.6	0.19	1.4	0.7	20	0.16	88	2.8	410
	N	76	76	76	66	76	76	76	72	76	38	64	72	61	58	40	76	75	76
2 - ore + waste	Average	6.6	420	200	9.7	3700	480	500	12	42	0.18	0.12	0.41	0.18	40	0.054	37	0.57	230
	Median	6.5	300	220	12	3900	500	440	13	42	0.21	0.05	0.41	0.035	23	0.0068	44	0.6	210
	Min	5.7	22	13	0.7	950	220	38	5.7	7	0.002	0.01	0.015	0.0093	0.05	0.0002	0.84	0.05	14
	Max	7.3	2200	370	25	8100	620	1200	29	79	0.38	0.65	1.7	2.4	210	0.35	120	1.9	760
	N	45	45	45	35	45	45	45	45	45	17	44	45	37	44	17	45	43	45
3 - waste	Average	4.2	1200	12	3	2600	180	290	6.5	9.5	25	1.1	0.59	2.9	180	0.38	25	1.0	270
	Median	3.9	230	2.0	0.7	1200	110	130	5	4	6.1	0.12	0.25	0.85	20	0.21	6.4	0.31	56
	Min	2.1	27	0.5	0.46	69	6.5	3.8	0.01	1.6	0.059	0.009	0.00052	0.0029	0.016	0.00034	0.015	0.05	2.2
	Max	7.6	20000	200	48	28000	560	2100	20	110	410	47	6.3	61	4300	2.0	320	12	4500
	N	60	61	61	52	61	61	61	50	61	58	59	60	61	60	48	61	60	61
3 - ore + waste	Average	6.0	3300	73	8.6	7700	530	1100	17	56	1.4	0.45	1.6	1.8	230	0.013	110	1.8	930
	Median	5.9	1800	46	8.4	7900	540	1200	17	56	0.69	0.29	1.7	0.3	220	0.0015	120	1.8	970
	Min	5.5	900	1.4	3.1	5500	460	730	14	40	0.036	0.1	0.92	0.027	63	0.00026	76	1.1	580
	Max	6.9	15000	310	12	10000	570	1300	20	67	6.2	1.1	2.2	7.0	390	0.084	140	2.6	1300
	N	9	9	8	9	9	9	9	9	9	7	9	9	9	9	8	9	9	9
3 - ore	Average	3.2	18000	3.8	83	21000	320	590	5.2	33	230	13	5.9	160	2800	1.8	310	5.3	7800
	Median	2.8	11000	1.0	2.9	15000	330	400	4	14	130	7.0	3.4	55	1200	1.6	160	3.5	6300
	Min	0.9	210	0.5	0.5	700	80	39	0.94	2.0	2.4	0.082	0.08	0.12	1.3	0.36	5.7	0.08	99
	Max	6.0	53000	31	1100	67000	510	3200	11	220	990	57	20	560	15000	4.9	2400	16	35000
	N	26	26	26	17	26	26	26	5	15	24	26	26	25	26	18	26	25	26

Note: Detection limits were used for statistical purposes when values were less than detection.
Where detection limits were greater than 10x the minimum detection limit due to high ionic strength, non-detect results were excluded from statistical calculations.

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Table 3: Characteristics of Individual Faro Seeps Used for Water Quality Predictions

Station ID	Statistic	Field pH	Acidity to pH 8.3	Alkalinity-Total	Chloride	Sulphate	Calcium	Magnesium	Potassium	Sodium	Aluminum	Cadmium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Zinc
	Units	s.u.	mgCaCO3/L	mgCaCO3/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	mg/L	mg/L
Minimum Method Detection Limit		1	0.5	0.5	0.5	0.05	0.1	0.05	2	0.002	0.00002	0.00003	0.0005	0.0002	0.0002	0.005	0.00002	0.005	
SRK-FD04	Average	2.4	31000	1	340	36000	380	1700	#N/A	10	500	9.6	11	250	6700	#N/A	940	7.7	6900
	Median	2.4	34000	1	160	38000	420	1600	#N/A	10	500	11	11	130	5300	#N/A	630	7.5	7800
	Min	2.2	5800	1	0.5	7500	160	190	#N/A	10	27	1.7	1.4	55	1300	#N/A	130	0.8	1200
	Max	2.5	50000	1	1100	59000	500	3200	#N/A	10	990	16	20	560	15000	#N/A	2400	15	11000
	N	4	4	4	4	4	4	4	#N/A	1	4	4	4	3	4	#N/A	4	4	4
SRK-FD05/6	Average	7.3	11	200	1.5	470	120	98	3.7	6.1	0.003	0.0024	0.00048	0.002	0.0075	0.00019	0.066	0.042	3.1
	Median	7.2	9.5	200	1.3	420	120	87	3.8	6.2	0.0023	0.002	0.00011	0.0017	0.006	0.00017	0.005	0.034	2.1
	Min	6.9	3.0	85	0.5	210	54	45	2.2	2.2	0.0016	0.00046	0.000056	0.0013	0.002	0.000033	0.00005	0.014	0.53
	Max	7.9	31	320	2.5	1200	200	210	5.2	9.0	0.006	0.0057	0.0028	0.004	0.02	0.00037	0.49	0.12	14
	N	26	26	26	26	26	26	26	26	26	13	13	13	13	11	13	26	16	26
SRK-FD14	Average	7.3	11	110	0.8	1700	180	260	15	80	0.0089	0.014	0.033	0.014	0.24	0.012	0.8	0.081	4.9
	Median	7.3	8.1	110	0.5	1400	180	220	15	86	0.011	0.0076	0.012	0.0048	0.05	0.0039	0.11	0.063	2.9
	Min	6.0	0.5	40	0.5	510	72	88	7.0	13	0.003	0.0042	0.0002	0.0011	0.008	0.00019	0.005	0.038	1.0
	Max	8.2	38	160	2.5	3900	320	670	25	150	0.016	0.037	0.18	0.06	0.89	0.048	7.7	0.24	19
	N	12	12	12	10	12	12	12	12	12	5	6	7	6	5	5	12	12	12
SRK-FD19	Average	7.0	150	370	1.9	4100	580	650	10	21	0.18	0.039	0.11	0.081	0.37	0.0071	25	0.47	84
	Median	6.9	120	400	1.8	4000	600	640	10	21	0.033	0.021	0.067	0.02	0.11	0.006	19	0.42	64
	Min	6.3	67	160	1.1	3100	450	400	6.9	15	0.002	0.0073	0.035	0.011	0.02	0.0014	12	0.27	36
	Max	7.6	300	450	2.8	5900	710	1000	13	26	0.55	0.15	0.46	0.42	2.9	0.014	49	0.79	200
	N	17	17	17	12	17	17	17	17	17	6	10	17	11	12	7.0	17	17	17
SRK-FD37	Average	2.4	30000	1.2	2.8	34000	300	610	#N/A	6.4	310	27	9.5	330	4000	2.4	350	8.9	15000
	Median	2.3	31000	1.0	2.8	35000	280	600	#N/A	6.7	280	26	9.7	320	3200	2.1	360	9.0	14000
	Min	0.9	11000	0.5	0.5	13000	220	240	#N/A	2.0	71	10	3.2	120	1000	0.47	130	3.2	6100
	Max	5.1	53000	2.0	5.0	67000	440	1100	#N/A	10	580	57	17	560	9400	4.9	660	16	35000
	N	10	10	10	4	10	10	10	#N/A	4.0	10	10	10	10	10	7	10	10	10
SRK-FD40	Average	4.4	290	8.7	0.84	750	70	75	1.6	3.2	12	3	0.2	1.3	39	0.22	3.8	0.18	68
	Median	3.5	140	1.9	0.5	640	69	66	1.5	3	5.3	0.068	0.13	0.62	20	0.13	3.1	0.14	45
	Min	2.7	43	0.5	0.46	330	23	29	1.1	1.6	0.13	0.02	0.00052	0.01	0.016	0.017	0.015	0.06	21
	Max	7	1200	29	2.5	2000	120	180	2.1	4.8	39	47	0.65	5.1	160	0.75	13	0.48	200
	N	16	16	16	14	16	16	16	6.0	16	13	16	13	16	12	13	16	16	16

Note: Detection limits were used for statistical purposes when values were less than detection.
Where detection limits were greater than 10x the minimum detection limit due to high ionic strength, non-detect results were excluded from statistical calculations.

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Table 4: Summary of 2010 Trends for Faro Seeps

Station ID	Location	Seep Type	Trends or Recent Changes
SRK-FD01	Ore and Low Grade Ore Stockpiles	Type 2ow	Decreasing pH; increasing SO_4, Zn (seasonal high concentration in the spring)
SRK-FD12	Ore and Low Grade Ore Stockpiles; West Main Dump	Type 2ow (9/13), Type 3ow (4/13)	Decreasing pH; increasing SO_4, Zn
SRK-FD13	Intermediate Dump	Type 3w	Decreasing pH; couple high SO_4, Zn results
SRK-FD14	Ramp Zone Dump	Type 1	Increasing SO_4, Zn (seasonal high concentration in the fall)
SRK-FD19	Lower Northwest Dump	Type 2w	Decreasing pH; increasing SO_4, Zn
SRK-FD23	Northeast Dumps towards Pit	Type 3w (9/13), Type 2w (4/13)	Decreasing pH; increasing SO_4, Zn
SRK-FD24	Northeast Dumps towards Pit	Type 2w (16/18), Type 3w (2/18)	Stable range of pH, SO_4, Zn
SRK-FD30	West Main Dump	Type 2w (6/11), Type 3w (5/11)	Decreasing pH, increasing. Zn, slight decrease in SO_4 (Likely outlier in spring 2010)
SRK-FD31	Ore and Low Grade Ore Stockpiles; West Main Dump	Type 2ow (12/16), Type 3ow (4/16)	Fluctuating pH; increasing SO_4, Zn
SRK-FD37	Medium Grade Stockpile	Type 3o	Increasing SO_4, Zn

4.1.3 Grum Waste Rock Dumps - 2009

No new seeps were identified in 2010. Figure 2 shows the location of seep sampling stations, and provides a graphical summary of the distribution of the different seepage types. Table 5 provides a summary of key characteristics for each of the above seepage types. Full seepage monitoring results are included in Appendix A.

Water Types

Most Grum toe seeps sampled in previous years had neutral to slightly alkaline pHs, and would be classified as Type 1 seeps under the system described for Faro. However, further division is possible on the basis of sulphate and zinc concentrations.

- Type 1a seeps (GD07, 08, 09, 10, 12, 13, 18, and 23) had low to intermediate sulphate (7.0 to 1200 mg/L) and low zinc concentrations (<0.005 to 0.45 mg/L). These seeps reflect drainage from calcareous phyllites and till in the northwest draining portion of the dump. Surface mapping in this drainage indicated some sulphides were present in this area, but they were typically in small isolated pockets, and were surrounded by extensive areas of calcareous phyllites.
- Type 1b seeps (GD01, 02, 04, 05, 06, 11, and 21) had zinc concentrations in the range of 1.1 to 17 mg/L, and sulphate concentrations ranging from 332 to 2900 mg/L. Most of these seeps were towards the southeast, and were below the sulphide cell.

Some Grum seeps (GD11, 16, 17, 19, 20 and 24) have been classified as Type 2 seeps. These seeps had sulphate concentrations ranging from 566 to 4,100 mg/L and zinc concentrations ranging from 7.7 to 139 mg/L.

Three new water types have been established for water quality predictions of the Grum waste rock dumps:

- WGD was established to represent the West portion of the Grum dump to better reflect local conditions in that part of the dump. This seep is based on data from SRK-GD13/18.
- Type G2 was developed based on recent Type 2 seeps from Grum.
- Type G3 has was developed based on Type 3 waste seeps from Faro.

Table 5: Characteristics of Grum Water Types

Water Type	Statistic	Field pH	Acidity to pH 8.3	Alkalinity-Total	Chloride	Sulphate	Calcium	Magnesium	Potassium	Sodium	Aluminum	Cadmium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Zinc
	Units	s.u.	mgCaCO3/L	mgCaCO3/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	mg/L	mg/L
Minimum Method Detection Limit			1	0.5	0.5	0.5	0.05	0.1	0.05	2	0.002	0.00002	0.00003	0.0005	0.0002	0.0002	0.005	0.00002	0.005
1a	Average	7.4	12	320	1.4	460	170	91	3.0	3.5	0.0064	0.000091	0.0022	0.0018	0.11	0.00016	0.092	0.09	0.054
	Median	7.4	10	340	1.3	440	170	73	3.0	3.0	0.004	0.000055	0.00098	0.0014	0.024	0.00018	0.007	0.088	0.016
	Min	6.7	1.0	110	0.5	7.0	42	23	1.8	2.0	0.002	0.00002	0.0001	0.0008	0.007	0.00005	0.0014	0.016	0.005
	Max	7.9	40	510	2.5	1200	370	250	4.2	7.5	0.014	0.00029	0.012	0.0038	0.43	0.0003	1.9	0.14	0.45
	N	34	34	34	31	34	34	34	23	34	9	8	9	9	9	9	34	17	34
1b	Average	7.5	25	520	1.9	1500	360	280	7.2	11	0.0032	0.0018	0.0081	0.006	0.13	0.0041	0.11	0.4	3.8
	Median	7.6	23	560	1.9	1500	350	270	7.4	11	0.003	0.0016	0.0028	0.0021	0.015	0.0013	0.05	0.37	3.1
	Min	6.3	0.5	260	0.5	330	120	70	1.8	2.0	0.001	0.00028	0.0004	0.001	0.006	0.00044	0.0016	0.086	1.1
	Max	8.5	69	700	3.0	3000	530	550	12	18	0.007	0.0054	0.05	0.041	0.8	0.072	1	0.92	17
	N	61	61	61	48	61	61	61	61	61	27	27	33	31	25	27	61	61	61
2	Average	7.0	87	320	1.7	1800	330	260	7.1	13	0.027	0.043	0.14	0.17	8.1	0.019	3.0	0.61	43
	Median	7.3	83	290	1.8	1700	350	250	6.5	5.8	0.0025	0.025	0.063	0.009	0.55	0.0045	1.7	0.39	17
	Min	5.7	7.0	39	0.52	570	160	110	2.4	2.3	0.001	0.0024	0.0084	0.0015	0.009	0.0012	0.11	0.1	7.7
	Max	7.6	240	660	2.8	4100	560	570	20	120	0.28	0.18	0.7	2.1	46	0.14	16	2.7	140
	N	19	19	19	18	19	19	19	19	19	12	16	19	15	13	12	19	19	19

Note: Detection limits were used for statistical purposes when values were less than detection.
Where detection limits were greater than 10x the minimum detection limit due to high ionic strength, non-detect results were excluded from statistical calculations

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Trends in Seepage Chemistry

Trends in seepage chemistry are now being systematically evaluated for all seeps where there is sufficient data. Temporary graphs of pH, sulphate and zinc were constructed using Excel's filter feature, and any noteworthy trends were recorded in a seepage review checklist, as presented in Appendix C. All but three stations at Grum (SRK-GD13, SRK-GD05 and SRK-GD06) either showed no appreciable trends over time, or did not have sufficient data to allow an evaluation of trends. The changing trends in Stations SRK-GD05 and GD-06 have been noted previously, while changes in GD-13 are relatively recent. The trends for all of these stations are summarized in Table 6, and are discussed as follows.

SRK-GD05 and GD06

Sulphate and zinc concentrations at these adjacent stations initially demonstrated increasing trends from 2002 to 2005, and then were relatively stable or slightly decreasing until 2008 when concentrations began to increase once again. The highest sulphate and zinc concentrations at these stations were recorded in 2009 (2500 and 6.4 mg/L, respectively). pH at these stations has been relatively stable ranging from 7.5 to 8.2. In 2010, pH SO_4 and Zn values remained stable at 2008-2009 levels.

SRK-GD13

Sulphate, pH and metals were stable from 2002-2008. From 2008 onwards, pH has decreased slightly (with the exception of the fall 2010 sample), and sulphate and zinc concentrations increased and then stabilized at concentrations of 1100 mg/L and 0.11 mg/L respectively.

Table 6: Summary of 2010 Trends for Grum Seeps

Station ID	Location	Seep Type	Trends or Recent Changes
SRK-GD05/06	South toe of Grum Dump, downslope of Grum Sulphide Cell	Type 1b	Increasing SO_4 and Zn concentrations
SRK-GD13	Northwest toe of Grum dump	Type 1a	Decreasing pH, increasing SO_4 and Zn

4.1.4 Vangorda Waste Rock Dumps - 2009

No seeps were sampled at Vangorda in 2010 due to all seeps being dry at time of sampling. No additional interpretation has been done for this report. The previously-developed grouping of seeps into water types continues to be a useful tool for summarizing the monitoring results and for tracking the evolution of dump seepage chemistry.

Figure 2 shows the location of seep sampling stations, and provides a graphical summary of the distribution of the different seepage types. Table 7 provides a summary of key characteristics for each of the above seepage types. Full seepage monitoring results are included in Appendix A. Trends in water quality from the Vangorda dump drains are discussed in Section 4.2.3.

Water Types

All of the seeps associated with the Vangorda Waste Rock Dump had very high concentrations of zinc and other metals. Only one of the seeps sampled in 2009 had pHs between 6 and 7; the other eleven seeps were acidic, with pHs of less than 6.

- The seeps with pHs between 6 and 7 can be classified as Type 2 seeps following the system described for the Faro seeps (Section 4.1.1). At Vangorda, these seeps tended to have higher zinc concentrations (13 to 2580 mg/L) than Faro waste rock seeps, reflecting the high proportion of sulphidic waste rock in the Vangorda Dumps. These seeps also had elevated concentrations of cadmium, cobalt, iron, manganese, and nickel. Cobalt and nickel concentrations were substantially higher than in Type 2 seeps at Faro.
- The acidic seeps can be classified as Type 3 following the system described for Faro. These seeps also tended to have higher zinc concentrations than observed in waste rock seeps at Faro, with values ranging from 87 to 16,700 mg/L. Aluminum, cadmium, cobalt, copper, iron, manganese and nickel concentrations were also generally very high.

Trends in Seepage Chemistry

Trends in seepage chemistry were systematically evaluated for all seeps where there was sufficient data. Temporary graphs of pH, sulphate and zinc were constructed using Excel's filter feature, and any noteworthy trends were recorded in a seepage review checklist, as presented in Appendix C. All of the active stations at Vangorda either showed no appreciable trends over time, or did not have sufficient data to allow an evaluation of trends. Stations SRK-VD02, VD03, VD04 and VD05, VD10 (the drains) had shown changes over time in previous monitoring, but were dropped from the program because they are covered in the routine monitoring program. The results for these stations are discussed in Section 4.2.3.

Table 7: Characteristics of Vangorda Water Types

Water Type	Statistic	Field pH	Acidity to pH 8.3	Alkalinity-Total	Chloride	Sulphate	Calcium	Magnesium	Potassium	Sodium	Aluminum	Cadmium	Cobalt	Copper	Iron	Lead	Manganese	Nickel	Zinc
	Units	s.u.	mgCaCO3/L	mgCaCO3/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	mg/L	mg/L
Minimum Method Detection Limit			1	0.5	0.5	0.5	0.05	0.1	0.05	2	0.002	0.00002	0.00003	0.0005	0.0002	0.0002	0.005	0.00002	0.005
2	Average	6.2	500	160	1.2	3300	370	440	10	9.1	0.049	0.083	1.7	0.017	71	0.035	89	3.1	240
	Median	6.2	400	170	1.0	3500	410	430	11	9.9	0.057	0.07	1.6	0.0042	33	0.0024	93	3.2	220
	Min	5.2	38	5.9	0.4	320	48	44	0.92	0.57	0.006	0.023	0.045	0.001	0.12	0.0008	3.1	0.11	16
	Max	6.8	2200	350	4.0	6100	530	1200	17	16	0.1	0.28	5.0	0.072	410	0.11	260	7.9	720
	N	28	28	28	21	28	28	28	27	28	9	28	28	10	28	12	28	28	28
3	Average	4.6	11000	23	1.2	24000	390	2500	6.8	4.9	130	4.5	12	7.0	1700	0.98	1500	9.9	4700
	Median	4.5	4400	2.0	0.5	15000	430	1300	6.0	4.0	49	1.3	6.8	0.59	850	1.1	620	6.7	2100
	Min	2.6	35	0.5	0.4	510	81	27	0.92	0.3	0.004	0.04	0.029	0.01	0.06	0.0007	2.4	0.065	13
	Max	7.1	42000	160	11	89000	640	10000	14	15	910	23	38	180	8600	2.5	5400	26	17000
	N	50	50	50	27	50	50	50	22	30	35	50	50	33	48	28	50	50	50

Note: Detection limits were used for statistical purposes when values were less than detection.
Where detection limits were greater than 10x the minimum detection limit due to high ionic strength, non-detect results were excluded from statistical calculations.

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4.2 Routine Monitoring

4.2.1 Faro Site

Locations of the routine seepage monitoring stations are shown in Figure 1. Data for these stations are available in the Anvil Range master water quality database maintained by DES. A summary of seepage chemistry at these stations is provided in Table 8. Graphs of key parameters are provided in Figures 5 through 10. Plotted values typically represent dissolved concentrations; where only total concentration was reported, this value was used for plotting purposes. Where reported concentrations were below method detection levels, the detection level values were plotted; this causes plotted values for some trace metals to decline over time as lower detection levels were achieved, and is not necessarily indicative of declining concentrations of these parameters.

The most noteworthy change in the data over the past few years was that Station X23 had uncharacteristically low pH on one occasion in each of 2008, 2009 and 2010 and consistently higher zinc, dissolved iron cadmium, nickel and cobalt concentrations throughout 2009 and 2010 compared to previous years. Although copper remains relatively constant, spikes have become much more frequent from 2008-2010. This reflects the gradual transition from Type 2 to Type 3 seepage chemistry from an area with mixed ore and waste rock sources. Station A30 has also undergone major changes from late 2009 to 2010. Average pH in 2010 has increased to 6.5 accompanied by a dramatic decrease in sulphate and most metals. This may reflect a change from Type 3 to Type 2 seepage chemistry. However, it may also reflect the relatively dry conditions observed on site this spring, or changes resulting from establishing this station further downstream (where flows converge), where there is a higher proportion of groundwater contributing to the flows.

4.2.2 Grum Site

The routine monitoring stations at Grum are shown in Figure 2. Station V2 has been monitored on a regular basis since 1988, with monitoring at V2A since 1997 and at V15 since 1995. The routine stations are located along the road access and are between 200 and 800 metres below the toe of the dumps, where dilution of toe seepage by surface water and interaction of toe seepage with soils along the flow-paths could be expected. As such, monitoring results from these stations are not directly comparable to seepage at the toes of the dumps. The routine seepage monitoring data were available from the Anvil Range master water quality database maintained by DES. A summary of seepage chemistry at these stations is provided in Table 9. Graphs of key parameters are provided in Figures 11 and 12. Plotted values represent dissolved concentrations; where only total concentration was reported, this value was used for plotting purposes. Where reported concentrations were below method detection levels, the detection level values were plotted, causing plotted values for some trace metals to decline over time as lower detection levels were achieved. As such, these changes are not necessarily indicative of declining concentrations of these parameters. Results from these stations have also been discussed as part of the 2010 Adaptive Management Plan (AMP) Event #4 report (SRK 2011).

Sulphate, calcium and magnesium concentrations at station V2A continued on a multi-year upward trend through 2010. Zinc concentrations remained elevated through 2010. Sulphate, calcium and magnesium concentrations at stations V15 and V2 continued to have an upward trend through 2010. Zinc concentrations increased sharply at V15 between 2009 and 2010, and stabilized during the latter part of 2010. Cadmium and nickel have shown similar trends.

4.2.3 Vangorda Site

The routine seepage monitoring stations at Vangorda are the three drains shown in Figure 2, as well as a Vangorda Creek monitoring station below all mine inputs (not shown on Figure 2). Results for these stations were available from the Anvil Range master water quality database maintained by DES. A summary of seepage chemistry at these stations is provided in Table 9. Graphs of key parameters are provided in Figures 13 to 16. Plotted values represent dissolved concentrations; where only total concentration was reported, this value was used for plotting purposes. Where reported concentrations were below method detection levels, the detection level values were plotted; this causes plotted values for some trace metals to decline over time as lower detection levels were achieved, and is not necessarily indicative of declining concentrations of these parameters.

The most noteworthy changes at routine monitoring stations at Vangorda over the past few years are as follows:

- Decrease in pH and increase in metals concentrations at stations V30 and V33; and
- Increase in sulphate concentrations at V30 and V27.

Table 8: Summary of Faro Routine Monitoring Sites

Station	Location	Figure	Period	Long-term and Seasonal Trends	Recent Changes	Current Range (2007 to 2010)					
						pH		SO_4 (mg/L)		Zn (mg/L)	
X23	Original Faro Creek Channel, below the eastern portion of the Main Dump, Oxide Fines and Medium Grade Stockpiles	5	1986 to present	– sulphate increased in stages, reaching 7000 to 9000 mg/L in 2009 – pH decreased from 7 to 6.5 in 2004 – changes correspond to change from Ca to Mg dominated – starting in 2000, cadmium and copper exhibit a strong seasonal pattern	Slight drop in pH, and increase in SO_4 and metal concentrations. One sample in each year from 2008-2010 had uncharacteristically low pH (2.9,3.2 and 3.3)	6.0	7.25	5000	9000	200	1400
X26	Discharge from dewatering sump in the Zone II Pit (operated seasonally)	6	1991 to present	– strong seasonal pattern with higher SO_4 concentrations as water levels in the pit are drawn down – modest increase in sulphate and Mg levels from 1998 to 2004, but generally stable pH and metal concentrations	Spike in sulphate concentrations in 2010 up to 4800 mg/L, Two 2010 samples with uncharacteristically high pH (7.63 and 7.53).	6.0	6.5	2000	4000	50	200
FCO and A30 (SRK-FD40)	Upstream (FCO) and downstream (A30) of Faro Valley Dump	7	1989 to present	– highly variable seepage chemistry – lower pH and much higher SO_4 and metal concentrations at downstream location (A30)	The downstream location (A30) SO_4 and metals appear to have reached peak concentrations in 2008 and have decreased rapidly in 2009-2010, accompanied by a pH rise.	5.5 (FCO), 2.6 (A30)	7.8 (FCO), 7,8 (A30)	20 (FCO), 200 (A30)	75 (FCO), 2000 (A30)	0.7 (FCO), 20 (A30)	40 (FCO), 200 (A30)
SP5-6 (SRK-FD26)	Below Upper Northeast Dump	8	1989 to present	– highly variable seepage chemistry correlated to flows (i.e. lower concentrations occurring in [high flow] spring samples, and higher concentrations occurring in [low flow] fall samples).	Slight increase in metal concentrations	6.4	7.7	400	1000	2	6
NE1, NE2 and W5 (SRK-FD05/6)	Toe of Northeast Dump	9	1989 to present	– consistently neutral pHs, moderate SO_4 and low metal concentrations	Spike in Zn and Fe concentrations in 2010	6.9 (NE1), 7.7 (NE2), 7.0 (W5)	8.0 (NE1), 8.4 (NE2), 8.0 (W5)	80 (NE1), 500 (NE2), 200 (W5)	180 (NE1), 900 (NE2), 700 (W5)	0.002 (NE1), 0.004 (NE2), 0.6 (W5)	0.055 (NE1), 0.005 (NE2), 8 (W5)
W8 and W10	Upper Guardhouse Creek	10	1989 to present	– consistently neutral pHs, low SO_4 and low metal concentrations	Site W10 sulphate decrease from 2009-2010 accompanied by a Slight pH increase. Spike in zinc concentrations in July 2010.	7.0 (W8) 7.0 (W10)	8.1 (W8) 8.5 (W10)	3.0 (W8) 1(W10)	9.0 (W8) 6.5(W10)	0.01 (W8) 0.002	0.02 (W8) 0.15

Table 9: Summary of Grum and Vangorda Routine Monitoring Sites

Site	Station	Location	Figure	Period	Long-term and Seasonal Trends	Recent Changes	Current Range (2007 to 2009)*					
							pH		SO_4 (mg/L)		Zn (mg/L)	
Grum	V15 and V2	Below the toe of the waste dump at upper limit of Tributary A (V15); upstream of Vangorda Creek in the original Grum Creek channel. Since 2007, discharge from V15 diverted to Moose Pond (minor seepage losses continue to report to V2).	11	1988 to present	– increase in SO_4 and most metals until 2006 then relatively stable until 2009. (Zn and Ni concentrations at V15 continue to increase). – much higher concentrations at V15 compared to V2. – pH is neutral to slightly alkaline	Slight recovery (increase) of pH at V15 and V2; increasing Zn, Ni Ca and Mg concentrations at V15. Slight increase in sulphate, Ca and Mg at V2 from 2009. One sample at V2 in May 2009 with uncharacteristically high Zn of 0.518 mg/L	6.3 (V15), 7.2 (V2)	8.1 (V15), 8.6 (V2)	1000 (V15), 500 (V2)	2700 (V15), 1200 (V2)	0.4 (V15), 0.005 (V2)	4 (V15) 0.008 (V2)
	V2A	Downstream extent of largest seepage flows originating at toe of Grum dump. Diverted water from Station V15 began reporting upstream of V2A in mid-2007.	12	1997 to present	– SO_4 demonstrated increasing trend over monitoring period, sometimes exhibiting seasonal fluctuations. – pH consistently neutral to slightly alkaline. – highly variable (but typically low) metal concentrations; Ni has demonstrated an increasing trend.	Jump in SO_4 and metal concentrations in 2008 but remained stable/decreased through 2009. Zinc has consistently remained elevated from 2009 onwards.	7.7	8.7	600	1400	0.1	2
Vangorda	V30	Drain 3 (SRK-VD03)	13	1994 to present	– pH consistently ~6 (one lower pH value of 5.2 in Sept. 2008). – gradually increasing SO_4 and metal concentrations over monitoring period.	Slight decrease in pH; slight increase in SO_4 and metal concentrations.	5.2	6.4	4000	8000	200	900
	V32	Drain 5 (SRK-VD04)	14	1994 to present	– pH decrease, SO_4 and metal concentration increase until ~2004 then relatively stable with the exception of aluminum, which continues to demonstrate an increasing trend.	Aluminum and zinc were higher in 2008 and 2009 in comparison to previous years	2.7	4.8	55000	80000	8000	11000
	V33	Drain 6 (SRK-VD05)	15	1992 to present	– stepped decrease in pH. – rapid increase in SO_4 and metal concentrations from 2000 to 2004; relatively stable since that time (although SO_4 concentrations quite variable).	Appreciable decrease in pH and increase in sulphate concentrations. Iron and aluminum concentrations increased, but zinc appears relatively insensitive to the pH change).	4.5	5.6	5000	88000	500	16000
	V27	Vangorda Creek downstream of the Vangorda and Grum Waste Rock dumps.	16	1991 to present	– consistently slightly alkaline pH, low SO_4 and metal concentrations.	Increase in SO_4, calcium and magnesium concentrations; decrease in aluminum, cobalt and cadmium concentrations. Anomalous pH in September 2010 of 5.75 and anomalous sulphate in July 2010 of 380 mg/L.	7.0	8.7	10	300	0.002	0.06

4.3 Temperature and Oxygen Monitoring of Waste Rock

Installations at Grum were destroyed during 2010 Grum Sulphide Cell Cover construction activities. For Faro and Vangorda locations, temperature monitoring instruments remain functional and the results of temperature monitoring continue to provide a proxy measurement for indicating changes in rates of sulphide oxidation at several locations. Based on a review of temperature trends that was completed in March 2010, reaction rates in the waste rock with the highest sulphur contents at both Faro and Vangorda may be decreasing and similar rates in more typical waste rock at both Faro and Vangorda may be increasing.

Oxygen monitoring installations have been less robust, and some of the monitoring ports have become blocked over time. This phenomenon of plugging of gas sampling ports has been observed at other mine sites where pore gas has been monitored. At both Faro and Vangorda, oxygen data have provided useful insight into both movement of air through the waste rock and relative rates of consumption of oxygen; monitoring of the remaining functional ports is considered to be worthwhile for tracking the evolution of geochemical processes in these rock piles over time. Seasonal monitoring has been important to demonstrate the changes in air flow through waste rock under summer and winter temperatures.

5 Conclusions

Seeps associated with the Faro Waste Rock Dumps showed a wide range of pH and zinc concentrations. Overall, trends observed in 2009 continued through 2010. The highest zinc concentrations (up to 34,800 mg/L) have been associated with the ore and oxide fines stockpiles and the mill area. However, most of these samples have been discontinued from the program. The seeps currently included in the program (SRK FD-37, SRK FD-33) were not sampled 2010 because they were dry. High zinc concentrations were also associated with the Main Dump sulphide cell (up to 1,000 mg/L). Away from the known sulphide cells, many seeps were acidic or partially buffered, and had zinc concentrations in the range of 5 to 600 mg/L. A moderate number of seeps at Faro had alkaline pHs, and zinc concentrations of less than 5 mg/L. These were associated with dumps that contained waste rock with relatively low sulphide content. Cadmium, cobalt, copper, iron, manganese and nickel concentrations in some of the seeps are at concentrations that significantly exceed receiving water quality criteria.

Seepage from the Main Dump, the Oxide Fines stockpile and the Medium Grade Ore Stockpile (as monitored at routine monitoring station X23, and SRK seep survey stations SRK-FD12 and SRK-FD31) has demonstrated increasing trends in sulphate, major ion, and zinc and other trace metal concentrations since 2008. The surface water at X23 represents the largest known source of loading from the Faro waste dumps, and as such the evolution of water chemistry at this station provides a critical link in understanding the progress of weathering within the Faro dumps.

Seeps associated with the Grum Waste Rock Dumps had consistently neutral to alkaline pHs. Grum waste rock seepage chemistry at most locations appears to have gradually increasing sulphate concentrations and stable or gradually increasing zinc concentrations. Seeps draining to the southeast had zinc concentrations generally in the range of 1 to 7 mg/L and elevated sulphate concentrations in 2009 and continued through 2010. The seeps to the Southeast were located below the sulphide cell, or below sulphidic waste identified in the SRK September 2002 surface mapping programs. Zinc concentrations remained within stable ranges at all southeast draining seeps in 2010. Over the 2002 to 2010 monitoring period, seeps draining to the northwest have had zinc concentrations ranging from <0.005 to 0.4 mg/L, dissolved nickel concentrations up to 0.14 mg/L and increasing sulphate concentrations ranging up to 1,200 mg/L. Grum seeps sampled in the 2010 monitoring period continue to have gradually increasing sulphate concentrations and stable or gradually increasing zinc concentrations. No large changes in chemistry that could be associated with the construction of the waste rock cover have been observed.

No isolated ephemeral seeps were sampled in 2010. In previous sampling programs, these types of seeps have had high zinc concentrations e.g. SRK-GD16 (28 mg/L, May 2009), and show that, at least at a local scale, waste rock at Grum has the potential to generate higher loads than are presently observed at the seepage stations with larger and more consistent flows.

The rate of increase in sulphate and zinc concentrations observed at station V15 over the 2004 to 2006 period appears to have slowed, but an increasing trend is still apparent.

Seeps associated with the Vangorda Waste Rock Dumps were acidic to partially buffered and contained high to very high zinc concentrations (from 10 to 16,700 mg/L). In general, sulphate and zinc concentrations have been stable in recent years; however concentrations at both Drain 5 (Station V32) and Drain 6 (Station V33) have demonstrated increasing trends since 2008. Other trace metals significantly exceeding receiving water quality criteria in the Vangorda seepage include aluminum cadmium, cobalt, copper, iron, manganese and nickel. Cobalt and nickel are notably higher compared to acidic seeps at Faro.

6 Recommendations

In an effort to eliminate duplication of sampling, a comparison was made between recent water chemistry at SRK FD-12 and SRK-FD 31 (located at the toe) to X23 (located further along the flowpath). This spatial comparison reveals systematic changes as water moves downgradient. At station X23 - pH is higher, sulphate, major ions, zinc and other trace metals are lower in comparison to the stations at the toe. This data suggests some attenuation is occurring from the toe of the dump to X23, likely due to the sorption of metals onto the iron oxyhydroxides that are precipitating along this flowpath. Comparing seepage locations at the toe of the dump to downgradient sites is a useful tool to evaluate the amount of natural dilution or attenuation present at the site. Continued monitoring of all three stations can reveal major differences between FD-12, FD-31 and X23 water

chemistry and may signal a change in flow mechanisms between the two locations. It is recommended that monitoring of SRK FD-12 and SRK FD-13 continues on a twice annual basis.

Construction of the Grum waste rock cover (started in 2010) could possibly result in changes to all seeps downgradient of the covered area. It will be important to closely monitor these seeps over the next few years. The survey should continue to include a compute inspection of the toe of the pile to monitor for changing positions or the development of new seeps

This draft report, "**1CY001.046 – Faro Mine Complex- 2010 Waste Rock and Seepage Monitoring Report:",** was prepared by SRK Consulting (Canada) Inc.

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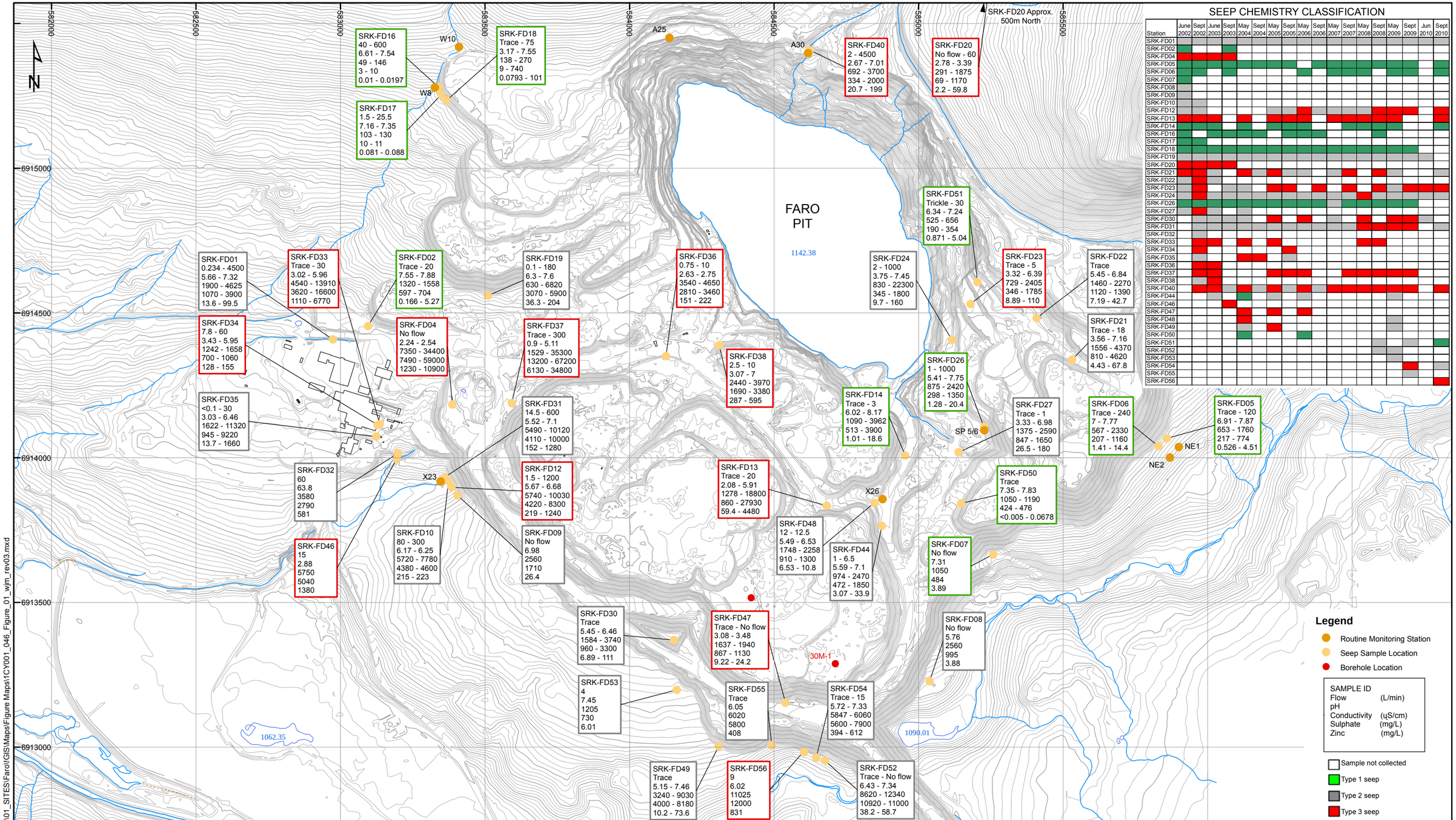
Figures



SEEP CHEMISTRY CLASSIFICATION

Station	June 2002	Sept 2002	June 2003	Sept 2003	May 2004	Sept 2004	May 2005	Sept 2005	May 2006	Sept 2006	May 2007	Sept 2007	May 2008	Sept 2008	May 2009	Sept 2009	Jun 2010	Sept 2010
SRK-FD001																		
SRK-FD02																		
SRK-FD04																		
SRK-FD05																		
SRK-FD06																		
SRK-FD07																		
SRK-FD08																		
SRK-FD09																		
SRK-FD10																		
SRK-FD12																		
SRK-FD13																		
SRK-FD14																		
SRK-FD16																		
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SRK-FD50																		
SRK-FD51																		
SRK-FD52																		
SRK-FD53																		
SRK-FD54																		
SRK-FD55																		
SRK-FD56																		

Faro Mine, Yukon

Contour Interval: 2m
Date of Photography: 03/07/25
Scale of Photography: 1:20000
Survey control derived from existing 1:20000 photography
Survey control based on: UTM Projection, NAD27
Compiled by The ORTHOSHOP, Calgary, September 2003
WO 8856

0 125 250 500 750 1,000 Meters

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Filename: 1CY001_046_Figure_01_wjm_rev03

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Faro Mine Complex

2010 Waste Rock and Seepage Monitoring

Seep Survey Locations
Faro Waste Rock Dumps

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Jan. 2011	LD	1

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SEEP CHEMISTRY CLASSIFICATION

Station	June 2002	Sept 2002	June 2003	Sept 2003	May 2004	Sept 2004	May 2005	Sept 2005	May 2006	Sept 2006	May 2007	Sept 2007	May 2008	Sept 2008	May 2009	Sept 2009	June 2010	Sept 2010
SRK-GD01																		
SRK-GD02																		
SRK-GD04																		
SRK-GD05																		
SRK-GD06																		
SRK-GD07																		
SRK-GD08																		
SRK-GD09																		
SRK-GD10																		
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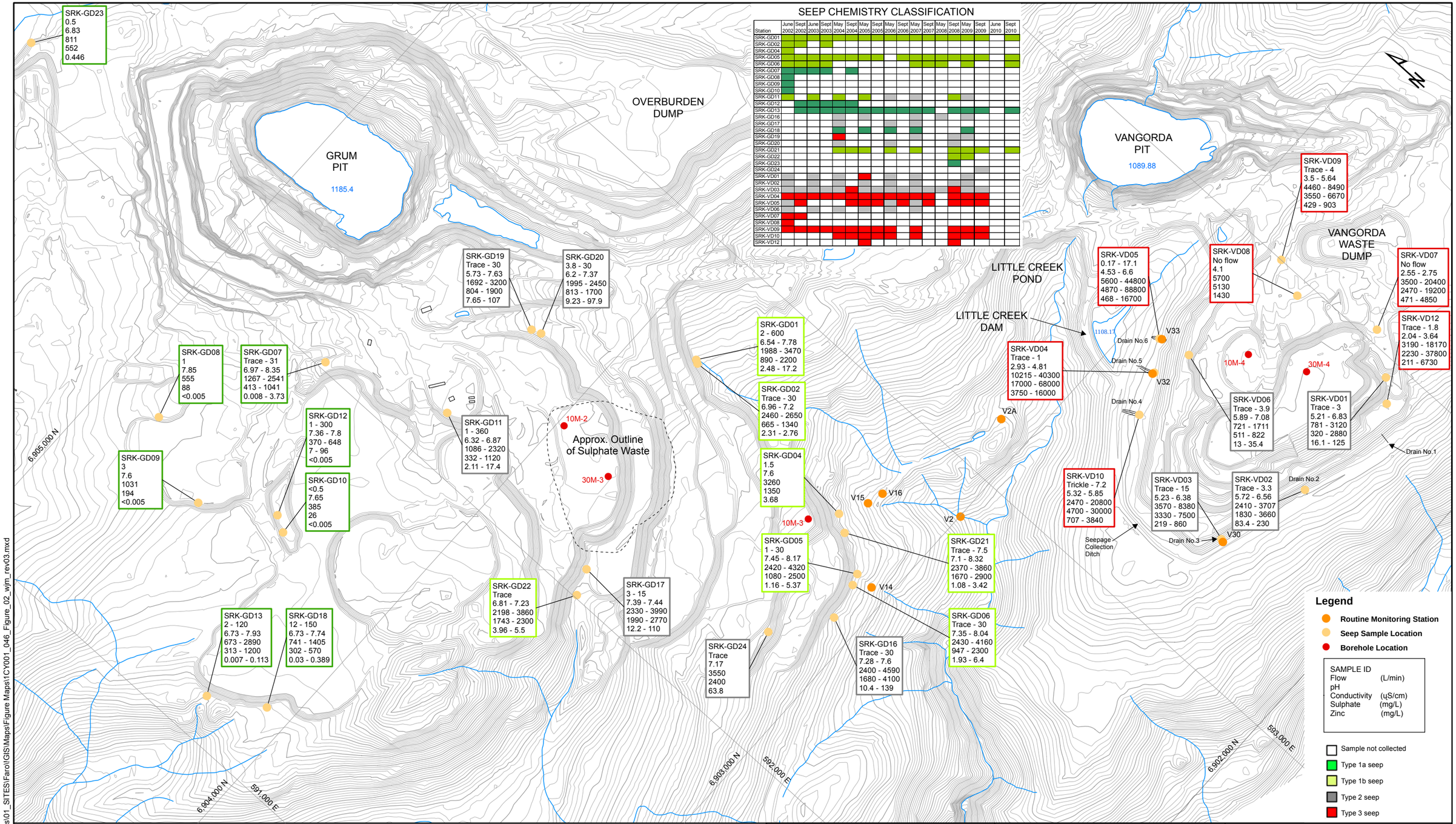

Legend

- Routine Monitoring Station
- Seep Sample Location
- Borehole Location

SAMPLE ID
Flow (L/min)
pH
Conductivity (µS/cm)
Sulphate (mg/L)
Zinc (mg/L)

- Sample not collected
- Type 1a seep
- Type 1b seep
- Type 2 seep
- Type 3 seep

Faro Mine, Yukon

Contour Interval: 2m
Date of Photography: 03/07/25
Scale of Photography: 1:20000
Survey control derived from existing 1:20000 photography
Survey control based on: UTM Projection, NAD27
Compiled by The ORTHOSHOP, Calgary, September 2003
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0 125 250 500 750 1,000 Meters

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2010 Waste Rock and Seepage Monitoring

Seep Survey Locations Vangorda & Grum Waste Rock Dumps

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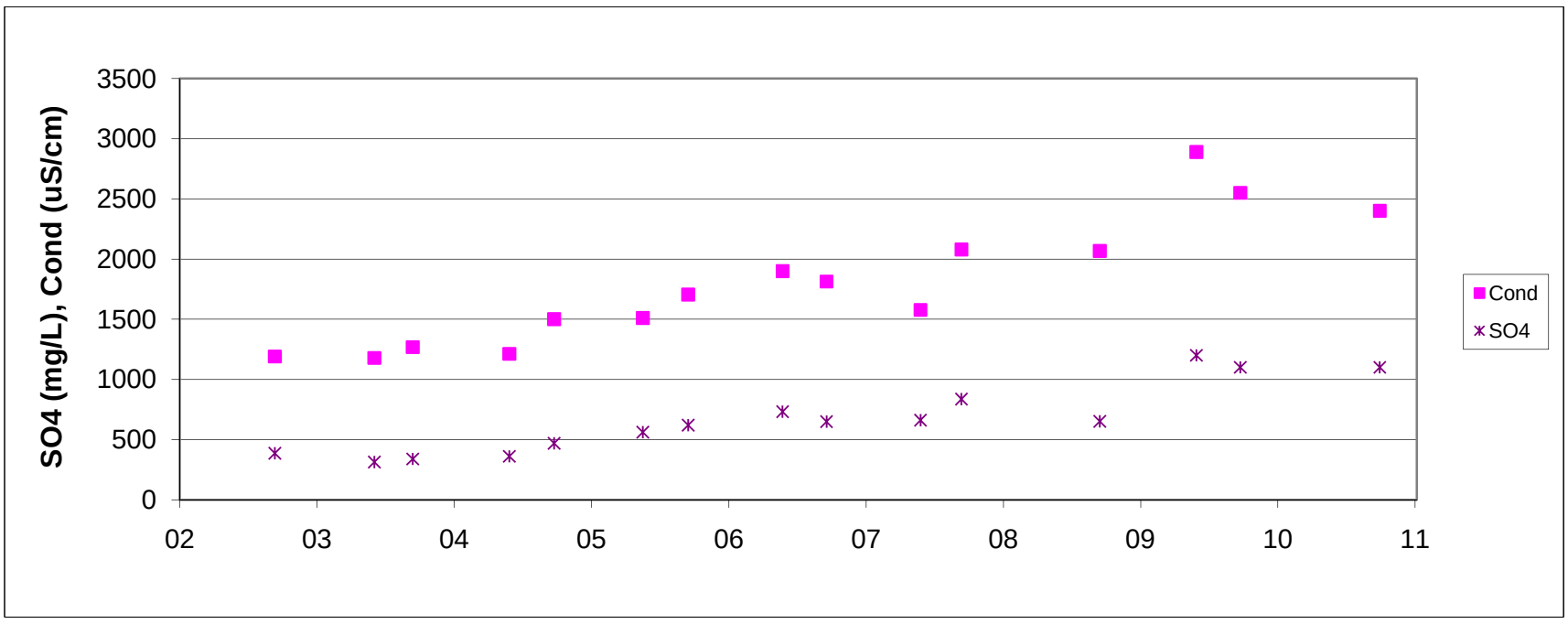
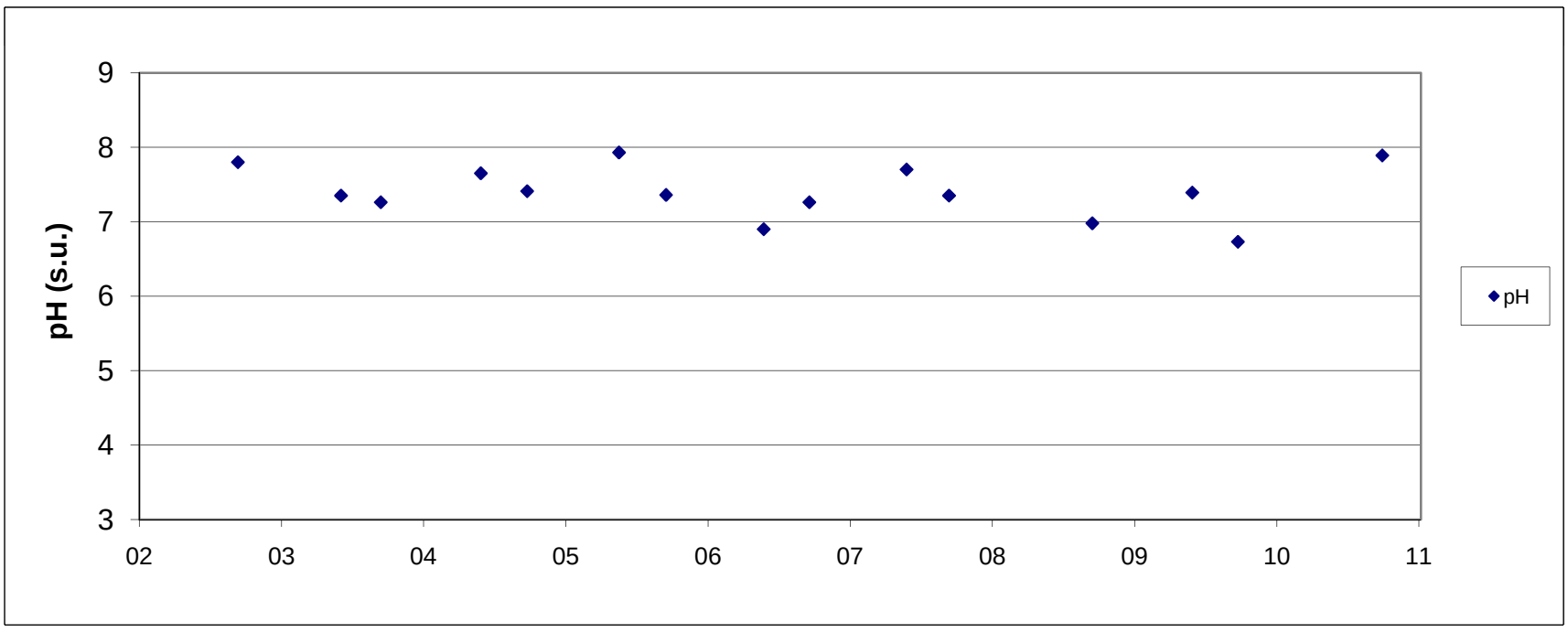
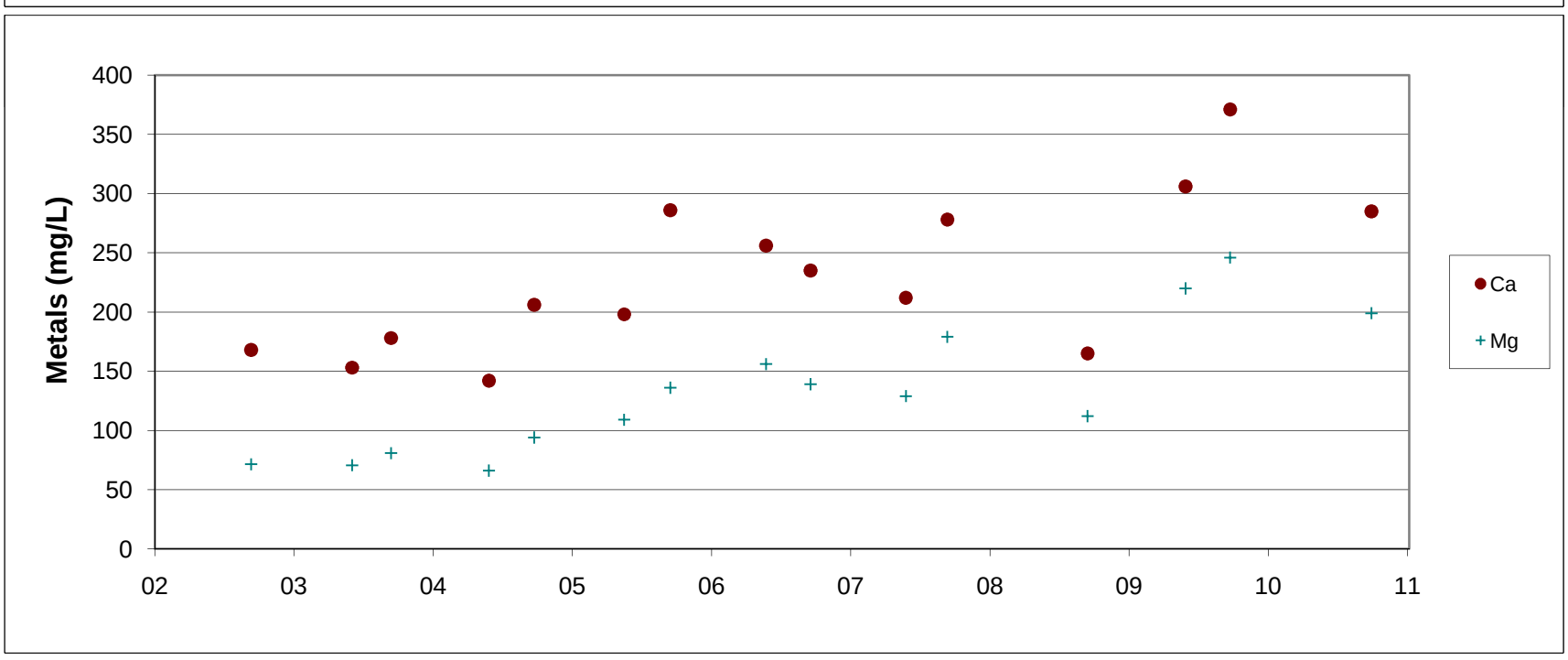
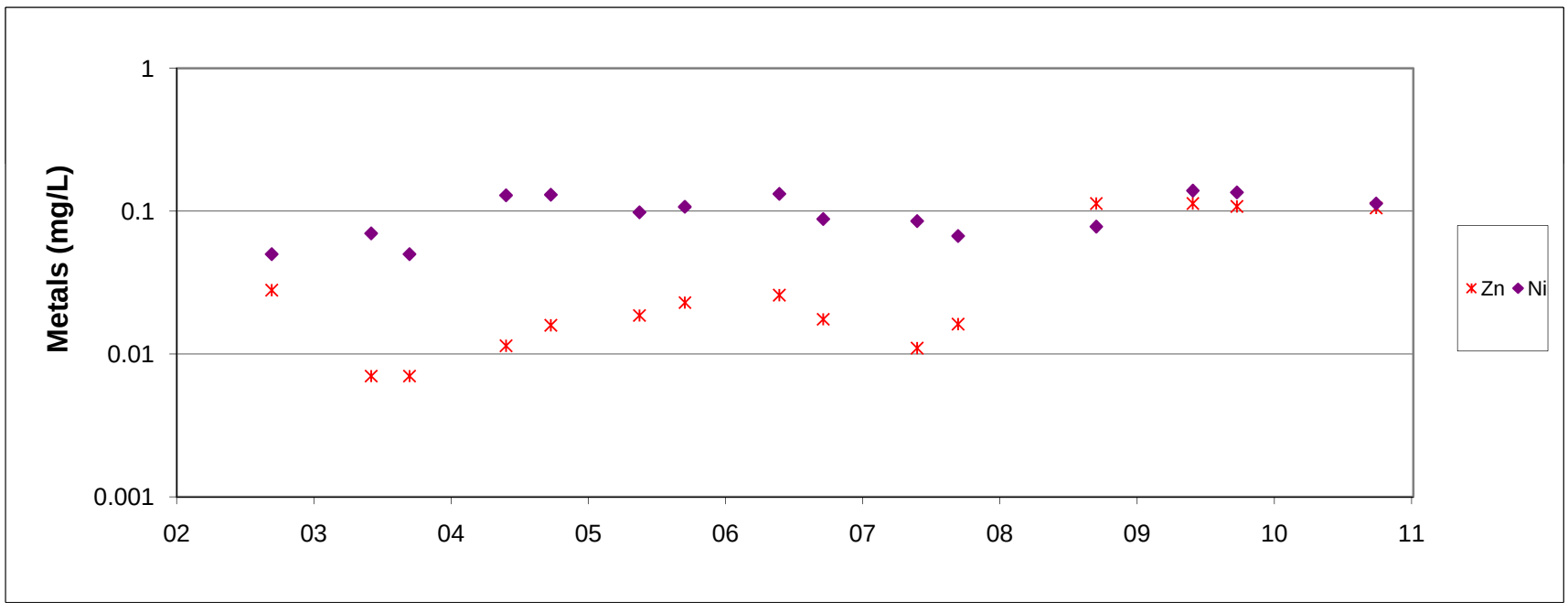
SRK-GD13









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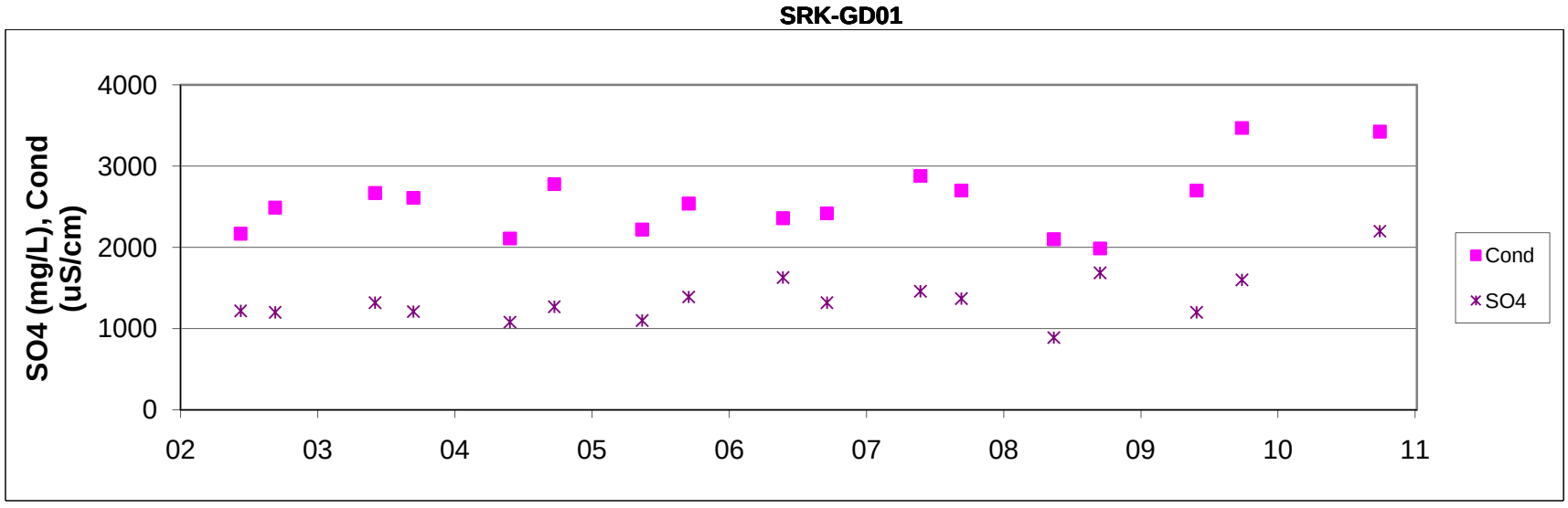
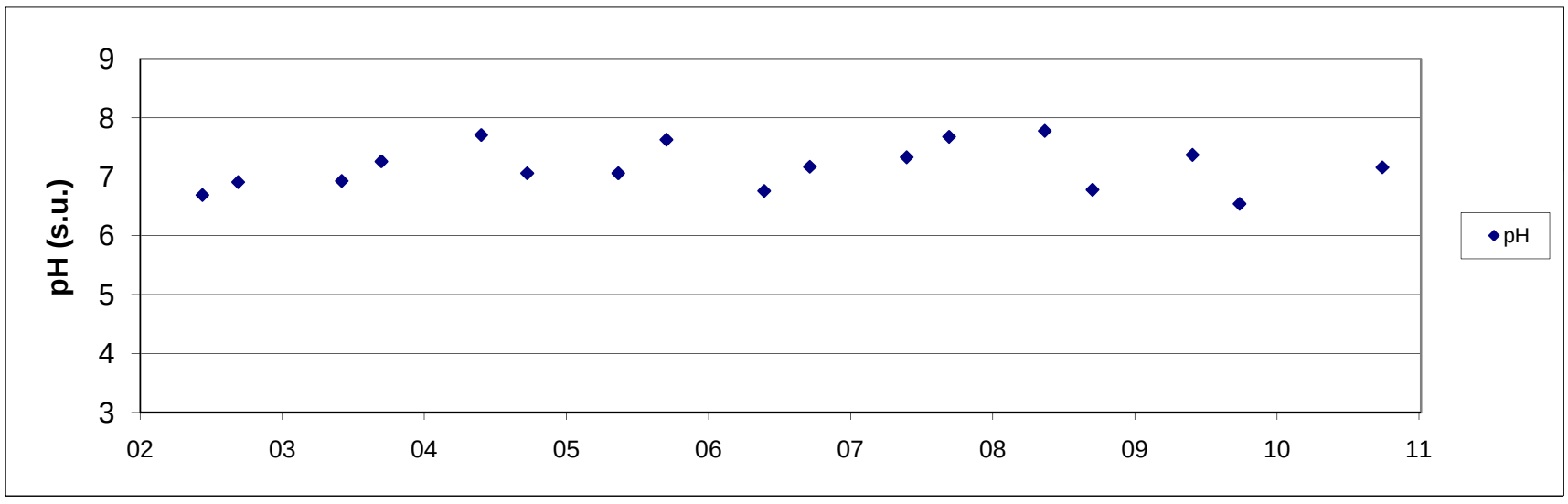
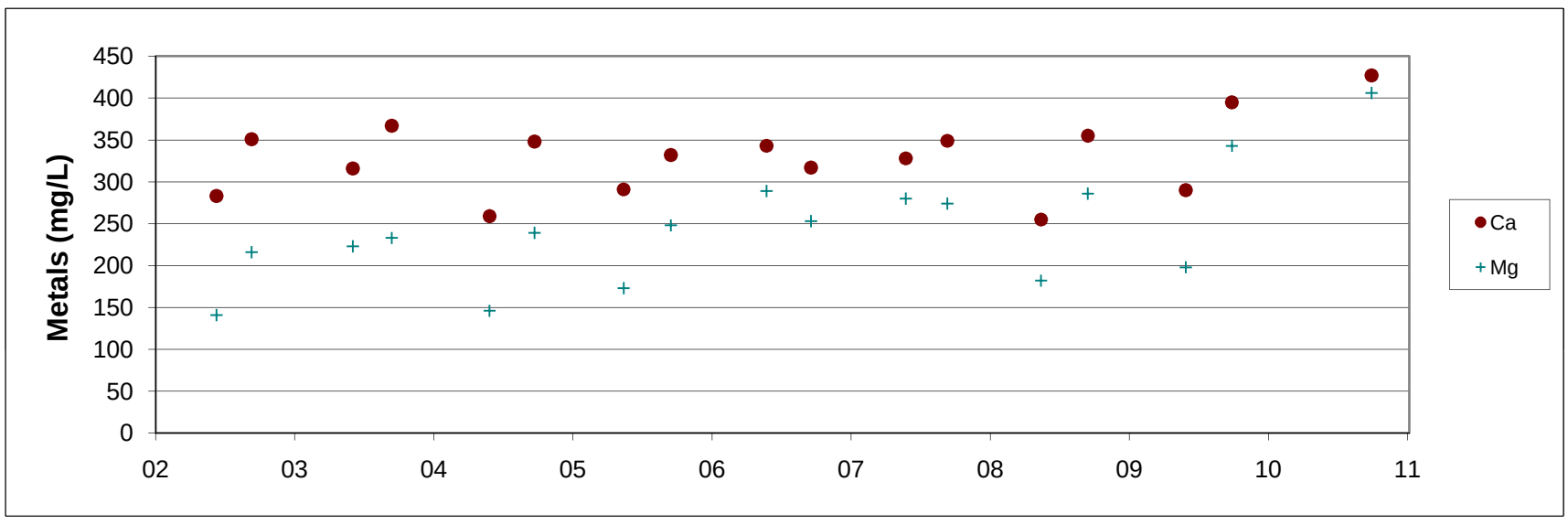
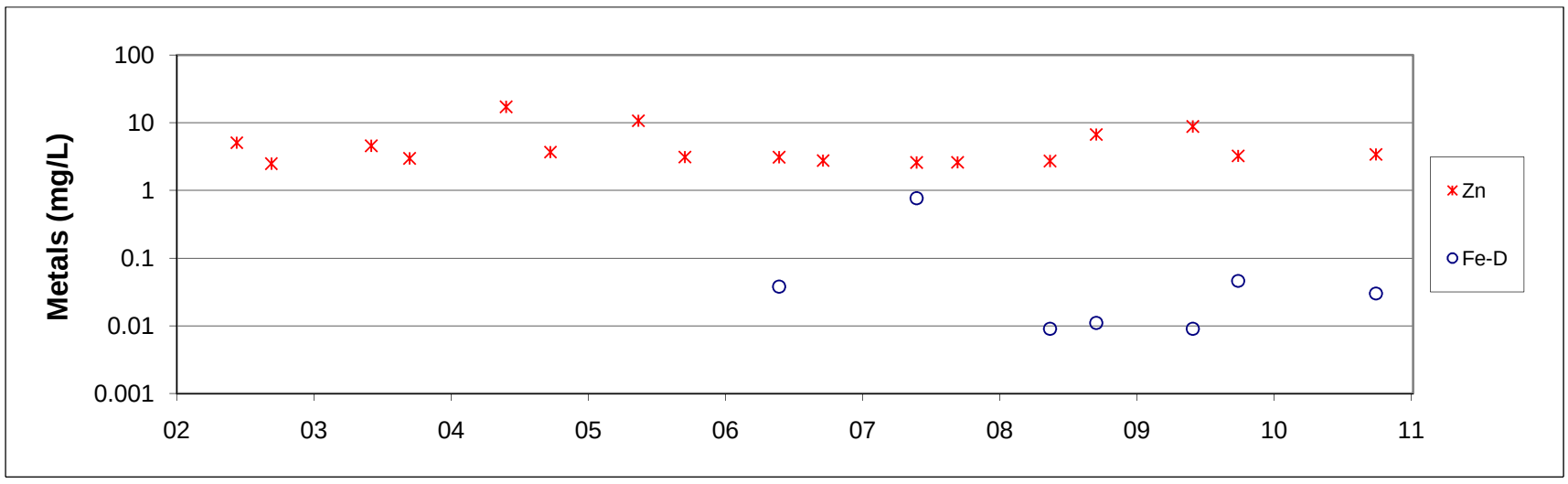
Grum Seepage Station
SRK-GD13

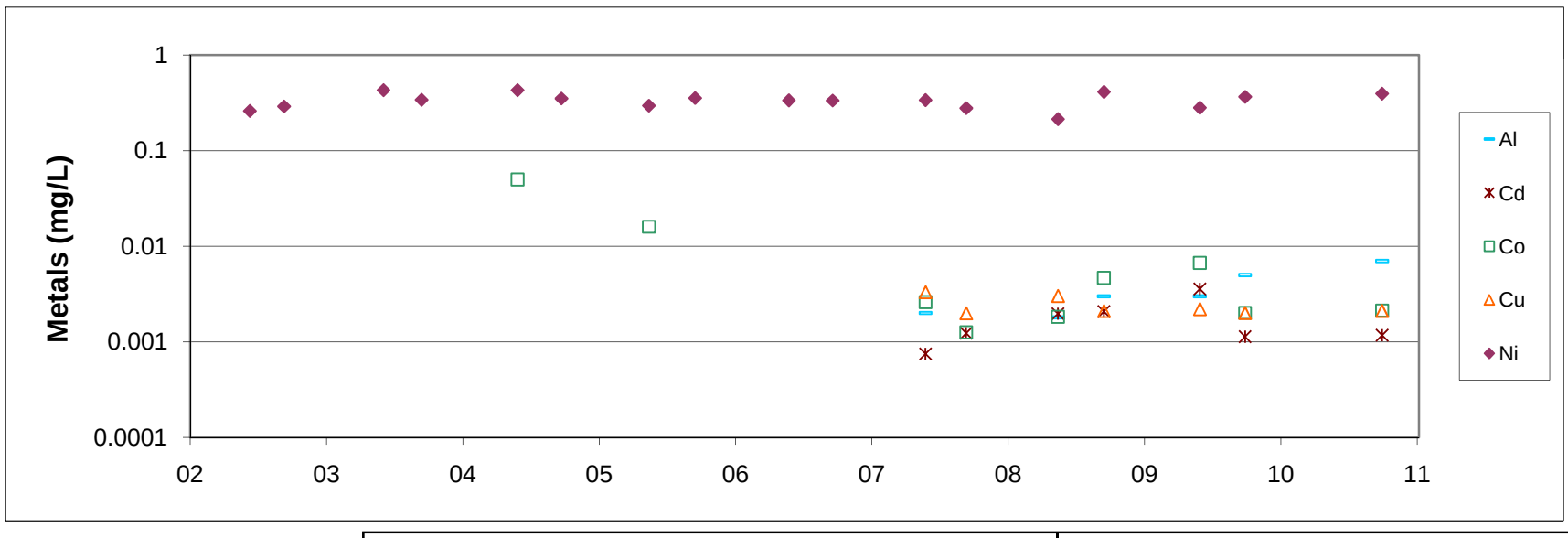
PROJECT	DATE	APPROVED	FIGURE
1CY001.046	February 2011	LD	3











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2010 Waste Rock and Seepage Monitoring Report

Grum Seepage Station
SRK-GD01

PROJECT	DATE	APPROVED	FIGURE
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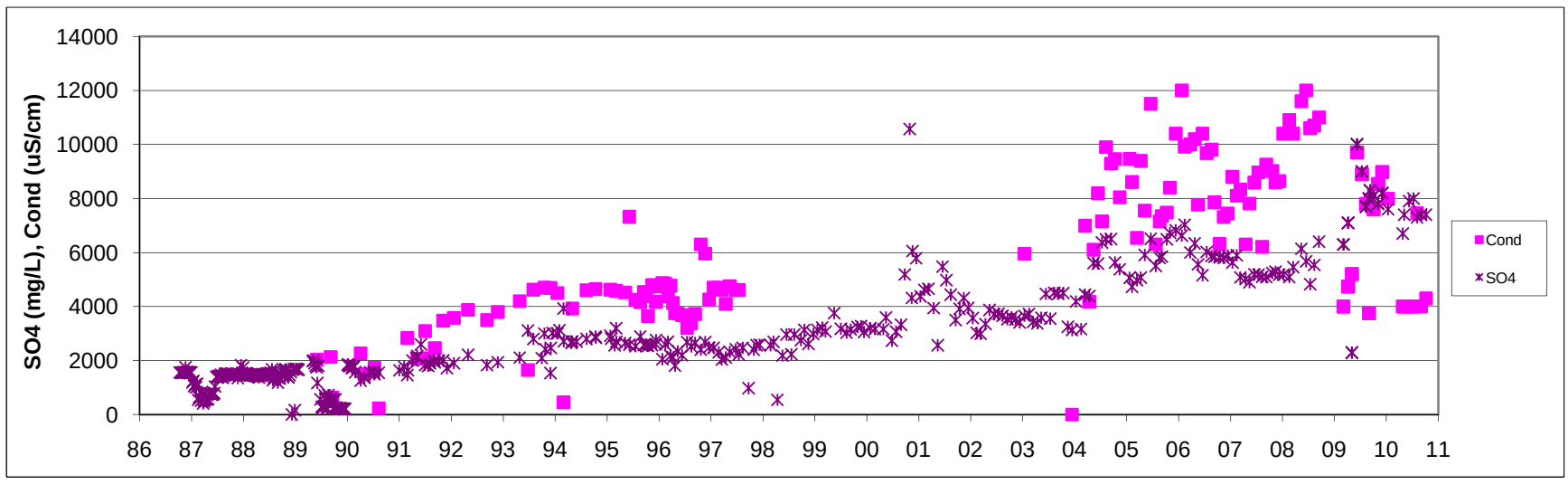
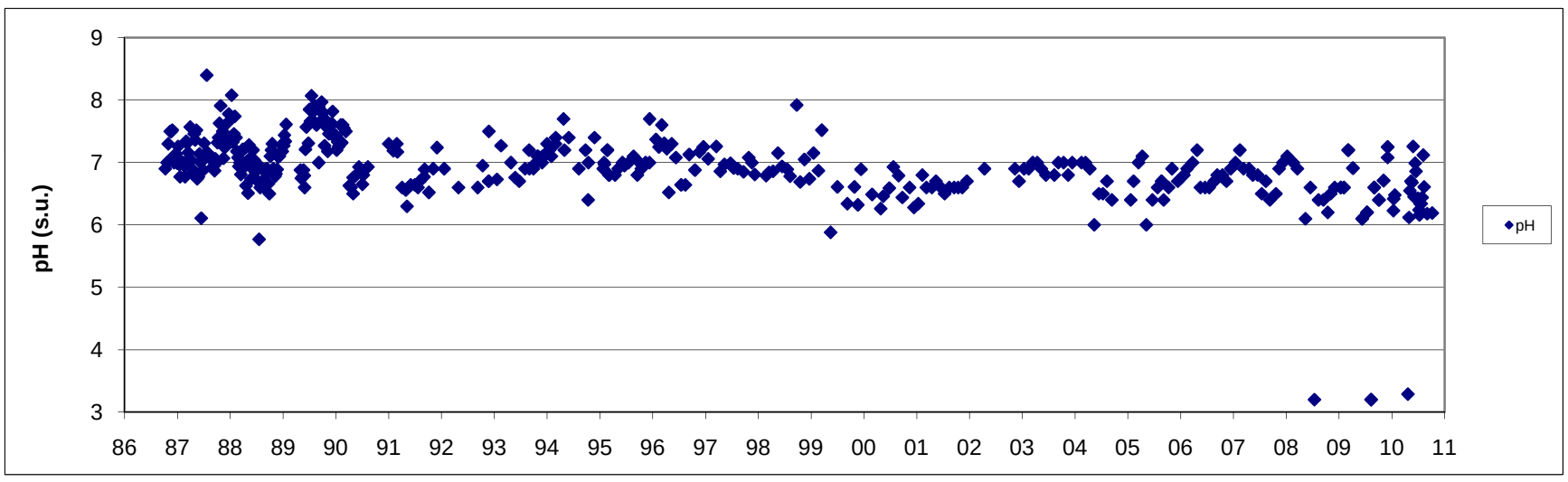
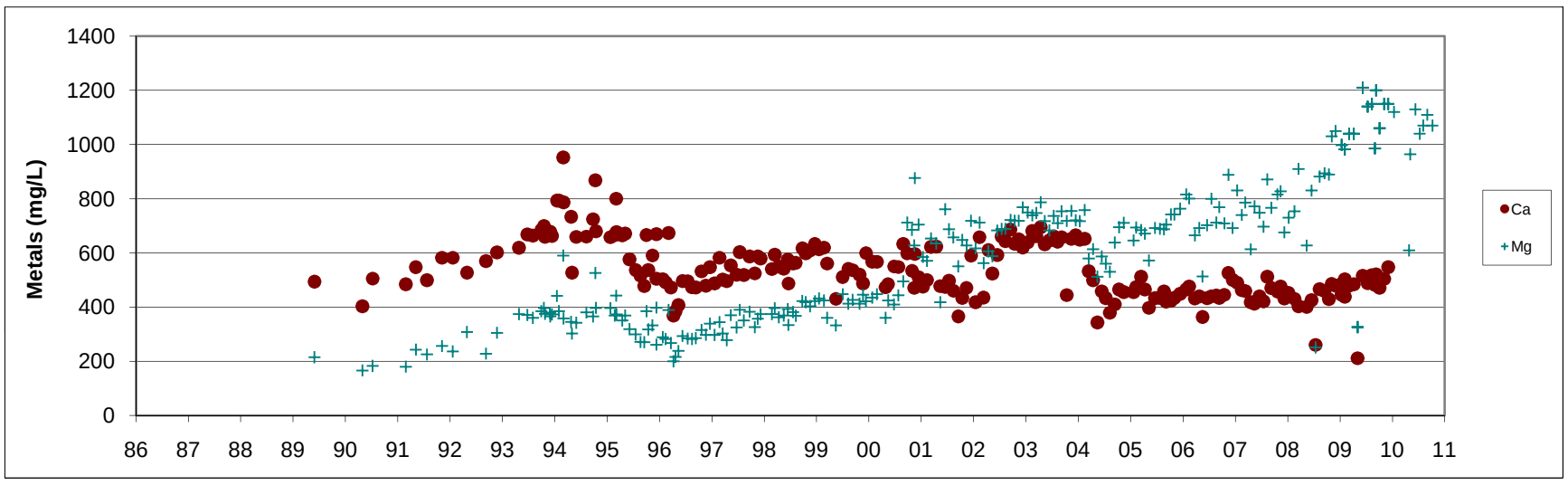
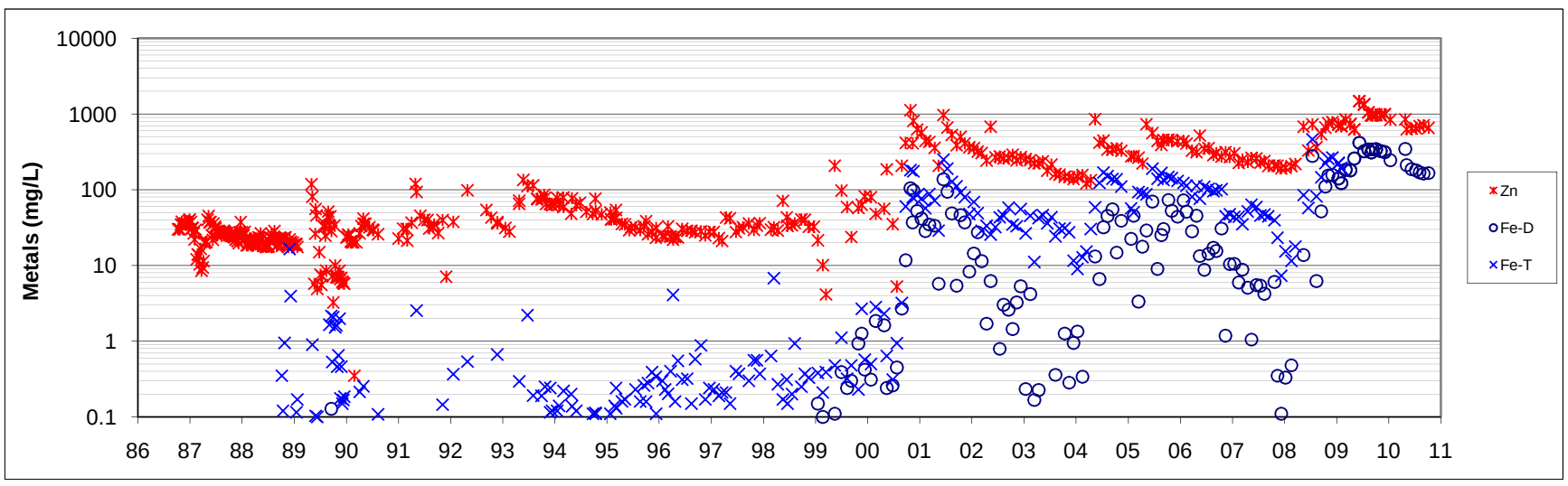
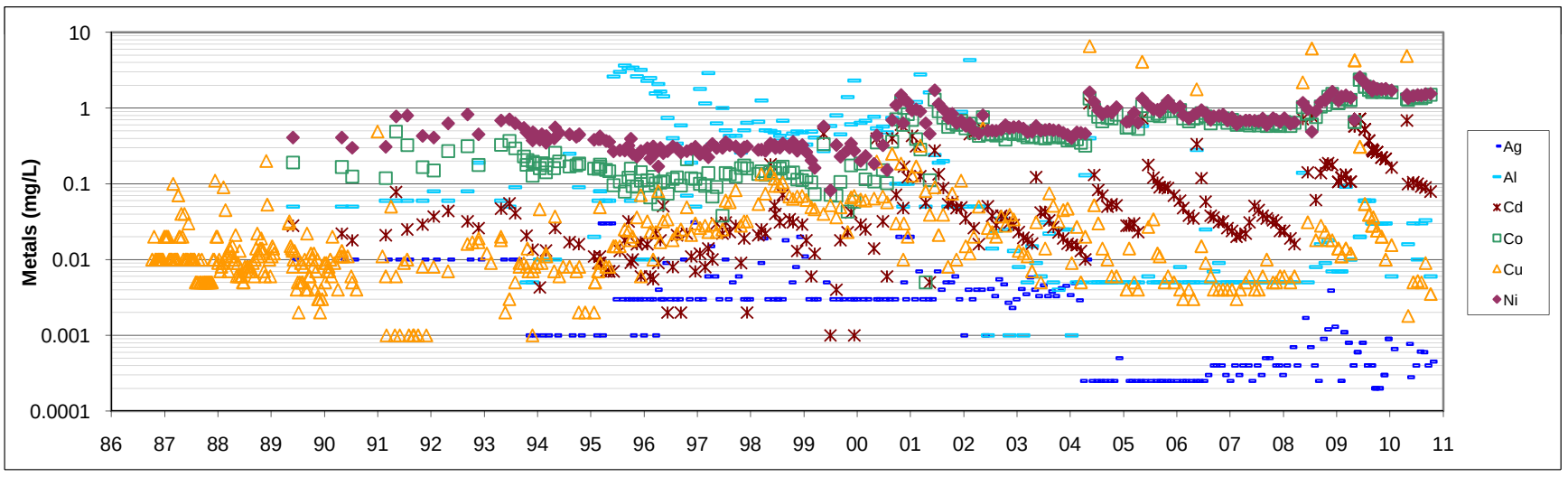
X23











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Faro Mine Complex
2010 Waste Rock and Seepage Monitoring Report

Faro Routine Monitoring Station
X23

PROJECT	DATE:	APPROVED	FIGURE
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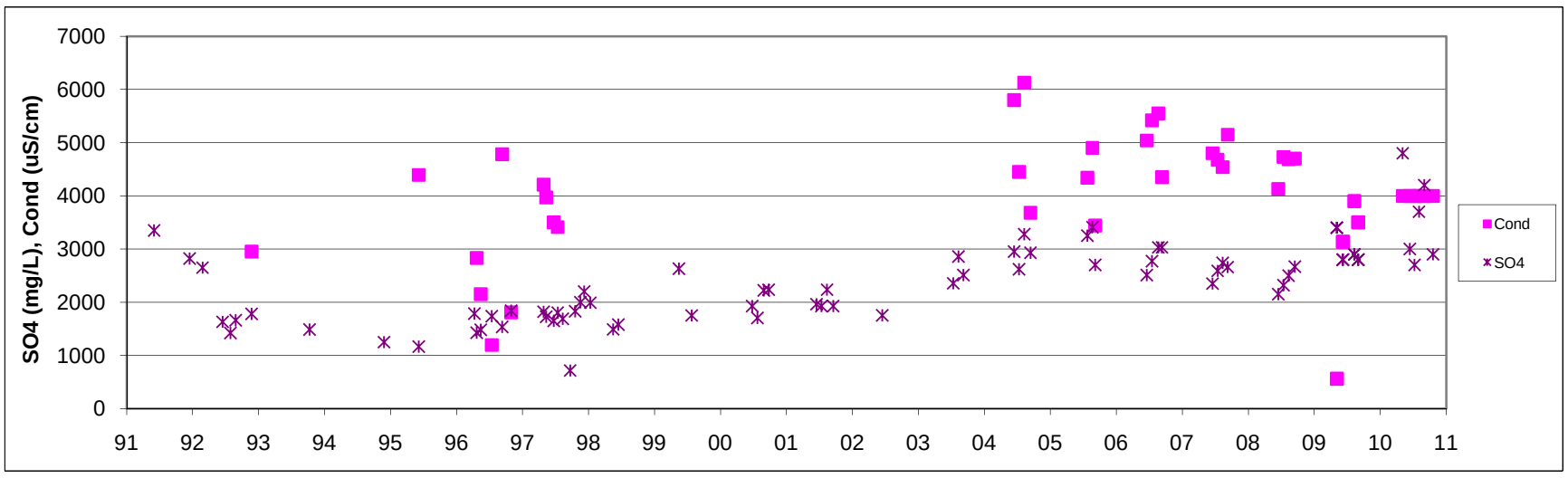
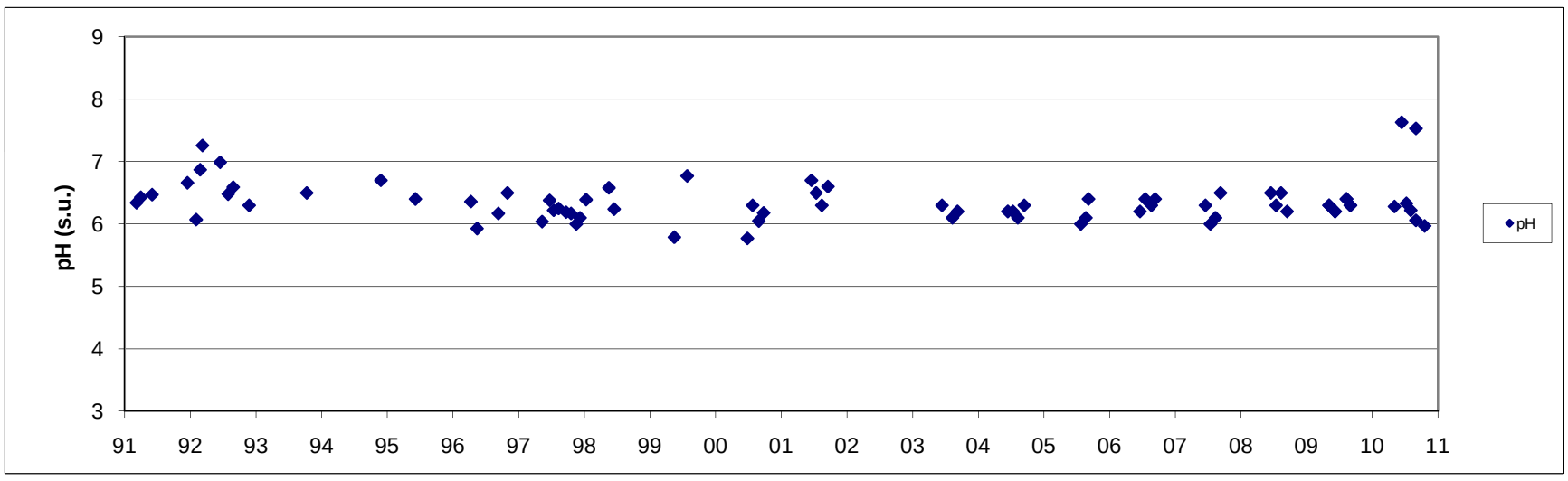
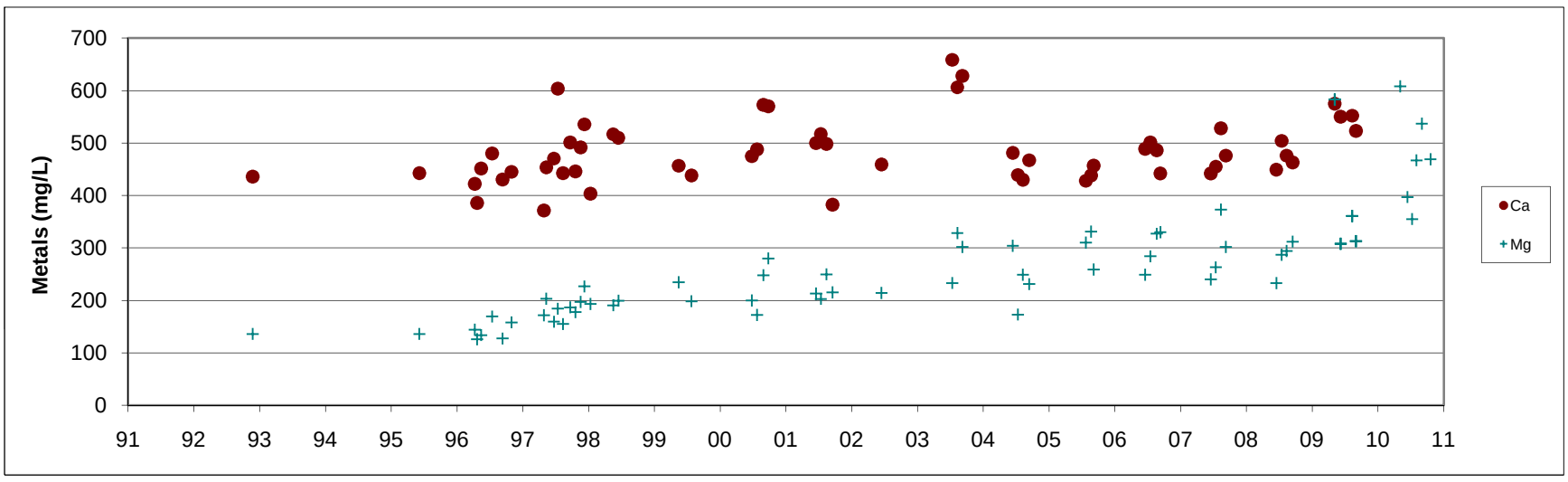
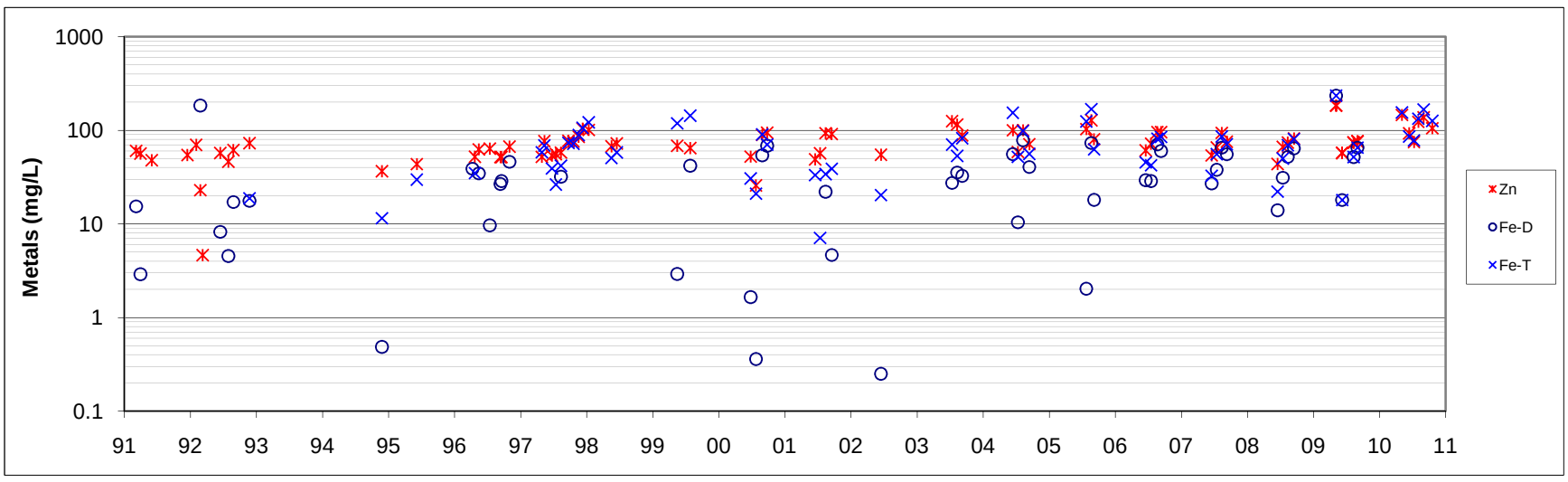
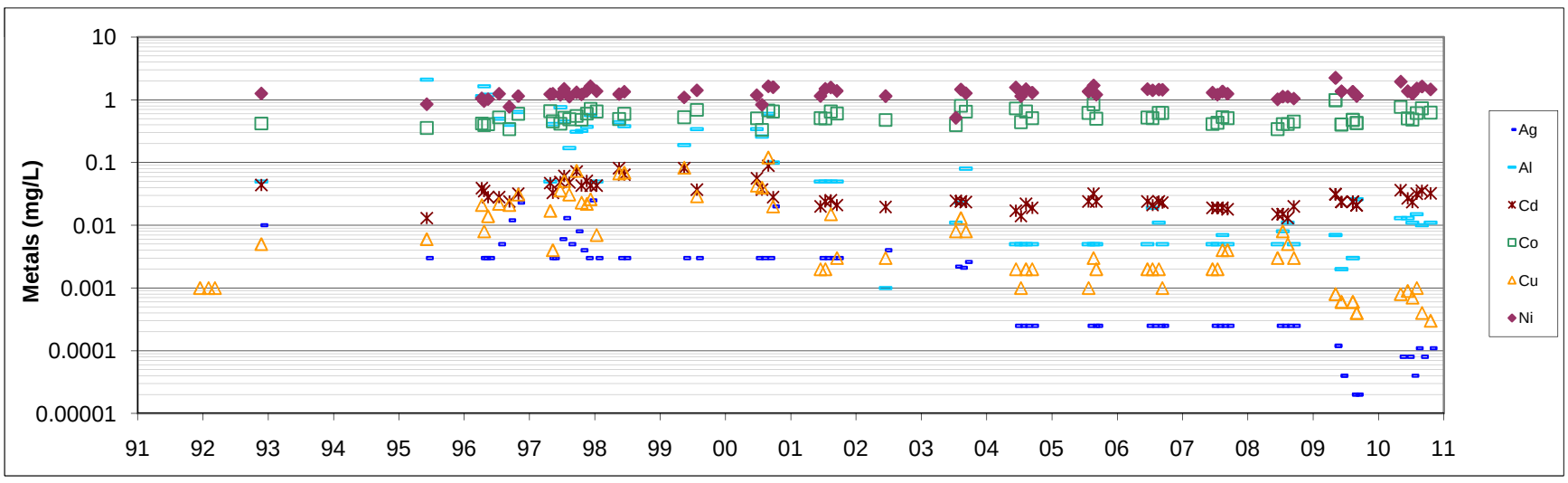
X26











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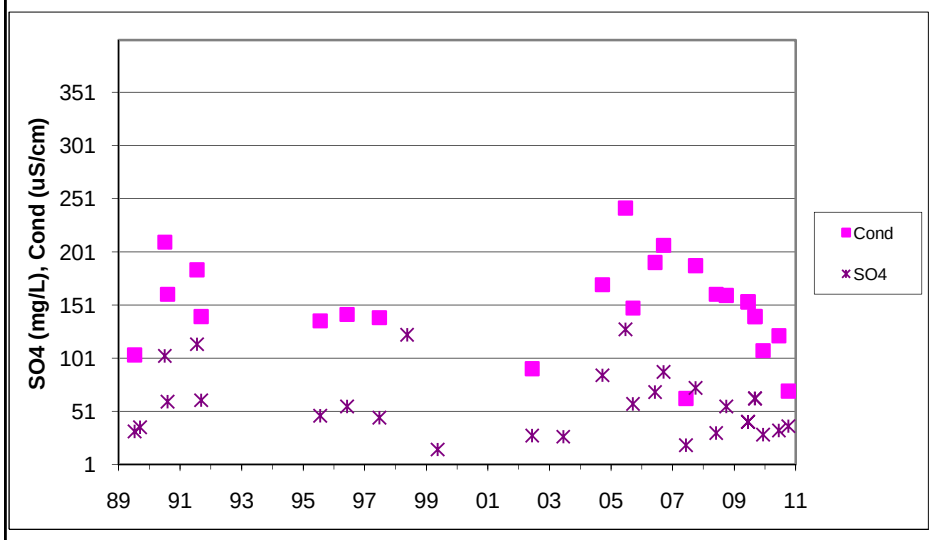
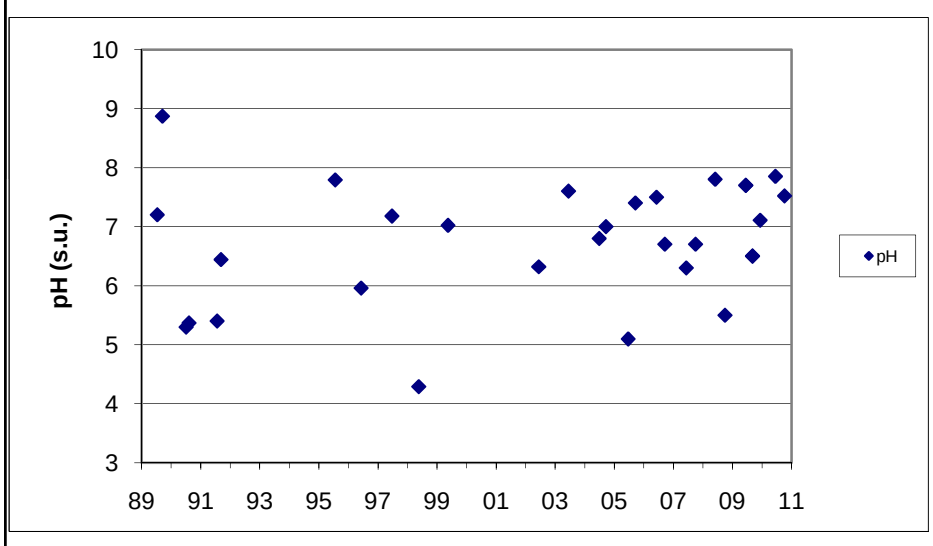
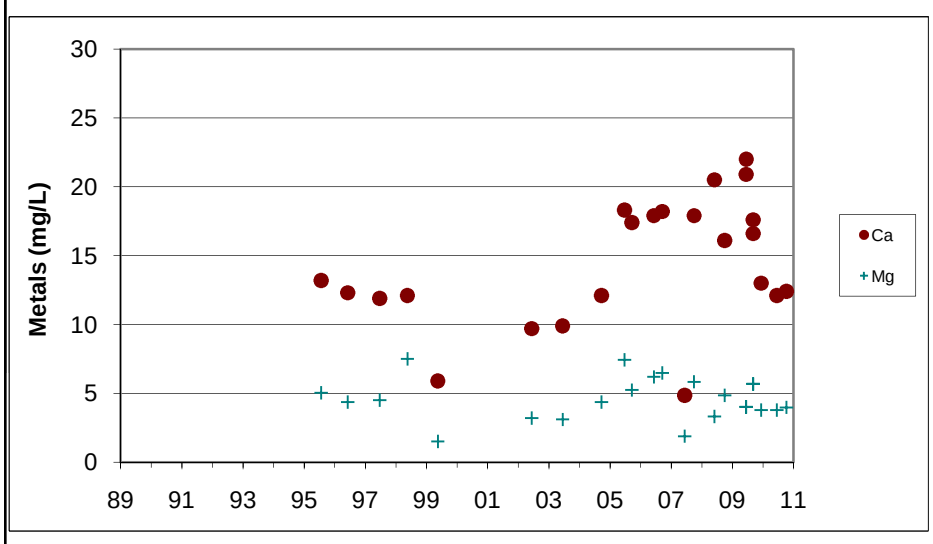
Faro Routine Monitoring Station
X26

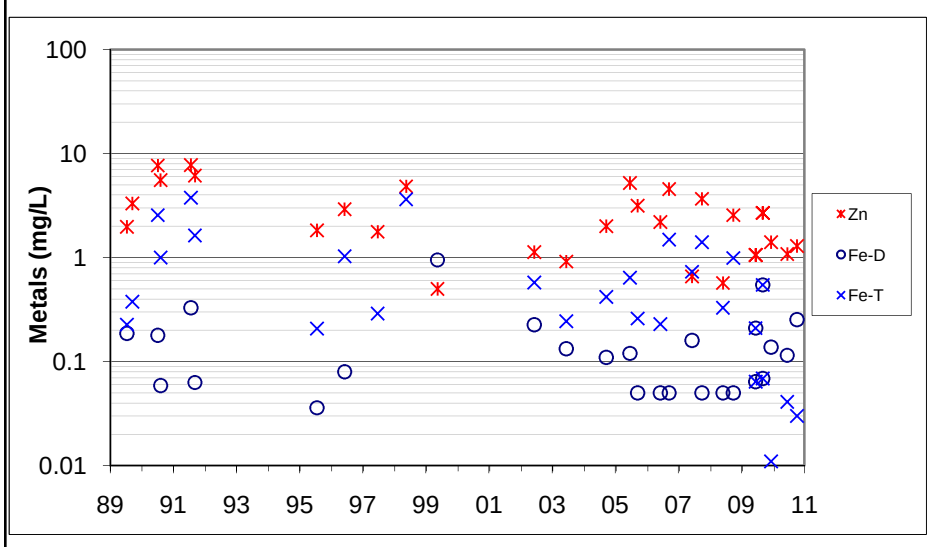
PROJECT	DATE:	APPROVED	FIGURE
1CY001.046	February 2011	LD	6

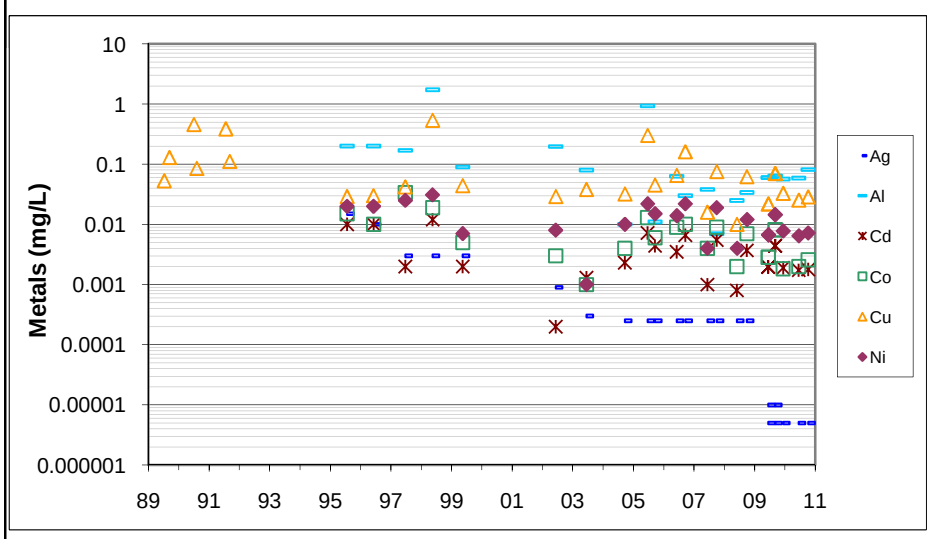
FCO



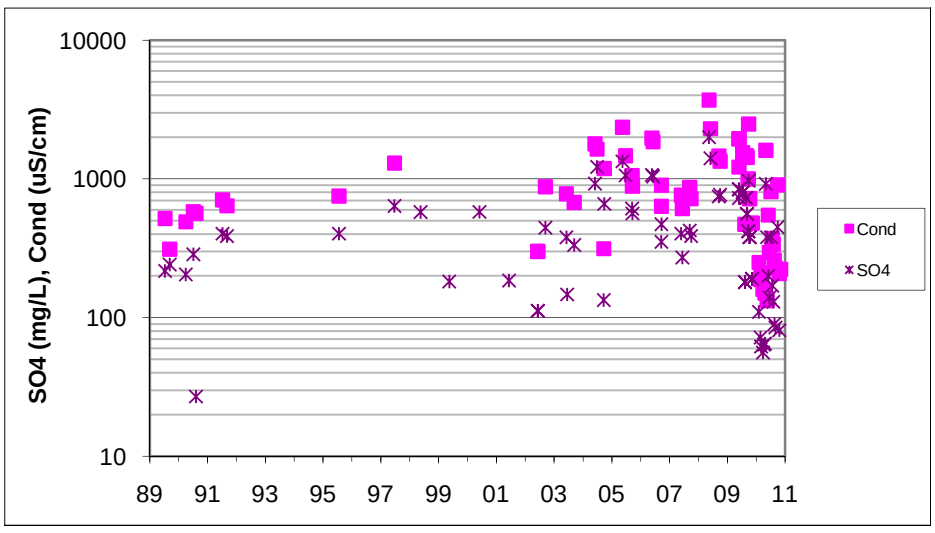


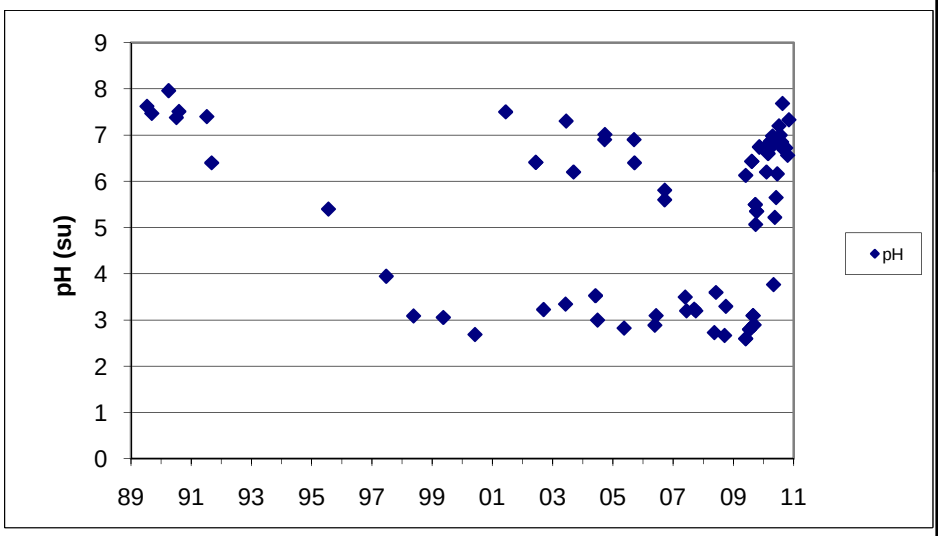


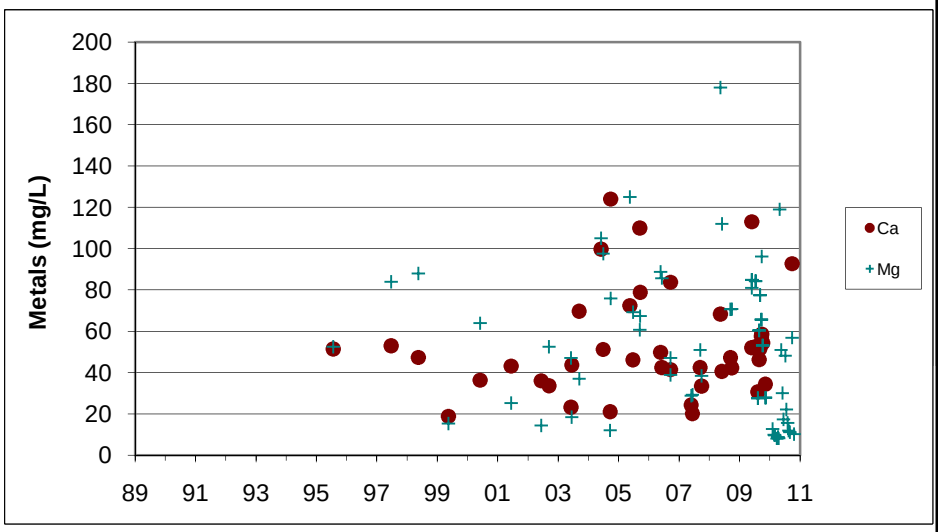


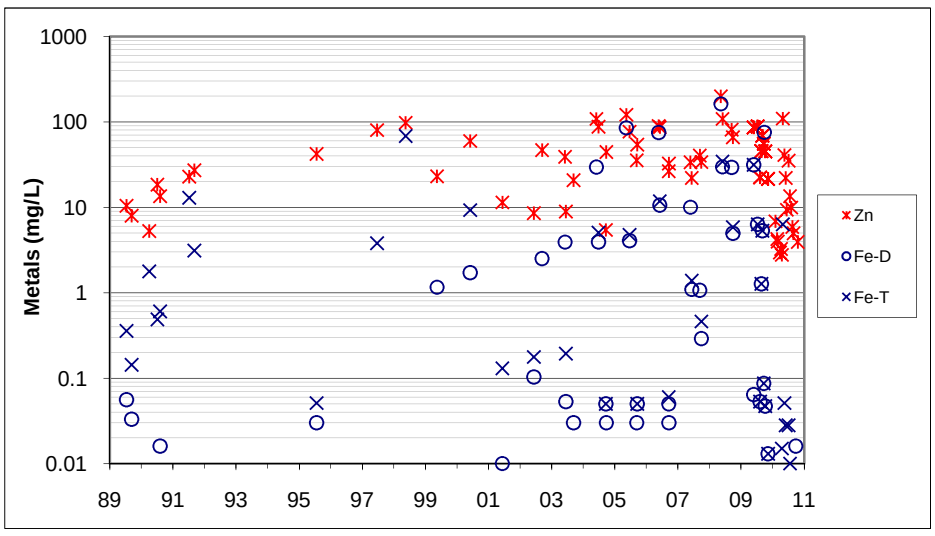


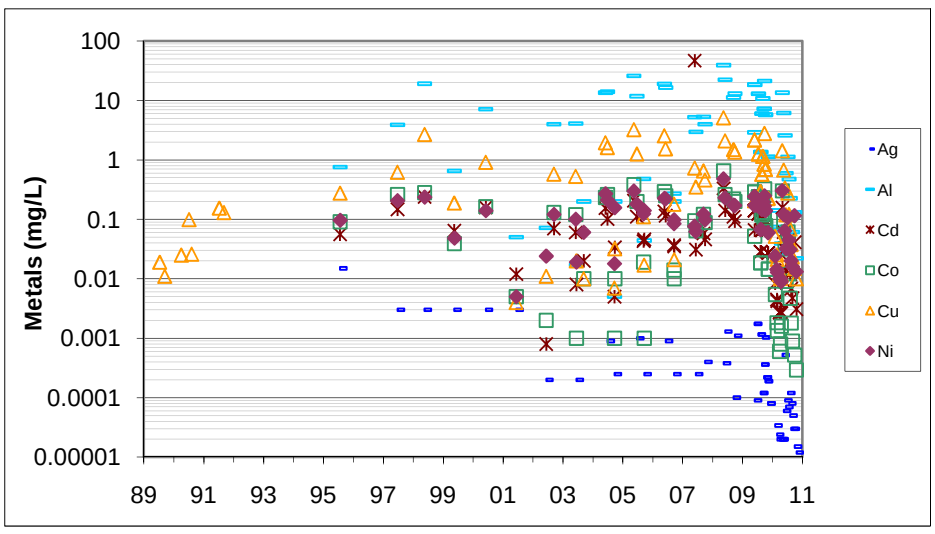
A30











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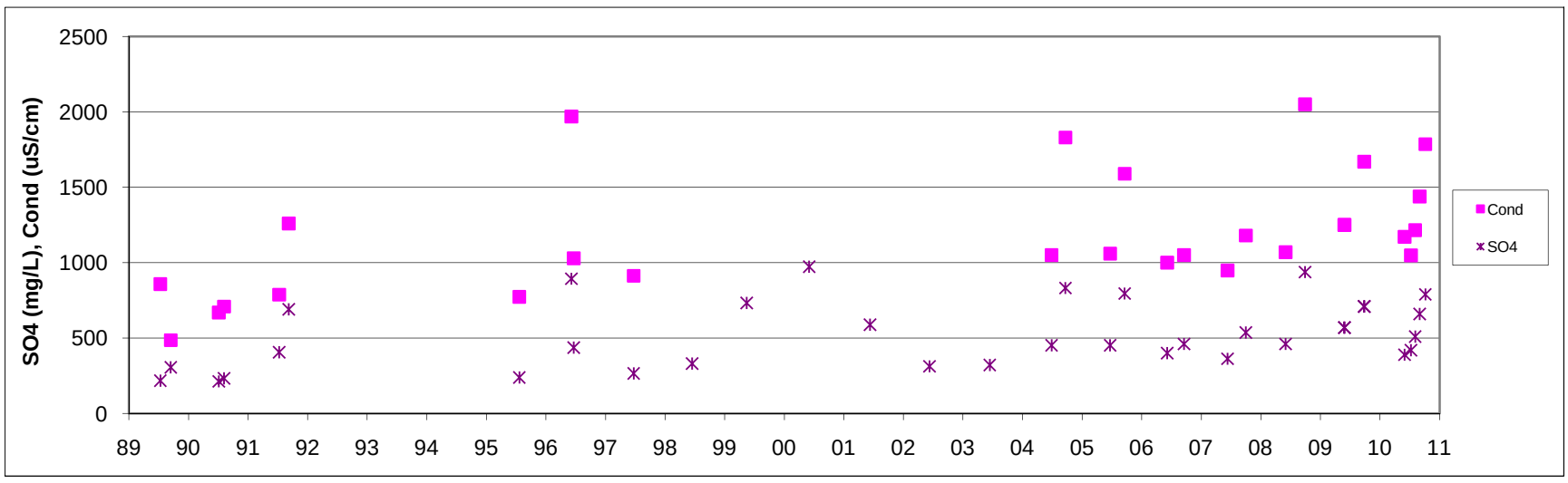
Faro Mine Closure
Fermeture de la mine Faro

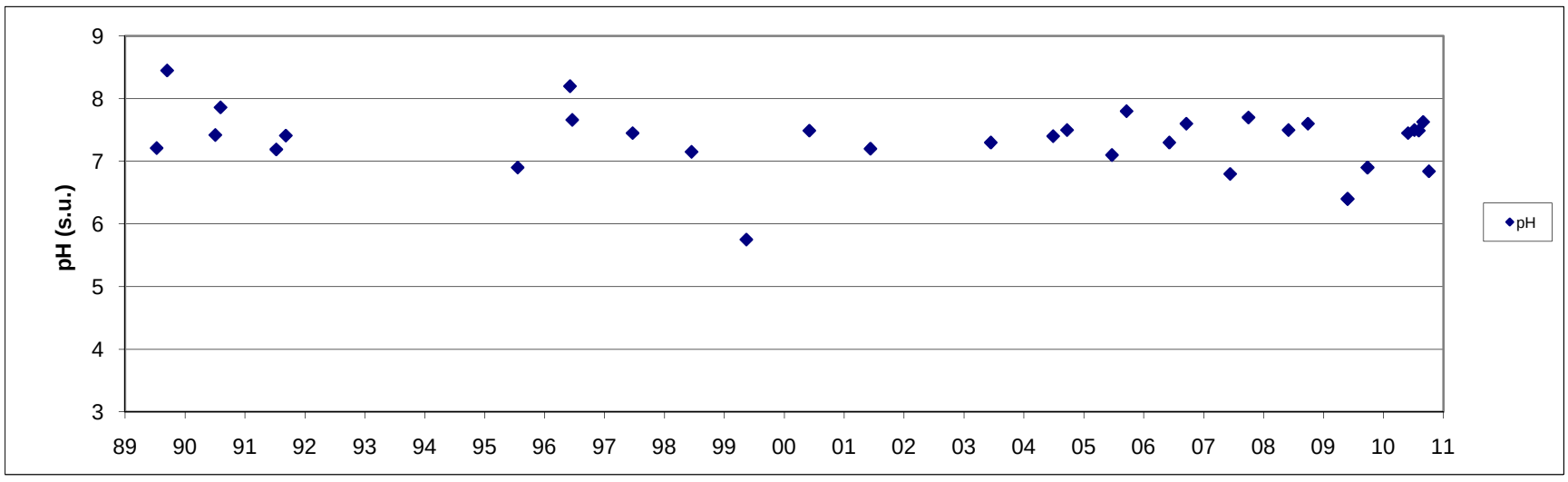
Faro Mine Complex
2010 Waste Rock and Seepage Monitoring Report

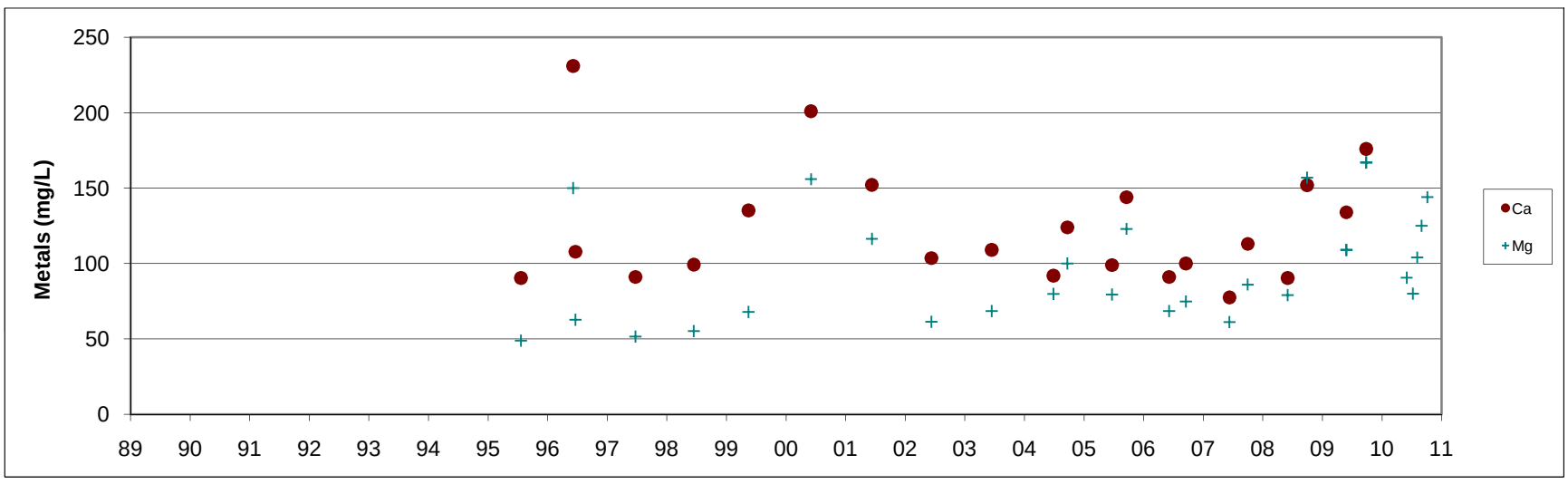
Faro Routine Monitoring Stations FCO and A30 (SRK-FD40)

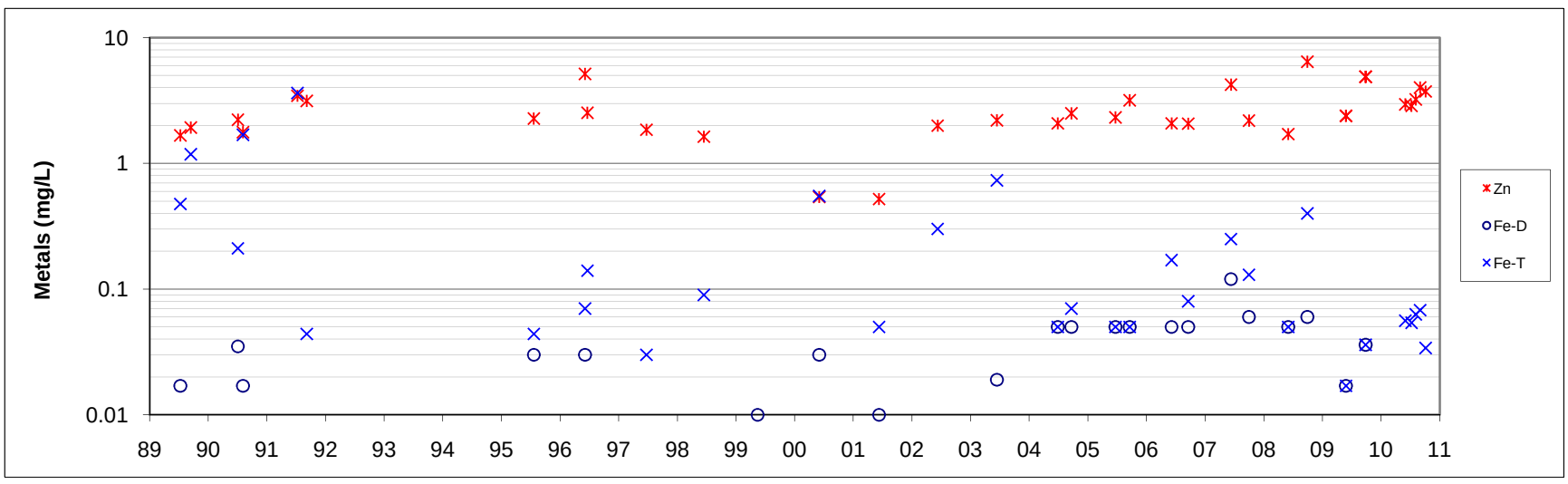
PROJECT	DATE:	APPROVED	FIGURE
1CY001.046	February 2011	LD	7

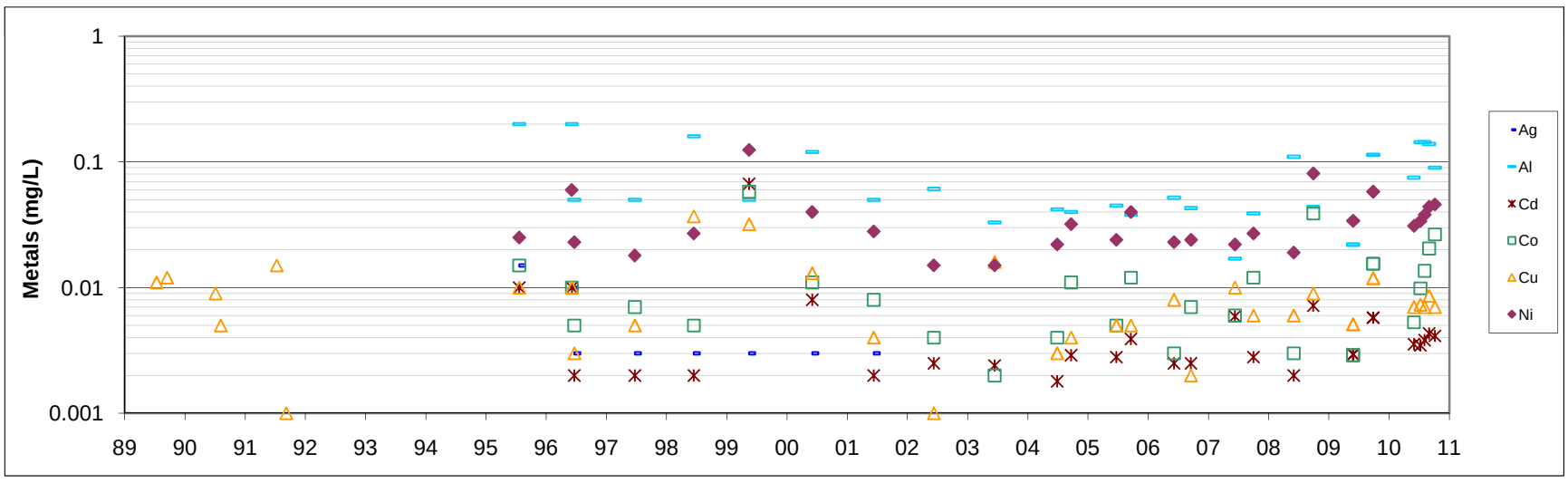
SP5-6











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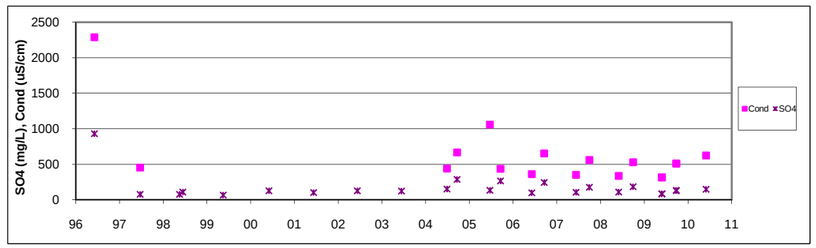
Faro Mine Closure
Fermeture de la mine Faro

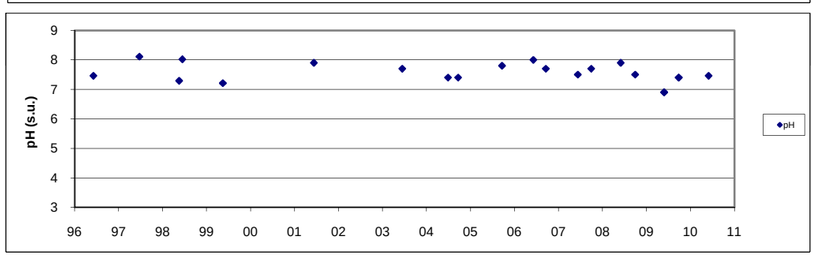
Faro Mine Complex
2010 Waste Rock and Seepage Monitoring Report

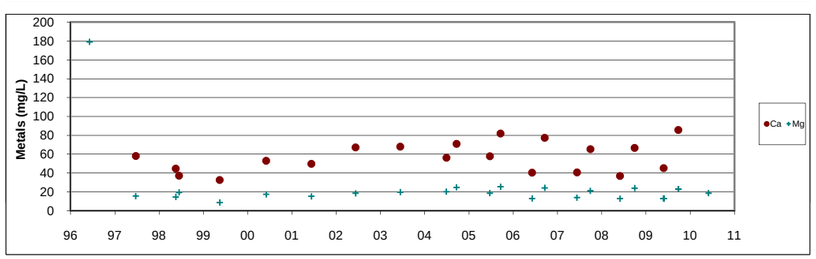
Faro Routine Monitoring Station
SP5-6

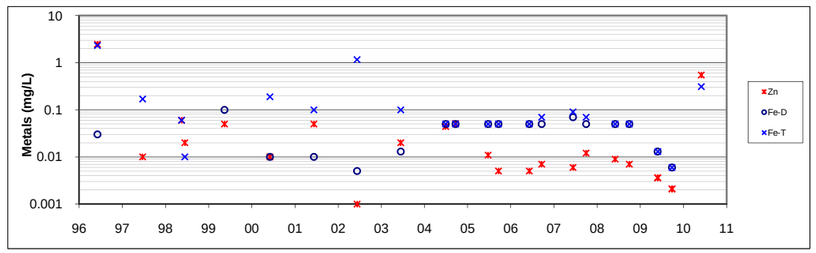
PROJECT	DATE:	APPROVED	FIGURE
1CY001.046	February 2011	LD	8

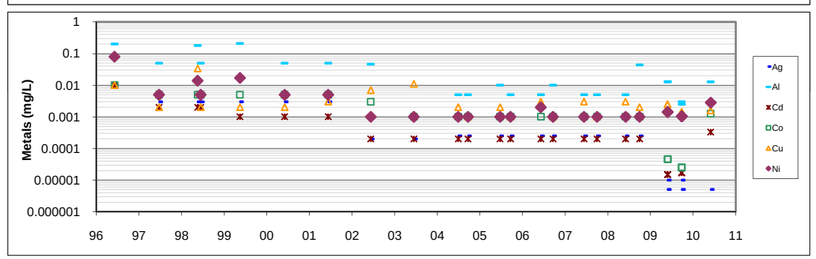
NE1



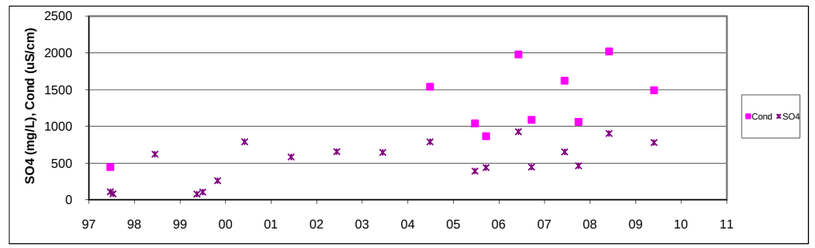


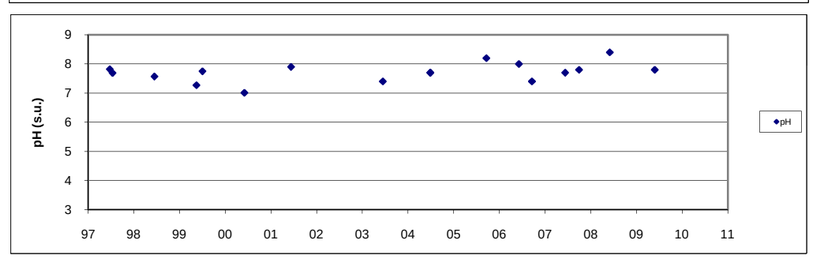


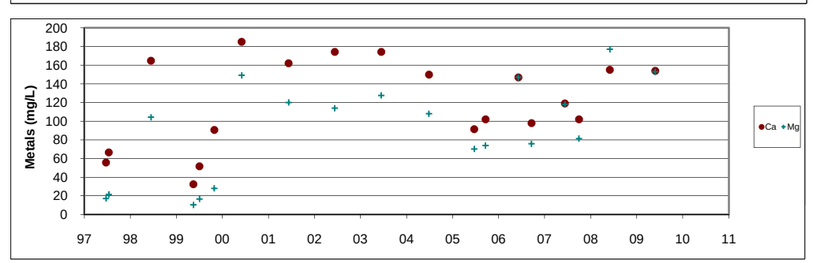


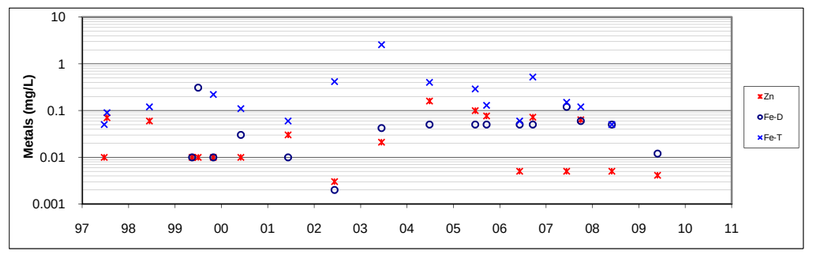


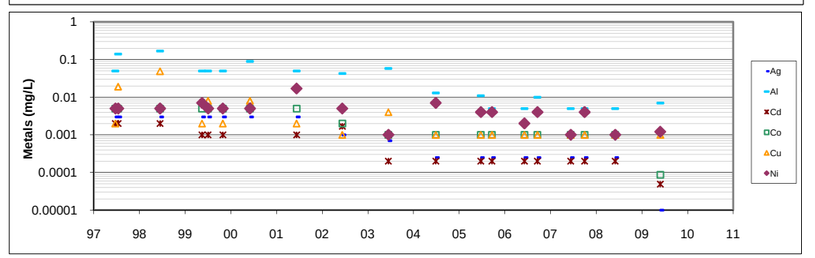
NE2



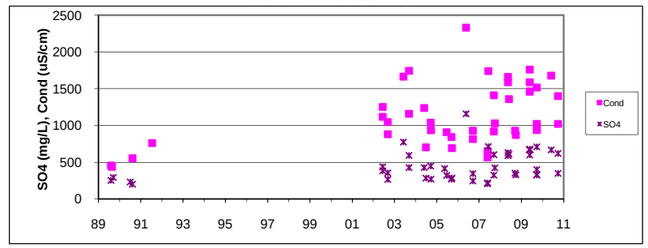


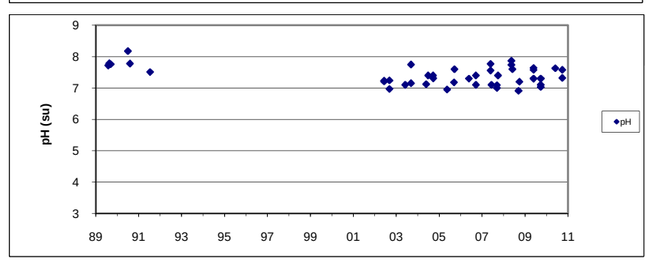


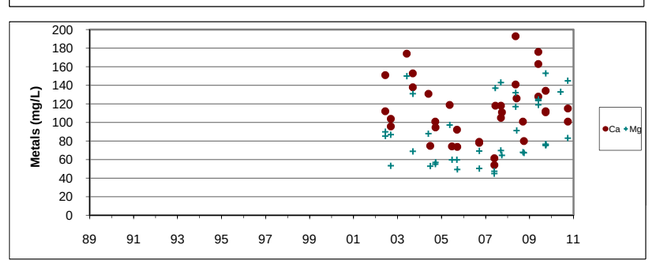


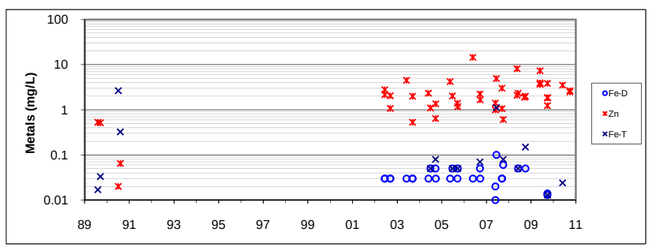


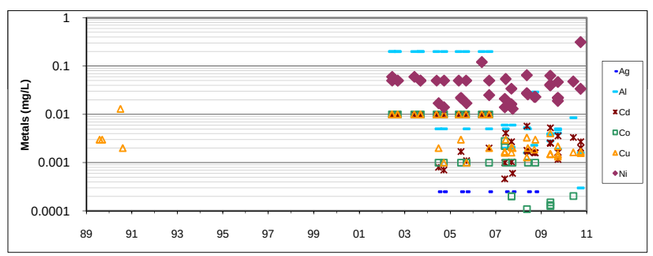
W5 (SRK-FD05/6)











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Faro Mine Closure
Fermeture de la mine Faro

Faro Mine Complex
2010 Waste Rock and Seepage Monitoring

Faro Routine Monitoring Stations NE1, NE2, and W5 (SRK-FD05/6)

PROJECT	DATE:	APPROVED	FIGURE
1CY001.046	February 2011	LD	9

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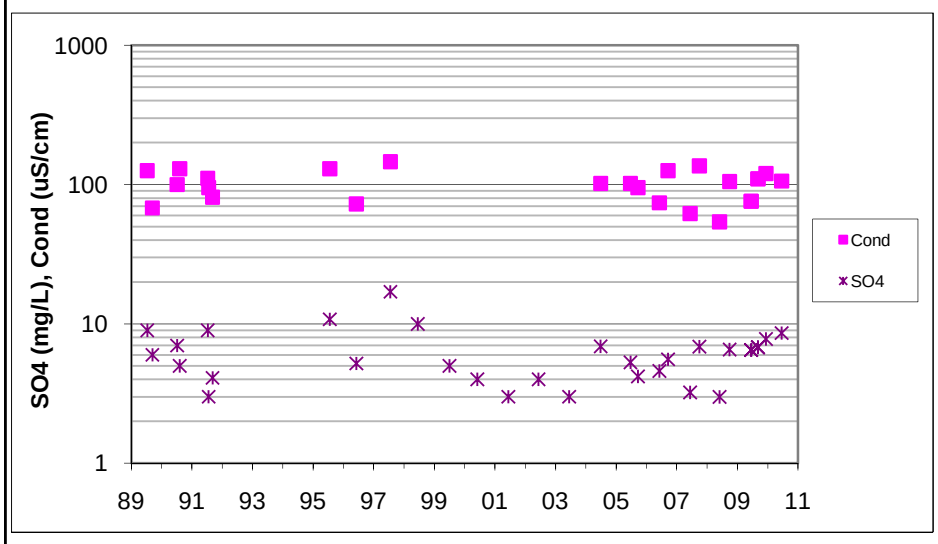
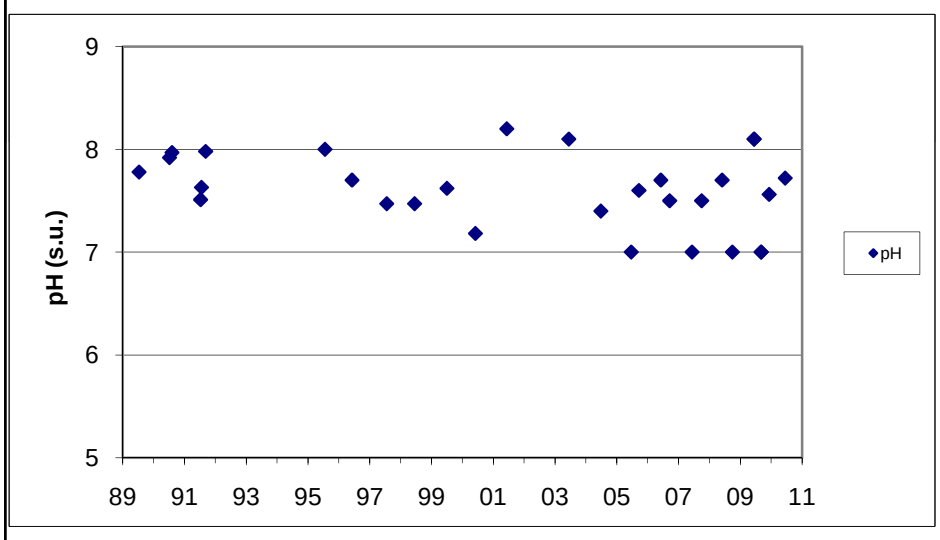
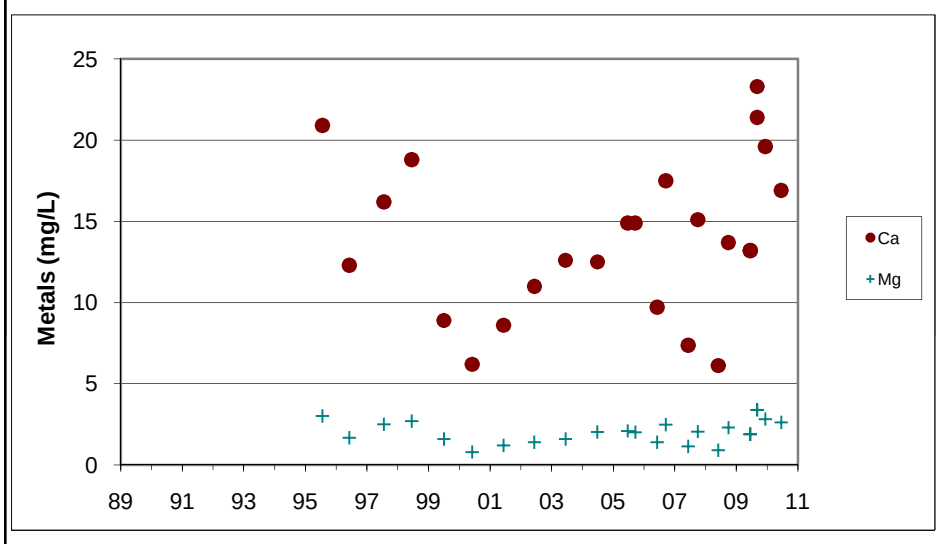
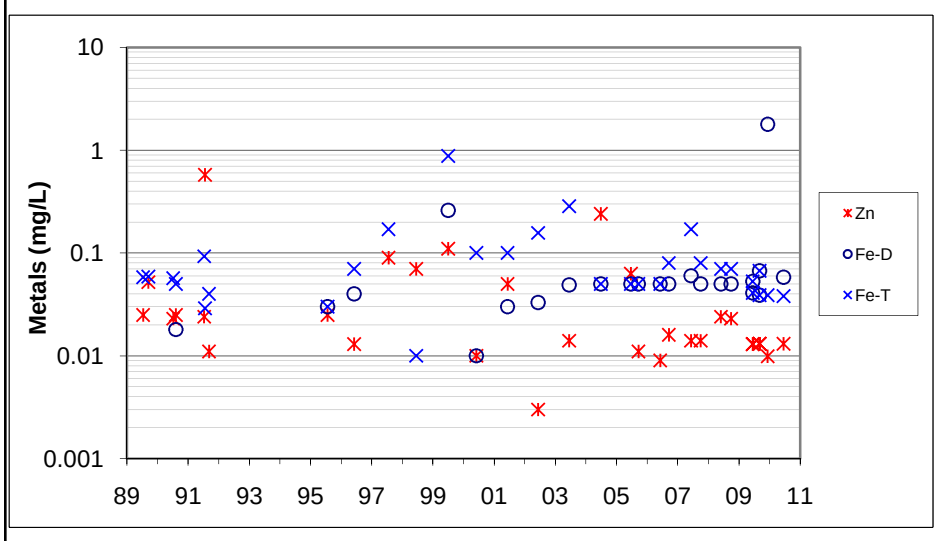
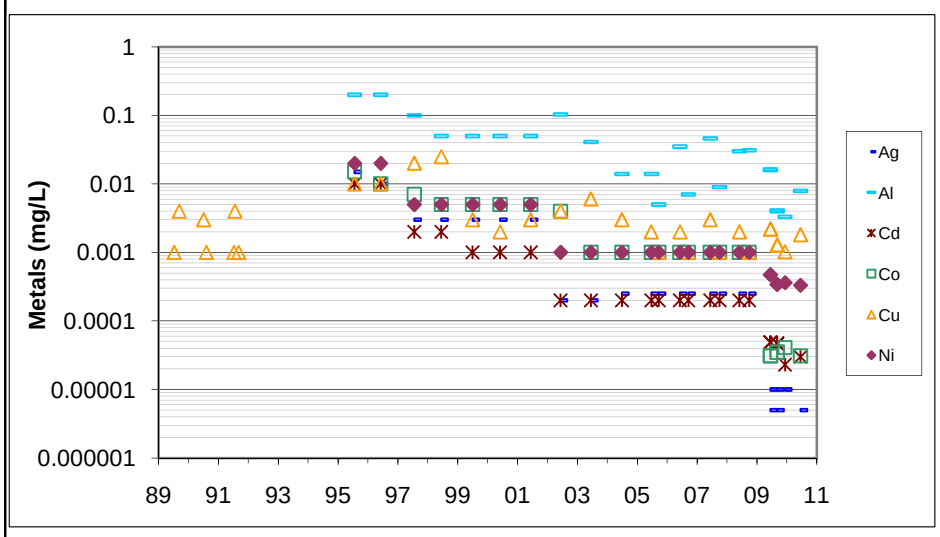
W8



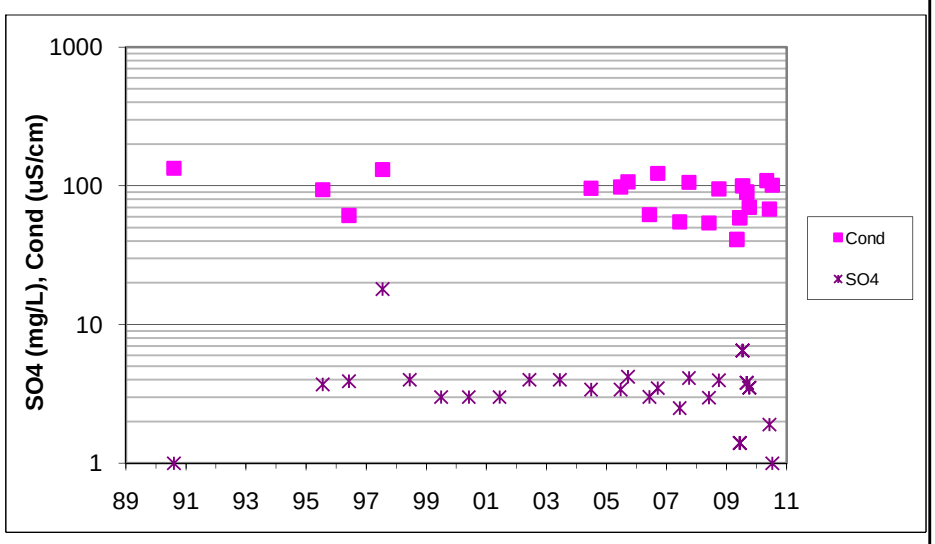


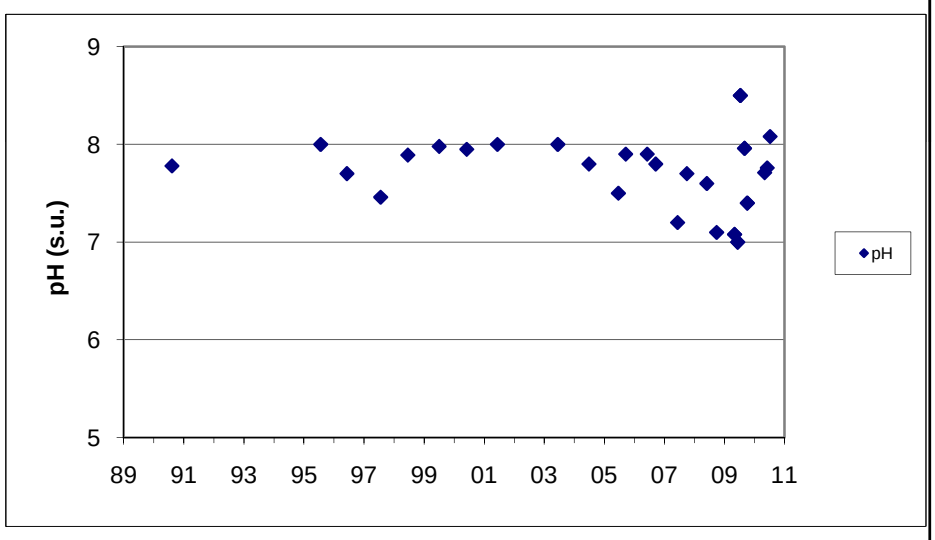


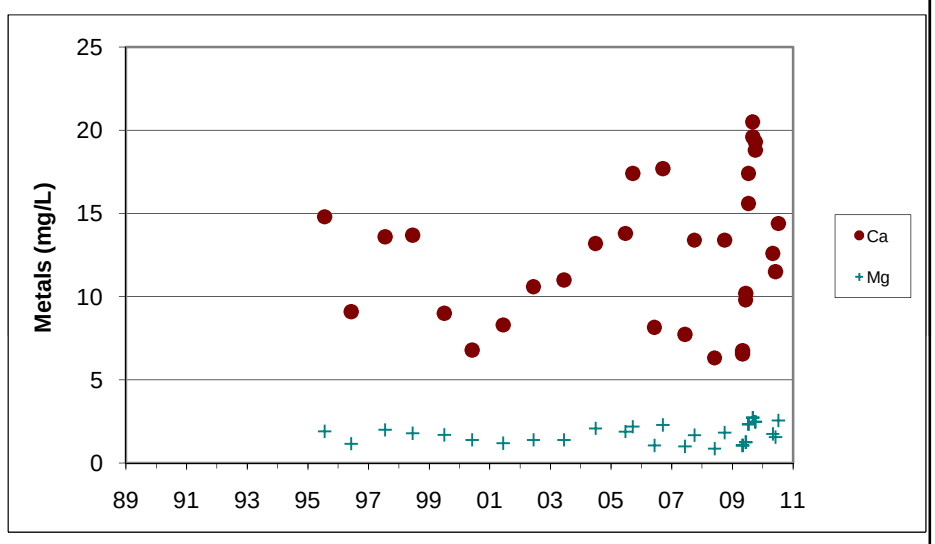


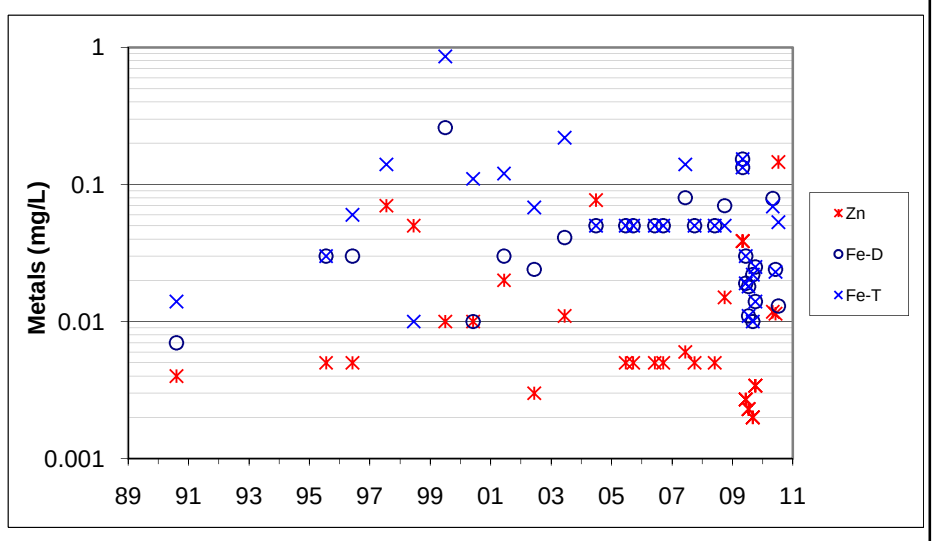


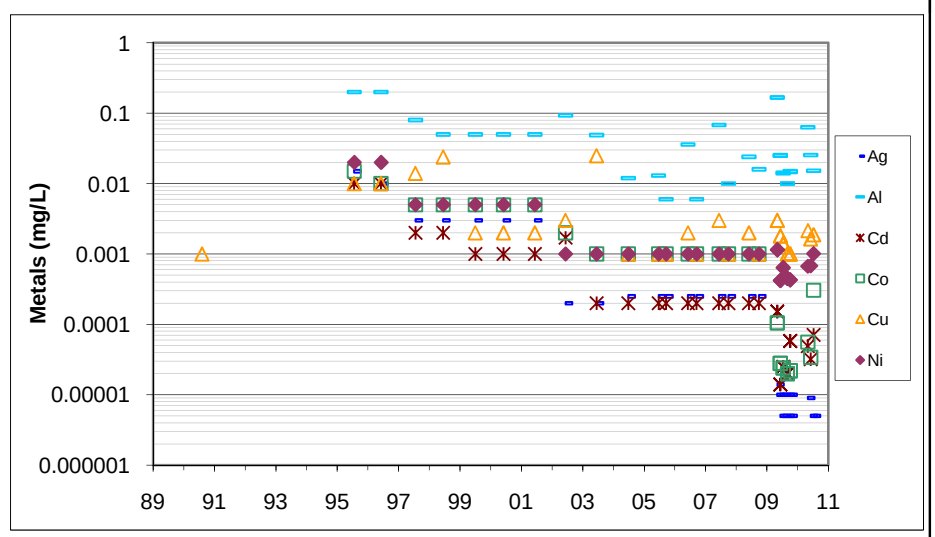
W10











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Faro Mine Closure
Fermeture de la mine Faro

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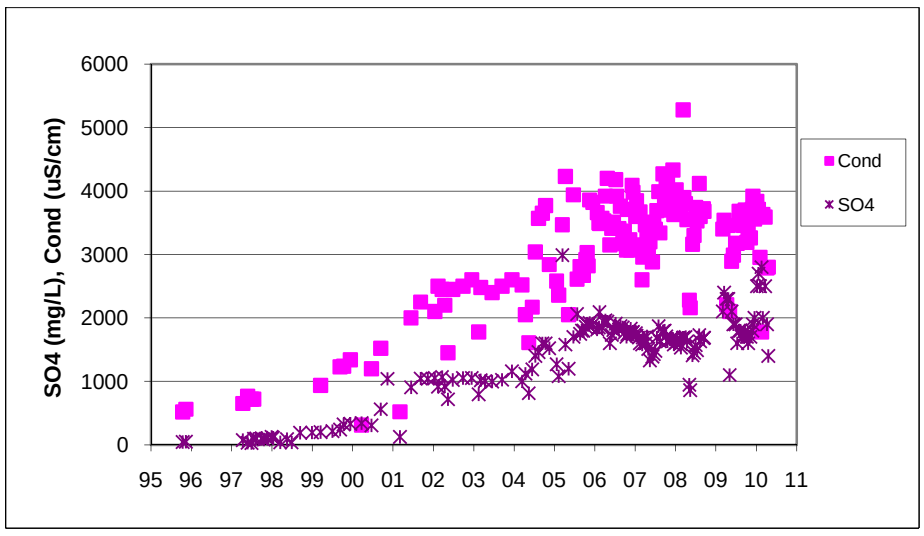
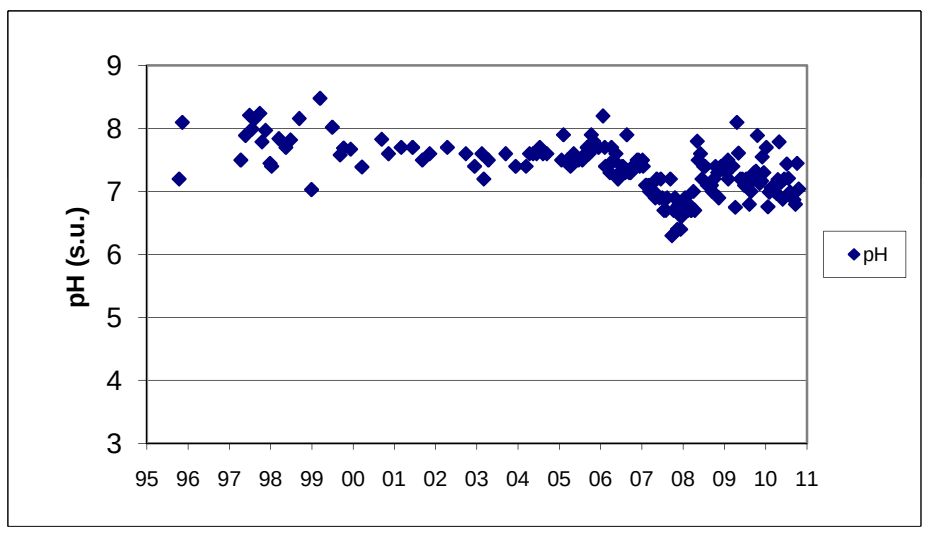
Faro Mine Complex
2010 Waste Rock and Seepage Monitoring Report

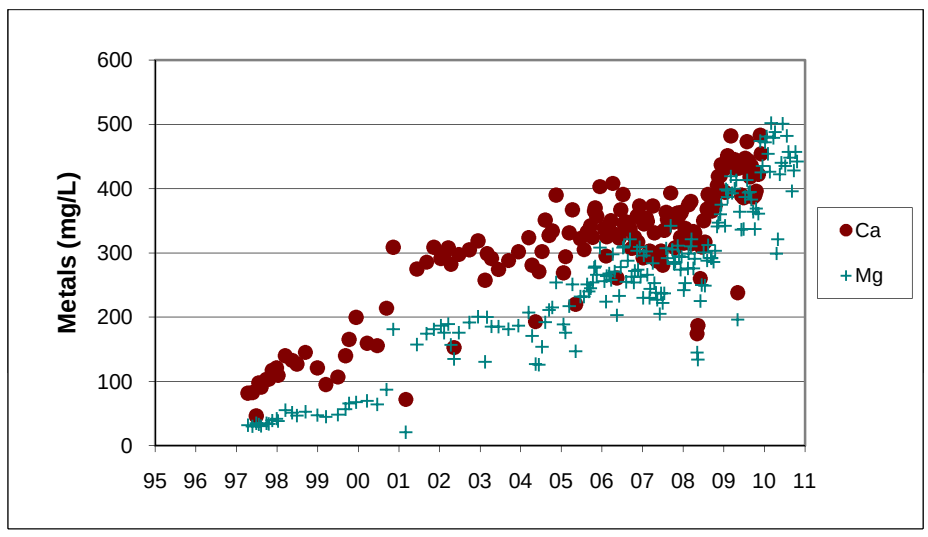
Faro Routine Monitoring Stations
W8 and W10

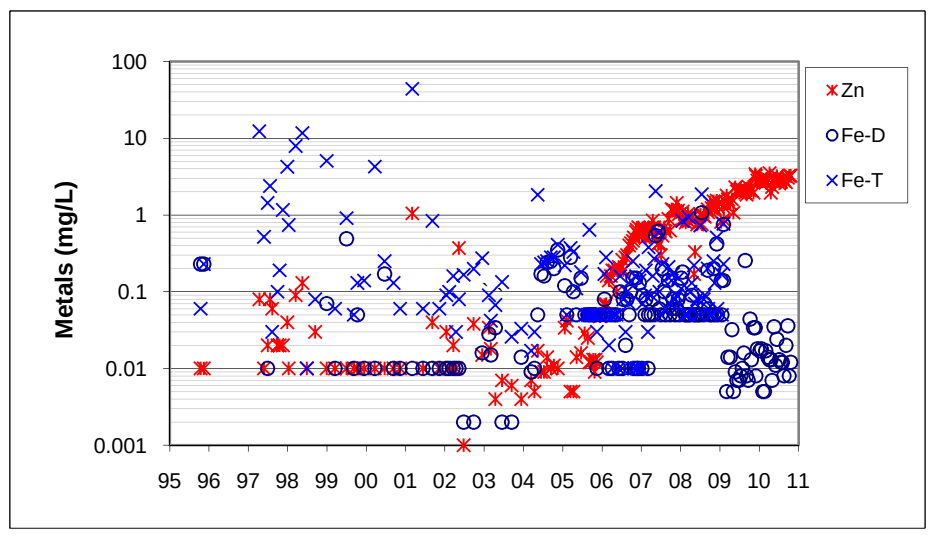
PROJECT	DATE:	APPROVED	FIGURE
1CY001.046	February 2011	LD	**10**

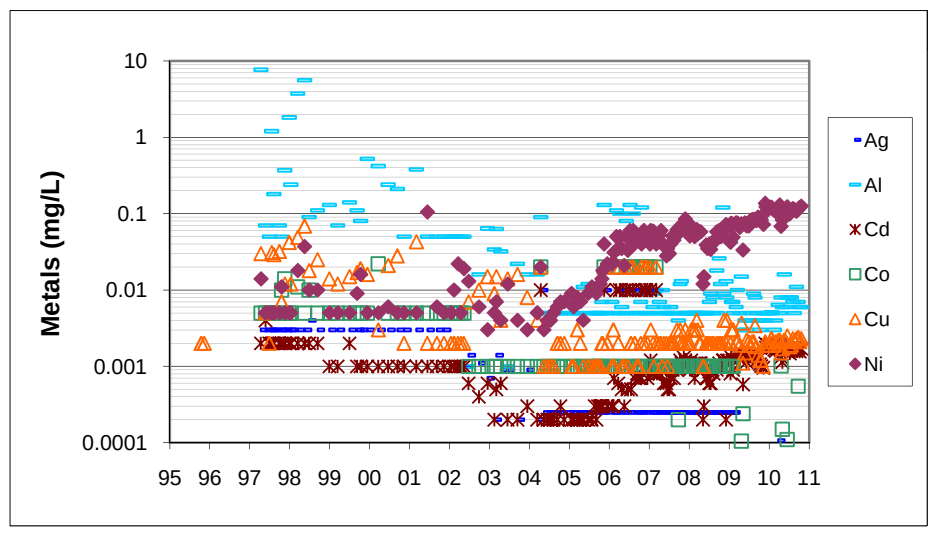
V15



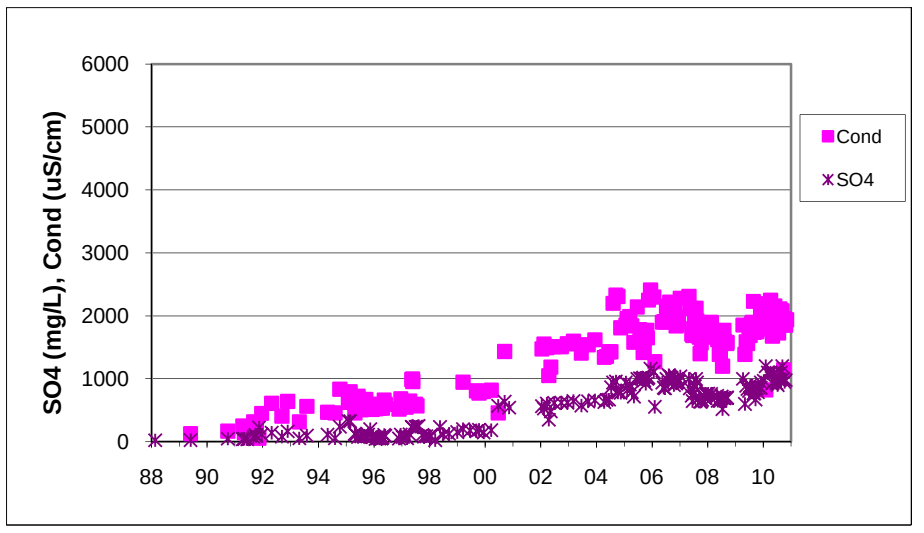


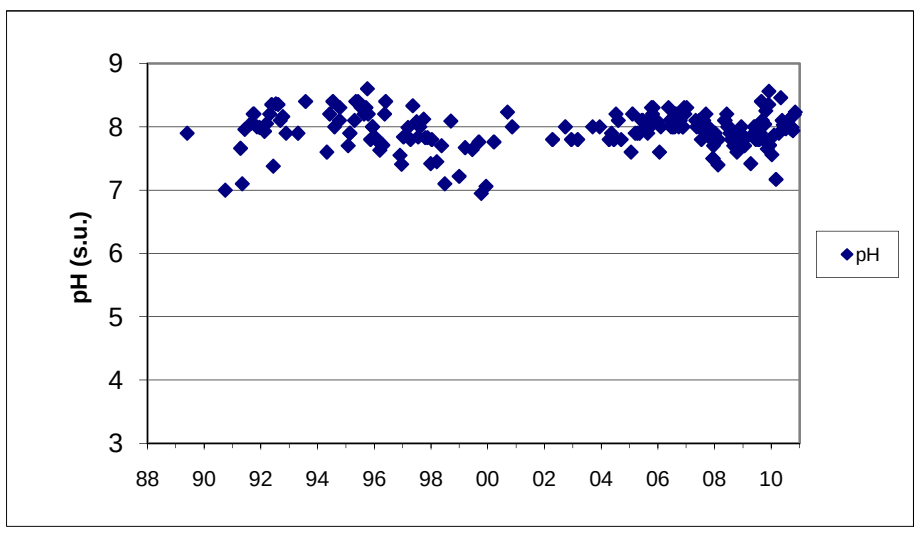


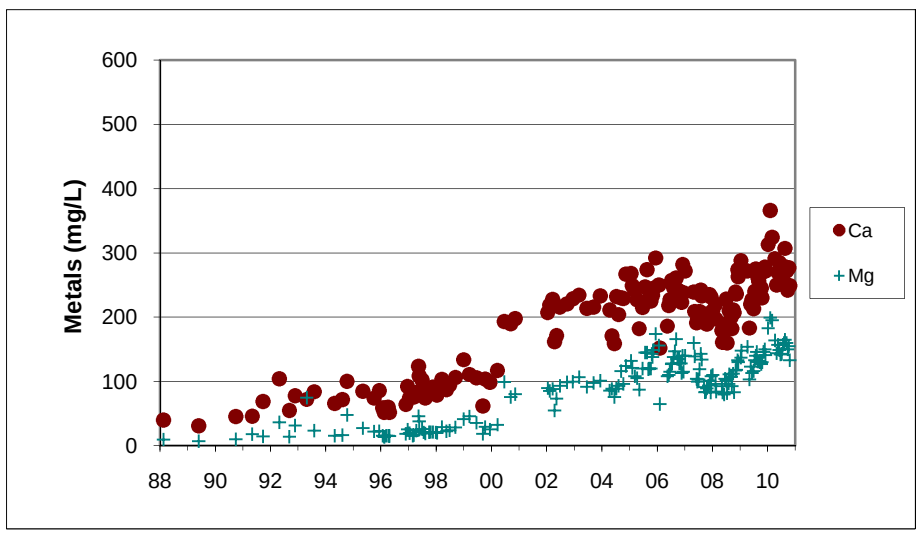


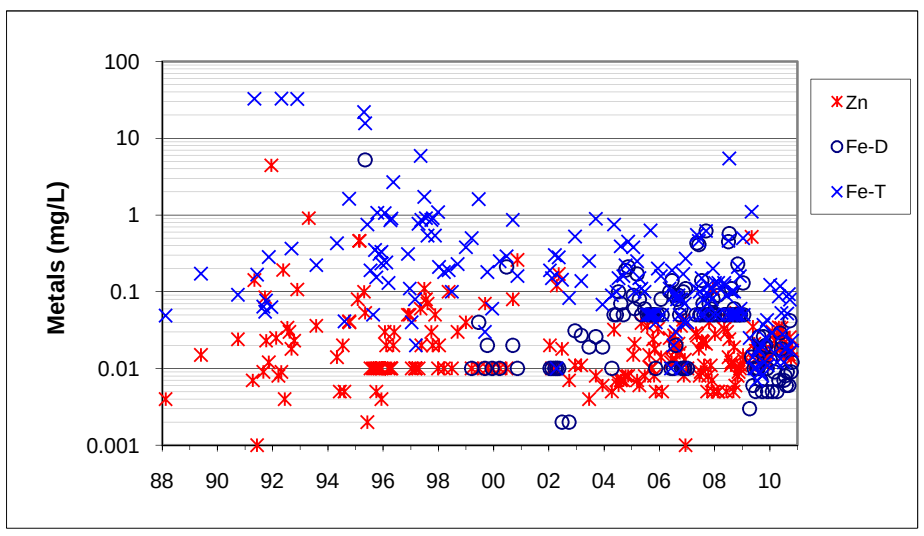


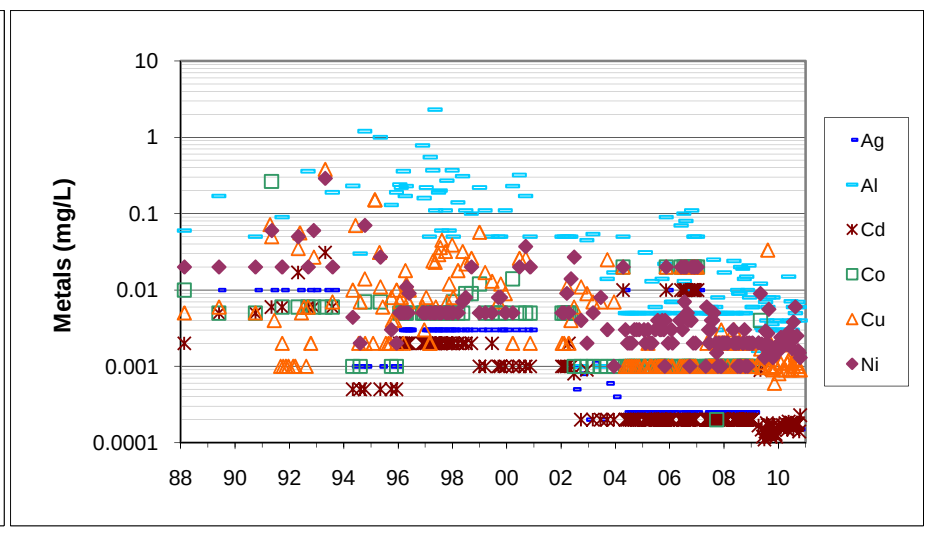
V2











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Faro Mine Closure
Fermeture de la mine Faro

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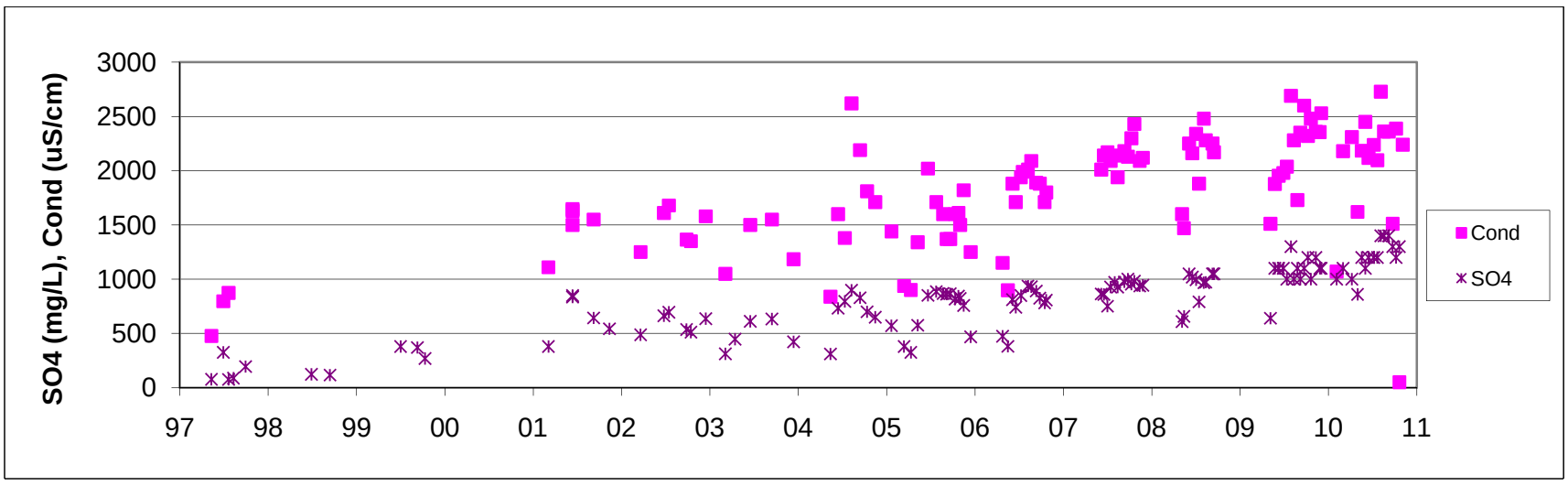
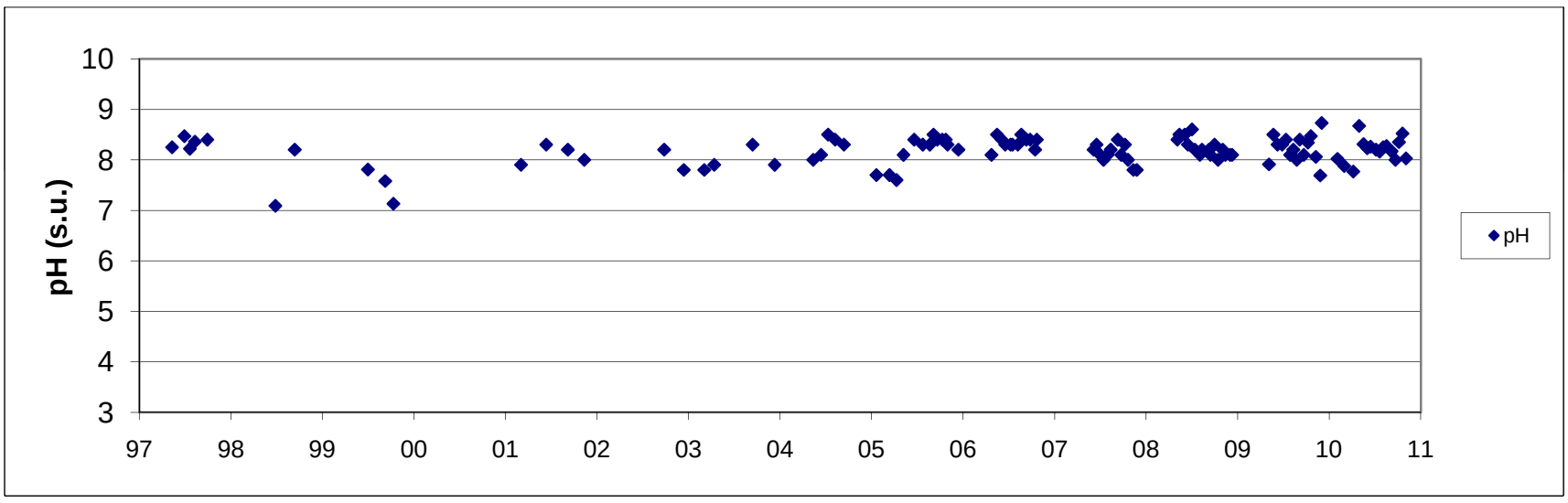
2010 Waste Rock and Seepage Monitoring Report

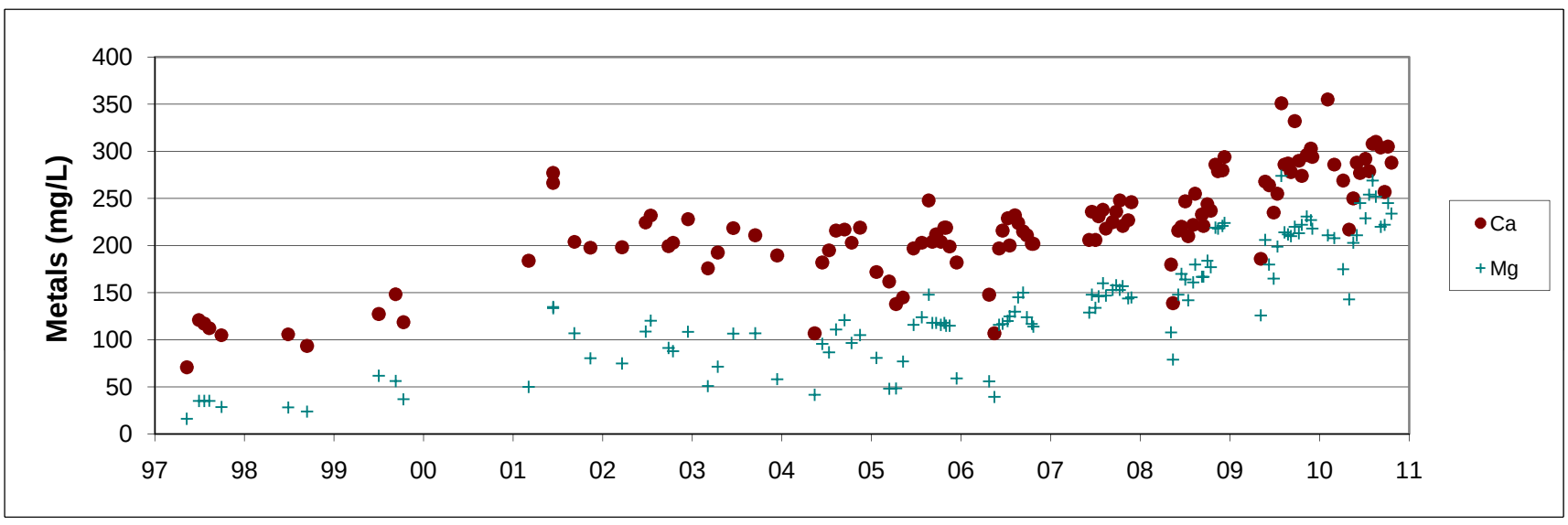
Grum Routine Monitoring Stations
V15 and V2

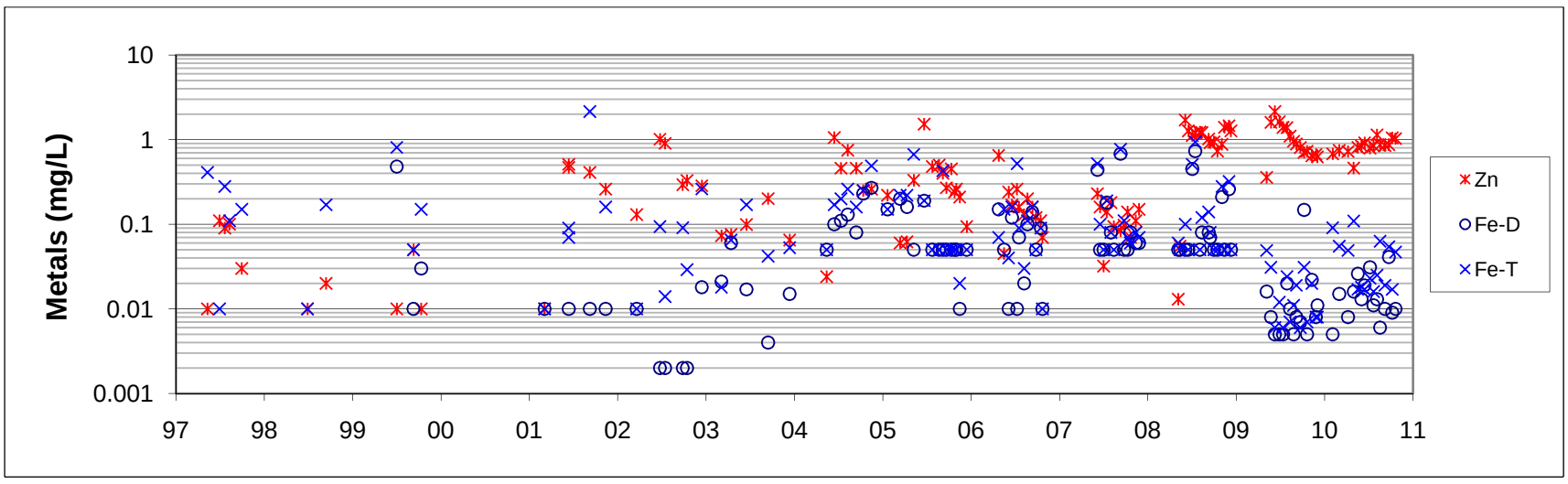
PROJECT	DATE	APPROVED	FIGURE
1CY001.046	February 2011	LD	11

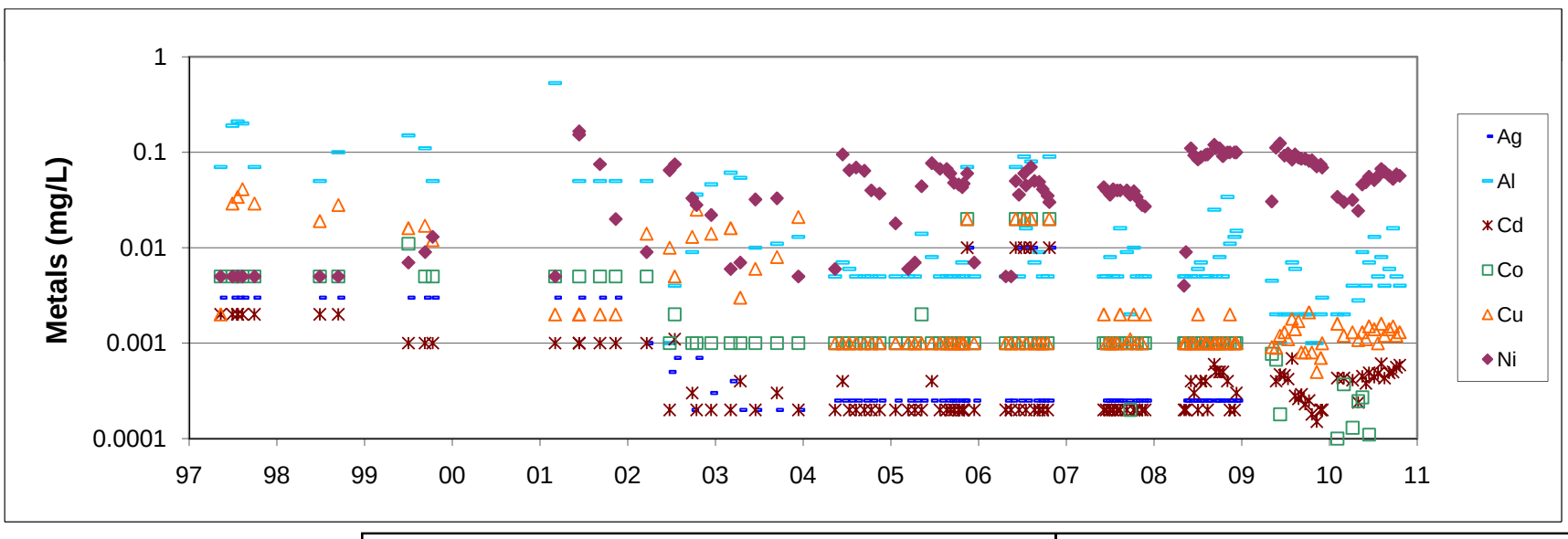
V2A











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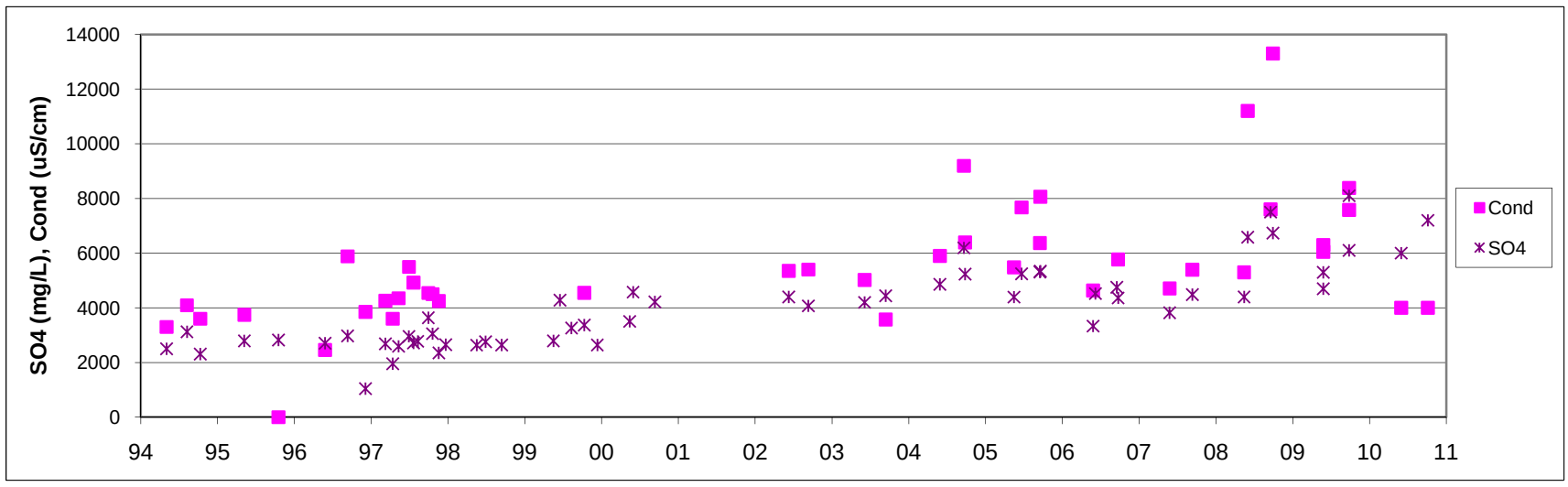
Faro Mine Closure
Fermeture de la mine Faro

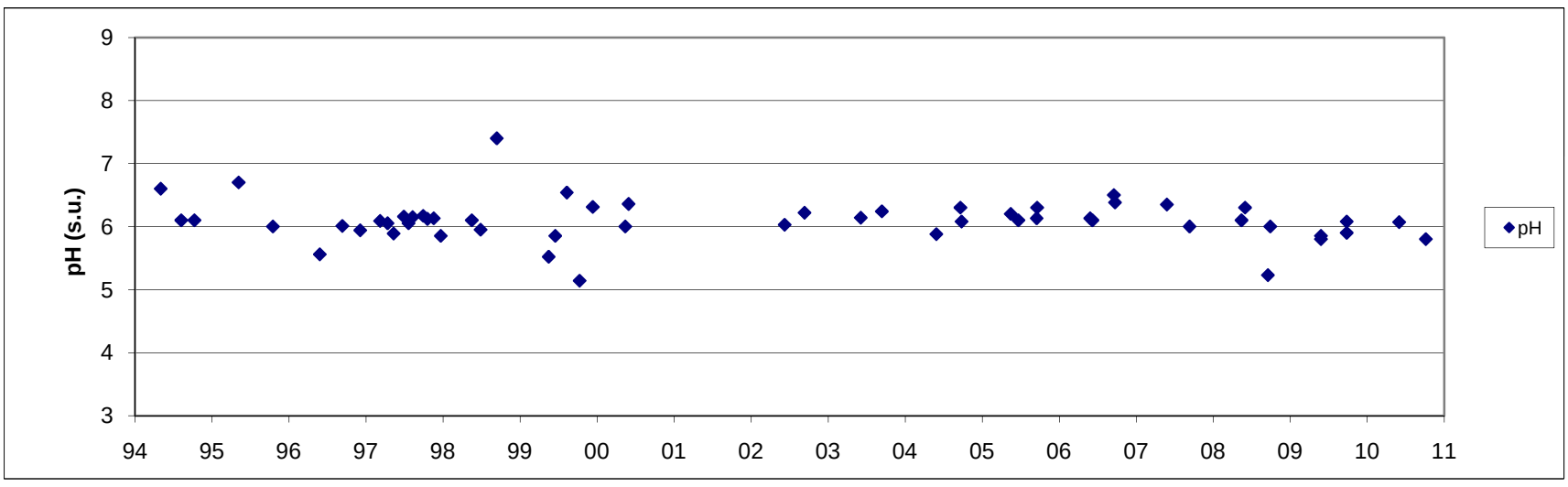
Faro Mine Complex
2010 Waste Rock and Seepage Monitoring Report

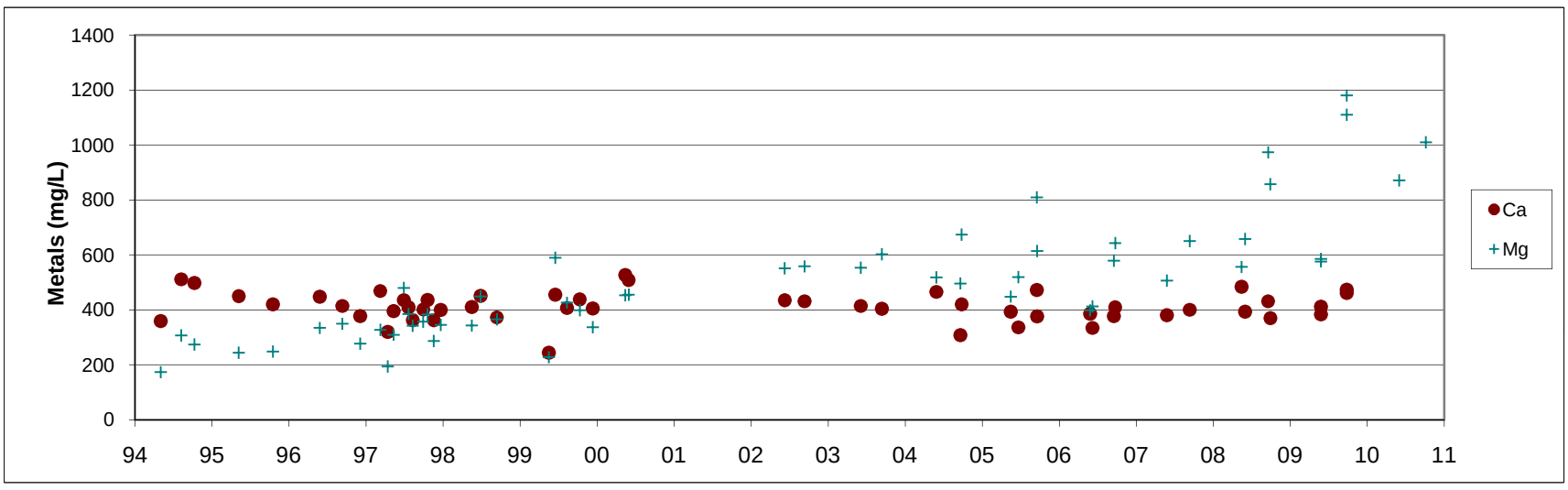
Grum Routine Monitoring Station
V2A

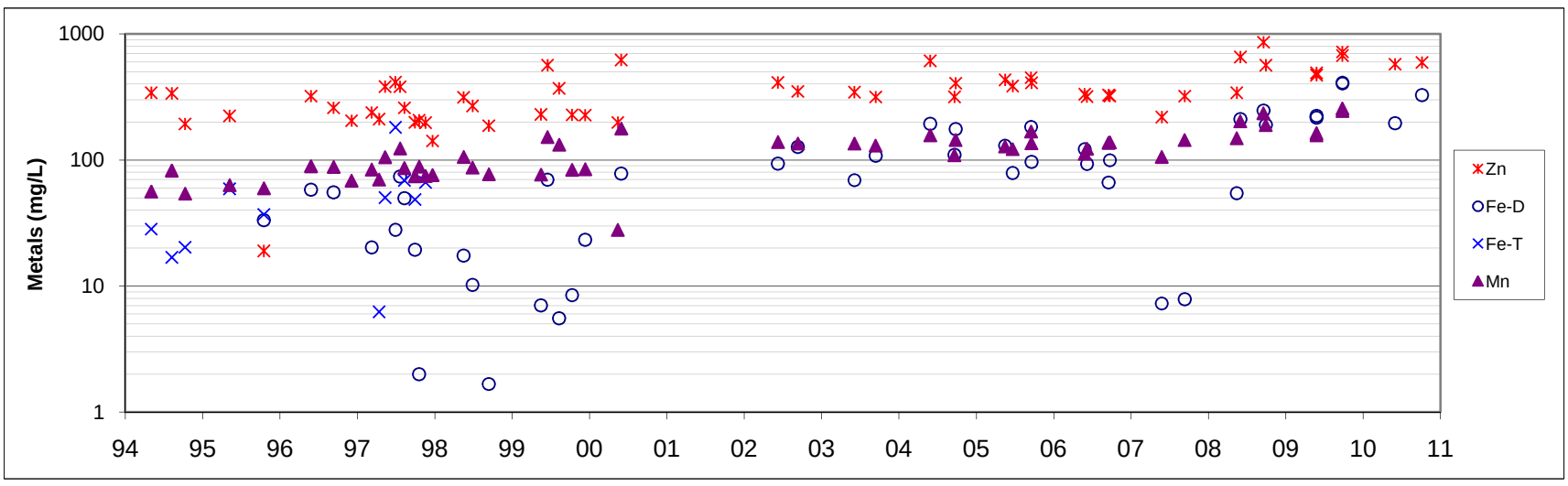
PROJECT	DATE	APPROVED	FIGURE
1CY001.046	February 2011	LD	12

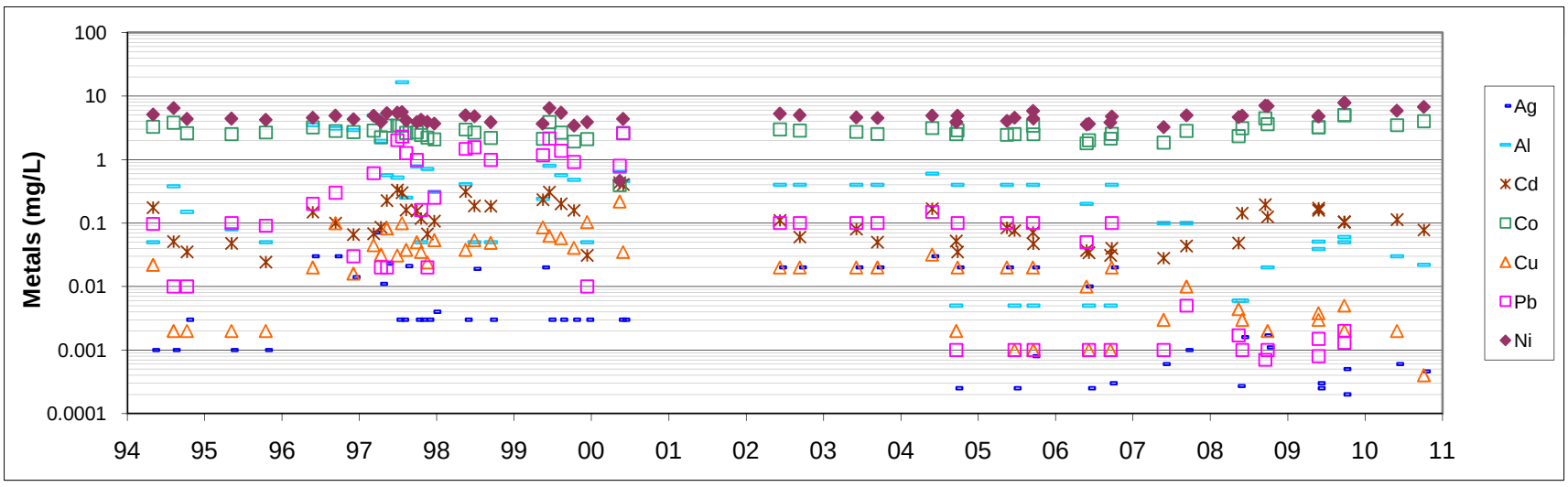
V30











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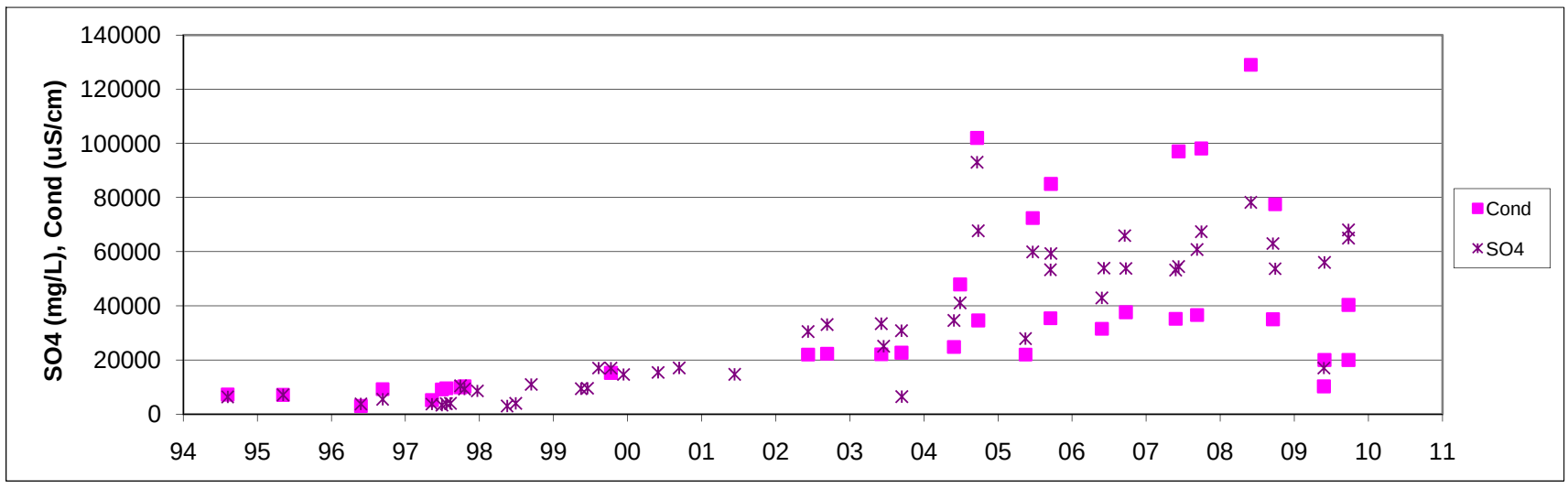

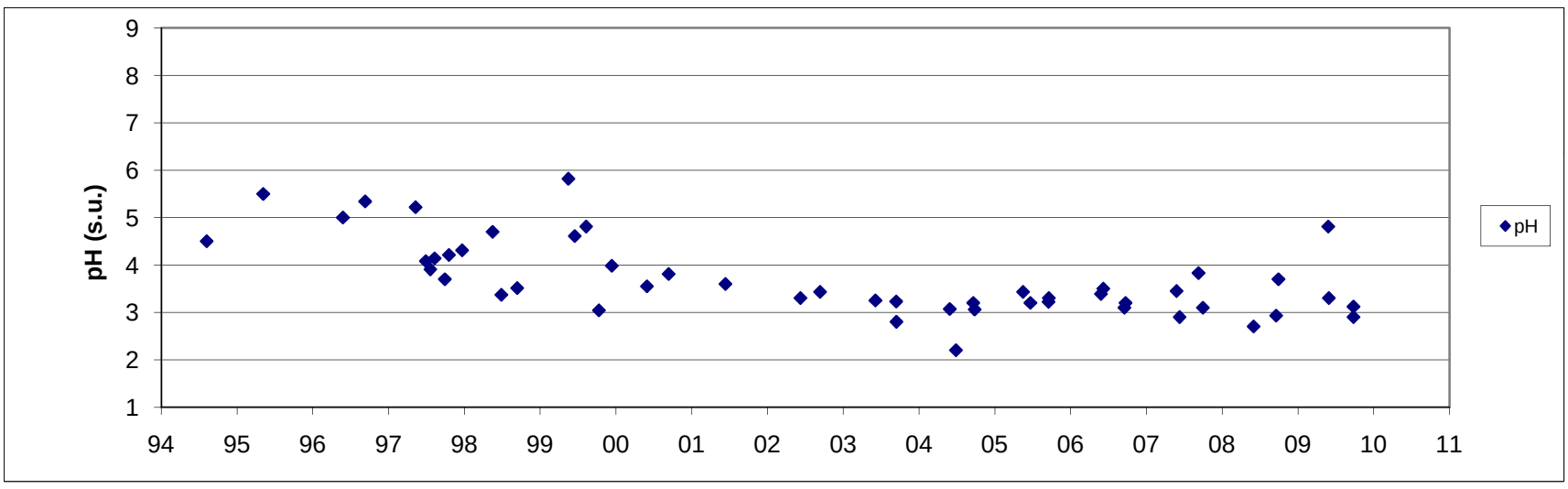

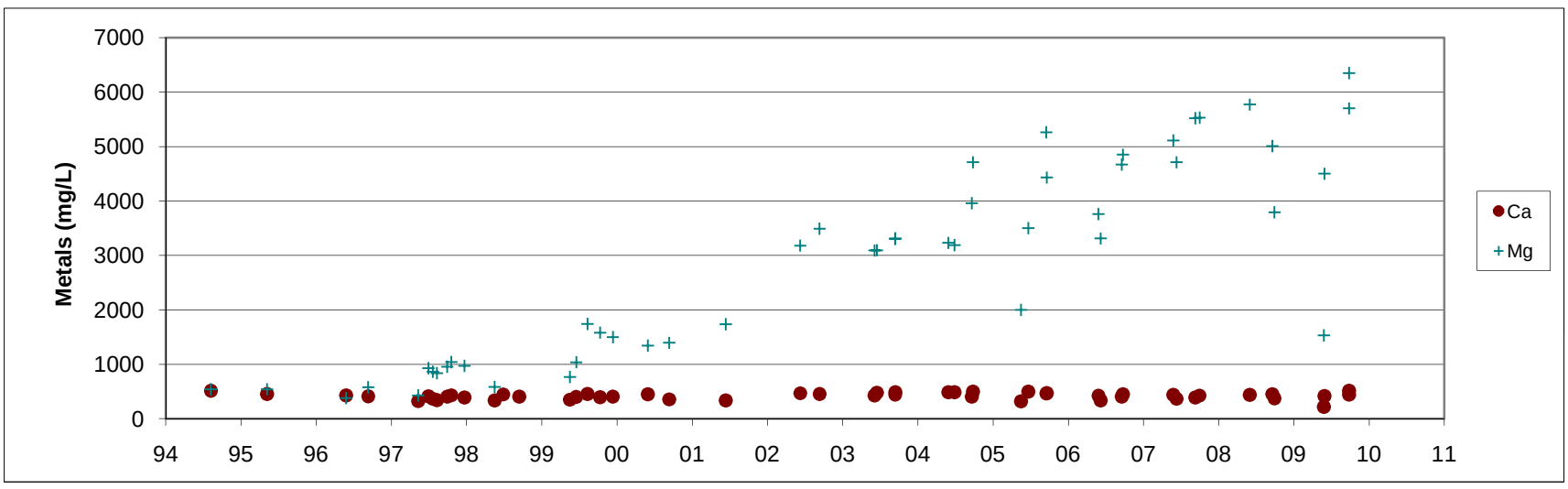

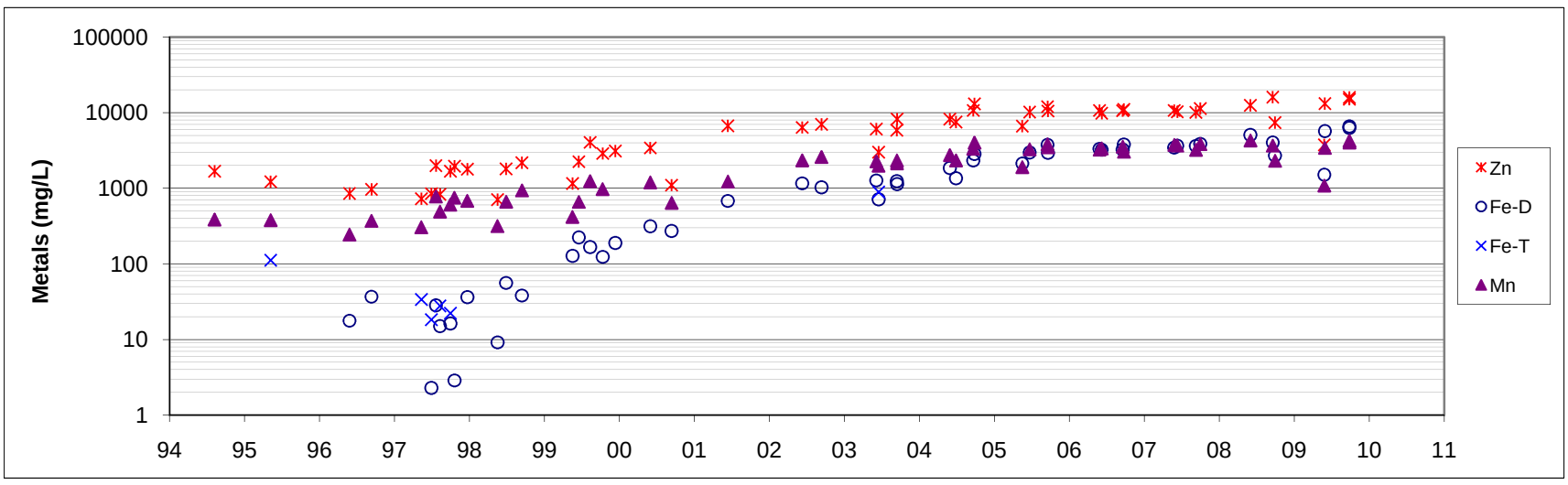

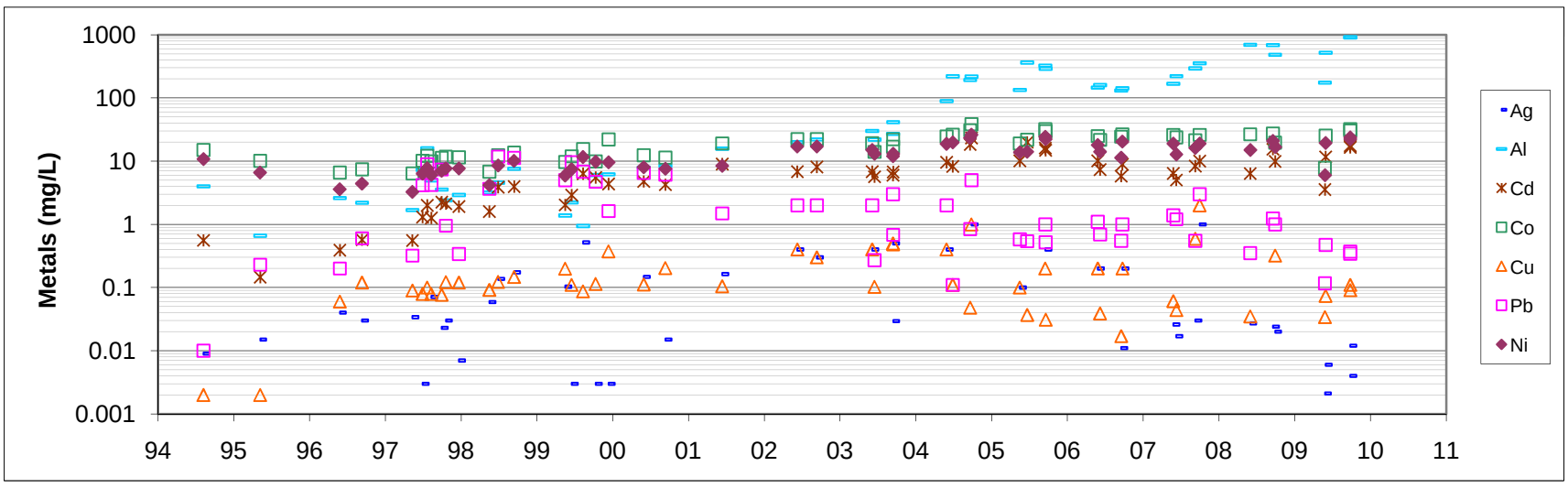

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PROJECT	DATE	APPROVED	FIGURE
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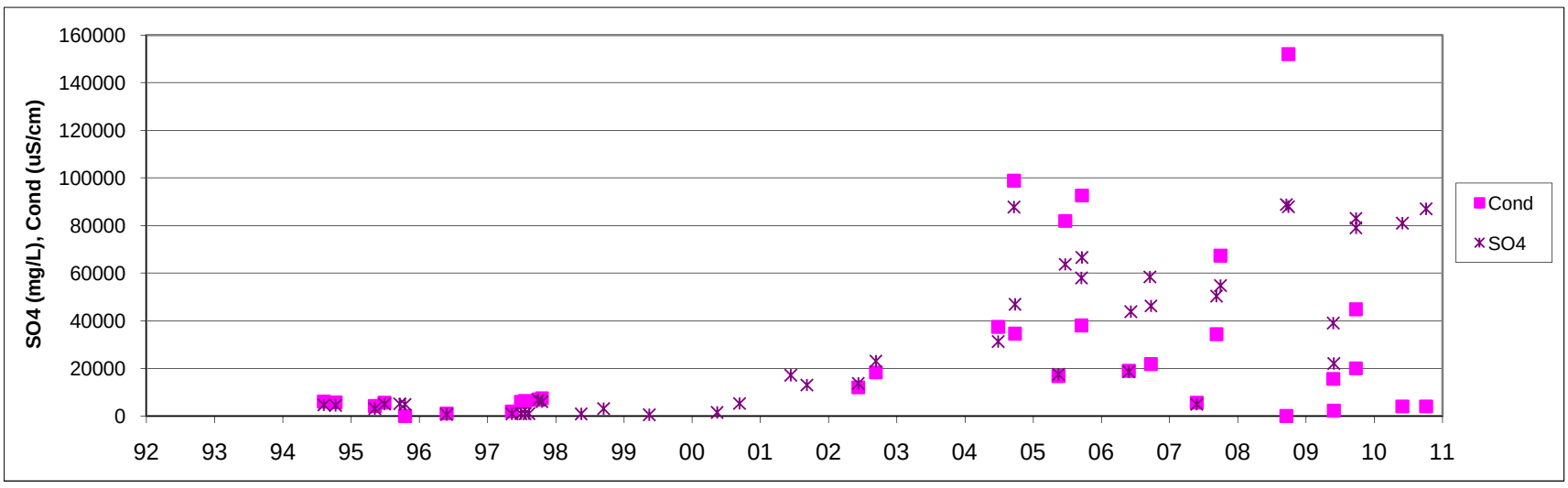
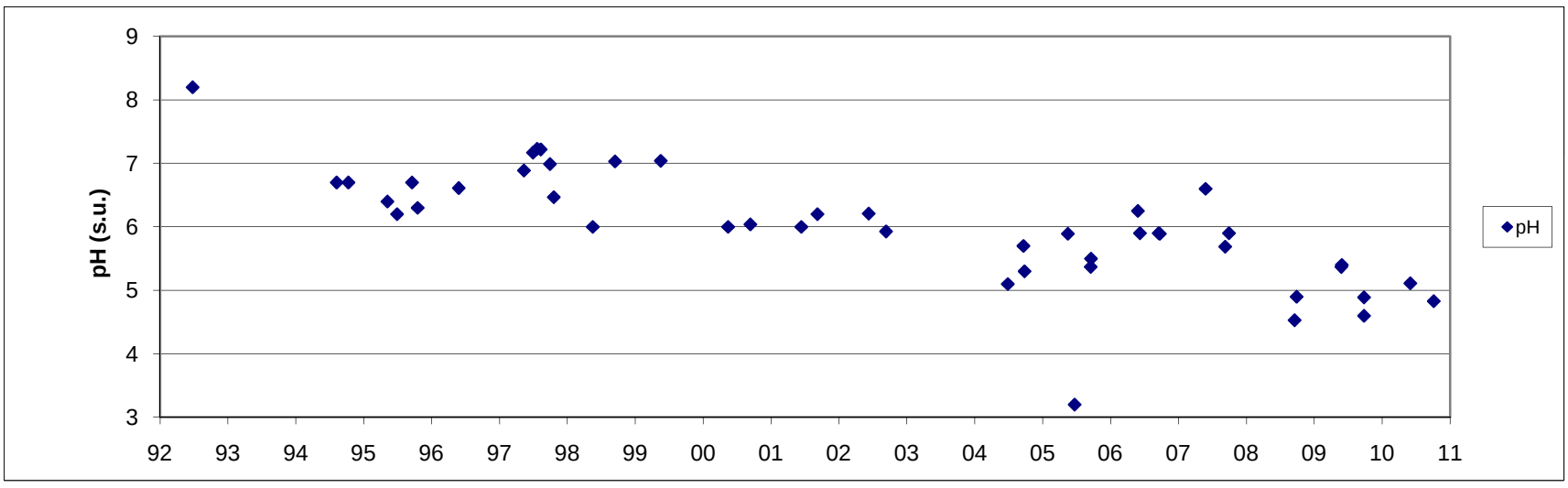
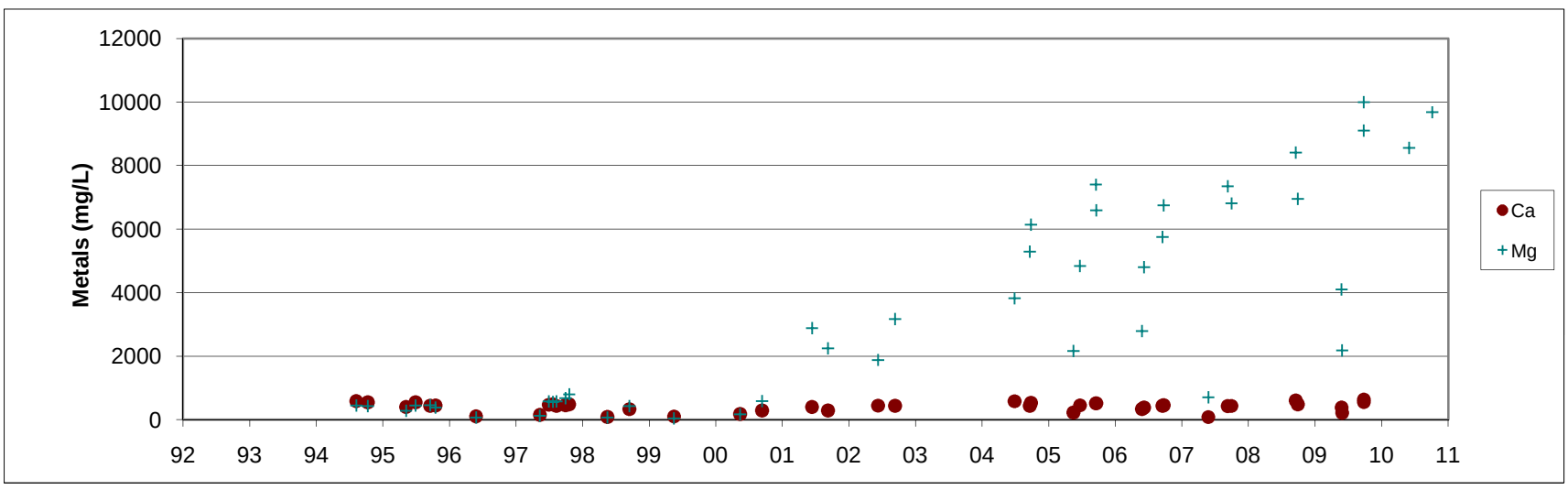
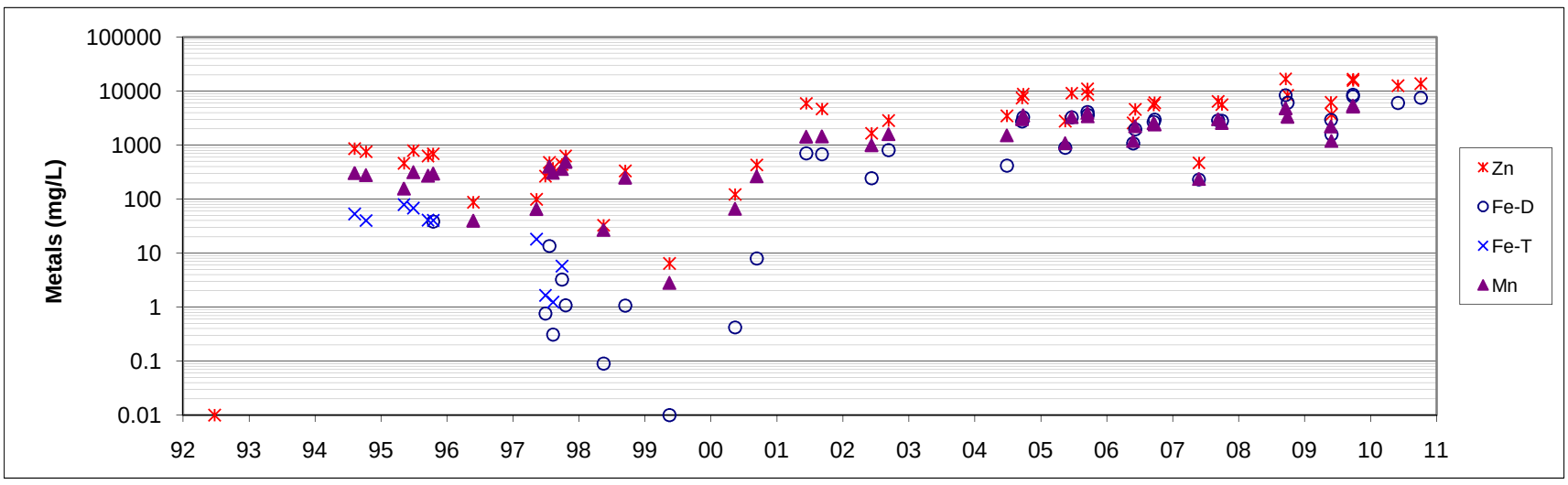
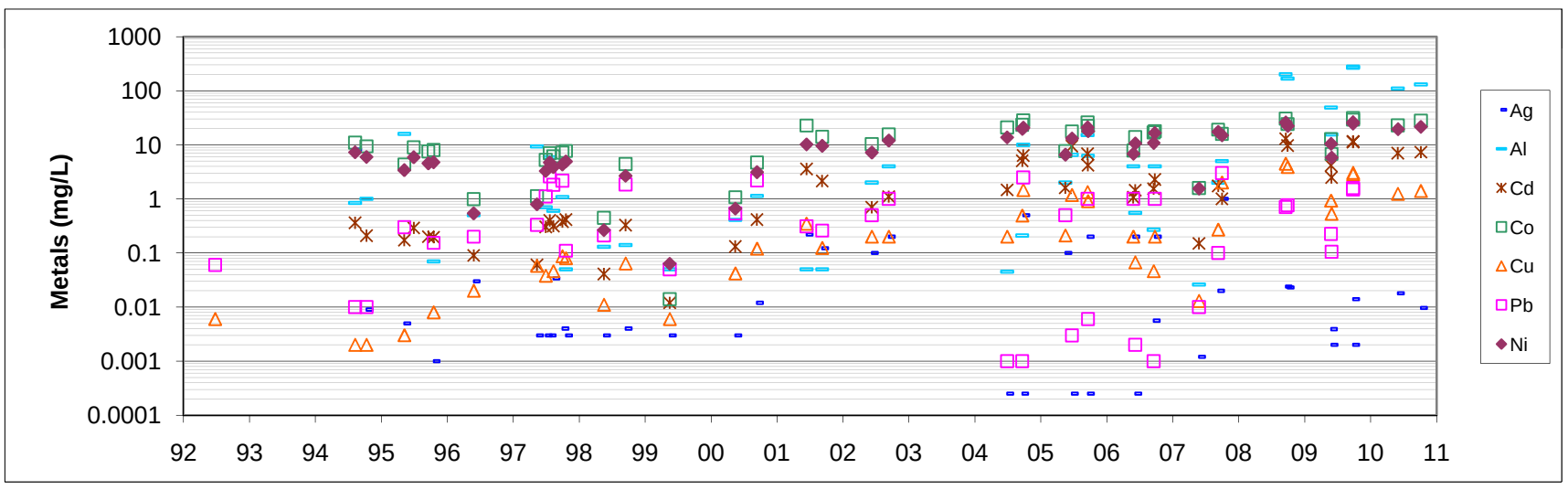
V33











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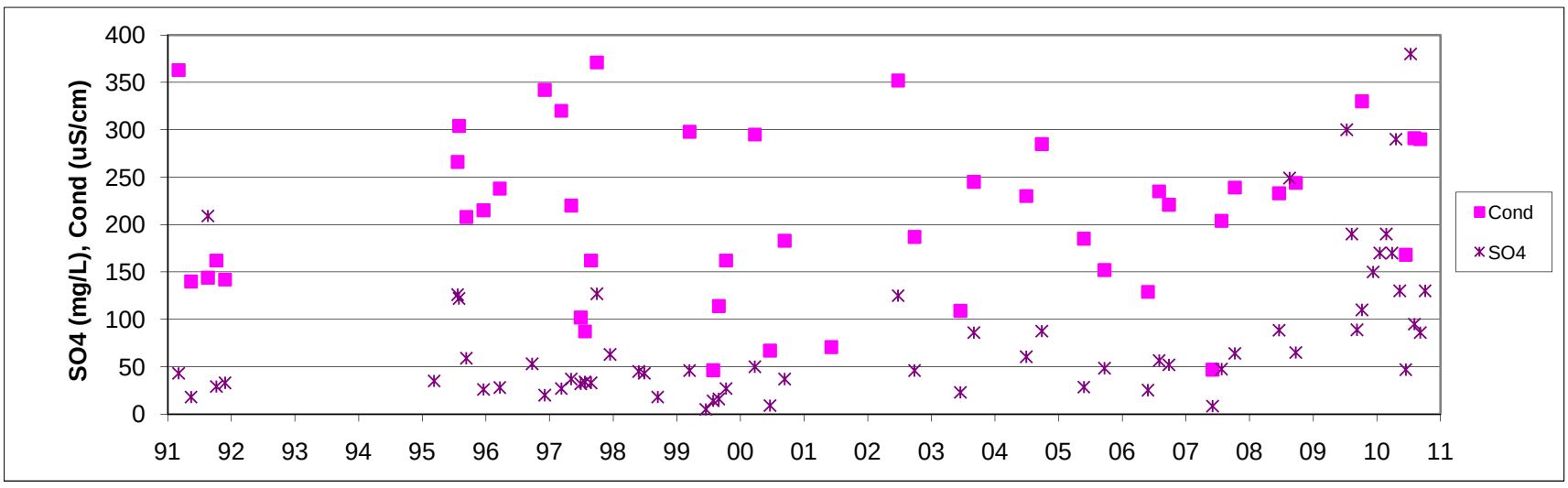

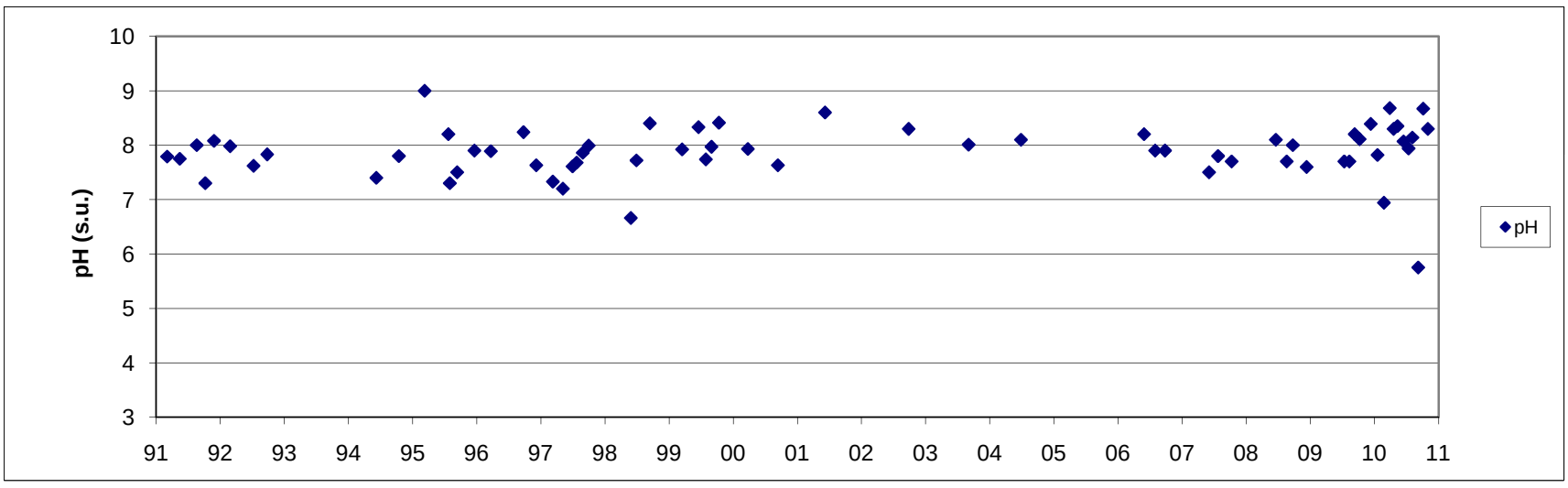

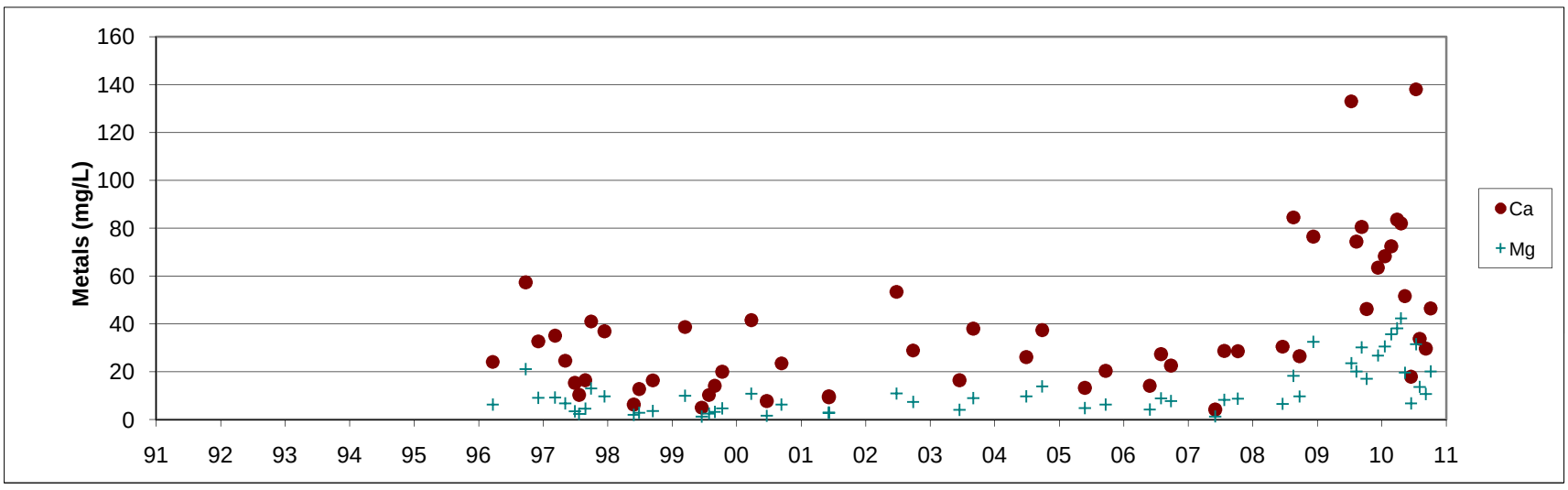

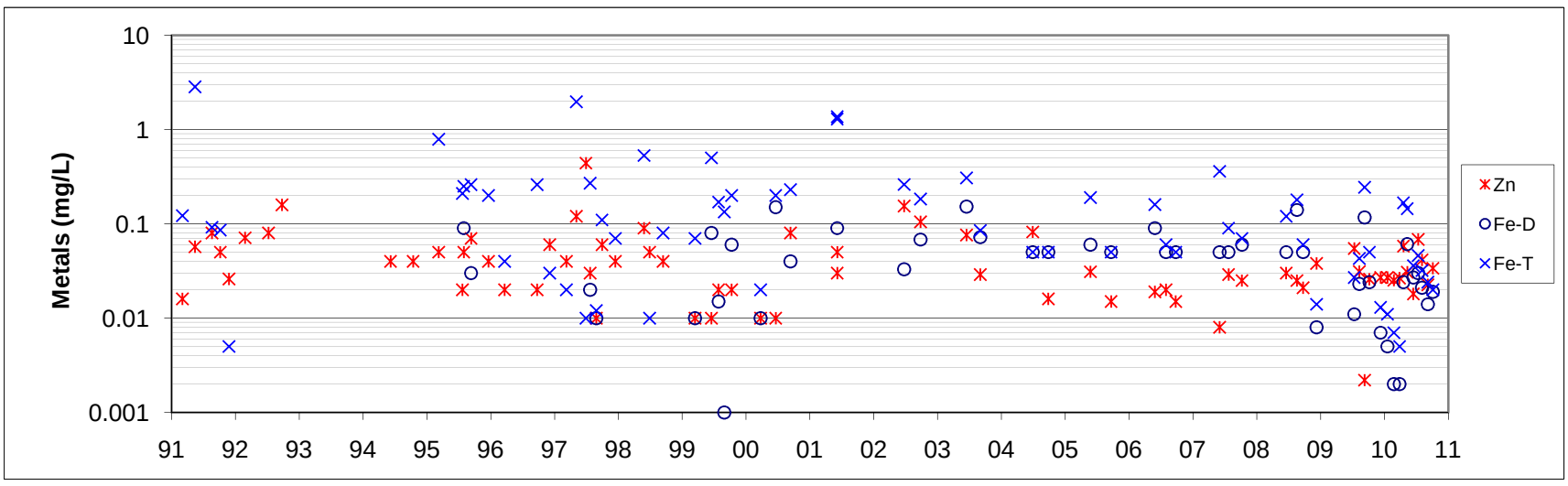

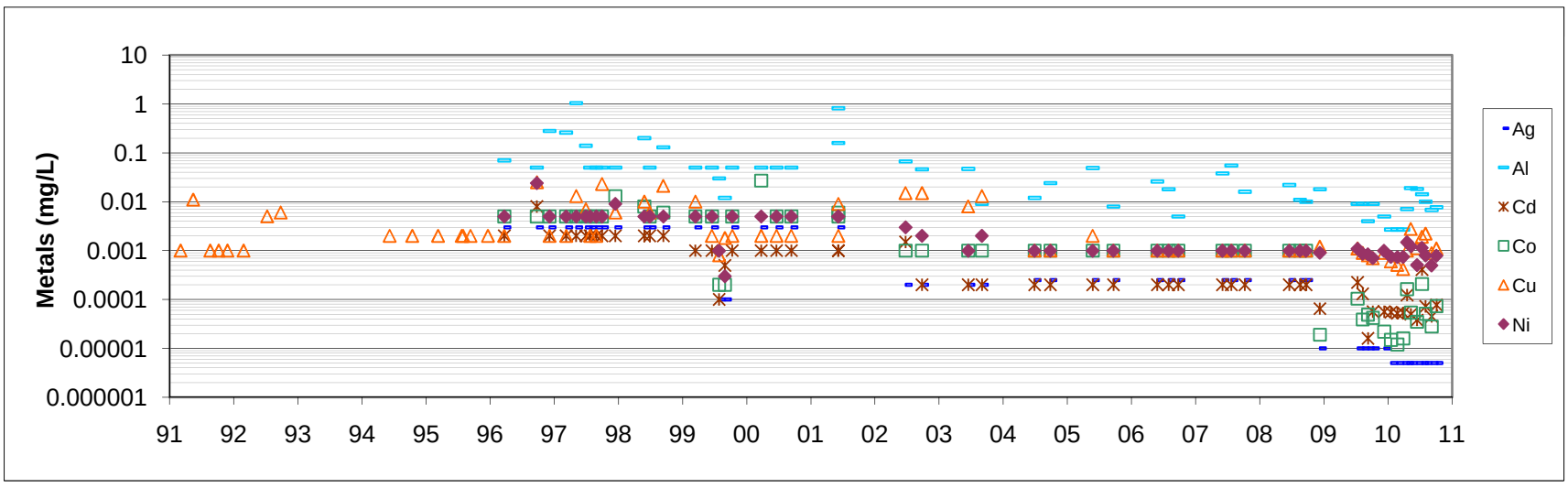

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Appendices

Appendix A
Waste Rock Seepage Monitoring Results

Appendix A.1 2002-2010 Waste Rock Seepage Results- Faro

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity CaCO3	Cl	SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	0.000005	0.01	0.00002	0.05
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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
SRK-FD01	6/10/2002	6.69	3670	13.2	139	6	3560	7.55	72	365	4.5	2220	<0.2	<0.2	<0.2	0.02	<0.005	<2	<0.1	0.02	543
SRK-FD01	9/11/2002	6.59	1900	4.2	212	0.5	1800	7.41	22	97	4.3	1070	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.02	272
SRK-FD01	6/4/2003	7.26	3340	13.2	198	-	3230	7.76	36	297	4.6	2260	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.02	492
SRK-FD01	9/13/2003	6.97	3180	3.4	312	30	3050	7.48	70	223	3.9	1960	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	0.05	463
SRK-FD01	5/31/2004	6.23	3580	1.9	355	200	3520	7.46	88.2	226	3.28	2410	0.24	<0.2	<0.2	0.031	<0.005	<0.2	<0.1	0.041	501
SRK-FD01	9/27/2004	6.93	3710	3	384	56	3560	7.4	67.4	252	<5	2370	<0.2	<0.2	<0.3	0.045	0.007	<0.2	<0.1	0.022	569
SRK-FD01	5/18/2005	6.48	3580	5.2	372	0.23	3440	7.50	96.9	220	<5.0	2420	0.31	<0.20	<0.20	0.034	<0.0050	<0.20	<0.10	0.045	508
SRK-FD01	9/16/2005	6.58	3780	3.4	374	45	3490	7.51	71.6	225	<5.0	2560	0.24	<0.20	<0.20	0.033	<0.0050	<0.20	<0.10	0.036	604
SRK-FD01	5/24/2006	6.93	2530	1.9	127	15	3920	6.85	121	235	3.3	2770	0.24	<0.2	<0.2	0.030	<0.005	<0.2	<0.1	0.041	519
SRK-FD01	9/21/2006	6.92	2520	2.4	110	30.5	3380	7.73	39.5	249	<10	2300	<0.20	<0.20	<0.20	0.033	<0.0050	<0.20	<0.10	0.016	434
SRK-FD01	5/29/2007	7.32	2540	3.3	205	50	5240	7.41	129	301	3.4	2810	0.03	0.0004	0.0017	0.032	<0.0002	<0.0002	<0.01	0.032	619
SRK-FD01	9/13/2007	7.13	3320	3.7	51	60	3130	7.66	61.1	233	<50	2110	0.117	<0.001	<0.001	0.032	<0.005	<0.005	<0.1	0.021	469
SRK-FD01	5/14/2008	6.65	2700	3.6	135	200	2600	7.20	161.0	088	2.5	1600	0.381	0.0003	0.001	0.033	0.00027	<0.00003	<0.3	0.073	342
SRK-FD01	9/16/2008	6.68	2961	2.9	138	60	3700	7.30	184.0	200	2.1	2895	0.362	0.0003	0.0003	0.031	0.0002	<0.00005	<0.5	0.074	522
SRK-FD01	5/28/2009	5.66	4625	1.8	159	30	4400	7.30	157.0	210	2	3900	0.345	0.0004	0.001	0.029	0.0001	<0.00005	<0.5	0.064	560
SRK-FD01	9/27/2009	6.41	4230	2.9	154	250	4070	7.50	89.8	240	1.4	3400	0.211	0.0004	0.0005	0.033	<0.0001	<0.00005	<0.5	0.028	624
SRK-FD01	6/23/2010	6.6	3731	10.3	97	-	4210	7.43	97.7	220	1.5	3500	0.015	0.0008	0.0008	0.0132	<0.0001	0.00014	<0.5	0.0708	562
SRK-FD01	10/1/2010	7.03	2573	3.4	237	240	4100	7.79	61.5	270	0.9	2900	0.114	0.0004	0.0004	0.034	<0.00005	<0.00003	<0.3	0.016	560
SRK-FD02	6/10/2002	7.88	1558	1.6	248	20	1520	8.2	4	165	1.2	704	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	248
SRK-FD02B	9/13/2003	7.55	1320	5.9	421	Trace	1230	8	14	155	0.9	597	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	0.01	223
SRK-FD04	6/10/2002	2.32	23500	17.3	460	No Flow	22600	2.33	39900	<1	240	43300	857	<8	87	<0.4	<0.2	<10	<4	14.4	504
SRK-FD04	9/11/2002	2.54	7350	6.2	460	ponded	6370	2.7	5780	<1	78	7490	137	<1	9	<0.05	<0.03	<1	<0.5	1.68	160
SRK-FD04	9/13/2003	2.39	34400	5	600	None	32300	2.38	49500	<1	1050	59000	986	<10	17	<0.5	<0.3	<10	<5	15.5	398
SRK-FD04B	6/6/2003	2.24	22000	15.6	613	No Flow	21900	2.4	28700	<1	<0.5	32300	27	<10	<10	<0.5	<0.3	<10	<5	7	449
SRK-FD05	6/12/2002	7.23	1252	1.2	317	10	1240	7.87	16	215	2.4	440	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	151
SRK-FD05	9/10/2002	6.97	882	1.9	225	60	875	7.65	18	172	1.3	266	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	104
SRK-FD05B	6/5/2003	7.1	1664	1.3	473	Abundant	1590	7.72	17	241	2	774	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	174
SRK-FD05C	9/12/2003	7.75	1161	8.8	361	30	1150	8.2	3	190	1.9	427	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	153
SRK-FD05	5/27/2004	7.12	1239	1.4	349	30	1270	7.89	11.7	228	1.72	428	<0.2	<0.2	<0.2	0.039	<0.005	<0.2	<0.1	<0.01	131
SRK-FD05	9/24/2004	7.31	935	3.4	307	82	885	8.02	3.8	203	<2.5	270	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.01	94.6
SRK-FD05	5/18/2005	6.95	-	2.6		120	1160	7.81	8.5	220	0.98	416	<0.20	<0.20	<0.20	0.035	<0.0050	<0.20	<0.10	<0.010	119
SRK-FD05	9/13/2005	7.18	844	5.6	352	26	810	7.92	5.3	168	0.76	270	<0.20	<0.20	<0.20	0.024	<0.0050	<0.20	<0.10	<0.010	92.1
SRK-FD05	9/20/2006	7.1	818	2.4	309	35.5	799	7.94	4.6	179	0.76	246	<0.20	<0.20	<0.20	0.022	<0.0050	<0.20	<0.10	<0.010	79.3
SRK-FD05B	5/28/2007	7.56	653	1.1	273	trace	610	7.46	8	106	0.75	217	0.006	<0.0002	0.0004	0.028	<0.0002	<0.0002	<0.01	0.00046	61.4
SRK-FD05	9/13/2007	7.09	920	3.7	87	10	911	6.94	21.3	174	0.95	324	0.0021	<0.0002	<0.0002	0.0265	<0.001	<0.001	<0.02	0.00104	105
SRK-FD05	5/16/2008	7.87	1660	2.1	132	15	1500	8.2	3.9	220	1.9	630	0.0053	0.00011	0.00016	0.0411	<0.00001	<0.000005	<0.05	0.00181	193
SRK-FD05	9/14/2008	6.91	931	3.3	222	60	910	8.2	8.4	170	1.1	351	0.0023	0.00013	0.00016	0.0231	<0.00001	<0.000005	<0.05	0.00161	101
SRK-FD05	5/28/2009	7.64	1760	5.3	236	10	1600	7.9	18.9	220	2.5	680	0.0038	0.00014	0.00014	0.0377	<0.00001	<0.000005	<0.05	0.00252	163
SRK-FD05	9/27/2009	7.1	1021		105	1.5	994	7.9	8	170	0.9	400	0.0041	0.00012	0.00015	0.0269	<0.00001	<0.000005	<0.05	0.00117	111
SRK-FD05	9/29/2010	7.32	1023	2	300	90	985	8.02	10.4	180	<0.5	350	0.003	0.00015	0.00016	0.0222	<0.00001	<0.000005	<0.05	0.00201	101
SRK-FD06	6/12/2002	7.21	1118	1.5	217	10	1110	7.97	12	209	2.4	382	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	112
SRK-FD06B	9/10/2002	7.24	1045	2.2	324	240	1020	7.85	14	191	1.1	355	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	95.7
SRK-FD06C	9/12/2003	7.15	1745	2	412	120	1410	8.1	7	211	2.1	593	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	138
SRK-FD06B	5/24/2006	7.3	2330	0.3	159	trace	2330	7.7	30.7	322	<2.5	1160	<0.2	<0.2	<0.2	0.054	<0.005	<0.2	<0.1	<0.01	201
SRK-FD06	5/28/2007	7.77	567	1	28	trickle	557	7.51	4	84.6	0.62	207	0.002	<0.0002	0.0005	0.015	<0.0002	<0.0002	<0.01	0.001	54
SRK-FD06	9/13/2007	7	1410	4.1	98	5	1390	7.71	12.1	218	1.31	605	<0.002	<0.0002	<0.0002	0.02	<0.001	<0.001	<0.02	0.0027	118
SRK-FD06	5/16/2008	7.74	1590	2	100	10	1500	8.1	7.5	250	1.3	590	0.0016	0.00016	0.00025	0.0357	0.00001	<0.000005	<0.05	0.00573	141
SRK-FD06	5/28/2009	7.58	1590	6.3	232	6	1400	7.8	24.4	230	2.1	600	0.0028	0.00016	0.00022	0.0331	0.00002	<0.000005	<0.05	0.00524	128
SRK-FD06	9/27/2009	7.03	1518		163	5	1490	7.9	12.4	200	1.2	710	0.0019	0.00014	0.00024	0.0215	<0.00001	<0.000005	<0.05	0.00356	134
SRK-FD06	9/29/2010	7.58	1400	1.5	295	1.5	1380	8.07	6.9	190	0.6	620	0.0016	0.00014	0.00026	0.0216	<0.00001	<0.000005	<0.05	0.00271	115
SRK-FD07	6/12/2002	7.31	1050	2.4	260	No Flow	1020	7.89	13	125	0.8	484	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	<0.01	97.8
SRK-FD08	6/12/2002	5.76	2560	8.9	188	No Flow	1540	7.32	24	22	0.8	995	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	166
SRK-FD09	6/12/2002	6.98	2560	5.9	235	No Flow	2450	7.12	61	54	1.8	1710	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.01	216
SRK-FD10	6/12/2002	6.17	5720	4.9	87	80	5440	6.36	434	350	17.5	4380	<0.2	<0.2	<0.2	0.02	<0.005	<0.3	<0.1	0.05	538
SRK-FD10	9/10/2002	6.25	7780	5.3	145	300	5440	6.58	578	319	17.5	4600	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.02	552
SRK-FD12	6/12/2002	6.42	5760	5.5	81	2.4	5560	6.98	420	338	15	4480	<0.2	<0.2	<0.2	0.02	<0.005	<0.3	<0.1	0.16	542
SRK-FD12	9/10/2002	6.24	5740	5.2	173	120	5400	6.91	519	320	14.4	4220	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.08	563
SRK-FD12	5/18/2005	6.05	7320	7.4	295	-	7060	6.18	813	112	19	6280	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.255	485
SRK-FD12	9/13/2005	6.68	7010	9	293	-	6310	6.35	755	160	15	5640	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.106	457
SRK-FD12	5/25/2006	5.76	6920	6.3	277	diffuse	6630	6.40	895	310	3.07	5540	0.78	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.324	473
SRK-FD12	9/24/2006	6.38	6550	6.5		4	6110	6.95	490	202	<25	4930	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.045	477
SRK-FD12	5/29/2007	6.5	6540	4.6	212	2	7340	6.43	770	218	18	5320	0.002	<0.0002	0.0014	0.014	<0.0002	<0.0002	<0.01	0.05883	495
SRK-FD12	9/14/2007	6.16	6300	4.6	38	1.5	5920	7	413	311	<50	5000	<0.05	<0.005	<0.005	0.0156	<0.025	<0.025	<0.5	0.0435	473
SRK-FD12	5/14/2008	6.1	6400	5.6	86	5	6100	6.6	1080	81	9.8	5300	0.092	<0.0002	0.0021	0.0215	0.0011	<0.00005	<0.5	0.645	463
SRK-FD12	9/14/2008	5.67	>3999	7.3	107	15	7200	6.2	1790	88	8	7170	0.037	<0.002	<0.002	0.019	<0.001	<0.0005	<5	0.214	531
SRK-FD12	5/29/2009	5.87	10030	7.6	179	1200	9100	4.8	3080	<50	8.4	8000	2.08	<0.002	0.002	0.024	0.003	<0.0005	<5	0.618	572
SRK-FD12	9/26/2009	5.92	8940	5.5	62	-	8580	6	2060	47	11	8300	0.05	<0.002	<0.002	0.017	<0.001	<0.0005	<5	0.288	542
SRK-FD12	9/28/2010	5.97	7885	5.6	264	22.5	8170	6.45	1380	75	12	7900	0.036	<0.002	<0.002	0.017	<0.001	<0.0005	<5	0.101	519
SRK-FD13	6/12/2002	3.23	5670	15.5	382	-1	5460	3.36	1720	<1	0.7	4780	21.7	<0.6	<0.6	<0.03	0.02	<0.9	<0.3	0.85	299
SRK-FD13	9/12/2002	4.52	2990	8.1	400	slight	2960	4.72	200	12	<0.5	2090	0.3	<0.2	<0.2	<0.01	<0.005	<0.6	<0.1	0.1	268
SRK-FD13	6/5/2003	5.91	2820	12.8	477	0	2710	6.93	177	21	<0.5	2290	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.12	277
SRK-FD13	5/26/2004	not recorded	5370	not recorded	638	4	5170	2.83	2760	<1	1.15	4500	40.7	<1	<1	<0.05	<0.025	<1	<0.5	0.967	104
SRK-FD13	5/16/2005	3.84	1278	5	508	4	1560	3.52	179	<2.0	<5.0	860	3.05	<0.20	<0.20	0.015	<0.0050	<0.20	<0.10	0.114	96.7
SRK-FD13	9/15/2005	3.75	4390	11.5	626	Trace	4150	3.96	122	6.9	<5.0	3160	1.10	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.059	303
SRK-FD13	5/24/2006	3.98	1699	0.6	312	2	1820	3.68	353	<2	<2.5	1130	2.59	<0.2	<0.2	0.015	<0.005	<0.2	<0.1	0.170	85.4
SRK-FD13	5/28/2007	4.8	2440	4.7	474	trace	3650	3.60	590	<0.5	<2	2420	5.90	<0.001	0.003	0.007	0.007	<0.001	<0.05	0.317	174.0
SRK-FD13	9/10/2007	7.59	2590	5.3	400	20	3070	3.51	476	<2	<50	2300	7.52	<0.01	<0.01	0.011	<0.05	<0.05	<1	0.227	212.0
SRK-FD13	5/14/2008	2.6	18800	3	436	4	17000	2.50	19800	<0.5	48	19000	405.00	0.009	3.53	0.030	0.21	0.0003	<3	5.550	383.0
SRK-FD13	9/14/2008	2.08	>3999	5.8	403	2.5	18000	2.70	18100	<0.5	8	27930	271.00	<0.01	0.62	0.025	0.109	<0.003	<30	4.220	411.0
SRK-FD13	5/29/2009	3.13	3250	6.8	319	1.5	3600	3.20	1150	<0.5	0.7	2900	9.01	<0.0004	0.0031	0.017	0.0048	<0.0001	<1	0.181	112.0
SRK-FD13	9/29/2010	3.52	8140	5.7	613.4	12	7390	3.67	3060	<0.5	<0.5	7800	128.00	<0.004	0.013	0.012	0.063	<0.001	<10	1.730	439.0
SRK-FD14	6/12/2002	8.14	2740	15.3	241	-1	2860	7.7	24	112	1.3	2260	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	223
SRK-FD14	9/12/2002	7.78	3400	9.4	275	3	3360	8.23	8	137	<0.5	2470	<0.2	<0.2	<0.2	<0.01	<0.005	<0.8	<0.1	<0.01	263
SRK-FD14B	6/6/2003	6.92	1499	8.8	643	0.6	2030	7.7	15	85	<0.5	1420	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.02	146
SRK-FD14	5/26/2004	7.13	1090	12	395	1.8	1100	8.08	3	76.1	<0.5	513	<0.2	<0.2	<0.2	0.018	<0.005	<0.2	<0.1	<0.01	71.5
SRK-FD14	5/16/2005	7.69	2250	9.5	336	1.9	2250	7.93	5.0	117	<5.0	1360	<0.20	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	<0.010	165
SRK-FD14	9/15/2005	7.05	2530	6.2	597	Trace	2850	7.89	7.0	147	<5.0	1800	<0.20	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	<0.010	207
SRK-FD14	5/24/2006	6.55	1876	11.2	156	trace	1830	7.64	9.5	118	<2.5	1040	<0.2	<0.2	<0.2	0.010	<0.005	<0.2	<0.1	<0.01	152
SRK-FD14	9/14/2007	6.02	2580	4.7	297	trace	2530	8	8.4	163	<0.5	1450	0.0036	0.00065	0.0007	0.00605	<0.001	<0.001	<0.02	0.00529	186
SRK-FD14	5/17/2008	8	1310	10.4	49	0.5	1200	7.6	2.6	40	<0.5	610	0.0161	0.00034	0.00014	0.0155	0.00019	<0.000005	<0.05	0.00491	91.4
SRK-FD14	9/14/2008	7.38	3644	6.5	191	1	3500	8	8.2	130	0.5	2667	0.003	0.0007	0.0005	0.0055	0.00011	<0.00003	<0.3	0.00996	279
SRK-FD14	5/28/2009	8.17	1469	14.7	231	trickle	1400	7.8	<0.5	90	0.7	700	0.011	0.0005	0.0002	0.0144	0.00014	<0.00003	<0.3	0.00415	94.8
SRK-FD14	9/29/2010	7.18	3962	6.1	286	1.2	4970	7.59	37.9	110	<0.5	3900	0.011	0.0002	0.0003	0.0161	<0.00005	<0.00003	<0.3	0.0369	324

Sample ID	Date Sampled	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	0.00005	0.00002	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	0.000002	0.0002	0.005	0.0001	
	Units	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-FD01	6/10/2002	<0.01	0.02	<0.01	0.36	0.23	0.03	244	3.41	<0.03	0.08	<0.3	11	<0.2	5.91	<0.01	30	2.86	<0.2	<0.03	<0.04		<0.03	34.6		2ow
SRK-FD01	9/11/2002	<0.01	0.02	<0.01	0.38	0.07	0.02	87.4	2.06	<0.03	0.05	<0.3	6	<0.2	2.94	<0.01	17	1.11	<0.2	<0.03	<0.01		<0.03	13.6		2ow
SRK-FD01	6/4/2003	<0.01	0.03	<0.01	5.02	<0.05	0.02	241	3.94	<0.03	0.06	<0.3	10	<0.2	5.46	<0.01	25	2.35	<0.2	<0.03	<0.01		<0.03	21.9		2ow
SRK-FD01	9/13/2003	<0.01	0.03	0.03	2.53	0.06	0.03	214	3.09	<0.03	0.08	<0.3	7	<0.2	4.6	<0.01	28	2.27	<0.2	<0.03	<0.01		<0.03	36.8		2ow
SRK-FD01	5/31/2004	<0.01	0.038	0.054	2.8	<0.05	0.043	248	3.34	<0.03	0.119	<0.3	8.1	<0.2	5.11	<0.01	26.7	2.73	<0.3	<0.03	<0.01		<0.03	57.8		2ow
SRK-FD01	9/27/2004	<0.01	0.015	0.02	6.29	<0.05	0.024	287	1.95	<0.03	0.088	<0.3	8.6	<0.2	5.5	<0.02	29.9	2.93	<0.2	<0.03	<0.01		<0.03	35.1		2ow
SRK-FD01	5/18/2005	<0.010	0.036	0.069	4.77	<0.050	0.035	281	3.70	<0.030	0.103	<0.30	9.7	<0.20	5.30	<0.010	34.2	2.76	<0.20	<0.030	<0.010		<0.030	60.8		2ow
SRK-FD01	9/16/2005	<0.010	0.037	0.027	8.30	<0.050	0.017	317	2.35	<0.030	0.126	<0.30	6.4	<0.20	5.86	<0.010	23.1	2.11	<0.20	<0.030	<0.010		<0.060	43.8		2ow
SRK-FD01	5/24/2006	<0.01	0.042	0.061	6.60	<0.05	0.029	318	4.19	<0.03	0.126	<0.3	9.1	<0.2	4.67	<0.01	26.7	2.77	<0.2	<0.03	<0.01		<0.03	69.2		2ow
SRK-FD01	9/21/2006	<0.010	0.020	0.013	5.86	<0.050	0.027	245	1.15	<0.030	0.077	<0.30	6.6	<0.20	4.50	<0.010	29.9	2.03	<0.20	<0.10	<0.010		<0.030	22.0		2ow
SRK-FD01	5/29/2007	<0.0002	0.030	0.024	4.73	0.021	0.030	373	3.47	0.0008	0.109	<0.03	9.1	0.0049	6.02	0.00012	25.0	3.47	0.0005	<0.0002	0.0004		<0.0002	54.9		2ow
SRK-FD01	9/13/2007	<0.005	0.023	0.021	5.22	0.00618	<0.05	259	1.50	<0.0005	0.098	<0.3	7.9	<0.01	5.22	<0.0001	34.2	2.46	<0.001	<0.001	0.011		<0.01	30.4		2ow
SRK-FD01	5/14/2008	<0.0005	0.074	0.120	7.07	0.0504	0.036	179	4.45	0.0003	0.151		5.73	0.001	4.36	0.00006	18.7	1.81	0.00051	<0.00005	<0.003	0.00449	<0.001	74.7	<0.0005	2ow
SRK-FD01	9/16/2008	<0.001	0.065	0.084	12.80	0.00261	0.040	323	5.02	<0.0005	0.179		8.45	0.003	5.28	0.00019	33.3	2.59	0.00051	<0.0001	<0.005	0.00725	<0.002	99.5	<0.001	2ow
SRK-FD01	5/28/2009	<0.001	0.049	0.077	5.40	0.0146	0.043	404	5.81	<0.0005	0.209		9.13	0.003	5.36	0.00007	26.0	2.78	0.0006	<0.0001	<0.005	0.00701	00.0	91.8	<0.001	2ow
SRK-FD01	9/27/2009	<0.001	0.027	0.027	6.21	0.00484	0.033	422	2.28	<0.0005	0.152		9.42	0.002	6.50	<0.00005	31.1	2.79	0.00037	<0.0001	0.007	0.00716	<0.002	44.7	<0.001	2ow
SRK-FD01	6/23/2010	<0.001	0.129	0.0	82.6	0.0042	0.048	444	6.16	0.0039	0.195		10.7	0.0006	5.23	0.0001	34.1	3.18	0.00	<0.0001	<0.005	0.00565	<0.002	87.7	<0.001	2ow
SRK-FD01	10/1/2010	<0.0005	0.016	0.032	5.48	0.0069	0.031	407	1.28	0.0003	0.121		8.5	0.001	5.45	<0.00003	29.4	3.11	0.00025	<0.00005	<0.003	0.00841	<0.001	27.9	<0.0005	2ow
SRK-FD02	6/10/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	40.5	0.028	<0.03	<0.05	<0.3	5	<0.2	4.5	<0.01	96	1.4	<0.2	<0.03	<0.01		<0.03	0.166		1
SRK-FD02B	9/13/2003	<0.01	<0.01	0.01	<0.03	0.15	0.01	26.8	0.422	<0.03	<0.05	<0.3	4	<0.2	3.92	<0.01	28	0.927	<0.2	<0.03	<0.01		<0.03	5.27		1
SRK-FD04	6/10/2002	1.1	9.8	559	9170	<2	0.8	1000	811	<2	6	<20	<80	<8	82	<0.6	<80	0.5	<20	<2	<0.4		<2	9210		3o
SRK-FD04	9/11/2002	0.22	1.38	55.4	1420	<0.3	0.2	190	125	<0.2	0.8	<2	<10	<1	16.4	<0.05	<10	0.22	<1	<0.2	<0.05		<0.2	1230		3o
SRK-FD04	9/13/2003	0.9	11.3	132	15100	<3	1.3	2220	448	<2	9	22	<100	<10	39	<0.5	<100	<0.3	<10	<2	<0.5		<2	10900		3o
SRK-FD04B	6/6/2003	<0.5	20	<0.5	1300	<3	<0.5	3210	2360	<2	15	<20	<100	<10	23	<0.5	<100	0.9	<10	<2	<0.5		<2	6380		3o
SRK-FD05	6/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	90	0.057	<0.03	0.06	<0.3	5	<0.2	5.74	<0.01	8	0.64	<0.2	<0.03	<0.01		<0.03	2.15		1
SRK-FD05	9/10/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	53.4	<0.005	<0.03	<0.05	<0.3	3	<0.2	5.29	<0.01	5	0.439	<0.2	<0.03	<0.01		<0.03	1.08		1
SRK-FD05B	6/5/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	150	0.193	<0.03	0.06	<0.3	5	<0.2	5.48	<0.01	9	0.734	<0.2	<0.03	<0.01		<0.03	4.51		1
SRK-FD05C	9/12/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	68.9	<0.005	<0.03	<0.05	<0.3	3	<0.2	5.29	<0.01	7	0.701	<0.2	<0.03	<0.01		<0.03	0.526		1
SRK-FD05	5/27/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.037	87.9	0.438	<0.03	<0.05	<0.3	4.2	<0.2	5.22	<0.01	6.7	0.571	<0.2	<0.03	<0.01		<0.03	2.33		1
SRK-FD05	9/24/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.018	57	<0.005	<0.03	<0.05	<0.3	4.3	<0.2	5.57	<0.01	5	0.418	<0.2	<0.03	<0.01		<0.03	1.36		1
SRK-FD05	5/18/2005	<0.010	<0.010	<0.010	<0.030	<0.050	0.022	97.3	<0.0050	<0.030	<0.050	<0.30	3.3	<0.20	5.11	<0.010	5.4	0.447	<0.20	<0.030	<0.010		<0.030	4.21		1
SRK-FD05	9/13/2005	<0.010	<0.010	<0.010	<0.030	<0.050	0.023	59.8	<0.0050	<0.030	<0.050	<0.30	2.5	<0.20	4.86	<0.010	4.4	0.368	<0.20	<0.030	<0.010		<0.030	1.38		1
SRK-FD05	9/20/2006	<0.010	<0.010	<0.010	<0.030	<0.050	0.017	50.4	<0.0050	<0.030	<0.050	<0.30	2.3	<0.20	4.65	<0.010	4.0	0.317	<0.20	<0.030	<0.010		<0.030	1.66		1
SRK-FD05B	5/28/2007	<0.0002	0.0028	0.0017	0.02	0.0003	0.016	47.5	0.493	0.0003	0.021	<0.03	2.89	0.0007	2.64	<0.00005	3.39	0.267	0.00008	<0.0002	<0.0002		<0.0002	0.99		1
SRK-FD05	9/13/2007	<0.001	<0.0002	0.00162	<0.03	0.00017	0.019	69.9	0.00029	0.00013	0.0163	<0.3	3.2	<0.002	5.49	<0.00002	5.7	0.405	<0.0002	<0.0002	<0.01		<0.002	1.06		1
SRK-FD05	5/16/2008	<0.0001	0.000109	0.00129	0.006	0.000061	0.0269	117	0.00768	0.00023	0.0274		4.46	0.0025	6.31	<0.000005	6.74	0.747	0.000079	<0.00001	<0.0005	0.0106	<0.0002	2.1	<0.0001	1
SRK-FD05	9/14/2008	<0.0001	0.000056	0.00187	0.002	0.000074	0.0221	67.9	0.00038	0.00013	0.0229		3.35	0.00166	5.61	<0.000005	4.99	0.395	0.000111	<0.00001	<0.0005	0.0056	<0.0002	1.88	<0.0001	1
SRK-FD05	5/28/2009	<0.0001	0.000132	0.00151	0.003	0.000033	0.0285	119	0.00833	0.00018	0.0415		4.03	0.00365	5.89	<0.000005	8.06	0.674	0.000124	<0.00001	<0.0005	0.0115	<0.0002	3.93	<0.0001	1
SRK-FD05	9/27/2009	<0.0001	0.000081	0.00134	0.014	0.000128	0.0206	75.3	0.0016	0.00018	0.019		3.27	0.00174	5.87	<0.000005	5.84	0.433	0.000063	<0.00001	<0.0005	0.00635	<0.0002	1.24	<0.0001	1
SRK-FD05	9/29/2010	<0.0001	0.000066	0.00169	0.002	0.00005	0.0248	83.2	0.00007	0.00022	0.0316		3.53	0.00207	6.14	<0.000005	5.38	0.416	0.000122	<0.00001	<0.0005	0.00852	<0.0002	2.48	<0.0001	1
SRK-FD06	6/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	85.3	0.036	<0.03	<0.05	<0.3	4	<0.2	5.3	<0.01	7	0.466	<0.2	<0.03	<0.01		<0.03	2.79		1
SRK-FD06B	9/10/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	86.9	<0.005	<0.03	<0.05	<0.3	3	<0.2	5.37	<0.01	5	0.42	<0.2	<0.03	<0.01		<0.03	2.04		1
SRK-FD06C	9/12/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	131	<0.005	<0.03	<0.05	<0.3	4	<0.2	5.45	<0.01	7	0.637	<0.2	<0.03	<0.01		<0.03	1.98		1
SRK-FD06B	5/24/2006	<0.01	<0.01	<0.01	<0.03	<0.05	0.033	213	0.0193	<0.03	0.121	<0.3	5.2	<0.2	5.43	<0.01	9	0.837	<0.2	<0.03	<0.01		<0.03	14.4		1
SRK-FD06	5/28/2007	<0.0002	0.0022	0.0016	0.01	0.0003	0.008	44.9	0.42	0.0002	0.014	<0.03	2.19	0.0005	1.72	<0.00005	2.16	0.214	0.0001	<0.0002	<0.0002		<0.0002	1.41		1
SRK-FD06	9/13/2007	<0.001	<0.0002	0.00209	<0.03	0.00024	0.025	143	0.00015	<0.0001	0.034	<0.3	3.8	<0.002	5.77	<0.00002	7	0.518	<0.0002	<0.0002	<0.01		<0.002	3.01		1
SRK-FD06	5/16/2008	<0.0001	0.000075	0.00331	0.002	0.000312	0.0309	132	0.00055	0.0001	0.0649		4.58	0.00176	6.81	0.000007	5.89	0.584	0.000209	<0.00001	<0.0005	0.0101	<0.0002	8.08	<0.0001	1
SRK-FD06	5/28/2009	<0.0001	0.00015	0.00403	0.007	0.000368	0.0303	125	0.00263	0.00008	0.0632		4.16	0.00291	6.2	<0.000005	7.28	0.521	0.000228	<0.00001	<0.0005	0.0123	<0.0002	7.36	<0.0001	1
SRK-FD06	9/27/2009	<0.0001	0.000095	0.00218	0.014	0.000277	0.0302	153	0.00142	0.00011	0.0469		4.2	0.00208	6.5	<0.000005	7.89	0.585	0.000167	<0.00001	0.0008	0.0114	<0.0002	3.83	<0.0001	1
SRK-FD06	9/29/2010	<0.0001	0.000062	0.00158	0.002	0.000141	0.0296	145	0.00005	0.0002	0.0339		3.87	0.00215	5.86	<0.000005	6.5	0.546	0.000159	<0.00001	<0.0005	0.0118	<0.0002	2.65	<0.0001	1
SRK-FD07	6/12/2002	<0.01	0.01	<0.01	<0.03	<0.05	0.13	69.8	0.278	<0.03	<0.05	<0.3	8	<0.2	1.15	<0.01	25	1.06	<0.2	<0.03	<0.01		<0.03	3.89		1
SRK-FD08	6/12/2002	<0.01	<0.01	<0.01	0.07	<0.05	<0.01	114	0.188	<0.03	0.06	<0.3	3	<0.2	6.27	<0.01	5	0.473	<0.2	<0.03	<0.01		<0.03	3.88		2w
SRK-FD09	6/12/2002	<0.01	0.03	0.01	0.05	0.1	0.08	284	0.844	<0.03	0.16	<0.3	13	<0.2	3.07	<0.01	7	0.758	<0.2	<0.03	<0.01		<0.03	26.4		2ow
SRK-FD10	6/12/2002	<0.01	0.47	<0.01	37	<0.05	0.18	686	54	<0.03	0.66	<0.3	17	<0.2	7.59	<0.02	69	3.86	<0.4	0.03	<0.01		<0.03	215		2ow
SRK-FD10	9/10/2002	<0.02	0.45	<0.02	57.8	<0.1	0.13	630	53.9	<0.06	0.6	<0.6	15	<0.4	7.3	<0.02	60	3.67	<0.4	<0.06	<0.02		<0.06	223		2ow
SRK-FD12	6/12/2002	<0.02	0.47	0.3	23.4	<0.05	0.15	682	50.4	<0.03	0.72	<0.3	16	<0.2	7.46	<0.02	57	3.55	<0.3	0.03	<0.01		<0.03	231		2ow
SRK-FD12	9/10/2002	<0.02	0.43	0.11	35.7	<0.1	0.12	627	49.1	<0.06	0.7	<0.6	13	<0.4	7.3	<0.02	50	3.48	<0.4	<0.06	<0.02		<0.06	219		2ow
SRK-FD12	5/18/2005	0.033	1.06	0.779	99.7	<0.10	0.200	794	76.5	<0.060	1.43	<0.60	14.0	<0.40	7.28	<0.020	52.3	3.28	<0.40	<0.060	<0.020		0.099	527		2ow
SRK-FD12	9/13/2005	<0.020	0.896	0.028	135	<0.10	0.199	803	79.6	<0.060	1.08	<0.60	15.0	<0.40	6.97	<0.020	58.7	3.27	<0.60	<0.060	<0.020		<0.060	472		2ow
SRK-FD12	5/25/2006	<0.02	0.921	1.95	114	<0.1	0.178	811	85.7	<0.06	1.09	<0.6	16.6	<0.4	7.93	<0.02	60.9	3.84	<0.4	<0.06	<0.02		<0.06	584		3ow
SRK-FD12	9/24/2006	<0.020	0.708	0.023	91.3	<0.10	0.158	777	71.6	<0.060	0.85	<0.60	13.6	<0.40	6.71	<0.020	64.0	3.17	<0.40	0.313	<0.020		0.067	301		2ow
SRK-FD12	5/29/2007	<0.0002	0.617	0.028	58.9	0.0012	0.15	834	71.2	0.0083	0.672	<0.03	16.2	0.0047	8.01	0.00063	57.4	4.35	0.0015	<0.0002	0.0007		<0.0002	331		2ow
SRK-FD12	9/14/2007	<0.025	0.699	0.0163	38.7	<0.0025	<0.25	796	72.6	<0.0025	0.818	<0.6	16.3	<0.05	7.2	<0.0005	62.3	4.13	<0.005	<0.005	<0.02		<0.05	255		2ow
SRK-FD12	5/14/2008	<0.001	0.921	2.35	16	0.00023	0.177	652	59.6	<0.0005	1.12		14.4	0.0006	7.46	0.00021	42	3.69	0.0018	<0.0001	<0.005	0.0107	<0.002	655	<0.001	2ow
SRK-FD12	9/14/2008	<0.01	1.27	0.298	172	0.0013	0.204	989	90	<0.005	1.56		17	<0.004	<10	0.0005	51	4.07	0.0018	<0.001	<0.05	0.0107	<0.02	723	<0.01	3ow
SRK-FD12	5/29/2009	<0.01	2.16	2.25	347	0.0161	0.267	1240	133	<0.005	2.48		17	<0.004	10.8	0.0006	56	4.44	0.0023	<0.001	<0.05	0.0184	<0.02	1240	<0.01	3ow
SRK-FD12	9/26/2009	<0.01	1.84	0.101	387	0.0016	0.254	1260	137	<0.005	2.02		20	<0.004	11.5	0.0006	66	4.19	0.002	<0.001	<0.05	0.013	<0.02	1080	<0.01	3ow
SRK-FD12	9/28/2010	<0.01	1.73	0.032	221	0.0018	0.235	1210	124	<0.005	1.83		19	<0.004	<10	<0.0005	65	4.28	0.002	<0.001	<0.05	0.0112	<0.02	767	<0.01	3ow
SRK-FD13	6/12/2002	<0.03	1.53	4.54	284	1.6	0.29	502	64.3	<0.09	3.2	<0.9	12	<0.6	7.8	<0.03	12	0.69	<0.6	<0.09	<0.03		<0.09	751		3w
SRK-FD13	9/12/2002	<0.01	0.28	0.12	0.45	0.31	0.18	319	12.6	<0.03	0.76	<0.3	13	<0.2	1.76	<0.01	36	1.01	<0.2	<0.03	<0.01		<0.03	96.5		3w
SRK-FD13	6/5/2003	<0.01	0.3	0.04	0.13	0.24	0.14	255	14.9	<0.03	0.68	<0.3	12	<0.2	2.43	<0.01	13	0.811	<0.2	<0.03	<0.01		<0.03	112		3w
SRK-FD13	5/26/2004	0.085	1.31	7.49	550	<0.25	0.156	356	60.3	<0.15	2.19	<1.5	<10	<1	5	<0.05	<10	0.233	<1	<0.15	<0.05		<0.15	877		3w
SRK-FD13	5/16/2005	<0.010	0.155	1.07	19.7	0.443	0.051	109	6.08	<0.030	0.358	<0.30	3.5	<0.20	1.43	<0.010	2.2	0.254	<0.20	<0.030	<0.010		<0.030	83.3		3w
SRK-FD13	9/15/2005	<0.010	0.265	0.325	3.83	0.335	0.388	449	9.11	<0.030	0.939	<0.30	19.8	<0.20	2.48	<0.010	114	1.68	<0.20	<0.030	<0.010		<0.070	59.4		3w
SRK-FD13	5/24/2006	<0.01	0.225	1.47	24.3	0.162	0.077	133	9.06	<0.03	0.756	<0.3	5.0	<0.2	1.33	<0.01	2.2	0.285	<0.2	<0.03	<0.01		<0.03	185		3w
SRK-FD13	5/28/2007	<0.001	0.420	1.02	18.9	0.710	0.140	291	23.60	0.0023	1.040	<0.15	6.9	0.006	3.70	0.0007	8.1	0.500	0.0019	<0.001	<0.001		<0.001	329		3w
SRK-FD13	9/10/2007	<0.05	0.508	1.01	37.2	1.300	<0.5	285	23.70	<0.005	1.330	<0.3	11.6	<0.1	4.46	<0.001	20.8	0.993	<0.01	<0.01	<0.01		<0.1	257		3w
SRK-FD13	5/14/2008	0.521	6.160	60.80	3440.0	0.423	1.100	1510	242.00	0.003	9.140		1.2	0.0	36.00	0.0043	12.8	0.637	0.0046	0.0025	<0.03	0.589	000	3880	0.012	3w
SRK-FD13	9/14/2008	0.382	6.320	24.80	4320.0	0.584	0.983	2090	315.00	<0.03	11.600		10	<0.02	<50	<0.003	32.0	1.900	0.002	<0.005	<0.3	0.296	<0.1	4480	<0.05	3w
SRK-FD13	5/29/2009	<0.002	0.308	0.90	31.4	0.341	0.119	155	13.50	<0.001	0.742		3.2	0.0	4.13	0.0001	2.6	0.309	0.00116	<0.0002	<0.01	0.00895	<0.004	168	<0.002	3w
SRK-FD13	9/29/2010	0.025	2.800	8.26	15.3	1.960	0.454	894	130.00	<0.01	4.370		11	<0.008	24.90	<0.001	23.0	1.030	0.0042	<0.002	<0.1	0.111	<0.04	1210	<0.02	3w
SRK-FD14	6/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.23	314	0.041	<0.03	0.07	<0.3	24	<0.2	0.8	<0.01	122	3.32	<0.3	<0.03	<0.01		<0.03	1.72		1
SRK-FD14	9/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.2	378	0.014	<0.03	0.09	<0.3	21	<0.2	0.87	<0.01	119	3.75	<0.2	<0.03	<0.01		<0.03	4.95		1
SRK-FD14B	6/6/2003	<0.01	0.02	0.06	0.89	<0.05	0.11	156	0.363	<0.03	0.05	<0.3	9	<0.2	1.08	<0.01	122	1.23	<0.2	<0.03	<0.01		<0.03	11.2		1
SRK-FD14	5/26/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.05	88	0.116	<0.03	0.056	<0.3	7.9	<0.2	0.491	<0.01	23	1.05	<0.2	<0.03	<0.01		<0.03	1.01		1
SRK-FD14	5/16/2005	<0.010	0.012	<0.010	<0.030	<0.050	0.102	223	0.420	<0.030	0.068	<0.30	10.3	<0.20	0.591	<0.010	52.5	2.05	<0.20	<0.030	<0.010		0.049	2.48		1
SRK-FD14	9/15/2005	<0.010	<0.010	<0.010	<0.030	<0.050	0.193	230	<0.0050	<0.030	0.075	<0.30	16.1	<0.20	0.726	<0.010	150	3.24	<0.20	<0.030	<0.010		<0.050	3.52		1
SRK-FD14	5/24/2006	<0.01	<0.01	<0.01	<0.03	<0.05	0.105	168	0.253	<0.03	0.053	<0.3	13.8	<0.2	0.737	<0.01	52.6	2.12	<0.2	<0.03	<0.01		<0.03	1.98		1
SRK-FD14	9/14/2007	<0.001	0.0002	<0.004	0.05	0.00388	0.154	219	0.0103	0.00218	0.0573	<0.3	17	0.0021	0.775	<0.00002	126	2.22	0.00107	<0.0002	<0.01		<0.002	3.38		1
SRK-FD14	5/17/2008	<0.0001	0.0127	0.00522	0.21	0.000194	0.0544	116	0.495	0.00139	0.0399		6.96	0.00175	0.5	<0.000005	12.9	0.926	0.000513	<0.00001	<0.0005	0.0223	<0.0002	1.66	<0.0001	1
SRK-FD14	9/14/2008	<0.0005	0.00028	0.0011	<0.005	0.00379	0.192	397	0.0352	0.0021	0.135		22	0.0043	0.786	<0.00003	121	3.5	0.00131	<0.00005	0.003	0.149	<0.001	6.27	<0.0005	1
SRK-FD14	5/28/2009	<0.0005	0.00311	0.0043	0.008	0.00476	0.073	120	0.107	0.0022	0.0379		9.58	0.0015	0.638	<0.00003	19.8	1	0.00071	<0.00005	<0.003	0.0428	<0.001	1.79	<0.0005	1
SRK-FD14	9/29/2010	<0.0005	0.182	0.0064	0.018	0.0476	0.129	665	7.72	<0.0003	0.242		24.7	0.0012	1.25	<0.00003	35.4	1.69	0.00163	<0.00005	<0.003	0.00293	<0.001	18.6	<0.0005	1

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity CaCO3	Cl	SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	0.000005	0.01	0.00002	0.05
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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
SRK-FD16	6/13/2002	6.61	84	2.1	298	300	82	7.79	9	37	<0.5	10	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	12.9
SRK-FD16	6/5/2003	7.42	67	1.4	508	40	64	7.32	3	30	0.7	5	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	9.97
SRK-FD16	9/11/2003	7.54	125	4.1	505	240	126	8.37	<1	60	0.8	7	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	19.6
SRK-FD16	5/27/2004	7.06	52	0.8	438	600	46.8	8.16	1.4	21.3	0.67	3.1	<0.2	<0.2	<0.2	0.016	<0.005	<0.2	<0.1	<0.01	7.46
SRK-FD16	9/26/2004	6.75	146	3.9	625	90	149	7.73	4	66.8	<0.5	8.48	<0.2	<0.2	<0.2	0.064	<0.005	<0.2	<0.1	<0.01	23.6
SRK-FD16	9/13/2005	7.12	126	5.1	602	60	126	8.07	2.8	49.4	<0.50	6.73	<0.20	<0.20	<0.20	0.060	<0.0050	<0.20	<0.10	<0.010	19.9
SRK-FD16	5/23/2006	6.93	49	1.1	302	-	48.4	7.73	3.8	19.0	<0.5	3.31	<0.2	<0.2	<0.2	0.022	<0.005	<0.2	<0.1	<0.01	9.04
SRK-FD16	9/20/2006	7.47	123	4	206	210	122	8.09	2.2	64.4	<0.50	5.66	<0.20	<0.20	<0.20	0.060	<0.0050	<0.20	<0.10	<0.010	19.7
SRK-FD16	9/13/2008	7.49	98	3.7	205	240	110	8.00	1.7	47.0	0.5	7.80	0.0116	0.00004	0.00016	0.030	0.00001	<0.000005	<0.05	0.000038	15.4
SRK-FD17	6/13/2002	7.16	103	1.6	321	26	101	8	7	42	0.6	10	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	15.3
SRK-FD17	9/12/2002	7.35	130	3.5	316	1.5	130	7.68	4	54	<0.5	11	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	19.1
SRK-FD18	6/13/2002	6.98	177	1.6	307		173	8.01	11	55	0.5	28	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	26.4
SRK-FD18	9/12/2002	7.33	173	3.2	334	1.5	170	7.72	4	65	<0.5	19	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	26.3
SRK-FD18	6/5/2003	7.12	152	1.1	515	75	151	7.51	5	57	1.1	21	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	22
SRK-FD18	9/11/2003	6.82	141	4	536	Trace	142	8.15	2	61	0.8	11	<0.2	<0.2	<0.2	0.08	<0.005	<0.2	<0.1	<0.01	21.9
SRK-FD18	5/27/2004	6.89	170	1.2	450	12.5	157	7.96	3.2	54.3	<0.5	28	<0.2	<0.2	<0.2	0.068	<0.005	<0.2	<0.1	<0.01	24.2
SRK-FD18	9/26/2004	6.77	148	3.1	572	0.25	150	7.67	7.5	67.6	<0.5	9.15	<0.2	<0.2	<0.2	0.087	<0.005	<0.2	<0.1	<0.01	23.6
SRK-FD18	5/16/2005	7.06	205	1.5	544	30	208	7.84	3.1	71.1	<0.50	39.2	<0.20	<0.20	<0.20	0.081	<0.0050	<0.20	<0.10	<0.010	33.0
SRK-FD18	9/13/2005	6.83	149	5	671	60	149	7.97	3.1	55.9	<0.50	12.3	<0.20	<0.20	<0.20	0.073	<0.0050	<0.20	<0.10	<0.010	21.8
SRK-FD18	5/23/2006	6.91	164	1.2	324	22	164	7.46	5.3	52.6	<0.5	29.8	<0.2	<0.2	<0.2	0.086	<0.005	<0.2	<0.1	<0.01	24.0
SRK-FD18	9/20/2006	7.06	138	3.8	222	6	138	7.89	3.4	68.8	<0.50	8.83	<0.20	<0.20	<0.20	0.084	<0.0050	<0.20	<0.10	<0.010	21.7
SRK-FD18	5/29/2007	7.55	149	1.4	374	20	145	7.29	19.0	49.9	0.28	23.00	0.022	<0.0002	0.0003	0.058	<0.0002	<0.0002	<0.01	0.0003	24.3
SRK-FD18	9/13/2007	6.15	170	3.9	166	15	168	7.20	7.1	71.6	<0.5	17.20	0.0064	<0.0001	0.00013	0.070	<0.0005	<0.0005	<0.01	0.000314	25.5
SRK-FD18	5/14/2008	6.03	270	1.3	303	trickle	200	7.70	13.3	57.0	<0.5	43.00	0.035	0.0001	0.007	0.078	<0.00005	<0.00003	<0.3	0.00035	29.1
SRK-FD18	9/13/2008	7.24	185	3.4	307	23.3	190	8.10	5.0	75.0	<0.5	24.00	0.0055	0.00005	0.00012	0.062	<0.00001	<0.000005	<0.05	0.000226	28.2
SRK-FD18	5/28/2009	3.17	192	9.7	440	60	1600	3.00	699.0	<0.5	0.5	740.00	14.8	0.0004	0.0011	0.072	0.0028	<0.00005	<0.5	0.164	33.0
SRK-FD18	9/27/2009	7.32	160		142	1	161	7.50	1.4	70.0	<0.5	13.00	0.0058	0.00005	0.00011	0.071	<0.00001	<0.000005	<0.05	0.0003	24.6
SRK-FD19	6/13/2002	6.98	5030	0	259	30	4710	7.52	91	394	2	3380	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	595
SRK-FD19	9/11/2002	6.87	5110	0.2	283	30	4900	7.21	115	386	1.6	3810	<0.4	<0.4	<0.4	0.04	<0.01	<0.4	<0.2	<0.02	628
SRK-FD19	6/6/2003	7.32	3550	1.3	444	30	4710	7.76	68	407	2.3	3670	<0.2	<0.2	<0.2	0.04	<0.005	<0.4	<0.1	<0.01	584
SRK-FD19B	9/13/2003	7.25	5240	0.3	470	5.2	5070	7.75	67	403	2.5	3860	<0.2	<0.2	<0.2	0.05	<0.005	<0.5	<0.1	<0.01	598
SRK-FD19	5/27/2004	6.65	4340	0.2	397	150	3940	7.45	90.3	279	1.55	3070	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.028	456
SRK-FD19	9/26/2004	6.44	5690	1.1	461	0.1	5470	7.51	114	406	<10	4110	<0.2	<0.2	<0.2	0.059	<0.005	<0.4	<0.1	<0.02	617
SRK-FD19	5/16/2005	7.04	4350	0.3	446	120	4290	7.58	114	259	<5.0	3170	<0.20	<0.20	<0.20	0.029	<0.0050	<0.20	<0.10	0.043	448
SRK-FD19	9/13/2005	6.91	5760	0.5	425	17	5100	7.51	128	414	<10	4290	<1.0	<1.0	<1.0	0.052	<0.025	<1.0	<0.50	<0.050	675
SRK-FD19	5/23/2006	7.51	4960	0.1	249	180	4870	7.50	92.1	403	<2.5	3550	<0.2	<0.2	<0.2	0.029	<0.005	<0.2	<0.1	0.011	445
SRK-FD19	9/20/2006	7.22	5750	0.2	152	2	5590	7.58	123	436	<25	4070	<0.60	<0.60	<0.60	0.043	<0.015	<0.60	<0.30	<0.030	634
SRK-FD19	5/29/2007	7.37	5100	0.2	328	50	6120	7.61	242	409	2.82	3570	0.002	0.0003	0.0018	0.022	<0.0002	<0.0002	<0.01	0.01122	515
SRK-FD19	9/13/2007	6.89	5460	0.6	72	2	5140	7.53	145	445	<50	4090	<0.02	<0.002	<0.002	0.0361	<0.01	<0.01	<0.2	0.0073	566
SRK-FD19	5/14/2008	7.6	5000	1.4	108	10	4800	7.9	74.1	340	2.1	4000	0.007	0.0004	0.0059	0.0275	<0.0001	<0.00005	<0.5	0.0138	552
SRK-FD19	9/13/2008	6.3	5940	1	190	30	5900	7.6	281	270	1.1	5100	0.475	<0.0004	0.0013	0.0538	0.0006	<0.0001	<1	0.0817	659
SRK-FD19	5/28/2009	6.91	630	2	272	120	5500	7.2	296	160	1.2	4200	0.546	0.0005	0.001	0.0359	0.001	<0.0001	<1	0.15	489
SRK-FD19	9/27/2009	6.3	6630	0.5	101	5	6350	7.5	232	410	1.6	5800	0.035	0.0004	0.0013	0.0582	<0.0002	<0.0001	<1	0.0201	707
SRK-FD19	6/23/2010	6.88	6820	0.6	158	-	6460	7.57	224	410	1.1	5900	0.031	<0.0004	0.0015	0.041	<0.0002	<0.0001	<1	0.0216	656
SRK-FD20	6/13/2002	3.18	555	8.2	492	0.5	572	3.18	135	<1	0.6	193	9.1	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	10.2
SRK-FD20	9/13/2002	2.78	1875	0.9	586	60	1820	2.82	8750	12	<0.5	1170	46.8	<0.2	<0.2	0.04	0.006	<0.2	<0.1	0.08	35.2
SRK-FD20	6/5/2003	3.39	291	2.3	723	no flow	189	4.2	28	<1	0.6	69	1.8	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	6.45
SRK-FD20	9/12/2003	2.93	834	2.2	778	2	771	3.66	176	<1	<0.5	248	11.3	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	0.02	18
SRK-FD21	6/13/2002	4.57	4370	7.1	418	1.5	4130	4.51	283	8	0.8	3540	27.3	<0.2	<0.2	<0.01	0.009	<0.2	<0.1	0.17	410
SRK-FD21B	9/13/2002	5.21	2860	1.6	371	slight	2820	5.37	35	8	<0.5	1980	1.5	<0.2	<0.2	<0.01	<0.005	<0.3	<0.1	0.05	322
SRK-FD21B	6/5/2003	6.61	3270	11.5	372	2.7	3220	7.51	40	21	<0.5	2650	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.08	378
SRK-FD21	5/30/2004	3.56	2840	6.5	700	9	2780	3.8	282	<1	1.08	1970	30.5	<0.2	<0.2	0.015	0.0088	<0.2	<0.1	0.106	335
SRK-FD21	9/26/2004	6.81	2550	1.6		Trace	2520	8	23.9	10.4	<5	1710	0.58	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.035	283
SRK-FD21	5/16/2005	4.18	2790	5.3	661	18	2740	4.56	161	2.4	<5.0	1900	16.4	<0.20	<0.20	0.012	0.0053	<0.20	<0.10	0.080	267
SRK-FD21	9/13/2005	7.16	4050	14.7	379	0.1	3680	7.49	55.7	15.3	<10	3060	1.24	<0.20	<0.20	0.013	<0.0050	<0.20	<0.10	0.077	398
SRK-FD21	5/24/2006	5.72	1932	6.5	345	8.6	1950	5.16	56.8	11.2	<2.5	1280	3.56	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	0.043	249
SRK-FD21	5/28/2007	7.13	2420	9.3	269	trace	2920	6.89	14	24.1	<2	1780	0.023	<0.0002	0.0006	0.016	<0.0002	<0.0002	<0.01	0.0295	299
SRK-FD21	9/13/2007	4.79	2500	9.3	216	trace	3360	4.83	135	12.1	<50	2720	10.4	<0.001	<0.001	0.0113	<0.005	<0.005	<0.1	0.0762	349
SRK-FD21	9/14/2008	4.33	3500	6.1	397	Trace	4900	4.7	216	<0.5	<0.5	4620	21.5	<0.0002	0.0014	0.012	0.0046	<0.00005	<0.5	0.165	468
SRK-FD21	5/29/2009	6.87	1556	6.9	204	0.5	1500	6.9	27.3	46	<0.5	810	0.0779	0.00006	0.00012	0.0168	0.00007	<0.000005	<0.05	0.0154	134
SRK-FD21	9/29/2010	6.78	3303	3.4	286	slight trickle	3370	7.03	16.9	12	0.7	2800	0.03	<0.0001	0.0002	0.0107	0.00005	<0.00003	<0.3	0.0192	381
SRK-FD22	6/13/2002	6.59	2270	13.4	271	Trace Flow	2150	7.72	25	179	0.7	1390	<0.2	<0.2	<0.2	<0.01	<0.005	<0.3	<0.1	0.01	346
SRK-FD22B	9/12/2002	5.45	1766	12	288	slight	1740	6.7	70	15	<0.5	1130	1.4	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.07	239
SRK-FD22B	6/8/2003	6.84	1460	8.1	632	Trace	1520	7.48	65	47	<0.5	1120	1.6	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	0.07	235
SRK-FD23	6/13/2002	6.39	729	19.4	113	Trace Flow	708	7.42	27	31	2.1	346	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.08	49.1
SRK-FD23B	9/13/2002	4.27	1403	36.9	235	5	1450	4.46	227	92	0.7	801	0.6	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.22	73.5
SRK-FD23B	9/12/2003	6.19	772	8.8	299	Trace	723	5.47	50	4	1.3	378	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.09	50.7
SRK-FD23	5/30/2004	5.74	875	16.2	288	Trace	859	6.48	36.7	8.9	1.45	474	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	0.103	65.6
SRK-FD23	5/16/2005	5.71	886	10.2	364	Trace	925	6.41	40.9	11.1	0.92	492	<0.20	<0.20	<0.20	0.013	<0.0050	<0.20	<0.10	0.119	74.1
SRK-FD23	9/13/2005	5.31	1148	13.6	405	Trace	1060	6.27	132	5.6	0.90	600	0.65	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.110	64.1
SRK-FD23	9/20/2006	5.01	1168	6.4	178	trace	1070	6.23	118	6.8	0.92	590	0.28	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.115	60.9
SRK-FD23	9/13/2007	4.77	1601	9.6	200	trace	1580	5.45	279	6.9	<5	1040	2.65	<0.001	<0.001	0.00609	<0.005	<0.005	<0.1	0.121	99.9
SRK-FD23	9/14/2008	3.87	2405	6.7	323	Trace	2300	4.2	582	<0.5	0.7	1785	18.2	<0.0002	0.0007	0.0138	0.0174	<0.00005	<0.5	0.472	126
SRK-FD23	5/29/2009	6.05	1190	10.2	189	trace	1000	5.4	97.8	<0.5	1.6	590	0.24	<0.0001	0.0002	0.0129	0.00137	<0.00003	<0.3	0.127	68.8
SRK-FD23	9/27/2009	3.32	1490	6.9	378	trace	1510	4.8	247	<0.5	0.6	920	0.896	<0.0002	0.0005	0.0108	0.0026	<0.00005	<0.5	0.17	90
SRK-FD23	6/23/2010	5.8	1240	13.5	142	-	1210	5.2	94	1.3	<0.5	680	0.338	<0.0001	0.0003	0.0	0.00187	<0.00003	<0.3	0.127	72.8
SRK-FD23	9/29/2010	5.67	1152	5.7	256	trace	1170	4.73	108	<0.5	<0.5	670	0.667	<0.0001	0.0002	0.0	0.00111	<0.00003	<0.3	0.0919	78.1

Sample ID	Date Sampled	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	0.00005	0.00002	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	0.000002	0.0002	0.005	0.0001	
	Units	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-FD16	6/13/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	1.9	<0.005	<0.03	<0.05	<0.3	<2	<0.2	5.9	<0.01	<2	0.045	<0.2	<0.03	<0.01		<0.03	0.01		1 dilute
SRK-FD16	6/5/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	1.5	<0.005	<0.03	<0.05	<0.3	<2	<0.2	5.41	<0.01	<2	0.037	<0.2	<0.03	<0.01		<0.03	0.01		1 dilute
SRK-FD16	9/11/2003	<0.01	<0.01	<0.01	0.03	<0.05	<0.01	2.8	0.018	<0.03	<0.05	<0.3	<2	<0.2	6.75	<0.01	<2	0.071	<0.2	<0.03	<0.01		<0.03	0.013		1 dilute
SRK-FD16	5/27/2004	<0.01	<0.01	<0.01	0.047	<0.05	<0.01	1.09	<0.005	<0.03	<0.05	<0.3	<2	<0.2	4.05	<0.01	<2	0.0271	<0.2	<0.03	<0.01		<0.03	0.0111		1 dilute
SRK-FD16	9/26/2004	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.34	0.0071	<0.03	<0.05	<0.3	<2	<0.2	6.91	<0.01	2.2	0.0875	<0.2	<0.03	<0.01		<0.03	0.0116		1 dilute
SRK-FD16	9/13/2005	<0.010	<0.010	<0.010	0.032	<0.050	<0.010	3.14	0.0136	<0.030	<0.050	<0.30	<2.0	<0.20	6.35	<0.010	<2.0	0.0803	<0.20	<0.030	<0.010		<0.030	0.0197		1 dilute
SRK-FD16	5/23/2006	<0.01	<0.01	<0.01	0.101	<0.05	<0.01	1.30	<0.005	<0.03	<0.05	<0.3	<2	<0.2	2.95	<0.01	<2	0.0335	<0.2	<0.03	<0.01		<0.03	0.0149		1 dilute
SRK-FD16	9/20/2006	<0.010	<0.010	<0.010	0.032	<0.050	<0.010	2.98	0.0099	<0.030	<0.050	<0.30	<2.0	<0.20	6.19	<0.010	<2.0	0.0795	<0.20	<0.030	<0.010		<0.030	0.0169		1 dilute
SRK-FD16	9/13/2008	<0.0001	0.00003	0.00176	0.025	0.000357	0.0014	2.20	0.0047	0.0003	0.00041		0.56	0.00006	5.84	<0.000005	1.73	0.0550	0.00001	<0.00001	<0.0005	0.00014	<0.0002	0.0118	0.0001	1 dilute
SRK-FD17	6/13/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	2.6	<0.005	<0.03	<0.05	<0.3	<2	<0.2	5.5	<0.01	<2	0.046	<0.2	<0.03	<0.01		<0.03	0.081		1 dilute
SRK-FD17	9/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.1	<0.005	<0.03	<0.05	<0.3	2	<0.2	6.22	<0.01	<2	0.076	<0.2	<0.03	<0.01		<0.03	0.088		1 dilute
SRK-FD18	6/13/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4.6	<0.005	<0.03	<0.05	<0.3	<2	<0.2	5.35	<0.01	<2	0.095	<0.2	<0.03	<0.01		<0.03	0.102		1 dilute
SRK-FD18	9/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4.3	<0.005	<0.03	<0.05	<0.3	<2	<0.2	6.21	<0.01	2	0.099	<0.2	<0.03	<0.01		<0.03	0.101		1 dilute
SRK-FD18	6/5/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4	<0.005	<0.03	<0.05	<0.3	<2	<0.2	5.04	<0.01	<2	0.084	<0.2	<0.03	<0.01		<0.03	0.082		1 dilute
SRK-FD18	9/11/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.4	<0.005	<0.03	<0.05	<0.3	<2	<0.2	6.55	<0.01	<2	0.083	<0.2	<0.03	<0.01		<0.03	0.119		1 dilute
SRK-FD18	5/27/2004	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4.14	<0.005	<0.03	<0.05	<0.3	<2	<0.2	4.71	<0.01	<2	0.0912	<0.2	<0.03	<0.01		<0.03	0.113		1 dilute
SRK-FD18	9/26/2004	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.45	<0.005	<0.03	<0.05	<0.3	<2	<0.2	6.62	<0.01	2.1	0.0883	<0.2	<0.03	<0.01		<0.03	0.163		1 dilute
SRK-FD18	5/16/2005	<0.010	<0.010	0.010	<0.030	<0.050	<0.010	5.73	<0.0050	<0.030	<0.050	<0.30	<2.0	<0.20	4.38	<0.010	<2.0	0.123	<0.20	<0.030	<0.010		<0.030	0.137		1 dilute
SRK-FD18	9/13/2005	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	3.64	<0.0050	<0.030	<0.050	<0.30	<2.0	<0.20	5.26	<0.010	<2.0	0.087	<0.20	<0.030	<0.010		<0.030	0.102		1 dilute
SRK-FD18	5/23/2006	<0.01	<0.01	0.016	0.059	<0.05	<0.01	4.66	0.0105	<0.03	<0.05	<0.3	<2	<0.2	4.51	<0.01	2.1	0.111	<0.2	<0.03	<0.01		<0.03	0.111		1 dilute
SRK-FD18	9/20/2006	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	3.53	<0.0050	<0.030	<0.050	<0.30	<2.0	<0.20	5.93	<0.010	<2.0	0.0881	<0.20	<0.030	<0.010		<0.030	0.129		1 dilute
SRK-FD18	5/29/2007	<0.0002	<0.0002	0.011	0.02	0.0038	0.002	4.28	0.0009	0.0005	0.0011	<0.03	1.1	<0.0002	4.97	<0.00005	1.45	0.0840	0.00008	<0.0002	0.0005		<0.0002	0.13		1 dilute
SRK-FD18	9/13/2007	<0.0005	<0.0001	0.00364	<0.03	0.00321	<0.005	4.26	0.000644	0.000666	0.00077	<0.3	<2	<0.001	6.50	<0.00001	2.1	0.0877	<0.0001	<0.0001	<0.01		<0.001	0.118		1 dilute
SRK-FD18	5/14/2008	<0.0005	0.00006	0.01	0.119	0.00305	<0.003	4.86	0.0033	0.0005	0.0018		1.29	<0.0002	4.81	0.00004	1.99	0.1200	0.00018	0.00006	<0.003	0.00064	<0.001	0.161	<0.0005	1 dilute
SRK-FD18	9/13/2008	<0.0001	0.00003	0.00345	0.008	0.00203	0.0028	4.96	0.00236	0.00139	0.00062		1.36	0.00014	5.79	<0.000005	2.06	0.1040	0.000058	<0.00001	<0.0005	0.000759	<0.0002	0.0793	<0.0001	1 dilute
SRK-FD18	5/28/2009	0.017	0.181	3.42	231	0.057	0.024	23.10	1.25	<0.0005	0.0727		1.41	<0.0004	4.82	0.0001	0.98	0.1510	0.00072	0.0001	<0.005	0.00766	0.003	101	<0.001	1 dilute
SRK-FD18	9/27/2009	<0.0001	0.000022	0.00331	0.009	0.00141	0.0022	3.94	0.00342	0.00055	0.00081		1.1	0.00006	6.44	<0.000005	2.1	0.0874	0.000062	<0.00001	<0.0005	0.000425	<0.0002	0.12	<0.0001	1 dilute
SRK-FD19	6/13/2002	<0.01	0.06	<0.01	0.06	<0.05	0.03	584	16.5	<0.03	0.35	<0.3	11	<0.2	6.44	<0.01	22	3.28	<0.3	<0.03	<0.01		<0.03	43.9		2w
SRK-FD19	9/11/2002	<0.02	0.06	0.12	2.94	<0.1	0.03	574	19.3	<0.06	0.3	<0.6	10	<0.4	6.3	<0.02	20	3.29	<0.4	<0.06	<0.02		<0.06	51.3		2w
SRK-FD19	6/6/2003	<0.01	0.04	<0.01	0.07	<0.05	0.03	536	16.1	<0.03	0.27	<0.3	9	<0.2	5.95	<0.01	18	2.95	<0.2	<0.03	<0.01		<0.03	40.8		2w
SRK-FD19B	9/13/2003	<0.01	0.06	<0.01	0.07	<0.05	0.02	538	19.2	<0.03	0.3	<0.3	8	<0.2	6.23	<0.02	18	3.02	<0.2	<0.03	<0.01		<0.03	44.9		2w
SRK-FD19	5/27/2004	<0.01	0.128	0.016	<0.03	<0.05	0.062	484	11.7	<0.03	0.341	<0.3	9	<0.2	4.3	<0.01	19.7	3	<0.2	<0.03	<0.01		<0.03	52.9		2w
SRK-FD19	9/26/2004	<0.01	0.057	<0.01	0.125	<0.05	0.029	667	24	<0.03	0.464	<0.3	9.9	<0.2	6.6	<0.01	20.9	3.49	<0.4	<0.03	<0.01		<0.03	68.7		2w
SRK-FD19	5/16/2005	<0.010	0.150	0.054	<0.030	<0.050	0.039	401	14.0	<0.030	0.356	<0.30	6.9	<0.20	4.10	<0.010	15.3	2.29	<0.20	<0.030	<0.010		0.048	64.3		2w
SRK-FD19	9/13/2005	<0.050	0.076	<0.050	<0.15	<0.25	0.062	702	28.0	<0.15	0.49	<1.5	12	<1.0	6.47	<0.050	26	3.82	<1.0	<0.15	<0.050		<0.15	83.8		2w
SRK-FD19	5/23/2006	<0.01	0.064	0.019	<0.03	<0.05	0.038	580	16.4	<0.03	0.418	<0.3	10.6	<0.2	4.20	<0.01	21.8	2.80	<0.2	<0.03	<0.01		<0.03	36.3		2w
SRK-FD19	9/20/2006	<0.030	0.073	<0.030	0.116	<0.15	0.039	736	30.8	<0.090	0.50	<0.90	10.7	<0.60	6.85	<0.030	21.0	3.31	<0.60	<0.090	<0.030		<0.090	84.1		2w
SRK-FD19	5/29/2007	<0.0002	0.035	0.011	0.02	0.0014	0.038	640	17.1	0.0021	0.376	<0.03	10.3	0.0057	5.11	0.00012	20.3	3.79	0.00032	<0.0002	0.0004		<0.0002	54		2w
SRK-FD19	9/13/2007	<0.01	0.0673	0.0105	<0.06	0.0054	<0.1	648	29.6	<0.001	0.474	<0.6	10.1	<0.02	6.75	<0.0002	19.2	3.19	<0.002	<0.002	<0.02		<0.02	87.1		2w
SRK-FD19	5/14/2008	<0.001	0.0432	0.0109	0.067	0.0136	0.044	560	13.9	<0.0005	0.389		9.9	0.004	4.93	0.00006	20.7	3.63	0.00036	<0.0001	<0.005	0.0154	<0.002	50	<0.001	2w
SRK-FD19	9/13/2008	<0.002	0.29	0.177	0.176	0.0085	0.051	765	35.7	<0.001	0.676		10.2	0.0053	6.93	<0.0001	21.8	3.5	0.00026	<0.0002	<0.01	0.0127	<0.004	166	<0.002	2w
SRK-FD19	5/28/2009	<0.002	0.462	0.42	0.468	0.0052	0.067	676	35.7	<0.001	0.75		9	0.0072	5.6	<0.0001	17.3	2.73	0.00045	<0.0002	<0.01	0.0102	0.014	204	<0.002	2w
SRK-FD19	9/27/2009	<0.002	0.106	0.02	0.278	0.0093	0.04	922	42.6	<0.001	0.679		12.2	0.0023	8.2	0.0001	24.7	3.46	0.0002	<0.0002	0.019	0.00986	<0.004	138	<0.002	2w
SRK-FD19	6/23/2010	<0.002	0.107	0.035	0.109	0.006	0.045	1030	48.9	0.002	0.794		13	0.0015	7.73	0.0001	25	3.74	0.00037	<0.0002	<0.01	0.0122	<0.004	164	<0.002	2w
SRK-FD20	6/13/2002	0.01	0.05	0.99	16.9	<0.05	0.01	9.1	0.603	<0.03	0.06	<0.3	<2	<0.2	10.8	<0.01	2	0.046	<0.2	<0.03	<0.01		<0.03	7.93		3w
SRK-FD20	9/13/2002	0.07	0.25	8.06	173	<0.05	0.08	35.8	2.31	<0.03	0.24	0.7	<2	<0.2	16.7	<0.01	4	0.145	<0.2	<0.03	<0.01		<0.03	59.8		3w
SRK-FD20	6/5/2003	<0.01	<0.01	0.24	1.45	<0.05	<0.01	3.8	0.161	<0.03	<0.05	<0.3	<2	<0.2	9.49	<0.01	2	0.044	<0.2	<0.03	<0.01		<0.03	2.2		3w
SRK-FD20	9/12/2003	0.02	0.06	1.94	32.2	<0.05	0.03	13.2	0.672	<0.03	0.08	<0.3	<2	<0.2	13.9	<0.01	3	0.095	<0.2	<0.03	<0.01		<0.03	13.4		3w
SRK-FD21	6/13/2002	<0.01	0.28	2.59	0.06	0.09	0.11	504	6.79	<0.03	0.53	<0.3	14	<0.2	8.54	<0.01	14	1.73	<0.3	<0.03	<0.01		<0.03	65		3w
SRK-FD21B	9/13/2002	<0.01	0.03	0.3	<0.03	<0.05	0.03	256	1.26	<0.03	0.18	<0.3	10	<0.2	3.15	<0.01	8	1.02	<0.2	<0.03	<0.01		<0.03	17		3w
SRK-FD21B	6/5/2003	<0.01	0.06	0.12	<0.03	<0.05	0.04	358	2.06	<0.03	0.25	<0.3	11	<0.2	4.02	<0.01	10	1.35	<0.2	<0.03	<0.01		<0.03	26.2		2w
SRK-FD21	5/30/2004	<0.01	0.243	2.33	5.18	0.19	0.096	219	4.47	<0.03	0.317	<0.3	8.1	<0.2	9.46	<0.01	5.8	1.08	<0.2	<0.03	<0.01		<0.03	44.1		3w
SRK-FD21	9/26/2004	<0.01	0.021	0.12	<0.03	<0.05	0.035	234	1.4	<0.03	0.232	<0.3	8.2	<0.2	3.05	<0.01	6.6	0.961	<0.2	<0.03	<0.01		<0.03	15.2		2w
SRK-FD21	5/16/2005	<0.010	0.158	1.45	0.654	0.099	0.058	202	3.08	<0.030	0.271	<0.30	6.1	<0.20	5.17	<0.010	4.4	0.826	<0.20	<0.030	<0.010		0.050	28.5		3w
SRK-FD21	9/13/2005	<0.010	0.065	0.416	<0.030	0.056	0.066	446	2.20	<0.030	0.361	<0.30	12.6	<0.20	4.70	<0.010	13.1	1.46	<0.20	<0.030	<0.010		<0.060	26.4		2w
SRK-FD21	5/24/2006	<0.01	0.082	0.424	<0.03	<0.05	0.032	153	1.82	<0.03	0.177	<0.3	7.5	<0.2	3.87	<0.01	4.6	0.743	<0.2	<0.03	<0.01		<0.03	17.3		2w
SRK-FD21	5/28/2007	<0.0002	0.032	0.026	<0.01	0.0031	0.029	278	1.04	0.0003	0.109	<0.03	8.63	0.003	3.6	<0.00005	7.55	1.02	0.00009	<0.0002	0.0002		<0.0002	11.5		2w
SRK-FD21	9/13/2007	<0.005	0.117	0.8	0.042	0.155	0.061	382	2.65	<0.0005	0.303	<0.3	10.4	<0.01	5.65	<0.0001	8.5	1.35	<0.001	<0.001	0.01		<0.01	31.7		3w
SRK-FD21	9/14/2008	0.001	0.263	1.35	0.067	0.148	0.078	677	6.3	<0.0005	0.615		14.2	0.0032	8	0.00007	14.9	2.08	0.00015	0.0001	<0.005	0.0204	<0.002	67.8	<0.001	3w
SRK-FD21	5/29/2009	<0.0001	0.0238	0.0292	0.008	0.00227	0.0279	141	0.703	0.00031	0.0758		5.92	0.00081	1.39	0.000005	3.1	0.499	0.000064	<0.00001	<0.0005	0.000501	<0.0002	5.39	<0.0001	2w
SRK-FD21	9/29/2010	<0.0005	0.0125	0.0165	0.026	0.00338	0.017	406	0.636	0.0005	0.0747		12.2	0.0016	1.85	<0.00003	8.9	1.24	0.00016	0.00005	<0.003	0.00231	<0.001	4.43	<0.0005	2w
SRK-FD22	6/13/2002	<0.01	0.02	<0.01	<0.03	<0.05	0.07	158	1.24	<0.03	0.07		<0.2	9	2.51	<0.01	4	1.23	<0.2	<0.03	<0.01		<0.03	7.19		2w
SRK-FD22B	9/12/2002	<0.01	0.04	0.45	0.07	<0.05	0.07	88.2	2.37	<0.03	0.06		<0.2	9	3.37	<0.01	5	0.816	<0.2	<0.03	<0.01		<0.03	41		3w
SRK-FD22B	6/8/2003	<0.01	0.06	0.5	0.07	<0.05	0.07	91.2	3.71	<0.03	0.09		<0.2	8	3.5	<0.01	5	0.836	<0.2	<0.03	<0.01		<0.03	42.7		2w
SRK-FD23	6/13/2002	<0.01	0.13	<0.01	2.14	<0.05	0.04	53.6	2.84	<0.03	0.13		<0.2	3	3.65	<0.01	3	0.183	<0.2	<0.03	<0.01		<0.03	8.89		2w
SRK-FD23B	9/13/2002	<0.01	0.38	0.2	50	<0.05	0.06	104	7.44	<0.03	0.37		<0.2	3	5.21	<0.01	3	0.23	<0.2	<0.03	<0.01		<0.03	43.4		3w
SRK-FD23B	9/12/2003	<0.01	0.15	0.05	20.2	<0.05	0.05	57.5	3.31	<0.03	0.14		<0.2	3	4	<0.01	3	0.185	<0.2	<0.03	<0.01		<0.03	15.9		2w
SRK-FD23	5/30/2004	<0.01	0.166	0.043	6.57	<0.05	0.064	62.1	3.77	<0.03	0.171		<0.2	3.5	3.82	<0.01	3.2	0.229	<0.2	<0.03	<0.01		<0.03	14.3		2w
SRK-FD23	5/16/2005	<0.010	0.209	0.129	10.1	<0.050	0.061	79.1	4.33	<0.030	0.210		<0.20	2.9	4.06	<0.010	2.8	0.266	<0.20	<0.030	<0.010		<0.030	18.4		3w
SRK-FD23	9/13/2005	<0.010	0.222	0.182	49.2	0.069	0.060	78.4	4.61	<0.030	0.238		<0.20	2.8	4.55	<0.010	3.0	0.221	<0.20	<0.030	<0.010		<0.040	24.3		3w
SRK-FD23	9/20/2006	<0.010	0.229	0.133	39.9	<0.050	0.052	76.5	4.56	<0.030	0.230		<0.20	2.6	4.21	<0.010	2.8	0.213	<0.20	<0.030	<0.010		<0.030	24.8		3w
SRK-FD23	9/13/2007	<0.005	0.234	0.412	75	0.0743	<0.05	136	4.1	<0.0005	0.241		<0.01	3.9	7.59	<0.0001	3.8	0.144	<0.001	<0.001	<0.01		<0.01	25.5		3w
SRK-FD23	9/14/2008	0.002	0.74	2.23	164	0.465	0.124	184	13	<0.0005	0.717		3.8	<0.0004	11.3	0.00007	4.22	0.35	0.00152	<0.0001	<0.005	0.0147	<0.002	110	<0.001	3w
SRK-FD23	5/29/2009	<0.0005	0.238	0.268	16.4	0.05	0.059	82.9	4.69	<0.0003	0.228		3.26	<0.0002	4.59	<0.00003	3.62	0.229	0.00107	<0.00005	<0.003	0.00051	<0.001	21.6	<0.0005	2w
SRK-FD23	9/27/2009	<0.001	0.338	0.357	79.4	0.115	0.067	120	6.88	<0.0005	0.334		3.7	<0.0004	7.31	0.00007	3.94	0.284	0.00105	<0.0001	0.013	0.00132	0.003	46.6	<0.001	3w
SRK-FD23	6/23/2010	<0.0005	0.277	0.369	20.6	0.106	0.067	104	5.69	0.001	0.262		3.8	<0.0002	5.27	<0.00003	3.80	0.265	0.00148	<0.00005	<0.003	0.00104	<0.001	23.9	<0.0005	3w
SRK-FD23	9/29/2010	<0.0005	0.232	0.162	48.1	0.0417	0.058	98.8	5.17	0.0005	0.228		3.6	<0.0002	4.96	<0.00003	3.90	0.269	0.00097	<0.00005	<0.003	0.00054	<0.001	23.2	<0.0005	3w

Appendix A.1 2002-2010 Waste Rock Seepage Results- Faro

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity CaCO3	Cl	SO4	Al	Sb	As	Ba	Be	Bi	B	Cd
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	0.000005	0.01	0.00002
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
SRK-FD24	6/13/2002	6.95	1323	8.4	71	300	1310	7.32	46	88	2	710	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.03
SRK-FD24	9/13/2002	5.12	902	3.2	196	1000	884	7.32	27	90	1	406	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.02
SRK-FD24	6/5/2003	6.46	1335	13.5	325	10	1370	7.42	38	59	0.8	864	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.02
SRK-FD24	9/12/2003	6.85	1446	2.6	331	21	921	6.91	45	82	1.3	444	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.02
SRK-FD24	5/30/2004	6.34	1689	8	285	12	1670	6.9	79.7	43.2	1.32	1020	<0.2	<0.2	<0.2	0.016	<0.005	<0.2	<0.1	0.059
SRK-FD24	9/26/2004	6.82	830	2.8	306	120	828	7.91	17.4	103	<2.5	345	<0.2	<0.2	<0.2	0.017	<0.005	<0.2	<0.1	0.016
SRK-FD24	5/16/2005	6.26	1837	5.6	348	144	1820	7.08	75.3	57.3	<5.0	1100	<0.20	<0.20	<0.20	0.014	<0.0050	<0.20	<0.10	0.061
SRK-FD24	9/15/2005	6.74	967	6.2	379	-	901	7.35	25.1	77.2	0.79	437	<0.20	<0.20	<0.20	0.012	<0.0050	<0.20	<0.10	0.014
SRK-FD24	5/24/2006	6.29	1939	2.5	199	15	1910	6.46	125	<2	<2.5	1210	0.52	<0.2	<0.2	0.017	<0.005	<0.2	<0.1	0.073
SRK-FD24	9/20/2006	6.71	957	5.2	160	66.6	926	7.11	30.3	80.5	0.91	447	<0.20	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.018
SRK-FD24	5/28/2007	7	1626	1.5	221	2	1650	7.19	68.0	130.0	<2	924	0.06	<0.0002	0.0004	0.012	<0.0002	<0.0002	<0.01	0.040
SRK-FD24	9/13/2007	6.62	1123	5.9	89	50	1090	7.07	59.6	74.2	1.04	573	0.038	<0.001	<0.001	0.010	<0.005	<0.005	<0.1	0.029
SRK-FD24	5/14/2008	3.75	2700	1.9	432	20	2600	3.30	486.0	<0.5	0.50	1800	19.3	0.0001	0.0041	0.013	0.0109	<0.00003	<0.3	0.218
SRK-FD24	9/14/2008	6.23	1651	5	171	120	1600	7.10	85.6	39.0	0.70	1095	0.12	<0.0002	0.0006	0.011	0.0005	<0.00005	<0.5	0.057
SRK-FD24	5/29/2009	6.73	22300	5	168	150	1900	6.50	131.0	31.0	1.10	1300	0.042	<0.0002	0.0006	0.011	0.0004	0.00006	<0.5	0.083
SRK-FD24	9/27/2009	6.33	1331		95	60	1300	7.00	759.0	49.0	<0.5	730	0.257	<0.0001	0.0006	0.010	0.0005	<0.00003	<0.3	0.033
SRK-FD24	6/23/2010	7.45	1541	9.1	73	-	1720	7.67	25	180	0.5	920	0.015	<0.0001	0.0003	0.0112	<0.00005	<0.00003	<0.3	0.0189
SRK-FD24	9/29/2010	6.6	1183	4.5	247	240	1170	7.19	44.4	47.0	<0.5	640	0.175	<0.0001	0.0002	0.011	0.00046	<0.00003	<0.3	0.026
SRK-FD26	6/13/2002	6.76	875	2.7	212	Good Flow	797	7.68	17	163	1.8	298	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01
SRK-FD26	9/12/2002	6.56	1117	2.6	345	>1000	1030	7.51	15	198	1.2	391	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01
SRK-FD26	6/5/2003	6.78	1209	2.9	418	400	1160	7.62	17	229	2.3	501	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01
SRK-FD26	9/12/2003	6.85	1446	2.6	331	21	1410	7.48	29	242	2.7	617	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01
SRK-FD26	5/30/2004	6.55	1160	3	380	23.2	1180	7.63	15.3	189	1.48	446	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.01
SRK-FD26	9/26/2004	7.29	1487	2.7	358	180	1460	7.98	12.7	233	<2.5	618	<0.2	<0.2	<0.2	0.027	<0.005	<0.2	<0.1	<0.01
SRK-FD26	5/16/2005	6.78	1632	2.5	336	600	1570	7.65	12.1	249	<5.0	684	<0.20	<0.20	<0.20	0.035	<0.0050	<0.20	<0.10	<0.010
SRK-FD26	9/15/2005	6.86	1696	2.7	399	190	1480	7.23	11.7	252	<2.5	678	<0.20	<0.20	<0.20	0.035	<0.0050	<0.20	<0.10	<0.010
SRK-FD26	5/24/2006	7.32	2230	0.8	165	30	2200	7.71	17.7	310	<2.5	1170	<0.2	<0.2	<0.2	0.027	<0.005	<0.2	<0.1	<0.01
SRK-FD26	9/20/2006	6.66	1090	2.7	243	330	1090	7.58	13.7	205	1.44	422	<0.20	<0.20	<0.20	0.029	<0.0050	<0.20	<0.10	<0.010
SRK-FD26	5/28/2007	6.98	2420	0.9	28	1	2610	7.44	62	304	3.2	1350	0.22	<0.0002	0.0007	0.02	0.0002	<0.0002	<0.01	0.0256
SRK-FD26	9/13/2007	6.9	1167	3.1	123	100	1150	7.44	20.7	219	1.56	465	0.0703	<0.0002	0.00026	0.0236	<0.001	<0.001	<0.02	0.00274
SRK-FD26	5/17/2008	7.75	2100	2.2	93	30	2000	8.2	2.6	250	2.2	960	0.0708	0.00005	0.00039	0.0285	0.00005	<0.000005	<0.05	0.0035
SRK-FD26	9/14/2008	6.29	1718	3	179	180	1600	7.9	34.4	200	1.5	909	0.352	0.00005	0.0003	0.033	0.00016	<0.000005	<0.05	0.00678
SRK-FD26	5/28/2009	5.41	1368	2.9	154	1000	1300	7.5	51.1	190	2.4	570	0.0253	0.00005	0.00035	0.024	0.00005	0.000009	<0.05	0.00293
SRK-FD26	9/27/2009	6.62	1807		215	2.88	1740	7.6	24.7	220	1.7	880	0.142	0.00005	0.00034	0.0294	0.00008	<0.000005	<0.05	0.0055
SRK-FD27	6/13/2002	6.98	1552	18.8	237	Trace Flow	1510	7.46	48	43	0.5	1050	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.04
SRK-FD27	9/12/2002	3.33	2590	11.6	392	slight	2350	3.86	350	<1	<0.5	1650	9.2	<0.2	<0.2	<0.01	0.005	<0.3	<0.1	0.25
SRK-FD27	6/5/2003	6.91	1375	17.3	369	0	1350	7.55	37	52	<0.5	847	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.04
SRK-FD27	5/26/2004	6.56	1392	7.5	328	1	1530	6.78	168	13.6	0.67	948	1.17	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.104
SRK-FD30	9/10/2002	6.4	3740	6.6	360	ponded	3590	6.91	60	36	0.9	2670	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	<0.02
SRK-FD30	6/6/2003	6.09	2100	11.9	657	no flow	1850	7.7	37	25	0.5	1430	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01
SRK-FD30	9/13/2003	5.9	3330	5.8	423	None	2600	7.68	21	61	1.4	1800	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01
SRK-FD30	5/26/2004	6.06	2180	9.9	380	None	2060	7.51	38.3	30.7	0.6	1270	<0.2	<0.2	<0.2	0.036	<0.005	<0.2	<0.2	0.013
SRK-FD30	5/18/2005	5.85	2490	12.4	492	None	2490	7.54	93.1	51.8	<5.0	1530	0.23	<0.20	<0.20	0.037	<0.0050	<0.20	<0.10	0.027
SRK-FD30	5/25/2006	5.73	2240	8.2	306	no flow	2270	7.37	83.8	2.4	<2.5	1500	0.43	<0.2	<0.2	0.029	<0.005	<0.2	<0.1	0.033
SRK-FD30	5/27/2007	6.36	2450	12.2	216	no flow	3270	6.4	92	37.2	<2	1930	0.067	<0.0002	0.0013	0.019	0.0003	<0.0002	<0.01	0.0106
SRK-FD30	5/14/2008	5.45	1880	5	267	no flow	1600	6.8	128	22	<0.5	960	1.42	0.00011	0.00037	0.0233	0.00542	<0.000005	<0.05	0.0646
SRK-FD30	5/28/2009	5.55	1584	2.7	151	trace	1700	6.4	105	16	0.6	980	0.153	0.0001	0.0006	0.0246	0.00049	<0.00003	<0.3	0.0184
SRK-FD30	9/27/2009	5.47	1637		353	trace	2130	6.4	314	25	<0.5	1300	0.059	<0.0002	0.0009	0.0078	0.0004	<0.00005	<0.5	0.00899
SRK-FD30	6/23/2010	6.46	3545	11	190	trace	4150	7.09	180	33	<0.5	3300	0.168	<0.0004	0.0009	0.0	0.0008	<0.0001	<1	0.0552
SRK-FD31	9/10/2002	6.37	5750	6.2	181	300	5420	6.46	585	333	15	4350	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.08
SRK-FD31	6/6/2003	6.82	5490	10.4	201	120	5260	7.16	274	301	16.7	4560	<0.2	<0.2	<0.2	0.02	<0.005	<0.6	<0.1	0.06
SRK-FD31	9/13/2003	6.9	5620	6.4	230	120	5430	7.2	207	331	16.1	4110	<0.2	<0.2	<0.2	0.02	<0.005	<0.9	<0.1	0.03
SRK-FD31	5/27/2004	6.28	6260	7.7	273	300	5630	7	603	204	12.3	4190	<0.4	<0.4	<0.4	0.025	<0.01	<0.4	<0.2	0.331
SRK-FD31	9/26/2004	6.62	6680	5	218	78	6260	6.91	639	127	14	5110	<0.4	<0.4	<0.6	<0.02	<0.01	<0.4	<0.2	0.044
SRK-FD31	5/18/2005	6.36	7200	7.5	328	360	6920	6.88	780	101	25	6290	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.289
SRK-FD31	9/13/2005	6.4	6880	10.2	289	-	6380	6.15	770	123	13	5580	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.113
SRK-FD31	5/25/2006	5.92	6820	5.8	376	33	6550	6.41	804	16.2	13.3	5440	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.309
SRK-FD31	9/24/2006	6.92	6530	6.3		15	6080	7.01	462	185	<25	4990	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.047
SRK-FD31	5/29/2007	6.36	6580	7.8	198	50	7330	6.44	650	214	17.4	5350	0.003	<0.0002	0.0014	0.014	<0.0002	<0.0002	<0.01	0.061
SRK-FD31	9/14/2007	6.24	6330	5.7	42	50	6010	6.42	423	332	<50	5010	<0.05	<0.005	<0.005	0.0159	<0.025	<0.025	<0.5	0.046
SRK-FD31	5/14/2008	5.82	7700	3.2	107	20	7200	5.80	1590	011	9.2	6600	0.686	<0.0002	0.0043	0.024	0.0032	<0.00005	<0.5	1.100
SRK-FD31	9/14/2008	6.91	6920	7.1	137	202	7300	6.10	1660	045	8.4	7260	<0.02	<0.002	<0.002	0.018	<0.001	<0.0005	<5	0.199
SRK-FD31	5/29/2009	5.52	10120	7.1	192	600	9100	5.10	15100	001	7.6	10000	6.24	<0.002	0.005	0.026	0.005	<0.0005	<5	0.888
SRK-FD31	9/26/2009	6.52	8850	5.5		71	8470	5.70	2020	006	10	8500	<0.02	<0.002	<0.002	0.018	<0.001	<0.0005	<5	0.273
SRK-FD31	9/28/2010	7.1	7896	5.8	236	-	8180	6.44	1370	077	15	8100	0.032	<0.002	<0.002	0.017	<0.001	<0.0005	<5	0.100
SRK-FD32	9/10/2002	6.38	3580	9.6	81	60	3410	4.86	2160	13	2.6	2790	<0.6	<0.6	<0.6	<0.03	<0.02	<0.6	<0.3	0.46
SRK-FD33	9/11/2002	5.96	4540	6.2	85	30	4250	5.36	1590	31	2.9	3620	<1	<1	<1	<0.05	<0.03	<1	<0.5	0.88
SRK-FD33	6/8/2003	5.49	5010	10.9	524	Trace	5210	5.82	2780	14	4.7	5340	4	<4	<4	<0.2	<0.1	<4	<2	6.9
SRK-FD33	5/26/2004	5.05	10760	13	376	0.5	10400	4.01	6100	12.8	<0.5	10000	7.5	<6	<6	<0.3	<0.15	<6	<3	4.55
SRK-FD33	5/18/2005	3.75	13910	13.9	565	Trace	14000	3.18	11600	<2.0	<5.0	16600	54.5	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	5.71
SRK-FD33	5/14/2008	3.37	5300	4.5	387	1	05000	3.10	03430	<0.5	1.1	04400	52.8	0.0048	0.0519	0.0147	0.00823	<0.00003	<0.3	1.65
SRK-FD33	9/14/2008	3.02	7140	7.9	353	30	07600	3.10	03680	<0.5	6.2	06870	13.0	0.003	0.04	0.006	0.001	<0.0005	<5	0.56
SRK-FD34	9/11/2002	5.95	1242	4.6	152	60	1190	6.63	227	8	0.5	700	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	0.12
SRK-FD34	9/13/2005	3.43	1658	9.8	666	7.8	1760	3.09	478	<2.0	<5.0	1060	2.61	<0.20	<0.20	0.055	<0.0050	<0.20	<0.10	0.082
SRK-FD35	9/11/2002	6.22	1654	7	266	30	1600	6.54	37	33	1.7	962	0.3	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01
SRK-FD35	5/26/2004	3.03	11320	7.3	578	-0.1	8990	2.95	6290	<1	2.08	9220	216	<2	2.1	<0.1	<0.05	<2	<1	2.79
SRK-FD35	9/27/2004	5.09	5320	10	491	0.1	2500	5.43	213	8.7	<5	1700	2.41	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.127
SRK-FD35	9/13/2005	6.46	1622	10.9	367	2.5	1550	6.92	34.6	53.2	<5.0	945	<0.20	<0.20	<0.20	0.010	<0.0050	<0.20	<0.10	0.010
SRK-FD36	9/11/2002	2.75	3540	5.5	521	10	3410	2.78	1530	<1	19.4	2810	38.9	<0.2	<0.2	<0.01	0.011	<0.2	<0.1	0.23
SRK-FD36	6/8/2003	2.63	4650	7.6	752	0.75	4250	2.72	2500	<1	23.8	3460	73	<0.2	<0.2	<0.01	0.021	<0.2	<0.1	0.37
SRK-FD37	9/11/2002	2.44	12740	10.1	438	300	12700	2.66	12500	<1	<0.5	16500	117	<6	28	<0.3	<0.2	<6	<3	12.6
SRK-FD37	6/8/2003	2.38	11980	7.8	663	120	10300	2.59	10900	<1	<0.5	13200	71.1	0.3	9.7	<0.01	0.009	<0.2	0.5	10
SRK-FD37	5/17/2005	2.7	19500	12.5	619	15	17500	2.85	19900	<2.0	<50	20800	196	<4.0	30.0	<0.20	<0.10	<4.0	<2.0	23.1
SRK-FD37	9/14/2005	2.28	28800	14.6	655		24400	2.36	30300	<2.0	<50	40700	259	<10	63	<0.50	<0.25	<10	<5.0	31.6
SRK-FD37	5/24/2006	0.9	21900	11.6	459	trace	24400	2.52	32200	<2	<500	37000	413	<10	234	<0.5	<0.25	<10	<5	26.5
SRK-FD37	9/14/2007	2.05	35300	6.8	413	trickle	32000	2.28	47300	<2	<2500	59800	578	1.53	450	<0.25	<2.5	<2.5	<50	36.1
SRK-FD37	5/14/2008	2.71	-	5.3	422	1	23000	2.60	31700	<0.5	5	32000	295	0.543	140	0.022	0.0349	0.0007	<3	25.1
SRK-FD37	9/14/2008	1.54	>3999	9.1	396	Trace	35000	2.40	53100	<0.5	<5	67200	544	0.516	117	<0.1	0.05	<0.03	<300	56.7
SRK-FD37	5/28/2009	5.11	1529	5.3	386	6	14000	2.80	13700	<0.5	5	16000	159	0.114	020	<0.02	0.022	<0.005	<50	13.4
SRK-FD37	9/27/2009	2.05	33500		396	1	30800	2.40	43800	<0.5	<5	41000	488	0.743	165	<0.02	0.04	<0.005	<50	32.7
SRK-FD38	9/12/2002	7	3970	8.6	313	2.5	3830	6.83	792	83	0.7	3380	<0.6	<0.6	<0.6	<0.03	<0.02	<0.6	<0.3	0.62
SRK-FD38B	6/8/2003	3.07	2440	6.8	689	10	2240	3.21	740	<1	<0.5	1690	9.1	<0.2	<0.2	<0.01	0.005	<0.2	<0.1	0.45

Sample ID	Date Sampled	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	0.05	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	0.00005	0.00002	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	0.000002	0.0002	0.005	0.0001	
	Units	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-FD24	6/13/2002	138	<0.01	0.06	0.03	2.47	<0.05	0.04	90.4	2.46	<0.03	0.11	<0.3	4	<0.2	5.1	<0.01	4	0.449	<0.2	<0.03	<0.01		<0.03	26.8		2w
SRK-FD24	9/13/2002	77.7	<0.01	0.04	0.03	2.51	<0.05	0.03	52.2	1.21	<0.03	0.05	<0.3	4	<0.2	4.22	<0.01	3	0.252	<0.2	<0.03	<0.01		<0.03	13.3		3w
SRK-FD24	6/5/2003	169	<0.01	0.06	0.02	5.35	<0.05	0.04	99.2	2.79	<0.03	0.12	<0.3	5	<0.2	6.07	<0.01	5	0.494	<0.2	<0.03	<0.01		<0.03	25.2		2w
SRK-FD24	9/12/2003	92.4	<0.01	0.05	0.04	3.47	<0.05	0.03	65.6	1.65	<0.03	0.07	<0.3	3	<0.2	5.44	<0.01	4	0.309	<0.2	<0.03	<0.01		<0.03	18.9		2w
SRK-FD24	5/30/2004	176	<0.01	0.138	0.148	6.18	0.069	0.053	119	5.37	<0.03	0.171	<0.3	4.8	<0.2	5.71	<0.01	4.2	0.561	<0.2	<0.03	<0.01		<0.03	45.6		2w
SRK-FD24	9/26/2004	89.8	<0.01	0.022	0.034	2.44	0.091	0.027	51.9	1.02	<0.03	<0.05	<0.3	4.1	<0.2	4.11	<0.01	3.6	0.293	<0.2	<0.03	<0.01		<0.03	9.7		2w
SRK-FD24	5/16/2005	209	<0.010	0.147	0.157	6.29	0.072	0.056	138	5.56	<0.030	0.205	<0.30	4.1	<0.20	4.69	<0.010	3.9	0.602	<0.20	<0.030	<0.010		<0.030	42.2		2w
SRK-FD24	9/15/2005	101	<0.010	0.034	0.029	3.73	0.071	0.029	63.5	1.42	<0.030	0.069	<0.30	2.8	<0.20	3.85	<0.010	3.5	0.318	<0.20	<0.030	<0.010		<0.050	12.0		2w
SRK-FD24	5/24/2006	229	<0.01	0.200	0.148	2.33	0.158	0.058	143	8.43	<0.03	0.242	<0.3	5.0	<0.2	5.21	<0.01	3.5	0.665	<0.2	<0.03	<0.01		<0.03	67.7		2w
SRK-FD24	9/20/2006	90.8	<0.010	0.034	0.048	1.62	0.089	0.031	65.2	1.38	<0.030	0.078	<0.30	3.0	<0.20	4.37	<0.010	3.6	0.284	<0.20	<0.030	<0.010		<0.030	16.9		2w
SRK-FD24	5/28/2007	199.0	<0.0002	0.081	0.038	2.81	0.006	0.057	126.0	5.01	0.0005	0.129	<0.03	4.8	0.0014	5.38	0.0001	6.2	0.536	0.00062	<0.0002	0.0002		<0.0002	41.4		2w
SRK-FD24	9/13/2007	111.0	<0.005	0.061	0.079	4.41	0.046	<0.05	83.2	2.07	<0.0005	0.104	<0.3	3.8	<0.01	5.96	<0.0001	4.1	0.318	<0.001	<0.001	<0.01		<0.01	27.6		2w
SRK-FD24	5/14/2008	217.0	0.0168	0.431	2.310	36.30	0.602	0.119	159.0	13.90	0.0004	0.523		4.37	0.0	10.40	0.00014	3.8	0.689	0.00108	0.00038	<0.003	0.0259	<0.001	160	<0.0005	3w
SRK-FD24	9/14/2008	165.0	<0.001	0.106	0.185	7.57	0.130	0.054	127.0	4.70	<0.0005	0.182		4.58	<0.0004	5.13	<0.00005	5.0	0.498	0.00119	<0.0001	0.006	0.00146	<0.002	48.4	<0.001	2w
SRK-FD24	5/29/2009	218.0	<0.001	0.169	0.196	6.68	0.041	0.069	152.0	6.88	<0.0005	0.279		4.93	0.0	6.61	0.00005	4.6	0.644	0.00124	<0.0001	<0.005	0.002	<0.002	64	<0.001	2w
SRK-FD24	9/27/2009	158.0	<0.0005	0.074	0.147	11.40	0.132	0.051	108.0	3.26	<0.0003	0.148		5.05	<0.0002	6.50	0.00003	5.3	0.442	0.00105	<0.00005	0.007	0.00159	00.0	30	<0.0005	2w
SRK-FD24	6/23/2010	228.0	<0.0005	0.0427	0.0073	3.9	0.00088	0.059	131.0	2.04	0.0009	0.121		6.1	<0.0002	4.19	<0.00003	5.9	0.728	0.0004	<0.00005	<0.003	0.00487	<0.001	15.5	<0.0005	2w
SRK-FD24	9/29/2010	119.0	<0.0005	0.056	0.159	4.37	0.142	0.045	87.8	2.02	0.0004	0.112		4.2	<0.0002	5.71	<0.00003	4.3	0.378	0.00076	<0.00005	<0.003	0.00099	<0.001	23.4	<0.0005	2w
SRK-FD26	6/13/2002	82.2	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	51.4	0.081	<0.03	<0.05	<0.3	3	<0.2	4.9	<0.01	4	0.32	<0.2	<0.03	<0.01		<0.03	1.28		1
SRK-FD26	9/12/2002	116	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	76.3	0.151	<0.03	<0.05	<0.3	4	<0.2	5.79	<0.01	6	0.461	<0.2	<0.03	<0.01		<0.03	2.02		1
SRK-FD26	6/5/2003	127	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	95.2	0.088	<0.03	<0.05	<0.3	4	<0.2	5.79	<0.01	7	0.529	<0.2	<0.03	<0.01		<0.03	1.49		1
SRK-FD26	9/12/2003	151	<0.01	<0.01	<0.01	<0.03	<0.05	0.04	114	0.351	<0.03	<0.05	<0.3	4	<0.2	5.34	<0.01	8	0.632	<0.2	<0.03	<0.01		<0.03	3.81		1
SRK-FD26	5/30/2004	112	<0.01	<0.01	<0.01	<0.03	<0.05	0.029	81.3	0.0975	<0.03	<0.05	<0.3	2.4	<0.2	5.09	<0.01	5.7	0.475	<0.2	<0.03	<0.01		<0.03	2.57		1
SRK-FD26	9/26/2004	158	<0.01	<0.01	<0.01	<0.03	<0.05	0.037	124	0.263	<0.03	<0.05	<0.3	4.4	<0.2	5.16	<0.01	8.8	0.668	<0.2	<0.03	<0.01		<0.03	2.97		1
SRK-FD26	5/16/2005	169	<0.010	<0.010	<0.010	<0.030	<0.050	0.037	135	0.153	<0.030	<0.050	<0.30	4.2	<0.20	5.04	<0.010	8.2	0.660	<0.20	<0.030	<0.010		0.033	3.15		1
SRK-FD26	9/15/2005	192	<0.010	<0.010	<0.010	<0.030	<0.050	0.049	155	0.284	<0.030	0.055	<0.30	4.6	<0.20	6.14	<0.010	10.2	0.768	<0.20	<0.030	<0.010		<0.030	4.43		1
SRK-FD26	5/24/2006	234	<0.01	<0.01	0.021	<0.03	<0.05	0.060	215	0.343	<0.03	0.051	<0.3	6.3	<0.2	4.37	<0.01	10.5	0.969	<0.2	<0.03	<0.01		<0.03	5.51		1
SRK-FD26	9/20/2006	119	<0.010	<0.010	<0.010	<0.030	<0.050	0.026	85.6	0.171	<0.030	<0.050	<0.30	3.2	<0.20	5.40	<0.010	5.9	0.458	<0.20	<0.030	<0.010		<0.030	2.37		1
SRK-FD26	5/28/2007	271	<0.0002	0.037	0.05	0.1	0.0013	0.063	260	1.75	0.0002	0.1	<0.03	5.25	0.0017	6.47	<0.00005	15.1	1.04	0.00012	<0.0002	0.0003		<0.0002	20.4		2w
SRK-FD26	9/13/2007	128	<0.001	0.0059	0.00626	<0.03	0.00024	0.027	92	0.192	<0.0001	0.0248	<0.3	3.9	<0.002	6.02	<0.00002	6.5	0.462	<0.0002	<0.0002	<0.01		<0.002	2.25		1
SRK-FD26	5/17/2008	244	<0.0001	0.00405	0.0077	0.032	0.000363	0.0504	191	0.186	0.0001	0.0264		6.37	0.0007	5.52	0.000009	9.14	0.908	0.000081	<0.00001	<0.0005	0.0126	<0.0002	2.3	<0.0001	1
SRK-FD26	9/14/2008	180	<0.0001	0.0287	0.0232	0.026	0.00028	0.0391	150	0.687	<0.00005	0.0638		5.29	0.00067	6.32	<0.000005	8.5	0.676	0.000086	<0.00001	<0.0005	0.00819	<0.0002	4.95	<0.0001	1
SRK-FD26	5/28/2009	132	<0.0001	0.00315	0.00596	0.013	0.000276	0.0391	111	0.153	<0.00005	0.0357		4.61	0.00131	5.64	<0.000005	7.46	0.496	0.000067	<0.00001	<0.0005	0.00504	<0.0002	2.61	<0.0001	1
SRK-FD26	9/27/2009	193	<0.0001	0.0167	0.0138	0.042	0.000216	0.0372	169	0.434	<0.00005	0.0524		5.16	0.00059	6.81	0.000006	10.5	0.694	0.00007	<0.00001	0.0008	0.0105	<0.0002	4	<0.0001	1
SRK-FD27	6/13/2002	140	<0.01	0.03	<0.01	<0.03	<0.05	0.09	123	1.46	<0.03	0.11	<0.3	8	<0.2	1.69	<0.01	3	0.617	<0.2	<0.03	<0.01		<0.03	29.4		2w
SRK-FD27	9/12/2002	240	<0.01	0.2	3.3	40.4	0.81	0.11	166	9.38	<0.03	0.35	<0.3	8	<0.2	6.66	<0.01	4	0.731	<0.2	<0.03	<0.01		<0.03	180		3w
SRK-FD27	6/5/2003	133	<0.01	0.02	0.02	0.06	<0.05	0.07	110	1.55	<0.03	0.1	<0.3	8	<0.2	1.95	<0.01	3	0.581	<0.2	<0.03	<0.01		<0.03	26.5		2w
SRK-FD27	5/26/2004	128	<0.01	0.132	0.704	15.9	0.084	0.072	95.2	6.16	<0.03	0.321	<0.3	4.2	<0.2	2.18	<0.01	<2	0.588	<0.2	<0.03	<0.01		<0.03	86.7		2w
SRK-FD30	9/10/2002	261	<0.02	0.09	<0.02	<0.06	<0.1	0.22	472	7.52	<0.06	0.6	<0.6	12	<0.4	2.6	<0.02	14	1.56	<0.4	<0.06	<0.02		<0.06	30.4		2w
SRK-FD30	6/6/2003	199	<0.01	0.01	<0.01	0.17	<0.05	0.09	195	0.566	<0.03	0.21	<0.3	7	<0.2	4.08	<0.01	12	0.819	<0.2	<0.03	<0.01		<0.03	26.1		2w
SRK-FD30	9/13/2003	218	<0.01	0.1	<0.01	2.54	<0.05	0.17	317	6.72	<0.03	0.33	<0.3	11	<0.2	6.29	<0.01	17	1.16	<0.2	<0.03	<0.01		<0.03	6.89		2w
SRK-FD30	5/26/2004	182	<0.01	0.029	0.034	0.084	<0.05	0.076	179	1.33	<0.03	0.073	<0.3	6.3	<0.2	1.62	<0.01	5.6	0.701	<0.2	<0.03	<0.01		<0.03	20.5		2w
SRK-FD30	5/18/2005	202	<0.010	0.061	0.074	0.104	<0.050	0.130	214	3.64	<0.030	0.175	<0.30	7.1	<0.20	2.76	<0.010	11.1	1.02	<0.20	<0.030	<0.010		<0.030	37.1		3w
SRK-FD30	5/25/2006	197	<0.01	0.060	0.104	0.195	<0.05	0.077	216	3.71	<0.03	0.210	<0.3	6.7	<0.2	2.34	<0.01	5.9	0.834	<0.2	<0.03	<0.01		<0.03	40.9		3w
SRK-FD30	5/27/2007	260	<0.0002	0.074	0.0069	2.03	0.0015	0.14	327	6.5	0.0007	0.327	<0.03	9.69	0.0021	3.45	0.00011	11	1.14	0.00023	<0.0002	0.0004		<0.0002	53.2		2w
SRK-FD30	5/14/2008	111	0.0002	0.232	0.732	3.55	0.0871	0.0725	170	7.91	0.00013	0.33		5.03	0.00142	1.69	0.000028	2.29	0.489	0.000669	<0.00001	<0.0005	0.00619	<0.0002	50.4	<0.0001	3w
SRK-FD30	5/28/2009	126	<0.0005	0.0337	0.0604	0.156	0.00821	0.067	130	1.75	<0.0003	0.157		5.05	0.0008	1.88	<0.00003	5.54	0.626	0.00031	<0.00005	<0.003	0.00044	0.004	26.3	<0.0005	3w
SRK-FD30	9/27/2009	133	<0.001	0.1	0.0029	0.799	0.00034	0.153	255	8.74	<0.0005	0.515		8.39	<0.0004	4.35	<0.00005	11.9	0.732	0.00031	<0.0001	0.009	0.00019	0.003	45	<0.001	3w
SRK-FD30	6/23/2010	266	<0.002	0.418	0.019	0.241	0.0041	0.239	573	20.2	0.003	1.08		12	0.0014	2.59	<0.0001	9	1.81	0.0006	<0.0002	<0.01	0.00071	<0.004	111	<0.002	2w
SRK-FD31	9/10/2002	576	<0.02	0.44	0.12	36.7	<0.1	0.12	640	50.3	<0.06	0.7	<0.6	13	<0.4	7.5	<0.02	51	3.56	<0.4	<0.06	<0.02		<0.06	223		2ow
SRK-FD31	6/6/2003	517	<0.01	0.38	0.04	28.2	<0.05	0.12	655	48.6	<0.03	0.58	<0.3	14	<0.2	6.93	<0.01	56	3.41	0.2	<0.03	<0.01		<0.03	162		2ow
SRK-FD31	9/13/2003	519	<0.01	0.41	0.03	22.9	<0.05	0.13	694	49.9	<0.03	0.58	<0.3	15	<0.2	7.21	<0.01	58	3.76	<0.3	<0.03	<0.01		<0.03	152		2ow
SRK-FD31	5/27/2004	509	<0.02	0.825	0.638	27.1	<0.1	0.18	726	63.3	<0.06	1.25	<0.6	15.2	<0.4	7.51	<0.02	48.7	3.75	<0.4	<0.06	<0.02		<0.06	393		2ow
SRK-FD31	9/26/2004	445	<0.02	0.644	0.027	112	<0.1	0.133	669	61.5	<0.06	0.81	<0.6	14.5	<0.4	6.22	<0.02	48.5	3.12	<0.8	<0.06	<0.02		<0.1	336		2ow
SRK-FD31	5/18/2005	471	0.030	1.04	0.736	81.8	<0.10	0.196	757	73.0	<0.060	1.43	<0.60	13.4	<0.40	6.95	<0.020	48.8	3.15	<0.40	<0.060	<0.020		0.122	525		2ow
SRK-FD31	9/13/2005	504	<0.020	0.98	<0.020	120.0	<0.10	0.216	873	84.9	<0.060	1.19	<0.60	16.0	<0.40	6.99	<0.020	63.2	3.51	<0.60	<0.060	<0.020		<0.060	501		2ow
SRK-FD31	5/25/2006	474	<0.02	0.929	0.453	61.6	<0.1	0.176	807	84.8	<0.06	1.10	<0.6	28.8	<0.4	6.71	<0.02	78.6	3.84	<0.4	<0.06	<0.02		<0.06	569		2ow
SRK-FD31	9/24/2006	471	<0.020	0.702	<0.020	72.1	<0.10	0.149	765	70.2	<0.060	0.83	<0.60	13.3	<0.40	6.22	<0.020	62.1	3.12	<0.40	0.306	<0.020		0.089	290		2ow
SRK-FD31	5/29/2007	504	<0.0002	0.610	0.025	66.6	<0.0002	0.150	834	70.5	0.0083	0.67	<0.03	16.2	0.0049	8.22	0.00062	58.4	4.38	0.0015	<0.0002	0.0007		<0.0002	329		2ow
SRK-FD31	9/14/2007	487	<0.025	0.696	0.023	43.9	0.0068	<0.25	809	74.0	<0.0025	0.82	<0.6	16.3	<0.05	7.54	<0.0005	62.2	4.24	<0.005	<0.005	<0.02		<0.05	261		2ow
SRK-FD31	5/14/2008	455	<0.001	1.280	6.95	63.0	0.00026	0.186	731	76.1	<0.0005	1.49		14.2	0.0007	8.77	0.00036	40.0	3.74	0.00194	<0.0001	0.006	0.0153	<0.002	967	<0.001	3ow
SRK-FD31	9/14/2008	545	<0.01	1.260	0.138	137.0	0.0007	0.204	1000	89.8	<0.005	1.56		17	<0.004	<10	<0.0005	53.0	4.13	0.0017	<0.001	<0.05	0.0105	<0.02	720	<0.01	3ow
SRK-FD31	5/29/2009	542	<0.01	2.150	4.72	304.0	0.0839	0.265	1170	126.0	<0.005	2.58		16	<0.004	12.20	0.0008	48.0	4.32	0.0025	<0.001	<0.05	0.0274	<0.02	1280	<0.01	3ow
SRK-FD31	9/26/2009	547	<0.01	1.780	0.027	338.0	0.0006	0.240	1210	132.0	<0.005	1.86		19	<0.004	10.10	0.0006	67.0	4.12	0.0017	<0.001	0.063	0.0127	<0.02	1020	<0.01	3ow
SRK-FD31	9/28/2010	500	<0.01	1.700	0.025	213.0	0.0023	0.212	1200	122.0	<0.005	1.85		19	<0.004	<10	<0.0005	64.0	4.27	0.002	<0.001	<0.05	0.0107	<0.02	757	<0.01	2ow
SRK-FD32	9/10/2002	322	<0.03	0.5	<0.03	89.9	<0.2	0.07	168	36.5	<0.09	0.6	<0.9	8	<0.6	4.2	<0.03	42	1.25	<0.6	<0.09	<0.03		<0.09	581		2ow
SRK-FD33	9/11/2002	355	<0.05	0.9	0.34	236	<0.3	0.12	221	63.4	<0.2	0.8	<2	<10	<1	6.5	<0.05	50	1.54	<1	<0.2	<0.05		<0.2	1110		3o
SRK-FD33	6/8/2003	475	<0.2	1.7	3.1	1.3	2	<0.2	211	64.2	<0.6	<1	<6	<40	<4	9	<0.2	46	0.7	<4	<0.6	<0.2		<0.6	2260		3o
SRK-FD33	5/26/2004	508	<0.3	2.92	1.38	456	2.3	<0.3	484	161	<0.9	2.3	<9	<60	<6	11.9	<0.3	<60	1.73	<6	<0.9	<0.3		<0.9	4900		3o
SRK-FD33	5/18/2005	448	0.43	3.52	5.96	850	1.99	0.31	485	198	<0.50	3.49	<3.0	<20	<2.0	25.6	<0.10	22	1.43	<2.0	<0.30	<0.10		<0.30	6770		3o
SRK-FD33	5/14/2008	187	0.05	0.78	5.58	368	1.45	0.10	093	030	<0.0003	0.68		0.94	0.001	13.3	0.0014	17	0.41	0.00822	0.0001	<0.003	0.0249	0.006	1280	<0.0005	3o
SRK-FD33	9/14/2008	374	0.01	2.00	0.40	479	0.95	0.16	447	109	<0.005	1.99		11	<0.004	14.0	0.0007	216	2.38	0.0111	<0.001	<0.05	0.0036	<0.02	1600	<0.01	3o
SRK-FD34	9/11/2002	107	<0.01	0.08	0.14	33.9	0.36	0.02	38.8	5.67	<0.03	0.08	<0.3	3	<0.2	2.06	<0.01	14	0.347	<0.2	<0.03	<0.01		<0.03	128		3o
SRK-FD34	9/13/2005	79.6	0.017	0.229	0.394	67.4	1.25	0.018	40.0	10.3	<0.030	0.206	<0.30	<2.0	<0.20	2.16	<0.010	11.6	0.232	<0.20	<0.030	<0.010		<0.040	155		3o
SRK-FD35	9/11/2002	272	<0.01	0.03	0.07	1.42	<0.05	0.03	51.1	3.84	<0.03	<0.05	<0.3	7	<0.2	11.9	<0.01	34	0.715	<0.2	<0.03	<0.01		<0.03	13.7		2ow
SRK-FD35	5/26/2004	392	<0.1	2.77	8.33	1750	1.64	0.19	269	109	<0.3	1.55	<3	<20	<2	39	<0.1	35	0.976	<2	<0.3	<0.1		<0.3	1660		3o
SRK-FD35	9/27/2004	458	<0.01	0.091	0.117	1.5	0.609	0.045	81.4	7.31	<0.03	0.087	<0.3	7	<0.2	6.86	<0.01	44.9	1.31	<0.2	<0.03	<0.01		<0.03	99.3		3o
SRK-FD35	9/13/2005	259	<0.010	0.030	0.035	3.15	<0.050	0.038	37.5	2.95	<0.030	<0.050	<0.30	6.3	<0.20	7.84	<0.010	28.5	0.745	<0.20	<0.030	<0.010		<0.030	14.6		2ow
SRK-FD36	9/11/2002	250	0.12	0.52	4.2	274	1.17	0.14	120	13.6	<0.03	1.05	<0.3	5	<0.2	23.3	<0.01	6	0.7	<0.3	<0.03	<0.01		<0.03	151		3w
SRK-FD36	6/8/2003	361	0.2	0.87	6.75	416	1.37	0.25	216	25	<0.03	1.6	0.6	7	<0.2	29.6	<0.01	8	1.01	0.4	<0.03	0.01		<0.03	222		3w
SRK-FD37	9/11/2002	268	<0.3	4.8	133	1780	<2	<0.3	310	166	<0.9	5	<9	<60	<6	29	<0.3	<60	0.5	<6	<0.9	<0.3		<0.9	6130		3o
SRK-FD37	6/8/2003	216	<0.01	3.23	120	1040	0.6	0.13	235	132	<0.03	3.17	3.2	<2	0.7	16.7	0.1	<2	0.283	0.6	<0.03	<0.01		<0.03	7840		3o
SRK-FD37	5/17/2005	265	0.82	8.10	274	1790	<1.0	0.26	501	311	<0.80	7.9	<6.0	<40	<4.0	22.2	<0.20	<40	0.42	<4.0	<0.60	<0.20		<0.60	11700		3o
SRK-FD37	9/14/2005	297	1.18	11.5	256	2910	<2.5	<0.50	823	408	<1.5	11.1	<15	<100	<10	37.1	<0.50	<100	0.42	<10	<1.5	<0.50		<1.5	14200		3o
SRK-FD37	5/24/2006	319	<0.5	10.7	549	5190	4.4	<0.5	670	391	<1.5	9.7	<15	<100	<10	33.1	<0.5	<100	0.39	<10	<1.5	<0.5		<1.5	15800		3o
SRK-FD37	9/14/2007	345	<2.5	14.4	492	9440	4.9	<25	738	456	<0.25	12.7	15.1	<40	<5	59.6	<0.05	<40	<0.6	<0.5	<0.5	0.23		<5	21100		3o
SRK-FD37	5/14/2008	251	0.26	08.8	373	3540	2.1	0.364	532	333	0.018	8.2		<0.5	0.014	30.0	0.0102	3.4	0.30	0.0029	0.0134	<0.03	1.08	00000	14500	0.024	3o
SRK-FD37	9/14/2008	348	<0.5	16.9	559	5480	2.4	<3	1100	656	<0.3	15.8		<50	<0.2	<500	<0.03	<50	0.47	<0.01	<0.05	3.09	1.66	<1	34800	<0.5	3o
SRK-FD37	5/28/2009	229	<0.1	04.7	182	1190	0.5	<0.5	350	180	<0.05	4.6		<10	<0.04	<100	<0.005	<10	0.48	0.005	<0.01	<0.5	0.478	00000	8160	<0.1	3o
SRK-FD37	9/27/2009	437	0.519	12.0	375	7690	1.6	0.733	822	446	<0.05	10.4		<10	<0.04	<100	0.018	<10	0.34	0.015	<0.01	<0.5	1.2	00000	20000	<0.1	3o
SRK-FD38	9/12/2002	504	<0.03	0.53	0.06	<0.09	<0.2	0.13	215	44.4	<0.09	0.9	<0.9	10	<0.6	6.3	<0.03	11	1.78	<0.6	<0.09	<0.03		<0.09	595		2ow
SRK-FD38B	6/8/2003	235	<0.01	0.26	2.38	33.8	1.78	0.06	67.9	16	<0.03	0.32	<0.3	4	<0.2	5.51	<0.01	3	0.499	<0.2	<0.03	<0.01		<0.03	287		3o

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity CaCO3	Cl	SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level								1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	0.000005	0.01	0.00002	0.05	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	0.00005	0.00002	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	0.000002	0.0002	0.005	0.0001	
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-FD40	9/13/2002	3.23	938	4.9	540	>1000	877	3.52	135	<1	<0.5	445	4	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.07	33.6	<0.01	0.13	0.58	2.51	0.1	0.02	52.5	3.79	<0.03	0.12	<0.3	<2	<0.2	8.02	<0.01	3	0.154	<0.2	<0.03	<0.01		<0.03	46.7		3w
SRK-FD40	6/6/2003	3.35	789	1.4	738	Lots	780	3.5	117	<1	0.7	379	4.1	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	0.06	23.2	<0.01	0.12	0.53	3.91	0.08	0.01	47.1	3.19	<0.03	0.1	<0.3	<2	<0.2	5.82	<0.01	2	0.118	<0.2	<0.03	<0.01		<0.03	38.9		3w
SRK-FD40	9/12/2003	6.2	692	3.1	494	120	676	7.24	43	29	0.5	334	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.02	69.7	<0.01	<0.01	0.01	<0.03	<0.05	0.01	37	0.037	<0.03	0.06	<0.3	<2	<0.2	9.25	<0.01	3	0.19	<0.2	<0.03	<0.01		<0.03	20.7		2w
SRK-FD40	6/3/2004	3.53	1664	8.6	720	900	1790	3.14	318	<1	0.83	926	13.5	<0.2	<0.2	0.025	0.0079	<0.2	<0.1	0.154	99.7	<0.01	0.233	1.95	29.5	0.394	0.052	105	6.63	<0.03	0.268	<0.3	<2	<0.2	12.8	<0.01	4.4	0.404	<0.2	<0.03	<0.01		<0.03	108		3w
SRK-FD40	9/26/2004	7.01	1192	2.8	443	30	1190	7.04	77.8	27.8	<5	661	<0.2	<0.2	<0.2	0.018	<0.005	<0.2	<0.1	0.034	124	<0.01	<0.01	0.032	<0.03	0.093	0.028	75.9	0.12	<0.03	0.156	<0.3	<2	<0.2	9.58	<0.01	4.6	0.362	<0.2	<0.03	<0.01		<0.03	44.2		2w
SRK-FD40	5/16/2005	2.83	2510	1.8	767	600	2360	2.80	672	<2.0	<5.0	1340	26.0	<0.20	<0.20	0.018	0.0093	<0.20	<0.10	0.206	72.4	0.029	0.384	3.24	85.0	0.423	0.060	125	8.48	<0.030	0.298	<0.30	<2.0	<0.20	7.00	<0.010	2.4	0.373	<0.20	<0.030	<0.010		<0.030	121		3w
SRK-FD40	9/13/2005	6.9	1100	8.2	403	>150	1060	6.47	75.3	25.3	<2.5	612	0.48	<0.20	<0.20	0.015	<0.0050	<0.20	<0.10	0.043	110	<0.010	0.019	0.111	<0.030	<0.050	0.018	60.7	0.708	<0.030	0.123	<0.30	<2.0	<0.20	9.66	<0.010	4.1	0.295	<0.20	<0.030	<0.010		<0.030	35.3		2w
SRK-FD40	5/24/2006	2.89	2160	2.1		-	1970	2.88	566	<2	<2.5	1070	19.0	<0.2	<0.2	0.018	0.0068	<0.2	<0.1	0.136	49.8	0.023	0.293	2.55	75.0	0.292	0.049	88.8	6.41	<0.03	0.225	<0.3	<2	<0.2	5.72	<0.01	<2	0.256	<0.2	<0.03	<0.01		<0.03	89.5		3w
SRK-FD40	9/20/2006	5.81	923	3.2	330	2	903	7.05	53.6	21.2	<0.50	471	<0.20	<0.20	<0.20	0.017	<0.0050	<0.20	<0.10	0.035	83.7	<0.010	<0.010	0.021	<0.030	<0.050	0.021	47.1	0.178	<0.030	0.098	<0.30	<2.0	<0.20	9.19	<0.010	3.0	0.244	<0.20	<0.030	<0.010		<0.030	32.4		2w
SRK-FD40	5/28/2007	3.5	934	1.6	691	>1	765	3.14	152.0	<0.5	0.46	403	5.22	<0.0002	0.0004	0.024	0.0019	<0.0002	<0.01	46.700	24.3	0.0041	0.095	0.734	10	0.131	0.016	28.8	2.150	0.0002	0.076	<0.03	1.17	0.001	4.12	0.00012	1.6	0.158	0.00027	<0.0002	<0.0002		<0.0002	33.7		3w
SRK-FD40	9/13/2007	3.24	943	5.9	448	>1000	867	3.56	145.0	<2	<0.5	425	5.32	<0.001	<0.001	0.039	<0.005	<0.001	<0.1	0.058	42.4	<0.005	0.121	0.652	1.07	0.162	<0.05	50.9	3.080	<0.0005	0.122	<0.3	<2	<0.01	9.11	<0.0001	3.6	0.198	<0.001	<0.001	<0.01		<0.01	40.3		3w
SRK-FD40	5/14/2008	2.73	3700	2.5	557	500	3300	2.70	1220.0	<0.5	<0.5	2000	39.2	0.0001	0.0036	0.016	0.017	<0.00003	<0.3	0.332	68.3	0.0419	0.652	5.130	162	0.752	0.101	178.0	13.400	<0.0003	0.477		1.65	0.0008	8.44	0.00038	2.9	0.343	0.00085	<0.00005	<0.003	0.045	<0.001	199	0.0006	3w
SRK-FD40	9/14/2008	2.67	1462	5	539	600	1400	3.00	319.0	<0.5	<0.5	747	11.2	<0.0004	0.0015	0.026	0.0045	<0.0001	<1	0.110	47.2	0.009	0.219	1.490	29.3	0.118	0.035	70.6	4.940	<0.001	0.173		1.1	<0.0008	7.85	0.0001	3.4	0.237	0.00029	<0.0002	0.022	0.00986	<0.004	81	<0.002	3w
SRK-FD40	5/28/2009	5.07	2484	1.7	399	4500	2200	2.80	615.0	<0.5	0.7	970	21.3	<0.0002	0.0014	0.017	0.0088	<0.00005	<0.5	0.156	58.6	0.021	0.325	2.800	75.2	0.222	0.060	96.2	6.760	<0.0005	0.247		1.28	<0.0004	7.36	0.00022	2.5	0.344	0.00046	<0.0001	<0.005	0.0175	00.0	105	<0.001	3w
SRK-FD40	9/27/2009	6.13	1216	3	140	150	1220	5.40	117.0	01.7	<0.5	730	2.9	<0.0002	0.0006	0.014	0.0014	<0.00005	<0.5	0.066	113.0	<0.001	0.0522	0.206	0.064	0.106	0.033	81.0	1.420	<0.0005	0.170		2.11	<0.0004	18.00	0.00009	4.8	0.350	0.0001	<0.0001	0.013	0.00132	00.0	55.7	<0.001	3w
SRK-FD40	9/28/2010	5.79	827	2.4	388	3600	906	6.72	59.0	23.0	<0.5	450	0.132	<0.0001	<0.0001	0.019	0.00022	<0.00003	<0.3	0.041	92.7	0.0006	0.00052	0.015	0.016	0.0171	0.026	56.9	0.015	0.0003	0.115		2	0.0003	11.30	<0.00003	4.2	0.291	0.00005	<0.00005	<0.003	0.00063	<0.001	34.5	<0.0005	3w
SRK-FD44	6/8/2003	7.1	2470	7.7	621	1	2290	6.84	99	83	<0.5	1850	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.04	300	<0.01	0.12	<0.01	0.04	<0.05	0.16	215	5.73	<0.03	0.16	<0.3	15	<0.2	1.18	<0.01	11	1.68	<0.2	<0.03	<0.01		<0.03	28.2		2w
SRK-FD44	5/26/2004	6.47	974	8	291	4	1060	7.91	6.5	57.4	<0.5	472	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	<0.01	89.1	<0.01	0.016	<0.01	0.101	<0.05	0.062	69.4	0.519	<0.03	<0.05	<0.3	5.7	<0.2	0.525	<0.01	3.1	0.485	<0.2	<0.03	<0.01		<0.03	3.07		1
SRK-FD44	5/16/2005	7	1870	7.6	395	6.5	1880	7.24	30.6	95.1	<5.0	939	<0.20	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.024	188	<0.010	0.061	0.011	0.041	<0.050	0.124	163	2.61	<0.030	0.099	<0.30	7.6	<0.20	0.709	<0.010	4.8	0.878	<0.20	<0.030	<0.010		0.033	16.2		2w
SRK-FD44	5/23/2006	6.72	1851	10.9	181	3.5	1790	7.48	68.8	40.9	<2.5	1140	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	0.042	149	<0.01	0.123	0.025	1.12	<0.05	0.131	159	5.86	<0.03	0.180	<0.3	6.5	<0.2	0.801	<0.01	3.6	0.761	<0.2	<0.03	<0.01		<0.03	33.9		2w
SRK-FD44	5/28/2009	5.59	1696	3	154	2.0	1600	7.10	57.2	59.0	<0.5	1100	0.055	0.0001	0.0005	0.017	0.00013	<0.00003	<0.3	0.022	147	<0.0005	0.063	0.036	0.14	0.00584	0.093	126	2.99	<0.0003	0.125		5.4	0.0015	1.020	<0.00003	3.2	0.547	0.00053	<0.00005	<0.003	0.00186	0.004	15.1	<0.0005	2w
SRK-FD46	9/13/2003	2.88	5750	5.6	652	15	5670	2.8	6550	<1	5.5	5040	71	<2	<2	<0.1	<0.05	<2	<1	1.8	190	<0.1	1.2	7.8	385	0.9	0.2	293	78.4	<0.3	1.5	<3	<20	<2	3.7	<0.1	<20	0.33	<2	<0.3	0.1		<0.3	1380		3o
SRK-FD47	5/26/2004	3.08	1940	13.3	560	Trace	1940	3.11	392	<1	1.76	1130	13.5	<0.2	<0.2	0.024	0.0126	<0.2	<0.1	0.04	160	0.014	0.584	2.15	98.8	0.861	0.092	65.8	11.7	<0.03	0.54	<0.3	5.6	<0.2	8.25	<0.01	<2	0.651	<0.2	<0.03	<0.01		<0.03	24.2		3w
SRK-FD47	5/18/2005	3.48	1637	5	666	Trace	1690	3.25	182	<2.0	1.40	905	6.23	<0.20	<0.20	0.018	<0.0050	<0.20	<0.10	0.018	178	<0.010	0.226	0.847	38.2	0.239	0.057	88.2	5.75	<0.030	0.224	<0.30	6.1	<0.20	3.52	<0.010	3.1	0.798	<0.20	<0.030	<0.010		<0.030	9.22		3w
SRK-FD47	5/23/2006	3.09	1660	13.8	490	no flow	1600	3.12	371	<2	<2.5	867	10.0	<0.2	<0.2	0.023	0.0065	<0.2	<0.1	0.019	104	0.017	0.298	1.66	98.4	0.297	0.057	61.7	6.01	<0.03	0.306	<0.3	3.9	<0.2	4.04	<0.01	<2	0.479	<0.2	<0.03	<0.01		<0.03	10.7		3w
SRK-FD48	5/26/2004	6.53	1748	2.5	339	12.5	1750	7.29	20.8	135	0.59	910	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	<0.01	126	<0.01	0.031	<0.01	<0.03	<0.05	0.18	120	1.19	<0.03	0.061	<0.3	9.3	<0.2	1.06	<0.01	65.1	1.46	<0.2	<0.03	<0.01		<0.03	10.8		2w
SRK-FD48	5/28/2009	5.49	2258	1.2	150	12	2200	7.9	18.2	190	1	1300	0.009	0.0004	0.0003	0.0105	0.00006	<0.00003	<0.3	0.00769	193	<0.0005	0.0099	0.0073	0.015	0.0153	0.251	185	0.357	0.0013	0.0577		12.2	0.0038	1.59	<0.00003	78.5	1.92	0.00021	<0.00005	<0.003	0.0169	0.001	6.53	<0.0005	2w
SRK-FD49	5/28/2004	6.05	9030	10.3	421	Trace	8970	6.29	122	22.1	<0.5	8180	1.17	<0.6	<0.6	<0.03	<0.015	<1.5	<0.3	0.091	368	<0.03	0.56	0.075	0.948	<0.15	0.419	1750	26.3	<0.09	1.84	<0.9	21.4	<0.6	2.33	<0.03	10.9	1.22	<0.6	<0.09	<0.03		<0.09	73.6		2w
SRK-FD49	5/18/2005	5.15	5150	9.9	477	Trace	5060	6.86	154	47.8	<10	4070	2.82	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.080	302	<0.010	0.328	0.420	3.75	0.163	0.283	717	11.9	<0.030	0.632	<0.30	16.0	<0.20	2.62	<0.010	6.3	0.771	<0.20	<0.030	<0.010		<0.030	73.0		3w
SRK-FD49	5/29/2009	7.46	3240	7.2	250	trace	4100	7.30	032	82.0	1.7	4000	0.02	0.0002	0.0012	0.0422	<0.00005	<0.00003	<0.3	0.006	442	<0.0005	0.020	0.007	0.08	0.001	0.061	359	08.5	0.0003	0.071		10.8	0.0008	7.06	<0.00003	162.0	1.470	0.00015	<0.00005	<0.003	0.00083	0.002	10.2	<0.0005	2w
SRK-FD50	5/30/2004	7.35	1190	11.1	352	Trace	1200	8.16	2.6	211	<0.5	476	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.01	91.9	<0.01	<0.01	<0.01	<0.03	<0.05	0.11	97.7	<0.005	<0.03	<0.05	<0.3	8.6	<0.2	0.643	<0.01	8.4	1.19	<0.2	<0.03	<0.01		<0.03	0.0678		1
SRK-FD50	5/24/2006	7.83	1050	8.1	162	trace	1020	8.08	4.0	184	<0.5	424	<0.2	<0.2	<0.2	0.021	<0.005	<0.2	<0.1	<0.01	80.7	<0.01	<0.01	<0.01	<0.03	<0.05	0.094	99.4	<0.005	<0.03	<0.05	<0.3	7.5	<0.2	0.552	<0.01	8.7	1.11	<0.2	<0.03	<0.01		<0.03	0.0448		1
SRK-FD51	9/14/2008	6.34	656	6.3	178	11.1	0670	7.30	017	31.0	0.8	0354	0.07	0.00006	0.00016	0.0184	0.00009	<0.000005	<0.05	0.013	081	<0.0001	0.012	0.108	0.02	0.044	0.027	035	00.1	<0.00005	0.014		2.9	00.0	5.40	0.00001	3.9	0.288	0.000347	<0.00001	<0.0005	0.000182	<0.0002	5.04	<0.0001	2w
SRK-FD51	9/27/2009	6.83	536	4.5	109	trickle	0530	7.40	006	41.0	<0.5	0290	0.03	0.00004	0.00011	0.0117	0.00004	<0.000005	<0.05	0.009	059	<0.0001	0.008	0.041	0.03	0.011	0.025	028	00.1	<0.00005	0.013		2.48	00.0	4.89	0.00001	3.3	0.203	0.000279	<0.00001	0.0006	0.000153	<0.0002	2.41	<0.0001	2w
SRK-FD51	9/29/2010	7.24	525	5.3	278	30	0525	7.60	007	69.0	<0.5	0190	0.01	0.00003	0.00007	0.0106	0.00002	<0.000005	<0.05	0.005	059	<0.0001	0.002	0.014	0.01	0.002	0.029	031	00.0	0.00013	0.007		2.73	00.0	3.69	0.00001	3.1	0.215	0.000255	<0.00001	<0.0005	0.000066	<0.0002	0.871	<0.0001	1
SRK-FD52	9/16/2008	6.43	8620	5.9	116	Trace	9500	7.10	085	42.0	<0.5	10920	0.05	<0.0002	0.0007	0.0453	<0.0001	<0.00005	<0.5	0.002	520	<0.001	0.051	0.003	0.13	0.005	0.320	2040	05.2	<0.0005	0.728		25.4	00.0	9.42	<0.00005	13.3	2.370	0.00012	<0.0001	0.009	0.00024	0.003	38.2	<0.001	2w
SRK-FD52	5/29/2009	7.34	12340	6.9	242	no flow	11000	6.70	096	30.0	<0.5	11000	0.05	<0.0004	0.0009	0.037	<0.0002	<0.0001	<1	0.006	513	<0.002	0.170	0.004	0.09	0.007	0.372	2290	17.2	<0.001	1.270		18.1	00.0	5.15	<0.0001	8.5	2.240	0.0001	<0.0002	<0.01	0.00015	0.008	58.7	<0.002	2w
SRK-FD53	5/29/2009	7.45	1205	10.5	248	4	1100	6.40	039	05.5	1.2	0730	0.43	0.00011	0.00058	0.0908	0.00005	0.000007	<0.05	0.003	105	0.0004	0.002	0.003	0.15	0.005	0.026	081	00.4	0.00008	0.011		4.51	00.0	5.16	0.000013	2.7	0.419	0.000019	<0.00001	0.001	0.000109	0.0002	6.01	0.0008	2w
SRK-FD54	9/26/2009	5.72	6060	3.5	335	trace	8030	7.20	1150	200.0	5.6	7900	0.12	<0.002	<0.002	0.022	<0.001	<0.0005	<5	0.137	560	<0.01	0.347	0.024	0.36	0.001	0.173	1310	162.0	<0.005	3.930		14	<0.004	16.80	<0.0005	30.0	2.180	0.0005	<0.001	0.068	0.0102	<0.02	612.0	<0.01	3w
SRK-FD54	9/28/2010	7.33	5847	2.2	323	15	6340	7.35	610	210.0	5	5600	0.03	<0.001	<0.001	0.02	<0.0005	<0.0003	<3	0.192	415	<0.005	0.581	0.006	0.09	0.001	0.119	902	80.3	<0.003	2.750		11	<0.002	12.40	<0.0003	28.0	1.520	0.0002	<0.0005	<0.03	0.0165	<0.01	394.0	<0.005	2w
SRK-FD55	9/26/2009	6.05	6020	3.5	294	trace	6130	6.90	474	21.0	<0.5	5800	0.21	<0.002	<0.002	0.021	<0.001	<0.0005	<5	0.166	352	<0.01	1.440	0.006	0.33	0.014	0.510	1030	88.3	<0.005	2.200		23	<0.004	<10	<0.0005	44.0	1.440	0.001	<0.001	<0.05	0.0005	<0.02	408.0	<0.01	2w
SRK-FD56	9/28/2010	6.02	11025	1.2	310	9	11100	4.92	997	<0.5	9.4	12000	1.03	<0.002	<0.002	0.059	0.002	<0.0005	<5	0.065	563	<0.01	3.760	0.026	14.60	0.057	0.405	2120	194.0	<0.005	5.260		20	<0.004	11.40	<0.0005	45.0	2.890	0.0014	<0.001	<0.05	0.0008	<0.02	831.0	<0.01	3w

Appendix A.2 2002-2010 Waste Rock Seepage Results- Grum

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity-Total CaCO3	Chloride Cl	Sulphate SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	0.000005	0.01	0.00002	0.05
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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
SRK-GD01	6/11/2002	6.69	2170	1.8	272	100	2080	7.66	38	337	1.7	1220	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	283
SRK-GD01	9/11/2002	6.91	2490	2.5	272	340	2460	7.27	69	497	1.5	1200	<0.2	<0.2	<0.2	0.06	<0.005	<0.4	<0.1	<0.01	351
SRK-GD01	6/4/2003	6.93	2670	2.4	488	105	2530	7.82	25	534	2.2	1320	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	316
SRK-GD01	09/14/2003	7.26	2610	2.5	459	150	2530	8.09	16	559	2.4	1210	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	367
SRK-GD01	5/28/2004	7.71	2110	2.1	414	400	2030	7.44	44.2	255	1.17	1080	<0.2	<0.2	<0.2	0.037	<0.005	<0.2	<0.1	<0.01	259
SRK-GD01	9/23/2004	7.06	2780	3.6	285	180	2700	7.77	23	583	<5	1270	<0.2	<0.2	<0.2	0.043	<0.005	<0.2	<0.1	<0.01	348
SRK-GD01	5/15/2005	7.06	2220	1.6	460	-	2170	7.69	21.8	290	<5.0	1100	<0.20	<0.20	<0.20	0.051	<0.0050	<0.20	<0.10	<0.010	291
SRK-GD01	9/16/2005	7.63	2540	2.9	402	100	2730	7.79	19.1	566	<5.0	1390	<0.20	<0.20	<0.20	0.035	<0.0050	<0.20	<0.10	<0.010	332
SRK-GD01	5/25/2006	6.76	2360	2.5	317	30	3130	7.85	34.9	588	<5	1630	<0.2	<0.2	<0.2	0.040	<0.005	<0.2	<0.1	<0.01	343
SRK-GD01	9/19/2006	7.17	2420	3	187	30	2620	7.63	22.5	552	1.23	1320	<0.20	<0.20	<0.20	0.043	<0.0050	<0.20	<0.10	<0.010	317
SRK-GD01	5/26/2007	7.33	2880	2.6	298	2	2880	7.61	65.0	535	1.28	1460	0.002	0.0009	0.0032	0.033	<0.0002	<0.0002	<0.01	0.00075	328
SRK-GD01	9/12/2007	7.68	2700	4.9	71	250	2700	7.68	40.3	570	<50	1370	<0.005	0.001	0.0033	0.033	<0.0025	<0.0025	<0.05	0.00123	349
SRK-GD01	5/15/2008	7.78	2100	2.1	72	20	2100	8.20	08.9	350	1.40	0890	0.0018	0.0009	0.0028	0.032	<0.00001	<0.000005	<0.05	0.00197	255
SRK-GD01	9/15/2008	6.78	1988	3.6	187	300	2700	7.90	58.1	430	1.60	1686	0.003	0.001	0.003	0.028	<0.00005	<0.00003	<0.3	0.00208	355
SRK-GD01	5/30/2009	7.37	2700	2.4	228	600	2400	7.90	14.8	380	1.80	1200	0.003	0.0008	0.0017	0.044	<0.00005	<0.00003	<0.3	0.00357	290
SRK-GD01	9/28/2009	6.54	3470	3.2	290	80	3190	7.80	35.9	560	1.70	1600	0.005	0.0012	0.0035	0.034	<0.00005	<0.00003	<0.3	0.00113	395
SRK-GD01	9/30/2010	7.16	3426	3.3	300	60	3410	7.92	50.8	620	0.60	2200	0.007	0.0012	0.0037	0.040	<0.00005	<0.00003	<0.3	0.00117	427
SRK-GD02	6/11/2002	7.02	2460	3.2	235	30	2430	8.02	19	494	1.8	1100	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	302
SRK-GD02	9/11/2002	6.96	2540	4	298	2	1580	7.56	27	278	0.9	665	<0.2	<0.2	<0.2	0.04	<0.005	<0.4	<0.1	<0.01	335
SRK-GD02	9/14/2003	7.2	2650	2.2	444	Trace	2580	8.07	16	574	2.4	1340	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	380
SRK-GD04	6/11/2002	7.6	3260	2.5	248	1.5	3220	8.06	18	477	1.9	1350	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	352
SRK-GD05	6/11/2002	7.74	2670	3.1	273	7.5	2570	8.14	13	527	2.2	1220	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	358
SRK-GD05	9/11/2002	7.45	2550	3.7	292	30	2470	7.88	28	600	1.9	1080	<0.2	<0.2	<0.2	0.02	<0.005	<0.3	<0.1	<0.01	349
SRK-GD05B	6/4/2003	7.8	2550	3.9	421	20	2480	8.04	15	638	2.4	1230	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	312
SRK-GD05B	9/14/2003	7.84	2610	1.7	402	21	2510	8.11	14	627	2.8	1180	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	337
SRK-GD05	5/28/2004	7.83	3180	4.9	399	20	2960	8.03	19.9	583	2.09	1680	<0.2	<0.2	<0.2	0.038	<0.005	<0.2	<0.1	<0.01	392
SRK-GD05	9/24/2004	7.64	3010	4.7	577	10	2930	8.01	4.8	609	<5	1440	<0.2	<0.2	<0.2	0.034	0.0056	<0.2	<0.1	<0.01	361
SRK-GD05	5/15/2005	7.96	2520	3.7	413	8	3240	8.14	10.3	541	<0.50	1760	<0.20	<0.20	<0.20	0.026	<0.0050	<0.20	<0.10	<0.010	363
SRK-GD05	9/16/2005	7.86	2550	6	386	3.6	3010	8.10	9.6	610	<5.0	1620	<0.20	<0.20	<0.20	0.029	<0.0050	<0.20	<0.10	<0.010	477
SRK-GD05	9/19/2006	8.06	2420	4.7	174	4	2820	8.00	10.4	589	<5.0	1460	<0.20	<0.20	<0.20	0.017	<0.0050	<0.20	<0.10	<0.010	310
SRK-GD05	5/26/2007	7.98	2420	9.1	356	2	3730	7.89	39.0	538	2.08	1810	<0.001	0.0018	0.0049	0.021	<0.0002	<0.0002	<0.01	0.00028	433
SRK-GD05	9/12/2007	8.08	2880	6.2	70	6	2880	8.08	17.0	592	<50	1640	<0.005	0.002	0.0049	0.017	<0.0025	<0.0025	<0.05	0.00063	375
SRK-GD05	5/15/2008	8.17	3200	4.4	65	1	3200	8.30	<0.5	460	1.8	1800	0.004	0.0017	0.0036	0.029	<0.00005	<0.00003	<0.3	0.00188	414
SRK-GD05	9/15/2008	7.47	2595	4.1	182	7.2	3400	8.00	34.9	620	2.1	2034	0.002	0.0008	0.0024	0.015	<0.00005	<0.00003	<0.3	0.00111	219
SRK-GD05	5/31/2009	8.03	4320	4.5	218	1	3800	8.10	06.3	610	2.5	2500	0.002	0.0017	0.0043	0.027	<0.00005	<0.00003	<0.3	0.00215	485
SRK-GD05	9/24/2009	7.71	3620	4	253	3.4039	3770	8.10	32.0	620	2.1	2500	0.004	0.0021	0.0052	0.020	<0.00005	<0.00003	<0.3	0.00185	497
SRK-GD05	9/30/2010	7.90	3716	5.7	241	2.7	3710	8.21	23.5	640	1.2	2400	0.003	0.0021	0.0051	0.019	<0.00005	<0.00003	<0.3	0.00069	480
SRK-GD06	6/11/2002	7.62	2640	3.5	269	15	2540	8.1	17	557	2.5	947	<0.2	<0.2	<0.2	0.03	<0.005	<0.3	<0.1	<0.01	361
SRK-GD06	9/11/2002	7.35	2540	3.1	314	30	2480	8	26	700	1.8	1040	<0.2	<0.2	<0.2	0.03	<0.005	<0.3	<0.1	<0.01	348
SRK-GD06	9/14/2003	7.74	2540	3.1	486	15	2500	8.28	1	646	2.5	1120	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	325
SRK-GD06	5/26/2007	7.69	2430	3.4	321	trace	3570	7.95	40	677	2.08	1710	<0.001	0.0013	0.0054	0.026	<0.0002	<0.0002	<0.01	0.00067	466
SRK-GD06	9/12/2007	8.04	2820	3.8	68	2	2820	8.04	21.9	635	<50	1420	<0.005	0.0011	0.0043	0.0192	<0.0025	<0.0025	<0.05	0.00146	385
SRK-GD06	5/15/2008	7.86	3300	3.2	85	2	3100	8.3	1.8	610	2.4	1600	0.002	0.0013	0.0053	0.0259	<0.00005	<0.00003	<0.3	0.00202	469
SRK-GD06	5/31/2009	7.71	4160	4.7	222	2	3700	8.1	5.9	640	3	2300	0.002	0.0012	0.0035	0.021	<0.00005	0.00021	<0.3	0.00362	498
SRK-GD06	9/30/2010	7.54	3521	3.9	265	9	3510	8.05	34.6	670	1.3	2200	0.004	0.0013	0.0039	0.0197	<0.00005	<0.00003	<0.3	0.00224	475
SRK-GD07	6/11/2002	7.24	1267	3.1	254	5	1210	8.18	6	336	2	413	<0.2	<0.2	<0.2	0.07	<0.005	<0.2	<0.1	<0.01	178
SRK-GD07B	9/11/2002	6.87	1332	3.7	2.45	2	1250	7.51	40	405	1.8	362	<0.2	<0.2	<0.2	0.11	<0.005	<0.2	<0.1	<0.01	205
SRK-GD07	9/12/2002	8.35	2541	4.1	315	31	2481	9	27	701	2.8	1041	<0.3	<0.3	<0.3	1.03	<0.006	<0.4	<0.2	<0.02	349
SRK-GD07	6/4/2003	7.37	1328	2.4	424	10	1300	7.73	15	338	1.9	575	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	194
SRK-GD07	9/14/2003	6.97	1373	5		Trace	1360	8.08	9	405	2.5	455	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	219
SRK-GD07	9/24/2004	7.1	1421	5.2	281	1	1380	7.92	12.2	433	<5	428	<0.2	<0.2	<0.2	0.061	<0.005	<0.2	<0.1	<0.01	208
SRK-GD08	6/11/2002	7.85	555	0.8	235	1	542	8.31	<1	209	2.3	88	<0.2	<0.2	<0.2	0.08	<0.005	<0.2	<0.1	<0.01	75.3
SRK-GD09	6/11/2002	7.6	1031	4.6	238	3	999	8.22	3	379	2.1	194	<0.2	<0.2	<0.2	0.11	<0.005	<0.2	<0.1	<0.01	142
SRK-GD10	6/11/2002	7.65	385	5.6	256	<0.5	384	8.3	<1	186	1.3	26	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	45.4
SRK-GD11	6/11/2002	6.67	1586	2.5	232	54	1570	7.69	31	371	2.1	593	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	201
SRK-GD11	6/4/2003	6.84	1660	3.2	434	7.5	1610	7.59	23	413	2.3	715	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	208
SRK-GD11	5/29/2004	6.65	1086	2.1	431	360	1040	7.46	33.2	282	0.75	332	<0.2	<0.2	<0.2	0.021	<0.005	<0.2	<0.1	<0.01	115
SRK-GD11	9/16/2005	6.8	2320	4.1	401	1	2210	7.61	23.2	500	<5.0	1120	<0.20	<0.20	<0.20	0.042	<0.0050	<0.20	<0.10	<0.010	354
SRK-GD11	5/25/2006	6.45	1450	2.8	169	42	1450	7.31	45.9	324	0.52	566	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.01	170
SRK-GD11	5/27/2007	6.87	1515	2.5	318	1	1700	7.14	131.0	341	<1	637	0.004	0.0009	0.0013	0.018	<0.0002	<0.0002	<0.01	0.0024	179
SRK-GD11	9/15/2008	6.32	1567	3.2	208	132	2000	7.40	60.3	420	1.80	510	<0.001	0.0005	0.0006	0.014	<0.00005	<0.00003	<0.3	0.0015	130
SRK-GD11	5/30/2009	6.81	1881	2.1	270	240	1600	7.60	35.9	320	1.30	650	0.004	0.0009	0.0007	0.017	<0.00005	<0.00003	<0.3	0.00568	157
SRK-GD12	9/11/2002	7.47	648	2.8	335	300	6300	7.87	13	268	<0.5	83	<0.2	<0.2	<0.2	0.1	<0.005	<0.2	<0.1	<0.01	86.3
SRK-GD12	6/4/2003	7.76	538	1.7	379	-	517	7.95	5	227	1.3	7	<0.2	<0.2	<0.2	0.07	<0.005	<0.2	<0.1	<0.01	60.9
SRK-GD12	9/14/2003	7.8	621	3.6	475	9	618	8.31	<1	289	1.7	81	<0.2	<0.2	<0.2	0.09	<0.005	<0.2	<0.1	<0.01	75.5
SRK-GD12	5/29/2004	7.36	370	3	400	240	392	8.1	2.7	168	0.77	46.9	<0.2	<0.2	<0.2	0.049	<0.005	<0.2	<0.1	<0.01	41.6
SRK-GD12	9/24/2004	7.77	608	4.8	333	1	658	8.21	1.8	285	<2.5	95.8	<0.2	<0.2	<0.2	0.088	<0.005	<0.2	<0.1	<0.01	77.8
SRK-GD13	9/12/2002	7.8	1190	4.6	201	10	1190	7.73	29	388	0.9	386	<0.2	<0.2	<0.2	0.11	<0.005	<0.2	<0.1	<0.01	168
SRK-GD13	6/4/2003	7.35	1178	1.5	414	4	1150	8.05	7	402	1.4	313	<0.2	<0.2	<0.2	0.09	<0.005	<0.2	<0.1	<0.01	153
SRK-GD13	9/14/2003	7.26	1268	1.6	418	9	1230	8.24	2	392	1.6	338	<0.2	<0.2	<0.2	0.11	<0.005	<0.2	<0.1	<0.01	178
SRK-GD13	5/28/2004	7.65	1212	1.9	417	15	1080	7.94	12.2	269	1.05	360	<0.2	<0.2	<0.2	0.098	<0.005	<0.2	<0.1	<0.01	142
SRK-GD13	9/24/2004	7.41	1500	3.7	519	8	1500	8.04	8.6	447	<5	468	<0.2	<0.2	<0.2	0.118	<0.005	<0.2	<0.1	<0.01	206
SRK-GD13	5/18/2005	7.93	1510			53	1510	7.93	10.9	311	0.66	561	<0.20	<0.20	<0.20	0.084	<0.0050	<0.20	<0.10	<0.010	198
SRK-GD13	9/16/2005	7.36	1704	2.3	406	2	1600	8.06	7.6	427	<5.0	620	<0.20	<0.20	<0.20	0.105	<0.0050	<0.20	<0.10	<0.010	286
SRK-GD13	5/25/2006	6.9	1899	2.5	245	36.4	1880	7.83	17.7	463	<2.5	731	<0.2	<0.2	<0.2	0.066	<0.005	<0.2	<0.1	<0.01	256
SRK-GD13	9/19/2006	7.26	1813	2.1	189	2	1800	7.84	12.2	473	0.89	649	<0.20	<0.20	<0.20	0.077	<0.0050	<0.20	<0.10	<0.010	235
SRK-GD13	5/27/2007	7.7	1577	0.8	296	12	1810	7.96	18.0	332	<1	661	0.003	0.0004	0.0029	0.047	<0.0002	<0.0002	<0.01	0.00002	212
SRK-GD13	9/13/2007	7.35	2080	3	111	10	2030	8.03	13.2	474	1.06	836	<0.005	0.0006	0.0029	0.057	<0.0025	<0.0025	<0.05	<0.00025	278
SRK-GD13	9/15/2008	6.98	2067	2.6	199	36.6	2400	7.80	30.4	450	1.60	651	0.002	0.0003	0.0016	0.031	<0.00005	<0.00003	<0.3	0.00004	165
SRK-GD13	5/30/2009	7.39	2890	1.8	236	120	2500	8.10	28.0	380	1.70	1200	0.0036	0.0005	0.0034	0.036	<0.00001	<0.000005	<0.05	0.000059	306
SRK-GD13	9/24/2009	6.73	2550	2.9	256	6	2650	8.00	26.2	470	1.40	1100	0.004	0.0005	0.0026	0.042	<0.00005	<0.00003	<0.3	0.00005	371
SRK-GD13	9/30/2010	7.08	673	1.8	296	18 - 60	2400	7.89	20.6	510	0.60	1100	0.003	0.0005	0.0023	0.038	<0.00005	<0.00003	<0.3	0.00004	285
SRK-GD16	5/28/2004	7.47	3280	3.4	504	30	3040	7.72	43	619	2.14	1680	<0.2	<0.2	<0.2	0.041	<0.005	<0.2	<0.1	<0.01	382
SRK-GD16	5/18/2005	7.28	3480		439	2.1	3480	7.62	93.2	602	<5.0	2090	<0.20	<0.20	<0.20	0.032	<0.0050	<0.20	<0.10	0.089	416
SRK-GD16	5/26/2007	7.6	2400	3.6	322	trace	3710	7.67	92.0	659	2.6	1730	0.002	0.0006	0.0048	0.027	<0.0002	<0.0002	<0.01	0.008	461
SRK-GD16	5/15/2008	7.45	4300	2	160	trickle	5000	7.50	151.0	290	1	4100	0.003	0.0009	0.0022	0.044	<0.0001	<0.00005	<0.5	0.045	462

Sample ID	Date Sampled	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	5E-05	2E-05	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	2E-06	0.0002	0.005	0.0001	
	Units	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-GD01	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	141	0.059	<0.03	0.26	<0.3	5	<0.2	3.98	<0.01	7	0.914	<0.2	<0.03	<0.01		<0.03	5.07		1b
SRK-GD01	9/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	216	0.062	<0.03	0.29	<0.3	8	<0.2	4.09	<0.01	9	1.31	<0.2	<0.03	<0.01		<0.03	2.48		1b
SRK-GD01	6/4/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	223	0.044	<0.03	0.43	<0.3	8	<0.2	4.36	<0.01	10	1.3	<0.2	<0.03	<0.01		<0.03	4.58		1b
SRK-GD01	09/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	233	0.053	<0.03	0.34	<0.3	8	<0.2	4.46	<0.01	10	1.48	<0.2	<0.03	<0.01		<0.03	2.98		1b
SRK-GD01	5/28/2004	<0.01	0.05	<0.01	<0.03	<0.05	0.018	146	0.998	<0.03	0.43	<0.3	5.4	<0.2	2.83	<0.01	5	0.912	<0.2	<0.03	<0.01		<0.03	17.2		1b
SRK-GD01	9/23/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.027	239	0.056	<0.03	0.351	<0.3	8.3	<0.2	4.08	<0.01	10.1	1.36	<0.2	<0.03	<0.01		<0.03	3.69		1b
SRK-GD01	5/15/2005	<0.010	0.016	<0.010	<0.030	<0.050	0.022	173	0.353	<0.030	0.295	<0.30	4.2	<0.20	2.93	<0.010	5.3	0.897	<0.20	<0.030	<0.010		0.037	10.7		1b
SRK-GD01	9/16/2005	<0.010	<0.010	<0.010	<0.030	<0.050	0.022	248	0.0502	<0.030	0.355	<0.30	5.7	<0.20	3.90	<0.010	9.1	1.14	<0.20	<0.030	<0.010		<0.050	3.11		1b
SRK-GD01	5/25/2006	<0.01	<0.01	<0.01	0.038	<0.05	0.015	289	0.0828	<0.03	0.336	<0.3	8.0	<0.2	3.23	<0.01	11.1	1.19	<0.2	<0.03	<0.01		<0.03	3.10		1b
SRK-GD01	9/19/2006	<0.010	<0.010	<0.010	<0.030	<0.050	0.030	253	0.0449	<0.030	0.334	<0.30	6.9	<0.20	3.83	<0.010	10.0	1.23	<0.20	0.099	<0.010		<0.030	2.76		1b
SRK-GD01	5/26/2007	<0.0002	0.0026	0.0033	0.77	0.0013	0.032	280	0.0300	0.0012	0.337	<0.03	7.2	0.0027	4.57	<0.00005	10.3	1.19	0.0003	<0.0002	0.0005		0.0005	2.59		1b
SRK-GD01	9/12/2007	<0.0025	0.00126	0.002	<0.03	0.00153	0.027	274	0.0299	0.0009	0.278	<0.3	7.5	<0.005	4.16	<0.00005	10.3	1.29	<0.0005	<0.0005	<0.01		<0.005	2.60		1b
SRK-GD01	5/15/2008	<0.0001	0.00183	0.003	0.009	0.00104	0.025	182	0.0236	0.0013	0.213		6.28	0.001	3.59	<0.000005	07.0	0.91	0.000285	<0.00001	<0.0005	0.0287	<0.0002	2.72	0.0005	1b
SRK-GD01	9/15/2008	<0.0005	0.00468	0.0021	0.011	0.00132	0.030	286	0.0593	0.0012	0.411		6.57	0.001	4.05	<0.00003	09.3	1.23	0.00034	<0.00005	0.003	0.0428	<0.001	6.69	0.0007	1b
SRK-GD01	5/30/2009	<0.0005	0.00668	0.0022	0.009	0.00064	0.026	198	0.1210	0.0009	0.281		5.09	0.001	3.13	<0.00003	06.1	0.94	0.00075	<0.00005	<0.003	0.0256	<0.001	8.82	<0.0005	1b
SRK-GD01	9/28/2009	<0.0005	0.00201	0.002	0.046	0.00149	0.033	343	0.0456	0.0012	0.366		7.76	0.001	4.72	<0.00003	11.8	1.33	0.00029	<0.00005	0.005	0.0567	0.002	3.24	0.0008	1b
SRK-GD01	9/30/2010	<0.0005	0.00213	0.0021	0.03	0.00189	0.039	406	0.0328	0.001	0.395		8.7	0.002	4.98	<0.00003	12.8	1.60	0.00029	0.000	<0.003	0.0623	<0.001	3.40	0.001	1b
SRK-GD02	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	206	0.121	<0.03	0.34	<0.3	8	<0.2	3.74	<0.01	10	1.2	<0.2	<0.03	<0.01		<0.03	2.76		1b
SRK-GD02	9/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.01	213	0.114	<0.03	0.32	<0.3	7	<0.2	3.89	<0.01	9	1.26	<0.2	<0.03	<0.01		<0.03	2.31		1b
SRK-GD02	9/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.01	251	<0.005	<0.03	0.29	<0.3	8	<0.2	4.45	<0.01	10	1.58	<0.2	<0.03	<0.01		<0.03	2.31		1b
SRK-GD04	6/11/2002	<0.01	0.03	<0.01	<0.03	<0.05	0.04	347	0.207	<0.03	0.42	<0.3	10	<0.2	3.65	<0.01	16	1.59	<0.2	<0.03	<0.01		<0.03	3.68		1b
SRK-GD05	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.04	211	0.189	<0.03	0.59	<0.3	8	<0.2	5.66	<0.01	14	1.52	<0.2	<0.03	<0.01		<0.03	3.54		1b
SRK-GD05	9/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	199	0.008	<0.03	0.51	<0.3	7	<0.2	6.06	<0.01	11	1.41	<0.2	<0.03	<0.01		<0.03	2.65		1b
SRK-GD05B	6/4/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	199	0.007	<0.03	0.38	<0.3	7	<0.2	5.51	<0.01	12	1.36	<0.2	<0.03	<0.01		<0.03	1.73		1b
SRK-GD05B	9/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	212	0.013	<0.03	0.44	<0.3	7	<0.2	5.66	<0.01	11	1.48	<0.2	<0.03	<0.01		<0.03	2.02		1b
SRK-GD05	5/28/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.043	269	0.0931	<0.03	0.644	<0.3	7.8	<0.2	5.48	<0.01	12.8	1.68	<0.2	0.033	<0.01		<0.03	4.92		1b
SRK-GD05	9/24/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.052	263	0.009	<0.03	0.705	<0.3	8.3	<0.2	5.07	<0.01	13.5	1.6	<0.2	<0.03	<0.01		<0.03	4.21		1b
SRK-GD05	5/15/2005	<0.010	<0.010	<0.010	<0.030	<0.050	0.044	298	0.0130	<0.030	0.540	<0.30	6.4	<0.20	3.90	<0.010	12.8	1.42	<0.20	<0.030	<0.010		0.059	2.99		1b
SRK-GD05	9/16/2005	<0.010	<0.010	<0.010	<0.030	<0.050	0.056	341	0.0127	<0.030	0.917	<0.30	8.9	<0.20	6.25	0.011	17.9	1.81	<0.20	<0.030	<0.010		<0.070	5.16		1b
SRK-GD05	9/19/2006	<0.010	<0.010	<0.010	<0.030	<0.050	0.034	234	<0.0050	<0.030	0.448	<0.30	5.5	<0.20	4.29	<0.010	11.2	1.17	<0.20	0.092	<0.010		<0.030	2.13		1b
SRK-GD05	5/26/2007	<0.0002	0.001	0.0027	0.8	0.0008	0.033	330	0.0048	0.0012	0.413	<0.03	6.7	0.0032	5.84	<0.00005	13.5	1.59	0.00035	<0.0002	0.0005		0.00	1.16		1b
SRK-GD05	9/12/2007	<0.0025	0.00064	0.0016	<0.03	0.00148	0.038	284	0.00589	0.001	0.413	<0.3	7.0	<0.005	5.30	<0.00005	13.3	1.48	<0.0005	<0.0005	0.01		<0.005	1.83		1b
SRK-GD05	5/15/2008	<0.0005	0.0044	0.0024	0.028	0.00111	0.048	312	0.0347	0.0013	0.348		7.3	0.0019	4.10	<0.00003	11.2	1.33	0.0005	<0.00005	<0.003	0.0462	<0.001	3.66	0.0006	1b
SRK-GD05	9/15/2008	<0.0005	0.0011	0.0014	0.006	0.00076	0.024	174	0.0664	0.0005	0.309		4.16	0.0002	2.74	<0.00003	07.6	0.82	0.00022	<0.00005	<0.003	0.0279	<0.001	2.59	<0.0005	1b
SRK-GD05	5/31/2009	<0.0005	0.00279	0.0019	0.007	0.00139	0.055	402	0.096	0.0012	0.604		8.01	0.0008	5.37	<0.00003	15.4	1.83	0.00046	<0.00005	<0.003	0.0644	<0.001	4.8	0.0009	1b
SRK-GD05	9/24/2009	<0.0005	0.00186	0.0022	0.049	0.00151	0.054	425	0.041	0.0013	0.715		9.09	0.0005	6.07	0.00006	17.5	1.78	0.00048	<0.00005	0.008	0.0746	0.00	5.37	0.0009	1b
SRK-GD05	9/30/2010	<0.0005	0.00093	0.0016	0.007	0.0007	0.051	460	0.007	0.0009	0.600		8.8	0.0004	6.19	<0.00003	17.6	1.89	0.00046	0.000	<0.003	0.0687	<0.001	3.31	0.0009	1b
SRK-GD06	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.04	209	0.23	<0.03	0.52	<0.3	9	<0.2	5.87	<0.01	14	1.56	<0.2	0.04	<0.01		<0.03	3.94		1b
SRK-GD06	9/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	196	0.008	<0.03	0.42	<0.3	7	<0.2	6.07	<0.01	11	1.39	<0.2	<0.03	<0.01		<0.03	2.73		1b
SRK-GD06	9/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	199	0.008	<0.03	0.41	<0.3	7	<0.2	5.64	<0.01	11	1.41	<0.2	<0.03	<0.01		<0.03	2.34		1b
SRK-GD06	5/26/2007	<0.0002	0.0004	0.0021	0.71	0.0008	0.028	320	0.0016	0.0006	0.428	<0.03	6.4	0.0031	5.87	<0.00005	12.3	1.63	0.0003	<0.0002	0.0005		0.0008	1.93		1b
SRK-GD06	9/12/2007	<0.0025	<0.0005	0.002	<0.03	0.00103	0.035	272	0.00272	0.0005	0.449	<0.3	6.8	<0.005	5.52	<0.00005	13.4	1.47	<0.0005	<0.0005	0.01		<0.005	2.71		1b
SRK-GD06	5/15/2008	<0.0005	0.00138	0.0016	0.011	0.00159	0.038	293	0.0113	0.0006	0.547		7.37	<0.0002	5.42	<0.00003	13.6	1.57	0.00041	<0.00005	<0.003	0.0516	<0.001	4.01	0.0007	1b
SRK-GD06	5/31/2009	<0.0005	0.00182	0.0017	0.006	0.00146	0.051	385	0.115	0.0006	0.755		7.9	0.0002	4.93	<0.00003	15.9	1.87	0.00052	<0.00005	<0.003	0.0677	<0.001	6.4	0.0008	1b
SRK-GD06	9/30/2010	<0.0005	0.00084	0.002	0.008	0.00125	0.041	382	0.012	0.0005	0.536		7.5	0.0002	6.07	<0.00003	15.9	1.78	0.00041	<0.00005	<0.003	0.0648	<0.001	4.23	0.0009	1b
SRK-GD07	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	69.6	<0.005	<0.03	<0.05	<0.3	4	<0.2	3.79	<0.01	3	0.604	<0.2	<0.03	<0.01		<0.03	0.021		1a
SRK-GD07B	9/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	63.6	1.92	<0.03	<0.05	<0.3	2	<0.2	4.61	<0.01	3	0.719	<0.2	<0.03	<0.01		<0.03	0.01		1a
SRK-GD07	9/12/2002	<0.02	<0.02	<0.02	<0.04	<0.06	1.02	197	1.008	<0.04	1.42	<0.4	8	<0.3	7.07	<0.02	12	2.39	<0.3	<0.04	<0.02		<0.04	3.73		1b
SRK-GD07	6/4/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	79.1	<0.005	<0.03	<0.05	<0.3	3	<0.2	4	<0.01	3	0.656	<0.2	<0.03	<0.01		<0.03	0.008		1a
SRK-GD07	9/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	74.1	0.007	<0.03	<0.05	<0.3	3	<0.2	5.08	<0.01	3	0.75	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD07	9/24/2004	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	72.1	0.011	<0.03	<0.05	<0.3	2.2	<0.2	4.67	<0.01	2.8	0.712	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD08	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	26.8	<0.005	<0.03	<0.05	<0.3	<2	<0.2	3.64	<0.01	<2	0.365	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD09	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	54.5	<0.005	<0.03	<0.05	<0.3	<2	<0.2	3.23	<0.01	<2	0.492	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD10	6/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	24.2	<0.005	<0.03	<0.05	<0.3	<2	<0.2	3.32	<0.01	<2	0.205	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD11	6/11/2002	<0.01	<0.01	0.01	<0.03	<0.05	0.02	108	0.26	<0.03	0.22	<0.3	4	<0.2	3.39	<0.01	4	0.815	<0.2	<0.03	<0.01		<0.03	2.11		1b
SRK-GD11	6/4/2003	<0.01	<0.01	0.01	<0.03	<0.05	0.01	121	0.425	<0.03	0.28	<0.3	3	<0.2	3.83	<0.01	5	0.864	<0.2	<0.03	<0.01		<0.03	3.75		1b
SRK-GD11	5/29/2004	<0.01	0.032	0.041	<0.03	<0.05	<0.01	69.8	0.618	<0.03	0.272	<0.3	2.5	<0.2	2.53	<0.01	<2	0.487	<0.2	<0.03	<0.01		<0.03	5.48		1b
SRK-GD11	9/16/2005	<0.010	<0.010	0.041	<0.030	<0.050	0.020	206	0.455	<0.030	0.336	<0.30	4.1	<0.20	4.66	<0.010	7.1	1.26	<0.20	<0.030	<0.010		<0.050	6.83		1b
SRK-GD11	5/25/2006	<0.01	0.099	0.061	<0.03	<0.05	0.011	128	2.05	<0.03	0.526	<0.3	3.4	<0.2	2.81	<0.01	3.9	0.682	<0.2	<0.03	<0.01		<0.03	17.4		2
SRK-GD11	5/27/2007	<0.0002	0.030	0.048	0.41	0.004	0.017	137	0.73	0.0006	0.313	<0.03	2.7	0.0018	3.83	<0.00005	3.7	0.614	0.00048	<0.0002	0.0003		00.0	8.02		2
SRK-GD11	9/15/2008	<0.0005	0.002	0.026	0.007	0.00169	0.007	087	0.06	0.0003	0.086		1.77	0.001	1.92	<0.00003	2.6	0.456	0.00032	<0.00005	<0.003	0.0092	<0.001	2.19	<0.0005	1b
SRK-GD11	5/30/2009	<0.0005	0.051	0.068	0.012	0.00379	0.016	130	1.23	0.0005	0.330		2.42	0.001	2.96	0.00003	3.4	0.591	0.0005	<0.00005	<0.003	0.0104	<0.001	11.4	<0.0005	2
SRK-GD12	9/11/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	40.4	0.028	<0.03	<0.05	<0.3	<2	<0.2	4.02	<0.01	2	0.329	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD12	6/4/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	34.2	<0.005	<0.03	<0.05	<0.3	<2	<0.2	3.34	<0.01	<2	0.256	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD12	9/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	39	<0.005	<0.03	<0.05	<0.3	<2	<0.2	4.23	<0.01	<2	0.322	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD12	5/29/2004	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	23	<0.005	<0.03	<0.05	<0.3	<2	<0.2	2.72	<0.01	<2	0.185	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD12	9/24/2004	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	38.6	0.0273	<0.03	<0.05	<0.3	<2	<0.2	3.97	<0.01	<2	0.327	<0.2	<0.03	<0.01		<0.03	<0.005		1a
SRK-GD13	9/12/2002	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	71.4	0.007	<0.03	<0.05	<0.3	3	<0.2	5.69	<0.01	3	0.823	<0.2	<0.03	<0.01		<0.03	0.028		1a
SRK-GD13	6/4/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	70.6	0.053	<0.03	0.07	<0.3	<2	<0.2	5.05	<0.01	3	0.788	<0.2	<0.03	<0.01		<0.03	0.007		1a
SRK-GD13	9/14/2003	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	80.8	<0.005	<0.03	<0.05	<0.3	<2	<0.2	5.32	<0.01	4	0.9	<0.2	<0.03	<0.01		<0.03	0.007		1a
SRK-GD13	5/28/2004	<0.01	0.012	<0.01	0.205	<0.05	<0.01	66.1	0.608	<0.03	0.129	<0.3	<2	<0.2	3.75	<0.01	2.4	0.758	<0.2	<0.03	<0.01		<0.03	0.0114		1a
SRK-GD13	9/24/2004	<0.01	<0.01	<0.01	<0.03	<0.05	0.014	94	<0.005	<0.03	0.13	<0.3	2.6	<0.2	5.83	<0.01	3.7	1.04	<0.2	<0.03	<0.01		<0.03	0.0159		1a
SRK-GD13	5/18/2005	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	109	0.0694	<0.030	0.098	<0.30	2.4	<0.20	4.38	<0.010	4.5	0.983	<0.20	<0.030	<0.010		<0.030	0.0186		1a
SRK-GD13	9/16/2005	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	136	<0.0050	<0.030	0.107	<0.30	2.4	<0.20	6.22	<0.010	4.9	1.17	<0.20	<0.030	<0.010		<0.050	0.0229		1a
SRK-GD13	5/25/2006	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	156	0.0420	<0.03	0.132	<0.3	3.5	<0.2	5.08	<0.01	5.9	1.30	<0.2	<0.03	<0.01		<0.03	0.0258		1a
SRK-GD13	9/19/2006	<0.010	<0.010	<0.010	<0.030	<0.050	0.012	139	<0.0050	<0.030	0.088	<0.30	2.3	<0.20	5.21	<0.010	4.5	1.02	<0.20	0.051	<0.010		<0.030	0.0175		1a
SRK-GD13	5/27/2007	<0.0002	0.0014	0.001	0.43	<0.0002	0.010	129	0.058	0.0014	0.085	<0.03	2.8	0.0023	5.04	<0.00005	4.2	0.92	0.00003	<0.0002	0.0004		0.0004	0.011		1a
SRK-GD13	9/13/2007	<0.0025	<0.0005	0.001	<0.03	<0.00025	<0.025	179	0.00144	0.0016	0.067	<0.3	3.3	<0.005	5.55	<0.00005	5.8	1.25	<0.0005	<0.0005	<0.01		<0.005	0.0162		1a
SRK-GD13	9/15/2008	<0.0005	0.00029	0.0008	0.008	0.00008	0.008	112	0.0048	0.0005	0.078		2.0	0.0012	2.66	<0.00003	3.4	0.67	0.00002	<0.00005	0.005	0.018	0.0010	0.113	0.0005	1a
SRK-GD13	5/30/2009	<0.0001	0.000977	0.0014	0.009	0.000052	0.015	220	0.00974	0.0011	0.139		3.8	0.0048	4.33	<0.000005	6.5	1.36	0.000081	<0.00001	<0.0005	0.0376	<0.0002	0.113	0.0009	1a
SRK-GD13	9/24/2009	<0.0005	0.00039	0.0015	0.048	0.00018	0.018	246	0.002	0.001	0.135		4.2	0.0029	6.73	<0.00003	7.5	1.39	0.00007	<0.00005	0.005	0.0438	<0.001	0.108	0.0009	1a
SRK-GD13	9/30/2010	<0.0005	0.00039	0.0013	0.007	0.00005	0.014	199	0.0024	0.0007	0.113		2.8	0.0021	5.51	<0.00003	5.8	1.31	0.00006	<0.00005	<0.003	0.0364	<0.001	0.105	0.0009	1a
SRK-GD16	5/28/2004	<0.01	0.03	<0.01	<0.03	<0.05	0.048	253	1.75	<0.03	0.701	<0.3	7	<0.2	4.59	<0.01	12	1.67	<0.2	<0.03	<0.01		<0.03	10.4		2
SRK-GD16	5/18/2005	<0.010	0.096	0.026	<0.030	<0.050	0.045	338	4.93	<0.030	0.501	<0.30	6.1	<0.20	6.71	<0.010	15.4	1.69	<0.20	<0.030	<0.010		<0.030	59.9		2
SRK-GD16	5/26/2007	<0.0002	0.008	0.004	0.86	0.0049	0.022	302	0.69	0.0008	0.214	<0.03	4.3	0.0033	8.28	<0.00005	12.9	1.51	0.00056	<0.0002	0.0006		0.0007	16.5		2
SRK-GD16	5/15/2008	<0.001	0.186	0.004	0.015	0.00725	0.087	570	1.73	0.0034	0.803		7	0.01	3.99	<0.00005	09.8	1.81	0.00086	<0.0001	<0.005	0.0329	<0.002	139.0	<0.001	2

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity-Total CaCO3	Chloride Cl	Sulphate SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	0.000005	0.01	0.00002	0.05	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	5E-05	2E-05	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	2E-06	0.0002	0.005	0.0001	
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-GD16	5/31/2009	7.39	4590	4.4	253	trace	4100	7.90	32.8	650	2.7	2600	0.002	0.0008	0.0036	0.027	<0.00005	<0.00003	<0.3	0.029	500	<0.0005	0.013	0.007	0.009	0.00398	0.048	447	2.65	0.0016	0.385		5.91	0.00	6.33	0.00005	16.5	1.76	0.00063	<0.00005	<0.003	0.037	<0.001	28.4	00.0	2
SRK-GD17	5/28/2004	7.44	3990	5.1	397	15	3740	7	158	195	1.99	2770	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	0.061	356	<0.01	0.214	<0.01	<0.03	<0.05	0.088	413	3.1	<0.03	1.08	<0.3	11.5	<0.2	1.31	<0.01	6.2	1.21	<0.2	<0.03	<0.01		<0.03	110		2
SRK-GD17	5/25/2006	7.39	2330	5.8	118	3	3000	7.67	57.6	177	<2.5	1990	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.027	288	<0.01	0.121	<0.01	<0.03	<0.05	0.060	319	1.47	<0.03	0.507	<0.3	9.4	<0.2	0.991	<0.01	5.4	0.916	<0.2	<0.03	<0.01		<0.03	42.2		2
SRK-GD17	5/27/2007	7.42	2430	3.4	387	5	4480	7.79	22.0	253	2.76	2670	<0.001	0.0013	0.0009	0.0066	<0.0002	<0.0002	<0.01	0.009	351	<0.0002	0.041	0.0015	0.75	0.0082	0.095	490	0.21	0.0038	0.307	<0.03	12.8	0.0043	1.310	<0.00005	7.6	0.955	0.0057	<0.0002	0.0005		<0.0002	12.2		2
SRK-GD18	5/28/2004	7.74	741	3	403	15	742	8.07	5.9	108	0.74	302	<0.2	<0.2	<0.2	0.023	<0.005	<0.2	<0.1	<0.01	80.4	<0.01	<0.01	<0.01	<0.03	<0.05	0.014	43.8	0.038	<0.03	0.051	<0.3	3	<0.2	1.57	<0.01	<2	0.359	<0.2	<0.03	<0.01		<0.03	0.105		1a
SRK-GD18	5/18/2005	6.73	1040	3	399	97.5	1040	8.09	6.5	141	<0.50	458	<0.20	<0.20	<0.20	0.024	<0.0050	<0.20	<0.10	<0.010	129	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	78.2	0.0416	<0.030	<0.050	<0.30	3.9	<0.20	1.89	<0.010	3.3	0.527	<0.20	<0.030	<0.010		<0.030	0.389		1a
SRK-GD18	5/25/2006	7.07	953	2.1	259	50	950	7.92	6.6	115	<0.5	418	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.01	123	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	68.6	0.0527	<0.03	<0.05	<0.3	4.1	<0.2	1.46	<0.01	4.3	0.498	<0.2	<0.03	<0.01		<0.03	0.132		1a
SRK-GD18	5/27/2007	7.67	1109	0.6	292	12	1090	7.69	14.0	151	<1	535	0.014	0.0006	0.0076	0.015	<0.0002	<0.0002	<0.01	0.0001	116	<0.0002	0.0025	0.0038	0.26	0.0003	0.01	97.1	0.0290	0.0013	0.05	0.06	3.7	0.0045	3.07	<0.00005	2.8	0.472	0.00012	<0.0002	0.0005		0.0004	0.030		1a
SRK-GD18	5/30/2009	7.74	1405	1.5	237	150	1200	8.00	4.6	150	1	570	0.0113	0.0006	0.005	0.018	<0.00001	<0.000005	<0.05	0.000128	114	<0.0001	0.00151	0.002	0.023	0.000268	0.0115	99.7	0.0343	0.0013	0.0416		3.5	0.003	1.94	<0.000005	2.7	0.477	0.000113	<0.00001	0.0006	0.0089	<0.0002	0.033	0.0002	1a
SRK-GD19	5/29/2004	5.73	2580	1.1	336	30	2500	5.75	238	38.7	0.58	1710	0.28	<0.2	<0.2	0.011	<0.005	<0.2	<0.1	0.178	321	<0.01	0.696	2.11	46.4	0.135	0.045	167	7.52	<0.03	2.65	<0.3	6.5	<0.2	3.69	<0.01	4.5	1.02	<0.3	<0.03	<0.01		<0.03	107		3
SRK-GD19	5/26/2007	7.63	1692	1.3	34	trace	1910	7.74	7	109	<1	1050	<0.001	0.0005	0.0006	0.0086	<0.0002	<0.0002	<0.01	0.007	269	<0.0002	0.011	0.0026	0.49	0.0012	0.024	112	0.11	0.0044	0.161	<0.03	6.55	0.0029	1.01	<0.00005	2.29	0.768	0.0044	<0.0002	0.0002		<0.0002	7.65		2
SRK-GD19	9/15/2008	6.03	1922	3.1	150	13.4	2500	7.4	82.6	320	2	804	0.002	0.0029	0.0006	0.0047	<0.00005	<0.00003	<0.3	0.0223	171	<0.0005	0.0631	0.0055	2.3	0.00406	0.015	107	1.17	<0.0003	0.307		2.77	<0.0002	1.55	<0.00003	3.35	0.513	0.00599	<0.00005	0.004	0.0019	0.001	14.2	<0.0005	2
SRK-GD19	5/30/2009	6.5	3200	1.7	175	5	2800	7.2	84.4	250	2.2	1900	0.006	0.0008	0.022	0.007	<0.0002	<0.0001	<1	0.0167	381	<0.002	0.154	0.009	25.9	0.0445	0.028	213	3.17	<0.001	0.662		4.8	<0.0008	4.52	<0.0001	5.8	1.23	0.0159	<0.0002	<0.01	0.0024	<0.004	44.2	<0.002	2
SRK-GD20	5/29/2004	6.2	2450	1.7	322	30	2410	7.59	198	130	0.9	1530	<0.2	<0.2	<0.2	0.012	<0.005	<0.2	<0.1	0.063	346	<0.01	0.446	0.12	27.3	<0.05	0.027	150	6.62	<0.03	1.46	<0.3	6.5	<0.2	4.04	<0.01	4.7	1.32	<0.2	<0.03	<0.01		<0.03	97.9		2
SRK-GD20	5/25/2006	7.37	2390	9.8	109	trace	2580	7.87	12.6	132	<2.5	1700	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	<0.01	249	<0.01	0.030	<0.01	<0.03	<0.05	0.065	308	0.576	<0.03	0.104	<0.3	19.6	<0.2	0.535	<0.01	7.4	0.744	<0.2	<0.03	<0.01		<0.03	9.23		2
SRK-GD20	9/15/2008	6.93	1995	5.4	58	3.8	2600	7.60	67.6	340	1.6	0813	0.002	0.0007	0.0006	0.005	<0.00005	<0.00003	<0.3	0.0158	187	<0.0005	0.062	0.0019	0.547	0.00128	0.015	106	1.080	<0.0003	0.330		2.92	<0.0002	1.530	<0.00003	3.3	0.548	0.00528	<0.00005	0.005	0.0037	0.001	13.80	<0.0005	2
SRK-GD21	5/28/2004	7.47	3390	3.4	394	7.5	3140	7.86	27.6	393	1.26	1990	<0.2	<0.2	<0.2	0.036	<0.005	<0.2	<0.1	<0.01	315	<0.01	0.026	<0.01	<0.03	<0.05	0.066	403	0.271	<0.03	0.345	<0.3	12.3	<0.2	2.3	<0.01	14.9	1.53	<0.2	<0.03	<0.01		<0.03	2.52		1b
SRK-GD21	9/24/2004	7.1	3860	4	536	Trace	3770	8.1	6.3	628	<5	2170	<0.2	<0.2	<0.2	0.016	<0.005	<0.2	<0.1	<0.01	365	<0.01	<0.01	<0.01	<0.03	<0.05	0.041	438	0.0619	<0.03	0.409	<0.3	10	<0.2	3.89	<0.01	17.1	1.63	<0.2	<0.03	<0.01		<0.03	1.82		1b
SRK-GD21	5/15/2005	7.74	2490	2.7	438	6	2950	8.10	7.9	356	<5.0	1770	<0.20	<0.20	<0.20	0.025	<0.0050	<0.20	<0.10	<0.010	277	<0.010	0.012	<0.010	<0.030	<0.050	0.047	340	0.0983	<0.030	0.290	<0.30	8.2	<0.20	1.66	<0.010	11.4	1.16	<0.20	<0.030	<0.010		0.053	2.63		1b
SRK-GD21	5/25/2006	7.85	2370	10.5	118	trace	2890	8.08	9.8	400	<2.5	1670	<0.2	<0.2	<0.2	0.018	<0.005	<0.2	<0.1	<0.01	287	<0.01	0.014	<0.01	<0.03	<0.05	0.043	342	0.0643	<0.03	0.330	<0.3	10.0	<0.2	2.18	<0.01	12.2	1.28	<0.2	<0.03	<0.01		<0.03	3.42		1b
SRK-GD21	5/26/2007	8.14	2420	11	364	trickle	3500	8.17	8.0	470	<2	1820	0.001	0.0022	0.0033	0.020	<0.0002	<0.0002	<0.01	0.00079	346	<0.0002	0.006	0.0023	0.63	0.0008	0.034	362	0.0190	0.0033	0.253	<0.03	08.3	0.0045	3.24	<0.00005	10.8	1.34	0.00054	<0.0002	0.0004		0.00	1.08		1b
SRK-GD21B	9/15/2008	6.83	3012	6.7	196	Trace	3600	8.00	37.9	340	0.9	2496	0.003	0.0017	0.0048	0.017	<0.00005	<0.00003	<0.3	0.00252	443	<0.0005	0.001	0.0017	0.008	0.00402	0.052	396	0.0839	0.0007	0.213		10.6	0.0005	3.44	<0.00003	11.7	1.48	0.00031	<0.00005	0.003	0.0215	<0.001	6.58	<0.0005	1b
SRK-GD21	5/31/2009	8.32	3830	7.2	223	trickle	3500	8.30	<0.5	490	3	2000	0.001	0.0021	0.0049	0.024	<0.00005	<0.00003	<0.3	0.00159	352	<0.0005	0.005	0.0017	0.043	0.00052	0.051	420	0.0111	0.0034	0.339		9.34	0.0029	2.55	<0.00003	12.5	1.35	0.00079	<0.00005	<0.003	0.071	<0.001	2	0.0006	1b
SRK-GD21	9/24/2009	7.62	3480	3.2	235	trace	4220	8.10	35.6	660	1.9	2900	0.004	0.0023	0.0035	0.015	<0.00005	<0.00003	<0.3	0.00187	494	<0.0005	0.007	0.0027	0.052	0.00183	0.060	547	0.0205	0.0029	0.622		11.8	0.0015	5.24	<0.00003	18.2	1.78	0.00086	<0.00005	0.003	0.0822	0.00	2.97	0.0013	1b
SRK-GD21B	9/30/2010	8.45	4370	2.1	224	trace	4360	8.19	26.8	660	1.4	3000	0.003	0.0023	0.0038	0.012	<0.00005	<0.00003	<0.3	0.00074	454	<0.0005	0.005	0.001	0.006	0.00044	0.052	511	0.0169	0.0031	0.556		9.4	0.0011	4.28	<0.00003	16.3	1.93	0.0007	<0.00005	<0.003	0.0889	<0.001	1.85	0.001	1b
SRK-GD22	9/15/2008	6.81	2198	2.4	163	Trace	2800	7.60	47.6	360	1.7	1743	0.004	0.0038	0.02	0.042	<0.00005	<0.00003	<0.3	0.00498	477	<0.0005	0.011	0.0041	0.015	0.0721	0.017	206	0.149	0.0009	0.155		2.57	0.0016	6.450	<0.00003	10.5	2.000	0.00071	<0.00005	<0.003	0.0168	<0.001	3.96	<0.0005	1b
SRK-GD22	5/30/2009	7.23	3860	4.4	211	trace	3500	7.90	26.0	360	2.8	2300	0.007	0.0021	0.0031	0.047	<0.00005	<0.00003	<0.3	0.0054	531	<0.0005	0.012	0.004	0.019	0.00594	0.027	282	0.221	0.0009	0.274		3.54	0.0026	5.440	<0.00003	11.3	2.220	0.00056	<0.00005	<0.003	0.0218	<0.001	5.50	<0.0005	1b
SRK-GD23	9/18/2008	6.83	811	3.8	159	0.5	1000	7.80	11.1	140	1.2	0552	0.0121	0.0004	0.0011	0.052	<0.00001	<0.000005	<0.05	0.00029	174	0.0001	0.000	0.0036	0.024	0.000063	0.003	053	0.016	0.0005	0.016		1.83	0.0005	5.730	<0.000005	3.1	0.576	0.000018	<0.00001	<0.0005	0.0088	<0.0002	0.45	0.00	1a
SRK-GD24	9/26/2009	7.17	3550	4.2	93	trace	3440	7.70	94.3	280	0.9	2400	0.018	0.0024	0.0011	0.009	<0.0001	<0.00005	<0.5	0.105	563	<0.001	0.222	0.0693	0.168	0.0149	0.047	284	15.8	<0.0005	0.265		11.9	<0.0004	6.04	0.00009	116.0	2.21	0.0103	<0.0001	0.022	0.0194	0.01	63.8	<0.001	2

Appendix A.3 2002-2010 Waste Rock Seepage Results- Vangorda

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity-Total CaCO3	Chloride Cl	Sulphate SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	5E-06	0.01	0.00002	0.05	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	0.00005	0.00002	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	2E-06	0.0002	0.005	0.0001	
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-VD01	6/10/2002	6.43	3120	10	136	Trace Flow	3080	7.23	115	38	<0.5	2340	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.12	261	<0.01	0.23	<0.01	0.25	0.1	0.07	370	16.4	<0.03	0.78	<0.3	8	<0.2	1.73	<0.01	5	1.69	<0.3	<0.03	<0.01		<0.03	71.6		2
SRK-VD01	6/6/2003	6.83	2780	11.4	390	Trace	3210	6.62	224	27	<0.5	2880	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.28	329	<0.01	0.49	<0.01	0.12	0.07	0.07	408	31.2	<0.03	1.2	<0.3	6	<0.2	1.75	<0.01	3	1.89	<0.2	<0.03	<0.01		<0.03	125		2
SRK-VD01	5/29/2004	6.38	966	7.7	325	3	646	6.38	38	13.7	<0.5	323	<0.2	<0.2	<0.2	0.026	<0.005	<0.2	<0.1	0.044	71.1	<0.01	0.082	0.016	1.2	<0.05	<0.01	54.6	4.97	<0.03	0.216	<0.3	<2	<0.2	0.861	<0.01	<2	0.374	<0.2	<0.03	<0.01		<0.03	24.5		2
SRK-VD01	5/17/2005	5.41	2260	3.8	466	1	2280	4.12	213	<2.0	<0.50	1550	2.24	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.136	210	<0.010	0.303	0.311	6.64	0.334	0.054	213	19.7	<0.030	0.751	<0.30	4.0	<0.20	2.40	<0.010	2.3	1.06	<0.20	<0.030	<0.010		<0.030	86.6		3
SRK-VD01	5/28/2006	6.7	2170	2.5	121	trace	2330	7.43	150	16.9	<2.5	1530	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.129	220	<0.01	0.288	0.028	0.897	0.114	0.040	232	19.2	<0.03	0.896	<0.3	3.7	<0.2	1.58	<0.01	<2	0.948	<0.2	<0.03	<0.01		<0.03	83.5		2
SRK-VD01	5/27/2007	6.73	820	1.4	324	trickle	0770	6.07	054	05.9	<0.4	0427	0.074	<0.001	<0.001	0.032	<0.001	<0.001	<0.05	0.044	069	<0.001	0.081	0.072	2.210	0.110	0.024	048	05.3	0.0005	0.260	<0.15	1.2	<0.001	1.40	<0.00025	0.61	0.280	0.0005	<0.001	<0.001		<0.001	33.6		2
SRK-VD01	5/27/2009	5.21	781	8.5	93	trickle	0650	6.60	040	13.0	0.7	0320	0.057	0.0002	0.0005	0.0241	<0.00005	<0.00003	<0.3	0.023	048	<0.0005	0.045	0.038	1.370	0.019	0.013	044	03.1	<0.0003	0.110		0.9	0.0006	0.96	<0.00003	0.57	0.209	0.00054	<0.00005	<0.003	0.00067	0.005	16.1	<0.0005	2
SRK-VD02	6/10/2002	6.17	3230	8.8	112	1	3180	7.07	171	289	1.2	2170	<0.2	<0.2	<0.2	0.02	<0.005	<0.3	<0.1	0.08	393	<0.01	0.81	<0.01	5.48	<0.05	0.05	257	36	<0.03	2	<0.3	11	<0.2	5.25	<0.01	10	1.48	<0.3	0.04	<0.01		<0.03	88.3		2
SRK-VD02	6/6/2003	6.56	3510	16	352	Trace	3270	7.03	182	258	<0.5	2690	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.12	436	<0.01	0.88	<0.01	0.21	<0.05	0.04	329	42.2	<0.03	1.98	<0.3	12	<0.2	5.85	<0.01	10	1.61	0.2	<0.03	<0.01		<0.03	83.4		2
SRK-VD02	5/29/2004	6.04	3410	9.2	294	3.3	3380	6.28	312	248	1.29	2200	<0.2	<0.2	<0.2	0.027	<0.005	<0.2	<0.1	0.093	471	<0.01	0.906	<0.01	26.6	<0.05	0.053	274	38.2	<0.03	2.37	<0.3	12.7	<0.2	6.03	<0.01	9.7	1.84	<0.2	0.032	<0.01		<0.03	100		2
SRK-VD02	5/17/2005	6.36	3700	6	367	0.72	3580	6.77	184	317	<10	2420	<0.20	<0.20	<0.20	0.029	<0.0050	<0.20	<0.10	0.112	534	<0.010	0.826	<0.010	4.35	<0.050	0.062	304	45	<0.030	2.41	<0.30	12.8	<0.20	6.01	<0.010	12.3	1.76	<0.20	<0.030	<0.010		<0.030	129		2
SRK-VD02	5/28/2006	6.5	2410	3.9	108	trace	3490	7.09	156	351	<2.5	2240	<0.2	<0.2	<0.2	0.017	<0.005	<0.2	<0.1	0.065	460	<0.01	0.554	<0.01	7.43	<0.05	0.049	312	44.2	<0.03	1.61	<0.3	12.5	<0.2	5.79	<0.01	8.3	1.53	<0.2	<0.03	<0.01		<0.03	90.1		2
SRK-VD02	5/27/2007	6.48	2480	13.2	191	1	3520	6.76	218	282	<2	1830	0.077	<0.001	0.019	0.015	<0.001	<0.001	<0.05	0.068	370	<0.001	0.43	0.004	6.99	0.002	0.069	221	35.3	0.0039	1.25	<0.15	9.9	0.002	5.5	0.0003	5.7	1.36	0.0011	<0.001	<0.001		<0.001	92.7		2
SRK-VD02	9/18/2008	6.47	3505	9.2	29	0.5	4500	7.2	407	210	1	3660	0.01	<0.0004	0.133	0.0131	<0.0002	<0.0001	<1	0.15	467	<0.002	1.35	<0.001	38.5	0.0027	0.072	456	79.5	<0.001	3.08		13.6	0.0069	5.18	0.0005	13.7	1.9	0.00289	<0.0002	<0.01	0.0206	<0.004	230	<0.002	2
SRK-VD02	5/27/2009	5.72	3707	10	100	1	3500	7	191	190	1.8	2800	0.018	0.0003	0.201	0.0126	<0.0001	<0.00005	<0.5	0.0373	412	<0.001	0.73	0.0023	66.4	0.00214	0.069	281	48	<0.0005	1.53		10.8	0.0011	6.25	<0.00005	6.48	1.46	0.00224	<0.0001	0.015	0.0146	<0.002	96.5	<0.001	2
SRK-VD03	6/10/2002	6.03	5350	7.3	97	6	5220	6.84	719	187	1.3	4400	<0.4	<0.4	<0.4	0.02	<0.01	<0.6	<0.2	0.11	435	<0.02	2.99	<0.02	93.7	<0.1	0.1	551	139	<0.06	5.3	<0.6	13	<0.4	7.5	<0.02	13	1.87	<0.4	<0.06	<0.02		<0.06	412		2
SRK-VD03	9/12/2002	6.22	5400	4.4	65	1.5	5140	6.39	755	124	0.8	4070	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.06	431	<0.02	2.86	<0.02	127	<0.1	0.07	558	135	<0.06	5	<0.6	12	<0.4	7.8	<0.02	13	1.77	<0.4	<0.06	<0.02		<0.06	350		2
SRK-VD03	6/6/2003	6.14	5020	13.3	242	2.1	4580	6.72	661	192	<0.5	4200	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.08	414	<0.02	2.72	<0.02	69.2	<0.1	0.08	553	135	<0.06	4.6	<0.6	13	<0.4	7.4	<0.02	12	1.69	<0.4	<0.06	<0.02		<0.06	345		2
SRK-VD03	9/14/2003	6.24	3570	5	245	1	5180	6.28	581	164	1.2	4440	<0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.05	404	<0.02	2.53	<0.02	108	<0.1	0.06	602	130	<0.06	4.5	<0.6	11	<0.4	7.3	<0.02	12	1.59	0.4	<0.06	<0.02		<0.06	316		2
SRK-VD03	5/29/2004	5.88	5900	7.3	276	5	5620	6.37	1210	102	3.11	4860	<0.6	<0.6	<0.6	0.036	<0.015	<0.6	<0.3	0.168	465	<0.03	3.13	0.032	194	<0.15	0.094	518	157	<0.09	4.9	<0.9	13.7	<0.6	7.7	<0.03	8.5	1.83	<0.6	<0.09	<0.03		<0.09	612		3
SRK-VD03	9/26/2004	6.08	6390	4.8	252	2.7	6050	6.53	883	168	<50	5230	<0.4	<0.4	<0.8	<0.02	0.014	<0.4	<0.2	0.035	420	<0.02	2.88	<0.02	176	<0.1	0.083	674	144	<0.06	4.89	<0.6	11.6	<0.4	7.25	<0.02	12	1.82	<0.4	<0.06	<0.02		<0.2	406		2
SRK-VD03	5/17/2005	6.2	5480	5.1	297	6	5150	6.67	851	141	<10	4390	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.084	393	0.029	2.45	<0.020	130	<0.10	0.062	448	128	<0.060	4.05	<0.60	8.2	<0.40	6.35	<0.020	7.2	1.25	<0.40	<0.060	<0.020		<0.060	432		2
SRK-VD03	9/17/2005	6.13	6370	8.2	333	3	5960	6.66	870	220	<10	5310	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.071	472	<0.020	3.4	<0.020	183	<0.10	0.124	809	168	<0.060	5.84	<0.60	14.1	<0.40	8.61	<0.020	16.2	1.98	<1.2	<0.060	<0.020		<0.080	450		2
SRK-VD03	5/28/2006	6.13	4630	5.9	62	0.8	4410	6.81	638	20.8	<10	3330	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.037	386	<0.01	1.8	<0.01	122	<0.05	0.042	398	112	<0.03	3.57	<0.3	10.3	<0.2	7.34	<0.01	9.1	1.25	<0.2	<0.03	<0.01		<0.03	332		2
SRK-VD03	9/24/2006	6.38	5770	1.1		trace	5730	6.68	807	237	<25	4360	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.04	409	<0.020	2.55	<0.020	99.5	<0.10	0.067	643	138	<0.060	4.77	<0.60	9.3	<0.40	6.68	<0.020	12.3	1.52	<0.40	0.256	<0.020		0.114	322		2
SRK-VD03	5/27/2007	6.35	4710	11.1	227	trickle	6080	6.88	400	179	<4	3820	0.1	<0.001	0.003	0.014	<0.001	<0.001	<0.05	0.028	380	<0.001	1.85	0.003	7.27	<0.001	0.071	506	106	0.012	3.25	<0.15	12.2	0.006	7.3	0.0006	15.6	1.75	0.0013	<0.001	<0.001		<0.001	219		2
SRK-VD03	9/12/2007	6	5390	14.7	113	trace	5270	6.39	513	185	<50	4480	<0.1	<0.01	<0.01	0.0108	<0.05	<0.05	<1	0.0436	400	<0.05	2.82	<0.01	7.87	<0.005	<0.5	650	144	<0.005	4.98	<0.6	9.7	<0.1	5.98	<0.001	11.2	1.63	<0.01	<0.01	<0.02		<0.1	321		2
SRK-VD03	5/15/2008	6.1	5300	3.7	118	2	5200	7	633	150	0.8	4400	0.006	0.0001	0.002	0.017	<0.00005	<0.00003	<0.3	0.0485	484	<0.0005	2.34	0.0044	54.5	0.0017	0.074	556	149	0.0003	4.65		10.1	0.0066	7.21	0.00027	8.82	1.59	0.00102	<0.00005	<0.003	0.0111	<0.001	342	<0.0005	2
SRK-VD03	9/18/2008	5.23	7600	6.7	196	9.9	7700	6.5	2660	120	<0.5	7500	<0.02	<0.002	0.008	0.014	<0.001	<0.0005	<5	0.194	431	<0.01	4.45	<0.005	247	0.0007	0.119	973	235	<0.005	7.07		11	0.019	<10	0.0017	5	2.09	0.0019	<0.001	<0.05	0.0073	<0.02	860	<0.01	3
SRK-VD03	5/27/2009	5.85	6050	5.6	68	15	5700	6.4	1010	82	1.7	5300	0.039	<0.001	0.051	0.014	<0.0005	<0.0003	<3	0.158	383	<0.005	3.24	<0.003	224	0.0008	0.082	576	163	<0.003	4.87		10.3	0.002	8.42	<0.0003	9.1	1.55	0.0024	<0.0005	<0.03	0.0041	<0.01	492	<0.005	2
SRK-VD03	9/26/2009	6.08	8380		46	4.83870968	7960	6.3	2150	81	<0.5	6100	0.06	<0.002	0.097	0.013	<0.001	<0.0005	<5	0.104	473	<0.01	5.04	<0.005	411	0.0013	0.142	1180	256	<0.005	7.92		17	<0.004	11.6	<0.0005	15	2.2	0.0025	<0.001	0.07	0.0133	<0.02	720	<0.01	2
SRK-VD04	6/10/2002	3.3	22000	9.9	334	0.75	21400	3.57	12300	<1	<0.5	30500	20	<8	<8	<0.4	<0.2	<20	<4	6.8	467	<0.4	22.3	<0.4	1160	<2	<0.4	3180	2350	<2	17	<20	<80	<8	21	<0.4	<80	1	<8	<2	<0.4		<2	6370		3
SRK-VD04	9/12/2002	3.43	22300	5.8	344	slight	22300	3.52	12500	7	<0.5	33100	22	<6	<6	<0.3	<0.2	<6	<3	8.1	456	<0.3	22.3	<0.3	1030	<2	0.4	3490	2600	<0.9	17	<9	<60	<6	20	<0.3	<60	1.1	<6	<0.9	<0.3		<0.9	6990		3
SRK-VD04	6/6/2003	3.25	22100	7.9	538	0.2	18800	3.53	15400	<1	<0.5	33400	30	<8	<8	<0.4	<0.2	<8	<4	6.8	428	<0.4	19.2	<0.4	1270	<2	0.5	3090	2280	<2	15	<20	<80	<8	22	<0.4	<80	0.9	<8	<2	<0.4		<2	6070		3
SRK-VD04	9/14/2003	3.23	22700	2.9	534	1	21700	3.27	10600	<1	<0.5	30800	27	<10	<10	<0.5	<0.3	<10	<5	6	445	<0.5	17	<0.5	1240	<3	<0.5	3300	2340	<2	12	<20	<100	<10	23	<0.5	<100	1	<10	<2	<0.5		<2	5850		3
SRK-VD04	5/29/2004	3.07	24800	12.2	551	Trace	23500	3.2	13600	<1	<0.5	34600	89.3	<8	<8	<0.4	<0.2	<8	<4	9.6	485	<0.5	24.5	<0.4	1850	<2	<0.4	3230	2760	<1.2	18.7	<12	<80	<8	21.8	<0.4	<80	1.06	15.5	<1.2	<0.4		<2	8230		3
SRK-VD04	9/26/2004	3.06	34600	3.6	510	Trace	31600	3.4	22400	<1	<500	67700	218	<20	<20	<1	<0.5	<20	<10	23.2	497	<1	38.3	<1	2850	<5	<1	4710	4030	<3	26.1	<30	<200	<20	18	<1	<200	0.92	<20	3	<1		<3	13100		3
SRK-VD04	5/17/2005	3.43	22000	5.5	512	Trace	25000	3.22	20100	<2.0	<500	27900	134	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	10.1	321	0.41	19	<0.10	2130	0.58	0.26	2000	1910	<0.60	13.7	<3.0	<20	<2.0	11.8	<0.10	<20	0.657	<2.0	<0.30	<0.10		<0.30	6640		3
SRK-VD04	9/17/2005	3.22	35400	8.5	544	0.35	31800	3.5	24200	<2.0	<50	53300	326	<4.0	<4.0	<0.20	<0.10	<4.0	<2.0	16.1	462	<0.20	32.1	<0.20	3760	<1.0	0.84	5260	3830	<0.60	24.3	<6.0	<40	<4.0	19.4	<0.40	<40	0.98	<20	<0.60	<0.20		<1.6	12000		3
SRK-VD04	5/28/2006	3.39	31500	5.6	331	trace	28000	3.38	20400	<2	<500	42900	146	<4	<4	<0.2	<0.1	<4	<2	10.1	422	<0.2	24.9	<0.2	3320	1.1	0.58	3760	3260	<0.6	17.9	<6	<40	<4	15.8	<0.2	<40	0.94	<4	<0.6	<0.2		<0.6	10700		3
SRK-VD04	9/24/2006	3.2	37600	3.1		trace	33600	3.5	24000	<2.0	<1000	53800	142	<4.0	<4.0	<0.20	<0.10	<4.0	<2.0	8.9	450	<0.20	26.6	<0.20	3800	<1.0	0.64	4850	3060	<0.60	20.3	<6.0	<40	<0.30	17.2	<0.20	<40	1.28	<4.0	2.14	<0.20		<6.0	11000		3
SRK-VD04	5/27/2007	3.45	35200	7	433	1	91900	3.34	25000	<0.5	<20	53200	168	0.002	0.024	0.006	0.026	<0.001	<0.05	6.39	438	0.013	26	0.061	3450	1.39	0.82	5110	3760	0.434	19	<0.15	3.5	0.11	24.8	0.026	15.3	1.11	0.024	<0.001	0.006		0.006	10700		3
SRK-VD04	9/10/2007	3.83	36600	9.6	327	0.2	34100	3.08	28700	<2	<2500	60800	294	<0.3	<0.3	<0.15	<1.5	<1.5	<30	8.33	389	<1.5	21.4	0.59	3630	0.55	<15	5520	3230	<0.15	16.1	<6	<40	<3	20.9	<0.03	<40	0.91	<0.3	<0.3	<0.2		<3	10100		3
SRK-VD04	9/18/2008	2.93	>20 000	8	209	Trace	35000	3.4	39500	<0.5	<5	63000	687	<0.02	0.066	0.024	0.059	<0.005	<50	15.4	451	0.105	27.3	<0.05	4020	1.23	1.19	5010	3680	<0.05	20.8		<10	0.055	<100	0.024	<10	1.17	0.015	<0.01	<0.5	1.72	<0.2	16000	<0.1	3
SRK-VD04	5/27/2009	4.81	10215	5.7	174	trickle	15000	3.5	11500	<0.5	<5	17000	175	<0.002	0.026	0.045	0.01	<0.0005	<5	3.54	218	<0.01	7.85	0.034	1510	0.117	0.333	1530	1090	<0.005	5.97		1	<0.004	<10	0.0021	5	0.58	0.0034	<0.001	<0.05	0.421	<0.02	3750	<0.01	3
SRK-VD04	9/26/2009	3.12	40300		319	trace	39000	3.2	42300	<0.5	<5	68000	913	<0.02	0.11	0.033	0.055	<0.005	<50	17.5	515	<0.1	32.1	0.11	6570	0.37	1.56	6350	4270	<0.05	23.7		<10	<0.04	<100	0.012	<10	1.2	0.015	<0.01	0.671	2.15	<0.2	15900	<0.1	3
SRK-VD05	6/10/2002	6.21	12000	13.5	15	0.17	11700	6.17	2550	160	1	13700	<2	<2	<2	<0.1	<0.05	<4	<1	0.7	442	<0.1	10.3	<0.2	243	<0.5	0.2	1880	1000	<0.3	7.2	<3	<20	<2	9.5	<0.1	<20	2.15	<2	<0.4	<0.1		<0.3	1650		2
SRK-VD05	9/12/2002	5.93	18290	4.6	62	0.2	1730	5.4	5490	119	0.7	23000	<4	<4	<4	<0.2	<0.1	<4	<2	1.1	440	<0.2	15.6	<0.2	807	<1	0.3	3170	1600	<0.6	12	<6	<40	<4	11	<0.2	<40	3	<4	<0.6	<0.2		<0.6	2850		3
SRK-VD05	9/26/2004	5.3	34600	4.2		3.5	31900	5.39	17000	127	<500	46900	<10	<10	<10	<0.5	<0.25	<10	<5	6.33	530	<0.5	28.4	1.46	3280	<2.5	<0.5	6140	3560	<1.5	20.7	<15	<100	<10	9	<0.5	<100	4.14	<10	<1.5	<0.5		<1.5	8740		3
SRK-VD05	5/17/2005	5.89	16760	2.1	310	17.1	15400	4.28	7570	81.0	<50	17500	<2.0	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	1.60	226	0.17	7.67	0.21	888	<0.50	0.16	2160	1090	<0.30	6.53	<3.0	<20	<2.0	3.67	<0.10	<20	1.51	<2.0	<0.30	<0.10		<0.30	2760		3
SRK-VD05	9/17/2005	5.37	38000	5.4	382	4.8	34300	5.29	28700	125	<50	58000	15.2	<4.0	<4.0	<0.20	<0.10	<4.0	<2.0	6.85	515	<0.20	25.8	1.34	4100	<1.0	0.79	7400	3990	<0.60	20.9	<6.0	<40	<4.0	10.5	<0.20	<40	3.51	10.3	<0.60	<0.20		2.58	10900		3
SRK-VD05	5/28/2006	6.25	18960	4.1	114	2	16600	5.92	6230	7.6	<500	18600	<4	<4	<4	<0.2	<0.1	<4	<2	1.07	336	<0.2	7.81	<0.2	1070	<1	0.27	2790	1200	<0.6	6.8	<6	<40	<4	5.0	<0.2	<40	2.30	<4	<0.6	<0.2		<0.6	2580		2
SRK-VD05	9/24/2006	5.89	21800	3		0.8	31700	5.36	14400	39.2	<1000	46200	<4.0	<4.0	<4.0	<0.20	<0.10	<4.0	<2.0	2.29	453	<0.20	17.9	<0.20	2940	<1.0	0.58	6750	2410	<0.60	16.5	<6.0	<40	<4.0	9.9	<0.20	<40	4.62	<4.0	2.96	<0.20		<6.0	6110		3
SRK-VD05	5/27/2007	6.6	5600	0.6	185	1	06920	4.98	01340	05.3	2.08	04870	0.026	<0.001	0.002	0.15	<0.001	<0.001	<0.05	0.15	081	<0.001	01.6	0.013	0230	0.01	0.07	0702	0236	0.028	01.6	<0.15	1.7	0.008	1.7	0.0012	1.85	0.64	0.0005	<0.001	<0.001		<0.001	0468		2
SRK-VD05	9/10/2007	5.69	34300	8.7	74	0.5	31500	5.69	20500	63.2	<2500	50300	<2	<0.2	<0.2	<0.1	<1	<1	<20	1.73	425	<1	19.1	0.27	2860	<0.1	<10	7350	3020	<0.1	17.3	<6	<40	<2	9.7	<0.02	<40	5.54	<0.2	<0.2	<0.2		<2	6450		3
SRK-VD05	9/18/2008	4.53	>20 000	8.3	193	9.6	43000	4.00	41600	<0.5	<5	88800	201	<0.02	0.102	0.073	0.038	<0.005	<50	13.00	603	<0.1	30.4	4.48	8350	0.71	0.86	8410	4830	<0.05	25.9		<10	0.113	<100	0.024	<10	3.71	0.011	<0.01	<0.5	0.856	<0.2	16700	<0.1	3
SRK-VD05	5/27/2009	5.37	15567	4.6	109	10	27000	4.20	19900	<0.5	<5	39000	48.8	<0.002	0.049	0.043	0.01	<0.0005	<5	4.14	382	<0.01	12.7	0.925	2930	0.225	0.46	4100	2210	<0.005	10.4		4	0.006	<10	0.0039	6	2.25	0.0063	<0.001	<0.05	0.393	<0.02	6140	<0.01	3
SRK-VD05	9/26/2009	4.89	44800		153	5.48780488	43700	3.90	41900	<0.5	<5	79000	278	<0.02	0.13	0.053	0.025	<0.005	<50	11.60	635	<0.1	31.3	3.03	8590	1.59	1.51	10000	5410	<0.05	26.2		14	<0.04	<100	0.014	<10	3.38	0.015	<0.01	<0.5	1.33	<0.2	16600	<0.1	3
SRK-VD06	6/10/2002	7.08	1233	10	106	0.25	1200	7.39	53	30	0.7	766	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.08	207	<0.01	0.1	0.01	<0.03	<0.05	0.02	54.2	4.8	<0.03	0.18	<0.3	2	<0.2	0.87	<0.01	<2	0.517	<0.2	<0.03	<0.01		<0.03	27.9		2
SRK-VD06	6/6/2003	6.68	1711	12.7	427	2	1240	6.91	56	28	<0.5	822	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.09	199	<0.01	0.06	<0.01	<0.03	<0.05	0.02	59	3.65	<0.03	0.14	<0.3	<2	<0.2	0.79	<0.01	<2	0.498	<0.2	<0.03	<0.01		<0.03	22.8		2
SRK-VD06	5/29/2004	5.89	1424	9.6	312	2	904	6.14	65.8	15	0.54	511	<0.2	<0.2	<0.2	0.059	<0.005	<0.2	<0.1	0.049	91.7	<0.01	0.069	<0.01	0.697	<0.05	<0.01	26.5	3.28	<0.03	0.105	<0.3	<2	<0.2	0.748	<0.01	<2	0.251	<0.2	<0.03	<0.01		<0.03	19.8		2
SRK-VD06	5/17/2005	6.34	1113	4.9	303	3.9	1330	7.50	69.5	16.7	<0.50	770	<0.20	<0.20	<0.20	0.022	<0.0050	<0.20	<0.10	0.082	183	<0.010	0.099	0.026	2.41	<0.050	0.017	48.0	4.78	<0.030	0.178	<0.30	<2.0	<0.20	0.648	<0.010	<2.0	0.399	<0.20	<0.030	<0.010		<0.030	27.2		2
SRK-VD06	5/28/2006	6.24	1098	3.6	126	trace	1240	6.83	99.5	7.9	<0.5	702	<0.2	<0.2	<0.2	0.019	<0.005	<0.2	<0.1	0.083	157	<0.01	0.111	0.072	7.34	<0.05	0.016	55.5	6.49	<0.03	0.227	<0.3	<2	<0.2	0.972	<0.01	<2	0.363	<0.2	<0.03	<0.01		<0.03	35.4		2
SRK-VD06	5/27/2007	6.87	721	13.1	27	trickle	0963	6.75	35.0	21.8	<0.4	543	0.004	0.0004	0.0004	0.048	<0.0002	<0.0002	<0.01	0.040	102	<0.0002	0.029	0.071	0.06	0.0008	0.011	27.6	2.41	0.0004	0.065	<0.03	0.92	0.0012	0.420	<0.00005	0.3	0.263	0.0015	<0.0002	<0.0002		<0.0002	13		2
SRK-VD07	6/10/2002	2.75	3500	15.5	498	No Flow	3420	2.79	1400	<1	0.7	2470	27.9	<0.4	<0.5	<0.02	<0.01	<0.4	<0.2	1.19	196	0.03	0.75	11.2	240	0.6	0.08	105	17.6	<0.06	1.1	<0.6	<4	<0.4	12.4	<0.02	<4	0.45	<0.4	<0.06	<0.02		<0.06	471		3
SRK-VD07	9/12/2002	2.55	20400	7.1	431	ponded	14600	2.55	16500	<1	11	19200	339	<4	19	<0.2	<0.1	<4	<2	8.5	457	0.3	6	180	3040	<1	0.5	721	232	<0.6	7	<6	<40	<4	74	<0.2	<40	0.7	<4	<0.6	<0.2		<0.6	4850		3
SRK-VD08	6/10/2002	4.1	5700	16.5	377	No Flow	5620	3.85	1840	3	0.5	5130	7	<2	<2	<0.1	<0.05	<2	<1	4.1	528	<0.1	2.1	9.2	14.8	2.5	0.1	346	122	<0.3	3.3	<3	<20	<2	11.2	<0.1	<20	0.9	<2	<0.3	<0.1		<0.3	1430		3

Sample ID	Date Sampled	pH (WTW)	Cond (uS/cm)	Temp (C)	ORP (mV)	Flow (L/min)	Cond (uS/cm)	Lab pH	Acidity (to pH 8.3) CaCO3	Alkalinity-Total CaCO3	Chloride Cl	Sulphate SO4	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level						2	0.01	1	0.5	0.5	0.5	0.002	0.0001	0.0002	0.01	0.00001	5E-06	0.01	0.00002	0.05	0.0001	0.00003	0.0005	0.0002	0.0002	0.003	0.1	0.005	0.00005	0.00002	0.03	0.05	0.0002	0.05	0.000005	2	0.3	0.0001	0.00001	0.0002	2E-06	0.0002	0.005	0.0001	
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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	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	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
SRK-VD09	6/11/2002	5.64	4600	6.3	145	Trace Flow	4610	6.36	764	11	0.8	3550	<0.4	<0.4	<0.4	<0.02	<0.01	<0.6	<0.2	0.83	444	<0.04	1.72	0.37	35.3	0.1	0.12	371	79.7	<0.06	2.8	<2	11	<0.4	4.3	<0.02	<4	1.78	<0.4	<0.06	<0.02		<0.06	499		3
SRK-VD09B	9/12/2002	4.45	5400	5.4	341	slight	5190	4.18	836	14	<0.5	4370	0.4	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.56	467	<0.02	2.45	0.07	25.5	0.7	0.19	514	126	<0.06	3.7	<0.6	10	<0.4	5.9	<0.02	5	1.9	<0.4	<0.06	<0.02		<0.06	474		3
SRK-VD09C	6/6/2003	3.67	4790	17.9	537	2	4620	3.74	860	<1	<0.5	4340	2.5	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.73	446	<0.02	2.2	0.69	68.5	1.8	0.18	464	103	<0.06	3.5	<0.6	9	<0.4	8.7	<0.02	<4	1.59	<0.4	<0.06	<0.02		<0.06	474		3
SRK-VD09C	9/14/2003	4.54	4740	0.7	522	Trace	4550	5.03	581	12	0.8	3810	1.5	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.45	402	<0.02	1.84	0.67	0.12	1	0.19	487	99.6	<0.06	2.8	<0.6	7	<0.4	5.4	<0.02	4	1.85	<0.4	<0.06	<0.02		<0.06	352		3
SRK-VD09	5/30/2004	3.5	4560	13.9	610	4	4490	3.71	875	<1	<0.5	3690	14.9	<0.6	<0.6	<0.03	<0.015	<0.6	<0.3	0.727	406	<0.04	2.67	1.33	20.7	1.84	0.188	365	96	<0.09	3.4	<0.9	6.7	<0.6	9.84	<0.03	<6	1.27	<0.6	<0.09	<0.03		<0.09	508		3
SRK-VD09	9/27/2004	3.99	5320	10	491	Trace	5110	4.85	709	4.6	<10	4240	4.04	<0.4	<0.6	<0.02	<0.01	<0.4	<0.2	0.486	443	<0.02	2.18	0.256	22.7	1.32	0.189	528	124	<0.06	3.14	<0.6	9.5	<0.4	7.5	<0.02	4.6	1.79	<0.4	<0.06	<0.02		<0.2	429		3
SRK-VD09	5/19/2005	3.84	4460	13.7			4500	3.26	1040	<2.0	<10	3850	29.6	<0.20	<0.20	<0.010	0.0064	<0.20	<0.10	0.701	384	<0.010	2.12	3.30	115	1.57	0.168	361	89.3	<0.030	2.53	<0.30	5.2	<0.20	11.1	<0.020	3.0	1.17	<0.20	<0.030	<0.010		<0.030	474		3
SRK-VD09	9/17/2005	3.6	5140	10.1	523	Trace	4800	4.22	755	3.3	<10	4290	6.53	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.693	488	<0.020	2.16	0.697	0.979	1.13	0.294	604	124	<0.060	3.43	<0.60	12.1	<0.40	9.47	<0.020	5.2	2.23	<0.80	<0.060	<0.020		<0.060	435		3
SRK-VD09	5/28/2006	4.42	5450	1.1	218	trace	5320	4.14	1200	<2	<10	4430	31.8	<0.4	<0.4	<0.02	<0.01	<0.4	<0.2	0.844	396	<0.02	3.19	2.54	108	1.59	0.193	566	119	<0.06	3.75	<0.6	11.8	<0.4	8.56	<0.02	7.0	1.45	<0.4	<0.06	<0.02		<0.06	583		3
SRK-VD09	5/27/2007	3.66	6870	18.9	477	trace	9760	3.33	2500	<0.5	<2	6670	92.7	<0.001	0.009	0.005	0.021	<0.001	<0.05	1.340	402	<0.001	5.20	5.70	230	2.06	0.320	603	169	0.018	5.06	<0.15	04.7	0.026	23.60	0.0025	3.7	1.24	0.0044	<0.001	<0.001		<0.001	903		3
SRK-VD09	9/18/2008	4.17	8490	6.8	248	2	6900	4.10	3370	<0.5	<0.5	6390	62.4	<0.0004	0.0199	0.0146	0.0099	<0.0001	<1	0.968	428	<0.002	3.26	0.13	400	1.31	0.314	626	135	<0.001	4.41		03.0	0.0068	16.30	0.0005	1.3	1.58	0.00286	<0.0002	<0.01	0.121	<0.004	674	<0.002	3
SRK-VD09	5/27/2009	4.73	4995	15.2	174	trace	5000	3.40	1430	<0.5	0.7	4200	53.2	<0.001	0.018	0.013	0.0112	<0.0003	<3	0.687	405	<0.005	2.25	1.96	089	1.70	0.247	363	089	<0.003	3.02		02.7	0.004	12.70	0.0006	1.8	1.26	0.0034	<0.0005	<0.03	0.126	<0.01	501	<0.005	3
SRK-VD09	9/28/2009	4.63	6070	0.5	214	1	5930	4.30	1310	<0.5	<0.5	5700	20.4	<0.002	0.017	0.011	0.004	<0.0005	<5	0.574	468	<0.01	2.60	0.06	136	1.14	0.228	697	156	<0.005	4.00		05.0	<0.004	15.70	<0.0005	2.0	1.74	0.0031	<0.001	0.094	0.0483	<0.02	672	<0.01	3
SRK-VD10	5/29/2004	5.85	2470	2.2	305	4.2	5490	5.71	1370	88.2	2.11	4700	<1	<1	<1	<0.05	<0.025	<1	<0.5	0.28	476	<0.05	2.89	<0.05	106	<0.25	<0.05	499	138	<0.15	3.89	<1.5	16	<1	8.38	<0.05	13	1.52	<1	<0.15	<0.05		<0.15	707		3
SRK-VD10	9/26/2004	5.65	13920	2.8	275	3.3	13500	4.95	5390	28	<250	15300	<2	<2	<2	<0.1	<0.05	<2	<1	<0.1	530	<0.1	7.19	<0.3	1100	<0.5	0.24	1820	1130	<0.3	4.85	<3	28	<2	12.6	<0.1	<20	2.12	<2	<0.3	<0.1		<1	1750		3
SRK-VD10	5/17/2005	5.48	6740	2.8	305	7.2	6430	3.98	2460	<2.0	<25	5420	0.60	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.218	431	0.053	3.12	<0.020	191	<0.10	0.063	565	201	<0.060	4.02	<0.60	10.0	<0.40	9.13	<0.020	10.2	1.29	<0.40	<0.060	<0.020		0.068	811		3
SRK-VD10	9/17/2005	5.66	16060	5.9	409	3.5	14800	5.49	5900	84.0	<10	15000	<2.0	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	<0.10	469	<0.10	8.70	<0.10	1380	<0.50	0.23	2260	1310	<0.30	5.73	<3.0	<20	<2.0	13.4	<0.10	<20	1.97	3.0	<0.30	<0.10		0.80	2540		3
SRK-VD10	5/28/2006	5.75	7090	4.3	110	3	07910	6.47	4250	14.2	<50	07310	<1	<1	<1	<0.05	<0.025	<1	<0.5	0.182	449	<0.05	4.17	<0.05	0342	<0.25	0.10	0879	0338	<0.15	4.97	<1.5	14	<1	10.8	<0.05	15	1.67	<1	<0.15	<0.05		<0.15	1300		3
SRK-VD10	5/27/2007	5.44	6500	5.9	265	1.5	08740	4.12	2150	<0.5	<4	06340	2.25	<0.001	0.005	0.01	<0.001	<0.001	<0.05	0.27	372	<0.001	3.24	0.032	0180	0.004	0.08	0619	0186	0.021	4.17	<0.15	12.3	0.014	10.4	0.0029	13.3	1.49	0.0	<0.001	<0.001		<0.001	958		3
SRK-VD10	9/18/2008	5.48	12740	7	37	3	16000	4.70	8800	<0.5	<5	19650	0.506	<0.004	<0.004	0.015	<0.002	<0.001	<10	0.303	508	<0.02	8.66	<0.01	1830	0.003	0.14	1990	1120	<0.01	6.61		14	0.019	<20	0.004	<2	2.15	0.0	<0.002	<0.1	0.003	<0.04	2920	<0.02	3
SRK-VD10	5/27/2009	5.32	5915	2.8	107	trickle	07400	4.50	3560	<0.5	<0.5	07000	0.787	<0.002	0.006	0.019	<0.001	<0.0005	<5	0.15	301	<0.01	3.42	0.007	0549	0.0018	0.09	0790	0354	<0.005	3.26		7	0.005	<10	<0.0005	9	1.09	0.0	0.001	<0.05	0.0037	<0.02	975	<0.01	3
SRK-VD10	9/26/2009	5.64	20800		78	0.5	20500	4.10	10600	<0.5	<5	30000	5.8	<0.01	0.018	0.021	<0.005	<0.003	<30	0.154	497	<0.05	11.30	<0.03	2490	0.005	0.40	3070	1650	<0.03	7.65		21	<0.02	<50	<0.003	10	1.89	0.0	<0.005	0.763	0.005	0000	3840	<0.05	3
SRK-VD12	5/17/2005	3.64	3190	5.6	647	1.8	3240	3.03	734	<2.0	<5.0	2230	17.2	<0.20	0.43	0.022	0.0064	<0.20	<0.10	0.210	287	0.013	1.30	2.60	104	0.263	0.077	243	33.6	<0.030	1.66	0.32	4.0	<0.20	5.53	<0.010	2.6	0.928	<0.20	<0.030	<0.010		<0.030	211		3
SRK-VD12	9/18/2008	2.04	18170	8.1	416	Trace	23000	2.60	24600	<0.5	10	37800	494.0	0.108	47.80	0.028	0.0820	<0.003	<30	6.510	368	0.573	29.50	62.40	4000	0.204	1.050	3330	856.0	<0.03	38.00		<5	0.1	<50	0.021	<5	1.520	0.002	0.006	0.364	0.914	0.211	6730	<0.05	3

Appendix B
Thermal and Pore Gas Monitoring Results

Appendix B.1 Waste Rock Oxygen Monitoring Data

Location: Faro
Hole ID: 60M1

Depth	Date / Port Label	19-Feb-03 Oxygen (%)	7-Jun-03 Oxygen (%)	16-Sep-03 Oxygen (%)	27-Apr-04 Oxygen (%)	7-Jun-04 Oxygen (%)	30-Sep-04 Oxygen (%)	19-May-05 Oxygen (%)	16-Sep-05 Oxygen (%)	27-Feb-06 Oxygen (%)	26-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	1-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 Oxygen (%)	28-Sep-10 Oxygen (%)	17-Feb-11 Oxygen (%)
0.7	0.7A	19.6	17.1	18.9	19.2	7.6	18.6	10.1	5.7	19.6	15.5	15.4	20	17	13	19.3	16.8	6.9	11.9	7.4	blocked	17.1	19.8
0.7	0.7B	19.6	16.9	18.9	19.2	7.5	18.6	10	5.2	19.6	15.9	15.3	20	17	13.6	19.2	17.1	6.8	11.8	7.6	blocked	17.2	19.7
1.4	1.4A	19.7	17.1	19.1	18.3	6.7	18.6	10.6	5.1	19.7	14.9	16	20	17	10.4	19.7	16.9	6.3	10.5	7.1	17.2	17.5	19.8
1.4	1.4B	19.7	17.5	19.1	18.3	6.6	18.6	10.6	5.1	19.8	14.9	16	20	17	10.4	19.7	16.9	6.3	10.5	7.1	17.3	17.4	19.8
2.8	2.8A	18.5	15.7	15.3	17.2	5.9	15.1	8.1	1.8	17.4	13.7	12.1	17.9	15.8	8.9	17.4	15.4	-	5.6	5.4	14	14.8	17.1
2.8	2.8B	18.5	15.7	15	17.3	5.9	14.7	7.8	2.2	17.4	13.5	12	17.8	15.7	8.9	17.5	15.3	4	5.7	4.8	13.7	14.5	17.2
5.6	5.6A	14.9	15.7	13.4	15.5	6	14.5	6.4	3.9	17.5	12.4	12.4	18.2	15.3	9.7	17.8	15.4	7.2	4.8	4.8	15.6	15.3	17.6
5.6	5.6B	15.6	15.5	13.2	15.2	6.3	14.3	5.7	4	17.5	12.3	12.1	18.3	15.5	9.7	17.9	15	7.4	4.7	5.3	15.5	15.1	17.7
10	10B[(1)]	17	12.2	11.1	14	9.2	10.7	7.7	4.2	13.6	10.4	10.4	14.9	17.8	8.4	14.3	15.9	6.9	9.6	9.3	10.3	15	16.7
10	20[(1)]	16.8	12.2	11.1	14.1	9.3	10.7	7.3	3.7	13.2	11.4	10.6	14.9	16.2	7.8	14.3	16.8	6.9	10.1	8.4	10.1	14.6	13.5
20	10A[(1)]	10	5.5	5.8	6.4	3.7	6.9	2.8	1.7	15.1	3.8	9.3	16.2	3.9	9.2	15.7	12	11	3.9	12.5	14.9	13.5	13.5
30	30	20.9	9.5	8.4	8.9	9	8.5	9.7	11.3	blocked	11.2	10.1	10.5	11.2	10.3	11.8	12.1	11.4	12	11.7	11.6	11.8	12.2
40	40	19.8	19.8	19	19.5	19.3	19.3	19.5	19.2	19.3	19.3	19.4	19.5	19.4	19.4	19.9	20.5	19.4	18.8	19.1	19.5	17.5	19.1
60	60	19.8	19.4	17.6	18.8	18.9	18.3	18.6	18.1	19.6	18.4	18.1	20.2	17.6	17.8	19.4	20.1	18.7	17.6	18.2	19.7	19	19.7

Note: (1) Port 20 and Port 10 A labels reversed

Location: Faro
Hole ID: 30M1

Depth	Date / Port Label	19-Feb-03 Oxygen (%)	7-Jun-03 Oxygen (%)	16-Sep-03 Oxygen (%)	27-Apr-04 Oxygen (%)	7-Jun-04 Oxygen (%)	30-Sep-04 Oxygen (%)	19-May-05 Oxygen (%)	16-Sep-05 Oxygen (%)	27-Feb-06 Oxygen (%)	26-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	1-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 Oxygen (%)	28-Sep-10 Oxygen (%)	17-Feb-11 Oxygen (%)
0.7	0.7A	19.4	16.6	16.8	17.4	16.4	19	17.8	16	19.4	16.8	16.9	20.9	16.9	15.5	18.3	18.1	-	18.2	18.2	blocked	blocked	blocked
0.7	0.7B	19.4	16.6	16.8	plugged	16.4	19	17.8	15.9	19.4	16.8	16.9	20.9	16.9	15.5	18.4	18.2	17.9	18.2	18.1	blocked	blocked	19.7
1.4	1.4A	19.3	16.6	16.7	plugged	16.4	19	17.8	16	blocked	16.8	16.9	19.9	17	15.6	18.4	18.6	18.5	17.7	18	blocked	blocked	blocked
1.4	1.4B	19.3	16.6	16.8	plugged	16.4	19	18	16	19.4	16.8	16.9	20	17	15.5	18.4	18.6	-	17.8	18	blocked	blocked	blocked
2.8	2.8A	19.3	16.6	16.8	17.3	16.6	19	17.9	16.1	blocked	17	17	20	17.2	15.6	18.4	18	18.5	19.4	18.1	blocked	blocked	blocked
2.8	2.8B	19.3	16.6	16.8	17.3	16.6	19	17.9	16.1	19.5	17	17	20.8	17.2	15.6	18.4	18	-	19.9	18.1	18.8	blocked	19.5
5.6	5.6A	19.7	17	17.6	17.3	17.9	19.4	17.8	16.4	19.6	17.4	16.8	20.2	18	15.9	18.7	17.8	18.9	19.4	18.5	19.1	17.5	blocked
5.6	5.6B	19.7	17	17.6	plugged	17.9	19.4	17.8	16.4	19.7	17.4	16.8	20.1	18	15.9	18.7	17.7	18.8	19.8	18.5	blocked	17.5	19.8
10	10A	19.4	16.1	17.6	17	16.9	19.1	16.2	16.3	19.5	16.1	16.8	19.8	16.4	15.7	18.4	16.7	21	16.8	18.5	18.6	17.5	19.6
10	10B	19.4	16.1	17.7	plugged	16.9	19.1	16.2	16.3	19.5	16.1	16.8	19.8	16.4	15.7	18.4	16.7	21	16.8	18.5	18.6	17.4	19.6
20	20	20.2	16.1	19.7	plugged	16.4	19.3	14.8	18.4	19.9	17.2	20	20.2	17.4	18.1	17.7	16.6	21	15.2	19.3	blocked	19.2	20.2
30	30	12.9	7.4	12.7	10.1	6.7	9.1	not recorded	9.2	13.3	7.4	13.1	12.2	7.8	10.6	9.1	7.4	17.9	5.1	7.4	blocked	6.1	9.7

Notes : '*' indicates suspect value
-grey cells indicate monitoring points that were found to be plugged during February 2006 or subsequent monitoring, or that were considered suspicious given later readings.

Location: Grum
Hole ID: 10M2

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Depth	Port Label	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)
0.7	0.7	20.6	20.1	20.6	Not recorded	20.6	20.6	20.3	17.7	20.6	20.4	20.6	20.4	20.4	20.1	20.6	20.5	20.3	18.2	19.3	20.5
1.4	1.4A	14.8	10	10.2	Not recorded	*0.2	14.3	10.3	14.1	7.8	0	15.2	4.8	12.3	17.2	17.7	11.7	16.1	10.5	17.5	14.6
1.4	1.4B	10	8.8	9.8	Not recorded	20.3	13.2	10	14	7.3	blocked			blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
2.8	2.8A	0.6	14.7	2.5	Not recorded	*0.2	3.5	2.3	3.1	0.3	blocked			blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
2.8	2.8B	3.4	11.6	2.5	Not recorded	3.5	3.5	2.1	3.1	0.3	blocked			blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
5.6	5.6A	1	10.9	12.7	Not recorded	10.2	10.4	7.5	12.4	0.5	7.6	11.8	1.6	blocked	14.6	4.1	9.6	13.8	blocked	12.6	1.2
5.6	5.6B	1	11.1	12.7	Not recorded	10.2	10.4	7.5	12.4	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
10	10	1.3	15.1	12.3	Not recorded	15.2	9.6	not recorded	13.1	1	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked

Location: Grum
Hole ID: 10M3

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Depth	Port Label	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)
0.7	0.7A	20.6	20.6	20.5	20.6	20.7	20.7	20.6	20.7	20.6	20.9	20.7	19.2	20.7	20.7	20.8	20.7	20.9	20.8	20.8	20.9
0.7	0.7B	20.6	20.6	20.5	20.6	20.7	20.7	20.6	20.7	20.6	20.9	20.7	19.3	20.7	20.7	20.9	20.7	20.9	20.8	20.9	20.9
1.4	1.4A	19	18.9	20.1	20.5	20.1	19.7	20.2	18.7	18.3	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
1.4	1.4B	18.9	18.7	20.1	plugged	20	19.5	20.2	18.8	18.2	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
2.8	2.8A	16.3	16	13.7	16.1	16.6	13.1	20.4	14.4	15.7	15.5	14.7	16.2	blocked	15.3	16.3	blocked	14	blocked	blocked	16.1
2.8	2.8B	15.9	16	13.7	16.2	16.6	13.2	17.2	14.4	15.6	15.5	14.7	16.4	blocked	15.2	16.3	blocked	14	17	15.7	16.1
5.6	5.6A	13.7	15	14.6	plugged	15.8	14.2	18.8	17.1	blocked		15.7	15.7	blocked	19.3	21	blocked	18.1	18.2	16.9	blocked
5.6	5.6B	13.7	15	14.6	14.4	15.8	14.2	16	17	blocked	16	15.7	15.7	blocked	19.2	21	blocked	18	18.1	16.9	blocked
10	10A	16	13.5	14.5	15.7	14.1	14.4	20.9	17.3	blocked	15.2	15.5	17.9	blocked	19.7	21	blocked	17.1	18.1	16.7	blocked
10	10B	16	14.1	14.5	15.7	*18.2	14.4	20.9	17	blocked		blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked

Location: Grum
Hole ID: 30M3

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Depth	Port Label	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)
0.7	0.7A	18.4	20.7	20.5	plugged	20.7	20.3	20.6	20.5	19.2	not recorded	20.8	20.1	20.8	20.4	20.3	20.8	20.4	20.7	19.2	20
0.7	0.7B	18.4	20.7	20.5	20.6	20.7	20.4	20.6	20.5	19.3	not recorded	20.8	20.1	20.8	20.4	20.3	20.9	20.4	20.8	19.3	20
1.4	1.4A	19.1	20.8	20.5	plugged	20.7	20.3	20.7	20.5	19.2	not recorded	20.7	20.1	20.8	20.3	20	20.8	20.3	20.8	19.1	20
1.4	1.4B	19	20.6	20.4	20.4	20.7	20.3	20.6	20.2	19.1	not recorded	20.7	20.1	20.8	20.3	20	20.8	20.3	20.7	19.1	19.9
2.8	2.8A	17.5	20.5	19.8	20.2	20.5	19.9	20.4	19.8	18.7	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
2.8	2.8B	17.5	20.5	19.8	20.2	20.5	19.9	20.4	19.7	18.7	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
5.6	5.6A	15.6	20.5	19.3	20.2	20.5	19.5	20.3	19.7	17.2	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
5.6	5.6B	15.5	20.5	19.3	20.2	20.5	19.5	20.3	19.7	17.2	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
10	10A	5.7	15.6	5.4	plugged	18	0	12.1	11.2	9.2	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
10	10B	5.5	15.9	5.4	0	18	0	12.1	11.4	9.3	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
20	20A	4.9	4	0	0	0.3	0.4	1.3	0	3.3	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
20	20B	4.9	3.7	0	0	0.3	0.4	1.3	0	3.4	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
30	30A	3.7	0.6	0.4	plugged	0.9	1	0.2	1.1	4.6	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
30	30B	3.8	0.6	0.4	0	0.9	1	0.2	1.1	4.6	not recorded	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked

Notes : '*' indicates suspect value
-grey cells indicate monitoring points that were found to be plugged during February 2006 or subsequent monitoring, or that were considered suspicious given later readings.

Location: Vangorda
Hole ID: 10M4

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10	30-Sep-10	17-Feb-11
Depth	Port Label	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)
0.7	0.7	20.6	18.6	19.6	19	18.4	19.8	18.3	18.3	20.8	19.1	19.6	20.8	19.5	18.7	20.5	18.9	18	19.4	19	blocked	19.4	blocked
1.4	1.4	20.9	20.3	20.6	19.9	20.3	20.7	20.1	19.7	20.9	20	20.5	20.8	20.3	20	20.4	20.2	20.5	20.4	20.4	blocked	20.6	20.8
2.8	2.8A	21	20.7	20.8	20	20.7	20.8	20.3	19.6	20.9	20	20.7	20.8	20.6	20.3	20.4	20.4	21	20.6	20.1	20.9	20.9	20.8
2.8	2.8B	21	20.7	20.8	20	20.7	20.8	20.3	19.6	20.9	20.1	20.7	20.8	20.6	20.3	21	20.4	21	20.6	20.1	20.9	20.8	20.8
5.6	5.6A	20.8	20.6	20	19.8	20.7	20.1	20.1	18	20.8	19.4	20.1	20.6	20.6	20	20.9	20.5	20.3	20.6	18.8	20.9	20.5	20.1
5.6	5.6B	20.8	20.7	20	19.8	20.7	20.1	20.1	18	20.8	19.4	20.1	20.6	20.6	20	20	20.5	20.3	20.6	18.8	blocked	20.5	20.1
10	10	20.2	19.3	19.3	17.9	20.1	19.4	Not recorded	17.3	20.5	19.1	19.8	19.7	20.5	19.9	19.5	20.1	20.3	20.8	17.9	20.6	19.1	blocked

Location: Vangorda
Hole ID: 30M4

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10	30-Sep-10	17-Feb-11
Depth	Port Label	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)	Oxygen (%)
0.7	0.7A	0	19.9	0.8	2.8	19.3	*2.2	17.4	1.7	0	9.8	9.2	0	9.2	17.5	0.04	19.8	17.9	18.8	0.3	0.5	10.5	blocked
0.7	0.7B	0	20	1.1	3.1	19.5	*2.7	17.5	7.9	blocked	10	9.2	0.1	9.2	17.4	0.04	19.8	18	18.8	0.3	0.5	9.5	blocked
1.4	1.4A	0	17.4	0	0.1	14.6	0	6.4	0	blocked	0.5	0.2	*20.9	0.2	12.8	0	17.2	6.3	10	0	0	0.2	blocked
1.4	1.4B	0	17.6	0	0.1	14.7	0	8	0.3	blocked	0.5	0.3	0.2	0.3	12.5	0	15.8	6.7	10	0	0	0.1	blocked
2.8	2.8A	0	0	0	0	0.1	0	0	0	0	0	0	0.2	0	0.1	0	**0	2.7	0	0	0	0	0
2.8	2.8B	2.4	15.4	2.3	plugged	*18.6	*8.7	20.8	20.8	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked
5.6	5.6A	2.4	2.8	2.3	2.1	1.7	1.8	2.3	1.4	2.9	1.4	3.3	0.5	3.3	4.2	0.07	2.6	4.8	0.5	0.2	blocked	0.1	blocked
5.6	5.6B	2.3	1	2.3	2.1	1.7	1.8	2.3	1.4	3	1.4	3.4	0.5	3.4	3.9	0.07	3.7	4.8	0.6	0.2	blocked	0.1	blocked
10	10A	2.3	6.9	2.2	plugged	*4.4	*2	*2.4 to 17.4	20.9	8.4	5.1	9	10.1	9	5.9	6.1	7.3	blocked	blocked	blocked	5.6	blocked	blocked
10	10B	8.3	6.9	6.4	plugged	*7.5	*6.9	8.1	4.3	8.4	5.2	8.9	10.1	8.9	5.8	6.1	7.3	8.3	5.1	4.3	5.6	4.5	blocked
20	20	0.2	0	0	0	0	0	0	0	0.4	0.09	0	1.3	0	0.2	0.05	**0	6.1	1.2	0	0	0	0.1
30	30	14.9	0.4	4.4	2.7	0.7	4.9	0.2	0	14.3	1.3	4	14.5	4	0.4	Not recorded	**0	7.2	0	1.1	12	2.8	14.2

Notes : '*' indicates suspect value
-grey cells indicate monitoring points that were found to be plugged during February 2006 or subsequent monitoring, or that were considered suspicious given later readings.

Location: Faro
Hole ID: 60M1

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	26-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	1-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10	28-Sep-10	17-Feb-11
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	0	3.2	13.5	9.4	4.7	15	7.8	12.2	12.2	0.5	10.1	11.6	-1.2	10.9	13.1	3.4	12	10.4	11.7	10.0	1.4	10.0	2.5
1.4	-0.1	7.9	14.3	15.6	7.5	14.9	13.6	13.4	15.8	5.9	10.8	15.1	4.2	11	16.2	7.1	12.6	13.5	11.2	14.1	5.1	14.2	6.5
2.8	0.1	16.9	18.6	23	14.9	17.8	22.5	16.7	22.7	15.6	15.7	22.1	14	14.9	21.5	14.6	15.6	19.3	14.3	20.4	13.4	20.4	13.9
5.6	0	29.2	28.1	30.7	27.2	26.6	30.7	26.4	29.2	27.5	26.4	29	26.6	24.7	27.4	25.6	24.2	26.6	23.2	26.1	23.2	25.4	23.5
10	-0.1	41.8	41.3	40.6	40.1	39.8	39.3	39.2	38.4	38.8	38.4	37.8	38.1	37.4	36.5	36.5	35.7	36.2	33.7	32.4	32.7	31.3	31.4
20	0.1	49.1	49	48.8	48.2	48.1	48.3	49	48.7	48.7	48.8	48.4	47.7	47.6	47.1	45.9	45.6	47.3	39.6	42.1	42.1	41.3	40.4
30	-0.1	36	36.3	36.4	36.8	36.8	37.2	37.4	37.7	37.9	38	38.1	38.2	38.1	38.1	38.1	37.9	40.0	38	38.1	38.1	37.7	37.5
40	-0.1	24.2	24.6	24.9	25.5	35.6	25.9	26.3	26.6	27	27.2	27.5	27.8	27.9	28.1	28.4	28.4	28.9	28.9	29.0	29.5	29.6	29.7
60	-0.1	6.3	6.5	7	7	7.1	7.7	7.7	8.3	8.3	8.5	9.1	9	9.2	9.9	9.9	9.9	10.9	10.6	11.2	11.6	12.4	12.5

Location: Faro
Hole ID: 30M1

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	26-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	1-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10	28-Sep-10	17-Feb-11
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	0.1	1.7	7.4	11.2	3.4	11.2	9.6	8.2	12.6	2.8	5.9	11.5	2.3	6.6	13.5	4.8	9.6	11.9	8.1	12.3	4.4	11.8	4.7
1.4	-0.1	4	7.2	12.9	5.4	12.9	12.3	7.8	13.8	5.1	6	13.2	4.8	6.5	14.7	6.8	9.2	13.5	7.9	14.1	6.5	14	6.9
2.8	0.1	8.5	8.5	14.5	9.4	14.5	15.6	10.3	16.1	10.4	9.6	16	10	9.6	16.5	11.3	11.4	15.9	10.9	17.0	11.2	17.1	11.6
5.6	0.1	17.3	16.8	18.6	18.3	18.6	20.1	19	20.4	19.9	19.1	20.7	20	19.2	20.7	20.4	19.9	21.8	19.6	21.4	20.4	21.6	20.7
10	-0.1	27	27.4	27.4	28.4	27.4	28	28.8	28.5	29.3	29.3	29.1	29.7	29.5	29.2	30	29.8	30.2	29.6	28.9	29.8	29.2	29.8
20	0.2	34.5	35.5	35.8	34.7	35.8	36	36.3	37.1	35.8	36	37.5	35.4	36.3	37.8	35.6	36.8	38.0	36.7	37.1	36.0	37.5	35.6
30	0	34.6	34.2	34.7	34.6	34.7	35.2	35	35.8	36.3	36.1	36.6	37.2	37	37.1	37.4	37.1	38.0	36.3	37.4	38.2	38.1	38.9

Appendix B.2 Waste Rock Temperature Monitoring Data

Location: Grum
Hole ID: 10M2 Outside PVC

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	0.1	-4.8	5	4.1	-0.6	5.3	2.9	3.9	8.7	
1.4	0.2	-0.2	-0.2	6.6	-0.3	-0.1	5.4	2.4	10	terminal box corroded
2.8	0.2	1.2	0.3	6.2	0.7	0.5	6	1.6	8.3	
5.6	0	3	2	3.9	2.4	2.1	5.2	2.7	5.8	
10	0.1	3.3	3.1	2.9	3.3	3.2	3.1	3.8	4.4	

Location: Grum
Hole ID: 10M2 Inside PVC

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	0.1	-3.3	3.7	4.9	Not recorded	3.6	3.2	2.3	7.6	-1.4	1.8	6.2	-2.8	1.7	8.8	-0.8	6	6.2	0.6	5.4	-0.4
1.4	0.2	-0.3	-0.4	6.6	Not recorded	-0.3	5.1	0.7	8.2	0.1	0.4	6.8	-0.3	-0.1	8.7	0.1	3.6	6.6	0.1	7.1	0.2
2.8	0.2	1.2	0.3	6	Not recorded	0.6	6.6	1.4	7.8	1.8	1.2	7.1	1.4	0.9	7.3	1.6	1.8	6.6	0.7	7.4	1.8
5.6	0	3.1	2	3.8	Not recorded	2.1	5.1	2.6	5.1	3.5	2.6	4.9	3.2	2.4	4.1	3.3	2.5	4.7	2.4	5.0	3.4
10	0.1	3.4	3.1	3	Not recorded	3.2	3.1	3.7	3.6	4.1	4	3.8	4	4	3.7	4	3.9	3.7	3.8	5.7	4.1

Location: Grum
Hole ID: 10M3

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	0.2	-4.9	6.1	6.5	-0.9	7.3	4.2	3.8	8.5	-7.5	2.2	7	-7.4	3	9.8	9.8	5.7	6.9	4.3	6.3	-4.1
1.4	0.2	-1.9	2.1	7.9	-1	3	5.9	0.3	8.9	-3.6	-0.1	7.3	-4.2	0	9.7	9.7	1.9	7.3	0	7.2	-3.2
2.8	0.2	1.1	0	6.8	0.2	0.3	7.1	0.9	8	0.7	0.2	6.7	0.4	0	7.3	7.3	0.4	6.6	-0.2	6.7	0.0
5.6	0	3.8	2.2	4.8	2.6	2.2	5.8	2.6	5.3	3.4	2	4.5	3	1.7	4.1	4.1	2	4.7	1.4	4.2	2.5
10	0.1	5	4.6	4.3	4.5	4.3	4.3	4.7	4.5	4.9	4.5	4.1	4.4	4.2	3.9	3.9	4.1	4.0	3.8	3.6	4.0

Location: Grum
Hole ID: 30M3

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	-0.1	-4.6	5.2	7	-1.3	5.5	4.6	3	8.1	-6.6	1.7	6.4	-7.9	2.3	9.4	-4.9	4.5	6.6	2.5	6.2	-4.1
1.4	0	-1.4	1.8	8	-1	2.1	6.5	0.2	8.8	-2.4	0.3	7.1	-3.7	-0.2	9.7	-3	1.7	7.3	-0.3	7.4	-2.3
2.8	0.1	2	1	7.5	1.2	1.4	8	1.8	8.6	2.1	1.4	7.9	1.5	0.9	8.5	1.1	1.6	7.3	0.5	7.7	1.4
5.6	-0.1	6.1	4.7	6.9	5.4	4.7	7.8	5.1	7.6	6.4	5.1	7.4	6.3	5	7.3	6.3	5.1	7.3	4.2	7.0	5.9
10	0.1	9.8	9.4	9.6	10.3	9.3	9.5	10.1	10.2	10.8	10.4	10.3	10.7	10.8	10.6	11	10.5	10.4	9.8	9.8	10.5
20	0.1	11.8	12	11.8	12.3	12.2	12.2	12.3	12.2	12.3	12.7	12.5	12.5	13.1	13	12.9	12.9	12.9	12.8	12.6	12.8
30	0.1	10	9.9	9.8	10.1	10	10	10.3	10.1	10.4	10.5	10.4	10.6	10.9	10.8	11	11	10.9	11	10.9	11.2

Location: Vangorda
Hole ID: 10M4

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10	30-Sep-10	17-Feb-11
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	0.1	-0.7	13	10.2	3.3	14	6.8	10.5	12	-6.8	8.9	10	-6.7	8.6	12.8	-3.7	19	8.6	8.1	8.0	-3.9	7.3	-5.1
1.4	0	3.7	12.9	15.3	5.6	12.7	11.5	11.1	15.1	-0.9	8.6	12.5	-2.8	7.1	14.4	-2.4	8.5	10.4	5.8	10.3	-2.5	10.4	-2.1
2.8	0.2	7.5	12.7	18.4	9	12.2	15.3	11.5	18.5	3.8	9.8	15.3	0.9	7.4	15.6	0.2	6.9	12.4	4.8	12.7	0.4	13	0.7
5.6	-0.1	16.7	15.2	22.6	14.1	14.4	20.8	13.8	20.8	11.8	12.6	18.2	8.4	9.2	15.7	6.5	7.1	12.9	5	13.5	6.1	13.9	6.8
10	0	31.6	29.3	29.5	27	27.3	27.6	27.2	27.6	25.8	23.7	23.1	21	18.7	18.8	16.5	15.4	16.5	15.8	17.8	16.3	17.3	16.6

Location: Vangorda
Hole ID: 30M4

	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10	30-Sep-10	17-Feb-11
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)
0.7	-0.1	-5.3	8.6	7.4	-1.3	10.4	5.4	6.7	9.8	-6.6	5.6	8.3	-6.3	5.1	11.7	-3.4	8	8.2	5.5	7.9	-3.0	7.4	-4.5
1.4	0	-1.3	6	10.3	-0.6	7.2	8.2	5.4	11.4	-1.5	3.9	10.1	-2.3	3.2	12.9	-1.6	6.5	9.5	3.4	10.3	-1.1	10.4	-1.2
2.8	0	3.7	4.5	11.7	3.1	5.5	11.9	4.9	12.6	4	4	12.1	3.5	3.3	13	3.6	5.5	11.4	3.7	12.4	4.0	13	4.5
5.6	-0.1	11.7	9.9	12.5	10.7	10.2	14	10.8	13.4	12.1	10.7	13.5	11.9	10.4	13	11.9	10.7	13.5	10.7	14.2	12.9	14.9	13.4
10	-0.1	16	16	15.6	16.5	16.4	16.2	16.7	16.4	17.3	17.2	16.8	17.7	17.5	17	17.9	17.6	17.9	17.9	17.5	18.6	18.1	18.7
20	-0.2	17.3	17.6	17.6	18.4	18.5	18.5	18.9	19	19.4	19.7	18.8	20.4	20.4	20.7	21.2	21	21.8	21.4	21.6	22.0	21.9	22.1
30	0	13.5	13.8	13.8	14.7	14.7	15	15.7	15.8	16.3	16.5	16.5	17.1	17.3	17.4	17.9	18	18.6	18.7	18.9	19.2	19.3	19.6

Appendix C
Seepage Checklist

ID	Location	# of Samples (by type)											Included in Current Program	Trends or Recent Changes*	Figure
		n/a	1	1a	1b	2w	2ow	2o	3w	3ow	3o	Total			
SRK-FD01	Ore and Low Grade Ore Stockpiles						18					18	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD02	Upper Parking Lot Dump		2									2	-	n/a	
SRK-FD04	Oxide Fines Stockpile										4	4	-	n/a	
SRK-FD05	Toe of Northeast Dump		16									16	Yes	none	
SRK-FD06	Toe of Northeast Dump		10									10	Yes	none	
SRK-FD07	Toe of Northeast Dump		1									1	-	n/a	
SRK-FD08	East Main Dump					1						1	-	n/a	
SRK-FD09	Ore and Low Grade Ore Stockpiles; West Main Dump						1					1	-	n/a	
SRK-FD10	Ore and Low Grade Ore Stockpiles; West Main Dump						2					2	-	n/a	
SRK-FD12	Ore and Low Grade Ore Stockpiles; West Main Dump						9			4		13	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD13	Intermediate Dump								13			13	Yes	Decreasing pH; couple high SO4, Zn results	
SRK-FD14	Ramp Zone Dump		12									12	Yes	Seasonally increasing SO_4, Zn	
SRK-FD16	Upper Northwest Dump		9									9	-	none	
SRK-FD17	Upper Northwest Dump		2									2	-	n/a	
SRK-FD18	Upper Northwest Dump		16									16	-	One very low pH, high SO4 + Zn in 2009	
SRK-FD19	Lower Northwest Dump					17						17	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD20	Faro Creek Diversion								4			4	-	n/a	
SRK-FD21	Northeast Dumps towards Pit					7			6			13	Yes	none	
SRK-FD22	Northeast Dumps towards Pit					2			1			3	-	n/a	
SRK-FD23	Northeast Dumps towards Pit					4			9			13	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD24	Northeast Dumps towards Pit					16			2			18	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD26	Northeast Dumps towards Pit		15			1						16	-	Decreasing pH; increasing SO4, Zn	
SRK-FD27	Northeast Dumps towards Pit					3			1			4	-	n/a	
SRK-FD30	West Main Dump					6			5			11	Yes	Dec. pH, Inc. Zn (Dec. SO4)	
SRK-FD31	Ore and Low Grade Ore Stockpiles; West Main Dump					12			4			16	Yes	Fluctuaing pH; increasing SO4, Zn	
SRK-FD32	Mill						1					1	-	n/a	
SRK-FD33	Mill										6	6	Yes	none	
SRK-FD34	Mill										2	2	-	n/a	
SRK-FD35	Mill						2				2	4	-	n/a	
SRK-FD36	West Main Dump								2			2	-	n/a	
SRK-FD37	Medium Grade Stockpile										10	10	Yes	Increasing SO4, Zn	
SRK-FD38	Ore and Low Grade Ore Stockpiles						1				1	2	-	n/a	
SRK-FD40	Faro Valley Dump					4			12			16	-	none	
SRK-FD44	Intermediate Dump		1			4						5	Yes	n/a	
SRK-FD46	Oxide Fines Stockpile, Mill										1	1	-	n/a	
SRK-FD47	Intermediate Dump								3			3	-	n/a	
SRK-FD48	Intermediate Dump					2						2	Yes	n/a	
SRK-FD49	Intermediate Dump					2			1			3	Yes	n/a	
SRK-FD50	Zone II East		2									2	-	n/a	
SRK-FD51	Northeast Dumps towards Pit		1			2						3	Yes	n/a	
SRK-FD52	Intermediate Dump					2						2	Yes	n/a	
SRK-FD53	Intermediate Dump					1						1	Yes	n/a	
SRK-FD54	Intermediate Dump					1			1			2	Yes	n/a	
SRK-FD55	Intermediate Dump					1						1	Yes	n/a	
SRK-FD56	Intermediate Dump								1			1	Yes	n/a	
SRK-GD01	Southeast toe of Grum Dump, east of Grum Sulphide Waste				17							17	-	none	4
SRK-GD02	Southeast toe of Grum Dump, east of Grum Sulphide Waste				3							3	-	n/a	
SRK-GD04	South toe of Grum Dump, downslope of Grum Sulphide Waste				1							1	-	n/a	
SRK-GD05	South toe of Grum Dump, downslope of Grum Sulphide Waste				16							16	Yes	Increasing SO4, Zn	
SRK-GD06	South toe of Grum Dump, downslope of Grum Sulphide Waste				8							8	Yes	Increasing SO4, Zn	
SRK-GD07	Northeast toe of Grum Dump			5	1							6	-	n/a	
SRK-GD08	North toe of Grum Dump			1								1	-	n/a	
SRK-GD09	Northwest toe of Grum Dump			1								1	-	n/a	
SRK-GD10	Northwest toe of Grum Dump			1								1	-	n/a	
SRK-GD11	East toe of Grum Dump				5	2						7	Yes	none	
SRK-GD12	Northwest toe of Grum Dump			5								5	-	n/a	
SRK-GD13	Northwest toe of Grum Dump			15								15	Yes	Dec. pH, Inc. SO4 + Zn	3
SRK-GD16	South toe of Grum Dump, downslope of Grum Sulphide Waste					5						5	Yes	n/a	
SRK-GD17	Southwest toe of Grum Dump, west of Grum Sulphide Waste					3						3	Yes	n/a	
SRK-GD18	Northwest toe of Grum Dump			5								5	Yes	Inc. SO4	
SRK-GD19	East toe of Grum Dump					3			1			4	Yes	n/a	
SRK-GD20	East toe of Grum Dump					3						3	Yes	n/a	
SRK-GD21	South toe of Grum Dump, downslope of Grum Sulphide Waste				9							9	Yes	Inc. SO4?	
SRK-GD22	Southwest toe of Grum Dump upslope of riprap quarry				2							2	Yes	n/a	
SRK-GD23	East side of Grum Ore Transfer Pad			1								1	Yes	n/a	
SRK-GD24	Downslope of Grum Sulphide Waste					1						1	Yes	n/a	
SRK-VD01	South toe of Vangorda Waste Dump					6			1			7	Yes	none	
SRK-VD02	Drain No. 2					8						8	-	Inc. SO4?	
SRK-VD03	Equivalent to routine monitoring station V30 (Drain No. 3)					16			2			18	-	Dec. pH, Inc. SO4 + Zn	
SRK-VD04	Equivalent to routine monitoring station V32 (Drain No. 5)								15			15	-	Increasing SO4, Zn	
SRK-VD05	Equivalent to routine monitoring station V33 (Drain No. 6)					3			9			12	-	Decreasing pH; increasing SO4, Zn	
SRK-VD06	Lift upslope of Drains No. 5 and 6					6						6	Yes	none	
SRK-VD07	East toe of Vangorda Waste Dump								2			2	-	n/a	
SRK-VD08	East toe of Vangorda Waste Dump								1			1	-	n/a	
SRK-VD09	East toe of Vangorda Waste Dump								11			11	Yes	none	
SRK-VD10	Drain No. 4								9			9	-	none	
SRK-VD12	South toe of Vangorda Dump								2			2	Yes	n/a	

* Based on a subjective evaluation, but are changes of more the 25% relative to previous findings, or trends over time that are more than a 25% change over 2 or more years