Faro Mine Complex 2009 Waste Rock and Seepage Monitoring Report

Task 4.5 - FINAL

Prepared for:

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Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

Task 4.5 - FINAL

Yukon Government,
Assessment and Abandoned Mines

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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 2009 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. Seepage at X23, however, has demonstrated increasing trends in sulphate and zinc concentrations since 2008 with the highest concentrations at this station being reported in 2009 (10000 and 1480 mg/L, respectively). 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 2009 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.

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 2009. 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 2009 seepage monitoring data, a review of trends in seepage concentration over time, and the results of the 2009 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 2009 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 or Oakton pen meters. 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.

Duplicates and field blanks were collected as a check on the quality of the field methods and laboratory results.

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.

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.

2.2 Pit Seepage Surveys

Monitoring of seepage and wall rock runoff in the Faro, Grum and Vangorda pits was carried out in 2003 and 2004 as part of studies relating to future pit lake water quality and treatment requirements.

Starting in 2005, seepage monitoring carried out in pits as part of the ARD monitoring program. Pit seep locations are shown in Figures 3 through 5. Samples were collected and analyzed in the manner described previously for waste rock seeps (Section 2.1).

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

In the past, erratic results from some individual monitoring ports have raised the question of whether the ports were blocked or pinched. Prior to sampling in 2009, a hand-operated vacuum pump was used to test whether pore gas was able to move freely through each monitoring tube. Those tubes which allowed a vacuum to develop were inferred as being blocked in some fashion, and the previous results from the blocked ports are considered questionable.

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 Omega thermistor reader measured resistance across each monitoring point and converted this measured resistance to temperature. The calculated temperature was then displayed on a digital readout, and was manually recorded. During September 2009, the resistance on each channel was read with an ohmmeter and resistance was converted to temperature according to the formula supplied by the manufacturer.

In the 2009 field program, monitoring of pore gas oxygen content and waste rock temperature was carried out in March, June and September 2009.

3 Results

3.1 Waste Rock Seepage Surveys

The results of the 2002 through 2009 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 Pit Seepage Surveys

Locations of the 2009 pit seepage monitoring stations are shown in Figures 3 to 5. Results of the 2003 to 2009 pit seepage surveys are included in Appendix B. The purpose of these surveys has been to provide inputs for updates to water quality predictions (such as those presented in SRK 2004b) and to monitor changes in pit seepage water quality over time. Pit seep locations are less consistent than waste rock seep locations, necessitating the establishment of several unique stations to sample available flows. However, there are some stations that have been sampled over several monitoring rounds at locations where seepage has been consistently available. In some areas, for comparison of year-over-year seepage chemistry results, it is necessary to group stations where seepage water interacts with similar pit wall rock types. Pit seepage chemistry is monitored for input to assessments of pit lake chemistry, and the monitoring results are not discussed further here.

3.3 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 8 through 19. The time series shown in these figures provide a graphical summary of the data that allows trends to be easily identified.

3.4 Temperature and Oxygen Monitoring of Waste Rock

The results of temperature and oxygen monitoring are provided in Appendix C, along with a memo documenting the results of a review of the monitoring record carried out as part of the 2009/10 ARD Monitoring.

Vacuum testing of all individual sampling ports has indicated that several monitoring ports are blocked. For the Faro and Vangorda monitoring locations, several blocked ports had a paired port at the same elevation that remained functional at the time of testing. However, since 2006 nearly all of the ports at the Grum monitoring locations have been blocked. All thermal monitoring instruments continue to function adequately.

Thermal conditions at both Faro and Vangorda continue to evolve, with evidence of both warming over time at the boreholes installed in bulk waste rock, and cooling over time at the boreholes installed in high-sulphide waste rock. Thermal conditions at all monitoring depths in the three instrumented boreholes at Grum have been stable in recent years. At all monitoring locations, seasonal temperature fluctuations are observed down to the 5.6m deep monitoring points, but no seasonal fluctuation is observed at the 10 m monitoring points.

Oxygen concentrations show a greater degree of seasonal variability below 5 m depth than do temperature conditions.

- At Faro, both borehole locations show signs of partial depletion of oxygen, however depletion is insufficient to limit oxidation rates.
- At Grum, early results from >20 m depth within the sulphide cell (30M-3) showed that oxygen was likely depeleted enough to limit oxidation rates; no data is available from 2006 on, and data is limited from the other two instrument Grum boreholes.
- At Vangorda, the 10 m borehole in high sulphide waste (10M-4) has had uniformly high (near-ambient) oxygen concentrations over the entire monitoring record. At the 30 m borehole in bulk phyllite, the distribution of oxygen is complex; two zones show a high degree of oxygen depletion (as measured at the 2.8 m and 20 m monitoring ports), with zones of only partial depletion indicated by measurements at the 10 m port and seasonally at the 30 m port.

4 Discussion

4.1 2002 to 2009 Waste Rock Seepage Surveys

4.1.1 Sampling Conditions

The spring waste rock survey took place during the last week of May, and corresponded with the freshet. One new seep was identified in May 2009.

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. A total of three new seeps were identified during the September 2009 survey. These were Stations FD53, FD54 and FD55 located along the toe of the Intermediate Dump (see Figure 1 for sample locations).

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 this year 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 and 2 and Appendix D 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 that 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 D. 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.

Upper Northwest Dump (SRK-FD18)

Seepage collected from SRK-FD18 has consistently been Type 1 water. The sample collected at this station in May 2009, however, had a field pH of 3.2, a dissolved sulphate concentration of 720 mg/L and a dissolved zinc concentration of 100 mg/L. Results from the September 2009 sample had returned to more typical values (pH of 7.3, 13 mg/L sulphate, and 0.12 mg/L zinc). The May 2009 sample appears to be an outlier or possibly a labelling issue.

Lower Northwest Dump (SRK-FD19)

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 and zinc concentrations were reported in 2009 (5800 and 200 mg/L, respectively).

Northeast Dumps Towards Pit (SRK-FD23, 24 and 26)

Seepage collected at SRK-FD26 has typically been Type 1 water except for one sample collected in May 2007 which was classified as Type 2 with sulphate and zinc concentrations of 1350 and 20 mg/L, respectively. Sulphate and zinc concentrations have returned to typical levels since then (<1000 and 5 mg/L, respectively); however, the last 3 samples collected at this station (May 2008, 2009 and September 2009) had lower pH values (5.4 to 6.6) than previously observed at this station. Station SRK-FD26 is equivalent to routine monitoring station SP5/6 (Section 4.2.1).

Seepage from SRK-FD24 has usually been classified as Type 2 water, but occasionally has demonstrated Type 3 water characteristics. Sulphate and zinc concentrations appear to be demonstrating slightly increasing trends over time.

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 2009 samples, however, was lower, ranging from 5.7 to 6.4. Sulphate concentrations at this station have demonstrated a slightly increasing trend over time with the highest concentrations observed in 2009 samples (3400 to 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.

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. 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).

Station SRK-FD31 was also originally classified as a Type 2 seep, but has developed into a Type 3 seep since 2008. The lowest pH (5.5) and highest sulphate and zinc concentrations (10000 and 1280 mg/L, respectively) for this station were recorded for 2009 samples.

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.

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 May 2009. pH, sulphate and zinc concentrations appear to have recovered.

Medium Grade Stockpile (SRK-FD37)

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 67200 and 34800 mg/L, respectively). Concentrations in 2009 samples ranged from 16000 to 41000 mg/L sulphate and 8100 to 20000 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	720	140	120	6.3	24	0.036	0.0047	0.0058	0.008	0.081	0.0079	0.15	0.052	3.1
	Median	7.1	12	190	1.3	590	130	110	4.4	7.9	0.004	0.0035	0.0025	0.004	0.014	0.00028	0.069	0.052	2.4
	Min	5.4	0.5	40	0.5	210	54	27	2.2	2.2	0.0016	0.00046	0.000056	0.0011	0.002	0.000033	0.00015	0.014	0.045
	Max	8.2	51	320	2.7	2700	280	400	24	150	0.35	0.02	0.029	0.06	0.89	0.15	0.69	0.14	14
	N	56	56	56	53	56	56	56	56	56	20	22	24	23	18	21	56	32	56
2 - waste	Average	6.6	91	120	1.3	2200	280	350	7.8	14	0.42	0.043	0.11	0.099	2.7	0.04	9.3	0.3	44
	Median	6.7	64	51	1.1	1300	210	160	7.6	5.4	0.099	0.031	0.061	0.038	0.3	0.014	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	3.2	11000	710	2300	25	160	3.6	0.17	1.4	0.7	20	0.16	88	2.2	410
	N	70	70	70	60	70	70	70	66	70	32	58	66	55	52	34	70	69	70
2 - ore + waste	Average	6.5	410	200	9.7	3700	480	490	12	42	0.21	0.11	0.38	0.19	35	0.041	36	0.55	220
	Median	6.5	340	220	11	4000	500	520	13	42	0.24	0.047	0.42	0.038	23	0.011	47	0.6	190
	Min	5.7	22	13	0.7	950	220	38	5.7	7	0.002	0.01	0.015	0.01	0.05	0.0002	0.84	0.05	14
	Max	7.3	2200	370	25	6300	620	870	29	79	0.38	0.65	1.1	2.4	140	0.23	85	1.4	660
	N	42	42	42	32	42	42	42	42	42	14	41	42	34	41	14	42	40	42
3 - waste	Average	4.1	1200	13	3	2500	170	260	6.3	8.9	24	1.2	0.52	3	200	0.38	22	0.92	260
	Median	3.8	240	2	0.7	1200	120	130	5.1	4	7.5	0.12	0.24	0.94	24	0.24	6.5	0.32	58
	Min	2.1	27	0.5	0.46	69	6.5	3.8	0.01	1.6	0.059	0.009	0.03	0.0029	0.042	0.00034	0.16	0.05	2.2
	Max	7.6	20000	200	48	28000	560	2100	20	110	410	47	6.3	61	4300	1.6	320	12	4500
	N	55	56	56	47	56	56	56	45	56	53	54	55	56	55	43	56	55	56
3 - ore + waste	Average	6	3500	73	8.2	7700	530	1100	17	55	1.6	0.49	1.6	2.1	230	0.015	110	1.8	950
	Median	5.8	1900	45	8.4	7600	540	1100	17	55	0.73	0.31	1.5	1.1	240	0.0013	110	1.7	990
	Min	5.5	900	1.4	3.1	5500	460	730	14	40	0.037	0.2	0.92	0.027	63	0.00026	76	1.1	580
	Max	6.9	15000	310	11	10000	570	1300	20	67	6.2	1.1	2.2	7	390	0.084	140	2.6	1300
	N	8	8	7	8	8	8	8	8	8	6	8	8	8	8	7	8	8	8
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	2.9	15000	330	400	4	14	130	7	3.4	55	1200	1.6	160	3.5	6300
	Min	0.9	210	0.5	0.5	700	80	39	0.94	2	2.4	0.082	0.08	0.12	1.3	0.36	5.7	0.08	99
	Max	6	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.

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	12	200	1.5	470	120	97	3.7	6.1	0.0031	0.0024	0.00055	0.002	0.0087	0.00021	0.072	0.044	3.1
	Median	7.2	10	210	1.3	420	120	87	3.9	6.3	0.0023	0.0018	0.00013	0.0017	0.007	0.00024	0.005	0.038	2.1
	Min	6.9	3	85	0.62	210	54	45	2.2	2.2	0.0016	0.00046	0.000056	0.0013	0.002	0.000033	0.00015	0.014	0.53
	Max	7.9	31	320	2.5	1200	200	210	5.2	9	0.006	0.0057	0.0028	0.004	0.02	0.00037	0.49	0.12	14
	N	24	24	24	24	24	24	24	24	24	11	11	11	11	9	11	24	14	24
SRK-FD14	Average	7.3	8.3	110	0.83	1500	170	220	14	84	0.0084	0.0089	0.008	0.015	0.29	0.0032	0.17	0.067	3.6
	Median	7.4	8	120	0.5	1400	170	220	14	120	0.0073	0.0053	0.0076	0.0043	0.13	0.0038	0.11	0.057	2.5
	Min	6	0.5	40	0.5	510	72	88	7	13	0.003	0.0042	0.0002	0.0011	0.008	0.00019	0.005	0.038	1
	Max	8.2	24	160	2.5	2700	280	400	24	150	0.016	0.02	0.02	0.06	0.89	0.0048	0.5	0.14	11
	N	11	11	11	9	11	11	11	11	11	4	5	6	5	4	4	11	11	11
SRK-FD19	Average	7	140	360	1.9	4000	570	630	9.9	20	0.21	0.041	0.11	0.086	0.4	0.0072	23	0.45	79
	Median	6.9	110	400	2	3900	590	610	10	21	0.035	0.02	0.066	0.02	0.12	0.007	19	0.4	59
	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	5800	710	920	12	26	0.55	0.15	0.46	0.42	2.9	0.014	43	0.75	200
	N	16	16	16	11	16	16	16	16	16	5	9	16	10	11	6	16	16	16
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	2.8	35000	280	600	#N/A	6.7	280	26	9.7	320	3200	2.1	360	9	14000
	Min	0.9	11000	0.5	0.5	13000	220	240	#N/A	2	71	10	3.2	120	1000	0.47	130	3.2	6100
	Max	5.1	53000	2	5	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	10	10	10	10	10	7	10	10	10
SRK-FD40	Average	4.3	310	7.7	0.86	770	68	76	1.5	3.2	13	3.2	0.22	1.3	43	0.24	4.1	0.18	70
	Median	3.5	150	1.7	0.5	660	68	71	1.3	3	8.3	0.07	0.17	0.65	29	0.15	3.2	0.16	47
	Min	2.7	43	0.5	0.46	330	23	29	1.1	1.6	0.48	0.02	0.019	0.01	0.064	0.08	0.037	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	15	15	15	13	15	15	15	5	15	12	15	12	15	11	12	15	15	15

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.

Table 4: Summary of 2009 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
SRK-FD12	Ore and Low Grade Ore Stockpiles; West Main Dump	Type 2ow (9/12), Type 3ow (3/12)	Decreasing pH; increasing SO_4, Zn
SRK-FD13	Intermediate Dump	Type 3w	Decreasing pH; couple high SO_4, Zn results
SRK-FD18	Upper Northwest Dump	Type 1	One very low pH, high SO_4 + Zn in 2009 (Likely erroneous data)
SRK-FD19	Lower Northwest Dump	Type 2w	Decreasing pH; increasing SO_4, Zn
SRK-FD23	Northeast Dumps towards Pit	Type 3w (7/11), Type 2w (4/11)	Decreasing pH; increasing SO_4, Zn
SRK-FD24	Northeast Dumps towards Pit	Type 2w (14/16), Type 3w (2/16)	Decreasing pH; increasing SO_4, Zn
SRK-FD26	Northeast Dumps towards Pit	Type 1 (15/16), Type 2w (1/16)	Decreasing pH; increasing SO_4, Zn
SRK-FD30	West Main Dump	Type 2w (5/10), Type 3w (5/10)	Decreasing pH, increasing. Zn, slight decrease in SO_4
SRK-FD31	Ore and Low Grade Ore Stockpiles; West Main Dump	Type 2w (11/15), Type 3w (4/15)	Decreasing pH; increasing SO_4, Zn
SRK-FD37	Medium Grade Stockpile	Type 3o	Increasing SO_4, Zn

4.1.3 Grum Waste Rock Dumps - 2009

One new seep (GD24) was identified in 2009. GD24 is located at the toe of a small (~3m) lift of mixed till and waste rock containing visually-identifiable sulphide mineralization.

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 I 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 4100 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.

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 D. All but one station at Grum (SRK-GD05/06) either showed no appreciable trends over time, or did not have sufficient data to allow an evaluation of trends. Results for station SRK-GD05/06 are summarized in Table 6, and are discussed as follows.

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	440	170	88	3	3.4	0.0069	0.000098	0.0024	0.0019	0.13	0.00017	0.095	0.089	0.053
	Median	7.4	9	340	1.3	430	170	72	3	3	0.0045	0.000059	0.0012	0.0015	0.036	0.00019	0.007	0.087	0.016
	Min	6.7	1	110	0.5	7	42	23	1.8	2	0.002	0.00002	0.0001	0.0008	0.008	0.000052	0.0014	0.016	0.005
	Max	7.9	40	470	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	33	33	33	30	33	33	33	22	33	8	7	8	8	8	8	33	16	33
1b	Average	7.4	24	510	1.9	1500	350	260	7.1	11	0.003	0.002	0.0089	0.0066	0.16	0.0046	0.11	0.4	3.8
	Median	7.6	22	540	2	1400	350	250	7.2	11	0.003	0.0019	0.0044	0.0022	0.019	0.0014	0.056	0.35	3
	Min	6.3	0.5	260	0.5	330	120	70	1.8	2	0.001	0.00028	0.0004	0.0014	0.006	0.00052	0.0016	0.086	1.1
	Max	8.3	69	700	3	2900	530	550	12	18	0.007	0.0054	0.05	0.041	0.8	0.072	1	0.92	17
	N	57	57	57	44	57	57	57	57	57	23	23	29	27	21	23	57	57	57
2	Average	7	87	320	1.7	1800	330	260	7.1	13	0.027	0.043	0.14	0.17	8.1	0.019	3	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	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.

SRK-GD05/06

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.

Table 6: Summary of 2009 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

4.1.4 Vangorda Waste Rock Dumps - 2009

No new seeps were identified at Vangorda in 2009. 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.

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 D. Most stations at Vangorda 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 8, and are discussed as follows.

SRK-VD02

Station SRK-VD02 is located at Drain No. 2. Sulphate concentrations at this station ranged from 1830 to 2700 mg/L from 2002 to 2007; however, sulphate concentrations were higher in 2009 samples (no samples were collected in 2008) ranging from 2800 to 3700 mg/L. The September 2009 sample also had the lowest recorded pH for this station (pH 5.7).

SRK-VD03

Station SRK-VD03 is equivalent to routine monitoring station V30 (Drain 4). Sulphate concentrations at this station have typically ranged from 3300 to 5300; however, the September 2008 sample and both 2009 samples from this station had sulphate concentrations ranging from 5300 to 7500 mg/L. Dissolved zinc concentrations demonstrate a similar trend. Zinc concentrations at this station typically ranged from 220 to 450 mg/L (with one outlier of 610 mg/L recorded in May 2004); however, zinc concentrations in September 2008 and both 2009 samples ranged from 490 to 860 mg/L.

SRK-VD04

Station SRK-VD04 is equivalent to routine monitoring station V32 (Drain 5). Selected results for this station are provided in Figure 17. Sulphate and zinc concentrations have demonstrated increasing trends at this station. The highest sulphate concentration (68000 mg/L) for this station was recorded in September 2009. The highest zinc concentrations (about 16000 mg/L) for this station were reported in September 2008 and 2009. pH at this station has been relatively stable, ranging from 2.9 to 3.8. (The May 2009 sample had an uncharacteristically high pH of 4.8 and lower than normal sulphate and zinc concentrations).

SRK-VD05

Station SRK-VD05 is equivalent to routine monitoring station V33 (Drain 6). Selected results for this station are provided in Figure 18. pH at this station was lower in 2008 and 2009 compared to previous years, ranging from 4.5 to 5.4. Samples collected in September 2008 and 2009 also had much higher sulphate and zinc concentrations than have been observed previously (79000 to 88800 mg/L and 16600 to 16700 mg/L, respectively).

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	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	6100	530	1200	17	16	0.1	0.28	5	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	1700	0.98	1500	9.9	4700
	Median	4.5	4400	2	0.5	15000	430	1300	6	4	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.

Table 8: Summary of 2009 Trends for Vangorda Seeps

Station ID	Location	Seep Type	Trends or Recent Changes
SRK-VD02	Drain No. 2	Type 2w	Possible increase in SO_4 (2009 samples)
SRK-VD03	Equivalent to routine monitoring station V30 (Drain 3)	Type 2w (18/18), Type 3w (2/18)	Possible increase in SO_4 and Zn (2008 and 2009 samples)
SRK-VD04	Equivalent to routine monitoring station V32 (Drain 5)	Type 3w	Increasing SO_4 and Zn
SRK-VD05	Equivalent to routine monitoring station V33 (Drain 6)	Type 3w (9/12), Type 2w (3/12)	Decreasing pH; increasing SO_4 and Zn

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 9. Graphs of key parameters are provided in Figures 8 through 13. 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 and 2009 and consistently higher zinc, cadmium, nickel and cobalt concentrations throughout 2009 compared to previous years. This reflects the gradual transition from Type 2 to Type 3 seepage chemistry from an area with mixed ore and waste rock sources.

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 GLL. A summary of seepage chemistry at these stations is provided in Table 10. Graphs of key parameters are provided in Figures 14 and 15. 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 2009 Adaptive Management Plan (AMP) Event #4 report (SRK 2010).

Sulphate, calcium and magnesium concentrations at station V2A continued on a multi-year upward trend through 2009. The highest observed zinc concentration also occurred in 2009, although the range of zinc concentrations measured was broader than in 2008 and the lowest concentrations in 2009 were below those of the previous year.

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 GLL. A summary of seepage chemistry at these stations is provided in Table 10. Graphs of key parameters are provided in Figures 16 to 19. 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 9: Summary of Faro Routine Monitoring Sites

Station	Location	Figure	Period	Long-term and Seasonal Trends	Recent Changes	Current Range (2007 to 2009)					
						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	8	1986 to present	– sulphate increased in stages, reaching 5000 to 7000 mg/L in 2004 – pH decreased from 7 to 6.5 in 2004 – changes correspond to change from Ca to Mg dominated	Slight drop in pH, and increase in SO_4 and metal concentrations. Two 2009 samples with uncharacteristically low pH (2.9 to 3.2)	6.0	7.0	5000	9000	200	1000
X26	Discharge from dewatering sump in the Zone II Pit (operated seasonally)	9	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	None present.	6.0	6.5	2000	3000	50	100
FCO and A30 (SRK-FD40)	Upstream (FCO) and downstream (A30) of Faro Valley Dump	10	1989 to present	– highly variable seepage chemistry – lower pH and much higher SO_4 and metal concentrations at downstream location (A30)	SO_4 and metals appear to have reached peak concentrations in 2008 and have begun to decrease slightly in 2009.	5.5 (FCO), 2.6 (A30)	7.8 (FCO), 3.6 (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	11	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 and decreasing trend in pH	6.4	7.7	400	1000	2	6
NE1, NE2 and W5 (SRK-FD05/6)	Toe of Northeast Dump	12	1989 to present	– consistently neutral pHs, moderate SO_4 and low metal concentrations	None present	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)	0.01 (NE1), 0.005 (NE2), 8 (W5)
W8 and W10	Upper Guardhouse Creek	13	1989 to present	– consistently neutral pHs, low SO_4 and low metal concentrations	None present	7.0	8.5	2.5	7	0.002	0.04

Table 10: 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).	14	1988 to present	– increase in SO_4 and most metals until 2006 then relatively stable (Zn and Ni concentrations at V15 continue to increase). – much higher concentrations at V15 compared to V2. – consistently neutral pH except for brief period of pH <7 in 2007/2008.	Recovery (increase) of pH at V15; increasing Zn and Ni concentrations at V15.	6.3 (V15), 7.5 (V2)	8.1 (V15), 8.4 (V2)	1000 (V15), 500 (V2)	2500 (V15), 1000 (V2)	0.4 (V15), 0.005 (V2)	4 (V15), 0.1 (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.	15	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 increasing trend.	Jump in SO_4 and metal concentrations in 2008 but remained stable/decreased through 2009.	7.7	8.7	600	1300	0.1	2
Vangorda	V30	Drain 3 (SRK-VD03)	16	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)	17	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	3.7	55000	80000	8000	11000
	V33	Drain 6 (SRK-VD05)	18	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.	19	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.	7.5	8.4	10	300	0.002	0.04

4.3 Temperature and Oxygen Monitoring of Waste Rock

For all monitoring 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 temperature trends, 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. At Grum, temperatures appear to be stable and indicate that oxidation rates remain constant.

Oxygen monitoring apparatus have been less robust, and roughly half of the monitoring ports have been blocked over time. In particular, the majority of the monitoring ports in the three Grum Dump boreholes have become blocked, with only ports down to 1.4 m depth remaining functional. Similar plugging ports have been observed at other mine sites where oxygen concentrations were monitored. However, at Faro and Vangorda, oxygen data provide useful insight into both movement of air through the waste rock and relative rates of consumption of oxygen. Seasonal monitoring has been important to demonstrate the changes in air flow through waste rock under summer and winter temperatures; in particular, the results from 60M-1 at Faro show evidence of stronger convection during the cold months.

5 Conclusions

Seeps associated with the Faro Waste Rock Dumps showed a wide range of pH and zinc concentrations. The highest zinc concentrations (up to 34,800 mg/L) have been associated with the ore and oxide fines stockpiles and the mill area. High zinc concentrations were also associated with the Main Dump sulphide cell (up to 1000 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. Seeps draining to the southeast had zinc concentrations generally in the range of 2 to 7 mg/L and elevated sulphate concentrations in 2009. 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 2009. Over the 2002 to 2009 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 1200 mg/L.

Grum waste rock seepage chemistry at most locations appears to have gradually increasing sulphate concentrations and stable or gradually increasing zinc concentrations. Isolated ephemeral seeps with high zinc concentrations (e.g. SRK-GD16 (28 mg/L, May 2009)) 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.

This report, "**1CY001.033 – Faro Mine Complex- 2009 Waste Rock and Seepage Monitoring Report: Task 4.5 – FINAL",** was prepared by SRK Consulting (Canada) Inc.

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6 References

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SRK Consulting 2006b. Anvil Range Mining Complex- 2005 Waste Rock and Seepage Monitoring Report: 2005/06 Task 18. Report prepared for Deloitte & Touche Inc. (Interim Receiver for Anvil Range Mining Corporation) on behalf of Faro Mine Closure Planning Office. July 2006.

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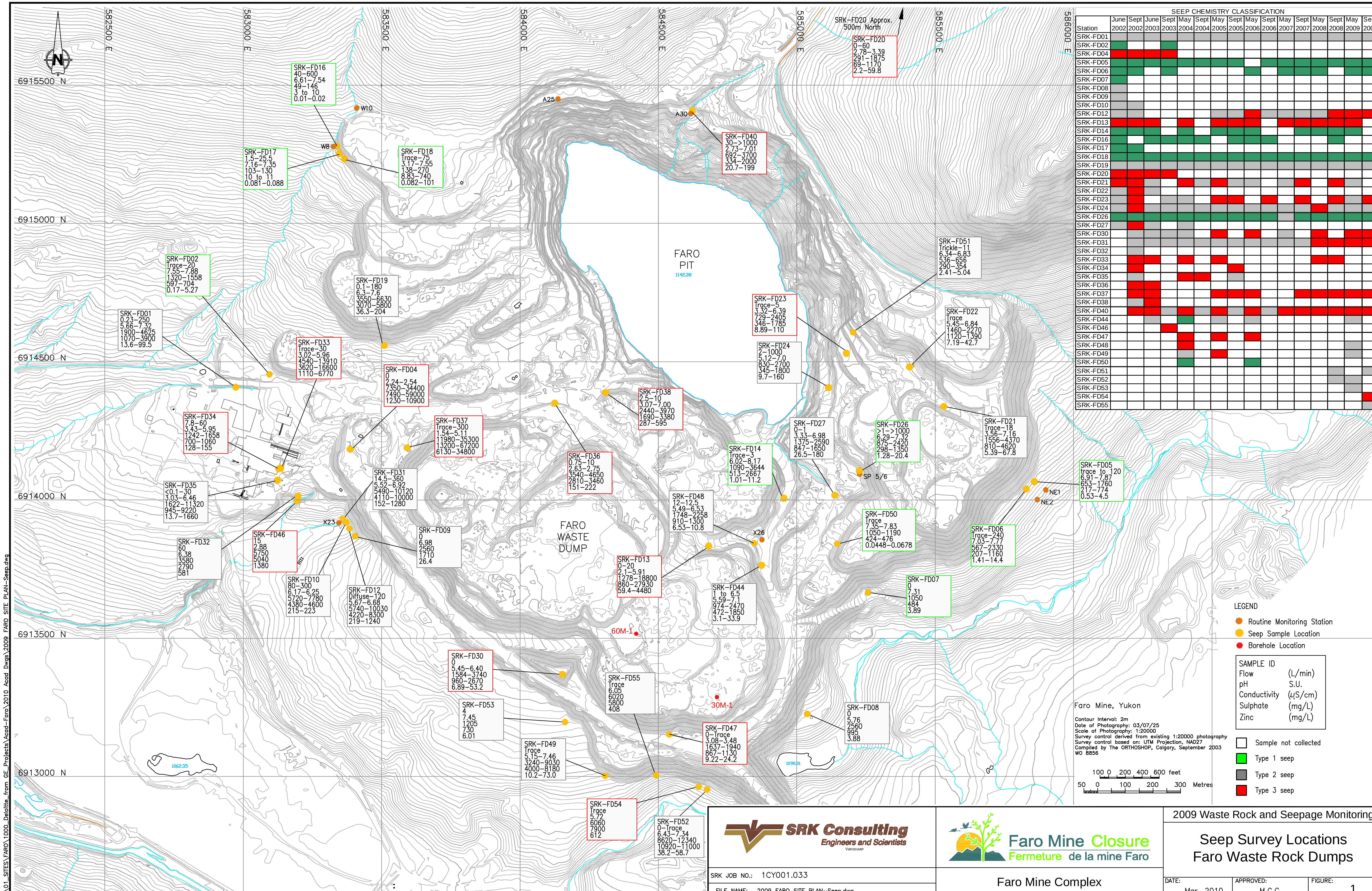
Figures



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
SRK-FD01
SRK-FD02
SRK-FD04
SRK-FD05
SRK-FD06
SRK-FD07
SRK-FD08
SRK-FD09
SRK-FD10
SRK-FD12
SRK-FD13
SRK-FD14
SRK-FD16
SRK-FD17
SRK-FD18
SRK-FD19
SRK-FD20
SRK-FD21
SRK-FD22
SRK-FD23
SRK-FD24
SRK-FD26
SRK-FD27
SRK-FD30
SRK-FD31
SRK-FD32
SRK-FD33
SRK-FD34
SRK-FD35
SRK-FD36
SRK-FD37
SRK-FD38
SRK-FD40
SRK-FD44
SRK-FD46
SRK-FD47
SRK-FD48
SRK-FD49
SRK-FD50
SRK-FD51
SRK-FD52
SRK-FD53
SRK-FD54
SRK-FD55
582500 E
583000 E
583500 E
584000 E
584500 E
585000 E
585500 E
586000 E
6915500 N
6915000 N
6914500 N
6914000 N
6913500 N
6913000 N
N
FARO PIT
FARO WASTE DUMP
SRK-FD20 Approx. 500m North
SRK-FD20 0-60 2.78-3.39 291-1875 69-1170 2.2-59.8
SRK-FD16 40-600 6.61-7.54 49-146 3 to 10 0.01-0.02
SRK-FD17 1.5-25.5 7.16-7.35 103-130 10 to 11 0.081-0.088
SRK-FD18 Trace-75 3.17-7.55 138-270 8.83-740 0.082-101
SRK-FD40 30->1000 2.73-7.01 692-3700 334-2000 20.7-199
SRK-FD02 Trace-20 7.55-7.88 1320-1558 597-704 0.17-5.27
SRK-FD01 0.23-250 5.66-7.32 1900-4625 1070-3900 13.6-99.5
SRK-FD19 0.1-180 6.3-7.6 3550-6630 3070-5800 36.3-204
SRK-FD33 Trace-30 3.02-5.96 4540-13910 3620-16600 1110-6770
SRK-FD04 0 2.24-2.54 7350-34400 7490-59000 1230-10900
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SRK-FD23 Trace-5 3.32-6.39 729-2405 346-1785 8.89-110
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SRK-FD35 <0.1-30 3.03-6.46 1622-11320 945-9220 13.7-1660
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SP 5/6
NE1
NE2
SRK-FD48 12-12.5 5.49-6.53 1748-2258 910-1300 6.53-10.8
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SRK-FD32 60 6.38 3580 2790 581
SRK-FD46 15 2.88 5750 5040 1380
X23
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X26
SRK-FD13 0-20 2.1-5.91 1278-18800 860-27930 59.4-4480
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SRK-FD12 Diffuse-120 5.67-6.68 5740-10030 4220-8300 219-1240
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SRK-FD52 0-Trace 6.43-7.34 8620-12340 10920-11000 38.2-58.7
W10
W8
A25
A30
1142.38
1062.35
1090.21
LEGEND
Routine Monitoring Station
Seep Sample Location
Borehole Location
SAMPLE ID
Flow (L/min)
pH S.U.
Conductivity (µS/cm)
Sulphate (mg/L)
Zinc (mg/L)
Sample not collected
Type 1 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
WO 8856
100 0 200 400 600 feet
50 0 100 200 300 Metres
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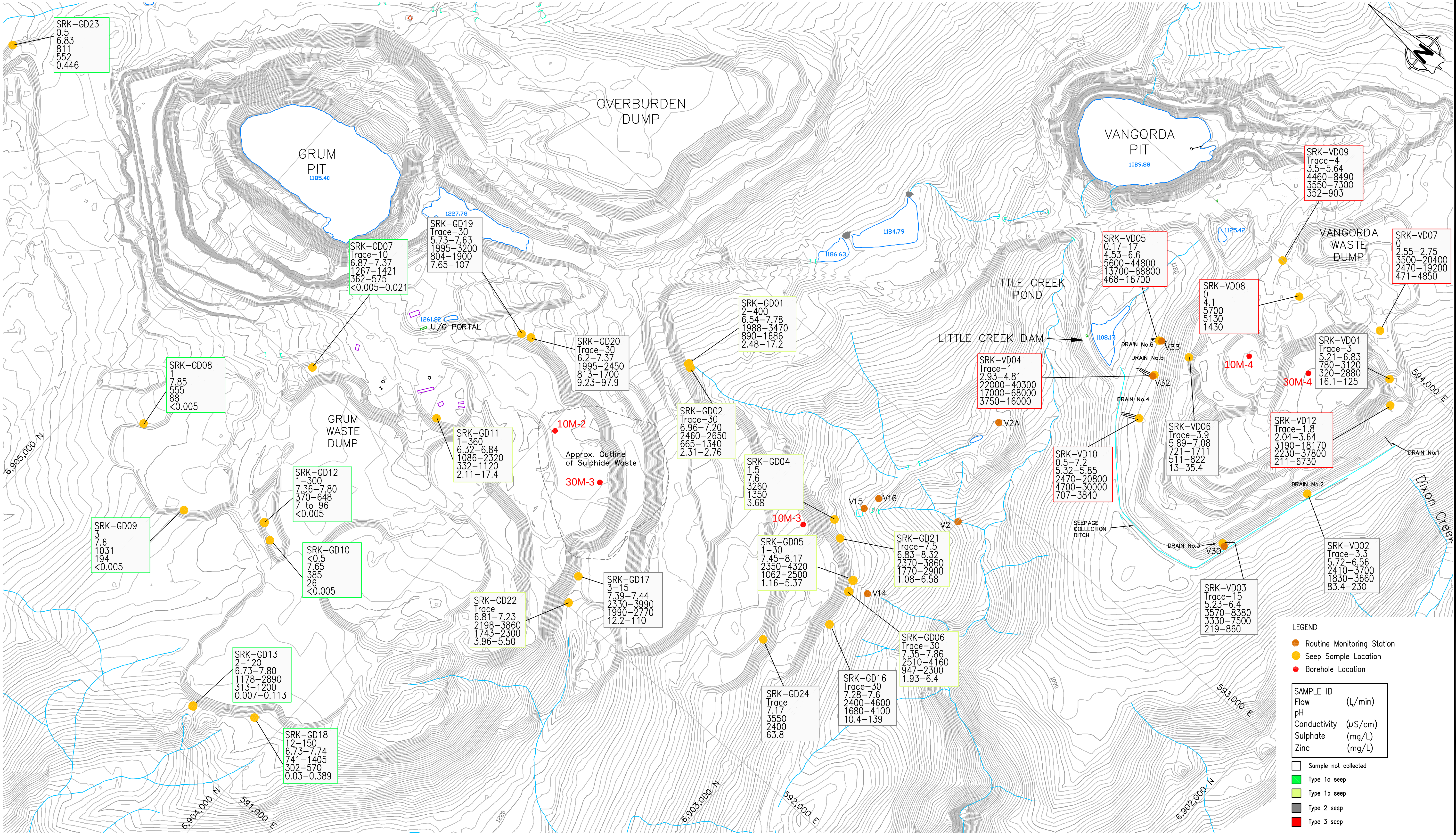
SRK Consulting
Engineers and Scientists
Vancouver
SRK JOB NO.: 1CY001.033
FILE NAME: 2009 FARO SITE PLAN-Seep.dwg
Faro Mine Closure
Fermeture de la mine Faro
Faro Mine Complex
2009 Waste Rock and Seepage Monitoring
Seep Survey Locations
Faro Waste Rock Dumps
DATE: Mar. 2010
APPROVED: M.C.C.
FIGURE: 1



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WO 8856

100 0 200 400 600 feet
50 0 100 200 300 Metres

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Faro Mine Closure
Fermeture de la mine Faro

SRK JOB NO.: 1CY001.033	Faro Mine Complex	2009 Waste Rock and Seepage Monitoring	
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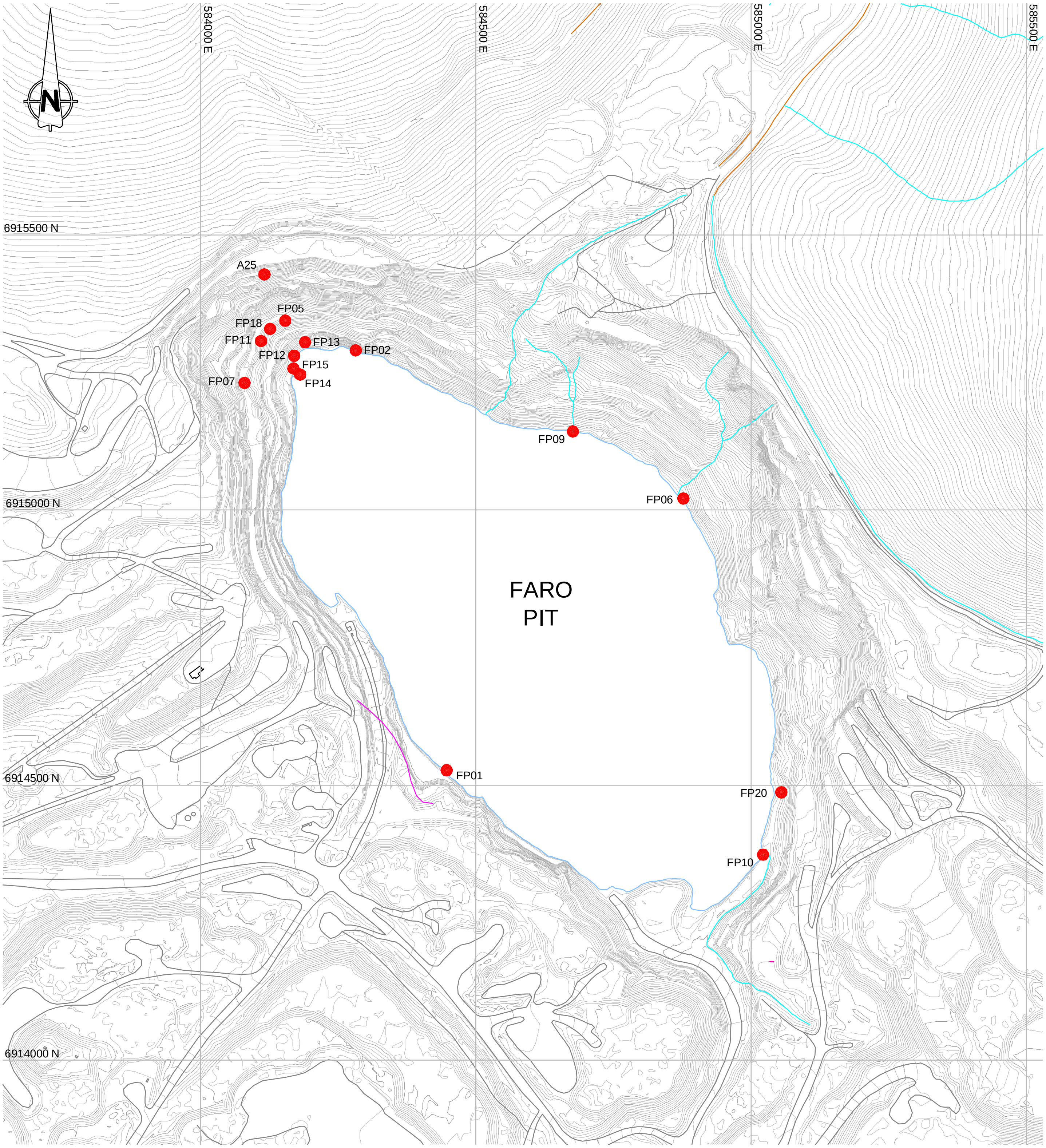
DATE: Mar. 2010	APPROVED: M.C.C.	FIGURE: 2	



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Compiled by The ORTHOSHOP, Calgary, September 2003
WO 8856

LEGEND

● Seep sample location

0 100 200 300 400 500

Scale in Metres

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Faro Mine Closure
Fermeture de la mine Faro

2009 Waste Rock and Seepage Monitoring

Seep Survey Locations
Faro Pit

SRK JOB NO.: 1CY001.033	FARO MINE COMPLEX	DATE: Mar. 2010	APPROVED: DBM	FIGURE: 3
FILE NAME: 2003 FARO SITE PLAN–Pit_Geology.dwg				

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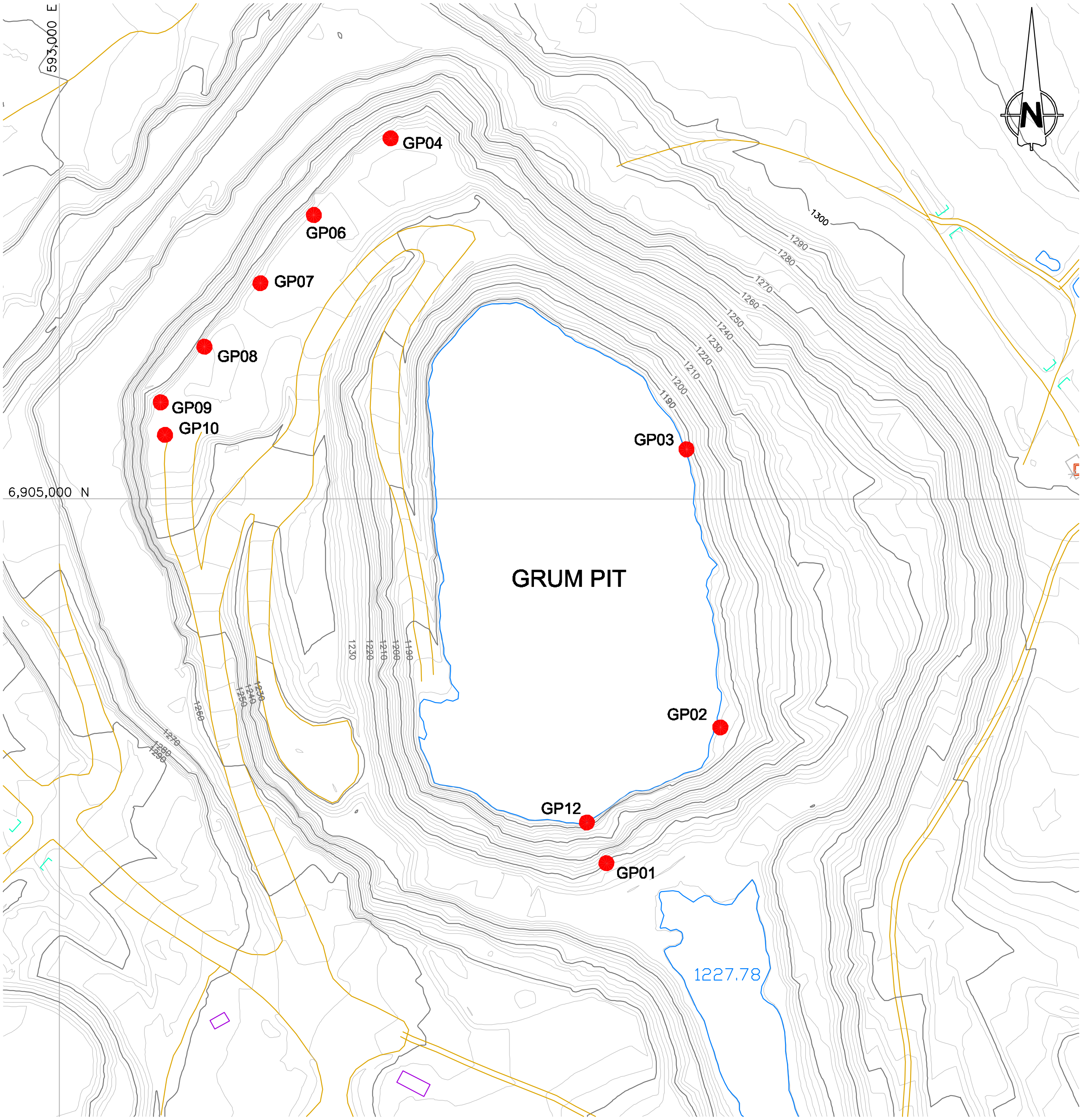

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Scale in Metres

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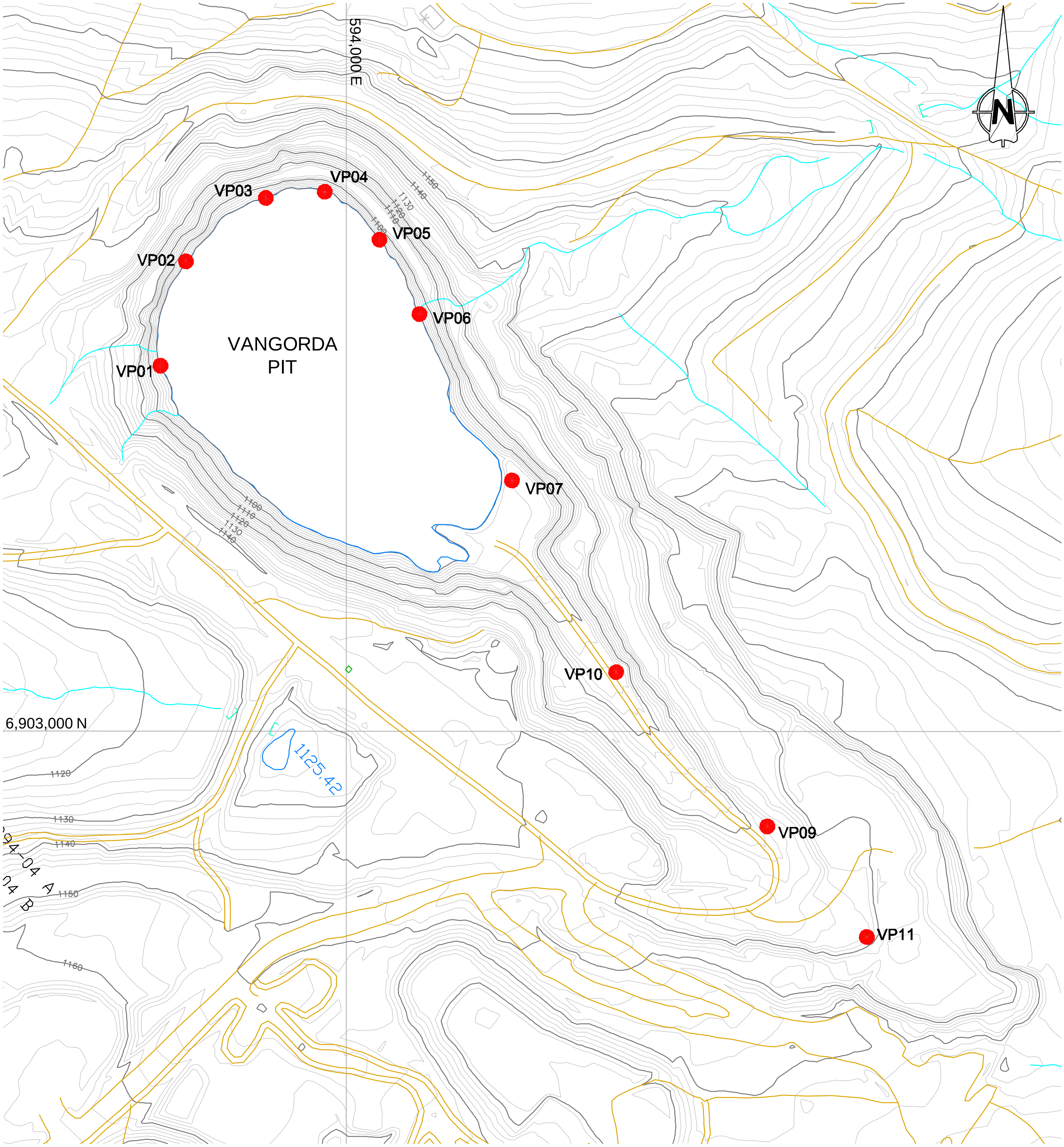
Faro Mine Closure
Fermeture de la mine Faro

2009 Waste Rock and Seepage Monitoring

Seep Survey Locations
Grum Pit

SRK JOB NO.: 1CY001.033	FARO MINE COMPLEX	DATE: Mar. 2010	APPROVED: DBM
FILE NAME: site_plan_2003-PitGeology.dwg			FIGURE: 4



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LEGEND

● Seep sample location

0 50 100 150 200 250

Scale in Metres

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Faro Mine Closure
Fermeture de la mine Faro

2009 Waste Rock and Seepage Monitoring

Seep Survey Locations Vangorda Pit

SRK JOB NO.: 1CY001.033	FARO MINE COMPLEX	DATE: Mar. 2010	APPROVED: DBM	FIGURE: 5
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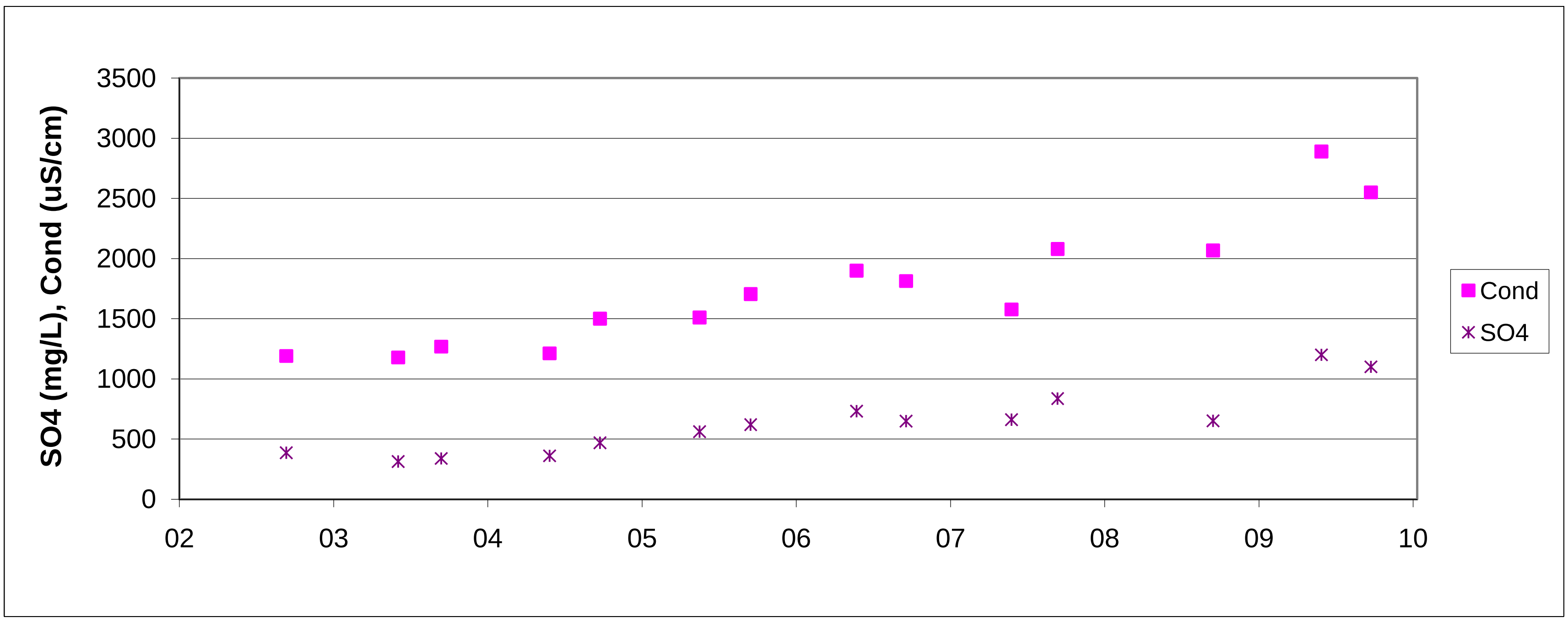
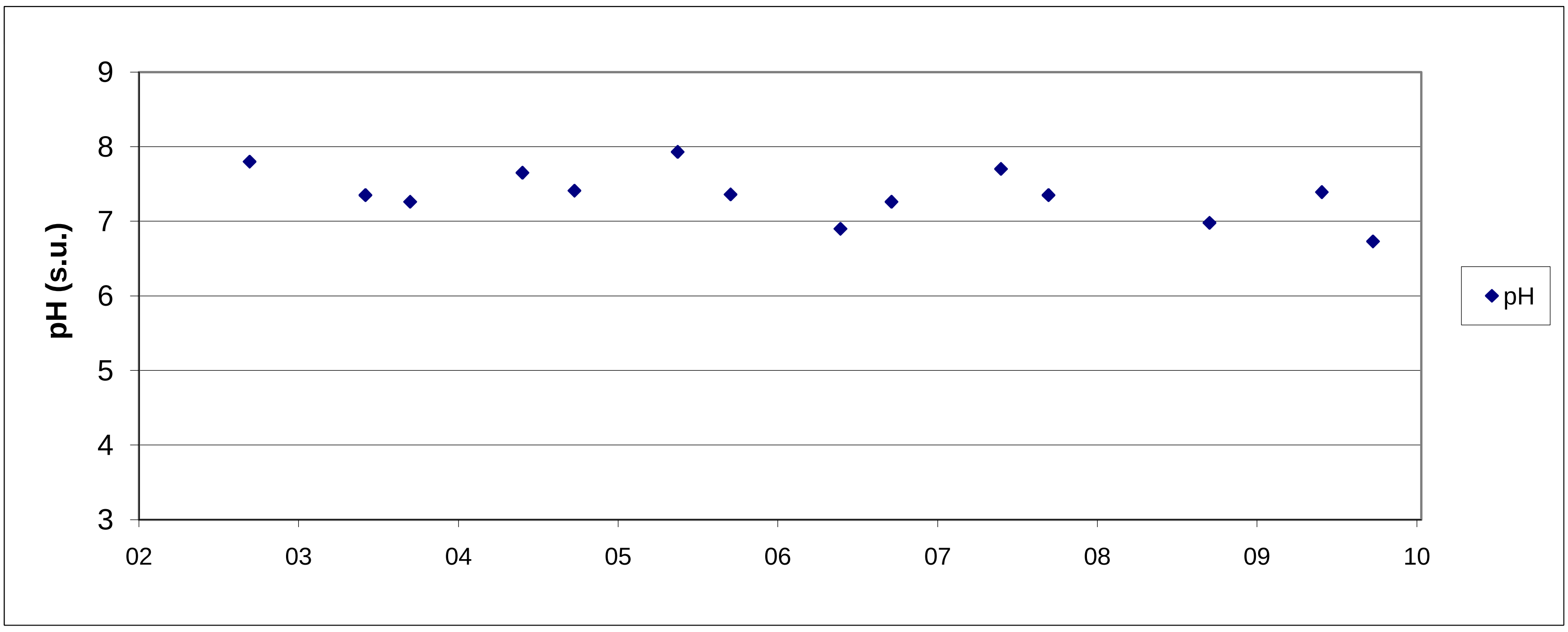
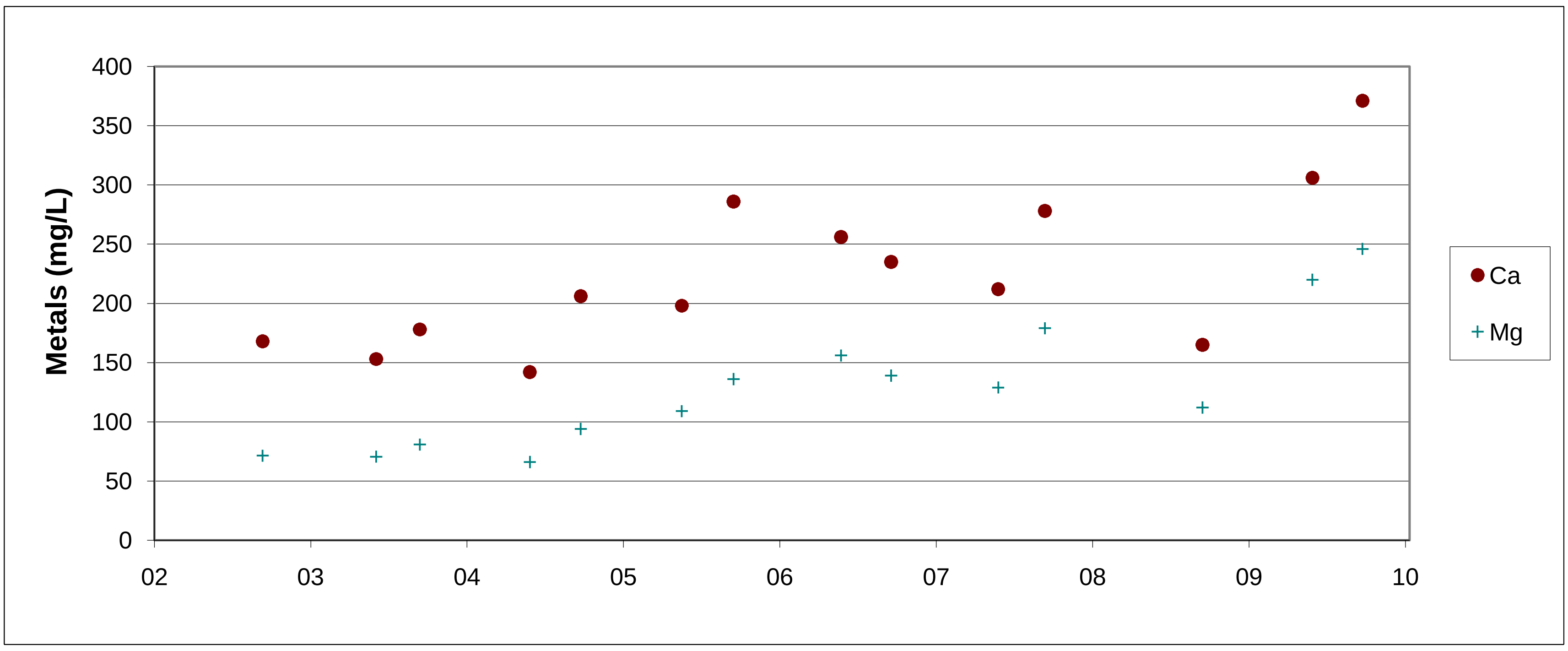
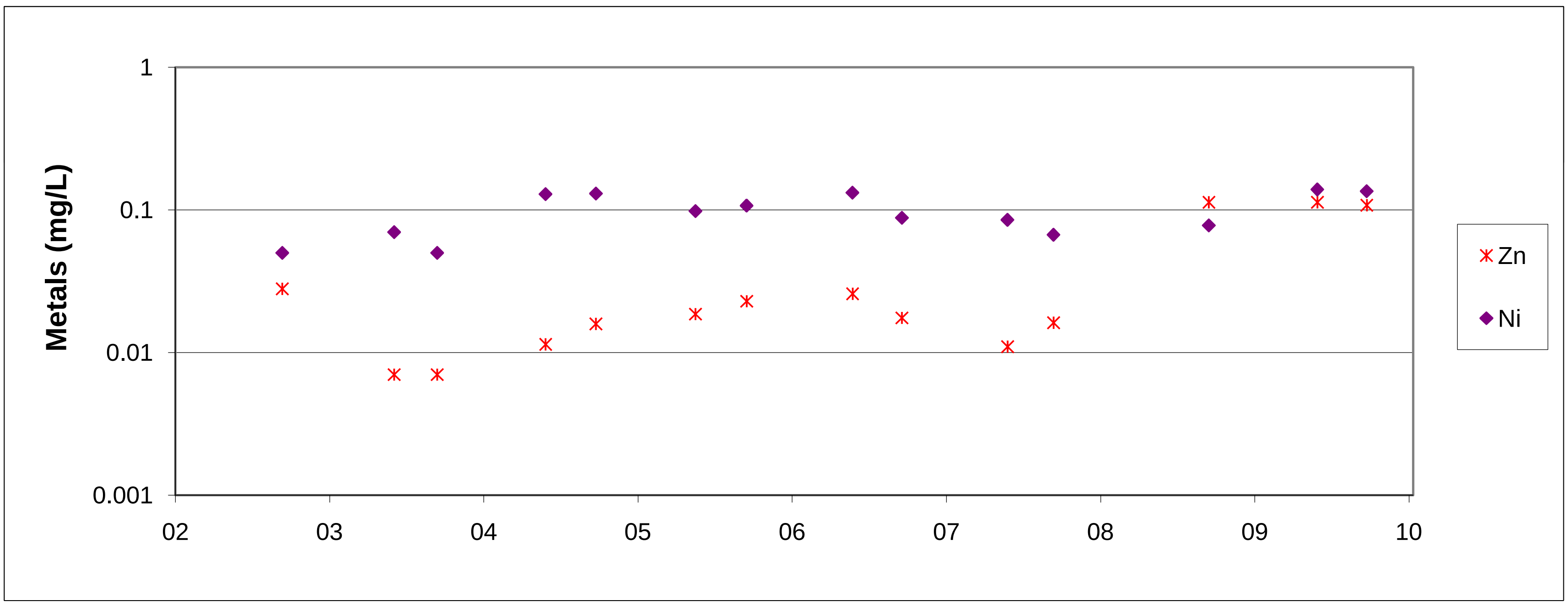
SRK-GD13









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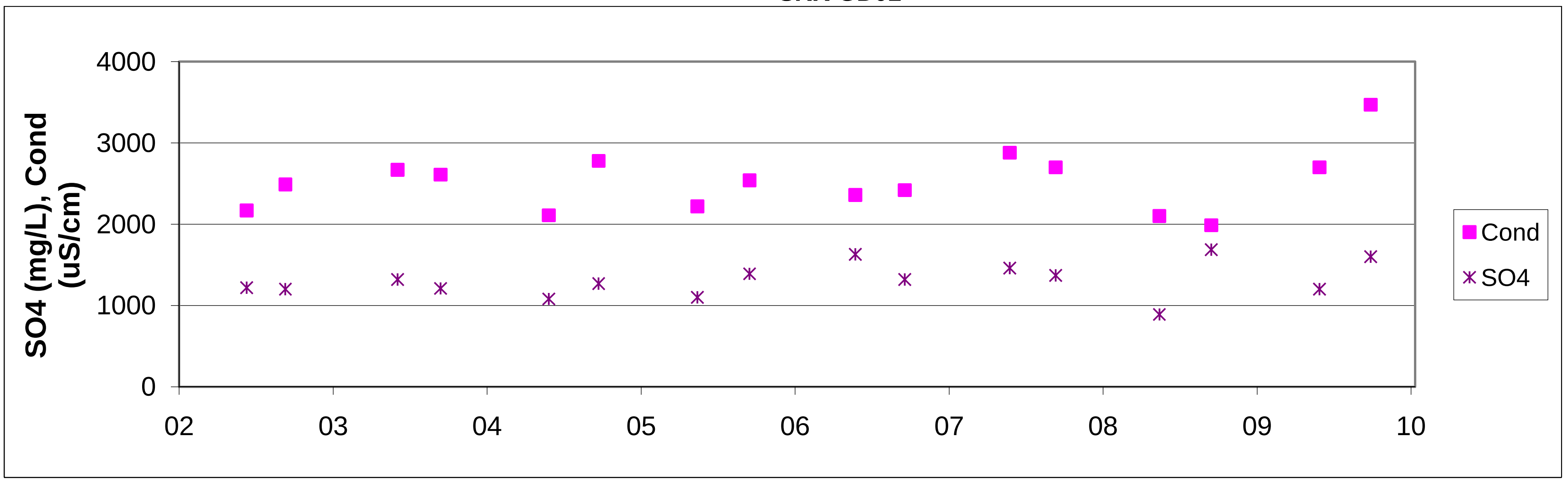
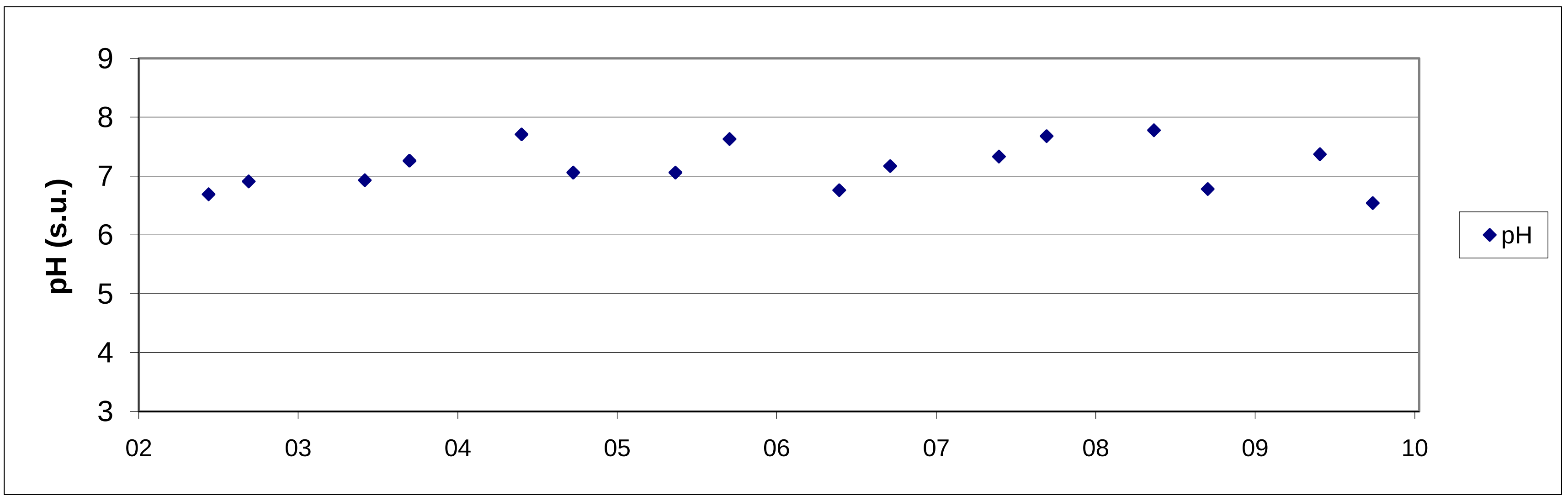
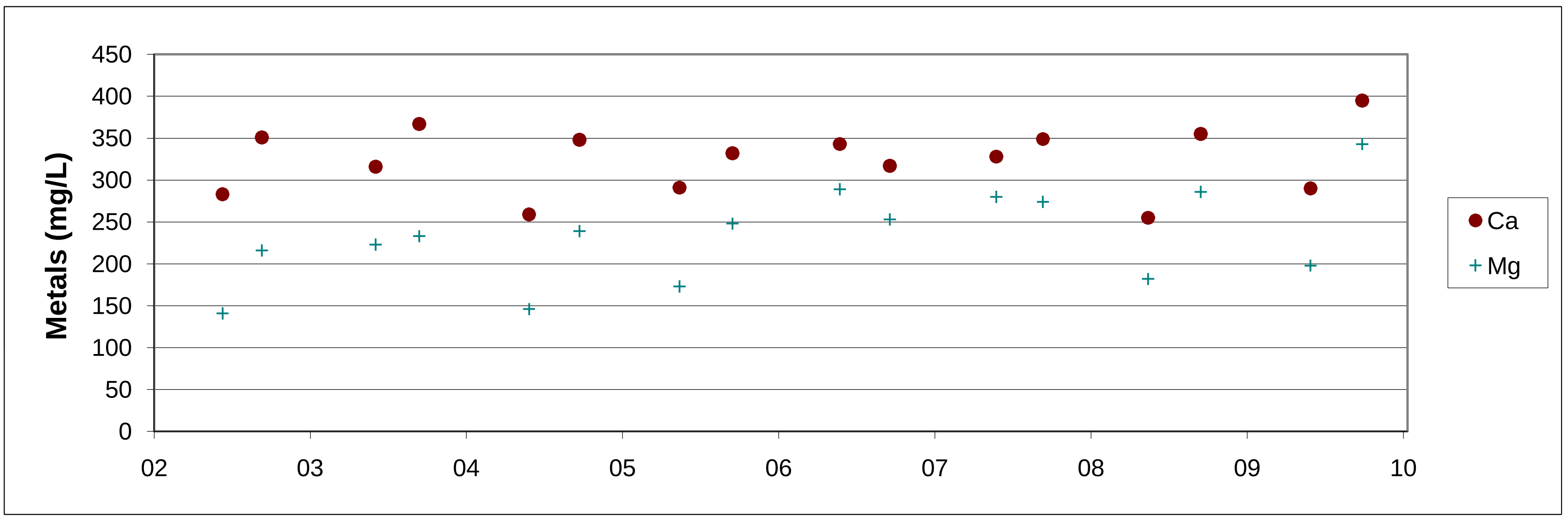
Fermeture de la mine Faro

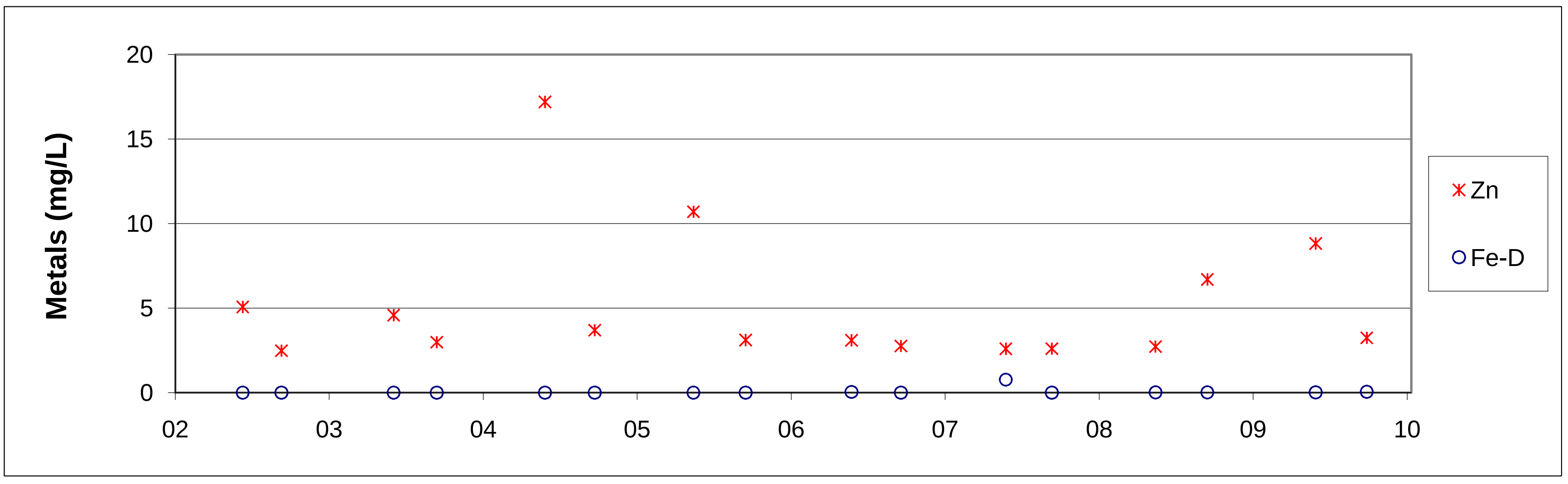
Faro Mine Complex 2009 Waste Rock and Seepage Monitoring Report			
Grum Seepage Station SRK-GD13			
PROJECT 1CY001.033	DATE February 2010	APPROVED MCC	FIGURE 6

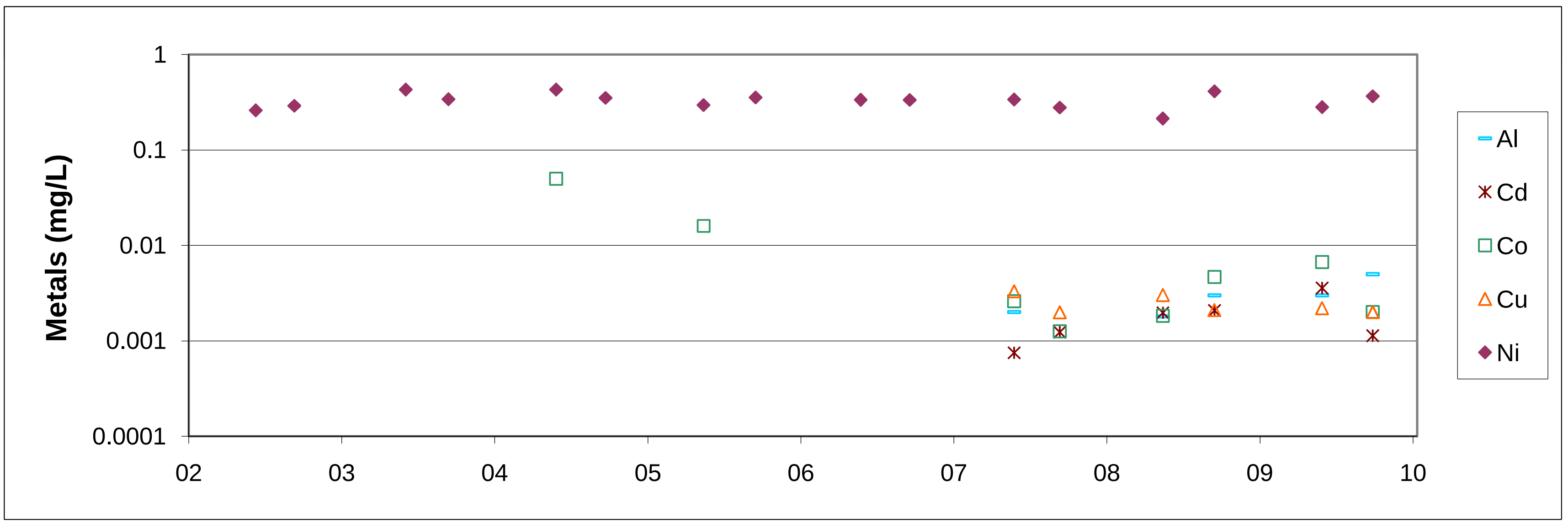
SRK-GD01







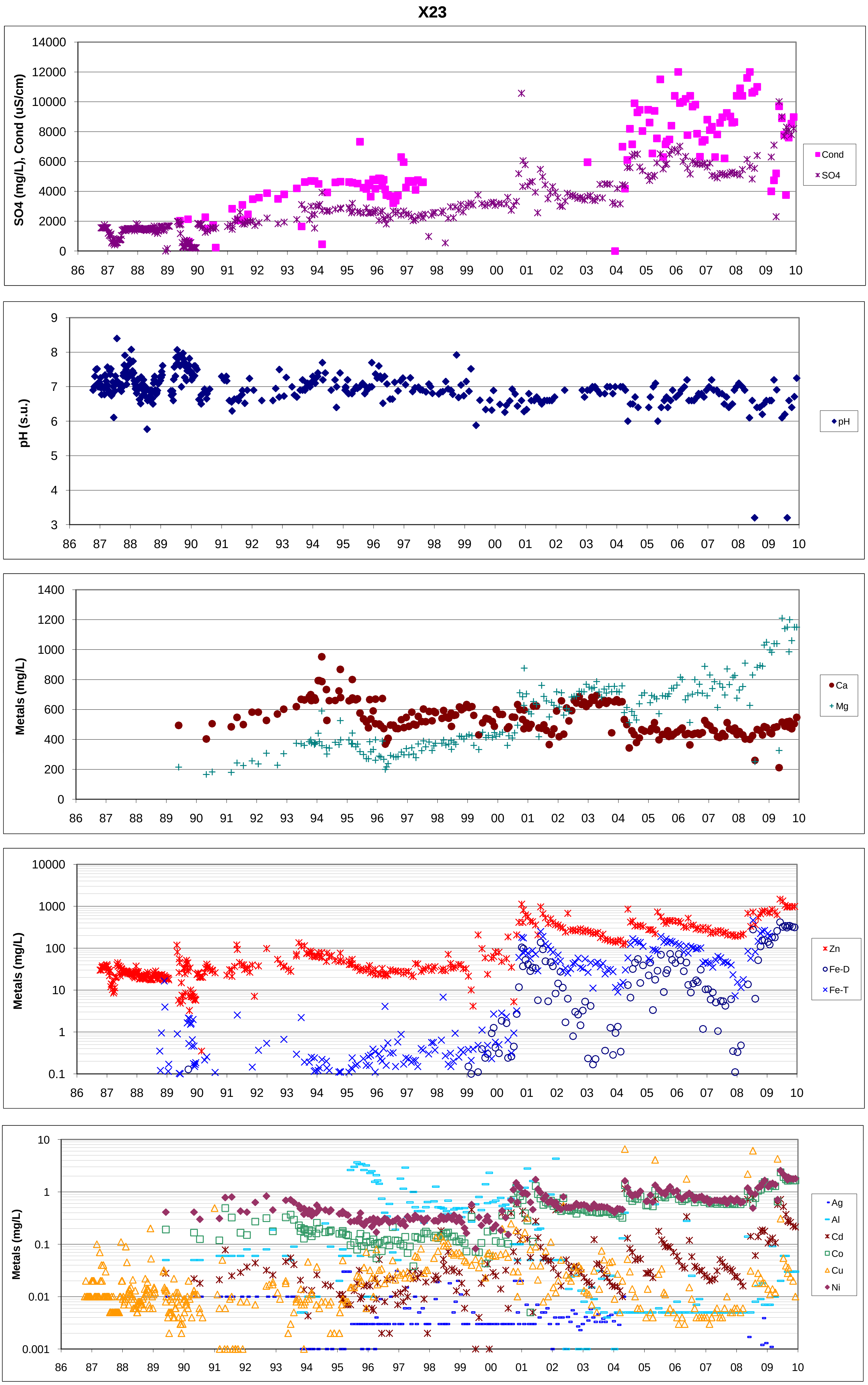




SRK Consulting Engineers and Scientists	Faro Mine Complex 2009 Waste Rock and Seepage Monitoring Report
Faro Mine Closure Fermeture de la mine Faro	Grum Seepage Station SRK-GD01

PROJECT	DATE	APPROVED	FIGURE
1CY001.033	February 2010	MCC	7

Grum_Routine Graphs.2009



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Faro Mine Closure
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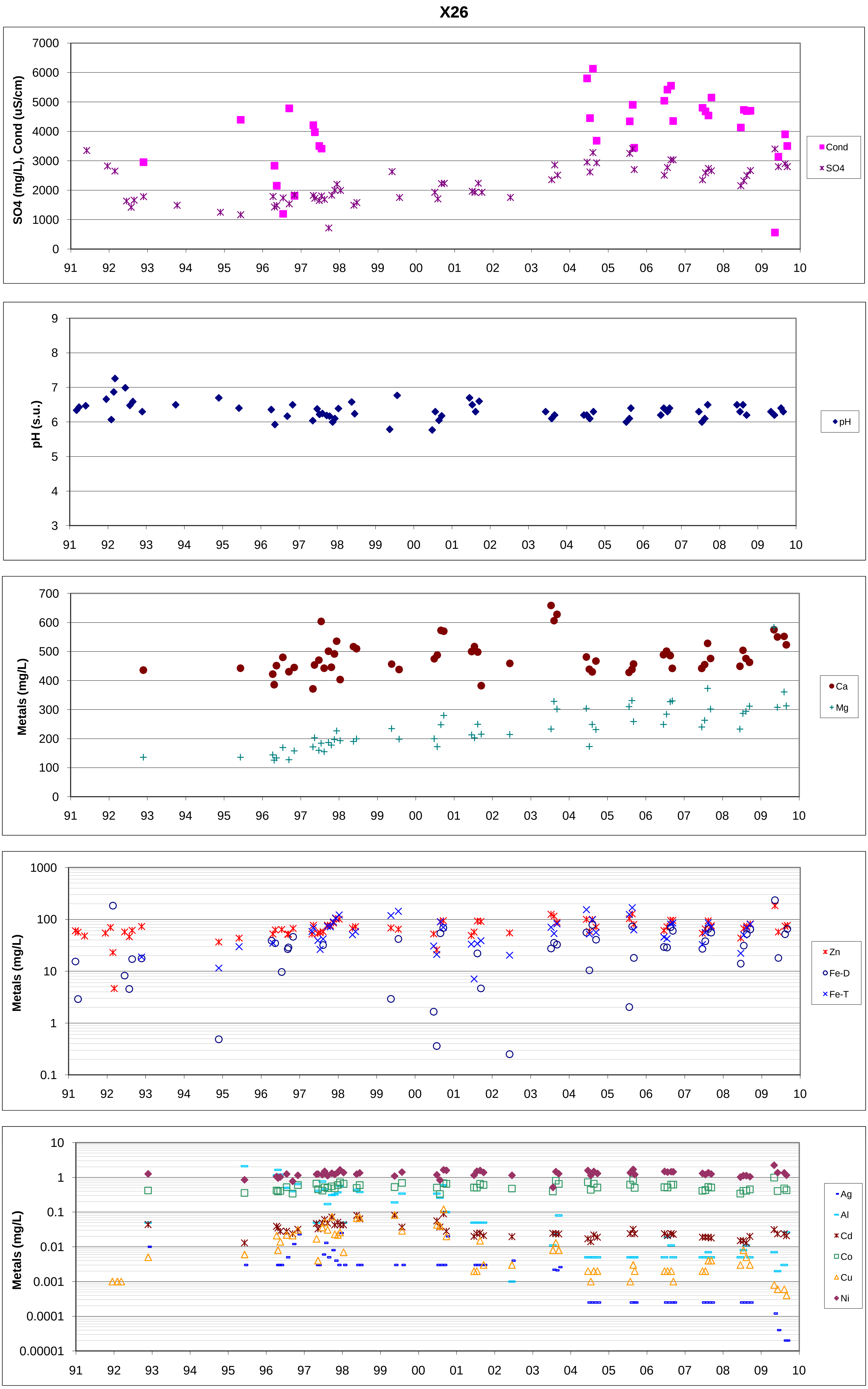
Faro Mine Complex 2009 Waste Rock and Seepage Monitoring Report			
Faro Routine Monitoring Station X23			
PROJECT 1CY001.033	DATE February 2010	APPROVED MCC	FIGURE 8



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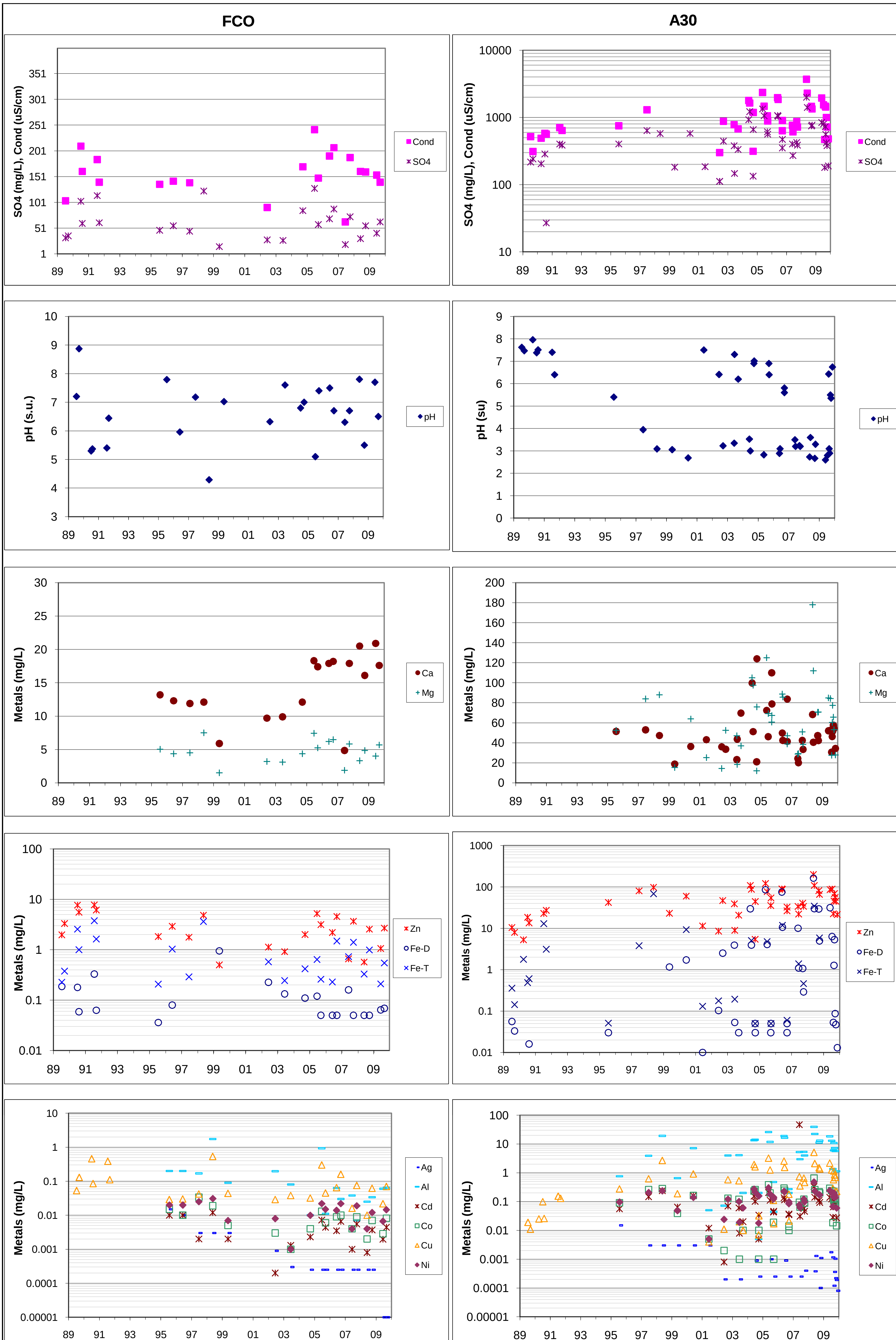
Faro Mine Closure
Fermeture de la mine Faro

Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

Faro Routine Monitoring Station
X26

PROJECT	DATE	APPROVED	FIGURE
1CY001.033	February 2010	MCC	9



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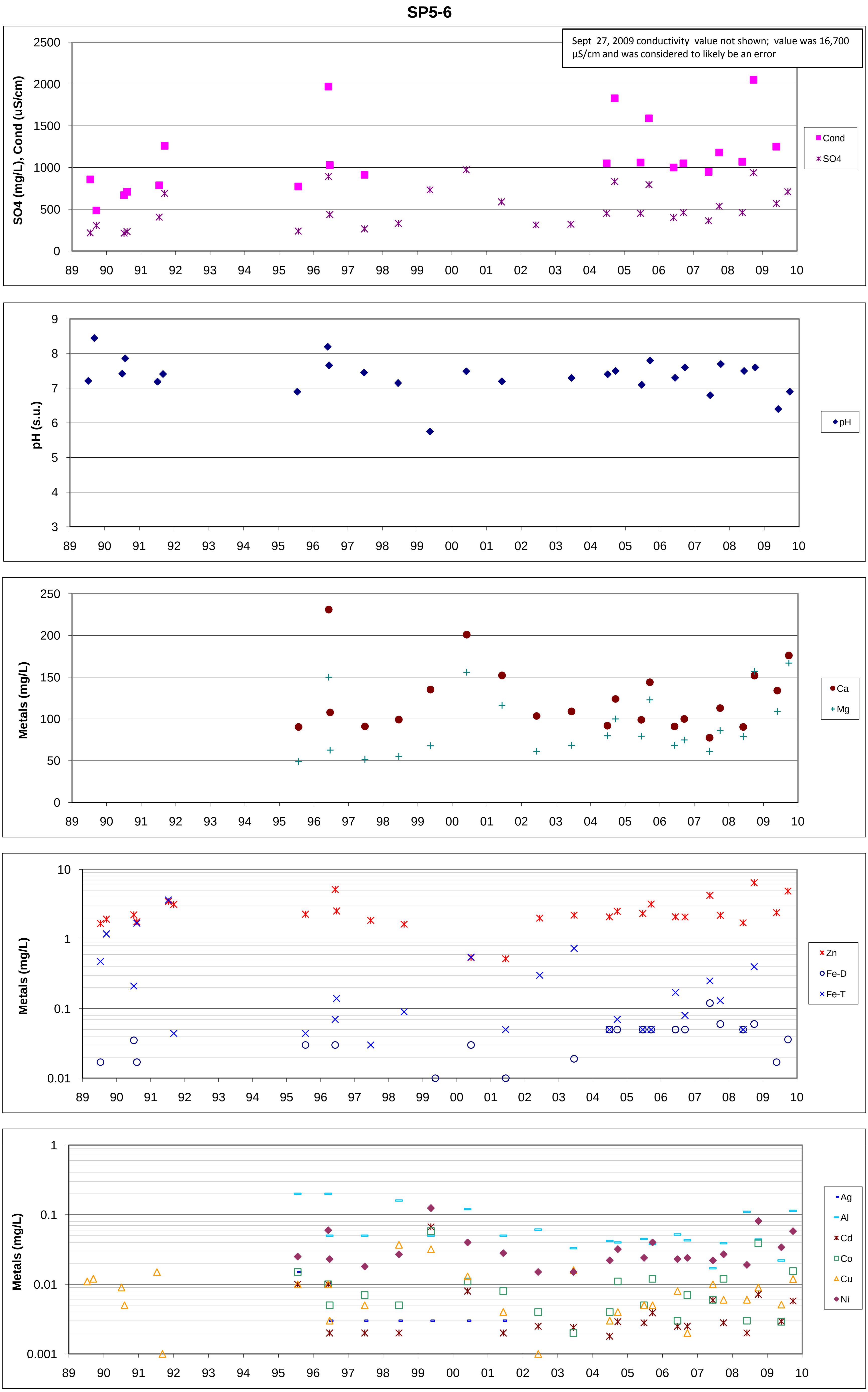
Faro Mine Closure
Fermeture de la mine Faro

Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

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

PROJECT	DATE	APPROVED	FIGURE
1CY001.033	February 2010	MCC	10



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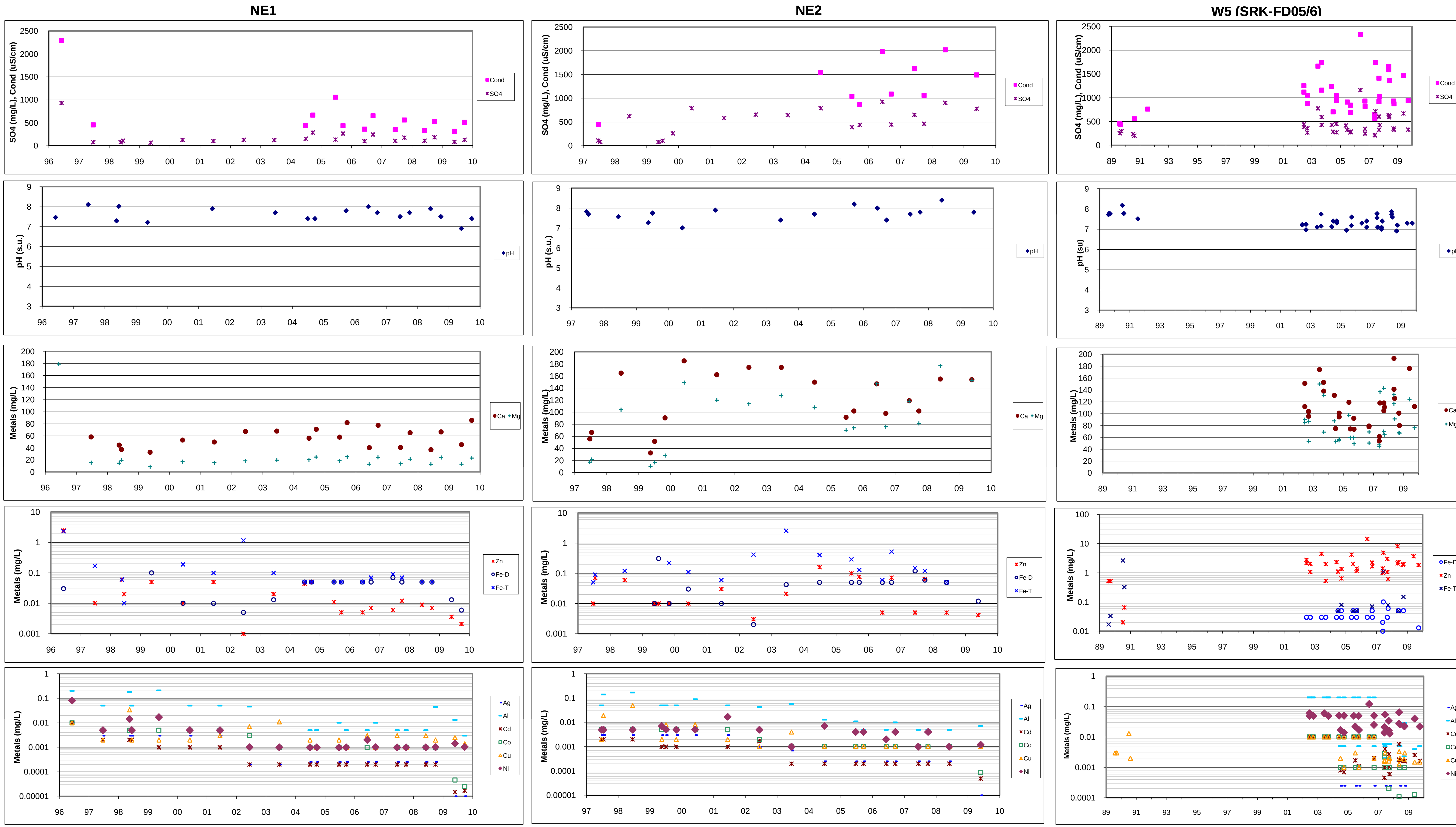
Faro Mine Closure
Fermeture de la mine Faro

Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

Faro Routine Monitoring Station SP5-6

PROJECT	DATE	APPROVED	FIGURE
1CY001.033	February 2010	MCC	11



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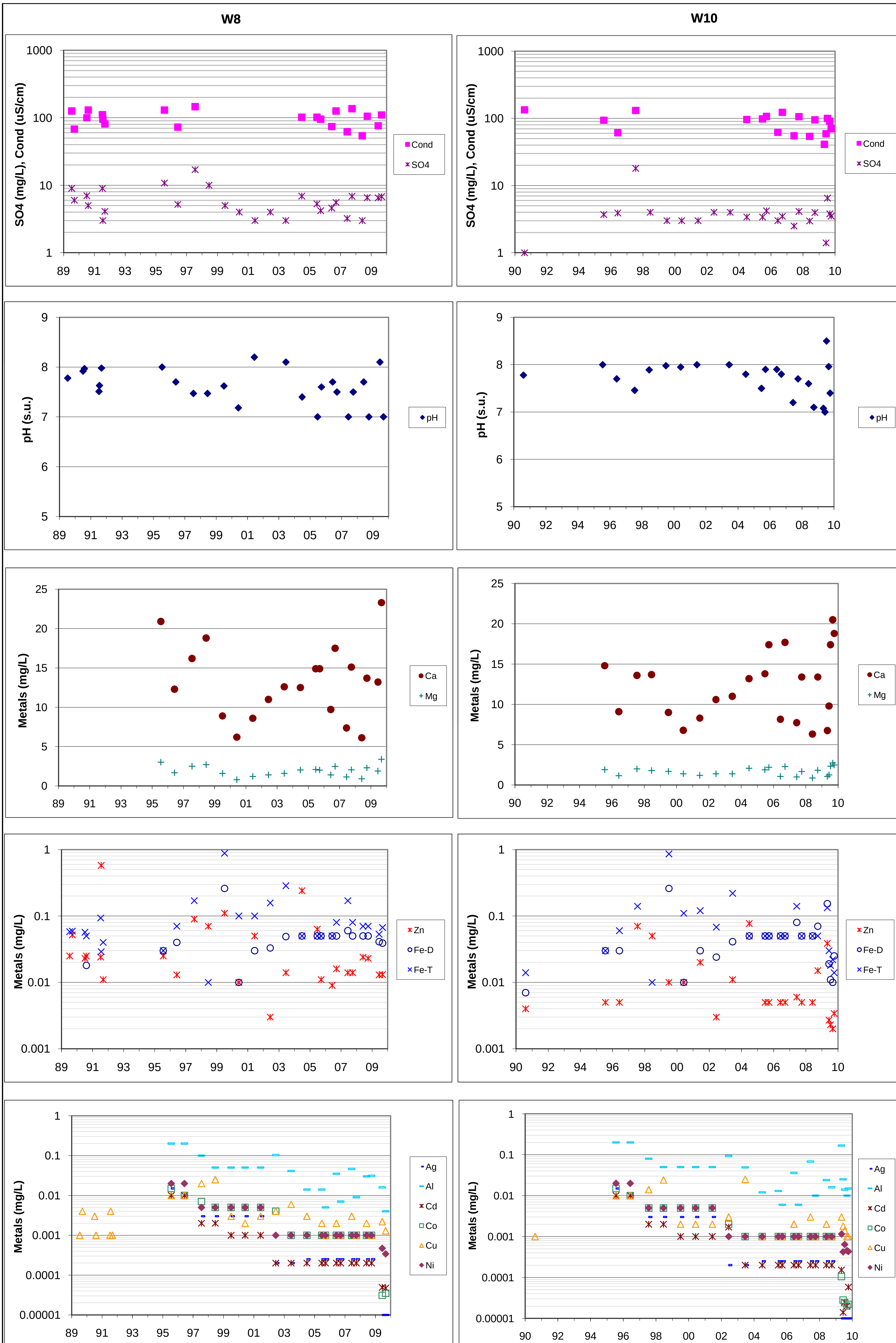
Faro Mine Closure
Fermeture de la mine Faro

Faro Mine Complex 2009 Waste Rock and Seepage Monitoring			
Faro Routine Monitoring Stations NE1, NE2, and W5 (SRK-FD05/6)			
PROJECT 1CY001.033	DATE February 2010	APPROVED	FIGURE 12



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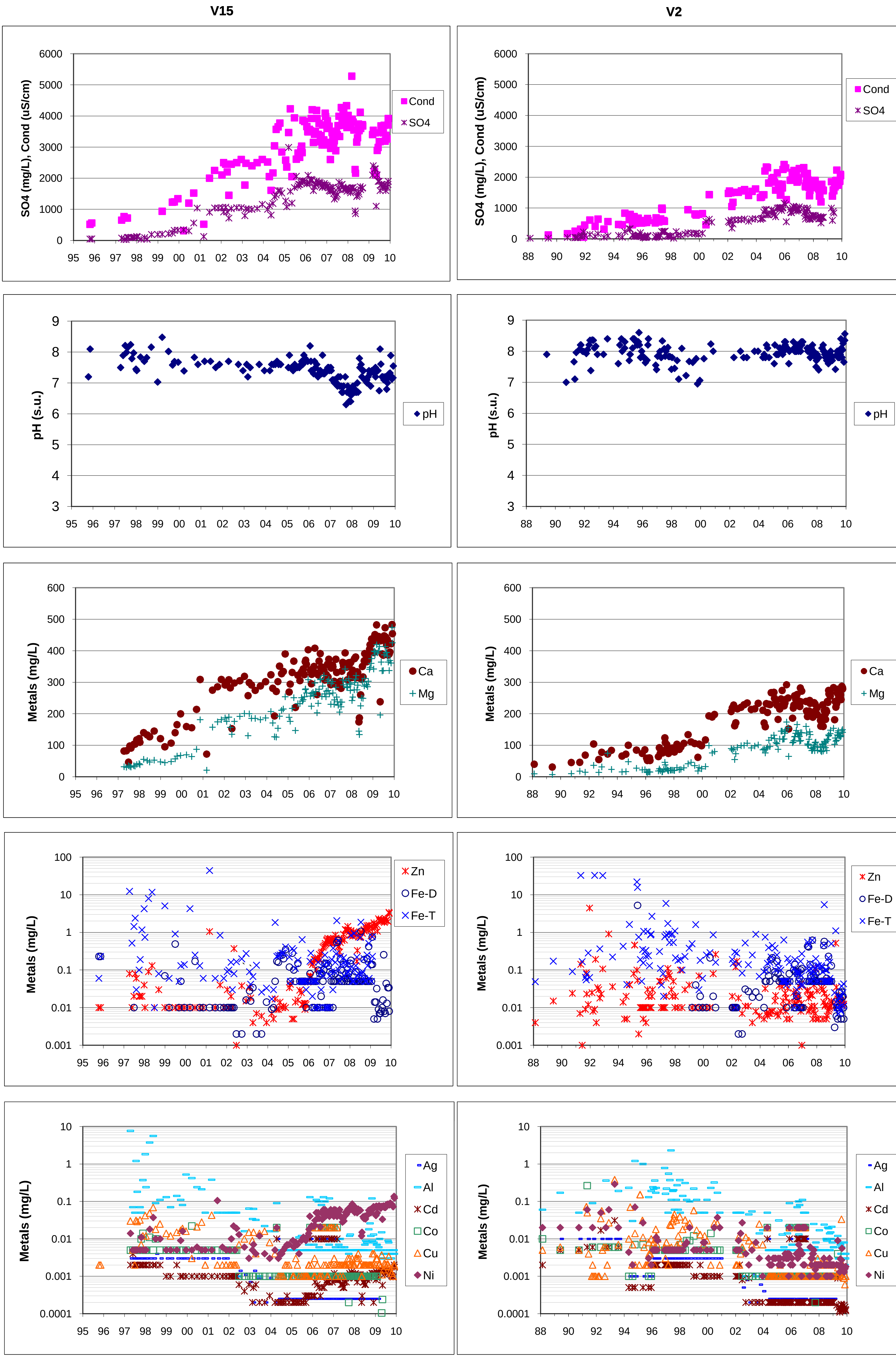
Fermeture de la mine Faro

Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

Faro Routine Monitoring Stations W8 and W10

PROJECT	DATE	APPROVED	FIGURE
1CY001.033	February 2010	MCC	13



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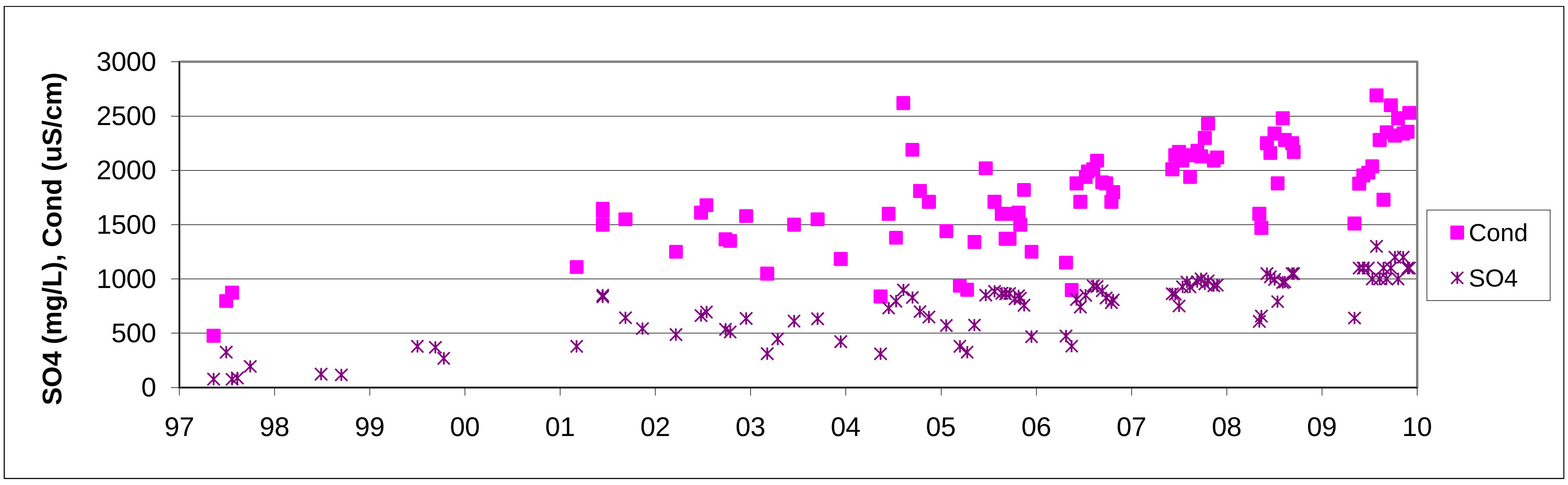
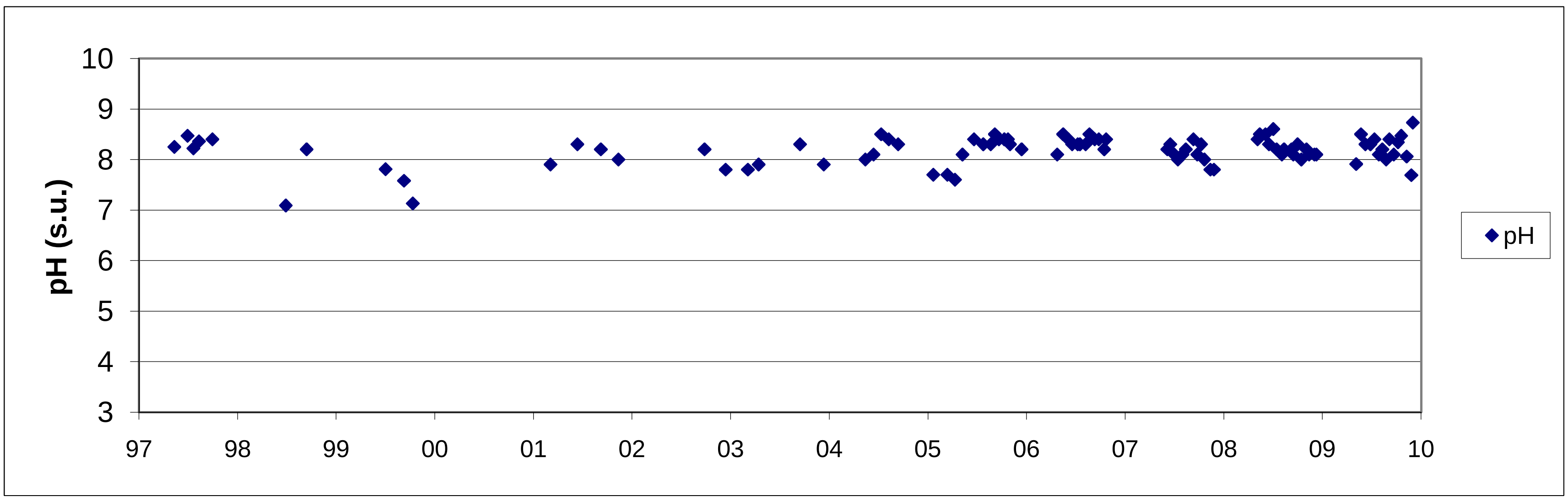
Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

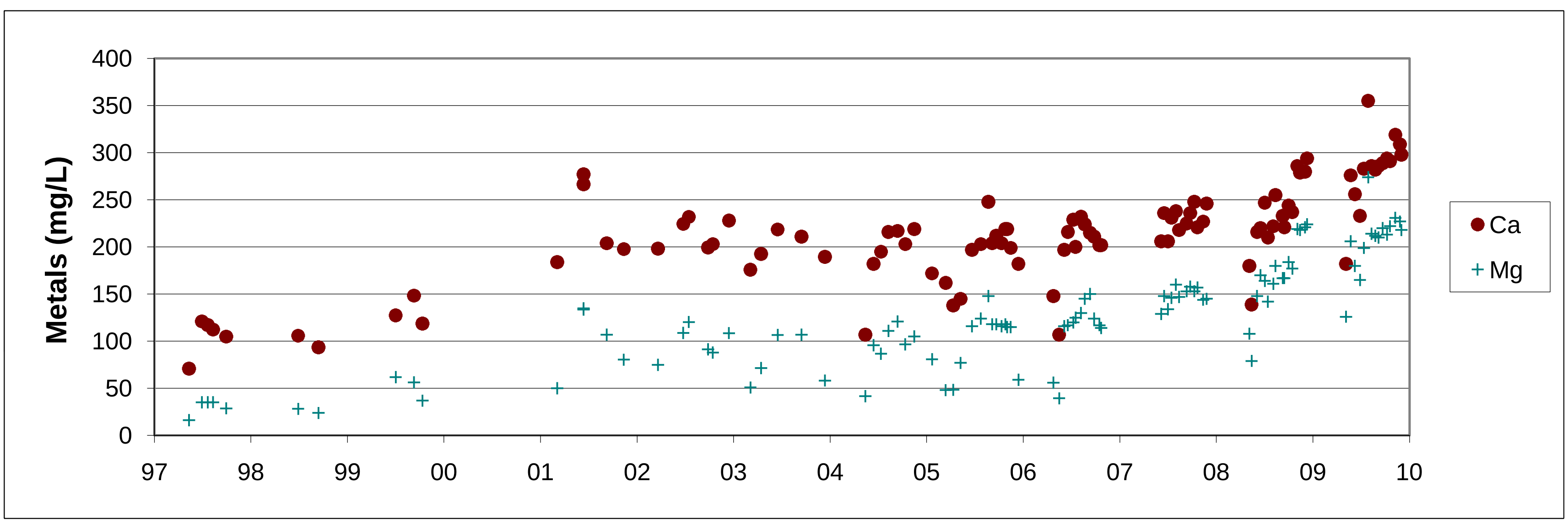
Grum Routine Monitoring Stations

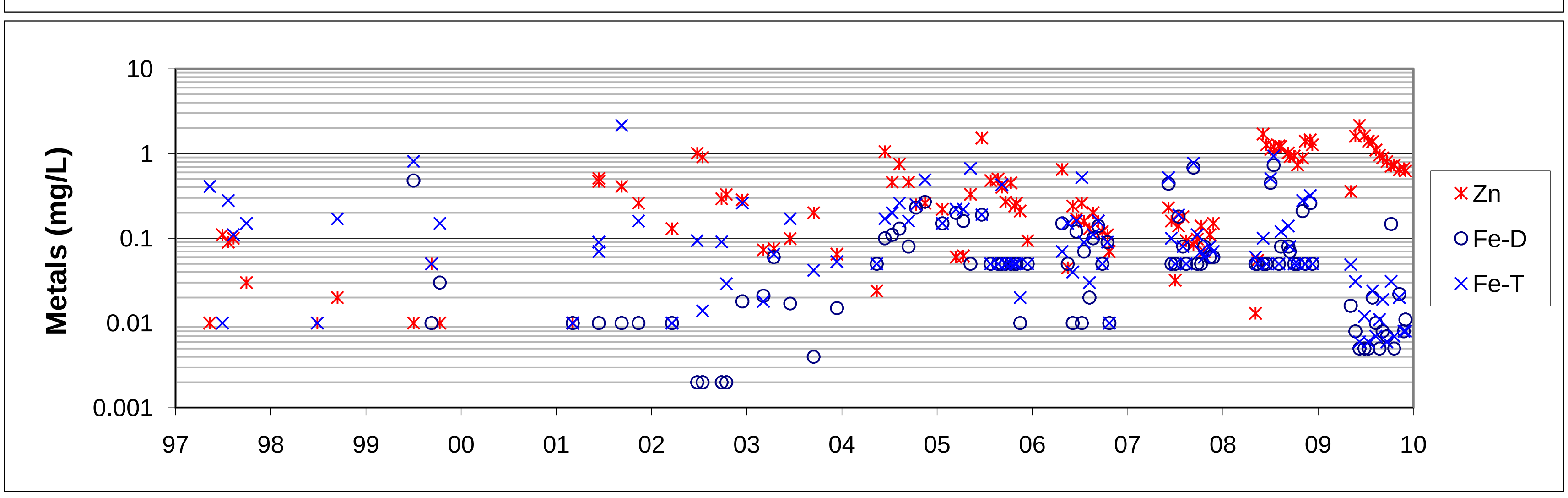
PROJECT	DATE	APPROVED	FIGURE
1CY001.033	February 2010	MCC	14

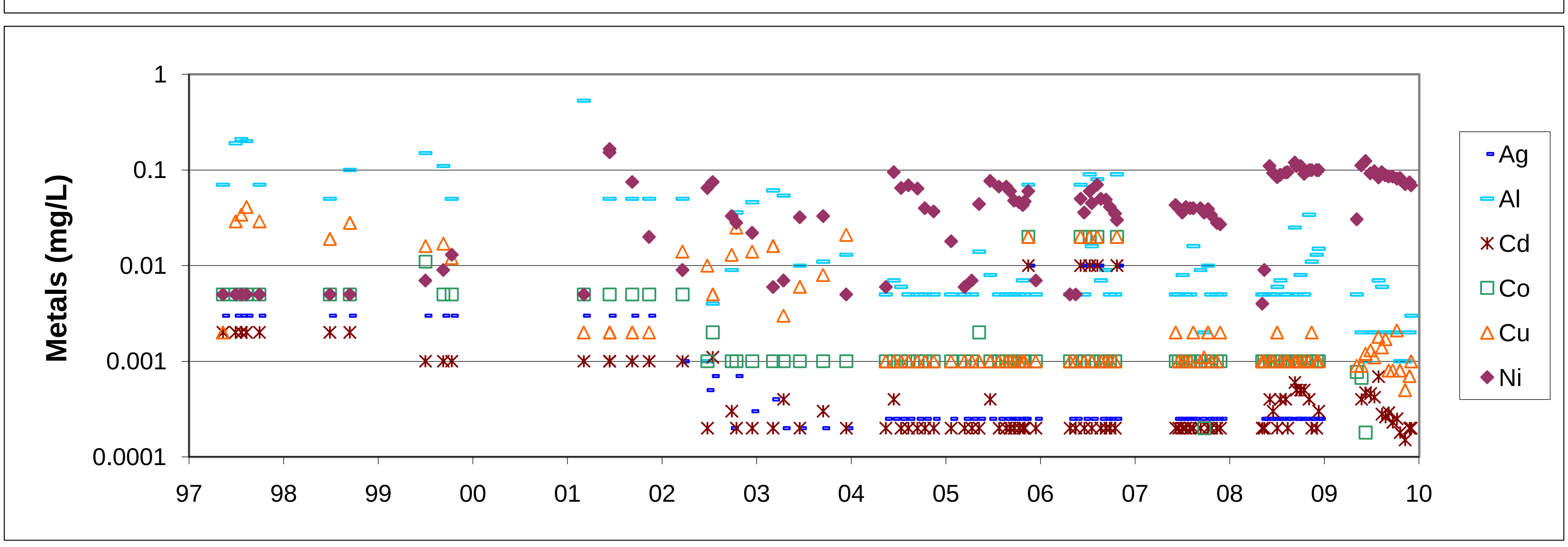
V2A











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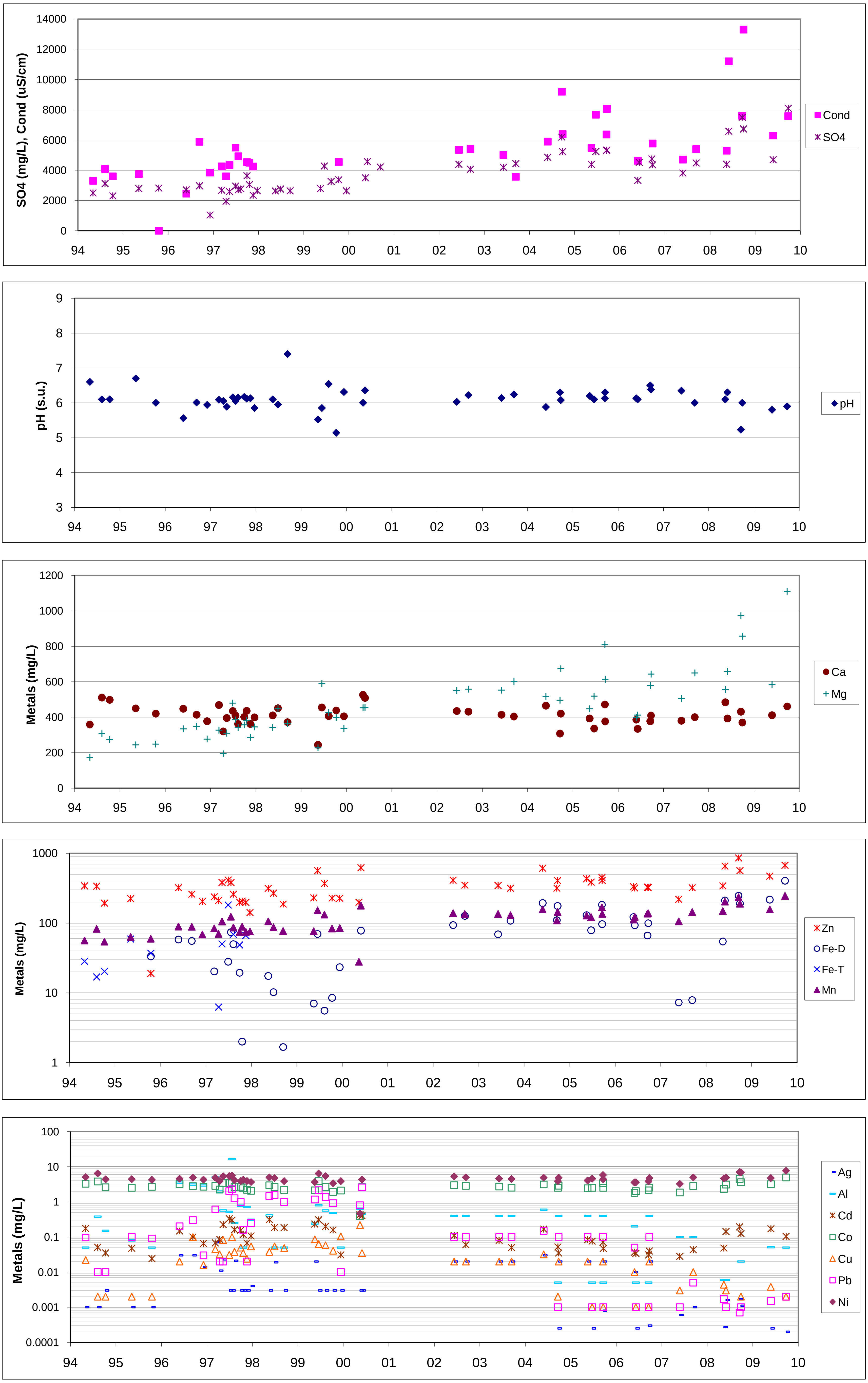
Faro Mine Complex 2009 Waste Rock and Seepage Monitoring Report			
Grum Routine Monitoring Station V2A			
PROJECT 1CY001.033	DATE February 2010	APPROVED MCC	FIGURE 15

V30



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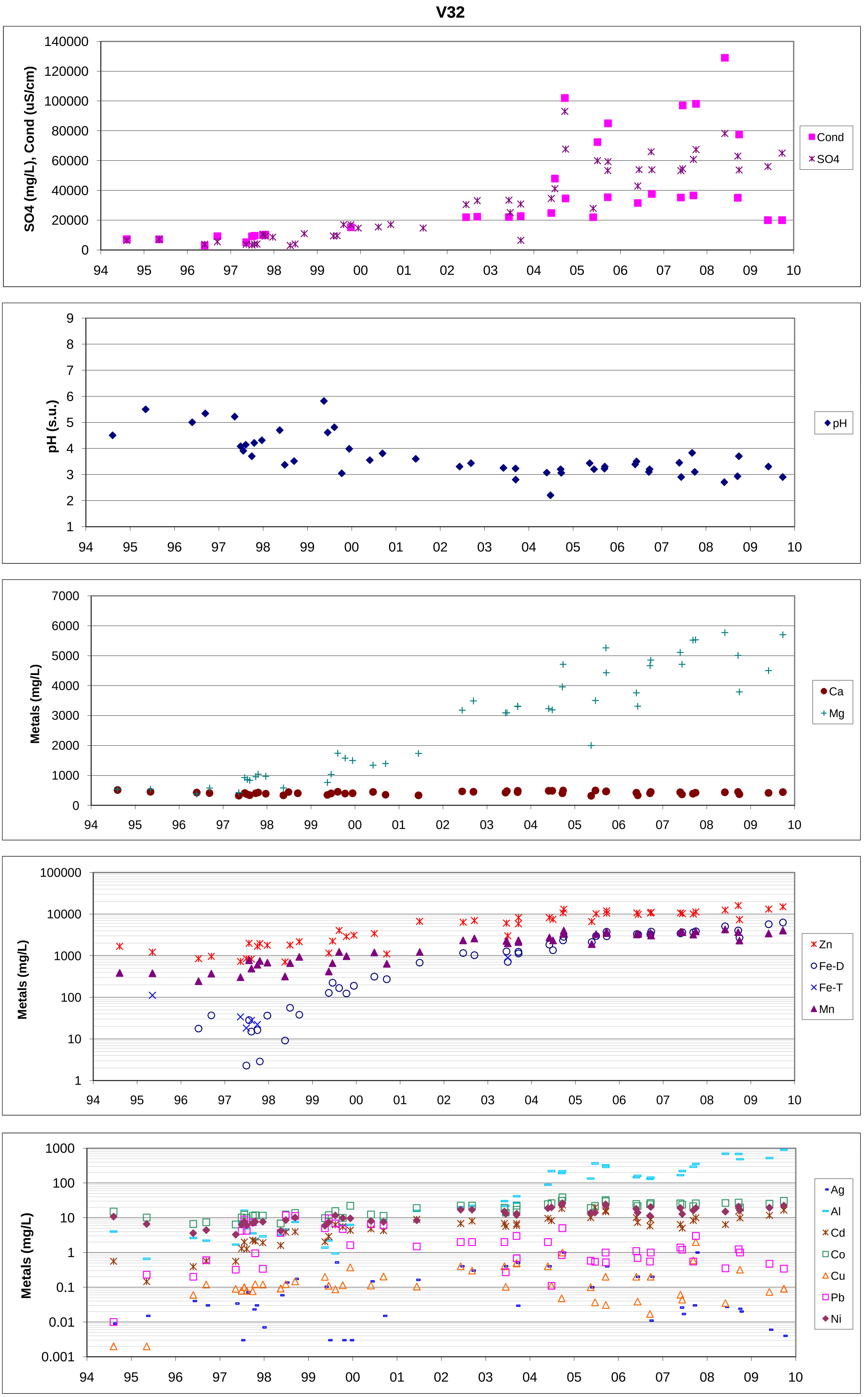
Fermeture de la mine Faro

Faro Mine Complex 2009 Waste Rock and Seepage Monitoring Report			
Vangorda Routine Monitoring Station V30 (SRK-VD03)			
PROJECT 1CY001.033	DATE February 2010	APPROVED MCC	FIGURE 16



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Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report

Vangorda Routine Monitoring Station
V32 (SRK-VD04)

PROJECT	DATE	APPROVED	FIGURE
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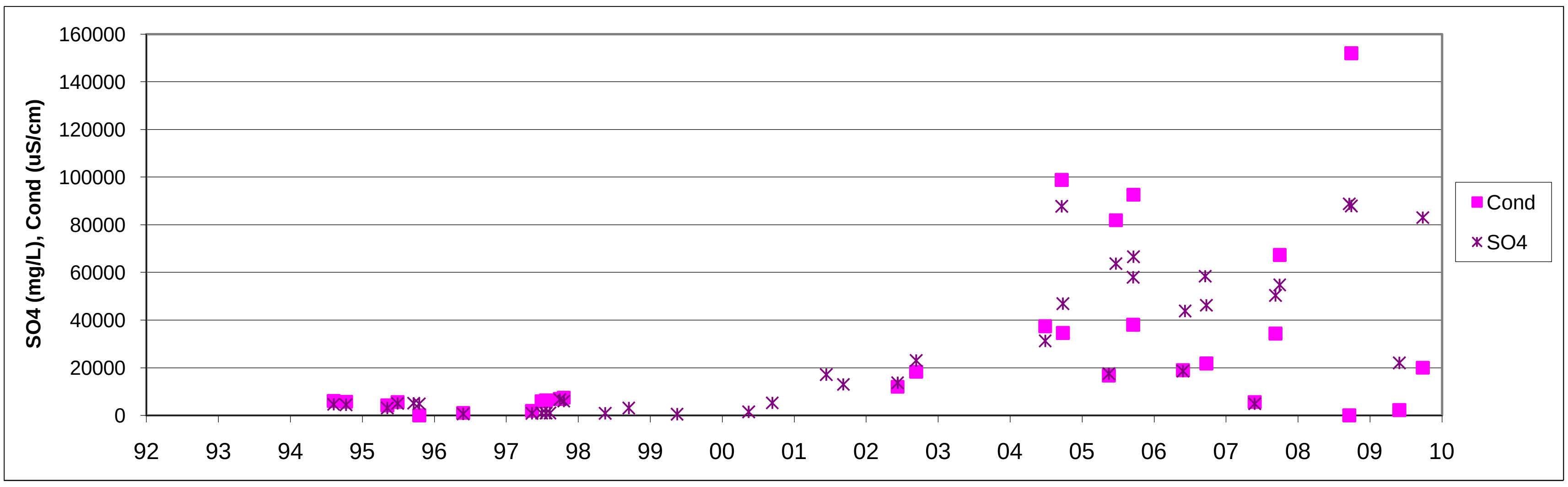
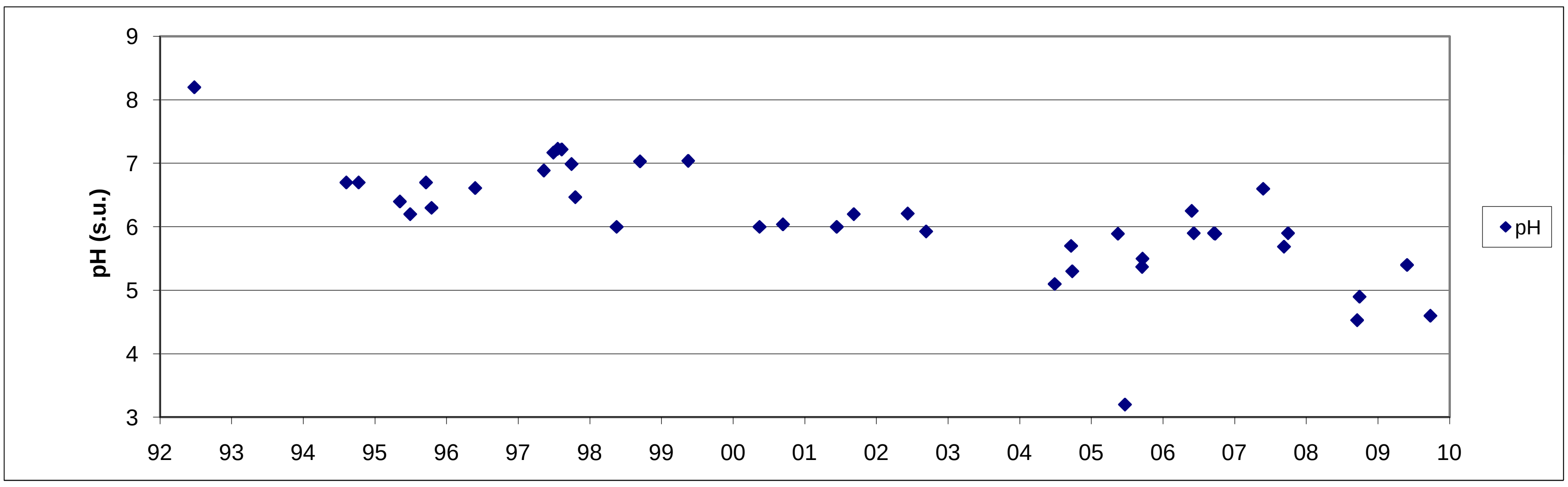
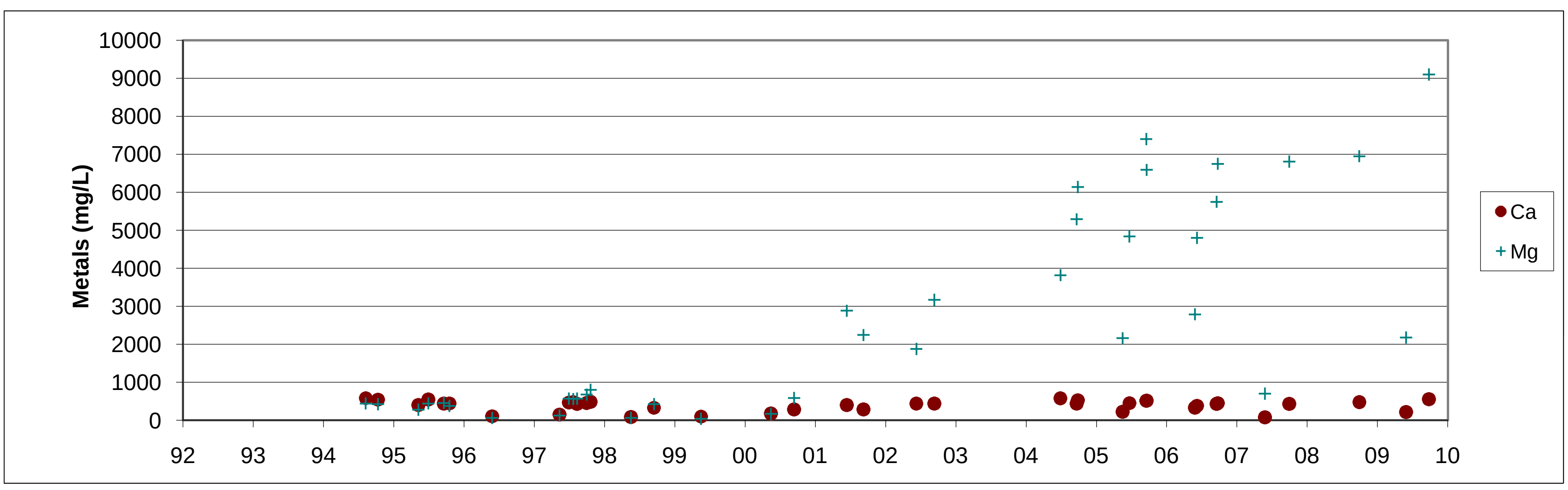
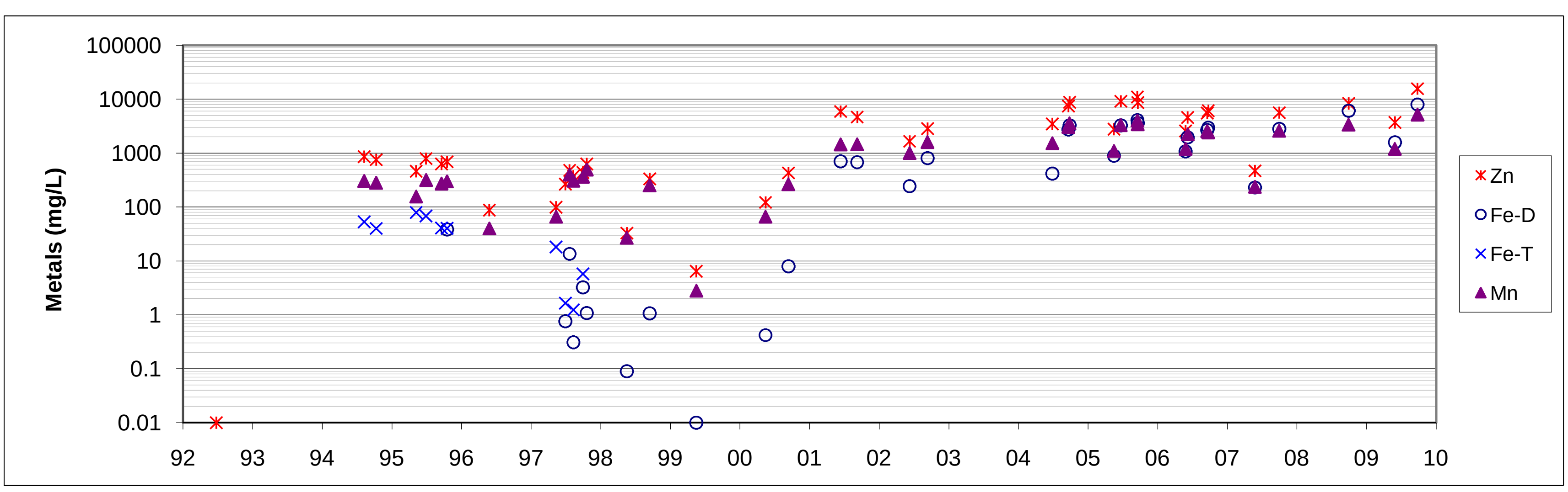
Vangorda_Routine Graphs.2009

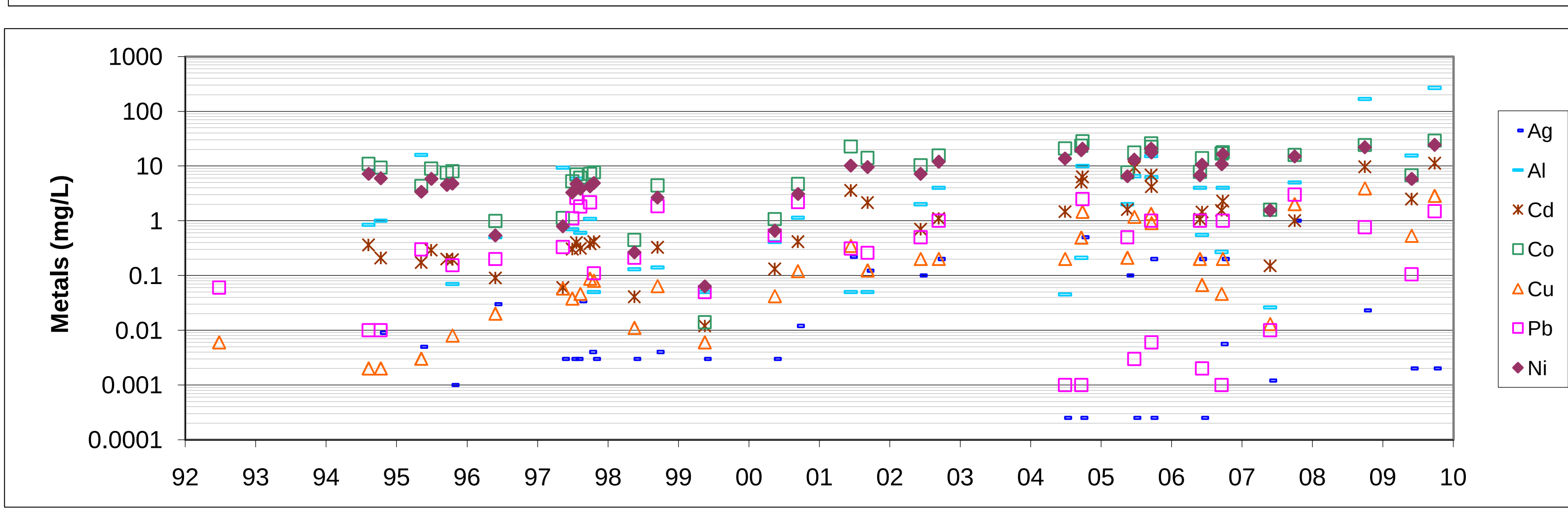
V33











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Anvil Range Mining Complex
2009 Waste Rock and Seepage Monitoring Report

Vangorda Routine Monitoring Station
V33 (SRK-VD05)

PROJECT	DATE	APPROVED	FIGURE
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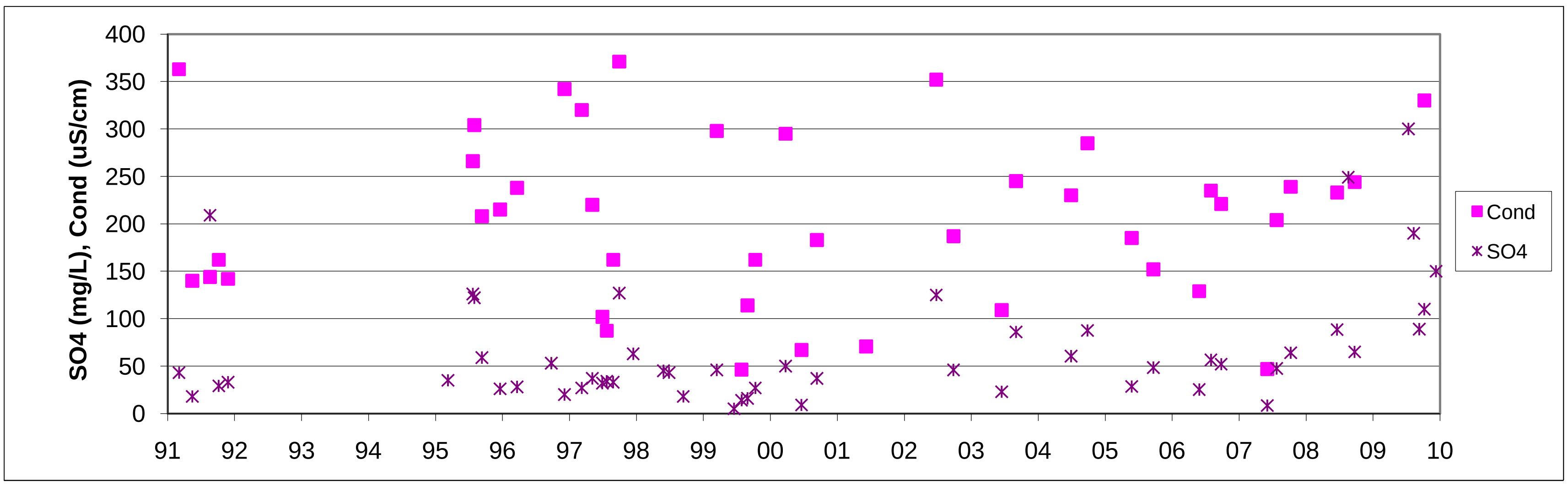
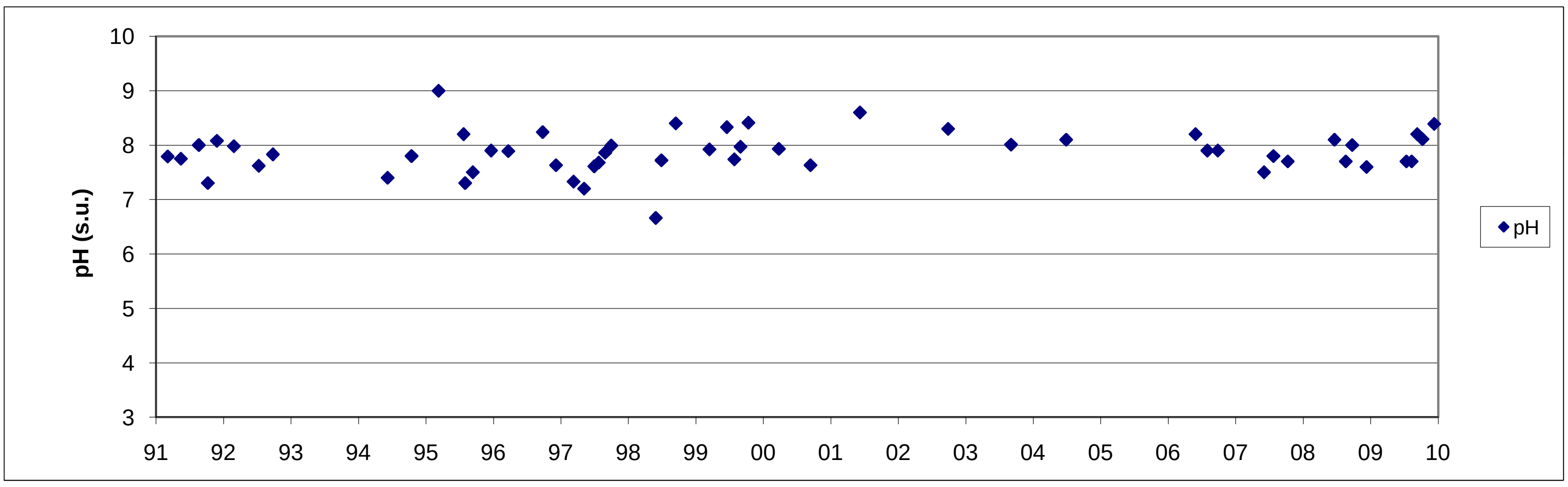
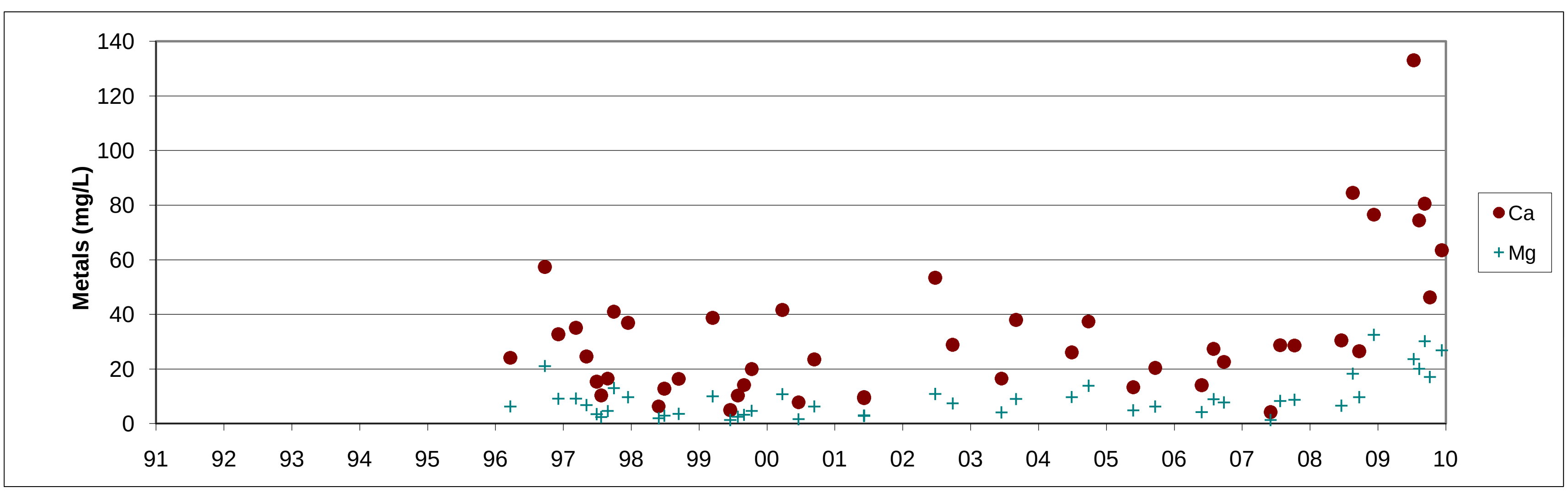
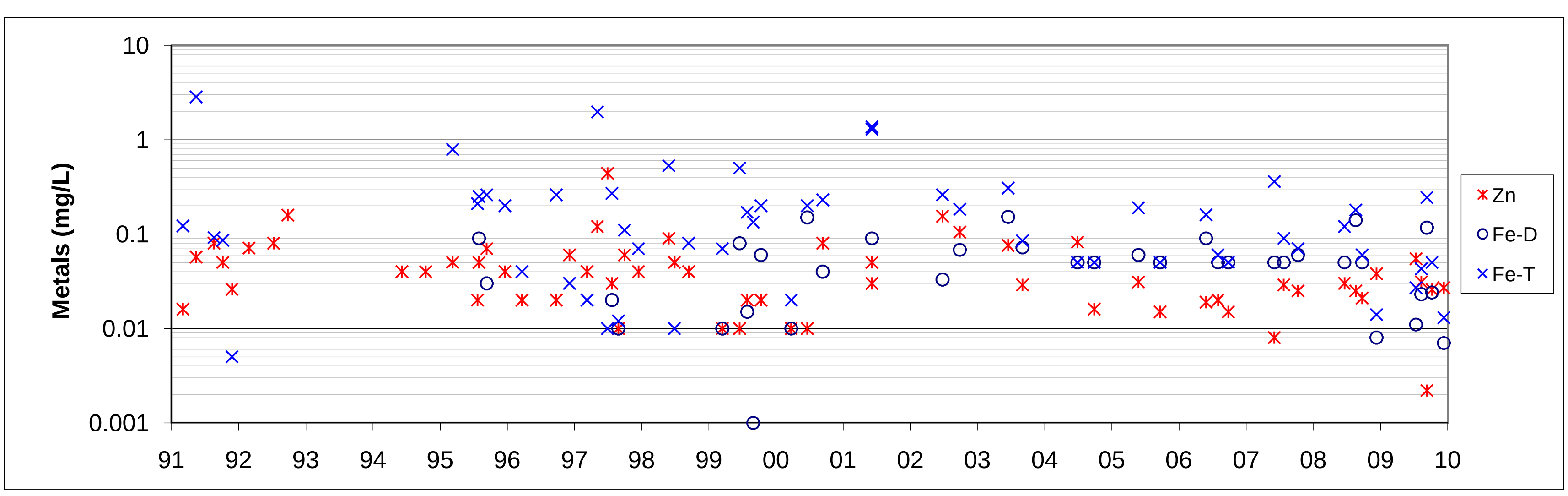
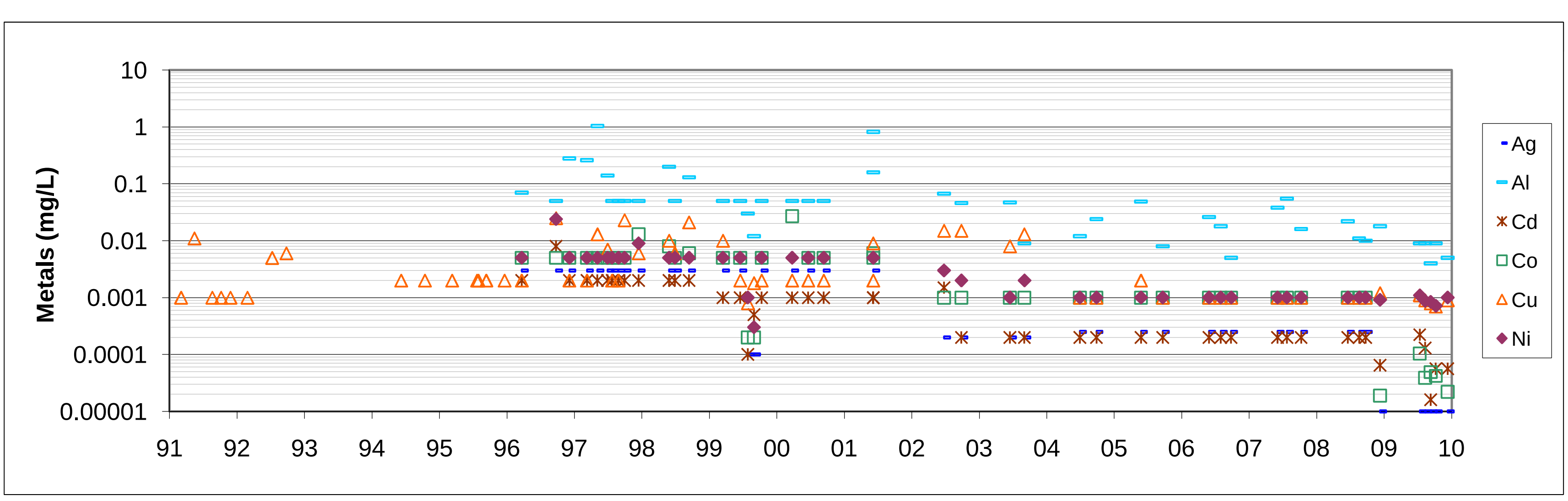
V27











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2009 Waste Rock and Seepage Monitoring Report

Vangorda Routine Monitoring Station
V27

PROJECT	DATE	APPROVED	FIGURE
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Appendices

Appendix A
Waste Rock Seepage Monitoring Results

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						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	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-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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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-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	<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	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	<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	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	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	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	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	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	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	2.24	22000	15.6	613	0	21900	2.4	28700	<1	<0.5	32300	27	<10	<10	<0.5	<0.3	<10	<5	7	449	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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-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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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-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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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-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	<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	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	<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	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	<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	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	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	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	<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	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	<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	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	<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	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	<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	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	<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	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	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	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	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	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	<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-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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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

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
	Min. detection level						2	0.01	1	0.5	0.5	0.5
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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
SRK-FD16	6/5/2003	7.42	67	1.4	508	40	64	7.32	3	30	0.7	5
SRK-FD16	9/11/2003	7.54	125	4.1	505	240	126	8.37	<1	60	0.8	7
SRK-FD16	5/27/2004	7.06	52	0.8	438	600	46.8	8.16	1.4	21.3	0.67	3.1
SRK-FD16	9/26/2004	6.75	146	3.9	625	90	149	7.73	4	66.8	<0.5	8.48
SRK-FD16	9/13/2005	7.12	126	5.1	602	60	126	8.07	2.8	49.4	<0.50	6.73
SRK-FD16	5/23/2006	6.93	49	1.1	302	-	48.4	7.73	3.8	19.0	<0.5	3.31
SRK-FD16	9/20/2006	7.47	123	4	206	210	122	8.09	2.2	64.4	<0.50	5.66
SRK-FD16	9/13/2008	7.49	98	3.7	205	240	110	8.00	1.7	47.0	0.5	7.80
SRK-FD17	6/13/2002	7.16	103	1.6	321	26	101	8	7	42	0.6	10
SRK-FD17	9/12/2002	7.35	130	3.5	316	1.5	130	7.68	4	54	<0.5	11
SRK-FD18	6/13/2002	6.98	177	1.6	307		173	8.01	11	55	0.5	28
SRK-FD18	9/12/2002	7.33	173	3.2	334	1.5	170	7.72	4	65	<0.5	19
SRK-FD18	6/5/2003	7.12	152	1.1	515	75	151	7.51	5	57	1.1	21
SRK-FD18	9/11/2003	6.82	141	4	536	Trace	142	8.15	2	61	0.8	11
SRK-FD18	5/27/2004	6.89	170	1.2	450	12.5	157	7.96	3.2	54.3	<0.5	28
SRK-FD18	9/26/2004	6.77	148	3.1	572	0.25	150	7.67	7.5	67.6	<0.5	9.15
SRK-FD18	5/16/2005	7.06	205	1.5	544	30	208	7.84	3.1	71.1	<0.50	39.2
SRK-FD18	9/13/2005	6.83	149	5	671	60	149	7.97	3.1	55.9	<0.50	12.3
SRK-FD18	5/23/2006	6.91	164	1.2	324	22	164	7.46	5.3	52.6	<0.5	29.8
SRK-FD18	9/20/2006	7.06	138	3.8	222	6	138	7.89	3.4	68.8	<0.50	8.83
SRK-FD18	5/29/2007	7.55	149	1.4	374	20	145	7.29	19.0	49.9	0.28	23.00
SRK-FD18	9/13/2007	6.15	170	3.9	166	15	168	7.20	7.1	71.6	<0.5	17.20
SRK-FD18	5/14/2008	6.03	270	1.3	303	trickle	200	7.70	13.3	57.0	<0.5	43.00
SRK-FD18	9/13/2008	7.24	185	3.4	307	23.3	190	8.10	5.0	75.0	<0.5	24.00
SRK-FD18	5/28/2009	3.17	192	9.7	440	60	1600	3.00	699.0	<0.5	0.5	740.00
SRK-FD18	9/27/2009	7.32	160		142	1	161	7.50	1.4	70.0	<0.5	13.00
SRK-FD19	6/13/2002	6.98	5030	0	259	30	4710	7.52	91	394	2	3380
SRK-FD19	9/11/2002	6.87	5110	0.2	283	30	4900	7.21	115	386	1.6	3810
SRK-FD19	6/6/2003	7.32	3550	1.3	444	30	4710	7.76	68	407	2.3	3670
SRK-FD19B	9/13/2003	7.25	5240	0.3	470	5.2	5070	7.75	67	403	2.5	3860
SRK-FD19	5/27/2004	6.65	4340	0.2	397	150	3940	7.45	90.3	279	1.55	3070
SRK-FD19	9/26/2004	6.44	5690	1.1	461	0.1	5470	7.51	114	406	<10	4110
SRK-FD19	5/16/2005	7.04	4350	0.3	446	120	4290	7.58	114	259	<5.0	3170
SRK-FD19	9/13/2005	6.91	5760	0.5	425	17	5100	7.51	128	414	<10	4290
SRK-FD19	5/23/2006	7.51	4960	0.1	249	180	4870	7.50	92.1	403	<2.5	3550
SRK-FD19	9/20/2006	7.22	5750	0.2	152	2	5590	7.58	123	436	<25	4070
SRK-FD19	5/29/2007	7.37	5100	0.2	328	50	6120	7.61	242	409	2.82	3570
SRK-FD19	9/13/2007	6.89	5460	0.6	72	2	5140	7.53	145	445	<50	4090
SRK-FD19	5/14/2008	7.6	5000	1.4	108	10	4800	7.9	74.1	340	2.1	4000
SRK-FD19	9/13/2008	6.3	5940	1	190	30	5900	7.6	281	270	1.1	5100
SRK-FD19	5/28/2009	6.91	630	2	272	120	5500	7.2	296	160	1.2	4200
SRK-FD19	9/27/2009	6.3	6630	0.5	101	5	6350	7.5	232	410	1.6	5800
SRK-FD20	6/13/2002	3.18	555	8.2	492	0.5	572	3.18	135	<1	0.6	193
SRK-FD20	9/13/2002	2.78	1875	0.9	586	60	1820	2.82	8750	12	<0.5	1170
SRK-FD20	6/5/2003	3.39	291	2.3	723	0	189	4.2	28	<1	0.6	69
SRK-FD20	9/12/2003	2.93	834	2.2	778	2	771	3.66	176	<1	<0.5	248
SRK-FD21	6/13/2002	4.57	4370	7.1	418	1.5	4130	4.51	283	8	0.8	3540
SRK-FD21B	9/13/2002	5.21	2860	1.6	371	slight	2820	5.37	35	8	<0.5	1980
SRK-FD21B	6/5/2003	6.61	3270	11.5	372	2.7	3220	7.51	40	21	<0.5	2650
SRK-FD21	5/30/2004	3.56	2840	6.5	700	9	2780	3.8	282	<1	1.08	1970
SRK-FD21	9/26/2004	6.81	2550	1.6		Trace	2520	8	23.9	10.4	<5	1710
SRK-FD21	5/16/2005	4.18	2790	5.3	661	18	2740	4.56	161	2.4	<5.0	1900
SRK-FD21	9/13/2005	7.16	4050	14.7	379	0.1	3680	7.49	55.7	15.3	<10	3060
SRK-FD21	5/24/2006	5.72	1932	6.5	345	8.6	1950	5.16	56.8	11.2	<2.5	1280
SRK-FD21	5/28/2007	7.13	2420	9.3	269	trace	2920	6.89	14	24.1	<2	1780
SRK-FD21	9/13/2007	4.79	2500	9.3	216	trace	3360	4.83	135	12.1	<50	2720
SRK-FD21	9/14/2008	4.33	3500	6.1	397	Trace	4900	4.7	216	<0.5	<0.5	4620
SRK-FD21	5/29/2009	6.87	1556	6.9	204	0.5	1500	6.9	27.3	46	<0.5	810
SRK-FD22	6/13/2002	6.59	2270	13.4	271	Trace Flow	2150	7.72	25	179	0.7	1390
SRK-FD22B	9/12/2002	5.45	1766	12	288	slight	1740	6.7	70	15	<0.5	1130
SRK-FD22B	6/8/2003	6.84	1460	8.1	632	Trace	1520	7.48	65	47	<0.5	1120
SRK-FD23	6/13/2002	6.39	729	19.4	113	Trace Flow	708	7.42	27	31	2.1	346
SRK-FD23B	9/13/2002	4.27	1403	36.9	235	5	1450	4.46	227	92	0.7	801
SRK-FD23B	9/12/2003	6.19	772	8.8	299	Trace	723	5.47	50	4	1.3	378
SRK-FD23	5/30/2004	5.74	875	16.2	288	Trace	859	6.48	36.7	8.9	1.45	474
SRK-FD23	5/16/2005	5.71	886	10.2	364	Trace	925	6.41	40.9	11.1	0.92	492
SRK-FD23	9/13/2005	5.31	1148	13.6	405	Trace	1060	6.27	132	5.6	0.90	600
SRK-FD23	9/20/2006	5.01	1168	6.4	178	trace	1070	6.23	118	6.8	0.92	590
SRK-FD23	9/13/2007	4.77	1601	9.6	200	trace	1580	5.45	279	6.9	<5	1040
SRK-FD23	9/14/2008	3.87	2405	6.7	323	Trace	2300	4.2	582	<0.5	0.7	1785
SRK-FD23	5/29/2009	6.05	1190	10.2	189	trace	1000	5.4	97.8	<0.5	1.6	590
SRK-FD23	9/27/2009	3.32	1490	6.9	378	trace	1510	4.8	247	<0.5	0.6	920

Sample ID	Date Sampled	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg
	Min. detection level	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
	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
SRK-FD16	6/13/2002	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	12.9	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	1.9
SRK-FD16	6/5/2003	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	9.97	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	1.5
SRK-FD16	9/11/2003	<0.2	<0.2	<0.2	0.05	<0.005	<0.2	<0.1	<0.01	19.6	<0.01	<0.01	<0.01	0.03	<0.05	<0.01	2.8
SRK-FD16	5/27/2004	<0.2	<0.2	<0.2	0.016	<0.005	<0.2	<0.1	<0.01	7.46	<0.01	<0.01	<0.01	0.047	<0.05	<0.01	1.09
SRK-FD16	9/26/2004	<0.2	<0.2	<0.2	0.064	<0.005	<0.2	<0.1	<0.01	23.6	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.34
SRK-FD16	9/13/2005	<0.20	<0.20	<0.20	0.060	<0.0050	<0.20	<0.10	<0.010	19.9	<0.010	<0.010	<0.010	0.032	<0.050	<0.010	3.14
SRK-FD16	5/23/2006	<0.2	<0.2	<0.2	0.022	<0.005	<0.2	<0.1	<0.01	9.04	<0.01	<0.01	<0.01	0.101	<0.05	<0.01	1.30
SRK-FD16	9/20/2006	<0.20	<0.20	<0.20	0.060	<0.0050	<0.20	<0.10	<0.010	19.7	<0.010	<0.010	<0.010	0.032	<0.050	<0.010	2.98
SRK-FD16	9/13/2008	0.0116	0.00004	0.00016	0.030	0.00001	<0.000005	<0.05	0.000038	15.4	<0.0001	0.00003	0.00176	0.025	0.000357	0.0014	2.20
SRK-FD17	6/13/2002	<0.2	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	15.3	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	2.6
SRK-FD17	9/12/2002	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	19.1	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.1
SRK-FD18	6/13/2002	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	26.4	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4.6
SRK-FD18	9/12/2002	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	26.3	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4.3
SRK-FD18	6/5/2003	<0.2	<0.2	<0.2	0.06	<0.005	<0.2	<0.1	<0.01	22	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4
SRK-FD18	9/11/2003	<0.2	<0.2	<0.2	0.08	<0.005	<0.2	<0.1	<0.01	21.9	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.4
SRK-FD18	5/27/2004	<0.2	<0.2	<0.2	0.068	<0.005	<0.2	<0.1	<0.01	24.2	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	4.14
SRK-FD18	9/26/2004	<0.2	<0.2	<0.2	0.087	<0.005	<0.2	<0.1	<0.01	23.6	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	3.45
SRK-FD18	5/16/2005	<0.20	<0.20	<0.20	0.081	<0.0050	<0.20	<0.10	<0.010	33.0	<0.010	<0.010	0.010	<0.030	<0.050	<0.010	5.73
SRK-FD18	9/13/2005	<0.20	<0.20	<0.20	0.073	<0.0050	<0.20	<0.10	<0.010	21.8	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	3.64
SRK-FD18	5/23/2006	<0.2	<0.2	<0.2	0.086	<0.005	<0.2	<0.1	<0.01	24.0	<0.01	<0.01	0.016	0.059	<0.05	<0.01	4.66
SRK-FD18	9/20/2006	<0.20	<0.20	<0.20	0.084	<0.0050	<0.20	<0.10	<0.010	21.7	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	3.53
SRK-FD18	5/29/2007	0.022	<0.0002	0.0003	0.058	<0.0002	<0.0002	<0.01	0.0003	24.3	<0.0002	<0.0002	0.011	0.02	0.0038	0.002	4.28
SRK-FD18	9/13/2007	0.0064	<0.0001	0.00013	0.070	<0.0005	<0.0005	<0.01	0.000314	25.5	<0.0005	<0.0001	0.00364	<0.03	0.00321	<0.005	4.26
SRK-FD18	5/14/2008	0.035	0.0001	0.007	0.078	<0.00005	<0.00003	<0.3	0.00035	29.1	<0.0005	0.00006	0.01	0.119	0.00305	<0.003	4.86
SRK-FD18	9/13/2008	0.0055	0.00005	0.00012	0.062	<0.00001	<0.000005	<0.05	0.000226	28.2	<0.0001	0.00003	0.00345	0.008	0.00203	0.0028	4.96
SRK-FD18	5/28/2009	14.8	0.0004	0.0011	0.072	0.0028	<0.00005	<0.5	0.164	33.0	0.017	0.181	3.42	231	0.057	0.024	23.10
SRK-FD18	9/27/2009	0.0058	0.00005	0.00011	0.071	<0.00001	<0.000005	<0.05	0.0003	24.6	<0.0001	0.000022	0.00331	0.009	0.00141	0.0022	3.94
SRK-FD19	6/13/2002	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	595	<0.01	0.06	<0.01	0.06	<0.05	0.03	584
SRK-FD19	9/11/2002	<0.4	<0.4	<0.4	0.04	<0.01	<0.4	<0.2	<0.02	628	<0.02	0.06	0.12	2.94	<0.1	0.03	574
SRK-FD19	6/6/2003	<0.2	<0.2	<0.2	0.04	<0.005	<0.4	<0.1	<0.01	584	<0.01	0.04	<0.01	0.07	<0.05	0.03	536
SRK-FD19B	9/13/2003	<0.2	<0.2	<0.2	0.05	<0.005	<0.5	<0.1	<0.01	598	<0.01	0.06	<0.01	0.07	<0.05	0.02	538
SRK-FD19	5/27/2004	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	0.028	456	<0.01	0.128	0.016	<0.03	<0.05	0.062	484
SRK-FD19	9/26/2004	<0.2	<0.2	<0.2	0.059	<0.005	<0.4	<0.1	<0.02	617	<0.01	0.057	<0.01	0.125	<0.05	0.029	667
SRK-FD19	5/16/2005	<0.20	<0.20	<0.20	0.029	<0.0050	<0.20	<0.10	0.043	448	<0.010	0.150	0.054	<0.030	<0.050	0.039	401
SRK-FD19	9/13/2005	<1.0	<1.0	<1.0	0.052	<0.025	<1.0	<0.50	<0.050	675	<0.050	0.076	<0.050	<0.15	<0.25	0.062	702
SRK-FD19	5/23/2006	<0.2	<0.2	<0.2	0.029	<0.005	<0.2	<0.1	0.011	445	<0.01	0.064	0.019	<0.03	<0.05	0.038	580
SRK-FD19	9/20/2006	<0.60	<0.60	<0.60	0.043	<0.015	<0.60	<0.30	<0.030	634	<0.030	0.073	<0.030	0.116	<0.15	0.039	736
SRK-FD19	5/29/2007	0.002	0.0003	0.0018	0.022	<0.0002	<0.0002	<0.01	0.01122	515	<0.0002	0.035	0.011	0.02	0.0014	0.038	640
SRK-FD19	9/13/2007	<0.02	<0.002	<0.002	0.0361	<0.01	<0.01	<0.2	0.0073	566	<0.01	0.0673	0.0105	<0.06	0.0054	<0.1	648
SRK-FD19	5/14/2008	0.007	0.0004	0.0059	0.0275	<0.0001	<0.00005	<0.5	0.0138	552	<0.001	0.0432	0.0109	0.067	0.0136	0.044	560
SRK-FD19	9/13/2008	0.475	<0.0004	0.0013	0.0538	0.0006	<0.0001	<1	0.0817	659	<0.002	0.29	0.177	0.176	0.0085	0.051	765
SRK-FD19	5/28/2009	0.546	0.0005	0.001	0.0359	0.001	<0.0001	<1	0.15	489	<0.002	0.462	0.42	0.468	0.0052	0.067	676
SRK-FD19	9/27/2009	0.035	0.0004	0.0013	0.0582	<0.0002	<0.0001	<1	0.0201	707	<0.002	0.106	0.02	0.278	0.0093	0.04	922
SRK-FD20	6/13/2002	9.1	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	10.2	0.01	0.05	0.99	16.9	<0.05	0.01	9.1
SRK-FD20	9/13/2002	46.8	<0.2	<0.2	0.04	0.006	<0.2	<0.1	0.08	35.2	0.07	0.25	8.06	173	<0.05	0.08	35.8
SRK-FD20	6/5/2003	1.8	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	<0.01	6.45	<0.01	<0.01	0.24	1.45	<0.05	<0.01	3.8
SRK-FD20	9/12/2003	11.3	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	0.02	18	0.02	0.06	1.94	32.2	<0.05	0.03	13.2
SRK-FD21	6/13/2002	27.3	<0.2	<0.2	<0.01	0.009	<0.2	<0.1	0.17	410	<0.01	0.28	2.59	0.06	0.09	0.11	504
SRK-FD21B	9/13/2002	1.5	<0.2	<0.2	<0.01	<0.005	<0.3	<0.1	0.05	322	<0.01	0.03	0.3	<0.03	<0.05	0.03	256
SRK-FD21B	6/5/2003	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.08	378	<0.01	0.06	0.12	<0.03	<0.05	0.04	358
SRK-FD21	5/30/2004	30.5	<0.2	<0.2	0.015	0.0088	<0.2	<0.1	0.106	335	<0.01	0.243	2.33	5.18	0.19	0.096	219
SRK-FD21	9/26/2004	0.58	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.035	283	<0.01	0.021	0.12	<0.03	<0.05	0.035	234
SRK-FD21	5/16/2005	16.4	<0.20	<0.20	0.012	0.0053	<0.20	<0.10	0.080	267	<0.010	0.158	1.45	0.654	0.099	0.058	202
SRK-FD21	9/13/2005	1.24	<0.20	<0.20	0.013	<0.0050	<0.20	<0.10	0.077	398	<0.010	0.065	0.416	<0.030	0.056	0.066	446
SRK-FD21	5/24/2006	3.56	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	0.043	249	<0.01	0.082	0.424	<0.03	<0.05	0.032	153
SRK-FD21	5/28/2007	0.023	<0.0002	0.0006	0.016	<0.0002	<0.0002	<0.01	0.0295	299	<0.0002	0.032	0.026	<0.01	0.0031	0.029	278
SRK-FD21	9/13/2007	10.4	<0.001	<0.001	0.0113	<0.005	<0.005	<0.1	0.0762	349	<0.005	0.117	0.8	0.042	0.155	0.061	382
SRK-FD21	9/14/2008	21.5	<0.0002	0.0014	0.012	0.0046	<0.00005	<0.5	0.165	468	0.001	0.263	1.35	0.067	0.148	0.078	677
SRK-FD21	5/29/2009	0.0779	0.00006	0.00012	0.0168	0.00007	<0.000005	<0.05	0.0154	134	<0.0001	0.0238	0.0292	0.008	0.00227	0.0279	141
SRK-FD22	6/13/2002	<0.2	<0.2	<0.2	<0.01	<0.005	<0.3	<0.1	0.01	346	<0.01	0.02	<0.01	<0.03	<0.05	0.07	158
SRK-FD22B	9/12/2002	1.4	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.07	239	<0.01	0.04	0.45	0.07	<0.05	0.07	88.2
SRK-FD22B	6/8/2003	1.6	<0.2	<0.2	0.03	<0.005	<0.2	<0.1	0.07	235	<0.01	0.06	0.5	0.07	<0.05	0.07	91.2
SRK-FD23	6/13/2002	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.08	49.1	<0.01	0.13	<0.01	2.14	<0.05	0.04	53.6
SRK-FD23B	9/13/2002	0.6	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.22	73.5	<0.01	0.38	0.2	50	<0.05	0.06	104
SRK-FD23B	9/12/2003	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.09	50.7	<0.01	0.15	0.05	20.2	<0.05	0.05	57.5
SRK-FD23	5/30/2004	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	0.103	65.6	<0.01	0.166	0.043	6.57	<0.05	0.064	62.1
SRK-FD23	5/16/2005	<0.20	<0.20	<0.20	0.013	<0.0050	<0.20	<0.10	0.119	74.1	<0.010	0.209	0.129	10.1	<0.050	0.061	79.1
SRK-FD23	9/13/2005	0.65	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.110	64.1	<0.010	0.222	0.182	49.2	0.069	0.060	78.4
SRK-FD23	9/20/2006	0.28	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.115	60.9	<0.010	0.229	0.133	39.9	<0.050	0.052	76.5
SRK-FD23	9/13/2007	2.65	<0.001	<0.001	0.00609	<0.005	<0.005	<0.1	0.121	99.9	<0.005	0.234	0.412	75	0.0743	<0.05	136
SRK-FD23	9/14/2008	18.2	<0.0002	0.0007	0.0138	0.0174	<0.00005	<0.5	0.472	126	0.002	0.74	2.23	164	0.465	0.124	184
SRK-FD23	5/29/2009	0.24	<0.0001	0.0002	0.0129	0.00137	<0.00003	<0.3	0.127	68.8	<0.0005	0.238	0.268	16.4	0.05	0.059	82.9
SRK-FD23	9/27/2009	0.896	<0.0002	0.0005	0.0108	0.0026	<0.00005	<0.5	0.17	90	<0.001	0.338	0.357	79.4	0.115	0.067	120

Sample ID	Date Sampled	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	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	
SRK-FD16	6/13/2002	<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	<0.005	<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	0.018	<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	<0.005	<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	0.0071	<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	0.0136	<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	<0.005	<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	0.0099	<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	0.0047	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	<0.005	<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	<0.005	<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	<0.005	<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	<0.005	<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	<0.005	<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	<0.005	<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	<0.005	<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	<0.005	<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	<0.0050	<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	<0.0050	<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	0.0105	<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	<0.0050	<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	0.0009	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	0.000644	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	0.0033	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	0.00236	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	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	0.00342	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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-FD20	6/13/2002	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	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	0.161	<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	0.672	<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	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	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	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	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	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	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	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	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	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	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	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	0.703	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-FD22	6/13/2002	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	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	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	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	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	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	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	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	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	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	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	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	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	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

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						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	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-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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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-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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	6.09	2100	11.9	657	0	1850	7.7	37	25	0.5	1430	<0.2	<0.2	<0.2	0.02	<0.005	<0.2	<0.1	<0.01	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	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	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	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	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	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	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	5.73	2240	8.2	306	0	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	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	6.36	2450	12.2	216		3270	6.4	92	37.2	<2	1930	0.067	<0.0002	0.0013	0.019	0.0003	<0.0002	<0.01	0.0106	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	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	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	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	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	5.47	1637		353	no flow	2130	6.4	314	25	<0.5	1300	0.059	<0.0002	0.0009	0.0078	0.0004	<0.00005	<0.5	0.00899	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-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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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-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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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
	Min. detection level						2	0.01	1	0.5	0.5	0.5
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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
SRK-FD40	6/6/2003	3.35	789	1.4	738	Lots	780	3.5	117	<1	0.7	379
SRK-FD40	9/12/2003	6.2	692	3.1	494	120	676	7.24	43	29	0.5	334
SRK-FD40	6/3/2004	3.53	1664	8.6	720	900	1790	3.14	318	<1	0.83	926
SRK-FD40	9/26/2004	7.01	1192	2.8	443	30	1190	7.04	77.8	27.8	<5	661
SRK-FD40	5/16/2005	2.83	2510	1.8	767	600	2360	2.80	672	<2.0	<5.0	1340
SRK-FD40	9/13/2005	6.9	1100	8.2	403	>150	1060	6.47	75.3	25.3	<2.5	612
SRK-FD40	5/24/2006	2.89	2160	2.1			1970	2.88	566	<2	<2.5	1070
SRK-FD40	9/20/2006	5.81	923	3.2	330	2	903	7.05	53.6	21.2	<0.50	471
SRK-FD40	5/28/2007	3.5	934	1.6	691	>1	765	3.14	152.0	<0.5	0.46	403
SRK-FD40	9/13/2007	3.24	943	5.9	448	>1000	867	3.56	145.0	<2	<0.5	425
SRK-FD40	5/14/2008	2.73	3700	2.5	557	500	3300	2.70	1220.0	<0.5	<0.5	2000
SRK-FD40	9/14/2008	2.67	1462	5	539	600	1400	3.00	319.0	<0.5	<0.5	747
SRK-FD40	5/28/2009	5.07	2484	1.7	399	4500	2200	2.80	615.0	<0.5	0.7	970
SRK-FD40	9/27/2009	6.13	1216	3	140	150	1220	5.40	117.0	01.7	<0.5	730
SRK-FD44	6/8/2003	7.1	2470	7.7	621	1	2290	6.84	99	83	<0.5	1850
SRK-FD44	5/26/2004	6.47	974	8	291	4	1060	7.91	6.5	57.4	<0.5	472
SRK-FD44	5/16/2005	7	1870	7.6	395	6.5	1880	7.24	30.6	95.1	<5.0	939
SRK-FD44	5/23/2006	6.72	1851	10.9	181	3.5	1790	7.48	68.8	40.9	<2.5	1140
SRK-FD44	5/28/2009	5.59	1696	3	154	2.0	1600	7.10	57.2	59.0	<0.5	1100
SRK-FD46	9/13/2003	2.88	5750	5.6	652	15	5670	2.8	6550	<1	5.5	5040
SRK-FD47	5/26/2004	3.08	1940	13.3	560	Trace	1940	3.11	392	<1	1.76	1130
SRK-FD47	5/18/2005	3.48	1637	5	666	Trace	1690	3.25	182	<2.0	1.40	905
SRK-FD47	5/23/2006	3.09	1660	13.8	490	0	1600	3.12	371	<2	<2.5	867
SRK-FD48	5/26/2004	6.53	1748	2.5	339	12.5	1750	7.29	20.8	135	0.59	910
SRK-FD48	5/28/2009	5.49	2258	1.2	150	12	2200	7.9	18.2	190	1	1300
SRK-FD49	5/28/2004	6.05	9030	10.3	421	Trace	8970	6.29	122	22.1	<0.5	8180
SRK-FD49	5/18/2005	5.15	5150	9.9	477	Trace	5060	6.86	154	47.8	<10	4070
SRK-FD49	5/29/2009	7.46	3240	7.2	250	trace	4100	7.30	032	82.0	1.7	4000
SRK-FD50	5/30/2004	7.35	1190	11.1	352	Trace	1200	8.16	2.6	211	<0.5	476
SRK-FD50	5/24/2006	7.83	1050	8.1	162	trace	1020	8.08	4.0	184	<0.5	424
SRK-FD51	9/14/2008	6.34	656	6.3	178	11.1	0670	7.30	017	31.0	0.8	0354
SRK-FD51	9/27/2009	6.83	536	4.5	109	trickle	0530	7.40	006	41.0	<0.5	0290
SRK-FD52	9/16/2008	6.43	8620	5.9	116	Trace	9500	7.10	085	42.0	<0.5	10920
SRK-FD52	5/29/2009	7.34	12340	6.9	242	0	11000	6.70	096	30.0	<0.5	11000
SRK-FD53	5/29/2009	7.45	1205	10.5	248	4	1100	6.40	039	05.5	1.2	0730
SRK-FD54	9/26/2009	5.72	6060	3.5	335	trace	8030	7.20	1150	200.0	5.6	7900
SRK-FD55	9/26/2009	6.05	6020	3.5	294	trace	6130	6.90	474	21.0	<0.5	5800

Sample ID	Date Sampled	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
	Min. detection level	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
	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
SRK-FD40	9/13/2002	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
SRK-FD40	6/6/2003	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
SRK-FD40	9/12/2003	<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
SRK-FD40	6/3/2004	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
SRK-FD40	9/26/2004	<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
SRK-FD40	5/16/2005	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
SRK-FD40	9/13/2005	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
SRK-FD40	5/24/2006	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
SRK-FD40	9/20/2006	<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
SRK-FD40	5/28/2007	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
SRK-FD40	9/13/2007	5.32	<0.001	<0.001	0.039	<0.005	<0.005	<0.1	0.058	42.4	<0.005	0.121	0.652	1.07	0.162	<0.05	50.9	3.080
SRK-FD40	5/14/2008	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
SRK-FD40	9/14/2008	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
SRK-FD40	5/28/2009	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
SRK-FD40	9/27/2009	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
SRK-FD44	6/8/2003	<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
SRK-FD44	5/26/2004	<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
SRK-FD44	5/16/2005	<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
SRK-FD44	5/23/2006	<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
SRK-FD44	5/28/2009	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
SRK-FD46	9/13/2003	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
SRK-FD47	5/26/2004	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
SRK-FD47	5/18/2005	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
SRK-FD47	5/23/2006	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
SRK-FD48	5/26/2004	<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
SRK-FD48	5/28/2009	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
SRK-FD49	5/28/2004	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
SRK-FD49	5/18/2005	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
SRK-FD49	5/29/2009	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
SRK-FD50	5/30/2004	<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
SRK-FD50	5/24/2006	<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
SRK-FD51	9/14/2008	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
SRK-FD51	9/27/2009	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
SRK-FD52	9/16/2008	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
SRK-FD52	5/29/2009	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
SRK-FD53	5/29/2009	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
SRK-FD54	9/26/2009	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
SRK-FD55	9/26/2009	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

Sample ID	Date Sampled	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	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	
SRK-FD40	9/13/2002	<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	<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	<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	<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	<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	<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	<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	<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	<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	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	<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	<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	<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	<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	<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-FD44	6/8/2003	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	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	<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	<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	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	<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	<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	<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	<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-FD52	9/16/2008	<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	<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	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	<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-FD55	9/26/2009	<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

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-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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	0.000500	1b
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	<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	0.000700	1b
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	<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	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	<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	0.000800	1b
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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<0.0025	0.00064	0.0016	<0.03	0.00148	0.038	284	0.0059	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	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	<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	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	<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	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	<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	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	<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-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	<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	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	<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	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	<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	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	<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	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	<0.0025	<0.0005	0.002	<0.03	0.00103	0.035	272	0.0027	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	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	<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	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	<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-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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<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	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	<0.0025	<0.0005	0.001	<0.03	<0.00025	<0.025	179	0.0014	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	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	<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	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	<0.0001	0.000977	0.0014	0.009	0.000052	0.015	220	0.0097	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	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	<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-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	<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	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	<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	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	<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	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	<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
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	
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

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
	Min. detection level						2	0.01	1	0.5	0.5	0.5
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	mg/L	mg/L	mg/L	mg/L
SRK-GD18	5/28/2004	7.74	741	3	403	15	742	8.07	5.9	108	0.74	302
SRK-GD18	5/18/2005	6.73	1040	3	399	97.5	1040	8.09	6.5	141	<0.50	458
SRK-GD18	5/25/2006	7.07	953	2.1	259	50	950	7.92	6.6	115	<0.5	418
SRK-GD18	5/27/2007	7.67	1109	0.6	292	12	1090	7.69	14.0	151	<1	535
SRK-GD18	5/30/2009	7.74	1405	1.5	237	150	1200	8.00	4.6	150	1	570
SRK-GD19	5/29/2004	5.73	2580	1.1	336	30	2500	5.75	238	38.7	0.58	1710
SRK-GD19	5/26/2007	7.63	1692	1.3	34	trace	1910	7.74	7	109	<1	1050
SRK-GD19	9/15/2008	6.03	1922	3.1	150	13.4	2500	7.4	82.6	320	2	804
SRK-GD19	5/30/2009	6.5	3200	1.7	175	5	2800	7.2	84.4	250	2.2	1900
SRK-GD20	5/29/2004	6.2	2450	1.7	322	30	2410	7.59	198	130	0.9	1530
SRK-GD20	5/25/2006	7.37	2390	9.8	109	trace	2580	7.87	12.6	132	<2.5	1700
SRK-GD20	9/15/2008	6.93	1995	5.4	58	3.8	2600	7.60	67.6	340	1.6	0813
SRK-GD21	5/28/2004	7.47	3390	3.4	394	7.5	3140	7.86	27.6	393	1.26	1990
SRK-GD21	9/24/2004	7.1	3860	4	536	Trace	3770	8.1	6.3	628	<5	2170
SRK-GD21	5/15/2005	7.74	2490	2.7	438	6	2950	8.10	7.9	356	<5.0	1770
SRK-GD21	5/25/2006	7.85	2370	10.5	118	trace	2890	8.08	9.8	400	<2.5	1670
SRK-GD21	5/26/2007	8.14	2420	11	364	trickle	3500	8.17	8.0	470	<2	1820
SRK-GD21B	9/15/2008	6.83	3012	6.7	196	Trace	3600	8.00	37.9	340	0.9	2496
SRK-GD21	5/31/2009	8.32	3830	7.2	223	trickle	3500	8.30	<0.5	490	3	2000
SRK-GD21	9/24/2009	7.62	3480	3.2	235	trace	4220	8.10	35.6	660	1.9	2900
SRK-GD22	9/15/2008	6.81	2198	2.4	163	Trace	2800	7.60	47.6	360	1.7	1743
SRK-GD22	5/30/2009	7.23	3860	4.4	211	trace	3500	7.90	26.0	360	2.8	2300
SRK-GD23	9/18/2008	6.83	811	3.8	159	0.5	1000	7.80	11.1	140	1.2	0552
SRK-GD24	9/26/2009	7.17	3550	4.2	93	trace	3440	7.70	94.3	280	0.9	2400

Sample ID	Date Sampled	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg
	Min. detection level	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
	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
SRK-GD18	5/28/2004	<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
SRK-GD18	5/18/2005	<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
SRK-GD18	5/25/2006	<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
SRK-GD18	5/27/2007	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
SRK-GD18	5/30/2009	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
SRK-GD19	5/29/2004	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
SRK-GD19	5/26/2007	<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
SRK-GD19	9/15/2008	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
SRK-GD19	5/30/2009	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
SRK-GD20	5/29/2004	<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
SRK-GD20	5/25/2006	<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
SRK-GD20	9/15/2008	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
SRK-GD21	5/28/2004	<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
SRK-GD21	9/24/2004	<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
SRK-GD21	5/15/2005	<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
SRK-GD21	5/25/2006	<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
SRK-GD21	5/26/2007	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
SRK-GD21B	9/15/2008	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
SRK-GD21	5/31/2009	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
SRK-GD21	9/24/2009	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
SRK-GD22	9/15/2008	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
SRK-GD22	5/30/2009	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
SRK-GD23	9/18/2008	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
SRK-GD24	9/26/2009	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

Sample ID	Date Sampled	Mn	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	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	
SRK-GD18	5/28/2004	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	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	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	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	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	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	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	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	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	
SRK-GD20	5/29/2004	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	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	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	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	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	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	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	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	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	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	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-GD22	9/15/2008	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	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	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	15.8000	<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 2002-2009 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

Appendix A.3 2002-2009 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
	Min. detection level						2	0.01	1	0.5	0.5	0.5
	Units	s.u.	uS/cm	0C	mV	L/min	uS/cm	s.u.	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
SRK-VD09B	9/12/2002	4.45	5400	5.4	341	slight	5190	4.18	836	14	<0.5	4370
SRK-VD09C	6/6/2003	3.67	4790	17.9	537	2	4620	3.74	860	<1	<0.5	4340
SRK-VD09C	9/14/2003	4.54	4740	0.7	522	Trace	4550	5.03	581	12	0.8	3810
SRK-VD09	5/30/2004	3.5	4560	13.9	610	4	4490	3.71	875	<1	<0.5	3690
SRK-VD09	9/27/2004	3.99	5320	10	491	Trace	5110	4.85	709	4.6	<10	4240
SRK-VD09	5/19/2005	3.84	4460	13.7			4500	3.26	1040	<2.0	<10	3850
SRK-VD09	9/17/2005	3.6	5140	10.1	523	Trace	4800	4.22	755	3.3	<10	4290
SRK-VD09	5/28/2006	4.42	5450	1.1	218	trace	5320	4.14	1200	<2	<10	4430
SRK-VD09	5/27/2007	3.66	6870	18.9	477	trace	9760	3.33	2500	<0.5	<2	6670
SRK-VD09	9/18/2008	4.17	8490	6.8	248	2	6900	4.10	3370	<0.5	<0.5	6390
SRK-VD09	5/27/2009	4.73	4995	15.2	174	trace	5000	3.40	1430	<0.5	0.7	4200
SRK-VD09	9/28/2009	4.63	6070	0.5	214	1	5930	4.30	1310	<0.5	<0.5	5700
SRK-VD10	5/29/2004	5.85	2470	2.2	305	4.2	5490	5.71	1370	88.2	2.11	4700
SRK-VD10	9/26/2004	5.65	13920	2.8	275	3.3	13500	4.95	5390	28	<250	15300
SRK-VD10	5/17/2005	5.48	6740	2.8	305	7.2	6430	3.98	2460	<2.0	<25	5420
SRK-VD10	9/17/2005	5.66	16060	5.9	409	3.5	14800	5.49	5900	84.0	<10	15000
SRK-VD10	5/28/2006	5.75	7090	4.3	110	3	07910	6.47	4250	14.2	<50	07310
SRK-VD10	5/27/2007	5.44	6500	5.9	265	1.5	08740	4.12	2150	<0.5	<4	06340
SRK-VD10	9/18/2008	5.48	12740	7	37	3	16000	4.70	8800	<0.5	<5	19650
SRK-VD10	5/27/2009	5.32	5915	2.8	107	trickle	07400	4.50	3560	<0.5	<0.5	07000
SRK-VD10	9/26/2009	5.64	20800		78	0.5	20500	4.10	10600	<0.5	<5	30000
SRK-VD12	5/17/2005	3.64	3190	5.6	647	1.8	3240	3.03	734	<2.0	<5.0	2230
SRK-VD12	9/18/2008	2.04	18170	8.1	416	Trace	23000	2.60	24600	<0.5	10	37800

Sample ID	Date Sampled	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Mo
	Min. detection level	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
	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
SRK-VD09	6/11/2002	<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
SRK-VD09B	9/12/2002	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
SRK-VD09C	6/6/2003	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
SRK-VD09C	9/14/2003	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
SRK-VD09	5/30/2004	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
SRK-VD09	9/27/2004	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
SRK-VD09	5/19/2005	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
SRK-VD09	9/17/2005	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
SRK-VD09	5/28/2006	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
SRK-VD09	5/27/2007	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
SRK-VD09	9/18/2008	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
SRK-VD09	5/27/2009	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
SRK-VD09	9/28/2009	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
SRK-VD10	5/29/2004	<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
SRK-VD10	9/26/2004	<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
SRK-VD10	5/17/2005	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
SRK-VD10	9/17/2005	<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
SRK-VD10	5/28/2006	<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
SRK-VD10	5/27/2007	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
SRK-VD10	9/18/2008	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
SRK-VD10	5/27/2009	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
SRK-VD10	9/26/2009	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
SRK-VD12	5/17/2005	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
SRK-VD12	9/18/2008	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

Sample ID	Date Sampled	Ni	P	K	Se	Si	Ag	Na	Sr	Tl	Sn	Ti	U	V	Zn	Zr	Water Type
	Min. detection level	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	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	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	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	3.5	<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	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	3.4	<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	3.14	<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	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	3.43	<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	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	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	4.41		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	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	4.00		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	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	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	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	5.73	<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	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	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	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	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	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	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	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
Pit Seepage Monitoring Results

Sample ID	Date Sampled	Field Parameters					Physical Tests		Dissolved Anions				Dissolved Metals																																	
		pH	Cond uS/cm	Temp °C	ORP mV	Flow L/min	Cond uS/cm	pH	Acidity (to pH 8.3) mg CaCO3/L	Alkalinity-Total mg CaCO3/L	Cl mg/L	SO4 mg/L	Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	Bi mg/L	B mg/L	Cd mg/L	Ca mg/L	Cr mg/L	Co mg/L	Cu mg/L	Fe mg/L	Pb mg/L	Li mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	P mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	Sr mg/L	Tl mg/L	Sn mg/L	Ti mg/L	U mg/L	V mg/L	Zn mg/L	Zr mg/L
04-FP01	3-Jun-04	6.54	3630	11.5	414	4	3540	7.29	80.6	280	44.2	2310	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.022	631	<0.01	0.047	0.014	<0.03	<0.05	0.097	171	6.01	<0.03	0.194	<0.3	8.2	<0.2	7	<0.01	58.3	2.24	<0.2	<0.03	0.012		<0.03	45.2	
04-FP02	3-Jun-04	7.46	1170	11.1	379	4	1150	8.01	2.4	139	0.64	428	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	<0.01	44.4	<0.01	<0.01	<0.01	<0.03	<0.05	0.032	10.1	<0.005	<0.03	<0.05	<0.3	<2	<0.2	2.61	<0.01	150	1.2	<0.2	<0.03	<0.01		<0.03	0.0509	
04-FP03	3-Jun-04	3.02	5180	12.4	657	25	5120	2.94	1960	<1	0.94	4100	2.5	<1.0	<1.0	<0.050	<0.025	<1.0	<0.7	0.904	302	<0.050	1.55	2.55	192	0.95	0.131	413	82	<0.15	1.41	<1.5	<10	<1.0	3.86	<0.05	<10	0.796	<1.0	<0.15	<0.05		<0.15	875	
04-FP04	3-Jun-04	7.32	616	12.5	349	600	600	8.05	4.2	239	<0.50	99.4	<0.2	<0.2	<0.2	0.036	<0.005	<0.2	<0.1	<0.01	58.6	<0.01	<0.01	<0.01	<0.03	<0.05	0.043	28.4	0.0928	<0.03	<0.05	<0.3	3.1	<0.2	0.989	<0.01	14.9	1.66	<0.2	<0.03	<0.01		<0.03	0.832	
04-FP05	3-Jun-04	8.12	1038	14.8	331	7.5	983	8.11	3.9	293	<0.50	287	<0.2	<0.2	<0.2	0.031	<0.005	<0.2	<0.1	<0.01	94.2	<0.01	<0.01	<0.01	<0.03	<0.05	0.055	59.2	<0.005	<0.03	<0.05	<0.3	6.1	<0.2	0.808	<0.01	35.6	3.24	<0.2	<0.03	<0.01		<0.03	<0.005	
04-FP06	3-Jun-04	7.23	275	11.2	436	not recorded	277	7.84	1	119	<0.50	21.7	<0.2	<0.2	<0.2	0.016	<0.005	<0.2	<0.1	<0.01	32.8	<0.01	<0.01	<0.01	<0.03	<0.05	0.021	10.4	<0.005	<0.03	<0.05	<0.3	2.2	<0.2	4.66	<0.01	3	0.234	<0.2	<0.03	<0.01		<0.03	<0.005	
04-FP07	3-Jun-04	7.03	379	4.2	424	400	393	7.99	4.1	193	<0.50	25.5	<0.2	<0.2	<0.2	0.062	<0.005	<0.2	<0.1	<0.01	50.4	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	13.2	<0.005	<0.03	<0.05	<0.3	<2	<0.2	1.75	<0.01	2.6	0.536	<0.2	<0.03	<0.01		<0.03	<0.005	
05-SF-A25	16-May-05	7.74	2490	2.7	438		434	8.24	<1	205	<0.5	38	<0.2	<0.2	<0.2	0.078	<0.005	<0.2	<0.1	<0.01	67	<0.01	<0.01	<0.01	<0.03	<0.05	0.013	20	<0.005	<0.03	<0.05	<0.3	<2	<0.2	1.46	<0.01	2.8	0.637	<0.2	<0.03	<0.01		<0.03	0.0055	
05-SF-FP04	17-May-05	8.18	586	6	295		554	8.07	4.9	252	<0.5	70.9	<0.2	<0.2	<0.2	0.039	<0.005	<0.2	<0.1	<0.01	82.7	<0.01	<0.01	<0.01	<0.03	<0.05	0.022	28	<0.005	<0.03	<0.05	<0.3	3.6	<0.2	0.804	<0.01	5.7	1.47	<0.2	<0.03	<0.01		<0.03	<0.005	
05-S-FP02	18-May-05	6.74	1903	7.8	293		1840	6.99	227	55.3	<0.5	1120	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.13	171	<0.01	0.108	0.043	16.4	<0.05	0.103	104	8.57	<0.03	0.069	<0.3	3.2	<0.2	1.05	<0.01	8.5	2.71	<0.2	<0.03	<0.01		<0.03	151	
05-S-FP03	18-May-05	2.9	204	2.7	645		3170	2.96	1240	<2	<10	1940	<0.2	<0.2	<0.2	<0.01	0.0097	<0.2	<0.1	0.428	135	0.03	0.504	2.55	110	1.27	0.038	157	25.4	<0.03	0.487	<0.3	<2	<0.2	2.97	<0.01	<2	0.21	<0.2	<0.03	<0.01		<0.03	420	
05-SF-A25	13-Sep-05	7.32	435	7.1	560	30	415	7.97	4.1	234	<0.50	18.7	<0.2	<0.2	<0.2	0.11	<0.005	<0.2	<0.1	<0.01	88.8	<0.01	<0.01	<0.01	<0.03	<0.05	0.013	20	<0.005	<0.03	<0.05	<0.3	2.1	<0.2	2.97	<0.01	3.6	0.749	<0.2	<0.03	<0.01		<0.03	<0.005	
05-F-FP01	15-Sep-05	6.93	3650	7.1	410	0.5	3490	7.53	91.6	279	51.2	2230	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	0.022	445	<0.01	0.022	<0.01	<0.03	<0.05	0.083	184	4.9	<0.03	0.256	<0.3	6.4	<0.2	5.78	<0.01	46.9	1.82	<0.2	<0.03	<0.01		<0.06	52.4	
05-F-FP02	15-Sep-05	7.46	764	10.6	345	5	727	7.43	4.7	80.8	<0.50	327	<0.2	<0.2	<0.2	0.011	<0.005	<0.2	<0.1	<0.01	91.2	<0.01	<0.01	<0.01	0.128	<0.05	0.016	38.3	0.0362	<0.03	<0.05	<0.3	<2	<0.2	2.42	<0.01	5.1	0.284	<0.2	<0.03	<0.01		<0.03	0.791	
05-F-FP03	15-Sep-05	8.43	407	14.1	619	20	425	8.3	<1.0	220	<0.50	34.7	<0.2	<0.2	<0.2	0.039	<0.005	<0.2	<0.1	<0.01	80.7	<0.01	<0.01	<0.01	<0.03	<0.05	0.048	27.2	<0.005	<0.03	<0.05	<0.3	3.3	<0.2	6.33	<0.01	6	0.819	<0.2	<0.03	<0.01		<0.03	0.029	
05-SF-FP04	16-Sep-05	7.84	569	3.5	624	15	520	8.16	2.5	272	<0.50	38.2	<0.2	<0.2	<0.2	0.068	<0.005	<0.2	<0.1	<0.01	74.5	<0.01	<0.01	<0.01	<0.03	<0.05	0.025	34.8	<0.005	<0.03	<0.05	<0.3	3.6	<0.2	1.46	<0.01	11.1	1.67	<0.2	<0.03	<0.01		<0.03	<0.005	
05-F-FP05	16-Sep-05	7.6	598	6.8	164	15	567	8.14	2.7	275	<0.50	77.3	<0.2	<0.2	<0.2	0.091	<0.005	<0.2	<0.1	<0.01	84.8	<0.01	<0.01	<0.01	0.146	<0.05	0.041	31.7	0.0973	<0.03	<0.05	<0.3	2.5	<0.2	1.94	<0.01	10.7	1.88	<0.2	<0.03	<0.01		<0.03	1.16	
05-F-FP06	16-Sep-05	6.25	3200	5	309	>1.8	2930	6.18	836	64	<5.0	2180	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.325	293	0.027	0.535	<0.01	276	0.309	0.153	174	23.8	<0.03	0.414	<0.3	5.2	<0.2	6.23	<0.01	16.8	3.05	<0.2	<0.03	<0.01		<0.11	386	
05-F-FP07	16-Sep-05	3.02	1687	8.7	759	>1.8	1550	3.17	308	<2.0	<5.0	843	0.9	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.137	111	0.013	0.183	0.849	29.1	2.46	0.032	98.7	11.4	<0.03	0.194	<0.3	<2	<0.2	2.06	<0.01	3.6	0.358	<0.2	<0.03	<0.01		<0.06	110	
A25	23-May-06	7.05	494	1.8	131	30	502	7.67	7.8	259	<0.5	42	<0.2	<0.2	<0.2	0.087	<0.005	<0.2	<0.1	<0.01	84.1	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	20.9	<0.005	<0.03	<0.05	<0.3	2.3	<0.2	1.88	<0.01	5	0.84	<0.2	<0.03	<0.01		<0.03	<0.005	
FP04	24-May-06	8.15	646	13.5	198	4	562	7.93	4.8	262	<0.5	69.7	<0.2	<0.2	<0.2	0.052	<0.005	<0.2	<0.1	<0.01	71.6	<0.01	<0.01	<0.01	<0.03	<0.05	0.028	37.4	<0.005	<0.03	<0.05	<0.3	5	<0.2	1.26	<0.01	14.9	2.1	<0.2	<0.03	<0.01		<0.03	<0.005	
FP05	24-May-06	7.85	571	6.2	146	15	550	8.04	4.2	266	<0.5	64.6	<0.2	<0.2	<0.2	0.063	<0.005	<0.2	<0.1	<0.01	65.7	<0.01	<0.01	<0.01	0.042	<0.05	0.037	25.2	0.042	<0.03	<0.05	<0.3	2.9	<0.2	1.52	<0.01	10.6	1.64	<0.2	<0.03	<0.01		<0.03	0.746	
FP11	24-May-06	6.27	2490	7.4	113	trace	3500	6.1	955	7.8	<2.5	2750	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.209	285	<0.01	0.482	<0.01	238	0.313	0.13	180	22.8	<0.03	0.419	<0.3	5.8	<0.2	6	<0.01	16.7	2.22	<0.2	<0.03	<0.01		<0.03	365	
FP08	27-May-06	3.19	1014	7.6	533	trace	1320	3.11	310	<2	<0.5	629	10.9	<0.2	0.22	0.013	0.0054	<0.2	<0.1	0.043	63.4	<0.01	0.226	4.09	69	0.186	0.038	51.8	1.8	<0.03	0.158	<0.3	3.9	<0.2	3.18	<0.01	<2	0.189	<0.2	<0.03	<0.01		<0.03	11	
FP01	21-Sep-06	7.3	3830	8	164	1	3690	7.7	74.6	285	63	2350	<0.20	<0.20	<0.20	0.014	<0.0050	<0.20	<0.10	0.018	479	<0.010	<0.010	<0.010	<0.030	<0.050	0.126	237	2.38	<0.030	0.233	<0.30	8.2	<0.20	5.9	<0.010	63.7	2.32	<0.20	<0.10	<0.010		<0.030	47.3	
FP13	21-Sep-06	6.62	4350	14.1	460	3	3750	3.42	960	<2.0	<25	2860	<0.20	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.287	253	<0.010	0.755	0.172	184	0.85	0.096	259	42.6	<0.030	0.771	<0.30	2.5	<0.20	2.17	<0.010	5.5	0.935	<0.20	0.112	<0.010		<0.070	353	
FP14	21-Sep-06	5.84	746	12.7		3	718	7.85	5.9	214	<0.50	199	<0.20	<0.20	<0.20	0.035	<0.0050	<0.20	<0.10	0.015	80.8	<0.010	0.011	<0.010	<0.030	<0.050	0.036	43	0.848	<0.030	<0.050	<0.30	2.7	<0.20	1.08	<0.010	6.4	1.47	<0.20	<0.030	<0.010		<0.030	10.7	
FP15	21-Sep-06	7.45	764	15	103	4	734	8.05	3.7	88.8	<0.50	314	<0.20	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	<0.010	92.7	<0.010	<0.010	<0.010	0.088	<0.050	0.018	36.8	0.0169	<0.030	<0.050	<0.30	<2.0	<0.20	2.44	<0.010	5.3	0.279	<0.20	<0.030	<0.010		<0.030	0.738	
FP06	21-Sep-06	8.35	378	6.2	74	17	372	8.31	<1.0	176	<0.50	29.4	<0.20	<0.20	<0.20	0.028	<0.0050	<0.20	<0.10	<0.010	49.8	<0.010	<0.010	<0.010	<0.030	<0.050	0.025	18.4	<0.0050	<0.030	<0.050	<0.30	2.2	<0.20	5.23	<0.010	3.5	0.5	<0.20	<0.030	<0.010		<0.030	<0.0050	
FP16	21-Sep-06	7.31	989	8.6	105	240	967	7.23	65	24.8	<0.50	513	<0.20	<0.20	<0.20	0.016	<0.0050	<0.20	<0.10	0.053	93.9	<0.010	0.028	0.112	<0.030	<0.050	0.024	52.4	1.7	<0.030	0.141	<0.30	<2.0	<0.20	9.78	<0.010	3.6	0.271	<0.20	<0.030	<0.010		<0.030	40.5	
FP09	21-Sep-06	7.79	259	8.2	115	330	256	7.75	8.5	49.6	<0.50	75	<0.20	<0.20	<0.20	0.025	<0.0050	<0.20	<0.10	<0.010	26.5	<0.010	<0.010	0.018	<0.030	<0.050	0.011	11.8	0.112	<0.030	<0.050	<0.30	<2.0	<0.20	6.43	<0.010	2.5	0.124	<0.20	<0.030	<0.010		<0.030	5.61	
FP10	21-Sep-06	7.85	1112	4.1	84	25	1100	8.17	2.4	214	1.42	437	<0.20	<0.20	<0.20	0.021	<0.0050	<0.20	<0.10	<0.010	121	<0.010	<0.010	<0.010	<0.030	<0.050	0.027	87.5	0.0581	<0.030	<0.050	<0.30	3.3	<0.20	4.58	<0.010	6.1	0.442	<0.20	<0.030	<0.010		<0.030	1.55	
FP11	21-Sep-06	6.45	2480	6.5	337	1.5	2990	6.48	813	139	<25	2120	<0.20	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.234	219	<0.010	0.397	<0.010	231	0.258	0.109	138	17.4	<0.030	0.297	<0.30	4	<0.20	4.93	<0.010	12.9	1.91	<0.20	0.053	<0.010		<0.060	284	
FP12	21-Sep-06	7.97	559	7.2	160	30	514	8.16	1.8	258	<0.50	40	<0.20	<0.20	<0.20	0.062	<0.0050	<0.20	<0.10	<0.010	73.7	<0.010	<0.010	<0.010	<0.030	<0.050	0.026	27.9	<0.0050	<0.030	<0.050	<0.30	2.2	<0.20	1.34	<0.010	4.4	1.28	<0.20	<0.030	<0.010		<0.030	<0.0050	
FP-05	28-May-07	7.67	598	5.3	286	20	573	8.06	5	271	<0.4	68	<0.001	<0.0002	0.0002	0.058	<0.0002	<0.0002	<0.01	0.00009	70.6	<0.0002	0.0003	0.0005	0.05	<0.0002	0.049	29.5	0.019	0.0007	0.001	<0.03	2.89	0.0005	2.05	<0.00005	16.8	1.89	<0.00002	<0.0002	<0.0002		0.0031	0.67	
FP-07	28-May-07	3.3	2590	6.8	598	trickle	3320	2.93	990	<0.5	<1	2080	2.8	<0.001	0.006	0.001	0.01	<0.001	<0.05	0.365	139	0.001	0.34	1.43	130	1.22	0.052	157	21.8	0.0019	0.37	<0.15	1.2	0.004	3.8	0.0008	3.6	0.19	0.0096	<0.001	<0.001		0.031	358	
FP-10	28-May-07	7.2	1458	0.4	32	1	1340	7.66	5	143	1.48	737	0.004	<0.0002	0.0003	0.017	<0.0002	<0.0002	<0.01	0.0033	149	<0.0002	0.0049	0.0021	<0.01	0.0007	0.053	129	0.34	0.0002	0.023	<0.03	5.16	0.0012	2.44	<0.00005	7.05	0.661	0.00021	<0.0002	<0.0002		0.0045	1.98	
FP-11	28-May-07	7.79	551	11.1	274	12	502	7.96	4	241	<0.4	57.7	0.001	<0.0002	0.0002	0.049	<0.0002	<0.0002	<0.01	0.00006	67.7	<0.0002	<0.0002	0.0006	<0.01	<0.0002	0.03	30	0.0046	0.0007	<0.0002	<0.03	2.62	0.0005	1.42	<0.00005	7.59	1.43	<0.00002	<0.0002	<0.0002		0.0032	0.037	
A25	28-May-07	6.74	499	2.3	299	50	484	7.81	11	247	0.4	38.3	<0.001	<0.0002	0.0002	0.082	<0.0002	<0.0002	<0.01	0.00023	76.9	<0.0002	<0.0002	0.0004	<0.01	<0.0002	0.013	19.8	<0.003	0.0007	<0.0002	<0.03	2.02	0.0006	1.9	<0.00005	4.93	0.711	<0.00002	<0.0002	<0.0002		0.002	<0.005	
FP-01	11-Sep-07	7.49	3310	11.1	328	5	3380	6.73	118	233	41	2200	<0.01	<0.001	<0.001	0.0148	<0.005	<0.005	<0.1	0.021	461	<0.005	0.021	0.004	<0.03	0.00125	0.128	244	6.64	<0.0005	0.269	<0.3	8.5	<0.01	6.3	<0.0001	54.5	2.78	<0.001	<0.001	<0.01		0.00743	63.8	
FP06	11-Sep-07	7.67	257	6.2	250	20	360	8.15	3.4	152	<0.5	35.5	0.901	0.00021	0.0004	0.025	<0.0005	<0.0005	<0.01	0.000058	51.8	0.00172	0.00065	0.00231	0.706	0.00357	0.021	17	0.023	0.00176	0.00217	<0.3	2.5	<0.001	6.22	0.000012	3.8	0.404	<0.0001	<0.0001	0.024		0.0195	0.0118	
FP-09	11-Sep-07	8.01	348	10.4	311	350	323	7.05	20.8	42.6	<0.5	111	0.0175	<0.0002	<0.0002	0.0323	<0.001	<0.001	<0.02	0.0107	33.2	<0.001	0.00374	0.0153	<0.03	0.00117	0.013	16.1	0.207	0.00059	0.0254	<0.3	<2	<0.002	7.34	<0.00002	3.2	0.144	<0.0002	<0.0002	<0.01		0.00175	8.74	
FP-10	11-Sep-07	8.32	1189	4.7	182	50	1170	8.01	7.1	175	1.38	486	0.0117	<0.0002	<0.0002	0.0166	<0.001	<0.001	<0.02	0.00371	131	<0.001	0.00387	0.00264	<0.03	0.00014	0.031	95	0.217	0.00012	0.0272	<0.3	4.2	<0.002	4.21	<0.00002	6.5	0.504	<0.0002	<0.0002	<0.01		0.00491	2.37	
FP12	11-Sep-07	6.9	600	13.7	250	50	577	8.26	<1	260	<0.5	67.5	0.024	<0.0001	<0.0001	0.0775	<0.0005	<0.0005	<0.01	0.00119	69.3	<0.0005	0.00246	0.00306	<0.03	0.00113	0.04	34.4	0.0666	0.000484	0.00076	<0.3	3.8	<0.001	1.33	<0.00001	14.6	1.96	0.00036	<0.0001	<0.01		0.00241	0.942	
FP13	11-Sep-07	6.49	4800	13.4	466	50	4510	2.83	2100	<2	<250	3850	3.95	<0.02	0.05	<0.01	<0.1	<0.1	<2	0.716	217	<0.1	1.11	5.02	386	1.62	<1	295	61.7	<0.01	2.8	<0.6	<4	<0.2	4.9	<0.002	5	0.672	<0.02	<0.02	<0.02		0.0384	705	
FP14	11-Sep-07	6.79	663	15.3	150	60	620	7.64	12.7	240	<0.5	99.8	0.0013	<0.0001	<0.0001	0.0588	<0.0005	<0.0005	<0.01	0.00555	75.8	<0.0005	0.00418	0.0009	0.054	0.00151	0.033	38.9	0.304	0.000525	0.00557	<0.3	3.1	<0.001	1.48	<0.00001	6.8	1.79	0.00089	<0.0001	<0.01		0.00315	4.96	
FP15	11-Sep-07	7.53	477	9.8	240	2	454	6.94	16.1	77.07	<0.5	159	0.0267	<0.0001	<0.0001	0.0258	<0.0005	<0.0005	<0.01	0.00347	66.4	<0.0005	0.00219	0.00392	0.031	0.00173	0.016	18.5	0.0653	0.000281	0.0161	<0.3	<2	<0.001	7.99	<0.00001	5	0.235	0.00011	<0.0001	<0.01		0.00213	3.64	
FP16	11-Sep-07	7.14	876	8.3	385	500	869	5.35	109	2.7	<0.5	468	3.13	<0.001	<0.001	0.0206	<0.005	<0.005	<0.1	0.0601	67.7	<0.005	0.09	0.438	0.176	0.162	<0.05	61.1	2.95	<0.0005	0.142	<0.3	<2	<0.01	9.97	<0.0001	4.2	0.245	<0.001	<0.001	<0.01		0.00311	49.6	
FP17	11-Sep-07	6.25	6600	10.4	474	trickle	6730	2.71	5610	<2	<250	7240	85.5	<0.05	0.937	<0.025	<0.25	<0.25	<5	2.19	272	<0.25	2.58	23.5	771	0.93	<2.5	345	97.4	<0.025	2.75	0.72	<4	<0.5	27.8	<0.005	6.7	0.768	<0.05	<0.05	<0.02		0.137	1860	
A25	13-Sep-07	6.7	436	6.6	128	75	416	7.96	6.4	234	<0.5	21.7	<0.001	<0.0001	<0.0001	0.0802	<0.0005	<0.0005	<0.01	<0.00005	68	<0.0005	<0.0001	0.00036	<0.03	0.000095	0.01	16.3	<0.00015	0.000649	<0.0005	<0.3	2.2	<0.001	2.66	<0.00001	3.2	0.578	<0.0001	<0.0001	<0.01		0.00155	0.0017	
FP-04	13-Sep-07	7.87	560	12.1	158	5	523	8.13	3.8	260	<0.5	48.1	0.001	<0.0001	<0.0001	0.0558	<0.0005	<0.0005	<0.01	<0.00005	71	<0.0005	<0.0001	0.00017	<0.03	0.000104	0.021	33.7	<0.0002	0.00139	<0.0005	<0.3	4.5	<0.001	1.41	<0.00001	7.7	1.58	<0.0001	<0.0001	<0.01		0.00443	0.0013	
FP-05	13-Sep-07	7.47	567	9.1	95	50	541	8.12	4.2	259	<0.5	56.5	<0.001	<0.0001	<0.0001	0.0806	<0.0005	<0.0005	<0.01	0.000129	72.5	<0.0005	0.00034	0.00019	0.066	0.000145	0.036	30	0.0236	0.000612	0.00085	<0.3	3.3	<0.001	1.57	<0.00001	8.9	1.85	<0.0001	<0.0001	<0.01		0.00266	0.558	
FP-11	13-Sep-07	5.94	2470	11.4	20	1	3260	6.06	1170	34.8	<50	2600	0.17	<0.01	0.034	0.0104	<0.05	<0.05	<1	0.338	263	<0.05	0.495	<0.01	321	0.287	<0.5	168	23.5	<0.005	0.367	<0.3	5.2	<0.1	5.88	<0.001	13.5	2.66	<0.01	<0.01	0.014		0.0046	449	
FP-16	13-Sep-07	7.75	607	8.2	198	30	545	8.12	4	276	<0.5	57.5	<0.001	<0.0001	<0.0001	0.0563	<0.0005	<0.0005	<0.01	<0.00005	83.3	<0.0005	<0.0001	0.00049	<0.03	0.000071	0.03	32.9	0.00017	0.000816	<0.0005	<0.3	3	<0.001	1.59	<0.00001	5.2	1.58	<0.0001	<0.0001	<0.01		0.00371	0.0021	
FP10	14-May-08	4.79	2100	4.3	197	50	2100	3.9	376	<0.5	0.5	1300	10.3	<0.0001	0.0027	0.0153	0.00663	<0.00003	<0.3	0.163	173	0.0026	0.287	1.38	9.85	0.291	0.086	124	10.3	<0.0003	0.388		3.82	0.0004	7.82	0.00006	3.18	0.569	0.00119	<0.00005	<0.003	0.0151	<0.001	121	<0.0005
FP05	15-May-08	7.79	600	3	34	12	580	8	<0.5	230	<0.5	74	0.0026	0.00004	<0.00002	0.0606	<0.00001	<0.000005	<0.05	0.000226	89	<0.0001	0.00162	0.0001	0.178	0.000214	0.038	27.6	0.0977	0.00059	0.00211		3.29	0.0001	1.65	<0.000005	9.85	1.84	0.000024	<0.00001	<0.0005	0.00296	<0.0002	1.26	<0.0001
FP18	15-May-08	8.3		4.5	27	20	560	8.1	3	220	<0.5	79	0.0027	0.00002	<0.00002	0.0494	<0.00001	<0.000005	<0.05	0.000006	100	<0.0001	1.2E-05	0.00007	0.009	0.000446	0.03	33.3	0.00055	0.00078	0.00006		3.21	0.0002	1.42	<0.000005	5.44	1.66	0.000028	<0.00001	<0.0005	0.00447	<0.0002	0.0018	<0.0001
A25	13-Sep-08	7.68	259	5.7	288	120	360	8.3	4.7	180	<0.5	20	0.0014	0.00003	0.00006	0.0746	<0.00001	<0.000005	<0.05	0.000009	52.7	<0.0001	1.8E-05	0.00038	0.003	0.000337	0.01	14.1	0.00061	0.00084	0.00009		2.05	0.0001	2.52	<0.000005	2.57	0.494	0.000024	<0.00001	<0.0005	0.00133	<0.0002	0.0042	<0.0001
FP01	16-Sep-08	6.65	3416	6.4	173	10	4500	7.4	324	250	45	3300	0.005	<0.0001	0.0003	0.016	<0.00005	<0.00003	<0.3	0.0656	612	<0.0005	0.138	0.0021	0.039	0.0008	0.192	414	28.5	<0.0003	0.698		10.9	0.0004	8.08	0.00006	65.4	2.93	0.00005	<0.00005	0.004	0.00524	<0.001	176	<0.0005
FP02	16-Sep-08	6.92	1032	7	6	5	1200	7.1	95.4	81	0.6	590	0.006	<0.0001	0.0001	0.0123	0.00008	<0.00003	<0.3	0.0623	123	<0.0005	0.0509	0.005	28.2	0.0034	0.06	76.1	2.8	<0.0003	0.0152		5.44	0.0004	0.699	0.00038	15	1.67	0.00423	<0.00005	0.004	0.00048	<0.001	49.7	<0.0005
FP06	16-Sep-08	8.48	315	5.9	123	40.2	430	8.4	<0.5	210	0.8	38	0.0104	0.00017	0.00037	0.0314	0.00002	<0.000005	<0.05	0.000028	60.3	<0.0001	2.9E-05	0.00122	0.002	0.000047	0.031	21.6	0.00048	0.0018	0.0014		2.67	0.0007	5.18	0.00001	4.15	0.561	0.000036	<0.00001	<0.0005	0.0191	<0.0002	0.0034	<0.0001
FP09	16-Sep-08	7.42	297	5.9	133	900	400	7.4	23.2	31	0.5	160	0.077	<0.0001	0.0002	0.0255	0.00045	<0.00003	<0.3	0.024	31.3	0.0005	0.0243	0.103	0.016	0.0197	0.017	20.2	0.749	0.0006	0.0453		0.98	0.0004	7.95	0.00019	2.8	0.141	0.00007	<0.00005	<0.003	0.00043	<0.001	17.8	<0.0005
FP10	16-Sep-08	7.69	1278	6.1	173	90	1700	8.1	8.6	190	1.5	820	0.0101	0.00009	0.00015	0.0187	0.00003	<0.000005	<0.05	0.00441	208	0.0001	0.00585	0.00196	0.093	0.000195	0.057	162	0.214	0.00013	0.0496		5.92	0.0006	5.41	0.00001	10.6	0.739	0.000156	<0.00001	<0.0005	0.00748	<0.0002	2.75	<0.0001
FP12	16-Sep-08	8.37	290	6.6	183	15	370	8.2	<0.5	180	0.9	33	0.0055	0.00003	0.00008	0.077	<0.00001	<0.000005	<0.05	0.000023	54	0.0001	0.0001	0.00119	0.024	0.00162	0.014	16.8	0.00213	0.0008	0.00012		2.3	0.0002	2.01	0.000018	4.36	0.783	0.000034	0.00005	<0.0005	0.00164	<0.0002	0.0184	<0.0001
FP13	16-Sep-08	2.27	2546	7	496	15	3200	2.9	999	<0.5	1.1	2000	2.7	0.0001	0.0094	0.004	0.00824	<0.00003	<0.3	0.478	165	0.006	0.576	1.8	118	0.878	0.064	194	30.9	<0.0003	0.551		1.71	0.0005	3.27	0.00046	4.6	0.506	0.00809	<0.00005	<0.003	0.0223	<0.001	408	<0.0005
FP14	16-Sep-08	6.03	1573	7.2	294	720	2000	6.6	423	22	1	1200	0.055	<0.0004	<0.0004	0.0151	0.0011	<0.0001	<1	0.291	142	<0.002	0.288	0.148	7.98	0.0019	0.081	129	18	<0.001	0.255		2.9	0.0009	<2	0.0004	6.6	1.75	0.00465	<0.0002	<0.01	0.00114	<0.004	284	<0.002
FP15	16-Sep-08	6.69	490	6.9	201	1	620	7.7	18.2	63	0.6	270	0.0974	0.00002	0.00008	0.016	0.0002	<0.000005	<0.05	0.00516	82.1	<0.0001	0.00764	0.023	0.212	0.0227	0.022	31.5	0.195	0.00008	0.0175		2.1	0.0002	4.9	0.000023	5.52	0.289	0.00131	0.00005	<0.0005	0.00034	<0.0002	3.47	<0.0001
FP19	16-Sep-08	8.24	1169	5.9	171	0.5	1400	8.3	<0.5	210	1.5	550	0.0029	0.00058	0.00174	0.0145	<0.00001	<0.000005	<0.05	0.000087	94.9	<0.0001	0.00048	0.00051	0.003	0.000406	0.034	18.2	0.00165	0.00583	0.00248		2.38	0.002	4.97	<0.000005	235	2.2	0.000018	<0.00001	<0.0005	0.00986	0.001	0.0545	<0.0001
A25	28-May-09	5.44	406	2.2	158	120	390	8.1	<0.5	200	0.8	24	0.0013	0.00003	0.00007	0.0763	<0.00001	<0.000005	<0.05	0.000012	56.7	<0.0001	0.00001	0.00031	0.002	0.000085	0.011	15	0.00011	0.00066	0.00002		1.9	0.0002	1.81	<0.000005	2.7	0.536	0.000013	<0.00001	<0.0005	0.00159	<0.0002	0.0008	<0.0001
FP05	29-May-09	8.17	457	5.8	194	300	370	8	12.6	180	0.8	29	0.006	0.00003	0.00005	0.0758	<0.00001	0.000079	<0.05	0.000009	55.3	<0.0001	1.9E-05	0.00037	0.018	0.000802	0.012	16	0.00095	0.00088	0.00008		1.97	0.0002	1.68	<0.000005	3.11	0.718	0.000023	<0.00001	<0.0005	0.00184	<0.0002	0.005	<0.0001
FP07	29-May-09	3.23	1980	2.8	369	2	1800	3.5	360	<0.5	1.1	920	0.454	<0.0002	0.0003	0.0049	0.0022	<0.00005	<0.5	0.159	119	<0.001	0.239	0.41	14.2	2.16	0.031	105	14	<0.0005	0.25		1.68	0.0007	2.92	0.00016	2.85	0.294	0.00784	<0.0001	<0.005	0.0045	<0.002	138	<0.001
FP10	29-May-09	6.5	2150	6	200	210	1900	6.3	139	22	1.1	1200	0.022	<0.0002	0.0003	0.011	0.0002	<0.00005	<0.5	0.0784	211	<0.001	0.161	0.077	3.71	0.0101	0.07	144	6.64	<0.0005	0.264		4.81	<0.0004	6.1	<0.00005	4.43	0.629	0.00121	<0.0001	<0.005	0.00162	<0.002	60.1	<0.001
FP18	29-May-09	8.24	537	4.5	204	360	590	8.2	4.4	270	0.9	71	0.0015	0.00003	0.00003	0.0436	<0.00001	<0.000005	<0.05	0.000008	90.2	<0.0001	1.3E-05	0.00015	0.008	0.000072	0.033	31	0.00026	0.00074	0.00003		2.72	0.0002	1.43	<0.000005	5.13	1.55	0.000021	<0.00001	<0.0005	0.00449	<0.0002	0.0017	<0.0001
A25	27-Sep-09	7.24	422		152	30	426	8.1	5.9	220	<0.5	21	0.0068	0.00003	0.00006	0.0932	<0.00001	<0.000005	<0.05	<0.000005	68.7	<0.0001	1.4E-05	0.00018	0.006	0.000025	0.01	15.6	0.00007	0.00063	0.00016		2.14	0.0001	2.98	<0.000005	3.26	0.582	0.000018	<0.00001	<0.0005	0.00157	<0.0002	0.0005	<0.0001
FP-01	24-Sep-09	6.41	5180	6.8	277		5030	7.4	479	260	46	4100	0.028	<0.001	<0.001	0.018	<0.0005	<0.0003	<3	0.0946	511	<0.005	0.32	0.006	0.145	0.0034	0.235	520	59.1	<0.003	0.987		11.7	<0.002	8.71	<0.0003	67	2.87	<0.0001	<0.0005	0.032	0.0031	<0.01	348	<0.005
FP-02	24-Sep-09	7.31	793	7.6	229	3.5	786	7.6	3.1	57	<0.5	390	0.0095	0.00004	0.00009	0.0107	<0.00001	<0.000005	<0.05	0.00166	108	<0.0001	0.00327	0.00346	0.106	0.00153	0.022	38.8	0.0326	0.00008	0.00665		2.45	0.0002	3.57	0.000007	6.06	0.312	0.000977	<0.00001	<0.0005	0.00033	<0.0002	0.989	<0.0001
FP-05	27-Sep-09	7.51	526		70	50	521	8.2	15.2	240	<0.5	60	0.0008	0.00004	<0.00002	0.0873	<0.00001	<0.000005	<0.05	0.000144	75.9	<0.0001	0.0012	0.00015	0.215	0.000056	0.033	25.6	0.0608	0.00083	0.00127		2.96	0.0001	1.56	<0.000005	7.84	1.62	0.00002	<0.00001	<0.0005	0.00289	<0.0002	0.824	<0.0001
FP-06	24-Sep-09	7.34	366	5.2	256	30	362	8.2	<0.5	170	0.5	28	0.0036	0.00018	0.00038	0.0239	<0.00001	<0.000005	<0.05	0.000027	51.6	<0.0001	0.00005	0.00102	0.007	0.000305	0.022	16.1	0.0005	0.00209	0.00136		2.22	0.0008	5.86	<0.000005	3.75	0.44	0.000024	<0.00001	<0.0005	0.0185	<0.0002	0.0019	<0.0001
FP-07	27-Sep-09	2.79	1757	7	495	3	1660	3.2	374	<0.5	<0.5	820	1.33	<0.0002	0.001	0.0024	0.004	<0.00005	<0.5	0.111	99	0.003	0.15	0.851	30.7	2.05	0.025	76.9	9.29	<0.0005	0.155		2.07	0.0004	2.86	0.00078	3.5	0.29	0.00936	<0.0001	0.009	0.00991	<0.002	109	<0.001
FP-09	24-Sep-09	7.35	401	4.5	299	120	397	7.6	17.8	44	<0.5	160	0.056	<0.0001	<0.0001	0.029	0.00014	<0.00003	<0.3	0.0199	38.5	<0.0005	0.0179	0.0674	0.01	0.00947	0.016	22.7	0.61	0.0007	0.0448		1.21	0.0003	8.33	0.00005	3.59	0.157	0.00003	<0.00005	0.006	0.00132	0.001	16.1	<0.0005
FP-11	27-Sep-09	6	3210		28	5	3050	6.3	1230	63	<0.5	2500	0.105	<0.001	0.034	0.006	0.0035	<0.0003	<3	0.346	265	<0.005	0.48	<0.003	278	0.29	0.125	164	22.6	<0.003	0.345		5	<0.002	6.04	0.0003	11.9	2.52	0.0038	<0.0005	<0.03	0.0042	<0.01	448	<0.005
FP-12	24-Sep-09	8.04	528	6.2	228	9.1	520	8.3	<0.5	240	<0.5	66	0.0009	0.00004	<0.00002	0.084	<0.00001	<0.000005	<0.05	0.000292	77.3	<0.0001	0.00095	0.00047	0.026	0.00026	0.032	26.8	0.0518	0.00081	0.00107		3.08	0.0001	1.57	<0.000005	8.15	1.63	0.00015	<0.00001	<0.0005	0.00266	<0.0002	0.695	<0.0001
FP-13	24-Sep-09	3.06	3070	6.1	499	3.0	3100	2.9	1210	<0.5	<0.5	2100	1.3	<0.001	0.012	0.004	0.0043	<0.0003	<3	0.266	176	<0.005	0.441	1.56	255	0.973	0.054	163	24.8	<0.003	0.427		2.5	<0.002	<5	0.0004	4	0.595	0.0085	<0.0005	0.06	0.0105	<0.01	314	<0.005
FP-14	24-Sep-09	6.99	879	6.7	172	4.2	844	7.9	31.2	210	<0.5	320	0.003	<0.0001	<0.0001	0.0215	<0.00005	<0.00003	<0.3	0.0254	99.2	<0.0005	0.0193	0.0061	0.393	0.00179	0.044	53.5	1.3	<0.0003	0.0239		3.33	<0.0002	1.2	0.00004	7.66	1.65	0.00323	<0.00005	<0.003	0.00097	<0.001	23.9	<0.0005
FP-15	24-Sep-09	7.24	600	6.2	245	1.5	590	7.8	13.2	79	<0.5	270	0.005	<0.0001	<0.0001	0.0281	<0.00005	<0.00003	<0.3	0.0138	74.4	<0.0005	0.0051	0.0079	0.017	0.00045	0.018	27.3	0.602	0.0003	0.0443		1.54	<0.0002	8.7	<0.00003	5.24	0.258	0.00018	<0.00005	0.004	0.00228	<0.001	11.8	<0.0005
FP-18	27-Sep-09	7.93	574		145	60	531	8.2	<0.5	250	<0.5	51	<0.01	<0.001	<0.001	0.065	<0.0005	<0.0003	<3	<0.0003	83.7	<0.005	<0.0003	<0.003	0.165	<0.0003	0.037	32	<0.003	<0.003	0.012		3	<0.002	<5	<0.0003	5.5	1.58	0.0003	<0.0005	<0.03	0.0044	<0.01	0.045	<0.005
FP-20	24-Sep-09	7.33	1286	6.7	140	5	1260	7.3	38.3	33	0.5	710	0.023	<0.0001	<0.0001	0.0093	<0.00005	<0.00003	<0.3	0.0314	135	<0.0005	0.07	0.0096	0.335	0.00179	0.042	95.2	2.96	<0.0003	0.143		4.14	<0.0002	5.16	0.00003	4.6	0.386	0.00106	<0.00005	<0.003	0.00136	<0.001	27.2	<0.0005
FP-21	24-Sep-09	7.22	1357	6.1	135	4	1330	6.8	123	33	0.6	760	0.018	<0.0001	<0.0001	0.0093	<0.00005	<0.00003	<0.3	0.0313	146	<0.0005	0.0686	0.0112	1.09	0.00313	0.046	103	3.11	<0.0003	0.147		4.37	<0.0002	4.84	0.00004	4.82	0.414	0.00093	<0.00005	<0.003	0.00099	<0.001	28.9	<0.0005

		Field Parameters					Physical Tests		Dissolved Anions				Dissolved Metals																																	
Sample ID	Date Sampled	pH	Cond	Temp	ORP	Flow	Cond	pH	Acidity (to pH 8.3)	Alkalinity-Total	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
			uS/cm	°C	mV	L/min	uS/cm		mg CaCO3/L	mg CaCO3/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
03-GP01	09-Jun-03	8.05	1928	12.7	635	2	1850	7.8	37	373	<0.5	989	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	239	<0.01	0.01	<0.01	<0.03	<0.05	0.02	167	0.015	<0.03	0.51	<0.3	3	<0.2	2.37	<0.01	6	1.14	<0.2	<0.03	<0.01		<0.03	6.69	
03-GP02	09-Jun-03	7.28	1456	13.7	622	Trace	1550	7.51	51	189	<0.5	932	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	197	<0.01	0.1	<0.01	<0.03	<0.05	0.02	112	0.224	<0.03	1.03	<0.3	3	<0.2	3.46	<0.01	8	1.41	<0.2	<0.03	<0.01		<0.03	14.3	
03-GP04	09-Jun-03	8.21	1896	15.4	617	1	1780	8.08	20	266	<0.5	1050	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	268	<0.01	0.02	<0.01	<0.03	<0.05	0.03	144	0.013	0.06	0.17	<0.3	5	<0.2	1.94	<0.01	6	1.78	<0.2	<0.03	<0.01		<0.03	0.073	
03-GP05	09-Jun-03	7.88	1289	3.7	586	3	1240	7.65	36	223	<0.5	627	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	158	<0.01	0.02	<0.01	<0.03	<0.05	0.03	96.9	<0.005	<0.03	0.07	<0.3	3	<0.2	1.78	<0.01	5	1.47	<0.2	<0.03	<0.01		<0.03	0.03	
03-GP06	09-Jun-03	8.36	1755	11.2	462	Trace	1660	8.13	11	264	2.7	995	<0.2	<0.2	<0.2	0.01	<0.005	<0.2	<0.1	<0.01	90	<0.01	<0.01	<0.01	<0.03	<0.05	0.05	235	<0.005	<0.03	<0.05	<0.3	4	<0.2	1.21	<0.01	5	0.403	<0.2	<0.03	<0.01		<0.03	<0.005	
04-GP01	31-May-04	7.81	946	12	349	Trace	935	8.29	<1.0	139	0.78	359	<0.2	<0.2	<0.2	0.014	<0.0050	<0.2	<0.1	<0.01	94.9	<0.01	<0.01	<0.01	<0.03	<0.05	0.023	70.9	<0.0050	<0.03	0.092	<0.3	2.9	<0.2	0.949	<0.01	<2	0.465	<0.2	<0.03	<0.01		<0.03	0.0188	
04-GP02	31-May-04	7.96	1174	8.6	360	15	1190	8.29	<1.0	210	2.3	456	<0.2	<0.2	<0.2	0.011	<0.0050	<0.2	<0.1	<0.01	117	<0.01	<0.01	<0.01	<0.03	<0.05	0.017	97.1	<0.0050	<0.03	0.108	<0.3	3.9	<0.2	0.879	<0.01	3	0.498	<0.2	<0.03	<0.01		<0.03	0.0238	
04-GP03	31-May-04	8	764	5.5	337	15	757	8.31	<1.0	187	0.86	225	<0.2	<0.2	<0.2	0.017	<0.0050	<0.2	<0.1	<0.01	64.8	<0.01	<0.01	<0.01	<0.03	<0.05	0.02	59.6	<0.0050	<0.03	0.08	<0.3	3.6	<0.2	1.11	<0.01	<2	0.289	<0.2	<0.03	<0.01		<0.03	<0.005	
04-GP04	31-May-04	7.95	341	4.3	354	60	346	8.28	<1.0	145	<0.50	34.7	<0.2	<0.2	<0.2	0.109	<0.0050	<0.2	<0.1	<0.01	46	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	9.78	<0.0050	<0.03	<0.05	<0.3	<2	<0.2	5.72	<0.01	6.9	0.314	<0.2	<0.03	<0.01		<0.03	<0.005	
04-GP05	31-May-04	7.87	1097	17.4	ecorded	Trace	1190	7.87	3.3	99.2	0.76	590	<0.2	<0.2	<0.2	0.342	<0.0050	<0.2	<0.1	<0.01	185	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	34.8	0.0252	<0.03	<0.05	<0.3	5.2	<0.2	1.4	<0.01	14.7	0.745	<0.2	<0.03	<0.01		<0.03	<0.005	
04-GP06	01-Jun-04	7.41	1744	12.4	296	0.1	1770	7.96	2.3	297	1.5	853	<0.2	<0.2	<0.2	0.011	<0.0050	<0.2	<0.1	<0.01	103	<0.01	<0.01	<0.01	<0.03	<0.05	0.036	206	0.0149	<0.03	0.056	<0.3	3.8	<0.2	1.33	<0.01	4.1	0.516	<0.2	<0.03	<0.01		<0.03	<0.005	
04-GP07	01-Jun-04	8.09	1059	8	310	5	1090	8.14	<1.0	245	0.84	403	<0.2	<0.2	<0.2	0.024	<0.0050	<0.2	<0.1	<0.01	83.9	<0.01	<0.01	<0.01	<0.03	<0.05	0.03	98.2	0.0083	<0.03	<0.05	<0.3	2.5	<0.2	0.887	<0.01	<2	0.418	<0.2	<0.03	<0.01		<0.03	<0.005	
04-GP08	01-Jun-04	8.34	1206	7.9	294	Trace	1280	8.04	3.7	268	0.61	513	<0.2	<0.2	<0.2	0.015	<0.0050	<0.2	<0.1	<0.01	144	<0.01	0.011	<0.01	<0.03	<0.05	0.022	89.3	0.0168	<0.03	0.052	<0.3	2.9	<0.2	1.58	<0.01	4	1.37	<0.2	<0.03	<0.01		<0.03	0.0133	
04-GP10	01-Jun-04	8.45	1518	7.3	ecorded	9	1520	7.92	5.8	273	<0.50	716	<0.2	<0.2	<0.2	0.011	<0.0050	<0.2	<0.1	<0.01	173	<0.01	0.022	<0.01	<0.03	<0.05	<0.01	109	0.0216	<0.03	0.418	<0.3	2.7	<0.2	1.44	<0.01	2.7	0.805	<0.2	<0.03	<0.01		<0.03	7.5	
04-GP11	01-Jun-04	7.5	1442	10.8	324	0.25	1480	7.61	13.4	217	<0.50	733	<0.2	<0.2	<0.2	0.014	<0.0050	<0.2	<0.1	<0.01	176	<0.01	0.101	<0.01	<0.03	<0.05	0.022	99.6	0.158	<0.03	1.03	<0.3	3	<0.2	3.06	<0.01	5.8	1.25	<0.2	<0.03	<0.01		<0.03	12	
04-GP12	01-Jun-04	7.94	1709	14.6	306	0.1	1680	8.05	4	280	0.63	849	<0.2	<0.2	<0.2	0.018	<0.0050	<0.2	<0.1	<0.01	216	<0.01	0.018	<0.01	<0.03	<0.05	0.019	121	0.0102	0.046	0.13	<0.3	4.8	<0.2	1.74	<0.01	4.8	1.45	<0.2	<0.03	<0.01		<0.03	0.0326	
04-GP13	01-Jun-04	8.28	789	12.8	306	0	775	8.29	<1.0	91.8	0.74	350	<0.2	<0.2	<0.2	0.043	<0.0050	<0.2	<0.1	<0.01	103	<0.01	<0.01	<0.01	<0.03	<0.05	0.011	34.3	0.558	<0.03	<0.05	<0.3	2.9	<0.2	0.726	<0.01	8.3	0.35	<0.2	<0.03	<0.01		<0.03	0.0307	
04-GP14	01-Jun-04	6.78	1371	3.9	259	15	1340	6.67	173	28.5	1.18	782	<0.2	<0.2	0.34	0.03	<0.0050	<0.2	<0.1	0.098	113	<0.01	0.529	1.73	72	0.074	0.025	66.9	17.4	<0.03	0.65	<0.3	<2	<0.2	5.57	<0.01	16	0.552	<0.2	<0.03	<0.01		<0.03	97.5	
05-SF-GP04	19-May-05	7.82	1651	5.4	407		1660	8.04	6.8	251	<0.5	802	<0.2	<0.2	<0.2	0.012	<0.005	<0.2	<0.1	<0.1	190	<0.01	<0.01	<0.01	<0.03	<0.05	0.015	149	0.0154	<0.03	0.191	<0.3	3.3	<0.2	1.08	<0.01	3.7	0.775	<0.2	<0.03	<0.01		<0.03	6.19	
05-SF-GP08	19-May-05	7.88	1051	5.4	382		980	8.17	2.2	180	<0.5	385	<0.2	<0.2	<0.2	0.012	<0.005	<0.2	<0.1	<0.1	121	<0.01	<0.01	<0.01	<0.03	<0.05	0.017	71.6	<0.01	<0.03	<0.05	<0.3	2.4	<0.2	1.06	<0.01	3.6	0.902	<0.2	<0.03	<0.01		<0.03	0.0066	
05-SF-GP09	19-May-05	8.19	935	12.6	370		926	8.3	<1	207	<0.5	333	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	<0.1	88.2	<0.01	<0.01	<0.01	<0.03	<0.05	0.018	83.4	<0.01	<0.03	<0.05	<0.3	2.5	<0.2	0.879	<0.01	2.5	0.603	<0.2	<0.03	<0.01		<0.03	<0.005	
05-SF-GP10	19-May-05	8.16	1695	11.9	381		1720	8.28	<1	285	<5	865	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	<0.1	134	<0.01	<0.01	<0.01	<0.03	<0.05	0.037	204	<0.01	<0.03	0.058	<0.3	4.5	<0.2	1.28	<0.01	4.6	0.664	<0.2	<0.03	<0.01		<0.03	0.0059	
05-S-GP01	19-May-05	8.19	1473	4.1	359		1430	8.16	2.8	259	1.23	601	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	<0.1	114	<0.01	0.031	<0.01	<0.03	<0.05	0.042	160	<0.01	<0.03	0.129	<0.3	4.2	<0.2	1.74	<0.01	5.2	0.862	<0.2	<0.03	<0.01		<0.03	0.068	
05-S-GP02	19-May-05	8.05	660	5.5	404		649	7.9	3.4	76.6	<0.5	276	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.1	78.9	<0.01	0.012	<0.01	0.148	<0.05	<0.01	40.4	2.18	<0.03	0.069	<0.3	2.1	<0.2	3.04	<0.01	4.5	0.281	<0.2	<0.03	<0.01		<0.03	0.204	
05-S-GP03	19-May-05	7.48	1080	4.7	413		1070	7.7	8.2	144	<0.5	484	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	<0.1	131	<0.01	0.014	<0.01	<0.03	<0.05	0.011	80.9	0.0656	<0.03	0.257	<0.3	2.9	<0.2	1.21	<0.01	3.4	0.555	<0.2	<0.03	<0.01		<0.03	5.74	
05-S-GP05	19-May-05	7.87	1740	7.6	383		1740	8.16	3.7	208	<5	917	<0.2	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	<0.1	215	<0.01	<0.01	<0.01	<0.03	<0.05	0.026	151	<0.01	<0.03	<0.05	<0.3	4.8	<0.2	0.92	<0.01	6.4	1.27	<0.2	<0.03	<0.01		<0.03	0.0561	
05-S-GP09	19-May-05	7.87	1014	8.5	386		1040	8.2	1.8	238	0.85	378	<0.2	<0.2	<0.2	0.017	<0.005	<0.2	<0.1	<0.1	80	<0.01	<0.01	<0.01	<0.03	<0.05	0.022	106	<0.01	<0.03	<0.05	<0.3	3	<0.2	0.68	<0.01	2.9	0.398	<0.2	<0.03	<0.01		<0.03	<0.005	
05-S-GP11	19-May-05	6.81	1664	10.9	244		1590	6.87	111	76.3	<0.5	907	<0.2	<0.2	<0.2	0.026	<0.005	<0.2	<0.1	0.042	185	<0.01	0.38	0.017	39.8	<0.05	0.025	95.8	14.2	<0.03	0.438	<0.3	2.5	<0.2	4.64	<0.01	18.9	0.884	<0.2	<0.03	<0.01		<0.03	68	
05-S-GP12	19-May-05	8.13	603	12.3	322		598	7.81	3.5	79.8	<0.5	241	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.1	77.5	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	22	0.306	<0.03	<0.05	<0.3	<2	<0.2	0.415	<0.01	5	0.229	<0.2	<0.03	<0.01		<0.03	0.0307	
05-S-GP13	19-May-05	7.8	1938	13.8	378		1920	7.91	5.2	122	<5	1190	<0.2	<0.2	<0.2	0.024	<0.005	<0.2	<0.1	<0.1	310	<0.01	0.02	<0.01	0.106	<0.05	0.012	115	0.242	<0.03	0.119	<0.3	7.7	<0.2	2.52	<0.01	12.8	0.72	<0.2	<0.03	<0.01		<0.03	2.36	
05-F-GP01	14-Sep-05	7.03	823	2.9	265	12	766	7.77	16.4	101	<0.50	322	<0.2	<0.2	<0.2	0.017	<0.0050	<0.2	<0.1	<0.1	94.6	<0.01	0.105	<0.010	10.8	<0.05	0.016	42.7	2.73	<0.03	0.104	<0.3	<2	<0.2	3.92	<0.01	21.1	0.528	<0.2	<0.03	<0.01		<0.03	14.4	
05-F-GP02	14-Sep-05	8.28	788	5.9	383	20	754	8.27	1	208	<0.50	239	<0.2	<0.2	<0.2	0.074	<0.0050	<0.2	<0.1	<0.1	129	<0.01	<0.010	<0.010	<0.03	<0.05	<0.01	29.8	0.294	<0.03	<0.05	<0.3	<2	<0.2	5.29	<0.01	15.7	0.565	<0.2	<0.03	<0.01		<0.03	<0.005	
05-F-GP03	14-Sep-05	8.21	317	3.6	349	180	312	8.31	<1.0	142	<0.50	36	<0.2	<0.2	<0.2	0.089	<0.0050	<0.2	<0.1	<0.1	46.1	<0.01	<0.010	<0.010	<0.03	<0.05	<0.01	11.9	0.013	<0.03	<0.05	<0.3	<2	<0.2	5.67	<0.01	6.9	0.313	<0.2	<0.03	<0.01		<0.03	<0.005	
05-F-GP06	14-Sep-05	7.65	1440	7	353	Trace	1360	7.83	22.2	206	<2.5	670	<0.2	<0.2	<0.2	0.014	<0.0050	<0.2	<0.1	<0.1	144	<0.01	0.045	<0.010	<0.03	<0.05	0.018	92.6	0.253	<0.03	0.353	<0.3	<2	<0.2	3.13	<0.01	6	0.998	<0.2	<0.03	<0.01		0.031	17.1	
05-F-GP07	14-Sep-05	7.84	1389	7.1	404	1.8	1360	8.04	7.2	370	<2.5	487	<0.2	<0.2	<0.2	0.017	<0.0050	<0.2	<0.1	<0.1	146	<0.01	<0.010	<0.010	<0.03	<0.05	0.025	97.7	<0.0050	<0.03	<0.05	<0.3	<2	<0.2	1.46	0.012	3.9	1.19	<0.2	<0.03	<0.01		<0.03	<0.005	
05-F-GP11	14-Sep-05	8.28	963	12.5	342	Ponded	936	8.18	2	103	0.53	423	<0.2	<0.2	<0.2	0.04	<0.0050	<0.2	<0.1	<0.1	151	<0.01	<0.010	<0.010	<0.03	<0.05	<0.01	52.9	0.0832	<0.03	<0.05	<0.3	3.1	<0.2	0.155	<0.01	14.3	0.524	<0.2	<0.03	<0.01		<0.03	<0.005	
05-SF-GP04	14-Sep-05	8.08	1953	6.8	351	Trace	1890	8.14	6.7	419	<5.0	906	<0.2	<0.2	<0.2	0.013	<0.0050	<0.2	<0.1	<0.1	236	<0.01	0.012	<0.010	<0.03	<0.05	0.02	158	0.008	<0.03	0.37	<0.3	2.8	<0.2	2.3	<0.01	6.1	1.09	<0.2	<0.03	<0.01		<0.05	5.74	
05-SF-GP08	14-Sep-05	7.3	1511	8.1	352	Trace	1570	7.97	7	473	<2.5	551	<0.2	<0.2	<0.2	0.015	<0.0050	<0.2	<0.1	<0.1	119	<0.01	<0.010	<0.010	<0.03	<0.05	0.04	169	<0.0050	<0.03	<0.05	<0.3	2.8	<0.2	1.67	<0.01	4.3	0.741	<0.2	<0.03	<0.01		<0.04	<0.005	
05-SF-GP09	14-Sep-05	7.45	1554	12.4	328	0.5	1460	8.16	4.4	467	<2.5	467	<0.2	<0.2	<0.2	0.02	<0.0050	<0.2	<0.1	<0.1	108	<0.01	<0.010	<0.010	<0.03	<0.05	0.034	152	<0.0050	<0.03	<0.05	<0.3	3.2	<0.2	1.1	<0.01	3	0.525	<0.2	<0.03	<0.01		<0.03	0.0074	
05-SF-GP10	14-Sep-05	8.15	1839	9.2	339	Trace	1780	8.16	4.9	458	<5.0	765	<0.2	<0.2	<0.2	0.014	<0.0050	<0.2	<0.1	<0.1	170	<0.01	0.01	<0.010	<0.03	<0.05	0.05	198	<0.0050	<0.03	0.094	<0.3	3.7	<0.2	2.45	<0.01	5.2	0.904	<0.2	<0.03	<0.01		<0.04	0.0134	
GP 04	27-May-06	7.89	1748	3	331	16	1780	8.06	8.7	283	<0.5	840	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	<0.01	208	<0.01	0.011	<0.01	<0.03	<0.05	0.014	156	0.0274	<0.03	0.277	<0.3	3.0	<0.2	1.34	<0.01	3.7	0.803	<0.2	<0.03	<0.01		<0.03	7.41	
GP 06	27-May-06	7.73	1700	6.9	329	2.5	1750	7.77	25.8	201	<0.5	888	<0.2	<0.2	<0.2	0.012	<0.005	<0.2	<0.1	<0.01	210	<0.01	0.049	<0.01	<0.03	<0.05	0.019	141	0.157	<0.03	0.429	<0.3	3.8	<0.2	2.00	<0.01	5.9	1.20	<0.2	<0.03	<0.01		<0.03	12.1	
GP 07	27-May-06	8.25	1103	3.9	309	1	1110	8.28	1.1	208	<0.5	440	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	<0.01	139	<0.01	<0.01	<0.01	<0.03	<0.05	0.016	81.7	<0.005	<0.03	<0.05	<0.3	2.4	<0.2	1.17	<0.01	3.7	0.976	<0.2	<0.03	<0.01		<0.03	0.0091	
GP 08	27-May-06	8.04	1267	5	299	trace	1290	8.26	1.7	400	<0.5	405	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	<0.01	92.5	<0.01	<0.01	<0.01	<0.03	<0.05	0.033	146	<0.005	<0.03	<0.05	<0.3	2.7	<0.2	1.36	<0.01	3.9	0.662	<0.2	<0.03	<0.01		<0.03	0.0082	
GP 09	27-May-06	8.05	1112	5.9	294		1170	8.25	2.1	266	0.94	434	<0.2	<0.2	<0.2	0.015	<0.005	<0.2	<0.1	<0.01	88.5	<0.01	<0.01	<0.01	<0.03	<0.05	0.023	124	0.0060	<0.03	<0.05	<0.3	3.0	<0.2	0.899	<0.01	2.8	0.421	<0.2	<0.03	<0.01		<0.03	0.0156	
GP 10	27-May-06	8.36	2290	8.3	401	trace	2380	8.24	2.7	254	<2.5	1350	<0.2	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	<0.01	92.5	<0.01	<0.01	<0.01	<0.03	<0.05	0.056	349	<0.005	<0.03	<0.05	<0.3	5.9	<0.2	1.27	<0.01	6.5	0.296	<0.2	<0.03	<0.01		<0.03	0.0108	
GP 11	27-May-06	8.01	781	8.8	309	0	771	7.56	12.6	101	<0.5	318	<0.2	<0.2	<0.2	0.029	<0.005	<0.2	<0.1	<0.01	106	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	38.8	0.767	<0.03	<0.05	<0.3	2.6	<0.2	0.868	<0.01	9.9	0.329	<0.2	<0.03	<0.01		<0.03	0.0297	
GP 13[1]	27-May-06	7.64	2290	4.4	405	trace	2440	7.72	27.1	251	<2.5	1410	<0.2	<0.2	<0.2	0.013	<0.005	<0.2	<0.1	<0.01	212	<0.01	0.012	<0.01	<0.03	<0.05	0.024	280	0.464	<0.03	0.252	<0.3	3.2	<0.2	1.24	<0.01	7.5	0.695	<0.2	<0.03	<0.01		<0.03	11.6	
GP 14[2]	27-May-06	7.07	717	5.2	337	3.8	1100	7.14	40.8	111	<0.5	514	<0.2	<0.2	<0.2	0.023	<0.005	<0.2	<0.1	<0.01	135	<0.01	0.111	<0.01	13.5	<0.05	0.014	61.8	5.39	<0.03	0.099	<0.3	<2	<0.2	4.23	<0.01	18.4	0.748	<0.2	<0.03	<0.01		<0.03	17.1	
GP-01	23-Sep-06	6.95	1040	3.8		6.1	947	7.47	30.7	76.0	<0.50	430	<0.20	<0.20	<0.20	0.012	<0.0050	<0.20	<0.10	0.013	94.2	<0.010	0.138	<0.010	28.5	<0.050	0.014	40.6	4.27	<0.030	0.139	<0.30	<2.0	<0.20	3.50	<0.010	14.2	0.439	<0.20	<0.030	<0.010		<0.030	23.7	
GP-02	23-Sep-06	8.59	736	3.7		30	709	8.32	<1.0	198	<0.50	194	<0.20	<0.20	<0.20	0.073	<0.0050	<0.20	<0.10	<0.010	105	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	23.6	0.116	<0.030	<0.050	<0.30	<2.0	<0.20	5.24	<0.010	10.2	0.456	<0.20	<0.030	<0.010		<0.030	<0.0050	
GP-03	23-Sep-06	8.52	315	5.4		360	300	8.28	<1.0	136	<0.50	32.2	<0.20	<0.20	<0.20	0.083	<0.0050	<0.20	<0.10	<0.010	37.3	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	9.41	0.0100	<0.030	<0.050	<0.30	<2.0	<0.20	4.85	<0.010	4.9	0.237	<0.20	<0.030	<0.010		<0.030	<0.0050	
GP-04	23-Sep-06	8.14	2030	8.3		trace	1960	8.17	7.1	415	<0.50	867	<0.20	<0.20	<0.20	0.012	<0.0050	<0.20	<0.10	<0.010	246	<0.010	0.011	<0.010	<0.030	<0.050	0.023	179	0.0089	<0.030	0.331	<0.30	3.0	<0.20	2.03	<0.010	5.7	1.02	<0.20	0.067	<0.010		<0.030	6.18	
GP-09	23-Sep-06	8.75	1925	7.6		trace	1860	8.22	4.3	350	2.77	832	<0.20	<0.20	<0.20	0.015	<0.0050	<0.20	<0.10	<0.010	150	<0.010	<0.010	<0.010	<0.030	<0.050	0.050	232	<0.0050	<0.030	0.063	<0.30	4.1	<0.20	2.24	<0.010	5.2	0.831	<0.20	0.086	<0.010		<0.030	0.017	
GP-10	23-Sep-06	8.06	1899	5.8		trace	1840	8.17	6.8	499	1.54	710	<0.20	<0.20	<0.20	0.012	<0.0050	<0.20	<0.10	<0.010	164	<0.010	<0.010	<0.010	<0.030	<0.050	0.042	213	<0.0050	<0.030	0.073	<0.30	3.1	<0.20	2.14	<0.010	4.0	0.777	<0.20	0.076	<0.010		<0.030	0.0146	
GP-11	23-Sep-06	8.52	1182	4.6		0	1140	8.06	4.5	110	0.59	537	<0.20	<0.20	<0.20	0.032	<0.0050	<0.20	<0.10	<0.010	159	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	067	0.0303	<0.030	<0.050	<0.30	3.3	<0.20	0.18	<0.010	16.6	0.530	<0.20	<0.030	<0.010		<0.030	0.0218	
GP-04	27-May-07	7.39	239	6.8	36	2	2430	7.83	17.0	353	<2	1370	0.091	0.034	0.017	0.011	<0.001	<0.001	<0.05	0.0063	269	<0.001	0.021	0.008	0.64	0.035	0.035	226	0.043	0.0088	0.380	<0.15	3.3	0.003	2.20	<0.00025	6.9	1.010	0.0042	<0.001	<0.001		0.033	11.7	
GP-07	27-May-07	7.81	1171	7.2	341	1	1120	8.04	4.0	223	<1	470	0.003	<0.0002	0.0009	0.012	<0.0002	<0.0002	<0.01	0.00013	138	<0.0002	0.0012	0.0005	<0.01	<0.0002	0.025	091	<0.003	0.0017	0.015	<0.03	2.2	0.0013	1.57	<0.00005	4.3	1.130	0.0002	<0.0002	<0.0002		0.015	0.011	
GP-09	27-May-07	8.6	1445	1.3	218	trickle	1360	8.15	4.0	326	<1	574	0.006	0.0005	0.0009	0.032	<0.0002	<0.0002	<0.01	0.0001	104	<0.0002	0.0011	0.0014	0.04	0.0005	0.044	171	0.012	0.0018	0.019	<0.03	4.0	0.0014	0.76	<0.00005	3.5	0.506	0.00019	<0.0002	<0.0002		0.023	0.065	
GP-01	29-May-07	7.02	1250	7.4	160	1	1130	7.05	64.0	105	0.52	614	<0.001	0.0039	0.078	0.021	<0.0002	<0.0002	<0.01	0.00852	147	<0.0002	0.155	0.0042	12	<0.0002	0.018	076	9.99	0.002	0.133	<0.03	2.0	0.001	4.51	0.00007	15.9	0.839	0.002	<0.0002	<0.0002		0.0027	35.1	
GP-02	29-May-07	8.54	425	7.7	344	200	0548	7.94	2.0	116	0.60	175	0.001	0.0011	0.0014	0.026	<0.0002	<0.0002	<0.01	0.00002	089	<0.0002	<0.0002	0.0013	<0.01	<0.0002	0.002	023	0.0091	0.0026	0.001	<0.03	3.6	0.003	2.14	<0.00005	7.1	0.392	<0.00002	<0.0002	<0.0002		0.041	0.01	
GP-03	29-May-07	8.41	343	8.6	337	250	0286	8.21	<0.5	148	<1	036	<0.001	<0.0002	0.0017	0.097	<0.0002	<0.0002	<0.01	0.00003	051	<0.0002	<0.0002	0.0004	<0.01	<0.0002	0.003	012	0.0095	0.0014	<0.0002	<0.03	1.1	0.0043	6.00	<0.00005	6.5	0.313	<0.00002	<0.0002	<0.0002		0.011	0.028	
GP-01	11-Sep-07	8.26	890	6.2	36	4.5	0861	7.18	53.8	050	<0.5	400	<0.005	0.00525	0.00843	0.016	<0.0025	<0.0025	<0.05	0.0125	093	<0.0025	0.132	0.00595	9.08	<0.00025	<0.025	046	4.27	0.00086	0.130	<0.3	<2	<0.005	3.27	0.00006	17.8	0.506	0.00322	<0.0005	<0.01		0.00076	27.3	
GP-02	11-Sep-07	8.55	786	7.8	184	20	0779	8.28	<1	193	0.51	235	0.0028	0.00054	0.0228	0.079	<0.001	<0.001	<0.02	<0.0001	127	<0.001	<0.0002	0.00116	<0.03	0.00021	<0.01	033	0.126	0.0026	0.001	<0.3	2.2	<0.002	5.92	<0.00002	12.4	0.612	<0.0002	<0.0002	<0.01		0.0174	0.0144	
GP-03	11-Sep-07	7.72	350	10.1	193	200	0334	8.33	<1	143	<0.5	044	0.0023	0.00018	0.00153	0.086	<0.0005	<0.0005	<0.01	<0.00005	052	<0.0005	<0.0001	0.00066	<0.03	0.000368	<0.005	012	0.0123	0.00157	<0.0005	<0.3	<2	0.0048	5.56	<0.00001	7.1	0.299	<0.0001	<0.0001	<0.01		0.0104	0.0074	
GP-07	11-Sep-07	8.72	1275	11.5	157	trickle	1250	8.26	1.0	255	<0.5	501	<0.005	<0.0005	0.00093	0.015	<0.0025	<0.0025	<0.05	<0.00025	145	<0.0025	0.00087	0.00069	<0.03	<0.00025	0.030	115	0.00279	0.00102	0.021	<0.3	2.9	<0.005	1.41	<0.00005	5.1	1.390	<0.0005	<0.0005	<0.01		0.0166	0.0111	
GP10	11-Sep-07	8.19	1732	11.2	135	trickle	1730	8.27	<1	373	1.44	721	<0.005	<0.0005	0.00106	0.011	<0.0025	<0.0025	<0.05	<0.00025	128	<0.0025	0.00351	<0.0005	0.046	<0.00025	0.041	221	0.00104	0.00203	0.042	<0.3	3.9	<0.005	2.19	<0.00005	4.0	0.650	<0.0005	<0.0005	<0.01		0.0264	0.0109	
GP04	15-May-08	7.41	2000	1.8	68	25	2000	8.10	7.6	200	<0.5	1100	0.003	0.0113	0.01	0.010	<0.00005	<0.00003	<0.3	0.00974	253	<0.0005	0.011	0.0024	0.007	0.0326	0.019	193	0.0534	0.0075	0.204		3.0	0.0032	1.11	<0.00003	3.0	0.794	0.00444	<0.00005	<0.003	0.0156	<0.001	9.76	<0.0005
GP09	15-May-08	8.22	710	2.5	72	30	0700	8.30	<0.5	130	<0.5	250	0.0012	0.00042	0.00056	0.014	<0.00001	<0.000005	<0.05	0.000007	059	<0.0001	0.00066	0.00021	0.002	0.000094	0.014	060	0.00052	0.00222	0.007		2.2	0.0006	0.49	<0.000005	1.1	0.234	0.000079	<0.00001	<0.0005	0.00876	<0.0002	0.0018	<0.0001
GP02	17-Sep-08	7.94	791	7	133	120	1000	8.20	16.1	170	2.40	400	0.0211	0.00094	0.00481	0.079	<0.00001	<0.000005	<0.05	0.000016	192	0.0001	0.00015	0.00114	0.044	0.000758	0.003	038	0.083	0.00268	0.002		3.8	0.0025	3.80	<0.000005	13.2	0.644	0.000004	0.000	0.0009	0.0313	0.001	0.0048	<0.0001
GP03	17-Sep-08	8.7	349	5.7	126	210	0510	8.30	<0.5	140	0.80	120	0.0028	0.00149	0.00214	0.105	<0.00001	<0.000005	<0.05	0.000022	070	<0.0001	9.5E-05	0.00029	0.004	0.000188	0.003	018	0.111	0.0062	0.000		1.8	0.0056	4.52	0.000006	10.8	0.418	<0.000002	<0.00001	<0.0005	0.0285	0.0011	0.0042	<0.0001
GP04	18-Sep-08	7.52	1372	5.8	8	24.9	1800	7.80	24.2	310	1.10	970	0.001	0.0161	0.0162	0.011	<0.00005	<0.00003	<0.3	0.0055	228	<0.0005	0.00516	0.0038	<0.005	0.0365	0.017	156	0.0098	0.0119	0.208		3.0	0.0011	1.52	<0.00003	3.7	0.885	0.00424	<0.00005	0.004	0.0256	<0.001	6.81	<0.0005
GP05	18-Sep-08	813	1515	5.9	67	60	2000	8.20	3.4	240	0.90	1200	0.002	0.0047	0.0495	0.010	<0.00005	<0.00003	<0.3	<0.00003	258	<0.0005	0.0233	0.0006	0.007	0.00017	0.020	164	0.0018	0.0073	0.175		3.9	0.0014	1.30	<0.00003	3.9	1.170	0.00049	<0.00005	<0.003	0.0386	<0.001	0.0135	<0.0005
GP06	18-Sep-08	7.64	1398	6.2	127	Trace	1900	7.90	38.5	190	0.60	1200	0.002	0.0315	0.0078	0.012	<0.00005	<0.00003	<0.3	0.00185	219	<0.0005	0.00797	0.001	<0.005	0.0162	0.025	155	0.0189	0.0078	0.078		3.9	0.001	1.20	<0.00003	4.6	1.150	0.00372	<0.00005	0.004	0.034	0.001	3.02	<0.0005
GP07	18-Sep-08	8.09	800	9.1	124	Trace	1100	8.30	12.2	210	1.00	480	0.0013	0.00022	0.00054	0.015	<0.00001	<0.000005	<0.05	0.000006	142	<0.0001	0.00036	0.00082	0.002	0.000342	0.020	073	0.00045	0.00192	0.011		2.1	0.0007	1.26	<0.000005	3.1	0.990	0.000215	0.000	<0.0005	0.0166	<0.0002	0.0043	<0.0001
GP08	18-Sep-08	8.41	860	10	121	Trace	1200	8.40	2.2	280	0.80	610	0.0013	0.00012	0.00025	0.014	<0.00001	<0.000005	<0.05	<0.000005	099	<0.0001	0.00034	0.00041	0.002	0.000051	0.028	113	0.00021	0.00078	0.009		2.6	0.0006	1.06	<0.000005	3.0	0.667	0.000091	0.000	<0.0005	0.0122	<0.0002	0.0011	<0.0001
GP09	18-Sep-08	7.66	1201	5.9	130	15	1600	8.10	20.0	340	2.30	780	0.0005	0.00041	0.00059	0.014	<0.00001	<0.000005	<0.05	0.000049	130	<0.0001	0.00323	0.00035	0.001	0.000324	0.040	175	0.00739	0.0035	0.040		3.9	0.0005	1.54	<0.000005	3.9	0.661	0.000191	<0.00001	<0.0005	0.0294	<0.0002	0.036	0.0002
GP10	18-Sep-08	8.3	1357	10.1	132	Trace	1700	8.20	7.0	350	2.70	870	0.0012	0.00021	0.0011	0.010	<0.00001	<0.000005	<0.05	0.000023	127	<0.0001	0.00132	0.00171	0.002	0.000191	0.046	210	0.00153	0.00382	0.071		4.1	0.0008	1.85	<0.000005	4.4	0.518	0.000124	<0.00001	<0.0005	0.0265	<0.0002	0.0147	0.0004
GP12	17-Sep-08	6.23	1456	6.2	138	10.4	1900	4.20	599.0	<0.5	1.10	1100	0.041	0.0023	0.0482	0.013	0.0003	<0.0001	<1	0.122	140	<0.002	0.552	0.783	147	0.0025	0.034	097	19.7	<0.001	0.526		1.4	<0.0008	4.25	0.0001	15.3	0.556	0.0114	<0.0002	<0.01	0.00074	<0.004	129	<0.002
GP13	17-Sep-08	7.89	804	6.3	85	Trace	1100	8.00	4.3	130	1.00	500	0.0008	0.00058	0.00019	0.015	<0.00001	<0.000005	<0.05	0.00271	166	<0.0001	0.00029	0.00068	0.001	0.0104	0.007	058	0.00502	0.00049	0.058		3.6	0.002	0.36	0.000009	14.5	0.529	0.00272	<0.00001	<0.0005	0.00538	<0.0002	2.34	<0.0001
GP14	17-Sep-08	3.11	2376	6.9	244	Trace	3100	3.30	1110.0	<0.5	0.60	2100	10.9	0.002	0.014	0.004	0.002	<0.0005	<5	0.976	247	<0.01	0.257	1.01	32	1.37	<0.05	098	10.2	<0.005	0.614		<1	0.006	11.10	0.0017	5.0	0.626	0.169	0.002	<0.05	0.011	<0.02	795	<0.01
GP15	17-Sep-08	7.6	1316	6.5	178	1	1600	7.90	24.3	250	0.80	680	0.001	0.0008	0.006	0.016	<0.00005	<0.00003	<0.3	0.00008	266	<0.0005	0.00048	0.0007	0.005	0.00011	0.013	097	0.304	0.0005	0.017		3.6	0.0048	3.65	<0.00003	16.8	1.210	0.00019	<0.00005	<0.003	0.035	0.001	0.182	<0.0005
GP16	17-Sep-08	7.95	1165	6.3	132	4	1400	8.00	5.3	240	1.00	610	0.007	0.00058	0.013	0.035	<0.00001	<0.000005	<0.05	0.000349	267	<0.0001	0.0002	0.00142	0.033	0.001	0.003	083	0.171	0.00176	0.009		2.9	0.002	4.12	<0.000005	18.8	1.370	0.000134	<0.00001	<0.0005	0.00749	<0.0002	0.385	<0.0001
GP17	17-Sep-08	8.08	263	6	129	180	0350	8.30	<0.5	140	1.00	041	0.0092	0.00026	0.00081	0.033	<0.00001	<0.000005	<0.05	0.00002	042	<0.0001	8.2E-05	0.00031	0.014	0.00017	0.004	016	0.00731	0.00157	0.001		1.3	0.0051	3.96	0.000005	5.7	0.246	0.000008	0.000	<0.0005	0.00981	0.0004	0.0017	<0.0001
GP18	17-Sep-08	8.04	1074	8.7	133	1	1200	8.30	<0.5	190	1.00	470	0.01	0.00025	0.00095	0.010	<0.00001	<0.000005	<0.05	0.000024	169	0.0002	0.00594	0.00062	0.028	0.000691	0.045	215	0.0024	0.00071	0.070		3.3	0.0006	2.55	0.000006	10.9	0.956	0.000039	0.000	0.0006	0.0198	0.0002	0.0255	0.0008
GP04	30-May-09	7.96	1544	4.4	219	120	1400	8.20	1.4	260	1.20	610	0.0015	0.012	0.012	0.011	<0.00001	0.000047	<0.05	0.0038	165	<0.0001	0.00377	0.00255	0.003	0.0312	0.013	101	0.00976	0.00962	0.146		2.5	0.001	1.10	0.000005	2.3	0.666	0.00352	<0.00001	<0.0005	0.0157	<0.0002	4.04	<0.0001
GP07	30-May-09	8.16	1113	3.5	231	2	0950	8.20	17.0	190	1.10	400	0.0047	0.00027	0.00112	0.012	<0.00001	<0.000005	<0.05	0.000011	118	<0.0001	0.00055	0.00043	0.012	0.000403	0.017	059	0.00236	0.00252	0.010		1.9	0.0007	1.14	<0.000005	2.3	0.861	0.00014	<0.00001	<0.0005	0.0136	<0.0002	0.0089	<0.0001
GP08	30-May-09	8.5	875	8.2	211	20	0790	8.30	<0.5	210	1.10	240	0.0072	0.00013	0.00027	0.014	<0.00001	0.00002	<0.05	0.000048	069	<0.0001	0.0003	0.0011	0.04	0.000591	0.017	062	0.0124	0.00074	0.004		2.0	0.0003	0.66	<0.000005	1.8	0.457	0.000081	0.000	<0.0005	0.00735	<0.0002	0.0431	<0.0001
GP09	30-May-09	8.41	1180	4.6	222	20	1000	8.30	<0.5	290	1.40	330	0.0018	0.00018	0.00065	0.014	<0.00001	<0.000005	<0.05	0.000009	066	<0.0001	0.00109	0.00024	0.002	0.000049	0.023	098	0.00086	0.00157	0.009		2.5	0.0007	0.80	<0.000005	1.8	0.322	0.000077	<0.00001	<0.0005	0.0128	<0.0002	0.0031	0.0001
GP10	31-May-09	8.56	2390	9.5	163	trickle	2200	8.30	<0.5	210	2.90	1300	0.0017	0.00038	0.00451	0.012	<0.00001	0.000026	<0.05	0.000009	069	<0.0001	0.00331	0.00015	0.002	0.000036	0.053	273	0.00014	0.0095	0.011		5.6	0.0035	1.14	<0.000005	4.8	0.199	0.000076	<0.00001	<0.0005	0.026	<0.0002	0.0004	0.0003
GP-01	25-Sep-09	6.66	1186	4.8	45	12	1050	5.80	<0.5	005	<0.5	590	0.003	0.0042	0.0496	0.014	0.00006	<0.00003	<0.3	0.0265	107	<0.0005	0.18	0.0164	54.4	0.00027	0.019	052	5.4	0.0011	0.152		1.5	<0.0002	4.39	0.00004	18.0	0.478	0.00375	<0.00005	<0.003	0.00153	<0.001	37.2	<0.0005
GP-02	25-Sep-09	8.23	981	4.9	224	15	0978	8.20	<0.5	180	0.60	350	0.0056	0.00037	0.00202	0.054	<0.00001	<0.000005	<0.05	0.00006	167	<0.0001	0.0001	0.00138	0.028	0.000305	0.003	035	0.117	0.00239	0.002		2.8	0.0005	5.78	<0.000005	13.6	0.632	0.000012	<0.00001	<0.0005	0.0244	0.0005	0.0012	<0.0001
GP-03	25-Sep-09	8.18	281	5.3	210	100	0279	8.10	<0.5	130	<0.5	021	0.0016	0.00012	0.00144	0.081	<0.00001	<0.000005	<0.05	0.000067	041	<0.0001	2.1E-05	0.00046	0.004	0.00032	0.004	010	0.00109	0.0012	0.000		1.0	0.0044	5.99	<0.000005	4.9	0.256	0.000007	<0.00001	<0.0005	0.0075	0.0008	0.0034	<0.0001
GP-06	25-Sep-09	7.08	1734		296	trace	1700	8.00	25.0	250	<0.5	880	0.002	0.0568	0.0243	0.012	<0.00005	<0.00003	<0.3	0.0075	213	<0.0005	0.0562	0.0004	0.031	0.0223	0.027	136	0.172	0.0039	0.546		3.3	<0.0002	3.32	<0.00003	6.9	1.270	0.00568	<0.00005	<0.003	0.026	<0.001	18.2	<0.0005
GP-08	25-Sep-09	7.63	1455	4	358	trace	1440	8.10	14.2	450	0.70	480	0.0015	0.00007	0.00013	0.016	<0.00001	<0.000005	<0.05	0.000007	127	<0.0001	0.00014	0.0002	0.009	0.000317	0.040	167	0.00031	0.00012	0.006		3.2	0.0001	2.14	0.000005	4.9	0.861	0.000138	<0.00001	<0.0005	0.0181	<0.0002	0.0032	<0.0001
GP-09	25-Sep-09	7.34	1866	5.6	382	trace	1840	8.10	16.9	400	2.30	820	0.0014	0.00046	0.00059	0.015	<0.00001	<0.000005	<0.05	0.000066	165	<0.0001	0.00076	0.0002	0.012	0.00147	0.044	212	0.0162	0.00291	0.043		4.3	0.0004	2.28	<0.000005	5.0	0.859	0.000172	<0.00001	<0.0005	0.035	<0.0002	0.055	<0.0001
GP-10	25-Sep-09	8.14	1634	4.8	235	trace							0.0012	0.0002	0.00227	0.007	<0.00001	<0.000005	<0.05	0.000028	094	<0.0001	0.0021	0.00061	0.008	0.000308	0.043	207	0.00031	0.00475	0.034		3.8	0.0006	2.33	<0.000005	4.4	0.289	0.000037	<0.00001	<0.0005	0.0156	<0.0002	0.0052	0.0006
GP-12	25-Sep-09	7.96	1576	5.6	148	2	1540	8.10	<0.5	250	<0.5	750	0.0058	0.00033	0.00978	0.028	<0.00001	<0.000005	<0.05	0.00045	274	0.0002	0.00011	0.00092	0.023	0.000109	0.004	088	0.149	0.00139	0.009		2.8	0.0007	4.93	<0.000005	20.6	1.420	0.000159	<0.00001	<0.0005	0.00647	<0.0002	0.301	<0.0001

Footnotes:

[1] - Below bench of GP01

[2] - Above GP01 which was sampled at lake level

Sample ID	Date Sampled	Field Parameters pH	Cond uS/cm	Temp ℃	ORP mV	Flow L/min	Physical Tests Cond uS/cm	pH	Dissolved Anions Acidity (to pH 8.3) mg CaCO3/L	Alkalinity-Total mg CaCO3/l	Cl mg/L	SO4 mg/L	Dissolved Metals Al mg/L	Sb mg/L	As mg/L	Ba mg/L	Be mg/L	Bi mg/L	B mg/L	Cd mg/L	Ca mg/L	Cr mg/L	Co mg/L	Cu mg/L	Fe mg/L	Pb mg/L	Li mg/L	Mg mg/L	Mn mg/L	Mo mg/L	Ni mg/L	P mg/L	K mg/L	Se mg/L	Si mg/L	Ag mg/L	Na mg/L	Sr mg/L	Tl mg/L	Sn mg/L	Ti mg/L	U mg/L	V mg/L	Zn mg/L	Zr mg/L
04-VP01	31-May-04	7.27	181	8.4	385	6	174	8.04	1.3	59.5	<0.50	23.3	<0.20	<0.2	<0.2	0.025	<0.005	<0.2	<0.1	<0.010	27	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	2.33	<0.0050	<0.030	<0.050	<0.30	<2.0	<0.20	3.92	<0.01	<2.0	0.087	<0.20	<0.03	<0.01		<0.03	0.0074	
04-VP02	01-Jun-04	2.95	1261	14.5	675	15	1240	2.83	408	<1.0	0.57	582	7.38	<0.2	<0.2	0.014	<0.005	<0.2	<0.1	0.025	28.1	<0.010	0.345	4.75	129	0.436	0.011	13.3	7.34	<0.030	0.075	<0.30	<2.0	<0.20	8.53	<0.01	2.1	0.145	<0.20	<0.03	<0.01		<0.03	12.1	
04-VP03	01-Jun-04	7.57	405	20.5		0.25	405	8.17	<1.0	201	0.62	25.1	<0.20	<0.2	<0.2	0.034	<0.005	<0.2	<0.1	<0.010	52.8	<0.010	<0.010	<0.010	<0.030	<0.050	<0.010	14.7	0.0084	<0.030	<0.050	<0.30	<2.0	<0.20	5.89	<0.01	6	0.304	<0.20	<0.03	<0.01		<0.03	<0.005	
04-VP04	01-Jun-04	3.96	7390	17.8	483	2	7410	3.61	4370	<1.0	<0.50	7070	45.6	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	3.21	221	<0.10	4.65	41.3	1410	2.49	<0.10	226	168	<0.30	2.11	<3.0	<20	<2.0	15.7	<0.10	<20	0.258	<2.0	<0.30	<0.10		<0.30	1530	
04-VP05	01-Jun-04	5.58	2810	8.3	257	Trace	2750	5.14	643	10.6	0.75	1930	<0.40	<0.40	<0.40	0.021	<0.010	<0.40	<0.20	0.059	232	<0.020	0.844	0.025	166	<0.10	0.103	131	90	<0.060	0.65	<0.60	7.9	<0.40	5.88	<0.02	5.1	0.807	<0.40	<0.06	<0.02		<0.06	229	
04-VP06	01-Jun-04	2.7	12.9	10210	715	Trace	10100	2.74	3270	<1.0	<0.50	11139	19.1	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	1.08	404	<0.10	9.14	11.9	421	<0.50	0.33	918	924	<0.30	3.77	<3.0	<20	<2.0	13.5	<0.10	<20	1.11	<2.0	<0.30	<0.10		<1.0	1550	
04-VP07	01-Jun-04	3.15	5750	11.3	619	1	5830	2.89	2070	<1.0	1.02	5110	54.6	<0.60	<0.60	<0.030	<0.015	<0.60	<0.30	0.823	363	<0.030	3.34	8.64	492	0.91	0.2	326	312	<0.090	1.69	<0.90	9.5	<0.60	19.7	<0.03	<6.0	0.946	<0.60	<0.09	<0.03		<0.30	558	
04-VP08	02-Jun-04	2.84	9110	6.9	610	Trace	8350	3.08	3570	<1.0	1.19	8080	12.1	<2.0	<2.0	<0.10	<0.050	<2.0	<1.0	1.13	455	<0.10	4.25	1.77	860	<0.50	0.35	675	559	<0.30	3.34	<3.0	<20	<2.0	24	<0.10	<20	1.52	<2.0	<0.30	<0.10		<1.0	1550	
04-VP09	02-Jun-04	5.62	1033	4.4	329	2	940	6.55	115	24.1	<0.50	485	<0.20	<0.2	<0.2	0.018	<0.005	<0.2	<0.1	0.045	98.6	<0.010	0.187	<0.010	50	<0.050	0.03	32.7	21.4	<0.030	0.076	<0.30	2.2	<0.20	5.08	<0.01	4.9	0.488	<0.20	<0.03	<0.01		<0.03	48.1	
04-VP10	02-Jun-04	6.33	809	13.3	357	Trace	1400	3.67	356	<1.0	<0.50	797	4	<0.2	<0.2	0.017	<0.005	<0.2	<0.1	0.322	105	<0.010	0.355	1.54	6.14	0.685	0.048	55.6	16.1	<0.030	0.603	<0.30	<2.0	<0.20	8.99	<0.01	<2.0	0.447	<0.20	<0.03	<0.01		<0.03	180	
04-VP11	02-Jun-04	3.44	1465	11.9	669	90	773	7.32	17.4	150	<0.50	286	<0.20	<0.2	<0.2	0.018	<0.005	<0.2	<0.1	<0.010	129	<0.010	0.05	<0.010	1.4	<0.050	<0.010	29	0.698	<0.030	0.125	<0.30	<2.0	<0.20	5.76	<0.01	3	1.38	<0.20	<0.03	<0.01		<0.03	5.19	
04-VP12	02-Jun-04	7.18	1372	12.6	434	Trace	1330	8	8.4	216	<0.50	600	<0.20	<0.2	<0.2	0.015	<0.005	<0.2	<0.1	<0.010	199	<0.010	<0.010	<0.010	<0.030	<0.050	0.045	77.2	0.245	<0.030	0.087	<0.30	2.4	<0.20	2.02	<0.01	2.3	1.05	<0.20	<0.03	<0.01		<0.03	2.86	
04-VP13	02-Jun-04	6.82	2080	12	458	Trace	2020	7.24	87.5	14	1.37	1370	<0.20	<0.2	<0.2	0.011	<0.005	<0.2	<0.1	<0.010	324	<0.010	0.113	<0.010	<0.030	<0.050	0.157	91.8	31.7	<0.030	0.646	<0.30	3.1	<0.20	3.14	<0.01	2.4	1.18	<0.20	<0.03	<0.01		<0.03	42	
04-VP14	02-Jun-04	7.18	583	12.6	446	0.25	568	7.46	35	90	<0.50	212	<0.20	<0.2	<0.2	0.041	<0.005	<0.2	<0.1	0.036	70.2	<0.010	0.072	<0.010	<0.030	<0.050	0.01	21.6	4.13	<0.030	0.183	<0.30	<2.0	<0.20	4.39	<0.01	2.1	0.334	<0.20	<0.03	<0.01		<0.03	19.9	
04-VP15	02-Jun-04	7.1	1243	12.8	461	Trace	1230	7.4	75	15.5	<0.50	684	<0.20	<0.2	<0.2	0.011	<0.005	<0.2	<0.1	0.036	166	<0.010	0.144	<0.010	<0.030	0.101	0.072	44.5	15	<0.030	0.745	<0.30	<2.0	<0.20	3.52	<0.01	2.3	0.794	<0.20	<0.03	<0.01		<0.03	37.7	
04-VP16	02-Jun-04	3.71	2980	15.1	637	0.1	2920	4.08	766	<1.0	1.08	2200	49.3	<0.2	0.2	<0.010	0.0132	<0.2	<0.1	0.284	298	<0.010	1.41	2.37	4.17	1.85	0.309	147	51.9	<0.030	2.51	<0.30	4.2	<0.20	20.9	<0.01	5.2	1.23	0.2	<0.03	<0.01		<0.03	238	
05-VP01	17-May-05	2.7	1950	12.5	619		405	8.3	<1	3.5	<0.5	473	0.27	<0.2	<0.2	0.221	<0.005	<0.2	<0.1	0.075	117	<0.01	0.134	1.59	20.8	<0.05	<0.01	35.1	11.7	<0.03	0.168	<0.3	<2	<0.2	5.48	<0.01	<2	0.331	<0.2	<0.03	<0.01		<0.03	32.3	
05-VP02	17-May-05	7.94	408	15.1	258		405	8.39	<1	213	<0.5	25	<0.2	<0.2	<0.2	0.04	<0.005	<0.2	<0.1	<0.01	65.6	<0.01	<0.01	<0.01	<0.03	<0.05	<0.01	15.1	0.0184	<0.05	<0.05	<0.3	<2	<0.2	6.19	<0.01	6.1	0.305	<0.2	<0.03	<0.01		<0.2	0.0094	
05-VP03	17-May-05	2.82	1369	6.8	350		1170	2.82	401	<2	<0.5	448	9.04	<0.2	<0.2	0.015	<0.005	<0.2	<0.1	0.021	36.1	0.016	0.278	3.35	91.1	0.466	0.019	15.7	5.57	<0.03	0.068	<0.3	<2	<0.2	11.2	<0.01	2.9	0.162	<0.2	<0.03	<0.01		<0.03	11.2	
05-VP04	17-May-05	3.32	7040	8	544		6780	2.94	4230	<2	<25	6960	64.9	<0.4	1.15	<0.02	<0.01	<0.4	<0.2	2.13	218	0.113	3.72	111	1620	1.56	0.111	159	148	<0.1	1.79	<0.6	<4	<0.4	16.5	<0.02	<4	0.295	<0.4	<0.06	<0.02		<0.06	1230	
05-VP05	17-May-05	5.06	1420	7.2	398		1360	6.89	221	3.6	<0.5	799	<0.2	<0.2	<0.2	0.012	<0.005	<0.2	<0.1	0.119	168	<0.01	0.236	0.08	70.3	<0.05	0.033	49.8	36.1	<0.03	0.117	<0.3	2.5	<0.2	5.84	<0.01	7.2	0.729	<0.2	<0.03	<0.01		<0.03	75	
05-VP06	17-May-05	5.41	2000	7.6	298		1990	6.44	276	5.6	<5	1230	1.19	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.31	190	<0.01	1.36	0.102	3.9	1.35	0.101	154	55.5	<0.03	2.84	<0.3	3.2	<0.2	5.35	<0.01	<2	0.516	<0.2	<0.03	<0.01		<0.03	126	
05-VP07	17-May-05	4.06	3290	7.2	472		3310	3.67	876	<2	<10	2220	24.4	<0.2	<0.2	<0.01	<0.005	<0.2	<0.1	0.651	249	0.018	1.66	1.21	29.2	2.16	0.153	261	47.8	<0.03	2.35	<0.3	<2	<0.2	13.7	<0.01	<2	0.436	<0.2	<0.03	<0.01		0.044	235	
05-VP09	19-May-05	2.91	11560	6.6	685		11000	2.7	10800	<2	<50	14000	151	<1	31.7	<0.05	<0.025	<1	<0.5	2.9	385	0.36	7.28	126	2630	1.11	0.396	660	546	<0.15	3.95	6	<10	<1	27.4	<0.05	<10	0.86	<1	<0.15	<0.05		<0.4	1710	
VP01	22-Sep-06	6.78	671	4.9	341	trace	637	7.74	9.4	183	<0.50	174	<0.20	<0.20	<0.20	0.015	<0.0050	<0.20	<0.10	<0.010	96.6	<0.010	0.014	<0.010	3.47	<0.050	0.01	26.4	0.474	<0.030	0.057	<0.30	<2.0	<0.20	5.31	<0.010	5.4	0.668	<0.20	<0.030	<0.010		<0.030	2.91	
VP02	22-Sep-06	7.08	4470	6.1	212	trace	4230	6.48	806	31.6	<25	3320	<0.40	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	0.372	378	<0.020	2.44	<0.020	<0.060	<0.10	0.185	366	67.1	<0.060	8.68	<0.60	4.8	<0.40	1.96	<0.020	4.7	2.47	<0.40	<0.060	<0.020		<0.080	627	
VP03	22-Sep-06	3.59	1057	5.9	333		1030	4.02	160	<2.0	<0.50	521	2.98	<0.20	<0.20	0.018	<0.0050	<0.20	<0.10	0.118	87.4	<0.010	0.13	0.495	3.59	0.435	0.036	43.9	6.81	0.031	0.341	<0.30	<2.0	<0.20	7.37	<0.010	<2.0	0.33	<0.20	<0.030	<0.010		<0.030	78.9	
VP-04	22-Sep-06	5.55	1623	6.7	272	trace	1590	4.72	344	9.6	<0.50	968	1.19	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.371	159	<0.010	0.746	4.02	0.53	2.67	0.057	69.6	22.9	<0.030	0.545	<0.30	<2.0	<0.20	7.94	<0.010	<2.0	0.601	<0.20	<0.030	<0.010		<0.030	180	
VP05	22-Sep-06	3.62	2020	6	407	trace	1920	3.92	164	<2.0	<0.50	1250	3.52	<0.20	<0.20	0.014	<0.0050	<0.20	<0.10	<0.010	302	<0.010	0.227	0.069	1.06	0.282	0.162	77.1	39.3	<0.030	0.761	<0.30	2.4	<0.20	10.3	<0.010	2.6	1.03	<0.20	<0.030	<0.010		<0.030	72.7	
VP06	22-Sep-06	8.24	885	7.7	132	trace	840	8	4.5	91.9	<0.50	369	<0.20	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	<0.010	169	<0.010	<0.010	<0.010	<0.030	<0.050	0.034	25.5	0.021	<0.030	<0.050	<0.30	2	<0.20	1.51	<0.010	2.2	0.563	<0.20	<0.030	<0.010		<0.030	0.148	
VP07	22-Sep-06	6.48	3680	6.9	360	20	3460	5.24	1570	10.5	<250	2740	<0.20	<0.20	<0.20	<0.010	<0.0050	<0.20	<0.10	0.291	198	<0.010	1.63	0.023	580	<0.050	0.082	144	84.6	<0.030	0.946	<0.30	3.3	<0.20	6.65	<0.010	5.6	0.755	<0.20	0.062	<0.010		<0.030	361	
VP09	22-Sep-06	6.91	646	6.7		trace	605	7.76	9.1	62.9	<0.50	246	<0.20	<0.20	<0.20	0.012	<0.0050	<0.20	<0.10	<0.010	89	<0.010	0.05	<0.010	6.62	<0.050	0.019	26.5	7.23	<0.030	<0.050	<0.30	<2.0	<0.20	3.93	<0.010	5.3	0.408	<0.20	<0.030	<0.010		<0.030	8.26	
VP10	22-Sep-06	3.56	2120	6.9		trace	2060	3.47	239	<2.0	<0.50	1340	1.44	<0.20	<0.20	0.011	<0.0050	<0.20	<0.10	0.012	186	<0.010	0.359	0.234	12.6	0.071	0.076	118	60.5	0.033	0.221	<0.30	4.8	<0.20	6.88	<0.010	7.1	0.576	<0.20	0.036	<0.010		<0.030	96.4	
VP11	22-Sep-06	3.02	6030	7.9		<1	5510	3.1	3560	<2.0	<250	5390	24.2	<0.40	<0.40	<0.020	<0.010	<0.40	<0.20	1.03	168	<0.020	2.92	3.9	1510	2.07	0.097	141	90.8	<0.060	1.05	<0.60	<4.0	<0.40	13.7	<0.020	<4.0	0.369	<0.40	<0.060	<0.020		<0.060	569	
VP-01	12-Sep-07	8.69	611	10.6	280	2	572	6.89	18	115	<0.5	200	0.0028	0.00022	0.0059	0.0158	<0.001	<0.001	<0.02	0.0144	85.5	<0.001	0.0378	0.0135	0.22	0.0007	0.01	26.1	0.561	0.0197	0.0565	<0.3	<2	0.0032	3.69	0.000021	2.4	0.377	0.0006	<0.0002	<0.01		0.0012	7.42	
VP-02	12-Sep-07	6.56	3990	18.4	324	1	4000	6.5	860	32.3	<50	3380	<0.2	<0.02	<0.02	0.023	<0.1	<0.1	<2	0.397	390	<0.1	2.43	0.314	<0.06	<0.01	<1	381	56.6	<0.01	7.58	<0.6	5.5	<0.2	4.07	<0.002	<4	2.8	<0.02	<0.02	<0.02		0.0277	608	
VP-03	12-Sep-07	3.68	1012	9.9	387	20	995	4.45	178	<2	<0.5	535	3.04	<0.002	<0.002	0.0191	<0.01	<0.01	<0.2	0.122	84	<0.01	0.136	0.448	1.58	0.495	<0.1	44.7	6.92	<0.001	0.31	<0.3	<2	<0.02	8.78	<0.0002	<2	0.336	<0.002	<0.002	<0.01		0.0086	84.3	
VP-07	12-Sep-07	5.39	5010	6.3	115	200	4900	4.1	2214.4	5.3	<500	4530	0.6	<0.02	0.043	<0.01	<0.1	<0.1	<2	0.573	249	<0.1	2.7	0.071	857	0.096	<1	213	150	<0.01	1.56	<0.6	<4	<0.2	8.74	<0.002	5.3	0.961	<0.02	<0.02	0.024		0.0026	687	
VP-09	12-Sep-07	6.85	390	6.5	105	1	389	7.97	4.8	171	<0.5	44.3	0.0015	<0.0001	0.0013	0.0281	<0.0005	<0.0005	<0.01	0.00023	58.6	<0.0005	0.00126	0.00053	0.551	0.0002	0.0099	15.3	0.216	<0.00005	0.00082	<0.3	<2	<0.001	6.72	<0.00001	5	0.35	<0.0001	<0.0001	<0.01		0.0006	0.352	
VP-10	12-Sep-07	3.57	2440	7.3	324	trace	2580	3.37	563	<2	<50	1710	5.32	<0.005	0.0054	0.0109	<0.025	<0.025	<0.5	0.0409	216	<0.025	0.623	1.35	64.3	0.0453	<0.25	152	89.5	<0.0025	0.343	<0.3	5.4	<0.05	10.4	<0.0005	7.5	0.68	<0.005	<0.005	0.011		0.0049	181	
VP-11	12-Sep-07	3.42	7230	12.7	354	trickle	7340	3.37	5090	<2	<500	7460	52.2	0.024	0.527	<0.01	<0.1	<0.1	<2	1.67	191	<0.1	4.4	12	2440	2.16	<1	172	125	<0.01	1.48	<1.5	<10	<0.2	22.5	<0.002	<10	0.279	0.041	<0.02	<0.05		0.0376	855	
VP01	17-Sep-08	7.26	584	8.6	162	1.8	810	7.6	44.8	100	0.8	330	0.005	0.0005	0.0015	0.0184	<0.00005	<0.00003	<0.3	0.0626	111	<0.0005	0.0937	0.0755	3.02	0.00021	0.014	34.6	0.9	0.0024	0.11		1.51	0.0156	3.75	0.00012	2.21	0.445	0.0018	0.00006	<0.003	0.0016	<0.001	24.4	<0.0005
VP02	17-Sep-08	6.78	2348	8.6	198	Trace	2900	6.6	769	15	<0.5	2000	<0.02	<0.002	<0.002	0.014	<0.001	<0.0005	<5	1.57	253	<0.01	2.8	0.125	0.149	<0.0005	0.162	149	40	<0.005	6.21		3	0.013	<10	0.0028	<1	1.18	0.0021	<0.001	<0.05	0.0067	<0.02	607	<0.01
VP03	17-Sep-08	2.93	1160	8.3	354	Trace	1500	3.3	412	<0.5	<0.5	750	5.62	<0.0004	0.0025	0.0128	0.001	<0.0001	<1	0.233	97.5	0.003	0.243	0.806	14.9	0.606	0.041	59.5	12.1	<0.001	0.504		0.7	0.001	10.7	0.0006	0.3	0.371	0.0016	<0.0002	<0.01	0.014	<0.004	176	<0.002
VP04	17-Sep-08	2.63	2533	8.5	428	3	3200	3	677	<0.5	<0.5	2000	13.9	<0.0004	0.0109	0.017	0.0067	<0.0001	<1	0.0269	439	0.004	0.528	0.21	30.1	0.722	0.189	122	57	<0.001	1.35		2.6	0.003	21.2	0.0005	1.5	1.58	0.001	<0.0002	<0.01	0.0275	<0.004	172	<0.002
VP05	17-Sep-08	7.68	1161	7.5	345	3	1500	7.8	27.6	89	<0.5	800	0.003	0.0003	0.0004	0.0111	<0.00005	<0.00003	<0.3	0.0002	281	<0.0005	0.00029	0.0028	0.016	0.0003	0.038	56.5	0.0152	<0.0003	0.0098		3.09	<0.0002	1.53	0.0001	1.81	0.822	0.0002	<0.00005	<0.003	0.0115	<0.001	0.174	<0.0005
VP06	17-Sep-08	6.94	190	8	270	4	250	7.5	<0.5	32	0.6	70	0.0083	0.00056	0.001	0.0353	<0.00001	<0.000005	<0.05	0.00031	34.9	<0.0001	0.0001	0.00261	0.003	0.00403	0.0113	4.9	0.0136	<0.00005	0.00965		0.76	0.00013	4.49	0.000006	1.7	0.127	0.0001	<0.00001	<0.0005	0.0005	<0.0002	0.26	<0.0001
VP07	17-Sep-08	6.94	1840	6.9	267	2	2400	7.4	182	150	0.9	1600	0.002	0.016	0.0009	0.0138	<0.0001	<0.00005	<0.5	0.0144	241	<0.001	0.751	0.143	0.549	0.00013	0.115	203	23	0.0006	1.09		4.51	0.002	5.51	0.00014	12.2	1.12	0.0037	<0.0001	<0.005	0.004	<0.002	133	<0.001
VP08	17-Sep-08	6.46	1749	7.7	16	3	2200	5.1	704	<0.5	0.5	1600	<0.002	<0.0002	0.0151	0.0104	<0.0001	<0.00005	<0.5	0.0931	159	<0.001	0.634	0.0059	273	0.00017	0.044	96.4	71.3	<0.0005	0.205		2.66	0.0005	6.73	0.00023	5.12	0.738	0.0006	<0.0001	<0.005	0.001	<0.002	157	<0.001
VP09	17-Sep-08	5.38	4210	4.9	197	10.2	5100	3.9	3910	<0.5	<0.5	4700	4.45	0.002	0.011	0.003	0.001	<0.0005	<5	1.17	181	<0.01	2.83	0.783	1010	1.35	0.137	215	191	<0.005	1.58		3	<0.004	10.7	0.0033	<1	0.481	0.0136	<0.001	<0.05	0.0098	<0.02	678	<0.01
VP11	17-Sep-08	3.61	5710	7.4	240	3	8100	3.3	7840	<0.5	<0.5	7900	59.1	0.041	1.99	0.005	0.006	<0.0005	<5	2.66	198	0.023	4.57	9.96	2400	2.57	0.154	210	165	<0.005	1.93		1	0.006	18.5	0.0033	<1	0.359	0.0469	<0.001	<0.05	0.0437	0.042	1560	<0.01
VP-01	28-Sep-09	6.3	645	3.9	39	2	639	7.5	14.3	170	<0.5	170	0.0013	0.00014	0.205	0.0153	0.00013	<0.000005	<0.05	0.00038	95.2	<0.0001	0.0167	0.00012	2.46	5.2E-05	0.0085	25.1	0.45	0.00172	0.0593		1.69	<0.00004	5.58	<0.000005	6.11	0.582	8E-05	<0.00001	<0.0005	0.0023	<0.0002	3.03	<0.0001
VP-02	28-Sep-09	5.95	1958	6.9	90	1	1930	6.2	416	3.7	<0.5	1300	0.552	<0.0004	0.0041	0.0159	0.0008	<0.0001	<1	0.584	188	<0.002	1.18	0.445	0.24	0.0007	0.098	103	21.4	<0.001	2.94		2.5	0.0025	5.5	0.0002	2.4	0.759	0.0013	<0.0002	0.019	0.0268	<0.004	271	<0.002
VP-03	28-Sep-09	3.03	1380	8.9	514	60	1300	3.3	265	<0.5	<0.5	650	5.15	0.0002	0.0013	0.0123	0.0006	<0.00005	<0.5	0.138	85.4	0.003	0.163	0.548	11.6	0.599	0.036	51.4	8.12	<0.0005	0.375		0.84	<0.0004	10.4	0.00015	1.87	0.327	0.0014	<0.0001	0.016	0.0108	0.002	103	<0.001
VP-04	28-Sep-09	2.58	4600	8.7	514	1	4360	2.8	1420	<0.5	<0.5	3600	69.2	<0.0004	0.0636	0.0165	0.0141	<0.0001	<1	0.0501	461	0.037	0.677	0.39	171	0.212	0.331	191	61.9	<0.001	1.98		1.9	0.003	37.4	0.0003	2.6	1.59	0.0013	<0.0002	0.01	0.0603	<0.004	173	<0.002
VP-05	28-Sep-09	6.68	1272	4.4	396	trace	1240	7.7	2.3	86	<0.5	640	0.0015	0.00032	0.0004	0.00925	<0.00001	<0.000005	<0.05	0.00031	239	<0.0001	0.00014	0.00054	0.037	0.00142	0.0283	48	0.00557	0.00046	0.00481		2.83	0.00009	1.16	<0.000005	2.14	0.754	0.0002	<0.00001	<0.0005	0.0064	<0.0002	0.153	<0.0001
VP-06	28-Sep-09	6.6	744	2.3	230	1	965	7.3	10.9	39	<0.5	520	0.0036	0.0029	0.0003	0.0249	<0.00001	<0.000005	<0.05	0.0025	186	<0.0001	0.00133	0.00245	0.021	0.00052	0.0278	25.4	0.153	0.00006	0.0174		1.73	0.0001	2.73	<0.000005	2.18	0.504	0.0005	<0.00001	<0.0005	0.0032	<0.0002	1.8	<0.0001
VP-07	28-Sep-09	6.56	1004	1.6	111	1	978	7.9	16.1	230	<0.5	390	0.007	0.0124	0.0022	0.0122	<0.00005	<0.00003	<0.3	0.00254	108	<0.0005	0.138	0.06	0.312	0.00026	0.057	68.3	5.11	0.0005	0.205		2.87	<0.0002	5.51	<0.00003	9.68	0.438	0.0018	<0.00005	0.004	0.0019	0.001	22	<0.0005
VP-09	28-Sep-09	6.72	703	0.4	-1	4	634	7.4	<0.5	100	<0.5	210	0.003	0.0002	0.0269	0.0341	<0.00005	<0.00003	<0.3	0.00547	79.4	<0.0005	0.0461	0.0025	29.2	0.00014	0.016	25.3	7.93	<0.0003	0.0181		1.99	<0.0002	6.92	0.00003	5.26	0.386	0.0002	<0.00005	0.005	0.0009	0.001	11.7	<0.0005
VP-10	28-Sep-09	3.21	3740	2.7	370	1	3940	3.2	179	<0.5	<0.5	3200	2.63	<0.001	0.015	0.01	0.0011	<0.0003	<3	0.0282	344	<0.005	1.39	0.392	458	0.017	0.125	264	183	<0.003	0.695		6.5	<0.002	13.5	0.0003	8.5	0.978	0.0003	<0.0005	<0.03	0.0033	<0.01	435	<0.005
VP-11	28-Sep-09	4.08	5400	3	195	10	5350	3.3	413	<0.5	<0.5	4200	20.4	0.022	2.22	0.005	0.002	<0.0003	<3	0.977	149	0.007	2.4	2.94	1470	1.89	0.115	131	89.4	<0.003	0.979		1.7	<0.002	18.1	0.0006	3.8	0.332	0.0317	<0.0005	<0.03	0.0135	0.018	678	<0.005

Appendix C
Thermal and Pore Gas Monitoring Review Memo

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DRAFT Memo

To:	File	**Date:**	March 30, 2010
cc:		**From:**	Michel Noel, Dylan MacGregor
Subject:	FARO MINE COMPLEX: Review of waste rock temperature and pore gas oxygen content monitoring	**Project #:**	1CY001.033

1 Introduction

As part of closure planning studies at the Faro Mine Complex, a program of installing temperature and pore gas monitoring capabilities in the Faro, Grum and Vangorda waste rock dumps was carried out in 2002; locations of boreholes are shown in Figures 1 and 2. Monitoring equipment was installed in seven vertical boreholes, ranging in depth from 10 to 60 m, and samples were collected for sulphur content determination. Details of drilling, sampling and analysis, and instrument installation are reported in SRK (2003).

2 Review of Monitoring Results

2.1 Overview

Monitoring instrumentation was installed in Fall 2002, and monitoring has been carried out two to three times per year since installation. Spring (May/ June) and fall (September) monitoring has been carried out every year, and late winter monitoring (late February/ early March) monitoring has been conducted five times over this period. Some of oxygen monitoring tubes have become blocked over time and no longer allow measurements to be taken; the temperature monitoring instruments have remained functional. The entire record of monitoring results is provided in tables in Appendix A.

Initial monitoring results were used to support early estimates of waste rock seepage water quality (SRK 2004). Although monitoring has continued as part of broader ARD monitoring studies, no further review of oxygen and temperature monitoring data had been carried out prior to 2009/10.

A review of the monitoring results was carried out in 2009/10 to assess whether the temperature and oxygen monitoring record was providing any indication of evolution of waste rock weathering conductions. This memo summarizes the findings of that review. Appendix B includes a variety of plots that were generated during the review but are not directly referenced in the discussions below; these plots are included because they provided alternate approaches to viewing the monitoring results.

2.2 Faro: Borehole 30M-1

2.2.1 Location

The location of borehole 30M-1 is shown in Figure 1. This location was selected for monitoring because bulk Intermediate Dump waste rock was expected at this location, and because the location was somewhat close to the dump face (where effects of the waste rock/ ambient air boundary could be observed) (SRK 2003).

2.2.2 Data Review

A two-dimensional plot of 30M-1 oxygen and temperature results with depth over time are shown in Figure 3, and a simple vertical scale of sulphur content with depth is also shown on the right hand side for reference. The following results indicate the following:

- The upper 20 to 25 m had fairly uniform, ambient to slightly depleted oxygen concentrations (15 to 21%) over the 7 year monitoring period. Waste rock over this interval had low to moderate sulphur concentrations.
- Oxygen was variable at the deepest monitoring point (30 m), with values as low as 7% indicating that oxygen consumption was occurring, but also that there was sufficient supply of oxygen to prevent complete depletion. The sulphur content of waste rock from 25 to 30 m was high (>10%).
- Shallow temperatures (0 to 5 m) were seasonably variable, but showed evidence of warming from below. Deeper temperatures were seasonally stable but appear to demonstrate a subtle warming trend over the monitoring period (best displayed at 10 m depth).
- The highest temperatures were recorded at the deepest monitoring point; temperatures may be higher at greater depths at this location.

2.2.3 Interpretation

Rates of sulphide oxidation do not appear to be limited by oxygen supply at this location. Partial depletion of oxygen at 30 m depth suggests that convection of air is occurring through the waste rock pores, and that convection is likely driven by the elevated temperatures observed at depth. The slight increase in temperature over time suggests that thermal equilibrium has not yet been achieved with the surrounding heat source. It is also possible that additional heat is being generated in the vicinity of the instrumented hole due to the oxidation process..

2.3 Faro: Borehole 60M-1

2.3.1 Location

The location of borehole 60M-1 is shown in Figure 1. This location was selected for monitoring because Intermediate Dump sulphide cell waste rock was expected at this location (SRK 2003).

2.3.2 Data Review

A two-dimensional plot of 60M-1 oxygen and temperature results with depth over time are shown in Figure 4, and a simple vertical scale of sulphur content with depth is also shown for reference. The following results indicate the following:

- Oxygen content varies seasonally in the upper 30 m
  - Late winter conditions show less depletion of oxygen throughout the profile; this is particularly evident for the 2006-2008 period, where late winter monitoring results are available for three consecutive years. The greatest difference between warm and cold season temperatures is observed at the 20 m depth, which also corresponds to the depth where the lowest oxygen concentrations have been observed.
  - Shallowest monitoring point (0.7m) shows partially depleted oxygen content with wide seasonal variation (6% to 20%); shows that even at shallow depths, oxidation

rates are sufficient to cause significant depletion of oxygen at certain times of the year.

- Near-surface oxygen consumption rates are high.
- At 40 m and 60 m, oxygen content was fairly uniform, with slightly depleted oxygen concentrations (18 to 20%) over the 7 year monitoring period. These depths correspond to waste rock with low (<1%) sulphur content.
- Hottest temperature recorded at 20 m depth
    - Temperature declining over 7 year monitoring period (Figure 5); the same pattern was observed at 10 m depth.
- Time series for 30 m, 40 m and 60 m depths show increase in temperatures over monitoring period.

2.3.3 Interpretation

Rates of sulphide oxidation do not appear to be significantly limited by oxygen supply at this location, although there may be short periods where oxygen is sufficiently depleted to limit reaction rates. Seasonal variations in oxygen content suggest that convection regularly occurs during the cold part of the year due to the high thermal gradients between the internal dump temperatures and winter air temperatures, and that less convection occurs during warmer parts of the year when the thermal gradients are lower. When less convection occurs, oxidation rates are sufficient to cause partial depletion of oxygen even very close to the surface of the waste rock pile. The near-ambient oxygen concentrations at 40 m and 60 m indicate that there is effectively an unlimited supply of oxygen at depth.

The increasing temperatures at 30 m, 40 m and 60 m likely reflect thermal diffusion from the heat source centered near 20 m depth, with thermal conditions not yet at equilibrium. The convergence of temperatures at the 20 m and 30 m depths may indicate that this portion of the profile is approaching a thermal equilibrium condition.

Declining temperatures at the depth of maximum temperature (20 m) likely reflects one of the following conditions: a reduction in oxidation rates with time near that depth; a reduction in oxidation rates with time in the overlying waste rock as recorded at 10 m; or a broader reduction in oxidation rates over the broad zone of high sulphur content in the upper 25 m.

2.4 Grum: Borehole 10M-2

2.4.1 Location

The location of borehole 10M-2 is shown in Figure 2. This location was selected for monitoring because Grum Sulphide Cell waste rock was expected at this location (SRK 2003).

2.4.2 Data Review

A two-dimensional plot of 10M-2 oxygen and temperature results with depth over time are shown in Figure 6, and a simple vertical scale of sulphur content with depth is also shown for reference. Oxygen data is limited due to blockage of monitoring tubes. The following observations can however be made:

- Oxygen concentrations were partially depleted throughout the 10 m profile for the period when data was collected from depth;
- Oxygen content at 0.7m was always higher than at 1.4 m by at least 2%, and up to 12%;
- Temperature varied seasonally at all depths except the deepest (10 m) monitoring point;
- Temperature at 10 m increased slightly over the monitoring period (from around 3°C to around 4°C);

- Despite the borehole being located to target the Grum Sulphide Cell waste rock, the samples collected had uniformly low sulphur content (<1%) over the 10 m profile.

2.4.3 Interpretation

A combination of restricted oxygen supply and consumption of oxygen by oxidation reactions resulted in measurable depletions in oxygen content over ambient conditions with depth. Although the sulphur content of the waste rock in the upper 10 m at this location is low, the relatively steep gradient in oxygen concentrations in the upper 1.4 m suggests that either upward advection of oxygen depleted pore gas is occurring, or that the near-surface waste is reacting sufficiently quickly to measurably deplete the oxygen. It is also possible that the location of the instrumented hole is located just outside the zone with oxygen consuming material.

The marginal increase (from 3 to 4°C) at 10 m depth may indicate that there is a heat source at some greater depth, and that thermal equilibrium has not yet been established within the waste rock mass. It is also possible that newly oxidising material may have shifted the source of heat.

2.5 Grum: Borehole 10M-3

2.5.1 Location

The location of borehole 10M-3 is shown in Figure 2. This location was selected for monitoring because bulk Grum Dump waste rock was expected at this location, and results would allow comparison with Grum Sulphide Cell results in 10M-2 and 30M-3 (SRK 2003).

2.5.2 Data Review

A two-dimensional plot of 10M-3 oxygen and temperature results with depth over time are shown in Figure 7, and a simple vertical scale of sulphur content with depth is also shown for reference. Oxygen data is limited due to blockage of monitoring tubes, however the following observations can be made:

- Oxygen concentrations were partially depleted throughout the 10 m profile for the period when data was available from depth;
- Over the 10 m interval monitored, oxygen was never observed to be depleted enough to limit oxidation rates;
- Temperature was stable at the deepest (10 m) monitoring point, and varied seasonally at all other monitoring points.
- No trend in temperatures was evident over the monitoring period.

2.5.3 Interpretation

Waste rock in the vicinity of 10M-3 appears to contain near-ambient oxygen concentrations in the pore gas. Waste rock temperatures suggest that there is no significant heat source close enough to influence temperatures at this location.

2.6 Grum: Borehole 30M-3

2.6.1 Location

The location of borehole 30M-3 is shown in Figure 2. This location was selected for monitoring because Grum Sulphide Cell waste rock was expected at this location (SRK 2003).

2.6.2 Data Review

A two-dimensional plot of 30M-3 oxygen and temperature results with depth over time are shown in Figure 8, and a simple vertical scale of sulphur content with depth is also shown for reference. Oxygen data from recent years is limited due to blockage of most monitoring tubes. The following observations can however be made from the initial data collected before the tubes were blocked:

- Oxygen concentrations were near-ambient in the upper 5 m, and decreased sharply between 5 m and 10 m;
- Oxygen concentrations were almost completely depleted in the monitoring zone from 20 to 30 m;
- The entire 30 m profile contained >1% sulphur, with the zone from around 15 m to 30 m containing 2 to 10% sulphur;
- Temperatures at both 20 m and 30 m monitoring points appeared to increase from the start of monitoring through 2007, and appeared to stabilize over the 2007 through 2009 period.
- Maximum temperatures observed in 30M-3 were lower than maximum temperatures observed at both Vangorda and Faro.

2.6.3 Interpretation

The high sulphur zone below 15 m appears to be generating heat and consuming oxygen through oxidation reactions. The oxidation rates in this zone are probably limited by oxygen supply, based on the depleted oxygen concentrations observed at depths of 20 m and 30 m. The temperature at both 20 m and 30 m remained stable from 2007 through 2009, which indicates that the heat source from the oxidation process is not declining at this location.

2.7 Vangorda: Borehole 10M-4

2.7.1 Location

The location of borehole 10M-4 is shown in Figure 2. This location was selected for monitoring because Vangorda Dump sulphide waste rock was expected at this location (SRK 2003).

2.7.2 Data Review

A two-dimensional plot of 10M-4 oxygen and temperature results with depth over time are shown in Figure 9, and a simple vertical scale of sulphur content with depth is also shown for reference. The monitoring record for oxygen is nearly complete, with limited blockage of monitoring ports. The following observations can be made:

- Oxygen concentrations were near-ambient throughout the 10 m profile for all monitoring rounds;
- Temperature fluctuated seasonally at all depths except the deepest monitoring point (10 m);
- Temperatures appeared to be declining with time- this was most evident at 5.6 m and 10 m, with temperatures at 10 m decreasing from 32°C in 2003 to 16°C in 2009;
- Sulphur content is high (>10%) throughout the 10 m profile being monitored.

2.7.3 Interpretation

Oxidation rates at this location have not been limited by oxygen supply. Rates have decreased substantially over time, based on the observed decrease in temperature at the deepest monitoring point (10 m).

2.8 Vangorda: Borehole 30M-4

2.8.1 Location

The location of borehole 30M-4 is shown in Figure 2. This location was selected for monitoring because Vangorda Dump phyllite waste rock was expected at this location (SRK 2003).

2.8.2 Data Review

A two-dimensional plot of 30M-4 oxygen and temperature results with depth over time are shown in Figure 7, and a simple vertical scale of sulphur content with depth is also shown for reference. Oxygen data is somewhat limited due to blockage of monitoring tubes. The following observations can however be made:

- Oxygen concentrations were partially depleted throughout the 10 m profile for the period when data was available from depth;
- Oxygen was typically depleted in the near surface (0 to 5 m) zone, significantly but incompletely depleted at 10 m, typically depleted at 20 m, and variably depleted at 30 m;
- The highest oxygen concentrations at the deepest port (30 m) corresponded to winter monitoring rounds (similar to the condition observed at Faro);
- Temperatures at 10 m, 20 m, and 30 m were increasing over time;
- The entire profile contained >1% sulphur, with >2% in both the upper 10 m, and between 20 m and 30 m.

2.8.3 Interpretation

Oxidation rates are likely limited by oxygen supply for at least portions of the profile monitored. The partially oxygenated layer (observed at 10 m) sandwiched between two oxygen-depleted zones indicates that there is likely lateral movement of pore gas bringing a supply of oxygen to this zone from outside of the dump. The higher oxygen concentrations at depth (30 m) during winter monitoring suggestion that convective air movement has occurred during the cold months when the thermal gradient is strongest.

The increase in temperatures at 10 m, 20 m, and 30 m indicate that oxidation rates are not decreasing and that thermal equilibrium between the heat source and the larger mass of waste rock has not yet been achieved.

3 Conclusions

For all monitoring 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 temperature trends, 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. At Grum, temperatures appear to be stable and indicate that oxidation rates remain constant.

Oxygen monitoring apparatus have been less robust, and roughly half of the monitoring ports have been blocked over time. In particular, the majority of the monitoring ports in the three Grum Dump boreholes have become blocked, with only ports down to 1.4 m depth remaining functional. Similar plugging ports have been observed at other mine sites where oxygen concentrations were monitored. However, at Faro and Vangorda, oxygen data provide useful insight into both movement of air through the waste rock and relative rates of consumption of oxygen. Seasonal monitoring has been important to demonstrate the changes in air flow through waste rock under summer and winter temperatures; in particular, the results from 60M-1 at Faro show evidence of stronger convection during the cold months.

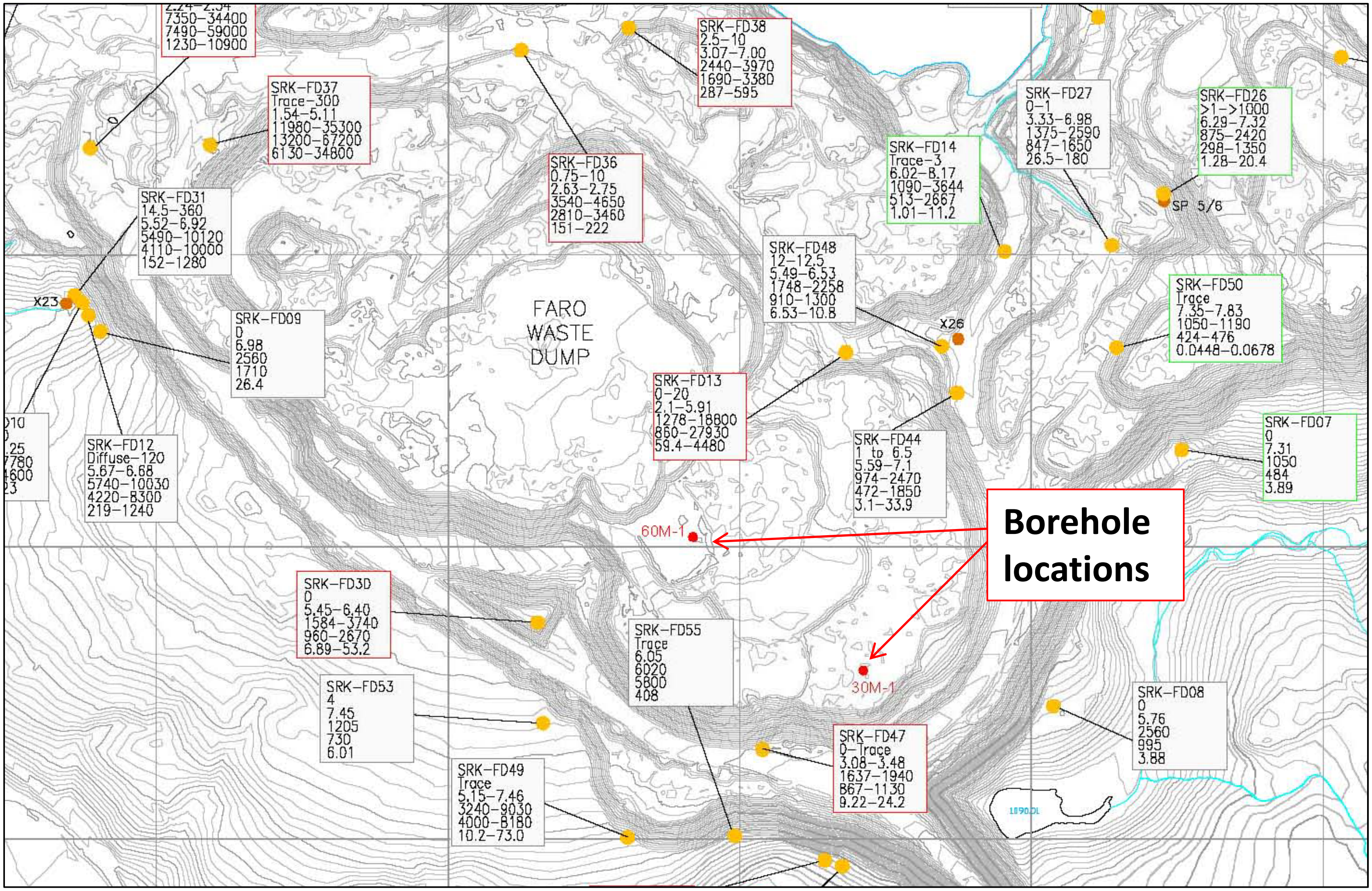
4 References

SRK Consulting (2003). Geochemical Studies of Faro and Vangorda/ Grum Waste Rock- Progress Report on Phase 1 And 2. Prepared for Deloitte & Touche, April 2003.

SRK Consulting (2004). Geochemical Studies of Waste Rock at the Anvil Range Mining Complex- Phase 3 Report. Prepared for Deloitte & Touche, June 2004.

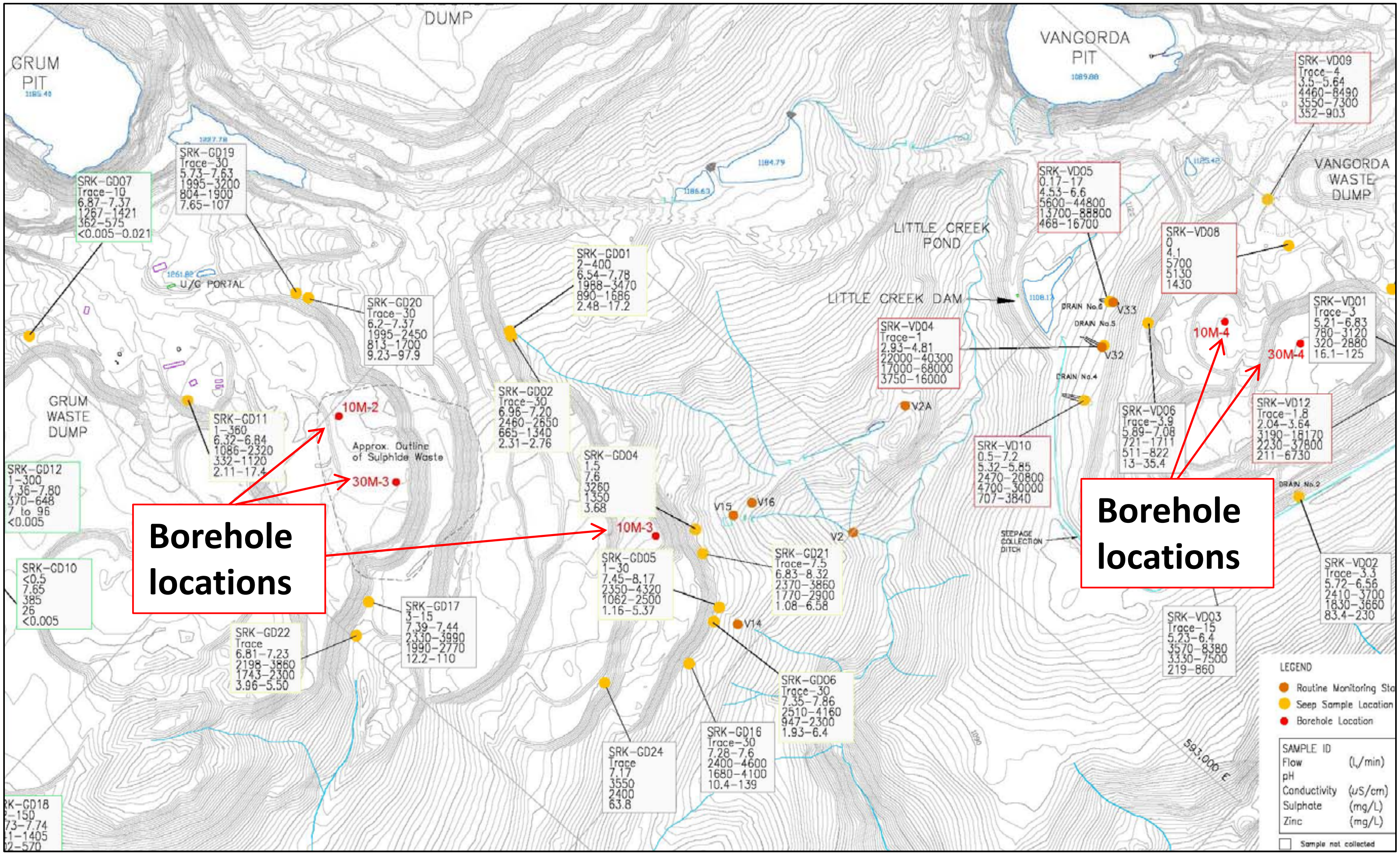
SRK Consulting (2010). Faro Mine Complex: 2009 Waste Rock and Seepage Monitoring Report- Task 4.5 – DRAFT. Prepared for Yukon Government, Assessment and Abandoned Mines, March 2010.

Figures



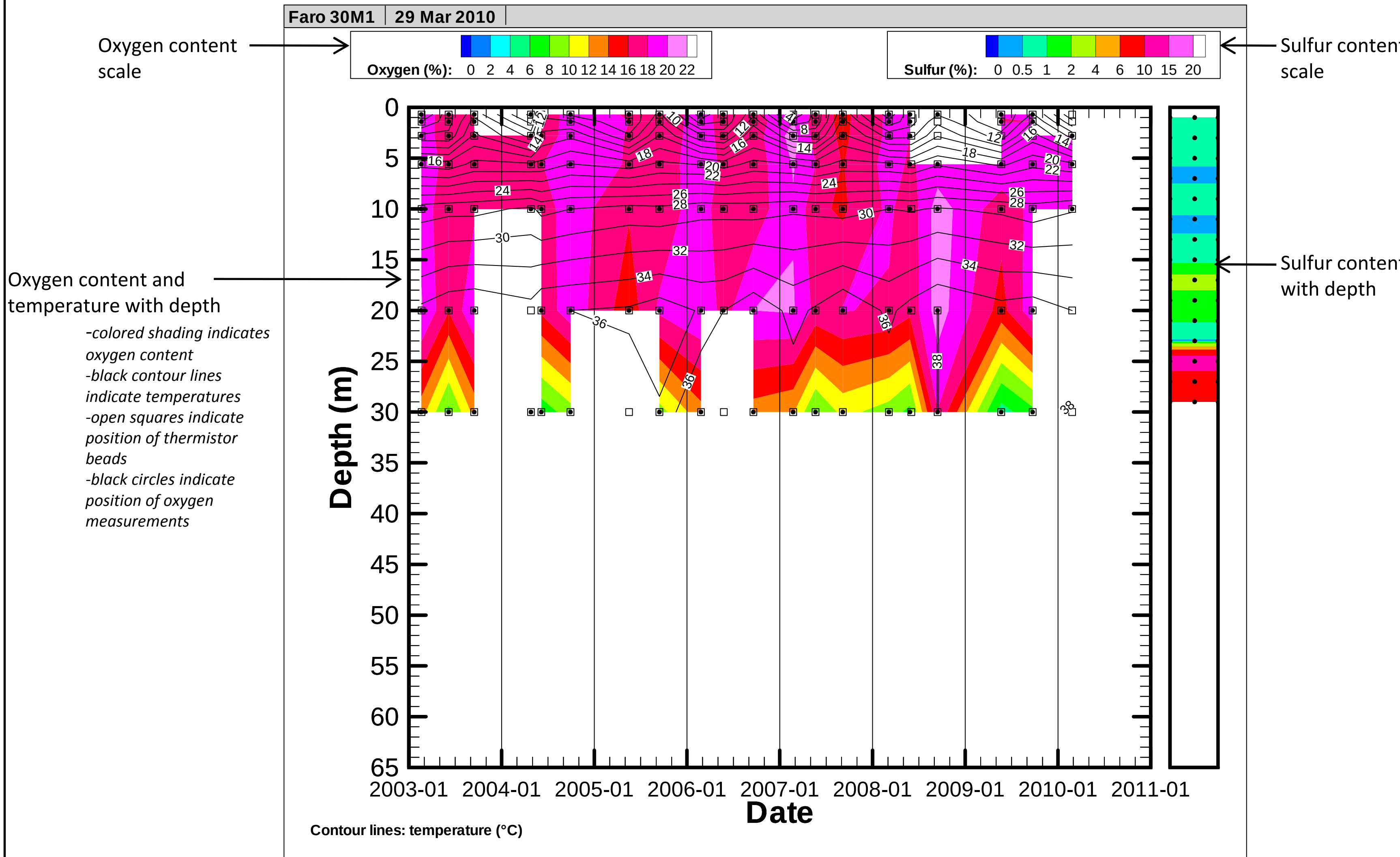
Adapted from Figure 1, SRK (2010):
Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report
Task 4.5 - DRAFT

SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure / Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content
		Faro Borehole Locations
Job No: 1CY001.033	Faro Mine Complex	Date: March 2010 / Approved: DBM / Figure: 1
Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt		



Adapted from Figure 2, SRK (2010):
Faro Mine Complex
2009 Waste Rock and Seepage Monitoring Report
Task 4.5 - DRAFT

SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure / Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content
		Grum and Vangorda Borehole Locations
Job No: 1CY001.033 Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt	Faro Mine Complex	Date: March 2010 | Approved: DBM | Figure: 2



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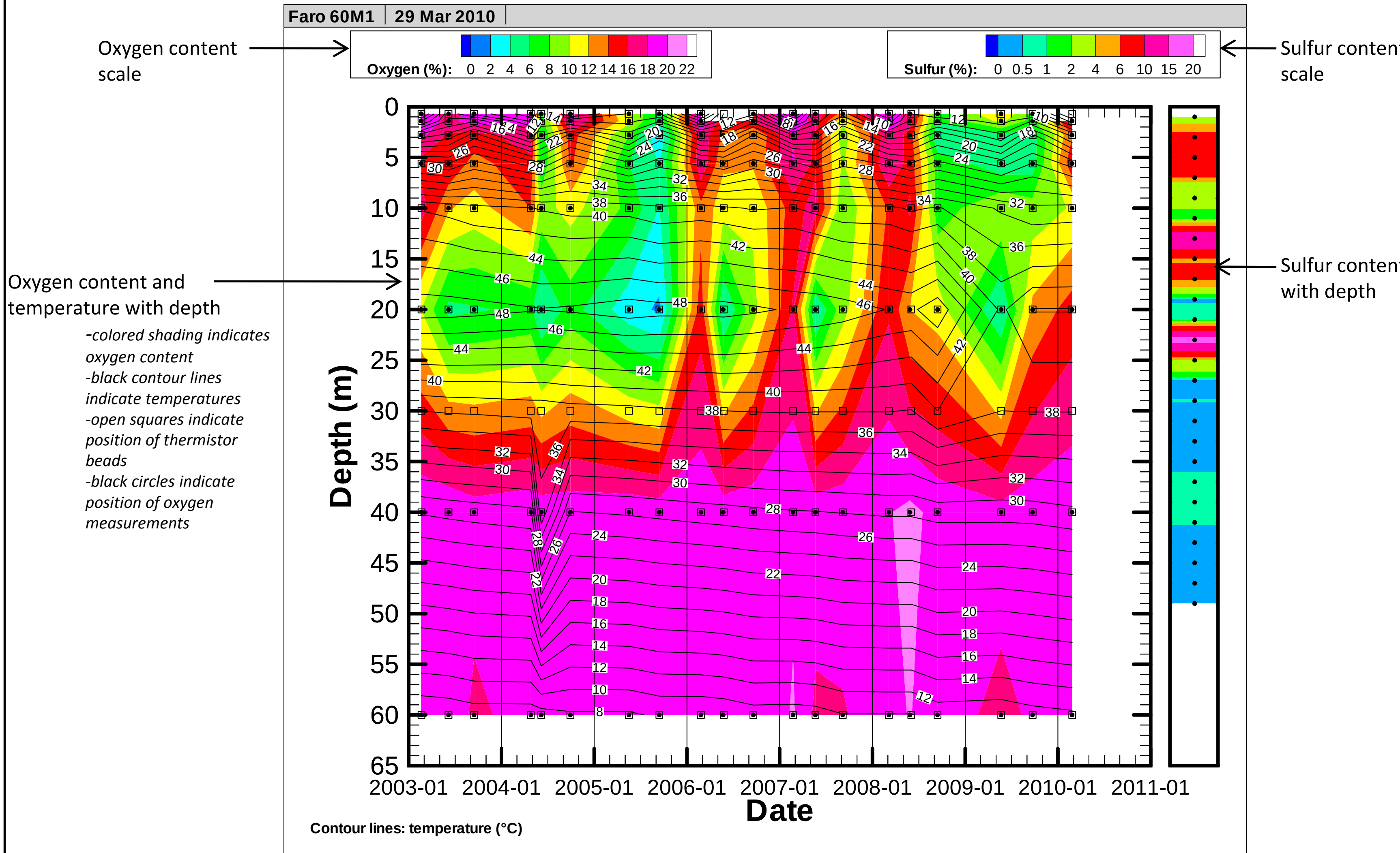
Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Faro 30M1 Depth-Time Profile

Job No: 1CY001.033	Faro Mine Complex	Date: March 2010	Approved: DBM
Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt		Figure: 3	



Data source: 2d_combined_Faro60M1b.wmf

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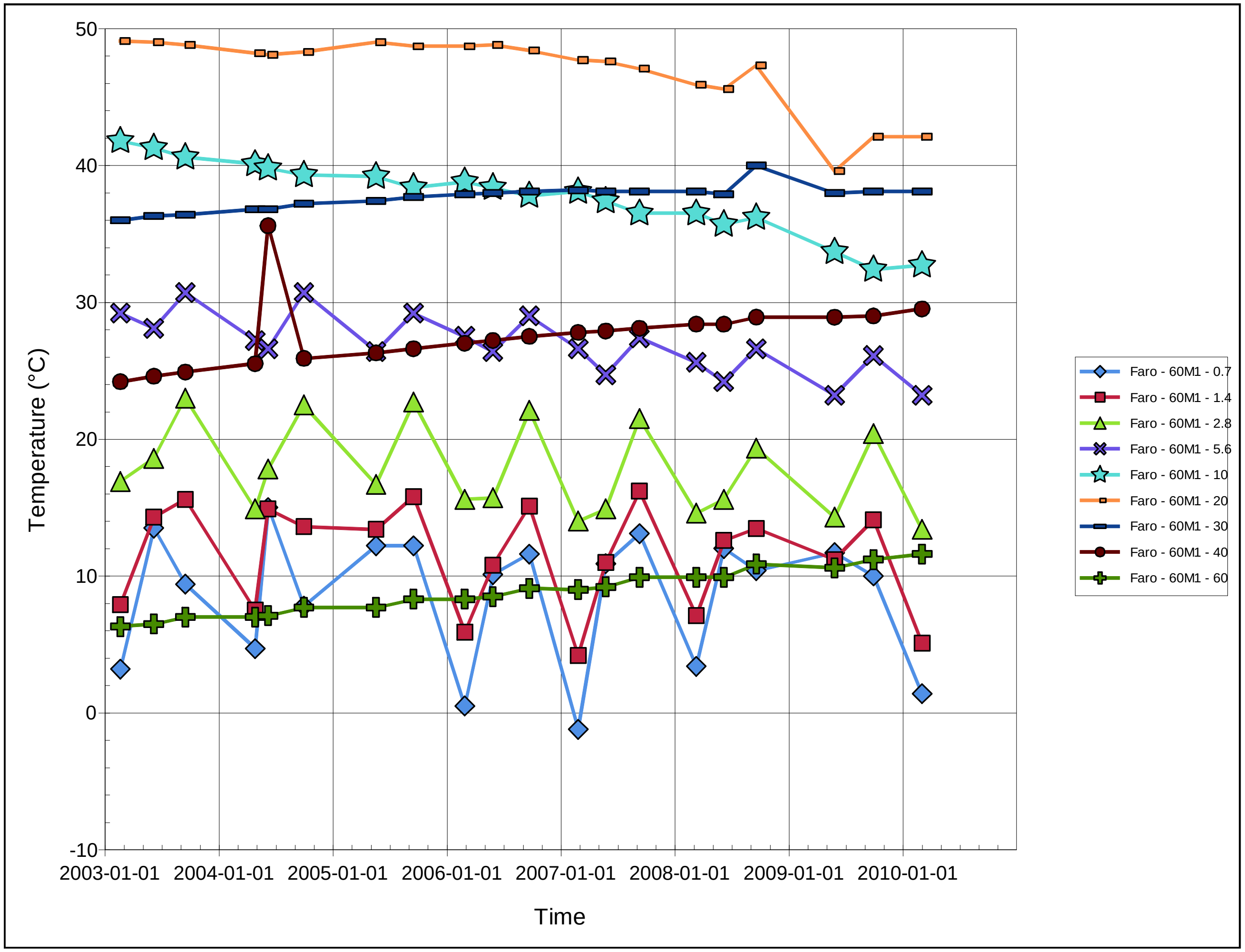
Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Faro 60M1 Depth-Time Profile

Job No: 1CY001.033	Faro Mine Complex	Date: March 2010	Approved: DBM	Figure: 4
Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt				



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Faro 60M1 Temperature Time Series

Job No: 1CY001.033

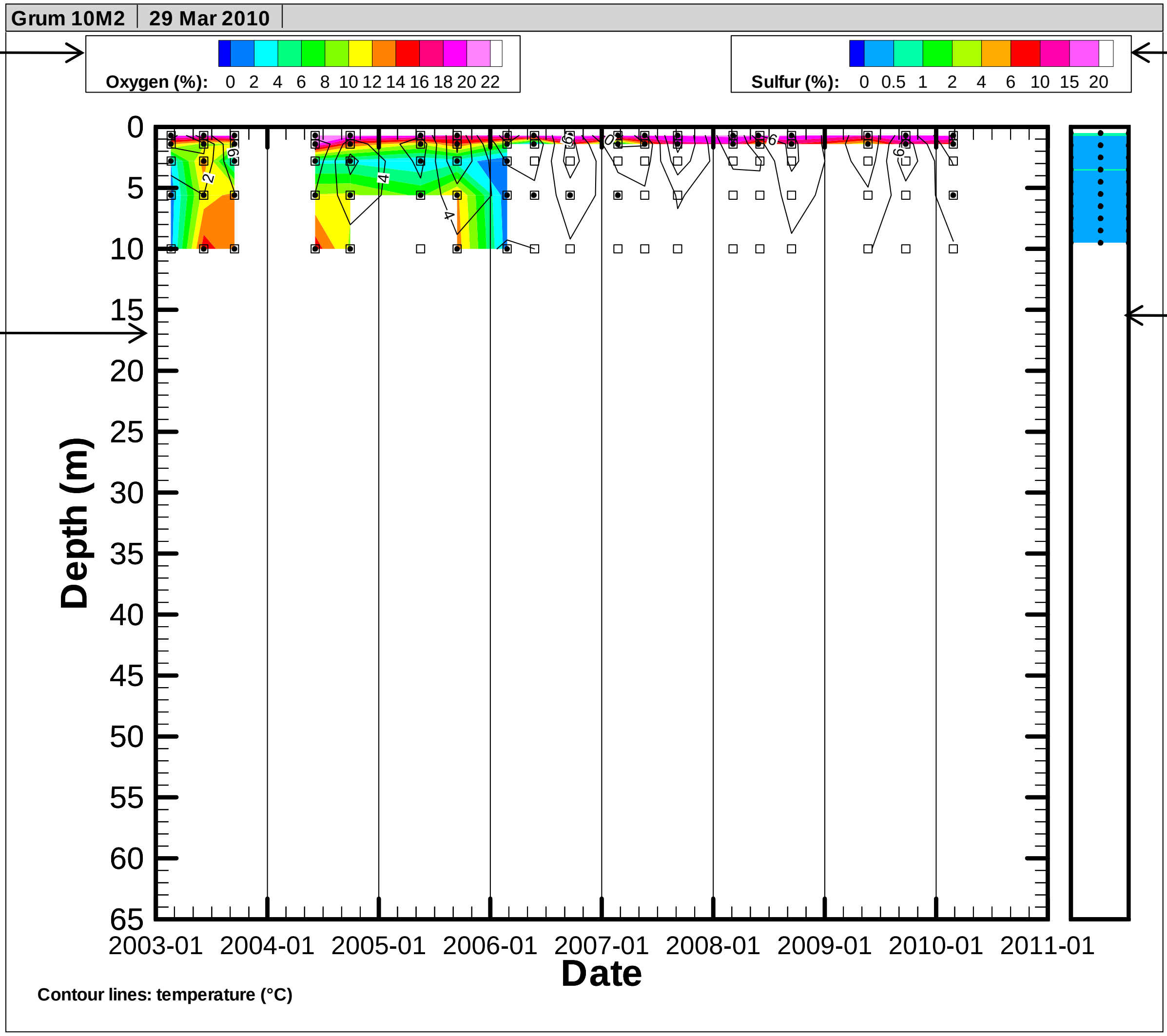
Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	5

Oxygen content scale

Sulfur content scale



Oxygen content and temperature with depth

-colored shading indicates oxygen content
-black contour lines indicate temperatures
-open squares indicate position of thermistor beads
-black circles indicate position of oxygen measurements

Sulfur content with depth

SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content **Grum 10M2 Depth-Time Profile**
Job No: 1CY001.033 Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt	Faro Mine Complex	Date: March 2010 / Approved: DBM / Figure: 6

Data source: 2d_combined_Grum10M2b.wmf

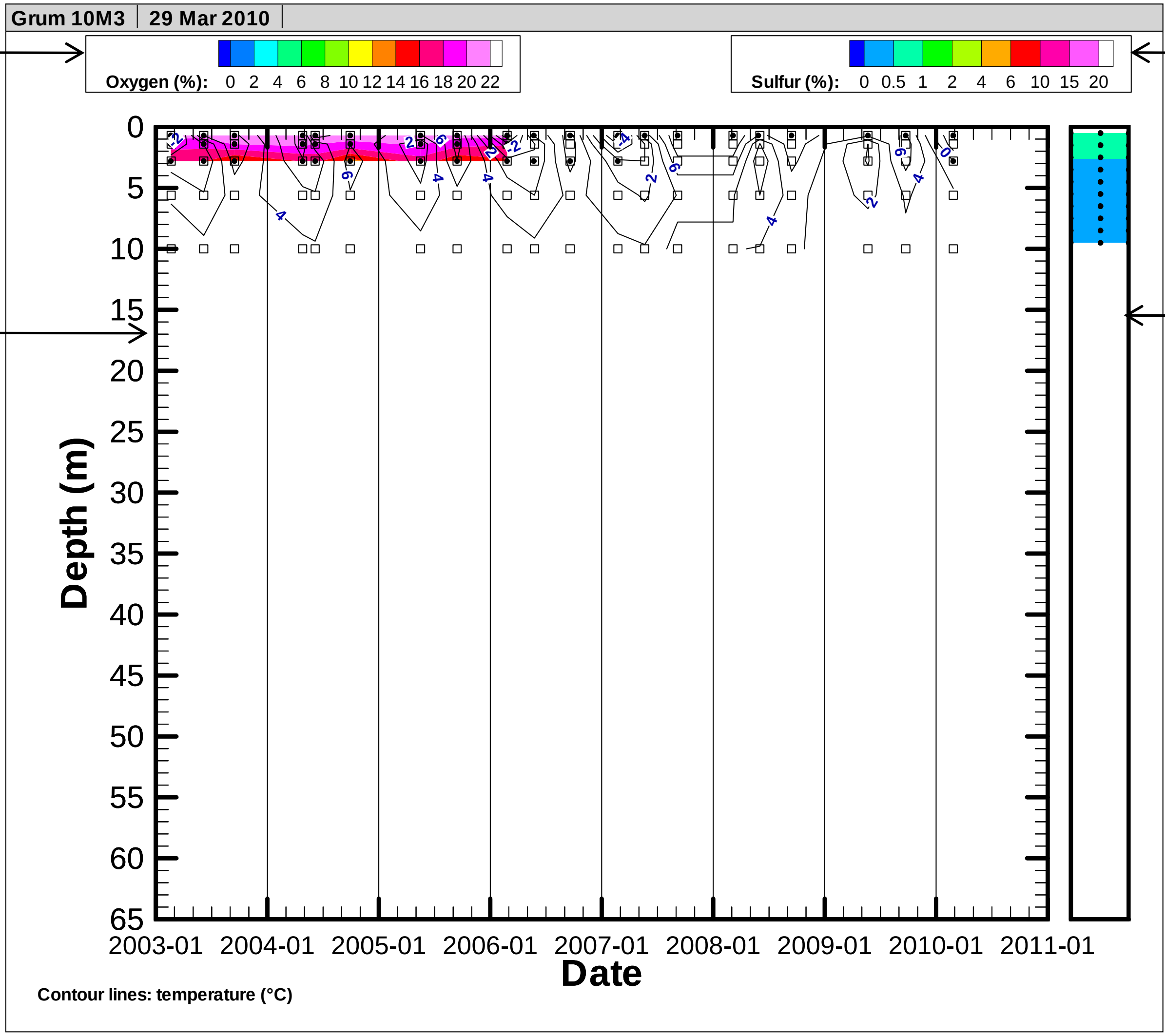
Oxygen content scale

Sulfur content scale

Oxygen content and temperature with depth

-colored shading indicates oxygen content
-black contour lines indicate temperatures
-open squares indicate position of thermistor beads
-black circles indicate position of oxygen measurements

Sulfur content with depth



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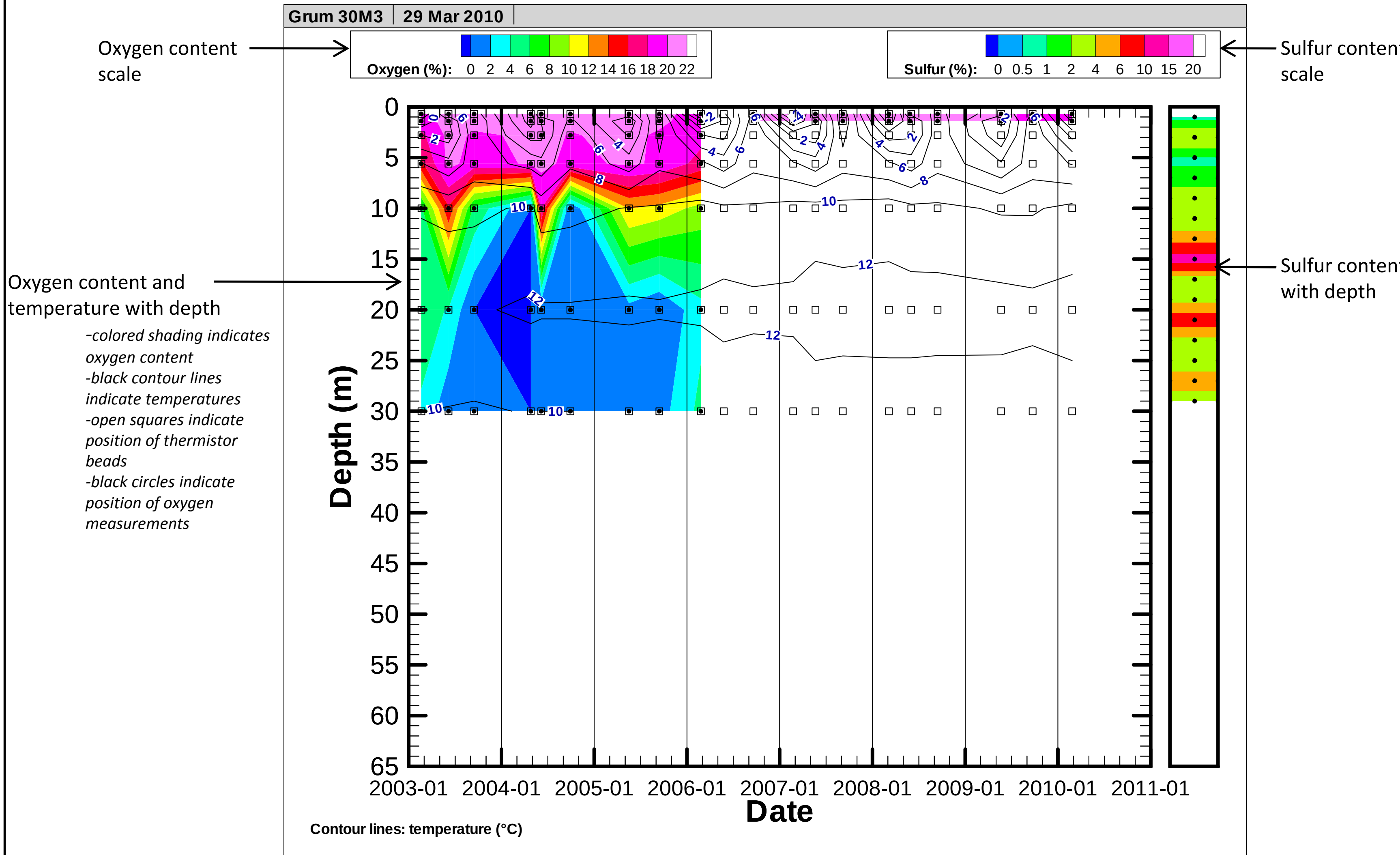
SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure / Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content
		Grum 10M3 Depth-Time Profile
Job No: 1CY001.033 Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt	Faro Mine Complex	Date: March 2010 · Approved: DBM · Figure: 7



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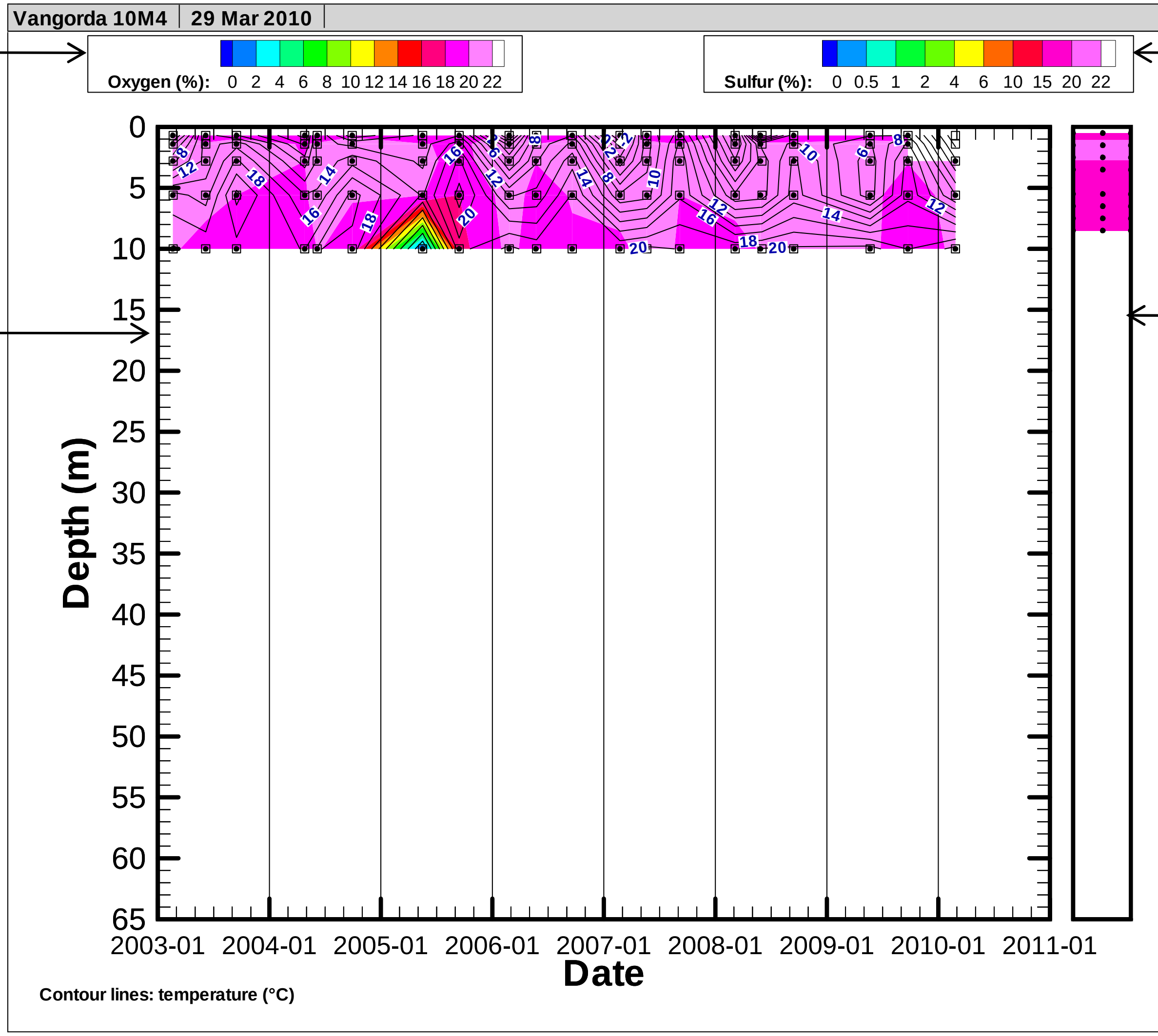
SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure / Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content
		Grum 30M3 Depth-Time Profile
Job No: 1CY001.033	Faro Mine Complex	Date: March 2010
Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt		Approved: DBM
		Figure: 8

Oxygen content scale

Sulfur content scale

Oxygen content and temperature with depth

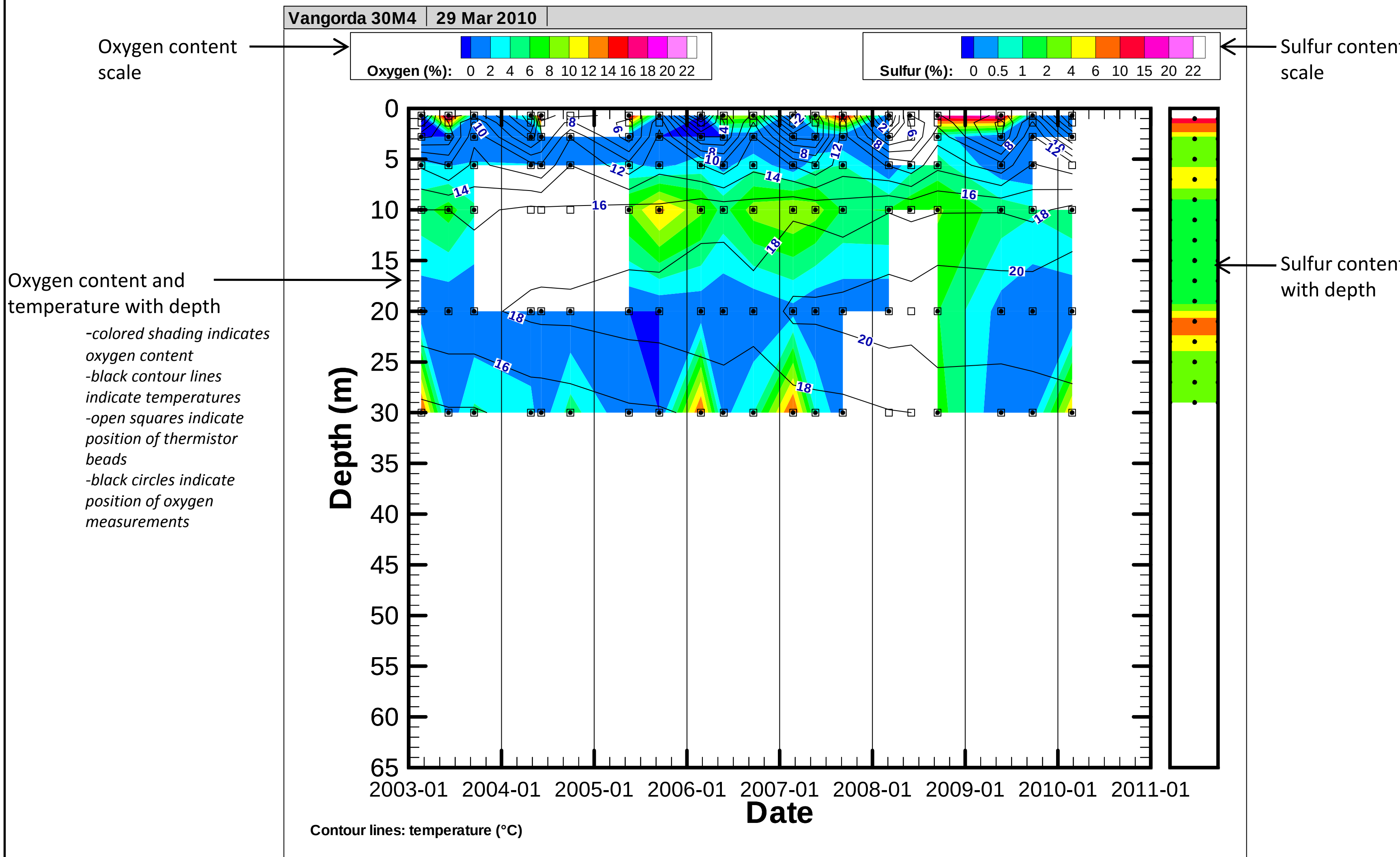
-colored shading indicates oxygen content
-black contour lines indicate temperatures
-open squares indicate position of thermistor beads
-black circles indicate position of oxygen measurements



Sulfur content with depth

Data source: 2d_combined_Vangorda10M4b.wmf

SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content **Vangorda 10M4 Depth-Time Profile**
Job No: 1CY001.033 Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt	Faro Mine Complex	Date: March 2010 / Approved: DBM / Figure: 9



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Vangorda 30M4 Depth-Time Profile

Job No: 1CY001.033

Filename: Figures_Oxygen+ThermalMonitoringReview_1CY001.033.dbm.rev00.ppt

Faro Mine Complex

Date: March 2010

Approved: DBM

Figure: 10

Data source: 2d_combined_Vangorda30M4b.wmf

Appendix A
Waste Rock Oxygen and Temperature Monitoring Results

Appendix A.1 Waste Rock Oxygen Monitoring Data

Location: Faro
Hole ID: 60M1

Depth	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 (%)
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
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
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
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
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	result discarded	5.6	5.4	14
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
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
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
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
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
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
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
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
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

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

Location: Faro
Hole ID: 30M1

Depth	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 (%)
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
0.7	0.7B	19.4	16.6	16.8	blocked	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
1.4	1.4A	19.3	16.6	16.7	blocked	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
1.4	1.4B	19.3	16.6	16.8	blocked	16.4	19	18	16	19.4	16.8	16.9	20	17	15.5	18.4	18.6	-	17.8	18	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
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
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
5.6	5.6B	19.7	17	17.6	blocked	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
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
10	10B	19.4	16.1	17.7	blocked	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
20	20	20.2	16.1	19.7	blocked	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
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

Notes :
-grey cells indicate monitoring points that were found to be blocked when tested by hand-held vacuum pump, or where data was discarded due to questionable data quality

Location: Grum
Hole ID: 10M2

Depth	Port Label	20-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 (%)	28-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	6-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 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	result discarded	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	blocked	blocked
2.8	2.8A	0.6	14.7	2.5	Not recorded	result discarded	3.5	2.3	3.1	0.3	blocked	blocked	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	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

Depth	Port Label	20-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 (%)	28-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	6-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 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	blocked	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	result discarded	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	blocked	15.8	14.2	18.8	17.1	blocked	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	result discarded	14.4	20.9	17	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked	blocked

Location: Grum
Hole ID: 30M3

Depth	Port Label	20-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 (%)	28-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	6-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 Oxygen (%)
0.7	0.7A	18.4	20.7	20.5	blocked	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	blocked	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	blocked	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	blocked	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 :

-grey cells indicate monitoring points that were found to be blocked when tested by hand-held vacuum pump, or where data was discarded due to questionable data quality

Location: Vangorda
Hole ID: 10M4

Depth	Port Label	20-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 (%)	28-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	6-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 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
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
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
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
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
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
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

Location: Vangorda
Hole ID: 30M4

Depth	Port Label	20-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 (%)	28-May-06 Oxygen (%)	22-Sep-06 Oxygen (%)	26-Feb-07 Oxygen (%)	25-May-07 Oxygen (%)	10-Sep-07 Oxygen (%)	10-Mar-08 Oxygen (%)	6-Jun-08 Oxygen (%)	18-Sep-08 Oxygen (%)	27-May-09 Oxygen (%)	28-Sep-09 Oxygen (%)	3-Mar-10 Oxygen (%)
0.7	0.7A	0	19.9	0.8	2.8	19.3	result discarded	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
0.7	0.7B	0	20	1.1	3.1	19.5	result discarded	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
1.4	1.4A	0	17.4	0	0.1	14.6	0	6.4	0	blocked	0.5	0.2	result discarded	0.2	12.8	0	17.2	6.3	10	0	0
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
2.8	2.8A	0	0	0	0	0.1	0	0	0	0	0	0	0.2	0	0.1	0	result discarded	2.7	0	0	0
2.8	2.8B	2.4	15.4	2.3	blocked	result discarded	result discarded	20.8	20.8	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
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
10	10A	2.3	6.9	2.2	blocked	result discarded	result discarded	result discarded	20.9	8.4	5.1	9	10.1	9	5.9	6.1	7.3	blocked	blocked	blocked	5.6
10	10B	8.3	6.9	6.4	blocked	result discarded	result discarded	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
20	20	0.2	0	0	0	0	0	0	0	0.4	0.09	0	1.3	0	0.2	0.05	result discarded	6.1	1.2	0	0
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	result discarded	7.2	0	1.1	12

Notes :

-grey cells indicate monitoring points that were found to be blocked when tested by hand-held vacuum pump, or where data was discarded due to questionable data quality

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
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	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
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
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
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
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
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
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
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
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

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
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	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
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
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
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
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
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
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

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	terminal box corroded
1.4	0.2	-0.2	-0.2	6.6	-0.3	-0.1	5.4	2.4	10	
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

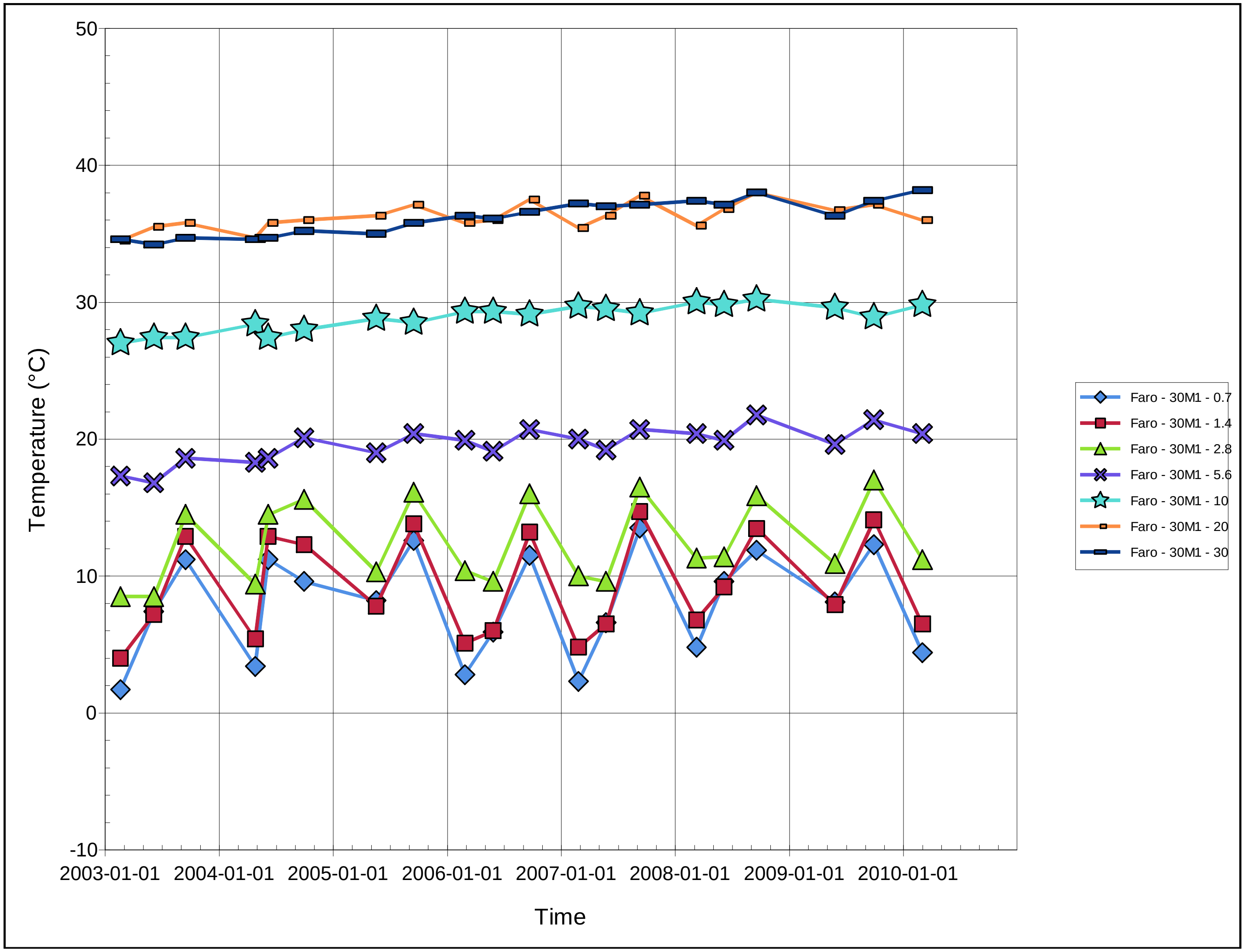
	Date	20-Feb-03	7-Jun-03	16-Sep-03	27-Apr-04	7-Jun-04	30-Sep-04	19-May-05	16-Sep-05	27-Feb-06	28-May-06	22-Sep-06	26-Feb-07	25-May-07	10-Sep-07	10-Mar-08	6-Jun-08	18-Sep-08	27-May-09	28-Sep-09	3-Mar-10
Bead Depth (m)	Correction factor	Corrected Temp (°C)	Corrected Temp (°C)	Corrected Temp (°C)	Corrected 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	-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
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
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
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
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

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
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	-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
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
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
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
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
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
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

Appendix B
Supplementary Charts



Data source: fig_tempFaro30M1.eps

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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

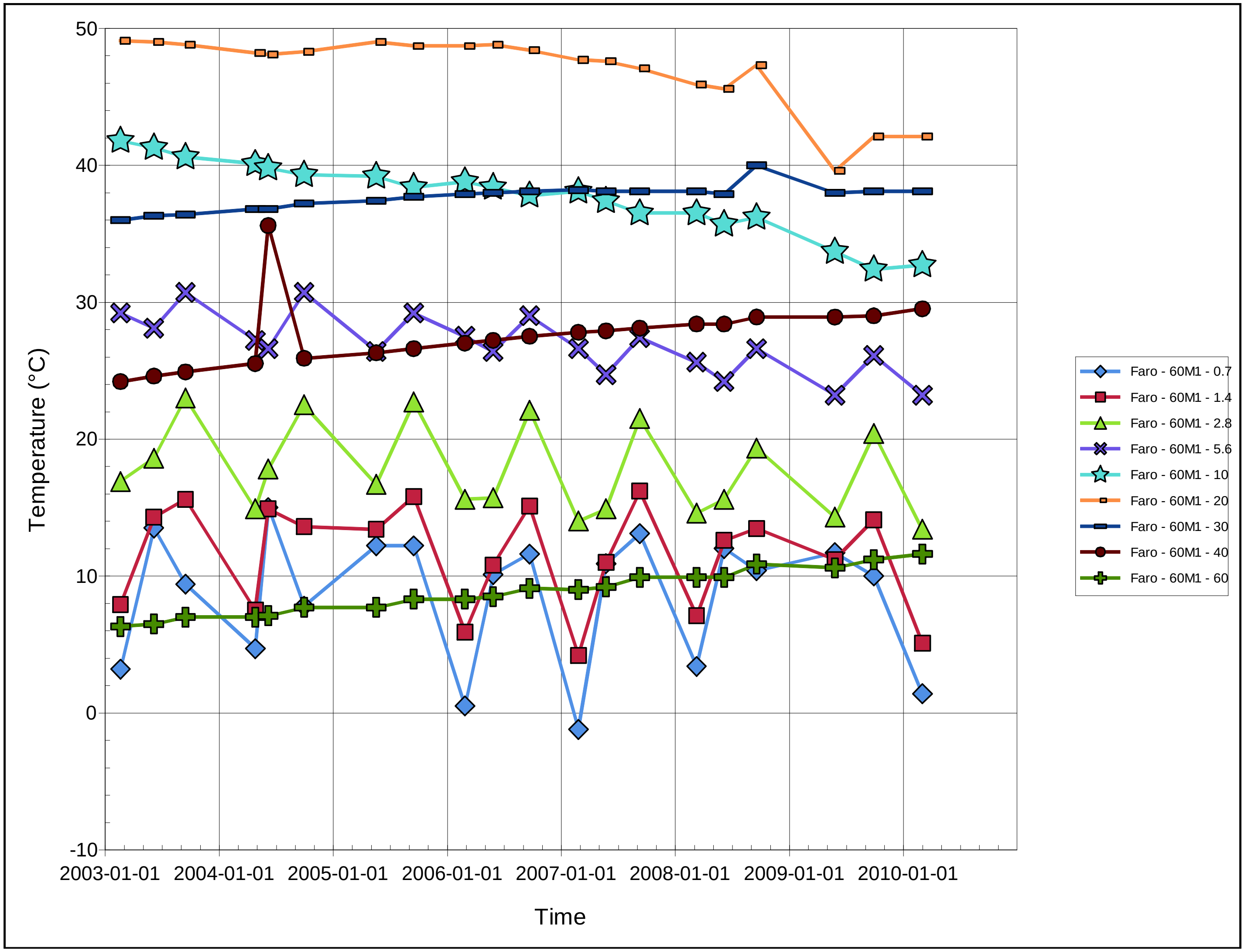
Faro 30M-1: Temperature over Time

Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	A



Data source: fig_tempFaro60M1.eps

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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

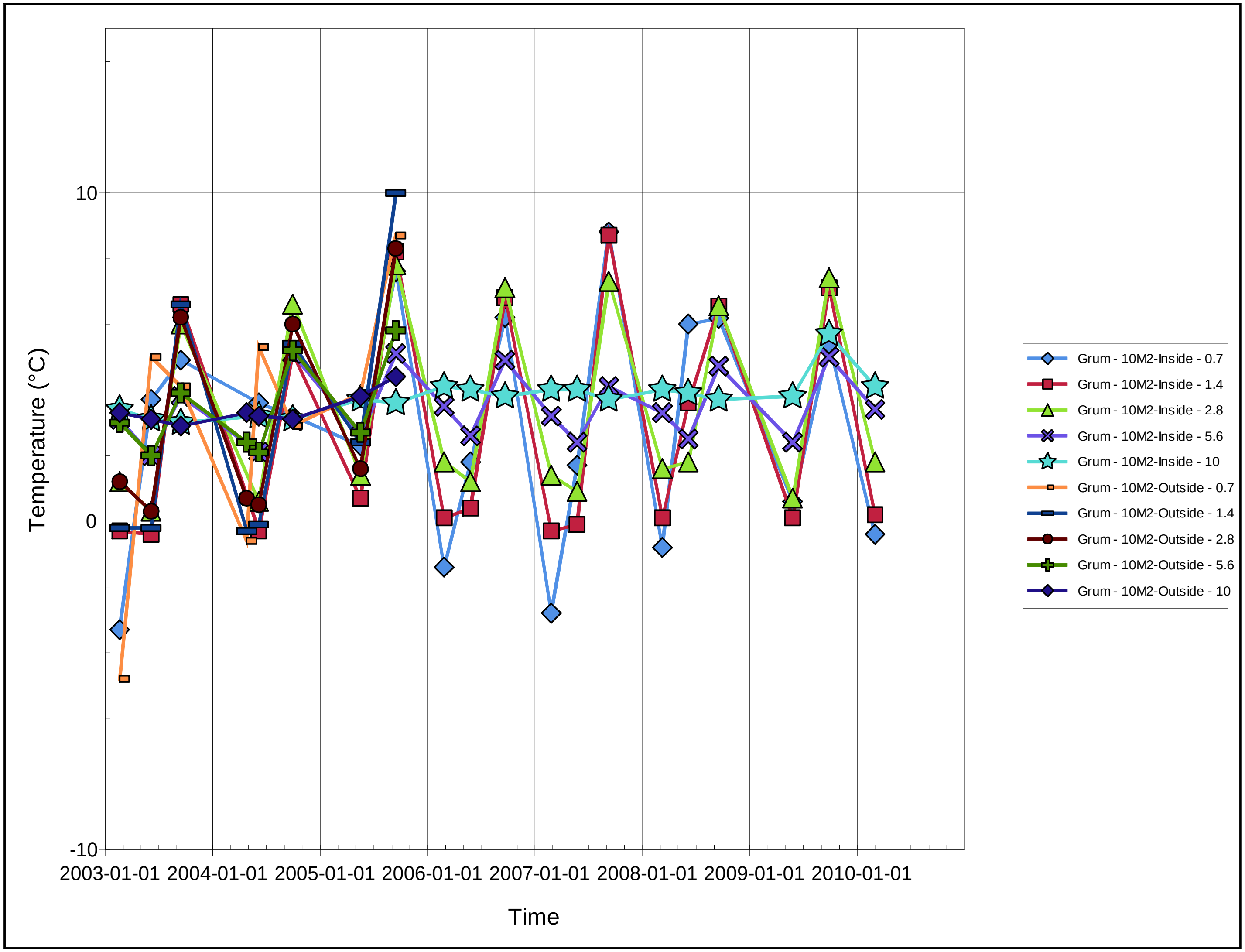
Faro 60M-1: Temperature over Time

Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	B



Data source: fig_tempGrum10M2z.eps

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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

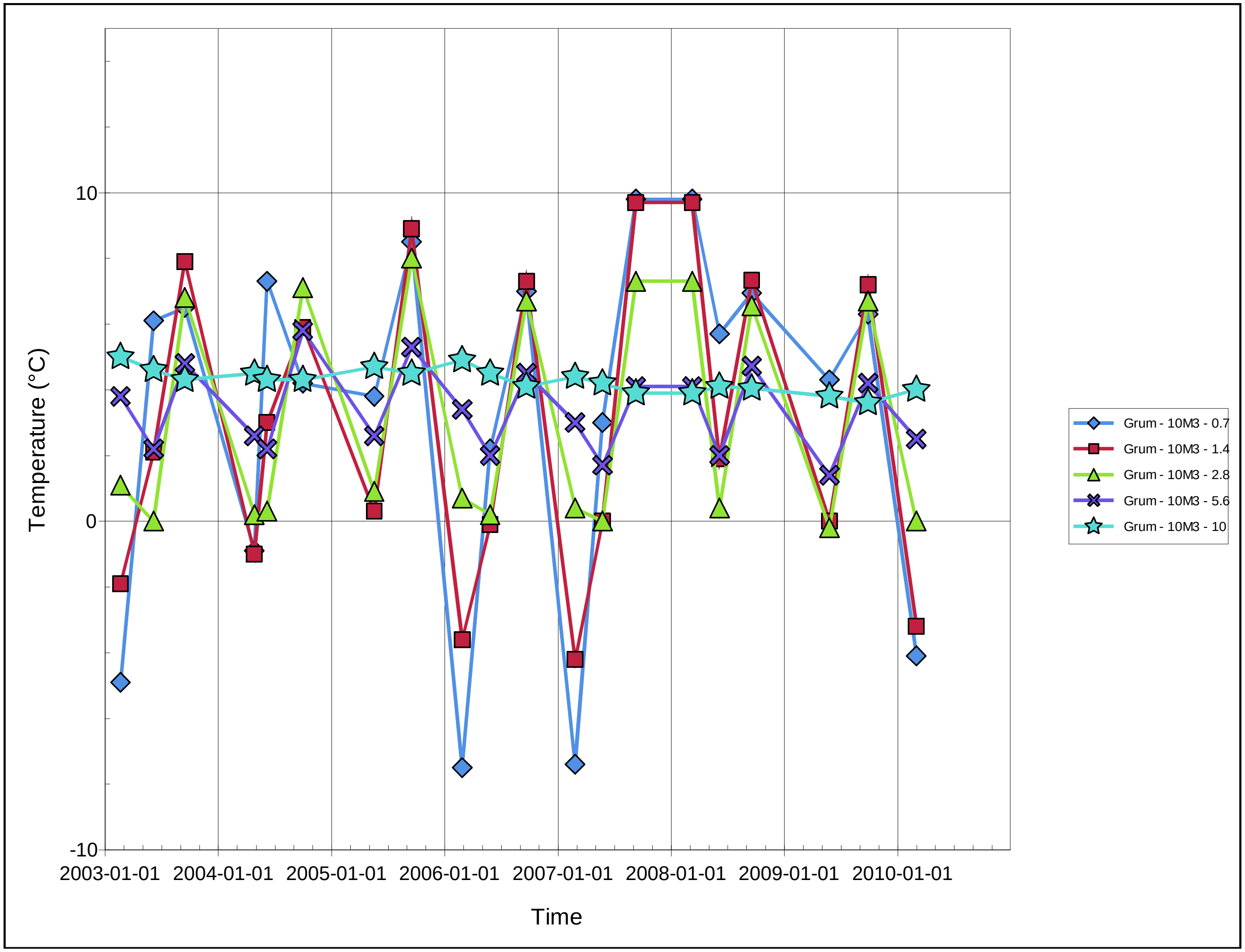
Grum 10M-2: Temperature over Time

Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

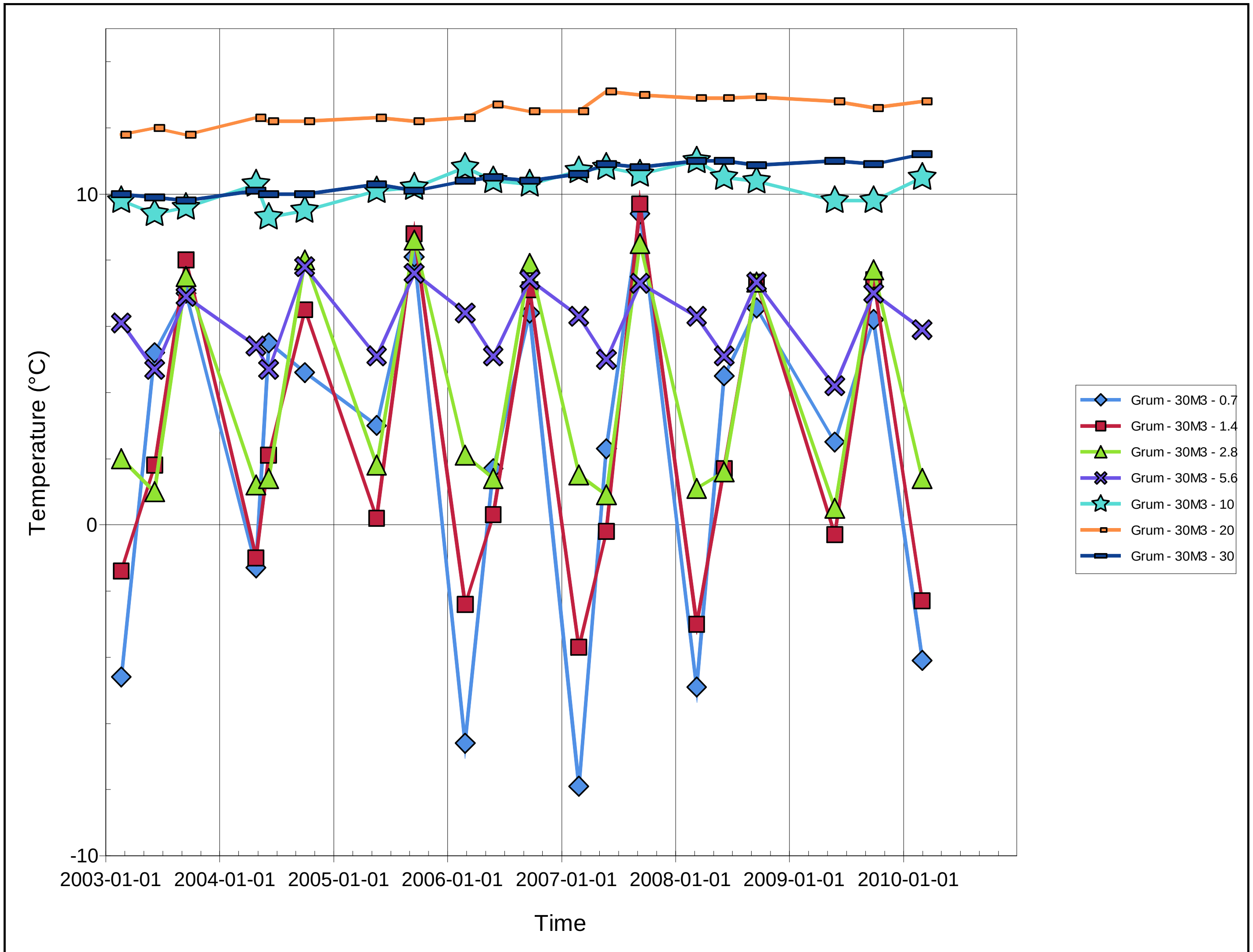
Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	C



SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content **Grum 10M-3: Temperature over Time**
Job No: 1CY001.033 Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00	Faro Mine Complex	Date: March 2010 / Approved: DBM / Figure: D

Data source: fig_tempGrum10M3z.eps



Data source: fig_tempGrum30M3z.eps

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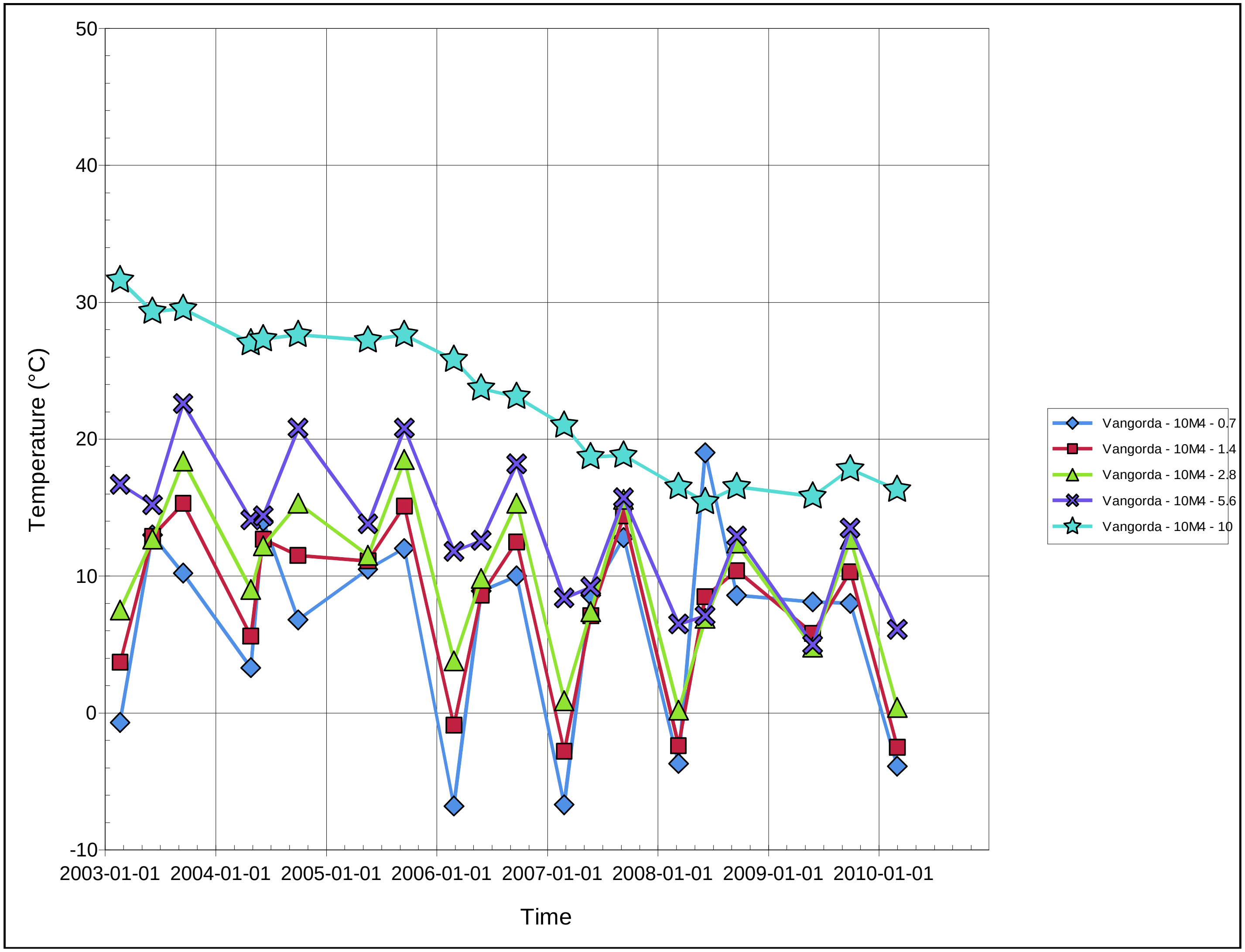
		Grum 30M-3: Temperature over Time
Job No: 1CY001.033	Faro Mine Complex	Date: March 2010
Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00		Approved: DBM
		Figure: **E**



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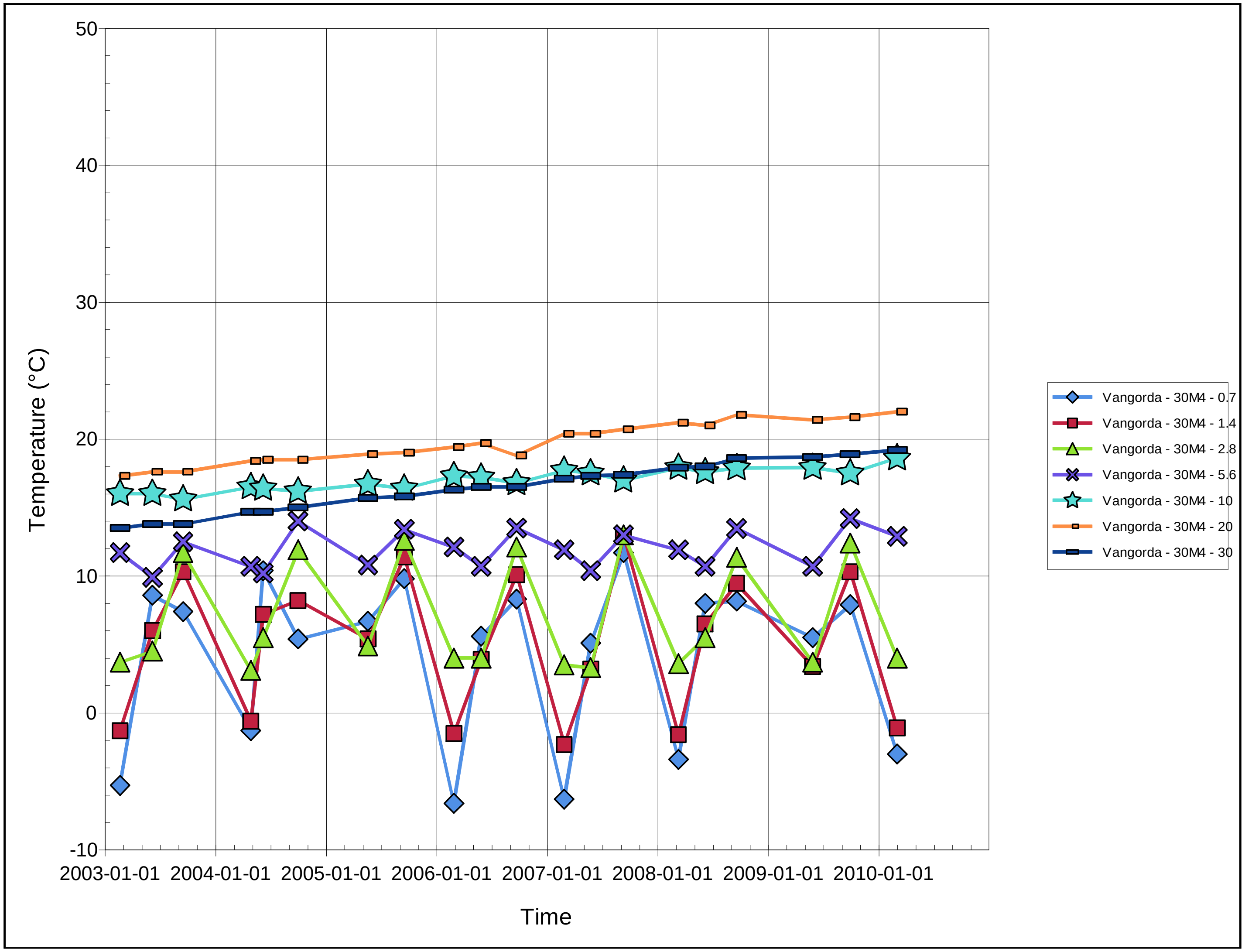
Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Vangorda 10M-4:
Temperature over Time

Job No: 1CY001.033	Faro Mine Complex	Date: March 2010	Approved: DBM	Figure: F
Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00				

Data source: fig_tempVangorda10M4.eps



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Vangorda 30M-4: Temperature over Time

Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

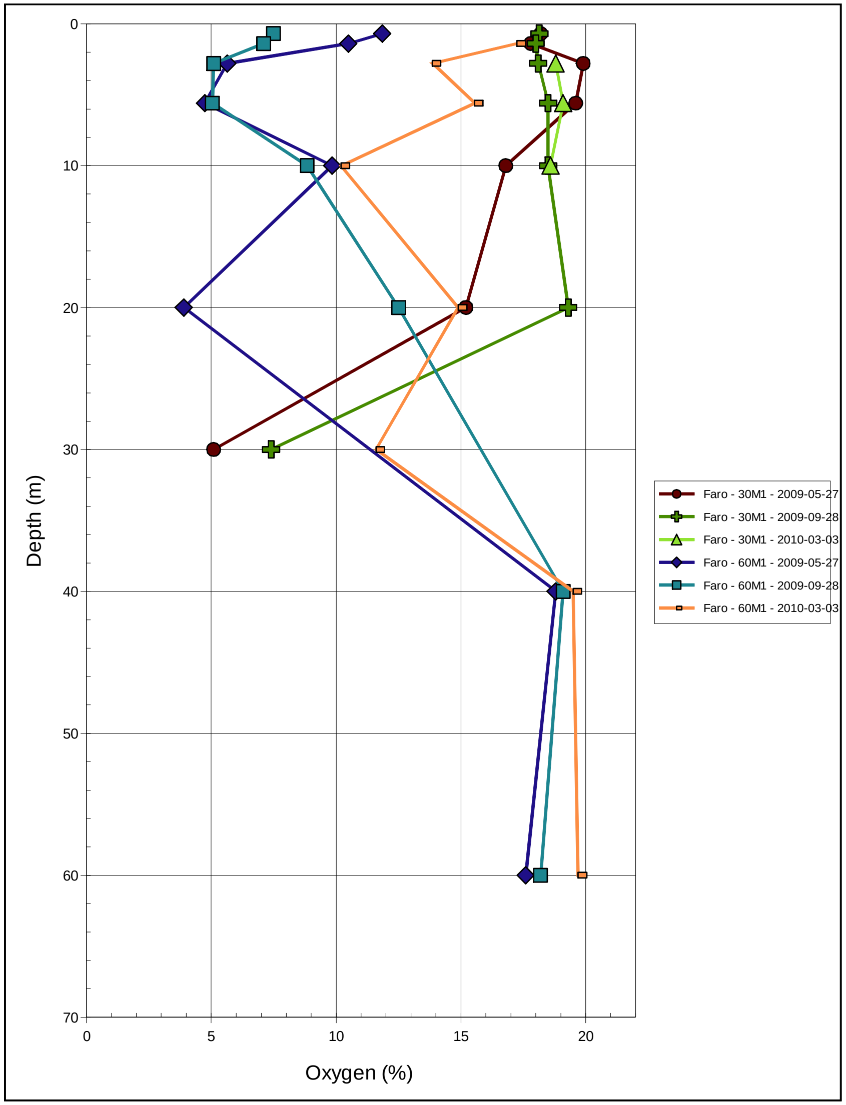
Faro Mine Complex

Date: March 2010

Approved: DBM

Figure: G

Data source: fig_tempVangorda30M4.eps



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Faro 30M-1 and 60M-1: Recent Oxygen Profiles

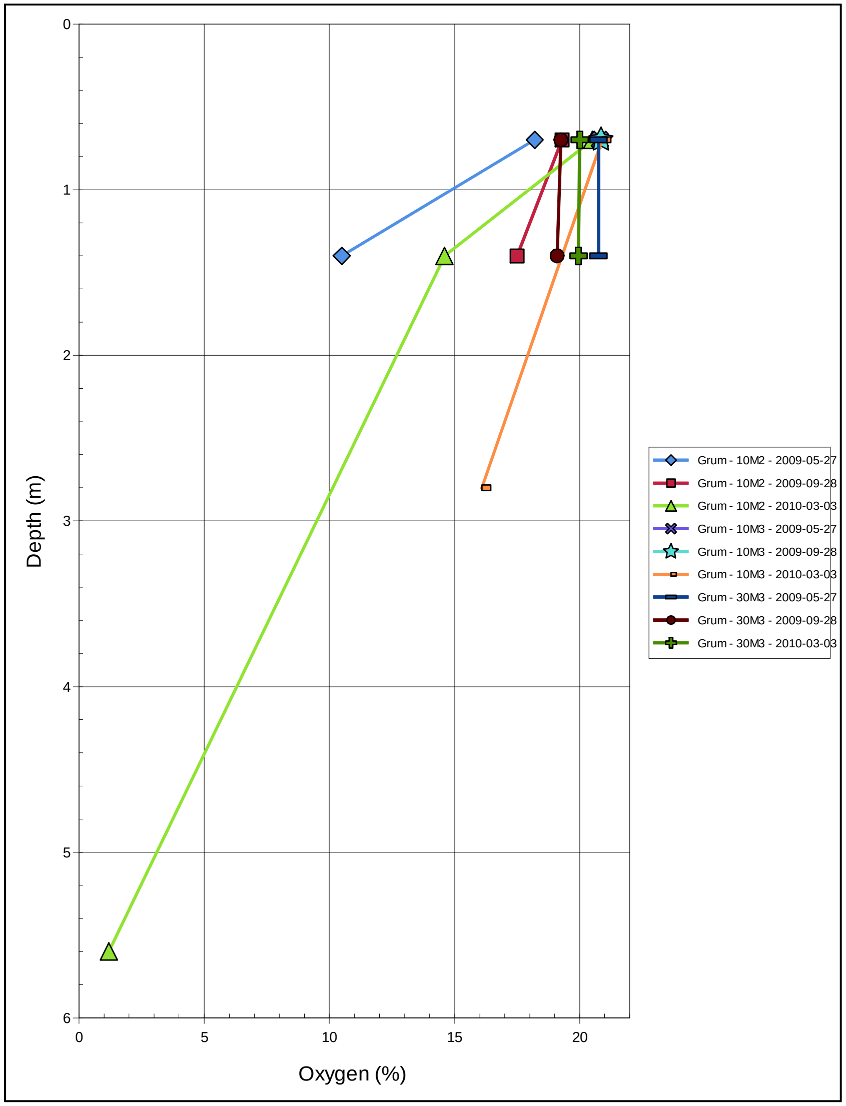
Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	H

Data source: profileOxygen_Faro.eps



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Grum 10M-2, 10M-3 and 30M-3: Recent Oxygen Profiles

Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

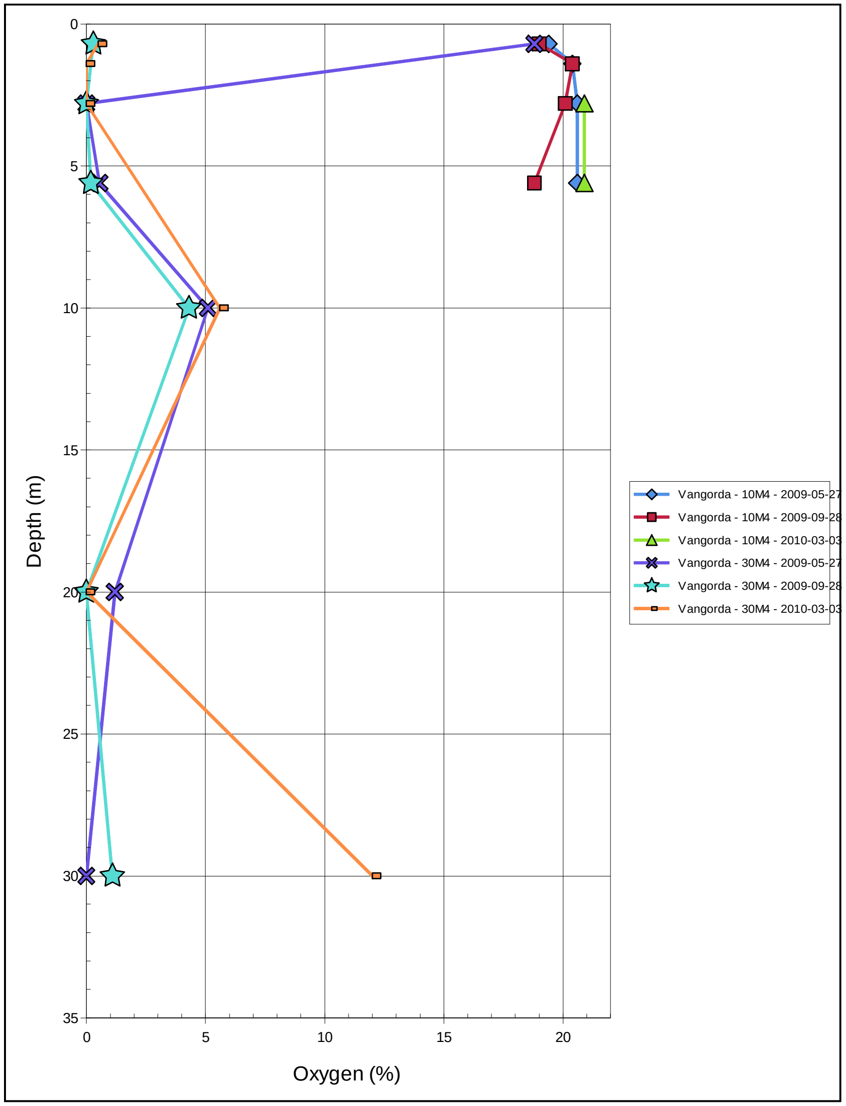
Faro Mine Complex

Date: March 2010

Approved: DBM

Figure: I

Data source: profileOxygen_Grum.eps



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Vangorda 10M-4 and 30M-4: Recent Oxygen Profiles

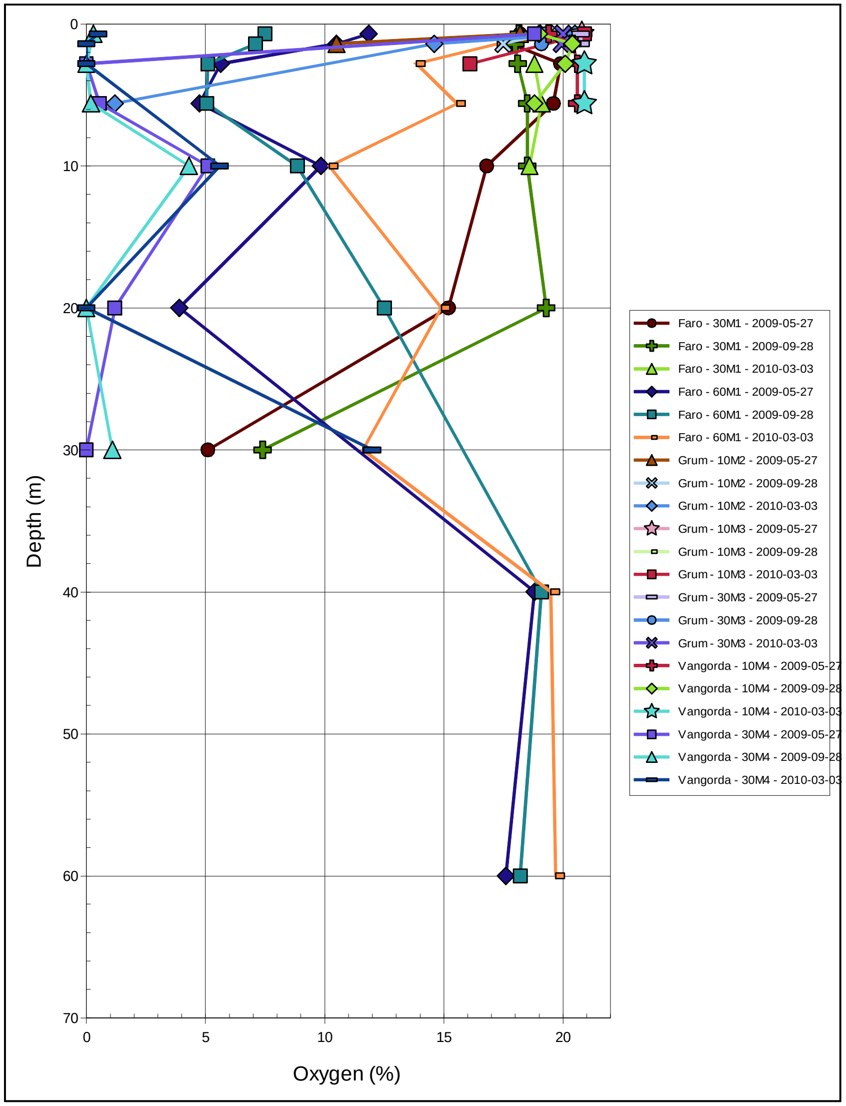
Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

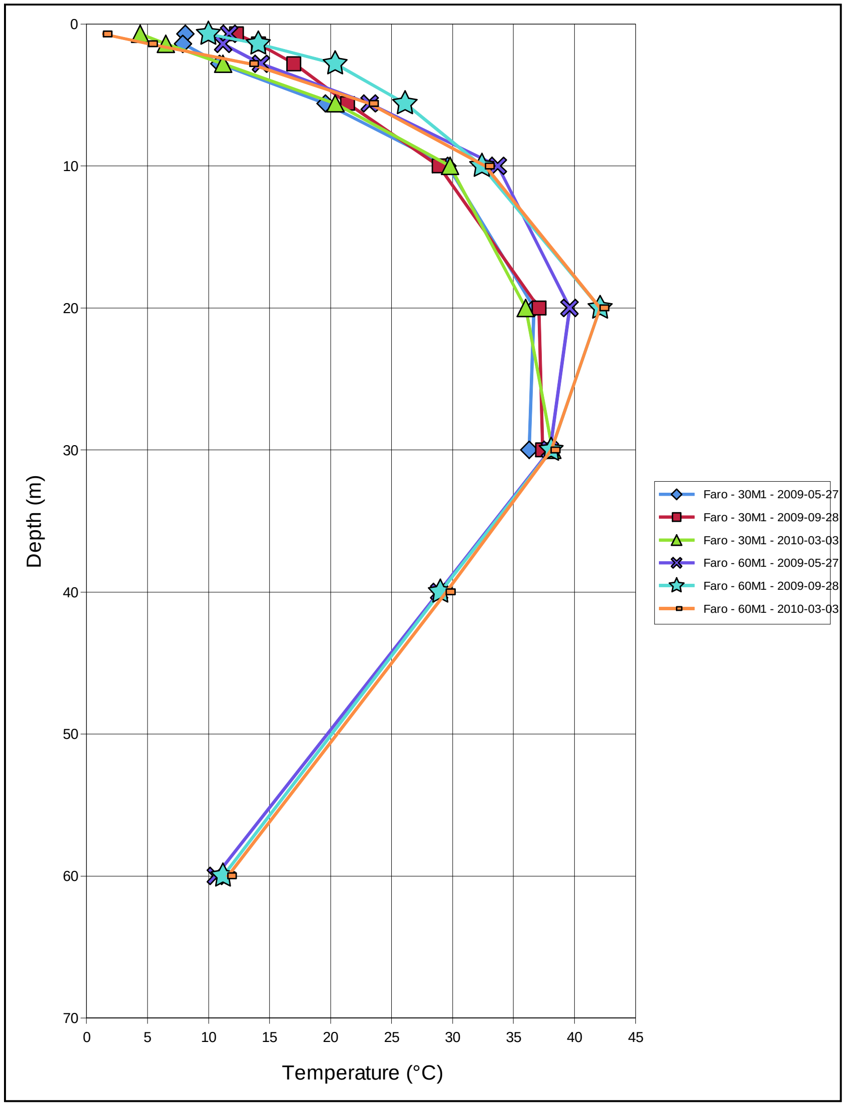
Date:	Approved:	Figure:
March 2010	DBM	J

Data source: profileOxygen_Vangorda.eps



Data source: profileOxygen_Combined.eps

SRK Consulting Engineers and Scientists VANCOUVER	Faro Mine Closure / Fermeture de la mine Faro	Review of Waste Rock Temperatures and Pore Gas Oxygen Content
		Faro, Grum, Vangorda : Recent Oxygen Profiles
Job No: 1CY001.033 Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00	Faro Mine Complex	Date: March 2010 / Approved: DBM / Figure: K



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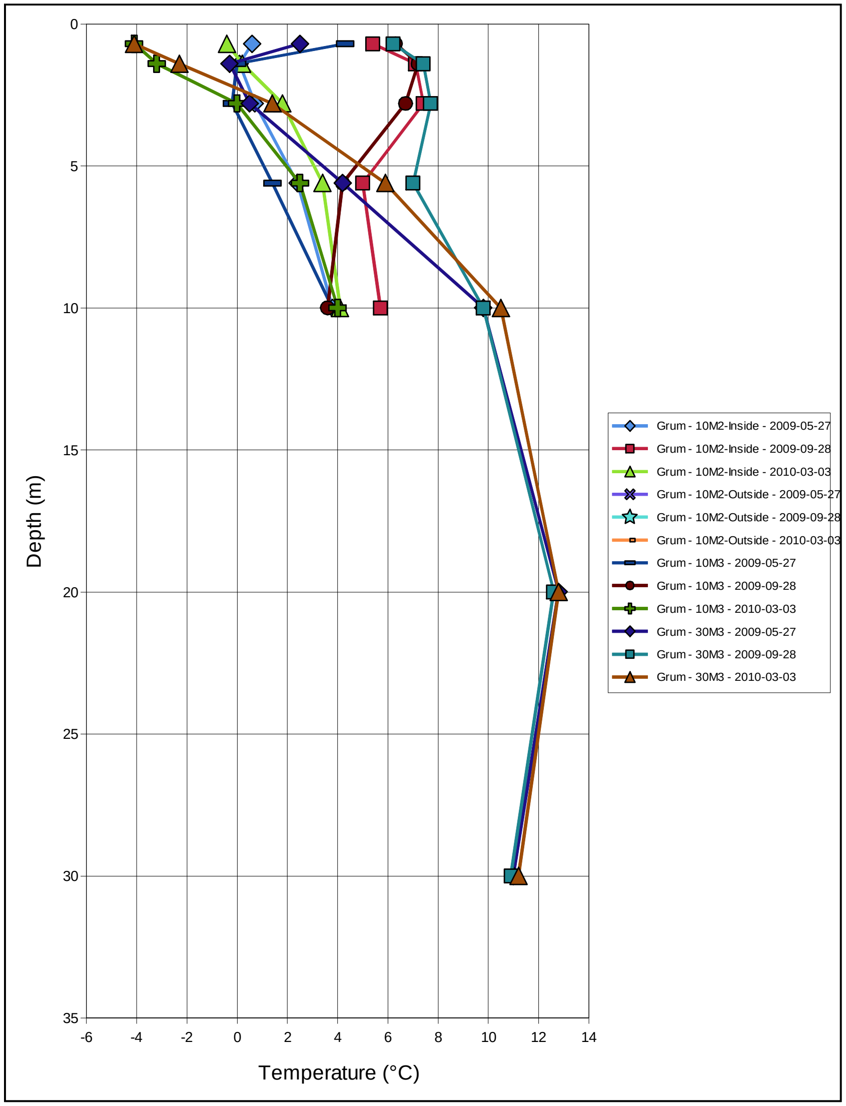
Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Faro:
Recent Temperature Profiles

Job No: 1CY001.033	Faro Mine Complex	Date: March 2010	Approved: DBM	Figure: L
Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00				

Data source: profileTemperature_Faro.eps



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Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Grum:
Recent Temperature Profiles

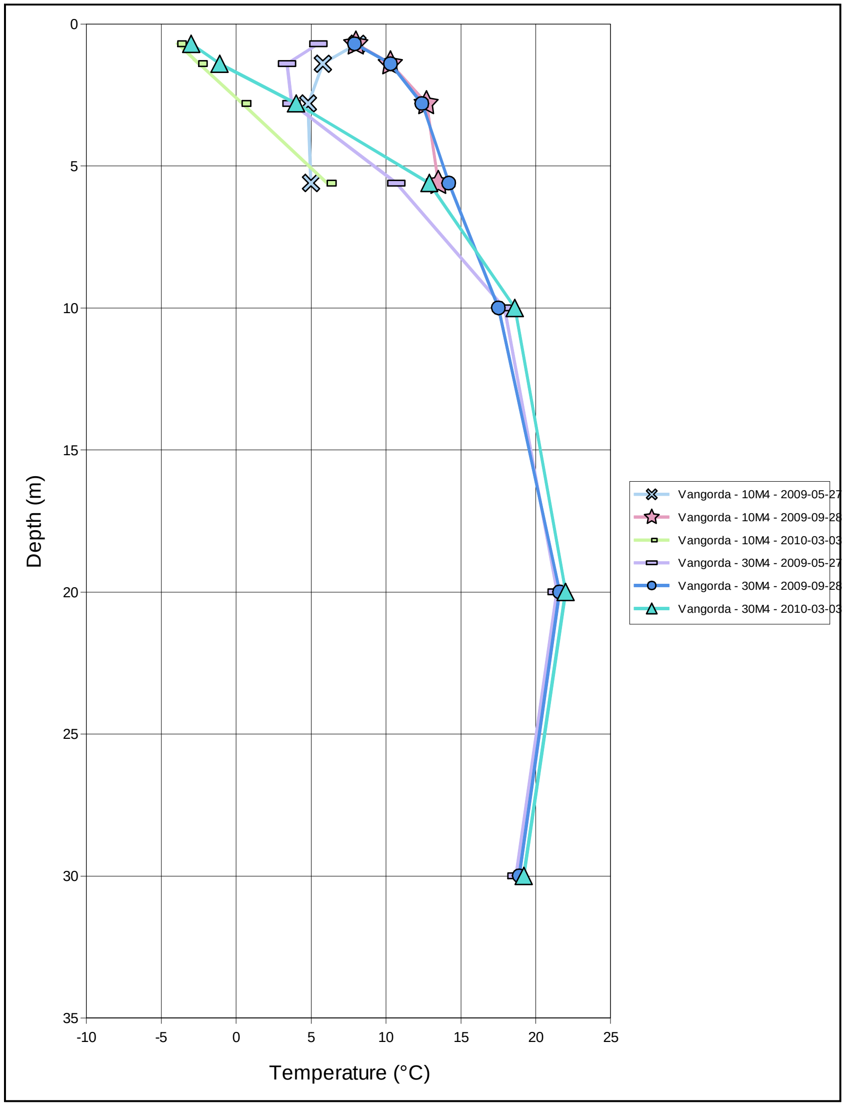
Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	**M**

Data source: profileTemperature_Grum.eps



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Vangorda: Recent Temperature Profiles

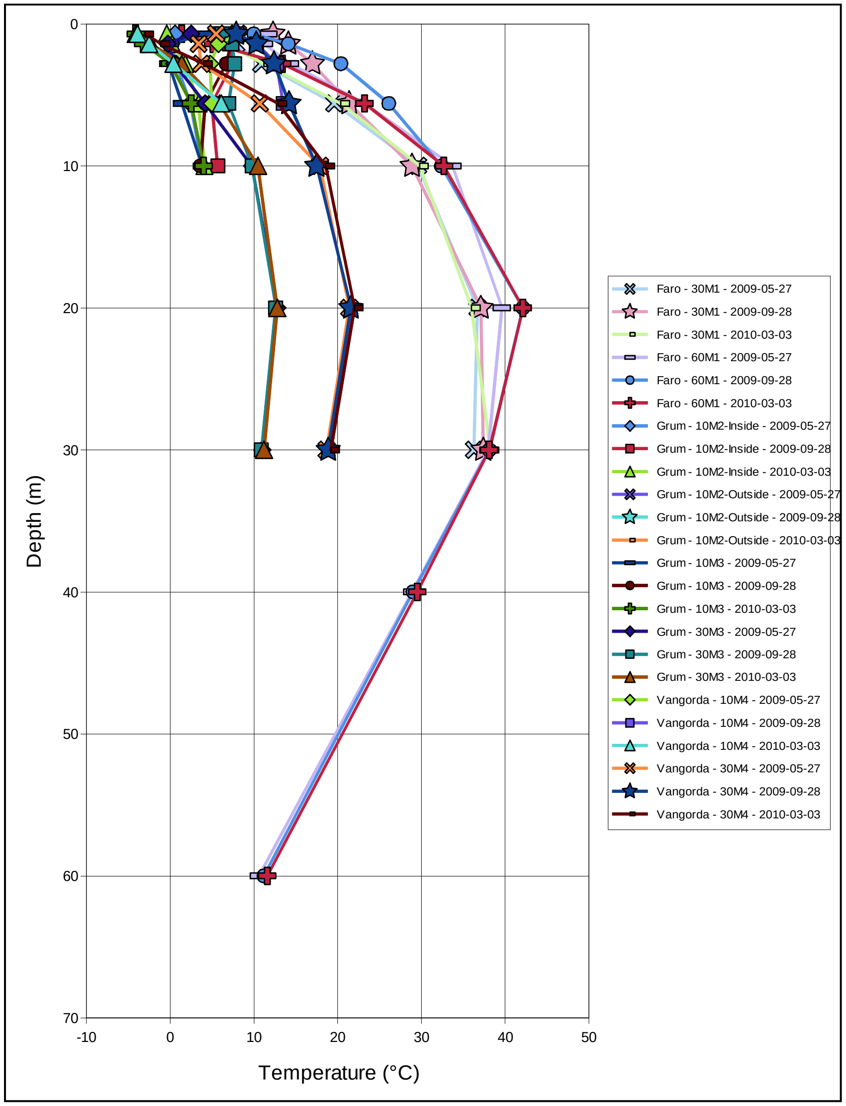
Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	N

Data source: profileTemperature_Vangorda.eps



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Faro Mine Closure
Fermeture de la mine Faro

Review of Waste Rock Temperatures and Pore Gas Oxygen Content

Faro, Grum, Vangorda : Recent Temperature Profiles

Job No: 1CY001.033

Filename: AppB_SupplementaryCharts_1CY001.033.dbm.rev00

Faro Mine Complex

Date:	Approved:	Figure:
March 2010	DBM	O

Data source: profileTemperature_Combined.eps

Appendix D
Seepage Checklist

Appendix D: 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						16					16	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		15									15	Yes	none	
SRK-FD06	Toe of Northeast Dump		9									9	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			3		12	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD13	Intermediate Dump								12			12	Yes	Decreasing pH; couple high SO4, Zn results	
SRK-FD14	Ramp Zone Dump		11									11	Yes	none	
SRK-FD16	Upper Northwest Dump		9									9	Yes	none	
SRK-FD17	Upper Northwest Dump		2									2	-	n/a	
SRK-FD18	Upper Northwest Dump		16									16	Yes	One very low pH, high SO4 + Zn in 2009	
SRK-FD19	Lower Northwest Dump					16						16	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD20	Faro Creek Diversion								4			4	-	n/a	
SRK-FD21	Northeast Dumps towards Pit					6			6			12	Yes	none	
SRK-FD22	Northeast Dumps towards Pit					2			1			3	-	n/a	
SRK-FD23	Northeast Dumps towards Pit					4			7			11	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD24	Northeast Dumps towards Pit					14			2			16	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD26	Northeast Dumps towards Pit		15			1						16	Yes	Decreasing pH; increasing SO4, Zn	
SRK-FD27	Northeast Dumps towards Pit					3			1			4	-	n/a	
SRK-FD30	West Main Dump					5			5			10	Yes	Dec. pH, Inc. Zn (Dec. SO4)	
SRK-FD31	Ore and Low Grade Ore Stockpiles; West Main Dump					11			4			15	Yes	Decreasing 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			11			15	Yes	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					2						2	Yes	n/a	
SRK-FD52	Intermediate Dump					2						2	Yes	n/a	
SRK-FD53						1						1	Yes	n/a	
SRK-FD54									1			1	Yes	n/a	
SRK-FD55						1						1	Yes	n/a	
SRK-GD01					16							16	Yes	none	6
SRK-GD02					3							3	-	n/a	
SRK-GD04					1							1	-	n/a	
SRK-GD05					15							15	Yes	Increasing SO4, Zn	
SRK-GD06					7							7	Yes	Increasing SO4, Zn	
SRK-GD07				5	1							6	-	n/a	
SRK-GD08				1								1	-	n/a	
SRK-GD09				1								1	-	n/a	
SRK-GD10				1								1	-	n/a	
SRK-GD11					5	2						7	Yes	none	
SRK-GD12				5								5	-	n/a	
SRK-GD13				14								14	Yes	Dec. pH, Inc. SO4 + Zn	7
SRK-GD16						5						5	Yes	n/a	
SRK-GD17						3						3	Yes	n/a	
SRK-GD18				5								5	Yes	Inc. SO4	
SRK-GD19						3			1			4	Yes	n/a	
SRK-GD20						3						3	Yes	n/a	
SRK-GD21					8							8	Yes	Inc. SO4?	
SRK-GD22					2							2	Yes	n/a	
SRK-GD23				1								1	Yes	n/a	
SRK-GD24						1						1	Yes	n/a	
SRK-VD01						6			1			7	Yes	none	
SRK-VD02						8						8	Yes	Inc. SO4?	
SRK-VD03						16			2			18	Yes	Dec. pH, Inc. SO4 + Zn	
SRK-VD04									15			15	Yes	Increasing SO4, Zn	
SRK-VD05						3			9			12	Yes	Decreasing pH; increasing SO4, Zn	
SRK-VD06						6						6	Yes	none	
SRK-VD07									2			2	-	n/a	
SRK-VD08									1			1	-	n/a	
SRK-VD09									11			11	Yes	none	
SRK-VD10									9			9	Yes	none	
SRK-VD12									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