Coeur Alaska Inc.

Kensington Gold Project

NPDES ANNUAL REPORT

Volume 2: Water Quality

2007

Table of Contents

Introduction 4
Changes to 2007 Monitoring 4
QC Summary 5
Plan QC 5
Detection 7
Outlier(s) 7
General Major Chemistry 7
Summary Statistics 7
Watersheds 8
JS2 (upstream) to JS5 (downstream) Johnson Creek 8
Major Chemistry- Johnson Cr 8
Trace Chemistry- Johnson Cr 9
MLA (upstream), SLB (above west fork confluence), SLC (downstream) Slate Creek 9
Major Chemistry- Slate Cr 9
Trace Chemistry- Slate Cr 10
Sherman Creek SH109 (upstream), SH113 (downstream of Outfall 001), SH105 (downstream at mouth of creek) 11
Major Chemistry- Sherman Cr 11
Trace Chemistry- Sherman Cr 12
Discharges 12
Outfall 001 12
Major Chemistry- 001 13
Trace Chemistry- 001 13
Outfall 002 13
Outfall 003 13

List of Tables

Table 1 Non-Detect Parameters at Receiving Water Stations
Table 2 Potential Outliers in Receiving Water Monitoring Data
Table 3 Station JS2 2007 Water Quality Data Summary Statistics
Table 4 Station JS5 2007 Water Quality Data Summary Statistics
Table 5 Station MLA 2007 Water Quality Data Summary Statistics
Table 6 Station SLB 2007 Water Quality Data Summary Statistics
Table 7 Station SLC 2007 Water Quality Data Summary Statistics
Table 8 Station SH109 2007 Water Quality Data Summary Statistics
Table 9 Station SH113 2007 Water Quality Data Summary Statistics
Table 10 Station SH105 2007 Water Quality Data Summary Statistics
Table 11 Outfall 001 Effluent 2007 Water Quality Data Summary Statistics
Table 12 Outfall 003 Effluent 2007 Water Quality Data Summary Statistics

List of Figures

Figure 1 Johnson Creek Monitoring Results 2007, Field Parameters
Figure 2 Johnson Creek Monitoring Results 2007, Major Chemistry
Figure 3 Johnson Creek Monitoring Results 2007, Trace Chemistry
Figure 4 Slate Creek Monitoring Results 2007, Field Parameters
Figure 5 Slate Creek Monitoring Results 2007, Major Chemistry
Figure 6 Slate Creek Monitoring Results 2007, Trace Chemistry
Figure 7 Sherman Creek Monitoring Results 2007, Field Parameters
Figure 8 Sherman Creek Monitoring Results 2007, Major Chemistry
Figure 9 Sherman Creek Monitoring Results 2007, Trace Chemistry
Figure 10 Outfall 001 Influent Monitoring Results 2007, Trace Chemistry
Figure 11 Outfall 001 Effluent Monitoring Results 2007, Field Parameters
Figure 12 Outfall 001 Effluent Monitoring Results 2007, Major Chemistry
Figure 13 Outfall 001 Effluent Monitoring Results 2007, Trace Chemistry
Figure 14 Outfall 001 Effluent Monitoring Results 2007, Continuous Parameters
Figure 15 Outfall 001 Effluent Monitoring Results 2007, Anions and Cations
Figure 16 Outfall 003 Monitoring Results 2007, General Chemistry

APPENDIX A – Duplicate Comparison

APPENDIX B – Variance Reports

APPENDIX C – Discharge Monitoring Report Results

Introduction

This volume of the Annual Water Quality Monitoring Summary report contains analytical results of water quality monitoring conducted in 2007 in accordance with the requirements of the National Pollutant Discharge Elimination System for the Kensington Gold Project, near Juneau, Alaska (Permit No. AK-005057-1). A graphical presentation of data at both discharge and receiving water monitoring stations along with tabular summary statistics is included.

Monitoring of water quality at Outfalls 001 (treated mine outflow discharge) and 003 (Kensington Camp domestic waste water discharge) occurred during 2007. In addition, monitoring of three receiving water streams (Johnson, Slate and Sherman Creeks) for ambient upstream and downstream water quality was conducted. The following list describes the sampling activities at these stations:

1. Continuous monitoring of flow and pH at Outfall 001 effluent. Daily samples from the influent and effluent of Outfall 001 for total suspended solids (TSS) analysis. Weekly water sampling at Outfall 001 influent and effluent for analysis of field, general and trace parameters. Quarterly sampling of the effluent for TDS, anions and cations. Monthly sampling of the effluent for whole effluent toxicity testing.

2. Weekly monitoring of flow, pH, TSS, biochemical oxygen demand (BOD 5 day test) and fecal coliform at Outfall 003 (effluent from the Kensington domestic waste water treatment plant). Quarterly monitoring of Outfall 003 influent for BOD and TSS.

3. Monthly receiving water field, general and trace parameters from stations MLA, SLB, SLC in East Fork Slate Creek. Stations SH113, SH105, SH109, SH111 and SH103 in Sherman Creek; stations JS2, JS4, JS5 in Johnson Creek.

Changes to 2007 Monitoring

A few adjustments were made in the sampling stations utilized for compliance monitoring of Outfall 001 (mine water treatment plant) during 2007. The final effluent from Outfall 001 was moved on January 18, 2007, from its previous location to its current location discharging into Sherman Creek. At that time, a new receiving water monitoring station "SH113" was established downstream of the discharge for downstream hardness monitoring during the weekly sampling of Outfall 001 effluent. Also at that time, station SH109, an existing background receiving water station on Sherman Creek, was first utilized for upstream turbidity monitoring during the weekly sampling of Outfall 001 effluent. Station SH112 was no longer sampled after this change occurred as it was no

longer necessary. Station SH113 became a receiving water station and was therefore sampled monthly. Data analyzed for this report was held to the new outfall location and associated sites. This was done based on the understanding that the 2006 report adequately addresses the condition of water quality at the old sites SH103 and SH112 during the 18 days in January before the outfall changed location.

QC Summary

Plan QC

Coeur Alaska has complied with the approved quality assurance plan for the 2007 water quality data. At least ten percent of all lab reports are reviewed for issues pertinent to the five categories of quality control;

- Precision
- Accuracy
- Comparability
- Representativeness
- Completeness

Based on the results of this review, lab reports, individual samples, or individual parameters within samples may be qualified on a variety of issues as;

- Accepted
- Estimated
- Rejected

No data were rejected from the 2007 dataset, but some parameters within individual samples were flagged as estimated within the database when one or more of the quality controls were not met.

Precision- Field Blind Duplicate Comparison

Precision is a qualitative measure of the reproducibility of a measurement under a given set of conditions. Precision in the analytical results of laboratory analysis is determined by laboratory quality control measures such as duplicate matrix spikes and sample duplicates. The plan criterion for precision is a relative percent difference of less than or equal to 20%. Field blind duplicate samples, which were collected throughout the year, were also used as a quality control for precision in the laboratory results.

Receiving water sample field duplicates were collected on a randomly selected basis. The total number of receiving water field duplicates collected was 28, an increase of 18 from sample duplicates collected in 2006. Relative percent difference was calculated for each duplicate parameter. 11.7% of all duplicate parameters were greater than 20% and

therefore did not pass the precision critera. The parameters having the greatest RPD between field duplicate samples included hardness, total dissolved solids, aluminum, manganese and turbidity.

The total number of Outfall field duplicates collected was 6, an average of once every two months. There were no field duplicates collected from the Outfalls during 2006.

While most parameters passed this criterion on most occasions, field duplicate sets contained select parameters that failed this criterion. Results of comparisons between duplicate sets are tabulated in **Appendix A**.

Accuracy

Accuracy in the analytical results of laboratory analysis is determined by percent recovery of laboratory quality control measures such as matrix spikes, control samples and method blanks. The criterion for accuracy in most analytical procedures is a percent recovery between 85 and 115 percent. Accuracy in the measurements gathered in the field is controlled and verified by using calibrated instruments.

Representativeness

Representativeness is controlled by sampling plan design, sampling techniques and sample handling procedures.

Comparability

Comparibility is maintained by using consistent sampling and analytical methods as well as units of measurement.

Completeness

Overall data capture was greater than 99%, which is above the target of 90% for completeness listed in the QAPP.

Detection
The laboratory practical quantitation limit (PQL) remained consistent for each analytical method during 2007 water quality monitoring. Dissolved arsenic, chromium, lead and selenium were not detected in any samples collected from the receiving water stations on Slate, Sherman and Johnson Creeks. Dissolved aluminum, manganese and iron were detected in virtually all samples collected from Slate Creek stations. Dissolved metals in Johnson Creek samples were either detected in a minority of samples or none at all. Dissolved aluminum was the only metal detected in all but one sample collected from Sherman Creek stations. Of the three streams, Johnson Creek samples had the highest number of undetected metals. Sulfate was detected in all samples collected from all stations on each of the three receiving water creeks. Ultra low mercury detection limits, provided through the use of method 1631, were used to determine mercury concentrations in the receiving waters. The majority of samples collected from Johnson and Sherman Creek stations remained below the detection limit. In the case of Slate Creek, all but six samples were above the ultra low level detection limit.

A complete list of parameters that remained undetected at each monitoring station during 2007 is shown in Table 1.

Outlier(s)
A variance analysis was conducted on each monthly set of monitoring data. Variance analysis reports compare sample results to historical results for the same parameters at the same sampling stations. Those results that exceeded the threshold level of two standard deviations are list in the table for the month in **Appendix B.**

Other field measurements or analytical results were identified by data time series plots as potential outliers. Table 2 contains potential outliers in receiving water monitoring data determined using a combination of trend and statistical analysis.

General Major Chemistry

Area waters generally:

- Have highly variable levels of turbidity
- Contain low levels of sulfate (<10ppm, excluding Sherman Creek)
- Are generally soft (in most cases <100ppm hardness)
- Are at or near oxygen saturation
- Have mildly basic pH

Summary Statistics
Summary statistics were calculated for all parameters at each discharge and receiving water station. The calculations include the minimum, maximum, arithmetic mean and standard deviations. The results are presented in Tables 3 through 12. Also included in the

summary tables are the total number of samples collected, the total number of non-detect results and the percentage of non-detects.

Watersheds

Upstream/downstream receiving station pairs are present on Johnson, Slate, and Sherman Creeks. A comparison of the chemistry between these station pairs is discussed below. Table 1 shows the dissolved metals that remained undetected the entire year at each station and thus will not be addressed in this section of the report. The absence of the majority of dissolved metals is typical of results obtained in all project area watersheds. In general, monitoring results indicate the water quality in the area of the project is very good with little to no impact from the project activities.

JS2 (upstream) to JS5 (downstream) Johnson Creek

Major Chemistry- Johnson Cr

Water quality monitoring on Johnson Creek was intended to identify potential impacts from Mill facility construction. Data collected during 2007 was similar in water quality trends to the data collected in 2006. Water quality from upstream to downstream on Johnson Creek shows consistent seasonal trends of temperature, TDS, nitrate, pH, and sulfate. Upstream temperature appears to be higher than downstream during the winter months and lower during the summer months. Some elevation of pH, conductivity, turbidity, TDS, nitrate, sulfate, hardness, and color is seen from upstream to downstream (Figures 1-3). No observable difference was found between upstream and downstream levels of TSS, ammonia and chloride.

Dissolved oxygen was greater in downstream measurements more often than not, however seasonal trends were not evident. DO measurements on Johnson Creek were not collected during March due to meter malfunctions.

Conductivity measurements (in umhos/cm) ranged from a high of 54.7 at JS2 and 132.2 at JS5 in March to a low of 23.7 at JS2 and 33.4 at JS5 in June.

Ammonia was only found in three samples collected from Johnson Creek stations which were at or slightly above the detection limit and collected in the winter. Two of the three samples with detectable levels were collected from the upstream station JS2.

Nitrate results in upstream and downstream samples correlated very closely the entire year with the downstream consistently slightly higher.

Chloride was found in four samples collected in winter and spring from Johnson Creek stations, three of which were from JS5. All detectable levels were near the detection limit.

Trace Chemistry- Johnson Cr
Downstream (JS5) dissolved aluminum and manganese appeared to remain at or elevated above upstream (JS2) levels throughout 2007. Downstream aluminum was highest in April with 19 ug/L (when JS2 was 5 ug/L) and lowest in August with 2 ug/L (when JS2 was also 2 ug/L).

Only three samples analyzed for dissolved mercury had results with detectable levels. Although two of the three were collected from the downstream station JS5, no significant trend between upstream and downstream dissolved mercury levels appears to exist.

Dissolved nickel remained undetected in all but two samples collected from Johnson Cr stations. Those two results were collected from JS5 six months apart from each other and were right at the detection level (1 ug/L).

Dissolved zinc was not detected at JS2 and detected slightly above the detection level in three samples collected from JS5.

MLA (upstream), SLB (above west fork confluence), SLC (downstream) Slate Creek

Major Chemistry- Slate Cr
Water quality monitoring on Slate Creek in 2007 was intended to identify potential impacts from Tailings Storage Facility (TSF) construction. Figures 4 through 6 are graphical presentations of analytical results gathered throughout the year.

As with the other receiving waters, Slate Creek's monitoring data exhibited trends in accordance with expected seasonal changes, increasing in summer and decreasing in winter (Figure 4). Compared to the other streams, Slate Creek was the warmest- most likely due to the presence of lakes in the system that warm in summer. Some elevation of pH, DO, conductivity, chloride, and sulfate was evident from upstream to downstream (Figures 4, 5). Color appears to be decreasing from upstream to downstream. No significant difference was apparent between upstream and downstream levels of turbidity, TDS, TSS, ammonia and nitrate.

In general, the pH measured at SLB and SLC trended closely together while MLA maintained the lowest pH of all three sites on Slate Creek for the entire year.

Dissolved oxygen measured at Slate Creek stations showed a seasonal trend similar to those of the other receiving water streams. MLA consistently had lower DO

measurements while SLB and SLC trended closely together similarly to what was observed in pH trends.

Conductivity measurements collected at MLA remained the lowest of the three sites during the winter months. All three sites appear to trend closely together and range from a low of 55.4 umhos/cm in January to a high of 139.7 umhos/cm in August. At least in the winter months, conductivity generally appears to increase from upstream to downstream.

Ammonia remained undetected during 2007 aside from at least one sample collected from each station. No significant trend was identified for these results.

Nitrate results for Slake Creek were by far the lowest of all the streams. Nitrate was only detectable in three samples, two from SLB and one at SLC (both downstream). It remained undetected at MLA during all monitoring during 2007.

Chloride results in Slate Creek samples were slightly higher than results from Johnson Creek. Chloride remained at or above the detection limit during the entire year at all three sites. Chloride results in SLC samples were either equal to or greater than results from the other two stations upstream indicating a possible difference in Chloride levels between the East and West Fork.

Sulfate at MLA remained relatively stable during the entire year compared to the two downstream stations. All three stations appeared to have lower sulfate during the summer. However into the fall and winter, sulfate increased at SLB and SLC only and as a result, the greatest difference in sulfate levels between the three stations occurred in December.

Hardness changed throughout the year in all three stations consistently. Hardness results ranged between 20 mg/L and 70 mg/L.

TDS data ranged from 40 mg/L to 180 mg/L, with a single anomalous result of 710 mg/L during August. TSS was below detection limits at all stations aside from a single anomalous result of 8 mg/L at CAK-MLA in November.

Trace Chemistry- Slate Cr

All three sampling stations on Slate Creek show a fall high-flow seasonal spike in aluminum, cadmium, copper, iron, manganese, nickel and mercury.

Slate Creek exhibited a high range of values for aluminum from 19 ug/L (at SLC) to 124 ug/L (at SLB), but also showed seasonal basis for trends. In general, aluminum had a decreasing trend between SLB and SLC with SLC consistently the lowest in concentration of all three stations. SLB appeared to have higher aluminum than the background MLA about 50% of the time they were sampled.

Cadmium remained undetected at both SLB and SLC until late August. It was also detected in three of the four samples collected at SLB during the remainder of the year. The highest concentration of cadmium at SLB was 1.1 ug/L. It remained undetected at MLA in all samples collected during 2007.

Copper was detected in 50% of samples collected at SLB. Copper appears to have increased in concentration at SLB and SLC during the late fall and winter months. It remained undetected at MLA in all samples collected during 2007.

Iron followed a seasonal trend in all sites with the lowest concentrations reported during the summer.

Mercury was detected at very low levels in the majority of samples collected from Slate Creek monitoring stations.

Zinc showed a seasonal spike at stations SLB and SLC late in the year.

Sherman Creek SH109 (upstream), SH113 (downstream of Outfall 001), SH105 (downstream at mouth of creek)

Major Chemistry- Sherman Cr

Water monitoring on Sherman Creek was intended to help identify any potential impacts from mine construction and water treatment activities. Station SH105 remained inaccessible during December due to extreme frozen conditions; therefore no sample was collected during this month.

Temperature consistently showed a slight increase upstream to downstream. pH shows a slight decrease between the upstream site and downstream sites but both parameters follow an annual cycle of summer increase and winter decrease.

DO also exhibited a seasonal trend and appeared to be consistent between upstream and downstream sites.

In general, conductivity showed a slight increase between the upstream and downstream sites with the highest reading observed at SH113 the majority of the year. Measurements ranged from below 80 umhos/cm to above 180 umhos/cm at each site throughout the year.

A slight increase can be observed in TDS from upstream to downstream for most of the samples collected.

Ammonia was detected in one upstream (SH109) sample and four samples collected at SH113. It remained undetected at SH105, the furthest site downstream. Nitrate showed a slight increasing trend from upstream to downstream.

Chloride, sulfate and hardness were elevated upstream to downstream with a slight increasing trend in the downstream sites towards the end of the year. All sites were non-detect for chloride during June.

Color was observed both upstream and downstream and the trend appears to be inversely related to temperature with one anomalous result at station SH105 in November of 78 color units.

Trace Chemistry- Sherman Cr
Aluminum and manganese were elevated from upstream to downstream with the greatest difference occurring later in the year.

Copper was detected in both upstream and downstream sites at least once with no significant trend apparent.

Iron was measured slightly above the detection limit in two samples at the downstream station (SH105), once in January and again in November. It remained undetected all year at SH109 and SH113. No trend is apparent.

Low level mercury remained undetected in the upstream site for the entire year and was found in four downstream sampling events.

Nickel and zinc showed a slightly elevated trend upstream to downstream during the majority of the months it was detected.

Discharges

Outfall 001
The frequency of sampling at the Comet water treatment plant (WTP) discharge was weekly, resulting in at least four times the data as compare to most receiving water stations. This larger group of sample results is a greater opportunity to identify trends (Figures 11-14). Quarterly sample results have been included in figure 15.

In 2007, the WTP was expanded, upgraded and commissioned during the month of July. Coeur experienced difficulties during the initial start-up and transition of the plant. Also during the month of July, Coeur completed the construction and breakthrough of the Jualin tunnel connecting the Jualin facilities with Comet Beach.

Variances in Outfall 001 effluent data may reflect subtle changes to treatment techniques and levels and areas of activities in the underground mine. Changes in the chemistry of mine outflow during 2007 can be observed in Figure 10.

Major Chemistry- 001
Dissolved oxygen showed a slight downward trend during the summer season, but was always well within a healthy concentration for freshwater life. Temperature also followed a seasonal cyclic trend ranging from a low of 0.1 °C in February to a high of 12.5 °C in June.

Grab samples from the effluent and background station SH109 are collected weekly in conjunction with the influent/effluent composite samples. The difference between background turbidity and effluent turbidity remained low for most of the year. Two isolated occurrences of elevated turbidity in the effluent water can be seen in Figure 12.

Major cations (represented by hardness) and anions (represented by sulfate) plus total dissolved solids varied throughout the year. TDS, sulfate and hardness experienced a shift (decrease) in concentration in July, most likely associated with an increase in overall mine outflow to the WTP.

TSS remained at or below the detection limit for the vast majority of the samples collected with the exception of a single elevated result occurring in July.

Nitrate and ammonia show slight downward trends owing to some slightly higher values early in the year. Increased concentrations early in the year were due to elevated mining activities in the underground mine. Although values remained well below daily maximum permit limitations throughout the year, in February, ammonia levels were slightly elevated during weekly sampling and resulted in a monthly average exceedance.

Trace Chemistry- 001
Arsenic and chromium remain undetected in effluent samples during 2007. Lead, mercury, and nickel vary in concentration but are essentially at or near the detection limit. Aluminum and iron exhibit a slight upward trend later in the year. Iron results in December were sufficiently elevated to result in a monthly average exceedence. Cadmium was elevated in April resulting in an exceedence of the month average limit.

On the whole, total recoverable metals monitored from effluent discharges are at or only slightly above detection limits in the discharge water and well under permitted limits.

Outfall 002
Outfall 002 is the tailing storage facility, which has not yet been constructed and therefore, no discharge occurred during 2007.

Outfall 003
Outfall 003 is the Comet Beach Camp sewage treatment plant with a marine discharge. Variances in effluent data from Outfall 003 during 2007 may reflect subtle changes to treatment techniques, slight changes to the plant treatment scheme or changes in camp population. The plant was decommissioned at the end of October as a result of the camp

population moving to the Jualin facilities. Since there was no longer any discharge from this outfall, monitoring ceased.

All four NPDES permit parameters (pH, BOD, Fecal coliform, and TSS) were within or well under permit compliance limits during all monitoring except for a few isolated events.

BOD and TSS levels were generally well below daily maximum permit limits during 2007. However, the BOD in effluent samples collected during one week in July was sufficiently elevated to result in a weekly average limit exceedance. In addition, two elevated TSS results, one in March and the other in September, were above the daily maximum permit limit of 60 mg/L.

Tables 1-12

Table 1: Non-detect Parameters at Monitoring Stations

SHERMAN CREEK

SH109

Parameter	PQL	Units
Arsenic	<2.5	ug/L
Cadmium	<0.1	ug/L
Chromium	<2.5	ug/L
Iron	<0.05	mg/L
Lead	<0.16	ug/L
Mercury	<0.001	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

SH113

Parameter	PQL	Units
Arsenic	<2.5	ug/L
Cadmium	<0.1	ug/L
Iron	<0.05	mg/L
Lead	<0.16	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

SH105

Parameter	PQL	Units
Arsenic	<2.5	ug/L
Cadmium	<0.1	ug/L
Copper	<1	ug/L
Lead	<0.16	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

SLATE CREEK

MLA

Parameter	PQL	Units
Nitrate	<0.05	mg/L
Arsenic	<2.5	ug/L
Cadmium	<0.1	ug/L
Chromium	<2.5	ug/L
Copper	<1	ug/L
Lead	<0.16	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

SLB

Parameter	PQL	Units
TSS	<5	mg/L
Arsenic	<2.5	ug/L
Chromium	<2.5	ug/L
Lead	<0.16	ug/L
Selenium	<1	ug/L

SLC

Parameter	PQL	Units
TSS	<5	mg/L
Arsenic	<2.5	ug/L
Chromium	<2.5	ug/L
Lead	<0.16	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

JOHNSON CREEK

JS-2

Parameter	PQL	Units
Arsenic	<2.5	ug/L
Cadmium	<0.1	ug/L
Chromium	<2.5	ug/L
Copper	<1	ug/L
Iron	<0.05	mg/L
Lead	<0.16	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

JS-5

Parameter	PQL	Units
Arsenic	<2.5	ug/L
Cadmium	<0.1	ug/L
Chromium	<2.5	ug/L
Copper	<1	ug/L
Iron	<0.05	mg/L
Lead	<0.16	ug/L
Selenium	<1	ug/L
Silver	<0.1	ug/L

OUTFALL 001

001 Effluent

Parameter	PQL	Units
Arsenic	<2.5	ug/L
Chromium	<2.5	ug/L

001 Influent

Parameter	PQL	Units
No parameter remained non-detect for all of 2007		

Table 2: Potential Outliers in Receiving Water Monitoring Data 2007

Site	Date	Parameter
JS2	3/18/2007	pH
JS2	9/3/2007	Total Dissolved Solids
JS5	9/3/2007	Total Dissolved Solids
MLA	5/9/2007	Turbidity
MLA	6/6/2007	Dissolved Oxygen
MLA	9/5/2007	Color
MLA	11/7/2007	Total Suspended Solids
MLA	11/7/2007	Ammonia
SLB	10/3/2007	Dissolved Cadmium
SLC	8/29/2007	Total Dissolved Solids
SH109	11/14/2007	Total Suspended Solids
SH113	11/14/2007	Total Suspended Solids
SH105	11/14/2007	Color

Table 3: Station JS2 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	1.2	7.5	6.3	12	0	0	4.23	2.06579
Dissolved Oxygen	mg/L	10.26	15.62	5.36	11	0	0	12.16	1.35515
pH	pH	6.61	10.02	3.41	12	0	0	7.30	0.88048
Conductivity	umhos/cm	23.7	54.7	31	12	0	0	37.13	8.49057
Turbidity	NTU	0.15	0.83	0.68	12	0	0	0.36	0.25543
Nitrate as N	mg/L	<0.05	0.37	0.37	12	3	25	0.16	0.10866
Ammonia as N	mg/L	<0.1	0.1	0.1	12	10	83	0.02	0.00000
Sulfate	mg/L	0.7	2	1.3	12	0	0	1.27	0.38925
Chloride	mg/L	<1	1	1	12	11	92	0.08	0.00000
Total Dissolved Solids	mg/L	<10	140	140	12	1	8	31.67	35.70714
Total Suspended Solids	mg/L	<5	8	8	12	11	92	0.67	0.86603
Hardness, Total	mg/L	<10	30	30	12	1	8	13.33	6.68558
Dissolved Aluminum	ug/L	<1	5	5	12	4	33	2.00	1.61433
Dissolved Arsenic	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Chromium	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Copper	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Iron	mg/L	<0.05	<0.05	0	12	12	100	0.00	0.00000
Dissolved Lead	ug/L	<0.16	<0.16	0	12	12	100	0.00	0.00006
Dissolved Manganese	ug/L	<1	2	2	12	10	83	0.25	0.28868
Mercury Dissolved	ug/L	<0.001	0.0015	0.0015	12	11	92	0.00	0.00014
Dissolved Nickel	ug/L	<1	1	1	12	11	92	0.08	0.00000
Dissolved Selenium	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	2.8	2.8	12	11	92	0.23	0.08660
Color	color unit	<5	20	20	12	7	58	4.42	4.45856

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 4: Station JS5 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0	8	8	12	0	0	3.89	2.70133
Dissolved Oxygen	mg/L	10.87	13.93	3.06	11	0	0	12.14	0.84505
pH	pH	6.69	7.65	0.96	12	0	0	7.32	0.28328
Conductivity	umhos/cm	33.4	132.2	98.8	12	0	0	69.77	28.05809
Turbidity	NTU	0.18	1.1	0.92	12	0	0	0.53	0.34957
Nitrate as N	mg/L	0.05	0.49	0.44	12	0	0	0.24	0.14123
Ammonia as N	mg/L	<0.1	0.2	0.2	12	11	92	0.02	0.02887
Sulfate	mg/L	1.4	6.2	4.8	12	0	0	3.64	1.53117
Chloride	mg/L	<1	1	1	12	9	75	0.25	0.00000
Total Dissolved Solids	mg/L	10	170	160	12	0	0	53.33	43.55421
Total Suspended Solids	mg/L	<5	10	10	12	11	92	0.83	1.44338
Hardness, Total	mg/L	14	50	36	12	0	0	28.33	12.32391
Dissolved Aluminum	ug/L	2	19	17	12	0	0	7.67	4.88659
Dissolved Arsenic	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Chromium	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Copper	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Iron	mg/L	<0.05	<0.05	0	12	12	100	0.00	0.00000
Dissolved Lead	ug/L	<0.16	<0.16	0	12	12	100	0.00	0.00006
Dissolved Manganese	ug/L	<1	4	4	12	2	17	1.67	1.02986
Mercury Dissolved	ug/L	<0.001	0.0031	0.0031	12	10	83	0.00	0.00060
Dissolved Nickel	ug/L	<1	1	1	12	10	83	0.17	0.00000
Dissolved Selenium	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	3.1	3.1	12	9	75	0.68	0.17299
Color	color unit	<5	24	24	12	6	50	8.00	6.77562

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 5: Station MLA 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.4	14.6	14.2	12	0	0	5.38	5.41683
Dissolved Oxygen	mg/L	7.11	13.33	6.22	11	0	0	10.33	1.91196
pH	pH	6.89	7.84	0.95	12	0	0	7.31	0.24344
Conductivity	umhos/cm	54.4	144.7	90.3	12	0	0	105.30	29.38316
Turbidity	NTU	0.42	5.3	4.88	12	0	0	1.17	1.34406
Nitrate as N	mg/L	<0.05	<0.05	0	12	12	100	0.00	0.00000
Ammonia as N	mg/L	<0.1	11.8	11.8	12	10	83	1.00	3.37500
Sulfate	mg/L	1.3	2.7	1.4	12	0	0	1.93	0.39341
Chloride	mg/L	1	2	1	12	0	0	1.50	0.52223
Total Dissolved Solids	mg/L	40	180	140	12	0	0	88.33	36.63911
Total Suspended Solids	mg/L	<5	8	8	12	11	92	0.67	0.86603
Hardness, Total	mg/L	20	70	50	12	0	0	50.00	15.37412
Dissolved Aluminum	ug/L	21	90	69	12	0	0	51.50	21.59335
Dissolved Arsenic	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Chromium	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Copper	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Iron	mg/L	0.05	0.24	0.19	12	0	0	0.14	0.05466
Dissolved Lead	ug/L	<0.16	<0.16	0	12	12	100	0.00	0.00006
Dissolved Manganese	ug/L	18	100	82	12	0	0	45.25	27.48264
Mercury Dissolved	ug/L	<0.001	0.0025	0.0025	12	2	17	0.00	0.00060
Dissolved Nickel	ug/L	<1	5	5	12	7	58	1.17	1.35680
Dissolved Selenium	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	6.2	6.2	12	6	50	2.29	1.28166
Color	color unit	25	210	185	11	0	0	96.36	50.40491

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 6: Station SLB 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.1	13.4	13.3	12	0	0	5.14	5.18905
Dissolved Oxygen	mg/L	9.92	15.83	5.91	11	0	0	12.42	1.95821
pH	pH	7.33	8.27	0.94	12	0	0	7.82	0.26590
Conductivity	umhos/cm	64.5	147.7	83.2	12	0	0	108.35	25.83385
Turbidity	NTU	0.49	2.1	1.61	12	0	0	0.94	0.50549
Nitrate as N	mg/L	<0.05	0.06	0.06	12	10	83	0.01	0.00289
Ammonia as N	mg/L	<0.1	0.1	0.1	12	11	92	0.01	0.00000
Sulfate	mg/L	2.9	11.6	8.7	12	0	0	6.39	2.91874
Chloride	mg/L	1	2	1	12	0	0	1.67	0.49237
Total Dissolved Solids	mg/L	50	110	60	12	0	0	77.50	19.59824
Total Suspended Solids	mg/L	<5	<5	0	12	12	100	0.00	0.00000
Hardness, Total	mg/L	30	70	40	12	0	0	51.67	13.37116
Dissolved Aluminum	ug/L	26	124	98	12	0	0	55.67	31.61511
Dissolved Arsenic	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	1.1	1.1	12	8	67	0.18	0.30588
Dissolved Chromium	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Copper	ug/L	<1	4	4	12	6	50	1.17	1.23091
Dissolved Iron	mg/L	<0.05	0.26	0.26	12	1	8	0.13	0.06824
Dissolved Lead	ug/L	<0.16	<0.16	0	12	12	100	0.00	0.00006
Dissolved Manganese	ug/L	<1	118	118	12	1	8	24.83	35.90001
Mercury Dissolved	ug/L	<0.001	0.002	0.002	12	1	8	0.00	0.00035
Dissolved Nickel	ug/L	<1	7	7	12	1	8	3.33	2.31432
Dissolved Selenium	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	0.1	0.1	12	11	92	0.01	0.00000
Dissolved Zinc	ug/L	<2.5	95.5	95.5	12	1	8	28.58	35.56169
Color	color unit	23	120	97	12	0	0	65.42	33.04668

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 7: Station SLC 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.2	12	11.8	12	0	0	4.78	4.79428
Dissolved Oxygen	mg/L	10.36	17.05	6.69	11	0	0	12.72	2.29759
pH	pH	7.28	8.15	0.87	12	0	0	7.79	0.27704
Conductivity	umhos/cm	65	163.7	98.7	12	0	0	113.17	29.16350
Turbidity	NTU	0.25	1.2	0.95	12	0	0	0.56	0.29319
Nitrate as N	mg/L	<0.05	0.15	0.15	12	11	92	0.01	0.02887
Ammonia as N	mg/L	<0.1	1	1	12	10	83	0.10	0.25879
Sulfate	mg/L	2.3	8.9	6.6	12	0	0	5.51	1.91190
Chloride	mg/L	2	4	2	12	0	0	2.42	0.66856
Total Dissolved Solids	mg/L	50	710	660	12	0	0	125.83	184.65981
Total Suspended Solids	mg/L	<5	<5	0	12	12	100	0.00	0.00000
Hardness, Total	mg/L	30	70	40	12	0	0	50.83	13.78954
Dissolved Aluminum	ug/L	19	82	63	12	0	0	38.08	18.81227
Dissolved Arsenic	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	0.5	0.5	12	9	75	0.08	0.12432
Dissolved Chromium	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Copper	ug/L	<1	2	2	12	9	75	0.50	0.45227
Dissolved Iron	mg/L	<0.05	0.15	0.15	12	5	42	0.05	0.03415
Dissolved Lead	ug/L	<0.16	<0.16	0	12	12	100	0.00	0.00006
Dissolved Manganese	ug/L	<1	56	56	12	5	42	10.83	17.05139
Mercury Dissolved	ug/L	<0.001	0.0019	0.0019	12	3	25	0.00	0.00030
Dissolved Nickel	ug/L	<1	5	5	12	3	25	2.17	1.37895
Dissolved Selenium	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	51.4	51.4	12	2	17	14.26	18.15399
Color	color unit	17	61	44	12	0	0	36.50	16.65969

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 8: Station SH109 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.1	8.2	8.1	12	0	0	3.33	2.97644
Dissolved Oxygen	mg/L	10.46	16.87	6.41	12	0	0	12.24	1.82426
pH	pH	7.56	7.94	0.38	12	0	0	7.75	0.12128
Conductivity	umhos/cm	53.9	138.4	84.5	12	0	0	95.08	26.14687
Turbidity	NTU	0.1	0.9	0.8	12	0	0	0.42	0.27490
Nitrate as N	mg/L	<0.05	0.32	0.32	12	2	17	0.14	0.08105
Ammonia as N	mg/L	<0.1	0.1	0.1	12	11	92	0.01	0.00000
Sulfate	mg/L	2.4	11.2	8.8	12	0	0	6.37	2.79816
Chloride	mg/L	<1	2	2	12	7	58	0.58	0.38925
Total Dissolved Solids	mg/L	30	90	60	12	0	0	51.67	21.67249
Total Suspended Solids	mg/L	<5	20	20	12	11	92	1.67	4.33013
Hardness, Total	mg/L	20	60	40	12	0	0	42.50	12.88057
Dissolved Aluminum	ug/L	<1	16	16	12	1	8	8.08	5.25415
Dissolved Arsenic	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Chromium	ug/L	<2.5	<2.5	0	12	12	100	0.00	0.00000
Dissolved Copper	ug/L	<1	1	1	12	11	92	0.08	0.00000
Dissolved Iron	mg/L	<0.05	<0.05	0	12	12	100	0.00	0.00000
Dissolved Lead	ug/L	<0.16	<0.16	0	12	12	100	0.00	0.00006
Dissolved Manganese	ug/L	<1	2	2	12	9	75	0.42	0.38925
Mercury Dissolved	ug/L	<0.001	<0.001	0	12	12	100	0.00	0.00000
Dissolved Nickel	ug/L	<1	2	2	12	8	67	0.42	0.28868
Dissolved Selenium	ug/L	<1	<1	0	12	12	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	12	12	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	2.9	2.9	12	9	75	0.67	0.11645
Color	color unit	<5	27	27	12	2	17	11.58	6.94731

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 9: Station SH113 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.1	8.8	8.7	11	0	0	4.02	3.07272
Dissolved Oxygen	mg/L	10.43	16.73	6.3	10	0	0	12.16	1.86272
pH	pH	7.51	7.82	0.31	11	0	0	7.64	0.08195
Conductivity	umhos/cm	74.8	258	183.2	11	0	0	177.06	52.27583
Turbidity	NTU	0.16	1.3	1.14	11	0	0	0.64	0.32858
Nitrate as N	mg/L	0.08	0.61	0.53	11	0	0	0.29	0.19926
Ammonia as N	mg/L	<0.1	0.3	0.3	11	7	64	0.09	0.08202
Sulfate	mg/L	5.3	58.3	53	11	0	0	30.71	17.37080
Chloride	mg/L	<1	7	7	11	1	9	3.36	1.63485
Total Dissolved Solids	mg/L	40	160	120	11	0	0	106.36	36.95206
Total Suspended Solids	mg/L	<5	28	28	11	9	82	3.09	6.91112
Hardness, Total	mg/L	28	130	102	11	0	0	79.64	28.71680
Dissolved Aluminum	ug/L	<1	21	21	11	1	9	8.82	7.10570
Dissolved Arsenic	ug/L	<2.5	<2.5	0	11	11	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	<0.1	0	11	11	100	0.00	0.00000
Dissolved Chromium	ug/L	<2.5	<2.5	0	11	11	100	0.00	0.00000
Dissolved Copper	ug/L	<1	1	1	11	10	91	0.09	0.00000
Dissolved Iron	mg/L	<0.05	<0.05	0	11	11	100	0.00	0.00000
Dissolved Lead	ug/L	<0.16	<0.16	0	11	11	100	0.00	0.00007
Dissolved Manganese	ug/L	2	35	33	11	0	0	16.27	12.95447
Mercury Dissolved	ug/L	<0.001	0.0012	0.0012	10	8	80	0.00	0.00007
Dissolved Nickel	ug/L	<1	5	5	11	5	45	1.36	1.25045
Dissolved Selenium	ug/L	<1	<1	0	11	11	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	11	11	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	4.5	4.5	11	7	64	1.39	0.75076
Color	color unit	<5	28	28	11	1	9	15.82	8.07578

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 10: Station SH105 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.2	8.7	8.5	11	0	0	4.14	3.12596
Dissolved Oxygen	mg/L	10.88	14.59	3.71	10	0	0	12.37	1.21134
pH	pH	7.28	7.8	0.52	11	0	0	7.58	0.17078
Conductivity	umhos/cm	56.6	221	164.4	11	0	0	126.10	49.20116
Turbidity	NTU	0.15	1.4	1.25	11	0	0	0.62	0.44191
Nitrate as N	mg/L	0.13	0.72	0.59	11	0	0	0.37	0.22228
Ammonia as N	mg/L	<0.1	<0.1	0	11	11	100	0.00	0.00000
Sulfate	mg/L	3.5	43.2	39.7	11	0	0	17.37	10.74142
Chloride	mg/L	<1	7	7	11	1	9	2.73	1.94001
Total Dissolved Solids	mg/L	20	160	140	11	0	0	77.27	46.70994
Total Suspended Solids	mg/L	<5	6	6	11	10	91	0.55	0.30151
Hardness, Total	mg/L	20	80	60	11	0	0	49.09	17.58098
Dissolved Aluminum	ug/L	6	62	56	11	0	0	21.91	18.86507
Dissolved Arsenic	ug/L	<2.5	<2.5	0	11	11	100	0.00	0.00000
Dissolved Cadmium	ug/L	<0.1	<0.1	0	11	11	100	0.00	0.00000
Dissolved Chromium	ug/L	<2.5	<2.5	0	11	11	100	0.00	0.00000
Dissolved Copper	ug/L	<1	1	1	11	7	64	0.36	0.00000
Dissolved Iron	mg/L	<0.05	0.08	0.08	11	9	82	0.01	0.01214
Dissolved Lead	ug/L	<0.16	<0.16	0	11	11	100	0.00	0.00007
Dissolved Manganese	ug/L	<1	9	9	11	5	45	2.18	2.37793
Mercury Dissolved	ug/L	<0.001	0.0026	0.0026	11	7	64	0.00	0.00050
Dissolved Nickel	ug/L	<1	3	3	11	6	55	0.82	0.67420
Dissolved Selenium	ug/L	<1	<1	0	11	11	100	0.00	0.00000
Dissolved Silver	ug/L	<0.1	<0.1	0	11	11	100	0.00	0.00000
Dissolved Zinc	ug/L	<2.5	7.4	7.4	11	6	55	2.10	1.73797
Color	color unit	<5	78	78	11	3	27	21.55	21.36097

*Non-detects are assigned a value of zero in the arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 11: Station CAK-001EFF (Outfall 001 Effluent) 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Temp	oC	0.1	12.5	12.4	60	0	0	6.78	3.24518
Dissolved oxygen	mg/L	8.86	13.6	4.74	60	0	0	10.81	0.98108
Lab Turbidity	NTU	0.25	6.8	6.55	60	0	0	1.26	1.32429
Ammonia as N	mg/L	<0.1	3.1	3.1	61	16	26	0.73	0.80573
Nitrate as N	mg/L	0.08	5.37	5.29	61	0	0	1.49	1.58352
Sulfate	mg/L	73.4	333	259.6	60	0	0	171.11	84.26151
Sulfate (as S)	mg/L	14	105	91	61	0	0	47.95	26.60415
Total Dissolved Solids	mg/L	200	700	500	61	0	0	373.11	138.78690
Hardness, Total	mg/L	84	910	826	61	0	0	237.18	112.40307
Total Recoverable Aluminum	ug/L	<1	107	107	61	3	5	22.20	24.03793
Total Recoverable Arsenic	ug/L	<2.5	<2.5	0	61	61	100	0.00	0.00000
Total Recoverable Cadmium	ug/L	<0.1	0.4	0.4	61	50	82	0.05	0.07647
Total Chromium	ug/L	<1	<2.5	0	61	61	100	0.00	0.19206
Total Recoverable Copper	ug/L	<1	5	5	61	40	66	0.54	0.62769
Total Recoverable Iron	mg/L	<0.05	1.5	1.5	61	13	21	0.20	0.27389
Total Recoverable Lead	ug/L	<0.16	0.26	0.26	61	53	87	0.03	0.01746
Total Recoverable Manganese	ug/L	9	133	124	61	0	0	67.82	29.88952
Total Recoverable Nickel	ug/L	1	23	22	61	0	0	6.70	4.84198
Total Recoverable Selenium	ug/L	<1	2	2	61	48	79	0.30	0.27659
Total Recoverable Silver	ug/L	<0.1	0.2	0.2	61	57	93	0.01	0.01796
Total Recoverable Zinc	ug/L	<2.5	29.6	29.6	61	9	15	5.85	4.48129
Mercury Total	ug/L	<0.001	0.0028	0.0028	61	49	80	0.00	0.00033
Hardness Downstream of Outfall	mg/L	28	543	515	61	0	0	94.79	71.92986

* Non-detects are treated as 0.0 in range and arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Table 12: Station CAK-003EFF (Outfall 003 Effluent) 2007 Water Quality Data Summary Statistics

Parameter	Units	Min	Max	Range (Max - Min)	Number of Samples	Number of NonDetects	Percent NonDetects	Arithmetic Mean	Standard Deviation
Biological Oxygen Demand	mg/L	<2	59.2	59.2	50	5	10	14.49	11.99616
Total Suspended Solids	mg/L	<4	92	92	45	4	8.9	21.28	18.68442
Fecal Coliform	#/100mL	<2	65000	65000	43	5	11.6	4181.05	10,824
pH	pH units	7.12	8.2	1.08	43	0	0	7.69	0.24375
Flow	GPD	40.003	4330.1	4290.0768	40	0	0	2,560.48	681.57422

* Non-detects are treated as zero in range and arithmetic mean calculation

**Non-detects are assigned a value equal to the detection limit in standard deviation calculation

Figures 1-16

Figure 1: Johnson Creek Monitoring Results 2007, Field Parameters

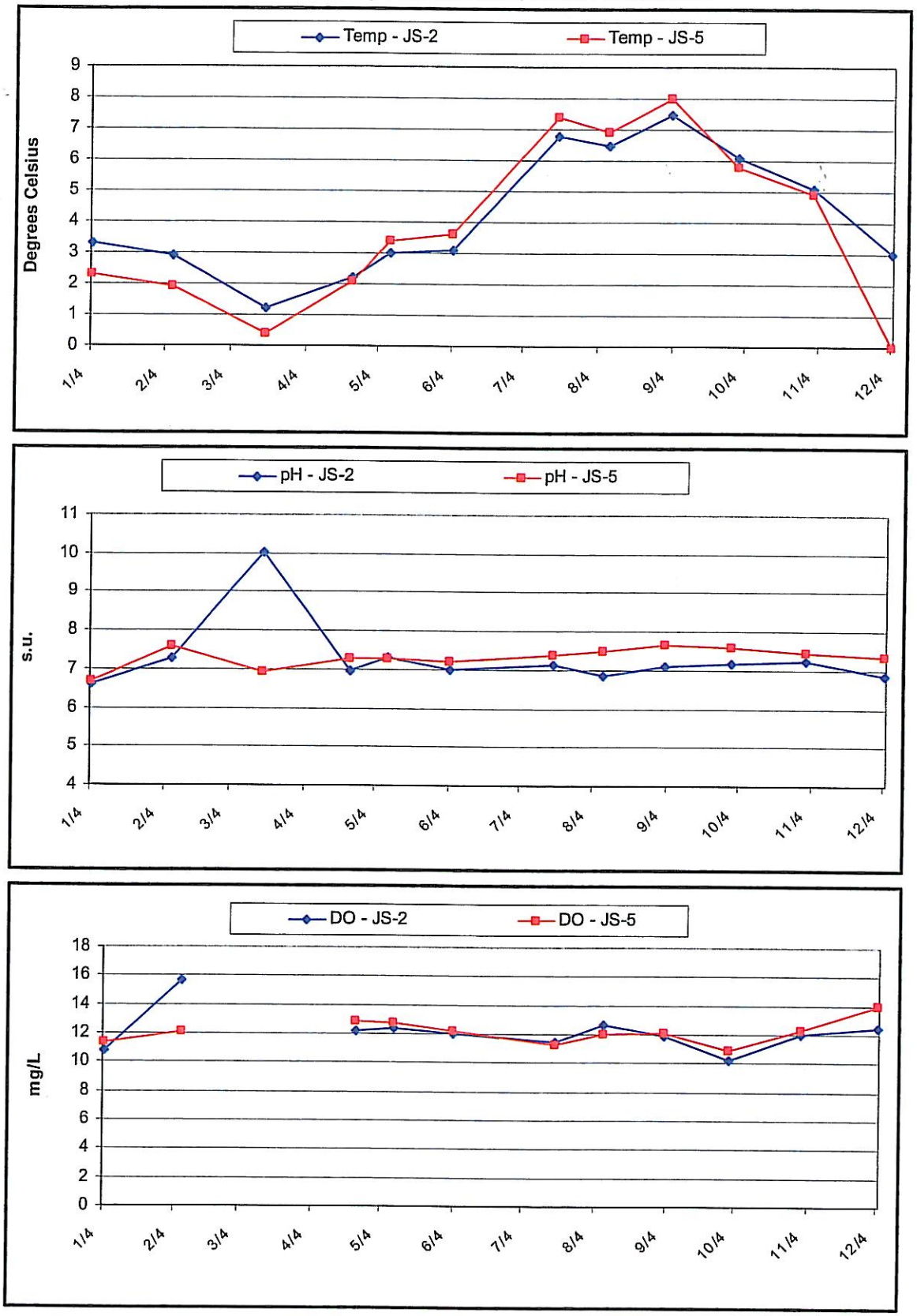


Figure 1: Johnson Creek Monitoring Results 2007, Field Parameters Cont'd

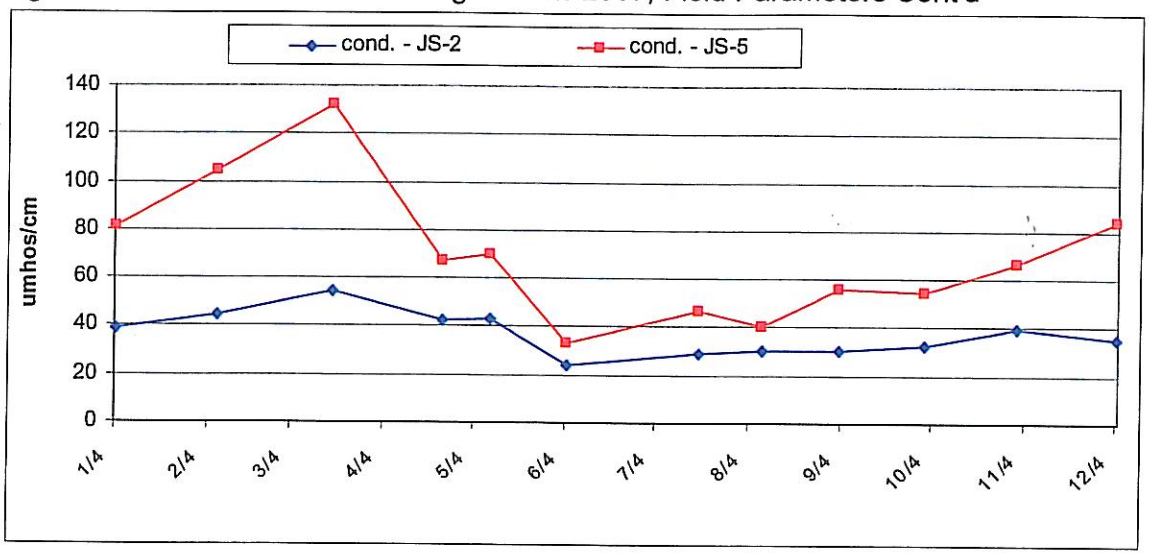


Figure 2: Johnson Creek Monitoring Results 2007, Major Chemistry

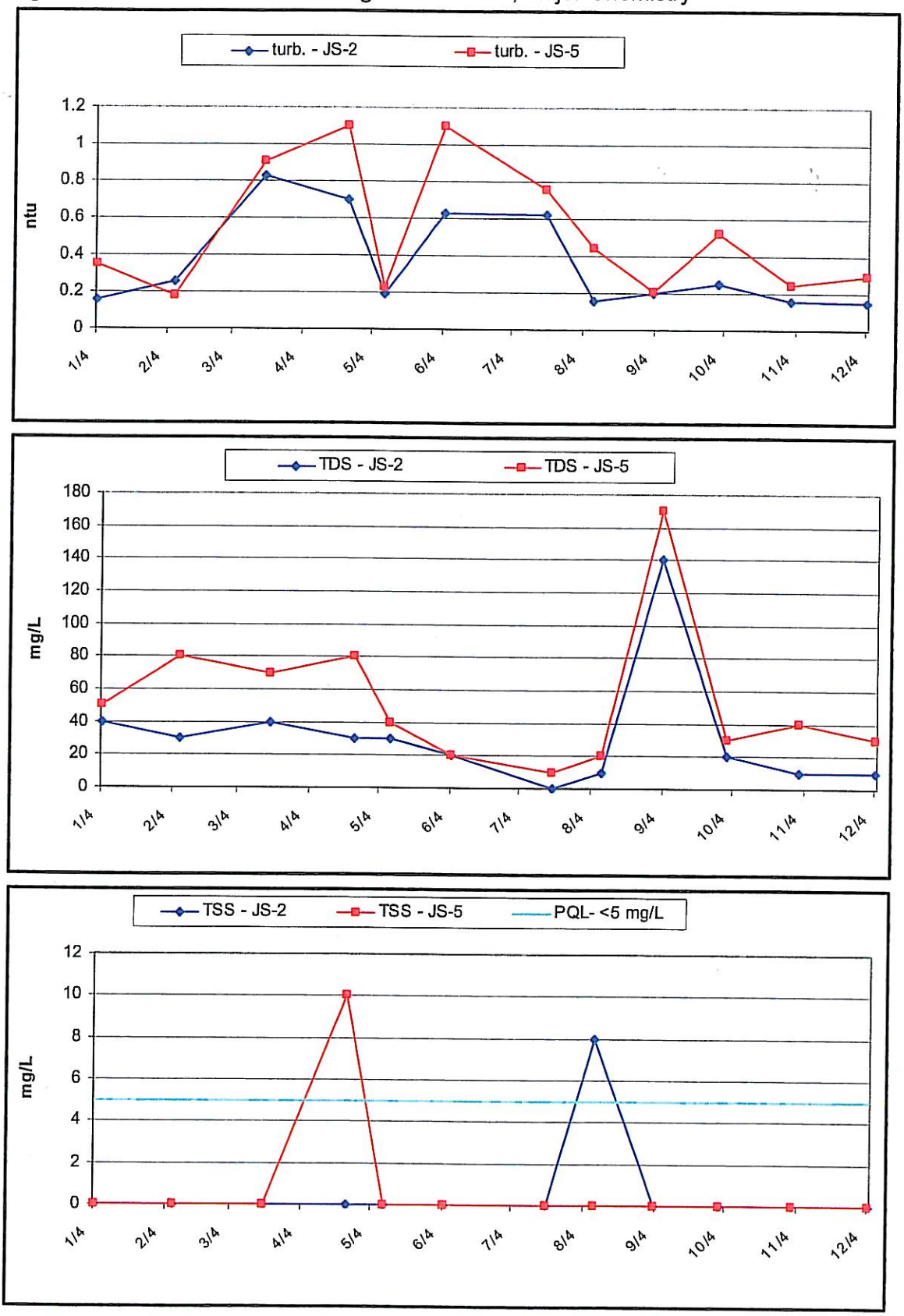
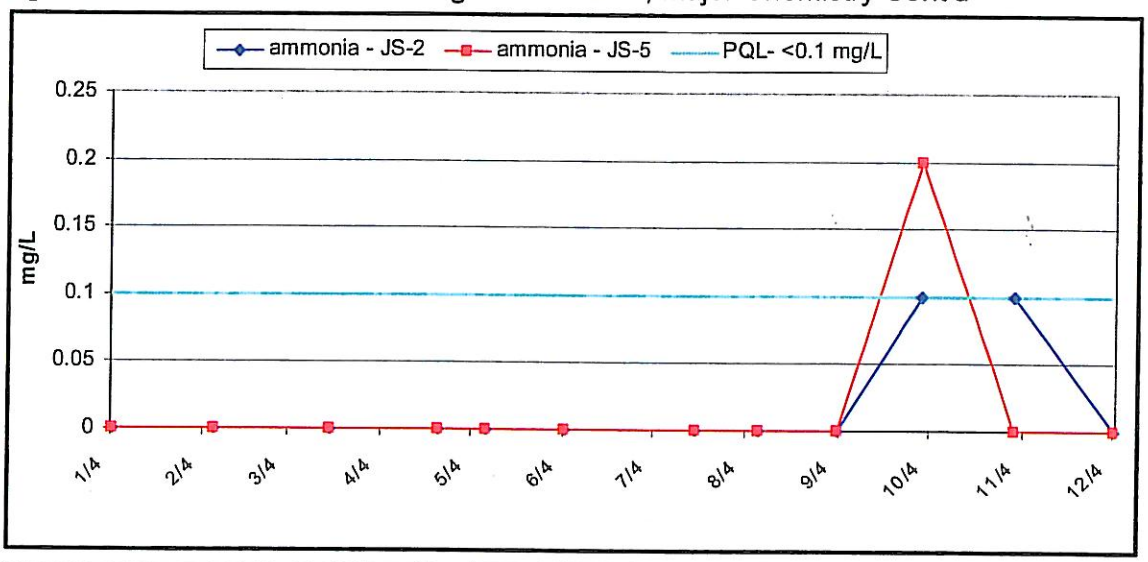
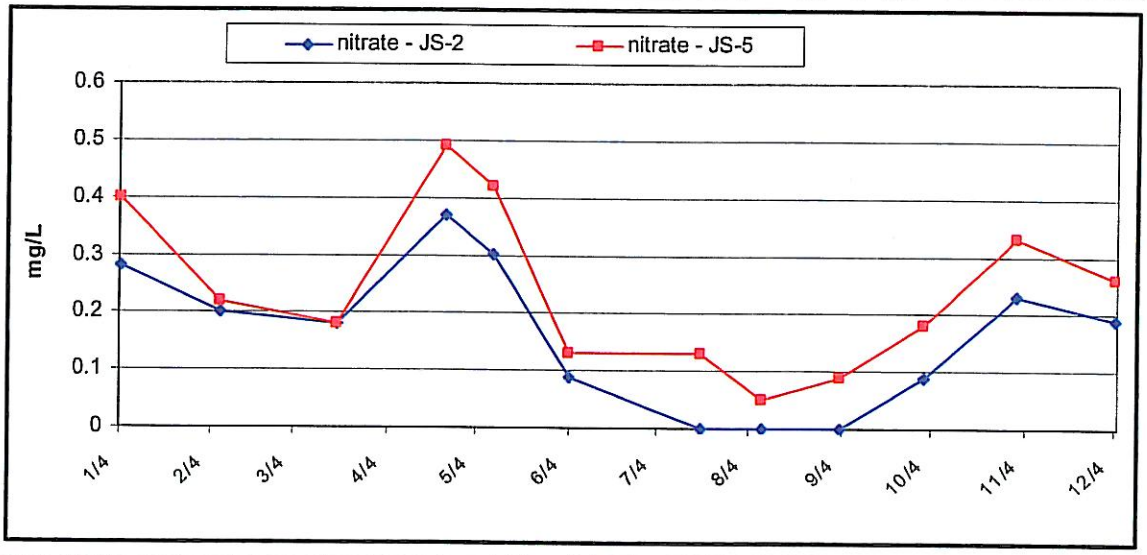


Figure 2: Johnson Creek Monitoring Results 2007, Major Chemistry Cont'd





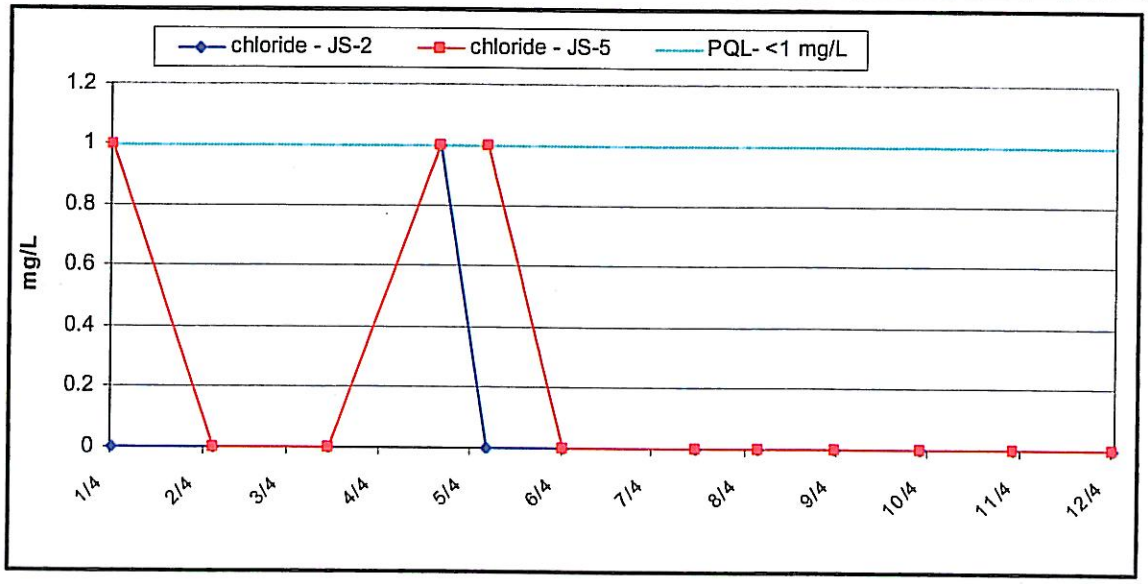
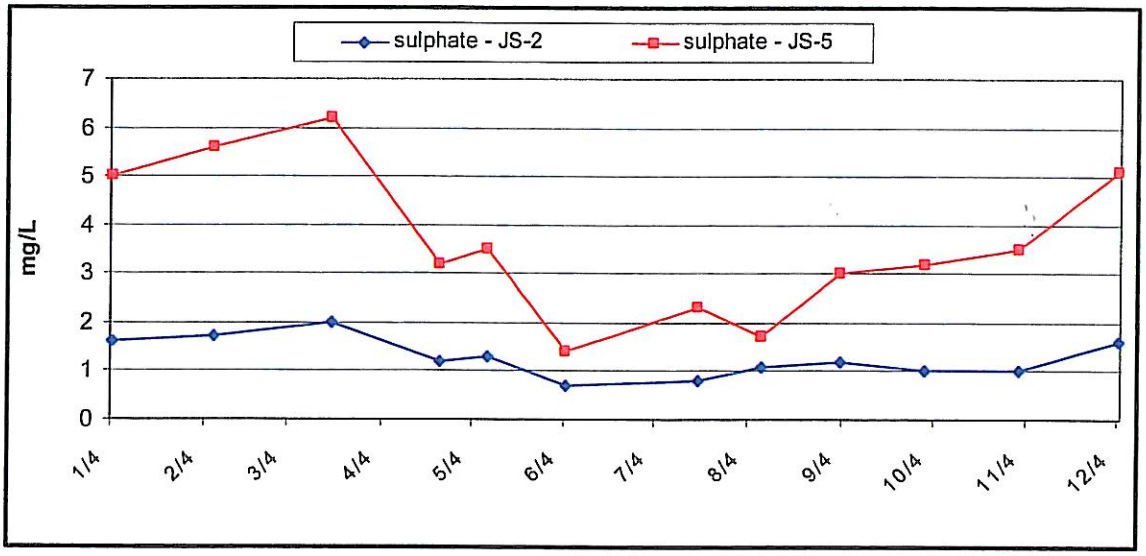
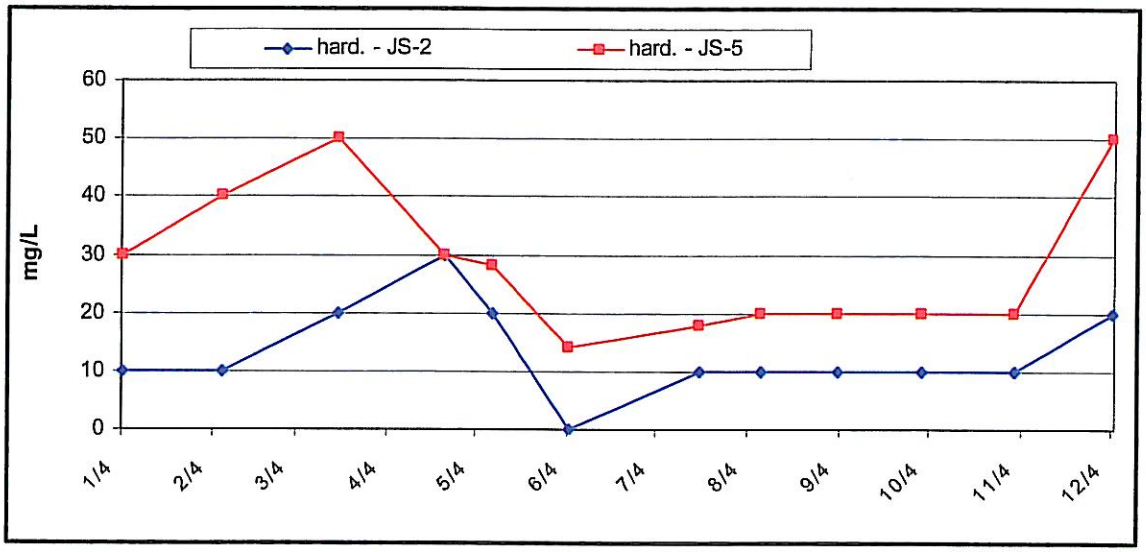


Figure 2: Johnson Creek Monitoring Results 2007, Major Chemistry Cont'd





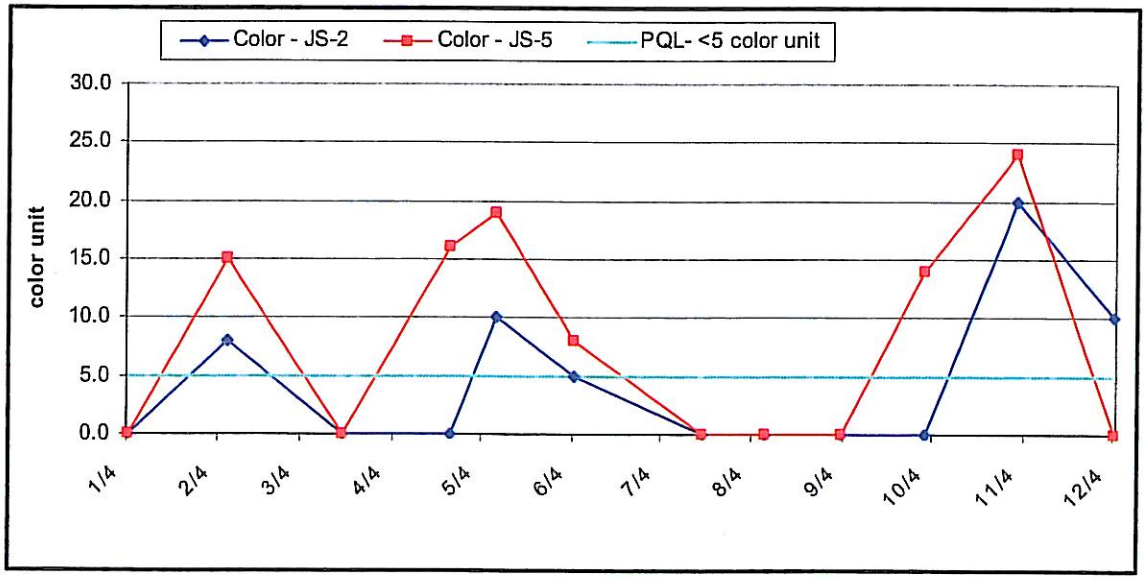
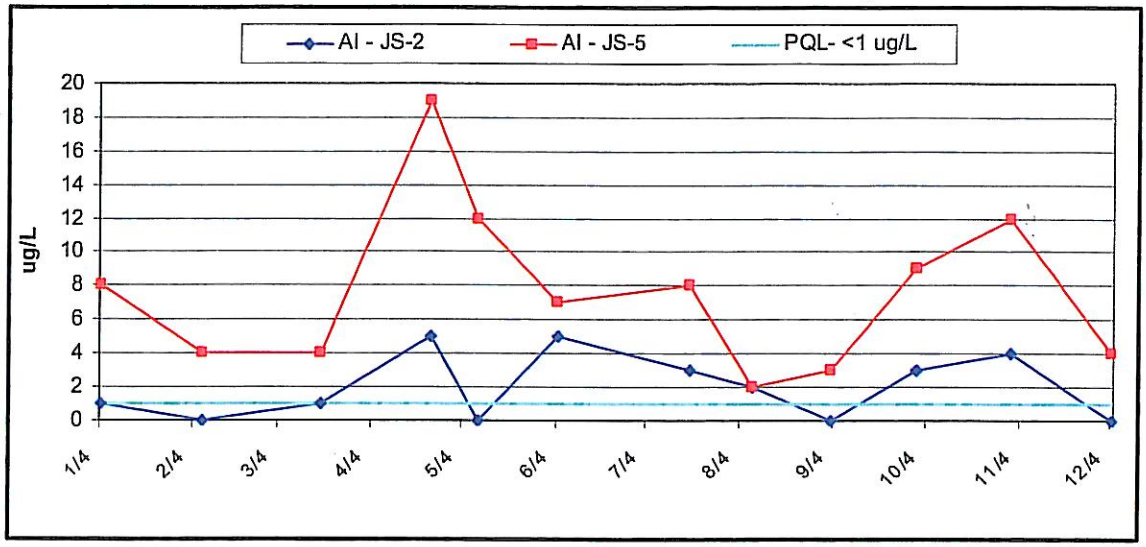
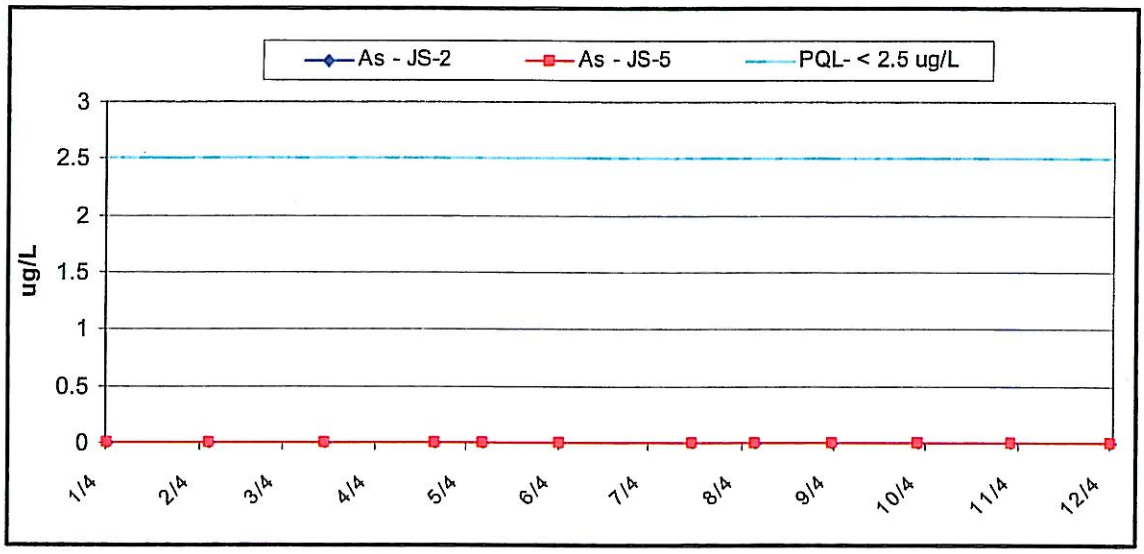


Figure 3: Johnson Creek Monitoring Results 2007, Trace Chemistry





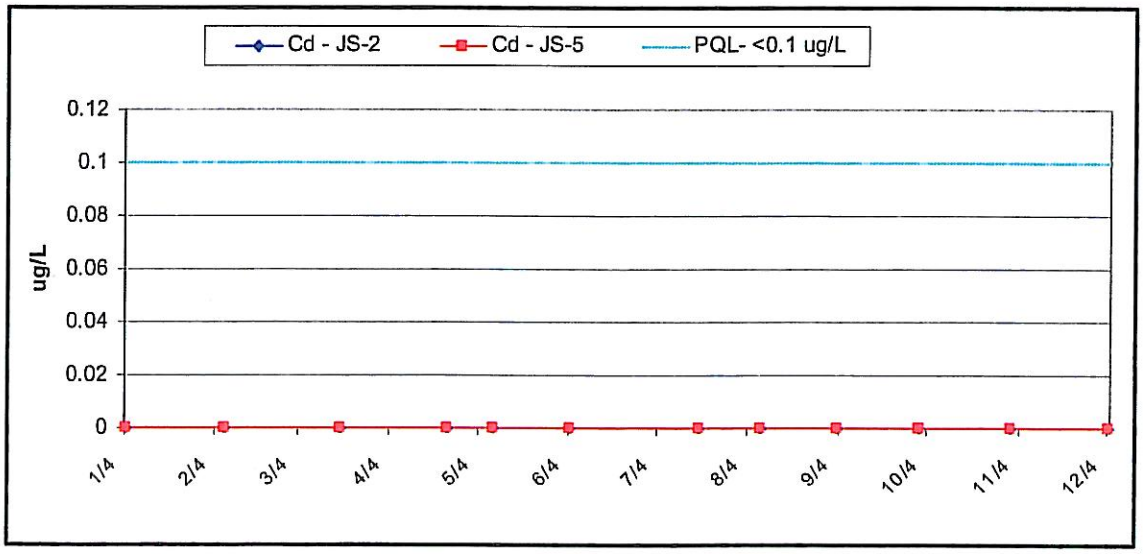
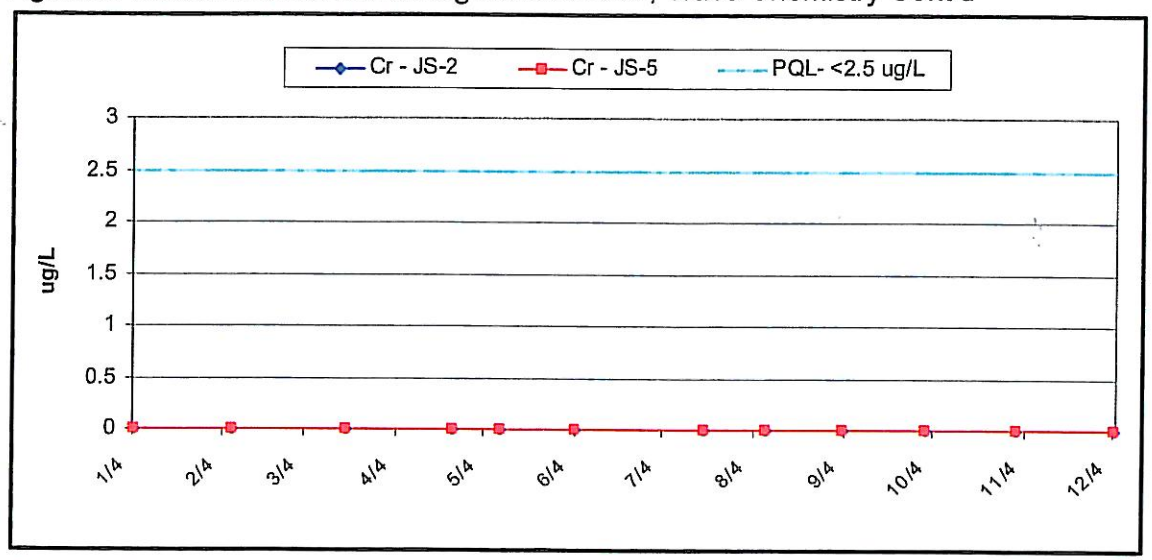
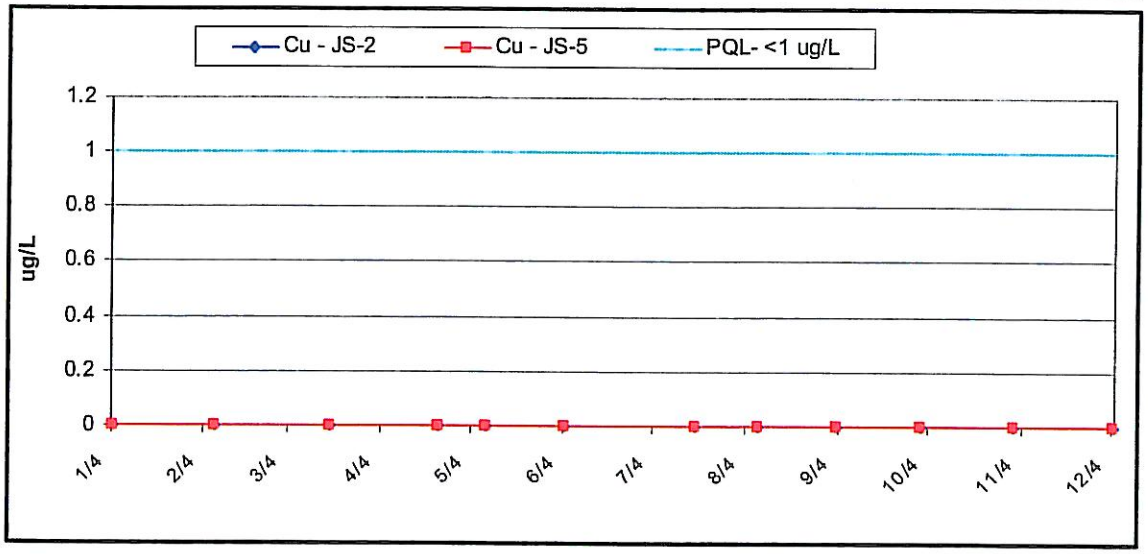


Figure 3: Johnson Creek Monitoring Results 2007, Trace Chemistry Cont'd





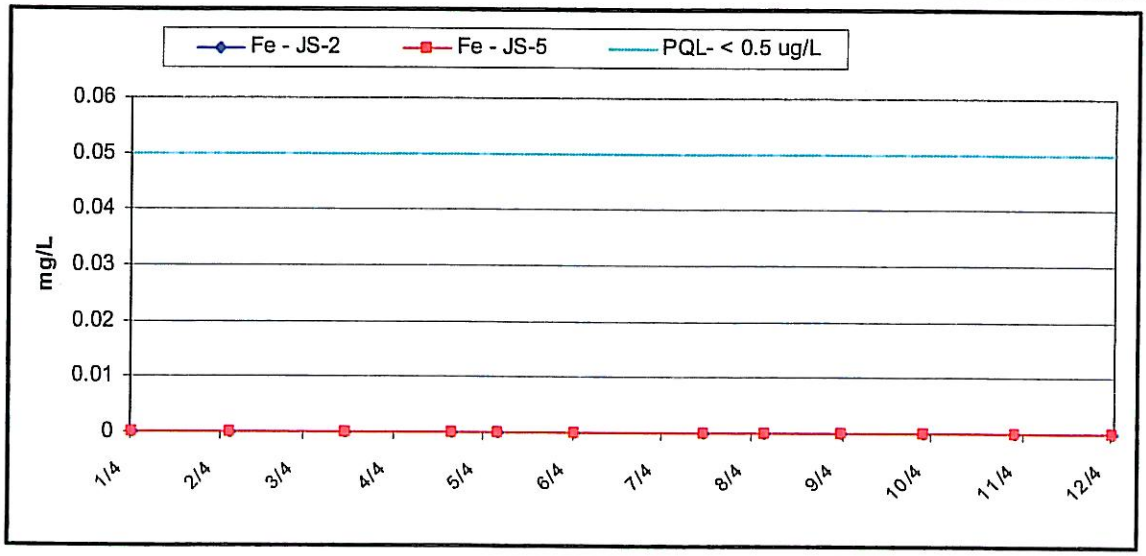
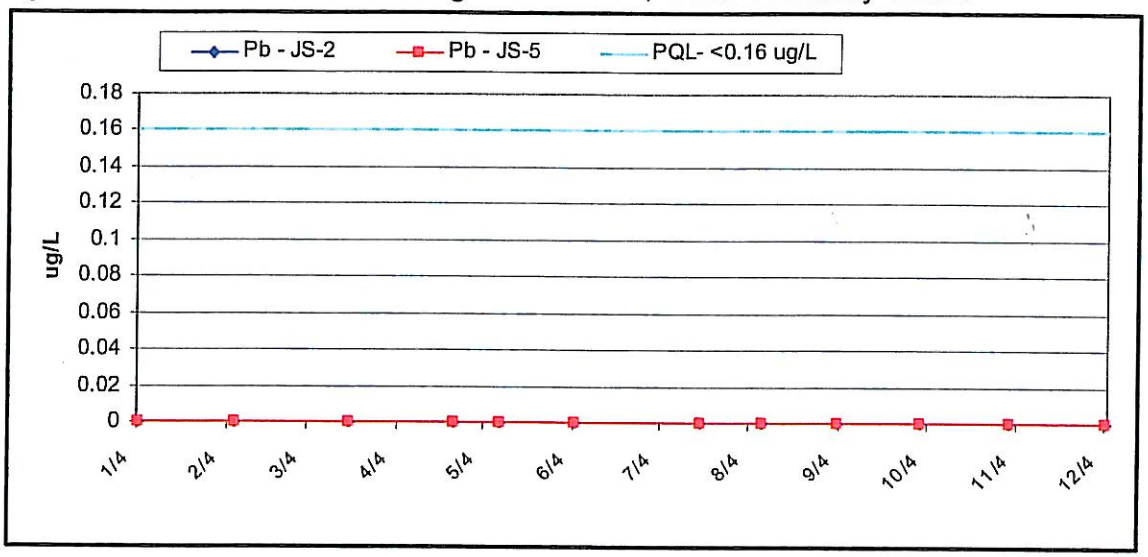
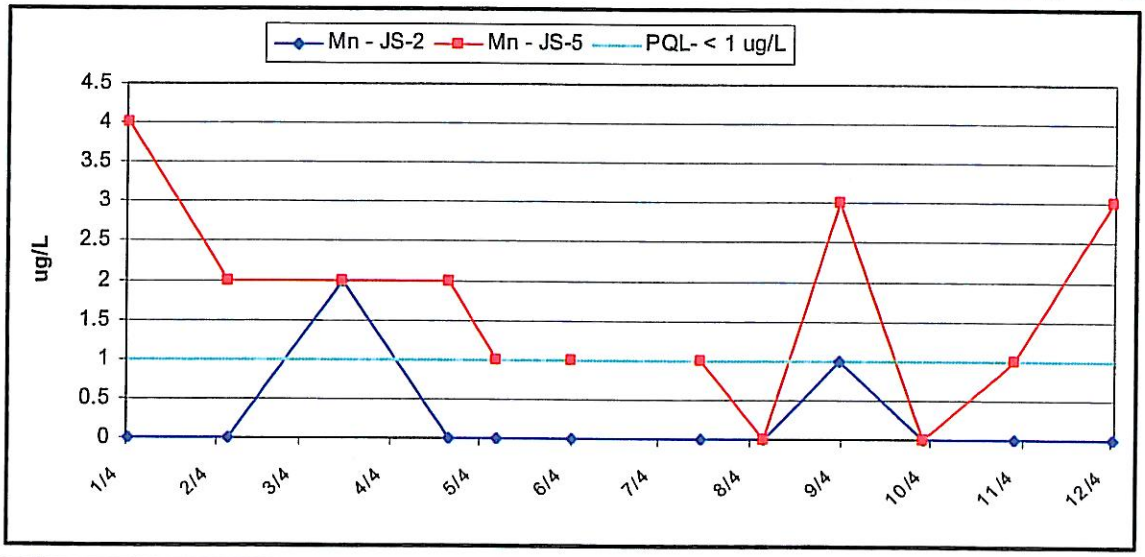


Figure 3: Johnson Creek Monitoring Results 2007, Trace Chemistry Cont'd





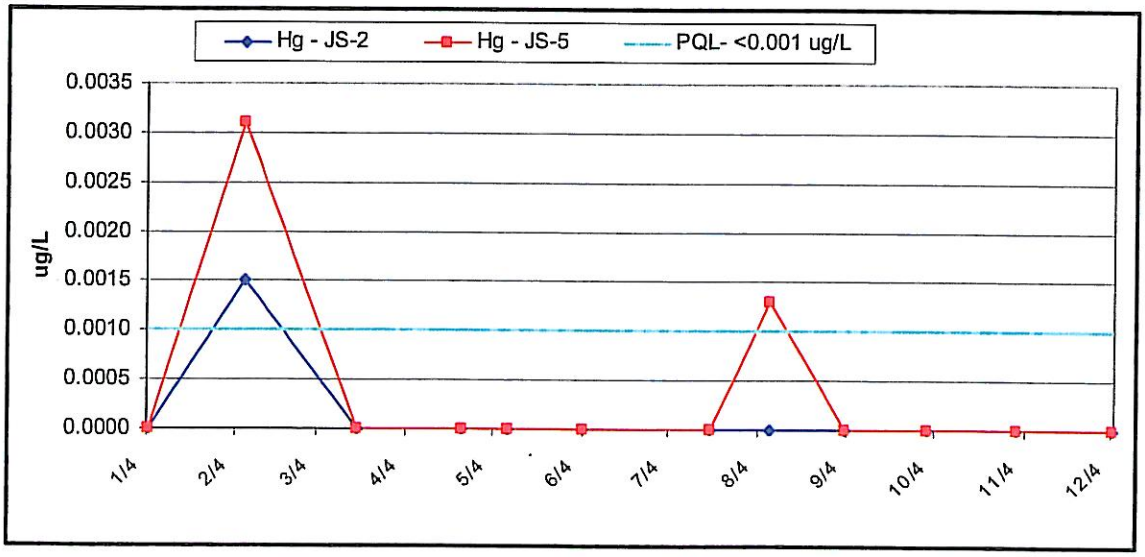
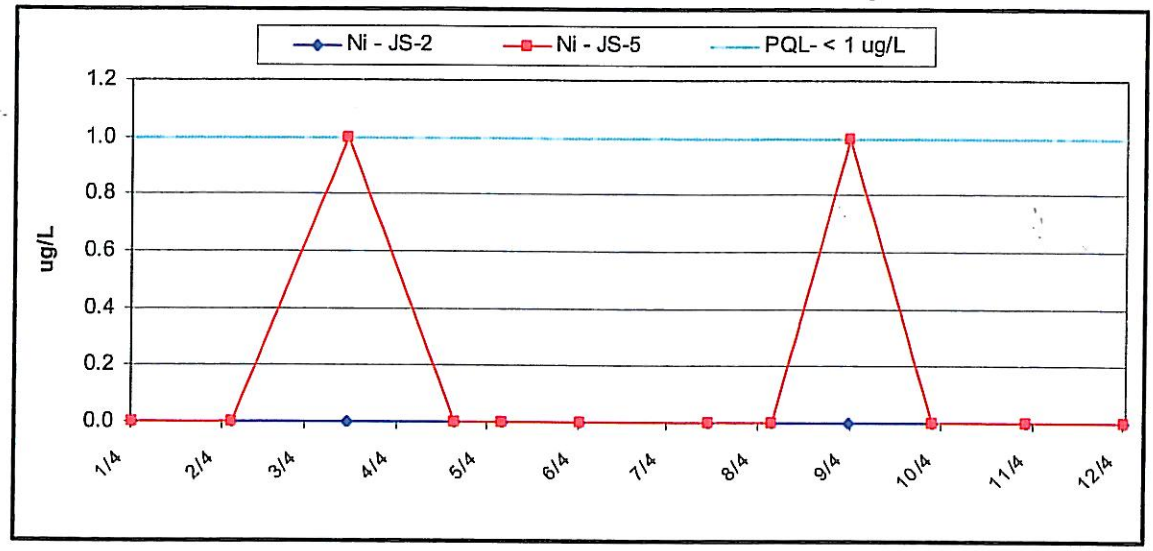
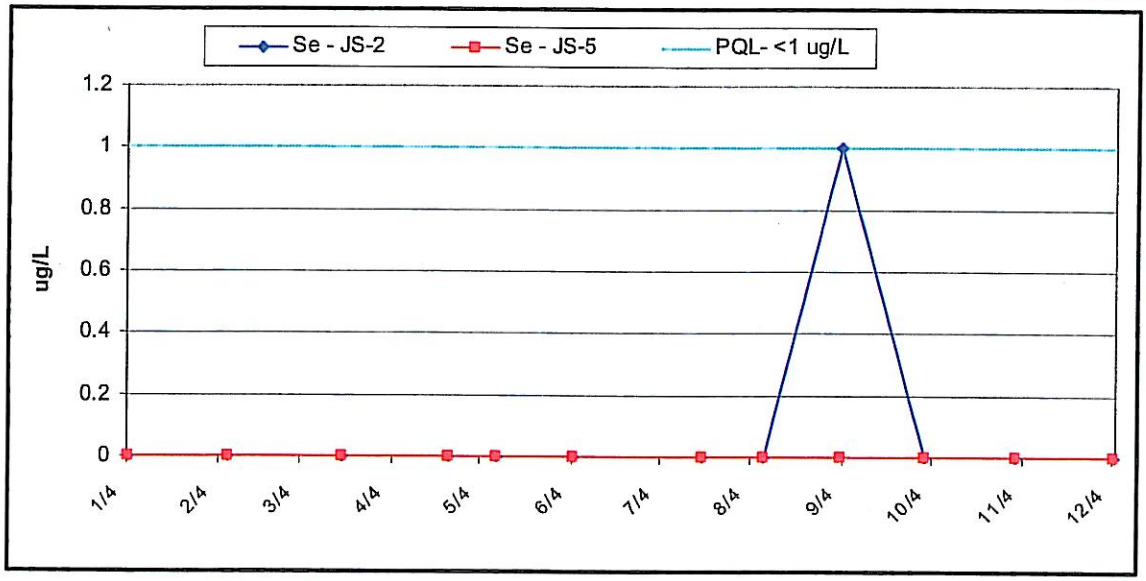


Figure 3: Johnson Creek Monitoring Results 2007, Trace Chemistry Cont'd





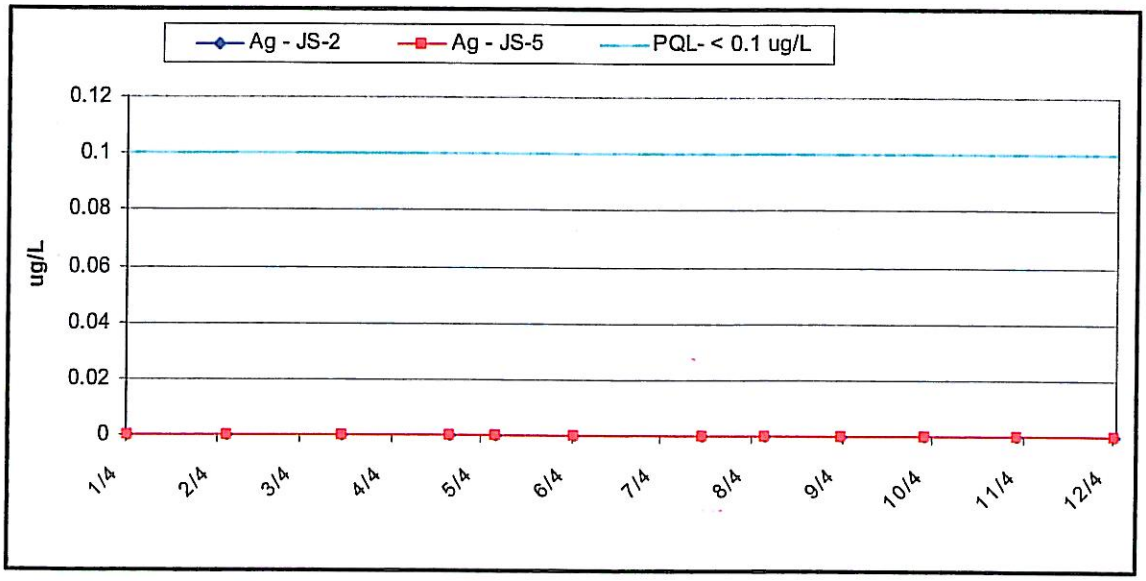


Figure 3: Johnson Creek Monitoring Results 2007, Trace Chemistry Cont'd

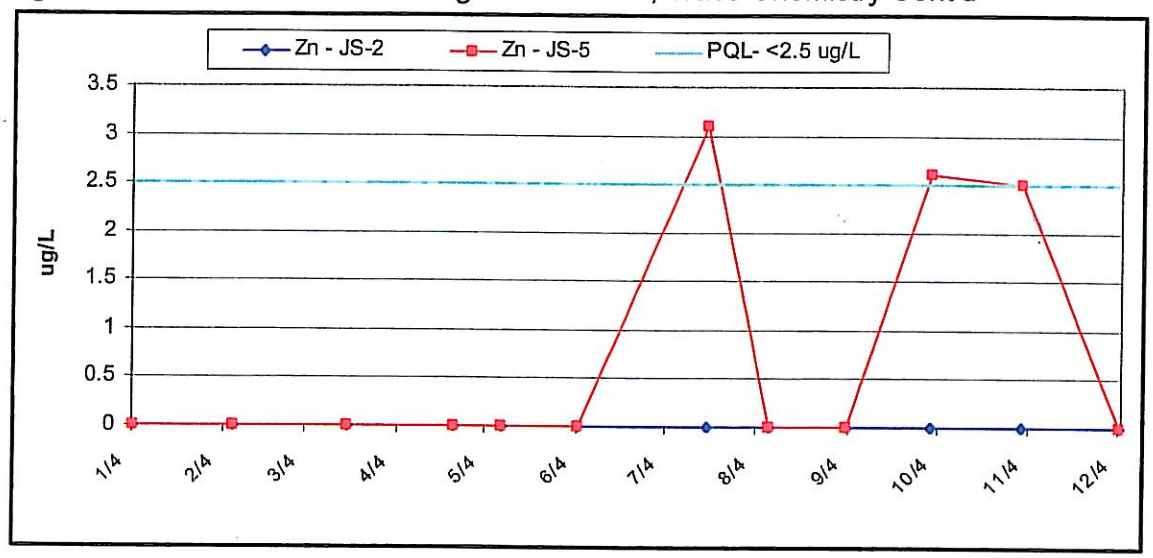
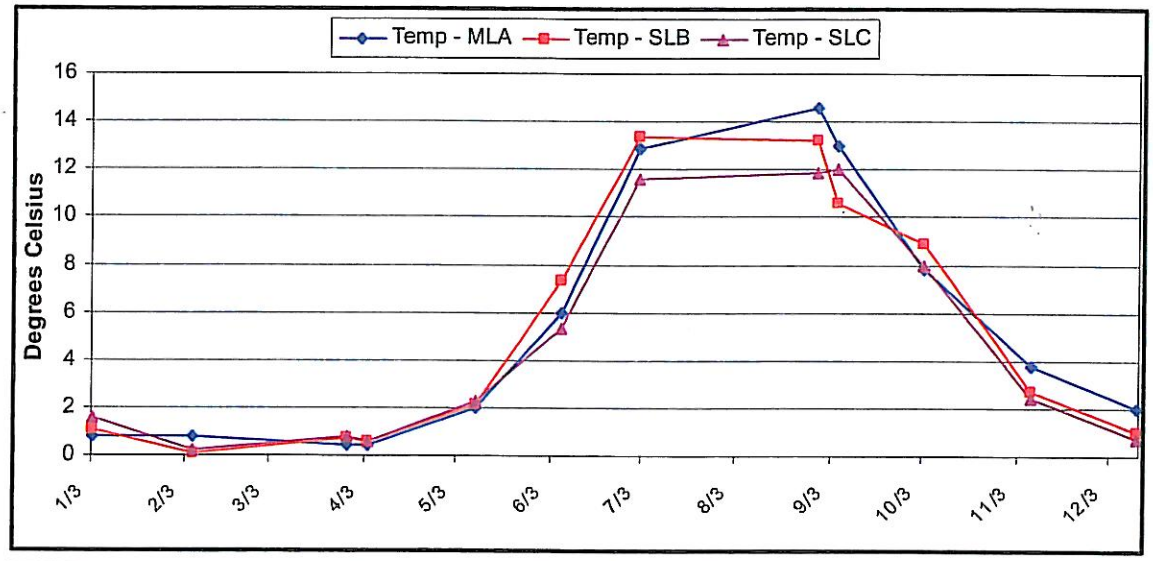
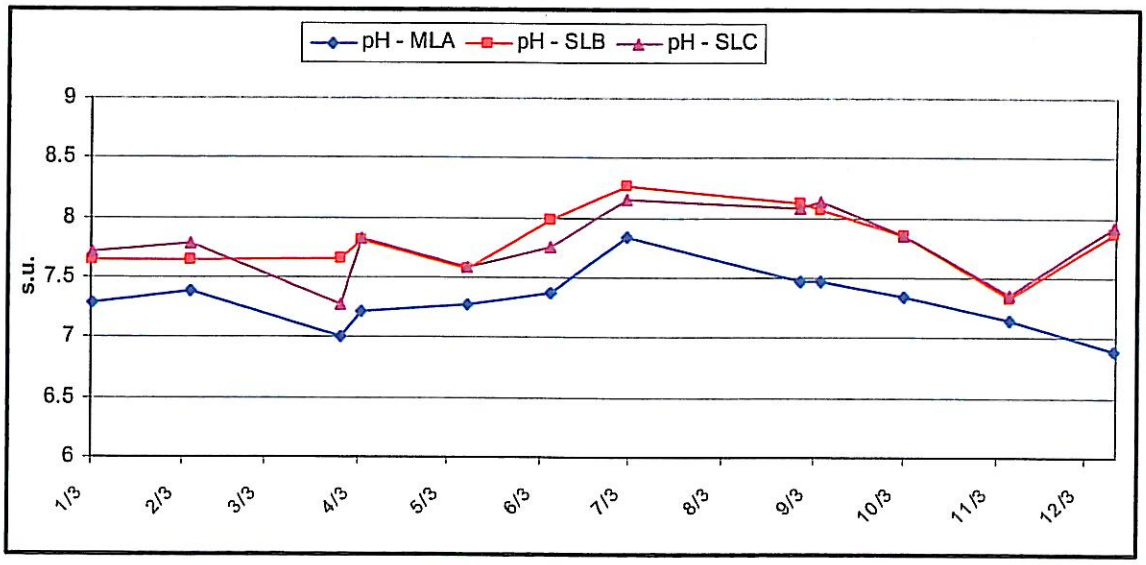


Figure 4: Slate Creek Monitoring Results 2007, Field Parameters





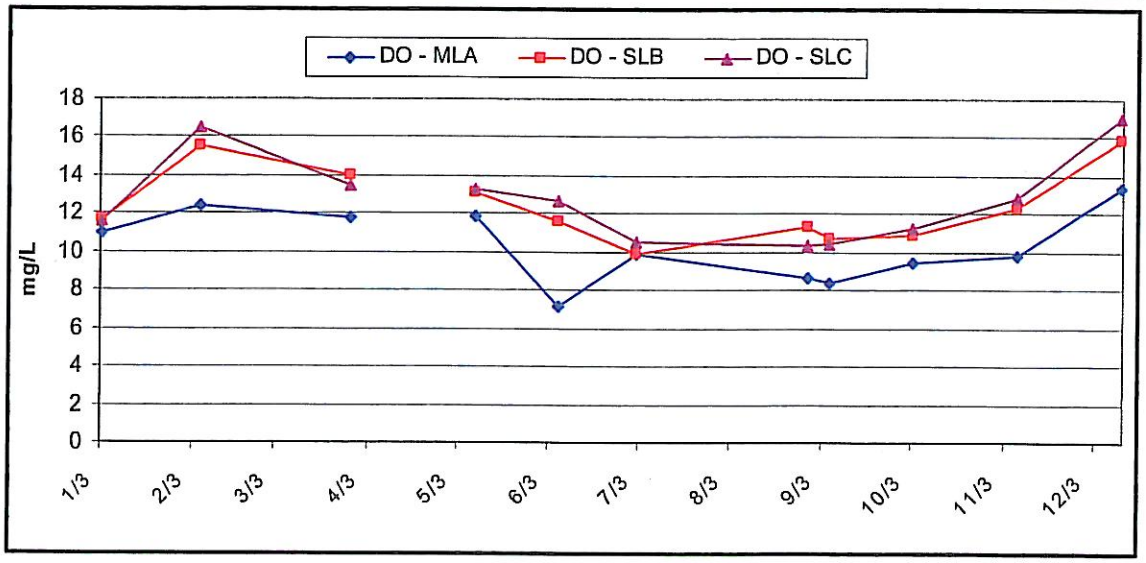


Figure 4: Slate Creek Monitoring Results 2007, Field Parameters Cont'd

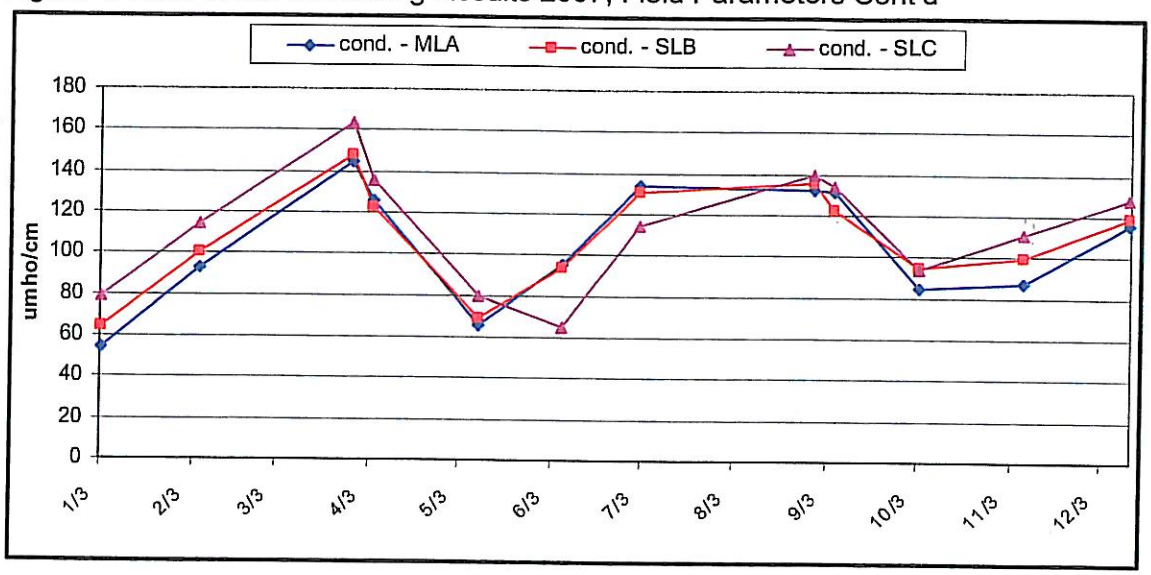
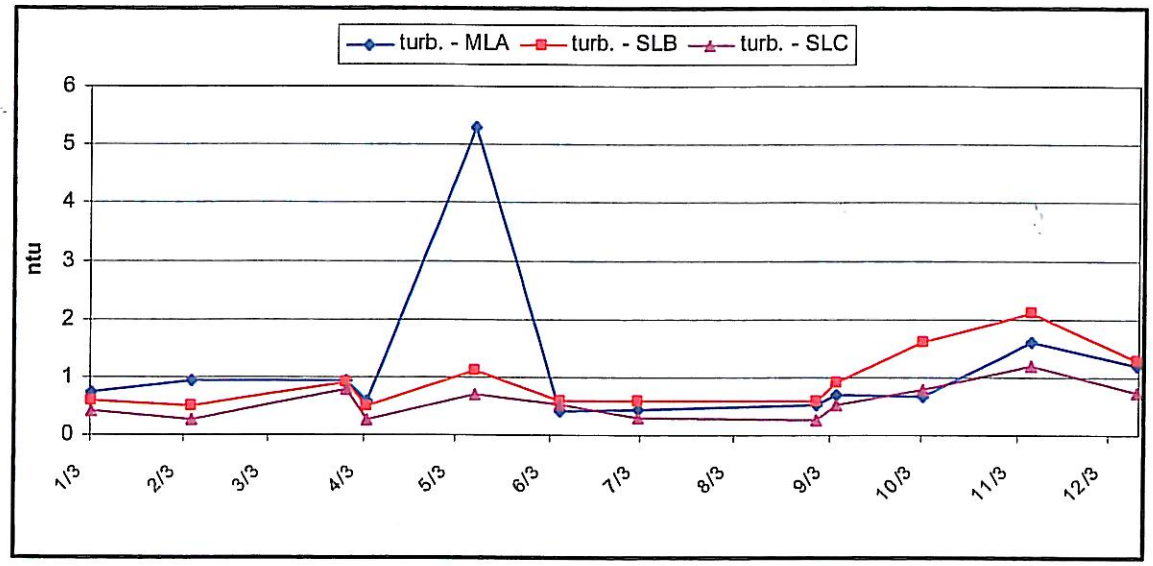
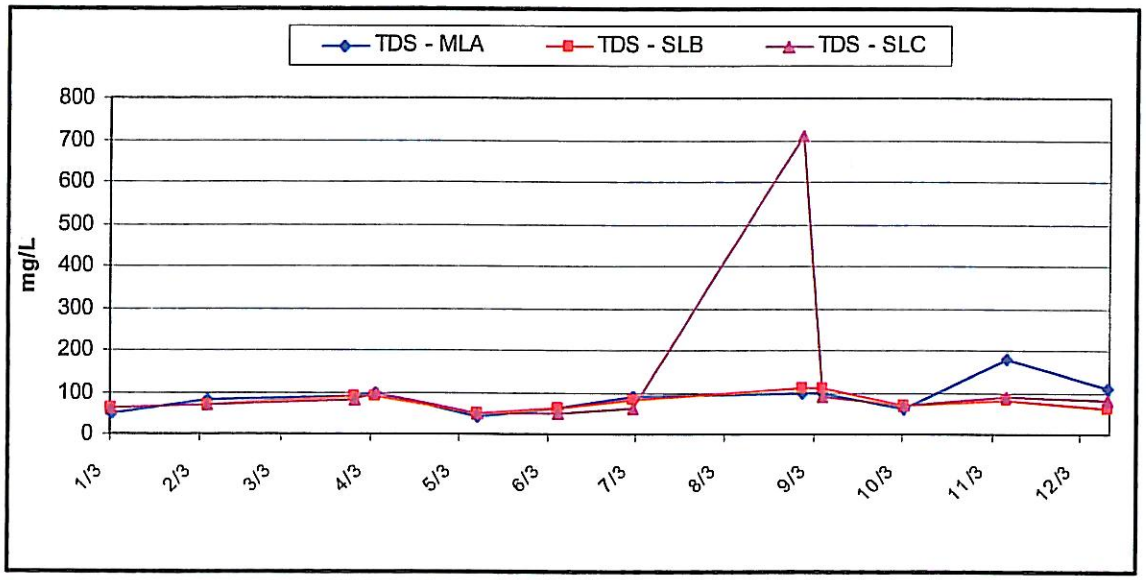


Figure 5: Slate Creek Monitoring Results 2007, Major Chemistry





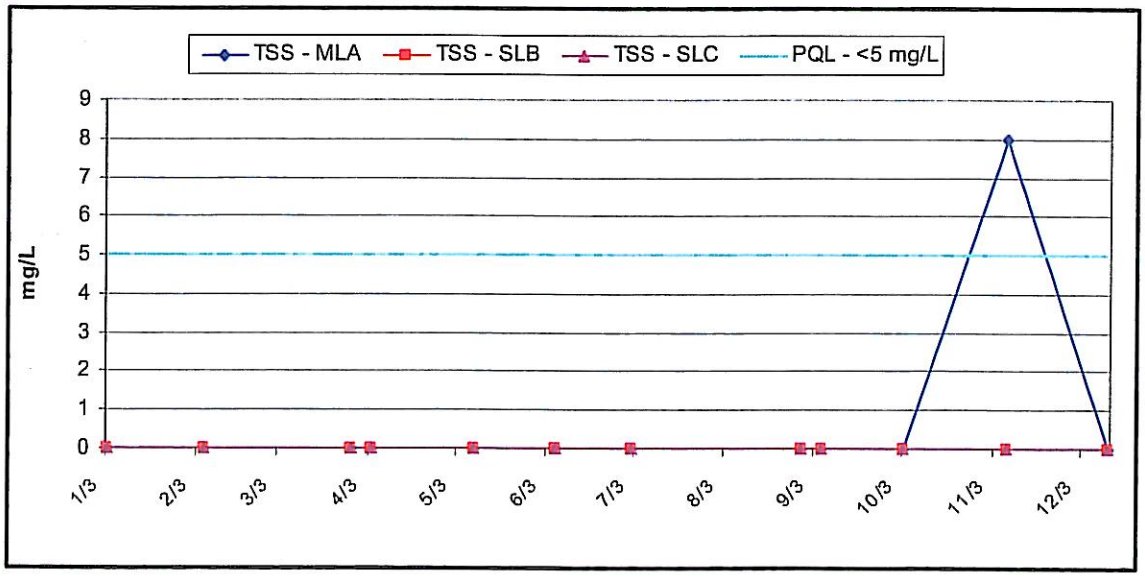
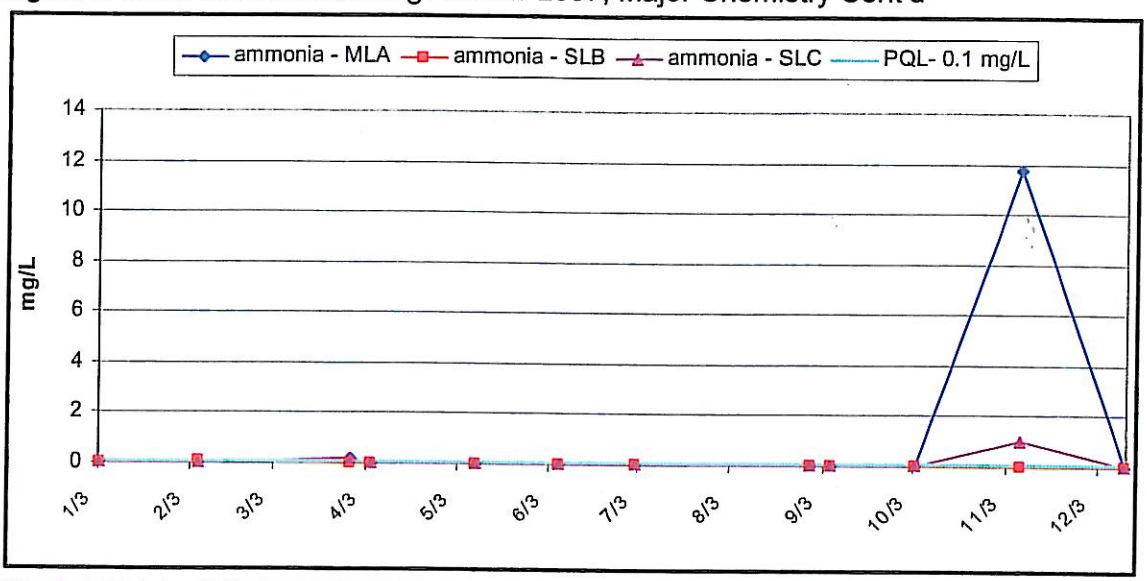
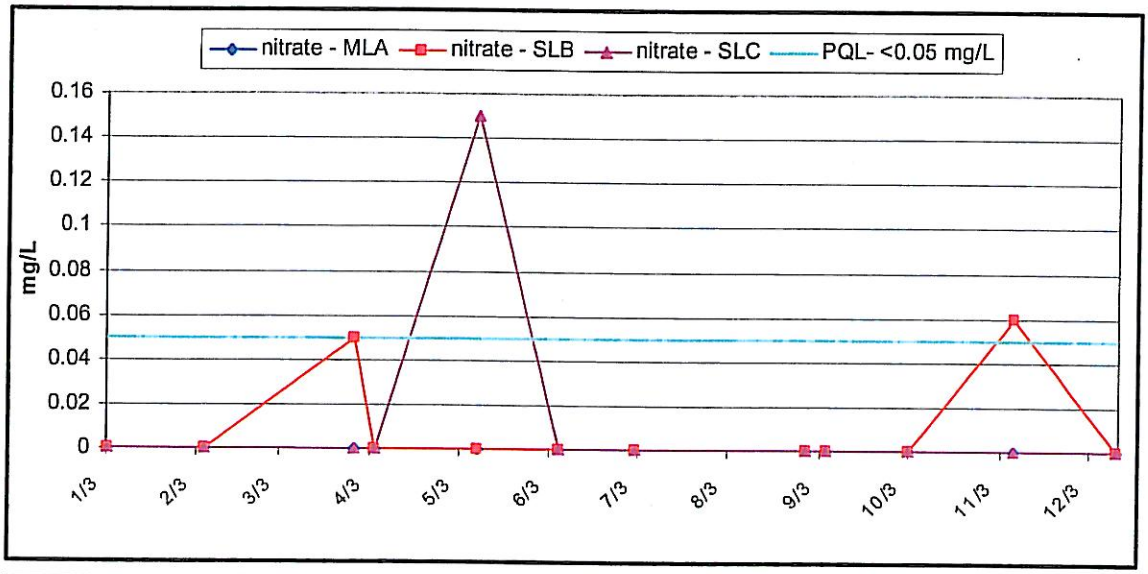


Figure 5: Slate Creek Monitoring Results 2007, Major Chemistry Cont'd





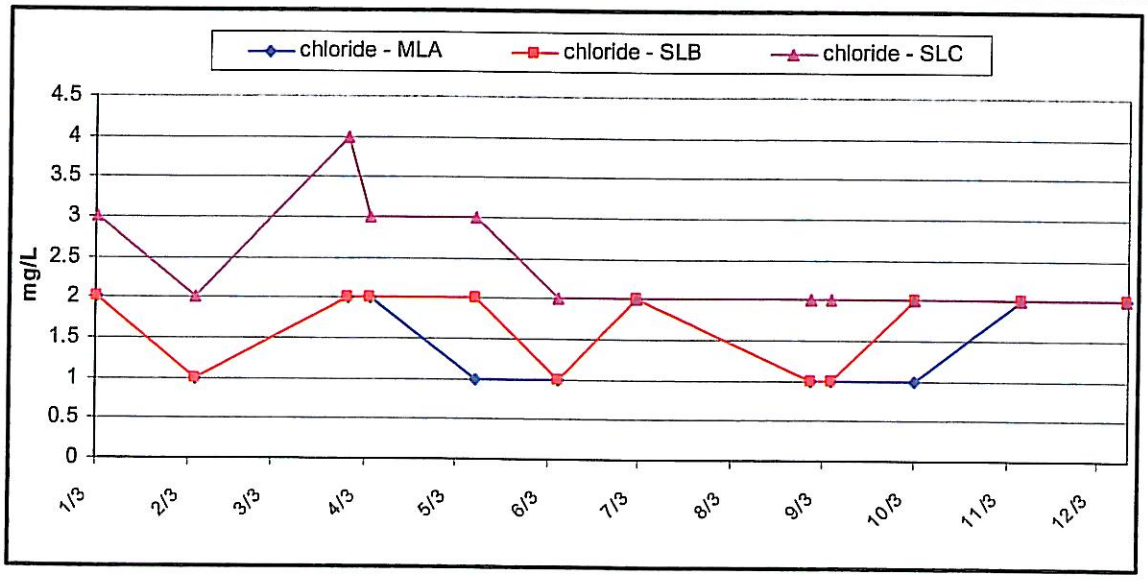
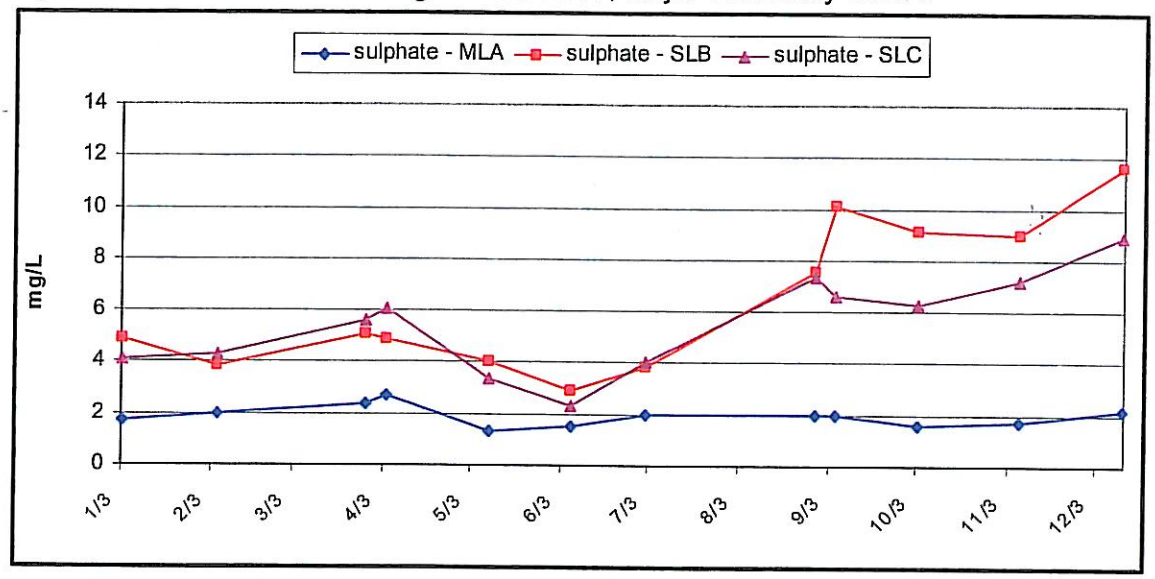
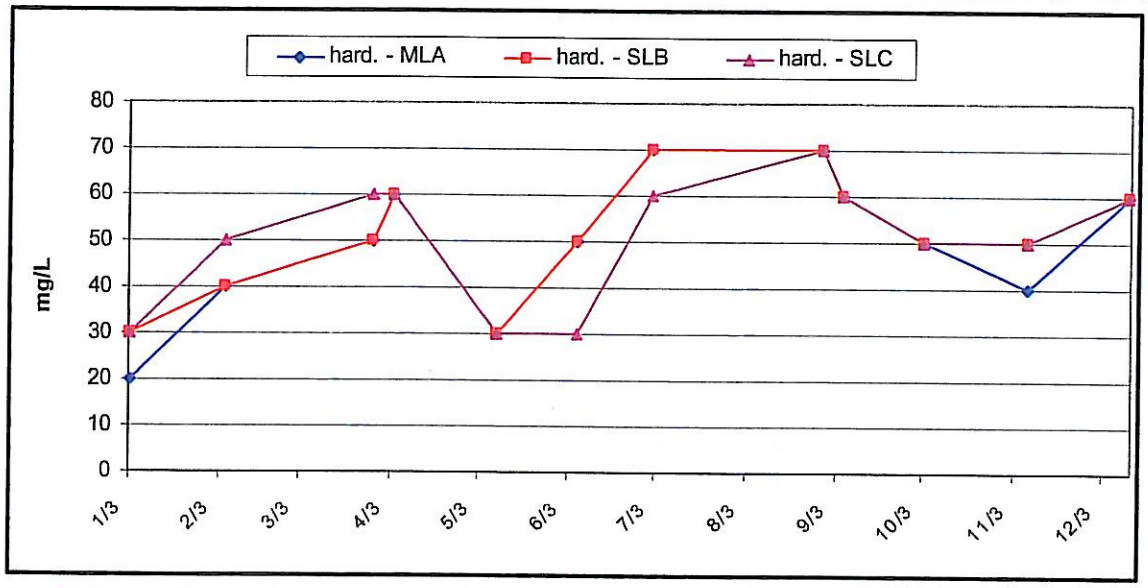


Figure 5: Slate Creek Monitoring Results 2007, Major Chemistry Cont'd





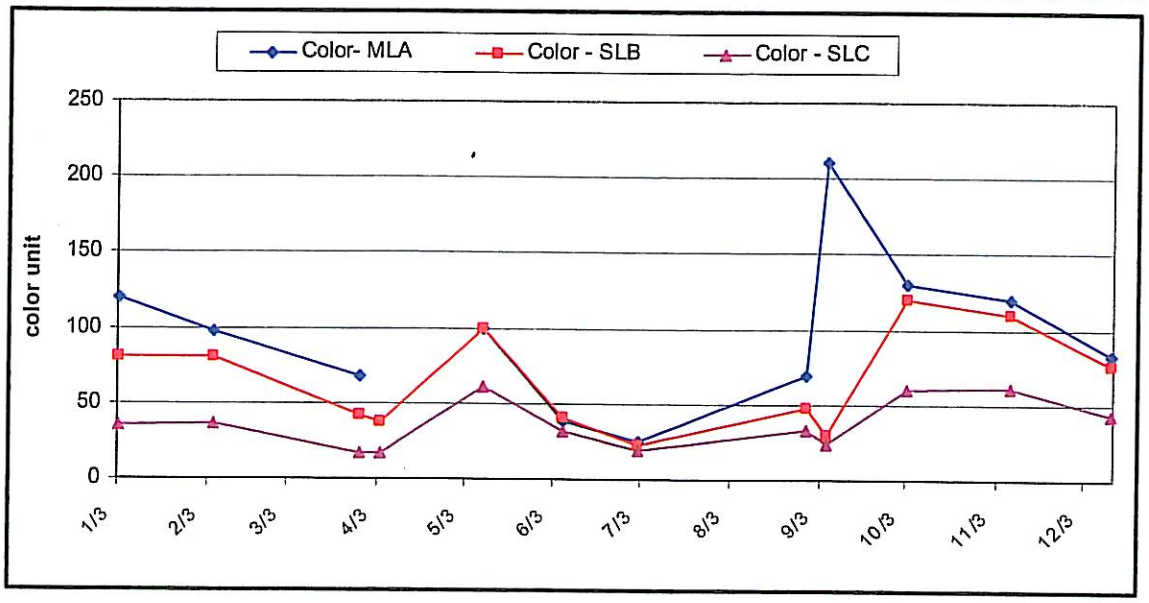
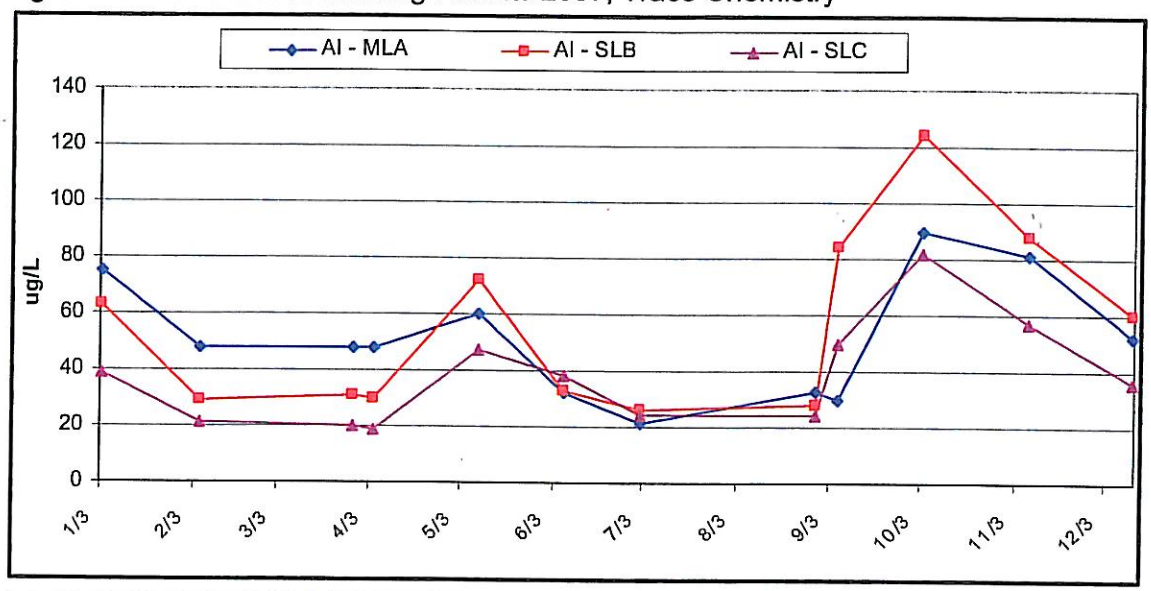
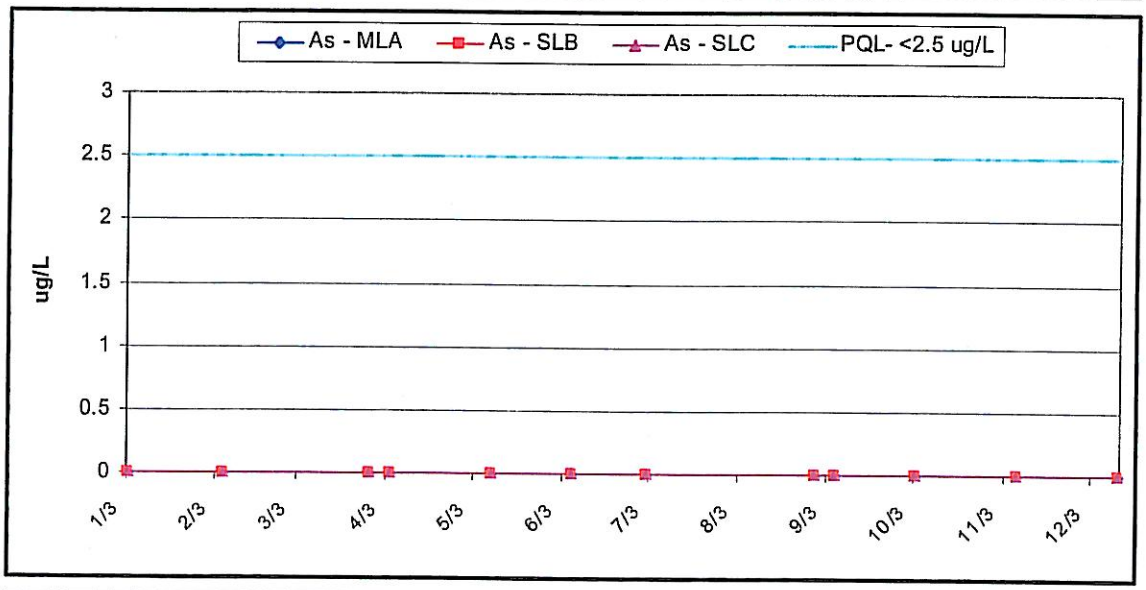


Figure 6: Slate Creek Monitoring Results 2007, Trace Chemistry





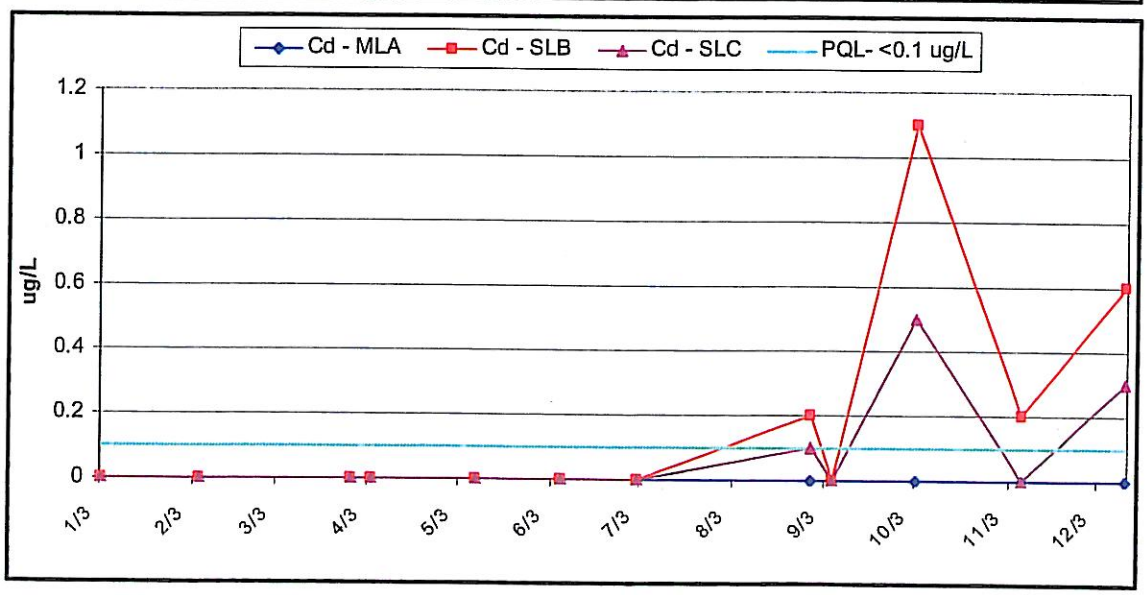
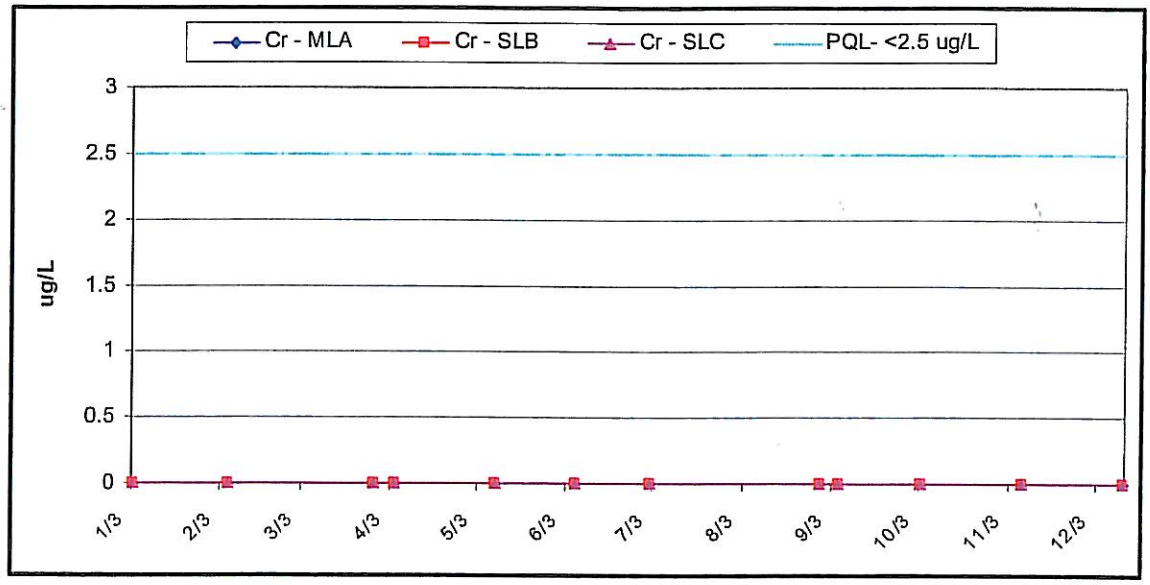
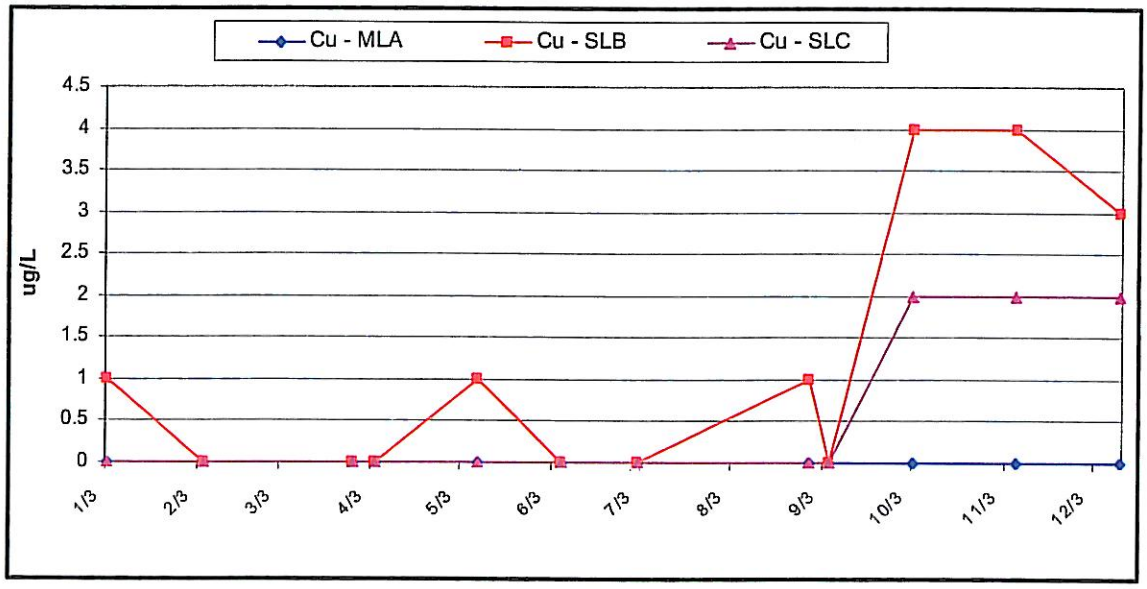


Figure 6: Slate Creek Monitoring Results 2007, Trace Chemistry Cont'd





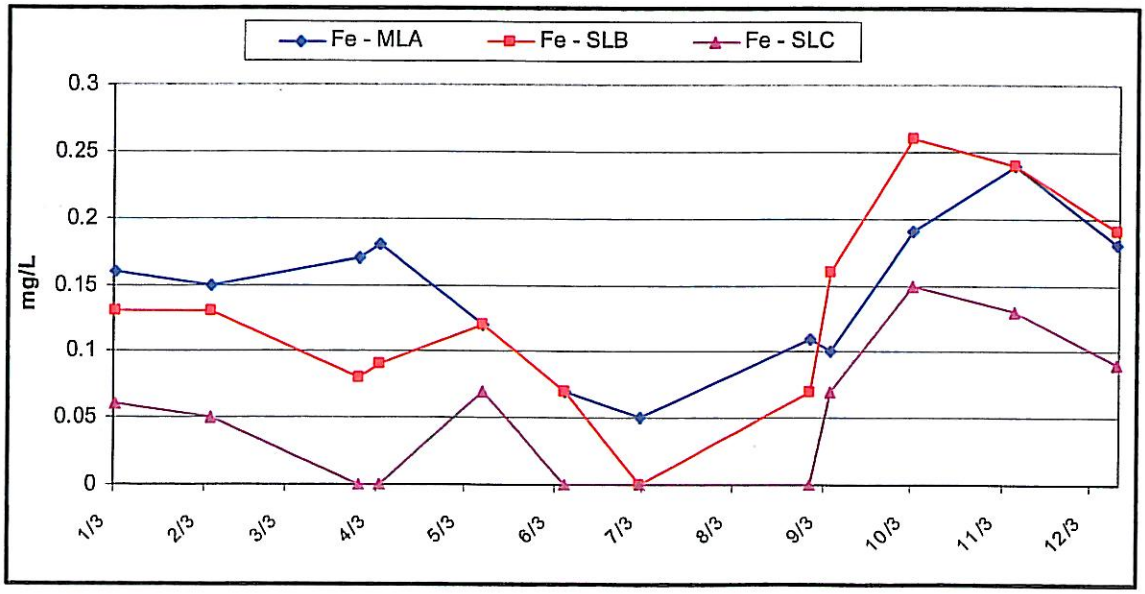
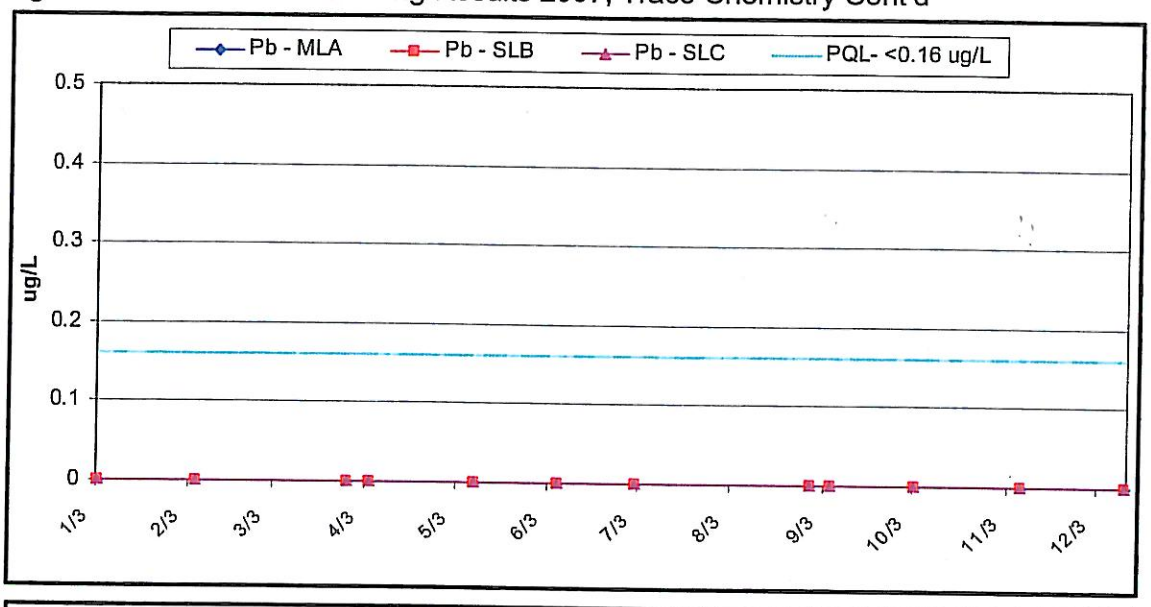
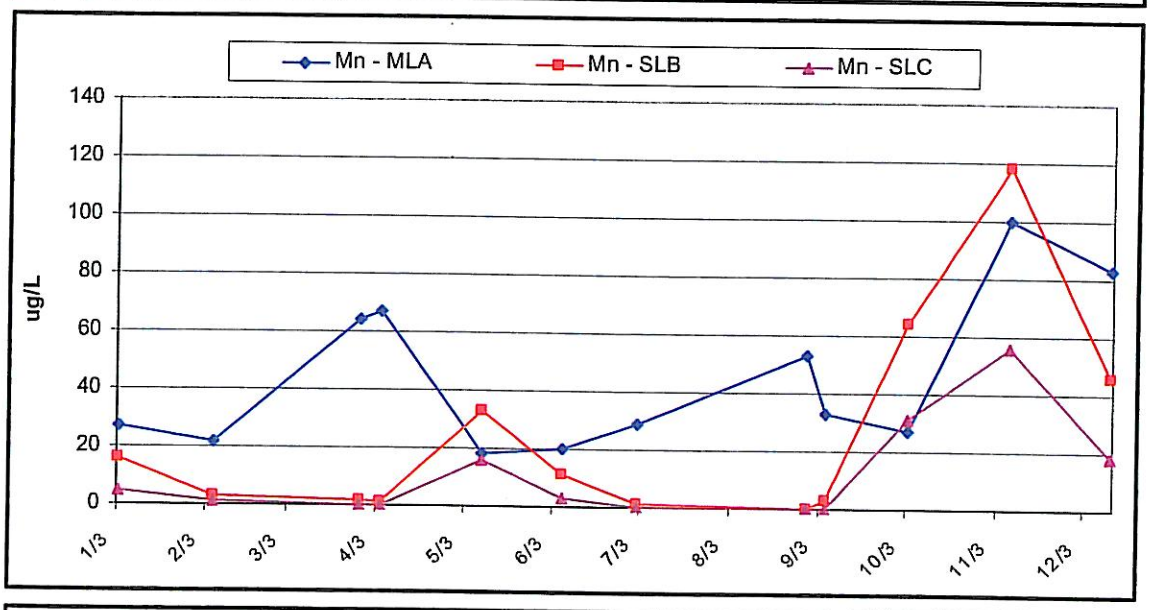


Figure 6: Slate Creek Monitoring Results 2007, Trace Chemistry Cont'd





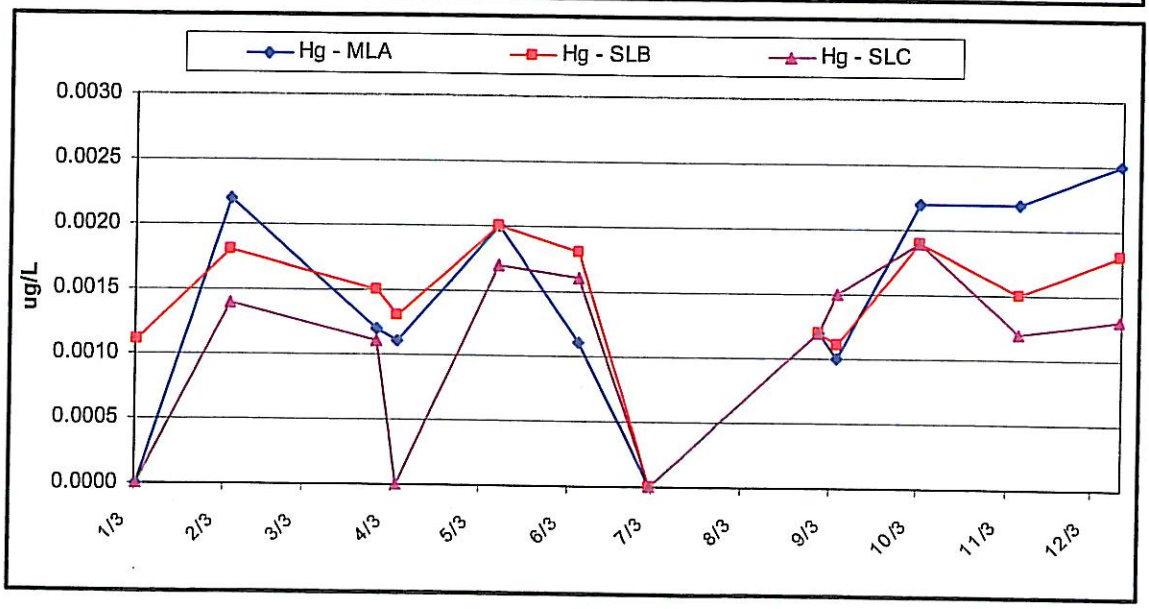
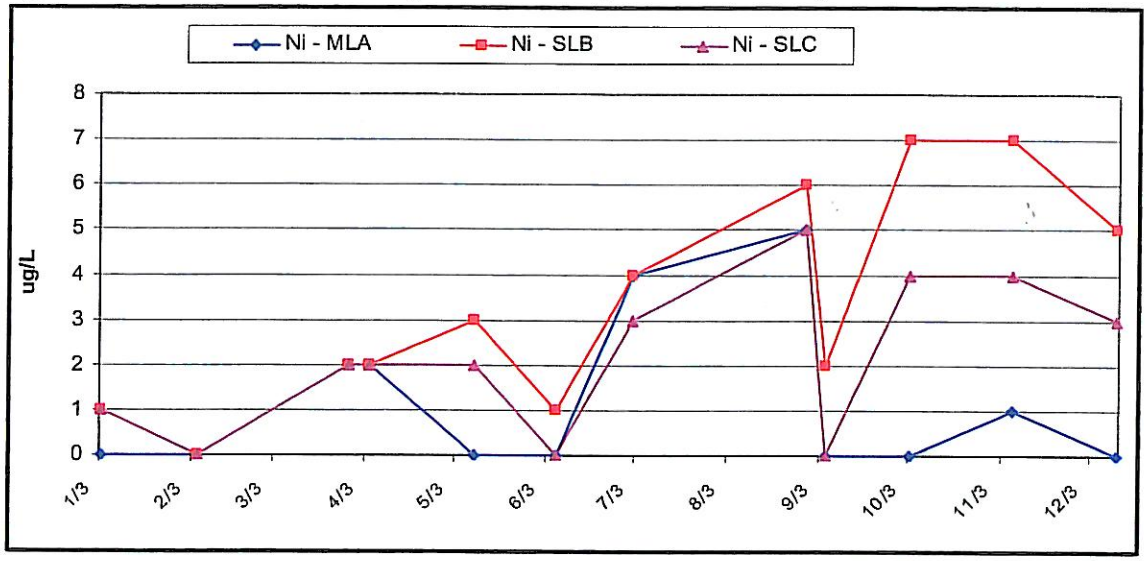
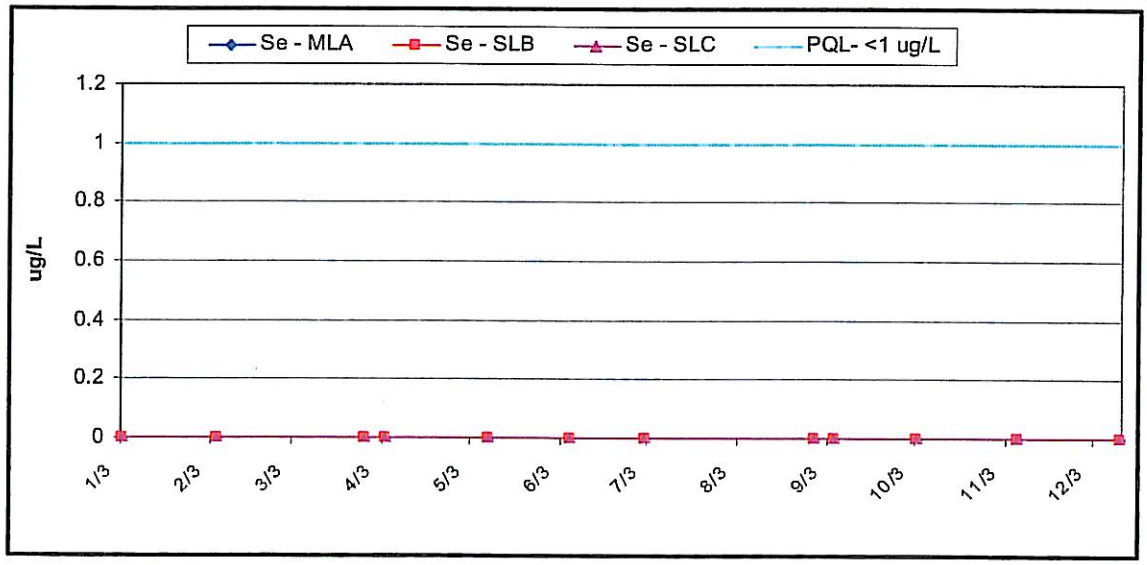


Figure 6: Slate Creek Monitoring Results 2007, Trace Chemistry Cont'd





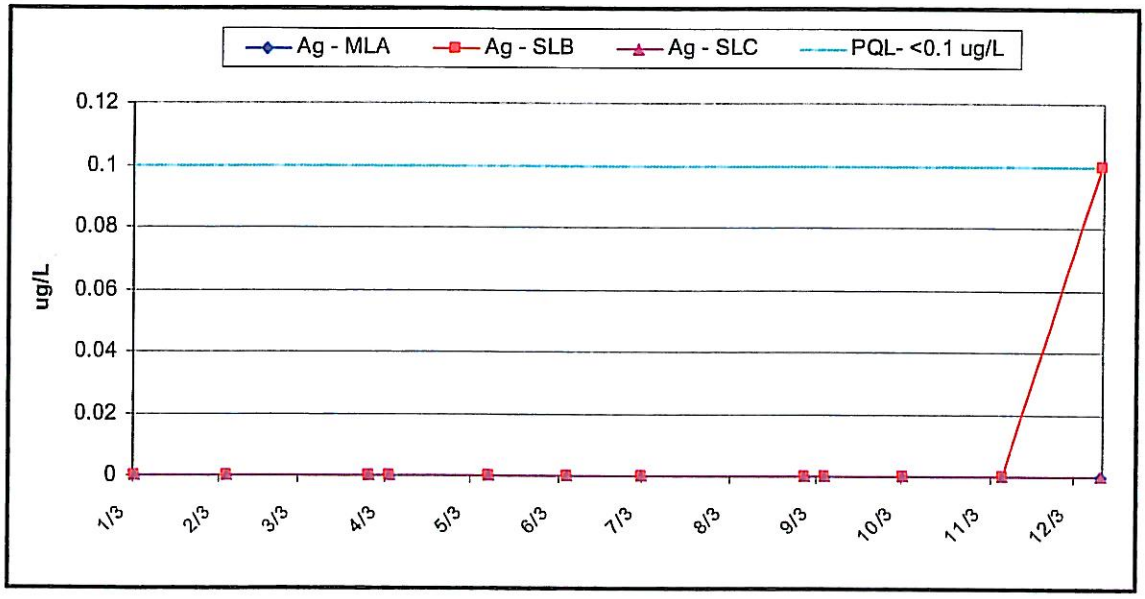


Figure 6: Slate Creek Monitoring Results 2007, Trace Chemistry Cont'd

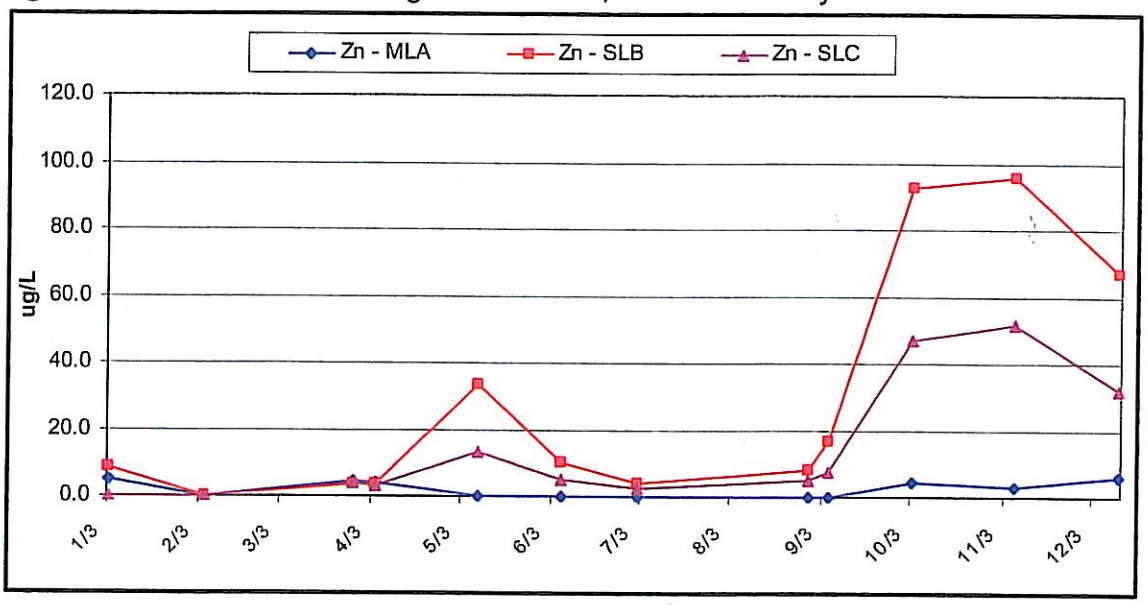


Figure 7: Sherman Creek Monitoring Results 2007, Field Parameters

NOTE: The vertical line on each graph marks the change in Outfall location (January 18, 2007)

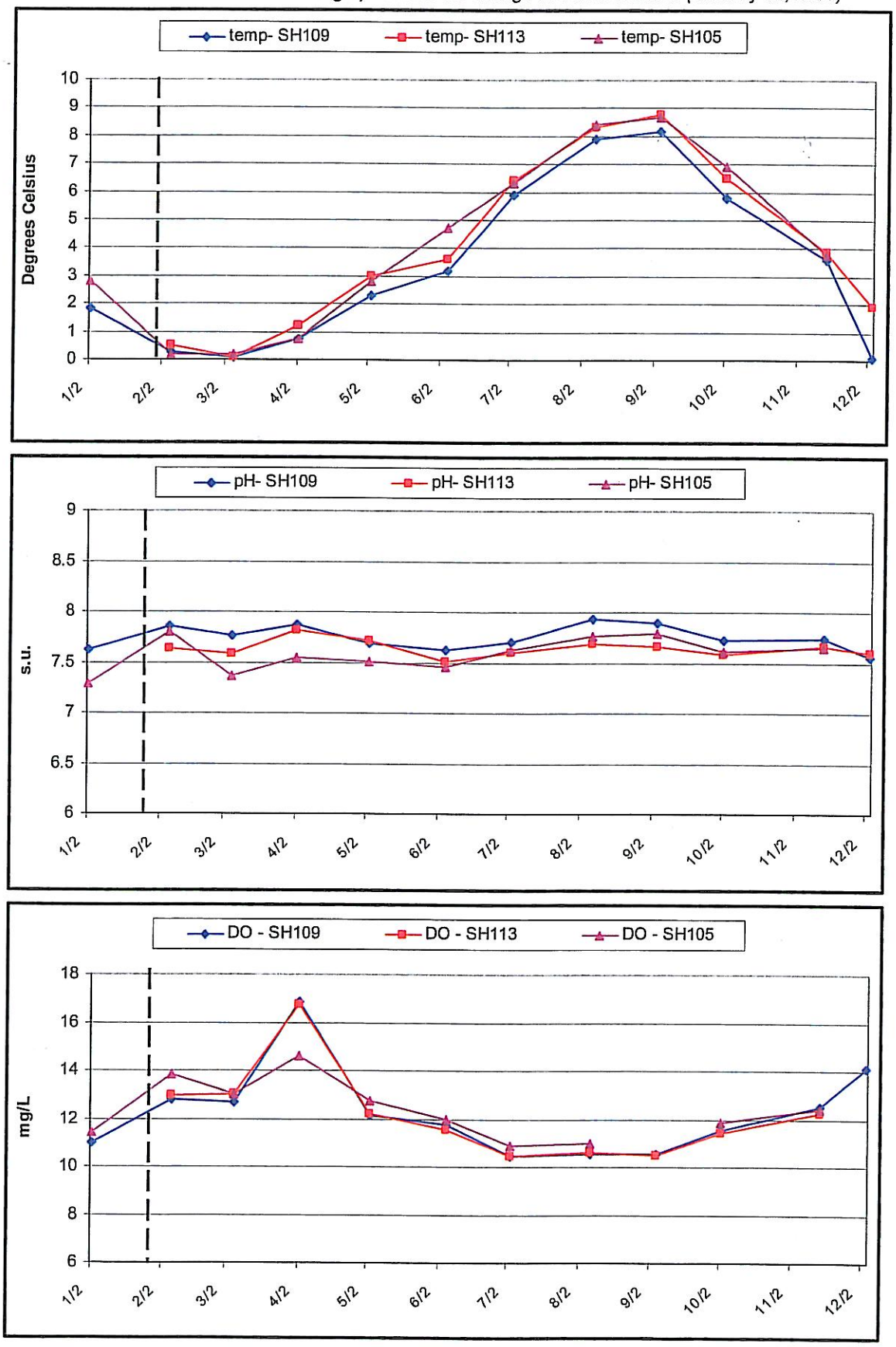


Figure 7: Sherman Creek Monitoring Results 2007, Field Parameters

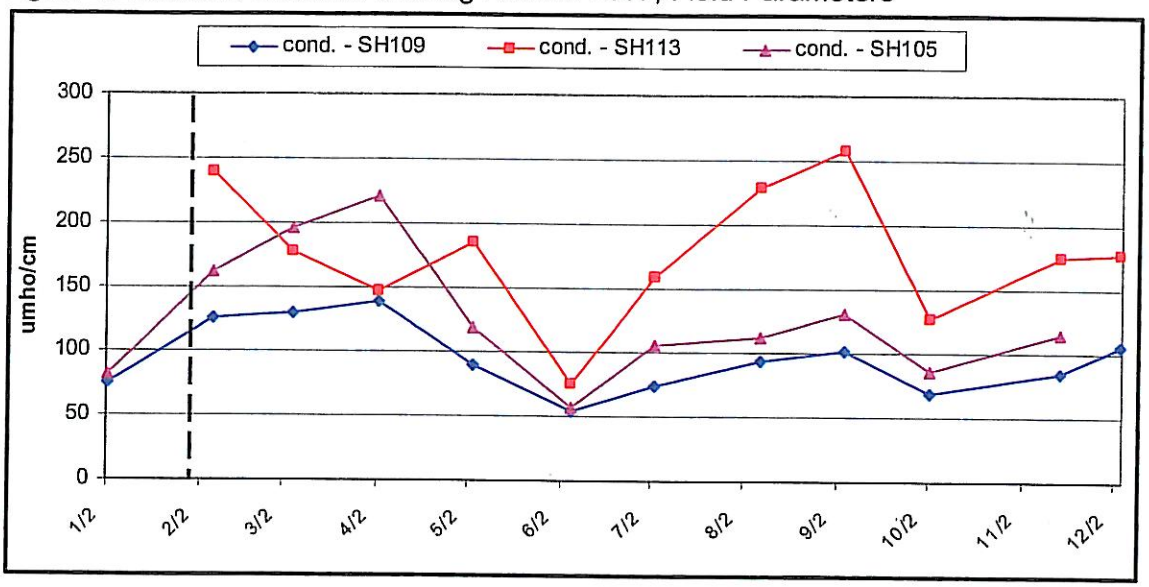
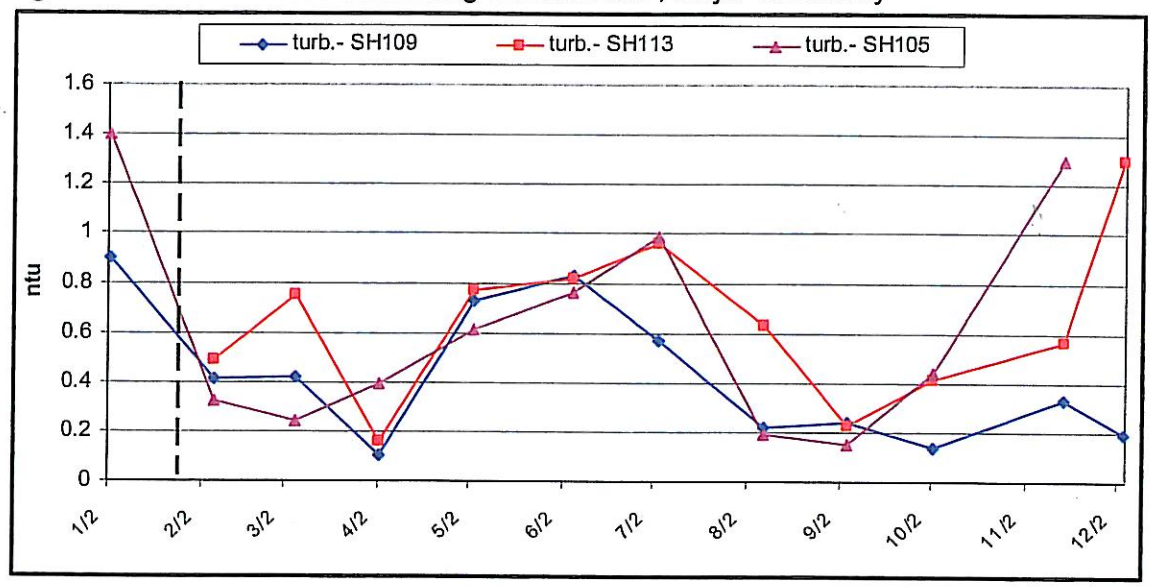
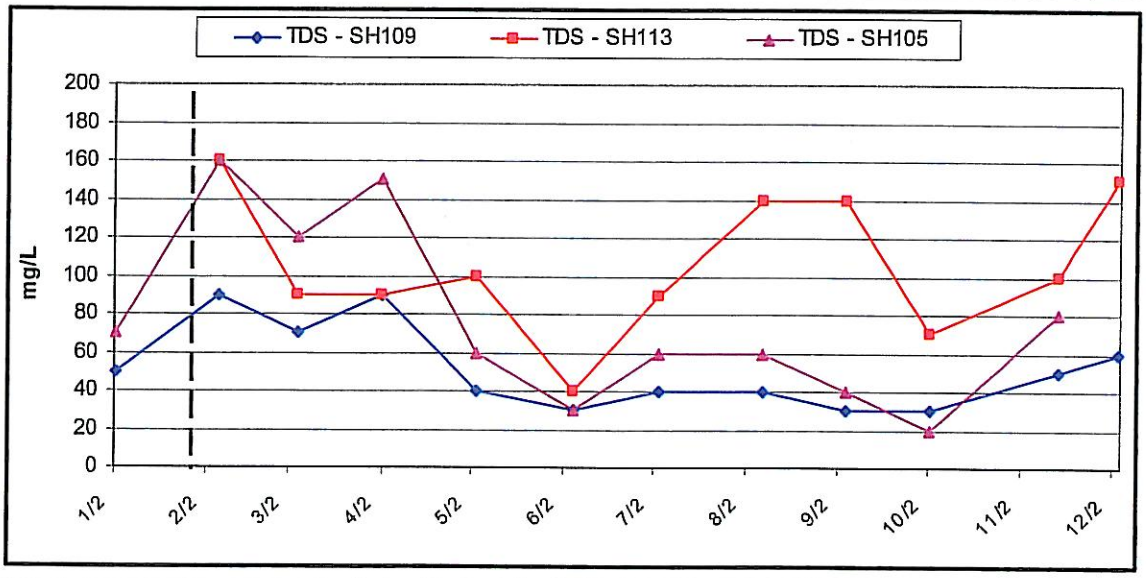


Figure 8: Sherman Creek Monitoring Results 2007, Major Chemistry





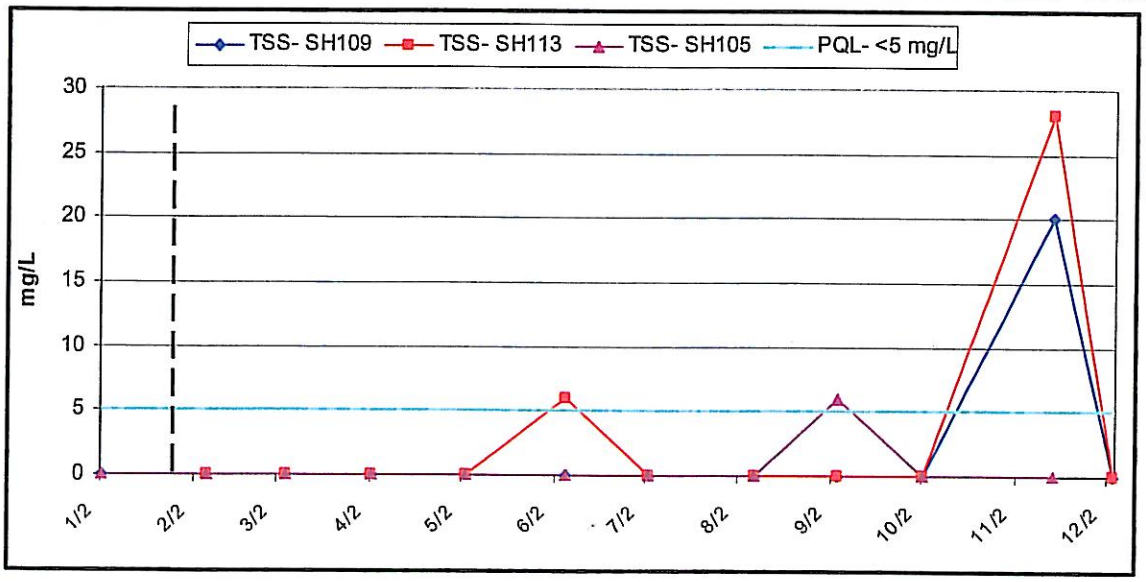


Figure 8: Sherman Creek Monitoring Results 2007, Major Chemistry Cont'd

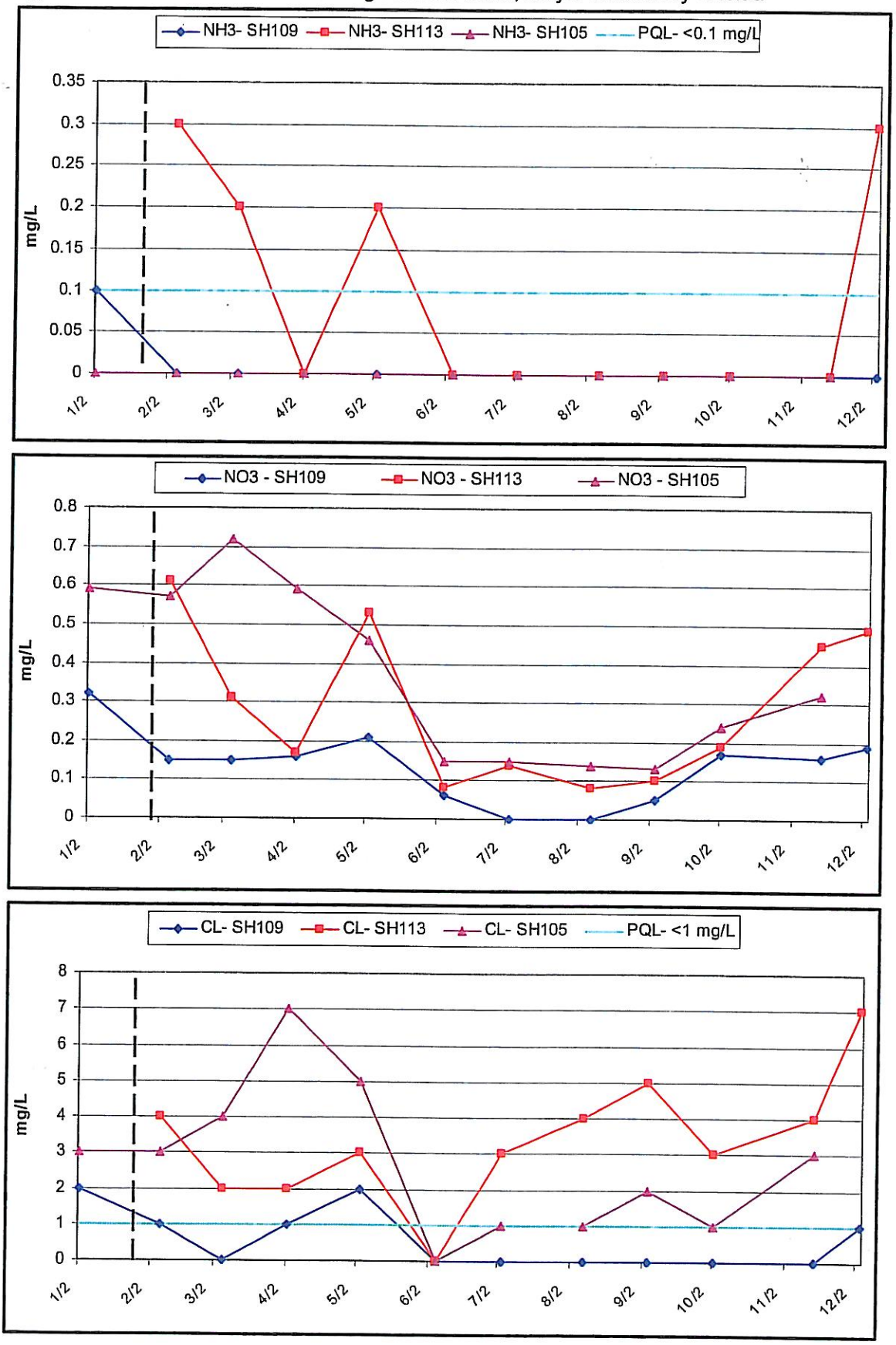
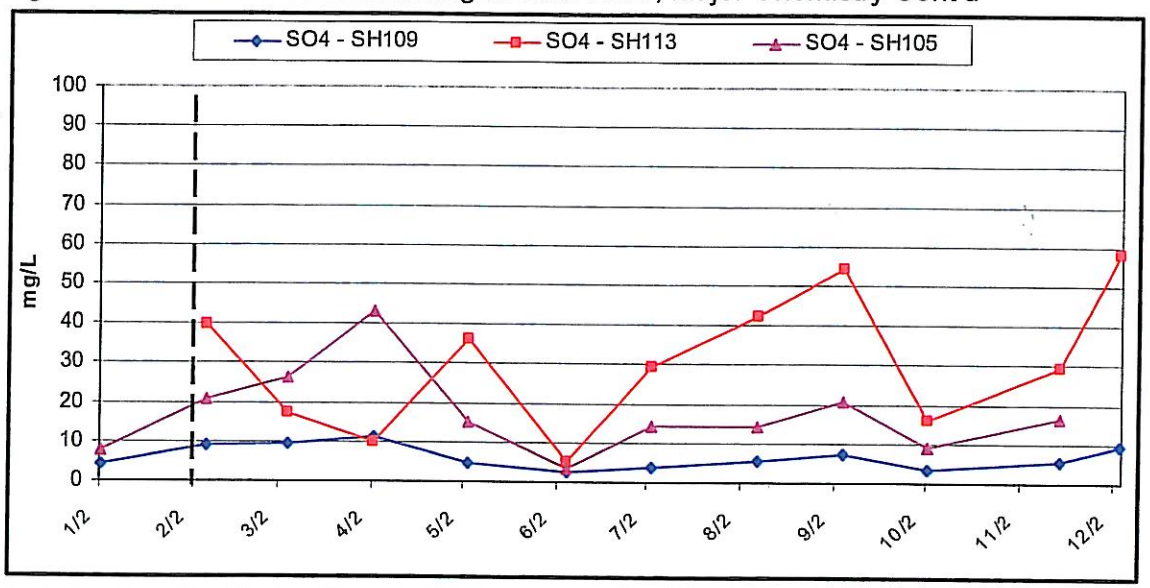
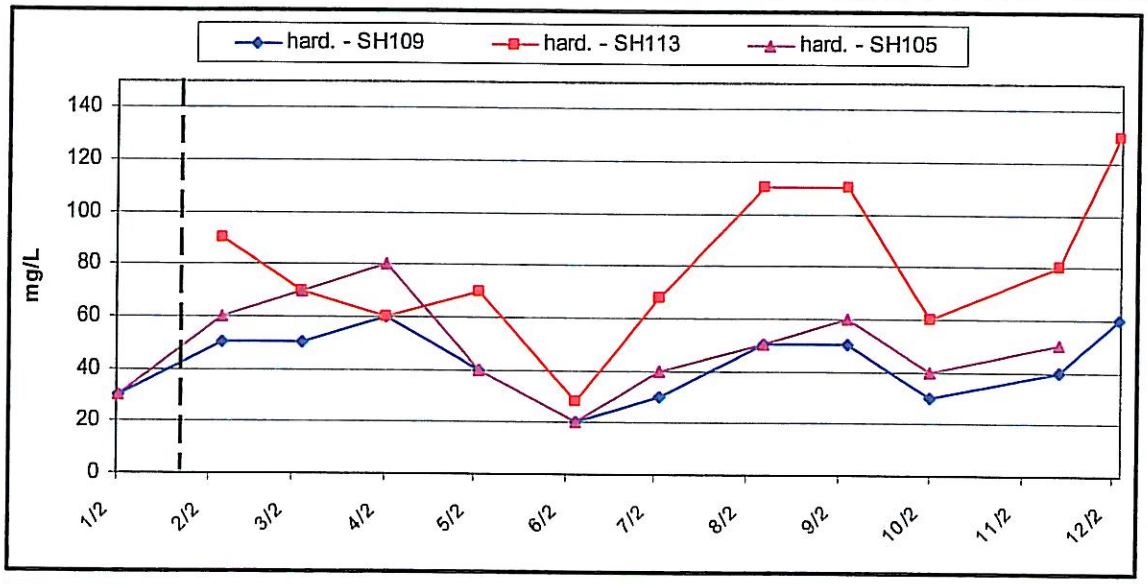


Figure 8: Sherman Creek Monitoring Results 2007, Major Chemistry Cont'd





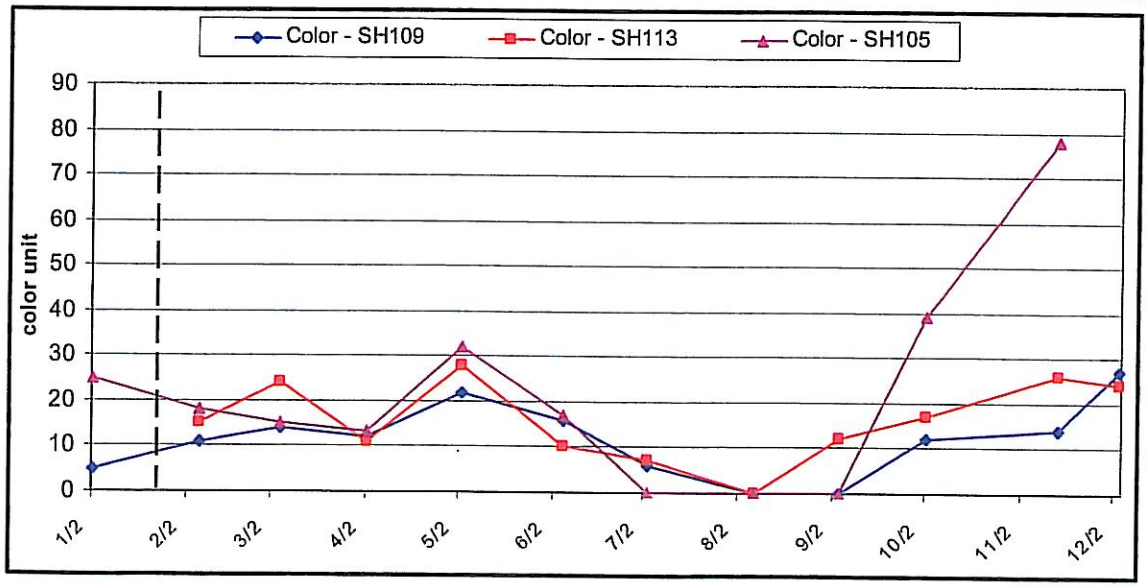


Figure 9: Sherman Creek Monitoring Results 2007, Trace Chemistry

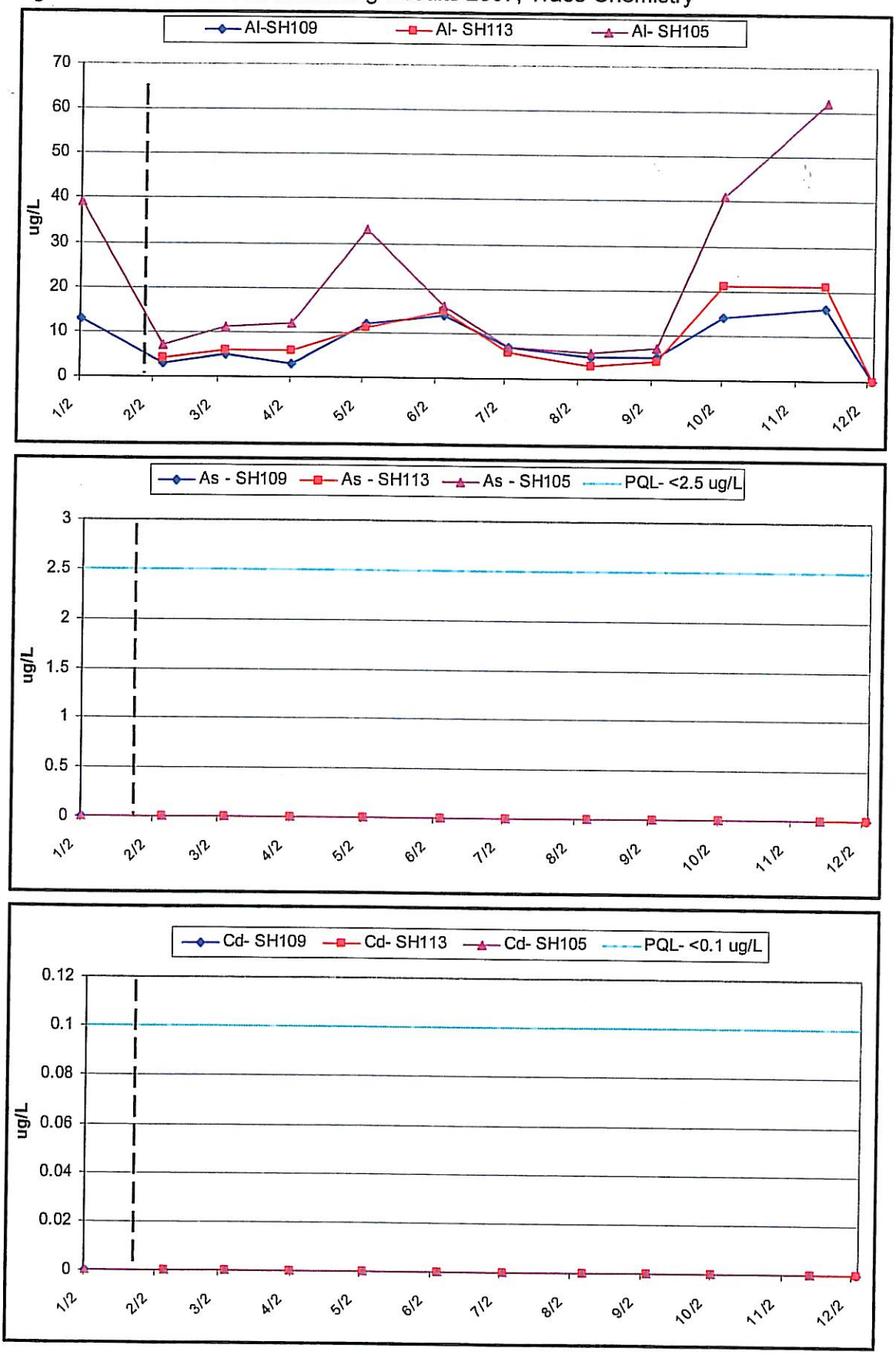
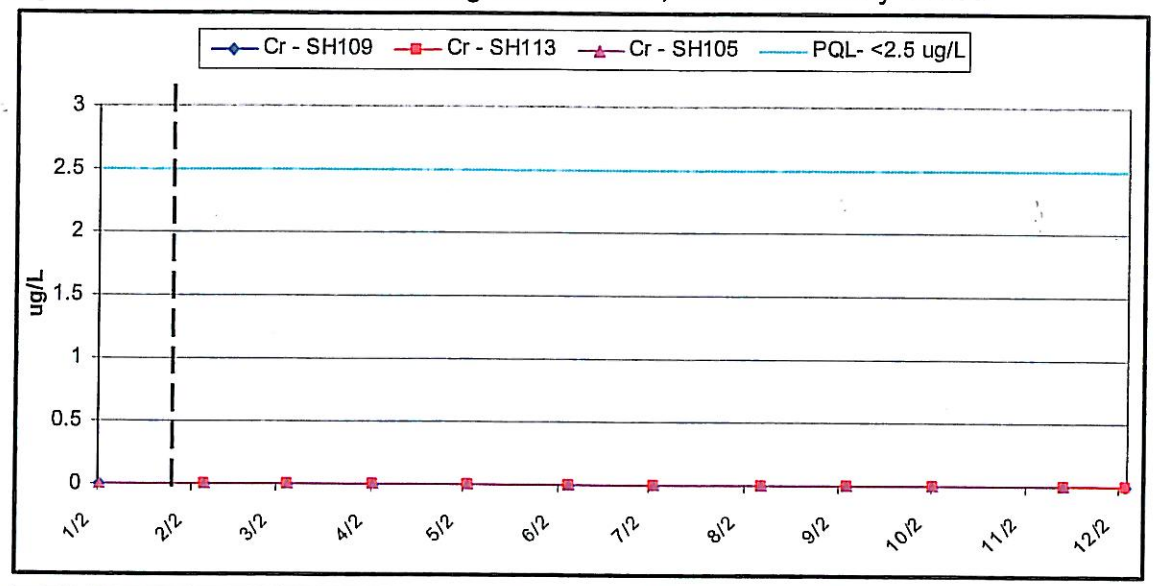
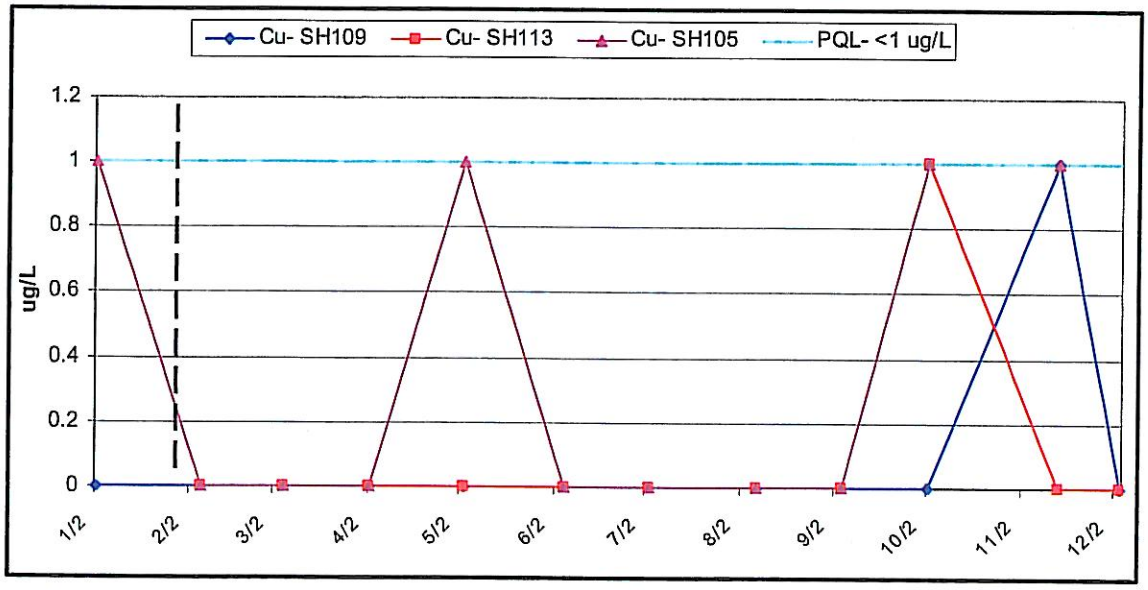


Figure 9: Sherman Creek Monitoring Results 2007, Trace Chemistry Cont'd





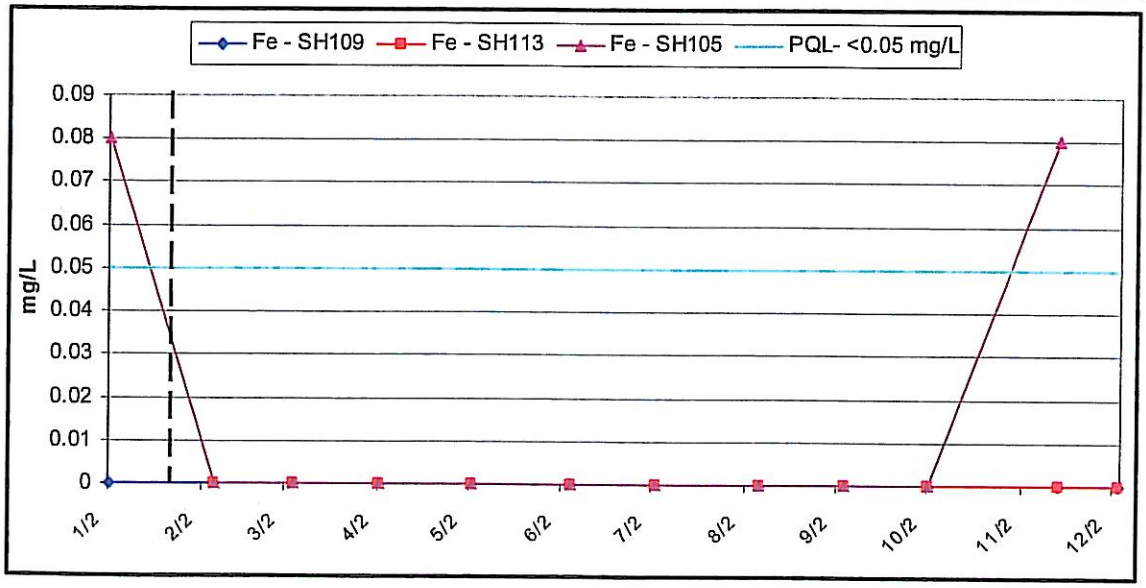
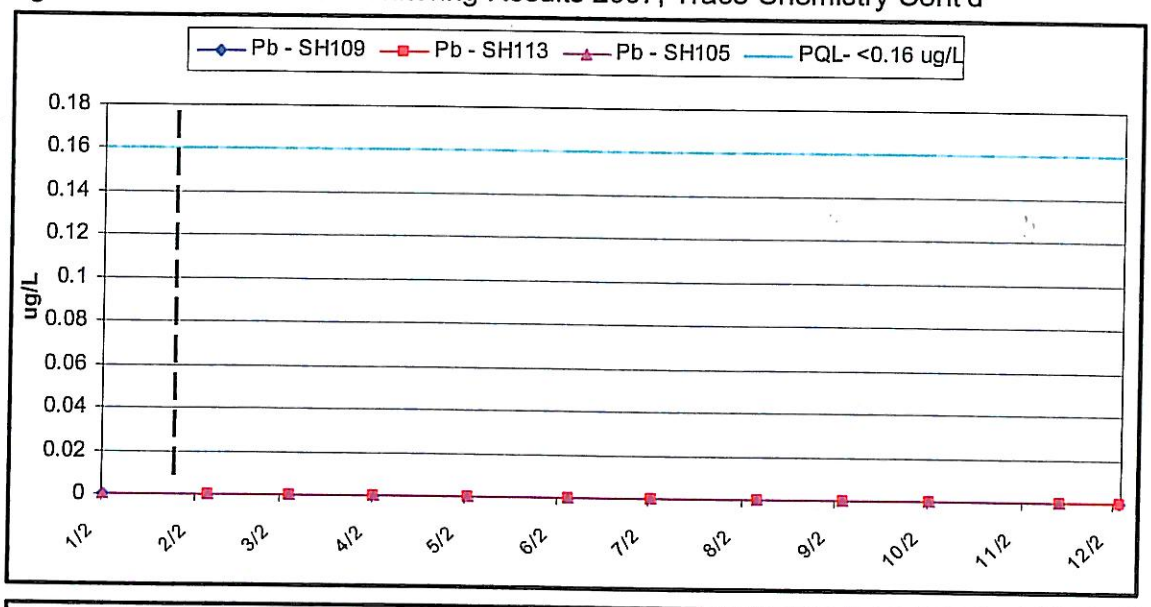
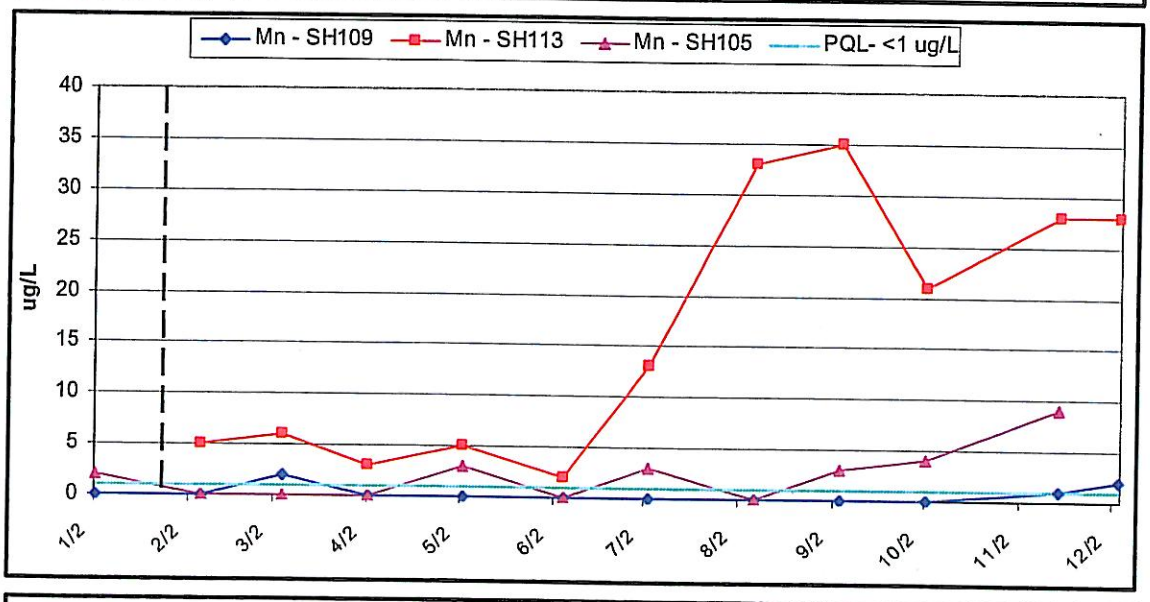


Figure 9: Sherman Creek Monitoring Results 2007, Trace Chemistry Cont'd





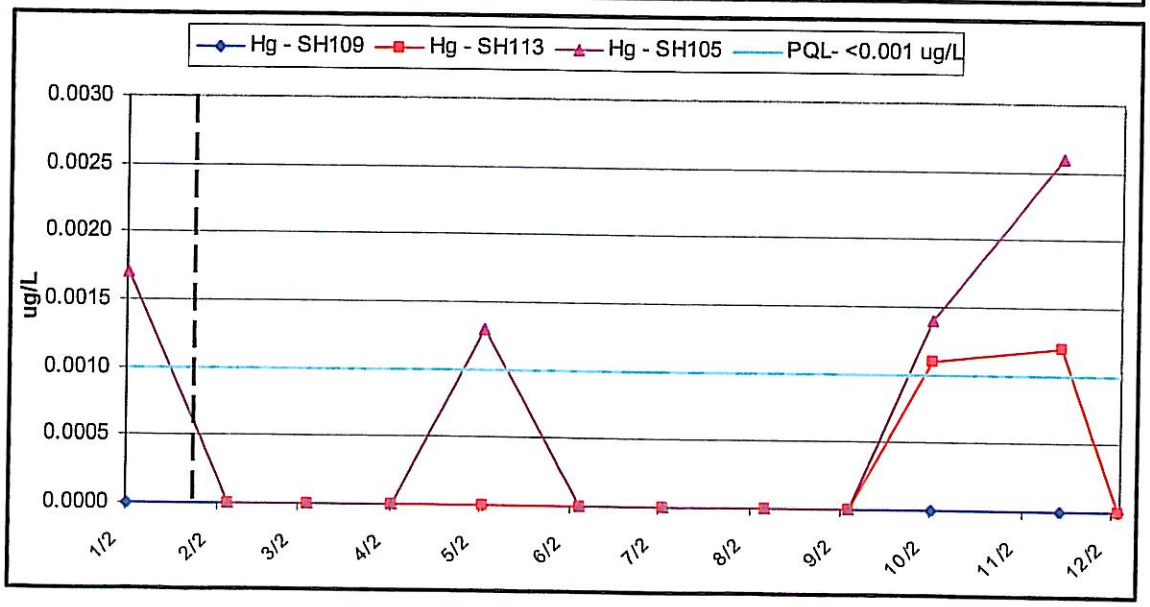
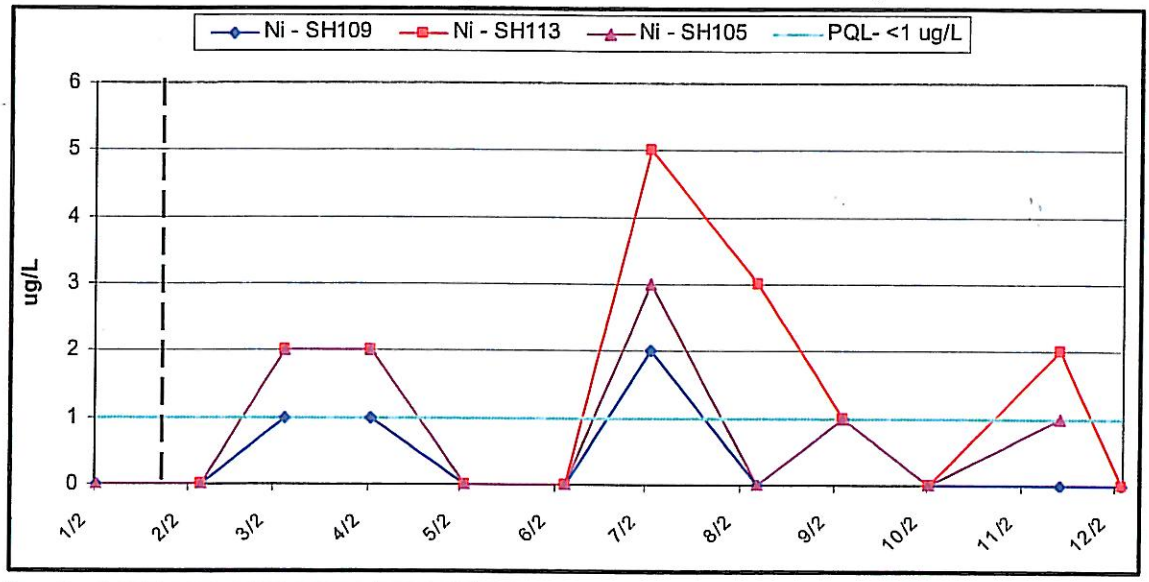
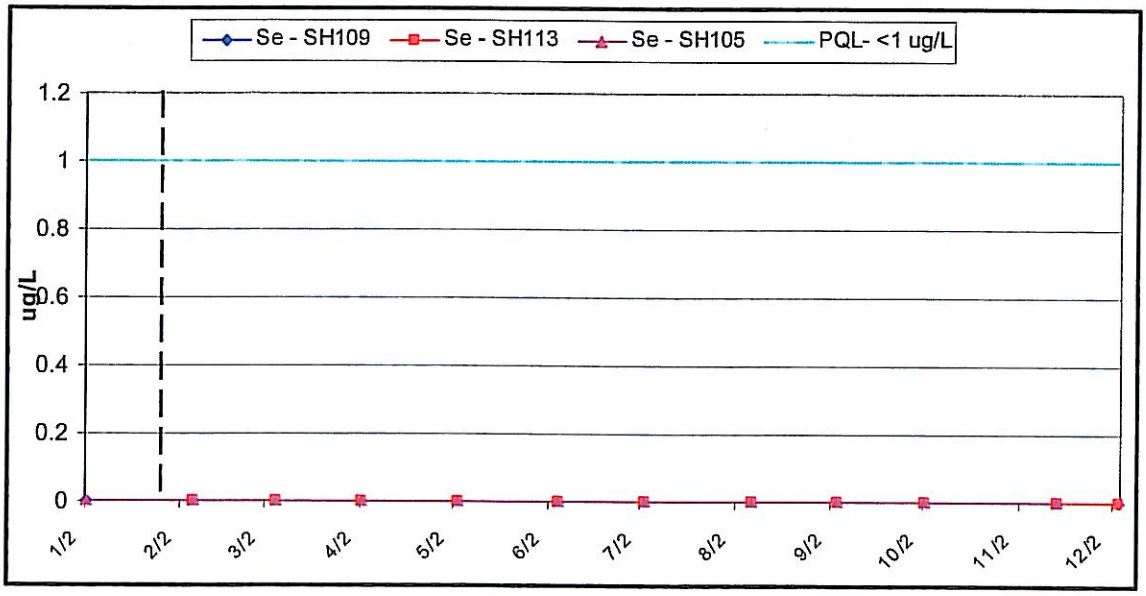


Figure 9: Sherman Creek Monitoring Results 2007, Trace Chemistry Cont'd





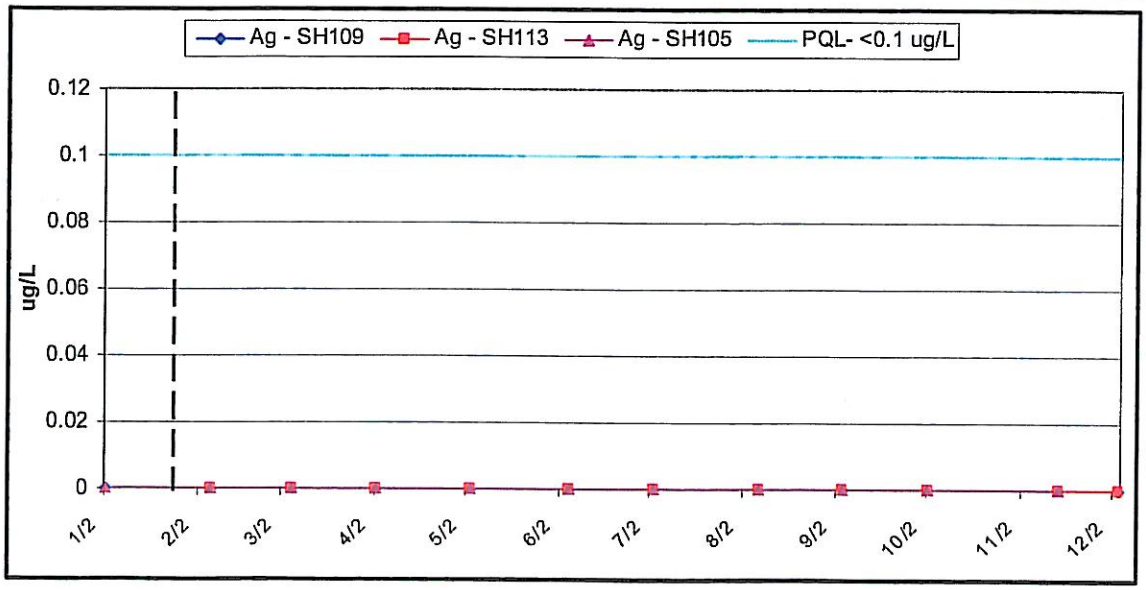


Figure 9: Sherman Creek Monitoring Results 2007, Trace Chemistry Cont'd

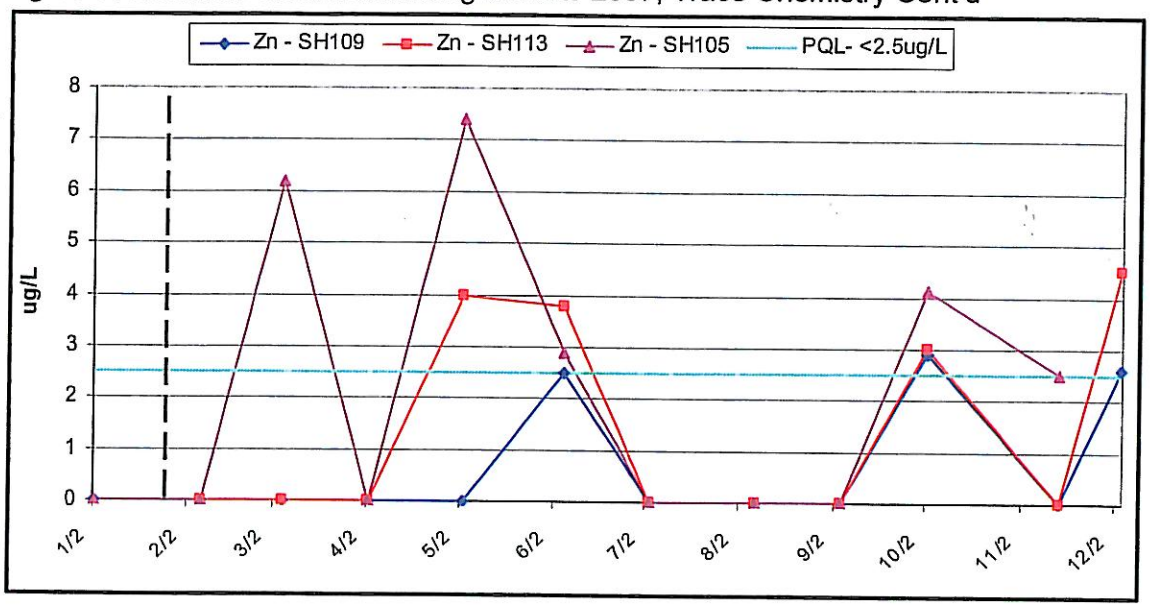
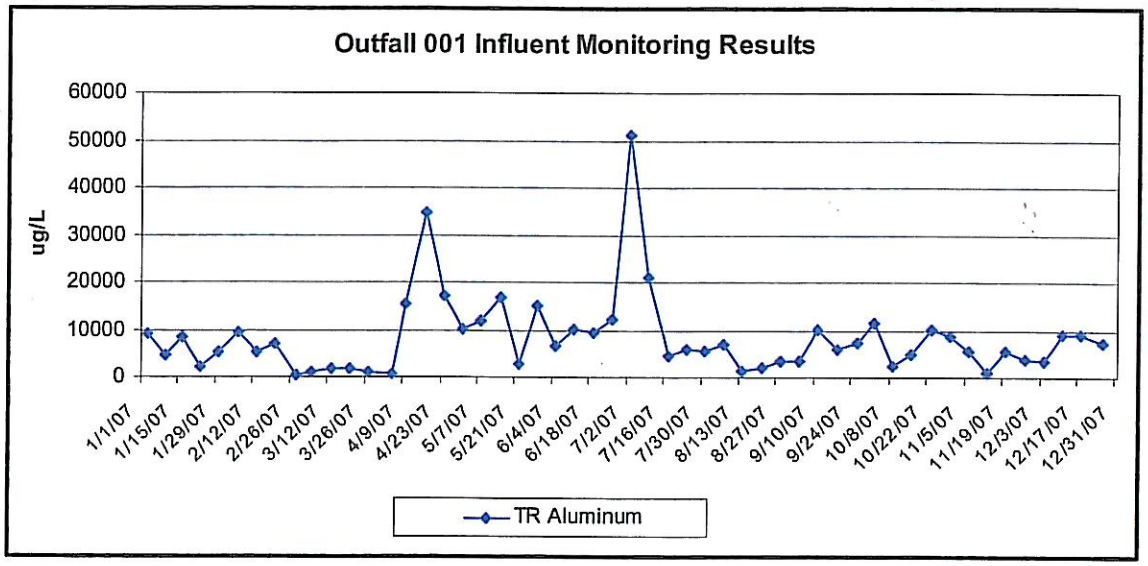
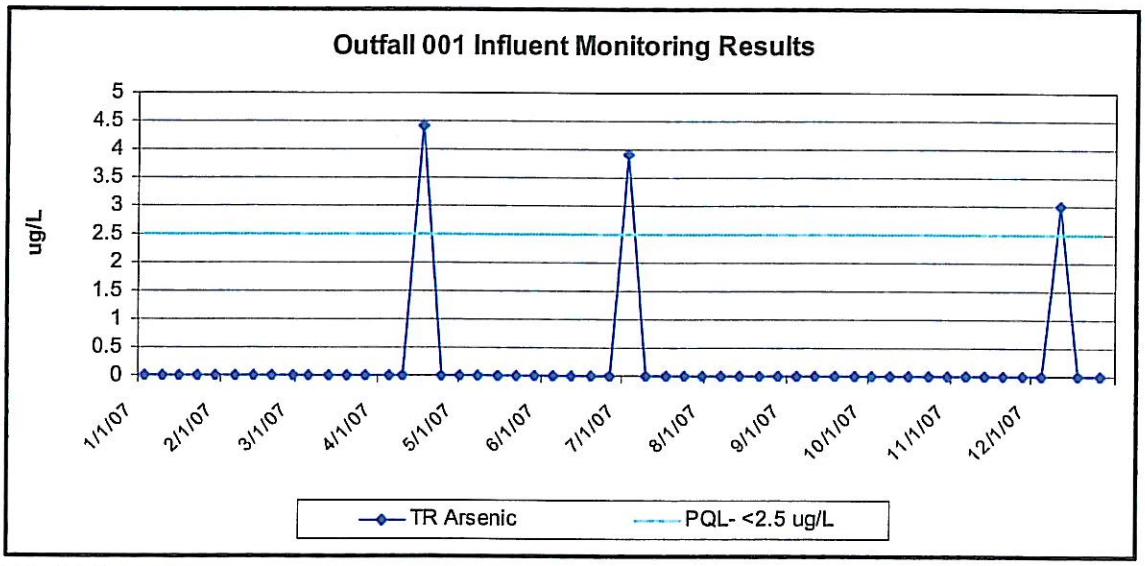


Figure 10: Outfall 001 Influent Monitoring Results 2007, Trace Chemistry





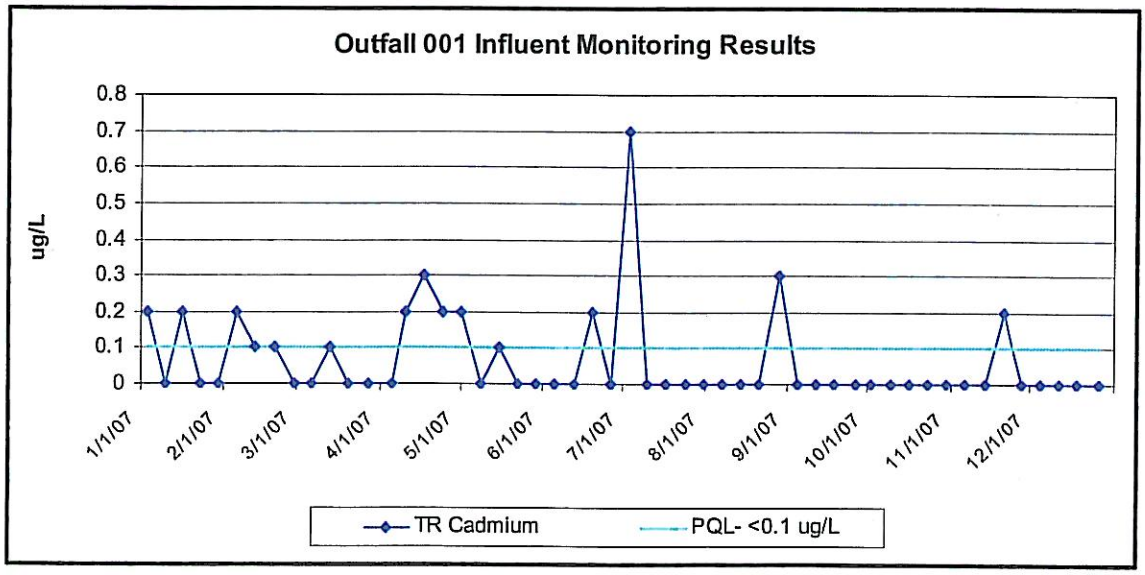
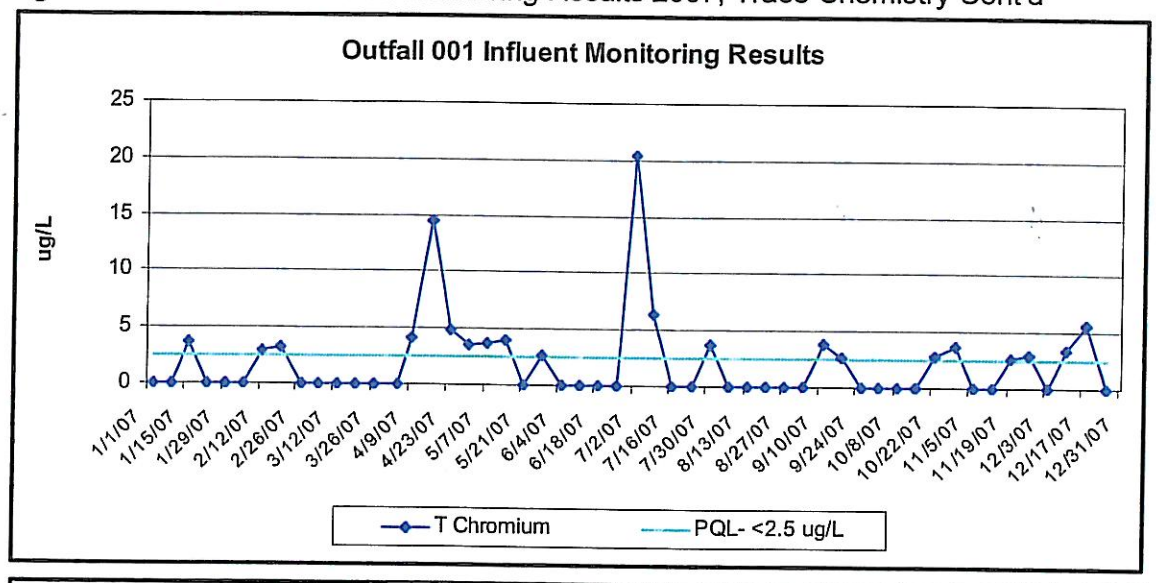
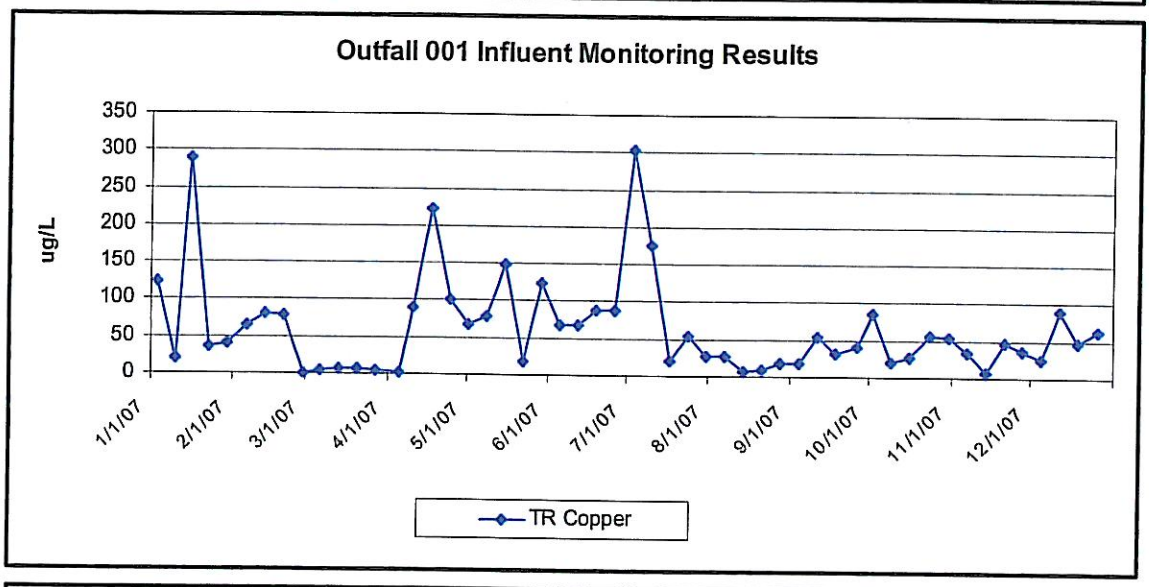


Figure 10: Outfall 001 Influent Monitoring Results 2007, Trace Chemistry Cont'd





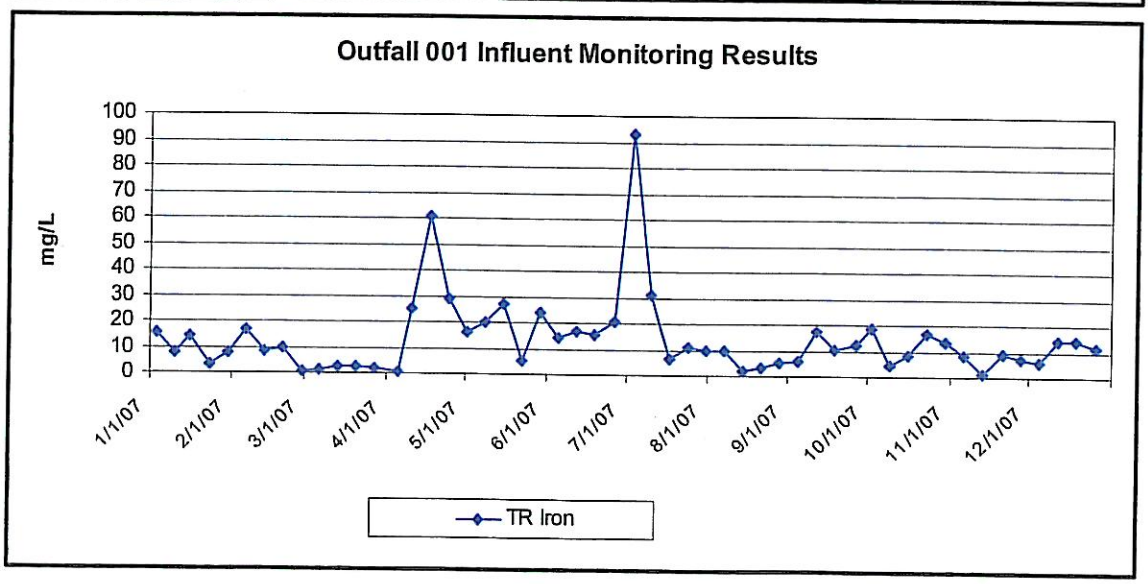
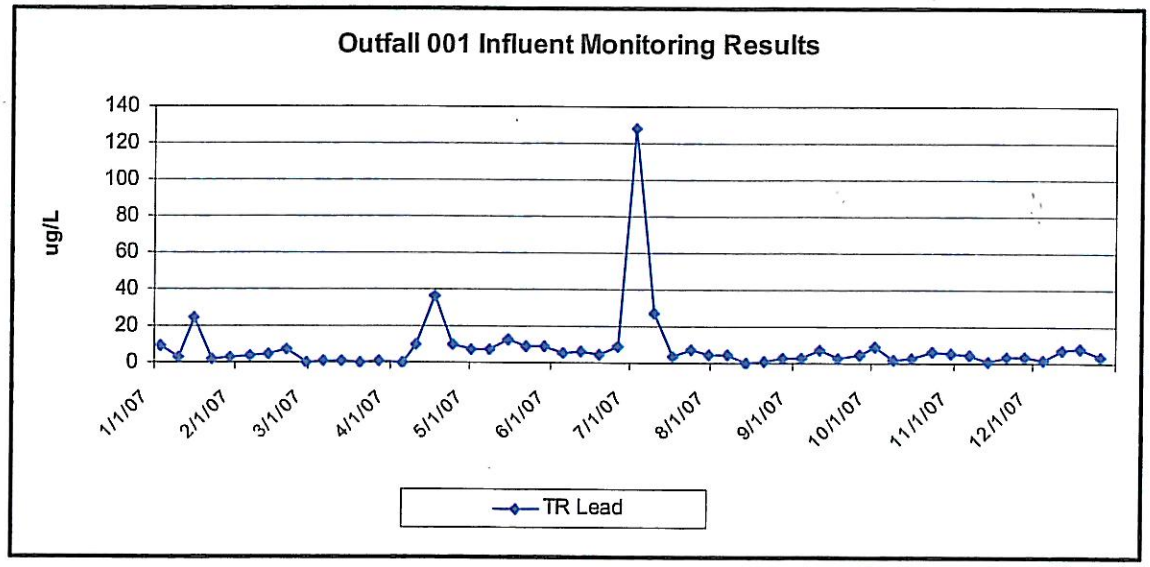
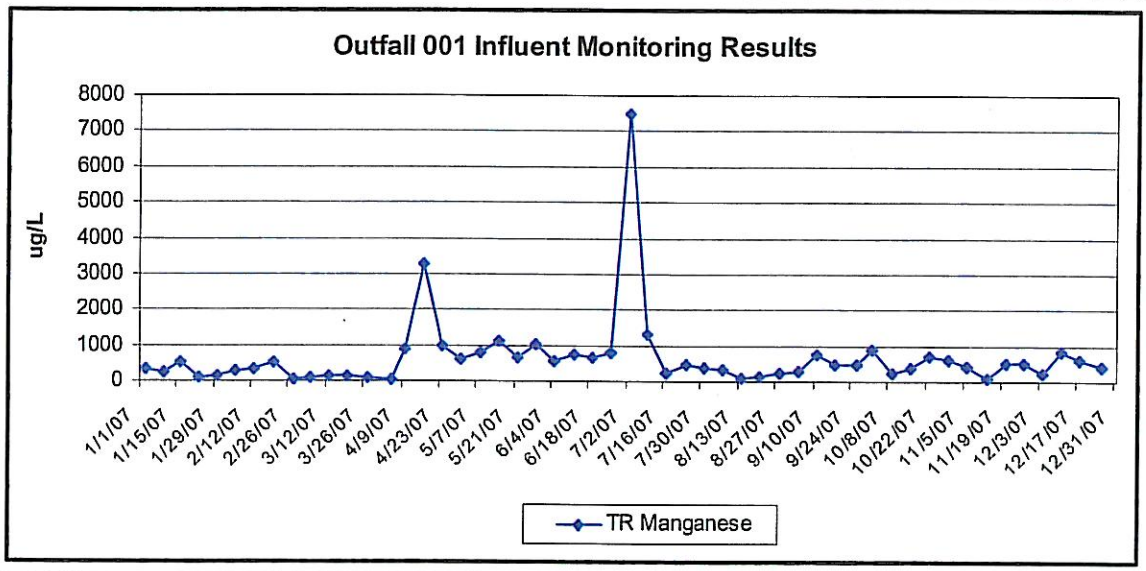


Figure 10: Outfall 001 Influent Monitoring Results 2007, Trace Chemistry Cont'd





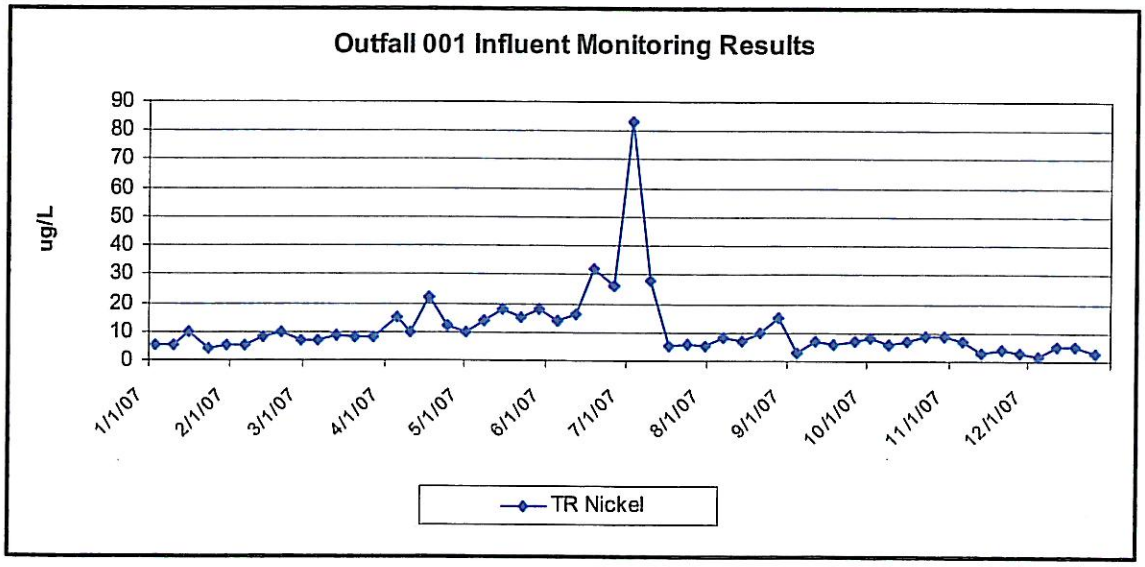
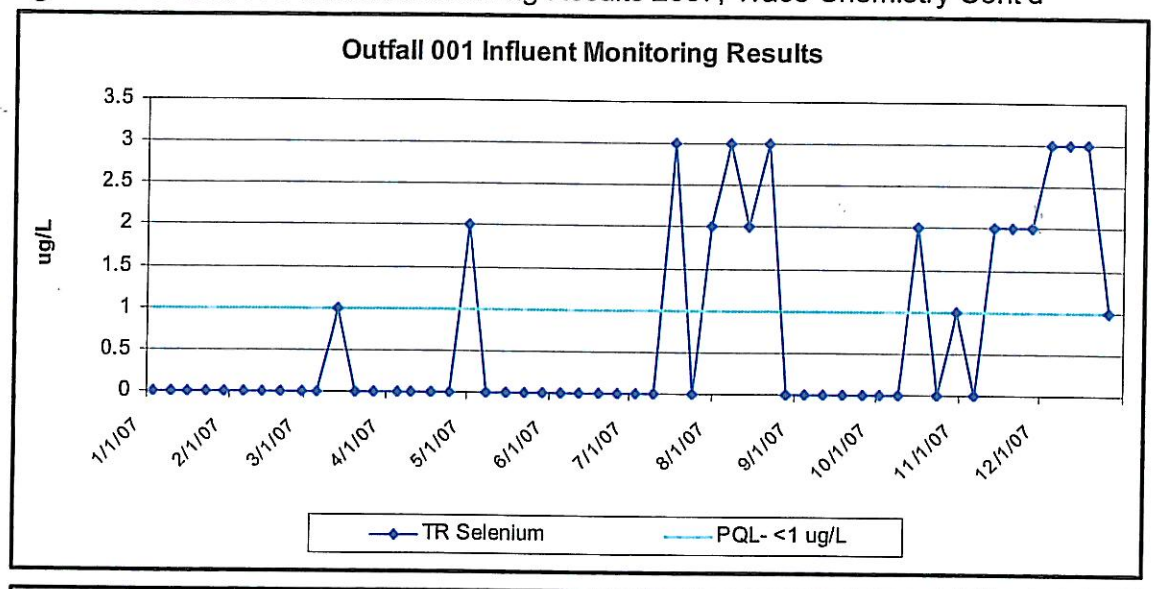
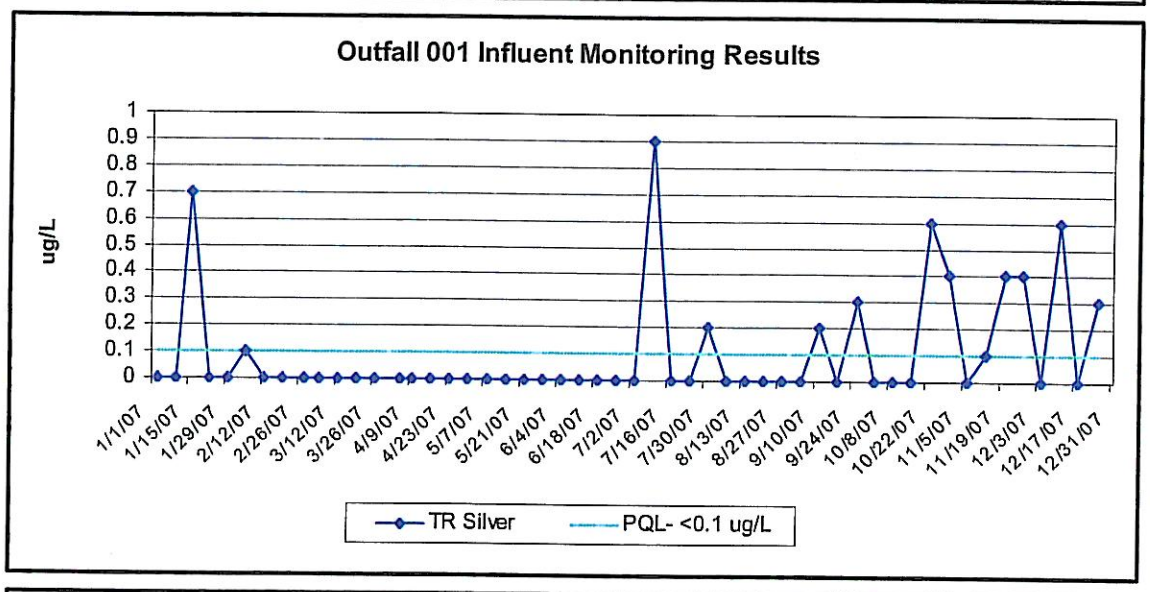


Figure 10: Outfall 001 Influent Monitoring Results 2007, Trace Chemistry Cont'd





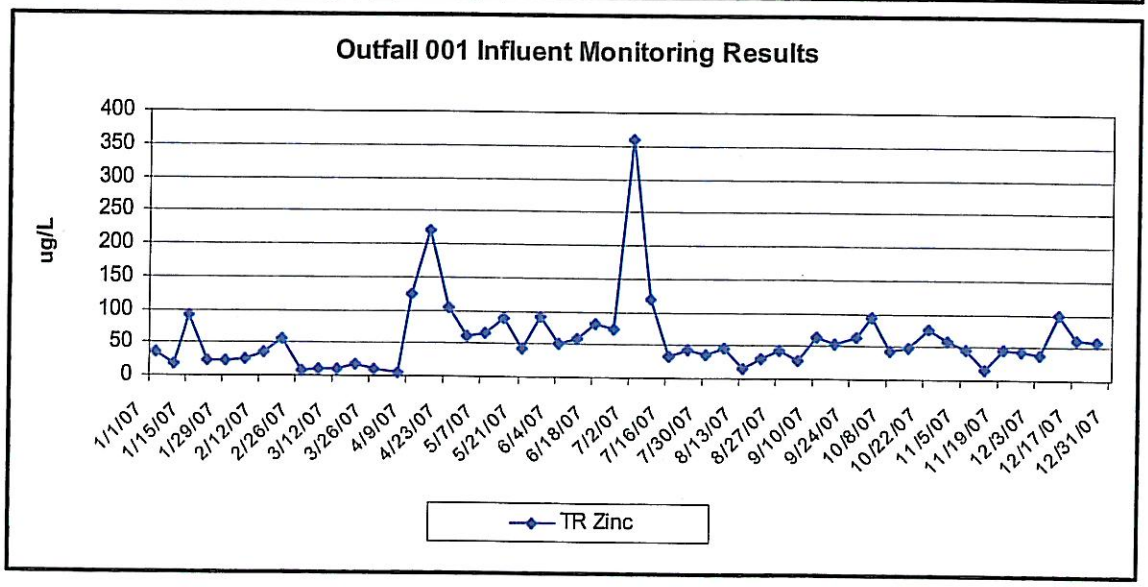


Figure 10: Outfall 001 Influent Monitoring Results 2007, Trace Chemistry Cont'd

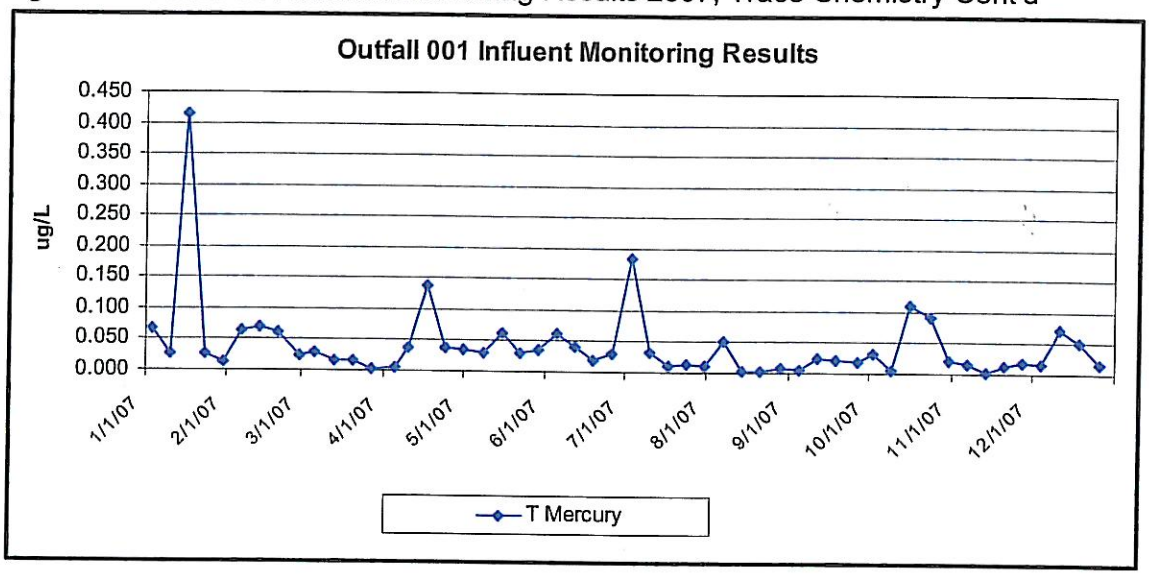
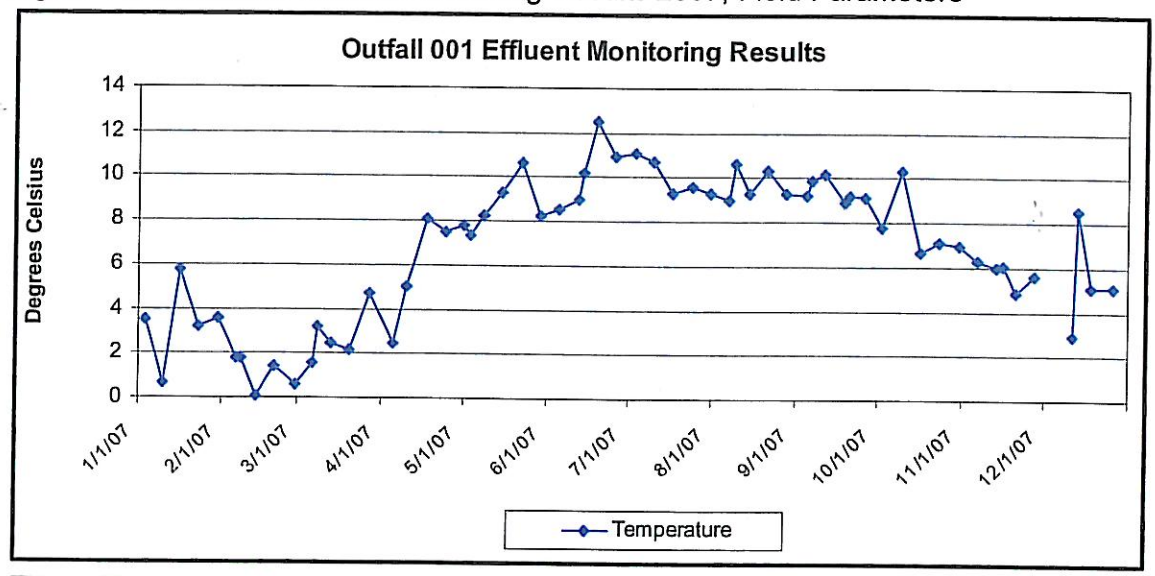


Figure 11: Outfall 001 Effluent Monitoring Results 2007, Field Parameters



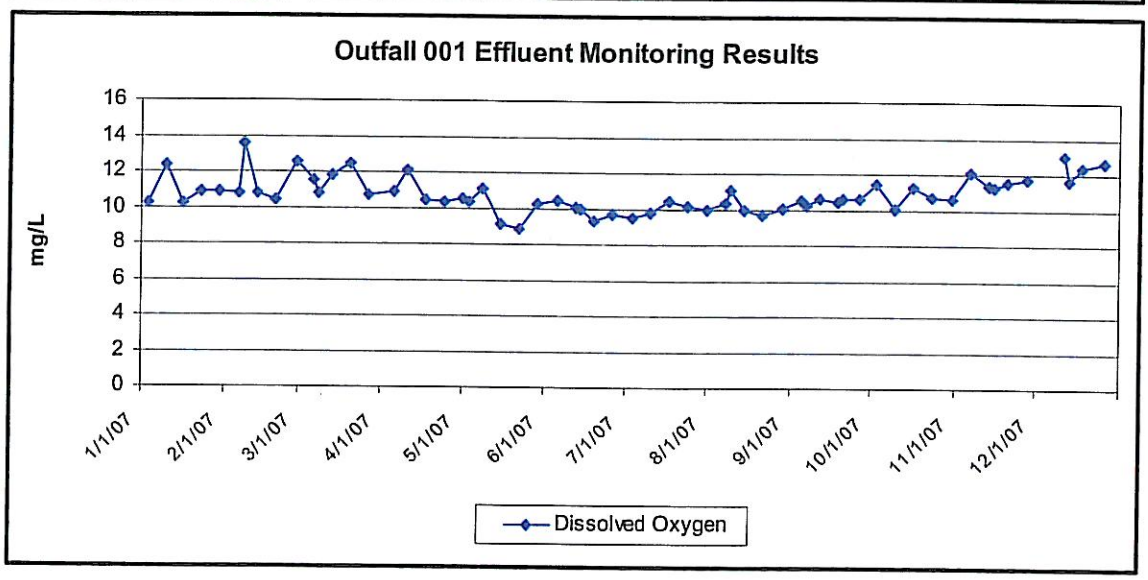
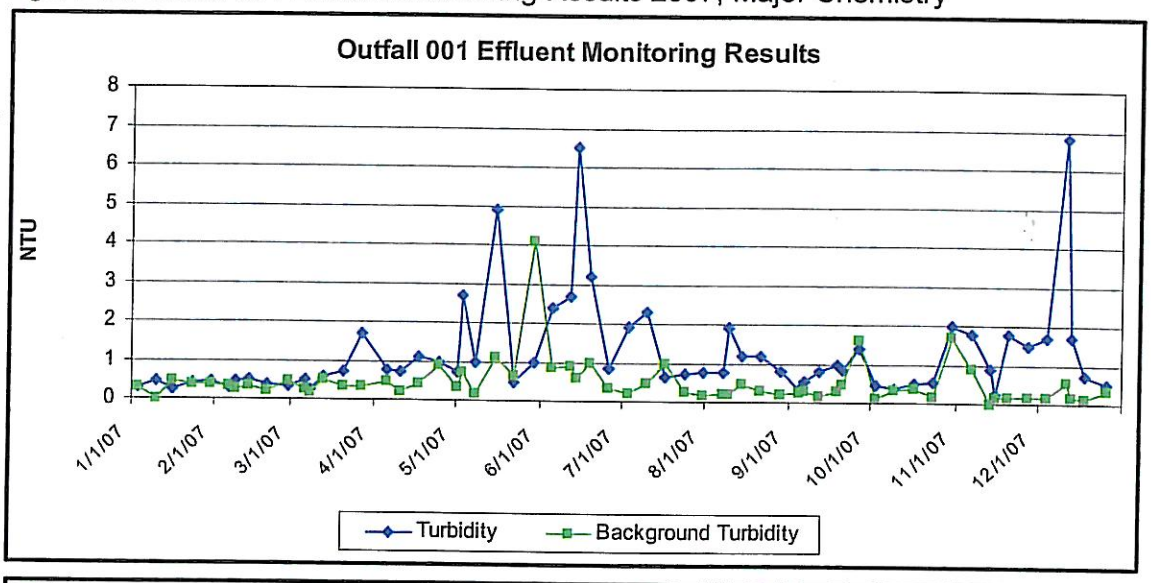
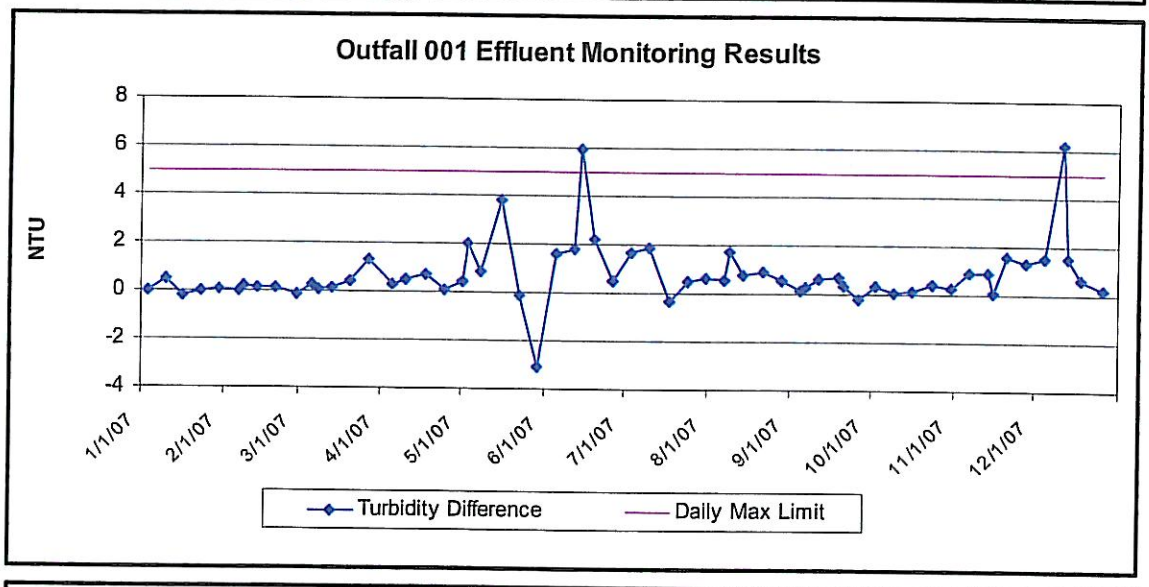


Figure 12: Outfall 001 Effluent Monitoring Results 2007, Major Chemistry





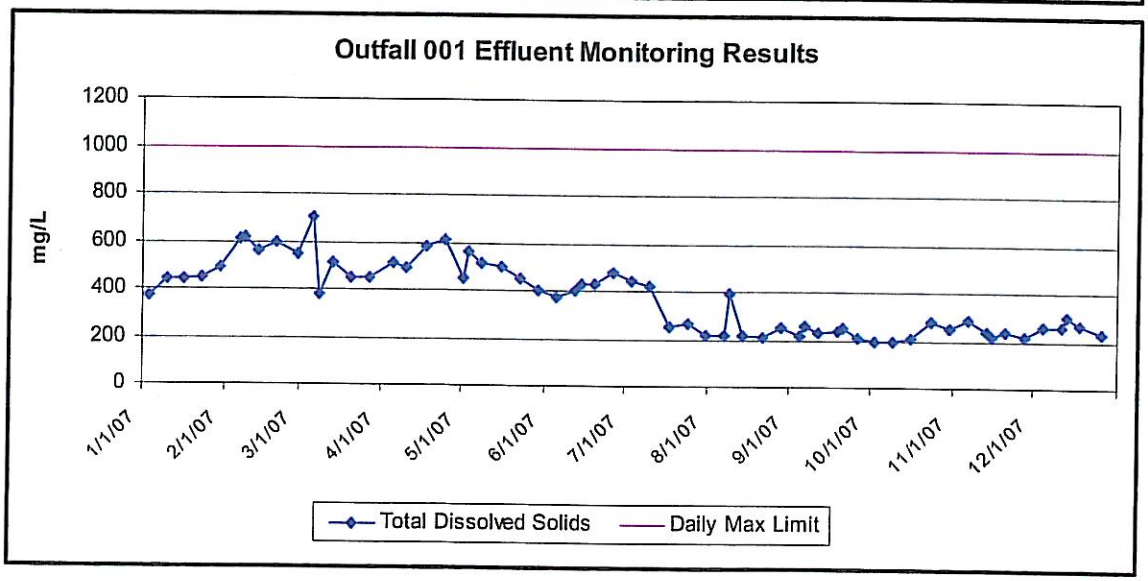
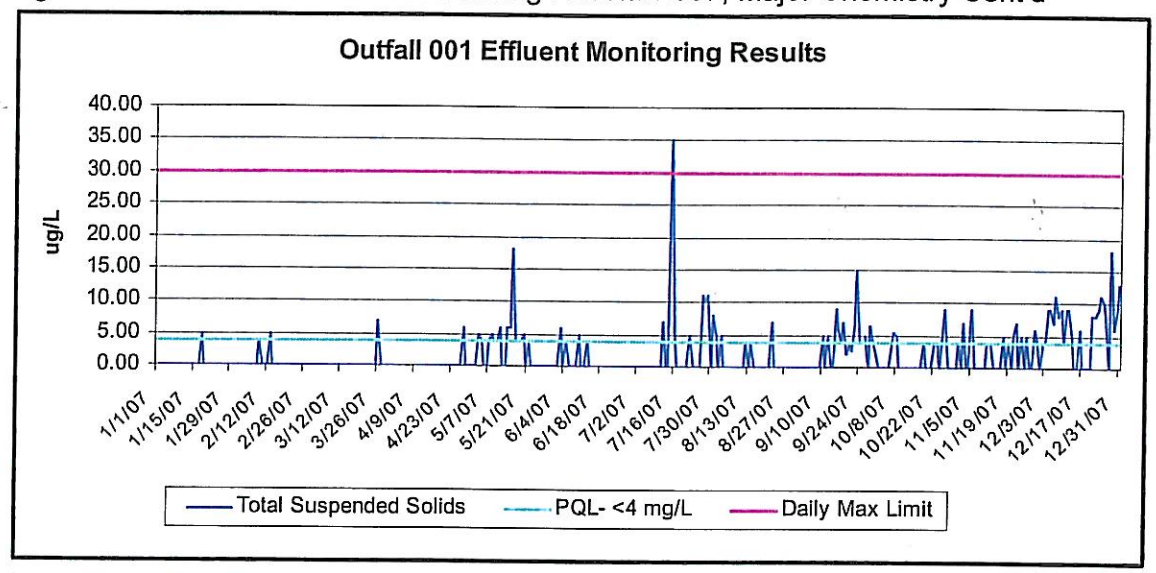
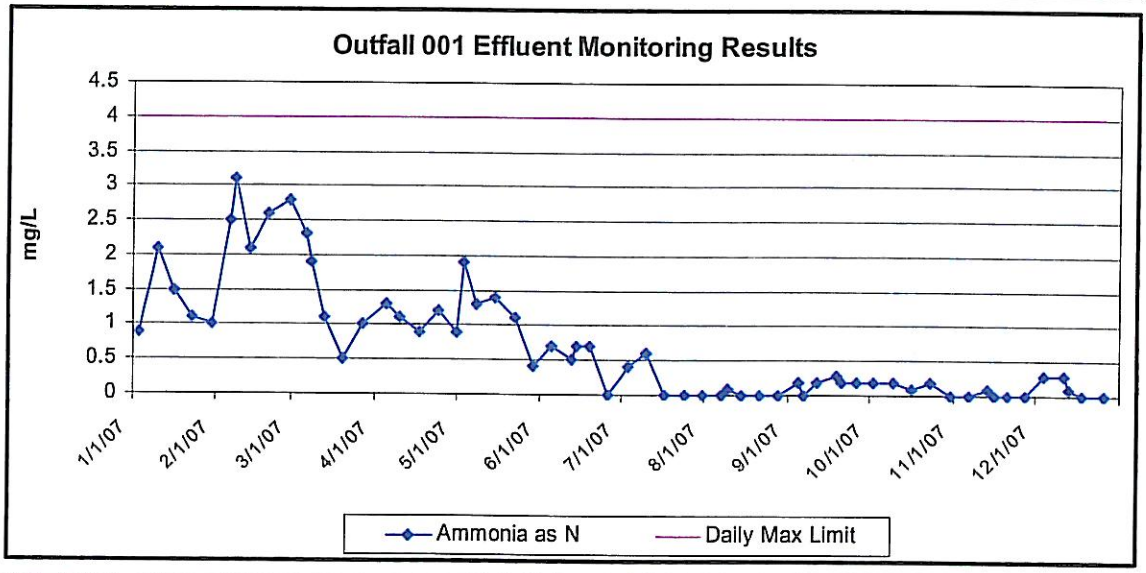


Figure 12: Outfall 001 Effluent Monitoring Results 2007, Major Chemistry Cont'd





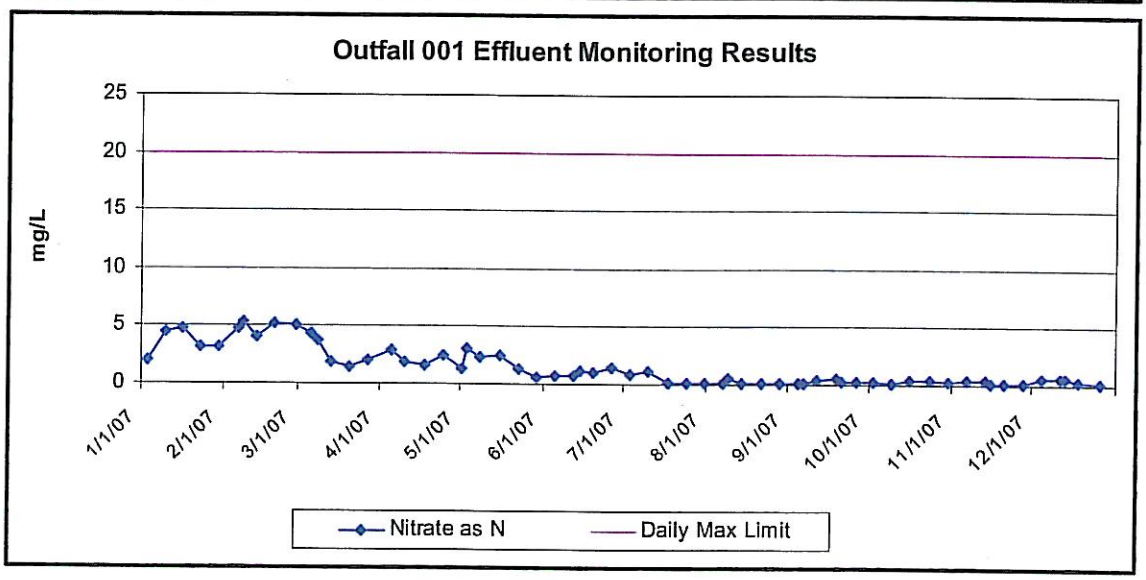
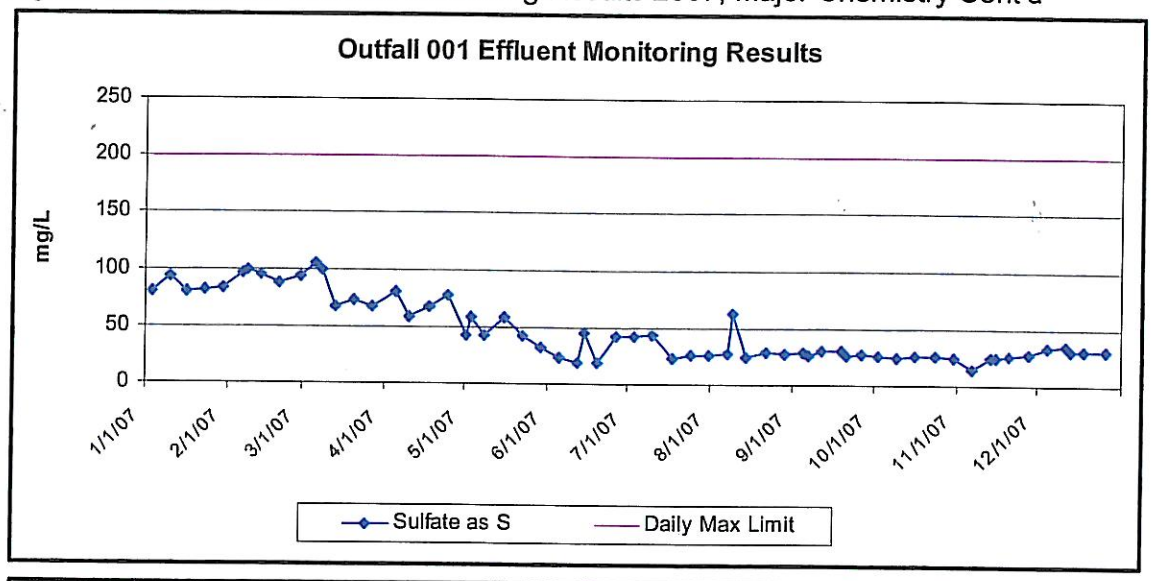


Figure 12: Outfall 001 Effluent Monitoring Results 2007, Major Chemistry Cont'd



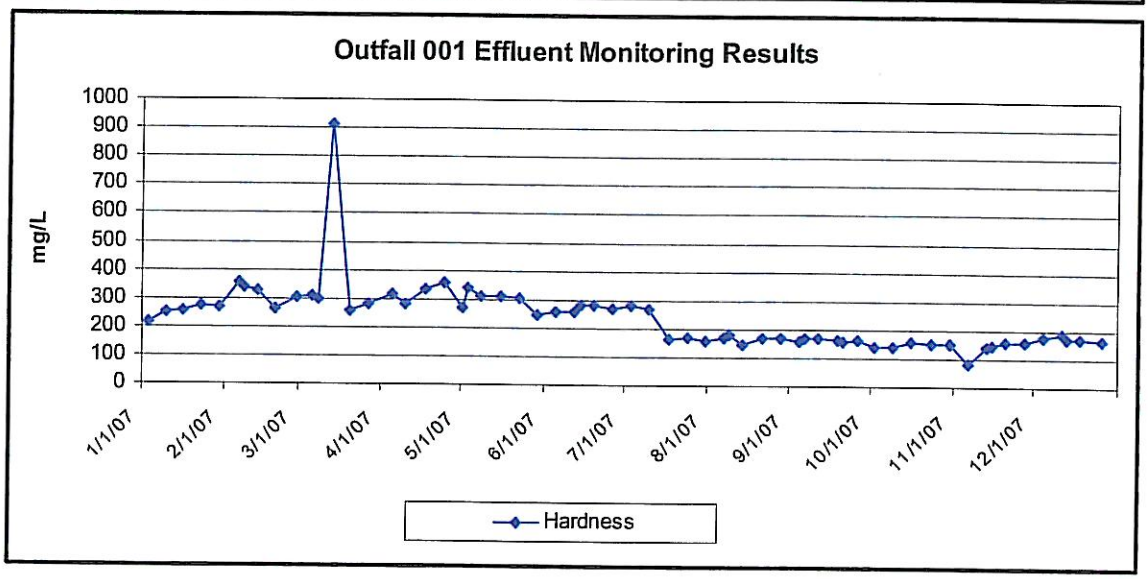
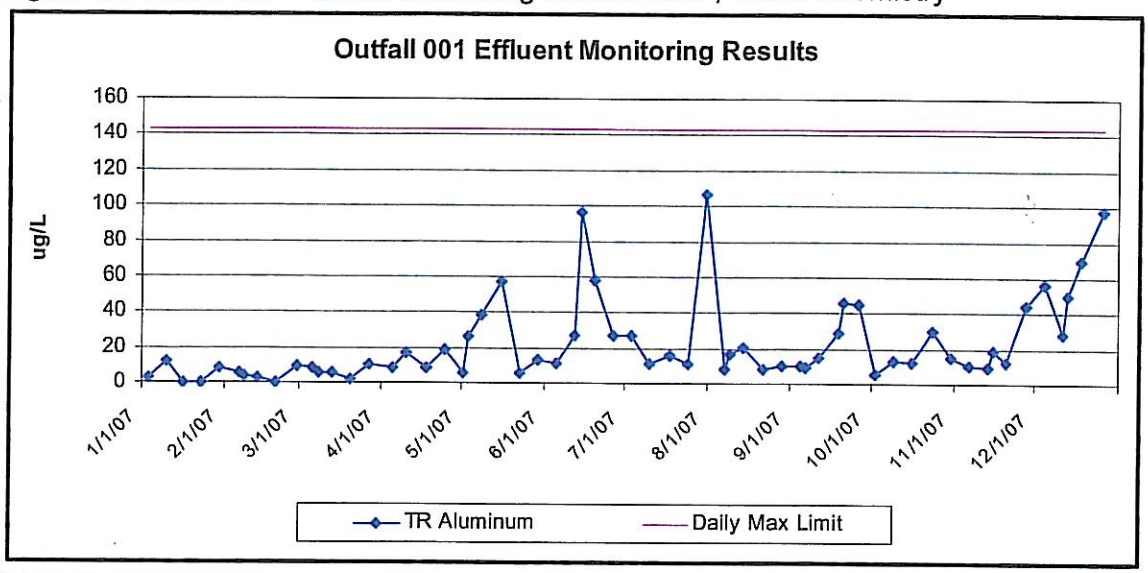
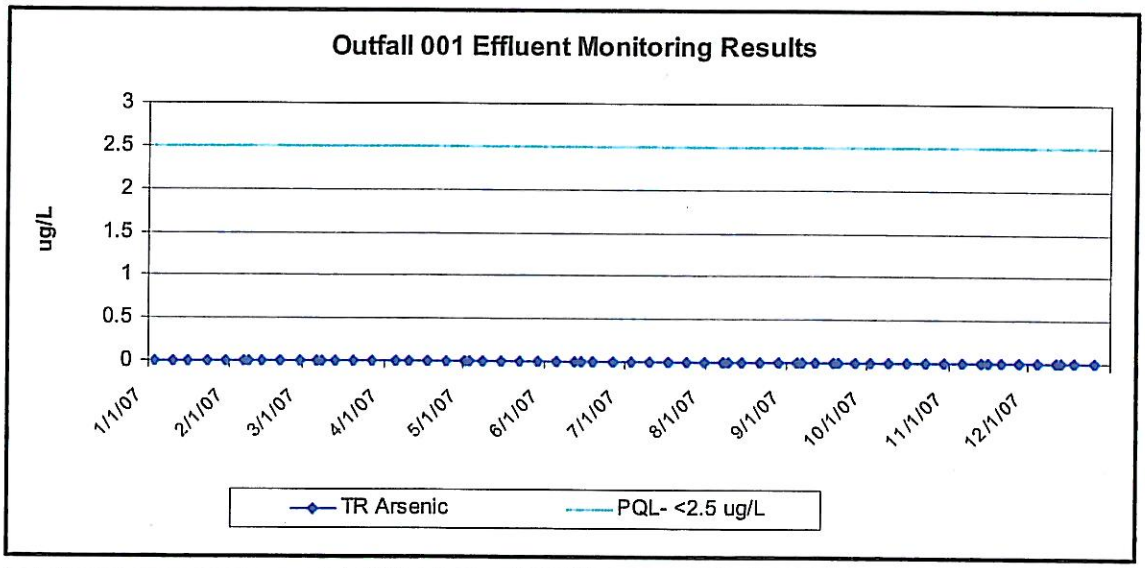


Figure 13: Outfall 001 Effluent Monitoring Results 2007, Trace Chemistry





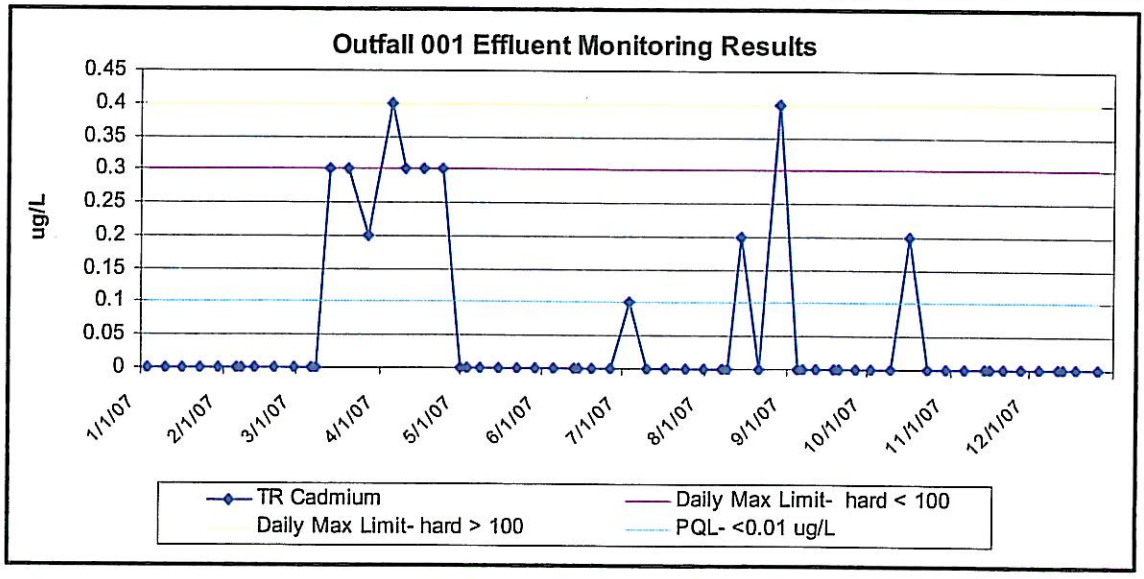
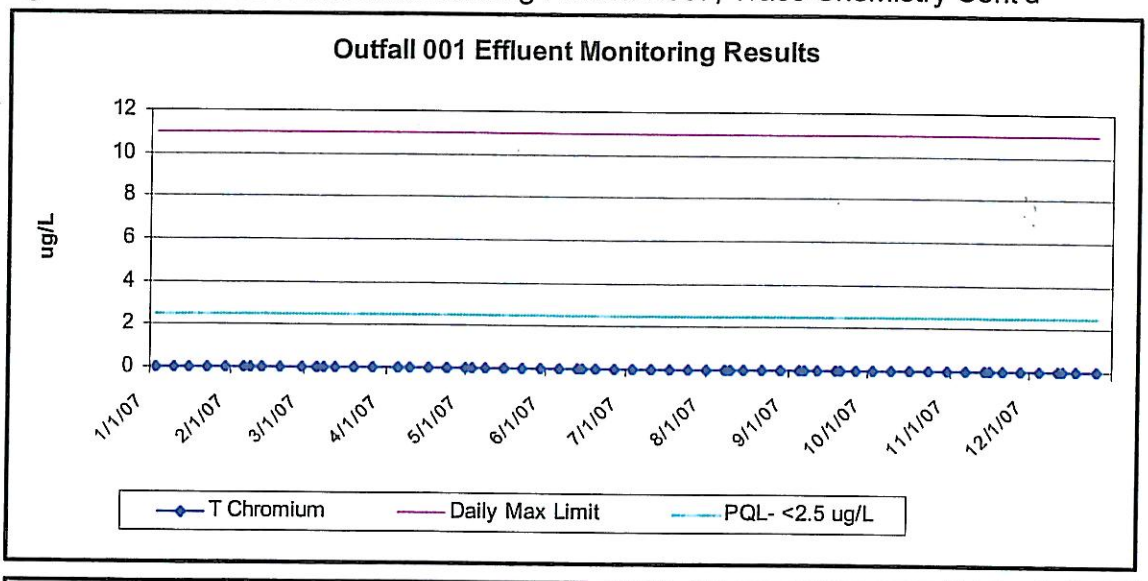
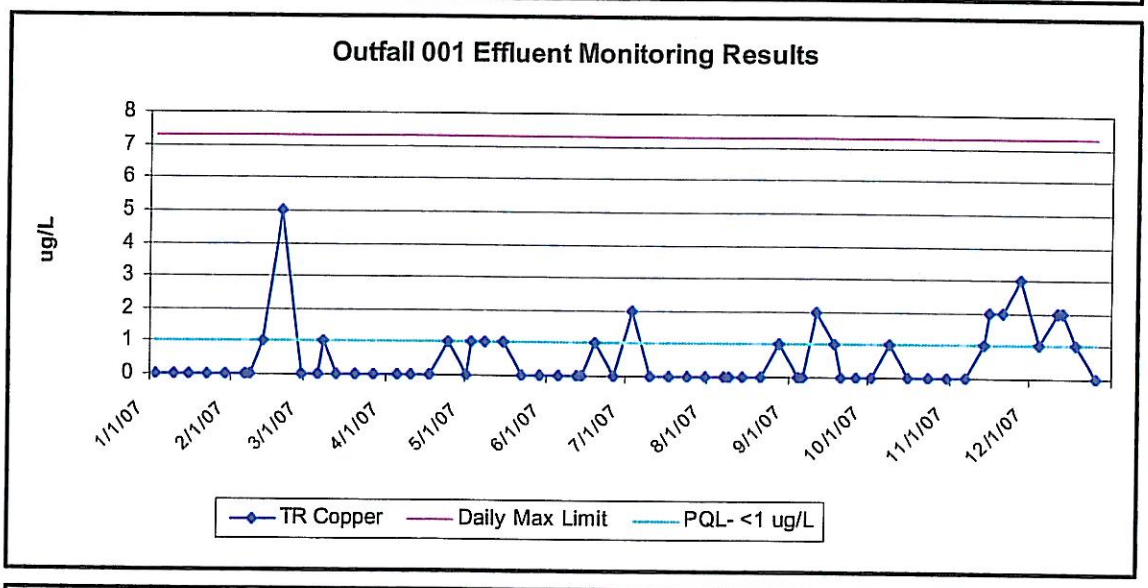


Figure 13: Outfall 001 Effluent Monitoring Results 2007, Trace Chemistry Cont'd





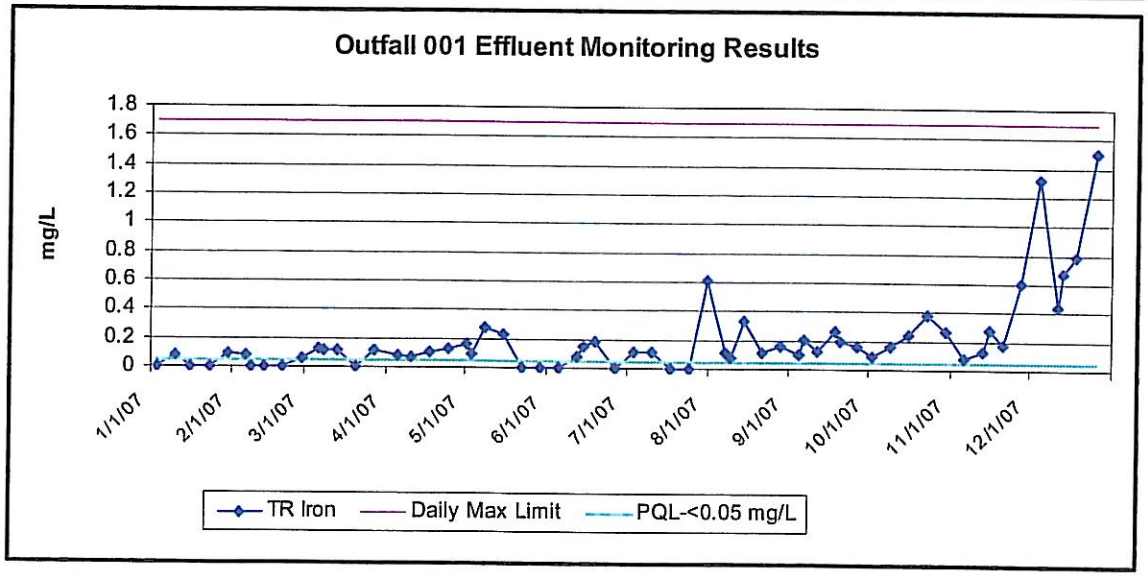
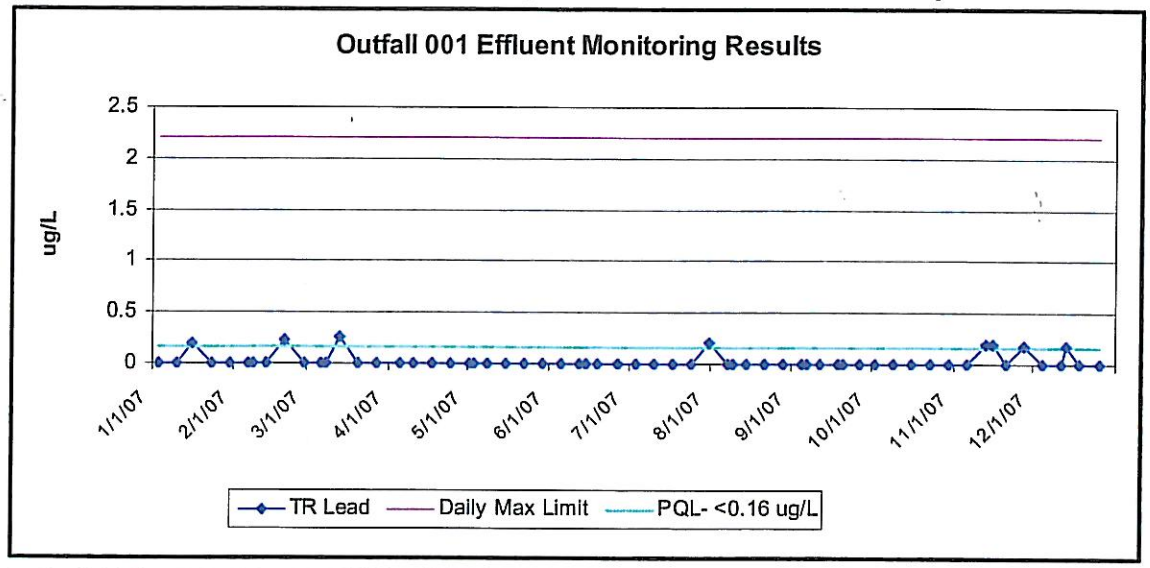
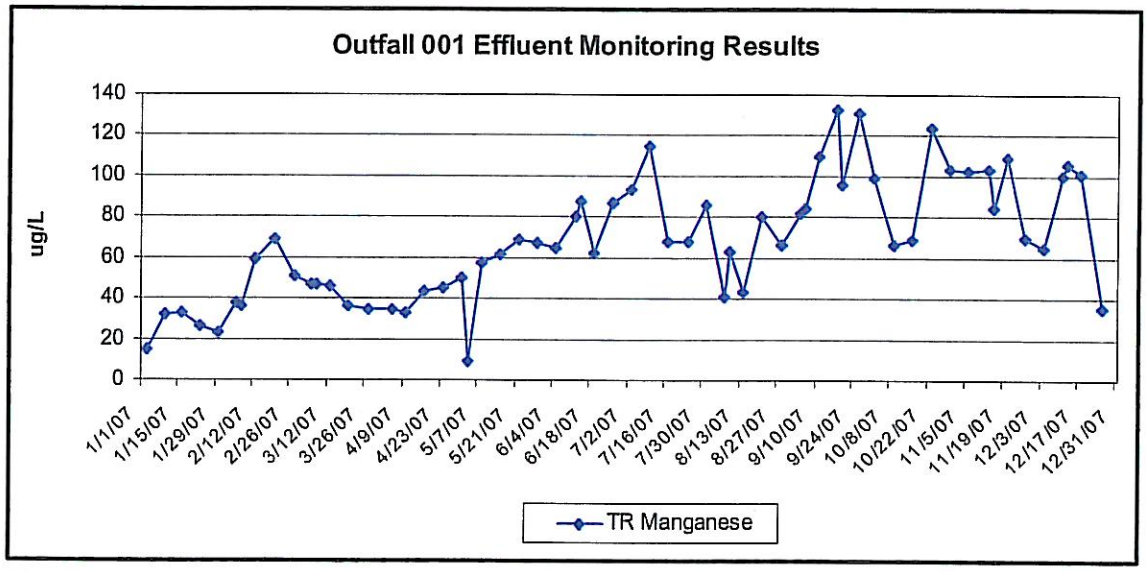


Figure 13: Outfall 001 Effluent Monitoring Results 2007, Trace Chemistry Cont'd





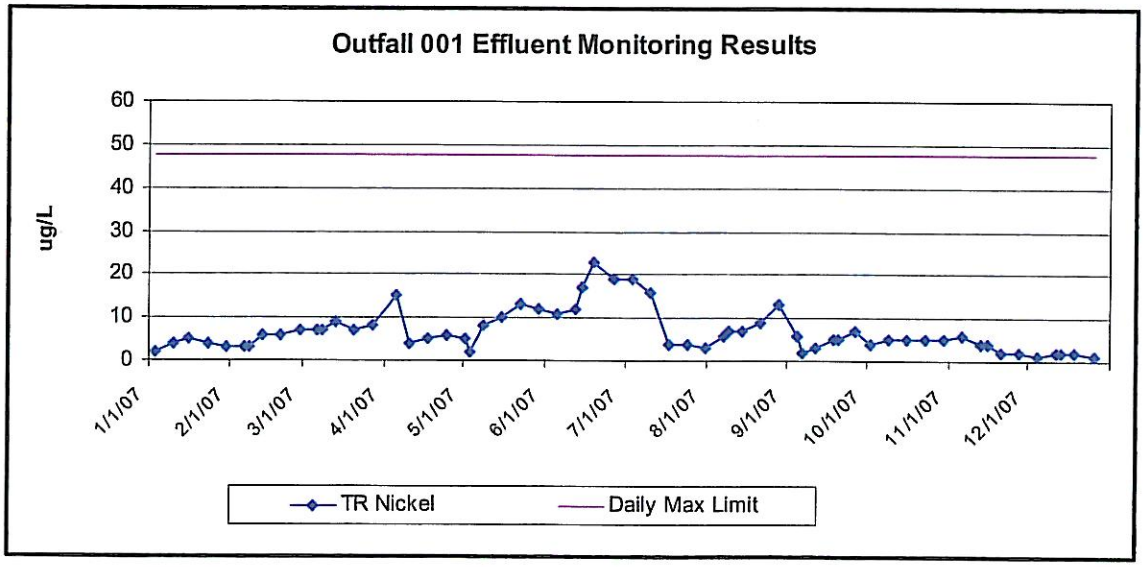
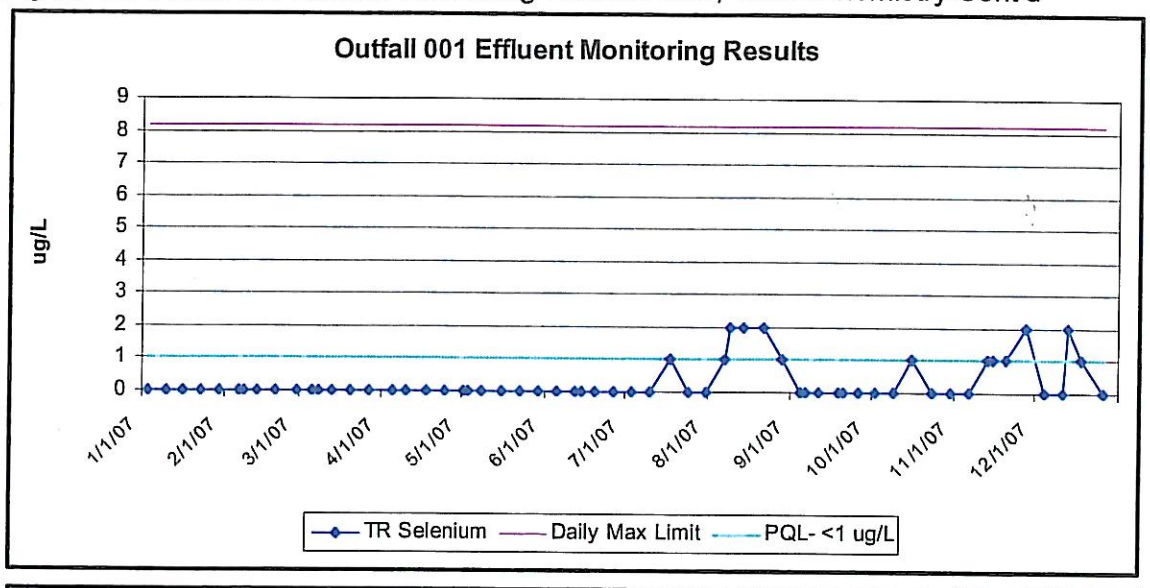
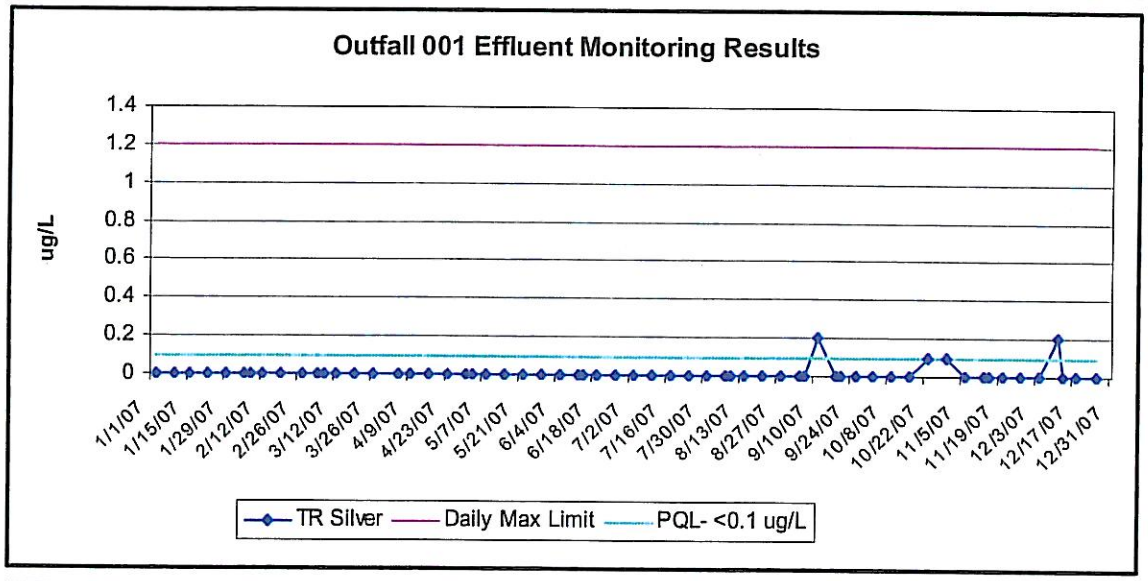


Figure 13: Outfall 001 Effluent Monitoring Results 2007, Trace Chemistry Cont'd





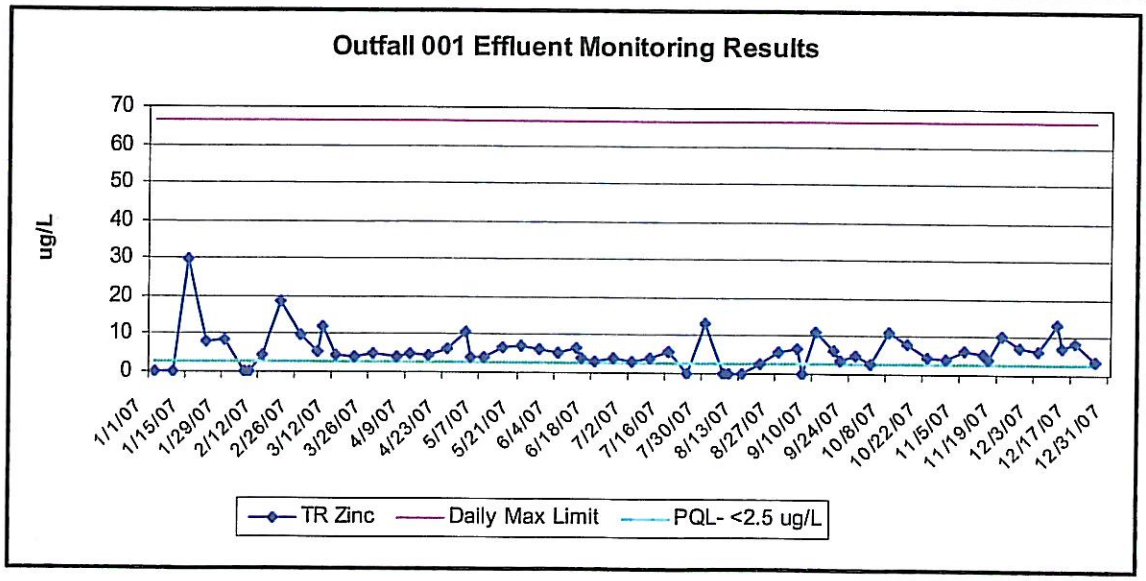


Figure 13: Outfall 001 Effluent Monitoring Results 2007, Trace Chemistry Cont'd

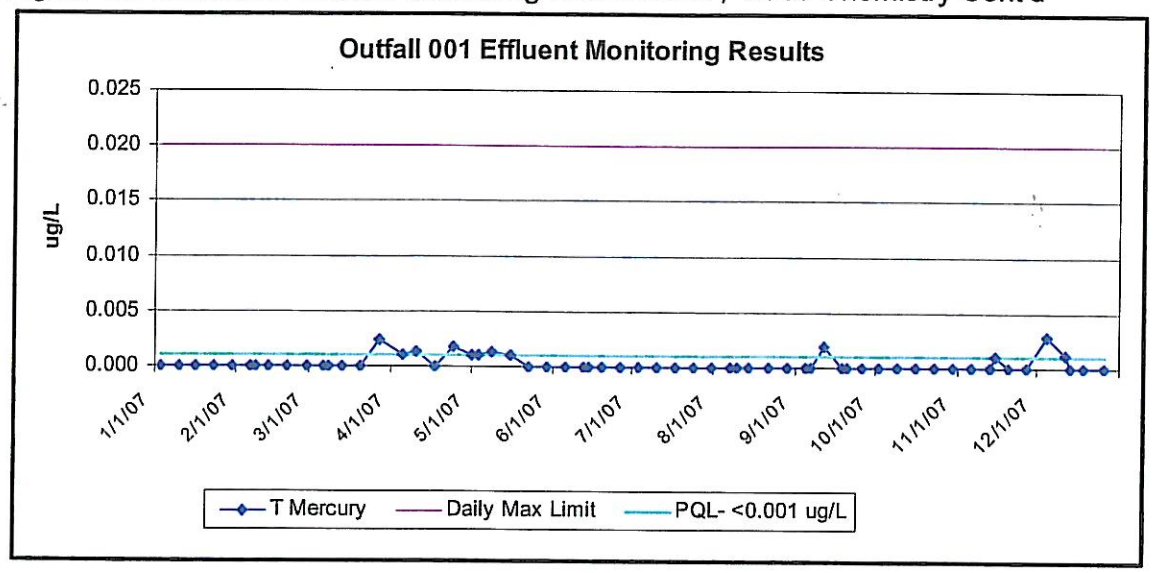
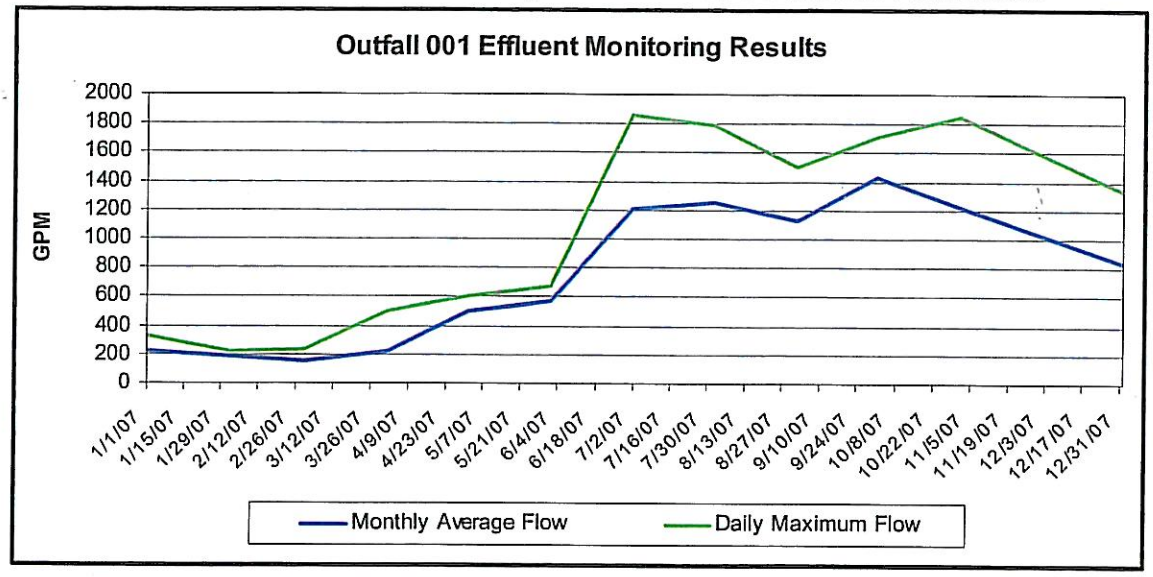


Figure 14: Outfall 001 Effluent Monitoring Results 2007, Continuous Parameters



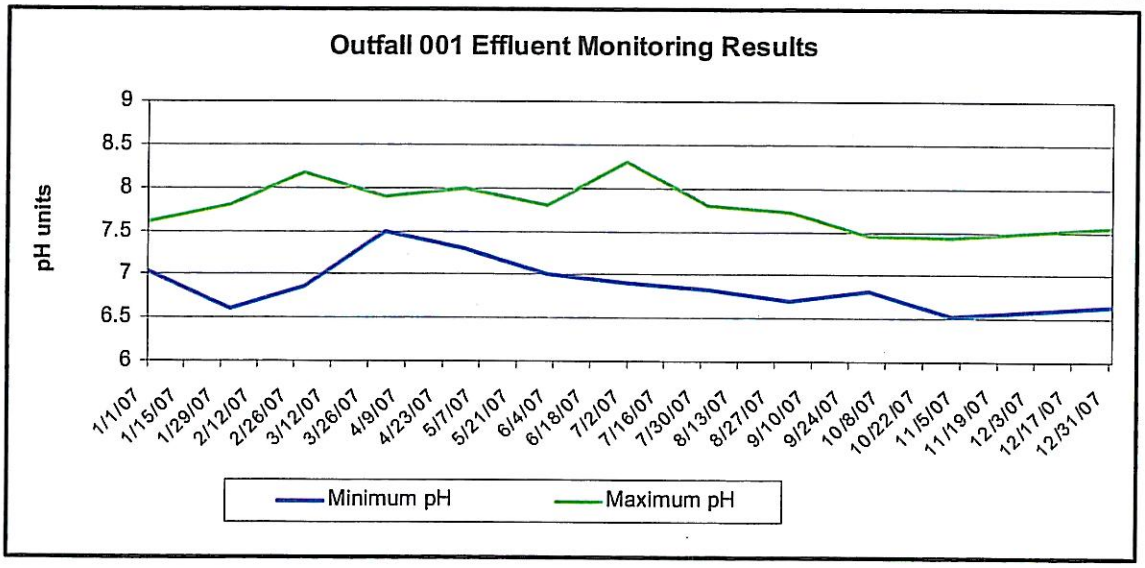


Figure 15: Outfall 001 Effluent Monitoring Results 2007, Anions & Cations

001 Final Effluent
TDS Quarterly Anions/Cations, March 2007

Parameters	*Units*	*Results*
Alkalinity	mg/L	71
Boron	mg/L	0.14
Calcium	mg/L	108
Chloride	mg/L	21
Conductivity	umhos/cm	809
Fluoride	mg/L	0.2
Hardness	mg/L	309
Potassium	mg/L	3
Magnesium	mg/L	10
Sodium	mg/L	32
Sulfate, Total	mg/L	258
pH (Lab)	pH	7.8

001 Final Effluent
TDS Quarterly Anions/Cations, June 2007

Parameters	*Units*	*Results*
Alkalinity	mg/L	82
Boron	mg/L	0.04
Calcium	mg/L	101
Chloride	mg/L	9
Conductivity	umhos/cm	574
Fluoride	mg/L	0.1
Hardness	mg/L	256
Potassium	mg/L	2
Magnesium	mg/L	<1
Sodium	mg/L	10
Sulfate, Total	mg/L	178
pH (Lab)	pH	8.1

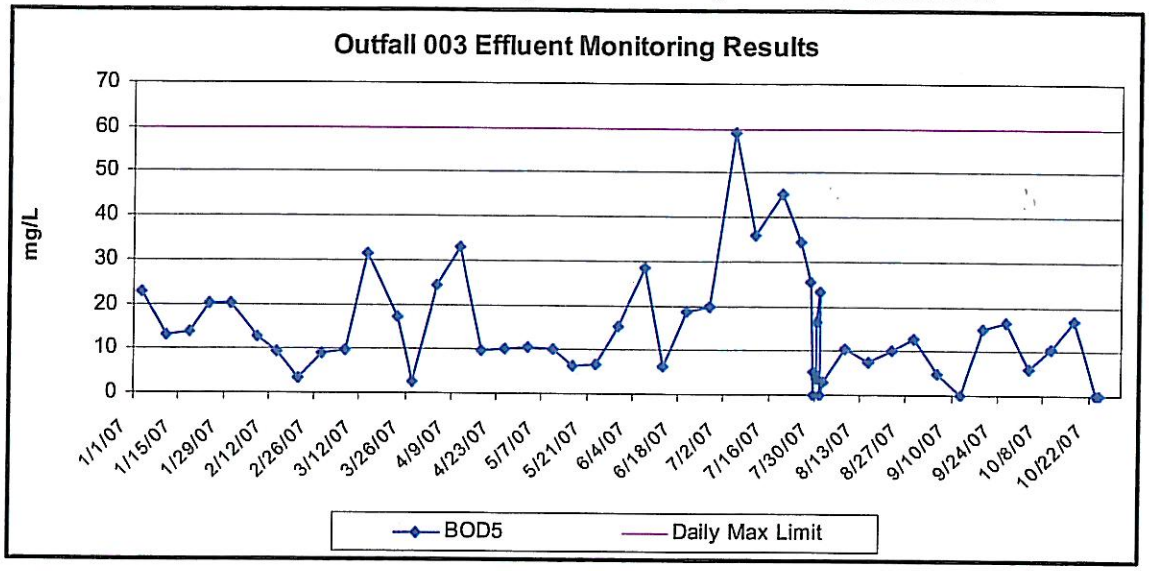
001 Final Effluent
TDS Quarterly Anions/Cations, September 2007

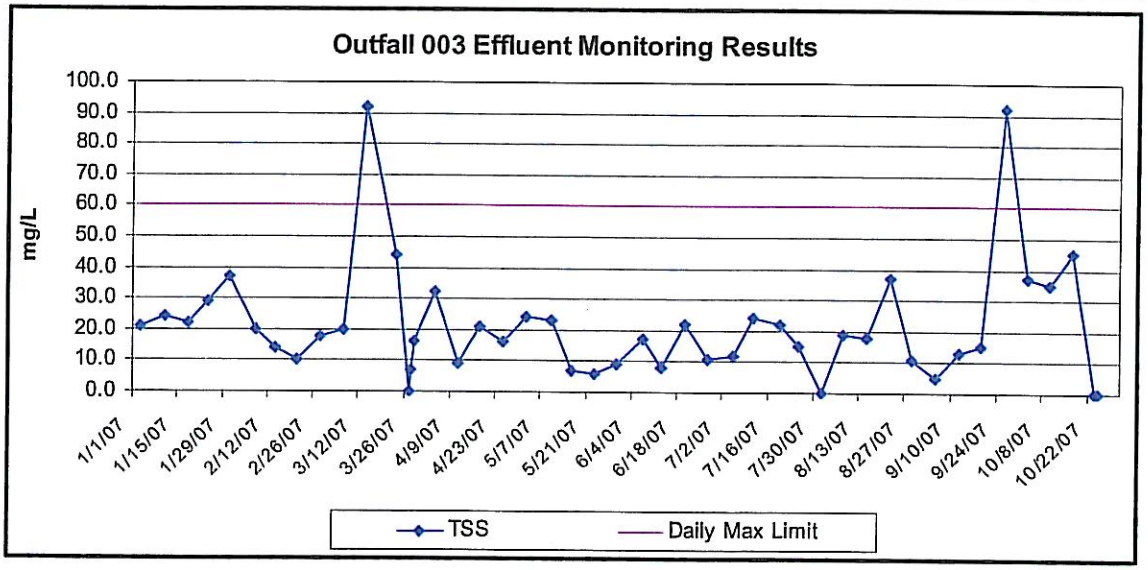
Parameters	*Units*	*Results*
Alkalinity	mg/L	60
Boron	mg/L	<0.03
Calcium	mg/L	57
Chloride	mg/L	10
Conductivity	umhos/cm	384
Fluoride	mg/L	0.1
Hardness	mg/L	159
Potassium	mg/L	<1
Magnesium	mg/L	4
Sodium	mg/L	7
Sulfate, Total	mg/L	95.1
pH (Lab)	pH	8.2

001 Final Effluent
TDS Quarterly Anions/Cations, December 2007

Parameters	*Units*	*Results*
Alkalinity	mg/L	65
Boron	mg/L	0.05
Calcium	mg/L	63
Chloride	mg/L	12
Conductivity	umhos/cm	416
Fluoride	mg/L	<0.1
Hardness	mg/L	176
Potassium	mg/L	1
Magnesium	mg/L	4
Sodium	mg/L	8
Sulfate, Total	mg/L	115
pH (Lab)	pH	7.9

Figure 16: Outfall 003 Effluent Monitoring Results 2007, General Parameters





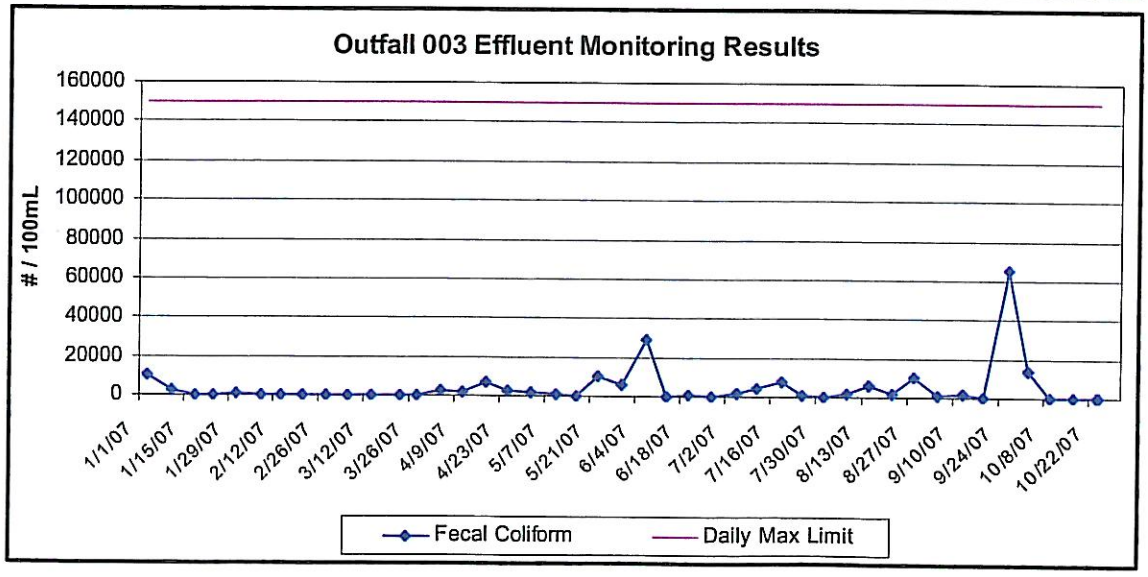
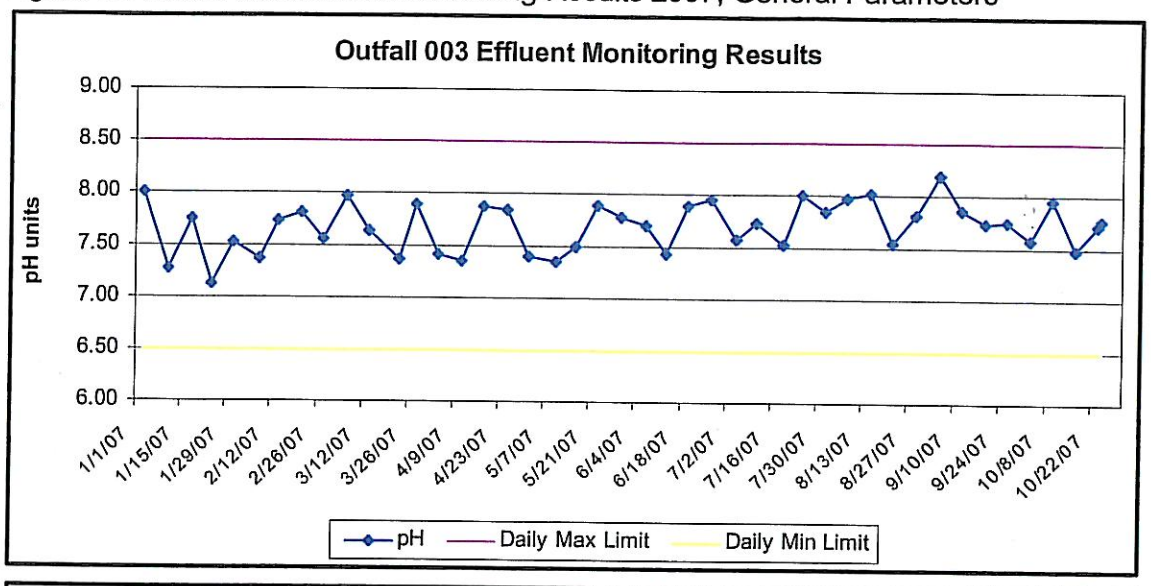
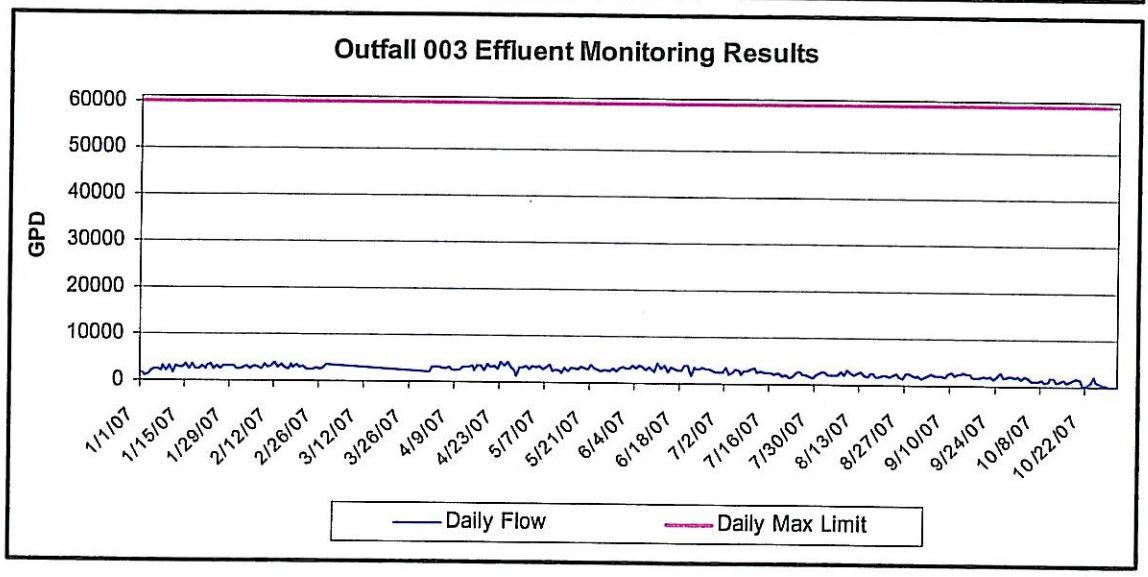


Figure 16: Outfall 003 Effluent Monitoring Results 2007, General Parameters





Appendix A – Duplicate Comparison

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS2				
	Sample No.	CAK-JS2-20070318d	CAK-JS2-20070318				
	Collect Date/Time	3/18/2007	3/18/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.77	0.83	0.8	0.06	7.5	
Nitrate as N	mg/L	0.18	0.18	0.18	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.9	2.0	1.95	0.1	5.1	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	40	40	40	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	20	20	0	0.0	
Dissolved Aluminum	ug/L	1	1	1	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	2	2	2	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS2				
	Sample No.	CAK-JS2-20070423d	CAK-JS2-20070423				
	Collect Date/Time	4/23/2007	4/23/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.69	0.7	0.695	0.01	1.4	
Nitrate as N	mg/L	0.36	0.37	0.365	0.01	2.7	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.1	1.2	1.15	0.1	8.7	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	30	30	30	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	30	25	10	40.0	Yes
Dissolved Aluminum	ug/L	6	5	5.5	1	18.2	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS2				
	Sample No.	CAK-JS2-20070718d	CAK-JS2-20070718				
	Collect Date/Time	7/18/2007	7/18/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.71	0.62	0.665	0.09	13.5	
Nitrate as N	mg/L	0.12	0.05	0.085	0.07	82.4	Yes
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	2.8	0.8	1.8	2	111.1	Yes
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	20	10	15	10	66.7	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	30	10	20	20	100.0	Yes
Dissolved Aluminum	ug/L	11	3	7	8	114.3	Yes
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	6	1	3.5	5	142.9	Yes
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.8	2.65	0.3	11.3	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS2				
	Sample No.	CAK-JS2-20071204d	CAK-JS2-20071204				
	Collect Date/Time	12/4/2007	12/4/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.1	0.15	0.125	0.05	40.0	Yes
Nitrate as N	mg/L	0.19	0.19	0.19	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.5	1.6	1.55	0.1	6.5	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	20	10	15	10	66.7	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	20	20	0	0.0	
Dissolved Aluminum	ug/L	1	1	1	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS4				
	Sample No.	CAK-JS4-20071101d	CAK-JS4-20071101				
	Collect Date/Time	11/1/2007	11/1/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.22	0.19	0.205	0.03	14.6	
Nitrate as N	mg/L	0.28	0.3	0.29	0.02	6.9	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	4.5	4.4	4.45	0.1	2.2	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	40	40	40	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	30	20	25	10	40.0	Yes
Dissolved Aluminum	ug/L	20	19	19.5	1	5.1	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	7	6	6.5	1	15.4	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS5				
	Sample No.	CAK-JS5-20070509d	CAK-JS5-20070509				
	Collect Date/Time	5/9/2007	5/9/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.48	0.23	0.355	0.25	70.4	Yes
Nitrate as N	mg/L	0.43	0.42	0.425	0.01	2.4	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	3.5	3.5	3.5	0	0.0	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	40	40	40	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	29	28	28.5	1	3.5	
Dissolved Aluminum	ug/L	14	12	13	2	15.4	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS5				
	Sample No.	CAK-JS5-20070604d	CAK-JS5-20070604				
	Collect Date/Time	6/4/2007	6/4/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	2.7	1.1	1.9	1.6	84.2	Yes
Nitrate as N	mg/L	0.13	0.13	0.13	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.7	1.4	1.55	0.3	19.4	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	20	20	20	0	0.0	
Total Suspended Solids	mg/L	6	5	5.5	1	18.2	
Hardness, Total	mg/L	18	14	16	4	25.0	Yes
Dissolved Aluminum	ug/L	9	7	8	2	25.0	Yes
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	2	1	1.5	1	66.7	Yes
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	3.1	2.5	2.8	0.6	21.4	Yes

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS5				
	Sample No.	CAK-JS5-20070806d	CAK-JS5-20070806				
	Collect Date/Time	8/6/2007	8/6/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.52	0.44	0.48	0.08	16.7	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.7	1.7	1.7	0	0.0	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	30	20	25	10	40.0	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	20	20	0	0.0	
Dissolved Aluminum	ug/L	2	2	2	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0013	0.00115	0.0003	26.1	Yes
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS5				
	Sample No.	CAK-JS5-20070903d	CAK-JS5-20070903				
	Collect Date/Time	9/3/2007	9/3/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.18	0.21	0.195	0.03	15.4	
Nitrate as N	mg/L	0.07	0.09	0.08	0.02	25.0	Yes
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	3	3.0	3	0	0.0	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	220	170	195	50	25.6	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	20	20	0	0.0	
Dissolved Aluminum	ug/L	2	3	2.5	1	40.0	Yes
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	3	3	3	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-JS5				
	Sample No.	CAK-JS5-20071001d	CAK-JS5-20071001				
	Collect Date/Time	10/1/2007	10/1/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.37	0.52	0.445	0.15	33.7	Yes
Nitrate as N	mg/L	0.17	0.18	0.175	0.01	5.7	
Ammonia as N	mg/L	0.1	0.2	0.15	0.1	66.7	Yes
Sulfate	mg/L	3.1	3.2	3.15	0.1	3.2	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	40	30	35	10	28.6	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	20	20	0	0.0	
Dissolved Aluminum	ug/L	11	9	10	2	20.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	3	2.6	2.8	0.4	14.3	

Field Duplicate Comparison:

	Stn.Code	Duplicate CAK-099	Sample CAK-MLA				
	Sample No.	CAK-DIVOUT-20070328d	CAK-DIVOUT-20070328				
	Collect Date/Time	3/28/2007	3/28/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	1	0.95	0.975	0.05	5.1	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.2	0.15	0.1	66.7	Yes
Sulfate	mg/L	2.4	2.4	2.4	0	0.0	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	90	90	90	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	50	50	50	0	0.0	
Dissolved Aluminum	ug/L	47	48	47.5	1	2.1	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.17	0.17	0.17	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	67	64	65.5	3	4.6	
Mercury Dissolved	ug/L	0.0012	0.0012	0.0012	0	0.0	
Dissolved Nickel	ug/L	2	2	2	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	4.6	4.6	4.6	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-MLA				
	Sample No.	CAK-MLA-20070702d	CAK-MLA-20070702				
	Collect Date/Time	7/2/2007	7/2/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.39	0.43	0.41	0.04	9.8	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.9	2.0	1.95	0.1	5.1	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	80	90	85	10	11.8	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	70	70	70	0	0.0	
Dissolved Aluminum	ug/L	22	21	21.5	1	4.7	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	29	29	29	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	4	4	4	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-MLA				
	Sample No.	CAK-MLA-20070905d	CAK-MLA-20070905				
	Collect Date/Time	9/5/2007	9/5/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.7	0.69	0.695	0.01	1.4	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	2	2.0	2	0	0.0	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	100	100	100	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	70	60	65	10	15.4	
Dissolved Aluminum	ug/L	31	30	30.5	1	3.3	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.1	0.1	0.1	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	31	33	32	2	6.3	
Mercury Dissolved	ug/L	0.0012	0.0010	0.0011	0.0002	18.2	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-MLA				
	Sample No.	CAK-MLA-20071003d	CAK-MLA-20071003				
	Collect Date/Time	10/3/2007	10/3/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.67	0.66	0.665	0.01	1.5	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.6	1.6	1.6	0	0.0	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	60	60	60	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	50	50	50	0	0.0	
Dissolved Aluminum	ug/L	45	90	67.5	45	66.7	Yes
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.19	0.19	0.19	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	13	27	20	14	70.0	Yes
Mercury Dissolved	ug/L	0.0021	0.0022	0.00215	0.0001	4.7	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	3.3	4.5	3.9	1.2	30.8	Yes

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-MLA				
	Sample No.	CAK-MLA-20071107d	CAK-MLA-20071107				
	Collect Date/Time	11/7/2007	11/7/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	1.5	1.6	1.55	0.1	6.5	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	11.8	5.95	11.7	196.6	Yes
Sulfate	mg/L	1.7	1.7	1.7	0	0.0	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	100	180	140	80	57.1	Yes
Total Suspended Solids	mg/L	5	8	6.5	3	46.2	Yes
Hardness, Total	mg/L	40	40	40	0	0.0	
Dissolved Aluminum	ug/L	80	81	80.5	1	1.2	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.24	0.24	0.24	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	100	100	100	0	0.0	
Mercury Dissolved	ug/L	0.0020	0.0022	0.0021	0.0002	9.5	
Dissolved Nickel	ug/L	2	1	1.5	1	66.7	Yes
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	3.4	3.2	3.3	0.2	6.1	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-MLA				
	Sample No.	CAK-MLA-20071212d	CAK-MLA-20071212				
	Collect Date/Time	12/12/2007	12/12/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	1.1	1.2	1.15	0.1	8.7	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	2.1	2.2	2.15	0.1	4.7	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	80	110	95	30	31.6	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	60	60	60	0	0.0	
Dissolved Aluminum	ug/L	53	52	52.5	1	1.9	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.18	0.18	0.18	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	85	83	84	2	2.4	
Mercury Dissolved	ug/L	0.0017	0.0025	0.0021	0.0008	38.1	Yes
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.7	6.2	4.45	3.5	78.7	Yes

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SLC				
	Sample No.	CAK-SLC-20070606d	CAK-SLC-20070606				
	Collect Date/Time	6/6/2007	6/6/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.53	0.53	0.53	0	0.0	
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	2.3	2.3	2.3	0	0.0	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	40	50	45	10	22.2	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	30	30	30	0	0.0	
Dissolved Aluminum	ug/L	40	38	39	2	5.1	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	3	3	3	0	0.0	
Mercury Dissolved	ug/L	0.0016	0.0016	0.0016	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	4.4	5	4.7	0.6	12.8	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SLC				
	Sample No.	CAK-SLC-20070829d	CAK-SLC-20070829				
	Collect Date/Time	8/29/2007	8/29/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.34	0.26	0.3	0.08	26.7	Yes
Nitrate as N	mg/L	0.05	0.05	0.05	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	7.2	7.3	7.25	0.1	1.4	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	100	710	405	610	150.6	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	70	70	70	0	0.0	
Dissolved Aluminum	ug/L	23	24	23.5	1	4.3	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0011	0.0012	0.00115	1E-04	8.7	
Dissolved Nickel	ug/L	5	5	5	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	5.3	4.9	5.1	0.4	7.8	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH103				
	Sample No.	CAK-SH103-20070809d	CAK-SH103-20070809				
	Collect Date/Time	8/9/2007	8/9/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.12	0.14	0.13	0.02	15.4	
Nitrate as N	mg/L	1.16	1.17	1.165	0.01	0.9	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	20.1	20.2	20.15	0.1	0.5	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	80	220	150	140	93.3	Yes
Total Suspended Solids	mg/L	5	8	6.5	3	46.2	Yes
Hardness, Total	mg/L	50	50	50	0	0.0	
Dissolved Aluminum	ug/L	1	1	1	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH105				
	Sample No.	CAK-SH105-20070102d	CAK-SH105-20070102				
	Collect Date/Time	1/2/2007	1/2/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	1.9	1.4	1.65	0.5	30.3	Yes
Nitrate as N	mg/L	0.59	0.59	0.59	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	7.7	7.7	7.7	0	0.0	
Chloride	mg/L	3	3	3	0	0.0	
Total Dissolved Solids	mg/L	70	70	70	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	30	30	30	0	0.0	
Dissolved Aluminum	ug/L	34	39	36.5	5	13.7	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.08	0.065	0.03	46.2	Yes
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	2	2	2	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0017	0.00135	0.0007	51.9	Yes
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH105				
	Sample No.	CAK-SH105-20070703d	CAK-SH105-20070703				
	Collect Date/Time	7/3/2007	7/3/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.55	0.99	0.77	0.44	57.1	Yes
Nitrate as N	mg/L	0.14	0.15	0.145	0.01	6.9	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	14.4	14.4	14.4	0	0.0	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	60	60	60	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	50	40	45	10	22.2	Yes
Dissolved Aluminum	ug/L	7	7	7	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	3	3	3	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	3	3	3	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH105				
	Sample No.	CAK-SH105-20070904d	CAK-SH105-20070904				
	Collect Date/Time	9/4/2007	9/4/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.15	0.15	0.15	0	0.0	
Nitrate as N	mg/L	0.12	0.13	0.125	0.01	8.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	20.3	20.5	20.4	0.2	1.0	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	60	40	50	20	40.0	Yes
Total Suspended Solids	mg/L	6	6	6	0	0.0	
Hardness, Total	mg/L	50	60	55	10	18.2	
Dissolved Aluminum	ug/L	7	7	7	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	2	3	2.5	1	40.0	Yes
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH105				
	Sample No.	CAK-SH109-20071002d	CAK-SH105-20071002				
	Collect Date/Time	10/2/2007	10/2/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.37	0.44	0.405	0.07	17.3	
Nitrate as N	mg/L	0.12	0.24	0.18	0.12	66.7	Yes
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	3.7	8.9	6.3	5.2	82.5	Yes
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	30	20	25	10	40.0	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	30	40	35	10	28.6	Yes
Dissolved Aluminum	ug/L	15	41	28	26	92.9	Yes
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	4	2.5	3	120.0	Yes
Mercury Dissolved	ug/L	0.0010	0.0014	0.0012	0.0004	33.3	Yes
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	4.1	3.3	1.6	48.5	Yes

Field Duplicate Comparison:

	Stn.Code	Duplicate	Sample				
		CAK-099	CAK-SH109				
	Sample No.	CAK-SH109-20071114d	CAK-SH109-20071114				
	Collect Date/Time	11/14/2007	11/14/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.48	0.33	0.405	0.15	37.0	Yes
Nitrate as N	mg/L	0.16	0.16	0.16	0	0.0	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	5.8	5.7	5.75	0.1	1.7	
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	60	50	55	10	18.2	
Total Suspended Solids	mg/L	5	20	12.5	15	120.0	Yes
Hardness, Total	mg/L	40	40	40	0	0.0	
Dissolved Aluminum	ug/L	16	16	16	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH111				
	Sample No.	CAK-SH111-20070605d	CAK-SH111-20070605				
	Collect Date/Time	6/5/2007	6/5/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.23	0.19	0.21	0.04	19.0	
Nitrate as N	mg/L	0.2	0.18	0.19	0.02	10.5	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	1.9	1.3	1.6	0.6	37.5	Yes
Chloride	mg/L	1	1	1	0	0.0	
Total Dissolved Solids	mg/L	20	20	20	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	20	20	20	0	0.0	
Dissolved Aluminum	ug/L	3	3	3	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	1	1	1	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.8	2.65	0.3	11.3	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH113				
	Sample No.	CAK-SH113-20070206d	CAK-SH113-20070206				
	Collect Date/Time	2/6/2007	2/6/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.53	0.49	0.51	0.04	7.8	
Nitrate as N	mg/L	0.59	0.61	0.6	0.02	3.3	
Ammonia as N	mg/L	0.4	0.3	0.35	0.1	28.6	Yes
Sulfate	mg/L	38.8	39.6	39.2	0.8	2.0	
Chloride	mg/L	4	4	4	0	0.0	
Total Dissolved Solids	mg/L	120	160	140	40	28.6	Yes
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	100	90	95	10	10.5	
Dissolved Aluminum	ug/L	4	4	4	0	0.0	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	6	5	5.5	1	18.2	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH113				
	Sample No.	CAK-SH113-20070402d	CAK-SH113-20070402				
	Collect Date/Time	4/2/2007	4/2/2007	Mean	Difference	% Difference	>20% ?
Nitrate as N	mg/L	0.14	0.17	0.155	0.03	19.4	
Ammonia as N	mg/L	0.1	0.1	0.1	0	0.0	
Sulfate	mg/L	10.1	10.1	10.1	0	0.0	
Chloride	mg/L	2	2	2	0	0.0	
Total Dissolved Solids	mg/L	90	90	90	0	0.0	
Total Suspended Solids	mg/L	5	5	5	0	0.0	
Hardness, Total	mg/L	60	60	60	0	0.0	
Dissolved Aluminum	ug/L	7	6	6.5	1	15.4	
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	3	3	3	0	0.0	
Mercury Dissolved	ug/L	0.0010	0.0010	0.001	0	0.0	
Dissolved Nickel	ug/L	1	2	1.5	1	66.7	Yes
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	2.5	2.5	0	0.0	

Field Duplicate Comparison:

		Duplicate	Sample				
	Stn.Code	CAK-099	CAK-SH113				
	Sample No.	CAK-SH113-20070503d	CAK-SH113-20070503				
	Collect Date/Time	5/3/2007	5/3/2007	Mean	Difference	% Difference	>20% ?
Lab Turbidity	NTU	0.95	0.77	0.86	0.18	20.9	Yes
Nitrate as N	mg/L	0.54	0.53	0.535	0.01	1.9	
Ammonia as N	mg/L	0.2	0.2	0.2	0	0.0	
Sulfate	mg/L	36.7	36.0	36.35	0.7	1.9	
Chloride	mg/L	4	3	3.5	1	28.6	Yes
Total Dissolved Solids	mg/L	110	100	105	10	9.5	
Total Suspended Solids	mg/L	12	5	8.5	7	82.4	Yes
Hardness, Total	mg/L	80	70	75	10	13.3	
Dissolved Aluminum	ug/L	19	11	15	8	53.3	Yes
Dissolved Arsenic	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Cadmium	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Chromium	ug/L	2.5	2.5	2.5	0	0.0	
Dissolved Copper	ug/L	1	1	1	0	0.0	
Dissolved Iron	mg/L	0.05	0.05	0.05	0	0.0	
Dissolved Lead	ug/L	0.16	0.16	0.16	0	0.0	
Dissolved Manganese	ug/L	9	5	7	4	57.1	Yes
Dissolved Nickel	ug/L	1	1	1	0	0.0	
Dissolved Selenium	ug/L	1	1	1	0	0.0	
Dissolved Silver	ug/L	0.1	0.1	0.1	0	0.0	
Dissolved Zinc	ug/L	2.5	4	3.25	1.5	46.2	Yes

Appendix B – Variance Reports

Variance Report: Receiving Waters January 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH109-20070102	SH109	1/2/07											
	Alkalinity, Total as CaCO3	26	mg/L	19	37.4	4.62	-2.5	X +---+---0---+---+	40	41	37	36	42
	Chloride	2	mg/L	22	0.992	0.265	3.8	+---+---0---+---+ X	2	<1	<1	<1	<1
	Lab Turbidity	0.9	NTU	6	0.288	0.139	4.4	+---+---0---+---+ X	0.19	0.14	0.5	0.2	0.4
	Nitrate as N	0.32	mg/L	7	0.107	0.0957	2.2	+---+---0---+---+ X	0.17	0.08	<0.05	<0.05	<0.05
CAK-SH112-20070102	SH112	1/2/07											
	Ammonia as N	0.6	mg/L	18	0.0917	0.0192	27	+---+---0---+---+ X	<0.1	<0.1	<0.1	0.1	<0.1
	Dissolved Copper	2	ug/L	18	1.06	0.325	2.9	+---+---0---+---+ X	<1	<1	<1	<1	<1
	Nitrate as N	13.9	mg/L	4	2.06	2.42	4.9	+---+---0---+---+ X	1.63	0.57	5.61	0.44	
CAK-SH105-20070102	SH105	1/2/07											
	Alkalinity, Total as CaCO3	17	mg/L	18	33.6	5.18	-3.2	X +---+---0---+---+	42	39	32	32	37
	Dissolved Iron	0.08	mg/L	21	0.0524	0.00625	4.4	+---+---0---+---+ X	<0.05	<0.05	<0.05	<0.05	<0.05
	Lab Turbidity	1.4	NTU	6	0.423	0.269	3.6	+---+---0---+---+ X	0.5	0.16	0.9	0.18	0.4
CAK-JS5-20070104	JS5	1/4/07											
	pH field	6.69	pH	18	7.53	0.164	-5.2	X +---+---0---+---+	7.76	7.7	7.68	7.74	7.55
CAK-JS2-20070104	JS2	1/4/07											
	pH field	6.61	pH	18	7.21	0.179	-3.4	X +---+---0---+---+	7.53	7.38	7.23	7.2	7.21
CAK-SLC-20070103	SLC	1/3/07											
	Chloride	3	mg/L	21	1.31	0.376	4.5	+---+---0---+---+ X	1	1	1	1	1
CAK-SLB-20070103	SLB	1/3/07											
	Chloride	2	mg/L	22	1.02	0.0883	11	+---+---0---+---+ X	1	1	<1	<1	<1
	Dissolved Zinc	8.6	ug/L	22	2.81	2.57	2.3	+---+---0---+---+ X	6.0	11.6	4.6	5.5	<2.5
CAK-MLA-20070103	MLA	1/3/07											
	Hardness, Total	20	mg/L	25	49.4	12.3	-2.4	X +---+---0---+---+	60	50	40	50	50
	pH lab	7.4	pH	8	7.81	0.146	-2.8	X +---+---0---+---+	7.9	7.6	7.6	7.8	7.8
CAK-SH113-20070130	SH113	1/30/07											
	Hardness, Total	106	mg/L	1	74	0	>100	+---+---0---+---+ X	74				

Variance Report: Receiving Waters February 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SLC-20070208	SLC	2/8/07											
	Dissolved Oxygen	16.46	mg/L	16	11.7	1.19	4	+---+---0---+---+ X	11.58	11.8	10.48	11.06	11.59
CAK-SLB-20070208	SLB	2/8/07											
	Dissolved Oxygen	15.51	mg/L	17	11.6	1.33	3	+---+---0---+---+ X	11.64	12.26	11.25	9.93	10.4
CAK-JS2-20070207	JS2	2/7/07											
	Dissolved Oxygen	15.62	mg/L	17	11.8	0.68	5.7	+---+---0---+---+ X	10.82	11.39	10.87	11.74	11.38
CAK-JS5-20070207	JS5	2/7/07											
	Mercury Dissolved	0.0031	ug/L	14	0.000917	0.000337	6.5	+---+---0---+---+ X	<0.0010	<0.0010	<0.001	<0.0010	<0.0010
	pH lab	8.0	pH	7	7.69	0.146	2.1	+---+---0---+---+ X	7.8	7.9	7.7	7.7	7.7
	Total Dissolved Solids	80	mg/L	19	39.5	16.8	2.4	+---+---0---+---+ X	50	50	60	20	30
CAK-SH105-20070206	SH105	2/6/07											
	Conductivity	161.7	umhos/cm	33	99.6	26	2.4	+---+---0---+---+ X	81.9	169.6	121.6	116.3	114.5
	Sulfate	20.7	mg/L	22	10.3	4.43	2.4	+---+---0---+---+ X	7.7	22.9	13.3	10.3	9.2
	Total Dissolved Solids	160	mg/L	30	61.3	36.5	2.7	+---+---0---+---+ X	70	100	80	60	40

Variance Report: Receiving Waters March 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SLB-20070328	SLB	3/28/07											
	Chloride	2	mg/L	24	1.06	0.217	4.3	+---+---0---+---+ X	1	2	1	1	<1
	Conductivity	147.7	umhos/cm	24	89.1	18.8	3.1	+---+---0---+---+ X	100.3	64.5	98	87.8	117.4
	Dissolved Nickel	2	ug/L	24	0.863	0.387	2.9	+---+---0---+---+ X	<1	1	1	2	1
	Total Dissolved Solids	90	mg/L	24	54.3	15.5	2.3	+---+---0---+---+ X	70	60	70	60	10
CAK-SLC-20070328	SLC	3/28/07											
	Ammonia as N	0.2	mg/L	23	0.0848	0.0351	3.3	+---+---0---+---+ X	<0.1	<0.1	<0.1	0.2	<0.1
	Chloride	4	mg/L	23	1.42	0.518	5	+---+---0---+---+ X	2	3	1	1	1
	Conductivity	163.7	umhos/cm	23	97.7	21.4	3.1	+---+---0---+---+ X	114	79.2	52.7	120.6	114.7
CAK-MLA-20070328	MLA	3/28/07											
	Ammonia as N	0.2	mg/L	26	0.0846	0.034	3.4	+---+---0---+---+ X	<0.1	<0.1	0.1	<0.1	<0.1
CAK-JS2-20070318	JS2	3/18/07											
	Lab Turbidity	0.83	NTU	6	0.243	0.132	4.4	+---+---0---+---+ X	0.26	0.16	0.2	0.14	<0.2
	pH field	10.02	pH	20	7.18	0.217	13	+---+---0---+---+ X	7.28	6.61	7.53	7.38	7.23
	Temperature	1.2	oC	18	4.73	1.73	-2	X +---+---0---+---+	2.9	3.3	5	3.8	6.2
CAK-JS5-20070318	JS5	3/18/07											
	Conductivity	132.2	umhos/cm	20	76.6	27.4	2	+---+---0---+---+ X	105	81.5	98.4	108.4	79.6
	Lab Turbidity	0.91	NTU	6	0.355	0.227	2.4	+---+---0---+---+ X	0.18	0.35	0.3	0.3	0.2
	pH field	6.91	pH	20	7.49	0.245	-2.4	X +---+---0---+---+	7.58	6.69	7.76	7.7	7.68
CAK-SH109-20070305	SH109	3/5/07											
	Conductivity	129.7	umhos/cm	33	94.1	17.3	2.1	+---+---0---+---+ X	124.9	74.8	111.1	103.9	111.2
	Dissolved Manganese	2	ug/L	24	1.07	0.293	3.2	+---+---0---+---+ X	<1	<1	2	<1	<1
	pH lab	8.0	pH	12	7.79	0.0901	2.3	+---+---0---+---+ X	7.9	7.7	7.7	7.8	7.9
CAK-SH113-20070305	SH113	3/5/07											
	Alkalinity, Total as CaCO3	53	mg/L	1	51	0	>100	+---+---0---+---+ X	51				
	Ammonia as N	0.2	mg/L	1	0.3	0	<-100	X +---+---0---+---+	0.3				
	Chloride	2	mg/L	1	4	0	<-100	X +---+---0---+---+	4				
	Color	24	Color Unit	1	15	0	>100	+---+---0---+---+ X	15				
	Conductivity	176.5	umhos/cm	1	239	0	<-100	X +---+---0---+---+	239				
	Dissolved Aluminum	6	ug/L	1	4	0	>100	+---+---0---+---+ X	4				
	Dissolved Manganese	6	ug/L	1	5	0	>100	+---+---0---+---+ X	5				
	Dissolved Nickel	2	ug/L	1	1	0	>100	+---+---0---+---+ X	<1				
	Dissolved Oxygen	12.99	mg/L	1	12.9	0	>100	+---+---0---+---+ X	12.95				
	Lab Turbidity	0.75	NTU	1	0.49	0	>100	+---+---0---+---+ X	0.49				
	Nitrate as N	0.31	mg/L	1	0.61	0	<-100	X +---+---0---+---+	0.61				
	pH field	7.59	pH	1	7.64	0	<-100	X +---+---0---+---+	7.64				
	Sulfate	17.4	mg/L	1	39.6	0	<-100	X +---+---0---+---+	39.6				
	Temperature	0.1	oC	1	0.5	0	<-100	X +---+---0---+---+	0.5				
	Total Dissolved Solids	90	mg/L	1	160	0	<-100	X +---+---0---+---+	160				
CAK-SH105-20070305	SH105	3/5/07											
	Conductivity	195.4	umhos/cm	34	101	27.7	3.4	+---+---0---+---+ X	161.7	81.9	169.6	121.6	116.3
	Hardness, Total	70	mg/L	29	42.2	11.2	2.5	+---+---0---+---+ X	60	30	70	50	40
	Sulfate	26.5	mg/L	23	10.7	4.84	3.3	+---+---0---+---+ X	20.7	7.7	22.9	13.3	10.3
CAK-SH113-20070306	SH113	3/6/07											
	Hardness, Total	156	mg/L	8	91.1	16.3	4	+---+---0---+---+ X	70	104	94	77	114
CAK-SH113-20070313	SH113	3/13/07											
	Hardness, Total	543	mg/L	10	99.3	25.1	18	+---+---0---+---+ X	108	156	70	104	94

Variance Report: Receiving Waters April 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH109-20070402	SH109	4/2/07											
	Alkalinity, Total as CaCO3	51	mg/L	22	37.5	5.48	**2.5**	+---+---0---+---+ X	46	44	26	40	41
	Conductivity	138.4	umhos/cm	34	95.2	18.1	**2.4**	+---+---0---+---+ X	129.7	124.9	74.8	111.1	103.9
	Dissolved Calcium	21	mg/L	21	14.9	2.57	**2.4**	+---+---0---+---+ X	19	18	11	18	16
	Dissolved Oxygen	16.87	mg/L	34	12.1	1.09	**4.4**	+---+---0---+---+ X	12.66	12.77	10.96	11.76	12.09
CAK-SH113-20070402	SH113	4/2/07											
	Dissolved Manganese	3	ug/L	2	5.5	0.707	**-3.5**	X +---+---0---+---+	6	5			
	Dissolved Oxygen	16.73	mg/L	2	13	0.0288	**>100**	+---+---0---+---+ X	12.99	12.95			
	Lab Turbidity	0.16	NTU	2	0.62	0.184	**-2.5**	X +---+---0---+---+	0.75	0.49			
	pH field	7.82	pH	2	7.61	0.0354	**5.8**	+---+---0---+---+ X	7.59	7.64			
	Temperature	1.2	oC	2	0.3	0.283	**3.2**	+---+---0---+---+ X	0.1	0.5			
	Turbidity	0.016	NTU	1	0.2	0	**<-100**	X +---+---0---+---+	0.2				
CAK-SH105-20070402	SH105	4/2/07											
	Alkalinity, Total as CaCO3	48	mg/L	21	33.5	6.52	**2.2**	+---+---0---+---+ X	43	39	17	42	39
	Chloride	7	mg/L	24	1.88	1.57	**3.3**	+---+---0---+---+ X	4	3	3	8	2
	Conductivity	221	umhos/cm	35	104	31.6	**3.7**	+---+---0---+---+ X	195.4	161.7	81.9	169.6	121.6
	Hardness, Total	80	mg/L	30	43.2	12.1	**3**	+---+---0---+---+ X	70	60	30	70	50
	pH lab	8.0	pH	12	7.73	0.123	**2.2**	+---+---0---+---+ X	7.9	7.9	7.5	7.6	7.7
	Sulfate	43.2	mg/L	24	11.4	5.73	**5.6**	+---+---0---+---+ X	26.5	20.7	7.7	22.9	13.3
	Total Dissolved Solids	150	mg/L	32	66.2	40.5	**2.1**	+---+---0---+---+ X	120	160	70	100	80
CAK-SLC-20070404	SLC	4/4/07											
	Chloride	3	mg/L	24	1.52	0.731	**2**	+---+---0---+---+ X	4	2	3	1	1
	Sulfate	6.1	mg/L	24	3.31	1.3	**2.2**	+---+---0---+---+ X	5.6	4.3	4.1	1.5	4.8
	Total Dissolved Solids	100	mg/L	24	58.4	13.7	**3**	+---+---0---+---+ X	80	70	60	30	50
CAK-SLB-20070404	SLB	4/4/07											
	Chloride	2	mg/L	25	1.1	0.284	**3.2**	+---+---0---+---+ X	2	1	2	1	1
	Dissolved Nickel	2	ug/L	25	0.908	0.442	**2.5**	+---+---0---+---+ X	2	<1	1	1	2
	Hardness, Total	60	mg/L	25	38.4	9.13	**2.4**	+---+---0---+---+ X	50	40	30	50	30
	Total Dissolved Solids	90	mg/L	25	55.7	16.8	**2**	+---+---0---+---+ X	90	70	60	70	60
CAK-MLA-20070404	MLA	4/4/07											
	Sulfate	2.7	mg/L	28	1.78	0.353	**2.6**	+---+---0---+---+ X	2.4	2.0	1.7	2.1	1.7
	Total Dissolved Solids	100	mg/L	28	64.9	16.8	**2.1**	+---+---0---+---+ X	90	80	50	70	60
CAK-JS2-20070423	JS2	4/23/07											
	Hardness, Total	30	mg/L	21	17.2	5.84	**2.2**	+---+---0---+---+ X	20	10	10	20	20
	Turbidity	2.17	NTU	21	0.471	0.467	**3.6**	+---+---0---+---+ X	0.28	0.13	0.72	0.22	0.37
CAK-JS5-20070423	JS5	4/23/07											
	Lab Turbidity	1.1	NTU	7	0.434	0.295	**2.3**	+---+---0---+---+ X	0.91	0.18	0.35	0.3	0.3

Variance Report: Receiving Waters May 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH113-20070503	SH113	5/3/07											
	Alkalinity, Total as CaCO3	37	mg/L	3	52.3	1.15	**-13**	X +---+---0---+---+	53	53	51		
	Dissolved Aluminum	11	ug/L	3	5.33	1.15	**4.9**	+---+---0---+---+ X	6	6	4		
	Dissolved Zinc	4.0	ug/L	3	2.5	0	**>100**	+---+---0---+---+ X	<2.5	<2.5	<2.5		
	Temperature	3.0	oC	3	0.6	0.557	**4.3**	+---+---0---+---+ X	1.2	0.1	0.5		
	Turbidity	0.90	NTU	2	0.108	0.13	**6.1**	+---+---0---+---+ X	0.016	0.2			
CAK-SH109-20070503	SH109	5/3/07											
	Chloride	2	mg/L	26	1.03	0.313	**3.1**	+---+---0---+---+ X	1	<1	1	2	2
CAK-MLA-20070509	MLA	5/9/07											
	Lab Turbidity	5.3	NTU	9	1.26	1.03	**3.9**	+---+---0---+---+ X	0.91	0.69	0.59	0.95	0.94
	pH lab	7.4	pH	12	7.78	0.17	**-2.3**	X +---+---0---+---+	7.8	7.9	7.8	7.4	7.9
CAK-SLC-20070509	SLC	5/9/07											
	Dissolved Zinc	13.3	ug/L	25	3.67	3.76	**2.6**	+---+---0---+---+ X	3.0	4.0	<2.5	<2.5	11.1
CAK-SLB-20070509	SLB	5/9/07											
	Chloride	2	mg/L	26	1.13	0.329	**2.6**	+---+---0---+---+ X	2	2	1	2	1
	Dissolved Nickel	3	ug/L	26	0.95	0.483	**4.2**	+---+---0---+---+ X	2	2	<1	1	1
	Dissolved Zinc	33.2	ug/L	26	3.08	2.62	**12**	+---+---0---+---+ X	3.7	3.5	<2.5	8.6	6.0
	pH lab	7.5	pH	11	7.83	0.142	**-2.3**	X +---+---0---+---+	8.0	8.0	7.9	7.6	7.8

Variance Report: Receiving Waters June 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH113-20070605	SH113	6/5/07											
	Alkalinity, Total as CaCO3	25	mg/L	4	48.5	7.72	**-3**	X +---+---0---+---+	37	53	53	51	
	Conductivity	74.8	umhos/cm	4	187	38.4	**-2.9**	X +---+---0---+---+	185.6	146.8	176.5	239	
	Dissolved Aluminum	15	ug/L	4	6.75	2.99	**2.8**	+---+---0---+---+ X	11	6	6	4	
	Dissolved Manganese	2	ug/L	4	4.75	1.26	**-2.2**	X +---+---0---+---+	5	3	6	5	
	Total Dissolved Solids	40	mg/L	4	110	33.7	**-2.1**	X +---+---0---+---+	100	90	90	160	
	Total Suspended Solids	6	mg/L	4	5	0	**>100**	+---+---0---+---+ X	<5	<5	<5	<5	
CAK-SH109-20070605	SH109	6/5/07											
	Alkalinity, Total as CaCO3	22	mg/L	24	37.9	6.05	**-2.6**	X +---+---0---+---+	32	51	46	44	26
	Conductivity	53.9	umhos/cm	36	96.2	19	**-2.2**	X +---+---0---+---+	90.0	138.4	129.7	124.9	74.8
	Hardness, Total	20	mg/L	34	42.7	10.9	**-2.1**	X +---+---0---+---+	31	40	60	50	50
CAK-MLA-20070606	MLA	6/6/07											
	Dissolved Oxygen	7.11	mg/L	17	11.7	1.51	**-3**	X +---+---0---+---+	11.86	11.8	12.41	10.97	11.76
CAK-JS2-20070604	JS2	6/4/07											
	Sulfate	0.7	mg/L	23	1.47	0.354	**-2.2**	X +---+---0---+---+	1.3	1.2	2.0	1.7	1.6

Variance Report: Receiving Waters July 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SLC-20070702	SLC	7/2/2007											
	Dissolved Nickel	3	ug/L	27	1.19	0.773	**2.3**	+---+---0---+---+ X	<1	2	2	2	<1
CAK-SLB-20070702	SLB	7/2/2007											
	Alkalinity, Total as CaCO3	66	mg/L	25	37.3	9.98	**2.9**	+---+---0---+---+ X	45	24	53	49	39
	Chloride	2	mg/L	28	1.16	0.358	**2.3**	+---+---0---+---+ X	1	2	2	2	1
	Dissolved Calcium	26	mg/L	25	14.7	3.98	**2.8**	+---+---0---+---+ X	17	11	20	20	16
	Dissolved Nickel	4	ug/L	28	1.03	0.605	**4.9**	+---+---0---+---+ X	1	3	2	2	<1
	Hardness, Total	70	mg/L	28	39.3	9.91	**3.1**	+---+---0---+---+ X	50	30	60	50	40
	pH field	8.27	pH	28	7.65	0.286	**2.2**	+---+---0---+---+ X	7.98	7.57	7.81	7.66	7.64
CAK-SH113-20070703	SH113	7/3/2007											
	Dissolved Manganese	13	ug/L	5	4.2	1.64	**5.4**	+---+---0---+---+ X	2	5	3	6	5
	Dissolved Nickel	5	ug/L	5	1.4	0.548	**6.6**	+---+---0---+---+ X	<1	<1	2	2	<1
	pH lab	7.8	pH	4	7.92	0.0501	**-2.5**	X +---+---0---+---+	7.9	7.9	8.0	7.9	
	Temperature	6.4	oC	5	1.68	1.54	**3.1**	+---+---0---+---+ X	3.6	3.0	1.2	0.1	0.5

Variance Report: Receiving Waters August 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH113-20070807	SH113	8/7/2007											
	Dissolved Manganese	33	ug/L	6	5.67	3.88	7	+---+---0---+---+ X	13	2	5	3	6
	Temperature	8.3	oC	6	2.47	2.37	2.5	+---+---0---+---+ X	6.4	3.6	3.0	1.2	0.1
CAK-JS2-20070808	JS2	8/8/2007											
	Total Suspended Solids	8	mg/L	25	4.92	0.494	6.2	+---+---0---+---+ X	<5	<5	<5	<5	<5
CAK-SLC-20070829	SLC	8/29/2007											
	Dissolved Calcium	24	mg/L	25	15.2	4.2	2.1	+---+---0---+---+ X	20	11	11	21	20
	Dissolved Nickel	5	ug/L	28	1.25	0.833	4.5	+---+---0---+---+ X	3	<1	2	2	2
	Hardness, Total	70	mg/L	28	43.7	11.7	2.2	+---+---0---+---+ X	60	30	30	60	60
	Sulfate	7.3	mg/L	28	3.4	1.33	2.9	+---+---0---+---+ X	4.0	2.3	3.4	6.1	5.6
	Total Dissolved Solids	710	mg/L	28	59.4	15.1	43	+---+---0---+---+ X	60	50	50	100	80
CAK-SLB-20070829	SLB	8/29/2007											
	Dissolved Cadmium	0.2	ug/L	29	0.11	0.031	2.9	+---+---0---+---+ X	<0.1	<0.1	<0.1	<0.1	<0.1
	Dissolved Nickel	6	ug/L	29	1.13	0.811	6	+---+---0---+---+ X	4	1	3	2	2
	Hardness, Total	70	mg/L	29	40.3	11.3	2.6	+---+---0---+---+ X	70	50	30	60	50
	Sulfate	7.5	mg/L	29	2.6	1.58	3.1	+---+---0---+---+ X	3.8	2.9	4.0	4.9	5.1
	Total Dissolved Solids	110	mg/L	29	57.7	17.4	3	+---+---0---+---+ X	80	60	50	90	90
CAK-MLA-20070829	MLA	8/29/2007											
	Dissolved Nickel	5	ug/L	31	1.39	1.75	2.1	+---+---0---+---+ X	4	<1	<1	2	2

Variance Report: Receiving Waters September 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH113-20070904	SH113	9/4/2007											
	Chloride	5	mg/L	7	2.71	1.11	2.1	+---+---0---+---+ X	4	3	<1	3	2
	Dissolved Manganese	35	ug/L	7	9.57	10.9	2.3	+---+---0---+---+ X	33	13	2	5	3
CAK-SLC-20070905	SLC	9/5/2007											
	Sulfate	6.6	mg/L	29	3.53	1.49	2.1	+---+---0---+---+ X	7.3	4.0	2.3	3.4	6.1
CAK-SLB-20070905	SLB	9/5/2007											
	Sulfate	10.1	mg/L	30	2.76	1.79	4.1	+---+---0---+---+ X	7.5	3.8	2.9	4.0	4.9
	Total Dissolved Solids	110	mg/L	30	59.4	19.6	2.6	+---+---0---+---+ X	110	80	60	50	90
CAK-MLA-20070905	MLA	9/5/2007											
	Color	210	Color Unit	23	71.6	44	3.1	+---+---0---+---+ X	69	25	38	100	68
CAK-JS5-20070903	JS5	9/3/2007											
	Total Dissolved Solids	170	mg/L	26	41.2	20.8	6.2	+---+---0---+---+ X	20	10	20	40	80
CAK-JS2-20070903	JS2	9/3/2007											
	Total Dissolved Solids	140	mg/L	26	23.5	10.2	11	+---+---0---+---+ X	10	<10	20	30	30

Variance Report: Receiving Waters October 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-JS5-20071001	JS5	10/1/2007											
	Ammonia as N	0.2	mg/L	27	0.0907	0.0198	5.5	+---+---0---+---+ X	<0.1	<0.1	<0.1	<0.1	<0.1
CAK-SLC-20071003	SLC	10/3/2007											
	Dissolved Cadmium	0.5	ug/L	30	0.14	0.165	2.2	+---+---0---+---+ X	<0.1	0.1	<0.1	<0.1	<0.1
	Dissolved Manganese	31	ug/L	30	5.05	9.27	2.8	+---+---0---+---+ X	<1	<1	<1	3	16
	Dissolved Nickel	4	ug/L	30	1.37	1.06	2.5	+---+---0---+---+ X	<1	5	3	<1	2
	Dissolved Zinc	47.1	ug/L	30	4.18	3.92	11	+---+---0---+---+ X	7.8	4.9	2.7	5.0	13.3
CAK-SLB-20071003	SLB	10/3/2007											
	Chloride	2	mg/L	31	1.18	0.375	2.2	+---+---0---+---+ X	1	1	2	1	2
	Dissolved Aluminum	124	ug/L	31	52.7	26.7	2.7	+---+---0---+---+ X	84	28	26	33	72
	Dissolved Cadmium	1.1	ug/L	31	0.113	0.0341	29	+---+---0---+---+ X	<0.1	0.2	<0.1	<0.1	<0.1
	Dissolved Copper	4	ug/L	31	0.861	0.351	8.9	+---+---0---+---+ X	<1	1	<1	<1	1
	Dissolved Manganese	64	ug/L	31	10.5	20.5	2.6	+---+---0---+---+ X	3	<1	1	11	33
	Dissolved Nickel	7	ug/L	31	1.31	1.18	4.8	+---+---0---+---+ X	2	6	4	1	3
	Dissolved Zinc	92.7	ug/L	31	4.91	6.41	14	+---+---0---+---+ X	16.7	8.2	4.1	9.9	33.2
	Sulfate	9.1	mg/L	31	3	2.2	2.8	+---+---0---+---+ X	10.1	7.5	3.8	2.9	4.0
CAK-SH113-20071002	SH113	10/2/2007											
	Dissolved Aluminum	21	ug/L	8	6.88	4.09	3.5	+---+---0---+---+ X	4	3	6	15	11
	Dissolved Copper	1	ug/L	8	1	0	<-100	X +---+---0---+---+	<1	<1	<1	<1	<1
	Mercury Dissolved	0.0011	ug/L	8	0.001	0	>100	+---+---0---+---+ X	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
CAK-SH105-20071002	SH105	10/2/2007											
	Color	39	Color Unit	32	12.8	9.73	2.7	+---+---0---+---+ X	<5.0	<5.0	<5.0	<5.0	<5.0
CAK-SH109-20071030	SH109	10/31/2007											
	Lab Turbidity	1.7	NTU	29	0.373	0.233	5.7	+---+---0---+---+ X	0.16	0.38	0.33	0.14	0.48

Variance Report: Receiving Waters November 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SLC-20071107	SLC	11/7/2007											
	Ammonia as N	1.0	mg/L	31	0.0919	0.0367	25	+---+---0---+---+ X	<0.1	<0.1	<0.1	<0.1	<0.1
	Dissolved Manganese	56	ug/L	31	5.89	10.2	4.9	+---+---0---+---+ X	31	<1	<1	<1	3
	Dissolved Nickel	4	ug/L	31	1.45	1.14	2.2	+---+---0---+---+ X	4	<1	5	3	<1
	Dissolved Zinc	51.4	ug/L	31	5.56	8.62	5.3	+---+---0---+---+ X	47.1	7.8	4.9	2.7	5.0
	Sulfate	7.2	mg/L	31	3.72	1.62	2.2	+---+---0---+---+ X	6.3	6.6	7.3	4.0	2.3
CAK-SLB-20071107	SLB	11/7/2007											
	Chloride	2	mg/L	32	1.2	0.396	2	+---+---0---+---+ X	2	1	1	2	1
	Dissolved Copper	4	ug/L	32	0.959	0.654	4.7	+---+---0---+---+ X	4	<1	1	<1	<1
	Dissolved Manganese	118	ug/L	32	12.2	22.2	4.8	+---+---0---+---+ X	64	3	<1	1	11
	Dissolved Nickel	7	ug/L	32	1.49	1.54	3.6	+---+---0---+---+ X	7	2	6	4	1
	Dissolved Zinc	95.5	ug/L	32	7.66	16.8	5.2	+---+---0---+---+ X	92.7	16.7	8.2	4.1	9.9
	Sulfate	9.0	mg/L	32	3.19	2.42	2.4	+---+---0---+---+ X	9.1	10.1	7.5	3.8	2.9
CAK-MLA-20071107	MLA	11/7/2007											
	Ammonia as N	11.8	mg/L	34	0.0912	0.0358	>100	+---+---0---+---+ X	<0.1	<0.1	<0.1	<0.1	<0.1
	Dissolved Iron	0.24	mg/L	35	0.129	0.0522	2.1	+---+---0---+---+ X	0.19	0.1	0.11	0.05	0.07
	Dissolved Manganese	100	ug/L	35	23.8	24.5	3.1	+---+---0---+---+ X	27	33	53	29	20
	Total Suspended Solids	8	mg/L	34	4.68	1.08	3.1	+---+---0---+---+ X	<5	<5	<5	<5	<5
CAK-SH113-20071114	SH113	11/14/2007											
	Dissolved Aluminum	21	ug/L	9	8.44	6.06	2.1	+---+---0---+---+ X	21	4	3	6	15
	Mercury Dissolved	0.0012	ug/L	9	0.00101	3.33E-05	5.7	+---+---0---+---+ X	0.0011	<0.0010	<0.0010	<0.0010	<0.0010
	Total Suspended Solids	28	mg/L	9	5.11	0.333	69	+---+---0---+---+ X	<5	<5	<5	<5	6
CAK-SH109-20071114	SH109	11/14/2007											
	Total Suspended Solids	20	mg/L	39	4.74	0.442	34	+---+---0---+---+ X	<5	<5	<5	<5	<5
CAK-SH105-20071114	SH105	11/14/2007											
	Color	78	Color Unit	33	13.6	10.6	6.1	+---+---0---+---+ X	39	<5.0	<5.0	<5.0	<5.0
	Dissolved Iron	0.08	mg/L	33	0.0524	0.00708	3.9	+---+---0---+---+ X	<0.05	<0.05	<0.05	<0.05	<0.05
	Mercury Dissolved	0.0026	ug/L	24	0.00117	0.000369	3.9	+---+---0---+---+ X	0.0014	<0.0010	<0.0010	<0.001	<0.001

Variance Report: Receiving Waters December 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-SH109-20071204	SH109	12/4/2007											
	Color	27	Color Unit	34	9.74	7.06	2.4	+---+---0---+---+ X	14	5.0	12	<5.0	<5.0
	Dissolved Manganese	2	ug/L	33	1.08	0.3	3.1	+---+---0---+---+ X	1	<1	<1	<1	<1
CAK-SH113-20071204	SH113	12/4/2007											
	Ammonia as N	0.3	mg/L	10	0.14	0.0699	2.3	+---+---0---+---+ X	<0.1	<0.1	<0.1	<0.1	<0.1
	Chloride	7	mg/L	10	3.1	1.2	3.3	+---+---0---+---+ X	4	3	5	4	3
	Dissolved Zinc	4.5	ug/L	10	2.83	0.587	2.8	+---+---0---+---+ X	<2.5	3.0	<2.5	<2.5	<2.5
	Lab Turbidity	1.3	NTU	10	0.578	0.259	2.8	+---+---0---+---+ X	0.56	0.41	0.23	0.63	0.96
CAK-JS5-20071204	JS5	12/4/2007											
	Dissolved Oxygen	13.93	mg/L	26	12.1	0.724	2.5	+---+---0---+---+ X	12.3	10.87	12.05	12.01	11.23
CAK-SLC-20071212	SLC	12/12/2007											
	Dissolved Oxygen	17.05	mg/L	25	12	1.51	3.4	+---+---0---+---+ X	12.83	11.24	10.4	10.36	10.55
	Dissolved Zinc	31.9	ug/L	32	7	11.7	2.1	+---+---0---+---+ X	51.4	47.1	7.8	4.9	2.7
	Sulfate	8.9	mg/L	32	3.83	1.71	3	+---+---0---+---+ X	7.2	6.3	6.6	7.3	4.0
CAK-SLB-20071212	SLB	12/12/2007											
	Dissolved Cadmium	0.6	ug/L	33	0.145	0.175	2.6	+---+---0---+---+ X	0.2	1.1	<0.1	0.2	<0.1
	Dissolved Copper	3	ug/L	33	1.05	0.833	2.3	+---+---0---+---+ X	4	4	<1	1	<1
	Dissolved Oxygen	15.83	mg/L	26	11.8	1.49	2.7	+---+---0---+---+ X	12.31	10.86	10.67	11.29	9.92
	Dissolved Zinc	66.9	ug/L	33	10.3	22.5	2.5	+---+---0---+---+ X	95.5	92.7	16.7	8.2	4.1
	Sulfate	11.6	mg/L	33	3.37	2.58	3.2	+---+---0---+---+ X	9.0	9.1	10.1	7.5	3.8
CAK-MLA-20071212	MLA	12/12/2007											
	Dissolved Manganese	83	ug/L	36	25.9	27.3	2.1	+---+---0---+---+ X	100	27	33	53	29
	Dissolved Zinc	6.2	ug/L	35	2.8	1.66	2.1	+---+---0---+---+ X	3.2	4.5	<2.5	<2.5	<2.5
	pH field	6.89	pH	34	7.47	0.286	-2	X +---+---0---+---+	7.15	7.35	7.47	7.47	7.84

Variance Report: Outfalls January 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070103	001 Influent	1/3/07											
	Total Dissolved Solids	410	mg/L	245	120	139	2.1	+---+---0---+---+ X	430	450	470	380	370
	Total Recoverable Copper	124	ug/L	287	9	12.7	9	+---+---0---+---+ X	22	42	42	30	17
CAK-001IN-20070110	001 Influent	1/10/07											
	Total Dissolved Solids	480	mg/L	246	121	140	2.6	+---+---0---+---+ X	410	430	450	470	380
CAK-001IN-20070116	001 Influent	1/16/07											
	Total Dissolved Solids	500	mg/L	247	123	141	2.7	+---+---0---+---+ X	480	410	430	450	470
	Total Recoverable Copper	289	ug/L	289	9.44	14.4	19	+---+---0---+---+ X	20	124	22	42	42
	Total Recoverable Lead	24.5	ug/L	289	3.52	5.74	3.7	+---+---0---+---+ X	2.40	9.31	2.04	3.78	5.06
	Total Recoverable Zinc	90.9	ug/L	289	11.9	13.8	5.7	+---+---0---+---+ X	17.5	35.9	7.6	20.6	18.2
CAK-001IN-20070123	001 Influent	1/23/07											
	Total Dissolved Solids	440	mg/L	248	124	143	2.2	+---+---0---+---+ X	500	480	410	430	450
CAK-001IN-20070130	001 Influent	1/30/07											
	Total Dissolved Solids	560	mg/L	249	125	144	3	+---+---0---+---+ X	440	500	480	410	430
CAK-001EFF-20070103	001 Effluent	1/3/07											
	Total Recoverable Nickel	2	ug/L	523	9.03	2.37	-3	X +---+---0---+---+	4	6	3	4	5
CAK-001EFF-20070110	001 Effluent	1/10/07											
	Ammonia as N	2.1	mg/L	511	0.187	0.371	5.2	+---+---0---+---+ X	0.9	1.3	3.4	2.7	1.5
	Nitrate as N	4.52	mg/L	93	0.931	1.55	2.3	+---+---0---+---+ X	2.07	3.72	7.18	5.48	4.01
	Sulfate (as S)	93	mg/L	44	67.4	11.2	2.3	+---+---0---+---+ X	81	76	81	81	78
	Total Dissolved Solids	440	mg/L	522	311	64.4	2	+---+---0---+---+ X	370	410	430	440	410
	Total Recoverable Nickel	4	ug/L	524	9.02	2.38	-2.1	X +---+---0---+---+	2	4	6	3	4
CAK-001EFF-20070116	001 Effluent	1/16/07											
	Ammonia as N	1.5	mg/L	512	0.19	0.38	3.4	+---+---0---+---+ X	2.1	0.9	1.3	3.4	2.7
	Nitrate as N	4.78	mg/L	94	0.97	1.59	2.4	+---+---0---+---+ X	4.52	2.07	3.72	7.18	5.48
	Total Recoverable Zinc	29.6	ug/L	526	4.05	1.98	13	+---+---0---+---+ X	<2.5	<2.5	<2.5	4.5	<2.5
CAK-001EFF-20070123	001 Effluent	1/23/07											
	Ammonia as N	1.1	mg/L	513	0.193	0.384	2.4	+---+---0---+---+ X	1.5	2.1	0.9	1.3	3.4
	Total Dissolved Solids	450	mg/L	524	312	64.8	2.1	+---+---0---+---+ X	440	440	370	410	430
	Total Recoverable Nickel	4	ug/L	526	9	2.39	-2.1	X +---+---0---+---+	5	4	2	4	6
CAK-001EFF-20070130	001 Effluent	1/30/07											
	Ammonia as N	1.0	mg/L	514	0.195	0.386	2.1	+---+---0---+---+ X	1.1	1.5	2.1	0.9	1.3
	Total Dissolved Solids	490	mg/L	525	312	65	2.7	+---+---0---+---+ X	450	440	440	370	410
	Total Recoverable Nickel	3	ug/L	527	8.99	2.4	-2.5	X +---+---0---+---+	4	5	4	2	4
CAK-003EFF-20070103	003 Effluent	1/3/07											
	Total Suspended Solids	21.0	mg/L	64	8.38	6.09	2.1	+---+---0---+---+ X	10.0	17.0	9.00	26.0	5.00
CAK-003EFF-20070111	003 Effluent	1/11/07											
	pH lab	7.26	pH	57	7.95	0.197	-3.5	X +---+---0---+---+	8.00	8.09	7.77	7.87	7.59
	Total Suspended Solids	24	mg/L	65	8.58	6.24	2.5	+---+---0---+---+ X	21.0	10.0	17.0	9.00	26.0
CAK-003EFF-20070118	003 Effluent	1/18/07											
	Total Suspended Solids	22.0	mg/L	66	8.81	6.48	2	+---+---0---+---+ X	24	21.0	10.0	17.0	9.00
CAK-003EFF-20070124	003 Effluent	1/24/07											
	pH lab	7.12	pH	59	7.93	0.215	-3.8	X +---+---0---+---+	7.75	7.26	8.00	8.09	7.77
	Total Suspended Solids	29.0	mg/L	67	9.01	6.63	3	+---+---0---+---+ X	22.0	24	21.0	10.0	17.0
CAK-003EFF-20070131	003 Effluent	1/31/07											
	Total Suspended Solids	37.0	mg/L	68	9.3	7.01	4	+---+---0---+---+ X	29.0	22.0	24	21.0	10.0

Variance Report: Outfalls February 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070206	001 Influent	2/6/07											
	Total Dissolved Solids	590	mg/L	250	127	146	3.2	+—+—0—+—+ X	560	440	500	480	410
	Total Recoverable Copper	65	ug/L	292	10.6	21.9	2.5	+—+—0—+—+ X	41	35	289	20	124
CAK-001IN-20070213	001 Influent	2/13/07											
	Total Dissolved Solids	540	mg/L	251	129	149	2.8	+—+—0—+—+ X	590	560	440	500	480
	Total Recoverable Copper	81	ug/L	293	10.8	22.1	3.2	+—+—0—+—+ X	65	41	35	289	20
CAK-001IN-20070220	001 Influent	2/20/07											
	Total Dissolved Solids	620	mg/L	252	131	151	3.2	+—+—0—+—+ X	540	590	560	440	500
	Total Recoverable Copper	78	ug/L	294	11	22.4	3	+—+—0—+—+ X	81	65	41	35	289
	Total Recoverable Zinc	56.3	ug/L	294	12.4	14.6	3	+—+—0—+—+ X	35.7	25.7	23.6	22.0	90.9
CAK-001IN-20070222	001 Influent	2/22/07											
	Total Suspended Solids	15300	mg/L	965	129	308	49	+—+—0—+—+ X	581	311	450	732	492
CAK-001IN-20070228	001 Influent	2/28/07											
	Total Dissolved Solids	580	mg/L	253	133	154	2.9	+—+—0—+—+ X	620	540	590	560	440
CAK-001EFF-20070206	001 Effluent	2/6/07											
	Ammonia as N	2.5	mg/L	515	0.196	0.387	6	+—+—0—+—+ X	1.0	1.1	1.5	2.1	0.9
	Hardness, Total	356	mg/L	96	219	40	3.4	+—+—0—+—+ X	268	277	255	254	217
	Nitrate as N	4.79	mg/L	97	1.05	1.64	2.3	+—+—0—+—+ X	3.12	3.22	4.78	4.52	2.07
	Sulfate (as S)	97	mg/L	48	68.9	11.9	2.4	+—+—0—+—+ X	83	82	81	93	81
	Total Dissolved Solids	610	mg/L	526	312	65.4	4.6	+—+—0—+—+ X	490	450	440	440	370
	Total Recoverable Nickel	3	ug/L	528	8.98	2.41	-2.5	X +—+—0—+—+	3	4	5	4	2
CAK-001EFF-20070208	001 Effluent	2/8/07											
	Ammonia as N	3.1	mg/L	516	0.201	0.4	7.3	+—+—0—+—+ X	2.5	1.0	1.1	1.5	2.1
	Hardness, Total	342	mg/L	97	221	42.1	2.9	+—+—0—+—+ X	356	268	277	255	254
	Nitrate as N	5.37	mg/L	98	1.09	1.67	2.6	+—+—0—+—+ X	4.79	3.12	3.22	4.78	4.52
	Sulfate (as S)	99	mg/L	49	69.4	12.4	2.4	+—+—0—+—+ X	97	83	82	81	93
	Total Dissolved Solids	620	mg/L	527	313	66.6	4.6	+—+—0—+—+ X	610	490	450	440	440
	Total Recoverable Nickel	3	ug/L	529	8.97	2.43	-2.5	X +—+—0—+—+	3	3	4	5	4
CAK-001EFF-20070213	001 Effluent	2/13/07											
	Ammonia as N	2.1	mg/L	517	0.206	0.419	4.5	+—+—0—+—+ X	3.1	2.5	1.0	1.1	1.5
	Hardness, Total	328	mg/L	98	222	43.7	2.4	+—+—0—+—+ X	342	356	268	277	255
	Total Dissolved Solids	560	mg/L	528	313	67.9	3.6	+—+—0—+—+ X	620	610	490	450	440
CAK-001EFF-20070220	001 Effluent	2/20/07											
	Ammonia as N	2.6	mg/L	518	0.21	0.427	5.6	+—+—0—+—+ X	2.1	3.1	2.5	1.0	1.1
	Nitrate as N	5.21	mg/L	100	1.16	1.74	2.3	+—+—0—+—+ X	3.99	5.37	4.79	3.12	3.22
	Total Dissolved Solids	600	mg/L	529	314	68.7	4.2	+—+—0—+—+ X	560	620	610	490	450
	Total Recoverable Copper	5	ug/L	532	2.14	1.15	2.5	+—+—0—+—+ X	1	<1	<1	<1	<1
	Total Recoverable Zinc	18.4	ug/L	532	4.11	2.28	6.3	+—+—0—+—+ X	4.4	<2.5	<2.5	8.4	7.8
CAK-001EFF-20070228	001 Effluent	2/28/07											
	Ammonia as N	2.8	mg/L	519	0.215	0.439	5.9	+—+—0—+—+ X	2.6	2.1	3.1	2.5	1.0
	Nitrate as N	5.04	mg/L	101	1.2	1.77	2.2	+—+—0—+—+ X	5.21	3.99	5.37	4.79	3.12
	Total Dissolved Solids	550	mg/L	530	314	69.7	3.4	+—+—0—+—+ X	600	560	620	610	490
	Total Recoverable Zinc	9.9	ug/L	533	4.13	2.36	2.4	+—+—0—+—+ X	18.4	4.4	<2.5	<2.5	8.4
CAK-003EFF-20070208	003 Effluent	2/8/07											
	pH lab	7.36	pH	61	7.91	0.241	-2.3	X +—+—0—+—+	7.53	7.12	7.75	7.26	8.00

Variance Report: Outfalls March 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070306	001 Influent	3/6/07											
	Total Dissolved Solids	470	mg/L	254	134	156	2.2	+---+---0---+---+ X	580	620	540	590	560
CAK-001IN-20070313	001 Influent	3/13/07											
	Total Dissolved Solids	520	mg/L	255	136	157	2.4	+---+---0---+---+ X	470	580	620	540	590
CAK-001IN-20070320	001 Influent	3/20/07											
	Total Dissolved Solids	490	mg/L	257	139	160	2.2	+---+---0---+---+ X	520	520	470	580	620
CAK-001EFF-20070306	001 Effluent	3/6/07											
	Ammonia as N	2.3	mg/L	521	0.224	0.466	4.5	+---+---0---+---+ X	2.75	2.8	2.6	2.1	3.1
	Chloride	21	mg/L	36	6.41	2.81	5.2	+---+---0---+---+ X	11	15	6	11	4
	Conductivity	809	umhos/cm	36	457	65.3	5.4	+---+---0---+---+ X	634	470	437	628	439
	Fluoride	0.2	mg/L	34	0.116	0.0409	2.1	+---+---0---+---+ X	0.2	0.1	0.1	0.1	<0.1
	pH lab	7.8	pH	405	8.09	0.139	-2.1	X +---+---0---+---+	7.9	8.0	7.8	8.1	8.1
	Sulfate (as S)	105	mg/L	54	71.6	13.8	2.4	+---+---0---+---+ X	93	93	87	95	99
	Total Dissolved Solids	700	mg/L	532	315	71	5.4	+---+---0---+---+ X	540	550	600	560	620
CAK-001EFF-20070308	001 Effluent	3/8/07											
	Ammonia as N	1.9	mg/L	522	0.228	0.474	3.5	+---+---0---+---+ X	2.3	2.75	2.8	2.6	2.1
	pH lab	7.7	pH	406	8.09	0.14	-2.8	X +---+---0---+---+	7.8	7.9	8.0	7.8	8.1
	Total Recoverable Zinc	11.9	ug/L	536	4.15	2.37	3.3	+---+---0---+---+ X	5.2	8.65	9.9	18.4	4.4
CAK-001EFF-20070313	001 Effluent	3/13/07											
	Hardness Downstream of Outfall	543	mg/L	87	130	77.1	5.4	+---+---0---+---+ X	108	156	104.5	104	94
	Hardness, Total	910	mg/L	104	227	46.6	15	+---+---0---+---+ X	300	309	309	307	261
	Total Dissolved Solids	510	mg/L	534	316	72.9	2.7	+---+---0---+---+ X	380	700	540	550	600
CAK-001EFF-20070326	001 Effluent	3/26/07											
	Total Suspended Solids	7.00	mg/L	812	4.19	1.4	2	+---+---0---+---+ X	<4.00	<4.00	<4.00	<4.00	<4.00
CAK-001EFF-20070327	001 Effluent	3/27/07											
	Lab Turbidity	1.7	NTU	36	0.427	0.328	3.9	+---+---0---+---+ X	0.72	0.60	0.25	0.53	0.465
CAK-003EFF-20070314	003 Effluent	3/14/07											
	Biological Oxygen Demand 5 day	31.3	mg/L	74	10.4	9.03	2.3	+---+---0---+---+ X	9.75	8.92	3.44	9.21	12.9
	Total Suspended Solids	92.0	mg/L	74	10.2	7.71	11	+---+---0---+---+ X	20.0	18.0	10.0	14.0	20.0
CAK-003EFF-20070323	003 Effluent	3/23/07											
	pH lab	7.36	pH	67	7.89	0.246	-2.2	X +---+---0---+---+	7.64	7.98	7.56	7.82	7.74
	Total Suspended Solids	44.0	mg/L	75	11.2	12.2	2.7	+---+---0---+---+ X	92.0	20.0	18.0	10.0	14.0

Variance Report: Outfalls April 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070405	001 Influent	4/5/07											
	Total Dissolved Solids	530	mg/L	259	141	162	2.4	+---+---0---+---+ X	400	490	520	520	470
CAK-001IN-20070410	001 Influent	4/10/07											
	Total Chromium	4.1	ug/L	28	2.64	0.341	4.3	+---+---0---+---+ X	<2.5	<2.5	<2.5	<2.5	<2.5
	Total Dissolved Solids	620	mg/L	260	143	163	2.9	+---+---0---+---+ X	530	400	490	520	520
	Total Recoverable Aluminum	15500	ug/L	192	2.18E+03	3.80E+03	3.5	+---+---0---+---+ X	562	1060	1590	1710	1710
	Total Recoverable Copper	89	ug/L	302	11.1	22.5	3.5	+---+---0---+---+ X	3	5	7	6	6
	Total Recoverable Iron	25	mg/L	187	3.6	6.62	3.2	+---+---0---+---+ X	0.89	1.68	2.53	2.62	2.62
	Total Recoverable Manganese	877	ug/L	192	122	231	3.3	+---+---0---+---+ X	63	88	136	129	129
	Total Recoverable Zinc	123	ug/L	302	12.5	14.6	7.6	+---+---0---+---+ X	5.5	10.2	17.5	10.8	10.8
CAK-001IN-20070413	001 Influent	4/13/07											
	Total Suspended Solids	1290	mg/L	1015	145	565	2	+---+---0---+---+ X	450	85.0	304	807	722
CAK-001IN-20070416	001 Influent	4/16/07											
	Total Suspended Solids	1760	mg/L	1018	147	566	2.9	+---+---0---+---+ X	1140	316	1290	450	85.0
CAK-001IN-20070417	001 Influent	4/17/07											
	Total Chromium	14.5	ug/L	29	2.69	0.431	27	+---+---0---+---+ X	4.1	<2.5	<2.5	<2.5	<2.5
	Total Dissolved Solids	640	mg/L	261	144	166	3	+---+---0---+---+ X	620	530	400	490	520
	Total Recoverable Aluminum	34900	ug/L	193	2.25E+03	3.91E+03	8.3	+---+---0---+---+ X	15500	562	1060	1590	1710
	Total Recoverable Copper	223	ug/L	303	11.3	22.9	9.3	+---+---0---+---+ X	89	3	5	7	6
	Total Recoverable Iron	60.6	mg/L	188	3.71	6.78	8.4	+---+---0---+---+ X	25	0.89	1.68	2.53	2.62
	Total Recoverable Lead	36.5	ug/L	303	3.56	5.77	5.7	+---+---0---+---+ X	9.92	0.22	0.80	0.35	1.21
	Total Recoverable Manganese	3280	ug/L	193	126	237	13	+---+---0---+---+ X	877	63	88	136	129
	Total Recoverable Zinc	221	ug/L	303	12.9	15.9	13	+---+---0---+---+ X	123	5.5	10.2	17.5	10.8
	Total Suspended Solids	1710	mg/L	1019	149	568	2.7	+---+---0---+---+ X	1760	1140	316	1290	450
CAK-001IN-20070418	001 Influent	4/18/07											
	Total Suspended Solids	1400	mg/L	1020	151	570	2.2	+---+---0---+---+ X	1710	1760	1140	316	1290
CAK-001IN-20070424	001 Influent	4/24/07											
	Total Dissolved Solids	550	mg/L	262	146	168	2.4	+---+---0---+---+ X	640	620	530	400	490
	Total Recoverable Aluminum	17200	ug/L	194	2.42E+03	4.55E+03	3.2	+---+---0---+---+ X	34900	15500	562	1060	1590
	Total Recoverable Copper	101	ug/L	304	12	25.9	3.4	+---+---0---+---+ X	223	89	3	5	7
	Total Recoverable Iron	28.8	mg/L	189	4.01	7.93	3.1	+---+---0---+---+ X	60.6	25	0.89	1.68	2.53
	Total Recoverable Manganese	966	ug/L	194	142	327	2.5	+---+---0---+---+ X	3280	877	63	88	136
	Total Recoverable Zinc	103	ug/L	304	13.6	19.9	4.5	+---+---0---+---+ X	221	123	5.5	10.2	17.5
CAK-001EFF-20070405	001 Effluent	4/5/07											
	Ammonia as N	1.3	mg/L	526	0.235	0.481	2.2	+---+---0---+---+ X	1.0	0.5	1.1	1.9	2.3
	Total Dissolved Solids	510	mg/L	537	317	73.6	2.6	+---+---0---+---+ X	450	450	510	380	700
	Total Recoverable Nickel	15	ug/L	539	8.93	2.43	2.5	+---+---0---+---+ X	8	7	9	7	7
CAK-001EFF-20070410	001 Effluent	4/10/07											
	Total Dissolved Solids	490	mg/L	538	317	74	2.3	+---+---0---+---+ X	510	450	450	510	380
	Total Recoverable Nickel	4	ug/L	540	8.94	2.44	-2	X +---+---0---+---+	15	8	7	9	7
CAK-001EFF-20070417	001 Effluent	4/17/07											
	Total Dissolved Solids	580	mg/L	539	318	74.3	3.5	+---+---0---+---+ X	490	510	450	450	510
CAK-001EFF-20070424	001 Effluent	4/24/07											
	Total Dissolved Solids	610	mg/L	540	318	75.1	3.9	+---+---0---+---+ X	580	490	510	450	450
CAK-003EFF-20070411	003 Effluent	4/11/07											
	Biological Oxygen Demand 5 day	32.8	mg/L	78	10.9	9.31	2.4	+---+---0---+---+ X	24.4	2.58	17.1	31.3	9.75
	pH lab	7.34	pH	70	7.88	0.256	-2.1	X +---+---0---+---+	7.41	7.90	7.36	7.64	7.98

Variance Report: Outfalls May 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070501	001 Influent	5/1/07											
	Total Dissolved Solids	510	mg/L	263	148	170	2.1	+---+---0---+---+ X	550	640	620	530	400
	Total Recoverable Copper	68	ug/L	305	12.3	26.3	2.1	+---+---0---+---+ X	101	223	89	3	5
	Total Recoverable Zinc	61.8	ug/L	305	13.9	20.5	2.3	+---+---0---+---+ X	103	221	123	5.5	10.2
CAK-001IN-20070504	001 Influent	5/4/07											
	Total Suspended Solids	2180	mg/L	1036	158	570	3.5	+---+---0---+---+ X	980	990	452	235	299
CAK-001IN-20070508	001 Influent	5/8/07											
	Total Dissolved Solids	530	mg/L	264	149	171	2.2	+---+---0---+---+ X	510	550	640	620	530
	Total Recoverable Aluminum	12100	ug/L	196	2.53E+03	4.68E+03	2	+---+---0---+---+ X	10200	17200	34900	15500	562
	Total Recoverable Copper	78	ug/L	306	12.5	26.5	2.5	+---+---0---+---+ X	68	101	223	89	3
	Total Recoverable Zinc	65.4	ug/L	306	14	20.6	2.5	+---+---0---+---+ X	61.8	103	221	123	5.5
CAK-001IN-20070509	001 Influent	5/9/07											
	Total Suspended Solids	2320	mg/L	1041	162	573	3.8	+---+---0---+---+ X	552	360	301	941	2180
CAK-001IN-20070515	001 Influent	5/15/07											
	Total Dissolved Solids	550	mg/L	265	151	172	2.3	+---+---0---+---+ X	530	510	550	640	620
	Total Recoverable Aluminum	16700	ug/L	197	2.58E+03	4.72E+03	3	+---+---0---+---+ X	12100	10200	17200	34900	15500
	Total Recoverable Copper	149	ug/L	307	12.7	26.7	5.1	+---+---0---+---+ X	78	68	101	223	89
	Total Recoverable Iron	27.1	mg/L	192	4.29	8.19	2.8	+---+---0---+---+ X	20.1	16.2	28.8	60.6	25
	Total Recoverable Manganese	1100	ug/L	197	152	334	2.8	+---+---0---+---+ X	772	594	966	3280	877
	Total Recoverable Zinc	89.5	ug/L	307	14.2	20.8	3.6	+---+---0---+---+ X	65.4	61.8	103	221	123
CAK-001IN-20070516	001 Influent	5/16/07											
	Total Suspended Solids	2180	mg/L	1048	167	576	3.5	+---+---0---+---+ X	934	725	366	830	946
CAK-001IN-20070517	001 Influent	5/17/07											
	Total Suspended Solids	1520	mg/L	1049	169	579	2.3	+---+---0---+---+ X	2180	934	725	366	830
CAK-001IN-20070523	001 Influent	5/23/07											
	Total Suspended Solids	1620	mg/L	1055	172	580	2.5	+---+---0---+---+ X	768	264	556	478	540
CAK-001IN-20070526	001 Influent	5/26/07											
	Total Suspended Solids	3420	mg/L	1058	175	582	5.6	+---+---0---+---+ X	870	1290	1620	768	264
CAK-001IN-20070527	001 Influent	5/27/07											
	Total Suspended Solids	1890	mg/L	1059	178	590	2.9	+---+---0---+---+ X	3420	870	1290	1620	768
CAK-001IN-20070529	001 Influent	5/29/07											
	Total Recoverable Aluminum	15000	ug/L	199	2.65E+03	4.80E+03	2.6	+---+---0---+---+ X	2930	16700	12100	10200	17200
	Total Recoverable Copper	124	ug/L	309	13.2	27.7	4	+---+---0---+---+ X	17	149	78	68	101
	Total Recoverable Iron	24	mg/L	194	4.41	8.31	2.4	+---+---0---+---+ X	5.44	27.1	20.1	16.2	28.8
	Total Recoverable Manganese	1030	ug/L	199	159	341	2.6	+---+---0---+---+ X	644	1100	772	594	966
	Total Recoverable Zinc	90.9	ug/L	309	14.5	21.3	3.6	+---+---0---+---+ X	42.6	89.5	65.4	61.8	103
CAK-001IN-20070531	001 Influent	5/31/07											
	Total Suspended Solids	1830	mg/L	1063	182	593	2.8	+---+---0---+---+ X	766	764	1190	1890	3420
CAK-001EFF-20070501	001 Effluent	5/1/07											
	Sulfate (as S)	42	mg/L	63	72.4	14.1	-2.2	X +---+---0---+---+	77	67	58	80	67
	Total Recoverable Zinc	10.8	ug/L	544	4.17	2.38	2.8	+---+---0---+---+ X	6.3	4.4	4.7	4.1	4.8
CAK-001EFF-20070503	001 Effluent	5/3/07											
	Ammonia as N	1.9	mg/L	531	0.243	0.486	3.4	+---+---0---+---+ X	0.9	1.2	0.9	1.1	1.3
	Lab Turbidity	2.7	NTU	42	0.507	0.387	5.7	+---+---0---+---+ X	0.71	0.98	1.1	0.71	0.75
	Lab Turbidity Difference	1.98	NTU	32	0.0981	0.34	5.5	+---+---0---+---+ X	0.38	0.07	0.67	0.50	0.28
	Total Dissolved Solids	560	mg/L	542	319	76.2	3.2	+---+---0---+---+ X	450	610	580	490	510
	Total Recoverable Nickel	2	ug/L	544	8.91	2.46	-2.8	X +---+---0---+---+	5	6	5	4	15
CAK-001EFF-20070508	001 Effluent	5/8/07											
	Ammonia as N	1.3	mg/L	532	0.246	0.491	2.1	+---+---0---+---+ X	1.9	0.9	1.2	0.9	1.1
	Sulfate (as S)	42	mg/L	65	71.8	14.5	-2.1	X +---+---0---+---+	59	42	77	67	58
	Total Dissolved Solids	510	mg/L	543	319	76.8	2.5	+---+---0---+---+ X	560	450	610	580	490

Variance Report: Outfalls May 2007 (cont'd)

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001EFF-20070515	**001 Effluent**	**5/15/07**											
	Ammonia as N	1.4	mg/L	533	0.248	0.492	**2.3**	+---+---0---+---+ X	1.3	1.9	0.9	1.2	0.9
	Dissolved Oxygen	9.07	mg/L	519	11.9	1.21	**-2.3**	X +---+---0---+---+	11.04	10.36	10.54	10.36	10.44
	Lab Turbidity	4.9	NTU	44	0.569	0.506	**8.6**	+---+---0---+---+ X	1.0	2.7	0.71	0.98	1.1
	Lab Turbidity Difference	3.8	NTU	34	0.175	0.475	**7.6**	+---+---0---+---+ X	0.83	1.98	0.38	0.07	0.67
	Total Dissolved Solids	500	mg/L	544	320	77.2	**2.3**	+---+---0---+---+ X	510	560	450	610	580
CAK-001EFF-20070516	**001 Effluent**	**5/16/07**											
	Total Suspended Solids	18.0	mg/L	859	4.2	1.37	**10**	+---+---0---+---+ X	6.00	6.00	<4.00	<4.00	6.00
CAK-001EFF-20070522	**001 Effluent**	**5/22/07**											
	Dissolved Oxygen	8.86	mg/L	520	11.9	1.21	**-2.5**	X +---+---0---+---+	9.07	11.04	10.36	10.54	10.36
CAK-001EFF-20070529	**001 Effluent**	**5/29/07**											
	Lab Turbidity 001 Background	4.1	NTU	40	0.4	0.399	**9.3**	+---+---0---+---+ X	0.65	1.1	0.17	0.72	0.33
	Lab Turbidity Difference	-3.12	NTU	36	0.266	0.764	**-4.4**	X +---+---0---+---+	-0.17	3.8	0.83	1.98	0.38
	Sulfate (as S)	32	mg/L	68	70.7	15.1	**-2.6**	X +---+---0---+---+	42	59	42	59	42

Variance Report: Outfalls June 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070601	001 Influent	6/1/07											
	Total Suspended Solids	1930	mg/L	1064	183	595	2.9	+---+---0---+---+ X	1830	766	764	1190	1890
CAK-001IN-20070606	001 Influent	6/6/07											
	Total Suspended Solids	1720	mg/L	1069	186	596	2.6	+---+---0---+---+ X	616	328	240	318	1930
CAK-001IN-20070610	001 Influent	6/10/07											
	Total Suspended Solids	1900	mg/L	1073	189	598	2.9	+---+---0---+---+ X	744	1310	776	1720	616
CAK-001IN-20070615	001 Influent	6/15/07											
	Total Suspended Solids	2360	mg/L	1078	193	600	3.6	+---+---0---+---+ X	960	692	582	992	1900
CAK-001IN-20070619	001 Influent	6/19/07											
	Total Recoverable Copper	88	ug/L	312	13.9	28.6	2.6	+---+---0---+---+ X	67	67	124	17	149
	Total Recoverable Nickel	32	ug/L	312	10.6	9.59	2.2	+---+---0---+---+ X	16	14	18	15	18
	Total Recoverable Zinc	81.5	ug/L	312	15	21.8	3	+---+---0---+---+ X	57.8	50.0	90.9	42.6	89.5
CAK-001IN-20070626	001 Influent	6/26/07											
	Total Recoverable Copper	87	ug/L	313	14.1	28.9	2.5	+---+---0---+---+ X	88	67	67	124	17
	Total Recoverable Zinc	74.0	ug/L	313	15.2	22.1	2.7	+---+---0---+---+ X	81.5	57.8	50.0	90.9	42.6
CAK-001IN-20070628	001 Influent	6/28/07											
	Total Suspended Solids	3570	mg/L	1091	203	605	5.6	+---+---0---+---+ X	912	958	888	932	868
CAK-001IN-20070629	001 Influent	6/29/07											
	Total Suspended Solids	3690	mg/L	1092	206	613	5.7	+---+---0---+---+ X	3570	912	958	888	932
CAK-001IN-20070630	001 Influent	6/30/07											
	Total Suspended Solids	3720	mg/L	1093	209	622	5.6	+---+---0---+---+ X	3690	3570	912	958	888
CAK-001EFF-20070605	001 Effluent	6/5/07											
	Lab Turbidity	2.4	NTU	47	0.668	0.801	2.2	+---+---0---+---+ X	0.98	0.48	4.9	1.0	2.7
	Sulfate (as S)	24	mg/L	69	70.1	15.7	-2.9	X +---+---0---+---+	32	42	59	42	59
CAK-001EFF-20070612	001 Effluent	6/12/07											
	Lab Turbidity	2.7	NTU	48	0.704	0.831	2.4	+---+---0---+---+ X	2.4	0.98	0.48	4.9	1.0
	Sulfate (as S)	19	mg/L	70	69.5	16.5	-3.1	X +---+---0---+---+	24	32	42	59	42
CAK-001EFF-20070614	001 Effluent	6/14/07											
	Lab Turbidity	6.5	NTU	49	0.744	0.87	6.6	+---+---0---+---+ X	2.7	2.4	0.98	0.48	4.9
	Lab Turbidity Difference	5.90	NTU	39	0.252	0.973	5.8	+---+---0---+---+ X	1.81	1.57	-3.12	-0.17	3.8
	Total Recoverable Nickel	17	ug/L	551	8.92	2.48	3.3	+---+---0---+---+ X	12	11	12	13	10
CAK-001EFF-20070619	001 Effluent	6/19/07											
	Dissolved Oxygen	9.34	mg/L	525	11.8	1.22	-2	X +---+---0---+---+	9.98	10.06	10.4	10.20	8.86
	Sulfate (as S)	19	mg/L	72	68.4	17.5	-2.8	X +---+---0---+---+	45	19	24	32	42
	Total Recoverable Nickel	23	ug/L	552	8.93	2.5	5.6	+---+---0---+---+ X	17	12	11	12	13
CAK-001EFF-20070626	001 Effluent	6/26/07											
	Total Dissolved Solids	480	mg/L	551	321	77.7	2	+---+---0---+---+ X	430	430	400	370	400
	Total Recoverable Nickel	19	ug/L	553	8.96	2.57	3.9	+---+---0---+---+ X	23	17	12	11	12

Variance Report: Outfalls July 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20070701	001 Influent	7/1/2007											
	Total Suspended Solids	3210	mg/L	1094	212	631	4.8	+---+---0---+---+ X	3720	3690	3570	912	958
CAK-001IN-20070703	001 Influent	7/3/2007											
	Total Recoverable Aluminum	51100	ug/L	204	2.85E+03	4.92E+03	9.8	+---+---0---+---+ X	12200	9310	10200	6620	15000
	Total Recoverable Copper	302	ug/L	314	14.4	29.1	9.9	+---+---0---+---+ X	87	88	67	67	124
	Total Recoverable Iron	93	mg/L	199	4.76	8.51	10	+---+---0---+---+ X	20.5	15.2	17	14.2	24
	Total Recoverable Lead	128	ug/L	314	3.8	6.03	21	+---+---0---+---+ X	9.21	4.16	6.58	5.17	8.98
	Total Recoverable Manganese	7480	ug/L	204	174	351	21	+---+---0---+---+ X	788	676	753	580	1030
	Total Recoverable Nickel	83	ug/L	314	10.7	9.67	7.5	+---+---0---+---+ X	26	32	16	14	18
	Total Recoverable Zinc	360	ug/L	314	15.4	22.3	15	+---+---0---+---+ X	74.0	81.5	57.8	50.0	90.9
	Total Suspended Solids	7530	mg/L	1096	216	637	11	+---+---0---+---+ X	1380	3210	3720	3690	3570
CAK-001IN-20070704	001 Influent	7/4/2007											
	Total Suspended Solids	2150	mg/L	1097	223	674	2.9	+---+---0---+---+ X	7530	1380	3210	3720	3690
CAK-001IN-20070705	001 Influent	7/5/2007											
	Total Suspended Solids	8350	mg/L	1098	225	677	12	+---+---0---+---+ X	2150	7530	1380	3210	3720
CAK-001IN-20070707	001 Influent	7/7/2007											
	Total Suspended Solids	2190	mg/L	1099	232	719	2.7	+---+---0---+---+ X	8350	2150	7530	1380	3210
CAK-001IN-20070708	001 Influent	7/8/2007											
	Total Suspended Solids	5340	mg/L	1100	234	721	7.1	+---+---0---+---+ X	2190	8350	2150	7530	1380
CAK-001IN-20070710	001 Influent	7/10/2007											
	Total Recoverable Aluminum	21100	ug/L	205	3.08E+03	5.96E+03	3	+---+---0---+---+ X	51100	12200	9310	10200	6620
	Total Recoverable Copper	174	ug/L	315	15.3	33.3	4.8	+---+---0---+---+ X	302	87	88	67	67
	Total Recoverable Iron	31	mg/L	200	5.2	10.5	2.4	+---+---0---+---+ X	93	20.5	15.2	17	14.2
	Total Recoverable Lead	27.6	ug/L	315	4.2	9.23	2.5	+---+---0---+---+ X	128	9.21	4.16	6.58	5.17
	Total Recoverable Zinc	118	ug/L	315	16.5	29.6	3.4	+---+---0---+---+ X	360	74.0	81.5	57.8	50.0
CAK-001IN-20070711	001 Influent	7/11/2007											
	Total Suspended Solids	5200	mg/L	1103	239	737	6.7	+---+---0---+---+ X	946	458	5340	2190	8350
CAK-001IN-20070712	001 Influent	7/12/2007											
	Total Suspended Solids	1810	mg/L	1104	244	752	2.1	+---+---0---+---+ X	5200	946	458	5340	2190
CAK-001EFF-20070703	001 Effluent	7/3/2007											
	Total Recoverable Nickel	19	ug/L	554	8.98	2.6	3.9	+---+---0---+---+ X	19	23	17	12	11
CAK-001EFF-20070710	001 Effluent	7/10/2007											
	Total Recoverable Nickel	16	ug/L	555	9	2.63	2.7	+---+---0---+---+ X	19	19	23	17	12
CAK-001EFF-20070715	001 Effluent	7/15/2007											
	Total Suspended Solids	35.0	mg/L	918	4.21	1.41	22	+---+---0---+---+ X	<4.00	<4.00	7.00	<4.00	<4.00
CAK-001EFF-20070717	001 Effluent	7/17/2007											
	Sulfate (as S)	24.0	mg/L	76	66.8	18.7	-2.3	X +---+---0---+---+	44	42	42	19	45
CAK-001EFF-20070724	001 Effluent	7/24/2007											
	Sulfate (as S)	26	mg/L	77	66.2	19.2	-2.1	X +---+---0---+---+	24.0	44	42	42	19
CAK-001EFF-20070729	001 Effluent	7/29/2007											
	Total Suspended Solids	11.0	mg/L	932	4.25	1.75	3.9	+---+---0---+---+ X	10.0	11.0	<4.00	<4.00	<4.00
CAK-001EFF-20070728	001 Effluent	7/28/2007											
	Total Suspended Solids	10.0	mg/L	931	4.25	1.74	3.3	+---+---0---+---+ X	11.0	<4.00	<4.00	<4.00	<4.00
CAK-001EFF-20070727	001 Effluent	7/27/2007											
	Total Suspended Solids	11.0	mg/L	930	4.24	1.73	3.9	+---+---0---+---+ X	<4.00	<4.00	<4.00	<4.00	5.0
CAK-001EFF-20070731	001 Effluent	7/31/2007											
	Sulfate (as S)	26	mg/L	78	65.7	19.6	-2	X +---+---0---+---+	26	24.0	44	42	42
	Total Recoverable Iron	0.61	mg/L	134	0.143	0.204	2.3	+---+---0---+---+ X	<0.05	<0.05	0.11	0.11	<0.05
	Total Recoverable Nickel	3	ug/L	558	8.99	2.66	-2.3	X +---+---0---+---+	4	4	16	19	19
	Total Recoverable Zinc	13.2	ug/L	559	4.2	2.38	3.8	+---+---0---+---+ X	<2.5	5.6	3.8	2.9	3.8
	Total Suspended Solids	8.00	mg/L	934	4.26	1.76	2.1	+---+---0---+---+ X	<4.00	11.0	10.0	11.0	<4.00
CAK-003EFF-20070705	003 Effluent	7/5/2007											
	Biological Oxygen Demand 5 day	59.2	mg/L	90	11.4	9.28	5.2	+---+---0---+---+ X	20.0	18.6	6.48	28.5	15.5
CAK-003EFF-20070711	003 Effluent	7/11/2007											
	Biological Oxygen Demand 5 day	36.0	mg/L	91	11.9	10.5	2.3	+---+---0---+---+ X	59.2	20.0	18.6	6.48	28.5
CAK-003EFF-20070719	003 Effluent	7/19/2007											
	Biological Oxygen Demand 5 day	45.3	mg/L	92	12.1	10.7	3.1	+---+---0---+---+ X	36.0	59.2	20.0	18.6	6.48

Variance Reports: Outfalls August 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-003EFF-20070822	003 Effluent	8/22/2007											
	Total Suspended Solids	37.0	mg/L	99	12.5	11.7	2.1	+---+---0---+---+ X	18.0	19.0	<4.00	15.0	22.0

Variance Reports: Outfalls September 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001EFF-20070906	001 Effluent	9/6/2007											
	Total Recoverable Nickel	2	ug/L	565	8.97	2.67	-2.6	X +---+---0---+---+	6	13	9	7	7
CAK-001EFF-20070911	001 Effluent	9/11/2007											
	Total Recoverable Nickel	3	ug/L	566	8.96	2.68	-2.2	X +---+---0---+---+	2	6	13	9	7
	Total Recoverable Zinc	11.1	ug/L	567	4.21	2.4	2.9	+---+---0---+---+ X	<2.5	6.7	5.8	2.7	<2.5
CAK-001EFF-20070915	001 Effluent	9/15/2007											
	Total Suspended Solids	9.00	mg/L	980	4.26	1.73	2.7	+---+---0---+---+ X	<4.00	<4.00	5.00	<4.00	5.00
CAK-001EFF-20070923	001 Effluent	9/23/2007											
	Total Suspended Solids	15.0	mg/L	988	4.27	1.73	6.2	+---+---0---+---+ X	6.50	2.50	3.50	2.00	7.00
CAK-003EFF-20070926	003 Effluent	9/26/2007											
	Total Suspended Solids	91.8	mg/L	104	12.7	11.7	6.8	+---+---0---+---+ X	15.0	13.0	5.00	11.0	37.0
CAK-003EFF-20070927	003 Effluent	9/27/2007											
	Fecal coliform	65000	#/100ml	102	5.47E+03	1.87E+04	3.2	+---+---0---+---+ X	100	1700	620	10000	1400

Variance Report: Outfalls October 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20071002	001 Influent	10/2/2007											
	Total Recoverable Copper	85	ug/L	327	16.2	34	2	+---+---0---+---+ X	40	32	54	18	17
	Total Recoverable Zinc	92.9	ug/L	327	17.6	30	2.5	+---+---0---+---+ X	63.0	52.9	62.9	28.6	42.1
CAK-001EFF-20071009	001 Effluent	10/9/2007											
	Total Recoverable Zinc	11.2	ug/L	572	4.22	2.41	2.9	+---+---0---+---+ X	2.6	4.8	3.4	6.3	11.1
CAK-003EFF-20071017	003 Effluent	10/17/2007											
	Total Suspended Solids	45.0	mg/L	107	13.9	14.2	2.2	+---+---0---+---+ X	35.0	37.0	91.8	15.0	13.0
CAK-001EFF-20071030	001 Effluent	10/30/2007											
	Lab Turbidity 001 Background	1.7	NTU	66	0.475	0.589	2.1	+---+---0---+---+ X	0.16	0.38	0.33	0.14	1.6
CAK-001EFF-20071026	001 Effluent	10/26/2007											
	Total Suspended Solids	9.00	mg/L	1020	4.27	1.74	2.7	+---+---0---+---+ X	6.00	<4.00	4.00	4.00	<4.00

Variance Report: Outfalls November 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001EFF-20071127	001 Effluent	11/27/2007											
	Total Recoverable Iron	0.6	mg/L	155	0.152	0.196	2.3	+---+---0---+---+ X	0.17	0.28	0.13	0.08	0.27
	Total Recoverable Nickel	2	ug/L	579	8.86	2.73	-2.5	X +---+---0---+---+	2	4	4	6	5
CAK-001EFF-20071120	001 Effluent	11/20/2007											
	Total Recoverable Nickel	2	ug/L	578	8.87	2.72	-2.5	X +---+---0---+---+	4	4	6	5	5
	Total Recoverable Zinc	10.4	ug/L	579	4.24	2.42	2.5	+---+---0---+---+ X	3.8	5.1	6.0	4.0	4.5
CAK-001EFF-20071105	001 Effluent	11/5/2007											
	Total Suspended Solids	9.00	mg/L	1030	4.28	1.74	2.7	+---+---0---+---+ X	<4.00	<4.00	7.00	<4.00	4.00

Variance Report: Outfalls December 2007

Sample No.	Stn.Code	Collect Date/Time	Units	N	Avg	St.Dev.	Num.SD	-2S --- 0 --- +2S	Most Recent Results -->				
CAK-001IN-20071211	001 Influent	12/11/2007											
	Total Recoverable Copper	90	ug/L	337	16.9	33.9	2.2	+---+---0---+---+ X	25	36	46	7	34
	Total Recoverable Zinc	97.7	ug/L	337	18.6	30.3	2.6	+---+---0---+---+ X	37.2	43.8	45.2	15.4	44.6
CAK-001IN-20071229	001 Influent	12/29/2007											
	Total Suspended Solids	2850	mg/L	1274	252	709	3.7	+---+---0---+---+ X	142	1660	334	68.0	409
CAK-001EFF-20071211	001 Effluent	12/11/2007											
	Lab Turbidity	6.8	NTU	79	0.963	1.04	5.6	+---+---0---+---+ X	1.7	1.5	1.8	0.27	0.9
	Lab Turbidity Difference	6.23	NTU	59	0.517	1.16	4.9	+---+---0---+---+ X	1.51	-0.20	0.35	0.70	0.63
	Total Recoverable Nickel	2	ug/L	581	8.83	2.76	-2.5	X +---+---0---+---+	1	2	2	4	4
	Total Recoverable Zinc	13.5	ug/L	582	4.26	2.43	3.8	+---+---0---+---+ X	6.4	6.9	10.4	3.8	5.1
	Total Suspended Solids	9.00	mg/L	1066	4.31	1.76	2.7	+---+---0---+---+ X	4.00	9.00	8.00	11.0	7.00
CAK-001EFF-20071204	001 Effluent	12/4/2007											
	Total Recoverable Iron	1.31	mg/L	156	0.154	0.199	5.8	+---+---0---+---+ X	0.6	0.17	0.28	0.13	0.08
	Total Recoverable Nickel	1	ug/L	580	8.85	2.75	-2.9	X +---+---0---+---+	2	2	4	4	6
	Total Suspended Solids	9.00	mg/L	1059	4.28	1.73	2.7	+---+---0---+---+ X	4.00	4.00	<4.00	5.00	6.00
CAK-001EFF-20071213	001 Effluent	12/13/2007											
	Total Recoverable Iron	0.67	mg/L	158	0.164	0.219	2.3	+---+---0---+---+ X	0.44	1.31	0.6	0.17	0.28
	Total Recoverable Nickel	2	ug/L	582	8.82	2.77	-2.5	X +---+---0---+---+	2	1	2	2	4
CAK-001EFF-20071209	001 Effluent	12/9/2007											
	Total Suspended Solids	9.00	mg/L	1064	4.31	1.76	2.7	+---+---0---+---+ X	8.00	11.0	7.00	9.00	9.00
CAK-001EFF-20071208	001 Effluent	12/8/2007											
	Total Suspended Solids	8.00	mg/L	1063	4.3	1.75	2.1	+---+---0---+---+ X	11.0	7.00	9.00	9.00	4.00
CAK-001EFF-20071207	001 Effluent	12/7/2007											
	Total Suspended Solids	11.0	mg/L	1062	4.3	1.74	3.8	+---+---0---+---+ X	7.00	9.00	9.00	4.00	4.00
CAK-001EFF-20071205	001 Effluent	12/5/2007											
	Total Suspended Solids	9.00	mg/L	1060	4.29	1.74	2.7	+---+---0---+---+ X	9.00	4.00	4.00	<4.00	5.00
CAK-001EFF-20071212	001 Effluent	12/12/2007											
	Total Suspended Solids	9.00	mg/L	1067	4.31	1.77	2.7	+---+---0---+---+ X	9.00	4.00	9.00	8.00	11.0
CAK-001EFF-20071226	001 Effluent	12/26/2007											
	Total Recoverable Iron	1.5	mg/L	160	0.171	0.226	5.9	+---+---0---+---+ X	0.79	0.67	0.44	1.31	0.6
	Total Recoverable Nickel	1	ug/L	584	8.8	2.8	-2.8	X +---+---0---+---+	2	2	2	1	2
	Total Suspended Solids	8.00	mg/L	1081	4.34	1.79	2	+---+---0---+---+ X	10.0	11.0	9.00	8.00	8.00
CAK-001EFF-20071218	001 Effluent	12/18/2007											
	Total Recoverable Iron	0.79	mg/L	159	0.167	0.222	2.8	+---+---0---+---+ X	0.67	0.44	1.31	0.6	0.17
	Total Recoverable Nickel	2	ug/L	583	8.81	2.79	-2.4	X +---+---0---+---+	2	2	1	2	2
CAK-001EFF-20071225	001 Effluent	12/25/2007											
	Total Suspended Solids	10.0	mg/L	1080	4.34	1.79	3.2	+---+---0---+---+ X	11.0	9.00	8.00	8.00	<4.00
CAK-001EFF-20071224	001 Effluent	12/24/2007											
	Total Suspended Solids	11.0	mg/L	1079	4.33	1.78	3.8	+---+---0---+---+ X	9.00	8.00	8.00	<4.00	<4.00
CAK-001EFF-20071223	001 Effluent	12/23/2007											
	Total Suspended Solids	9.00	mg/L	1078	4.33	1.77	2.6	+---+---0---+---+ X	8.00	8.00	<4.00	<4.00	<4.00
CAK-001EFF-20071222	001 Effluent	12/22/2007											
	Total Suspended Solids	8.00	mg/L	1077	4.32	1.77	2.1	+---+---0---+---+ X	8.00	<4.00	<4.00	<4.00	<4.00
CAK-001EFF-20071221	001 Effluent	12/21/2007											
	Total Suspended Solids	8.00	mg/L	1076	4.32	1.76	2.1	+---+---0---+---+ X	<4.00	<4.00	<4.00	<4.00	6.00
CAK-001EFF-20071231	001 Effluent	12/31/2007											
	Total Suspended Solids	13.0	mg/L	1086	4.36	1.85	4.7	+---+---0---+---+ X	9.00	6.00	18.0	<4.00	8.00
CAK-001EFF-20071230	001 Effluent	12/30/2007											
	Total Suspended Solids	9.00	mg/L	1085	4.36	1.84	2.5	+---+---0---+---+ X	6.00	18.0	<4.00	8.00	10.0
CAK-001EFF-20071228	001 Effluent	12/28/2007											
	Total Suspended Solids	18.0	mg/L	1083	4.34	1.8	7.6	+---+---0---+---+ X	<4.00	8.00	10.0	11.0	9.00

Appendix C – Discharge Monitoring Reports Results

OUTFALL 001- Influent

Discharge Monitoring Report Results

		January		*February*		*March*	
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Total Suspended Solids	mg/L	267	552	874	15300	98.00	355
Total Recoverable Arsenic	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	9,658	15,200	8,725	16,600	2,053	2,620
Total Recoverable Selenium	ug/L	0.0	<1	0.0	<1	0.25	1
Total Chromium	ug/L	0.74	3.70	1.55	3.2	0.0	<2.5
Total Recoverable Nickel	ug/L	5.8	10	7.5	10	8	9
Total Recoverable Silver	ug/L	0.1	0.7	0.03	0.1	0	<0.1
Total Recoverable Zinc	ug/L	37.98	90.9	31.48	56.3	11.98	17.5
Total Recoverable Aluminum	ug/L	5,840	9,020	5,503	9,510	1,310	1,710
Total Recoverable Cadmium	ug/L	0.08	0.20	0.1	0.2	0.03	0.1
Total Recoverable Lead	ug/L	8.12	24.5	3.89	7.17	0.82	1.21
Total Recoverable Copper	ug/L	101.8	289	56.3	81.0	5.5	7
Total Recoverable Manganese	ug/L	259.6	515	301.8	525	109	136
Mercury Total	ug/L	0	<0.001	0.055	0.07	0.02	0.03

* Values reported as less than MDL were replaced with zero for calculating monthly averages

OUTFALL 001- Influent

Discharge Monitoring Report Results

		April		*May*		*June*	
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Total Suspended Solids	mg/L	576	1760	1075	3420	1243	3720
Total Recoverable Arsenic	ug/L	1.1	4.4	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	28,823	60,600	18,568	27,100	16,725	20,500
Total Recoverable Selenium	ug/L	0.0	<1	0.4	2	0.0	<1
Total Chromium	ug/L	5.9	14.5	2.78	4	0.0	<2.5
Total Recoverable Nickel	ug/L	14.75	22	15	18	22	32
Total Recoverable Silver	ug/L	0.0	<0.1	0.0	<0.1	0	<0.1
Total Recoverable Zinc	ug/L	113.13	221	70.04	90.9	65.83	81.5
Total Recoverable Aluminum	ug/L	17,041	34,900	11,386	16,700	9,583	12,200
Total Recoverable Cadmium	ug/L	0.18	0.30	0.06	0.2	0.05	0.2
Total Recoverable Lead	ug/L	14.2	36.5	8.99	12.7	6.28	9.21
Total Recoverable Copper	ug/L	104.0	223	87.2	149.0	77.25	88
Total Recoverable Manganese	ug/L	1269.5	3280	828.0	1100	699	788
Mercury Total	ug/L	0.055	0.137	0.039	0.061	0.038	0.062

* Values reported as less than MDL were replaced with zero for calculating monthly averages

OUTFALL 001- Influent

Discharge Monitoring Report Results

		July		*August*		*September*	
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Total Suspended Solids	mg/L	1570	8350	220	1640	389.00	1160
Total Recoverable Arsenic	ug/L	0.8	3.9	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	30,240	93,000	5,158	9,920	11,443	17,500
Total Recoverable Selenium	ug/L	1.0	3	2.0	3	0.0	<1
Total Chromium	ug/L	6.1	20.4	0.0	<2.5	1.63	3.8
Total Recoverable Nickel	ug/L	25.4	83	10	15	5.75	7
Total Recoverable Silver	ug/L	0.22	0.9	0.0	<0.1	0.13	0.3
Total Recoverable Zinc	ug/L	118.02	360	33.38	46.4	51.85	63
Total Recoverable Aluminum	ug/L	17704	51100	3483	6950	6860.00	10300
Total Recoverable Cadmium	ug/L	0.14	0.70	0.08	0.3	0	<0.1
Total Recoverable Lead	ug/L	34.26	128	2.05	4.57	4.24	7.31
Total Recoverable Copper	ug/L	115.5	302	15.25	28.0	36	54
Total Recoverable Manganese	ug/L	1979.8	7480	204.3	347	488	750
Mercury Total	ug/L	0.05	0.182	0.016	0.052	0.018	0.023

* Values reported as less than MDL were replaced with zero for calculating monthly averages

OUTFALL 001- Influent

Discharge Monitoring Report Results

		October		*November*		*December*	
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Total Suspended Solids	mg/L	265	744	230	700	358	2,850
Total Recoverable Arsenic	ug/L	0.0	<2.5	0.0	<2.5	0.75	3.0
Total Recoverable Iron	ug/L	12,410	19,000	6,535	9,050	11,545	14,300
Total Recoverable Selenium	ug/L	0.6	2	1.5	2	2.5	3.0
Total Chromium	ug/L	1.3	3.7	1.4	2.9	2.25	5.60
Total Recoverable Nickel	ug/L	7.8	9	4.25	7	3.75	5.00
Total Recoverable Silver	ug/L	0.2	0.6	0.23	0.4	0.23	0.6
Total Recoverable Zinc	ug/L	63.54	92.9	37.25	45.2	63.68	97.7
Total Recoverable Aluminum	ug/L	7,586	11,700	3,953	5,620	7273.00	9,260
Total Recoverable Cadmium	ug/L	0.0	<0.1	0.05	0.2	0	<0.1
Total Recoverable Lead	ug/L	5.1	8.88	3.28	4.74	5.31	8.19
Total Recoverable Copper	ug/L	48.6	85	30.75	46.0	56	90
Total Recoverable Manganese	ug/L	548.4	885	393.3	538	527	823
Mercury Total	ug/L	0.052	0.11	0.013	0.019	0.039	0.073

* Values reported as less than MDL were replaced with zero for calculating monthly averages

OUTFALL 001- Effluent

Discharge Monitoring Report Results

		January		*February*		*March*	
Parameter	**Units**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**
pH	pH units	7.02	7.6	6.6	7.80	6.86	8.17
Hardness Downstream of Outfall	mg/L	74	270	77	114	88	543
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Temperature	oC	3.36	5.8	1.14	1.8	2.84	4.7
Turbidity	NTU	0.37	0.46	0.43	0.53	0.76	1.7
Background Turbidity	NTU	0.39	0.48	0.30	0.36	0.32	0.49
Turbidity Difference	NTU	0.06	0.45	0.13	0.22	0.44	1.34
Sulfate (as S)	mg/L	84	93	94	99	82	105
Dissolved oxygen	mg/L	10.92	12.36	11.63	13.6	11.46	12.48
Total Suspended Solids	mg/L	0.16	5	0.32	5	0.23	7
Ammonia as N	mg/L	1.32	2.1	2.61	3.1	1.55	2.4
Nitrate as N	mg/L	3.54	4.78	4.93	5.37	3.08	4.5
Total Recoverable Arsenic	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	34	90	28	80	96	130
Total Recoverable Selenium	ug/L	0.0	<1	0.0	<1	0.0	<1
Total Chromium	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Nickel- "O"	ug/L	4	4	5	6	***	8
Total Recoverable Nickel- "P"	ug/L	2.5	3	5	7	***	7
Total Recoverable Nickel- "Q"	ug/L	4.5	5	***	***	7.6	9
Total Recoverable Silver- "O"	ug/L	0.0	<0.1	0.0	<0.1	***	<0.1
Total Recoverable Silver- "P"	ug/L	0.0	<0.1	0.0	<0.1	***	<0.1
Total Recoverable Silver- "Q"	ug/L	0.0	<0.1	***	***	0.0	<0.1
Total Recoverable Zinc- "O"	ug/L	7.8	7.8	7.6	18.4	***	4.8
Total Recoverable Zinc- "P"	ug/L	4	8	4	9	***	12
Total Recoverable Zinc- "Q"	ug/L	14.8	29.6	***	***	6.06	4.3
Total Recoverable Aluminum	ug/L	4.6	12	4.5	9.5	6.40	10
Total Recoverable Cadmium- "O"	ug/L	0.0	<0.1	0.0	<0.1	***	0.2
Total Recoverable Cadmium- "P"	ug/L	0.0	<0.1	0.0	<0.1	***	0.3
Total Recoverable Cadmium- "Q"	ug/L	0.0	<0.1	***	***	0.16	0.3
Total Recoverable Lead- "O"	ug/L	0.0	<0.16	0.07	0.22	***	<0.16
Total Recoverable Lead- "P"	ug/L	0.0	<0.16	0.0	<0.16	***	<0.16
Total Recoverable Lead- "Q"	ug/L	0.1	0.2	***	***	0.05	0.26
Total Recoverable Copper- "O"	ug/L	0.0	<1	2.0	5.0	***	<1
Total Recoverable Copper- "P"	ug/L	0.0	<1	0.0	<1	***	1
Total Recoverable Copper- "Q"	ug/L	0.0	<1	***	***	0.2	<1
Total Recoverable Manganese	ug/L	25.8	33	50.5	69	42	47
Total Dissolved Solids	mg/L	438	490	586	620	498	700
Mercury Total	ug/L	0	<0.001	0	<0.001	0.00048	0.0024

*Values reported as less than PQL were replaced with zero for calculating monthly averages

***No value to report: Downstream hardness not within criteria

OUTFALL 001- Effluent

Discharge Monitoring Report Results

		April		*May*		*June*	
Parameter	**Units**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**
pH	pH units	7.5	7.9	7.3	8.00	7.0	7.8
Hardness Downstream of Outfall	mg/L	48	162	39	78	28	59
Parameter	**Units**	**MO AVG****	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Temperature	oC	5.78	8.1	8.57	10.6	10.22	12.5
Turbidity	NTU	0.885	1.1	1.8	4.9	3.13	6.5
Background Turbidity	NTU	0.51	0.91	1.18	4.1	0.73	0.97
Turbidity Difference	NTU	0.38	0.67	0.62	3.8	2.40	5.9
Sulfate (as S)	mg/L	71	80	41	59	30	45
Dissolved oxygen	mg/L	10.94	12.11	10.01	11.04	9.90	10.4
Total Suspended Solids	mg/L	0.23	6	2.68	18	0.63	6
Ammonia as N	mg/L	1.13	1.3	1.17	1.9	0.52	0.7
Nitrate as N	mg/L	2.23	2.94	1.83	3.03	1.02	1.38
Total Recoverable Arsenic	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	95	130	127	280	82	180
Total Recoverable Selenium	ug/L	0.0	<1	0.0	<1	0.0	<1
Total Chromium	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Nickel- "O"	ug/L	7.5	6	8.33	13	16.4	23
Total Recoverable Nickel- "P"	ug/L	***	15	***	***	***	***
Total Recoverable Nickel- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Silver- "O"	ug/L	0.0	<0.1	0.0	<0.1	0.0	<0.1
Total Recoverable Silver- "P"	ug/L	***	<0.1	***	***	***	***
Total Recoverable Silver- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Zinc- "O"	ug/L	4.88	6.3	6.37	10.8	4.5	6.7
Total Recoverable Zinc- "P"	ug/L	***	4.1	***	***	***	***
Total Recoverable Zinc- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Aluminum	ug/L	13	19	24.33	57	43.80	96
Total Recoverable Cadmium- "O"	ug/L	0.3	0.3	0.0	<0.1	0.0	<0.1
Total Recoverable Cadmium- "P"	ug/L	***	0.4	***	***	***	***
Total Recoverable Cadmium- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Lead- "O"	ug/L	0.0	<0.16	0.0	<0.16	0.0	<0.16
Total Recoverable Lead- "P"	ug/L	***	<0.16	***	***	***	***
Total Recoverable Lead- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Copper- "O"	ug/L	0.3	1	0.5	1.0	0.2	1
Total Recoverable Copper- "P"	ug/L	***	<1	***	***	***	***
Total Recoverable Copper- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Manganese	ug/L	38.75	45	52.2	69	76.4	88
Total Dissolved Solids	mg/L	547.5	610	478.33	560	422	480
Mercury Total	ug/L	0.001	0.0018	0.00075	0.0014	0.0000	<0.001

*Values reported as less than PQL were replaced with zero for calculating monthly averages

***No value to report: Downstream hardness not within criteria

OUTFALL 001- Effluent

Discharge Monitoring Report Results

		July		*August*		*September*	
Parameter	**Units**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**
pH	pH units	6.9	8.31	6.83	7.80	6.7	7.73
Hardness Downstream of Outfall	mg/L	47	89	66	112	57	109
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Temperature	oC	10	11.1	9.7	10.6	9.42	10.2
Turbidity	NTU	1.27	2.3	1.17	1.9	0.83	1.4
Background Turbidity	NTU	0.42	0.97	0.28	0.47	0.52	1.6
Turbidity Difference	NTU	0.85	1.83	0.89	1.7	0.31	0.7
Sulfate (as S)	mg/L	32	44	35	63	29	31
Dissolved oxygen	mg/L	9.95	10.4	10.2	11.05	10.48	10.61
Total Suspended Solids	mg/L	3.07	35	0.81	7	3.00	15
Ammonia as N	mg/L	0.2	0.6	0.02	0.1	0.18	0.3
Nitrate as N	mg/L	0.47	1.09	0.21	0.61	0.33	0.54
Total Recoverable Arsenic	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	166	610	162	340	178	270
Total Recoverable Selenium	ug/L	0.2	1	1.6	2	0.0	<1
Total Chromium	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Nickel- "O"	ug/L	9.2	19	***	7	4.67	7
Total Recoverable Nickel- "P"	ug/L	***	***	8.4	13	***	6
Total Recoverable Nickel- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Silver- "O"	ug/L	0.0	<0.1	***	<0.1	0.03	0.2
Total Recoverable Silver- "P"	ug/L	***	***	0.0	<0.1	***	<0.1
Total Recoverable Silver- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Zinc- "O"	ug/L	5.1	13.2	***	<2.5	5.4	11.1
Total Recoverable Zinc- "P"	ug/L	***	***	1.7	5.8	***	6.7
Total Recoverable Zinc- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Aluminum	ug/L	34.4	107	12.8	21	25.67	46
Total Recoverable Cadmium- "O"	ug/L	0.02	0.1	***	<0.1	0	<0.1
Total Recoverable Cadmium- "P"	ug/L	***	***	0.12	0.4	***	<0.1
Total Recoverable Cadmium- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Lead- "O"	ug/L	0.04	0.21	***	<0.16	0	<0.16
Total Recoverable Lead- "P"	ug/L	***	***	0.0	<0.16	***	<0.16
Total Recoverable Lead- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Copper- "O"	ug/L	0.4	2	***	<1	0.5	2
Total Recoverable Copper- "P"	ug/L	***	***	0.2	1	***	<1
Total Recoverable Copper- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Manganese	ug/L	86.0	115	58.6	80	106	133
Total Dissolved Solids	mg/L	320	440	258	390	235	260
Mercury Total	ug/L	0.0000	<0.001	0.0000	<0.001	0.0003	0.002

*Values reported as less than PQL were replaced with zero for calculating monthly averages

***No value to report: Downstream hardness not within criteria

OUTFALL 001- Effluent

Discharge Monitoring Report Results

		October		*November*		*December*	
Parameter	**Units**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**	**MINIMUM**	**MAXIMUM**
pH	pH units	6.82	7.45	6.52	7.43	6.64	7.54
Hardness Downstream of Outfall	mg/L	40	78	76	98	102	129
Parameter	**Units**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**	**MO AVG**	**DAILY MX**
Temperature	oC	7.78	10.3	5.78	6.3	5.4	8.5
Turbidity	NTU	0.79	2	1.25	1.8	2.29	6.8
Background Turbidity	NTU	0.54	1.7	0.75	2.3	0.28	0.57
Turbidity Difference	NTU	0.25	0.39	0.51	1.62	2.01	6.23
Sulfate (as S)	mg/L	26	27	24	28	32	35
Dissolved oxygen	mg/L	10.8	11.45	11.58	12.11	12.40	13.03
Total Suspended Solids	mg/L	1.4	6	2.2	9	6.00	18
Ammonia as N	mg/L	0.14	0.2	0.02	0.1	0.14	0.3
Nitrate as N	mg/L	0.31	0.44	0.24	0.48	0.45	0.65
Total Recoverable Arsenic	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Iron	ug/L	228	380	252	600	942	1500
Total Recoverable Selenium	ug/L	0.2	1	1.0	2	0.6	2
Total Chromium	ug/L	0.0	<2.5	0.0	<2.5	0.0	<2.5
Total Recoverable Nickel- "O"	ug/L	4.8	5	3.6	6	***	***
Total Recoverable Nickel- "P"	ug/L	***	***	***	***	1.6	2
Total Recoverable Nickel- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Silver- "O"	ug/L	0.04	0.1	0.0	<0.1	***	***
Total Recoverable Silver- "P"	ug/L	***	***	***	***	0.04	0.2
Total Recoverable Silver- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Zinc- "O"	ug/L	6.06	11.2	6.4	10.4	***	***
Total Recoverable Zinc- "P"	ug/L	***	***	***	***	7.8	13.5
Total Recoverable Zinc- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Aluminum	ug/L	15.2	30	18.8	44	60.00	97
Total Recoverable Cadmium- "O"	ug/L	0.04	0.2	0.0	<0.1	***	***
Total Recoverable Cadmium- "P"	ug/L	***	***	***	***	0.0	<0.1
Total Recoverable Cadmium- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Lead- "O"	ug/L	0.0	<0.16	0.11	0.19	***	***
Total Recoverable Lead- "P"	ug/L	***	***	***	***	0.04	0.18
Total Recoverable Lead- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Copper- "O"	ug/L	0.2	1	1.6	3.0	***	***
Total Recoverable Copper- "P"	ug/L	***	***	***	***	1.2	2
Total Recoverable Copper- "Q"	ug/L	***	***	***	***	***	***
Total Recoverable Manganese	ug/L	92.2	124	93.6	109	81.4	106
Total Dissolved Solids	mg/L	228	280	242	290	264	300
Mercury Total	ug/L	0.000	<0.001	0.000	0.001	0.001	0.0028

*Values reported as less than PQL were replaced with zero for calculating monthly averages

***No value to report: Downstream hardness not within criteria