Recology
Yuba - Sutter
WASTE ZERO

January 30, 2015

Mr. Todd Del Frate
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

RE: 2014 Second Semiannual and Annual Monitoring Report, Recology Yuba-Sutter Landfill, Yuba County, California

Dear Mr. Del Frate:

Please find the enclosed copy of the above-referenced report, which was prepared by Golder Associates Inc. for the Recology Yuba Sutter Landfill. The report presents monitoring results for the second half of 2014 and an evaluation of corrective action measures.

Groundwater downgradient of LF-1 has improved, especially for chlorinated hydrocarbons, which are either not detected or detected at low trace concentrations that are trending downward. Additional corrective actions for LF-1 (repair of subsurface pipelines, surface drainage improvements, and installation of additional landfill gas extraction wells in the southeastern portion of LF-1) were completed in 2013. The new landfill gas extraction wells have removed offsite landfill gas migration to perimeter probe GP-14. Corrective action monitoring results demonstrate that groundwater downgradient of LF-2 has improved and additional corrective actions are not needed. In the LF-3 Area, corrective action monitoring results indicate improvement, as no significant VOCs have been detected in the LF-3 corrective action monitoring wells since 2007.

As required by the Standard Provisions, “I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

Should you have any questions regarding this report or the monitoring program, please contact Bryan Clarkson of Recology at 707.678.1492.

Sincerely,
Recology Yuba-Sutter

Phillip Graham
General Manager

cc: William Davis, Yuba County Environmental Health Department
Stephanie Kendall, Recology Yuba Sutter
Amy Dietz, Recology
Bryan Clarkson, Recology Environmental Solutions
Kris Johnson, Golder Associates Inc.

2014 SECOND SEMI-ANNUAL AND ANNUAL MONITORING REPORT

Recology Yuba Sutter Landfill, Yuba County, California

Submitted To: Recology Yuba Sutter
3001 North Levee Road
Marysville, CA 95901

Submitted By: Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
(408) 220-9223

Distribution:

(1) Copy	Todd Del Frate, RWQCB Central Valley Region (GeoTracker upload)
(1) Copy	William Davis, Yuba County Health Department
(1) Copy	Amy Dietz, Recology
(1) Copy	Bryan Clarkson, Recology Environmental Solutions Inc.
(1) Copy	Stephanie Kendall, Recology Yuba Sutter
(1) Copy	Golder Associates Inc.

January 30, 2015 **053-7442-14**

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Prepared for:

Recology Yuba Sutter
3001 North Levee Road
Marysville, CA 95901

Prepared by:

Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085
(408) 220-9223

GOLDER ASSOCIATES INC.

Kris H. Johnson, P.G. 4496, C.E.G. 1763
Associate/Senior Consultant

Kimberly DeVillier
Staff Geologist

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1.0 INTRODUCTION

On behalf of Recology Yuba-Sutter Landfill (RYSL), Golder Associates Inc. (Golder) has prepared this 2014 second semi-annual monitoring report. This report presents the results of groundwater, surface water, and leachate monitoring conducted at RYSL (Landfill) during the third and fourth quarters of 2014. Results of the monitoring program, including groundwater flow and elevation measurements, analytical data, and standard observations are provided. An evaluation of corrective actions for the landfill also is included. Monitoring activities were performed in accordance with Waste Discharge Requirements (WDRs) Order No. R5-2003-0093 and the corresponding Monitoring and Reporting Program (MRP) adopted in June 2003.[1]

1.1 Background

The RYSL is a 160-acre facility located in Yuba County, northeast of the City of Marysville (Figure 1). The landfill comprises three areas: the South Area (LF-1), the Peach Orchard (LF-2), and the North Area (LF-3) (Figure 2). Area LF-1 ceased accepting waste in 1984 and was closed in accordance with the regulations that existed at that time. Groundwater monitoring, which began in 1987, indicated a release from areas LF-1 and LF-2 as indicated by sporadic detections of volatile organic compounds (VOCs) in site monitoring wells. In August 1993, RYSL submitted an Amendment to Report of Waste Discharge, which assessed the nature and extent of the release as well as presented an Engineering Feasibility Study (EFS) and a corrective action plan. The corrective action plan proposed to implement source control by closing and capping LF-2. The final cover was to reduce the percolation of precipitation, thereby reducing the rate at which leachate is generated. LF-2 ceased receiving waste in 1988 and the final cover was completed in 1995. A landfill gas extraction system also has been installed on LF-2. Area LF-3 ceased accepting waste in 1996, and in May 1997, RYSL submitted a Report of Waste Discharge proposing an engineered alternative for the closure of the facility, including construction of the final cover. The engineered alternative was deemed acceptable by the Regional Water Quality Control Board (RWQCB) and was completed in October 1997.

In April 2002, RYSL submitted an Evaluation Monitoring Program (EMP) for the LF-3 North Area to the RWQCB.[2] The purpose of the EMP was to investigate the evidence of a release identified in detection monitoring well MW-8, adjacent to the North Area (LF-3). The EMP was approved by the RWQCB with minor revisions,[3] and was started in July 2002. As part of the EMP, three groundwater monitoring wells (MW-11, MW-12, and MW-13) were installed at the perimeter of the LF-3 North Area and placed in the detection monitoring program.

An EFS that presented results of the EMP and evaluated corrective action alternatives was submitted to the RWQCB in September 2002.[4] In summary, the EFS concluded that the low-level VOC impacts to groundwater were limited to the area of well MW-8. The most likely source of impact was determined to be landfill gas migrating from LF-3. Some elevated inorganic results potentially indicative of landfill gas influence were also detected in groundwater samples from well MW-11 (elevated total dissolved solids [TDS] and bicarbonate concentrations). In 2003, well MW-12 had somewhat consistent detections of trace 1,1-DCA and with slight inorganic exceedances. These wells were transferred to the corrective action monitoring program. The primary corrective action recommended in the EFS targeted source control of landfill gas in LF-3. Construction of a passive landfill gas control vent was completed in spring 2004. In fall 2004, a cover extension project was completed on the northeast corner of North Area LF-3.

[1] California RWQCB, Central Valley Region. *Order No. R5-2003-0093*, *Waste Discharge Requirements, Yuba Sutter Disposal, Inc. Yuba Sutter Disposal, Inc. Landfill, Class III Landfills, Post-Closure Maintenance and Corrective Action, Yuba County.*
[2] Conor Pacific. *Amendment to Report of Waste Discharge and Establishment of Evaluation Monitoring Program for the LF-3 North Area, Yuba Sutter Disposal, Inc. Landfill, Yuba County, California*. April 5, 2002.
[3] California RWQCB Central Valley Region. Letter to T. Daleiden of Alta Environmental Services Re: "Amendment to Report of Waste Discharge and Establishment of Evaluation Monitoring Program for the LF-3 North Area, Yuba Sutter Disposal, Inc. Landfill, Yuba County, California." June 21, 2002.
[4] Conor Pacific. *Engineering Feasibility Study for the LF-3 North Area, Yuba Sutter Disposal, Inc. Landfill, Yuba County, California*. September 19, 2002.

These corrective actions have appeared effective, as no significant VOCs have been detected in LF-3 area wells since 2007. An active landfill gas control system was voluntarily installed in LF-3 in 2010.

At the request of the RWQCB, a corrective action evaluation for the LF-1 and LF-2 landfills was completed in July 2011.[5] The evaluation concluded that the LF-2 corrective actions have effectively reduced the detection of VOCs and elevated inorganic parameters downgradient of LF-2. Some VOCs, cis-1,2-dichloroethene and vinyl chloride, have been effectively reduced downgradient of LF-1, but other VOCs, notably 1,4-dichlorobenzene, and inorganic parameters (mainly bicarbonate alkalinity and chloride) still are detected above the reporting limit or concentration limit.

An Engineering Feasibility Study for the LF-1 area was prepared in June 2012 evaluating corrective action alternatives.[6] Several corrective actions were recommended:

1. Design and construct landfill gas extraction for the southeastern side of LF-1 between the MRF and perimeter LFG monitoring probe GP-14.
2. Evaluate the integrity of the subsurface pipelines in LF-1.
3. Evaluate the integrity of the paved surfaces constructed on LF-1.
4. Based on the pipeline and paved surface evaluations, prioritize repairs to provide the greatest potential to reduce infiltration into LF-1.

The subsurface pipelines and paved surface were evaluated and the results were reported to the RWQCB in November 2012 and March 2013.[7] [8] Recommendations were made in the evaluation report to repair damaged storm drain and sewer pipelines, and repair the landfill surface where ponding of rainwater can occur. This work, LFG system installation, pipeline repairs, and surface repairs were completed by the end of September 2013. Five new LFG extraction wells were installed in LF-1 east of the MRF (EW-22 through EW-26). These wells are operational and have effectively reduced methane in perimeter LFG probe GP-14.

2.0 GROUNDWATER ELEVATION

Groundwater elevations are measured semiannually in the second and fourth quarters. Water levels were measured by Golder personnel in all site monitoring wells on December 1, 2014, according to established protocol as described in the Sampling and Analysis Plan (SAP),[9] and were recorded on a water level data sheet (Appendix A). To calculate groundwater elevations, the water levels were subtracted from the top-of-casing elevations, which have been surveyed to mean sea level (Table 2).

Fourth quarter groundwater elevations and equipotential contours are shown in Figure 2. Except for wells MW-1 and MW-15, fourth-quarter groundwater elevations were lower than second quarter (June 2014) elevations by 0.2 to 7.7 feet. The December 2014 groundwater elevations were roughly equivalent to the December 2013 elevations, with the exception of wells MW-3 and MW-4, which were 3.57 and 1.75 feet higher, respectively. Historically, elevations in well MW-3 and MW-4 have exhibited greater seasonal variation than other site wells, possibly due to localized influences. Historical observations have shown

[5] Golder Associates Inc., July 29, 2011, *Monitoring System Evaluation and Corrective Action Effectiveness, Yuba-Sutter Disposal, Inc. Landfill, Yuba County, California.*

[6] Golder Associates Inc., June 29, 2012, Engineering Feasibility Study and Amended Report of Waste Discharge, South Area Landfill LF-1, Yuba Sutter Disposal, Inc. Landfill, Yuba County, California.

[7] Golder Associates Inc., November 15,, 2012, Report on the Evaluation of the Integrity of the Subsurface Pipelines and Paved Surfaces at LF-1, Recology Yuba Sutter Landfill.

[8] Golder Associates Inc., March 14, 2013, *Additional Evaluation of the Integrity of the Subsurface Pipelines at LF-1, Recology Yuba Sutter Landfill*.

[9] Golder Associates Inc. *2009 First Semiannual Monitoring Report, YSDI Landfill, Yuba County, California* (appendix A). July 31, 2009.

that higher water-levels are present over most of the site in the late winter and spring, and lower levels are present over most of the site in the summer to late fall. Hydrographs of the site wells are included in Appendix A. The groundwater elevations in site wells are measured above the top of the well screen intervals, because the wells monitor groundwater that is confined beneath a clay layer and the water levels measured in the wells are piezometric heads in the aquifer that underlies the confining bed.

Groundwater flow direction across the site is generally to the south-southwest. Based on the equipotential contours (Figure 2), the gradient is calculated to be approximately 0.002 in the area of LF-1 and LF-2, and 0.001 in the area of LF-3. Using the gradient, the hydraulic conductivity of the water-bearing unit beneath the site, and the estimated effective porosity of the soil, the groundwater seepage velocity can be approximated. As a conservative measure, the highest measured hydraulic conductivity of 7×10^{-3} centimeters per second (cm/s) is used when calculating the groundwater seepage velocity. Laboratory porosity measurements of soil from the water-bearing unit were averaged, resulting in an average value of 30%. Using these values, groundwater seepage velocity is estimated to be approximately 6×10^{-5} cm/s (58 feet per year [ft/yr]) in the area of LF-1 and LF-2, and 2×10^{-5} cm/s (24 ft/yr) in the area of LF-3. Groundwater flow direction, gradient, and velocity are in accordance with historical observations.

3.0 SAMPLING AND ANALYSIS

3.1 Program

As specified in MRP No. R5-2003-0093, and subsequent site reports (i.e. EMP, EFS) the LF-3 groundwater monitoring network consists of three background wells (MW-5, MW-6, and MW-7), two detection monitoring wells (MW-9, MW-13), and three corrective action wells (MW-8, MW-11, and MW-12). Six corrective action wells are associated with LF-1 and LF-2 (MW-1R, MW-2R, MW-3, MW-4, MW-10, and MW-15). MW-1R and MW-2R have replaced wells MW-1 and MW-2 in the corrective action program; this is the first monitoring period in which they have been sampled.[10] Background and detection wells are sampled semiannually for general water quality parameters and VOCs. The corrective action wells are sampled quarterly for VOCs and semiannually for general parameters.

Surface water is sampled semiannually at three downstream locations (SW-2, SW-3, and SW-4) and one upstream location (SW-5). Figure 2 shows the locations of the four current surface water monitoring locations.

Leachate is sampled semiannually for general water quality parameters and VOCs at five sump locations (S-1 through S-5). The list of monitoring parameters and the associated laboratory method is included in Table 1. All monitoring points are shown in Figure 2.

3.2 Methods and Quality Control

The third and fourth quarter sampling events occurred in August and December, respectively. All samples were collected according to the site-specific SAP. Field measurements of pH, specific conductance, temperature, and turbidity were taken and recorded on water sample field data sheets during well purge and sample collection (Appendix A). Samples were properly preserved and stored on the day of sampling. Chain-of-custody documentation accompanied the samples through collection and delivery to the analytical laboratory.

[10] Golder Associates Inc., August 7, 2014, *Installation of Replacement Monitoring Wells MW-1R and MW-2R, Recology Yuba Sutter, Yuba County, California.*

Laboratory analyses were performed by BC Laboratories (BC) of Bakersfield, California (CA ELAP Certificate Number 1186). BC is a California state-certified analytical laboratory. Analytical reports are located in Appendix B; laboratory electronic data files also are included here for the RWQCB. Detailed documentation of laboratory quality control (QC) is included at the end of each laboratory report. Laboratory analyses occurred within specified holding times and within laboratory quality control standards.

As a field quality assurance and quality control (QA/QC) measure for water sampling, an equipment blank was collected during each sampling event using organic-free water supplied by the laboratory. The equipment blank was analyzed for VOCs by EPA Method 8260. No VOCs were detected in either equipment blank.

For all analyses, trace results (estimated values above the method detection limit [MDL], but below the reporting limit) were reported. It should be noted that these values are strictly estimates and are not considered defensible or certifiable by the laboratory.

4.0 GROUNDWATER MONITORING RESULTS

Groundwater analytical results from background, detection, and corrective action monitoring wells are summarized in tables 3 and 4, and are discussed below. Samples were analyzed in accordance with the monitoring program outlined in Table 1.

4.1 Background Wells

Results for routine parameters from the background wells (MW 5, MW 6, and MW 7) are listed in Table 3. No VOCs were detected. Concentration limits were exceeded for sulfate in well MW-5 and TDS for MW-5 and MW-7. Well MW-5 generally has higher inorganic concentrations than the other background wells and the current results are similar to historical concentrations in the well.

To evaluate groundwater quality in the detection and corrective action monitoring wells, concentration limits for inorganic monitoring parameters are updated annually and have been calculated using pooled analytical data collected from the background monitoring wells through fourth quarter 2014. The concentration limits were calculated using the interwell method with tolerance limits at 95% confidence and 95% coverage. Analytical results from detection and corrective action wells are then compared to the concentration limit for each monitoring parameter. Concentration limits are included with the analytical results in the data tables. A summary of the statistical calculations is included in Appendix C.

4.2 Detection Monitoring Wells

Results from detection wells MW-9 and MW-13 are presented in Table 3. All inorganic results for both wells were below the concentration limits. No VOCs were detected. All field and general water quality parameters are within the historical range of concentrations in the wells.

4.3 Corrective Action Monitoring Wells

4.3.1 LF-1 and LF-2 Areas Inorganic Parameters

Field and inorganic analytical results from the LF-1 and LF-2 corrective action wells (MW-1R, MW-2R, MW-3, MW-4, MW-10, and MW-15) are compared to concentration limits and subjected to trend analyses to evaluate the progress of the corrective action program. Monitoring results are presented in Table 4, with the concentration limits. Former corrective action wells MW-1 and MW-2 were sampled in third quarter 2014 prior to the installation of replacement wells MW-1R and MW-2R; these monitoring results are included in Table 4.

A comparison of concentration limits to results for routine monitoring parameters shows that bicarbonate alkalinity, chloride, specific conductance, and TDS concentrations were above concentration limits in wells MW-1, MW-1R, MW-2, MW-2R, and MW-15. Following a concentration limit exceedance of nitrate in well MW-2 during second quarter, the well was resampled in third quarter and nitrate was detected below the concentration limit. All results for routine inorganic monitoring parameters in wells MW-3, MW-4, and MW-10 were below concentration limits.

An evaluation of general water quality parameters from 1995, when LF-2 was closed and capped, to the present allows for evaluation of the inorganic parameters. A summary of trend test results is provided in Table 5. The complete Mann-Kendall trend test report is provided in Appendix C. Downward trends were determined for many of the inorganic parameters in the LF-1 and LF-2 corrective action wells; no trends were determined for well MW-15 because there is insufficient data to establish trends. Wells MW-1R and MW-2R were not evaluated for trends as they have only been sampled twice. No upward trends were identified. Using the Mann-Kendall statistical trend test, the following trends are apparent for inorganic parameters in the corrective action wells:

- MW-1 *downward:* specific conductance, bicarbonate alkalinity, chloride, sulfate, and TDS
- MW-1R *no trends due to only two sample events*
- MW-2 *no trends*
- MW-2R *no trends due to only two sample events*
- MW-3 *downward*: specific conductance, bicarbonate alkalinity, and TDS
- MW-4 *downward:* specific conductance, bicarbonate alkalinity, sulfate, and TDS
- MW-10 *downward:* specific conductance, bicarbonate alkalinity, chloride, and TDS
- MW-15 *no trends*

4.3.2 LF-1 and LF-2 Areas VOCs

Detected VOCs in the corrective action wells (MW-1R, MW-2R, MW-3, MW-4, MW-10, and MW-15) are subjected to trend analyses to evaluate the progress of the corrective action program. Wells MW-1 and MW-2 were analyzed for VOCs in the third quarter for comparison to their replacement wells. Monitoring results are presented in Table 4; trend test results are presented in Table 5. Either downward trends or no significant trends were determined for VOCs in all of the LF-1 and LF-2 corrective action wells. No upward trends were identified.

Two VOCs were detected above the reporting limit in corrective action wells. Chlorobenzene was detected at concentrations of 1.0 µg/L and 1.1 µg/L in well MW-1R and 0.52 µg/L and 0.91 µg/L in well MW-2R in the third and fourth quarters, respectively. 1,4-Dichlorobenzene (1,4-DCB) was detected at concentrations of 0.93 µg/L and 0.75 µg/L in well MW-1R and 0.81 µg/L and 0.75 µg/L well MW-2R in the third and fourth quarters, respectively. 1,4-DCB was also detected above the reporting limit in wells MW-2 (0.72 µg/L) and MW-10 (0.50 µg/L).

In addition to the detections listed above, other estimated trace VOC concentrations, between the reporting limit and MDL, were reported for all corrective action wells except for well MW-4. Trace concentrations of the following compounds were detected: benzene, chlorobenzene, 1,4-DCB, cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride. These compounds have been detected at the site in the past.

The concentrations of cis-1,2-DCE and vinyl chloride in LF-1 and LF-2 wells have fallen below the method detection limit, or are at very low trace concentrations – there were only two trace concentrations of vinyl chloride detected in fourth quarter. Vinyl chloride is the breakdown product of chlorinated VOCs.

4.3.3 LF-3 Area Inorganic Parameters

Inorganic monitoring data for LF-3 area wells are included in Table 4. In wells MW-8 and MW-11, concentrations of bicarbonate alkalinity, specific conductance and TDS exceeded their respective concentration limits.

The primary corrective action recommended in the EFS for the LF-3 Area targeted source control of landfill gas. Construction of a passive landfill gas control trench was completed in 2004. To evaluate the effectiveness of this corrective action, trend analyses have been conducted on inorganic data collected from 2004 to the present. In addition, in 2010, fifteen landfill gas extraction wells were installed in the LF-3 area. The new wells and the existing four leachate sumps were connected to the active landfill gas control system and existing flare. Results of the Mann-Kendall trend test are included in Table 5. The following are trend test results for inorganic parameters:

- MW-8 *downward*: pH, sulfate
- MW-11 *downward*: specific conductance, bicarbonate alkalinity and TDS
  upward: sulfate
- MW-12 *downward*: specific conductance, chloride, and sulfate

While there is an upward trend for sulfate in well MW-11, the sulfate concentration in fourth quarter was 17 mg/l, which is significantly lower than the background wells and the concentration limit of 63 mg/l. The downward trends indicate that the LFG control is having a beneficial effect on adjacent groundwater.

4.3.4 LF-3 Area VOCs

No VOCs were detected in samples from corrective action wells MW-8, MW-11, and MW-12. VOCs have not been detected in LF-3 wells since 2007.

4.4 Piper Diagram Analysis of Water Samples

When evaluating ionic water quality, absolute concentrations of the major ions can vary widely, but ratios of ionic constituents remain relatively constant. Graphical tools that use ratios instead of absolute concentrations, such as Piper diagrams are useful for providing a "fingerprint" of the ionic character of the water. Piper diagrams are also useful for interpreting relationships that exist between various samples including mixing trends and geochemical reactions (e.g., cation exchange, precipitation and dissolution reactions, and sulfate reduction). Data on a Piper diagram is plotted as percentages of the principal cations and anions in separate triangular fields. The resulting anion and cation percentages for each sample are then projected into a central diamond-shaped field. The intersection of these projections represents the composition of the water with respect to the combination of ions shown.

Fourth quarter 2014 data from groundwater, surface water, and leachate sampling locations are plotted on a Piper diagram, included in Appendix C. In the Piper diagram, the groundwater samples plot in a grouping that is slightly enriched in calcium and magnesium cations and dominated by bicarbonate anions. Some corrective action monitoring wells show enrichment in bicarbonate alkalinity compared to background and detection wells. The leachate samples plot separately from the groundwater samples, showing chloride and sodium enrichment and lower sulfate and calcium percentages.

5.0 SURFACE WATER MONITORING

Surface water sampling is required semiannually. Surface water samples were obtained on December 15, 2014 from locations SW-2, SW-3, and SW-4; however, no sample was obtained during this monitoring period from SW-5. Locations SW-4 and SW-5 must be sampled after a rain event in order to obtain a sample, as these locations do not represent perennial surface water bodies. Location SW-2, the Yuba

River, always has water present for sample collection. Monitoring point SW-5 is often dry, because it is located in a drainage that flows from the neighboring property and is not a seasonally-consistent surface water body. Surface water analytical results are summarized in Table 6. Interpoint tolerance limits, included in Table 6, have been calculated using all available data from background location SW-5. The concentration of total suspended solids (TSS) at location SW-3 was above the concentration limit.

No VOCs were detected in the surface water samples.

Location SW-3 is now a storm water drainage, not a true surface water monitoring location, which flows only during rainfall events and receives runoff predominantly from the impervious surfaces of the RYS material recycling facility, maintenance facility, vehicle parking areas, and roadways.

5.1 Run-on/Run-off Controls

As described in the Background section above, the landfill has been closed and all wastes have received final cover, which provides the necessary run-on/run-off controls. The waste units are also protected from run-on by perimeter berms and ditches. Over the past few years, run-off controls and BMPs have been implemented in response to monitoring results. Storm water BMPs have been improved in the vicinity of SW-3 (STW-7 for storm water monitoring) to minimize sediment transport from the transfer station and truck maintenance areas. Specific actions taken to date include reconstructing the drainage ditch and drain inlets, installing a rock swale to minimize sediment transport and installing a permanent covering over the fueling area. The storm water is monitored under the NPDES General Industrial Permit.

6.0 LEACHATE MONITORING

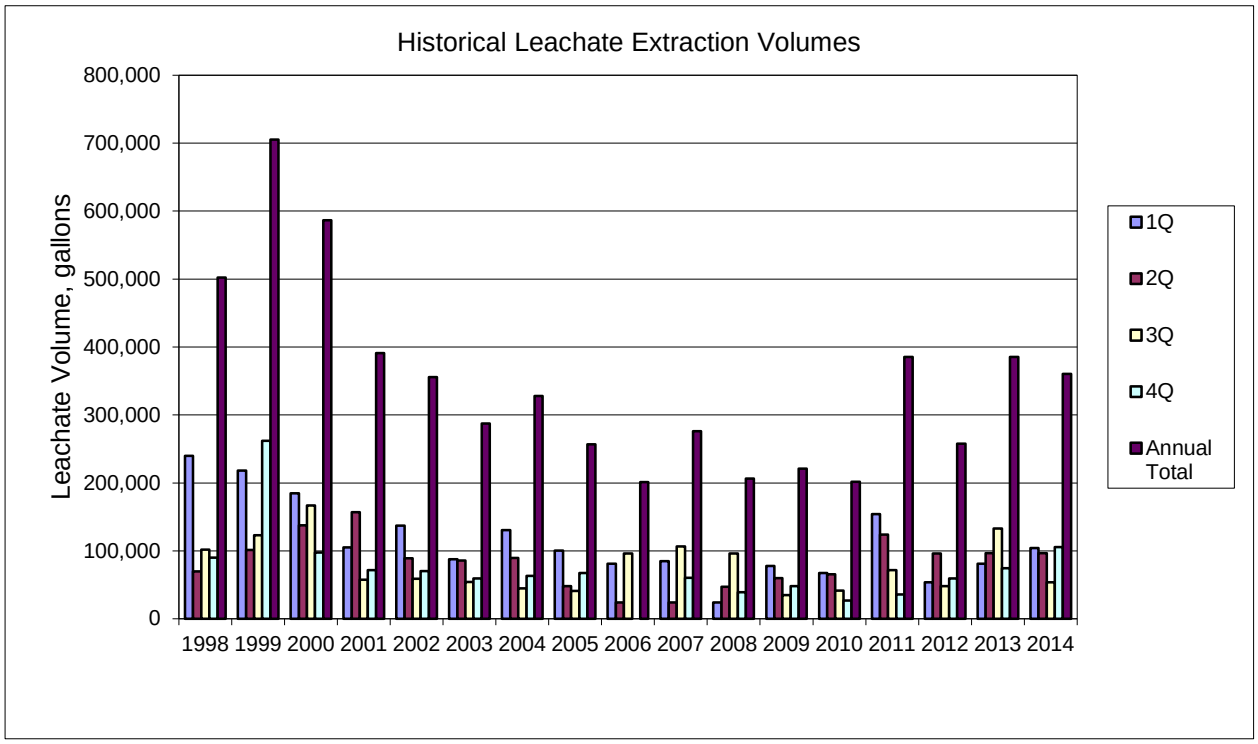
6.1.1 Analytical Results

The four LF-3 leachate sumps (S-2, S-3, S-4, and S-5) and sump S-1 in LF-2 were sampled. The analytical results are summarized in Table 7. Several VOCs were detected at concentrations above laboratory reporting limits. These VOCs have been detected previously in site leachate samples. Leachate typically has high chloride, bicarbonate, and dissolved solids concentrations.

6.2 Control Facilities

During this monitoring period, the leachate extraction system was operational. According to records provided by RYSL personnel, approximately 159,600 gallons (gal) of leachate were extracted during the third and fourth quarters of 2014. A summary of average gallon per day (gpd) flow rates with monthly totals is provided in Table 8. Extracted leachate was transported to the City of Marysville's wastewater treatment system.

The volume of leachate removed during this semiannual monitoring period is similar to recent historical extraction volumes, demonstrating that the extraction system is operational (see chart below). The leachate extraction volume had decreased significantly from the peak volume in 1999 (a little over one year following final closure of LF-3), until 2011 following installation of active landfill gas extraction in LF-3. The increase in leachate volume in 2011 may be the result of the landfill gas well installation or landfill gas condensate being included in the leachate collection volumes.



No indications of a leachate release have been identified, providing further evidence that the leachate collection system is effective.

7.0 STANDARD OBSERVATIONS

Weekly standard observations were conducted by RYSL personnel for the waste management unit (WMU), perimeter of the WMU, and receiving waters. Standard observation field sheets are included in Appendix A. For the monitoring period of July through December, no ponded water, erosion, or other issues were observed.

8.0 LANDFILL GAS MIGRATION MONITORING

The perimeter landfill gas monitoring probes (GP-1 through GP-15 shown on Figure 2) are monitored quarterly for methane, carbon dioxide, and oxygen. Tabulated monitoring results are included in Appendix A. No methane was measured in the probes throughout the monitoring period, except for GP-13D (0.4%) in the third quarter. Both the shallow and deep zones in GP-14 contained no methane. Probe GP-14 formerly contained methane and the new LFG extraction wells in LF-1 have effectively removed the migration of landfill gas.

8.1 Landfill Gas Flare Monitoring

The second semi-annual 2014 LFG flare sample for laboratory analysis by EPA Method TO-15 was collected on December 15, 2014. Ten of the sixty-four constituents analyzed for were detected in the sample. Results of the analysis are provided in Appendix B.

9.0 ANNUAL COMPLIANCE EVALUATION SUMMARY

A summary of monitoring data collected during 2014 and an assessment of progress toward re-establishing the water quality protection standard in the LF-1 and LF-2 areas are provided below. An evaluation of corrective action activities also is included. Tabular summaries of monitoring data from the previous two six-month periods are presented in appendix D. These data files will be included in an email sent to the RWQCB. Graphical summaries in the form of time concentration plots are provided in appendix E. For VOCs, only those that were detected during the past six-month period and at least once in the past five-years are provided. A matrix showing which VOCs have been graphed is included.

9.1 Groundwater Monitoring and Evaluation of Corrective Actions

9.1.1 LF-1 and LF-2 Areas

The following inorganic monitoring parameters were detected above their respective concentration limits (these results are consistent with historical results): specific conductance in MW-1 and MW-2, specific conductance, bicarbonate alkalinity, chloride, and TDS in MW-1R, MW-2R, and MW-15

The following trends are apparent for inorganic parameters (note that wells MW-1R, MW-2R, and MW-15 have either a short historical monitoring period or insufficient data to calculate trends):

- MW-1 - *downward:* specific conductance, bicarbonate alkalinity, chloride, sulfate, TDS
- MW-2 - *no trends*
- MW-3 - *downward*: specific conductance, bicarbonate alkalinity, and TDS
- MW-4 - *downward:* specific conductance, bicarbonate alkalinity, sulfate, and TDS
- MW-10 - *downward:* specific conductance, bicarbonate alkalinity, chloride, and TDS
- MW-15 – *no trends*

The following VOCs were detected above the reporting limit: 1,4-DCB in MW-1R, MW-2R, and MW-10, chlorobenzene in MW-1R and MW-2R. Trace VOC results, between the reporting limit and MDL, were estimated for wells MW-1, MW-2, MW-3, MW-10, and MW-15.

All detected VOCs have either downward trends or no trends. These results indicate that groundwater downgradient of LF-2 (wells MW-3 and MW-4) has improved and additional corrective actions are not needed. Groundwater downgradient of LF-1 has improved, especially for cis-1,2-DCE and vinyl chloride, which are either not detected or detected at low trace concentrations that are trending downward. The targeted landfill gas extraction system wells installed in LF-1 in September 2013, in addition to the repairs to the subsurface pipelines and surface drainage improvements, are expected to further improve the groundwater quality downgradient from LF-1.

9.1.2 LF-3 Area

Monitoring results demonstrate that groundwater quality with respect to VOCs has improved downgradient of LF-3; no VOCs were detected in the LF-3 corrective action monitoring wells and no VOCs have been detected since 2007. The lack of VOC detections demonstrates that the gas controls have been effective at preventing the migration of landfill gas outside of the waste unit.

The following inorganic monitoring parameters were detected in corrective action wells MW-8 and MW-11 above the concentration limits: bicarbonate alkalinity, specific conductance, and total dissolved solids. The downward trend for bicarbonate alkalinity indicates that the LFG control is having a beneficial effect

on adjacent groundwater. Most inorganic constituents in wells MW-8, MW-11, and MW-12 no longer exhibit upward trends of general water quality parameters as in the past.

The following trends are apparent for VOCs and inorganic parameters in LF-3 corrective action monitoring wells:

- MW-8 *downward*: pH, sulfate, and cis-1,2-dichloroethene
- MW-11 *downward*: specific conductance, bicarbonate alkalinity and TDS
  upward: sulfate
- MW-12 *downward*: specific conductance, chloride, and sulfate

While there is an upward trend for sulfate in well MW-11, the sulfate concentration in fourth quarter was 17 mg/l, which is significantly lower than the background wells and the concentration limit of 63 mg/l. The downward trends indicate that the LFG control is having a beneficial effect on adjacent groundwater.

9.2 Groundwater Detection Monitoring

Sulfate in well MW-5 and TDS in wells MW-5 and MW-7 were detected above their concentration limits. Background well MW-5 typically has higher inorganic parameter concentrations than the other background wells. No VOCs were detected in the background and detection monitoring wells.

9.3 Surface Water Monitoring

During the fourth quarter sampling event, sample location SW-5 was dry. The following results were noted for the surface water sampling locations:

- TSS exceeded the concentration limit in SW-3
- No VOCs were detected

Location SW-3 is now a storm water discharge, not a true surface water monitoring location, which flows only during rainfall events and receives runoff predominantly from the impervious surfaces of the RYS material recycling facility, maintenance facility, vehicle parking areas, and roadways.

TABLES

Table 1
Sampling and Analysis Program R5-2003-0093
Yuba Sutter Disposal Landfill

Parameters	Monitoring Points				
	Groundwater			Leachate	Surface Water
	Background MW-5, 6, 7	Detection MW-9, 12*, 13	Corrective Action MW-1R, 2R, 3, 4, 8, 10, 11, 15	S-2, 3, 4, 5	SW-2, 3, 4, 5
Depth to Water (Field Measurement)	SA	SA	SA	NA	NA
Turbidity (Field Measurement)	SA	SA	SA	-	SA
pH (Field Measurement)	SA	SA	SA	M	SA
Specific Conductance (Field Measurement)	SA	SA	SA	M	SA
Temperature (Field Measurement)	SA	SA	SA	-	SA
Total Dissolved Solids (EPA 160.1)	SA	SA	SA	SA	SA
Chloride (EPA 300.0)	SA	SA	SA	SA	SA
Sulfate (EPA 375.4)	SA	SA	SA	SA	SA
Nitrate + Nitrite as Nitrogen (EPA 353.2)	SA	SA	SA	SA	SA
Volatile Organic Compounds (EPA 8260)	SA	SA	Q	SA	SA
Volatile Organic Compounds (EPA 8260, extended list)	5	5	5	5	5
Ca, Mg, K, Na (EPA 6010)	SA	SA	SA	SA	SA
Total Suspended Solids (EPA 160.2)	-	-	-	-	SA
Total Organic Carbon (EPA 415.1)	5	5	5	5	SA
Chemical Oxygen Demand (EPA 410.1)	-	-	-	-	5
Alkalinity; Carbonate, Bicarbonate (EPA 310.1)	SA	SA	SA	SA	SA
Semi-Volatile Organic Compounds (EPA 8270)	5	5	5	5	5
Chlorphenoxy Herbicides (EPA 8151)	5	5	5	5	5
Organophosphorus Compounds (EPA 8141)	5	5	5	5	5
Dissolved Oxygen (Field Measurement)	-	-	-	-	5
Dissolved Metals (EPA 200 or 7000 series)	5	5	5	5	5
Cyanide (EPA 335.4)	5	5	5	5	5
Sulfide (EPA 376.1)	5	5	5	5	5

Notes:

Program summary per Monitoring and Reporting Program (MRP) No. R5-2003-0093

Well MW-11 was transferred to corrective action monitoring after adoption of the MRP.

Q = Quarterly; SA = Semi-annually; A = Annually; 5 = every 5 years

Semi-annual monitoring is completed during the second and fourth quarters; annual monitoring is completed during the fourth quarter.

Metals include: Al, Sb, Ba, Be, Cd, Cr (total), Co, Cu, Ag, Sn, V, Zn, Fe, Mn, As, Pb, Hg, Ni, Se, Tl.

Next five-year COC sampling and analysis event to be conducted Fourth Quarter 2016.

* Well MW-12 is being monitored under the corrective action program.

Table 2
Groundwater Elevations
Fourth Quarter 2014
Yuba Sutter Disposal Landfill

Well Number	Top of Casing Elevation (feet, MSL)	Depth to Groundwater (feet) December 15, 2014	Groundwater Elevation (feet, MSL) December 15, 2014
MW-1	78.46	26.55	51.91
MW-1R*	79.53	29.40	50.13
MW-2	79.91	26.66	53.25
MW-2R*	82.42	30.01	52.41
MW-3	86.39	30.24	56.15
MW-4	85.66	27.38	58.28
MW-5	78.81	17.44	61.37
MW-6	84.39	22.66	61.73
MW-7	85.47	23.49	61.98
MW-8	87.70	27.11	60.59
MW-9	84.80	26.14	58.66
MW-10	94.63	42.04	52.59
MW-11	89.43	28.83	60.60
MW-12	89.92	29.90	60.02
MW-13	76.55	16.88	59.67
PZ-14	79.49	19.51	59.98
MW-15*	73.67	23.73	49.94

* Well surveyed to NAVD88 datum. Other site wells surveyed to NGVD29.

Table 3
Groundwater Analytical Results and Concentration Limits - Detection and Background Wells
Fourth Quarter 2014
Yuba Sutter Disposal Landfill

Sample Designation		Detection		Background			*Concentration Limit*
Sampling Date		MW-9 12/15/14	MW-13 12/15/14	MW-5 12/15/14	MW-6 12/15/14	MW-7 12/15/14	
Field Parameters	*Unit*						
pH	std. units	7.21	7.28	7.01	7.09	7.03	*6.37 - 7.99*
Specific Conductance	µmhos/cm	289	302	510	336	460	*520*
Temperature	°C	17.9	20.1	19.7	19.6	19.5	-
Turbidity	NTU	2	57	1	1	2	-
General Water Quality Parameters							
Calcium, dissolved	mg/l	27	29	47	26	47	*NR*
Magnesium, dissolved	mg/l	18	20	35	17	34	*NR*
Sodium, Dissolved	mg/l	20	15	17	25	16	*NR*
Potassium, dissolved	mg/l	0.71 t	0.82 t	1.4	1.2	1.2	*NR*
Alkalinity, bicarbonate	mg/l	140	130	190	120	180	*200*
Alkalinity, carbonate	mg/l	<4.1	<4.1	<4.1	<4.1	<4.1	*NE*
Chloride	mg/l	3.8	5.6	16	7.7	18	*19*
Nitrate/Nitrite as N	mg/l	0.96	1.8	1.1	0.34	1.5	*1.8*
Sulfate	mg/l	19	26	**64**	22	44	*63*
Total Dissolved Solids	mg/l	270	270	**430**	250	**390**	*380*
Volatile Organic Compounds by EPA Method 8260							
All VOCs below method detection limits.		ND	ND	ND	ND	ND	*ND*

mg/l - milligrams per liter (parts per million)
µmhos/cm - micromhos per centimeter at 25 °C
NTU - Nephelometric Turbidity Units
µg/l - micrograms per liter (parts per billion)
t - trace concentration between the reporting limit and detection limit; result is an estimate.
NE = none established; insufficient number of data points or detections.
NR - Not required by MRP No. R5-2003-0093.
Concentration limits calculated using interwell tolerance limits at 95% confidence and 95% coverage.
Concentration limits calculated using pooled historical data collected from background wells through fourth quarter 2014.
Bold type indicates inorganic result that exceeds concentration limit

Table 4
Groundwater Analytical Results - Corrective Action Wells
Third and Fourth Quarters 2014
Yuba Sutter Disposal Landfill

		LF-1 and LF-2 Areas										*Concentration*
Sample Designation		MW-1	MW-1R		MW-2	MW-2R		MW-3		MW-4		*Limit*
Sampling Date		8/6/14	8/26/14	12/15/14	8/6/14	8/26/14	12/15/14	8/5/14	12/15/14	8/5/14	12/15/14	
Field Parameters	*Unit*											
pH	std. units	6.72	6.49	6.46	6.46	6.58	6.57	6.40	6.47	6.67	7.29	*6.37 - 7.99*
Specific Conductance	µmhos/cm	**659**	**951**	**821**	**1026**	**1049**	**1023**	203	216	116	165	*520*
Temperature	°C	19.8	19.5	17.6	21.0	20.8	19.9	17.7	16.8	17.8	16.1	-
Turbidity	NTU	2	3	8	4	4	7	4	18	4	13	-
General Water Quality Parameters												
Calcium, dissolved	mg/l	-	-	64	-	-	91	-	20	-	15	*NR*
Magnesium, dissolved	mg/l	-	-	44	-	-	63	-	8.7	-	7.9	*NR*
Sodium, dissolved	mg/l	-	-	52	-	-	49	-	16	-	4.4	*NR*
Potassium, dissolved	mg/l	-	-	5.0	-	-	14	-	0.92 t	-	0.85 t	*NR*
Alkalinity, bicarbonate	mg/l	-	-	**330**	-	-	**450**	-	81	-	77	*200*
Alkalinity, carbonate	mg/l	-	-	<4.1	-	-	<8.2	-	<4.1	-	<4.1	*NE*
Chloride	mg/l	-	-	**64**	-	-	**96**	-	6.9	-	2.8	*19*
Nitrate/Nitrite as N	mg/l	-	-	<0.014	0.13/0.14	-	0.11	-	0.94	-	0.080 t	*1.8*
Sulfate	mg/l	-	-	44	-	-	1.8	-	16	-	0.28 t	*63*
Total Dissolved Solids	mg/l	-	-	**570**	-	-	**670**	-	190	-	120	*380*
Volatile Organic Compounds by EPA Method 8260B												
Benzene	µg/l	<0.083	<0.083	<0.083	<0.083	<0.083	0.14 t	<0.083	<0.083	<0.083	<0.083	*NE*
Chlorobenzene	µg/l	0.26 t	**1.0**	**1.1**	0.41 t	**0.52**	**0.91**	<0.093	<0.093	<0.093	<0.093	*ND*
1,4-Dichlorobenzene	µg/l	0.10 t	**0.93**	**0.75**	**0.72**	**0.81**	**0.75**	0.12 t	<0.062	<0.062	<0.062	*ND*
cis-1,2-Dichloroethene	µg/l	0.12 t	0.36 t	0.30 t	0.15 t	0.16 t	0.23 t	<0.085	<0.085	<0.085	<0.085	*ND*
Vinyl Chloride	µg/l	<0.12	0.17 t	0.12 t	0.23 t	0.28 t	0.30 t	<0.12	<0.12	<0.12	<0.12	*ND*
All other VOCs below method detection limits.												

mg/l - milligrams per liter (parts per million)
µmhos/cm - micromhos per centimeter at 25 °C
NTU - Nephelometric Turbidity Units
µg/l - micrograms per liter (parts per billion)
t - trace concentration between the reporting limit and detection limit; result is an estimate.
Concentration limits calculated using interwell tolerance limits at 95% confidence and 95% coverage.
Concentration limits calculated using pooled historical data collected from background wells through fourth quarter 2014.
Bold type indicates inorganic result that exceeds concentration limit, or VOC detected above the reporting limit.
ND - never detected above detection limit.
NE - none established due to insufficient data and high percentage of ND results.
NR - not required by MRP No. R5-2003-0093.

Table 4
Groundwater Analytical Results - Corrective Action Wells
Third and Fourth Quarters 2014
Yuba Sutter Disposal Landfill

		LF-1 Area				LF-3 Area						*Concentration*
Sample Designation		MW-10		MW-15		MW-8		MW-11		MW-12		*Limit*
Sampling Date		8/5/14	12/15/14	8/6/14	12/15/14	8/5/14	12/15/14	8/5/14	12/15/14	8/5/14	12/15/14	
Field Parameters	*Unit*											
pH	std. units	6.50	6.52	6.77	7.23	6.79	6.76	6.64	6.80	7.53	6.99	*6.37 - 7.99*
Specific Conductance	µmhos/cm	340	181	**663**	**566**	**733**	**697**	**541**	498	379	379	*520*
Temperature	°C	19.6	18.4	18.9	18.1	19.7	19.0	19.8	19.2	19.8	19.0	-
Turbidity	NTU	2	3	468	>1000	3	2	13	4	17	>1000	-
General Water Quality Parameters												
Calcium, dissolved	mg/l	-	17	-	61	-	86	-	62	-	33	*NR*
Magnesium, dissolved	mg/l	-	11	-	39	-	52	-	32	-	24	*NR*
Sodium, dissolved	mg/l	-	5.9	-	24	-	22	-	20	-	28	*NR*
Potassium, dissolved	mg/l	-	0.98 t	-	7.4	-	0.92 t	-	0.43 t	-	0.63 t	*NR*
Alkalinity, bicarbonate	mg/l	-	77	-	**280**	-	**400**	-	**270**	-	170	*200*
Alkalinity, carbonate	mg/l	-	<4.1	-	<4.1	-	<4.1	-	<4.1	-	<4.1	*NE*
Chloride	mg/l	-	5.7	-	**22**	-	8.6	-	7.1	-	5.9	*19*
Nitrate/Nitrite as N	mg/l	-	1.2	-	0.27	-	1.1	-	0.62	-	1.8	*1.8*
Sulfate	mg/l	-	10	-	21	-	21	-	17	-	39	*63*
Total Dissolved Solids	mg/l	-	160	-	**400**	-	**460**	-	**410**	-	330	*380*
Volatile Organic Compounds by EPA Method 8260B												
Benzene	µg/l	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	*NE*
Chlorobenzene	µg/l	<0.093	<0.093	<0.093	0.23 t	<0.093	<0.093	<0.093	<0.093	<0.093	<0.093	*ND*
1,4-Dichlorobenzene	µg/l	**0.50**	0.070 t	0.25 t	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	<0.062	*ND*
cis-1,2-Dichloroethene	µg/l	<0.085	<0.085	0.090 t	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085	<0.085	*ND*
Vinyl Chloride	µg/l	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	*ND*
All other VOCs below method detection limits.												

mg/l - milligrams per liter (parts per million)
µmhos/cm - micromhos per centimeter at 25 °C
NTU - Nephelometric Turbidity Units
µg/l - micrograms per liter (parts per billion)
t - trace concentration between the reporting limit and detection limit; result is an estimate.
Concentration limits calculated using interwell tolerance limits at 95% confidence and 95% coverage.
Concentration limits calculated using pooled historical data collected from background wells through fourth quarter 2014.
Bold type indicates inorganic result that exceeds concentration limit, or VOC detected above the reporting limit.
ND - never detected above detection limit.
NE - none established due to insufficient data and high percentage of ND results.
NR - not required by MRP No. R5-2003-0093.

Table 5
Trend Analysis of Monitoring Parameters - Corrective Action Wells
Third and Fourth Quarters 2014
Yuba Sutter Disposal Landfill

	Statistically Significant Trends [1]								
	LF-1 and LF-2 Wells						LF-3 Wells		
Parameters	MW-1	MW-2	MW-3	MW-4	MW-10	MW-15	MW-8	MW-11	MW-12
Field Measurements									
pH	-	-	-	-	-	-	Down	-	-
Specific Conductance	Down	-	Down	Down	Down	-	-	Down	Down
General Water Quality Parameters									
Bicarbonate Alkalinity	Down	-	Down	Down	Down	-	-	Down	-
Carbonate Alkalinity	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloride	Down	-	-	-	Down	-	-	-	Down
Nitrate/Nitrite as N	-	-	-	-	-	-	-	-	-
Sulfate	Down	-	-	Down	-	-	Down	Up	Down
Total Dissolved Solids	Down	-	Down	Down	Down	-	-	Down	-
Volatile Organic Compounds									
Benzene	NA	Down	Down	ND	Down	ND	ND	ND	
Chlorobenzene	-	-	Down	ND	Down	-	ND	ND	ND
1,4-Dichlorobenzene	Down	Down	Down	ND	Down	-	ND	ND	ND
cis-1,2-Dichloroethene	Down	Down	Down	ND	Down	NA	Down	ND	NA
Vinyl chloride	Down	Down	Down	ND	ND	ND	ND	ND	NA

Trend analyses for LF-1 and LF-2 wells conducted with data from 1995 (date of capping and closure of LF-2) through fourth quarter 2014.
Trend analyses for LF-3 wells conducted with data from 2004 (when corrective actions were implemented) through fourth quarter 2014.
Non-detect values were set equal to 1/2 the reporting limit.
[1] Significant at a 95% confidence level using the Mann-Kendall test method.
NA - Insufficient number of detections to determine a trend (less than 4).
ND - Analyte not detected in samples from this location.
- = no trend

Table 6
Surface Water Analytical Results and Concentration Limits
Fourth Quarter 2014
Yuba Sutter Disposal Landfill

Sample Designation Sampling Date		SW-2 12/15/14	SW-3 12/15/14	SW-4 12/15/14	SW-5 12/15/14	*Concentration Limit*
Field Measurements	*Unit*					
pH	std. units	7.17	7.34	7.31	*Dry*	*4.06 - 10.1*
Specific Conductance	µmhos/cm	101	273	70	-	*1010*
Temperature	°C	12.35	12.41	11.90	-	-
Turbidity	NTU	3.1	968	23.4	-	-
General Water Quality Parameters						
Alkalinity, bicarbonate	mg/l	42	130	27	-	*270*
Alkalinity, carbonate	mg/l	<4.1	<4.1	<4.1	-	*Non-detect*
Chloride	mg/l	2.1	8.5	1.2	-	*70*
Nitrate/Nitrite as N	mg/l	0.19	0.61	0.12	-	*NE*
Sulfate	mg/l	5.0	19	2.0	-	*130*
Total Dissolved Solids	mg/l	82	230	54	-	*810*
Total Suspended Solids	mg/l	5.6	**580**	5.2	-	*47*
Total Organic Carbon	mg/l	1.9	21	12	-	*91*
Total Calcium	mg/l	11	64	5.4	-	*NR*
Total Magnesium	mg/l	4.3	16	3.3	-	*NR*
Total Sodium	mg/l	3.3	13	2.8	-	*NR*
Total Potassium	mg/l	0.64 t	11	3.0	-	*NR*
Volatile Organic Compounds by EPA Method 8260						
All VOCs below method detection limits.		ND	ND	ND	-	*ND*

µmhos/cm - micromhos per centimeter at 25°C

NTU - nephelometric turbidity units

mg/l - milligrams per liter (parts per million)

µg/l - micrograms per liter (parts per billion)

t - trace concentration between the reporting limit and detection limit; result is an estimate.

Concentration limits calculated using interwell tolerance limits at 95% confidence and 95% coverage.

Concentration limits calculated using data from background location SW-5.

Bold type indicates inorganic result that exceeds concentration limit

ND - Not detected.

NE - None established due to insufficient data points and/or high percentage of ND results.

NR - Not required by MRP No. R5-2003-0093.

Non-detect - Concentration limit set at detection limit, data set is 100% ND.

Table 7
Leachate Analytical Results
Fourth Quarter 2014
Yuba Sutter Disposal Landfill

Sample Designation		S-1	S-2	S-3	S-4	S-5
Sampling Date		12/15/14	12/15/14	12/15/14	12/15/14	12/15/14
Field Measurements	*Unit*					
pH	std. units	7.16	7.20	5.52	5.93	6.86
Specific Conductance	µmhos/cm	11,600	5,010	2,430	6,190	6,830
General Water Quality Parameters						
Calcium, dissolved	mg/l	100	220	30	210	260
Magnesium, dissolved	mg/l	130	110	59	250	320
Sodium, dissolved	mg/l	1,000	560	340	550	770
Potassium, dissolved	mg/l	690	260	200	130	130
Alkalinity, bicarbonate	mg/l	4,200	540	<4.1	1,500	1,500
Alkalinity, carbonate	mg/l	<8.2	<8.2	<4.1	<8.2	<8.2
Chloride	mg/l	1,600	820	87	1,300	1,600
Nitrate/Nitrite as N	mg/l	<0.014	150	0.16	0.027 t	<0.014
Sulfate	mg/l	110	170	3.9	43	21
Total Dissolved Solids	mg/l	6,600	3,300	640	4,000	4,700
Volatile Organic Compounds by EPA Method 8260						
Benzene	µg/l	**2.0**	**0.25 t**	**0.28 t**	**3.5**	**0.63**
Chlorobenzene	µg/l	**11**	<0.093	**0.52**	**0.84**	**0.13 t**
Chloroethane	µg/l	<0.14	<0.14	<0.14	**0.51**	<0.14
1,2-Dichlorobenzene	µg/l	<0.072	<0.072	**0.15 t**	**0.29 t**	**0.18 t**
1,4-Dichlorobenzene	µg/l	**1.2**	**1.3**	**1.7**	**9.9**	**5.7**
1,1-Dichloroethane	µg/l	<0.11	<0.11	<0.11	**0.79**	**0.19 t**
1,2-Dichloroethane	µg/l	<0.17	<0.17	<0.17	**0.28 t**	<0.17
cis-1,2-Dichloroethene		<0.085	<0.085	<0.085	**0.95**	<0.085
Ethylbenzene	µg/l	**1.8**	<0.098	<0.098	**4.7**	**0.21 t**
Styrene		<0.068	<0.068	<0.068	**0.15 t**	<0.068
Toluene	µg/l	**0.68**	**1.3**	**0.32 t**	**4.7**	**0.32 t**
Vinyl chloride	µg/l	<0.12	<0.12	<0.12	**1.5**	**0.16 t**
Total Xylenes	µg/l	**17**	<0.36	**0.45 t**	**17**	**1.7**
Acetone	µg/l	**17**	**13**	**16,000**	**15**	**25**
2-Hexanone	µg/l	<3.4	<3.4	**320**	**5.0 t**	<3.4
2-Butanone	µg/l	<2.5	<2.5	**5,500**	<2.5	<2.5
All other VOCs below method detection limits.						

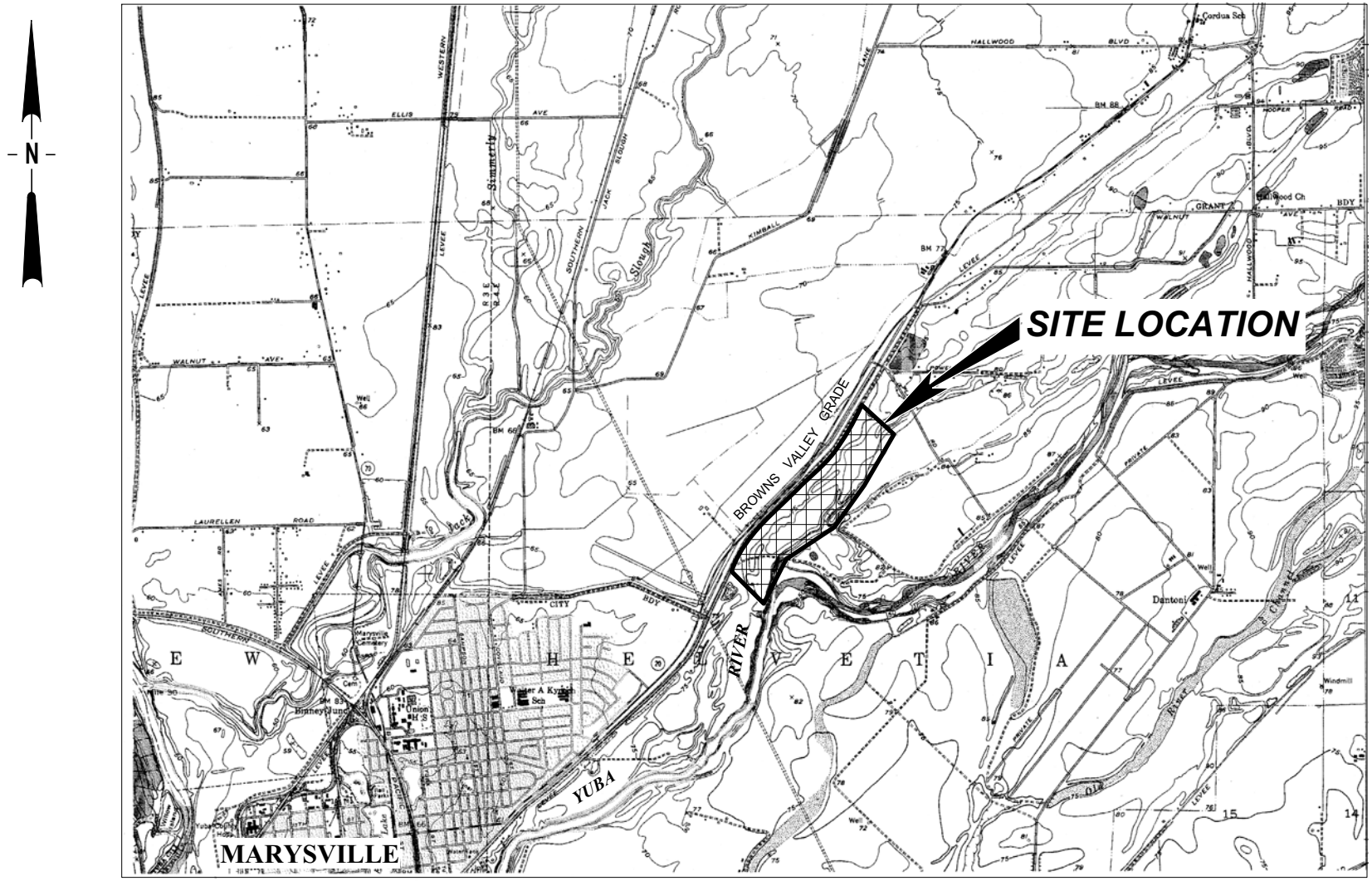
mg/l - milligrams per liter (parts per million)
µmhos/cm - micromhos per centimeter at 25 °C
µg/l - micrograms per liter (parts per billion)
NS - not sampled due to insufficient liquid.
t - trace concentration between the reporting limit and detection limit; result is an estimate.
Bold type indicates VOC detected above the reporting limit.

Table 8
Leachate Removal Volumes
Third and Fourth Quarters 2014
Yuba Sutter Disposal Landfill

	Total (gal)					Flow Rate (avg gpd)					Monthly	Quartely
Sump Designation	S-1	S-2	S-3	S-4	S-5	S-1	S-2	S-3	S-4	S-5	Total (gal)	Total (gal)
Month												
July	0	5,200	5,500	5,100	7,100	0	168	177	165	229	22,900	
August	0	0	3,800	1,400	4,500	0	0	123	45	145	9,700	
September	400	4,900	4,700	6,400	4,900	13	163	157	213	163	21,300	53,900
October	1,800	7,000	16,700	4,200	5,400	58	226	539	135	174	35,100	
November	1,600	4,300	14,100	3,400	4,000	53	143	470	113	133	27,400	
December	1000	14,800	5,700	18,900	2,800	32	477	184	610	90	43,200	105,700
Totals	4,800	36,200	50,500	39,400	28,700						159,600	

gal - gallons
avg gpd - average gallons per day

FIGURES



Base map from USGS 7.5' Quad. Map: Yuba City, CA (PR 1973).

Golder Associates

RECOLOGY YUBA SUTTER LANDFILL
RECOLOGY YUBA SUTTER
YUBA COUNTY, CALIFORNIA

SITE LOCATION

FIGURE
1

PROJECT NO.
053-7442-13

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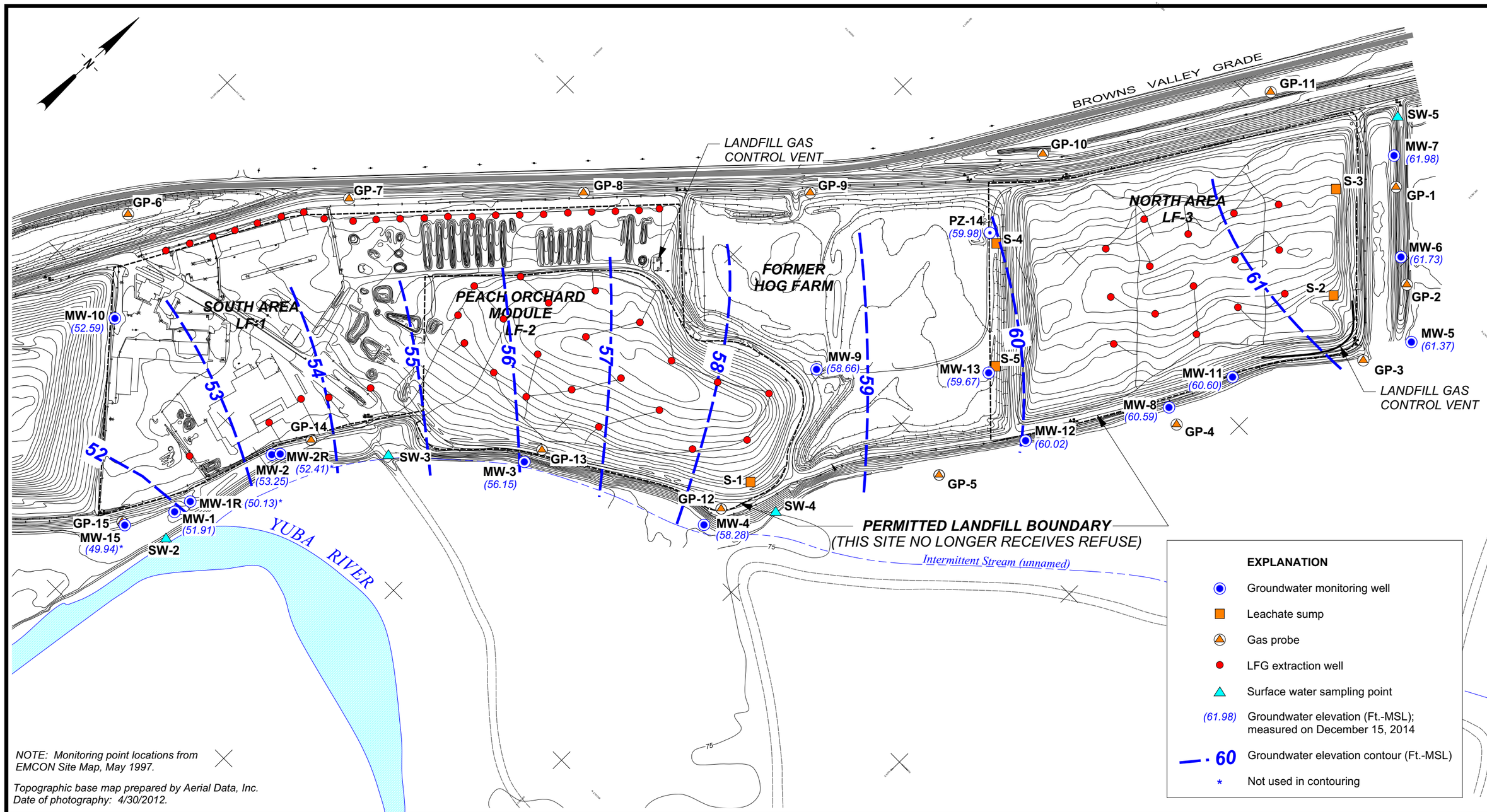

NOTE: Monitoring point locations from EMCON Site Map, May 1997.

Topographic base map prepared by Aerial Data, Inc.
Date of photography: 4/30/2012.

Golder Associates

SCALE: 0 400 800 FEET

RECOLOGY YUBA SUTTER LANDFILL
RECOLOGY YUBA-SUTTER
YUBA COUNTY, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP, DECEMBER 2014

FIGURE
2

PROJECT NO.
053-7442-14

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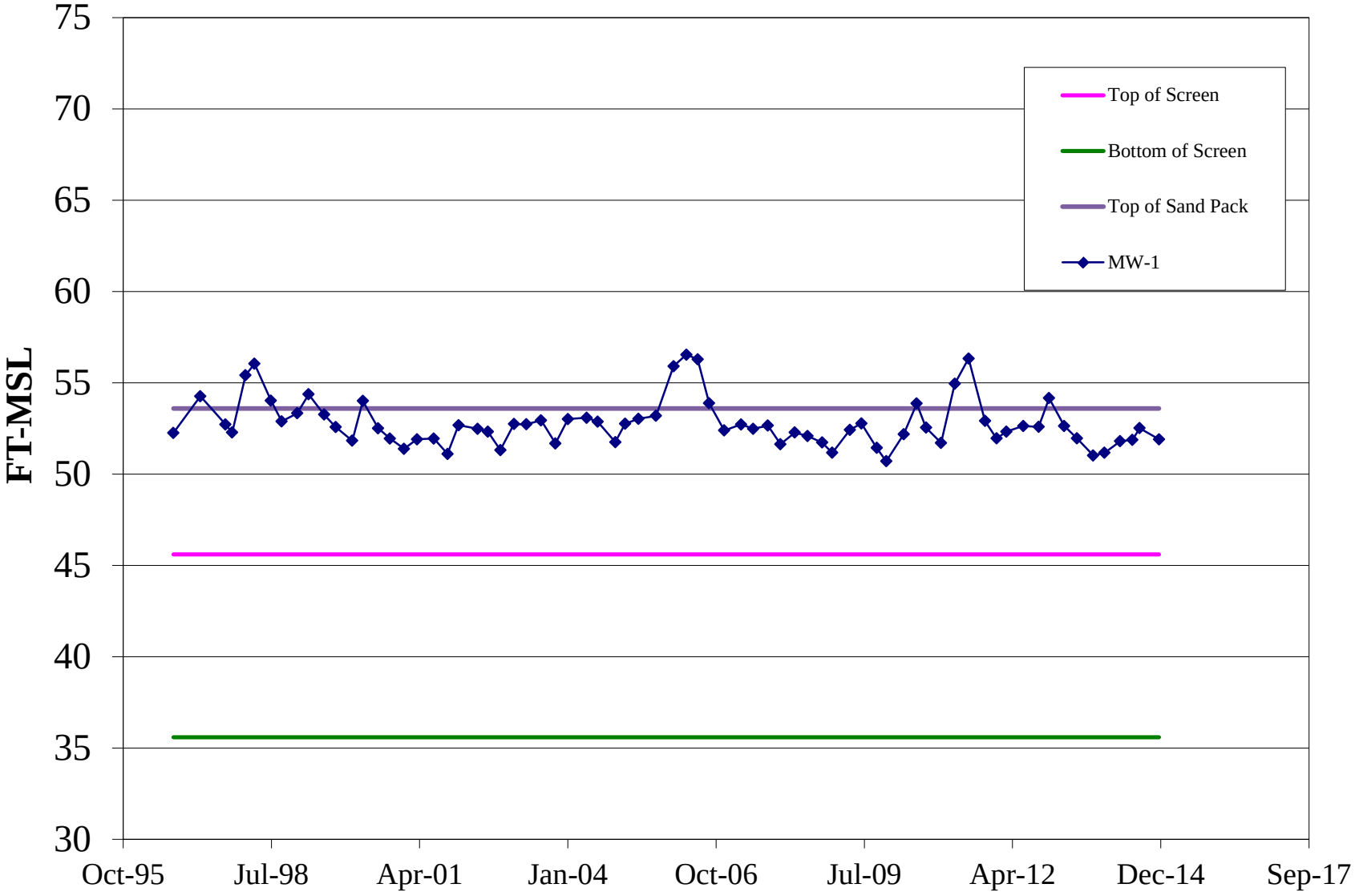
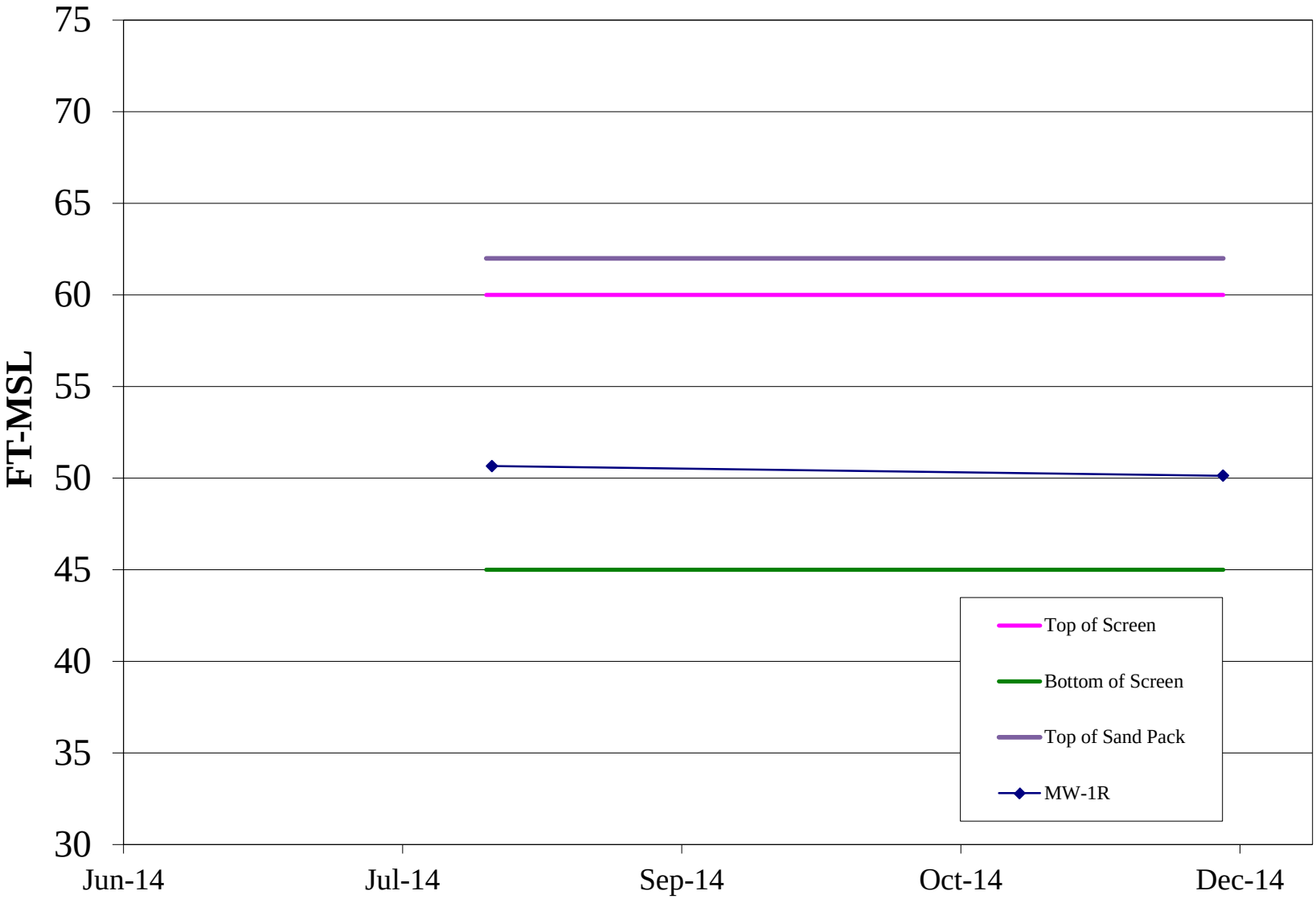
APPENDIX A

SITE HYDROGRAPHS, WATER LEVEL DATA SHEET, WATER SAMPLE FIELD DATA SHEETS, STANDARD OBSERVATIONS, AND PERIMETER LANDFILL GAS PROBE MONITORING RESULTS

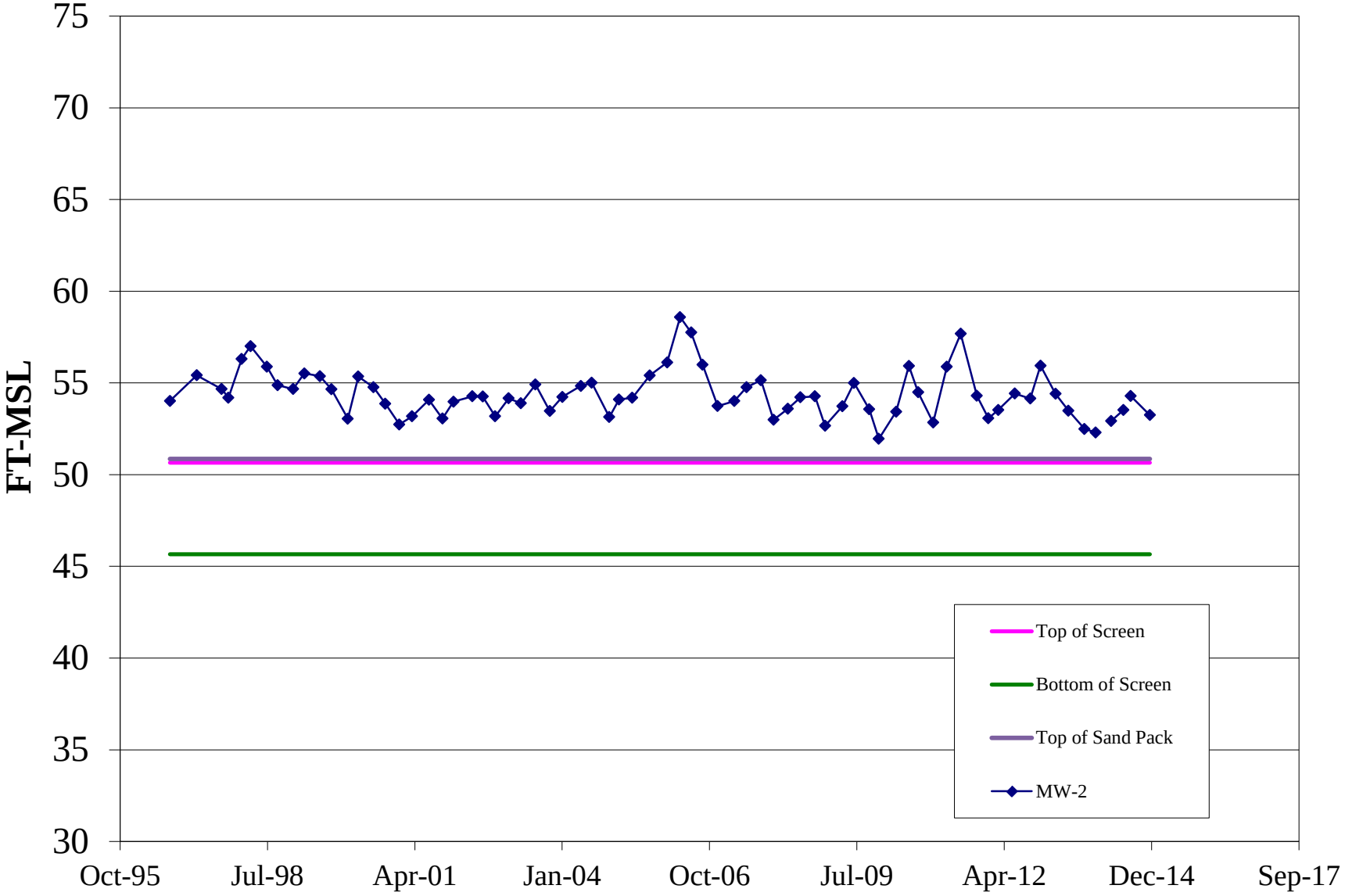
YSDI Monitoring Well MW-1



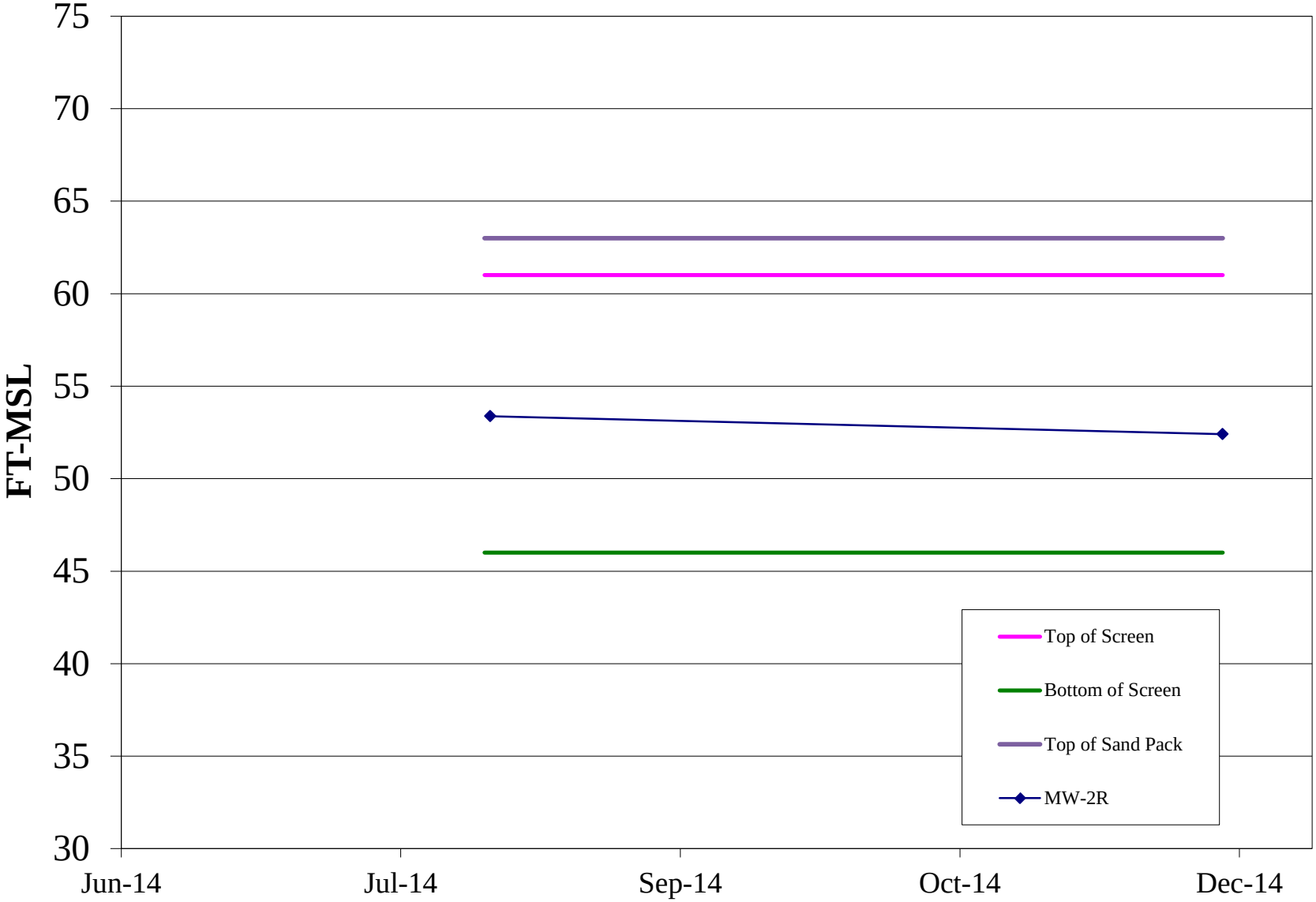
YSDI Monitoring Well MW-1R



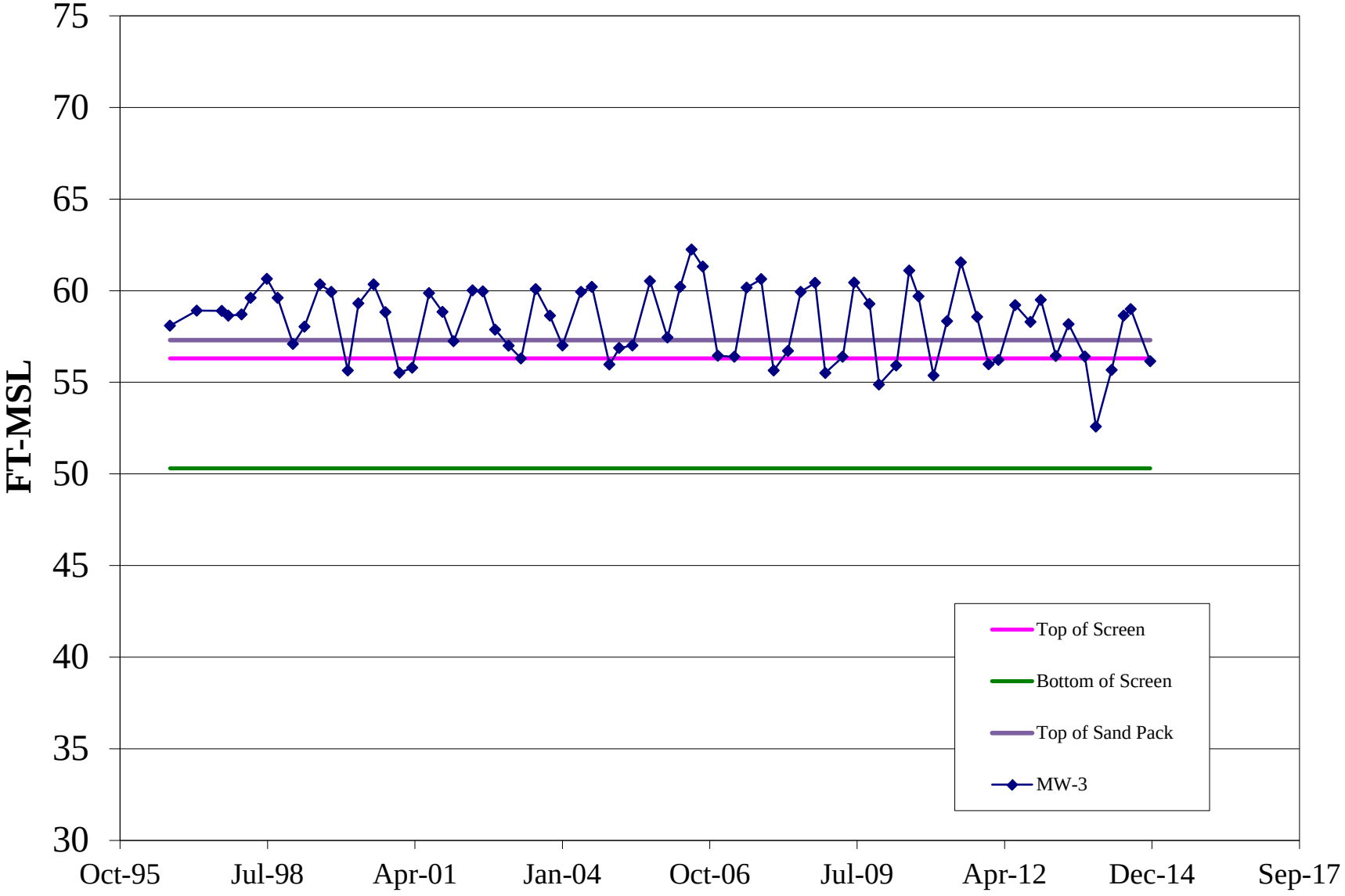
YSDI Monitoring Well MW-2



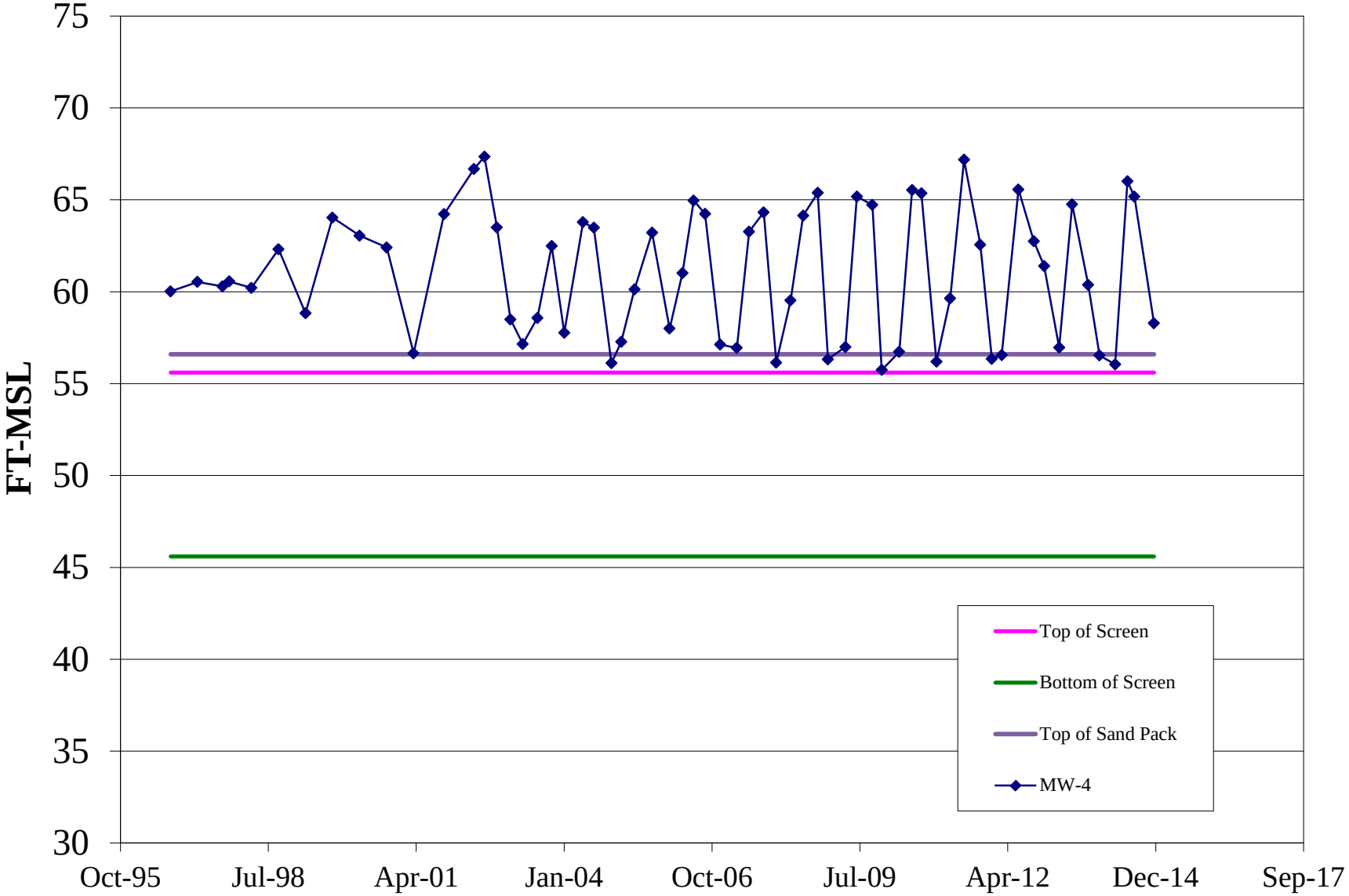
YSDI Monitoring Well MW-2R



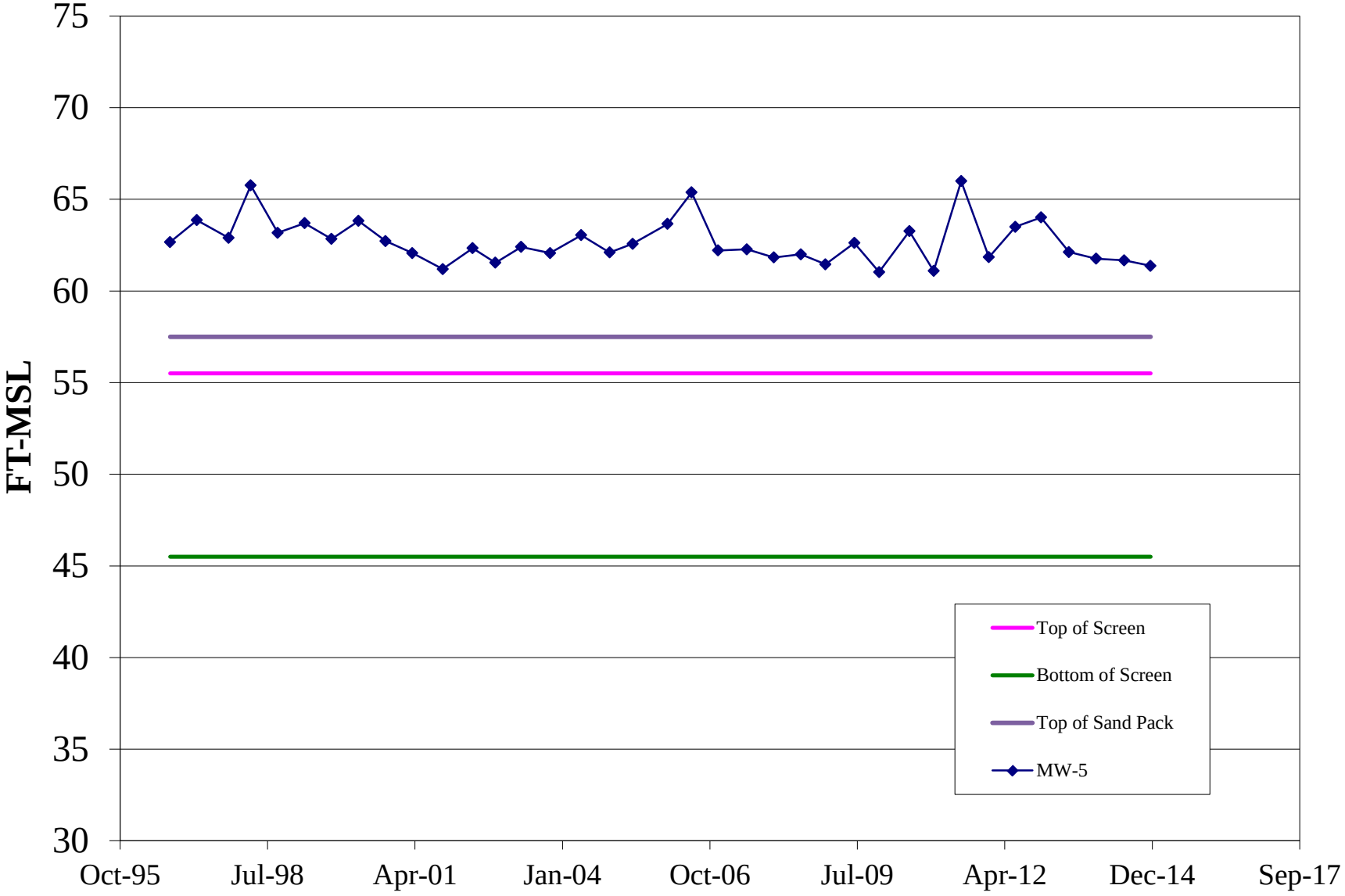
YSDI Monitoring Well MW-3



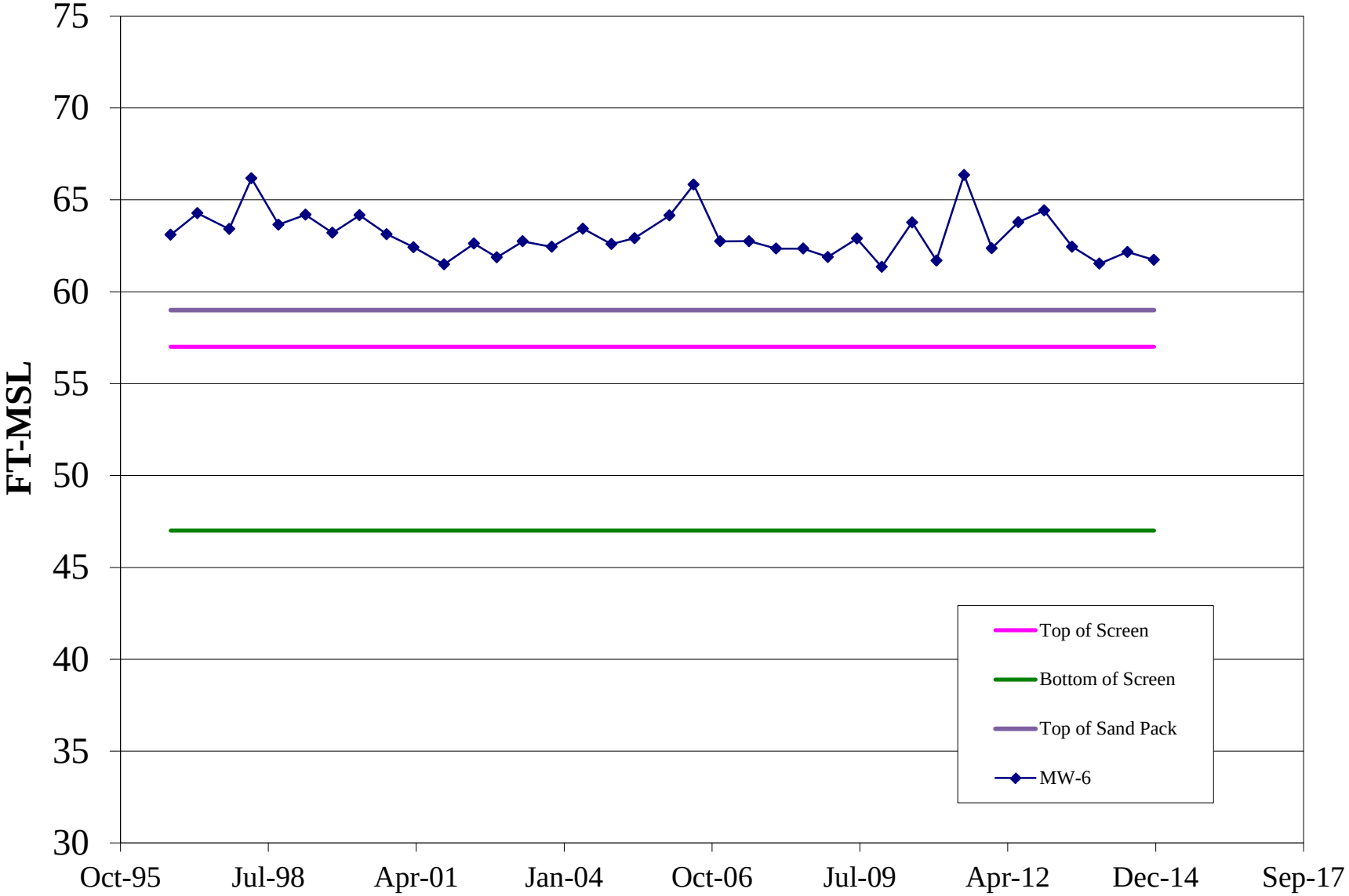
YSDI Monitoring Well MW-4



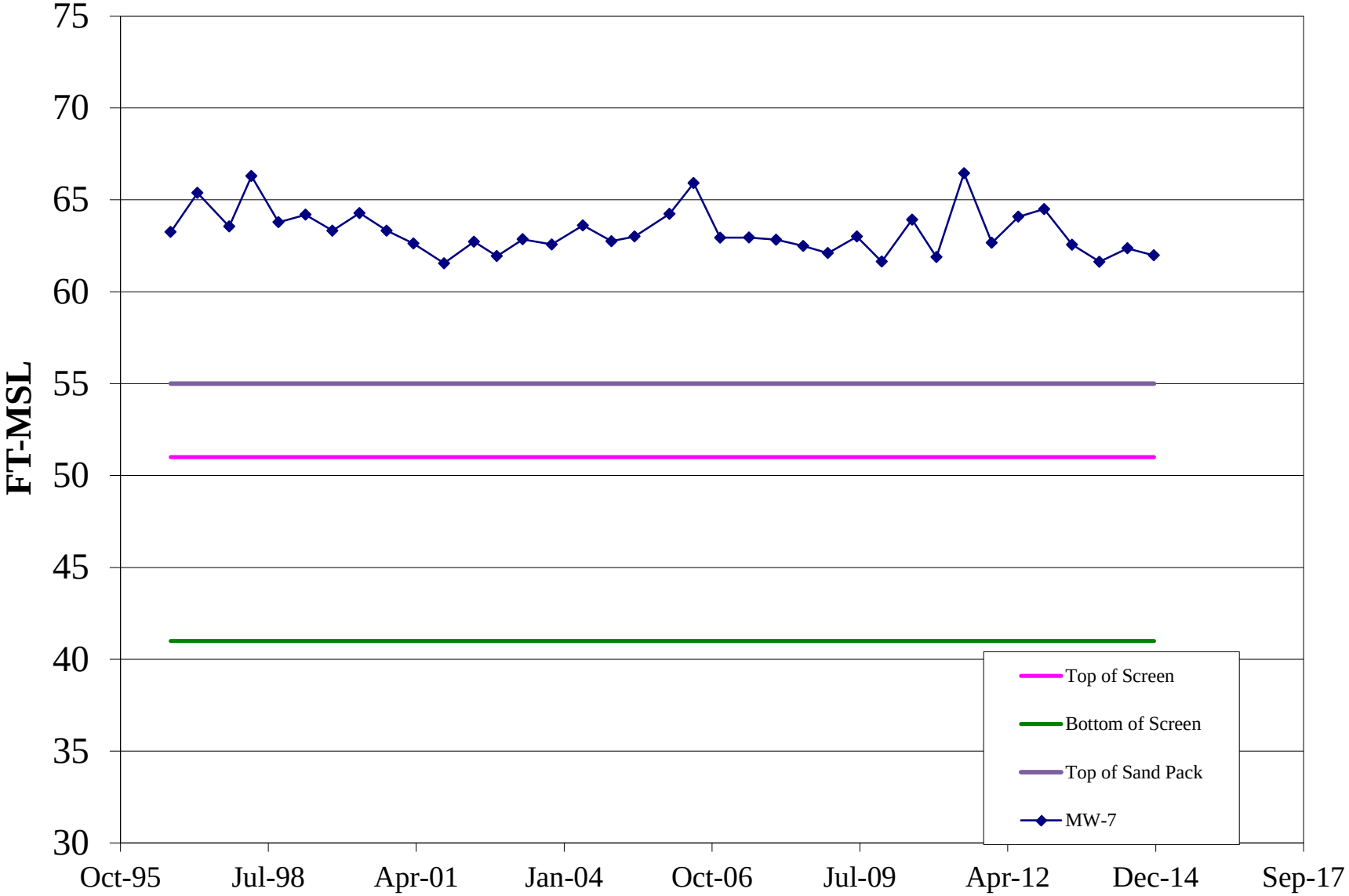
YSDI Monitoring Well MW-5



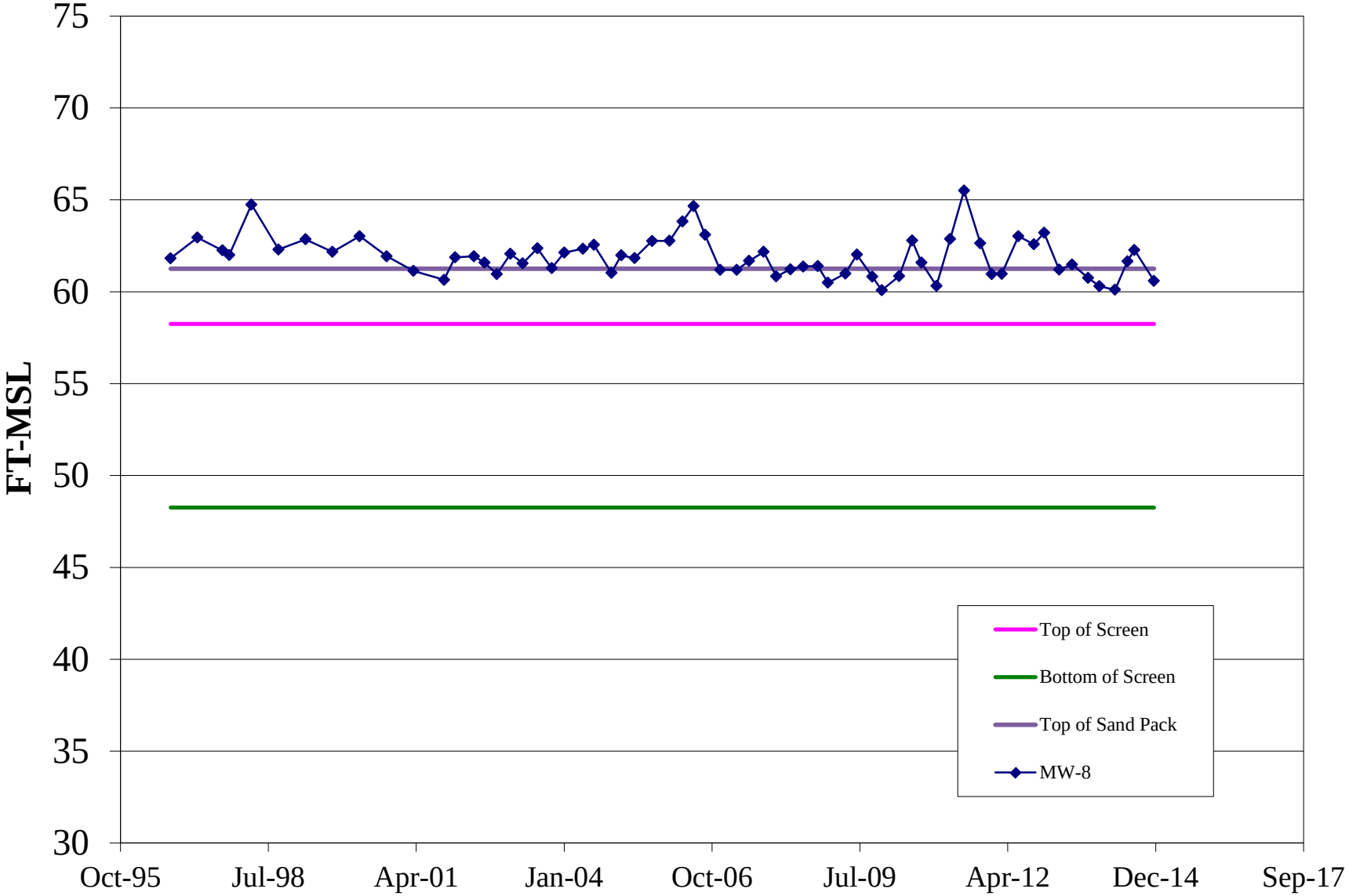
YSDI Monitoring Well MW-6



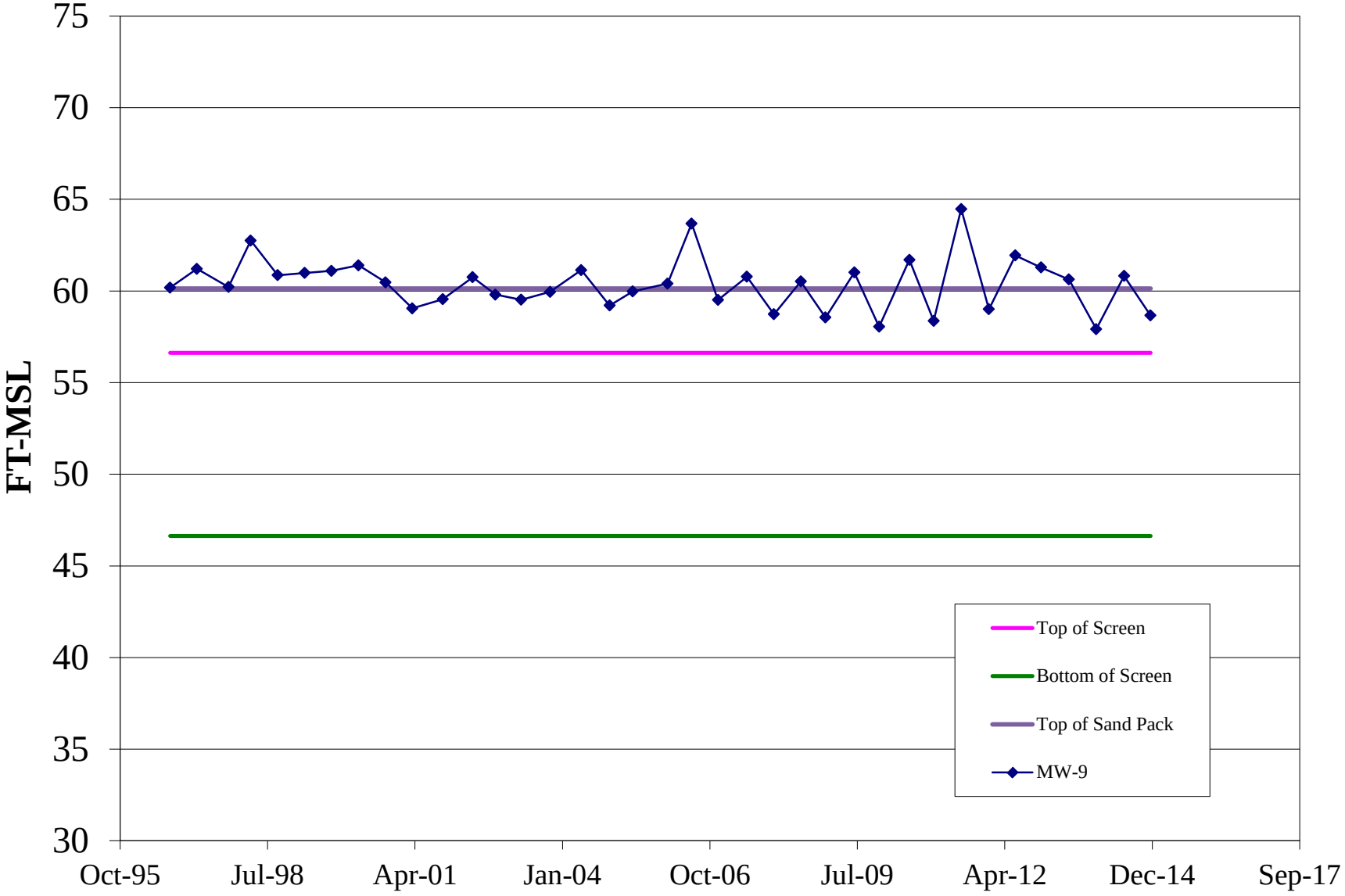
YSDI Monitoring Well MW-7



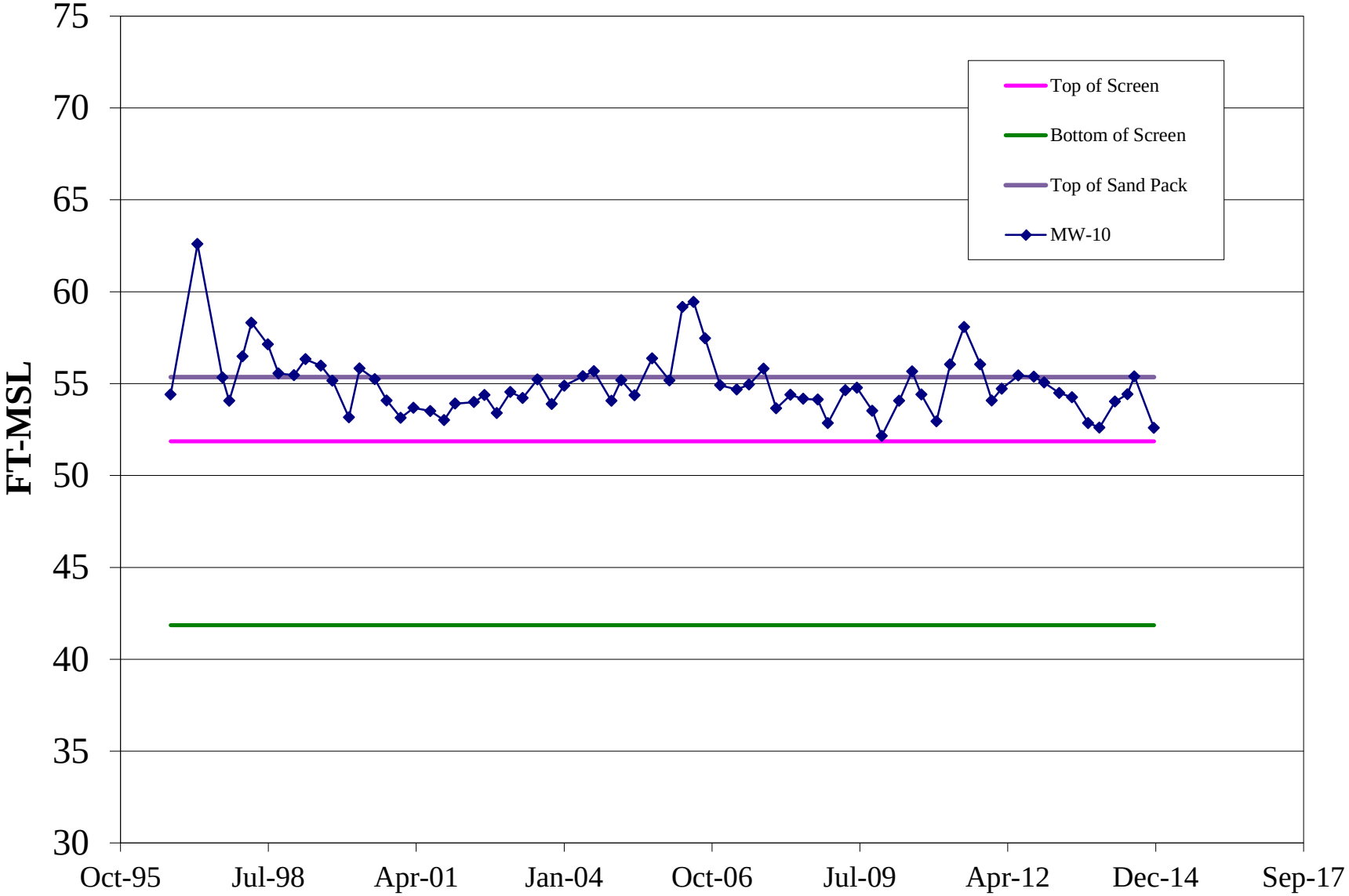
YSDI Monitoring Well MW-8



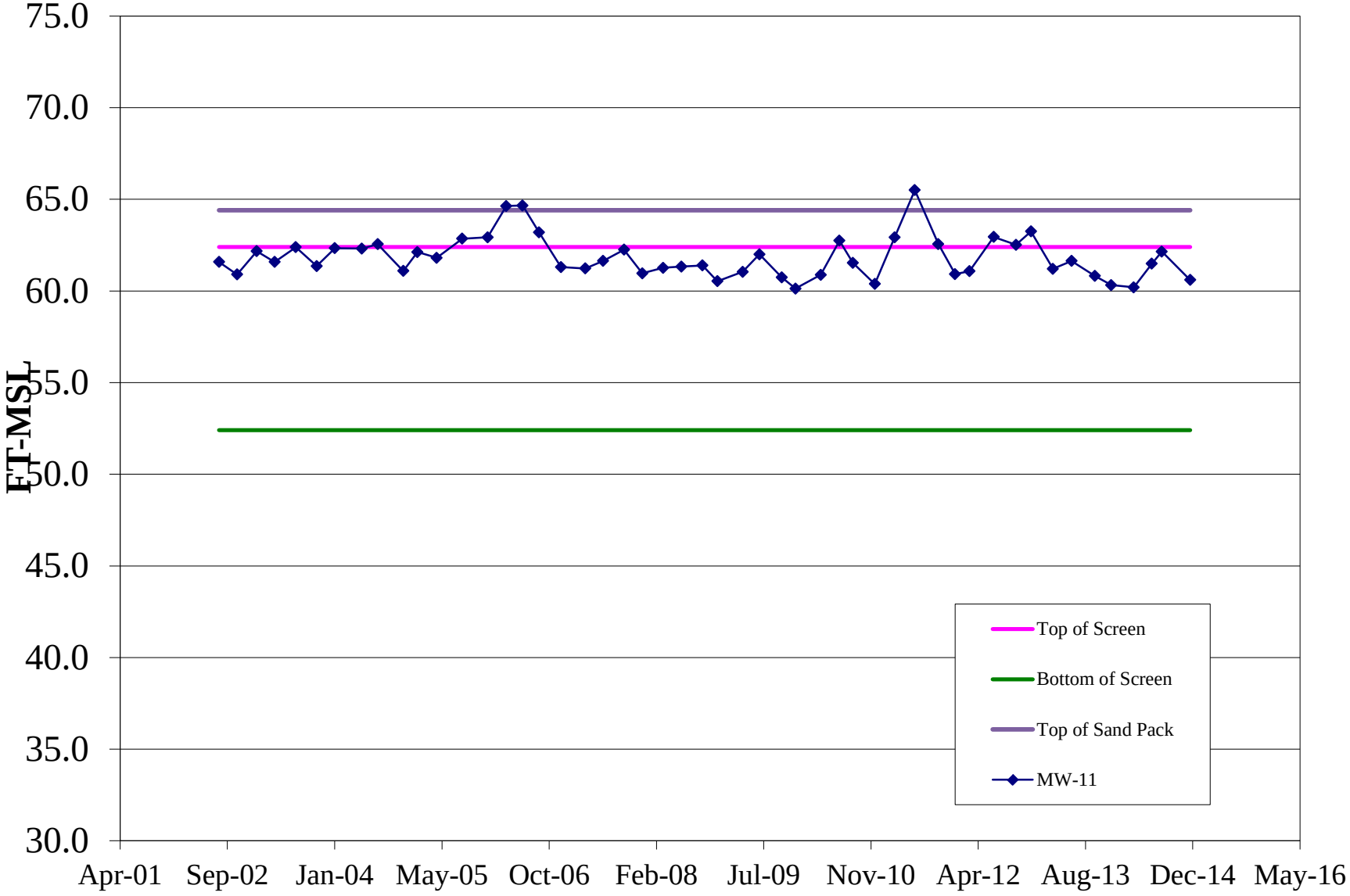
YSDI Monitoring Well MW-9



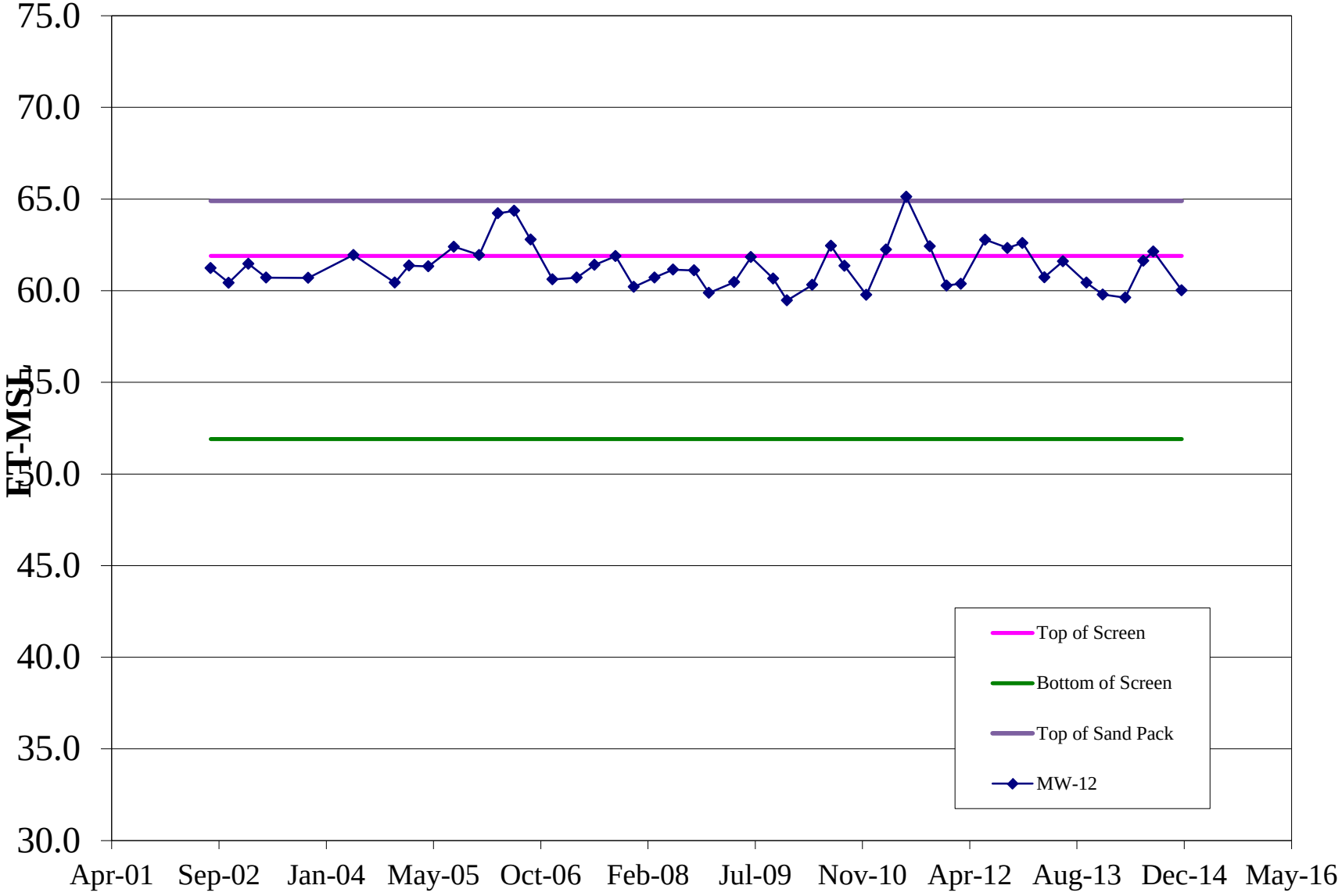
YSDI Monitoring Well MW-10



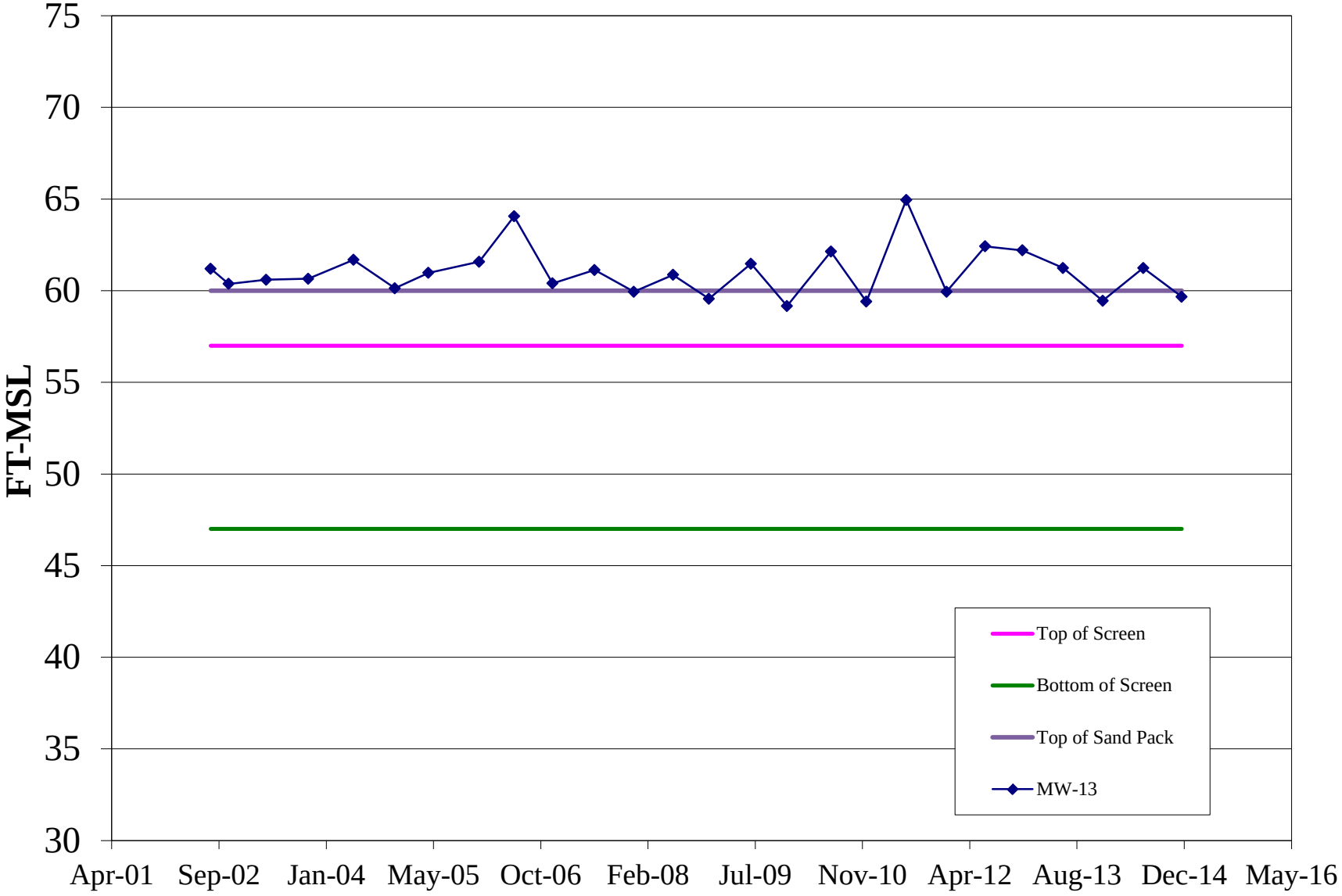
YSDI Monitoring Well MW-11



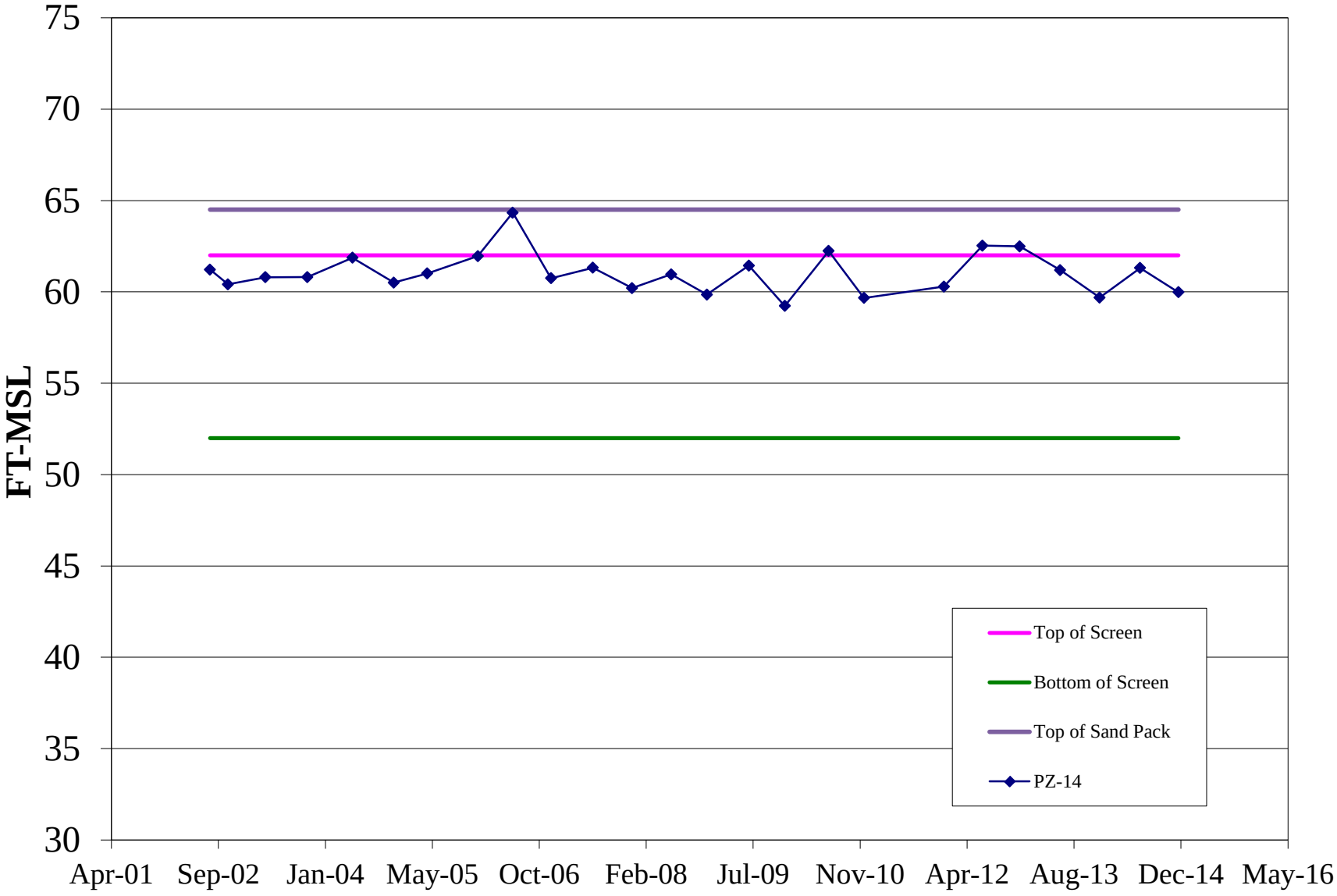
YSDI Monitoring Well MW-12



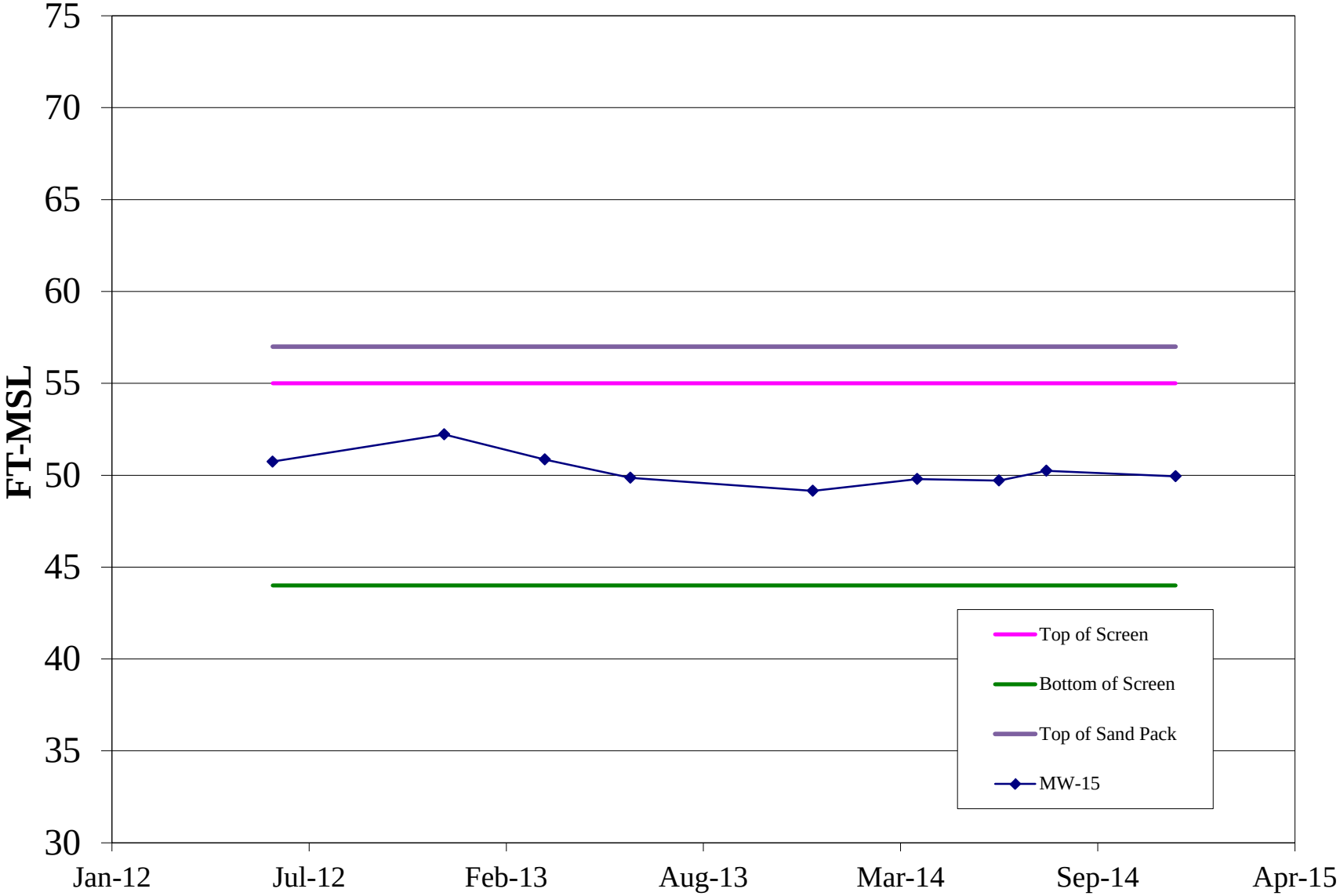
YSDI Monitoring Well MW-13



YSDI Monitoring Well PZ-14



YSDI Monitoring Well MW-15



WATER LEVEL DATA SHEET
Golder Associates

Project: YSDI
Project No.: 053-7442-14
Date(s): 12/15/14
Name: R. McCarty
Weather: Rain Sounder #: 35330

Well	Date	Time	DTW (TOC)	Total Depth	Meas. By	Comments
MW-1	12/15/14	1103	26.55	37.2	RM	
MW-2		1055	26.66	38.9	RM	
MW-3		1044	30.24	36.4	MT	
MW-4		1039	27.38	39.1	MT	
MW-5		1118	17.44	34.7	RM	
MW-6		1120	22.66	37.1	RM	
MW-7		1122	23.49	45.4	RM	
MW-8		1105	27.11	39.6	MT	
MW-9		1112	26.14	38.8	MT	
MW-10		1115	42.04	51.9	RM	
MW-11		1050	28.83	37.3	MT	
MW-12		1043	29.90	38.2	MT	
MW-13		1038	16.88	29.4	MT	
MW-15		1115	28.73	29.6	MT	
PZ-14		1056	19.51	NM	MT	
MW-1R		1100	29.40	34.0	RM	
MW-2R		1050	30.01	36.8	RM	

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-1
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 37.2	Volume in Casing (gal): 1.9
Depth to Water (ft): ~~37.2~~ 25.94	Calculated Purge (volumes / gal.): 6.0
Height of Water Column (ft): 11.26	Actual Pre-Sampling Purge (gal): 6.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NDNR - Grenna
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
0929	2.0	20.0	665	6.82	clear	low		
0933	4.0	19.8	664	6.76				
0937	6.0	19.8	659	6.72				

Purge Date: 8/6/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
0945	19.8	659	6.72	2.89	clear	2	

Sheen: — Odor: — Sample Date: 8/6/14

Field Measurement Devices: Horiba: ____ YSI: ✓ Oakton Turbidity: ✓ Other: ____

Meter Calibration Date:____ Time:____ Location:____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: [signature] **DATE:** 8/6/14

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Golder Associates

LOW-FLOW WATER SAMPLE FIELD DATA

Location: RYS

Sample ID: MW-1R

Project No.: 053-7442-14

Sampled By: R. McCarthy

Client: Rockaway

Sample type: Groundwater _____ Leachate _____ Other _____

Casing diameter: 3/4" _____ 1" _____ 2" _____ 4" _____ 4.5" _____ 6" _____ 8" _____ Other _____

Well Total Depth (ft): 34.0

Screen Length (ft): _____

Depth to Water (ft): 28.82

Total Volume Purged (ml): _____

PURGE / SAMPLE:

Device (Depth of Intake from TOC): Bladder Pump _____ Peristaltic Pump _____ Dedicated _____

Electric Submersible Pump ^ Tubing Types Dedicated Other _____

Purge Water Containment: None - Ground

Field Measurement Device: Horiba _____ YSI ^ LaMotte _____ Other Oakton

QC Samples Collected at this Well: QCEB-_____ QCAB-_____ DUP-_____ Other _____ Time: _____

TIME (2400 Hr)	~~RATE (ml/min)~~ gal/min	DTW (ft)	Temp. (°C)	pH (std. units)	EC (µmhos @ 25°C)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	Color / Odor Comments
1126	5.0		19.8	6.51	946		245		
1128	6.0		19.6	6.50	945		52		
1129	7.0		19.6	6.50	947		31		
1131	8.0		19.6	6.48	950		21		
1133	9.0		19.5	6.48	951		15		
1136	10.0		19.5	6.49	950		8		
1140	11.0		19.5	6.49	951		6		
1145	12.0		19.5	6.49	951		3		

REMARKS: _____

SIGNATURE: [signature]

SAMPLE DATE: 8/26/14

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-2
PROJECT NO: 0537442-14
SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater X Surface Water ___ Leachate ___ Other ___
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 X 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 33.9
Depth to Water (ft): 25.62
Height of Water Column (ft): 8.28
Volume in Casing (gal): 1.5
Calculated Purge (volumes / gal.): 4.5
Actual Pre-Sampling Purge (gal): 4.5

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ___ Centrifugal Pump ___
Bladder Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___
Purge Water Containment: NONE - GROUND.
Field QC Samples Collected: EB-___ FB-___ DUP- 1 @ 1450 Time: ___ Other PCBB-1 @ 1045 Lot #

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1050	1.5	21.8	970	6.57	clear	low		
1054	3.0	21.2	998	6.54	?	?		
1058	4.5	21.0	1026	6.46				

Purge Date: 8/6/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ___ Centrifugal Pump ___
Bladder Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1100	21.0	1026	6.46	—	clear	4	

Sheen: — Odor: — Sample Date: 8/6/14

Field Measurement Devices: Horiba: ___ YSI: X Oakton Turbidity: X Other: ___

Meter Calibration Date: ___ Time: ___ Location: ___ Ins. # ___
pH 4: (___/___@___°C) pH 7: (___/___@___°C) pH 10: (___/___@___°C)
D.O. (___/___@100%) EC (___/___µmhos/cm@25°C)
ORP (___/___/___@°C Turbidity (___/___NTU)

REMARKS:

SIGNATURE: [signature] **DATE:** 8/6/14

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Golder Associates

LOW-FLOW WATER SAMPLE FIELD DATA

Location: RYS

Sample ID: MW-2R

Project No.: 053-7442-14

Sampled By: R. McCARTHY

Client: Rockaway

Sample type: Groundwater X Leachate ____ Other ____

Casing diameter: 3/4" ____ 1" ____ 2" X 4" ____ 4.5" ____ 6" ____ 8" ____ Other ____

Well Total Depth (ft): 36.8

Screen Length (ft): ____

Depth to Water (ft): 29.11

Total Volume Purged (ml): ____

PURGE / SAMPLE:

Device (Depth of Intake from TOC): Bladder Pump ____ Peristaltic Pump ____ Dedicated ____

Electric Submersible Pump X Tubing Types DEDICATED Other ____

Purge Water Containment: NONE - GROUND

Field Measurement Device: Horiba ____ YSI ____ LaMotte ____ Other ____

QC Samples Collected at this Well: QCEB-____ QCAB-____ DUP-____ Other ____ Time: ____

TIME (2400 Hr)	RATE ~~(ml/min)~~ gal	DTW (ft)	Temp. (°C)	pH (std. units)	EC (µmhos @ 25°C)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	Color / Odor Comments
1213	START	PURGE							
1219	2.0		21.8	6.48	1040		400		
1224	5.0		21.6	6.56	1051		70		
1230	7.0		21.0	6.54	1053		28		
1240	12.0		21.0	6.58	1054		13		
1250	17.0		20.8	6.57	1050		8		
1300	22.0		20.8	6.57	1051		6		
1310	27.0		20.8	6.58	1049		4		

REMARKS: ____

SIGNATURE: ____ **SAMPLE DATE:** 8/26/14

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-3
PROJECT NO: 0537442-14
SAMPLED BY: R. MacCarthy
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 86.4
Volume in Casing (gal): 1.6
Depth to Water (ft): 27.40
Calculated Purge (volumes / gal.): 4.8
Height of Water Column (ft): 9.0
Actual Pre-Sampling Purge (gal): 5.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NONE - GROUND.
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1433	1.6	17.9	173	6.64	clear	low		
1436	3.2	17.7	203	6.49	↓	↓		
1440	5.0	17.7	203	6.40				

Purge Date: 8/5/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1450	17.7	203	6.40	1.97	clear	4	

Sheen: — Odor: — Sample Date: 8/5/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS:

SIGNATURE: **DATE:** 8/5/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-4
PROJECT NO: 0537442-14
SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater R Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 39.1
Volume in Casing (gal): 3.2
Depth to Water (ft): 20.49
Calculated Purge (volumes / gal.): 9.6
Height of Water Column (ft): 18.61
Actual Pre-Sampling Purge (gal): ____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: None - Ground
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1402	3.2	18.1	130	7.14	clear	low		
1407	6.4	17.8	117	6.70	↓	↓		
1412	9.8	18.0	116	6.65				

Purge Date: 8/5/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1420	17.8	116	6.67	2.68	clear	4	

Sheen: — Odor: — Sample Date: 8/5/14

Field Measurement Devices: Horiba: ____ YSI: ✓ Oakton Turbidity: ____ Other: ____

Meter Calibration Date:____ Time:____ Location:____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: ____

SIGNATURE: [signature] **DATE:** 8/5/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-8
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 X 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 39.6	Volume in Casing (gal): 11.8
Depth to Water (ft): 25.43	Calculated Purge (volumes / gal.): 35.4
Height of Water Column (ft): 14.17	Actual Pre-Sampling Purge (gal): 35.5

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump x Dedicated Tubing Other ____
Purge Water Containment: NONE - Ground
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1249	12.0	19.7	745	6.84	clear	low		
1257	24.0	19.7	746	6.86	↓	↓		
1305	36.0	19.6	733	6.79				

Purge Date: 8/5/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump x Dedicated Tubing Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1310	19.7	733	6.79	1.25	clear	3	

Sheen: — Odor: — Sample Date: 8/5/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: [signature] **DATE:** 8/5/14

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-10
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ✓ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 51.9 Volume in Casing (gal): 10.5
Depth to Water (ft): 39.24 Calculated Purge (volumes / gal.): 31.5
Height of Water Column (ft): 12.66 Actual Pre-Sampling Purge (gal): 31.5

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ✓ Dedicated TUBING Other ____
Purge Water Containment: NONE - GROUND
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1514	10.5	19.7	339	6.38	clear	low		
1524	21.0	19.5	346	6.48	?	?		
1534	31.5	19.6	340	6.50				

Purge Date: 8/5/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ✓ Dedicated TUBING Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1540	19.6	340	6.50	2.51	clear	2	

Sheen: — Odor: — Sample Date: 8/5/14

Field Measurement Devices: Horiba: ____ YSI: ✓ Oakton Turbidity: ✓ Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** 8/5/14

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-11
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater X Surface Water ___ Leachate ___ Other ___
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 X 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 37.3 Volume in Casing (gal): 1.7
Depth to Water (ft): 27.28 Calculated Purge (volumes / gal.): 5.1
Height of Water Column (ft): 10.02 Actual Pre-Sampling Purge (gal): 5.1

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ___ Centrifugal Pump ___
Bladder Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___
Purge Water Containment: NONE - GROUND
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ___ Other ___

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1204	1.7	20.4	552	6.62	clear	low		
1208	3.4	19.8	545	6.56	↓	↓		
1212	5.1	19.8	541	6.64	↓	↓		

Purge Date: 8/5/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ___ Centrifugal Pump ___
Bladder Pump ___ Electric Submersible Pump ___ Dedicated ___ Other ___

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1220	19.8	541	6.64	2.37	clear	13	

Sheen: — Odor: — Sample Date: 8/5/14

Field Measurement Devices: Horiba: ___ YSI: X Oakton Turbidity: X Other: ___

Meter Calibration Date: 8/5/14 Time: 1150 Location: RYS Ins. # 10H100444
pH 4: (___/___@___°C) pH 7: (___/___@___°C) pH 10: (___/___@___°C)
D.O. (___/___@100%) EC (___/___µmhos/cm@25°C)
ORP (___/___/___@°C Turbidity (___/___ NTU)

REMARKS:

SIGNATURE: **DATE:** 8/5/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-12
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater _____ Surface Water _____ Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4____ 4.5____ 6____ 8____ Other____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 38.2	Volume in Casing (gal): 1.8
Depth to Water (ft): 27.78	Calculated Purge (volumes / gal.): 5.4
Height of Water Column (ft): 10.42	Actual Pre-Sampling Purge (gal): 6.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____
Purge Water Containment: NONE - GROUND
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1326	2.0	20.0	397	7.14	clear	low		
1329	4.0	19.7	380	7.07				
1333	6.0	19.8	379	7.03				

Purge Date: 8/5/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1340	19.8	379	7.03	2.96	clear	17	

Sheen: — Odor: — Sample Date: 8/5/14

Field Measurement Devices: Horiba: _____ YSI: X Oakton Turbidity: X Other: _____

Meter Calibration Date:_____ Time:_____ Location:_____ Ins. # _____
pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)
D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

REMARKS: _____

SIGNATURE: _____ **DATE:** 8/5/14

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WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-15
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 29.6	Volume in Casing (gal): 1.0
Depth to Water (ft): 23.43	Calculated Purge (volumes / gal.): 3.0
Height of Water Column (ft): 6.17	Actual Pre-Sampling Purge (gal): 3.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NONE - Ground
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
0853	1.0	19.6	619	6.61	brown	high		
0857	2.0	19.1	644	6.76	?	?		
0901	3.0	18.9	657	6.77	↓	↓		

Purge Date: 8/6/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
0910	18.9	663	6.77	—	gray brown	468	

Sheen: — Odor: — Sample Date: 8/6/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: 8/6/14 Time: 0840 Location: ____ Ins. # 10H100446
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** 8/6/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-12
PROJECT NO: 0537442-14
SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater ✓ Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ✓ 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 34.0
Volume in Casing (gal): 0.8
Depth to Water (ft): 29.40
Calculated Purge (volumes / gal.): 2.4
Height of Water Column (ft): 4.6
Actual Pre-Sampling Purge (gal): 3.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1205	1.0	17.5	813	6.84	clear	low		
1208	2.0	17.5	820	6.46	"	"		
1211	3.0	17.6	821	6.46	"	"		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1215	17.6	821	6.46	—	clear	8	

Sheen: — Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: ✓ Oakton Turbidity: ✓ Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-22
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy
SAMPLE TYPE: Groundwater ____ Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 36.8	Volume in Casing (gal): 1.2
Depth to Water (ft): 30.01	*Calculated Purge (volumes / gal.):* 3.6
Height of Water Column (ft): 6.79	Actual Pre-Sampling Purge (gal): 4.5

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump X Dedicated Tubing Other ____
Purge Water Containment: None - Ground
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1229	1.5	19.1	998	6.52	clearly	low		
1235	3.0	19.8	1021	6.55	clear	?		
1241	4.5	19.9	1023	6.57	"	"		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump X Dedicated Tubing Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1245	19.9	1023	6.57	—	clear	7	

Sheen: — Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-3
PROJECT NO: 0537442-14 SAMPLED BY: M. TODI
SAMPLE TYPE: Groundwater Y Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 36.40 Volume in Casing (gal): 1.0
Depth to Water (ft): 30.24 *Calculated Purge (volumes / gal.):* 3.0
Height of Water Column (ft): 6.16 Actual Pre-Sampling Purge (gal): 3.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NONE
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1220	1.0	16.6	373	6.12	Clear	low		
1225	2.0	17.2	235	6.06	"	"		
1231	3	17.3	337	6.31	"	"		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1235	16.8	216	6.47	—	Clear	18	—

Sheen: NONE Odor: NONE Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: Y Other: ____

Meter Calibration Date:____ Time:____ Location:____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: *Check PH with PH7. 6.98 = OK

SIGNATURE: **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-4
PROJECT NO: 0537442-14 SAMPLED BY: M. Todi
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 39.10 Volume in Casing (gal): 2.0
Depth to Water (ft): 27.38 Calculated Purge (volumes / gal.): 6.0
Height of Water Column (ft): 11.72 Actual Pre-Sampling Purge (gal): ____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1255	2.0	16.3	190	7.05	Clear	low		
1301	4.0	16.3	192	7.34	"	"		
1307	6.0	16.4	166	7.41	"	"		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1313	16.1	165	7.29	—	Clear	13	—

Sheen: None Odor: None Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-5

PROJECT NO: 0537442-14 SAMPLED BY: R. McCeserty

SAMPLE TYPE: Groundwater X Surface Water ___ Leachate ___ Other ___

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 X 4.5 ___ 6 ___ 8 ___ Other ___

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 34.7	Volume in Casing (gal): 11.5
Depth to Water (ft): 17.44	Calculated Purge (volumes / gal.): 34.5
Height of Water Column (ft): 17.26	Actual Pre-Sampling Purge (gal): 35.0

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer ___ Peristaltic Pump ___ Centrifugal Pump ___

Bladder Pump ___ Electric Submersible Pump X Dedicated Turney Other ___

Purge Water Containment: None - Ground.

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ___ Other ___

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1444	12.0	20.0	511	6.98	clear	low		
1448	24.0	19.8	510	6.99	↓	↓		
1452	35.0	19.8	510	7.01				

Purge Date: 12/15/14

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer ___ Peristaltic Pump ___ Centrifugal Pump ___

Bladder Pump ___ Electric Submersible Pump X Dedicated Turney Other ___

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1455	19.7	510	7.01	—	clear	1	

Sheen: — Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: ___ YSI: X Oakton Turbidity: ✓ Other: ___

Meter Calibration Date: ___ Time: ___ Location: ___ Ins. # ___

pH 4: (___/___@___°C) pH 7: (___/___@___°C) pH 10: (___/___@___°C)

D.O. (___/___@100%) EC (___/___µmhos/cm@25°C)

ORP (___/___/___@°C Turbidity (___/___NTU)

REMARKS:

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-6
PROJECT NO: 0537442-14 SAMPLED BY: R. McCarty
SAMPLE TYPE: Groundwater _____ Surface Water _____ Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4____ 1____ 2____ 4 X 4.5____ 6____ 8____ Other____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 37.1 Volume in Casing (gal): 9.6
Depth to Water (ft): 22.66 *Calculated Purge (volumes / gal.):* 28.8
Height of Water Column (ft): 14.44 Actual Pre-Sampling Purge (gal): 30.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump ✓ Dedicated TUBING Other_____
Purge Water Containment: DOWN-GROUND.
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time:_____ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1508	10.0	19.8	353	7.15	clear	low		
1513	20.0	19.5	339	7.11	↓	↓		
1518	30.0	19.5	336	7.09				

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer_____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump X Dedicated TUBING Other_____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1520	19.6	336	7.09	—	clear	1	

Sheen: _____ Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: _____ YSI: X Oakton Turbidity: ✓ Other: _____

Meter Calibration Date:_____ Time:_____ Location:_____ Ins. # _____
pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)
D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

REMARKS:

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

Location: YSD1 Sample ID: MW-7

Project No.: 0537442-14 Sampled By: R McCARM

Client: Pecology

Sample Type: Groundwater X Surface Water ____ Leachate ____ Treatment System ____ Other ____

Casing Diameter: 3/4"____ 1"____ 2"____ 4" X 4.5"____ 6"____ 8"____ Other____

Gallons per Linear Foot: (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 45.4 Volume in Casing (gal): 14.5

Depth to Water (ft): 23.49 Calculated Purge Volume (gal.): 43.5

Height of Water Column (ft): 21.91

PURGE:

Device (Depth of Intake from TOC): Bladder Pump ____ Peristaltic Pump ____ Disp Bailer ____

Electric Submersible Pump X Dedicated TUBING Other ____

Purge Water Containment: ____

Field Measurement Device: Horiba ____ YSI____ LaMotte____ Other____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	Elec. Conductivity (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1535	15.0	19.0	498	7.08	Clear	low		
1545	30.0	19.2	461	7.03	?	?		
1555	45.0	19.5	460	7.03				

Purge Date: 12/15/14

SAMPLE:

Device (Depth of Intake from TOC): Bladder Pump ____ Peristaltic Pump ____ Disp Bailer ____

Electric Submersible Pump X Dedicated TUBING Other ____

Time (2400 Hr)	Temp. (°C)	Electrical Conductivity (µmhos/cm)	pH (std. units)	Dissolved Oxygen (mg/l)	Color (visual)	Turbidity (NTU)	Other
1600	19.5	460	7.03	—	clear	2	

Sheen: ____ Odor: ____

QC Samples Collected at this Well: QCEB-____ QCAB-____ DUP-____ Other ____ Time:____

REMARKS: ____

SIGNATURE: [signature] **SAMPLE DATE:** 12/15/14

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-8
PROJECT NO: 0537442-14
SAMPLED BY: R. McGarry
SAMPLE TYPE: Groundwater X Surface Water ___ Leachate ___ Other ___
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 X 4.5 X 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 27.11
Volume in Casing (gal): 10.4
Depth to Water (ft): 39.6
Calculated Purge (volumes / gal.): 31.2
Height of Water Column (ft): 12.49
Actual Pre-Sampling Purge (gal): ___

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ___ Peristaltic Pump ___ Centrifugal Pump ___
Bladder Pump ___ Electric Submersible Pump X Dedicated TUBING Other ___
Purge Water Containment: NONE - GROUND
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ___ Other ___

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1307	10.5	18.8	716	6.76	clear	low		
1312	21.0	19.0	695	6.76	↓	↓		
1317	32.0	19.0	694	6.76	↓	↓		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ___ Peristaltic Pump ___ Centrifugal Pump ___
Bladder Pump ___ Electric Submersible Pump X Dedicated TUBING Other ___

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1320	19.0	697	6.76	—	clear	2	

Sheen: ___ Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: ___ YSI: X Oakton Turbidity: X Other: ___

Meter Calibration Date: ___ Time: ___ Location: ___ Ins. # ___
pH 4: (___/___@___°C) pH 7: (___/___@___°C) pH 10: (___/___@___°C)
D.O. (___/___@100%) EC (___/___µmhos/cm@25°C)
ORP (___/___/___@°C Turbidity (___/___ NTU)

REMARKS: ___

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-9
PROJECT NO: 0537442-14 SAMPLED BY: R. McGarry
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 X 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 38.8	Volume in Casing (gal): 10.5
Depth to Water (ft): 26.14	*Calculated Purge (volumes / gal.):* 31.5
Height of Water Column (ft): 12.66	Actual Pre-Sampling Purge (gal):

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump X Dedicated tubing Other ____
Purge Water Containment: Ground
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1338	10.5	17.7	296	7.25	clear	low		
1343	21.0	17.7	285	7.20				
1348	32.0	17.8	289	7.21				

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1350	17.9	289	7.21	—	clear	2	

Sheen: — Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS:

SIGNATURE: **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-10

PROJECT NO: 0537442-14 SAMPLED BY: R. McCarthy

SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 X 6 ____ 8 ____ Other ____

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 51.9	Volume in Casing (gal): 8.5
Depth to Water (ft): 42.04	Calculated Purge (volumes / gal.): 25.5
Height of Water Column (ft): 9.86	Actual Pre-Sampling Purge (gal):

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump X Dedicated Tubing Other ____

Purge Water Containment: None - Ground

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1411	8.5	17.8	188	6.82	clear	low		
1415	17.0	18.3	181	6.55	?	?		
1419	25.5	18.4	181	6.52	✓			

Purge Date: 12/15/14

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1420	18.4	181	6.52	—	clear	3	

Sheen: ____ Odor: — Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: / Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: ____

SIGNATURE: [signature] **DATE:** 12/18/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-11
PROJECT NO: 0537442-14
SAMPLED BY: M. Todi
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 37.30
Volume in Casing (gal): 1.4
Depth to Water (ft): 28.83
Calculated Purge (volumes / gal.): 4.2
Height of Water Column (ft): 8.47
Actual Pre-Sampling Purge (gal): 4.2

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NONE
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1401	1.5	18.6	488	6.51	Clear	low		
1406	3.0	19.3	496	6.63	"	"		
1410	4.2	19.1	495	6.77	"	"		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1413	19.2	498	6.80	—	Clear	4	—

Sheen: None Odor: None Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-12
PROJECT NO: 0537442-14 SAMPLED BY: M Todi
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): ~~29.90~~ 38.20 Volume in Casing (gal): 1.4
Depth to Water (ft): 29.90 Calculated Purge (volumes / gal.): 4.2
Height of Water Column (ft): 8.3 Actual Pre-Sampling Purge (gal): ____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NONE
Field QC Samples Collected: EB- X FB- ___ DUP- ___ Time: 1224 Other QCEB-1

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1330 ~~1230~~	1.5	17.6	387	7.09	Brown	low-MED		
1334 ~~1234~~	3.0	18.9	401	7.13	"	MED		
1338 ~~1238~~	4.3	19.0	407	7.07	"	MED		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1342 ~~1242~~	19.0	379	6.99	—	Brown	>1000	—

Sheen: NONE Odor: NONE Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____ NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** 12/15/14

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: MW-13
PROJECT NO: 0537442-14
SAMPLED BY: M. Todi
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 29.40
Volume in Casing (gal): 2.1
Depth to Water (ft): 16.88
Calculated Purge (volumes / gal.): 6.3
Height of Water Column (ft): 12.52
Actual Pre-Sampling Purge (gal): ____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1431	2.2	19.3	296	6.89	Lt Brown	Low		
1438	4.4	19.8	303	7.25	Lt Brown Cloudy	~~Low~~-Med		
1445	6.3	20.3	304	7.321	"	Med		

Purge Date: ____

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1449	20.1	302	7.28	—	Cloudy Lt Brown	57	

Sheen: ____ Odor: ____ Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: ____ Time: ____ Location: ____ Ins. # ____
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** ____

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: MW-15
PROJECT NO: 0537442-14 SAMPLED BY: M. TODI
SAMPLE TYPE: Groundwater X Surface Water ____ Leachate ____ Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 X 4 ____ 4.5 ____ 6 ____ 8 ____ Other ____
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): 29.65	Volume in Casing (gal): 1.0
Depth to Water (ft): 23.73	Calculated Purge (volumes / gal.): 3.0
Height of Water Column (ft): 5.92	Actual Pre-Sampling Purge (gal): 3.0

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: NONE
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation
1149	1.0	17.6	734	7.13	Brown cloudy	High		
1153	2.0	18.2	581	7.19	"	"		
1157	3.0	18.2	578	7.22	"	"		

Purge Date: 12/15/14

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1201	18.1	566	7.23	—	Brown	>1000	—

Sheen: NONE Odor: NONE Sample Date: 12/15/14

Field Measurement Devices: Horiba: ____ YSI: X Oakton Turbidity: X Other: ____

Meter Calibration Date: 12/15/14 Time: 1130 Location: MW-3 Ins. # 448
pH 4: (4.01 / ____ @ ____ °C) pH 7: (7.06 / ____ @ ____ °C) pH 10: (9.98 / ____ @ ____ °C)
D.O. (____ / ____ @100%) EC (1432 @ 1413 µmhos/cm@25°C)
ORP (____ / ____ / ____ @°C Turbidity (20 / 100 NTU)

REMARKS: ____

SIGNATURE: ____ **DATE:** 12/15/14

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WATER LEVEL DATA SHEET
Golder Associates

Project: YSDI
Project No.: 053-7442-14
Date(s): 12/15/14
Name: Steve Cameron
Weather: Rain, cold Sounder #: 26 LG

Well	Date	Time	DTW (TOC)	Total Depth	Meas. By	Comments
MW-1						
MW-2						
MW-3						
MW-4						
MW-5						
MW-6						
MW-7						
MW-8						
MW-9						
MW-10						
MW-11						
MW-12						
MW-13						
MW-15						
PZ-14						
MW-1R						
MW-2R						
S-1	12/15	1320	30.65	—	[illegible]	
S-2	12/15	1330	80.90	—	[illegible]	
S-3	12/15	1355	80.60	—	[illegible]	
S-4	12/15	1421	63.60	—	[illegible]	
S-5	12/15	1440	75.30	—	[illegible]	

Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: S-1
PROJECT NO: 0537442-14
SAMPLED BY: S. Giacomini
SAMPLE TYPE: Groundwater _____ Surface Water _____ Leachate X Other _____
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 X 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____
Volume in Casing (gal): _____
Depth to Water (ft): 30.65
Calculated Purge (volumes / gal.): _____
Height of Water Column (ft): NM
Actual Pre-Sampling Purge (gal): _____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____
Purge Water Containment: _____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: _____ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: _____

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump X Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated X tubing Other _____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1255	15.63	11600	7.16	6.88	Brown	9.6	NM

Sheen: None Odor: light Sample Date: 12/15/14

Field Measurement Devices: Horiba: X YSI: _____ Oakton Turbidity: _____ Other: _____

Meter Calibration Date: 12/15/14 Time: 1145 Location: YSDI Ins. # U8
pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)
D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

REMARKS: Collected grab sample

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: S-2

PROJECT NO: 0537442-14 SAMPLED BY: S. Giacomini

SAMPLE TYPE: Groundwater ____ Surface Water ____ Leachate X Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other 12"

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): NM	Volume in Casing (gal):
Depth to Water (ft): 60.90	Calculated Purge (volumes / gal.):
Height of Water Column (ft): ~~60~~ NM	Actual Pre-Sampling Purge (gal):

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Purge Water Containment: ____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: ____

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump X Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1340	18.74	5010	7.20	5.71	Brown tint	13.9	/

Sheen: none Odor: light Sample Date: 12/15/14

Field Measurement Devices: Horiba: X YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: 12/15/14 Time: 1145 Location: YSDI Ins. # U53

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: collected grab sample

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI SAMPLE ID: S-3

PROJECT NO: 0537442-14 SAMPLED BY: S. Giacomini

SAMPLE TYPE: Groundwater _____ Surface Water _____ Leachate X Other _____

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 ___ 4.5 ___ 6 ___ 8 ___ Other 12"

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): —	Volume in Casing (gal): —
Depth to Water (ft): 80.60	*Calculated Purge (volumes / gal.):* —
Height of Water Column (ft): NM	Actual Pre-Sampling Purge (gal): —

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: _____ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: _____

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump X Dedicated X Other _____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1400	19.45	2430	5.52	5.25	Yellow tint	21.6	

Sheen: none Odor: moderate Sample Date: 12/15/09

Field Measurement Devices: Horiba: NS YSI: _____ Oakton Turbidity: _____ Other: _____

Meter Calibration Date: 12/15/09 Time: 1145 Location: YSDI Ins. # USB

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____ NTU)

REMARKS: _____

SIGNATURE: SG **DATE:** 12/15/09

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: S-4
PROJECT NO: 0537442-14
SAMPLED BY: S. Giacomini
SAMPLE TYPE: Groundwater ____ Surface Water ____ Leachate X Other ____
CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other 12"
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): ____ Volume in Casing (gal): ____
Depth to Water (ft): 63.60 Calculated Purge (volumes / gal.): ____
Height of Water Column (ft): ____ Actual Pre-Sampling Purge (gal): ____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: ____

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump X Dedicated X Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1425	21.65	6190	5.93	4.65	yellow tint	19	

Sheen: none Odor: moderate Sample Date: 12/15/09

Field Measurement Devices: Horiba: X YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: 12/15/09 Time: 1145 Location: YSDI Ins. # U2
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: Collected grab sample

SIGNATURE: [signature] **DATE:** 12/15/09

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
PROJECT NO: 0537442-14
SAMPLE ID: S-5
SAMPLED BY: S. Giacomini

SAMPLE TYPE: Groundwater ____ Surface Water ____ Leachate X Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other 12"
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): /
Depth to Water (ft): 75.30'
Height of Water Column (ft): /
Volume in Casing (gal): /
Calculated Purge (volumes / gal.): /
Actual Pre-Sampling Purge (gal): /

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated / Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: ____

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1445	24.67	6830	6.86	3.48	yellow tint	51	

Sheen: none Odor: slight Sample Date: 12/5

Field Measurement Devices: Horiba: X YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: 12/15/14 Time: 1145 Location: YSDI Ins. # U52
pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)
D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)
ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: Collected grab sample

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI

SAMPLE ID: SW-2

PROJECT NO: 0537442-14

SAMPLED BY: S. Giacomini

SAMPLE TYPE: Groundwater ____ Surface Water X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other River

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): ____ Volume in Casing (gal): ____

Depth to Water (ft): ____ Calculated Purge (volumes / gal.): ____

Height of Water Column (ft): ____ Actual Pre-Sampling Purge (gal): ____

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____

Purge Water Containment: ____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: ____

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump ____ Centrifugal Pump ____

Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other Bailer (Disp)

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1200	12.35	101	7.17	10.79	colorless	3.1	NM

Sheen: none Odor: none Sample Date: 12/15/09

Field Measurement Devices: Horiba: X YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: 12/15/09 Time: 1145 Location: YSDI Ins. # USB

pH 4: (____/____@____°C) pH 7: (____/____@____°C) pH 10: (____/____@____°C)

D.O. (____/____@100%) EC (____/____µmhos/cm@25°C)

ORP (____/____/____@°C Turbidity (____/____NTU)

REMARKS: Collected GRAB sample from YUBA River - Downstream from LF-1 (MW-1).

SIGNATURE: [signature] **DATE:** 12/17/09

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: SW-3
PROJECT NO: 0537442-14
SAMPLED BY: S. Giacomini

SAMPLE TYPE: Groundwater ____ Surface Water X Leachate ____ Other ____

CASING DIAMETER (OD-inches): 3/4 ____ 1 ____ 2 ____ 4 ____ 4.5 ____ 6 ____ 8 ____ Other Drainage culvert/ditch
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): ____ Volume in Casing (gal): ____
Depth to Water (ft): ____ Calculated Purge (volumes / gal.): ____
Height of Water Column (ft): ____ Actual Pre-Sampling Purge (gal): ____

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other ____
Purge Water Containment: ____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: ____ Other ____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: ____

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer ____ Peristaltic Pump ____ Centrifugal Pump ____
Bladder Pump ____ Electric Submersible Pump ____ Dedicated ____ Other X dip

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1220	12.41	273	7.34	9.74	Brown	968	

Sheen: none Odor: none Sample Date: 12/15/14

Field Measurement Devices: Horiba: X YSI: ____ Oakton Turbidity: ____ Other: ____

Meter Calibration Date: 12/5/14 Time: 1145 Location: YSDF Ins. # UTR
pH 4: (4.02 / / @ 14.3 °C) pH 7: (7.04 / / @ 14.3 °C) pH 10: (none / / @ ____ °C)
D.O. (auto / / @100%) EC (0 / 1200 µmhos/cm@25°C)
ORP (none / / @°C Turbidity (0 / 100 NTU)

REMARKS: Collected Grab sample from SW-3 sample location down flow from convergence of culvert & swale flow on South side of Gate/Fence

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI
SAMPLE ID: SW-4
PROJECT NO: 0537442-14
SAMPLED BY: S. Giacomini
SAMPLE TYPE: Groundwater _____ Surface Water X Leachate _____ Other _____
CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 ___ 4.5 ___ 6 ___ 8 ___ Other ___
GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): NM
Volume in Casing (gal): NM
Depth to Water (ft): /
Calculated Purge (volumes / gal.): /
Height of Water Column (ft): /
Actual Pre-Sampling Purge (gal): /

PURGE:
Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____
Purge Water Containment: _____
Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: _____ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: _____

SAMPLE:
Device (Depth of Intake from TOC): Disp. Bailer X Peristaltic Pump _____ Centrifugal Pump _____
Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other DO

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)
1240	11.90	70	7.31	10.12	Brown	23.4	/

Sheen: none Odor: none Sample Date: 12/15/14

Field Measurement Devices: Horiba: X YSI: _____ Oakton Turbidity: _____ Other: _____

Meter Calibration Date: 12/15/14 Time: 1145 Location: YSDI Ins. # U52
pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)
D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)
ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

REMARKS: _____

SIGNATURE: [signature] **DATE:** 12/15/14

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Golder Associates

WATER SAMPLE FIELD DATA

LOCATION: YSDI

PROJECT NO: 0537442-14

SAMPLE ID: SW-5

SAMPLED BY: S. Giacomini

SAMPLE TYPE: Groundwater _____ Surface Water X Leachate _____ Other _____

CASING DIAMETER (OD-inches): 3/4 ___ 1 ___ 2 ___ 4 ___ 4.5 ___ 6 ___ 8 ___ Other Culvert

GALLONS PER LINEAR FOOT : (0.02) (0.04) (0.17) (0.66) (0.83) (1.5) (2.6)

Well Total Depth (ft): _____ Volume in Casing (gal): _____

Depth to Water (ft): _____ Calculated Purge (volumes / gal.): _____

Height of Water Column (ft): _____ Actual Pre-Sampling Purge (gal): _____

PURGE:

Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

Purge Water Containment: _____

Field QC Samples Collected: EB-___ FB-___ DUP-___ Time: _____ Other _____

Time (2400 Hr)	Volume (gallons)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	Color (visual)	Turbidity (visual)	Other	Observation

Purge Date: _____

SAMPLE:

Device (Depth of Intake from TOC): Disp. Bailer _____ Peristaltic Pump _____ Centrifugal Pump _____

Bladder Pump _____ Electric Submersible Pump _____ Dedicated _____ Other _____

Time (2400 Hr)	Temp. (°C)	EC (µmhos/cm)	pH (std. units)	DO (mg/l)	Color (visual)	Turbidity (NTU)	ORP (mV)

Sheen: _____ Odor: _____ Sample Date: _____

Field Measurement Devices: Horiba: _____ YSI: _____ Oakton Turbidity: _____ Other: _____

Meter Calibration Date: _____ Time: _____ Location: _____ Ins. # _____

pH 4: (_____/_____@_____°C) pH 7: (_____/_____@_____°C) pH 10: (_____/_____@_____°C)

D.O. (_____/_____@100%) EC (_____/_____µmhos/cm@25°C)

ORP (_____/_____/_____@°C Turbidity (_____/_____NTU)

REMARKS:

No flow present at SW-5 - No Sample

SIGNATURE: _____ **DATE:** _____

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Golder Associates

LYSIMETER SAMPLE FIELD DATA

LOCATION: Reedley Yuba Sutter
SAMPLE ID: LYS-2
PROJECT NO: 053744214
VACUUM BY: S. Greenwood
CLIENT NAME: Reedley
SAMPLED BY:

Date	Time	Cup (A or B)	Soil Moisture	Vacuum Reading (Centibars)	Liquid Removed (Milliliters)	Vacuum Applied (Centibars)
12/15/04	1545	—	—	—	—	70
12/17/04	1320	—	—	60	—	—

SAMPLE FIELD PARAMETERS:

Date	Time	Odor	pH (units)	E.C. (umhos/cm@25C)	Temperature (C)	Other

LYSIMETER INTEGRITY: Lock No:

REMARKS:

Black = p/o tubing
Green = S tubes

EVACUATED only AIR through sample tubing
- No Liquid present - NO Samples

SIGNATURE:

Golder Associates

LYSIMETER SAMPLE FIELD DATA

LOCATION: Recovery VOBA Site SAMPLE ID: LYS-1

PROJECT NO: 0374421 VACUUM BY: S. Greenman

CLIENT NAME: Recovery SAMPLED BY: S. Green

Date	Time	Cup (A or B)	Soil Moisture	Vacuum Reading (Centibars)	Liquid Removed (Milliliters)	Vacuum Applied (Centibars)
12/15/14	1045	✓	NA	—	—	70
12/17/14	1310	—	—	0	0	—

SAMPLE FIELD PARAMETERS:

Date	Time	Odor	pH (units)	E.C. (umhos/cm@25C)	Temperature (C)	Other

LYSIMETER INTEGRITY: Good Lock No:

REMARKS:

Black = P/V tubing
Green = S- tubing

EVACUATED ONLY AIR THROUGH sample tubing
NO LIQUID present - No Samples

SIGNATURE:

Landfill Gas Migration Monitoring

Recology Yuba Sutter

Third Quarter 2014 - Perimeter Probes and Sensors

TECHNICIANS: Rob McCarthy, Steve Giacomini **EQUIPMENT:** Landtec GEM 2000

WEATHER: 7/21/14 at 12:58 - Sunny, partly cloudy, breezy; Temp 82°F; Barometric Pressure 30.21 inches Hg.

Monitoring Location	Date & Time	CH_4 (% by vol)	CO_2 (% by vol)	O_2 (% by vol)	Balance (% by vol)	Static Pressure ("w.c.)
Probes						
GP-1D	7/21/14 13:35	0.0	0.3	12.3	87.4	0.00
GP-1S	7/21/14 13:37	0.0	1.2	19.0	79.8	0.00
GP-2D	7/21/14 13:44	0.0	0.5	19.7	79.8	0.01
GP-2S	7/21/14 13:47	0.0	0.1	15.9	84.0	0.00
GP-3	7/21/14 13:56	0.0	14.3	9.3	76.4	0.00
GP-4	7/21/14 14:07	0.0	0.9	19.0	80.1	0.00
GP-5	7/21/14 14:16	0.0	0.1	20.4	79.5	0.00
GP-6	7/21/14 15:29	0.0	2.0	17.8	80.2	0.00
GP-7	7/21/14 15:22	0.0	1.8	16.1	82.1	0.00
GP-8	7/21/14 15:14	0.0	0.7	18.4	80.9	0.00
GP-9	7/21/14 15:11	0.0	1.7	17.5	80.8	0.02
GP-10	7/21/14 15:01	0.0	2.3	16.6	81.1	0.00
GP-11	7/21/14 14:55	0.0	1.9	16.9	81.2	0.02
GP-12D	7/21/14 12:49	0.0	6.6	14.6	78.8	0.00
GP-12S	7/21/14 12:51	0.0	3.3	17.6	79.1	0.01
GP-13D	7/21/14 12:54	0.4	9.0	8.8	81.8	0.00
GP-13S	7/21/14 12:56	0.0	9.1	10.0	80.9	0.00
GP-14D	7/21/14 13:00	0.0	8.9	9.0	82.1	0.00
GP-14S	7/21/14 13:06	0.0	12.7	5.2	82.1	0.00
GP-15	7/21/14 13:13	0.0	3.1	17.5	79.4	0.00

Continuous Monitoring Methane Sensors

Structure Location	Operating Properly?	Calibrated?	Repaired?	Replaced?	Comments
MRF	Yes	Yes	No	No	
Scalehouse	Yes	Yes	No	No	
Main Office 1	Yes	Yes	No	No	
Main Office 2	Yes	Yes	No	No	
Main Office 3	Yes	Yes	No	No	
Main Office 4	Yes	Yes	No	No	
Maintenance Shop	Yes	Yes	No	No	
Welding Shop	Yes	Yes	No	No	
Paint Shop	Yes	Yes	No	No	
Storage Building	Yes	Yes	No	No	

NOTES: Weather info obtained from wunderground.com.

All sensors were checked and calibrated on September 29, 2014 using cal gas at methane concentration of 5,000 ppm.

Landfill Gas Migration Monitoring

Recology Yuba Sutter

Fourth Quarter 2014 - Perimeter Probes and Sensors

TECHNICIANS: Rob McCarthy, Steve Giacomini **EQUIPMENT:** Landtec GEM 2000

WEATHER: 12/1/14 at 11:58 - Intermittently cloudy with drizzle, breezy; Temp 61°F
Barometric Pressure 30.34 inches Hg.

Monitoring Location	Date & Time	CH_4 (% by vol)	CO_2 (% by vol)	O_2 (% by vol)	Balance (% by vol)	Static Pressure ("w.c.)
Probes						
GP-1D	12/1/14 13:13	0.0	0.0	20.3	79.7	0.00
GP-1S	12/1/14 13:16	0.0	1.2	19.3	79.5	0.00
GP-2D	12/1/14 13:07	0.0	1.6	15.7	82.7	0.01
GP-2S	12/1/14 13:10	0.0	0.1	19.9	80.0	0.00
GP-3	12/1/14 13:01	0.0	6.4	15.3	79.3	0.00
GP-4	12/1/14 12:56	0.0	1.2	19.3	79.4	0.00
GP-5	12/1/14 12:49	0.0	0.3	19.9	79.7	0.00
GP-6	12/1/14 14:30	0.0	1.4	19.4	79.2	0.02
GP-7	12/1/14 14:24	0.0	2.4	17.8	79.8	0.01
GP-8	12/1/14 14:20	0.0	1.3	19.5	79.2	0.00
GP-9	12/1/14 14:17	0.0	2.0	18.3	79.2	0.00
GP-10	12/1/14 14:10	0.0	1.1	19.4	79.4	0.00
GP-11	12/1/14 14:05	0.0	1.4	19.2	79.3	0.00
GP-12D	12/1/14 11:43	0.0	6.5	15.3	78.2	0.00
GP-12S	12/1/14 11:45	0.0	3.0	17.5	79.5	0.00
GP-13D	12/1/14 11:48	0.0	5.7	15.4	78.8	0.00
GP-13S	12/1/14 12:16	0.0	5.3	15.1	79.6	0.00
GP-14D	12/1/14 12:20	0.0	20.2	0.1	79.7	0.00
GP-14S	12/1/14 12:25	0.0	19.0	1.2	79.8	0.00
GP-15	12/1/14 12:30	0.0	3.1	17.5	79.4	0.00

Continuous Monitoring Methane Sensors

Structure Location	Operating Properly?	Calibrated?	Repaired?	Replaced?	Comments
MRF	Yes	Yes	No	No	All interior readings indicated
Scalehouse	Yes	Yes	No	No	atmospheric conditions
Main Office 1	Yes	Yes	No	No	(no methane or carbon dioxide
Main Office 2	Yes	Yes	No	No	detected, oxygen at 20.8%)
Main Office 3	Yes	Yes	No	No	
Main Office 4	Yes	Yes	No	No	
Maintenance Shop	Yes	Yes	No	No	
Welding Shop	Yes	Yes	No	No	
Paint Shop	Yes	Yes	No	No	
Storage Building	Yes	Yes	No	No	

NOTES: Weather info obtained from wunderground.com.
All sensors were checked and calibrated on December 17, 2014.

Recology Yuba-Sutter
North Area Landfill (S2-S4) and Peach Orchard (S1)
Leachate Pumping Record

Date	Sump #	Start	Stop	Total Gallons
12/24/2014	1	8:00 AM	9:00 AM	200
12/24/2014	2	406.5	411.4	4900
12/24/2014	3	414.7	415.7	1000
12/24/2014	4	305.8	310.5	4700
12/24/2014	5	225.1	226.4	1300
12/18/2014	1	8:00 AM	9:00 AM	200
12/18/2014	2	401.1	406.5	5400
12/18/2014	3	414.7	414.7	0
12/18/2014	4	301.6	305.8	4200
12/18/2014	5	225.1	225.1	0
12/9/2014	1	7:45 AM	8:45 AM	200
12/9/2014	2	398.2	401.1	2900
12/9/2014	3	413.4	414.7	1300
12/9/2014	4	301.3	301.6	300
12/9/2014	5	224.6	225.1	500
12/5/2014	1	8:00 AM	9:00 AM	200
12/5/2014	2	397.6	398.2	600
12/5/2014	3	411.7	413.4	1700
12/5/2014	4	301	301.3	300
12/5/2014	5	224.1	224.6	500
12/2/2014	1	8:15:00 AM	9:15:00 AM	200
12/2/2014	2	396.6	397.6	1000
12/2/2014	3	410	411.7	1700
12/2/2014	4	300.6	310	9400
12/2/2014	5	223.6	224.1	500
11/28/2014	1	8:00 AM	9:00 AM	200
11/28/2014	2	396.6	396.6	0
11/28/2014	3	410	410	0
11/28/2014	4	300.2	300.6	400
11/28/2014	5	223.2	223.6	400
11/25/2014	1	8:30 AM	9:30 AM	200
11/25/2014	2	396.3	396.6	300
11/25/2014	3	408.4	410	1600
11/25/2014	4	299.7	300.2	500
11/25/2014	5	222.5	223.2	700
11/20/2014	1	8:00 AM	9:00 AM	200
11/20/2014	2	396	396.3	300
11/20/2014	3	406.7	408.4	1700
11/20/2014	4	299.5	299.7	200
11/20/2014	5	222.2	222.5	300
11/18/2014	1	8:00 AM	9:00 AM	200
11/18/2014	2	395.4	396	600
11/18/2014	3	404.4	406.7	2300
11/18/2014	4	298.9	299.5	600
11/18/2014	5	221.5	222.2	700

Recology Yuba-Sutter
North Area Landfill (S2-S4) and Peach Orchard (S1)
Leachate Pumping Record

Date	Sump #	Start	Stop	Total Gallons
11/13/2014	1	8:00 AM	9:00 AM	200
11/13/2014	2	395.1	395.4	300
11/13/2014	3	402.6	404.4	1800
11/13/2014	4	298.6	298.9	300
11/13/2014	5	221.2	221.5	300
11/11/2014	1	8:30 AM	9:30 AM	200
11/11/2014	2	394.1	395.1	1000
11/11/2014	3	400.2	402.6	2400
11/11/2014	4	298.1	298.6	500
11/11/2014	5	220.6	221.2	600
11/6/2014	1	8:30 AM	9:30 AM	200
11/6/2014	2	394.1	394.1	0
11/6/2014	3	398.3	400.2	1900
11/6/2014	4	297.8	298.1	300
11/6/2014	5	220.3	220.6	300
11/4/2014	1	8:30 AM	9:30 AM	200
11/4/2014	2	392.3	394.1	1800
11/4/2014	3	395.9	398.3	2400
11/4/2014	4	297.2	297.8	600
11/4/2014	5	219.6	220.3	700
10/30/2014	1	8:00 AM	9:00 AM	200
10/30/2014	2	392.3	392.3	0
10/30/2014	3	395.9	395.9	0
10/30/2014	4	297	297.2	200
10/30/2014	5	219.3	219.6	300
10/28/2014	1	8:00 AM	9:00 AM	200
10/28/2014	2	392.3	392.3	0
10/28/2014	3	395.9	395.9	0
10/28/2014	4	296.4	297.2	800
10/28/2014	5	218.7	219.6	900
10/23/2014	1	8:00 AM	9:00 AM	200
10/23/2014	2	390.4	392.3	1900
10/23/2014	3	393.3	395.9	2600
10/23/2014	4	296.2	296.4	200
10/23/2014	5	218.2	218.7	500
10/22/2014	2	385.3	390.4	5100
10/21/2014	1	8:30 AM	9:30 AM	200
10/21/2014	2	385.3	385.3	0
10/21/2014	3	393.3	393.3	0
10/21/2014	4	295.8	296.2	400
10/21/2014	5	217.8	218.2	400
10/17/2014	1	8:30 AM	9:30 AM	200
10/17/2014	2	385.3	385.3	0
10/17/2014	3	393.3	393.3	0

Recology Yuba-Sutter
North Area Landfill (S2-S4) and Peach Orchard (S1)
Leachate Pumping Record

Date	Sump #	Start	Stop	Total Gallons
10/17/2014	4	295.8	295.8	0
10/17/2014	5	217.3	217.8	500
10/14/2014	1	8:00 AM	9:00 AM	200
10/14/2014	2	385.3	385.3	0
10/14/2014	3	388.1	393.3	5200
10/14/2014	4	294.8	295.8	1000
10/14/2014	5	216.6	217.3	700
10/10/2014	1	8:30 AM	9:30 AM	200
10/10/2014	2	385.3	385.3	0
10/10/2014	3	385.2	388.1	2900
10/10/2014	4	294.4	294.8	400
10/10/2014	5	216.1	216.6	500
10/7/2014	1	7:30 AM	8:30 AM	200
10/7/2014	2	385.3	385.3	0
10/7/2014	3	385.2	385.2	0
10/7/2014	4	293.7	294.4	700
10/7/2014	5	215.4	216.1	700
10/2/2014	1	8:00 AM	9:00 AM	200
10/2/2014	2	385.3	385.3	0
10/2/2014	3	379.2	385.2	6000
10/2/2014	4	293.2	293.7	500
10/2/2014	5	214.5	215.4	900
9/30/2014	1	7:30 AM	8:30 AM	200
9/30/2014	2	384.2	385.3	1100
9/30/2014	3	376.7	379.2	2500
9/30/2014	4	290.9	293.2	2300
9/30/2014	5	210.9	214.5	3600
9/26/2014	1	10:00 AM	11:00 AM	200
9/26/2014	2	380.4	384.2	3800
9/26/2014	3	374.5	376.7	2200
9/26/2014	4	286.8	290.9	4100
9/26/2014	5	209.6	210.9	1300
8/26/2014	3	370.7	374.5	3800
8/26/2014	4	285.4	286.8	1400
8/26/2014	5	205.1	209.6	4500
7/29/2014	2	375.2	380.4	5200
7/29/2014	4	283.6	285.4	1800
7/29/2014	5	198.8	205.1	6300
7/17/2014	3	365.2	370.7	5500
7/17/2014	4	280.3	283.6	3300
7/17/2014	5	198	198.8	800

Recology Yuba Sutter

Weekly Standard Observations

Month : December 2014

Inspector : [illegible]

	Dates				
1. Recieiving Waters	12-3-14	12-10-14	12-17-14	12-26-14	
Evidence of floating or suspended materials of waste origin	NO	NO	NO	NO	
Evidence of discoloration and turbidity	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of beneficial use, presence of water associated wildlife	Ducks	Ducks	Ducks	None	
Wind direction and estimated velocity	South 10-20	South Breze	South	South 10-15	
Flow rate and total precipitation	1.52"	.06"	1.6" Total		
2. Perimeter of Unit					
Evidence of liquid leaving or entering the unit	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of exposed refuse	NO	NO	NO	NO	
3. Unit					
Evidence of ponded water	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of daylighted refuse	NO	NO	NO	NO	
4. Status of any visible portion of the liner	None Visible	None Visible	None Visible	None Visible	

Comments (explain any "yes" responses including date of inspection)

Recology Yuba Sutter

Weekly Standard Observations

Month : November 2014

Inspector : Mike [illegible]

	Dates				
1. Recieiving Waters	11-5-14	11-11-14	11-21-14	11-26-14	
Evidence of floating or suspended materials of waste origin	NO	NO	NO	NO	
Evidence of discoloration and turbidity	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of beneficial use, presence of water associated wildlife	NO	NO	NO	NO	
Wind direction and estimated velocity	None	Ø	South 15mph	NO	
Flow rate and total precipitation	Ø	Ø	Rain 37 HRT 3 days	NO	
2. Perimeter of Unit					
Evidence of liquid leaving or entering the unit	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of exposed refuse	NO	NO	NO	NO	
3. Unit					
Evidence of ponded water	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of daylighted refuse	NO	NO	NO	NO	
4. Status of any visible portion of the liner	None Visible	None Visible	None visible	None Visible	

Comments (explain any "yes" responses including date of inspection)

Recology Yuba Sutter

Weekly Standard Observations

Month : October 2014

Inspector : Mike McCormick

	Dates				
1. Recieiving Waters	10-2-14	10-9-14	10-15-14	10-23-14	10-29-14
Evidence of floating or suspended materials of waste origin	NO	NO	NO	NO	NO
Evidence of discoloration and turbidity	NO	NO	NO	NO	NO
Evidence of odors	NO	NO	NO	NO	NO
Evidence of beneficial use, presence of water associated wildlife	NO	NO	NO	NO	NO
Wind direction and estimated velocity	Calm	South 10	South 20+	Calm	South
Flow rate and total precipitation	Ø	Ø	Rain .23"	Clear	Cloudy
2. Perimeter of Unit					
Evidence of liquid leaving or entering the unit	NO	NO	NO	NO	NO
Evidence of odors	NO	NO	NO	NO	NO
Evidence of erosion of exposed refuse	NO	NO	NO	NO	NO
3. Unit					
Evidence of ponded water	NO	NO	NO	NO	NO
Evidence of odors	NO	NO	NO	NO	NO
Evidence of erosion of daylighted refuse	NO	NO	NO	NO	NO
4. Status of any visible portion of the liner	None Visible	None Visible	None Visible	None Visible	None Visible

Comments (explain any "yes" responses including date of inspection)

Recology Yuba Sutter

Weekly Standard Observations

Month : September 2014

Inspector : [illegible]

	Dates				
1. Recieiving Waters	9-2-14	9-8-14	9-17-14	9-25-14	
Evidence of floating or suspended materials of waste origin	NO	NO	NO	NO	
Evidence of discoloration and turbidity	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of beneficial use, presence of water associated wildlife	NO	NO	NO	NO	
Wind direction and estimated velocity	Calm	North wind	South 10mph	South Breeze	
Flow rate and total precipitation	Ø	Ø	Ø	Ø	
2. Perimeter of Unit					
Evidence of liquid leaving or entering the unit	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of exposed refuse	NO	NO	NO	NO	
3. Unit					
Evidence of ponded water	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of daylighted refuse	NO	NO	NO	NO	
4. Status of any visible portion of the liner	None Exposed	None Exposed	None Exposed	None Exposed	

Comments (explain any "yes" responses including date of inspection)

Recology Yuba Sutter

Weekly Standard Observations

Month : August 2014

Inspector : [illegible]

	Dates				
1. Recieiving Waters	8-6-14	8-15-14	8-20-14	8-27-14	
Evidence of floating or suspended materials of waste origin	NO	NO	NO	NO	
Evidence of discoloration and turbidity	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of beneficial use, presence of water associated wildlife	NO	NO	NO	NO	
Wind direction and estimated velocity	Calm	Calm	Calm	Calm	
Flow rate and total precipitation	Sunny	Sunny	Sunny	Sunny	
2. Perimeter of Unit					
Evidence of liquid leaving or entering the unit	NO	NO	NO	NO	
Evidence of odors	NO	NO	NO	NO	
Evidence of erosion of exposed refuse	NO	NO	NO	NO	
3. Unit					
Evidence of ponded water	NO	NO	NO	No	
Evidence of odors	NO	NO	NO	No	
Evidence of erosion of daylighted refuse	NO	NO	NO	NO	
4. Status of any visible portion of the liner	None exposed	None Exposed	None Exposed	None Exposed	

Comments (explain any "yes" responses including date of inspection)

Recology Yuba Sutter

Weekly Standard Observations

Month : July 2014

Inspector : [illegible]

	Dates				
1. Recieiving Waters	7-2-14	7-9-14	7-16-14	7-23-14	7-31-14
Evidence of floating or suspended materials of waste origin	NO	NO	NO	NO	NO
Evidence of discoloration and turbidity	NO	NO	NO	NO	NO
Evidence of odors	NO	NO	NO	NO	NO
Evidence of beneficial use, presence of water associated wildlife	NO	NO	NO	NO	NO
Wind direction and estimated velocity	South 5-10	South Breeze	North 10-15	South 15 mph	South Breze
Flow rate and total precipitation	~~0~~	~~0~~	~~0~~	Cloudy	Sunny ~~0~~
2. Perimeter of Unit					
Evidence of liquid leaving or entering the unit	NO	NO	NO	NO	NO
Evidence of odors	NO	NO	NO	NO	NO
Evidence of erosion of exposed refuse	NO	NO	NO	NO	NO
3. Unit					
Evidence of ponded water	NO	NO	NO	NO	NO
Evidence of odors	NO	NO	NO	NO	NO
Evidence of erosion of daylighted refuse	NO	NO	NO	NO	NO
4. Status of any visible portion of the liner	None Visible	None Visible	None Visible	None Visible	None Visible

Comments (explain any "yes" responses including date of inspection)

APPENDIX B

CERTIFIED ANALYTICAL REPORTS

Date of Report: 08/15/2014

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	YSDI - Extended List
BCL Work Order:	1418262
Invoice ID:	B180809

Enclosed are the results of analyses for samples received by the laboratory on 8/9/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Golder Associates

Golder Associates Inc.

CHAIN OF CUSTODY 1418262

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Quotation No.

PROJECT AND PHASE NO.: 053744214

SITE NAME: YSDI

SAMPLER SIGNATURE(S):

CONTRACT LABORATORY: BC-Labs

TURN-AROUND TIME: Standard

EDD Required? Yes

EDF Required? Yes

ANALYSES

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info	YSD 8260, short list	Cont. Qty.	Remarks
						Type	voa		
						Volume	40 ml		
						Filter	N		
						Preserv.	HCl		
MW-1	-1	8/6/14	0945	W			3	3	
MW-2	-2	8/6/14	1100				3	3	
MW-3	-3	8/5/14	1450				3	3	
MW-4	-4	8/5/14	1420				3	3	
MW-8	-5	8/5/14	1310				3	3	
MW-10	-6	8/5/14	1540				3	3	
MW-11	-7	8/5/14	1220				3	3	
MW-12	-8	8/5/14	1340				3	3	
MW-15	-9	8/6/14	0910				3	3	
MW-18	-10	8/6/14	1020				3	3	
MW-28	-11	8/6/14	1135				3	3	
18 QCEB-1	-12	8/6/14	10:45	W			3		

CHK BY SB DISTRIBUTION SUB-OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		8/8/14 1550
Relinquished by (signature):	Received by (signature):	Date/Time:
		8-08-14 17:30
Relinquished by (signature):	Received by (signature):	Date/Time:

SEND RESULTS TO:

Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\RMcCarthy\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\9G18HTVO\YSD 3rd qtrCOC.xlsx

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Chain of Custody and Cooler Receipt Form for 1418262 Page 2 of 3

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 17 06/05/14 Page 1 Of 2

Submission #: 1478262

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: _____ Date/Time 8/9/14 17:30

Temperature: (A) 3.7 °C / (C) 4.0 °C Analyst Init TRO

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A 3	A 3	A 3	A 3	A 3	A 3	A 3	A 3	A 3	A 3
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:_____
Sample Numbering Completed By: TRO Date/Time: 8/11/14 1411 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16
A = Actual / C = Corrected

Chain of Custody and Cooler Receipt Form for 1418262 Page 3 of 3

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 17 06/05/14 Page 2 Of 2

Submission #: 14-18262

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: _____ Date/Time 8/9/14 17:30

Temperature: (A) 3.7 °C / (C) 4.0 °C Analyst Init JRG

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A (3)	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:_____
Sample Numbering Completed By: TSB Date/Time: 8/11/14 1411 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16
A = Actual / C = Corrected

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1418262-01	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/06/2014 09:45
	Sampling Location:	MW-1	**Sample Depth:**	---
	Sampling Point:	MW-1	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-02	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/06/2014 11:00
	Sampling Location:	MW-2	**Sample Depth:**	---
	Sampling Point:	MW-2	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-03	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/05/2014 14:50
	Sampling Location:	MW-3	**Sample Depth:**	---
	Sampling Point:	MW-3	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1418262-04	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/05/2014 14:20
	Sampling Location:	MW-4	**Sample Depth:**	---
	Sampling Point:	MW-4	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-05	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/05/2014 13:10
	Sampling Location:	MW-8	**Sample Depth:**	---
	Sampling Point:	MW-8	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-8	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-06	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/05/2014 15:40
	Sampling Location:	MW-10	**Sample Depth:**	---
	Sampling Point:	MW-10	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-10	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1418262-07	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/05/2014 12:20
	Sampling Location:	MW-11	**Sample Depth:**	---
	Sampling Point:	MW-11	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-11	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-08	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/05/2014 13:40
	Sampling Location:	MW-12	**Sample Depth:**	---
	Sampling Point:	MW-12	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-12	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-09	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/06/2014 09:10
	Sampling Location:	MW-15	**Sample Depth:**	---
	Sampling Point:	MW-15	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-15	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1418262-10	**COC Number:** ---		**Receive Date:**	08/09/2014 17:30
	Project Number: YSDI		**Sampling Date:**	08/06/2014 10:20
	Sampling Location: MW-1R		**Sample Depth:**	---
	Sampling Point: MW-1R		**Lab Matrix:**	Water
	Sampled By: Client of GAMV		**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-1R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-11	**COC Number:** ---		**Receive Date:**	08/09/2014 17:30
	Project Number: YSDI		**Sampling Date:**	08/06/2014 11:35
	Sampling Location: MW-2R		**Sample Depth:**	---
	Sampling Point: MW-2R		**Lab Matrix:**	Water
	Sampled By: Client of GAMV		**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418262-12	**COC Number:** ---		**Receive Date:**	08/09/2014 17:30
	Project Number: YSDI		**Sampling Date:**	08/06/2014 10:45
	Sampling Location: MW-2R		**Sample Depth:**	---
	Sampling Point: QCEB-1		**Lab Matrix:**	Water
	Sampled By: Client of GAMV		**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-01 | **Client Sample Name:** YSDI, MW-1, MW-1, 8/6/2014 9:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.26**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J**	1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.10**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND	**J**	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.12**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-01 | **Client Sample Name:** YSDI, MW-1, MW-1, 8/6/2014 9:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 13:58	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-02 | **Client Sample Name:** YSDI, MW-2, MW-2, 8/6/2014 11:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.41**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J**	1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.72**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.15**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-02 | **Client Sample Name:** YSDI, MW-2, MW-2, 8/6/2014 11:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**0.23**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	**J**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 14:21	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-03 | **Client Sample Name:** YSDI, MW-3, MW-3, 8/5/2014 2:50:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.12**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND	**J**	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-03 | **Client Sample Name:** YSDI, MW-3, MW-3, 8/5/2014 2:50:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	89.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 14:43	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-04 | **Client Sample Name:** YSDI, MW-4, MW-4, 8/5/2014 2:20:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-04 | **Client Sample Name:** YSDI, MW-4, MW-4, 8/5/2014 2:20:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 15:06	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-05 | **Client Sample Name:** YSDI, MW-8, MW-8, 8/5/2014 1:10:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-05 | **Client Sample Name:** YSDI, MW-8, MW-8, 8/5/2014 1:10:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 15:29	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-06 | **Client Sample Name:** YSDI, MW-10, MW-10, 8/5/2014 3:40:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.50**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-06 | **Client Sample Name:** YSDI, MW-10, MW-10, 8/5/2014 3:40:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	92.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 15:51	MGC	MS-V5	1	BXH1180

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-07 | **Client Sample Name:** YSDI, MW-11, MW-11, 8/5/2014 12:20:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-07 | **Client Sample Name:** YSDI, MW-11, MW-11, 8/5/2014 12:20:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	88.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 16:14	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-08 | **Client Sample Name:** YSDI, MW-12, MW-12, 8/5/2014 1:40:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-08 | **Client Sample Name:** YSDI, MW-12, MW-12, 8/5/2014 1:40:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	87.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 16:37	MGC	MS-V5	1	BXH1180

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Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-09 | **Client Sample Name:** YSDI, MW-15, MW-15, 8/6/2014 9:10:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.25**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND	**J**	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.090**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-09 | **Client Sample Name:** YSDI, MW-15, MW-15, 8/6/2014 9:10:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	87.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 16:59	MGC	MS-V5	1	BXH1180

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Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-12 | **Client Sample Name:** YSDI, MW-2R, QCEB-1, 8/6/2014 10:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1418262-12 | **Client Sample Name:** YSDI, MW-2R, QCEB-1, 8/6/2014 10:45:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/13/14	08/14/14 04:33	MGC	MS-V5	1	BXH1180

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH1180						
Benzene	BXH1180-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXH1180-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXH1180-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXH1180-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXH1180-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXH1180-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXH1180-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXH1180-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXH1180-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXH1180-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXH1180-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BXH1180-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXH1180-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXH1180-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXH1180-BLK1	ND	ug/L	0.50	0.062	
1,1-Dichloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXH1180-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXH1180-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXH1180-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXH1180-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXH1180-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXH1180-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXH1180-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXH1180-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXH1180-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXH1180-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXH1180-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXH1180-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXH1180-BLK1	ND	ug/L	0.50	0.085	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH1180						
Trichlorofluoromethane	BXH1180-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXH1180-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXH1180-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXH1180-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXH1180-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXH1180-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXH1180-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXH1180-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXH1180-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXH1180-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXH1180-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXH1180-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXH1180-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXH1180-BLK1**	**104**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXH1180-BLK1**	**105**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXH1180-BLK1**	**96.2**	%	**80 - 120 (LCL - UCL)**		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXH1180										
Benzene	BXH1180-BS1	LCS	20.320	25.000	ug/L	81.3		70 - 130		
Bromodichloromethane	BXH1180-BS1	LCS	20.250	25.000	ug/L	81.0		70 - 130		
Chlorobenzene	BXH1180-BS1	LCS	20.240	25.000	ug/L	81.0		70 - 130		
Chloroethane	BXH1180-BS1	LCS	20.470	25.000	ug/L	81.9		70 - 130		
1,4-Dichlorobenzene	BXH1180-BS1	LCS	21.700	25.000	ug/L	86.8		70 - 130		
1,1-Dichloroethane	BXH1180-BS1	LCS	20.080	25.000	ug/L	80.3		70 - 130		
1,1-Dichloroethene	BXH1180-BS1	LCS	18.950	25.000	ug/L	75.8		70 - 130		
Toluene	BXH1180-BS1	LCS	20.720	25.000	ug/L	82.9		70 - 130		
Trichloroethene	BXH1180-BS1	LCS	21.390	25.000	ug/L	85.6		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXH1180-BS1	LCS	10.740	10.000	ug/L	107		75 - 125		
Toluene-d8 (Surrogate)	BXH1180-BS1	LCS	10.270	10.000	ug/L	103		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXH1180-BS1	LCS	10.130	10.000	ug/L	101		80 - 120		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/15/2014 14:47
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXH1180	Used client sample: N										
Benzene	MS	1416132-91	ND	24.360	25.000	ug/L		97.4		70 - 130	
	MSD	1416132-91	ND	22.360	25.000	ug/L	8.6	89.4	20	70 - 130	
Bromodichloromethane	MS	1416132-91	ND	23.130	25.000	ug/L		92.5		70 - 130	
	MSD	1416132-91	ND	22.080	25.000	ug/L	4.6	88.3	20	70 - 130	
Chlorobenzene	MS	1416132-91	ND	23.970	25.000	ug/L		95.9		70 - 130	
	MSD	1416132-91	ND	22.780	25.000	ug/L	5.1	91.1	20	70 - 130	
Chloroethane	MS	1416132-91	ND	25.340	25.000	ug/L		101		70 - 130	
	MSD	1416132-91	ND	23.090	25.000	ug/L	9.3	92.4	20	70 - 130	
1,4-Dichlorobenzene	MS	1416132-91	ND	26.330	25.000	ug/L		105		70 - 130	
	MSD	1416132-91	ND	24.580	25.000	ug/L	6.9	98.3	20	70 - 130	
1,1-Dichloroethane	MS	1416132-91	ND	23.980	25.000	ug/L		95.9		70 - 130	
	MSD	1416132-91	ND	22.370	25.000	ug/L	6.9	89.5	20	70 - 130	
1,1-Dichloroethene	MS	1416132-91	ND	23.400	25.000	ug/L		93.6		70 - 130	
	MSD	1416132-91	ND	21.670	25.000	ug/L	7.7	86.7	20	70 - 130	
Toluene	MS	1416132-91	ND	23.850	25.000	ug/L		95.4		70 - 130	
	MSD	1416132-91	ND	22.460	25.000	ug/L	6.0	89.8	20	70 - 130	
Trichloroethene	MS	1416132-91	ND	24.880	25.000	ug/L		99.5		70 - 130	
	MSD	1416132-91	ND	24.340	25.000	ug/L	2.2	97.4	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1416132-91	ND	10.850	10.000	ug/L		108		75 - 125	
	MSD	1416132-91	ND	10.700	10.000	ug/L	1.4	107		75 - 125	
Toluene-d8 (Surrogate)	MS	1416132-91	ND	10.170	10.000	ug/L		102		80 - 120	
	MSD	1416132-91	ND	10.120	10.000	ug/L	0.5	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1416132-91	ND	10.310	10.000	ug/L		103		80 - 120	
	MSD	1416132-91	ND	10.280	10.000	ug/L	0.3	103		80 - 120	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 08/15/2014 14:47 Project: YSDI - Extended List Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

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Date of Report: 08/13/2014

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	YSDI - Extended List
BCL Work Order:	1418263
Invoice ID:	B180528

Enclosed are the results of analyses for samples received by the laboratory on 8/9/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Golder Associates

Golder Associates Inc.

CHAIN OF CUSTODY

14-18263

Page___of

Quotation No.

PROJECT AND PHASE NO.: 053744214	SITE NAME: YSDI
SAMPLER SIGNATURE(S):	
CONTRACT LABORATORY:	BC-Labs
TURN-AROUND TIME:	Standard

EDD Required? Yes

EDF Required? Yes

ANALYSES

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info: Type / Volume / Filter / Preserv.	Nitrate+Nitrite as N	Cont. Qty.	Remarks
						Type	PE		
						Volume	2 oz.		
						Filter	N		
						Preserv.	H2SO4		
~~MW-1R~~		~~8/6/14~~	~~1020~~	~~W~~			~~X~~		
MW-2R	-1	8/6/14	1135	W			X		
MW-2R	-2	8/6/14	1100				X		
MW-2	-3	8/6/14	1450				X		

CHK BY DISTRIBUTION SUB-OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		8/8/14 1550
Relinquished by (signature):	Received by (signature):	Date/Time: 8/8/14 1730
Relinquished by (signature):	Received by (signature):	Date/Time:

SEND RESULTS TO:

Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\RMcCarthy\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\9G18HTVO\YSD 3rd qtrCOC.xlsx

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Chain of Custody and Cooler Receipt Form for 1418263 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 17 06/05/14 Page 1 Of 1

Submission #: 1418263

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Federal Express ☐ UPS ☐ Hand Delivery ☒	Ice Chest ☒ None ☐ Box ☐	YES ☐ NO ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Other ☐ (Specify)_____	

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.97 Container: VOA Thermometer ID: _____ Date/Time 8/4/14 17:30

Temperature: (A) 3.7 °C / (C) 4.0 °C Analyst Init TRB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE	A	A	A							
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
0 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
0ml EPA 547										
0ml EPA 531.1										
oz Amber EPA 548										
T EPA 549										
T EPA 632										
T EPA 8015M										
T AMBER										
OZ. JAR										
OZ. JAR										
OIL SLEEVE										
EB VIAL										
ASTIC BAG										
RROUS IRON										
CORE										
IART KIT										
mma Canister										

nments:_____

nple Numbering Completed By: DP Date/Time: 8/11/14 1412 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16

: Actual / C = Corrected

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/13/2014 13:42
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1418263-01	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/06/2014 11:35
	Sampling Location:	MW-2R	**Sample Depth:**	---
	Sampling Point:	MW-2R	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418263-02	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/06/2014 11:00
	Sampling Location:	MW-2	**Sample Depth:**	---
	Sampling Point:	MW-2	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1418263-03	**COC Number:**	---	**Receive Date:**	08/09/2014 17:30
	Project Number:	YSDI	**Sampling Date:**	08/06/2014 14:50
	Sampling Location:	MW-2	**Sample Depth:**	---
	Sampling Point:	MW-2	**Lab Matrix:**	Water
	Sampled By:	Client of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/13/2014 13:42
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1418263-02 | **Client Sample Name:** YSDI, MW-2, MW-2, 8/6/2014 11:00:00AM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate/Nitrite as N	**0.13**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-353.2	08/12/14	08/12/14 15:52	JP1	SC-1	1	BXH1034

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/13/2014 13:42
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1418263-03 | **Client Sample Name:** YSDI, MW-2, MW-2, 8/6/2014 2:50:00PM, Client

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate/Nitrite as N	**0.14**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-353.2	08/12/14	08/12/14 15:54	JP1	SC-1	1	BXH1034

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 08/13/2014 13:42 Project: YSDI - Extended List Project Number: 053744214 Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXH1034						
Nitrate/Nitrite as N	BXH1034-BLK1	ND	mg/L	0.10	0.014	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/13/2014 13:42
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXH1034										
Nitrate/Nitrite as N	BXH1034-BS1	LCS	1.9120	2.0000	mg/L	95.6		90 - 110		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 08/13/2014 13:42
Project: YSDI - Extended List
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXH1034	Used client sample: N										
Nitrate/Nitrite as N	DUP	1417974-01	0.62360	0.61640		mg/L	1.2		10		
	MS	1417974-01	0.62360	2.7240	2.1053	mg/L		99.8		90 - 110	
	MSD	1417974-01	0.62360	2.7375	2.1053	mg/L	0.5	100	10	90 - 110	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 08/13/2014 13:42 Project: YSDI - Extended List Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

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Date of Report: 09/03/2014

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	Yuba Sutter Disposal
BCL Work Order:	1420066
Invoice ID:	B182223

Enclosed are the results of analyses for samples received by the laboratory on 8/29/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1420066-01 Yuba Sutter, MW-1R, MW-1R, 8/26/2014 11:50:00AM, R. McCarthy						
Chlorobenzene	1.0	0.50	0.093	ug/L	EPA-8260B	
1,4-Dichlorobenzene	0.93	0.50	0.062	ug/L	EPA-8260B	
cis-1,2-Dichloroethene	0.36	0.50	0.085	ug/L	EPA-8260B	J
Vinyl chloride	0.17	0.50	0.12	ug/L	EPA-8260B	J
1420066-02 Yuba Sutter, MW-2R, MW-2R, 8/26/2014 1:10:00PM, R. McCarthy						
Chlorobenzene	0.52	0.50	0.093	ug/L	EPA-8260B	
1,4-Dichlorobenzene	0.81	0.50	0.062	ug/L	EPA-8260B	
cis-1,2-Dichloroethene	0.16	0.50	0.085	ug/L	EPA-8260B	J
Vinyl chloride	0.28	0.50	0.12	ug/L	EPA-8260B	J

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Golder Associates

Golder Associates Inc.

CHAIN OF CUSTODY 1420066

Page 1 of 1

Quotation No.

PROJECT AND PHASE NO.:	053744214
SITE NAME:	YSDI
SAMPLER SIGNATURE(S):	
CONTRACT LABORATORY:	BC-Labs
TURN-AROUND TIME:	Standard
EDD Required?	Yes
EDF Required?	Yes

ANALYSES: YSD 8260, short list

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info: Type / Volume / Filter / Preserv.	YSD 8260, short list: voa / 40 ml / N / HCl	Cont. Qty.	Remarks
MW-1R	-1	8/26/14	1150	W			3	3	
MW-2R	-2	8/26/14	1310	W			3	3	

CHK BY DISTRIBUTION SUB-OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		8/27/14 1645
Relinquished by (signature):	Received by (signature): 8/29/14 8:15	Date/Time: 8/28/14 0930
Relinquished by (signature):	Received by (signature):	Date/Time:

SEND RESULTS TO:

Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\RMcCarthy\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\9G18HTVO\YSD 3rd qtrCOC.xlsx

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Chain of Custody and Cooler Receipt Form for 1420066 Page 2 of 2

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 17 06/05/14 Page 1 Of 1

Submission #: 14-20066

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☑ (Specify) on trac

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☐ Blue Ice ☑ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.97 Container: Voa Thermometer ID: 207 Date/Time 8/29/14
Temperature: (A) 12.2 °C / (C) 12.5 °C Analyst Init NS @ 8:15

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC	ABC	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: BP Date/Time: 8/29/14 1801 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC16
A = Actual / C = Corrected

Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 09/03/2014 12:51 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1420066-01	**COC Number:**	---	**Receive Date:**	08/29/2014 08:15
	Project Number:	Yuba Sutter	**Sampling Date:**	08/26/2014 11:50
	Sampling Location:	MW-1R	**Sample Depth:**	---
	Sampling Point:	MW-1R	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-1R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1420066-02	**COC Number:**	---	**Receive Date:**	08/29/2014 08:15
	Project Number:	Yuba Sutter	**Sampling Date:**	08/26/2014 13:10
	Sampling Location:	MW-2R	**Sample Depth:**	---
	Sampling Point:	MW-2R	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1420066-01 | **Client Sample Name:** Yuba Sutter, MW-1R, MW-1R, 8/26/2014 11:50:00AM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**1.0**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.93**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.36**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1420066-01 | **Client Sample Name:** Yuba Sutter, MW-1R, MW-1R, 8/26/2014 11:50:00AM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**0.17**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	**J**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	85.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	09/02/14	09/02/14 14:44	MGC	MS-V5	1	BXI0010

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1420066-02 | **Client Sample Name:** Yuba Sutter, MW-2R, MW-2R, 8/26/2014 1:10:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.52**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.81**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.16**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1420066-02 | **Client Sample Name:** Yuba Sutter, MW-2R, MW-2R, 8/26/2014 1:10:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**0.28**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	**J**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	88.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	09/02/14	09/02/14 15:06	MGC	MS-V5	1	BXI0010

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXI0010						
Benzene	BXI0010-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXI0010-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXI0010-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXI0010-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXI0010-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXI0010-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXI0010-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXI0010-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXI0010-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXI0010-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXI0010-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane (EDB)	BXI0010-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXI0010-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXI0010-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXI0010-BLK1	ND	ug/L	0.50	0.062	
1,1-Dichloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXI0010-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXI0010-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXI0010-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXI0010-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXI0010-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXI0010-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXI0010-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXI0010-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXI0010-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXI0010-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXI0010-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXI0010-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXI0010-BLK1	ND	ug/L	0.50	0.085	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXI0010						
Trichlorofluoromethane	BXI0010-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXI0010-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXI0010-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXI0010-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXI0010-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXI0010-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXI0010-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXI0010-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXI0010-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXI0010-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXI0010-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXI0010-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXI0010-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXI0010-BLK1**	**104**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXI0010-BLK1**	**101**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXI0010-BLK1**	**88.4**	%	**80 - 120 (LCL - UCL)**		

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Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXI0010										
Benzene	BXI0010-BS1	LCS	26.060	25.000	ug/L	104		70 - 130		
Bromodichloromethane	BXI0010-BS1	LCS	25.350	25.000	ug/L	101		70 - 130		
Chlorobenzene	BXI0010-BS1	LCS	25.580	25.000	ug/L	102		70 - 130		
Chloroethane	BXI0010-BS1	LCS	26.880	25.000	ug/L	108		70 - 130		
1,4-Dichlorobenzene	BXI0010-BS1	LCS	25.290	25.000	ug/L	101		70 - 130		
1,1-Dichloroethane	BXI0010-BS1	LCS	24.440	25.000	ug/L	97.8		70 - 130		
1,1-Dichloroethene	BXI0010-BS1	LCS	24.640	25.000	ug/L	98.6		70 - 130		
Toluene	BXI0010-BS1	LCS	25.240	25.000	ug/L	101		70 - 130		
Trichloroethene	BXI0010-BS1	LCS	24.410	25.000	ug/L	97.6		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXI0010-BS1	LCS	10.480	10.000	ug/L	105		75 - 125		
Toluene-d8 (Surrogate)	BXI0010-BS1	LCS	10.100	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXI0010-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 09/03/2014 12:51
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXI0010	Used client sample: N										
Benzene	MS	1420028-04	ND	26.740	25.000	ug/L		107		70 - 130	
	MSD	1420028-04	ND	26.790	25.000	ug/L	0.2	107	20	70 - 130	
Bromodichloromethane	MS	1420028-04	ND	26.630	25.000	ug/L		107		70 - 130	
	MSD	1420028-04	ND	26.420	25.000	ug/L	0.8	106	20	70 - 130	
Chlorobenzene	MS	1420028-04	ND	25.360	25.000	ug/L		101		70 - 130	
	MSD	1420028-04	ND	26.760	25.000	ug/L	5.4	107	20	70 - 130	
Chloroethane	MS	1420028-04	ND	27.340	25.000	ug/L		109		70 - 130	
	MSD	1420028-04	ND	27.820	25.000	ug/L	1.7	111	20	70 - 130	
1,4-Dichlorobenzene	MS	1420028-04	ND	23.950	25.000	ug/L		95.8		70 - 130	
	MSD	1420028-04	ND	25.190	25.000	ug/L	5.0	101	20	70 - 130	
1,1-Dichloroethane	MS	1420028-04	0.21000	25.090	25.000	ug/L		99.5		70 - 130	
	MSD	1420028-04	0.21000	25.790	25.000	ug/L	2.8	102	20	70 - 130	
1,1-Dichloroethene	MS	1420028-04	ND	24.690	25.000	ug/L		98.8		70 - 130	
	MSD	1420028-04	ND	25.150	25.000	ug/L	1.8	101	20	70 - 130	
Toluene	MS	1420028-04	ND	25.940	25.000	ug/L		104		70 - 130	
	MSD	1420028-04	ND	26.620	25.000	ug/L	2.6	106	20	70 - 130	
Trichloroethene	MS	1420028-04	ND	24.060	25.000	ug/L		96.2		70 - 130	
	MSD	1420028-04	ND	25.150	25.000	ug/L	4.4	101	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1420028-04	ND	10.660	10.000	ug/L		107		75 - 125	
	MSD	1420028-04	ND	9.9900	10.000	ug/L	6.5	99.9		75 - 125	
Toluene-d8 (Surrogate)	MS	1420028-04	ND	10.200	10.000	ug/L		102		80 - 120	
	MSD	1420028-04	ND	10.250	10.000	ug/L	0.5	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1420028-04	ND	9.5600	10.000	ug/L		95.6		80 - 120	
	MSD	1420028-04	ND	9.8900	10.000	ug/L	3.4	98.9		80 - 120	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 09/03/2014 12:51 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

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Date of Report: 01/08/2015

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	Yuba Sutter Disposal
BCL Work Order:	1430024
Invoice ID:	B192917

Enclosed are the results of analyses for samples received by the laboratory on 12/17/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430024-01 YSDI, S-1, S-1, 12/15/2014 12:55:00PM, S. Giacomini						
Benzene	2.0	0.50	0.083	ug/L	EPA-8260B	
Chlorobenzene	11	0.50	0.093	ug/L	EPA-8260B	
1,4-Dichlorobenzene	1.2	0.50	0.062	ug/L	EPA-8260B	
Ethylbenzene	1.8	0.50	0.098	ug/L	EPA-8260B	
Toluene	0.68	0.50	0.093	ug/L	EPA-8260B	
Total Xylenes	17	1.0	0.36	ug/L	EPA-8260B	
Acetone	17	10	4.6	ug/L	EPA-8260B	
Dissolved Calcium	100	0.50	0.080	mg/L	EPA-6010B	A10
Dissolved Magnesium	130	0.25	0.095	mg/L	EPA-6010B	A10
Dissolved Sodium	1000	2.5	0.26	mg/L	EPA-6010B	A01
Dissolved Potassium	690	5.0	0.50	mg/L	EPA-6010B	A10
Bicarbonate Alkalinity as CaCO3	4200	8.2	8.2	mg/L	EPA-310.1	
Chloride	1600	5.0	0.61	mg/L	EPA-300.0	A01
Sulfate	110	10	1.0	mg/L	EPA-300.0	A01
Total Dissolved Solids @ 180 C	6600	500	500	mg/L	EPA-160.1	
1430024-02 YSDI, S-2, S-2, 12/15/2014 1:40:00PM, S. Giacomini						
Benzene	0.25	0.50	0.083	ug/L	EPA-8260B	J
1,4-Dichlorobenzene	1.3	0.50	0.062	ug/L	EPA-8260B	
Toluene	1.3	0.50	0.093	ug/L	EPA-8260B	
Acetone	13	10	4.6	ug/L	EPA-8260B	
Dissolved Calcium	220	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	110	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	560	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	260	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	540	8.2	8.2	mg/L	EPA-310.1	
Chloride	820	2.5	0.30	mg/L	EPA-300.0	A01
Nitrate/Nitrite as N	150	10	1.4	mg/L	EPA-353.2	A01
Sulfate	170	5.0	0.50	mg/L	EPA-300.0	A01
Total Dissolved Solids @ 180 C	3300	200	200	mg/L	EPA-160.1	
1430024-03 YSDI, S-3, S-3, 12/15/2014 2:00:00PM, S. Giacomini						
Benzene	0.28	0.50	0.083	ug/L	EPA-8260B	J
Chlorobenzene	0.52	0.50	0.093	ug/L	EPA-8260B	
1,2-Dichlorobenzene	0.15	0.50	0.072	ug/L	EPA-8260B	J
1,4-Dichlorobenzene	1.7	0.50	0.062	ug/L	EPA-8260B	
Toluene	0.32	0.50	0.093	ug/L	EPA-8260B	J
Total Xylenes	0.45	1.0	0.36	ug/L	EPA-8260B	J
Acetone	16000	500	230	ug/L	EPA-8260B	A01

Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430024-03 YSDI, S-3, S-3, 12/15/2014 2:00:00PM, S. Giacomini						
2-Hexanone	320	10	3.4	ug/L	EPA-8260B	
2-Butanone	5500	500	120	ug/L	EPA-8260B	A01
Dissolved Calcium	30	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	59	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	340	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	200	1.0	0.10	mg/L	EPA-6010B	
Chloride	87	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.16	0.10	0.014	mg/L	EPA-353.2	
Sulfate	3.9	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	640	33	33	mg/L	EPA-160.1	
1430024-04 YSDI, S-4, S-4, 12/15/2014 2:25:00PM, S. Giacomini						
Benzene	3.5	0.50	0.083	ug/L	EPA-8260B	
Chlorobenzene	0.84	0.50	0.093	ug/L	EPA-8260B	
Chloroethane	0.51	0.50	0.14	ug/L	EPA-8260B	
1,2-Dichlorobenzene	0.29	0.50	0.072	ug/L	EPA-8260B	J
1,4-Dichlorobenzene	9.9	0.50	0.062	ug/L	EPA-8260B	
1,1-Dichloroethane	0.79	0.50	0.11	ug/L	EPA-8260B	
1,2-Dichloroethane	0.28	0.50	0.17	ug/L	EPA-8260B	J
cis-1,2-Dichloroethene	0.95	0.50	0.085	ug/L	EPA-8260B	
Ethylbenzene	4.7	0.50	0.098	ug/L	EPA-8260B	
Styrene	0.15	0.50	0.068	ug/L	EPA-8260B	J
Toluene	4.7	0.50	0.093	ug/L	EPA-8260B	
Vinyl chloride	1.5	0.50	0.12	ug/L	EPA-8260B	
Total Xylenes	17	1.0	0.36	ug/L	EPA-8260B	
Acetone	15	10	4.6	ug/L	EPA-8260B	
2-Hexanone	5.0	10	3.4	ug/L	EPA-8260B	J
Dissolved Calcium	210	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	250	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	550	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	130	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	1500	8.2	8.2	mg/L	EPA-310.1	
Chloride	1300	5.0	0.61	mg/L	EPA-300.0	A01
Nitrate/Nitrite as N	0.027	0.10	0.014	mg/L	EPA-353.2	J
Sulfate	43	10	1.0	mg/L	EPA-300.0	A01
Total Dissolved Solids @ 180 C	4000	200	200	mg/L	EPA-160.1	
1430024-05 YSDI, S-5, S-5, 12/15/2014 2:45:00PM, S. Giacomini						
Benzene	0.63	0.50	0.083	ug/L	EPA-8260B	

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430024-05 YSDI, S-5, S-5, 12/15/2014 2:45:00PM, S. Giacomini						
Chlorobenzene	0.13	0.50	0.093	ug/L	EPA-8260B	J
1,2-Dichlorobenzene	0.18	0.50	0.072	ug/L	EPA-8260B	J
1,4-Dichlorobenzene	5.7	0.50	0.062	ug/L	EPA-8260B	
1,1-Dichloroethane	0.19	0.50	0.11	ug/L	EPA-8260B	J
Ethylbenzene	0.21	0.50	0.098	ug/L	EPA-8260B	J
Toluene	0.32	0.50	0.093	ug/L	EPA-8260B	J
Vinyl chloride	0.16	0.50	0.12	ug/L	EPA-8260B	J
Total Xylenes	1.7	1.0	0.36	ug/L	EPA-8260B	
Acetone	25	10	4.6	ug/L	EPA-8260B	
Dissolved Calcium	260	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	320	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	770	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	130	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	1500	8.2	8.2	mg/L	EPA-310.1	
Chloride	1600	5.0	0.61	mg/L	EPA-300.0	A01
Sulfate	21	10	1.0	mg/L	EPA-300.0	A10
Total Dissolved Solids @ 180 C	4700	200	200	mg/L	EPA-160.1	

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Golder Associates

Golder Associates Inc.

CHAIN OF CUSTODY

14-230024

Page 1 of 1

Quotation No.

PROJECT AND PHASE NO.:	SITE NAME:
053744214	YSDI

SAMPLER SIGNATURE(S):

CONTRACT LABORATORY: BC-Labs

TURN-AROUND TIME: Standard

EDD Required? Yes

EDF Required? Yes

ANALYSES

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info	YSD 8260, short list	TDS,Chloride. Sulfate, Carbonate, Bicarbonate	Nitrate+Nitrite as N	Ca, Mg, Na, K	Cont. Qty.	Remarks
						Type	voa	PE	PE	PE		
						Volume	40 ml	16 oz	2 oz.	16 oz		
						Filter	N	N	N	Y		
						Preserv.	HCl	none	H2SO4	HNO3		
S-1	-1	12/15/2014	1255	w			3	1	1	1	6	
S-2	-2	12/15/2014	1340	w			3	1	1	1	6	
S-3	-3	12/15/2014	1400	w			3	1	1	1	6	
S-4	-4	12/15/2014	1425	w			3	1	1	1	6	
S-5	-5	12/15/2014	1445	w			3	1	1	1	6	

CHK BY DISTRIBUTION
MAMUSK
SUB-OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		12/15/14 1030
	12/15/14 0840	12/16/14 1430

SEND RESULTS TO:

Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\sgiacomini\Documents\coc\YSD SACOC 4 qtr.xlsx

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Chain of Custody and Cooler Receipt Form for 1430024 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 14-30024

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☑ (Specify) Ontrac

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: PE Thermometer ID: 208
Temperature: (A) 1.2 °C / (C) 0.8 °C

Date/Time 12/17/14 0930
Analyst Init MB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	D	D	D	D	D					
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	E	E	E	E	E					
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE	F	F	F	F	F					
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC	ABC	ABC	ABC	ABC					
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: MM Date/Time: 12/17/14@0930 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430024-01	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:55
	Sampling Location:	S-1	**Sample Depth:**	---
	Sampling Point:	S-1	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): S-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430024-02	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 13:40
	Sampling Location:	S-2	**Sample Depth:**	---
	Sampling Point:	S-2	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): S-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430024-03	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 14:00
	Sampling Location:	S-3	**Sample Depth:**	---
	Sampling Point:	S-3	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): S-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 01/08/2015 17:09 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430024-04	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 14:25
	Sampling Location:	S-4	**Sample Depth:**	---
	Sampling Point:	S-4	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): S-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430024-05	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 14:45
	Sampling Location:	S-5	**Sample Depth:**	---
	Sampling Point:	S-5	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): S-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-01 | **Client Sample Name:** YSDI, S-1, S-1, 12/15/2014 12:55:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**2.0**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**11**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**1.2**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	**1.8**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	**0.68**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-01 | **Client Sample Name:** YSDI, S-1, S-1, 12/15/2014 12:55:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	**17**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND		1
Acetone	**17**	**ug/L**	**10**	**4.6**	**EPA-8260B**	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	91.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 07:00	JPT	MS-V5	1	BXL1875

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430024-01 | **Client Sample Name:** YSDI, S-1, S-1, 12/15/2014 12:55:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**100**	**mg/L**	**0.50**	**0.080**	**EPA-6010B**	ND	**A10**	1
Dissolved Magnesium	**130**	**mg/L**	**0.25**	**0.095**	**EPA-6010B**	ND	**A10**	1
Dissolved Sodium	**1000**	**mg/L**	**2.5**	**0.26**	**EPA-6010B**	ND	**A01**	1
Dissolved Potassium	**690**	**mg/L**	**5.0**	**0.50**	**EPA-6010B**	ND	**A10**	1
Bicarbonate Alkalinity as CaCO3	**4200**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Chloride	**1600**	**mg/L**	**5.0**	**0.61**	**EPA-300.0**	ND	**A01**	3
Nitrate/Nitrite as N	ND	mg/L	0.10	0.014	EPA-353.2	ND		4
Sulfate	**110**	**mg/L**	**10**	**1.0**	**EPA-300.0**	ND	**A01**	3
Total Dissolved Solids @ 180 C	**6600**	**mg/L**	**500**	**500**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	01/07/15 10:08	ARD	PE-OP3	5	BYA0236
2	EPA-310.1	12/22/14	12/22/14 14:44	RML	MET-1	2	BXL2104
3	EPA-300.0	12/30/14	12/30/14 18:33	BMW	IC1	10	BXL2784
4	EPA-353.2	12/17/14	12/18/14 09:08	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 09:00	CAD	MANUAL	50	BXL1777

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-02 | **Client Sample Name:** YSDI, S-2, S-2, 12/15/2014 1:40:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.25**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**J**	1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**1.3**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	**1.3**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-02 | **Client Sample Name:** YSDI, S-2, S-2, 12/15/2014 1:40:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	**13**	**ug/L**	**10**	**4.6**	**EPA-8260B**	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	89.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 07:23	JPT	MS-V5	1	BXL1875

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430024-02 | **Client Sample Name:** YSDI, S-2, S-2, 12/15/2014 1:40:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**220**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**110**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Dissolved Sodium	**560**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.13		1
Dissolved Potassium	**260**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**540**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Chloride	**820**	**mg/L**	**2.5**	**0.30**	**EPA-300.0**	ND	**A01**	3
Nitrate/Nitrite as N	**150**	**mg/L**	**10**	**1.4**	**EPA-353.2**	ND	**A01**	4
Sulfate	**170**	**mg/L**	**5.0**	**0.50**	**EPA-300.0**	ND	**A01**	3
Total Dissolved Solids @ 180 C	**3300**	**mg/L**	**200**	**200**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 13:59	ARD	PE-OP3	1	BXL1826
2	EPA-310.1	12/22/14	12/22/14 14:56	RML	MET-1	2	BXL2104
3	EPA-300.0	12/30/14	12/30/14 18:48	BMW	IC1	5	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:37	JP1	SC-1	100	BXL1668
5	EPA-160.1	12/19/14	12/19/14 09:00	CAD	MANUAL	20	BXL1777

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Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-03 | **Client Sample Name:** YSDI, S-3, S-3, 12/15/2014 2:00:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.28**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**J**	1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.52**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	**0.15**	**ug/L**	**0.50**	**0.072**	**EPA-8260B**	ND	**J**	1
1,4-Dichlorobenzene	**1.7**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	**0.32**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J**	1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-03 | **Client Sample Name:** YSDI, S-3, S-3, 12/15/2014 2:00:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	**0.45**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND	**J**	1
Acetone	**16000**	**ug/L**	**500**	**230**	**EPA-8260B**	ND	**A01**	2
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	**320**	**ug/L**	**10**	**3.4**	**EPA-8260B**	ND		1
2-Butanone	**5500**	**ug/L**	**500**	**120**	**EPA-8260B**	ND	**A01**	2
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	94.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	93.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.3	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 07:46	JPT	MS-V5	1	BXL1875
2	EPA-8260B	12/19/14	12/23/14 17:37	JPT	MS-V5	50	BXL1875

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430024-03 | **Client Sample Name:** YSDI, S-3, S-3, 12/15/2014 2:00:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**30**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**59**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Dissolved Sodium	**340**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.13		1
Dissolved Potassium	**200**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**87**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.16**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**3.9**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**640**	**mg/L**	**33**	**33**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:01	ARD	PE-OP3	1	BXL1826
2	EPA-310.1	12/22/14	12/22/14 15:02	RML	MET-1	1	BXL2104
3	EPA-300.0	12/30/14	12/30/14 19:03	BMW	IC1	1	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:38	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 09:00	CAD	MANUAL	3.333	BXL1777

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Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-04 | **Client Sample Name:** YSDI, S-4, S-4, 12/15/2014 2:25:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**3.5**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.84**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	**0.51**	**ug/L**	**0.50**	**0.14**	**EPA-8260B**	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	**0.29**	**ug/L**	**0.50**	**0.072**	**EPA-8260B**	ND	**J**	1
1,4-Dichlorobenzene	**9.9**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	**0.79**	**ug/L**	**0.50**	**0.11**	**EPA-8260B**	ND		1
1,2-Dichloroethane	**0.28**	**ug/L**	**0.50**	**0.17**	**EPA-8260B**	ND	**J**	1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.95**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	**4.7**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	**0.15**	**ug/L**	**0.50**	**0.068**	**EPA-8260B**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	**4.7**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-04 | **Client Sample Name:** YSDI, S-4, S-4, 12/15/2014 2:25:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**1.5**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND		1
Total Xylenes	**17**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND		1
Acetone	**15**	**ug/L**	**10**	**4.6**	**EPA-8260B**	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	**5.0**	**ug/L**	**10**	**3.4**	**EPA-8260B**	ND	**J**	1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/23/14 15:45	JPT	MS-V5	1	BXL1625

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430024-04 | **Client Sample Name:** YSDI, S-4, S-4, 12/15/2014 2:25:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**210**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**250**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Dissolved Sodium	**550**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	ND		1
Dissolved Potassium	**130**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**1500**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Chloride	**1300**	**mg/L**	**5.0**	**0.61**	**EPA-300.0**	ND	**A01**	3
Nitrate/Nitrite as N	**0.027**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND	**J**	4
Sulfate	**43**	**mg/L**	**10**	**1.0**	**EPA-300.0**	ND	**A01**	3
Total Dissolved Solids @ 180 C	**4000**	**mg/L**	**200**	**200**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	01/07/15 10:17	ARD	PE-OP3	1	BYA0236
2	EPA-310.1	12/22/14	12/22/14 15:07	RML	MET-1	2	BXL2104
3	EPA-300.0	12/30/14	12/30/14 19:18	BMW	IC1	10	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:40	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 09:00	CAD	MANUAL	20	BXL1777

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Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-05 | **Client Sample Name:** YSDI, S-5, S-5, 12/15/2014 2:45:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.63**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.13**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J**	1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	**0.18**	**ug/L**	**0.50**	**0.072**	**EPA-8260B**	ND	**J**	1
1,4-Dichlorobenzene	**5.7**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	**0.19**	**ug/L**	**0.50**	**0.11**	**EPA-8260B**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	**0.21**	**ug/L**	**0.50**	**0.098**	**EPA-8260B**	ND	**J**	1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	**0.32**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J**	1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430024-05 | **Client Sample Name:** YSDI, S-5, S-5, 12/15/2014 2:45:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**0.16**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	**J**	1
Total Xylenes	**1.7**	**ug/L**	**1.0**	**0.36**	**EPA-8260B**	ND		1
Acetone	**25**	**ug/L**	**10**	**4.6**	**EPA-8260B**	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/23/14 16:07	JPT	MS-V5	1	BXL1625

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Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430024-05 | **Client Sample Name:** YSDI, S-5, S-5, 12/15/2014 2:45:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**260**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**320**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Dissolved Sodium	**770**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	ND		1
Dissolved Potassium	**130**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**1500**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Chloride	**1600**	**mg/L**	**5.0**	**0.61**	**EPA-300.0**	ND	**A01**	3
Nitrate/Nitrite as N	ND	mg/L	0.10	0.014	EPA-353.2	ND		4
Sulfate	**21**	**mg/L**	**10**	**1.0**	**EPA-300.0**	ND	**A10**	3
Total Dissolved Solids @ 180 C	**4700**	**mg/L**	**200**	**200**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	01/07/15 10:18	ARD	PE-OP3	1	BYA0236
2	EPA-310.1	12/22/14	12/22/14 15:14	RML	MET-1	2	BXL2104
3	EPA-300.0	12/30/14	12/30/14 20:02	BMW	IC1	10	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:41	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 09:00	CAD	MANUAL	20	BXL1777

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Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1625						
Benzene	BXL1625-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXL1625-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXL1625-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXL1625-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXL1625-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXL1625-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXL1625-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane (EDB)	BXL1625-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXL1625-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXL1625-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXL1625-BLK1	ND	ug/L	0.50	0.062	
1,1-Dichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXL1625-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXL1625-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXL1625-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXL1625-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXL1625-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXL1625-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXL1625-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.085	

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Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1625						
Trichlorofluoromethane	BXL1625-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXL1625-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXL1625-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXL1625-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXL1625-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXL1625-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXL1625-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXL1625-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXL1625-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXL1625-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXL1625-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXL1625-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXL1625-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXL1625-BLK1**	**103**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXL1625-BLK1**	**98.6**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXL1625-BLK1**	**89.9**	%	**80 - 120 (LCL - UCL)**		
QC Batch ID: BXL1875						
Benzene	BXL1875-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXL1875-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXL1875-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXL1875-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXL1875-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXL1875-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXL1875-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXL1875-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXL1875-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXL1875-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXL1875-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane (EDB)	BXL1875-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXL1875-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXL1875-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXL1875-BLK1	ND	ug/L	0.50	0.062	

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Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1875						
1,1-Dichloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXL1875-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXL1875-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXL1875-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXL1875-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXL1875-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXL1875-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXL1875-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXL1875-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXL1875-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXL1875-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXL1875-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXL1875-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXL1875-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BXL1875-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXL1875-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXL1875-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXL1875-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXL1875-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXL1875-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXL1875-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXL1875-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXL1875-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXL1875-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXL1875-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXL1875-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXL1875-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXL1875-BLK1**	**96.0**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXL1875-BLK1**	**100**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXL1875-BLK1**	**89.0**	%	**80 - 120 (LCL - UCL)**		

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Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1625										
Benzene	BXL1625-BS1	LCS	25.630	25.000	ug/L	103		70 - 130		
Bromodichloromethane	BXL1625-BS1	LCS	26.840	25.000	ug/L	107		70 - 130		
Chlorobenzene	BXL1625-BS1	LCS	26.350	25.000	ug/L	105		70 - 130		
Chloroethane	BXL1625-BS1	LCS	24.530	25.000	ug/L	98.1		70 - 130		
1,4-Dichlorobenzene	BXL1625-BS1	LCS	24.890	25.000	ug/L	99.6		70 - 130		
1,1-Dichloroethane	BXL1625-BS1	LCS	24.610	25.000	ug/L	98.4		70 - 130		
1,1-Dichloroethene	BXL1625-BS1	LCS	25.100	25.000	ug/L	100		70 - 130		
Toluene	BXL1625-BS1	LCS	24.580	25.000	ug/L	98.3		70 - 130		
Trichloroethene	BXL1625-BS1	LCS	25.010	25.000	ug/L	100		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXL1625-BS1	LCS	10.050	10.000	ug/L	100		75 - 125		
Toluene-d8 (Surrogate)	BXL1625-BS1	LCS	9.8600	10.000	ug/L	98.6		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXL1625-BS1	LCS	9.5800	10.000	ug/L	95.8		80 - 120		
QC Batch ID: BXL1875										
Benzene	BXL1875-BS1	LCS	27.770	25.000	ug/L	111		70 - 130		
Bromodichloromethane	BXL1875-BS1	LCS	29.950	25.000	ug/L	120		70 - 130		
Chlorobenzene	BXL1875-BS1	LCS	28.980	25.000	ug/L	116		70 - 130		
Chloroethane	BXL1875-BS1	LCS	25.700	25.000	ug/L	103		70 - 130		
1,4-Dichlorobenzene	BXL1875-BS1	LCS	26.800	25.000	ug/L	107		70 - 130		
1,1-Dichloroethane	BXL1875-BS1	LCS	26.820	25.000	ug/L	107		70 - 130		
1,1-Dichloroethene	BXL1875-BS1	LCS	27.860	25.000	ug/L	111		70 - 130		
Toluene	BXL1875-BS1	LCS	27.490	25.000	ug/L	110		70 - 130		
Trichloroethene	BXL1875-BS1	LCS	28.400	25.000	ug/L	114		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXL1875-BS1	LCS	9.8900	10.000	ug/L	98.9		75 - 125		
Toluene-d8 (Surrogate)	BXL1875-BS1	LCS	10.120	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXL1875-BS1	LCS	9.5300	10.000	ug/L	95.3		80 - 120		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1625	Used client sample: N										
Benzene	MS	1429866-01	ND	26.690	25.000	ug/L		107		70 - 130	
	MSD	1429866-01	ND	26.070	25.000	ug/L	2.4	104	20	70 - 130	
Bromodichloromethane	MS	1429866-01	ND	28.580	25.000	ug/L		114		70 - 130	
	MSD	1429866-01	ND	27.900	25.000	ug/L	2.4	112	20	70 - 130	
Chlorobenzene	MS	1429866-01	ND	27.210	25.000	ug/L		109		70 - 130	
	MSD	1429866-01	ND	27.260	25.000	ug/L	0.2	109	20	70 - 130	
Chloroethane	MS	1429866-01	ND	25.640	25.000	ug/L		103		70 - 130	
	MSD	1429866-01	ND	25.320	25.000	ug/L	1.3	101	20	70 - 130	
1,4-Dichlorobenzene	MS	1429866-01	ND	25.570	25.000	ug/L		102		70 - 130	
	MSD	1429866-01	ND	25.630	25.000	ug/L	0.2	103	20	70 - 130	
1,1-Dichloroethane	MS	1429866-01	ND	26.050	25.000	ug/L		104		70 - 130	
	MSD	1429866-01	ND	26.110	25.000	ug/L	0.2	104	20	70 - 130	
1,1-Dichloroethene	MS	1429866-01	ND	26.770	25.000	ug/L		107		70 - 130	
	MSD	1429866-01	ND	26.090	25.000	ug/L	2.6	104	20	70 - 130	
Toluene	MS	1429866-01	ND	26.690	25.000	ug/L		107		70 - 130	
	MSD	1429866-01	ND	25.790	25.000	ug/L	3.4	103	20	70 - 130	
Trichloroethene	MS	1429866-01	ND	26.590	25.000	ug/L		106		70 - 130	
	MSD	1429866-01	ND	26.570	25.000	ug/L	0.1	106	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1429866-01	ND	10.170	10.000	ug/L		102		75 - 125	
	MSD	1429866-01	ND	10.050	10.000	ug/L	1.2	100		75 - 125	
Toluene-d8 (Surrogate)	MS	1429866-01	ND	9.7500	10.000	ug/L		97.5		80 - 120	
	MSD	1429866-01	ND	9.8900	10.000	ug/L	1.4	98.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1429866-01	ND	9.5900	10.000	ug/L		95.9		80 - 120	
	MSD	1429866-01	ND	9.9600	10.000	ug/L	3.8	99.6		80 - 120	
QC Batch ID: BXL1875	Used client sample: N										
Benzene	MS	1429897-01	0.090000	21.210	25.000	ug/L		84.5		70 - 130	
	MSD	1429897-01	0.090000	21.130	25.000	ug/L	0.4	84.2	20	70 - 130	
Bromodichloromethane	MS	1429897-01	ND	22.690	25.000	ug/L		90.8		70 - 130	
	MSD	1429897-01	ND	23.190	25.000	ug/L	2.2	92.8	20	70 - 130	
Chlorobenzene	MS	1429897-01	ND	22.240	25.000	ug/L		89.0		70 - 130	
	MSD	1429897-01	ND	22.220	25.000	ug/L	0.1	88.9	20	70 - 130	
Chloroethane	MS	1429897-01	ND	19.510	25.000	ug/L		78.0		70 - 130	
	MSD	1429897-01	ND	19.450	25.000	ug/L	0.3	77.8	20	70 - 130	
1,4-Dichlorobenzene	MS	1429897-01	ND	20.040	25.000	ug/L		80.2		70 - 130	
	MSD	1429897-01	ND	19.750	25.000	ug/L	1.5	79.0	20	70 - 130	
1,1-Dichloroethane	MS	1429897-01	ND	20.610	25.000	ug/L		82.4		70 - 130	
	MSD	1429897-01	ND	20.910	25.000	ug/L	1.4	83.6	20	70 - 130	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1875	Used client sample: N										
1,1-Dichloroethene	MS	1429897-01	ND	21.560	25.000	ug/L		86.2		70 - 130	
	MSD	1429897-01	ND	20.980	25.000	ug/L	2.7	83.9	20	70 - 130	
Toluene	MS	1429897-01	0.13000	21.860	25.000	ug/L		86.9		70 - 130	
	MSD	1429897-01	0.13000	20.820	25.000	ug/L	4.9	82.8	20	70 - 130	
Trichloroethene	MS	1429897-01	ND	22.180	25.000	ug/L		88.7		70 - 130	
	MSD	1429897-01	ND	21.640	25.000	ug/L	2.5	86.6	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1429897-01	ND	10.000	10.000	ug/L		100		75 - 125	
	MSD	1429897-01	ND	10.380	10.000	ug/L	3.7	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1429897-01	ND	10.250	10.000	ug/L		102		80 - 120	
	MSD	1429897-01	ND	10.180	10.000	ug/L	0.7	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1429897-01	ND	9.3900	10.000	ug/L		93.9		80 - 120	
	MSD	1429897-01	ND	9.7200	10.000	ug/L	3.5	97.2		80 - 120	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1668						
Nitrate/Nitrite as N	BXL1668-BLK1	ND	mg/L	0.10	0.014	
QC Batch ID: BXL1777						
Total Dissolved Solids @ 180 C	BXL1777-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BXL1826						
Dissolved Calcium	BXL1826-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BXL1826-BLK1	ND	mg/L	0.050	0.019	
Dissolved Sodium	**BXL1826-BLK1**	**0.12592**	**mg/L**	**0.50**	**0.051**	**J**
Dissolved Potassium	BXL1826-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BXL2104						
Bicarbonate Alkalinity as CaCO3	BXL2104-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BXL2104-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BXL2784						
Chloride	BXL2784-BLK1	ND	mg/L	0.50	0.061	
Sulfate	BXL2784-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYA0236						
Dissolved Calcium	BYA0236-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BYA0236-BLK1	ND	mg/L	0.050	0.019	
Dissolved Sodium	BYA0236-BLK1	ND	mg/L	0.50	0.051	
Dissolved Potassium	BYA0236-BLK1	ND	mg/L	1.0	0.10	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1668										
Nitrate/Nitrite as N	BXL1668-BS1	LCS	2.0559	2.0000	mg/L	103		90 - 110		
QC Batch ID: BXL1777										
Total Dissolved Solids @ 180 C	BXL1777-BS1	LCS	545.00	586.00	mg/L	93.0		90 - 110		
QC Batch ID: BXL1826										
Dissolved Calcium	BXL1826-BS1	LCS	9.8538	10.000	mg/L	98.5		85 - 115		
Dissolved Magnesium	BXL1826-BS1	LCS	10.491	10.000	mg/L	105		85 - 115		
Dissolved Sodium	BXL1826-BS1	LCS	10.195	10.000	mg/L	102		85 - 115		
Dissolved Potassium	BXL1826-BS1	LCS	9.9961	10.000	mg/L	100		85 - 115		
QC Batch ID: BXL2784										
Chloride	BXL2784-BS1	LCS	51.538	50.000	mg/L	103		90 - 110		
Sulfate	BXL2784-BS1	LCS	103.32	100.00	mg/L	103		90 - 110		
QC Batch ID: BYA0236										
Dissolved Calcium	BYA0236-BS1	LCS	9.6969	10.000	mg/L	97.0		85 - 115		
Dissolved Magnesium	BYA0236-BS1	LCS	10.322	10.000	mg/L	103		85 - 115		
Dissolved Sodium	BYA0236-BS1	LCS	9.7679	10.000	mg/L	97.7		85 - 115		
Dissolved Potassium	BYA0236-BS1	LCS	9.9153	10.000	mg/L	99.2		85 - 115		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1668	Used client sample: Y - Description: S-1, 12/15/2014 12:55										
Nitrate/Nitrite as N	DUP	1430024-01	ND	ND		mg/L			10		
	MS	1430024-01	ND	2.0524	2.1053	mg/L		97.5		90 - 110	
	MSD	1430024-01	ND	2.0866	2.1053	mg/L	1.7	99.1	10	90 - 110	
QC Batch ID: BXL1777	Used client sample: Y - Description: Sump-2A, 12/12/2014 11:25										
Total Dissolved Solids @ 180 C	DUP	1430023-01	4600.0	4600.0		mg/L	0		10		
QC Batch ID: BXL1826	Used client sample: N										
Dissolved Calcium	DUP	**1430013-01**	**148.06**	**145.24**		**mg/L**	**1.9**		**20**		
	MS	**1430013-01**	**148.06**	**155.58**	**10.204**	**mg/L**		**73.7**		**75 - 125**	**A03**
	MSD	**1430013-01**	**148.06**	**155.98**	**10.204**	**mg/L**	**0.3**	**77.6**	**20**	**75 - 125**	
Dissolved Magnesium	DUP	1430013-01	54.916	53.685		mg/L	2.3		20		
	MS	1430013-01	54.916	65.771	10.204	mg/L		106		75 - 125	
	MSD	1430013-01	54.916	66.083	10.204	mg/L	0.5	109	20	75 - 125	
Dissolved Sodium	DUP	1430013-01	49.422	48.267		mg/L	2.4		20		
	MS	1430013-01	49.422	59.415	10.204	mg/L		97.9		75 - 125	
	MSD	1430013-01	49.422	59.804	10.204	mg/L	0.7	102	20	75 - 125	
Dissolved Potassium	DUP	1430013-01	3.7819	3.8317		mg/L	1.3		20		
	MS	1430013-01	3.7819	14.770	10.204	mg/L		108		75 - 125	
	MSD	1430013-01	3.7819	14.760	10.204	mg/L	0.1	108	20	75 - 125	
QC Batch ID: BXL2104	Used client sample: Y - Description: Sump-2A, 12/12/2014 11:25										
Bicarbonate Alkalinity as CaCO3	DUP	1430023-01	1568.2	1576.7		mg/L	0.5		10		
Carbonate Alkalinity as CaCO3	DUP	1430023-01	ND	ND		mg/L			10		
QC Batch ID: BXL2784	Used client sample: Y - Description: LD-3B, 12/12/2014 13:25										
Chloride	DUP	1430023-05	26.557	26.464		mg/L	0.4		10		
	MS	1430023-05	26.557	79.909	50.505	mg/L		106		80 - 120	
	MSD	1430023-05	26.557	80.238	50.505	mg/L	0.4	106	10	80 - 120	
Sulfate	DUP	1430023-05	62.152	62.129		mg/L	0.0		10		
	MS	1430023-05	62.152	171.31	101.01	mg/L		108		80 - 120	
	MSD	1430023-05	62.152	171.41	101.01	mg/L	0.1	108	10	80 - 120	
QC Batch ID: BYA0236	Used client sample: N										
Dissolved Calcium	DUP	1500165-01	59.401	56.303		mg/L	5.4		20		
	MS	1500165-01	59.401	68.729	10.204	mg/L		91.4		75 - 125	
	MSD	1500165-01	59.401	70.413	10.204	mg/L	2.4	108	20	75 - 125	
Dissolved Magnesium	DUP	1500165-01	19.987	20.007		mg/L	0.1		20		
	MS	1500165-01	19.987	30.658	10.204	mg/L		105		75 - 125	
	MSD	1500165-01	19.987	31.537	10.204	mg/L	2.8	113	20	75 - 125	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/08/2015 17:09
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYA0236	Used client sample: N										
Dissolved Sodium	DUP	1500165-01	68.702	64.892		mg/L	5.7		20		
	MS	1500165-01	68.702	77.714	10.204	mg/L		88.3		75 - 125	
	MSD	1500165-01	68.702	79.192	10.204	mg/L	1.9	103	20	75 - 125	
Dissolved Potassium	DUP	1500165-01	5.7238	5.5955		mg/L	2.3		20		
	MS	1500165-01	5.7238	15.332	10.204	mg/L		94.2		75 - 125	
	MSD	1500165-01	5.7238	15.886	10.204	mg/L	3.6	99.6	20	75 - 125	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 01/08/2015 17:09 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A03	The sample concentration is more than 4 times the spike level.
A10	PQL's and MDL's were raised due to matrix interference.

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Date of Report: 01/07/2015

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	Yuba Sutter Disposal
BCL Work Order:	1430025
Invoice ID:	B192696

Enclosed are the results of analyses for samples received by the laboratory on 12/17/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430025-01 YSDI, SW-2, SW-2, 12/15/2014 12:00:00PM, S. Giacomini						
Total Calcium	11	0.10	0.015	mg/L	EPA-6010B	
Total Magnesium	4.3	0.050	0.019	mg/L	EPA-6010B	
Total Sodium	3.3	0.50	0.051	mg/L	EPA-6010B	
Total Potassium	0.64	1.0	0.13	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	42	4.1	4.1	mg/L	EPA-310.1	
Chloride	2.1	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.19	0.10	0.014	mg/L	EPA-353.2	
Sulfate	5.0	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	82	6.7	6.7	mg/L	EPA-160.1	
Total Suspended Solids (Glass Fiber)	5.6	0.96	0.96	mg/L	EPA-160.2	
Non-Volatile Organic Carbon	1.9	1.0	0.30	mg/L	EPA-415.1	
1430025-02 YSDI, SW-3, SW-3, 12/15/2014 12:20:00PM, S. Giacomini						
Total Calcium	64	0.10	0.015	mg/L	EPA-6010B	
Total Magnesium	16	0.050	0.019	mg/L	EPA-6010B	
Total Sodium	13	0.50	0.051	mg/L	EPA-6010B	
Total Potassium	11	1.0	0.13	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	130	4.1	4.1	mg/L	EPA-310.1	
Chloride	8.5	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.61	0.10	0.014	mg/L	EPA-353.2	
Sulfate	19	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	230	20	20	mg/L	EPA-160.1	
Total Suspended Solids (Glass Fiber)	580	10	10	mg/L	EPA-160.2	
Non-Volatile Organic Carbon	21	20	6.0	mg/L	EPA-415.1	A01
1430025-03 YSDI, SW-4, SW-4, 12/15/2014 12:40:00PM, S. Giacomini						
Total Calcium	5.4	0.10	0.015	mg/L	EPA-6010B	
Total Magnesium	3.3	0.050	0.019	mg/L	EPA-6010B	
Total Sodium	2.8	0.50	0.051	mg/L	EPA-6010B	
Total Potassium	3.0	1.0	0.13	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	27	4.1	4.1	mg/L	EPA-310.1	
Chloride	1.2	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.12	0.10	0.014	mg/L	EPA-353.2	
Sulfate	2.0	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	54	6.7	6.7	mg/L	EPA-160.1	
Total Suspended Solids (Glass Fiber)	5.2	1.0	1.0	mg/L	EPA-160.2	
Non-Volatile Organic Carbon	12	2.0	0.60	mg/L	EPA-415.1	A01

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Golder Associates Inc.

Golder Associates

CHAIN OF CUSTODY

14-39025

Page___of

Quotation No.

PROJECT AND PHASE NO.:	053744214
SITE NAME:	YSDI
SAMPLER SIGNATURE(S):	
CONTRACT LABORATORY:	BC-Labs
TURN-AROUND TIME:	Standard

EDD Required? Yes

EDF Required? Yes

ANALYSES

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info	YSD 8260, short list	TDS, TSS,Chloride. Sulfate, Carbonate, Bicarbonate	Nitrate+Nitrite as N	Ca, Mg, Na, K	TOC	Cont. Qty.	Remarks
						Type	voa	PE	PE	PE	glass		
						Volume	40 ml	16 oz	2 oz.	16 oz	16 oz		
						Filter	N	N	N	N	N		
						Preserv.	HCl	none	H2SO4	HNO3	H2SO4		
SW-2	-1	12/15/2014	1220	w			3	1	1	1	1	7	
SW-3	-2	12/15/2014	1220	w			3	1	1	1	1	7	
SW-4	-3	12/15/2014	1240	w			3	1	1	1	1	7	

CHK BY MM DISTRIBUTION MATRIX SUB OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
[signature]		12/16/14 1030
[signature]	[signature] 12/17/14 0840	12/16/14 1430

SEND RESULTS TO:

Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\sgiacomini\Documents\coc\YSD SACOC 4 qtr.xlsx

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Chain of Custody and Cooler Receipt Form for 1430025 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 14-39025

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☑ (Specify) Airtran

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time 12/17/14 0830
Temperature: (A) 1.2 °C / (C) 0.8 °C Analyst Init MB

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	D	D	D							
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	E	E	E							
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE	F	F	F							
PT TOTAL ORGANIC CARBON	G	G	G							
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC	ABC	ABC							
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: MM Date/Time: 12/17/14@0930 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430025-01	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:00
	Sampling Location:	SW-2	**Sample Depth:**	---
	Sampling Point:	SW-2	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): SW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430025-02	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:20
	Sampling Location:	SW-3	**Sample Depth:**	---
	Sampling Point:	SW-3	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): SW-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430025-03	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:40
	Sampling Location:	SW-4	**Sample Depth:**	---
	Sampling Point:	SW-4	**Lab Matrix:**	Water
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): SW-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430025-01 | **Client Sample Name:** YSDI, SW-2, SW-2, 12/15/2014 12:00:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430025-01 | **Client Sample Name:** YSDI, SW-2, SW-2, 12/15/2014 12:00:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/18/14	12/23/14 23:23	JCC	MS-V14	1	BXL1768

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430025-01 | **Client Sample Name:** YSDI, SW-2, SW-2, 12/15/2014 12:00:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**11**	**mg/L**	**0.10**	**0.015**	**EPA-6010B**	ND		1
Total Magnesium	**4.3**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Total Sodium	**3.3**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	ND		1
Total Potassium	**0.64**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**42**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**2.1**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.19**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**5.0**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**82**	**mg/L**	**6.7**	**6.7**	**EPA-160.1**	ND		5
Total Suspended Solids (Glass Fiber)	**5.6**	**mg/L**	**0.96**	**0.96**	**EPA-160.2**	ND		6
Non-Volatile Organic Carbon	**1.9**	**mg/L**	**1.0**	**0.30**	**EPA-415.1**	ND		7

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/31/14	01/02/15 10:00	ARD	PE-OP3	1	BXL2769
2	EPA-310.1	12/22/14	12/22/14 15:49	RML	MET-1	1	BXL2105
3	EPA-300.0	12/30/14	12/30/14 20:17	BMW	IC1	1	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:42	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 13:00	CAD	MANUAL	0.667	BXL1887
6	EPA-160.2	12/22/14	12/22/14 10:30	VV1	MANUAL	1.923	BXL2116
7	EPA-415.1	12/18/14	12/18/14 20:06	ALW	TOC2	1	BXL1696

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430025-02 | **Client Sample Name:** YSDI, SW-3, SW-3, 12/15/2014 12:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430025-02 | **Client Sample Name:** YSDI, SW-3, SW-3, 12/15/2014 12:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/18/14	12/20/14 07:45	JCC	MS-V14	1	BXL1768

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430025-02 | **Client Sample Name:** YSDI, SW-3, SW-3, 12/15/2014 12:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**64**	**mg/L**	**0.10**	**0.015**	**EPA-6010B**	ND		1
Total Magnesium	**16**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Total Sodium	**13**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	ND		1
Total Potassium	**11**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**130**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**8.5**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.61**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**19**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**230**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5
Total Suspended Solids (Glass Fiber)	**580**	**mg/L**	**10**	**10**	**EPA-160.2**	ND		6
Non-Volatile Organic Carbon	**21**	**mg/L**	**20**	**6.0**	**EPA-415.1**	ND	**A01**	7

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/31/14	01/02/15 10:10	ARD	PE-OP3	1	BXL2769
2	EPA-310.1	12/22/14	12/22/14 15:54	RML	MET-1	1	BXL2105
3	EPA-300.0	12/30/14	12/30/14 20:32	BMW	IC1	1	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:43	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 13:00	CAD	MANUAL	2	BXL1887
6	EPA-160.2	12/22/14	12/22/14 10:30	VV1	MANUAL	20	BXL2116
7	EPA-415.1	12/18/14	12/18/14 21:18	ALW	TOC2	20	BXL1696

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430025-03 | **Client Sample Name:** YSDI, SW-4, SW-4, 12/15/2014 12:40:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430025-03 | **Client Sample Name:** YSDI, SW-4, SW-4, 12/15/2014 12:40:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	95.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/18/14	12/20/14 08:09	JCC	MS-V14	1	BXL1768

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Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430025-03 | **Client Sample Name:** YSDI, SW-4, SW-4, 12/15/2014 12:40:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Total Calcium	**5.4**	**mg/L**	**0.10**	**0.015**	**EPA-6010B**	ND		1
Total Magnesium	**3.3**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	ND		1
Total Sodium	**2.8**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	ND		1
Total Potassium	**3.0**	**mg/L**	**1.0**	**0.13**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**27**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**1.2**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.12**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**2.0**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**54**	**mg/L**	**6.7**	**6.7**	**EPA-160.1**	ND		5
Total Suspended Solids (Glass Fiber)	**5.2**	**mg/L**	**1.0**	**1.0**	**EPA-160.2**	ND		6
Non-Volatile Organic Carbon	**12**	**mg/L**	**2.0**	**0.60**	**EPA-415.1**	ND	**A01**	7

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/31/14	01/02/15 10:11	ARD	PE-OP3	1	BXL2769
2	EPA-310.1	12/22/14	12/22/14 15:59	RML	MET-1	1	BXL2105
3	EPA-300.0	12/30/14	12/30/14 20:47	BMW	IC1	1	BXL2784
4	EPA-353.2	12/17/14	12/17/14 21:44	JP1	SC-1	1	BXL1668
5	EPA-160.1	12/19/14	12/19/14 13:00	CAD	MANUAL	0.667	BXL1887
6	EPA-160.2	12/22/14	12/22/14 10:30	VV1	MANUAL	2	BXL2118
7	EPA-415.1	12/18/14	12/18/14 21:33	ALW	TOC2	2	BXL1696

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1768						
Benzene	BXL1768-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXL1768-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXL1768-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXL1768-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXL1768-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXL1768-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXL1768-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXL1768-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXL1768-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXL1768-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXL1768-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane (EDB)	BXL1768-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXL1768-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXL1768-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXL1768-BLK1	ND	ug/L	0.50	0.062	
1,1-Dichloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXL1768-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXL1768-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXL1768-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXL1768-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXL1768-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXL1768-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXL1768-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXL1768-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXL1768-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXL1768-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXL1768-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXL1768-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXL1768-BLK1	ND	ug/L	0.50	0.085	

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1768						
Trichlorofluoromethane	BXL1768-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXL1768-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXL1768-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXL1768-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXL1768-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXL1768-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXL1768-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXL1768-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXL1768-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXL1768-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXL1768-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXL1768-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXL1768-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXL1768-BLK1**	**86.8**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXL1768-BLK1**	**93.6**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXL1768-BLK1**	**92.1**	%	**80 - 120 (LCL - UCL)**		

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Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1768										
Benzene	BXL1768-BS1	LCS	20.187	25.000	ug/L	80.7		70 - 130		
Bromodichloromethane	BXL1768-BS1	LCS	20.169	25.000	ug/L	80.7		70 - 130		
Chlorobenzene	BXL1768-BS1	LCS	24.565	25.000	ug/L	98.3		70 - 130		
Chloroethane	BXL1768-BS1	LCS	20.305	25.000	ug/L	81.2		70 - 130		
1,4-Dichlorobenzene	BXL1768-BS1	LCS	23.363	25.000	ug/L	93.5		70 - 130		
1,1-Dichloroethane	BXL1768-BS1	LCS	19.385	25.000	ug/L	77.5		70 - 130		
1,1-Dichloroethene	BXL1768-BS1	LCS	19.414	25.000	ug/L	77.7		70 - 130		
Toluene	BXL1768-BS1	LCS	20.723	25.000	ug/L	82.9		70 - 130		
Trichloroethene	BXL1768-BS1	LCS	20.510	25.000	ug/L	82.0		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXL1768-BS1	LCS	9.5400	10.000	ug/L	95.4		75 - 125		
Toluene-d8 (Surrogate)	BXL1768-BS1	LCS	9.5200	10.000	ug/L	95.2		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXL1768-BS1	LCS	9.4900	10.000	ug/L	94.9		80 - 120		

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Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1768	Used client sample: N										
Benzene	MS	1430418-02	ND	22.129	25.000	ug/L		88.5		70 - 130	
	MSD	1430418-02	ND	21.543	25.000	ug/L	2.7	86.2	20	70 - 130	
Bromodichloromethane	MS	1430418-02	ND	21.298	25.000	ug/L		85.2		70 - 130	
	MSD	1430418-02	ND	21.644	25.000	ug/L	1.6	86.6	20	70 - 130	
Chlorobenzene	MS	1430418-02	ND	26.284	25.000	ug/L		105		70 - 130	
	MSD	1430418-02	ND	25.575	25.000	ug/L	2.7	102	20	70 - 130	
Chloroethane	MS	1430418-02	ND	21.892	25.000	ug/L		87.6		70 - 130	
	MSD	1430418-02	ND	21.412	25.000	ug/L	2.2	85.6	20	70 - 130	
1,4-Dichlorobenzene	MS	1430418-02	ND	25.312	25.000	ug/L		101		70 - 130	
	MSD	1430418-02	ND	24.469	25.000	ug/L	3.4	97.9	20	70 - 130	
1,1-Dichloroethane	MS	1430418-02	ND	21.016	25.000	ug/L		84.1		70 - 130	
	MSD	1430418-02	ND	20.659	25.000	ug/L	1.7	82.6	20	70 - 130	
1,1-Dichloroethene	MS	1430418-02	0.65100	21.756	25.000	ug/L		84.4		70 - 130	
	MSD	1430418-02	0.65100	21.285	25.000	ug/L	2.2	82.5	20	70 - 130	
Toluene	MS	1430418-02	ND	21.936	25.000	ug/L		87.7		70 - 130	
	MSD	1430418-02	ND	22.112	25.000	ug/L	0.8	88.4	20	70 - 130	
Trichloroethene	MS	1430418-02	0.11900	21.396	25.000	ug/L		85.1		70 - 130	
	MSD	1430418-02	0.11900	21.621	25.000	ug/L	1.0	86.0	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1430418-02	ND	9.4200	10.000	ug/L		94.2		75 - 125	
	MSD	1430418-02	ND	9.0800	10.000	ug/L	3.7	90.8		75 - 125	
Toluene-d8 (Surrogate)	MS	1430418-02	ND	9.3700	10.000	ug/L		93.7		80 - 120	
	MSD	1430418-02	ND	9.4400	10.000	ug/L	0.7	94.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1430418-02	ND	9.5000	10.000	ug/L		95.0		80 - 120	
	MSD	1430418-02	ND	9.4500	10.000	ug/L	0.5	94.5		80 - 120	

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Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1668						
Nitrate/Nitrite as N	BXL1668-BLK1	ND	mg/L	0.10	0.014	
QC Batch ID: BXL1696						
Non-Volatile Organic Carbon	BXL1696-BLK1	ND	mg/L	1.0	0.30	
QC Batch ID: BXL1887						
Total Dissolved Solids @ 180 C	BXL1887-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BXL2105						
Bicarbonate Alkalinity as CaCO3	BXL2105-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BXL2105-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BXL2116						
Total Suspended Solids (Glass Fiber)	BXL2116-BLK1	ND	mg/L	0.50	0.50	
QC Batch ID: BXL2118						
Total Suspended Solids (Glass Fiber)	BXL2118-BLK1	ND	mg/L	0.50	0.50	
QC Batch ID: BXL2769						
Total Calcium	BXL2769-BLK1	ND	mg/L	0.10	0.015	
Total Magnesium	BXL2769-BLK1	ND	mg/L	0.050	0.019	
Total Sodium	BXL2769-BLK1	ND	mg/L	0.50	0.051	
Total Potassium	BXL2769-BLK1	ND	mg/L	1.0	0.13	
QC Batch ID: BXL2784						
Chloride	BXL2784-BLK1	ND	mg/L	0.50	0.061	
Sulfate	BXL2784-BLK1	ND	mg/L	1.0	0.10	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1668										
Nitrate/Nitrite as N	BXL1668-BS1	LCS	2.0559	2.0000	mg/L	103		90 - 110		
QC Batch ID: BXL1696										
Non-Volatile Organic Carbon	BXL1696-BS1	LCS	5.3090	5.0000	mg/L	106		85 - 115		
QC Batch ID: BXL1887										
Total Dissolved Solids @ 180 C	BXL1887-BS1	LCS	565.00	586.00	mg/L	96.4		90 - 110		
QC Batch ID: BXL2769										
Total Calcium	BXL2769-BS1	LCS	9.4897	10.000	mg/L	94.9		85 - 115		
Total Magnesium	BXL2769-BS1	LCS	9.4543	10.000	mg/L	94.5		85 - 115		
Total Sodium	BXL2769-BS1	LCS	9.8021	10.000	mg/L	98.0		85 - 115		
Total Potassium	BXL2769-BS1	LCS	9.6604	10.000	mg/L	96.6		85 - 115		
QC Batch ID: BXL2784										
Chloride	BXL2784-BS1	LCS	51.538	50.000	mg/L	103		90 - 110		
Sulfate	BXL2784-BS1	LCS	103.32	100.00	mg/L	103		90 - 110		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/07/2015 12:07
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1668	Used client sample: Y - Description: S-1, 12/15/2014 12:55										
Nitrate/Nitrite as N	DUP	1430024-01	ND	ND		mg/L			10		
	MS	1430024-01	ND	2.0524	2.1053	mg/L		97.5		90 - 110	
	MSD	1430024-01	ND	2.0866	2.1053	mg/L	1.7	99.1	10	90 - 110	
QC Batch ID: BXL1696	Used client sample: Y - Description: SW-2, 12/15/2014 12:00										
Non-Volatile Organic Carbon	DUP	1430025-01	1.9160	1.9360		mg/L	1.0		10		
	MS	1430025-01	1.9160	7.2241	5.0251	mg/L		106		80 - 120	
	MSD	1430025-01	1.9160	7.1889	5.0251	mg/L	0.5	105	10	80 - 120	
QC Batch ID: BXL1887	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1429997-01	10000	10050		mg/L	0.5		10		
QC Batch ID: BXL2105	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1430051-01	165.98	166.43		mg/L	0.3		10		
Carbonate Alkalinity as CaCO3	DUP	1430051-01	ND	ND		mg/L			10		
QC Batch ID: BXL2116	Used client sample: N										
Total Suspended Solids (Glass Fiber)	DUP	1429793-01	417.33	397.33		mg/L	4.9		10		
QC Batch ID: BXL2118	Used client sample: N										
Total Suspended Solids (Glass Fiber)	DUP	1429984-02	5190.0	4710.0		mg/L	9.7		10		
QC Batch ID: BXL2769	Used client sample: Y - Description: SW-2, 12/15/2014 12:00										
Total Calcium	DUP	1430025-01	11.052	11.231		mg/L	1.6		20		
	MS	1430025-01	11.052	20.637	10.000	mg/L		95.9		75 - 125	
	MSD	1430025-01	11.052	22.786	10.000	mg/L	9.9	117	20	75 - 125	
Total Magnesium	DUP	1430025-01	4.3328	4.1779		mg/L	3.6		20		
	MS	1430025-01	4.3328	14.490	10.000	mg/L		102		75 - 125	
	MSD	1430025-01	4.3328	15.228	10.000	mg/L	5.0	109	20	75 - 125	
Total Sodium	DUP	1430025-01	3.2694	3.3046		mg/L	1.1		20		
	MS	1430025-01	3.2694	13.320	10.000	mg/L		101		75 - 125	
	MSD	1430025-01	3.2694	14.798	10.000	mg/L	10.5	115	20	75 - 125	
Total Potassium	DUP	1430025-01	0.64143	0.64708		mg/L	0.9		20		J
	MS	1430025-01	0.64143	10.761	10.000	mg/L		101		75 - 125	
	MSD	1430025-01	0.64143	11.924	10.000	mg/L	10.3	113	20	75 - 125	
QC Batch ID: BXL2784	Used client sample: Y - Description: LD-3B, 12/12/2014 13:25										
Chloride	DUP	1430023-05	26.557	26.464		mg/L	0.4		10		
	MS	1430023-05	26.557	79.909	50.505	mg/L		106		80 - 120	
	MSD	1430023-05	26.557	80.238	50.505	mg/L	0.4	106	10	80 - 120	
Sulfate	DUP	1430023-05	62.152	62.129		mg/L	0.0		10		
	MS	1430023-05	62.152	171.31	101.01	mg/L		108		80 - 120	
	MSD	1430023-05	62.152	171.41	101.01	mg/L	0.1	108	10	80 - 120	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 01/07/2015 12:07 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.

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Date of Report: 12/22/2014

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	Yuba Sutter Disposal
BCL Work Order:	1430059
Invoice ID:	B191483

Enclosed are the results of analyses for samples received by the laboratory on 12/17/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430059-01 YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini						
Acetone	1500	660	85	ppbv	EPA-TO-15	A01
Benzene	840	330	45	ppbv	EPA-TO-15	A01
Dichlorodifluoromethane	510	330	43	ppbv	EPA-TO-15	A01
1,2-Dichloro-1,1,2,2-tetrafluoroethane	150	330	33	ppbv	EPA-TO-15	J,A01
Ethylbenzene	1100	330	33	ppbv	EPA-TO-15	A01
n-Heptane	540	330	38	ppbv	EPA-TO-15	A01
Toluene	2000	330	33	ppbv	EPA-TO-15	A01
p- & m-Xylenes	1800	330	72	ppbv	EPA-TO-15	A01
o-Xylene	480	330	46	ppbv	EPA-TO-15	A01
Total Xylenes	2300	660	120	ppbv	EPA-TO-15	A01

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Golder Associates

Golder Associates Inc.

CHAIN OF CUSTODY 14-30059

Page 1 of 1

Quotation No.

PROJECT AND PHASE NO.:	053744214
SITE NAME:	YSDI
SAMPLER SIGNATURE(S):	
CONTRACT LABORATORY:	BC-Labs
TURN-AROUND TIME:	Standard

ANALYSES

EDD Required? Yes

EDF Required? Yes

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info	TO-15										Cont. Qty.	Remarks
						Type	suma											
						Volume	1L											
						Filter	y											
						Preserv.	none											
LFG Flare Inlet	-1	12/15/14	1520	Air/gas	grab		X										1	CAN # 2859

CHK BY JSC/AF DISTRIBUTION SUB-OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		12/16/14 1040
	0815 12/17/14	12/16/14 1430

SEND RESULTS TO:
Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\sgiacomini\Documents\coc\YSD SACOC 4 qtr.xlsx

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Chain of Custody and Cooler Receipt Form for 1430059 Page 2 of 2

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 18 09/04/14 Page 1 Of 1

Submission #: 14-30059

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☑ (Specify) Ontario

SHIPPING CONTAINER
Ice Chest ☐ None ☐ Box ☑
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☐ Blue Ice ☐ None ☑ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☑ YES ☐ NO

Emissivity: — Container: Summa Thermometer ID: — Date/Time 121714

Temperature: (A) — °C / (C) — °C Analyst Init AMS 0815

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister	A									

Comments:
Sample Numbering Completed By: AMS Date/Time: 12/17/14 @ 1310 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430059-01	**COC Number:**	---	**Receive Date:**	12/17/2014 08:15
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 15:20
	Sampling Location:	LFG Flare Inlet	**Sample Depth:**	---
	Sampling Point:	LFG Flare Inlet	**Lab Matrix:**	Air
	Sampled By:	S. Giacomini of GAMV	**Sample Type:**	Vapor or Air

Delivery Work Order:
Global ID: L10009133662
Location ID (FieldPoint): LFG Flare Inlet
Matrix: GS
Sample QC Type (SACode): CS
Cooler ID:

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

BCL Sample ID: 1430059-01 | **Client Sample Name:** YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**1500**	**ppbv**	**660**	**85**	**EPA-TO-15**	ND	**A01**	1
Acrylonitrile	ND	ppbv	660	85	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Benzene	**840**	**ppbv**	**330**	**45**	**EPA-TO-15**	ND	**A01**	1
Benzyl chloride	ND	ppbv	660	33	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
Bromoform	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Bromomethane	ND	ppbv	330	58	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ppbv	330	50	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Chloroethane	ND	ppbv	330	47	EPA-TO-15	ND	A01	1
Chloroform	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Chloromethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ppbv	330	52	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ppbv	330	60	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ppbv	330	43	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	**510**	**ppbv**	**330**	**43**	**EPA-TO-15**	ND	**A01**	1
1,1-Dichloroethane	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ppbv	330	45	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**150**	**ppbv**	**330**	**33**	**EPA-TO-15**	ND	**J,A01**	1
1,4-Dioxane	ND	ppbv	330	46	EPA-TO-15	ND	A01	1
Ethanol	ND	ppbv	660	200	EPA-TO-15	ND	A01	1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

BCL Sample ID: 1430059-01 | **Client Sample Name:** YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethyl acetate	ND	ppbv	330	64	EPA-TO-15	ND	A01	1
Ethylbenzene	**1100**	**ppbv**	**330**	**33**	**EPA-TO-15**	ND	**A01**	1
1-Ethyl-4-methylbenzene	ND	ppbv	330	58	EPA-TO-15	ND	A01	1
n-Heptane	**540**	**ppbv**	**330**	**38**	**EPA-TO-15**	ND	**A01**	1
Hexachlorobutadiene	ND	ppbv	330	39	EPA-TO-15	ND	A01	1
Hexane	ND	ppbv	660	43	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ppbv	330	72	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ppbv	330	62	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ppbv	330	85	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ppbv	330	98	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ppbv	330	79	EPA-TO-15	ND	A01	1
Propylene	ND	ppbv	330	64	EPA-TO-15	ND	A01	1
Styrene	ND	ppbv	330	35	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ppbv	330	55	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ppbv	330	41	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ppbv	330	110	EPA-TO-15	ND	A01	1
Toluene	**2000**	**ppbv**	**330**	**33**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ppbv	660	38	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ppbv	330	42	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ppbv	330	37	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ppbv	330	36	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ppbv	330	33	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ppbv	330	79	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ppbv	330	39	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ppbv	330	35	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**1800**	**ppbv**	**330**	**72**	**EPA-TO-15**	ND	**A01**	1
o-Xylene	**480**	**ppbv**	**330**	**46**	**EPA-TO-15**	ND	**A01**	1
Total Xylenes	**2300**	**ppbv**	**660**	**120**	**EPA-TO-15**	ND	**A01**	1
4-Bromofluorobenzene (Surrogate)	108	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 12/22/2014 16:27 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

BCL Sample ID: 1430059-01 | **Client Sample Name:** YSDI, LFG Flare Inlet, LFG Flare Inlet, 12/15/2014 3:20:00PM, S. Giacomini

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15	12/19/14	12/19/14 10:52	MJB	MS-A1	655	BXL1829

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1829						
Acetone	BXL1829-BLK1	ND	ppbv	1.0	0.13	
Acrylonitrile	BXL1829-BLK1	ND	ppbv	1.0	0.13	
Allyl chloride	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Benzene	BXL1829-BLK1	ND	ppbv	0.50	0.068	
Benzyl chloride	BXL1829-BLK1	ND	ppbv	1.0	0.050	
Bromodichloromethane	BXL1829-BLK1	ND	ppbv	0.50	0.069	
Bromoform	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Bromomethane	BXL1829-BLK1	ND	ppbv	0.50	0.088	
1,3-Butadiene	BXL1829-BLK1	ND	ppbv	0.50	0.076	
Carbon disulfide	BXL1829-BLK1	ND	ppbv	0.50	0.068	
Carbon tetrachloride	BXL1829-BLK1	ND	ppbv	0.50	0.057	
Chlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Chloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.072	
Chloroform	BXL1829-BLK1	ND	ppbv	0.50	0.051	
Chloromethane	BXL1829-BLK1	ND	ppbv	0.50	0.051	
Cyclohexane	BXL1829-BLK1	ND	ppbv	0.50	0.079	
Dibromochloromethane	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,2-Dibromoethane	BXL1829-BLK1	ND	ppbv	0.50	0.069	
1,2-Dichlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.056	
1,3-Dichlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.091	
1,4-Dichlorobenzene	BXL1829-BLK1	ND	ppbv	0.50	0.066	
Dichlorodifluoromethane	BXL1829-BLK1	ND	ppbv	0.50	0.066	
1,1-Dichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.063	
1,2-Dichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,1-Dichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.063	
cis-1,2-Dichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
trans-1,2-Dichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.056	
1,2-Dichloropropane	BXL1829-BLK1	ND	ppbv	0.50	0.068	
cis-1,3-Dichloropropene	BXL1829-BLK1	ND	ppbv	0.50	0.063	
trans-1,3-Dichloropropene	BXL1829-BLK1	ND	ppbv	0.50	0.062	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	BXL1829-BLK1	ND	ppbv	0.50	0.051	
1,4-Dioxane	BXL1829-BLK1	ND	ppbv	0.50	0.070	
Ethanol	BXL1829-BLK1	ND	ppbv	1.0	0.31	
Ethyl acetate	BXL1829-BLK1	ND	ppbv	0.50	0.098	

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Sunnyvale, CA 94085

Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1829						
Ethylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1-Ethyl-4-methylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.089	
n-Heptane	BXL1829-BLK1	ND	ppbv	0.50	0.058	
Hexachlorobutadiene	BXL1829-BLK1	ND	ppbv	0.50	0.059	
Hexane	BXL1829-BLK1	ND	ppbv	1.0	0.065	
2-Hexanone	BXL1829-BLK1	ND	ppbv	0.50	0.11	
Isopropyl alcohol	BXL1829-BLK1	ND	ppbv	0.50	0.095	
Methylene chloride	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Methyl ethyl ketone	BXL1829-BLK1	ND	ppbv	0.50	0.13	
Methyl isobutyl ketone	BXL1829-BLK1	ND	ppbv	0.50	0.15	
Methyl t-butyl ether	BXL1829-BLK1	ND	ppbv	0.50	0.12	
Propylene	BXL1829-BLK1	ND	ppbv	0.50	0.098	
Styrene	BXL1829-BLK1	ND	ppbv	0.50	0.053	
1,1,2,2-Tetrachloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.084	
Tetrachloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.063	
Tetrahydrofuran	BXL1829-BLK1	ND	ppbv	0.50	0.17	
Toluene	BXL1829-BLK1	ND	ppbv	0.50	0.051	
1,2,4-Trichlorobenzene	BXL1829-BLK1	ND	ppbv	1.0	0.058	
1,1,1-Trichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.064	
1,1,2-Trichloroethane	BXL1829-BLK1	ND	ppbv	0.50	0.057	
Trichloroethene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
Trichlorofluoromethane	BXL1829-BLK1	ND	ppbv	0.50	0.055	
1,1,2-Trichloro-1,2,2-trifluoroethane	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,2,4-Trimethylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.050	
1,3,5-Trimethylbenzene	BXL1829-BLK1	ND	ppbv	0.50	0.12	
Vinyl acetate	BXL1829-BLK1	ND	ppbv	0.50	0.060	
Vinyl chloride	BXL1829-BLK1	ND	ppbv	0.50	0.053	
p- & m-Xylenes	BXL1829-BLK1	ND	ppbv	0.50	0.11	
o-Xylene	BXL1829-BLK1	ND	ppbv	0.50	0.070	
Total Xylenes	BXL1829-BLK1	ND	ppbv	1.0	0.18	
4-Bromofluorobenzene (Surrogate)	**BXL1829-BLK1**	**113**	%	**70 - 130 (LCL - UCL)**		

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Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
Acetone	**BXL1829-BS1**	LCS	**7.6210**	**5.0000**	**ppbv**	**152**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.9160**	**5.0000**	**ppbv**	**158**	**3.8**	**70 - 130**	**30**	
Acrylonitrile	BXL1829-BS1	LCS	5.9510	5.0000	ppbv	119		70 - 130		
	BXL1829-BSD1	LCSD	6.4280	5.0000	ppbv	129	7.7	70 - 130	30	
Allyl chloride	BXL1829-BS1	LCS	5.7040	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.9680	5.0000	ppbv	119	4.5	70 - 130	30	
Benzene	BXL1829-BS1	LCS	5.2540	5.0000	ppbv	105		70 - 130		
	BXL1829-BSD1	LCSD	5.4430	5.0000	ppbv	109	3.5	70 - 130	30	
Benzyl chloride	BXL1829-BS1	LCS	4.8910	5.0000	ppbv	97.8		70 - 130		
	BXL1829-BSD1	LCSD	4.7760	5.0000	ppbv	95.5	2.4	70 - 130	30	
Bromodichloromethane	BXL1829-BS1	LCS	6.1310	5.0000	ppbv	123		70 - 130		
	BXL1829-BSD1	LCSD	6.2730	5.0000	ppbv	125	2.3	70 - 130	30	
Bromoform	BXL1829-BS1	LCS	4.6790	5.0000	ppbv	93.6		70 - 130		
	BXL1829-BSD1	LCSD	4.7110	5.0000	ppbv	94.2	0.7	70 - 130	30	
Bromomethane	BXL1829-BS1	LCS	6.3380	5.0000	ppbv	127		70 - 130		
	BXL1829-BSD1	LCSD	6.4400	5.0000	ppbv	129	1.6	70 - 130	30	
1,3-Butadiene	**BXL1829-BS1**	LCS	**6.5030**	**5.0000**	**ppbv**	**130**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.8490**	**5.0000**	**ppbv**	**137**	**5.2**	**70 - 130**	**30**	
Carbon disulfide	BXL1829-BS1	LCS	4.8700	5.0000	ppbv	97.4		70 - 130		
	BXL1829-BSD1	LCSD	5.0600	5.0000	ppbv	101	3.8	70 - 130	30	
Carbon tetrachloride	BXL1829-BS1	LCS	6.3430	5.0000	ppbv	127		70 - 130		
	BXL1829-BSD1	LCSD	6.3210	5.0000	ppbv	126	0.3	70 - 130	30	
Chlorobenzene	BXL1829-BS1	LCS	5.8930	5.0000	ppbv	118		70 - 130		
	BXL1829-BSD1	LCSD	5.9320	5.0000	ppbv	119	0.7	70 - 130	30	
Chloroethane	**BXL1829-BS1**	LCS	**6.3540**	**5.0000**	**ppbv**	**127**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.5330**	**5.0000**	**ppbv**	**131**	**2.8**	**70 - 130**	**30**	
Chloroform	BXL1829-BS1	LCS	5.7030	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.7790	5.0000	ppbv	116	1.3	70 - 130	30	
Chloromethane	**BXL1829-BS1**	LCS	**6.4650**	**5.0000**	**ppbv**	**129**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.6680**	**5.0000**	**ppbv**	**133**	**3.1**	**70 - 130**	**30**	
Cyclohexane	BXL1829-BS1	LCS	4.5910	5.0000	ppbv	91.8		70 - 130		
	BXL1829-BSD1	LCSD	4.7900	5.0000	ppbv	95.8	4.2	70 - 130	30	
Dibromochloromethane	BXL1829-BS1	LCS	6.4230	5.0000	ppbv	128		70 - 130		
	BXL1829-BSD1	LCSD	6.3910	5.0000	ppbv	128	0.5	70 - 130	30	
1,2-Dibromoethane	BXL1829-BS1	LCS	5.8690	5.0000	ppbv	117		70 - 130		
	BXL1829-BSD1	LCSD	5.9560	5.0000	ppbv	119	1.5	70 - 130	30	

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Reported: 12/22/2014 16:27
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
1,2-Dichlorobenzene	BXL1829-BS1	LCS	4.7630	5.0000	ppbv	95.3		70 - 130		
	BXL1829-BSD1	LCSD	4.6940	5.0000	ppbv	93.9	1.5	70 - 130	30	
1,3-Dichlorobenzene	BXL1829-BS1	LCS	5.2540	5.0000	ppbv	105		70 - 130		
	BXL1829-BSD1	LCSD	5.1640	5.0000	ppbv	103	1.7	70 - 130	30	
1,4-Dichlorobenzene	BXL1829-BS1	LCS	4.6510	5.0000	ppbv	93.0		70 - 130		
	BXL1829-BSD1	LCSD	4.6720	5.0000	ppbv	93.4	0.5	70 - 130	30	
Dichlorodifluoromethane	**BXL1829-BS1**	LCS	**7.5970**	**5.0000**	**ppbv**	**152**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.8200**	**5.0000**	**ppbv**	**156**	**2.9**	**70 - 130**	**30**	
1,1-Dichloroethane	BXL1829-BS1	LCS	5.4520	5.0000	ppbv	109		70 - 130		
	BXL1829-BSD1	LCSD	5.6350	5.0000	ppbv	113	3.3	70 - 130	30	
1,2-Dichloroethane	BXL1829-BS1	LCS	6.3930	5.0000	ppbv	128		70 - 130		
	BXL1829-BSD1	LCSD	6.3410	5.0000	ppbv	127	0.8	70 - 130	30	
1,1-Dichloroethene	BXL1829-BS1	LCS	6.0280	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	6.1430	5.0000	ppbv	123	1.9	70 - 130	30	
cis-1,2-Dichloroethene	BXL1829-BS1	LCS	5.9290	5.0000	ppbv	119		70 - 130		
	BXL1829-BSD1	LCSD	6.0010	5.0000	ppbv	120	1.2	70 - 130	30	
trans-1,2-Dichloroethene	BXL1829-BS1	LCS	5.5990	5.0000	ppbv	112		70 - 130		
	BXL1829-BSD1	LCSD	5.8860	5.0000	ppbv	118	5.0	70 - 130	30	
1,2-Dichloropropane	BXL1829-BS1	LCS	5.7020	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.7660	5.0000	ppbv	115	1.1	70 - 130	30	
cis-1,3-Dichloropropene	BXL1829-BS1	LCS	5.1260	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.2190	5.0000	ppbv	104	1.8	70 - 130	30	
trans-1,3-Dichloropropene	BXL1829-BS1	LCS	5.2240	5.0000	ppbv	104		70 - 130		
	BXL1829-BSD1	LCSD	5.3110	5.0000	ppbv	106	1.7	70 - 130	30	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**BXL1829-BS1**	LCS	**6.8090**	**5.0000**	**ppbv**	**136**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.0030**	**5.0000**	**ppbv**	**140**	**2.8**	**70 - 130**	**30**	
1,4-Dioxane	BXL1829-BS1	LCS	5.8880	5.0000	ppbv	118		70 - 130		
	BXL1829-BSD1	LCSD	5.9510	5.0000	ppbv	119	1.1	70 - 130	30	
Ethanol	**BXL1829-BS1**	LCS	**15.063**	**10.000**	**ppbv**	**151**		**70 - 130**		
	BXL1829-BSD1	LCSD	**15.838**	**10.000**	**ppbv**	**158**	**5.0**	**70 - 130**	**30**	
Ethyl acetate	**BXL1829-BS1**	LCS	**6.4960**	**5.0000**	**ppbv**	**130**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.5920**	**5.0000**	**ppbv**	**132**	**1.5**	**70 - 130**	**30**	
Ethylbenzene	BXL1829-BS1	LCS	4.1270	5.0000	ppbv	82.5		70 - 130		
	BXL1829-BSD1	LCSD	4.1570	5.0000	ppbv	83.1	0.7	70 - 130	30	
1-Ethyl-4-methylbenzene	BXL1829-BS1	LCS	4.6480	5.0000	ppbv	93.0		70 - 130		
	BXL1829-BSD1	LCSD	4.5380	5.0000	ppbv	90.8	2.4	70 - 130	30	

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Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
n-Heptane	BXL1829-BS1	LCS	6.0300	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	6.0440	5.0000	ppbv	121	0.2	70 - 130	30	
Hexachlorobutadiene	**BXL1829-BS1**	LCS	**0.58600**	**5.0000**	**ppbv**	**11.7**		**70 - 130**		
	BXL1829-BSD1	LCSD	**0.49100**	**5.0000**	**ppbv**	**9.8**	**17.6**	**70 - 130**	**30**	**J**
Hexane	BXL1829-BS1	LCS	5.7380	5.0000	ppbv	115		70 - 130		
	BXL1829-BSD1	LCSD	5.8450	5.0000	ppbv	117	1.8	70 - 130	30	
2-Hexanone	BXL1829-BS1	LCS	6.0700	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	5.9330	5.0000	ppbv	119	2.3	70 - 130	30	
Isopropyl alcohol	**BXL1829-BS1**	LCS	**6.6170**	**5.0000**	**ppbv**	**132**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.9530**	**5.0000**	**ppbv**	**139**	**5.0**	**70 - 130**	**30**	
Methylene chloride	BXL1829-BS1	LCS	5.1300	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.1760	5.0000	ppbv	104	0.9	70 - 130	30	
Methyl ethyl ketone	BXL1829-BS1	LCS	5.4630	5.0000	ppbv	109		70 - 130		
	BXL1829-BSD1	LCSD	5.5070	5.0000	ppbv	110	0.8	70 - 130	30	
Methyl isobutyl ketone	**BXL1829-BS1**	LCS	**7.0350**	**5.0000**	**ppbv**	**141**		**70 - 130**		
	BXL1829-BSD1	LCSD	**6.9170**	**5.0000**	**ppbv**	**138**	**1.7**	**70 - 130**	**30**	
Methyl t-butyl ether	BXL1829-BS1	LCS	5.3110	5.0000	ppbv	106		70 - 130		
	BXL1829-BSD1	LCSD	5.5080	5.0000	ppbv	110	3.6	70 - 130	30	
Propylene	BXL1829-BS1	LCS	4.6870	5.0000	ppbv	93.7		70 - 130		
	BXL1829-BSD1	LCSD	5.2320	5.0000	ppbv	105	11.0	70 - 130	30	
Styrene	BXL1829-BS1	LCS	4.1700	5.0000	ppbv	83.4		70 - 130		
	BXL1829-BSD1	LCSD	4.1080	5.0000	ppbv	82.2	1.5	70 - 130	30	
1,1,2,2-Tetrachloroethane	BXL1829-BS1	LCS	4.4520	5.0000	ppbv	89.0		70 - 130		
	BXL1829-BSD1	LCSD	4.3780	5.0000	ppbv	87.6	1.7	70 - 130	30	
Tetrachloroethene	BXL1829-BS1	LCS	6.0350	5.0000	ppbv	121		70 - 130		
	BXL1829-BSD1	LCSD	6.0570	5.0000	ppbv	121	0.4	70 - 130	30	
Tetrahydrofuran	BXL1829-BS1	LCS	6.3680	5.0000	ppbv	127		70 - 130		
	BXL1829-BSD1	LCSD	6.4770	5.0000	ppbv	130	1.7	70 - 130	30	
Toluene	BXL1829-BS1	LCS	5.1300	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.1500	5.0000	ppbv	103	0.4	70 - 130	30	
1,2,4-Trichlorobenzene	**BXL1829-BS1**	LCS	**1.9820**	**5.0000**	**ppbv**	**39.6**		**70 - 130**		
	BXL1829-BSD1	LCSD	**2.0260**	**5.0000**	**ppbv**	**40.5**	**2.2**	**70 - 130**	**30**	
1,1,1-Trichloroethane	BXL1829-BS1	LCS	6.1210	5.0000	ppbv	122		70 - 130		
	BXL1829-BSD1	LCSD	6.2360	5.0000	ppbv	125	1.9	70 - 130	30	
1,1,2-Trichloroethane	BXL1829-BS1	LCS	5.6990	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	5.7130	5.0000	ppbv	114	0.2	70 - 130	30	

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Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Compounds by GC/MS (EPA Method TO-15)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1829										
Trichloroethene	BXL1829-BS1	LCS	5.8470	5.0000	ppbv	117		70 - 130		
	BXL1829-BSD1	LCSD	5.9980	5.0000	ppbv	120	2.5	70 - 130	30	
Trichlorofluoromethane	**BXL1829-BS1**	LCS	**7.2770**	**5.0000**	**ppbv**	**146**		**70 - 130**		
	BXL1829-BSD1	LCSD	**7.4350**	**5.0000**	**ppbv**	**149**	**2.1**	**70 - 130**	**30**	
1,1,2-Trichloro-1,2,2-trifluoroethane	BXL1829-BS1	LCS	5.2890	5.0000	ppbv	106		70 - 130		
	BXL1829-BSD1	LCSD	5.4860	5.0000	ppbv	110	3.7	70 - 130	30	
1,2,4-Trimethylbenzene	BXL1829-BS1	LCS	4.8440	5.0000	ppbv	96.9		70 - 130		
	BXL1829-BSD1	LCSD	4.8250	5.0000	ppbv	96.5	0.4	70 - 130	30	
1,3,5-Trimethylbenzene	BXL1829-BS1	LCS	5.5720	5.0000	ppbv	111		70 - 130		
	BXL1829-BSD1	LCSD	5.6870	5.0000	ppbv	114	2.0	70 - 130	30	
Vinyl acetate	BXL1829-BS1	LCS	5.6770	5.0000	ppbv	114		70 - 130		
	BXL1829-BSD1	LCSD	6.1080	5.0000	ppbv	122	7.3	70 - 130	30	
Vinyl chloride	BXL1829-BS1	LCS	6.1470	5.0000	ppbv	123		70 - 130		
	BXL1829-BSD1	LCSD	6.4710	5.0000	ppbv	129	5.1	70 - 130	30	
p- & m-Xylenes	BXL1829-BS1	LCS	9.7970	10.000	ppbv	98.0		70 - 130		
	BXL1829-BSD1	LCSD	9.9500	10.000	ppbv	99.5	1.5	70 - 130	30	
o-Xylene	BXL1829-BS1	LCS	5.1310	5.0000	ppbv	103		70 - 130		
	BXL1829-BSD1	LCSD	5.0870	5.0000	ppbv	102	0.9	70 - 130	30	
Total Xylenes	BXL1829-BS1	LCS	14.928	15.000	ppbv	99.5		70 - 130		
	BXL1829-BSD1	LCSD	15.037	15.000	ppbv	100	0.7	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	BXL1829-BS1	LCS	11.5	10.0	ppbv	115		70 - 130		
	BXL1829-BSD1	LCSD	11.1	10.0	ppbv	111	3.1	70 - 130		

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 12/22/2014 16:27 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.

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Date of Report: 01/06/2015

Kris Johnson

Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Client Project:	053744214
BCL Project:	Yuba Sutter Disposal
BCL Work Order:	1430165
Invoice ID:	B192700

Enclosed are the results of analyses for samples received by the laboratory on 12/17/2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Authorized Signature

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430165-01 YSDI, MW-1R, MW-1R, 12/15/2014 12:15:00PM, R. McCarthy						
Chlorobenzene	1.1	0.50	0.093	ug/L	EPA-8260B	
1,4-Dichlorobenzene	0.75	0.50	0.062	ug/L	EPA-8260B	
cis-1,2-Dichloroethene	0.30	0.50	0.085	ug/L	EPA-8260B	J
Vinyl chloride	0.12	0.50	0.12	ug/L	EPA-8260B	J
Dissolved Calcium	64	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	44	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	52	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	5.0	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	330	4.1	4.1	mg/L	EPA-310.1	
Chloride	64	0.50	0.061	mg/L	EPA-300.0	
Sulfate	44	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	570	33	33	mg/L	EPA-160.1	
1430165-02 YSDI, MW-2R, MW-2R, 12/15/2014 12:45:00PM, R. McCarthy						
Benzene	0.14	0.50	0.083	ug/L	EPA-8260B	J
Chlorobenzene	0.91	0.50	0.093	ug/L	EPA-8260B	
1,4-Dichlorobenzene	0.75	0.50	0.062	ug/L	EPA-8260B	
cis-1,2-Dichloroethene	0.23	0.50	0.085	ug/L	EPA-8260B	J
Vinyl chloride	0.30	0.50	0.12	ug/L	EPA-8260B	J
Dissolved Calcium	91	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	63	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	49	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	14	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	450	8.2	8.2	mg/L	EPA-310.1	
Chloride	96	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.11	0.10	0.014	mg/L	EPA-353.2	
Sulfate	1.8	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	670	33	33	mg/L	EPA-160.1	
1430165-03 YSDI, MW-3, MW-3, 12/15/2014 12:35:00PM, R. McCarthy						
Dissolved Calcium	20	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	8.7	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	16	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.92	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	81	4.1	4.1	mg/L	EPA-310.1	
Chloride	6.9	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.94	0.10	0.014	mg/L	EPA-353.2	
Sulfate	16	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	190	10	10	mg/L	EPA-160.1	

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430165-04 YSDI, MW-4, MW-4, 12/15/2014 1:13:00PM, R. McCarthy						
Dissolved Calcium	15	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	7.9	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	4.4	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.85	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	77	4.1	4.1	mg/L	EPA-310.1	
Chloride	2.8	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.080	0.10	0.014	mg/L	EPA-353.2	J
Sulfate	0.28	1.0	0.10	mg/L	EPA-300.0	J
Total Dissolved Solids @ 180 C	120	6.7	6.7	mg/L	EPA-160.1	
1430165-05 YSDI, MW-5, MW-5, 12/15/2014 2:55:00PM, R. McCarthy						
Dissolved Calcium	47	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	35	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	17	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	1.4	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	190	4.1	4.1	mg/L	EPA-310.1	
Chloride	16	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	1.1	0.10	0.014	mg/L	EPA-353.2	
Sulfate	64	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	430	20	20	mg/L	EPA-160.1	
1430165-06 YSDI, MW-6, MW-6, 12/15/2014 3:20:00PM, R. McCarthy						
Dissolved Calcium	26	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	17	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	25	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	1.2	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	120	4.1	4.1	mg/L	EPA-310.1	
Chloride	7.7	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.34	0.10	0.014	mg/L	EPA-353.2	
Sulfate	22	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	250	20	20	mg/L	EPA-160.1	
1430165-07 YSDI, MW-7, MW-7, 12/15/2014 4:00:00PM, R. McCarthy						
Dissolved Calcium	47	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	34	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	16	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	1.2	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	180	4.1	4.1	mg/L	EPA-310.1	
Chloride	18	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	1.5	0.10	0.014	mg/L	EPA-353.2	

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430165-07 YSDI, MW-7, MW-7, 12/15/2014 4:00:00PM, R. McCarthy						
Sulfate	44	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	390	20	20	mg/L	EPA-160.1	
1430165-08 YSDI, MW-8, MW-8, 12/15/2014 1:20:00PM, R. McCarthy						
Dissolved Calcium	86	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	52	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	22	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.92	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	400	4.1	4.1	mg/L	EPA-310.1	
Chloride	8.6	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	1.1	0.10	0.014	mg/L	EPA-353.2	
Sulfate	21	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	460	33	33	mg/L	EPA-160.1	
1430165-09 YSDI, MW-9, MW-9, 12/15/2014 1:50:00PM, R. McCarthy						
Dissolved Calcium	27	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	18	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	20	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.71	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	140	4.1	4.1	mg/L	EPA-310.1	
Chloride	3.8	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.96	0.10	0.014	mg/L	EPA-353.2	
Sulfate	19	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	270	20	20	mg/L	EPA-160.1	
1430165-10 YSDI, MW-10, MW-10, 12/15/2014 2:20:00PM, R. McCarthy						
1,4-Dichlorobenzene	0.070	0.50	0.062	ug/L	EPA-8260B	J
Dissolved Calcium	17	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	11	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	5.9	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.98	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	77	4.1	4.1	mg/L	EPA-310.1	
Chloride	5.7	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	1.2	0.10	0.014	mg/L	EPA-353.2	
Sulfate	10	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	160	10	10	mg/L	EPA-160.1	
1430165-11 YSDI, MW-11, MW-11, 12/15/2014 2:13:00PM, R. McCarthy						
Dissolved Calcium	62	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	32	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	20	0.50	0.051	mg/L	EPA-6010B	

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Executive Summary - Detections

Constituent	Result	PQL	MDL	Units	Method	Lab Quals
1430165-11 YSDI, MW-11, MW-11, 12/15/2014 2:13:00PM, R. McCarthy						
Dissolved Potassium	0.43	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	270	4.1	4.1	mg/L	EPA-310.1	
Chloride	7.1	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.62	0.10	0.014	mg/L	EPA-353.2	
Sulfate	17	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	410	20	20	mg/L	EPA-160.1	
1430165-12 YSDI, MW-12, MW-12, 12/15/2014 1:42:00PM, R. McCarthy						
Dissolved Calcium	33	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	24	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	28	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.63	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	170	4.1	4.1	mg/L	EPA-310.1	
Chloride	5.9	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	1.8	0.10	0.014	mg/L	EPA-353.2	
Sulfate	39	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	330	20	20	mg/L	EPA-160.1	
1430165-13 YSDI, MW-13, MW-13, 12/15/2014 2:49:00PM, R. McCarthy						
Dissolved Calcium	29	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	20	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	15	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	0.82	1.0	0.10	mg/L	EPA-6010B	J
Bicarbonate Alkalinity as CaCO3	130	4.1	4.1	mg/L	EPA-310.1	
Chloride	5.6	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	1.8	0.10	0.014	mg/L	EPA-353.2	
Sulfate	26	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	270	20	20	mg/L	EPA-160.1	
1430165-14 YSDI, MW-15, MW-15, 12/15/2014 12:01:00PM, R. McCarthy						
Chlorobenzene	0.23	0.50	0.093	ug/L	EPA-8260B	J
Dissolved Calcium	61	0.10	0.016	mg/L	EPA-6010B	
Dissolved Magnesium	39	0.050	0.019	mg/L	EPA-6010B	
Dissolved Sodium	24	0.50	0.051	mg/L	EPA-6010B	
Dissolved Potassium	7.4	1.0	0.10	mg/L	EPA-6010B	
Bicarbonate Alkalinity as CaCO3	280	4.1	4.1	mg/L	EPA-310.1	
Chloride	22	0.50	0.061	mg/L	EPA-300.0	
Nitrate/Nitrite as N	0.27	0.10	0.014	mg/L	EPA-353.2	
Sulfate	21	1.0	0.10	mg/L	EPA-300.0	
Total Dissolved Solids @ 180 C	400	20	20	mg/L	EPA-160.1	

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Golder Associates

14-30165

Golder Associates Inc.

CHAIN OF CUSTODY

Page 1 of 1

Quotation No.

PROJECT AND PHASE NO.:	SITE NAME:
053744214	YSDI

SAMPLER SIGNATURE(S): M Podl

CONTRACT LABORATORY: BC-Labs

TURN-AROUND TIME: Standard

EDD Required? Yes

EDF Required? Yes

ANALYSES

Sample ID	Lab ID	Collection Date	Collection Time	Matrix	Depth	Container Info	YSD 8260, short list	TDS,Chloride. Sulfate, Carbonate, Bicarbonate	Nitrate+Nitrite as N	Ca, Mg, Na, K								Cont. Qty.	Remarks
						Type	voa	PE	PE	PE									
						Volume	40 ml	16 oz	2 oz.	16 oz									
						Filter	N	N	N	Y									
						Preserv.	HCl	none	H2SO4	HNO3									
MW-1R	-1	12/15/2014	1215	W			3	1	1	1								6	
MW-2R	-2	12/15/2014	1245				3	1	1	1								6	
MW-3	-3	12/15/2014	1235				3	1	1	1								6	
MW-4	-4	12/15/2014	1313				3	1	1	1								6	
MW-5	-5	12/15/2014	1455				3	1	1	1								6	
MW-6	-6	12/15/2014	1520				3	1	1	1								6	
MW-7	-7	12/15/2014	1600				3	1	1	1								6	
MW-8	-8	12/15/2014	1320				3	1	1	1								6	
MW-9	-9	12/15/2014	1350				3	1	1	1								6	
MW-10	-10	12/15/2014	1420				3	1	1	1								6	
MW-11	-11	12/15/2014	1413				3	1	1	1								6	
MW-12	-12	12/15/2014	1342				3	1	1	1								6	
MW-13	-13	12/15/2014	1449				3	1	1	1								6	
MW-15	-14	12/15/2014	1201				3	1	1	1								6	
QCEB-1	-15	12/15/2014	1224				3											3	

CHK BY DISTRIBUTION SUB OUT

Relinquished by (signature):	Received by (signature):	Date/Time:
		12-16-14 0915
Relinquished by (signature):	Received by (signature):	Date/Time:
		121714 0840
Relinquished by (signature):	Received by (signature):	Date/Time:

SEND RESULTS TO:

Attention: Kris Johnson
Golder Associates Inc.
425 Lakeside Dr.
Sunnyvale, CA 94085
Phone (408) 220-9223
Fax (408) 220-9224

C:\Users\RMcCarthy\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\9G18HTVO\YSD SACOC 4 qtr.xlsx

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Chain of Custody and Cooler Receipt Form for 1430165 Page 2 of 3

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 18 09/04/14 Page 1 Of 2

Submission #: 1430165

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☐ (Specify) Ontron

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time 12/17/14 0850
Temperature: (A) 1.3 °C / (C) 0.9 °C Analyst Init WM

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	11	13	15	16	19	10	14
QT GENERAL MINERAL/ GENERAL				B	B	B	B	B	B	B
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS				E	E	E	E	E	E	E
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE				F	F	F	F	F	F	F
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK				ABC	ABC	ABC	ABC	ABC	ABC	ABC
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: Date/Time: 12-17-14 2115 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1430165 Page 3 of 3

BC LABORATORIES INC. **COOLER RECEIPT FORM** Rev. No. 18 09/04/14 Page 2 Of 2

Submission #: 14-30165

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☐ Other ☑ (Specify) Driver

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.97 Container: PG Thermometer ID: 208 Date/Time 12/17/14 0840

Temperature: (A) 1.6 °C / (C) 1.2 °C Analyst Init WB

SAMPLE CONTAINERS	SAMPLE NUMBERS 12	14	17	18	11	12	13	15	9	10
QT GENERAL MINERAL/ GENERAL	D	D	D	D	D	D	D			
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	E	E	E	E	E	E	E			
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE	F	F	F	F	F	F	F			
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC		
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz Amber EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
Summa Canister										

Comments:
Sample Numbering Completed By: AT Date/Time: 12/17/14 2411 [S:\WPDoc\WordPerfect\LAB_DOCS\FORMS\SAMREC]
A = Actual / C = Corrected

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430165-01	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:15
	Sampling Location:	MW-1R	**Sample Depth:**	---
	Sampling Point:	MW-1R	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-1R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430165-02	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:45
	Sampling Location:	MW-2R	**Sample Depth:**	---
	Sampling Point:	MW-2R	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-2R	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430165-03	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:35
	Sampling Location:	MW-3	**Sample Depth:**	---
	Sampling Point:	MW-3	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1430165-04	**COC Number:** ---	**Receive Date:** 12/17/2014 08:40
	Project Number: YSDI	**Sampling Date:** 12/15/2014 13:13
	Sampling Location: MW-4	**Sample Depth:** ---
	Sampling Point: MW-4	**Lab Matrix:** Water
	Sampled By: R. McCarthy of GAMV	**Sample Type:** Water
		Metal Analysis: 1-Field Filtered and Acidified
		Delivery Work Order:
		Global ID: L10009133662
		Location ID (FieldPoint): MW-4
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:
1430165-05	**COC Number:** ---	**Receive Date:** 12/17/2014 08:40
	Project Number: YSDI	**Sampling Date:** 12/15/2014 14:55
	Sampling Location: MW-5	**Sample Depth:** ---
	Sampling Point: MW-5	**Lab Matrix:** Water
	Sampled By: R. McCarthy of GAMV	**Sample Type:** Water
		Metal Analysis: 1-Field Filtered and Acidified
		Delivery Work Order:
		Global ID: L10009133662
		Location ID (FieldPoint): MW-5
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:
1430165-06	**COC Number:** ---	**Receive Date:** 12/17/2014 08:40
	Project Number: YSDI	**Sampling Date:** 12/15/2014 15:20
	Sampling Location: MW-6	**Sample Depth:** ---
	Sampling Point: MW-6	**Lab Matrix:** Water
	Sampled By: R. McCarthy of GAMV	**Sample Type:** Water
		Metal Analysis: 1-Field Filtered and Acidified
		Delivery Work Order:
		Global ID: L10009133662
		Location ID (FieldPoint): MW-6
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430165-07	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 16:00
	Sampling Location:	MW-7	**Sample Depth:**	---
	Sampling Point:	MW-7	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-7	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430165-08	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 13:20
	Sampling Location:	MW-8	**Sample Depth:**	---
	Sampling Point:	MW-8	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-8	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430165-09	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 13:50
	Sampling Location:	MW-9	**Sample Depth:**	---
	Sampling Point:	MW-9	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-9	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1430165-10	**COC Number:** ---	**Receive Date:** 12/17/2014 08:40
	Project Number: YSDI	**Sampling Date:** 12/15/2014 14:20
	Sampling Location: MW-10	**Sample Depth:** ---
	Sampling Point: MW-10	**Lab Matrix:** Water
	Sampled By: R. McCarthy of GAMV	**Sample Type:** Water
		Metal Analysis: 1-Field Filtered and Acidified
		Delivery Work Order:
		Global ID: L10009133662
		Location ID (FieldPoint): MW-10
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:
1430165-11	**COC Number:** ---	**Receive Date:** 12/17/2014 08:40
	Project Number: YSDI	**Sampling Date:** 12/15/2014 14:13
	Sampling Location: MW-11	**Sample Depth:** ---
	Sampling Point: MW-11	**Lab Matrix:** Water
	Sampled By: R. McCarthy of GAMV	**Sample Type:** Water
		Metal Analysis: 1-Field Filtered and Acidified
		Delivery Work Order:
		Global ID: L10009133662
		Location ID (FieldPoint): MW-11
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:
1430165-12	**COC Number:** ---	**Receive Date:** 12/17/2014 08:40
	Project Number: YSDI	**Sampling Date:** 12/15/2014 13:42
	Sampling Location: MW-12	**Sample Depth:** ---
	Sampling Point: MW-12	**Lab Matrix:** Water
	Sampled By: R. McCarthy of GAMV	**Sample Type:** Water
		Metal Analysis: 1-Field Filtered and Acidified
		Delivery Work Order:
		Global ID: L10009133662
		Location ID (FieldPoint): MW-12
		Matrix: W
		Sample QC Type (SACode): CS
		Cooler ID:

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1430165-13	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 14:49
	Sampling Location:	MW-13	**Sample Depth:**	---
	Sampling Point:	MW-13	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430165-14	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:01
	Sampling Location:	MW-15	**Sample Depth:**	---
	Sampling Point:	MW-15	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Metal Analysis: 1-Field Filtered and Acidified	
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): MW-15	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1430165-15	**COC Number:**	---	**Receive Date:**	12/17/2014 08:40
	Project Number:	YSDI	**Sampling Date:**	12/15/2014 12:24
	Sampling Location:	QCEB-1	**Sample Depth:**	---
	Sampling Point:	QCEB-1	**Lab Matrix:**	Water
	Sampled By:	R. McCarthy of GAMV	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: L10009133662	
			Location ID (FieldPoint): QCEB-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-01 | **Client Sample Name:** YSDI, MW-1R, MW-1R, 12/15/2014 12:15:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**1.1**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.75**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.30**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-01 | **Client Sample Name:** YSDI, MW-1R, MW-1R, 12/15/2014 12:15:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**0.12**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	**J**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.5	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 01:23	JPT	MS-V5	1	BXL1625

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-01 | **Client Sample Name:** YSDI, MW-1R, MW-1R, 12/15/2014 12:15:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**64**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**44**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**52**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**5.0**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**330**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**64**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	ND	mg/L	0.10	0.014	EPA-353.2	ND		4
Sulfate	**44**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**570**	**mg/L**	**33**	**33**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:14	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 17:44	RML	MET-1	1	BXL2106
3	EPA-300.0	12/31/14	12/31/14 10:40	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:15	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	3.333	BXL2059

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-02 | **Client Sample Name:** YSDI, MW-2R, MW-2R, 12/15/2014 12:45:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.14**	**ug/L**	**0.50**	**0.083**	**EPA-8260B**	ND	**J**	1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.91**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.75**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	**0.23**	**ug/L**	**0.50**	**0.085**	**EPA-8260B**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-02 | **Client Sample Name:** YSDI, MW-2R, MW-2R, 12/15/2014 12:45:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	**0.30**	**ug/L**	**0.50**	**0.12**	**EPA-8260B**	ND	**J**	1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	87.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 01:46	JPT	MS-V5	1	BXL1625

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-02 | **Client Sample Name:** YSDI, MW-2R, MW-2R, 12/15/2014 12:45:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**91**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**63**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**49**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**14**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**450**	**mg/L**	**8.2**	**8.2**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	8.2	8.2	EPA-310.1	ND		2
Chloride	**96**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.11**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**1.8**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**670**	**mg/L**	**33**	**33**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:22	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 17:50	RML	MET-1	2	BXL2106
3	EPA-300.0	12/31/14	12/31/14 11:39	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:16	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	3.333	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-03 | **Client Sample Name:** YSDI, MW-3, MW-3, 12/15/2014 12:35:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-03 | **Client Sample Name:** YSDI, MW-3, MW-3, 12/15/2014 12:35:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	90.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 02:08	JPT	MS-V5	1	BXL1625

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-03 | **Client Sample Name:** YSDI, MW-3, MW-3, 12/15/2014 12:35:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**20**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**8.7**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**16**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.92**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**81**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**6.9**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.94**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**16**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**190**	**mg/L**	**10**	**10**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:26	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 17:56	RML	MET-1	1	BXL2106
3	EPA-300.0	12/31/14	12/31/14 11:54	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:10	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	1	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-04 | **Client Sample Name:** YSDI, MW-4, MW-4, 12/15/2014 1:13:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-04 | **Client Sample Name:** YSDI, MW-4, MW-4, 12/15/2014 1:13:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 02:31	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-04 | **Client Sample Name:** YSDI, MW-4, MW-4, 12/15/2014 1:13:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**15**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**7.9**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**4.4**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.85**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**77**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**2.8**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.080**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND	**J**	4
Sulfate	**0.28**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND	**J**	3
Total Dissolved Solids @ 180 C	**120**	**mg/L**	**6.7**	**6.7**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:28	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 18:02	RML	MET-1	1	BXL2106
3	EPA-300.0	12/31/14	12/31/14 12:09	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:20	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	0.667	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-05 | **Client Sample Name:** YSDI, MW-5, MW-5, 12/15/2014 2:55:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-05 | **Client Sample Name:** YSDI, MW-5, MW-5, 12/15/2014 2:55:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	83.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 02:53	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-05 | **Client Sample Name:** YSDI, MW-5, MW-5, 12/15/2014 2:55:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**47**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**35**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**17**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**1.4**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**190**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**16**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**1.1**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**64**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**430**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:30	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 18:49	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 12:23	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:21	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-06 | **Client Sample Name:** YSDI, MW-6, MW-6, 12/15/2014 3:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-06 | **Client Sample Name:** YSDI, MW-6, MW-6, 12/15/2014 3:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	81.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 03:16	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-06 | **Client Sample Name:** YSDI, MW-6, MW-6, 12/15/2014 3:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**26**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**17**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**25**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**1.2**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**120**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**7.7**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.34**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**22**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**250**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:32	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:03	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 13:08	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:22	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-07 | **Client Sample Name:** YSDI, MW-7, MW-7, 12/15/2014 4:00:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-07 | **Client Sample Name:** YSDI, MW-7, MW-7, 12/15/2014 4:00:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	81.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 03:38	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-07 | **Client Sample Name:** YSDI, MW-7, MW-7, 12/15/2014 4:00:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**47**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**34**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**16**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**1.2**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**180**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**18**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**1.5**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**44**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**390**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:36	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:09	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 13:23	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:23	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-08 | **Client Sample Name:** YSDI, MW-8, MW-8, 12/15/2014 1:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-08 | **Client Sample Name:** YSDI, MW-8, MW-8, 12/15/2014 1:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	86.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 04:01	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-08 | **Client Sample Name:** YSDI, MW-8, MW-8, 12/15/2014 1:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**86**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**52**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**22**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.92**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**400**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**8.6**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**1.1**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**21**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**460**	**mg/L**	**33**	**33**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:38	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:15	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 13:37	OLH	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:25	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	3.333	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-09 | **Client Sample Name:** YSDI, MW-9, MW-9, 12/15/2014 1:50:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-09 | **Client Sample Name:** YSDI, MW-9, MW-9, 12/15/2014 1:50:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	84.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 04:23	JPT	MS-V5	1	BXL1715

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Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-09 | **Client Sample Name:** YSDI, MW-9, MW-9, 12/15/2014 1:50:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**27**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**18**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**20**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.71**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**140**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**3.8**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.96**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**19**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**270**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:40	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:21	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 13:52	BMW	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:26	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-10 | **Client Sample Name:** YSDI, MW-10, MW-10, 12/15/2014 2:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	**0.070**	**ug/L**	**0.50**	**0.062**	**EPA-8260B**	ND	**J**	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-10 | **Client Sample Name:** YSDI, MW-10, MW-10, 12/15/2014 2:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	85.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 04:45	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-10 | **Client Sample Name:** YSDI, MW-10, MW-10, 12/15/2014 2:20:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**17**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**11**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**5.9**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.98**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**77**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**5.7**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**1.2**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**10**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**160**	**mg/L**	**10**	**10**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:42	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:27	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 14:07	BMW	IC1	1	BYA0035
4	EPA-353.2	01/02/15	01/05/15 12:27	JP1	SC-1	1	BYA0072
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	1	BXL2059

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-11 | **Client Sample Name:** YSDI, MW-11, MW-11, 12/15/2014 2:13:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-11 | **Client Sample Name:** YSDI, MW-11, MW-11, 12/15/2014 2:13:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	84.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 05:08	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-11 | **Client Sample Name:** YSDI, MW-11, MW-11, 12/15/2014 2:13:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**62**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**32**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**20**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.43**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**270**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**7.1**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.62**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**17**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**410**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:43	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:33	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 15:21	BMW	IC1	1	BYA0036
4	EPA-353.2	01/02/15	01/05/15 12:31	JP1	SC-1	1	BYA0074
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2060

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-12 | **Client Sample Name:** YSDI, MW-12, MW-12, 12/15/2014 1:42:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-12 | **Client Sample Name:** YSDI, MW-12, MW-12, 12/15/2014 1:42:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	84.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 05:30	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-12 | **Client Sample Name:** YSDI, MW-12, MW-12, 12/15/2014 1:42:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**33**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**24**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**28**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.63**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**170**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**5.9**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**1.8**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**39**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**330**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:45	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:39	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 16:20	BMW	IC1	1	BYA0036
4	EPA-353.2	01/02/15	01/05/15 12:38	JP1	SC-1	1	BYA0074
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2060

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-13 | **Client Sample Name:** YSDI, MW-13, MW-13, 12/15/2014 2:49:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-13 | **Client Sample Name:** YSDI, MW-13, MW-13, 12/15/2014 2:49:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	81.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 05:53	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-13 | **Client Sample Name:** YSDI, MW-13, MW-13, 12/15/2014 2:49:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**29**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**20**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**15**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**0.82**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND	**J**	1
Bicarbonate Alkalinity as CaCO3	**130**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**5.6**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**1.8**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**26**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**270**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 14:47	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:46	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 16:35	BMW	IC1	1	BYA0036
4	EPA-353.2	01/02/15	01/05/15 12:39	JP1	SC-1	1	BYA0074
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2060

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-14 | **Client Sample Name:** YSDI, MW-15, MW-15, 12/15/2014 12:01:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	**0.23**	**ug/L**	**0.50**	**0.093**	**EPA-8260B**	ND	**J**	1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-14 | **Client Sample Name:** YSDI, MW-15, MW-15, 12/15/2014 12:01:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	84.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 06:15	JPT	MS-V5	1	BXL1715

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Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

BCL Sample ID: 1430165-14 | **Client Sample Name:** YSDI, MW-15, MW-15, 12/15/2014 12:01:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Calcium	**61**	**mg/L**	**0.10**	**0.016**	**EPA-6010B**	ND		1
Dissolved Magnesium	**39**	**mg/L**	**0.050**	**0.019**	**EPA-6010B**	0.019		1
Dissolved Sodium	**24**	**mg/L**	**0.50**	**0.051**	**EPA-6010B**	0.099		1
Dissolved Potassium	**7.4**	**mg/L**	**1.0**	**0.10**	**EPA-6010B**	ND		1
Bicarbonate Alkalinity as CaCO3	**280**	**mg/L**	**4.1**	**4.1**	**EPA-310.1**	ND		2
Carbonate Alkalinity as CaCO3	ND	mg/L	4.1	4.1	EPA-310.1	ND		2
Chloride	**22**	**mg/L**	**0.50**	**0.061**	**EPA-300.0**	ND		3
Nitrate/Nitrite as N	**0.27**	**mg/L**	**0.10**	**0.014**	**EPA-353.2**	ND		4
Sulfate	**21**	**mg/L**	**1.0**	**0.10**	**EPA-300.0**	ND		3
Total Dissolved Solids @ 180 C	**400**	**mg/L**	**20**	**20**	**EPA-160.1**	ND		5

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	12/15/14	12/19/14 15:52	ARD	PE-OP3	1	BXL1827
2	EPA-310.1	12/22/14	12/22/14 19:52	RML	MET-1	1	BXL2107
3	EPA-300.0	12/31/14	12/31/14 16:50	BMW	IC1	1	BYA0036
4	EPA-353.2	01/02/15	01/05/15 12:40	JP1	SC-1	1	BYA0074
5	EPA-160.1	12/22/14	12/22/14 09:00	CAD	MANUAL	2	BXL2060

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-15 | **Client Sample Name:** YSDI, QCEB-1, QCEB-1, 12/15/2014 12:24:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260B	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260B	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260B	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260B	ND		1
1,2-Dibromoethane (EDB)	ND	ug/L	0.50	0.16	EPA-8260B	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260B	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260B	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260B	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260B	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260B	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260B	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260B	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260B	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260B	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260B	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260B	ND		1

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1430165-15 | **Client Sample Name:** YSDI, QCEB-1, QCEB-1, 12/15/2014 12:24:00PM, R. McCarthy

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260B	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260B	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260B	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260B	ND		1
Acetone	ND	ug/L	10	4.6	EPA-8260B	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-8260B	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-8260B	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-8260B	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-8260B	ND		1
2-Butanone	ND	ug/L	10	2.5	EPA-8260B	ND		1
Iodomethane	ND	ug/L	2.0	0.47	EPA-8260B	ND		1
4-Methyl-2-pentanone	ND	ug/L	10	2.1	EPA-8260B	ND		1
Vinyl acetate	ND	ug/L	10	1.8	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	83.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	12/19/14	12/20/14 06:38	JPT	MS-V5	1	BXL1715

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1625						
Benzene	BXL1625-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXL1625-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXL1625-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXL1625-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXL1625-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXL1625-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXL1625-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXL1625-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane (EDB)	BXL1625-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXL1625-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXL1625-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXL1625-BLK1	ND	ug/L	0.50	0.062	
1,1-Dichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXL1625-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXL1625-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXL1625-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXL1625-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXL1625-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXL1625-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXL1625-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXL1625-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXL1625-BLK1	ND	ug/L	0.50	0.085	

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1625						
Trichlorofluoromethane	BXL1625-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXL1625-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXL1625-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXL1625-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXL1625-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXL1625-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXL1625-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXL1625-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXL1625-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXL1625-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXL1625-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXL1625-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXL1625-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXL1625-BLK1**	**103**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXL1625-BLK1**	**98.6**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXL1625-BLK1**	**89.9**	%	**80 - 120 (LCL - UCL)**		
QC Batch ID: BXL1715						
Benzene	BXL1715-BLK1	ND	ug/L	0.50	0.083	
Bromochloromethane	BXL1715-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BXL1715-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BXL1715-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BXL1715-BLK1	ND	ug/L	1.0	0.25	
Carbon tetrachloride	BXL1715-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BXL1715-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BXL1715-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BXL1715-BLK1	ND	ug/L	0.50	0.14	
Dibromochloromethane	BXL1715-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BXL1715-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane (EDB)	BXL1715-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BXL1715-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BXL1715-BLK1	ND	ug/L	0.50	0.072	
1,4-Dichlorobenzene	BXL1715-BLK1	ND	ug/L	0.50	0.062	

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1715						
1,1-Dichloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BXL1715-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BXL1715-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BXL1715-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BXL1715-BLK1	ND	ug/L	0.50	0.13	
cis-1,3-Dichloropropene	BXL1715-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BXL1715-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BXL1715-BLK1	ND	ug/L	0.50	0.098	
Methylene chloride	BXL1715-BLK1	ND	ug/L	1.0	0.48	
Styrene	BXL1715-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BXL1715-BLK1	ND	ug/L	0.50	0.13	
Toluene	BXL1715-BLK1	ND	ug/L	0.50	0.093	
1,1,1-Trichloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BXL1715-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BXL1715-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BXL1715-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BXL1715-BLK1	ND	ug/L	1.0	0.24	
Vinyl chloride	BXL1715-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BXL1715-BLK1	ND	ug/L	1.0	0.36	
Acetone	BXL1715-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BXL1715-BLK1	ND	ug/L	5.0	1.2	
Carbon disulfide	BXL1715-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BXL1715-BLK1	ND	ug/L	5.0	1.4	
2-Hexanone	BXL1715-BLK1	ND	ug/L	10	3.4	
2-Butanone	BXL1715-BLK1	ND	ug/L	10	2.5	
Iodomethane	BXL1715-BLK1	ND	ug/L	2.0	0.47	
4-Methyl-2-pentanone	BXL1715-BLK1	ND	ug/L	10	2.1	
Vinyl acetate	BXL1715-BLK1	ND	ug/L	10	1.8	
1,2-Dichloroethane-d4 (Surrogate)	**BXL1715-BLK1**	**104**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BXL1715-BLK1**	**99.8**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BXL1715-BLK1**	**88.2**	%	**80 - 120 (LCL - UCL)**		

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1625										
Benzene	BXL1625-BS1	LCS	25.630	25.000	ug/L	103		70 - 130		
Bromodichloromethane	BXL1625-BS1	LCS	26.840	25.000	ug/L	107		70 - 130		
Chlorobenzene	BXL1625-BS1	LCS	26.350	25.000	ug/L	105		70 - 130		
Chloroethane	BXL1625-BS1	LCS	24.530	25.000	ug/L	98.1		70 - 130		
1,4-Dichlorobenzene	BXL1625-BS1	LCS	24.890	25.000	ug/L	99.6		70 - 130		
1,1-Dichloroethane	BXL1625-BS1	LCS	24.610	25.000	ug/L	98.4		70 - 130		
1,1-Dichloroethene	BXL1625-BS1	LCS	25.100	25.000	ug/L	100		70 - 130		
Toluene	BXL1625-BS1	LCS	24.580	25.000	ug/L	98.3		70 - 130		
Trichloroethene	BXL1625-BS1	LCS	25.010	25.000	ug/L	100		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXL1625-BS1	LCS	10.050	10.000	ug/L	100		75 - 125		
Toluene-d8 (Surrogate)	BXL1625-BS1	LCS	9.8600	10.000	ug/L	98.6		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXL1625-BS1	LCS	9.5800	10.000	ug/L	95.8		80 - 120		
QC Batch ID: BXL1715										
Benzene	BXL1715-BS1	LCS	24.270	25.000	ug/L	97.1		70 - 130		
Bromodichloromethane	BXL1715-BS1	LCS	28.530	25.000	ug/L	114		70 - 130		
Chlorobenzene	BXL1715-BS1	LCS	26.720	25.000	ug/L	107		70 - 130		
Chloroethane	BXL1715-BS1	LCS	24.060	25.000	ug/L	96.2		70 - 130		
1,4-Dichlorobenzene	BXL1715-BS1	LCS	24.760	25.000	ug/L	99.0		70 - 130		
1,1-Dichloroethane	BXL1715-BS1	LCS	24.590	25.000	ug/L	98.4		70 - 130		
1,1-Dichloroethene	BXL1715-BS1	LCS	25.830	25.000	ug/L	103		70 - 130		
Toluene	BXL1715-BS1	LCS	25.730	25.000	ug/L	103		70 - 130		
Trichloroethene	BXL1715-BS1	LCS	27.800	25.000	ug/L	111		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BXL1715-BS1	LCS	9.6900	10.000	ug/L	96.9		75 - 125		
Toluene-d8 (Surrogate)	BXL1715-BS1	LCS	10.100	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	BXL1715-BS1	LCS	9.5600	10.000	ug/L	95.6		80 - 120		

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1625	Used client sample: N										
Benzene	MS	1429866-01	ND	26.690	25.000	ug/L		107		70 - 130	
	MSD	1429866-01	ND	26.070	25.000	ug/L	2.4	104	20	70 - 130	
Bromodichloromethane	MS	1429866-01	ND	28.580	25.000	ug/L		114		70 - 130	
	MSD	1429866-01	ND	27.900	25.000	ug/L	2.4	112	20	70 - 130	
Chlorobenzene	MS	1429866-01	ND	27.210	25.000	ug/L		109		70 - 130	
	MSD	1429866-01	ND	27.260	25.000	ug/L	0.2	109	20	70 - 130	
Chloroethane	MS	1429866-01	ND	25.640	25.000	ug/L		103		70 - 130	
	MSD	1429866-01	ND	25.320	25.000	ug/L	1.3	101	20	70 - 130	
1,4-Dichlorobenzene	MS	1429866-01	ND	25.570	25.000	ug/L		102		70 - 130	
	MSD	1429866-01	ND	25.630	25.000	ug/L	0.2	103	20	70 - 130	
1,1-Dichloroethane	MS	1429866-01	ND	26.050	25.000	ug/L		104		70 - 130	
	MSD	1429866-01	ND	26.110	25.000	ug/L	0.2	104	20	70 - 130	
1,1-Dichloroethene	MS	1429866-01	ND	26.770	25.000	ug/L		107		70 - 130	
	MSD	1429866-01	ND	26.090	25.000	ug/L	2.6	104	20	70 - 130	
Toluene	MS	1429866-01	ND	26.690	25.000	ug/L		107		70 - 130	
	MSD	1429866-01	ND	25.790	25.000	ug/L	3.4	103	20	70 - 130	
Trichloroethene	MS	1429866-01	ND	26.590	25.000	ug/L		106		70 - 130	
	MSD	1429866-01	ND	26.570	25.000	ug/L	0.1	106	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1429866-01	ND	10.170	10.000	ug/L		102		75 - 125	
	MSD	1429866-01	ND	10.050	10.000	ug/L	1.2	100		75 - 125	
Toluene-d8 (Surrogate)	MS	1429866-01	ND	9.7500	10.000	ug/L		97.5		80 - 120	
	MSD	1429866-01	ND	9.8900	10.000	ug/L	1.4	98.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1429866-01	ND	9.5900	10.000	ug/L		95.9		80 - 120	
	MSD	1429866-01	ND	9.9600	10.000	ug/L	3.8	99.6		80 - 120	
QC Batch ID: BXL1715	Used client sample: N										
Benzene	MS	**1430015-02**	**192.14**	**202.27**	**25.000**	**ug/L**		**40.5**		**70 - 130**	**A03,Q03**
	MSD	**1430015-02**	**192.14**	**200.65**	**25.000**	**ug/L**	**0.8**	**34.0**	**20**	**70 - 130**	**A03,Q03**
Bromodichloromethane	MS	1430015-02	ND	29.270	25.000	ug/L		117		70 - 130	
	MSD	1430015-02	ND	29.220	25.000	ug/L	0.2	117	20	70 - 130	
Chlorobenzene	MS	1430015-02	ND	27.740	25.000	ug/L		111		70 - 130	
	MSD	1430015-02	ND	28.300	25.000	ug/L	2.0	113	20	70 - 130	
Chloroethane	MS	1430015-02	ND	25.190	25.000	ug/L		101		70 - 130	
	MSD	1430015-02	ND	24.830	25.000	ug/L	1.4	99.3	20	70 - 130	
1,4-Dichlorobenzene	MS	1430015-02	ND	25.730	25.000	ug/L		103		70 - 130	
	MSD	1430015-02	ND	27.050	25.000	ug/L	5.0	108	20	70 - 130	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1715	Used client sample: N										
1,1-Dichloroethane	MS	1430015-02	ND	26.000	25.000	ug/L		104		70 - 130	
	MSD	1430015-02	ND	25.810	25.000	ug/L	0.7	103	20	70 - 130	
1,1-Dichloroethene	MS	1430015-02	ND	27.210	25.000	ug/L		109		70 - 130	
	MSD	1430015-02	ND	26.780	25.000	ug/L	1.6	107	20	70 - 130	
Toluene	MS	1430015-02	2.8500	28.820	25.000	ug/L		104		70 - 130	
	MSD	1430015-02	2.8500	28.470	25.000	ug/L	1.2	102	20	70 - 130	
Trichloroethene	MS	1430015-02	ND	28.400	25.000	ug/L		114		70 - 130	
	MSD	1430015-02	ND	28.180	25.000	ug/L	0.8	113	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1430015-02	ND	8.7600	10.000	ug/L		87.6		75 - 125	
	MSD	1430015-02	ND	8.7800	10.000	ug/L	0.2	87.8		75 - 125	
Toluene-d8 (Surrogate)	MS	1430015-02	ND	10.220	10.000	ug/L		102		80 - 120	
	MSD	1430015-02	ND	10.030	10.000	ug/L	1.9	100		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1430015-02	ND	10.050	10.000	ug/L		100		80 - 120	
	MSD	1430015-02	ND	10.120	10.000	ug/L	0.7	101		80 - 120	

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425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BXL1827						
Dissolved Calcium	BXL1827-BLK1	ND	mg/L	0.10	0.016	
Dissolved Magnesium	BXL1827-BLK1	ND	mg/L	0.050	0.019	
Dissolved Sodium	**BXL1827-BLK1**	**0.098566**	**mg/L**	**0.50**	**0.051**	**J**
Dissolved Potassium	BXL1827-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BXL2059						
Total Dissolved Solids @ 180 C	BXL2059-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BXL2060						
Total Dissolved Solids @ 180 C	BXL2060-BLK1	ND	mg/L	6.7	6.7	
QC Batch ID: BXL2106						
Bicarbonate Alkalinity as CaCO3	BXL2106-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BXL2106-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BXL2107						
Bicarbonate Alkalinity as CaCO3	BXL2107-BLK1	ND	mg/L	4.1	4.1	
Carbonate Alkalinity as CaCO3	BXL2107-BLK1	ND	mg/L	4.1	4.1	
QC Batch ID: BYA0035						
Chloride	BYA0035-BLK1	ND	mg/L	0.50	0.061	
Sulfate	BYA0035-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYA0036						
Chloride	BYA0036-BLK1	ND	mg/L	0.50	0.061	
Sulfate	BYA0036-BLK1	ND	mg/L	1.0	0.10	
QC Batch ID: BYA0072						
Nitrate/Nitrite as N	BYA0072-BLK1	ND	mg/L	0.10	0.014	
QC Batch ID: BYA0074						
Nitrate/Nitrite as N	BYA0074-BLK1	ND	mg/L	0.10	0.014	

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Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BXL1827										
Dissolved Calcium	BXL1827-BS1	LCS	11.205	10.000	mg/L	112		85 - 115		
Dissolved Magnesium	BXL1827-BS1	LCS	11.545	10.000	mg/L	115		85 - 115		
Dissolved Sodium	BXL1827-BS1	LCS	11.415	10.000	mg/L	114		85 - 115		
Dissolved Potassium	BXL1827-BS1	LCS	11.113	10.000	mg/L	111		85 - 115		
QC Batch ID: BXL2059										
Total Dissolved Solids @ 180 C	BXL2059-BS1	LCS	560.00	586.00	mg/L	95.6		90 - 110		
QC Batch ID: BXL2060										
Total Dissolved Solids @ 180 C	BXL2060-BS1	LCS	555.00	586.00	mg/L	94.7		90 - 110		
QC Batch ID: BYA0035										
Chloride	BYA0035-BS1	LCS	51.488	50.000	mg/L	103		90 - 110		
Sulfate	BYA0035-BS1	LCS	103.11	100.00	mg/L	103		90 - 110		
QC Batch ID: BYA0036										
Chloride	BYA0036-BS1	LCS	51.459	50.000	mg/L	103		90 - 110		
Sulfate	BYA0036-BS1	LCS	102.69	100.00	mg/L	103		90 - 110		
QC Batch ID: BYA0072										
Nitrate/Nitrite as N	BYA0072-BS1	LCS	2.0602	2.0000	mg/L	103		90 - 110		
QC Batch ID: BYA0074										
Nitrate/Nitrite as N	BYA0074-BS1	LCS	2.0191	2.0000	mg/L	101		90 - 110		

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BXL1827	Used client sample: Y - Description: MW-1R, 12/15/2014 12:15										
Dissolved Calcium	DUP	**1430165-01**	**64.065**	**63.933**		**mg/L**	**0.2**		**20**		
	MS	**1430165-01**	**64.065**	**80.268**	**10.204**	**mg/L**		**159**		**75 - 125**	**A03**
	MSD	**1430165-01**	**64.065**	**78.420**	**10.204**	**mg/L**	**2.3**	**141**	**20**	**75 - 125**	**A03**
Dissolved Magnesium	DUP	**1430165-01**	**43.526**	**43.452**		**mg/L**	**0.2**		**20**		
	MS	**1430165-01**	**43.526**	**58.039**	**10.204**	**mg/L**		**142**		**75 - 125**	**A03**
	MSD	**1430165-01**	**43.526**	**57.837**	**10.204**	**mg/L**	**0.3**	**140**	**20**	**75 - 125**	**A03**
Dissolved Sodium	DUP	**1430165-01**	**51.810**	**51.325**		**mg/L**	**0.9**		**20**		
	MS	**1430165-01**	**51.810**	**66.810**	**10.204**	**mg/L**		**147**		**75 - 125**	**A03**
	MSD	**1430165-01**	**51.810**	**65.021**	**10.204**	**mg/L**	**2.7**	**129**	**20**	**75 - 125**	**A03**
Dissolved Potassium	DUP	1430165-01	4.9619	4.9664		mg/L	0.1		20		
	MS	1430165-01	4.9619	15.897	10.204	mg/L		107		75 - 125	
	MSD	1430165-01	4.9619	15.767	10.204	mg/L	0.8	106	20	75 - 125	
QC Batch ID: BXL2059	Used client sample: Y - Description: MW-1R, 12/15/2014 12:15										
Total Dissolved Solids @ 180 C	DUP	1430165-01	566.66	559.99		mg/L	1.2		10		
QC Batch ID: BXL2060	Used client sample: N										
Total Dissolved Solids @ 180 C	DUP	1430013-01	605.00	600.00		mg/L	0.8		10		
QC Batch ID: BXL2106	Used client sample: N										
Bicarbonate Alkalinity as CaCO3	DUP	1430054-01	10.040	10.040		mg/L	0		10		
Carbonate Alkalinity as CaCO3	DUP	1430054-01	ND	ND		mg/L			10		
QC Batch ID: BXL2107	Used client sample: Y - Description: MW-5, 12/15/2014 14:55										
Bicarbonate Alkalinity as CaCO3	DUP	1430165-05	185.30	185.45		mg/L	0.1		10		
Carbonate Alkalinity as CaCO3	DUP	1430165-05	ND	ND		mg/L			10		
QC Batch ID: BYA0035	Used client sample: Y - Description: MW-1R, 12/15/2014 12:15										
Chloride	DUP	1430165-01	63.556	63.668		mg/L	0.2		10		
	MS	1430165-01	63.556	123.11	50.505	mg/L		118		80 - 120	
	MSD	1430165-01	63.556	123.22	50.505	mg/L	0.1	118	10	80 - 120	
Sulfate	DUP	**1430165-01**	**44.093**	**44.109**		**mg/L**	**0.0**		**10**		
	MS	**1430165-01**	**44.093**	**167.99**	**101.01**	**mg/L**		**123**		**80 - 120**	**Q03**
	MSD	**1430165-01**	**44.093**	**168.88**	**101.01**	**mg/L**	**0.5**	**124**	**10**	**80 - 120**	**Q03**
QC Batch ID: BYA0036	Used client sample: Y - Description: MW-11, 12/15/2014 14:13										
Chloride	DUP	1430165-11	7.1310	7.1830		mg/L	0.7		10		
	MS	1430165-11	7.1310	57.052	50.505	mg/L		98.8		80 - 120	
	MSD	1430165-11	7.1310	57.164	50.505	mg/L	0.2	99.1	10	80 - 120	
Sulfate	DUP	1430165-11	16.612	16.430		mg/L	1.1		10		
	MS	1430165-11	16.612	117.19	101.01	mg/L		99.6		80 - 120	
	MSD	1430165-11	16.612	117.53	101.01	mg/L	0.3	99.9	10	80 - 120	

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Golder Associates
425 Lakeside Drive
Sunnyvale, CA 94085

Reported: 01/06/2015 20:06
Project: Yuba Sutter Disposal
Project Number: 053744214
Project Manager: Kris Johnson

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BYA0072	Used client sample: Y - Description: MW-3, 12/15/2014 12:35										
Nitrate/Nitrite as N	DUP	1430165-03	0.93750	0.94670		mg/L	1.0		10		
	MS	1430165-03	0.93750	3.1183	2.1053	mg/L		104		90 - 110	
	MSD	1430165-03	0.93750	3.0428	2.1053	mg/L	2.4	100	10	90 - 110	
QC Batch ID: BYA0074	Used client sample: Y - Description: MW-11, 12/15/2014 14:13										
Nitrate/Nitrite as N	DUP	1430165-11	0.62150	0.61670		mg/L	0.8		10		
	MS	1430165-11	0.62150	2.8656	2.1053	mg/L		107		90 - 110	
	MSD	1430165-11	0.62150	2.8113	2.1053	mg/L	1.9	104	10	90 - 110	

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Golder Associates 425 Lakeside Drive Sunnyvale, CA 94085	**Reported:** 01/06/2015 20:06 Project: Yuba Sutter Disposal Project Number: 053744214 Project Manager: Kris Johnson

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A03	The sample concentration is more than 4 times the spike level.
Q03	Matrix spike recovery(s) is(are) not within the control limits.

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APPENDIX C

MANN-KENDALL TREND TEST RESULTS, PIPER DIAGRAM, AND SUMMARY OF CONCENTRATION LIMIT CALCULATIONS

Mann-Kendall Trend Test Report

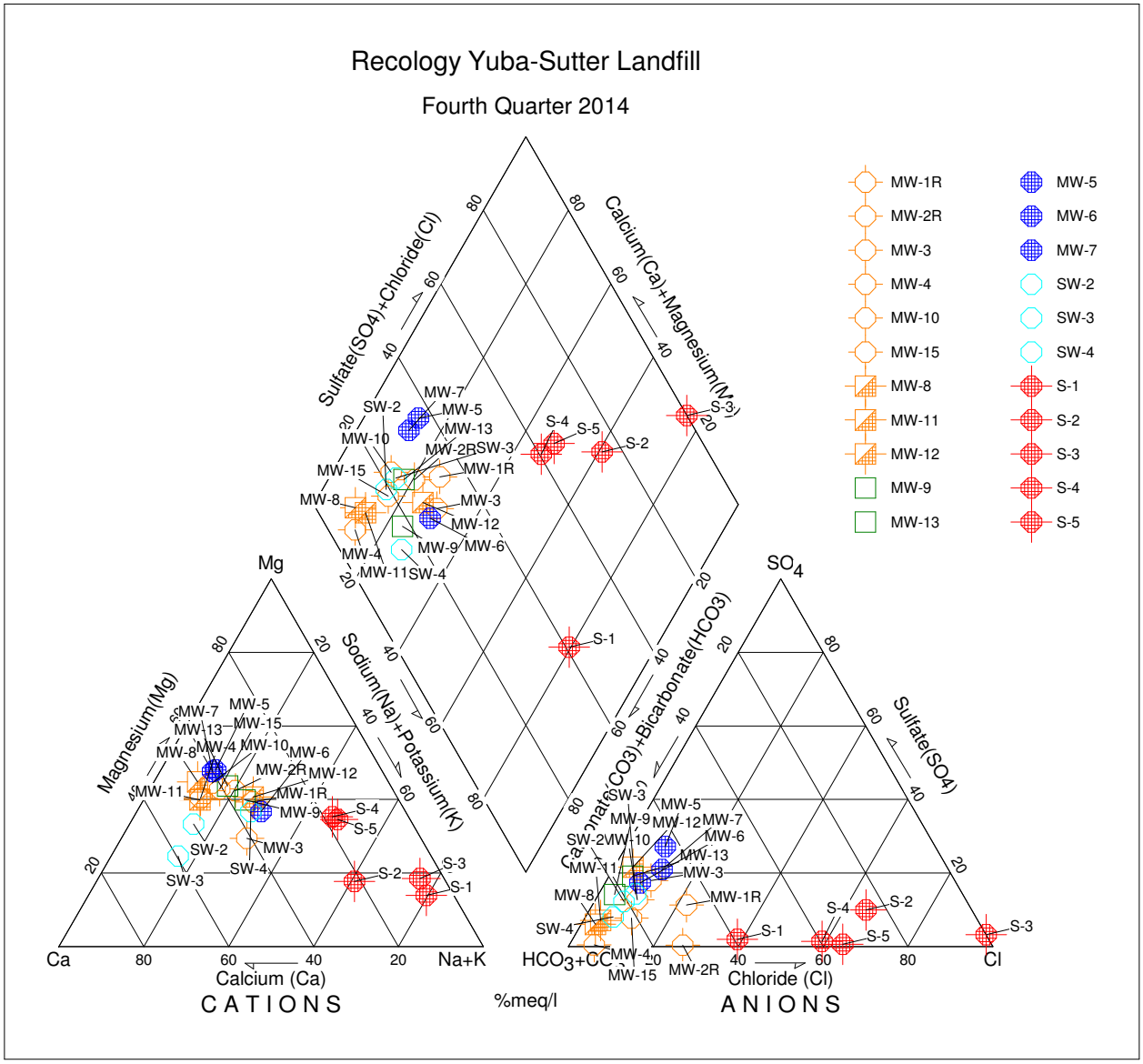
Company:	Recology Yuba-Sutter	**Data Group:**	None
Site:	YSDI Landfill	**Date Range:**	01-01-2004 to 12-31-2014
Program:	YSD Groundwater	**Non-detects:**	1/2 detection limit
Permit:		**Duplicates:**	Mean
Minimum Size:	4	**Confidence Level:**	0.95
Reported by:	XPMUser	**Range of Censoring:**	0% - 100%

Parameter	Unit	Size	%NDs	S Value	Tabular Value	Statistically Significant Trend	Direction
MW-11							
pH	s.u.	45	0.00%		0.831137	No	-
Specific Conductance	µmhos/cm	45	0.00%	-5.15528	0.00000013	Yes	Downward
Chloride	mg/L	22	0.00%	-35	0.171	No	-
Nitrogen, Nitrate plus Nitrite	mg/L	22	18.20%	22	0.2795	No	-
Sulfate as SO4	mg/L	22	0.00%	113	0.001	Yes	Upward
Total Dissolved Solids	mg/L	22	0.00%	-65	0.035	Yes	Downward
1,4-Dichlorobenzene	µg/L	45	100.00%	-4.99877	0.00000029	No	ND
Benzene	µg/L	44	100.00%	-1.36545	0.086056	No	ND
Chlorobenzene	µg/L	44	100.00%	-1.16316	0.122382	No	ND
cis-1,2-Dichloroethene	µg/L	44	100.00%	-3.43891	0.000292033	No	ND
Vinyl chloride	µg/L	44	100.00%	-0.89007	0.186714	No	ND
Bicarbonate (as CaCO3)	mg/L	22	0.00%	-124	0	Yes	Downward
Carbonate (as CaCO)	mg/L	22	100.00%	-136	0	No	ND
MW-12							
pH	s.u.	43	0.00%	2.73152	0.996848	No	-
Specific Conductance	µmhos/cm	43	0.00%	-1.92567	0.0270726	Yes	Downward
Chloride	mg/L	22	0.00%	-65	0.035	Yes	Downward
Nitrogen, Nitrate plus Nitrite	mg/L	22	9.10%	20	0.2985	No	-
Sulfate as SO4	mg/L	22	0.00%	-147	0	Yes	Downward
Total Dissolved Solids	mg/L	22	0.00%	-26	0.243	No	-
1,4-Dichlorobenzene	µg/L	43	100.00%	-5.24327	0.00000008	No	ND
Benzene	µg/L	42	100.00%	-2.28673	0.0111057	No	ND
Chlorobenzene	µg/L	42	100.00%	-2.06998	0.019227	No	ND
cis-1,2-Dichloroethene	µg/L	42	97.60%	-3.99907	0.00003180	No	NA
Vinyl chloride	µg/L	42	95.20%	-2.17836	0.0146897	No	NA
Bicarbonate (as CaCO3)	mg/L	22	0.00%	-8	0.423	No	-
Carbonate (as CaCO)	mg/L	22	100.00%	-113	0.001	No	ND
MW-8							
pH	s.u.	45	0.00%	-2.91513	0.00177769	Yes	Downward
Specific Conductance	µmhos/cm	45	0.00%	-0.342381	0.366032	No	-
Chloride	mg/L	22	0.00%	30	0.209	No	-
Nitrogen, Nitrate plus Nitrite	mg/L	22	0.00%	-54	0.068	No	-
Sulfate as SO4	mg/L	22	0.00%	-114	0.0005	Yes	Downward
Total Dissolved Solids	mg/L	22	0.00%	49	0.089	No	-
1,4-Dichlorobenzene	µg/L	45	100.00%	-4.99877	0.00000029	No	ND
Benzene	µg/L	44	100.00%	-1.36545	0.086056	No	ND
Chlorobenzene	µg/L	44	100.00%	-1.16316	0.122382	No	ND
cis-1,2-Dichloroethene	µg/L	44	86.40%	-5.42134	0.00000003	Yes	Downward
Vinyl chloride	µg/L	44	100.00%	-0.89007	0.186714	No	ND
Bicarbonate (as CaCO3)	mg/L	22	0.00%	20	0.2985	No	-
Carbonate (as CaCO)	mg/L	22	100.00%	-136	0	No	ND

Parameter	Unit	Size	%NDs	S Value	Tabular Value	Statistically Significant Trend	Direction
Date Range:	01-01-1995 to 12-31-2014						
MW-1							
pH	s.u.	80	0.00%	1		No	-
Specific Conductance	µmhos/cm	80	0.00%	-4.48705	0.00000361	Yes	Downward
Chloride	mg/L	45	0.00%	-3.62924	0.000142128	Yes	Downward
Nitrogen, Nitrate plus Nitrite	mg/L	45	53.30%	2.39667	0.991728	No	-
Sulfate as SO4	mg/L	45	0.00%	-2.19124	0.0142172	Yes	Downward
Total Dissolved Solids	mg/L	46	0.00%	-2.9446	0.00161689	Yes	Downward
1,4-Dichlorobenzene	µg/L	82	67.10%	-2.08632	0.0184748	Yes	Downward
Benzene	µg/L	79	98.70%	-4.85564	0.00000060	No	NA
Chlorobenzene	µg/L	79	45.60%	-0.321734	0.373827	No	-
cis-1,2-Dichloroethene	µg/L	79	40.50%	-9.41071	0.0000000000000000000025	Yes	Downward
Vinyl chloride	µg/L	79	70.90%	-7.69197	0.0000000000000072	Yes	Downward
Bicarbonate (as CaCO3)	mg/L	24	0.00%	-125	0.0012	Yes	Downward
Carbonate (as CaCO)	mg/L	24	100.00%	-141	0	No	ND
MW-10							
pH	s.u.	80	0.00%	4.52444	0.999997	No	-
Specific Conductance	µmhos/cm	82	0.00%	-6.85563	0.00000000000355	Yes	Downward
Chloride	mg/L	45	0.00%	-2.68036	0.0036772	Yes	Downward
Nitrogen, Nitrate plus Nitrite	mg/L	46	47.80%	5.9744	1	No	-
Sulfate as SO4	mg/L	46	10.90%	2.67002	0.996208	No	-
Total Dissolved Solids	mg/L	46	0.00%	-5.31163	0.0000000543	Yes	Downward
1,4-Dichlorobenzene	µg/L	83	14.50%	-6.63449	0.00000000001628	Yes	Downward
Benzene	µg/L	80	83.80%	-6.85106	0.00000000000367	Yes	Downward
Chlorobenzene	µg/L	80	95.00%	-4.16298	0.0000157058	Yes	Downward
cis-1,2-Dichloroethene	µg/L	80	76.30%	-7.05879	0.000000000000840	Yes	Downward
Vinyl chloride	µg/L	80	100.00%	-4.53275	0.00000291104	No	ND
Bicarbonate (as CaCO3)	mg/L	25	0.00%	-104	0.008	Yes	Downward
Carbonate (as CaCO)	mg/L	25	100.00%	-97	0.0116	No	ND
MW-15							
pH	s.u.	10	0.00%	3	0.431	No	-
Specific Conductance	µmhos/cm	10	0.00%	-11	0.19	No	-
Chloride	mg/L	6	0.00%	-3	0.36	No	-
Nitrogen, Nitrate plus Nitrite	mg/L	6	0.00%	6	0.1855	No	-
Sulfate as SO4	mg/L	6	0.00%	3	0.36	No	-
Total Dissolved Solids	mg/L	6	0.00%	-2	0.43	No	-
1,4-Dichlorobenzene	µg/L	11	9.10%	11	0.223	No	-
Benzene	µg/L	9	100.00%	0	0.54	No	ND
Chlorobenzene	µg/L	9	33.30%	-5	0.3303	No	-
cis-1,2-Dichloroethene	µg/L	9	77.80%	7	0.2543	No	NA
Vinyl chloride	µg/L	9	100.00%	0	0.54	No	ND
Bicarbonate (as CaCO3)	mg/L	6	0.00%	-5	0.235	No	-
Carbonate (as CaCO)	mg/L	6	100.00%	0	0.592	No	ND

Parameter	Unit	Size	%NDs	S Value	Tabular Value	Statistically Significant Trend	Direction
Date Range:	01-01-1995 to 12-31-2014						
MW-2							
pH	s.u.	79	0.00%	5.30437	1	No	-
Specific Conductance	µmhos/cm	81	0.00%	-0.668859	0.251793	No	-
Chloride	mg/L	45	0.00%	0.733674	0.768426	No	-
Nitrogen, Nitrate plus Nitrite	mg/L	47	31.90%	4.16339	0.999984	No	-
Sulfate as SO4	mg/L	45	37.80%	-1.28148	0.100012	No	-
Total Dissolved Solids	mg/L	45	0.00%	-0.019565	0.492195	No	-
1,4-Dichlorobenzene	µg/L	82	6.10%	-1.91413	0.0278018	Yes	Downward
Benzene	µg/L	79	50.60%	-4.79214	0.000000825066	Yes	Downward
Chlorobenzene	µg/L	79	38.00%	2.3368	0.990275	No	-
cis-1,2-Dichloroethene	µg/L	79	32.90%	-8.33968	0.0000000000000000372	Yes	Downward
Vinyl chloride	µg/L	79	29.10%	-6.56591	0.00000000002586	Yes	Downward
Bicarbonate (as CaCO3)	mg/L	24	0.00%	-65	0.0613	No	-
Carbonate (as CaCO)	mg/L	24	100.00%	-95	0.0112	No	ND
MW-3							
pH	s.u.	81	0.00%	2.94053	0.998362	No	-
Specific Conductance	µmhos/cm	82	0.00%	-2.55084	0.00537321	Yes	Downward
Chloride	mg/L	46	0.00%	1.4865	0.931427	No	-
Nitrogen, Nitrate plus Nitrite	mg/L	46	50.00%	2.38597	0.991483	No	-
Sulfate as SO4	mg/L	46	10.90%	4.52578	0.999997	No	-
Total Dissolved Solids	mg/L	46	0.00%	-1.71374	0.0432887	Yes	Downward
1,4-Dichlorobenzene	µg/L	84	27.40%	-7.42875	0.0000000000000548	Yes	Downward
Benzene	µg/L	80	87.50%	-6.43975	0.00000000005984	Yes	Downward
Chlorobenzene	µg/L	80	60.00%	-5.8207	0.000000002930	Yes	Downward
cis-1,2-Dichloroethene	µg/L	80	76.30%	-6.31511	0.000000000135	Yes	Downward
Vinyl chloride	µg/L	80	85.00%	-5.87055	0.000000002172	Yes	Downward
Bicarbonate (as CaCO3)	mg/L	25	0.00%	-80	0.032	Yes	Downward
Carbonate (as CaCO)	mg/L	25	100.00%	-80	0.032	No	ND
MW-4							
pH	s.u.	72	0.00%	4.064	0.999976	No	-
Specific Conductance	µmhos/cm	73	0.00%	-6.27676	0.0000000001729	Yes	Downward
Chloride	mg/L	46	0.00%	-0.369258	0.355968	No	-
Nitrogen, Nitrate plus Nitrite	mg/L	46	34.80%	2.91619	0.998228	No	-
Sulfate as SO4	mg/L	46	73.90%	-2.00725	0.0223616	Yes	Downward
Total Dissolved Solids	mg/L	46	0.00%	-3.42747	0.000304616	Yes	Downward
1,4-Dichlorobenzene	µg/L	56	100.00%	-5.4632	0.000000023	No	ND
Benzene	µg/L	53	100.00%	0.184099	0.573032	No	ND
Chlorobenzene	µg/L	53	100.00%	0.552296	0.709627	No	ND
cis-1,2-Dichloroethene	µg/L	53	100.00%	-2.99927	0.00135312	No	ND
Vinyl chloride	µg/L	53	100.00%	0.605991	0.72774	No	ND
Bicarbonate (as CaCO3)	mg/L	25	0.00%	-201	0	Yes	Downward
Carbonate (as CaCO)	mg/L	25	100.00%	-80	0.032	No	ND

End of report


Recology Yuba-Sutter Landfill
Fourth Quarter 2014
Sulfate(SO4)+Chloride(Cl)
Calcium(Ca)+Magnesium(Mg)
Sodium(Na)+Potassium(K)
Carbonate(CO3)+Bicarbonate(HCO3)
Magnesium(Mg)
Sulfate(SO4)
Mg
SO4
Ca
Na+K
Calcium (Ca)
CATIONS
%meq/l
HCO3+CO3
Cl
Chloride (Cl)
ANIONS
MW-1R
MW-2R
MW-3
MW-4
MW-10
MW-15
MW-8
MW-11
MW-12
MW-9
MW-13
MW-5
MW-6
MW-7
SW-2
SW-3
SW-4
S-1
S-2
S-3
S-4
S-5

Descriptive Statistics Report

Site: YSDI Landfill
Program: YSD Groundwater
Monitor 5
Minimum Size: 4

Date Range: All through 12/31/2014
Non-detects: 1/2 detection limit
Duplicates: Mean
Log Transform: No

Parameter	Unit	Size	% NDs	Mean	Median	Standard Deviation	Variance	Min	Max	K(95%)	Conc. Limit calculated		Conc. Limit actual
Upgradient													
Background Data (MW-5,6,7)													
Field or Physical Parameters													
pH	s.u.	203	0.00%	7.179	7.14	0.377	0.142	6.15	8.9	2.142	6.37	7.99	6.37 - 7.99
Specific Conductance	µmhos	208	0.00%	384.187	383	73.448	5394.576	249	544	1.847	519.8	-	520
Inorganic Parameters												-	
Chloride	mg/L	204	1.00%	11.178	11	4.064	16.517	0	26	1.847	19	-	19
Nitrogen, Nitrate plus Nitrite	mg/L	92	4.30%	1.029	1.06	0.393	0.155	0	2.2	1.942	1.8	-	1.8
Sulfate as SO4	mg/L	188	0.50%	35.122	35	15.122	228.672	0	77	1.853	63	-	63
Total Dissolved Solids	mg/L	167	0.00%	279.311	280	56.273	3166.649	130	430	1.863	384	-	380
Volatile Organic Compounds												-	
1,4-Dichlorobenzene	µg/L	107	100.00%	0.461	0.08	0.912	0.832	0	ND	1.916	2.2	-	ND
Benzene	µg/L	103	99.00%	0.179	0.075	0.195	0.038	0	0.5	1.922	0.55	-	ND
Chlorobenzene	µg/L	101	100.00%	0.179	0.07	0.196	0.038	0	ND	1.925	0.56	-	ND
cis-1,2-Dichloroethene	µg/L	101	100.00%	0.193	0.1	0.19	0.036	0	ND	1.925	0.56	-	ND
Vinyl chloride	µg/L	101	100.00%	0.185	0.07	0.192	0.037	0	ND	1.925	0.55	-	ND
Water Quality Indicator Parameters												-	
Bicarbonate (as CaCO3)	mg/L	155	0.00%	146.484	150	27.32	746.407	55	190	1.869	198	-	200
Carbonate (as CaCO)	mg/L	156	97.40%	3.536	2.05	7.785	60.612	0	57	1.869	18	-	NE

End of report.

Note:The statistics are replaced by the corresponding minimum variance unbiased estimates for the log normal distribution.

The background data set for nitrate was restricted to the time period of 1997 to present to reduce the influence of more frequent monitoring for nitrate from 1988 to 1994.

APPENDIX D

TABULAR SUMMARIES OF ANALYTICAL DATA FROM PREVIOUS TWO SIX-MONTH PERIODS (DIGITAL DATA FILE EMAILED TO RWQCB)

WELLS

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
MW-5					
Field or Physical Parameters					
pH (s.u.)	6/23/2014	MW-5/41813	7.26	0.01	
pH (s.u.)	12/15/2014	MW-5/41988	7.01	0.01	
Specific Conductance (µmhos/cm)	6/23/2014	MW-5/41813	508	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-5/41988	510	1	
Temperature (deg C)	6/23/2014	MW-5/41813	20.5	0.1	
Temperature (deg C)	12/15/2014	MW-5/41988	19.7	0.1	
Turbidity (NTU)	6/23/2014	MW-5/41813	1	1	
Turbidity (NTU)	12/15/2014	MW-5/41988	1	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-5/41813	16	0.067	
Chloride (mg/L)	12/15/2014	MW-5/41988	16	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-5/41813	1.3	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-5/41988	1.1	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-5/41813	69	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-5/41988	64	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-5/41813	340	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-5/41988	430	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-5/41813	47	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-5/41988	47	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-5/41813	36	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-5/41988	35	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-5/41813	1.7	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	MW-5/41988	1.4	0.1	
Sodium, Dissolved (mg/L)	6/23/2014	MW-5/41813	14	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-5/41988	17	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-5/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-5/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-5/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-5/41988	<0.062	0.062	
Benzene (µg/L)	6/23/2014	MW-5/41813	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-5/41988	<0.083	0.083	
Chlorobenzene (µg/L)	6/23/2014	MW-5/41813	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-5/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-5/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-5/41988	<0.085	0.085	
Vinyl chloride (µg/L)	6/23/2014	MW-5/41813	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-5/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-5/41813	180	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-5/41988	190	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-5/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-5/41988	<4.100	4.1	
MW-6					
Field or Physical Parameters					
pH (s.u.)	6/23/2014	MW-6/41813	7.39	0.01	
pH (s.u.)	12/15/2014	MW-6/41988	7.09	0.01	
Specific Conductance (µmhos/cm)	6/23/2014	MW-6/41813	355	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-6/41988	336	1	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Temperature (deg C)	6/23/2014	MW-6/41813	21.3	0.1	
Temperature (deg C)	12/15/2014	MW-6/41988	19.6	0.1	
Turbidity (NTU)	6/23/2014	MW-6/41813	0	1	
Turbidity (NTU)	12/15/2014	MW-6/41988	1	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-6/41813	10	0.067	
Chloride (mg/L)	12/15/2014	MW-6/41988	7.7	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-6/41813	0.57	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-6/41988	0.34	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-6/41813	31	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-6/41988	22	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-6/41813	260	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-6/41988	250	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-6/41813	27	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-6/41988	26	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-6/41813	19	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-6/41988	17	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-6/41813	1.3	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	MW-6/41988	1.2	0.1	
Sodium, Dissolved (mg/L)	6/23/2014	MW-6/41813	24	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-6/41988	25	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-6/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-6/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-6/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-6/41988	<0.062	0.062	
Benzene (µg/L)	6/23/2014	MW-6/41813	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-6/41988	<0.083	0.083	
Chlorobenzene (µg/L)	6/23/2014	MW-6/41813	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-6/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-6/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-6/41988	<0.085	0.085	
Vinyl chloride (µg/L)	6/23/2014	MW-6/41813	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-6/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-6/41813	140	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-6/41988	120	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-6/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-6/41988	<4.100	4.1	
MW-7					
Field or Physical Parameters					
pH (s.u.)	6/23/2014	MW-7/41813	7.28	0.01	
pH (s.u.)	12/15/2014	MW-7/41988	7.03	0.01	
Specific Conductance (µmhos/cm)	6/23/2014	MW-7/41813	467	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-7/41988	460	1	
Temperature (deg C)	6/23/2014	MW-7/41813	22.2	0.1	
Temperature (deg C)	12/15/2014	MW-7/41988	19.5	0.1	
Turbidity (NTU)	6/23/2014	MW-7/41813	0	1	
Turbidity (NTU)	12/15/2014	MW-7/41988	2	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-7/41813	17	0.067	
Chloride (mg/L)	12/15/2014	MW-7/41988	18	0.061	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-7/41813	1.4	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-7/41988	1.5	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-7/41813	44	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-7/41988	44	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-7/41813	350	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-7/41988	390	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-7/41813	42	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-7/41988	47	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-7/41813	30	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-7/41988	34	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-7/41813	1.3	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	MW-7/41988	1.2	0.1	
Sodium, Dissolved (mg/L)	6/23/2014	MW-7/41813	15	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-7/41988	16	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-7/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-7/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-7/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-7/41988	<0.062	0.062	
Benzene (µg/L)	6/23/2014	MW-7/41813	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-7/41988	<0.083	0.083	
Chlorobenzene (µg/L)	6/23/2014	MW-7/41813	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-7/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-7/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-7/41988	<0.085	0.085	
Vinyl chloride (µg/L)	6/23/2014	MW-7/41813	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-7/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-7/41813	170	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-7/41988	180	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-7/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-7/41988	<4.100	4.1	

Corrective Action Monitoring

MW-1

Field or Physical Parameters					
pH (s.u.)	3/28/2014	MW-1/41726	6.03	0.01	
pH (s.u.)	6/23/2014	MW-1/41813	6.83	0.01	
pH (s.u.)	8/ 6/2014	MW-1/41857	6.72	0.01	
Specific Conductance (µmhos/cm)	3/28/2014	MW-1/41726	555	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-1/41813	631	1	
Specific Conductance (µmhos/cm)	8/ 6/2014	MW-1/41857	659	1	
Temperature (deg C)	3/28/2014	MW-1/41726	20.5	0.1	
Temperature (deg C)	6/23/2014	MW-1/41813	20.1	0.1	
Temperature (deg C)	8/ 6/2014	MW-1/41857	19.8	0.1	
Turbidity (NTU)	3/28/2014	MW-1/41726	31.3	1	
Turbidity (NTU)	6/23/2014	MW-1/41813	5.5	1	
Turbidity (NTU)	8/ 6/2014	MW-1/41857	2	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-1/41813	29	0.067	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-1/41813	0.029	0.014	J
Sulfate as SO4 (mg/L)	6/23/2014	MW-1/41813	19	0.18	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Total Dissolved Solids (mg/L)	6/23/2014	MW-1/41813	430	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-1/41813	57	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-1/41813	40	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-1/41813	2.7	0.1	
Sodium, Dissolved (mg/L)	6/23/2014	MW-1/41813	25	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/28/2014	MW-1/41726	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-1/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 6/2014	MW-1/41857	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/28/2014	MW-1/41726	0.09	0.062	J
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-1/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	8/ 6/2014	MW-1/41857	0.1	0.062	J
Benzene (µg/L)	3/28/2014	MW-1/41726	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-1/41813	<0.083	0.083	
Benzene (µg/L)	8/ 6/2014	MW-1/41857	<0.083	0.083	
Chlorobenzene (µg/L)	3/28/2014	MW-1/41726	0.29	0.093	J
Chlorobenzene (µg/L)	6/23/2014	MW-1/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 6/2014	MW-1/41857	0.26	0.093	J
cis-1,2-Dichloroethene (µg/L)	3/28/2014	MW-1/41726	0.15	0.085	J
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-1/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 6/2014	MW-1/41857	0.12	0.085	J
Vinyl chloride (µg/L)	3/28/2014	MW-1/41726	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-1/41813	0.14	0.12	J
Vinyl chloride (µg/L)	8/ 6/2014	MW-1/41857	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-1/41813	280	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-1/41813	<4.100	4.1	

MW-10

Field or Physical Parameters					
pH (s.u.)	3/27/2014	MW-10/41725	5.77	0.01	
pH (s.u.)	6/23/2014	MW-10/41813	6.76	0.01	
pH (s.u.)	8/ 5/2014	MW-10/41856	6.5	0.01	
pH (s.u.)	12/15/2014	MW-10/41988	6.52	0.01	
Specific Conductance (µmhos/cm)	3/27/2014	MW-10/41725	288	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-10/41813	323	1	
Specific Conductance (µmhos/cm)	8/ 5/2014	MW-10/41856	340	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-10/41988	181	1	
Temperature (deg C)	3/27/2014	MW-10/41725	21.2	0.1	
Temperature (deg C)	6/23/2014	MW-10/41813	20.8	0.1	
Temperature (deg C)	8/ 5/2014	MW-10/41856	19.6	0.1	
Temperature (deg C)	12/15/2014	MW-10/41988	18.4	0.1	
Turbidity (NTU)	3/27/2014	MW-10/41725	3.8	1	
Turbidity (NTU)	6/23/2014	MW-10/41813	3	1	
Turbidity (NTU)	8/ 5/2014	MW-10/41856	2	1	
Turbidity (NTU)	12/15/2014	MW-10/41988	3	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-10/41813	7.5	0.067	
Chloride (mg/L)	12/15/2014	MW-10/41988	5.7	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-10/41813	0.49	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-10/41988	1.2	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-10/41813	4.1	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-10/41988	10	0.1	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Total Dissolved Solids (mg/L)	6/23/2014	MW-10/41813	170	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-10/41988	160	10	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-10/41813	29	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-10/41988	17	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-10/41813	17	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-10/41988	11	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-10/41813	1.6	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	MW-10/41988	0.98	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-10/41813	7.7	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-10/41988	5.9	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/27/2014	MW-10/41725	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-10/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 5/2014	MW-10/41856	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-10/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/27/2014	MW-10/41725	0.33	0.062	J
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-10/41813	0.46	0.062	J
1,4-Dichlorobenzene (µg/L)	8/ 5/2014	MW-10/41856	0.5	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-10/41988	0.07	0.062	J
Benzene (µg/L)	3/27/2014	MW-10/41725	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-10/41813	<0.083	0.083	
Benzene (µg/L)	8/ 5/2014	MW-10/41856	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-10/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/27/2014	MW-10/41725	<0.093	0.093	
Chlorobenzene (µg/L)	6/23/2014	MW-10/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 5/2014	MW-10/41856	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-10/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	3/27/2014	MW-10/41725	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-10/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 5/2014	MW-10/41856	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-10/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/27/2014	MW-10/41725	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-10/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 5/2014	MW-10/41856	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-10/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-10/41813	140	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-10/41988	77	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-10/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-10/41988	<4.100	4.1	

MW-11

Field or Physical Parameters					
pH (s.u.)	3/27/2014	MW-11/41725	5.88	0.01	
pH (s.u.)	6/23/2014	MW-11/41813	6.79	0.01	
pH (s.u.)	8/ 5/2014	MW-11/41856	6.64	0.01	
pH (s.u.)	12/15/2014	MW-11/41988	6.8	0.01	
Specific Conductance (µmhos/cm)	3/27/2014	MW-11/41725	469	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-11/41813	507	1	
Specific Conductance (µmhos/cm)	8/ 5/2014	MW-11/41856	541	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-11/41988	498	1	
Temperature (deg C)	3/27/2014	MW-11/41725	21.4	0.1	
Temperature (deg C)	6/23/2014	MW-11/41813	22.4	0.1	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Temperature (deg C)	8/ 5/2014	MW-11/41856	19.8	0.1	
Temperature (deg C)	12/15/2014	MW-11/41988	19.2	0.1	
Turbidity (NTU)	3/27/2014	MW-11/41725	39	1	
Turbidity (NTU)	6/23/2014	MW-11/41813	11.1	1	
Turbidity (NTU)	8/ 5/2014	MW-11/41856	13	1	
Turbidity (NTU)	12/15/2014	MW-11/41988	4	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-11/41813	6.4	0.067	
Chloride (mg/L)	12/15/2014	MW-11/41988	7.1	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-11/41813	0.47	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-11/41988	0.62	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-11/41813	15	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-11/41988	17	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-11/41813	380	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-11/41988	410	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-11/41813	56	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-11/41988	62	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-11/41813	30	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-11/41988	32	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-11/41813	0.58	0.1	J
Potassium, Dissolved (mg/L)	12/15/2014	MW-11/41988	0.43	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-11/41813	18	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-11/41988	20	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/27/2014	MW-11/41725	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-11/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 5/2014	MW-11/41856	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-11/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/27/2014	MW-11/41725	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-11/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	8/ 5/2014	MW-11/41856	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-11/41988	<0.062	0.062	
Benzene (µg/L)	3/27/2014	MW-11/41725	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-11/41813	<0.083	0.083	
Benzene (µg/L)	8/ 5/2014	MW-11/41856	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-11/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/27/2014	MW-11/41725	<0.093	0.093	
Chlorobenzene (µg/L)	6/23/2014	MW-11/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 5/2014	MW-11/41856	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-11/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	3/27/2014	MW-11/41725	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-11/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 5/2014	MW-11/41856	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-11/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/27/2014	MW-11/41725	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-11/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 5/2014	MW-11/41856	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-11/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-11/41813	260	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-11/41988	270	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-11/41813	<4.100	4.1	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-11/41988	<4.100	4.1	
MW-12					
Field or Physical Parameters					
pH (s.u.)	3/27/2014	MW-12/41725	5.99	0.01	
pH (s.u.)	6/23/2014	MW-12/41813	7.18	0.01	
pH (s.u.)	8/ 5/2014	MW-12/41856	7.53	0.01	
pH (s.u.)	12/15/2014	MW-12/41988	6.99	0.01	
Specific Conductance (µmhos/cm)	3/27/2014	MW-12/41725	373	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-12/41813	365	1	
Specific Conductance (µmhos/cm)	8/ 5/2014	MW-12/41856	379	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-12/41988	379	1	
Temperature (deg C)	3/27/2014	MW-12/41725	21.4	0.1	
Temperature (deg C)	6/23/2014	MW-12/41813	22.7	0.1	
Temperature (deg C)	8/ 5/2014	MW-12/41856	19.8	0.1	
Temperature (deg C)	12/15/2014	MW-12/41988	19	0.1	
Turbidity (NTU)	3/27/2014	MW-12/41725	274	1	
Turbidity (NTU)	6/23/2014	MW-12/41813	24.7	1	
Turbidity (NTU)	8/ 5/2014	MW-12/41856	17	1	
Turbidity (NTU)	12/15/2014	MW-12/41988	1000	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-12/41813	5.1	0.067	
Chloride (mg/L)	12/15/2014	MW-12/41988	5.9	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-12/41813	1.6	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-12/41988	1.8	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-12/41813	37	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-12/41988	39	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-12/41813	270	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-12/41988	330	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-12/41813	27	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-12/41988	33	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-12/41813	21	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-12/41988	24	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-12/41813	0.63	0.1	J
Potassium, Dissolved (mg/L)	12/15/2014	MW-12/41988	0.63	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-12/41813	26	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-12/41988	28	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/27/2014	MW-12/41725	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-12/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 5/2014	MW-12/41856	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-12/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/27/2014	MW-12/41725	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-12/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	8/ 5/2014	MW-12/41856	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-12/41988	<0.062	0.062	
Benzene (µg/L)	3/27/2014	MW-12/41725	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-12/41813	<0.083	0.083	
Benzene (µg/L)	8/ 5/2014	MW-12/41856	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-12/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/27/2014	MW-12/41725	<0.093	0.093	
Chlorobenzene (µg/L)	6/23/2014	MW-12/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 5/2014	MW-12/41856	<0.093	0.093	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Monitor 5					
Chlorobenzene (µg/L)	12/15/2014	MW-12/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	3/27/2014	MW-12/41725	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-12/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 5/2014	MW-12/41856	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-12/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/27/2014	MW-12/41725	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-12/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 5/2014	MW-12/41856	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-12/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-12/41813	140	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-12/41988	170	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-12/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-12/41988	<4.100	4.1	
MW-15					
Field or Physical Parameters					
pH (s.u.)	3/28/2014	MW-15/41726	6.11	0.01	
pH (s.u.)	6/23/2014	MW-15/41813	6.94	0.01	
pH (s.u.)	8/ 6/2014	MW-15/41857	6.77	0.01	
pH (s.u.)	12/15/2014	MW-15/41988	7.23	0.01	
Specific Conductance (µmhos/cm)	3/28/2014	MW-15/41726	565	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-15/41813	643	1	
Specific Conductance (µmhos/cm)	8/ 6/2014	MW-15/41857	663	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-15/41988	566	1	
Temperature (deg C)	3/28/2014	MW-15/41726	19.8	0.1	
Temperature (deg C)	6/23/2014	MW-15/41813	19.9	0.1	
Temperature (deg C)	8/ 6/2014	MW-15/41857	18.9	0.1	
Temperature (deg C)	12/15/2014	MW-15/41988	18.1	0.1	
Turbidity (NTU)	3/28/2014	MW-15/41726	293	1	
Turbidity (NTU)	6/23/2014	MW-15/41813	656	1	
Turbidity (NTU)	8/ 6/2014	MW-15/41857	468	1	
Turbidity (NTU)	12/15/2014	MW-15/41988	1000	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-15/41813	26	0.067	
Chloride (mg/L)	12/15/2014	MW-15/41988	22	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-15/41813	0.19	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-15/41988	0.27	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-15/41813	17	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-15/41988	21	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-15/41813	410	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-15/41988	400	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-15/41813	58	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-15/41988	61	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-15/41813	37	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-15/41988	39	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-15/41813	5.9	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	MW-15/41988	7.4	0.1	
Sodium, Dissolved (mg/L)	6/23/2014	MW-15/41813	24	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-15/41988	24	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/28/2014	MW-15/41726	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-15/41813	<0.072	0.072	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Monitor 5					
1,2-Dichlorobenzene (µg/L)	8/ 6/2014	MW-15/41857	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-15/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/28/2014	MW-15/41726	0.2	0.062	J
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-15/41813	0.28	0.062	J
1,4-Dichlorobenzene (µg/L)	8/ 6/2014	MW-15/41857	0.25	0.062	J
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-15/41988	<0.062	0.062	
Benzene (µg/L)	3/28/2014	MW-15/41726	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-15/41813	<0.083	0.083	
Benzene (µg/L)	8/ 6/2014	MW-15/41857	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-15/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/28/2014	MW-15/41726	0.43	0.093	J
Chlorobenzene (µg/L)	6/23/2014	MW-15/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 6/2014	MW-15/41857	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-15/41988	0.23	0.093	J
cis-1,2-Dichloroethene (µg/L)	3/28/2014	MW-15/41726	0.1	0.085	J
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-15/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 6/2014	MW-15/41857	0.09	0.085	J
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-15/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/28/2014	MW-15/41726	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-15/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 6/2014	MW-15/41857	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-15/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-15/41813	290	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-15/41988	280	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-15/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-15/41988	<4.100	4.1	
MW-1R					
Field or Physical Parameters					
pH (s.u.)	8/26/2014	MW-1R/41877	6.49	0.01	
pH (s.u.)	12/15/2014	MW-1R/41988	6.46	0.01	
Specific Conductance (µmhos/cm)	8/26/2014	MW-1R/41877	951	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-1R/41988	821	1	
Temperature (deg C)	8/26/2014	MW-1R/41877	19.5	0.1	
Temperature (deg C)	12/15/2014	MW-1R/41988	17.6	0.1	
Turbidity (NTU)	8/26/2014	MW-1R/41877	3	1	
Turbidity (NTU)	12/15/2014	MW-1R/41988	8	1	
Inorganic Parameters					
Chloride (mg/L)	12/15/2014	MW-1R/41988	64	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-1R/41988	<0.014	0.014	
Sulfate as SO4 (mg/L)	12/15/2014	MW-1R/41988	44	0.1	
Total Dissolved Solids (mg/L)	12/15/2014	MW-1R/41988	570	33	
Metals					
Calcium, Dissolved (mg/L)	12/15/2014	MW-1R/41988	64	0.016	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-1R/41988	44	0.019	
Potassium, Dissolved (mg/L)	12/15/2014	MW-1R/41988	5	0.1	
Sodium, Dissolved (mg/L)	12/15/2014	MW-1R/41988	52	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	8/26/2014	MW-1R/41877	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-1R/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	8/26/2014	MW-1R/41877	0.93	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-1R/41988	0.75	0.062	
Benzene (µg/L)	8/26/2014	MW-1R/41877	<0.083	0.083	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Benzene (µg/L)	12/15/2014	MW-1R/41988	<0.083	0.083	
Chlorobenzene (µg/L)	8/26/2014	MW-1R/41877	1	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-1R/41988	1.1	0.093	
cis-1,2-Dichloroethene (µg/L)	8/26/2014	MW-1R/41877	0.36	0.085	J
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-1R/41988	0.3	0.085	J
Vinyl chloride (µg/L)	8/26/2014	MW-1R/41877	0.17	0.12	J
Vinyl chloride (µg/L)	12/15/2014	MW-1R/41988	0.12	0.12	J
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-1R/41988	330	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-1R/41988	<4.100	4.1	
MW-2					
Field or Physical Parameters					
pH (s.u.)	3/28/2014	MW-2/41726	5.94	0.01	
pH (s.u.)	6/23/2014	MW-2/41813	6.74	0.01	
pH (s.u.)	8/ 6/2014	MW-2/41857	6.46	0.01	
Specific Conductance (µmhos/cm)	3/28/2014	MW-2/41726	819	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-2/41813	965	1	
Specific Conductance (µmhos/cm)	8/ 6/2014	MW-2/41857	1026	1	
Temperature (deg C)	3/28/2014	MW-2/41726	22	0.1	
Temperature (deg C)	6/23/2014	MW-2/41813	21.4	0.1	
Temperature (deg C)	8/ 6/2014	MW-2/41857	21	0.1	
Turbidity (NTU)	3/28/2014	MW-2/41726	48.2	1	
Turbidity (NTU)	6/23/2014	MW-2/41813	4.7	1	
Turbidity (NTU)	8/ 6/2014	MW-2/41857	4	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-2/41813	66	0.067	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-2/41813	7.7	0.07	
Nitrogen, Nitrate plus Nitrite (mg/L)	8/ 6/2014	MW-2/41857	0.13	0.014	DR
Nitrogen, Nitrate plus Nitrite (mg/L)	8/ 6/2014	MW-2/41857	0.14	0.014	DR
Sulfate as SO4 (mg/L)	6/23/2014	MW-2/41813	6.9	0.18	
Total Dissolved Solids (mg/L)	6/23/2014	MW-2/41813	610	33	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-2/41813	75	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-2/41813	56	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-2/41813	12	0.1	
Sodium, Dissolved (mg/L)	6/23/2014	MW-2/41813	42	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/28/2014	MW-2/41726	0.12	0.072	J
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-2/41813	0.1	0.072	J
1,2-Dichlorobenzene (µg/L)	8/ 6/2014	MW-2/41857	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/28/2014	MW-2/41726	0.92	0.062	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-2/41813	0.94	0.062	
1,4-Dichlorobenzene (µg/L)	8/ 6/2014	MW-2/41857	0.72	0.062	
Benzene (µg/L)	3/28/2014	MW-2/41726	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-2/41813	<0.083	0.083	
Benzene (µg/L)	8/ 6/2014	MW-2/41857	<0.083	0.083	
Chlorobenzene (µg/L)	3/28/2014	MW-2/41726	0.38	0.093	J
Chlorobenzene (µg/L)	6/23/2014	MW-2/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 6/2014	MW-2/41857	0.41	0.093	J
cis-1,2-Dichloroethene (µg/L)	3/28/2014	MW-2/41726	0.18	0.085	J
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-2/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 6/2014	MW-2/41857	0.15	0.085	J
Vinyl chloride (µg/L)	3/28/2014	MW-2/41726	0.18	0.12	J

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Monitor 5					
Vinyl chloride (µg/L)	6/23/2014	MW-2/41813	0.27	0.12	J
Vinyl chloride (µg/L)	8/ 6/2014	MW-2/41857	0.23	0.12	J
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-2/41813	410	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-2/41813	<4.100	4.1	
MW-2R					
Field or Physical Parameters					
pH (s.u.)	8/26/2014	MW-2R/41877	6.58	0.01	
pH (s.u.)	12/15/2014	MW-2R/41988	6.57	0.01	
Specific Conductance (µmhos/cm)	8/26/2014	MW-2R/41877	1049	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-2R/41988	1023	1	
Temperature (deg C)	8/26/2014	MW-2R/41877	20.8	0.1	
Temperature (deg C)	12/15/2014	MW-2R/41988	19.9	0.1	
Turbidity (NTU)	8/26/2014	MW-2R/41877	4	1	
Turbidity (NTU)	12/15/2014	MW-2R/41988	7	1	
Inorganic Parameters					
Chloride (mg/L)	12/15/2014	MW-2R/41988	96	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-2R/41988	0.11	0.014	
Sulfate as SO4 (mg/L)	12/15/2014	MW-2R/41988	1.8	0.1	
Total Dissolved Solids (mg/L)	12/15/2014	MW-2R/41988	670	33	
Metals					
Calcium, Dissolved (mg/L)	12/15/2014	MW-2R/41988	91	0.016	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-2R/41988	63	0.019	
Potassium, Dissolved (mg/L)	12/15/2014	MW-2R/41988	14	0.1	
Sodium, Dissolved (mg/L)	12/15/2014	MW-2R/41988	49	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	8/26/2014	MW-2R/41877	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-2R/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	8/26/2014	MW-2R/41877	0.81	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-2R/41988	0.75	0.062	
Benzene (µg/L)	8/26/2014	MW-2R/41877	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-2R/41988	0.14	0.083	J
Chlorobenzene (µg/L)	8/26/2014	MW-2R/41877	0.52	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-2R/41988	0.91	0.093	
cis-1,2-Dichloroethene (µg/L)	8/26/2014	MW-2R/41877	0.16	0.085	J
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-2R/41988	0.23	0.085	J
Vinyl chloride (µg/L)	8/26/2014	MW-2R/41877	0.28	0.12	J
Vinyl chloride (µg/L)	12/15/2014	MW-2R/41988	0.3	0.12	J
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-2R/41988	450	8.2	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-2R/41988	<8.200	8.2	
MW-3					
Field or Physical Parameters					
pH (s.u.)	3/28/2014	MW-3/41726	5.79	0.01	
pH (s.u.)	6/23/2014	MW-3/41813	6.63	0.01	
pH (s.u.)	8/ 5/2014	MW-3/41856	6.4	0.01	
pH (s.u.)	12/15/2014	MW-3/41988	6.47	0.01	
Specific Conductance (µmhos/cm)	3/28/2014	MW-3/41726	336	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-3/41813	218	1	
Specific Conductance (µmhos/cm)	8/ 5/2014	MW-3/41856	203	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-3/41988	216	1	
Temperature (deg C)	3/28/2014	MW-3/41726	20.3	0.1	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Temperature (deg C)	6/23/2014	MW-3/41813	20.7	0.1	
Temperature (deg C)	8/ 5/2014	MW-3/41856	17.7	0.1	
Temperature (deg C)	12/15/2014	MW-3/41988	16.8	0.1	
Turbidity (NTU)	3/28/2014	MW-3/41726	10.2	1	
Turbidity (NTU)	6/23/2014	MW-3/41813	2	1	
Turbidity (NTU)	8/ 5/2014	MW-3/41856	4	1	
Turbidity (NTU)	12/15/2014	MW-3/41988	18	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-3/41813	11	0.067	
Chloride (mg/L)	12/15/2014	MW-3/41988	6.9	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-3/41813	0.035	0.014	J
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-3/41988	0.94	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-3/41813	7.3	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-3/41988	16	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-3/41813	170	10	
Total Dissolved Solids (mg/L)	12/15/2014	MW-3/41988	190	10	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-3/41813	20	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-3/41988	20	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-3/41813	9.1	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-3/41988	8.7	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-3/41813	0.95	0.1	J
Potassium, Dissolved (mg/L)	12/15/2014	MW-3/41988	0.92	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-3/41813	15	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-3/41988	16	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/28/2014	MW-3/41726	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-3/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 5/2014	MW-3/41856	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-3/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/28/2014	MW-3/41726	0.16	0.062	J
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-3/41813	0.16	0.062	J
1,4-Dichlorobenzene (µg/L)	8/ 5/2014	MW-3/41856	0.12	0.062	J
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-3/41988	<0.062	0.062	
Benzene (µg/L)	3/28/2014	MW-3/41726	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-3/41813	<0.083	0.083	
Benzene (µg/L)	8/ 5/2014	MW-3/41856	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-3/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/28/2014	MW-3/41726	<0.093	0.093	
Chlorobenzene (µg/L)	6/23/2014	MW-3/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 5/2014	MW-3/41856	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-3/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	3/28/2014	MW-3/41726	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-3/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 5/2014	MW-3/41856	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-3/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/28/2014	MW-3/41726	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-3/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 5/2014	MW-3/41856	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-3/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-3/41813	92	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-3/41988	81	4.1	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-3/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-3/41988	<4.100	4.1	
MW-4					
Field or Physical Parameters					
pH (s.u.)	3/28/2014	MW-4/41726	6.15	0.01	
pH (s.u.)	6/23/2014	MW-4/41813	6.97	0.01	
pH (s.u.)	8/ 5/2014	MW-4/41856	6.67	0.01	
pH (s.u.)	12/15/2014	MW-4/41988	7.29	0.01	
Specific Conductance (µmhos/cm)	3/28/2014	MW-4/41726	212	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-4/41813	136	1	
Specific Conductance (µmhos/cm)	8/ 5/2014	MW-4/41856	116	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-4/41988	165	1	
Temperature (deg C)	3/28/2014	MW-4/41726	19.1	0.1	
Temperature (deg C)	6/23/2014	MW-4/41813	20.2	0.1	
Temperature (deg C)	8/ 5/2014	MW-4/41856	17.8	0.1	
Temperature (deg C)	12/15/2014	MW-4/41988	16.1	0.1	
Turbidity (NTU)	3/28/2014	MW-4/41726	13.3	1	
Turbidity (NTU)	6/23/2014	MW-4/41813	4	1	
Turbidity (NTU)	8/ 5/2014	MW-4/41856	4	1	
Turbidity (NTU)	12/15/2014	MW-4/41988	13	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-4/41813	2.1	0.067	
Chloride (mg/L)	12/15/2014	MW-4/41988	2.8	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-4/41813	0.067	0.014	J
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-4/41988	0.08	0.014	J
Sulfate as SO4 (mg/L)	6/23/2014	MW-4/41813	1.1	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-4/41988	0.28	0.1	J
Total Dissolved Solids (mg/L)	6/23/2014	MW-4/41813	110	6.7	
Total Dissolved Solids (mg/L)	12/15/2014	MW-4/41988	120	6.7	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-4/41813	11	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-4/41988	15	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-4/41813	6	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-4/41988	7.9	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-4/41813	0.92	0.1	J
Potassium, Dissolved (mg/L)	12/15/2014	MW-4/41988	0.85	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-4/41813	3.4	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-4/41988	4.4	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/28/2014	MW-4/41726	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-4/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 5/2014	MW-4/41856	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-4/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/28/2014	MW-4/41726	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-4/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	8/ 5/2014	MW-4/41856	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-4/41988	<0.062	0.062	
Benzene (µg/L)	3/28/2014	MW-4/41726	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-4/41813	<0.083	0.083	
Benzene (µg/L)	8/ 5/2014	MW-4/41856	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-4/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/28/2014	MW-4/41726	<0.093	0.093	
Chlorobenzene (µg/L)	6/23/2014	MW-4/41813	<0.093	0.093	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Monitor 5					
Chlorobenzene (µg/L)	8/ 5/2014	MW-4/41856	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-4/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	3/28/2014	MW-4/41726	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-4/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 5/2014	MW-4/41856	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-4/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/28/2014	MW-4/41726	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-4/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 5/2014	MW-4/41856	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-4/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-4/41813	61	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-4/41988	77	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-4/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-4/41988	<4.100	4.1	
MW-8					
Field or Physical Parameters					
pH (s.u.)	3/27/2014	MW-8/41725	6	0.01	
pH (s.u.)	6/23/2014	MW-8/41813	7.04	0.01	
pH (s.u.)	8/ 5/2014	MW-8/41856	6.79	0.01	
pH (s.u.)	12/15/2014	MW-8/41988	6.76	0.01	
Specific Conductance (µmhos/cm)	3/27/2014	MW-8/41725	669	1	
Specific Conductance (µmhos/cm)	6/23/2014	MW-8/41813	686	1	
Specific Conductance (µmhos/cm)	8/ 5/2014	MW-8/41856	733	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-8/41988	697	1	
Temperature (deg C)	3/27/2014	MW-8/41725	21.3	0.1	
Temperature (deg C)	6/23/2014	MW-8/41813	21.5	0.1	
Temperature (deg C)	8/ 5/2014	MW-8/41856	19.7	0.1	
Temperature (deg C)	12/15/2014	MW-8/41988	19	0.1	
Turbidity (NTU)	3/27/2014	MW-8/41725	2.7	1	
Turbidity (NTU)	6/23/2014	MW-8/41813	0	1	
Turbidity (NTU)	8/ 5/2014	MW-8/41856	3	1	
Turbidity (NTU)	12/15/2014	MW-8/41988	2	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-8/41813	7.5	0.067	
Chloride (mg/L)	12/15/2014	MW-8/41988	8.6	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-8/41813	1.3	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-8/41988	1.1	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-8/41813	21	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-8/41988	21	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-8/41813	470	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-8/41988	460	33	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-8/41813	74	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-8/41988	86	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-8/41813	45	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-8/41988	52	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-8/41813	1	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	MW-8/41988	0.92	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-8/41813	22	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-8/41988	22	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	3/27/2014	MW-8/41725	<0.072	0.072	

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-8/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	8/ 5/2014	MW-8/41856	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-8/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	3/27/2014	MW-8/41725	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-8/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	8/ 5/2014	MW-8/41856	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-8/41988	<0.062	0.062	
Benzene (µg/L)	3/27/2014	MW-8/41725	<0.083	0.083	
Benzene (µg/L)	6/23/2014	MW-8/41813	<0.083	0.083	
Benzene (µg/L)	8/ 5/2014	MW-8/41856	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-8/41988	<0.083	0.083	
Chlorobenzene (µg/L)	3/27/2014	MW-8/41725	<0.093	0.093	
Chlorobenzene (µg/L)	6/23/2014	MW-8/41813	<0.093	0.093	
Chlorobenzene (µg/L)	8/ 5/2014	MW-8/41856	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-8/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	3/27/2014	MW-8/41725	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-8/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	8/ 5/2014	MW-8/41856	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-8/41988	<0.085	0.085	
Vinyl chloride (µg/L)	3/27/2014	MW-8/41725	<0.120	0.12	
Vinyl chloride (µg/L)	6/23/2014	MW-8/41813	<0.120	0.12	
Vinyl chloride (µg/L)	8/ 5/2014	MW-8/41856	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-8/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-8/41813	360	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-8/41988	400	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-8/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-8/41988	<4.100	4.1	

Detection Monitoring

MW-13

Field or Physical Parameters				
pH (s.u.)	6/23/2014	MW-13/41813	6.97	0.01
pH (s.u.)	12/15/2014	MW-13/41988	7.28	0.01
Specific Conductance (µmhos/cm)	6/23/2014	MW-13/41813	316	1
Specific Conductance (µmhos/cm)	12/15/2014	MW-13/41988	302	1
Temperature (deg C)	6/23/2014	MW-13/41813	23.2	0.1
Temperature (deg C)	12/15/2014	MW-13/41988	20.1	0.1
Turbidity (NTU)	6/23/2014	MW-13/41813	16.4	1
Turbidity (NTU)	12/15/2014	MW-13/41988	57	1
Inorganic Parameters				
Chloride (mg/L)	6/23/2014	MW-13/41813	4.8	0.067
Chloride (mg/L)	12/15/2014	MW-13/41988	5.6	0.061
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-13/41813	1.8	0.014
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-13/41988	1.8	0.014
Sulfate as SO4 (mg/L)	6/23/2014	MW-13/41813	25	0.18
Sulfate as SO4 (mg/L)	12/15/2014	MW-13/41988	26	0.1
Total Dissolved Solids (mg/L)	6/23/2014	MW-13/41813	220	20
Total Dissolved Solids (mg/L)	12/15/2014	MW-13/41988	270	20
Metals				
Calcium, Dissolved (mg/L)	6/23/2014	MW-13/41813	28	0.016
Calcium, Dissolved (mg/L)	12/15/2014	MW-13/41988	29	0.016
Magnesium, Dissolved (mg/L)	6/23/2014	MW-13/41813	19	0.019

Result Report

Company: Recology Yuba-Sutter **Data Group:** None
Site: YSDI Landfill **Date Range:** 01-01-2014 to 12-31-2014
Program: YSD Groundwater

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Monitor 5					
Magnesium, Dissolved (mg/L)	12/15/2014	MW-13/41988	20	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-13/41813	0.91	0.1	J
Potassium, Dissolved (mg/L)	12/15/2014	MW-13/41988	0.82	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-13/41813	15	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-13/41988	15	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-13/41813	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-13/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-13/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-13/41988	<0.062	0.062	
Benzene (µg/L)	6/23/2014	MW-13/41813	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-13/41988	<0.083	0.083	
Chlorobenzene (µg/L)	6/23/2014	MW-13/41813	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-13/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-13/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-13/41988	<0.085	0.085	
Vinyl chloride (µg/L)	6/23/2014	MW-13/41813	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-13/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-13/41813	130	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-13/41988	130	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-13/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-13/41988	<4.100	4.1	
MW-9					
Field or Physical Parameters					
pH (s.u.)	6/23/2014	MW-9/41813	7.34	0.01	
pH (s.u.)	12/15/2014	MW-9/41988	7.21	0.01	
Specific Conductance (µmhos/cm)	6/23/2014	MW-9/41813	295	1	
Specific Conductance (µmhos/cm)	12/15/2014	MW-9/41988	289	1	
Temperature (deg C)	6/23/2014	MW-9/41813	20.7	0.1	
Temperature (deg C)	12/15/2014	MW-9/41988	17.9	0.1	
Turbidity (NTU)	6/23/2014	MW-9/41813	0	1	
Turbidity (NTU)	12/15/2014	MW-9/41988	2	1	
Inorganic Parameters					
Chloride (mg/L)	6/23/2014	MW-9/41813	3.1	0.067	
Chloride (mg/L)	12/15/2014	MW-9/41988	3.8	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/23/2014	MW-9/41813	0.71	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	MW-9/41988	0.96	0.014	
Sulfate as SO4 (mg/L)	6/23/2014	MW-9/41813	13	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	MW-9/41988	19	0.1	
Total Dissolved Solids (mg/L)	6/23/2014	MW-9/41813	220	20	
Total Dissolved Solids (mg/L)	12/15/2014	MW-9/41988	270	20	
Metals					
Calcium, Dissolved (mg/L)	6/23/2014	MW-9/41813	25	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	MW-9/41988	27	0.016	
Magnesium, Dissolved (mg/L)	6/23/2014	MW-9/41813	16	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	MW-9/41988	18	0.019	
Potassium, Dissolved (mg/L)	6/23/2014	MW-9/41813	0.87	0.1	J
Potassium, Dissolved (mg/L)	12/15/2014	MW-9/41988	0.71	0.1	J
Sodium, Dissolved (mg/L)	6/23/2014	MW-9/41813	19	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	MW-9/41988	20	0.051	
Volatile Organic Compounds					
1,2-Dichlorobenzene (µg/L)	6/23/2014	MW-9/41813	<0.072	0.072	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
1,2-Dichlorobenzene (µg/L)	12/15/2014	MW-9/41988	<0.072	0.072	
1,4-Dichlorobenzene (µg/L)	6/23/2014	MW-9/41813	<0.062	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	MW-9/41988	<0.062	0.062	
Benzene (µg/L)	6/23/2014	MW-9/41813	<0.083	0.083	
Benzene (µg/L)	12/15/2014	MW-9/41988	<0.083	0.083	
Chlorobenzene (µg/L)	6/23/2014	MW-9/41813	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	MW-9/41988	<0.093	0.093	
cis-1,2-Dichloroethene (µg/L)	6/23/2014	MW-9/41813	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	MW-9/41988	<0.085	0.085	
Vinyl chloride (µg/L)	6/23/2014	MW-9/41813	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	MW-9/41988	<0.120	0.12	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/23/2014	MW-9/41813	140	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	MW-9/41988	140	4.1	
Carbonate (as CaCO) (mg/L)	6/23/2014	MW-9/41813	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	MW-9/41988	<4.100	4.1	

End of report

SURFACE WATER

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
SW-2					
Field or Physical Parameters					
pH (s.u.)	2/10/2014	SW-2/41680	7.25	0.01	
pH (s.u.)	12/15/2014	SW-2/41988	7.17	0.01	
Specific Conductance (µmhos/cm)	2/10/2014	SW-2/41680	111	1	
Specific Conductance (µmhos/cm)	12/15/2014	SW-2/41988	101	1	
Temperature (deg C)	2/10/2014	SW-2/41680	14	0.1	
Temperature (deg C)	12/15/2014	SW-2/41988	12.35	0.1	
Turbidity (NTU)	2/10/2014	SW-2/41680	11	1	
Turbidity (NTU)	12/15/2014	SW-2/41988	3.1	1	
Inorganic Parameters					
Chloride (mg/L)	2/10/2014	SW-2/41680	1.5	0.067	
Chloride (mg/L)	12/15/2014	SW-2/41988	2.1	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	2/10/2014	SW-2/41680	0.3	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	SW-2/41988	0.19	0.014	
Sulfate as SO4 (mg/L)	2/10/2014	SW-2/41680	3.8	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	SW-2/41988	5	0.1	
Total Dissolved Solids (mg/L)	2/10/2014	SW-2/41680	59	6.7	
Total Dissolved Solids (mg/L)	12/15/2014	SW-2/41988	82	6.7	
Total Suspended Solids (mg/L)	2/10/2014	SW-2/41680	24	5	A,1,1
Total Suspended Solids (mg/L)	12/15/2014	SW-2/41988	5.6	0.96	
Metals					
Calcium (mg/L)	2/10/2014	SW-2/41680	12	0.015	
Calcium (mg/L)	12/15/2014	SW-2/41988	11	0.015	
Magnesium (mg/L)	2/10/2014	SW-2/41680	4.2	0.019	
Magnesium (mg/L)	12/15/2014	SW-2/41988	4.3	0.019	
Sodium (mg/L)	2/10/2014	SW-2/41680	3.4	0.051	
Sodium (mg/L)	12/15/2014	SW-2/41988	3.3	0.051	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	2/10/2014	SW-2/41680	39	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	SW-2/41988	42	4.1	
Carbonate (as CaCO) (mg/L)	2/10/2014	SW-2/41680	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	SW-2/41988	<4.100	4.1	
Total Organic Carbon (mg/L)	2/10/2014	SW-2/41680	3.2	0.1	B
Total Organic Carbon (mg/L)	12/15/2014	SW-2/41988	1.9	0.3	
SW-3					
Field or Physical Parameters					
pH (s.u.)	2/10/2014	SW-3/41680	6.64	0.01	
pH (s.u.)	12/15/2014	SW-3/41988	7.34	0.01	
Specific Conductance (µmhos/cm)	2/10/2014	SW-3/41680	617	1	
Specific Conductance (µmhos/cm)	12/15/2014	SW-3/41988	273	1	
Temperature (deg C)	2/10/2014	SW-3/41680	18.5	0.1	
Temperature (deg C)	12/15/2014	SW-3/41988	12.41	0.1	
Turbidity (NTU)	2/10/2014	SW-3/41680	263	1	
Turbidity (NTU)	12/15/2014	SW-3/41988	968	1	
Inorganic Parameters					
Chloride (mg/L)	2/10/2014	SW-3/41680	57	0.067	
Chloride (mg/L)	12/15/2014	SW-3/41988	8.5	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	2/10/2014	SW-3/41680	1.6	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	SW-3/41988	0.61	0.014	
Sulfate as SO4 (mg/L)	2/10/2014	SW-3/41680	60	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	SW-3/41988	19	0.1	
Total Dissolved Solids (mg/L)	2/10/2014	SW-3/41680	550	20	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Total Dissolved Solids (mg/L)	12/15/2014	SW-3/41988	230	20	
Total Suspended Solids (mg/L)	2/10/2014	SW-3/41680	590	6.7	
Total Suspended Solids (mg/L)	12/15/2014	SW-3/41988	580	10	
Metals					
Calcium (mg/L)	2/10/2014	SW-3/41680	74	0.015	
Calcium (mg/L)	12/15/2014	SW-3/41988	64	0.015	
Magnesium (mg/L)	2/10/2014	SW-3/41680	21	0.019	
Magnesium (mg/L)	12/15/2014	SW-3/41988	16	0.019	
Sodium (mg/L)	2/10/2014	SW-3/41680	27	0.051	
Sodium (mg/L)	12/15/2014	SW-3/41988	13	0.051	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	2/10/2014	SW-3/41680	190	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	SW-3/41988	130	4.1	
Carbonate (as CaCO) (mg/L)	2/10/2014	SW-3/41680	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	SW-3/41988	<4.100	4.1	
Total Organic Carbon (mg/L)	2/10/2014	SW-3/41680	100	2	B
Total Organic Carbon (mg/L)	12/15/2014	SW-3/41988	21	6	L
SW-4					
Field or Physical Parameters					
pH (s.u.)	2/10/2014	SW-4/41680	7.08	0.01	
pH (s.u.)	12/15/2014	SW-4/41988	7.31	0.01	
Specific Conductance (µmhos/cm)	2/10/2014	SW-4/41680	206	1	
Specific Conductance (µmhos/cm)	12/15/2014	SW-4/41988	70	1	
Temperature (deg C)	2/10/2014	SW-4/41680	14.8	0.1	
Temperature (deg C)	12/15/2014	SW-4/41988	11.9	0.1	
Turbidity (NTU)	2/10/2014	SW-4/41680	17	1	
Turbidity (NTU)	12/15/2014	SW-4/41988	23.4	1	
Inorganic Parameters					
Chloride (mg/L)	2/10/2014	SW-4/41680	4.8	0.067	
Chloride (mg/L)	12/15/2014	SW-4/41988	1.2	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	2/10/2014	SW-4/41680	0.75	0.014	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	SW-4/41988	0.12	0.014	
Sulfate as SO4 (mg/L)	2/10/2014	SW-4/41680	14	0.18	
Sulfate as SO4 (mg/L)	12/15/2014	SW-4/41988	2	0.1	
Total Dissolved Solids (mg/L)	2/10/2014	SW-4/41680	87	6.7	
Total Dissolved Solids (mg/L)	12/15/2014	SW-4/41988	54	6.7	
Total Suspended Solids (mg/L)	2/10/2014	SW-4/41680	10	3.3	
Total Suspended Solids (mg/L)	12/15/2014	SW-4/41988	5.2	1	
Metals					
Calcium (mg/L)	2/10/2014	SW-4/41680	8.2	0.015	
Calcium (mg/L)	12/15/2014	SW-4/41988	5.4	0.015	
Magnesium (mg/L)	2/10/2014	SW-4/41680	5.4	0.019	
Magnesium (mg/L)	12/15/2014	SW-4/41988	3.3	0.019	
Sodium (mg/L)	2/10/2014	SW-4/41680	4.9	0.051	
Sodium (mg/L)	12/15/2014	SW-4/41988	2.8	0.051	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	2/10/2014	SW-4/41680	31	4.1	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	SW-4/41988	27	4.1	
Carbonate (as CaCO) (mg/L)	2/10/2014	SW-4/41680	<4.100	4.1	
Carbonate (as CaCO) (mg/L)	12/15/2014	SW-4/41988	<4.100	4.1	
Total Organic Carbon (mg/L)	2/10/2014	SW-4/41680	14	0.2	B
Total Organic Carbon (mg/L)	12/15/2014	SW-4/41988	12	0.6	L

End of report

LEACHATE

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
S-1					
Field or Physical Parameters					
pH (s.u.)	12/15/2014	S-1/41988	7.16	0.01	
Specific Conductance (µmhos/cm)	12/15/2014	S-1/41988	11600	1	
Inorganic Parameters					
Chloride (mg/L)	12/15/2014	S-1/41988	1600	0.61	L
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	S-1/41988	<0.014	0.014	
Sulfate as SO4 (mg/L)	12/15/2014	S-1/41988	110	1	L
Total Dissolved Solids (mg/L)	12/15/2014	S-1/41988	6600	500	
Metals					
Calcium, Dissolved (mg/L)	12/15/2014	S-1/41988	100	0.08	
Magnesium, Dissolved (mg/L)	12/15/2014	S-1/41988	130	0.095	
Potassium, Dissolved (mg/L)	12/15/2014	S-1/41988	690	0.5	
Sodium, Dissolved (mg/L)	12/15/2014	S-1/41988	1000	0.26	L
Volatile Organic Compounds					
1,1-Dichloroethane (µg/L)	12/15/2014	S-1/41988	<0.110	0.11	
1,2-Dichlorobenzene (µg/L)	12/15/2014	S-1/41988	<0.072	0.072	
1,2-Dichloroethane (µg/L)	12/15/2014	S-1/41988	<0.170	0.17	
1,4-Dichlorobenzene (µg/L)	12/15/2014	S-1/41988	1.2	0.062	
2-Butanone (µg/L)	12/15/2014	S-1/41988	<2.500	2.5	
2-Hexanone (µg/L)	12/15/2014	S-1/41988	<3.400	3.4	
Acetone (µg/L)	12/15/2014	S-1/41988	17	4.6	
Benzene (µg/L)	12/15/2014	S-1/41988	2	0.083	
Chlorobenzene (µg/L)	12/15/2014	S-1/41988	11	0.093	
Chloroethane (µg/L)	12/15/2014	S-1/41988	<0.140	0.14	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	S-1/41988	<0.085	0.085	
Ethylbenzene (µg/L)	12/15/2014	S-1/41988	1.8	0.098	
Styrene (µg/L)	12/15/2014	S-1/41988	<0.068	0.068	
Toluene (µg/L)	12/15/2014	S-1/41988	0.68	0.093	
Vinyl chloride (µg/L)	12/15/2014	S-1/41988	<0.120	0.12	
Xylenes (µg/L)	12/15/2014	S-1/41988	17	0.36	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	S-1/41988	4200	8.2	
Carbonate (as CaCO) (mg/L)	12/15/2014	S-1/41988	<8.200	8.2	
S-2					
Field or Physical Parameters					
pH (s.u.)	6/19/2014	S-2/41809	7.3	0.01	
pH (s.u.)	12/15/2014	S-2/41988	7.2	0.01	
Specific Conductance (µmhos/cm)	6/19/2014	S-2/41809	6640	1	
Specific Conductance (µmhos/cm)	12/15/2014	S-2/41988	5010	1	
Inorganic Parameters					
Chloride (mg/L)	6/19/2014	S-2/41809	1200	0.67	
Chloride (mg/L)	12/15/2014	S-2/41988	820	0.3	L
Nitrogen, Nitrate plus Nitrite (mg/L)	6/19/2014	S-2/41809	99	0.7	
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	S-2/41988	150	1.4	L
Sulfate as SO4 (mg/L)	6/19/2014	S-2/41809	280	1.8	
Sulfate as SO4 (mg/L)	12/15/2014	S-2/41988	170	0.5	L
Total Dissolved Solids (mg/L)	6/19/2014	S-2/41809	3900	200	
Total Dissolved Solids (mg/L)	12/15/2014	S-2/41988	3300	200	
Metals					
Calcium, Dissolved (mg/L)	6/19/2014	S-2/41809	210	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	S-2/41988	220	0.016	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Magnesium, Dissolved (mg/L)	6/19/2014	S-2/41809	150	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	S-2/41988	110	0.019	
Potassium, Dissolved (mg/L)	6/19/2014	S-2/41809	330	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	S-2/41988	260	0.1	
Sodium, Dissolved (mg/L)	6/19/2014	S-2/41809	700	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	S-2/41988	560	0.051	
Volatile Organic Compounds					
1,1-Dichloroethane (µg/L)	6/19/2014	S-2/41809	<0.110	0.11	
1,1-Dichloroethane (µg/L)	12/15/2014	S-2/41988	<0.110	0.11	
1,2-Dichlorobenzene (µg/L)	6/19/2014	S-2/41809	<0.072	0.072	
1,2-Dichlorobenzene (µg/L)	12/15/2014	S-2/41988	<0.072	0.072	
1,2-Dichloroethane (µg/L)	6/19/2014	S-2/41809	<0.170	0.17	
1,2-Dichloroethane (µg/L)	12/15/2014	S-2/41988	<0.170	0.17	
1,4-Dichlorobenzene (µg/L)	6/19/2014	S-2/41809	2.8	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	S-2/41988	1.3	0.062	
2-Butanone (µg/L)	6/19/2014	S-2/41809	25	2.5	
2-Butanone (µg/L)	12/15/2014	S-2/41988	<2.500	2.5	
2-Hexanone (µg/L)	6/19/2014	S-2/41809	<3.400	3.4	
2-Hexanone (µg/L)	12/15/2014	S-2/41988	<3.400	3.4	
Acetone (µg/L)	6/19/2014	S-2/41809	<4.600	4.6	
Acetone (µg/L)	12/15/2014	S-2/41988	13	4.6	
Benzene (µg/L)	6/19/2014	S-2/41809	0.89	0.083	
Benzene (µg/L)	12/15/2014	S-2/41988	0.25	0.083	J
Chlorobenzene (µg/L)	6/19/2014	S-2/41809	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	S-2/41988	<0.093	0.093	
Chloroethane (µg/L)	6/19/2014	S-2/41809	<0.140	0.14	
Chloroethane (µg/L)	12/15/2014	S-2/41988	<0.140	0.14	
cis-1,2-Dichloroethene (µg/L)	6/19/2014	S-2/41809	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	S-2/41988	<0.085	0.085	
Ethylbenzene (µg/L)	6/19/2014	S-2/41809	<0.098	0.098	
Ethylbenzene (µg/L)	12/15/2014	S-2/41988	<0.098	0.098	
Styrene (µg/L)	6/19/2014	S-2/41809	<0.068	0.068	
Styrene (µg/L)	12/15/2014	S-2/41988	<0.068	0.068	
Toluene (µg/L)	6/19/2014	S-2/41809	0.2	0.093	J
Toluene (µg/L)	12/15/2014	S-2/41988	1.3	0.093	
Vinyl chloride (µg/L)	6/19/2014	S-2/41809	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	S-2/41988	<0.120	0.12	
Xylenes (µg/L)	6/19/2014	S-2/41809	1.2	0.36	
Xylenes (µg/L)	12/15/2014	S-2/41988	<0.360	0.36	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/19/2014	S-2/41809	1100	8.2	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	S-2/41988	540	8.2	
Carbonate (as CaCO) (mg/L)	6/19/2014	S-2/41809	<8.200	8.2	
Carbonate (as CaCO) (mg/L)	12/15/2014	S-2/41988	<8.200	8.2	
S-3					
Field or Physical Parameters					
pH (s.u.)	6/19/2014	S-3/41809	7.14	0.01	
pH (s.u.)	12/15/2014	S-3/41988	5.52	0.01	
Specific Conductance (µmhos/cm)	6/19/2014	S-3/41809	7750	1	
Specific Conductance (µmhos/cm)	12/15/2014	S-3/41988	2430	1	
Inorganic Parameters					
Chloride (mg/L)	6/19/2014	S-3/41809	1000	0.67	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Chloride (mg/L)	12/15/2014	S-3/41988	87	0.061	
Nitrogen, Nitrate plus Nitrite (mg/L)	6/19/2014	S-3/41809	0.028	0.014	J
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	S-3/41988	0.16	0.014	
Sulfate as SO4 (mg/L)	6/19/2014	S-3/41809	100	1.8	
Sulfate as SO4 (mg/L)	12/15/2014	S-3/41988	3.9	0.1	
Total Dissolved Solids (mg/L)	6/19/2014	S-3/41809	4000	500	
Total Dissolved Solids (mg/L)	12/15/2014	S-3/41988	640	33	
Metals					
Calcium, Dissolved (mg/L)	6/19/2014	S-3/41809	73	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	S-3/41988	30	0.016	
Magnesium, Dissolved (mg/L)	6/19/2014	S-3/41809	130	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	S-3/41988	59	0.019	
Potassium, Dissolved (mg/L)	6/19/2014	S-3/41809	450	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	S-3/41988	200	0.1	
Sodium, Dissolved (mg/L)	6/19/2014	S-3/41809	750	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	S-3/41988	340	0.051	
Volatile Organic Compounds					
1,1-Dichloroethane (µg/L)	6/19/2014	S-3/41809	0.56	0.11	
1,1-Dichloroethane (µg/L)	12/15/2014	S-3/41988	<0.110	0.11	
1,2-Dichlorobenzene (µg/L)	6/19/2014	S-3/41809	0.45	0.072	J
1,2-Dichlorobenzene (µg/L)	12/15/2014	S-3/41988	0.15	0.072	J
1,2-Dichloroethane (µg/L)	6/19/2014	S-3/41809	0.3	0.17	J
1,2-Dichloroethane (µg/L)	12/15/2014	S-3/41988	<0.170	0.17	
1,4-Dichlorobenzene (µg/L)	6/19/2014	S-3/41809	4.1	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	S-3/41988	1.7	0.062	
2-Butanone (µg/L)	6/19/2014	S-3/41809	<2.500	2.5	
2-Butanone (µg/L)	12/15/2014	S-3/41988	5500	120	L
2-Hexanone (µg/L)	6/19/2014	S-3/41809	<3.400	3.4	
2-Hexanone (µg/L)	12/15/2014	S-3/41988	320	3.4	
Acetone (µg/L)	6/19/2014	S-3/41809	<4.600	4.6	
Acetone (µg/L)	12/15/2014	S-3/41988	16000	230	L
Benzene (µg/L)	6/19/2014	S-3/41809	2.1	0.083	
Benzene (µg/L)	12/15/2014	S-3/41988	0.28	0.083	J
Chlorobenzene (µg/L)	6/19/2014	S-3/41809	1.9	0.093	
Chlorobenzene (µg/L)	12/15/2014	S-3/41988	0.52	0.093	
Chloroethane (µg/L)	6/19/2014	S-3/41809	<0.140	0.14	
Chloroethane (µg/L)	12/15/2014	S-3/41988	<0.140	0.14	
cis-1,2-Dichloroethene (µg/L)	6/19/2014	S-3/41809	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	S-3/41988	<0.085	0.085	
Ethylbenzene (µg/L)	6/19/2014	S-3/41809	0.2	0.098	J
Ethylbenzene (µg/L)	12/15/2014	S-3/41988	<0.098	0.098	
Styrene (µg/L)	6/19/2014	S-3/41809	<0.068	0.068	
Styrene (µg/L)	12/15/2014	S-3/41988	<0.068	0.068	
Toluene (µg/L)	6/19/2014	S-3/41809	1.1	0.093	
Toluene (µg/L)	12/15/2014	S-3/41988	0.32	0.093	J
Vinyl chloride (µg/L)	6/19/2014	S-3/41809	<0.120	0.12	
Vinyl chloride (µg/L)	12/15/2014	S-3/41988	<0.120	0.12	
Xylenes (µg/L)	6/19/2014	S-3/41809	1.4	0.36	
Xylenes (µg/L)	12/15/2014	S-3/41988	0.45	0.36	J
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/19/2014	S-3/41809	2500	8.2	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	S-3/41988	<4.100	4.1	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Carbonate (as CaCO) (mg/L)	6/19/2014	S-3/41809	<8.200	8.2	
Carbonate (as CaCO) (mg/L)	12/15/2014	S-3/41988	<4.100	4.1	
S-4					
Field or Physical Parameters					
pH (s.u.)	6/19/2014	S-4/41809	6.83	0.01	
pH (s.u.)	12/15/2014	S-4/41988	5.93	0.01	
Specific Conductance (µmhos/cm)	6/19/2014	S-4/41809	5930	1	
Specific Conductance (µmhos/cm)	12/15/2014	S-4/41988	6190	1	
Inorganic Parameters					
Chloride (mg/L)	6/19/2014	S-4/41809	1100	0.67	
Chloride (mg/L)	12/15/2014	S-4/41988	1300	0.61	L
Nitrogen, Nitrate plus Nitrite (mg/L)	6/19/2014	S-4/41809	0.036	0.014	J
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	S-4/41988	0.027	0.014	J
Sulfate as SO4 (mg/L)	6/19/2014	S-4/41809	47	1.8	
Sulfate as SO4 (mg/L)	12/15/2014	S-4/41988	43	1	L
Total Dissolved Solids (mg/L)	6/19/2014	S-4/41809	3500	200	
Total Dissolved Solids (mg/L)	12/15/2014	S-4/41988	4000	200	
Metals					
Calcium, Dissolved (mg/L)	6/19/2014	S-4/41809	210	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	S-4/41988	210	0.016	
Magnesium, Dissolved (mg/L)	6/19/2014	S-4/41809	240	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	S-4/41988	250	0.019	
Potassium, Dissolved (mg/L)	6/19/2014	S-4/41809	150	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	S-4/41988	130	0.1	
Sodium, Dissolved (mg/L)	6/19/2014	S-4/41809	560	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	S-4/41988	550	0.051	
Volatile Organic Compounds					
1,1-Dichloroethane (µg/L)	6/19/2014	S-4/41809	1.4	0.11	
1,1-Dichloroethane (µg/L)	12/15/2014	S-4/41988	0.79	0.11	
1,2-Dichlorobenzene (µg/L)	6/19/2014	S-4/41809	0.2	0.072	J
1,2-Dichlorobenzene (µg/L)	12/15/2014	S-4/41988	0.29	0.072	J
1,2-Dichloroethane (µg/L)	6/19/2014	S-4/41809	0.53	0.17	
1,2-Dichloroethane (µg/L)	12/15/2014	S-4/41988	0.28	0.17	J
1,4-Dichlorobenzene (µg/L)	6/19/2014	S-4/41809	7.8	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	S-4/41988	9.9	0.062	
2-Butanone (µg/L)	6/19/2014	S-4/41809	<2.500	2.5	
2-Butanone (µg/L)	12/15/2014	S-4/41988	<2.500	2.5	
2-Hexanone (µg/L)	6/19/2014	S-4/41809	<3.400	3.4	
2-Hexanone (µg/L)	12/15/2014	S-4/41988	5	3.4	J
Acetone (µg/L)	6/19/2014	S-4/41809	<4.600	4.6	
Acetone (µg/L)	12/15/2014	S-4/41988	15	4.6	
Benzene (µg/L)	6/19/2014	S-4/41809	3.3	0.083	
Benzene (µg/L)	12/15/2014	S-4/41988	3.5	0.083	
Chlorobenzene (µg/L)	6/19/2014	S-4/41809	0.78	0.093	
Chlorobenzene (µg/L)	12/15/2014	S-4/41988	0.84	0.093	
Chloroethane (µg/L)	6/19/2014	S-4/41809	<0.140	0.14	
Chloroethane (µg/L)	12/15/2014	S-4/41988	0.51	0.14	
cis-1,2-Dichloroethene (µg/L)	6/19/2014	S-4/41809	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	S-4/41988	0.95	0.085	
Ethylbenzene (µg/L)	6/19/2014	S-4/41809	0.36	0.098	J
Ethylbenzene (µg/L)	12/15/2014	S-4/41988	4.7	0.098	
Styrene (µg/L)	6/19/2014	S-4/41809	<0.068	0.068	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Monitor 5					
Styrene (µg/L)	12/15/2014	S-4/41988	0.15	0.068	J
Toluene (µg/L)	6/19/2014	S-4/41809	0.57	0.093	
Toluene (µg/L)	12/15/2014	S-4/41988	4.7	0.093	
Vinyl chloride (µg/L)	6/19/2014	S-4/41809	1	0.12	
Vinyl chloride (µg/L)	12/15/2014	S-4/41988	1.5	0.12	
Xylenes (µg/L)	6/19/2014	S-4/41809	4.2	0.36	
Xylenes (µg/L)	12/15/2014	S-4/41988	17	0.36	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/19/2014	S-4/41809	1600	8.2	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	S-4/41988	1500	8.2	
Carbonate (as CaCO) (mg/L)	6/19/2014	S-4/41809	<8.200	8.2	
Carbonate (as CaCO) (mg/L)	12/15/2014	S-4/41988	<8.200	8.2	
S-5					
Field or Physical Parameters					
pH (s.u.)	6/19/2014	S-5/41809	6.85	0.01	
pH (s.u.)	12/15/2014	S-5/41988	6.86	0.01	
Specific Conductance (µmhos/cm)	6/19/2014	S-5/41809	6080	1	
Specific Conductance (µmhos/cm)	12/15/2014	S-5/41988	6830	1	
Inorganic Parameters					
Chloride (mg/L)	6/19/2014	S-5/41809	1400	0.67	
Chloride (mg/L)	12/15/2014	S-5/41988	1600	0.61	L
Nitrogen, Nitrate plus Nitrite (mg/L)	6/19/2014	S-5/41809	0.066	0.014	J
Nitrogen, Nitrate plus Nitrite (mg/L)	12/15/2014	S-5/41988	<0.014	0.014	
Sulfate as SO4 (mg/L)	6/19/2014	S-5/41809	54	1.8	
Sulfate as SO4 (mg/L)	12/15/2014	S-5/41988	21	1	
Total Dissolved Solids (mg/L)	6/19/2014	S-5/41809	4200	200	
Total Dissolved Solids (mg/L)	12/15/2014	S-5/41988	4700	200	
Metals					
Calcium, Dissolved (mg/L)	6/19/2014	S-5/41809	270	0.016	
Calcium, Dissolved (mg/L)	12/15/2014	S-5/41988	260	0.016	
Magnesium, Dissolved (mg/L)	6/19/2014	S-5/41809	310	0.019	
Magnesium, Dissolved (mg/L)	12/15/2014	S-5/41988	320	0.019	
Potassium, Dissolved (mg/L)	6/19/2014	S-5/41809	110	0.1	
Potassium, Dissolved (mg/L)	12/15/2014	S-5/41988	130	0.1	
Sodium, Dissolved (mg/L)	6/19/2014	S-5/41809	640	0.051	
Sodium, Dissolved (mg/L)	12/15/2014	S-5/41988	770	0.051	
Volatile Organic Compounds					
1,1-Dichloroethane (µg/L)	6/19/2014	S-5/41809	0.3	0.11	J
1,1-Dichloroethane (µg/L)	12/15/2014	S-5/41988	0.19	0.11	J
1,2-Dichlorobenzene (µg/L)	6/19/2014	S-5/41809	0.3	0.072	J
1,2-Dichlorobenzene (µg/L)	12/15/2014	S-5/41988	0.18	0.072	J
1,2-Dichloroethane (µg/L)	6/19/2014	S-5/41809	<0.170	0.17	
1,2-Dichloroethane (µg/L)	12/15/2014	S-5/41988	<0.170	0.17	
1,4-Dichlorobenzene (µg/L)	6/19/2014	S-5/41809	6	0.062	
1,4-Dichlorobenzene (µg/L)	12/15/2014	S-5/41988	5.7	0.062	
2-Butanone (µg/L)	6/19/2014	S-5/41809	<2.500	2.5	
2-Butanone (µg/L)	12/15/2014	S-5/41988	<2.500	2.5	
2-Hexanone (µg/L)	6/19/2014	S-5/41809	<3.400	3.4	
2-Hexanone (µg/L)	12/15/2014	S-5/41988	<3.400	3.4	
Acetone (µg/L)	6/19/2014	S-5/41809	<4.600	4.6	
Acetone (µg/L)	12/15/2014	S-5/41988	25	4.6	
Benzene (µg/L)	6/19/2014	S-5/41809	1.6	0.083	

Result Report

Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate

Data Group: None
Date Range: 01-01-2014 to 12-31-2014

Monitor 5

Parameter (Unit)	Date	Sample ID	Result Value	Detection Limit	Code
Benzene (µg/L)	12/15/2014	S-5/41988	0.63	0.083	
Chlorobenzene (µg/L)	6/19/2014	S-5/41809	<0.093	0.093	
Chlorobenzene (µg/L)	12/15/2014	S-5/41988	0.13	0.093	J
Chloroethane (µg/L)	6/19/2014	S-5/41809	<0.140	0.14	
Chloroethane (µg/L)	12/15/2014	S-5/41988	<0.140	0.14	
cis-1,2-Dichloroethene (µg/L)	6/19/2014	S-5/41809	<0.085	0.085	
cis-1,2-Dichloroethene (µg/L)	12/15/2014	S-5/41988	<0.085	0.085	
Ethylbenzene (µg/L)	6/19/2014	S-5/41809	0.22	0.098	J
Ethylbenzene (µg/L)	12/15/2014	S-5/41988	0.21	0.098	J
Styrene (µg/L)	6/19/2014	S-5/41809	<0.068	0.068	
Styrene (µg/L)	12/15/2014	S-5/41988	<0.068	0.068	
Toluene (µg/L)	6/19/2014	S-5/41809	0.45	0.093	J
Toluene (µg/L)	12/15/2014	S-5/41988	0.32	0.093	J
Vinyl chloride (µg/L)	6/19/2014	S-5/41809	0.56	0.12	
Vinyl chloride (µg/L)	12/15/2014	S-5/41988	0.16	0.12	J
Xylenes (µg/L)	6/19/2014	S-5/41809	2.2	0.36	
Xylenes (µg/L)	12/15/2014	S-5/41988	1.7	0.36	
Water Quality Indicator Parameters					
Bicarbonate (as CaCO3) (mg/L)	6/19/2014	S-5/41809	1500	8.2	
Bicarbonate (as CaCO3) (mg/L)	12/15/2014	S-5/41988	1500	8.2	
Carbonate (as CaCO) (mg/L)	6/19/2014	S-5/41809	<8.200	8.2	
Carbonate (as CaCO) (mg/L)	12/15/2014	S-5/41988	<8.200	8.2	

End of report

APPENDIX E

GRAPHICAL SUMMARIES OF HISTORICAL ANALYTICAL DATA

RYSL Groundwater
Organic Compound Matrix

(X indicates that graph is present.)

	LF-1 and LF-2 Areas								LF-3 Area			Detection		Background		
Volatile Organic Compounds	MW-1	MW-1R	MW-2	MW-2R	MW-3	MW-4	MW-10	MW-15	MW-8	MW-11	MW-12	MW-9	MW-13	MW-5	MW-6	MW-7
1,1,1,2-Tetrachloroethane																
1,1,1-Trichloroethane																
1,1,2,2-Tetrachloroethane																
1,1,2-Trichloroethane																
1,1-Dichloroethane																
1,1-Dichloroethene																
1,1-Dichloropropene																
1,2,3-Trichloropropane																
1,2,4-Trichlorobenzene																
1,2,4-Trimethylbenzene																
1,2-Dibromo-3-chloropropane																
1,2-Dibromoethane																
1,2-Dichlorobenzene																
1,2-Dichloroethane																
1,2-Dichloropropane																
1,3,5-Trimethylbenzene																
1,3-Dichlorobenzene																
1,3-Dichloropropane																
1,4-Dichlorobenzene	x	x	x	x	x		x	x								
1,4-Dioxane																
2,2-Dichloropropane																
2-Hexanone																
Acetone																
Acetonitrile																
Acrolein																
Acrylonitrile																
Allyl chloride																
Benzene																
Bromobenzene																
Bromochloromethane																
Bromodichloromethane																
Bromoform																
Bromomethane																
Carbon disulfide																
Carbon tetrachloride																
Chlorobenzene	x	x	x	x				x								
Chloroethane																
Chloroform																
Chloromethane																
Chloroprene																
cis-1,2-Dichloroethene	x	x	x	x				x								

RYSL Groundwater
Organic Compound Matrix

(X indicates that graph is present.)

	LF-1 and LF-2 Areas								LF-3 Area			Detection		Background		
Volatile Organic Compounds	MW-1	MW-1R	MW-2	MW-2R	MW-3	MW-4	MW-10	MW-15	MW-8	MW-11	MW-12	MW-9	MW-13	MW-5	MW-6	MW-7
cis-1,3-Dichloropropene																
Dibromochloromethane																
Dibromomethane																
Dichlorodifluoromethane																
Diisopropyl ether																
Ethanol																
Ethyl methacrylate																
Ethyl t-butyl ether																
Ethylbenzene																
Hexachlorobutadiene																
Hexachloroethane																
Isobutanol																
Methacrylonitrile																
Methyl ethyl ketone (2-butanone)																
Methyl iodide																
Methyl isobutyl ketone																
Methyl t-butyl ether																
Methylene chloride																
Naphthalene																
n-Butylbenzene																
n-Propylbenzene																
o-Xylene																
p- & m-Xylenes																
Propionitrile																
sec-Butylbenzene																
Styrene																
t-Amyl Methyl ether																
tert-Butylbenzene																
Tetrachloroethene																
Toluene																
Total Xylenes																
trans-1,2-Dichloroethene																
trans-1,3-Dichloropropene																
trans-1,4-Dichloro-2-butene																
Trichloroethene																
Trichlorofluoromethane																
Vinyl acetate																
Vinyl chloride		x	x	x												

RYSL Leachate and Surface Water
Organic Compound Matrix

(X indicates that graph is present.)

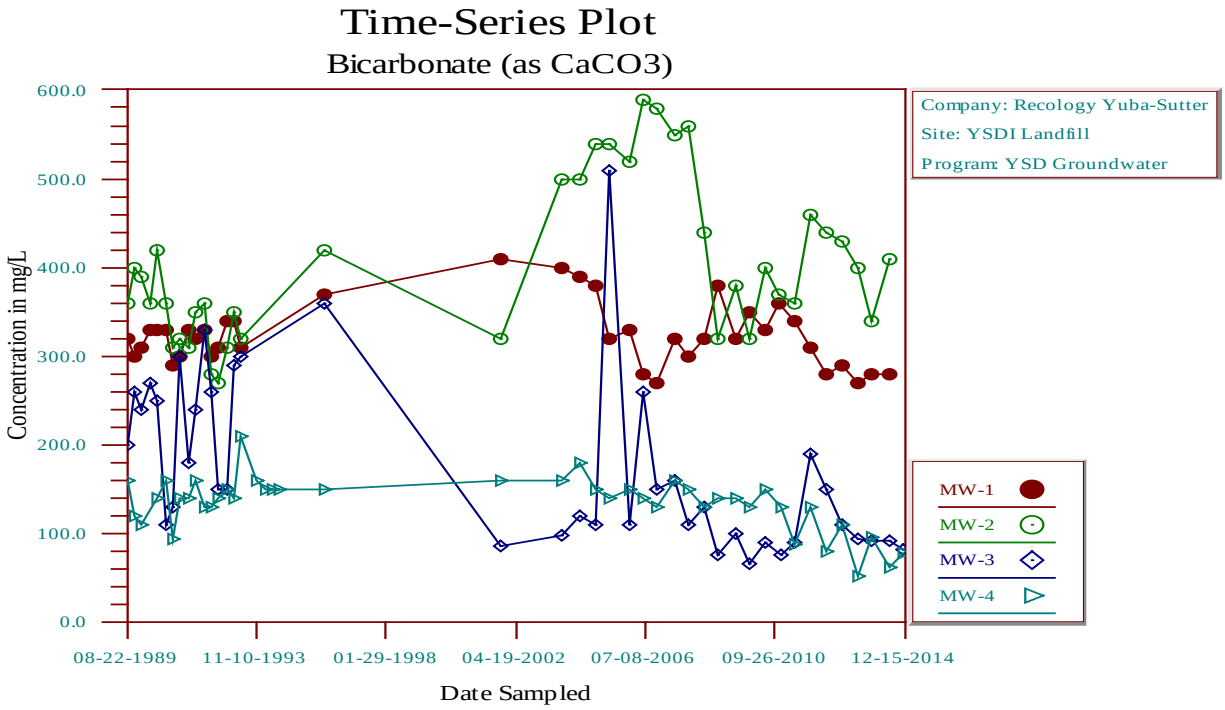
	Leachate					Surface Water		
Volatile Organic Compounds	S-1	S-2	S-3	S-4	S-5	SW-2	SW-3	SW-4
1,1,1,2-Tetrachloroethane								
1,1,1-Trichloroethane								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,1-Dichloroethane				x	x			
1,1-Dichloroethene								
1,1-Dichloropropene								
1,2,3-Trichloropropane								
1,2,4-Trichlorobenzene								
1,2,4-Trimethylbenzene								
1,2-Dibromo-3-chloropropane								
1,2-Dibromoethane								
1,2-Dichlorobenzene			x	x	x			
1,2-Dichloroethane				x				
1,2-Dichloropropane								
1,3,5-Trimethylbenzene								
1,3-Dichlorobenzene								
1,3-Dichloropropane								
1,4-Dichlorobenzene	x	x	x	x	x			
1,4-Dioxane								
2,2-Dichloropropane								
2-Hexanone			x	x				
2-Butanone			x					
4-methyl-2-pentanone								
Acetone	x	x	x	x	x			
Acetonitrile								
Acrolein								
Acrylonitrile								
Allyl chloride								
Benzene	x	x	x	x	x			
Bromobenzene								
Bromochloromethane								
Bromodichloromethane								
Bromoform								
Bromomethane								
Carbon disulfide								
Carbon tetrachloride								
Chlorobenzene	x		x	x	x			
Chloroethane				x				
Chloroform								
Chloromethane								
Chloroprene								
cis-1,2-Dichloroethene				x				
cis-1,3-Dichloropropene								

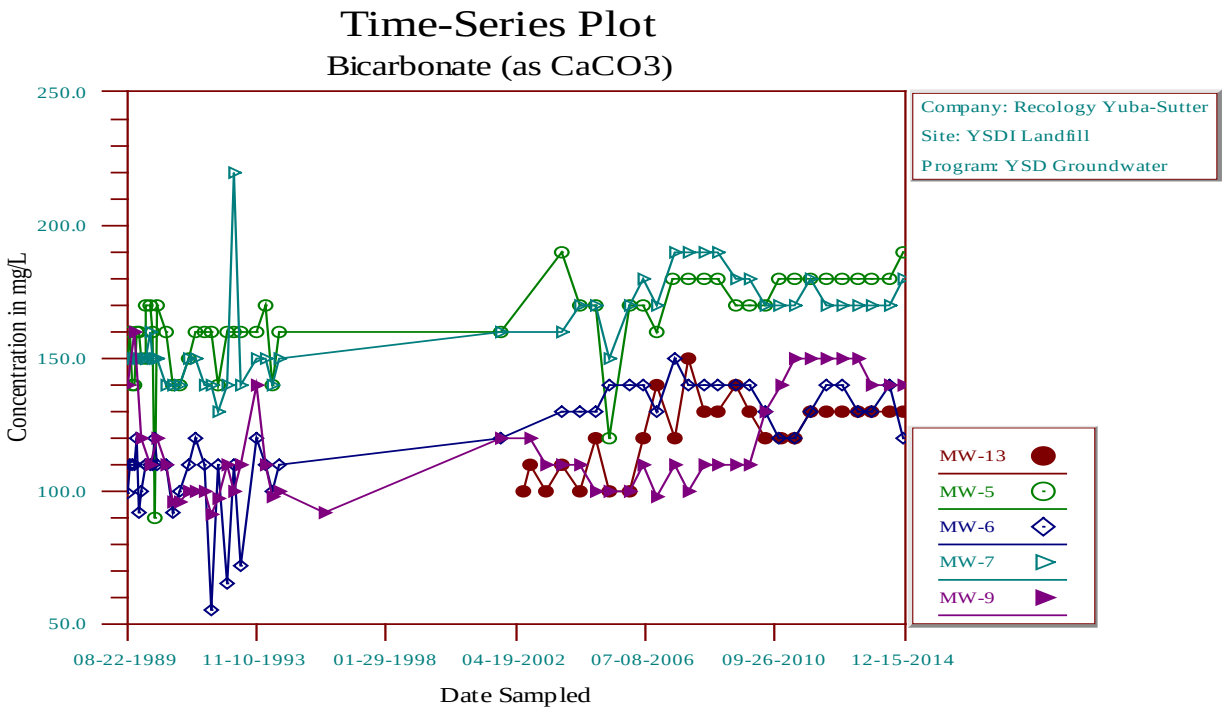
RYSL Leachate and Surface Water
Organic Compound Matrix

(X indicates that graph is present.)

	Leachate					Surface Water		
Volatile Organic Compounds	S-1	S-2	S-3	S-4	S-5	SW-2	SW-3	SW-4
Dibromochloromethane								
Dibromomethane								
Dichlorodifluoromethane								
Diisopropyl ether								
Ethanol								
Ethyl methacrylate								
Ethyl t-butyl ether								
Ethylbenzene				x	x			
Hexachlorobutadiene								
Hexachloroethane								
Isobutanol								
Methacrylonitrile								
Methyl ethyl ketone (2-butanone)								
Methyl iodide								
Methyl isobutyl ketone (4-methyl-2-pentanone)								
Methyl t-butyl ether								
Methylene chloride								
Naphthalene								
n-Butylbenzene								
n-Propylbenzene								
o-Xylene								
p- & m-Xylenes								
Propionitrile								
sec-Butylbenzene								
Styrene				x				
t-Amyl Methyl ether								
tert-Butylbenzene								
Tetrachloroethene								
Toluene	x	x	x	x	x			
Total Xylenes	x		x	x	x			
trans-1,2-Dichloroethene								
trans-1,3-Dichloropropene								
trans-1,4-Dichloro-2-butene								
Trichloroethene								
Trichlorofluoromethane								
Vinyl acetate								
Vinyl chloride				x	x			

WELLS


Time-Series Plot
Bicarbonate (as CaCO3)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
600.0
500.0
400.0
300.0
200.0
100.0
0.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled
MW-1
MW-2
MW-3
MW-4


Time-Series Plot
Bicarbonate (as CaCO3)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
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150.0
100.0
50.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
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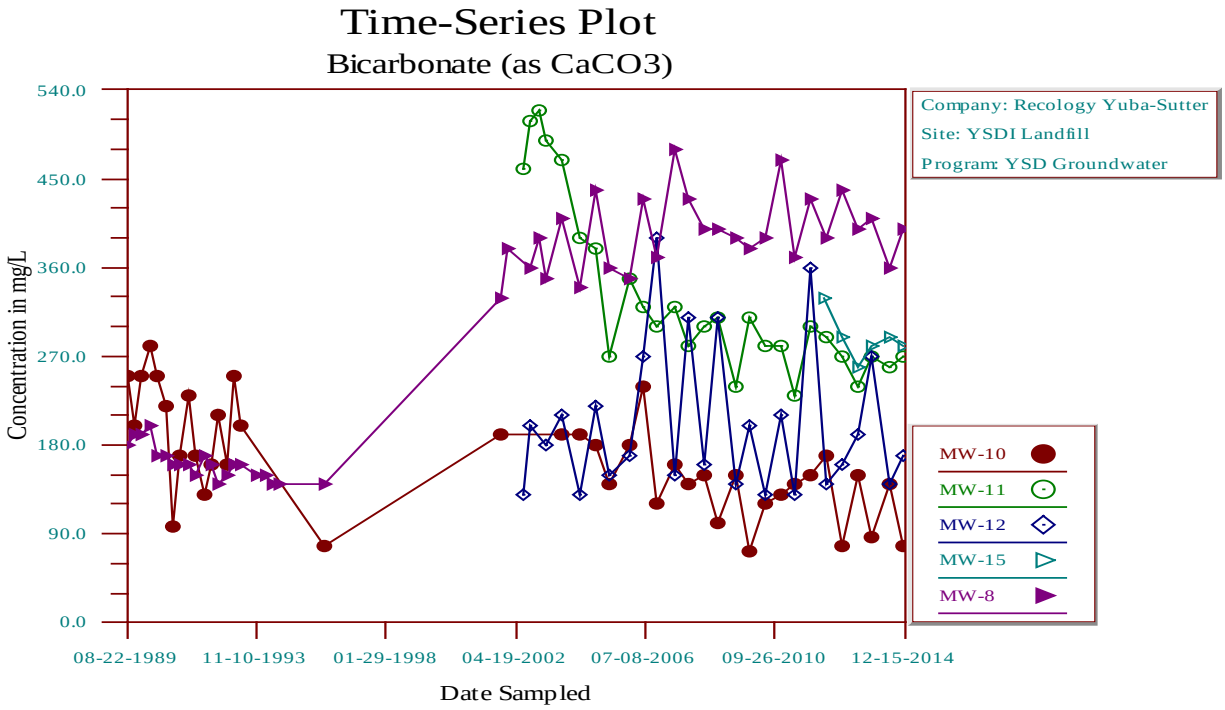
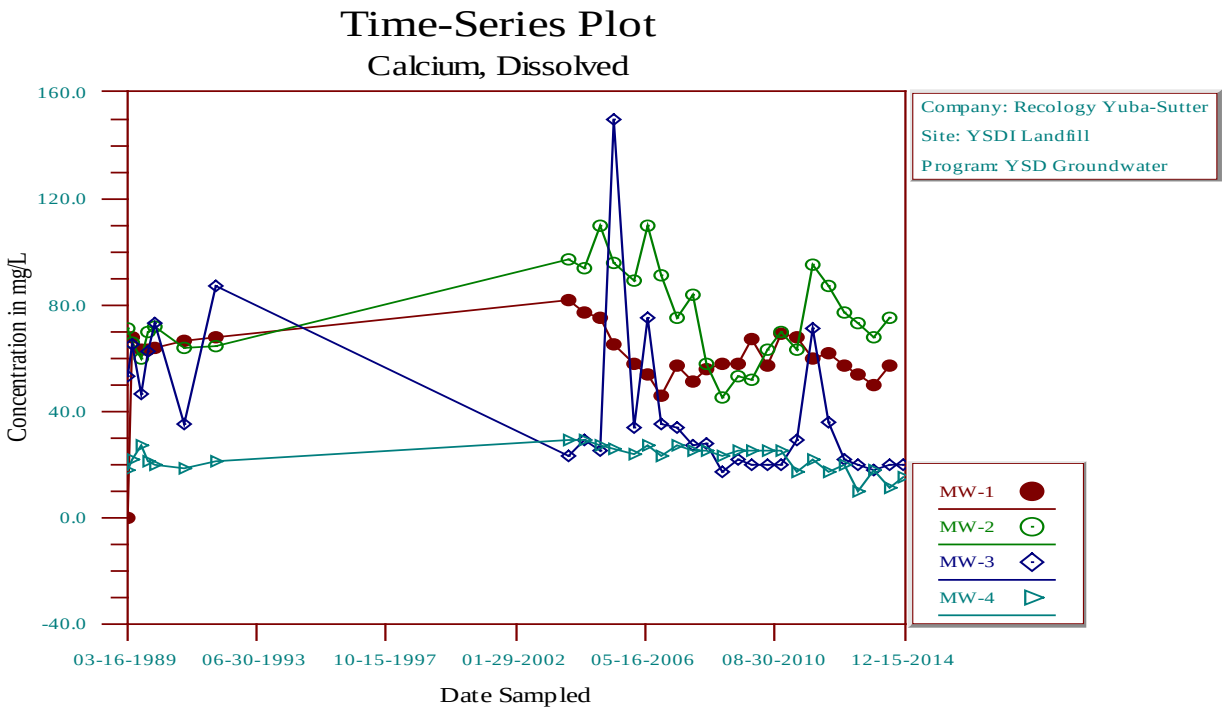
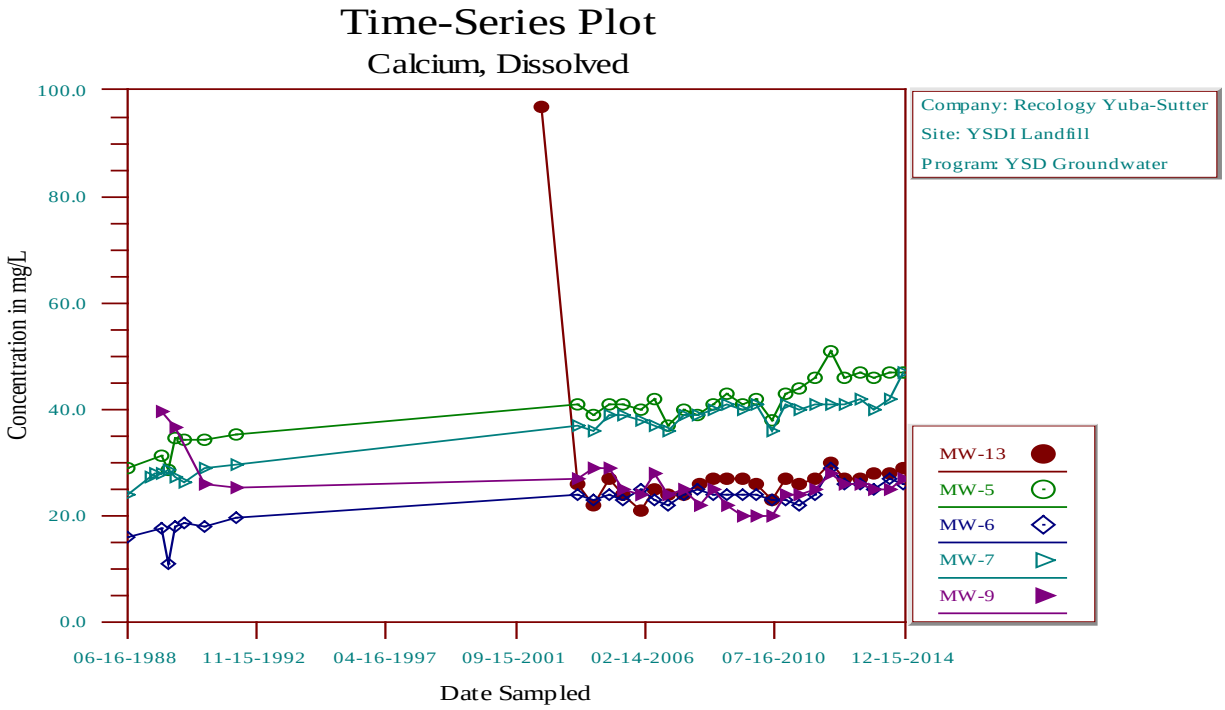
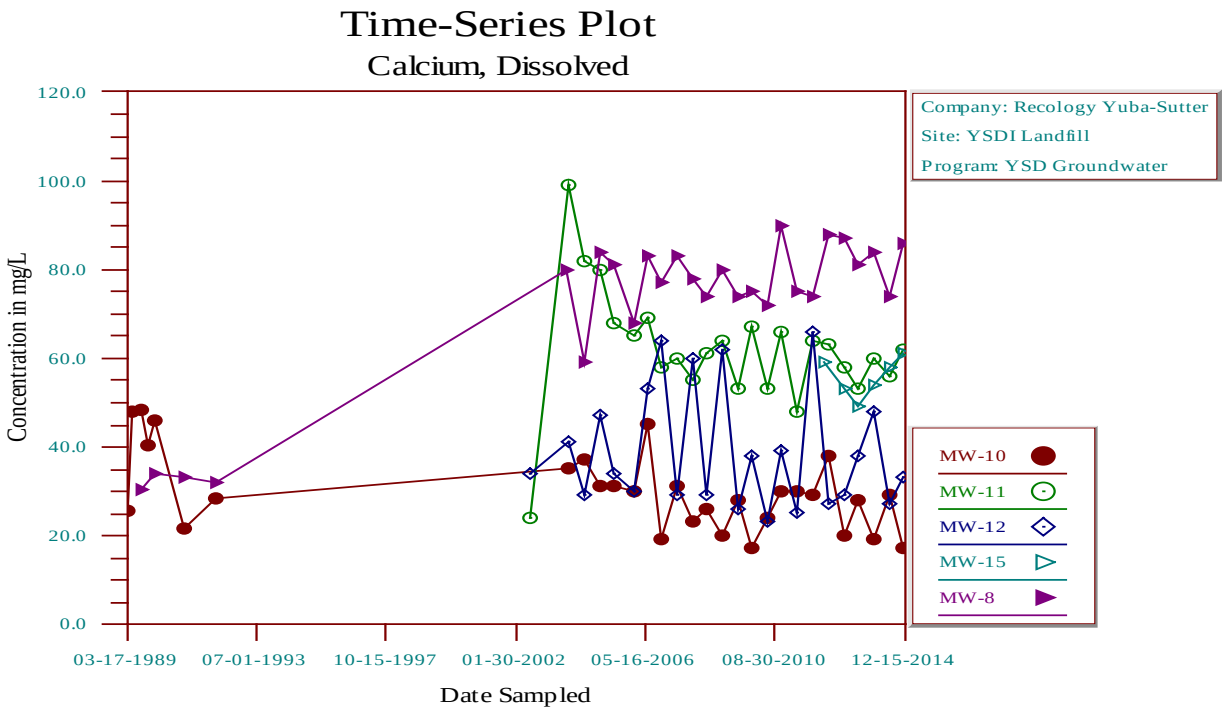
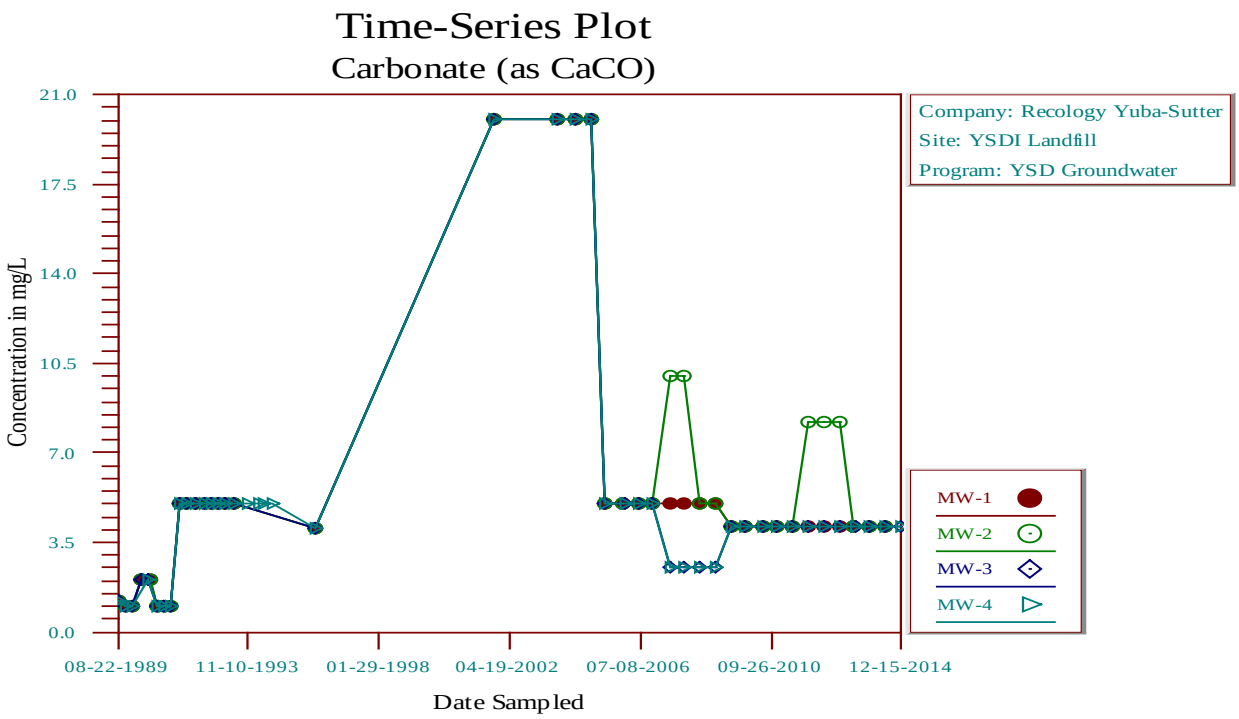
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

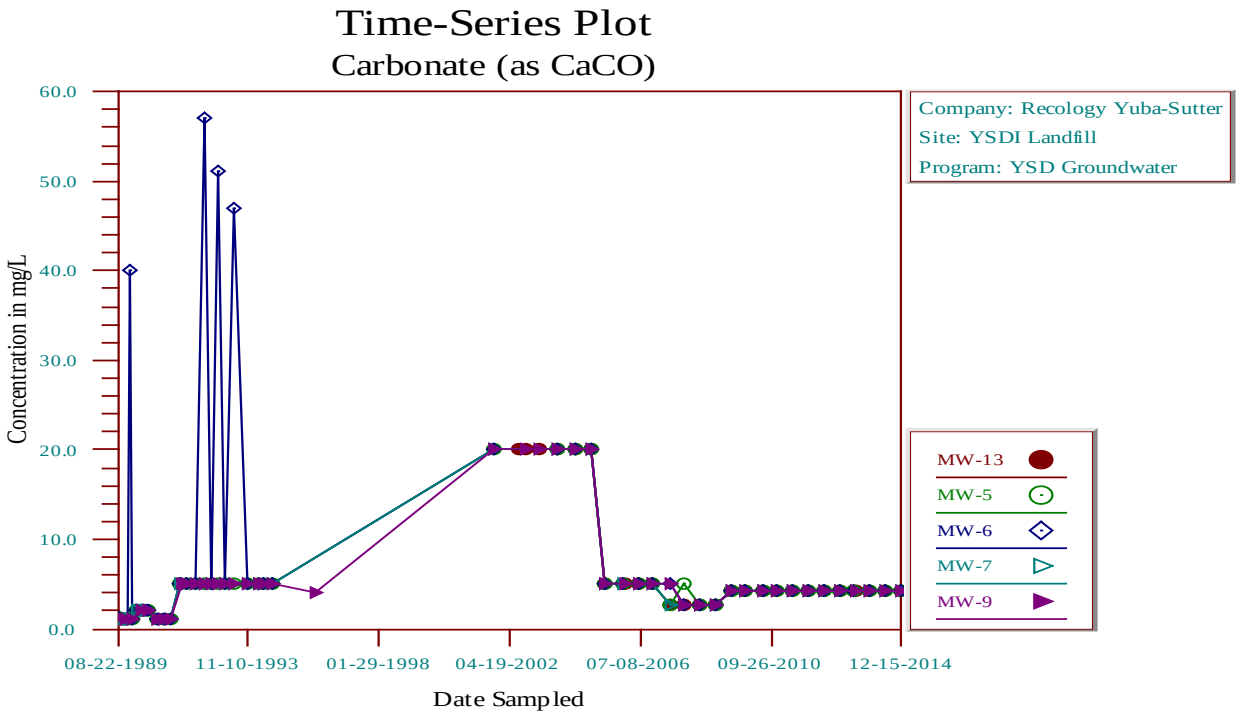

Time-Series Plot
Bicarbonate (as CaCO3)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
540.0
450.0
360.0
270.0
180.0
90.0
0.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

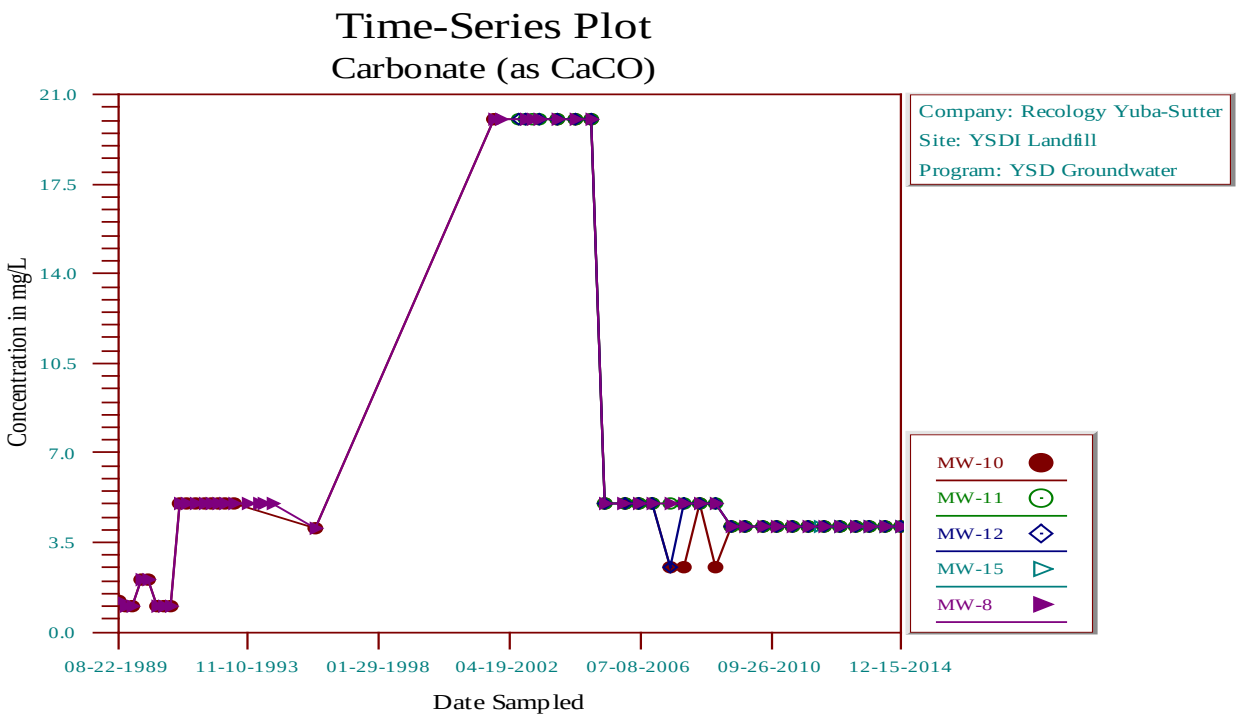

Time-Series Plot
Calcium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
160.0
120.0
80.0
40.0
0.0
-40.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-1
MW-2
MW-3
MW-4

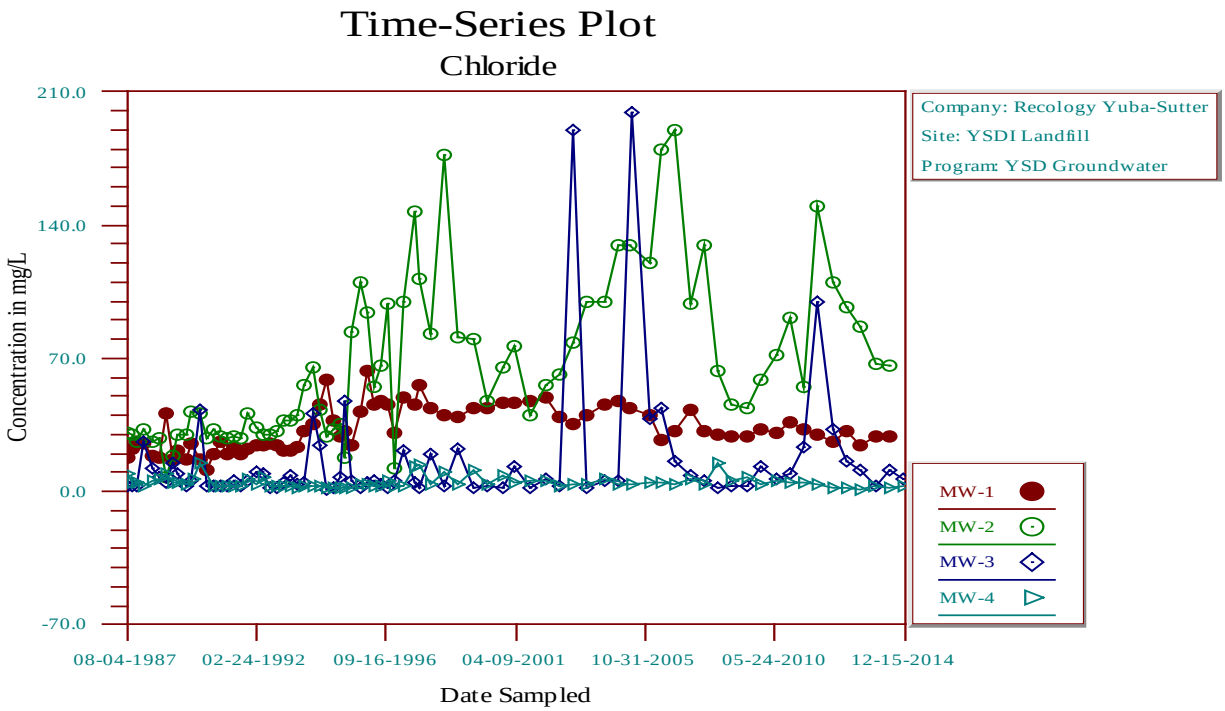

Time-Series Plot
Calcium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
100.0
80.0
60.0
40.0
20.0
0.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

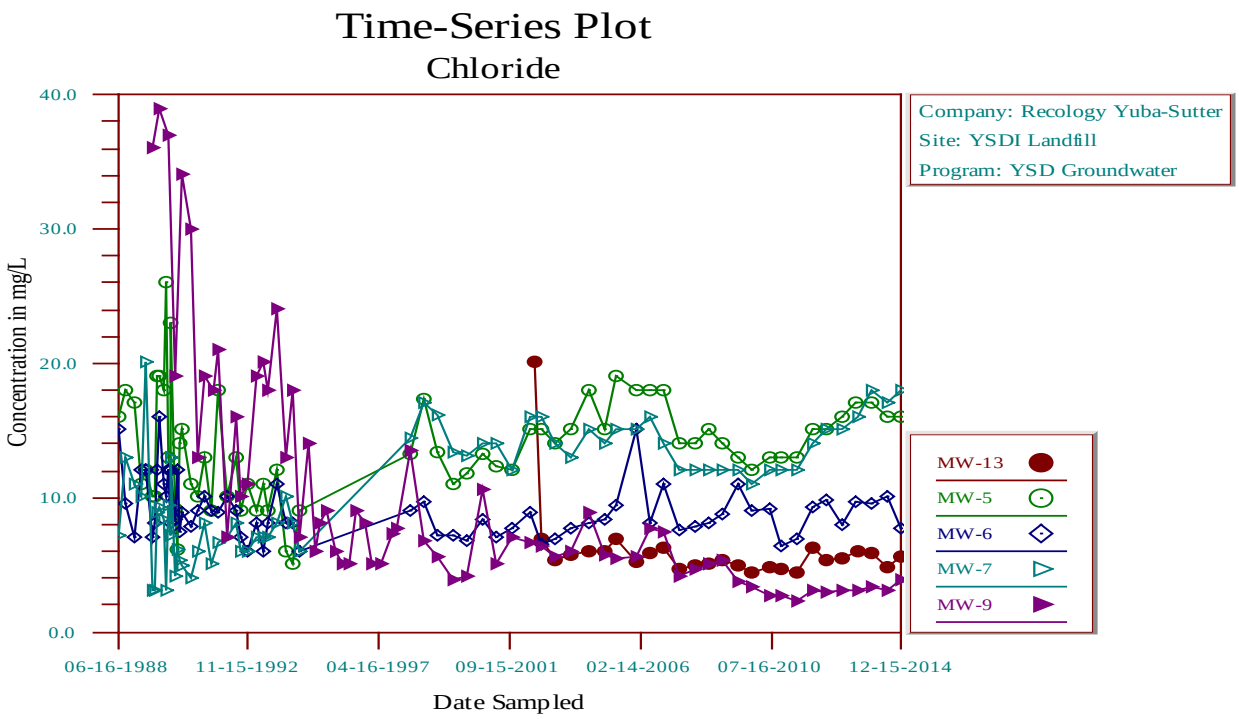

Time-Series Plot
Calcium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
120.0
100.0
80.0
60.0
40.0
20.0
0.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

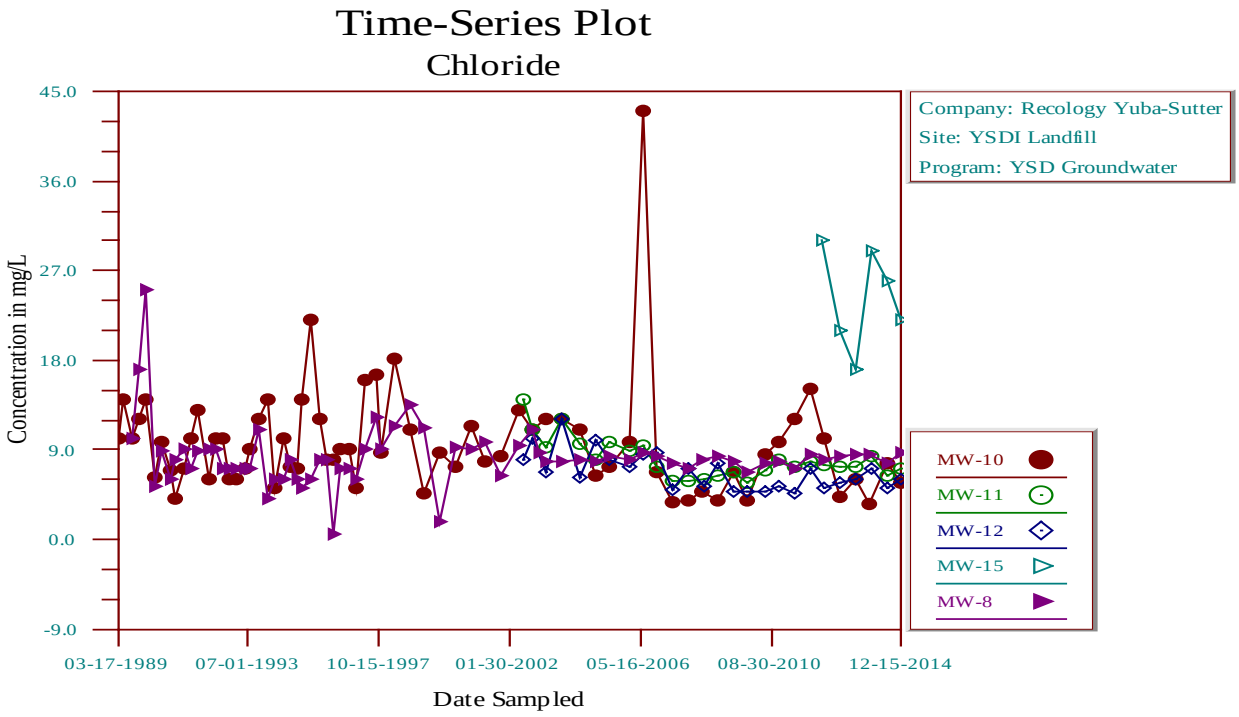

Time-Series Plot
Carbonate (as CaCO)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
21.0
17.5
14.0
10.5
7.0
3.5
0.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled
MW-1
MW-2
MW-3
MW-4

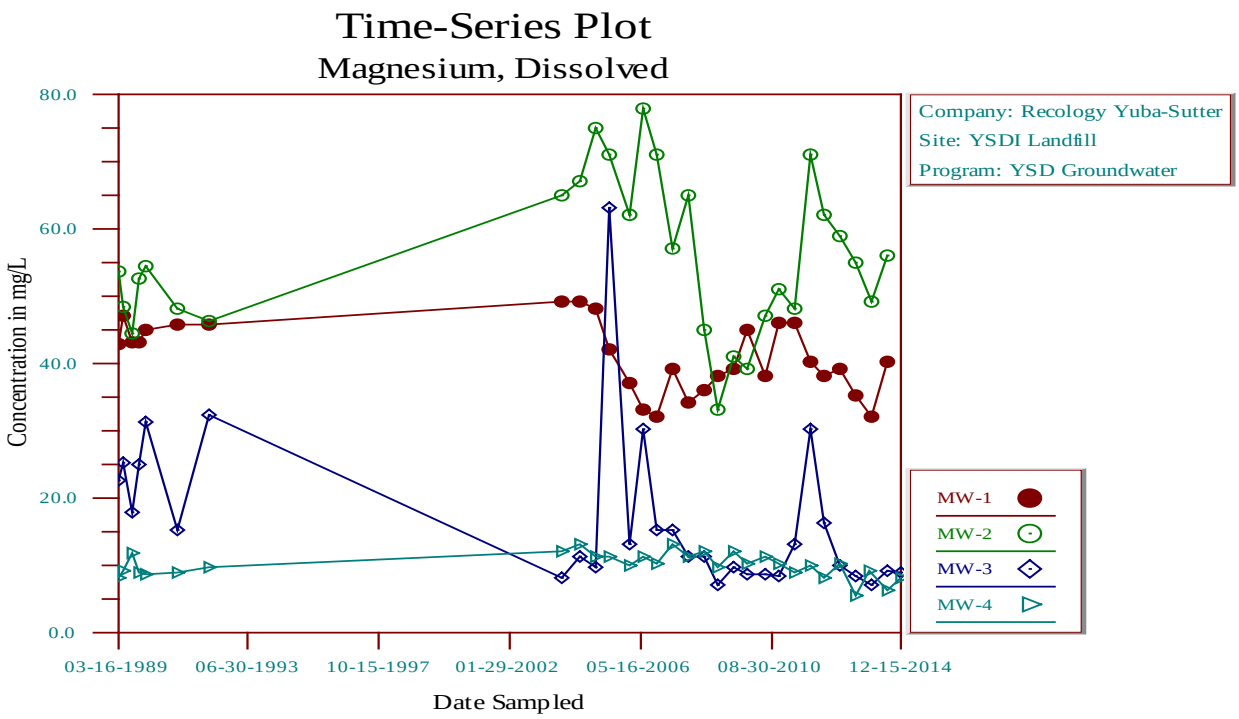

Time-Series Plot
Carbonate (as CaCO)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
60.0
50.0
40.0
30.0
20.0
10.0
0.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

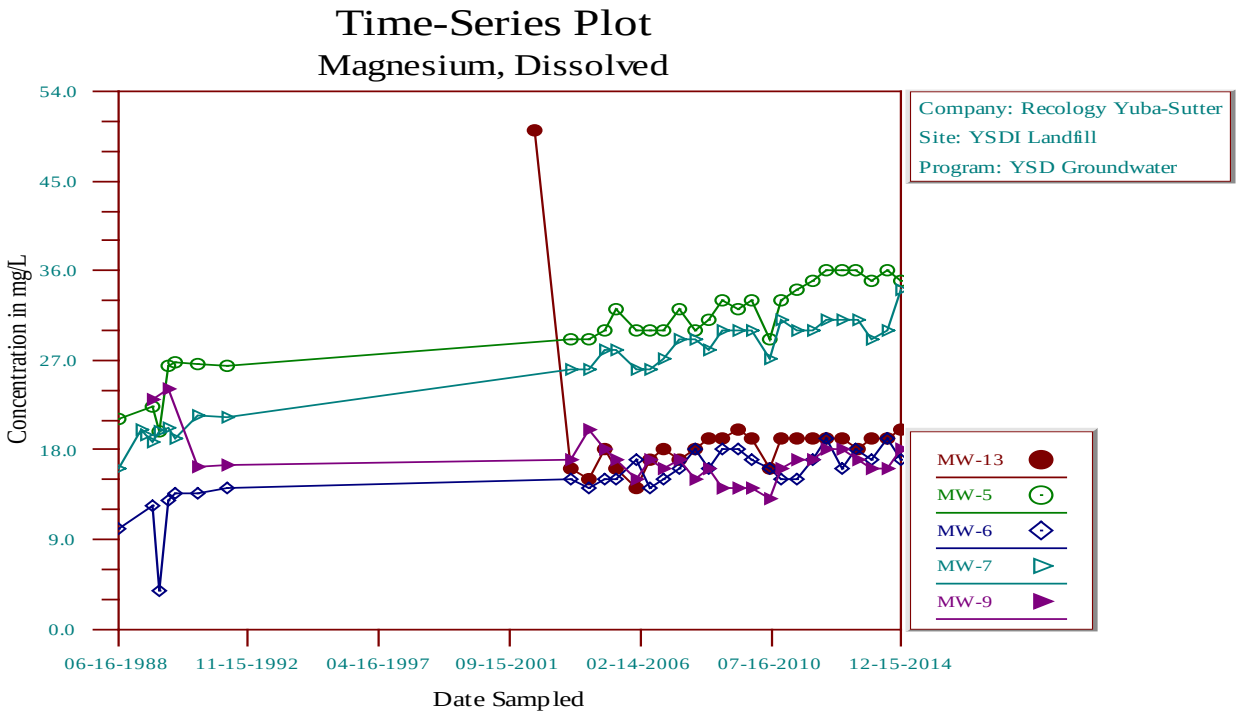

Time-Series Plot
Carbonate (as CaCO)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
21.0
17.5
14.0
10.5
7.0
3.5
0.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

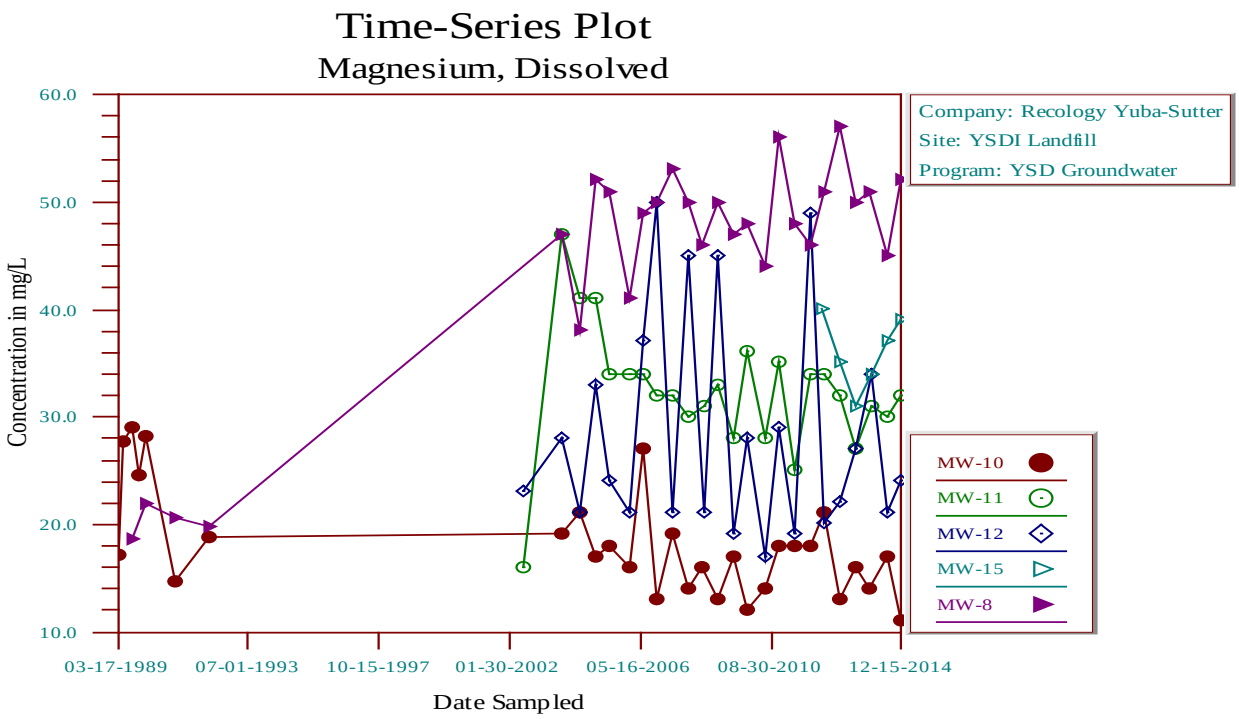

Time-Series Plot
Chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
210.0
140.0
70.0
0.0
-70.0
08-04-1987
02-24-1992
09-16-1996
04-09-2001
10-31-2005
05-24-2010
12-15-2014
Date Sampled
MW-1
MW-2
MW-3
MW-4

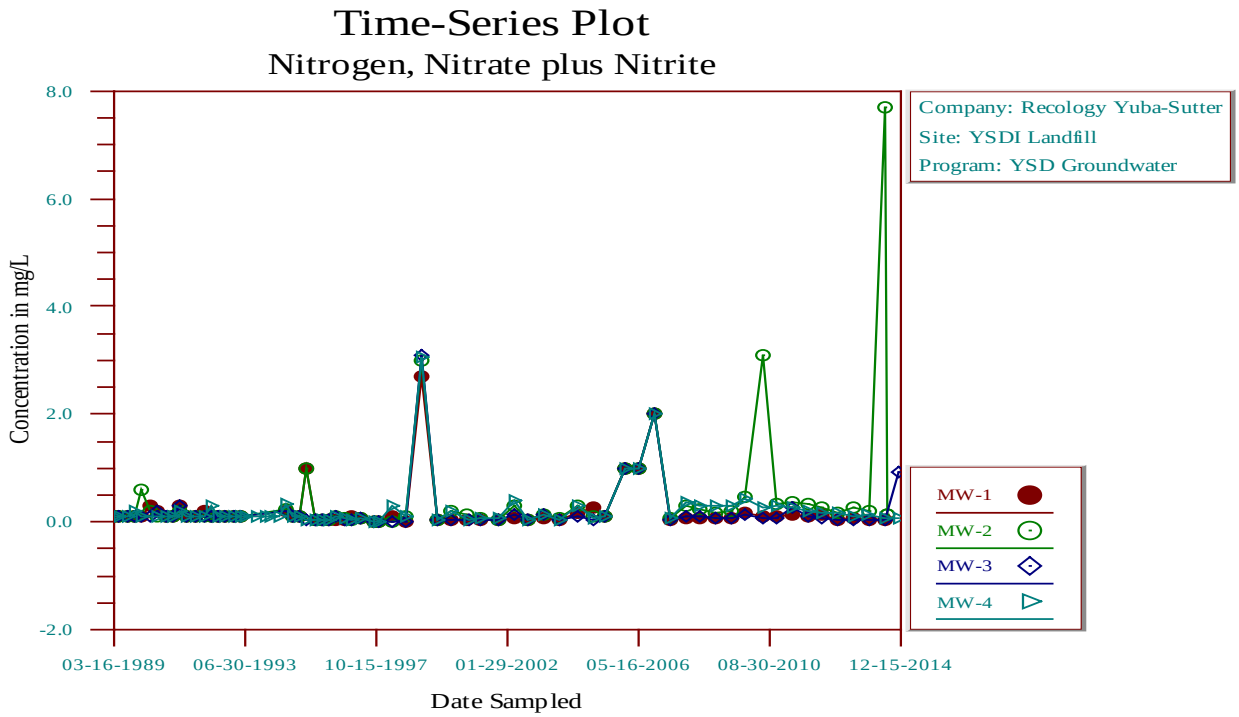

Time-Series Plot
Chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-13
MW-5
MW-6
MW-7
MW-9
Concentration in mg/L
40.0
30.0
20.0
10.0
0.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled

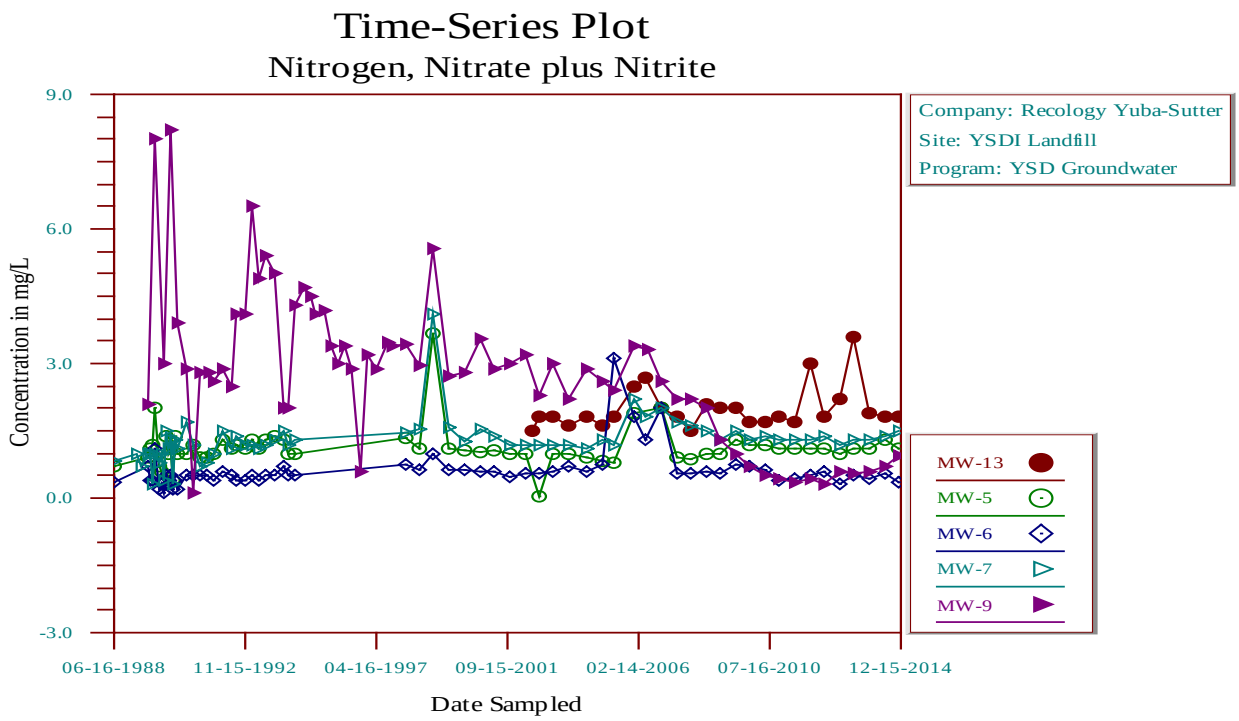

Time-Series Plot
Chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-10
MW-11
MW-12
MW-15
MW-8
Concentration in mg/L
45.0
36.0
27.0
18.0
9.0
0.0
-9.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

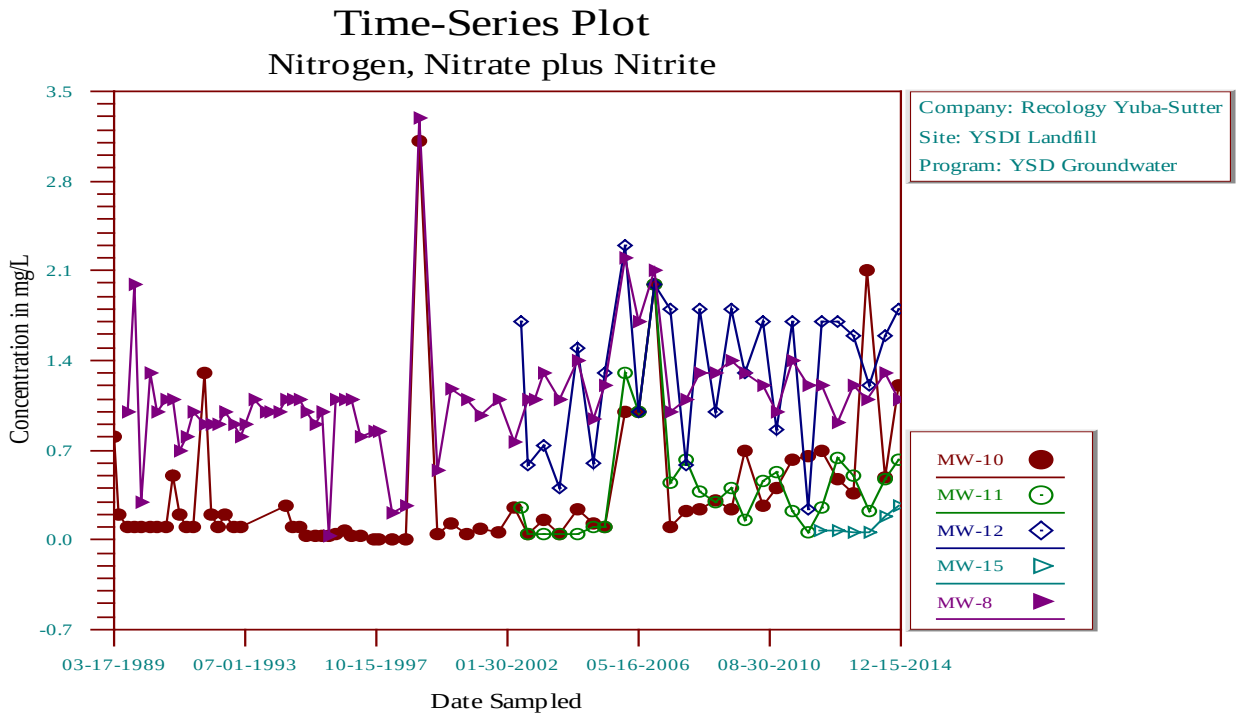

Time-Series Plot
Magnesium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
80.0
60.0
40.0
20.0
0.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-1
MW-2
MW-3
MW-4

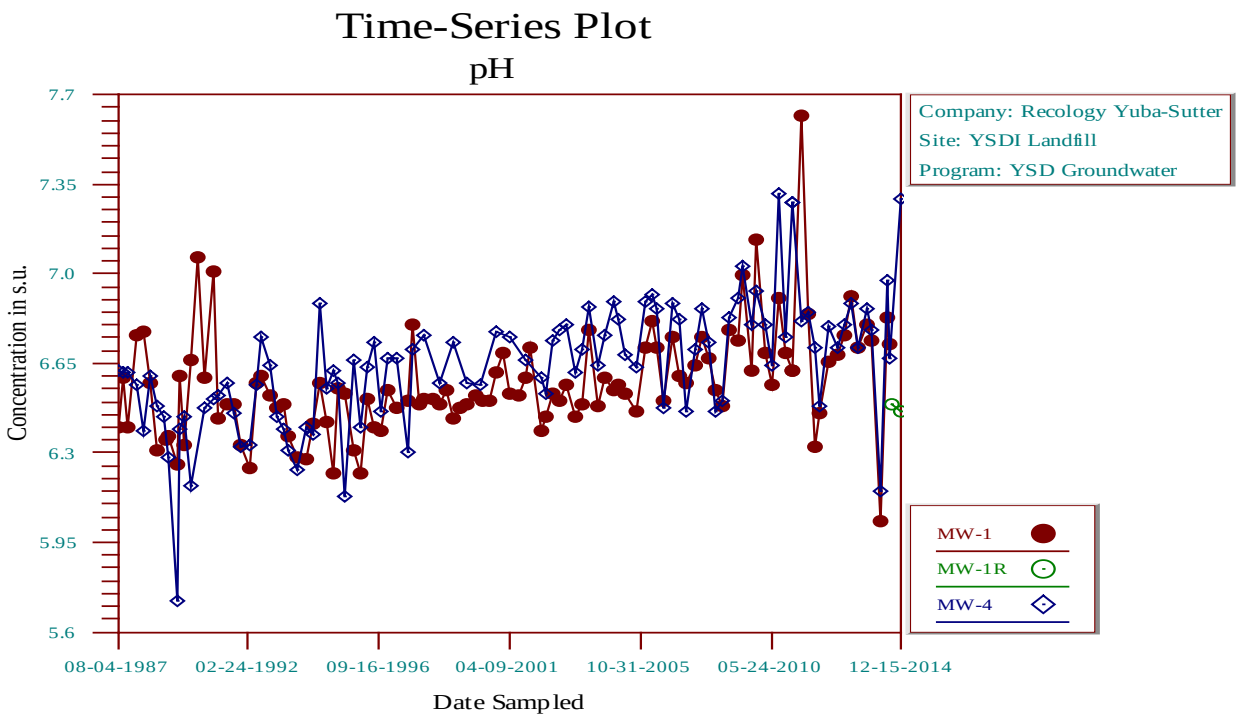

Time-Series Plot
Magnesium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
54.0
45.0
36.0
27.0
18.0
9.0
0.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

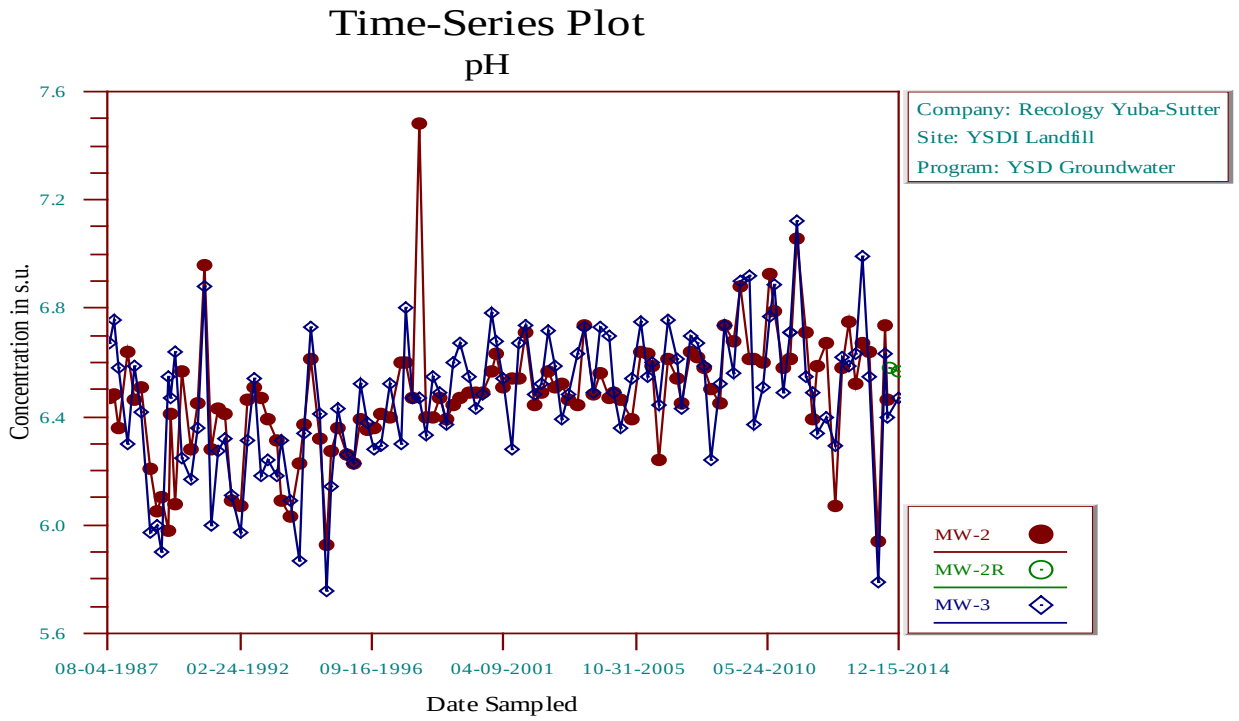

Time-Series Plot
Magnesium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-10
MW-11
MW-12
MW-15
MW-8
Concentration in mg/L
60.0
50.0
40.0
30.0
20.0
10.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

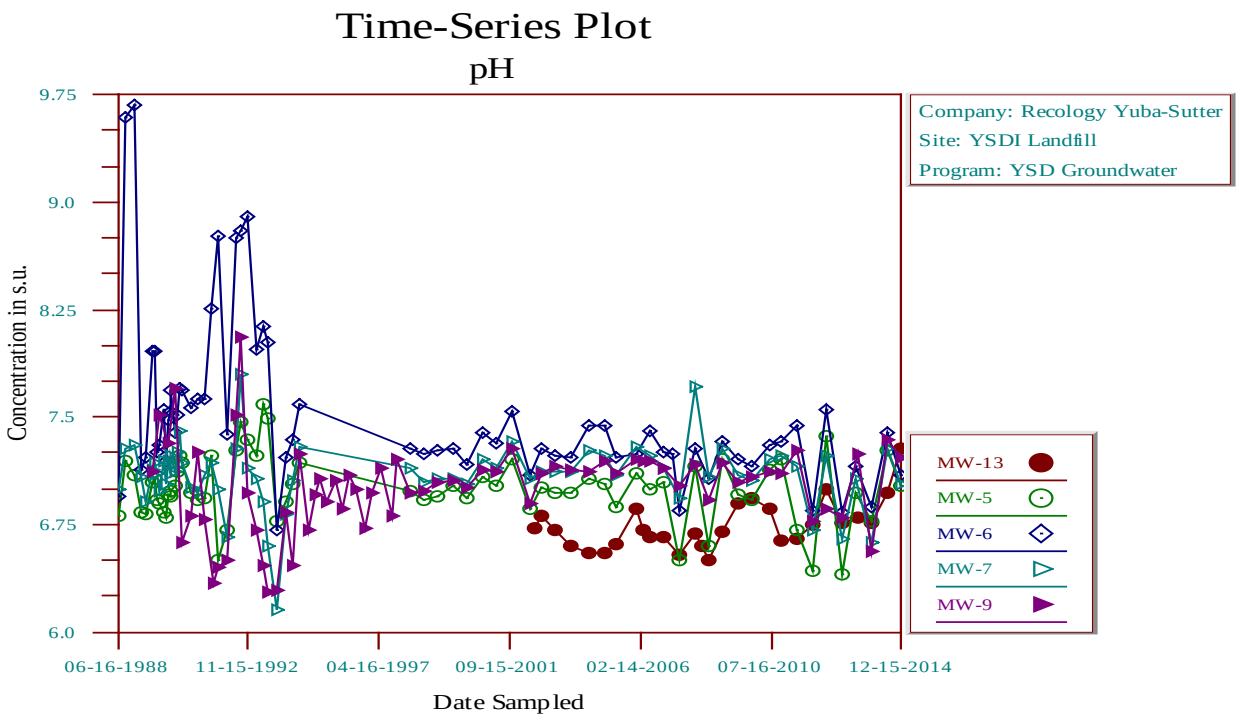

Time-Series Plot
Nitrogen, Nitrate plus Nitrite
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-2
MW-3
MW-4
Concentration in mg/L
8.0
6.0
4.0
2.0
0.0
-2.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

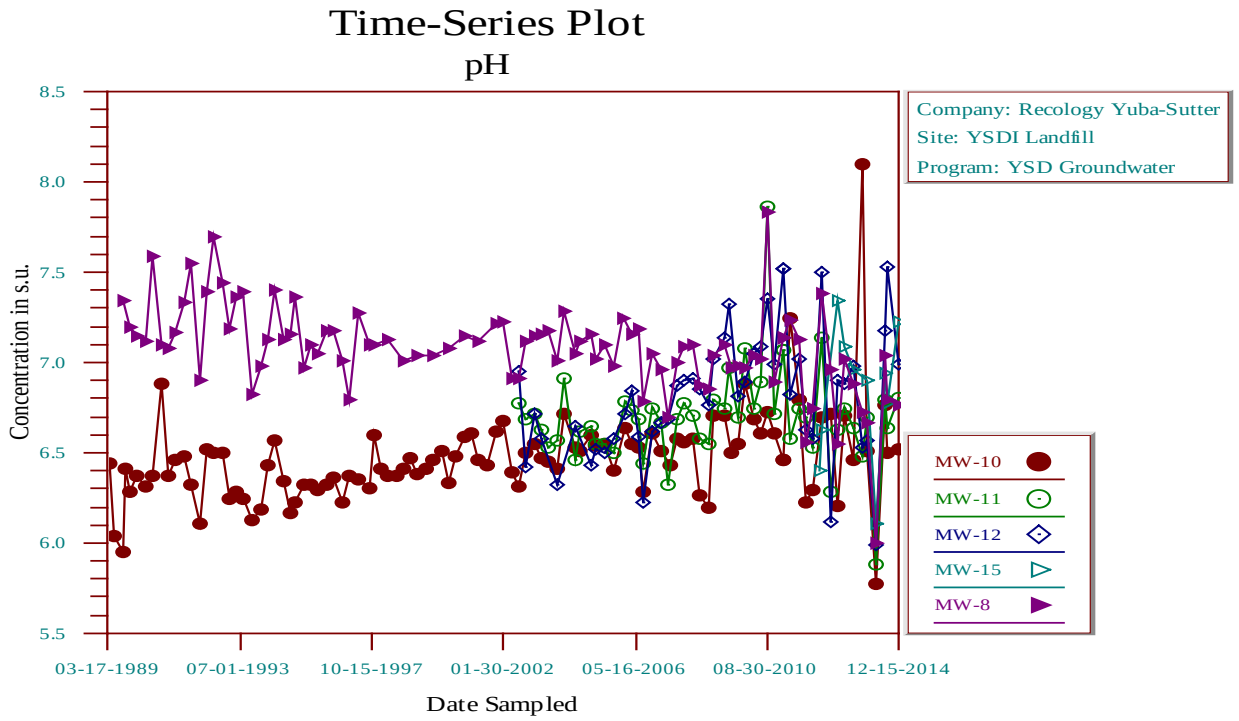

Time-Series Plot
Nitrogen, Nitrate plus Nitrite
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
9.0
6.0
3.0
0.0
-3.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

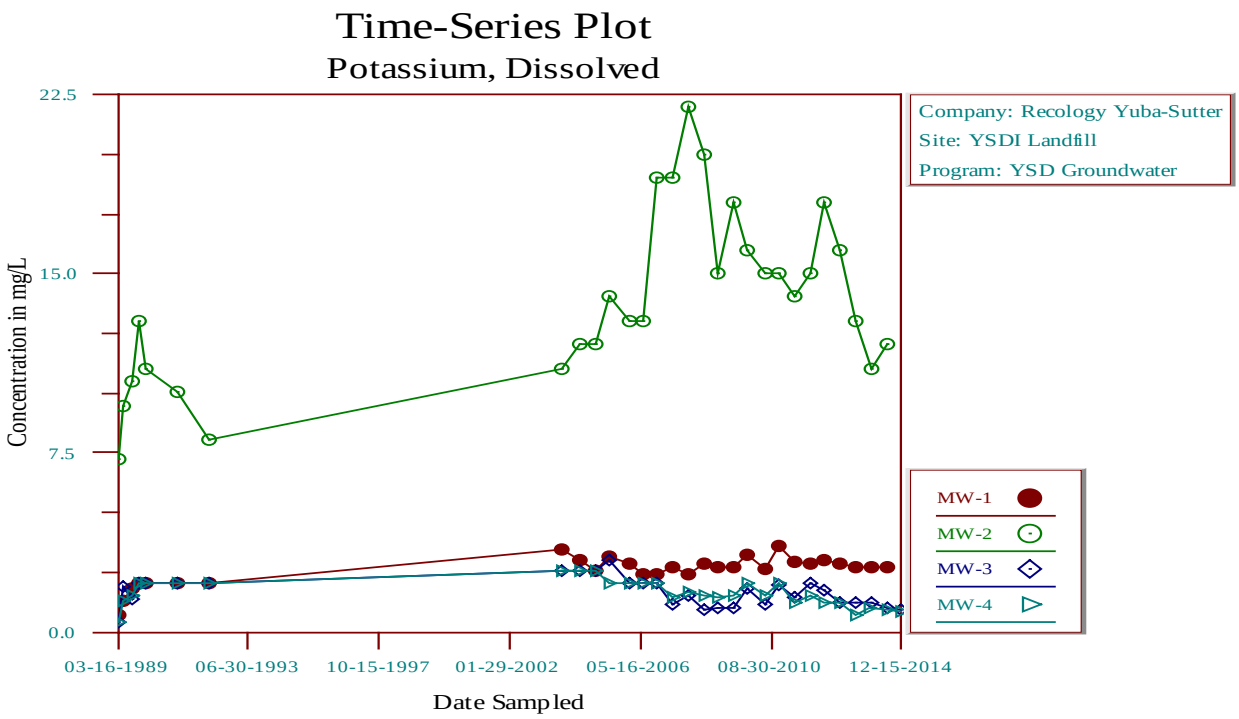

Time-Series Plot
Nitrogen, Nitrate plus Nitrite
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
3.5
2.8
2.1
1.4
0.7
0.0
-0.7
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

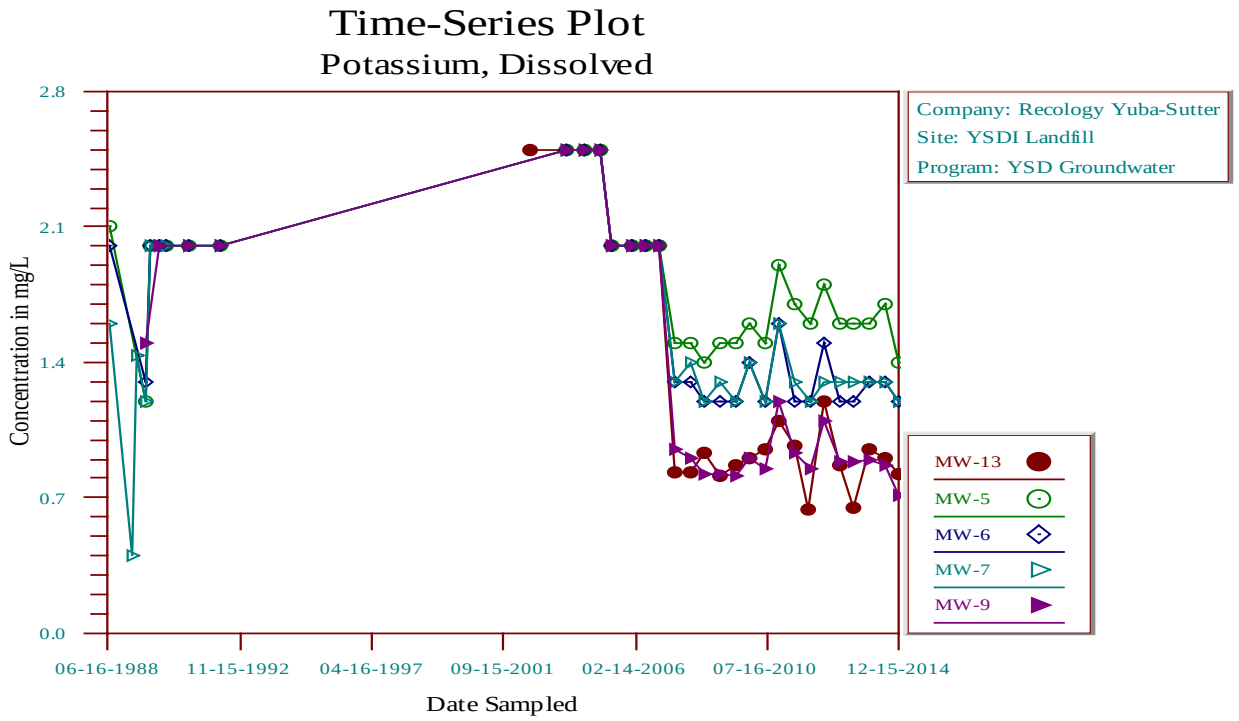

Time-Series Plot
pH
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in s.u.
7.7
7.35
7.0
6.65
6.3
5.95
5.6
08-04-1987
02-24-1992
09-16-1996
04-09-2001
10-31-2005
05-24-2010
12-15-2014
Date Sampled
MW-1
MW-1R
MW-4

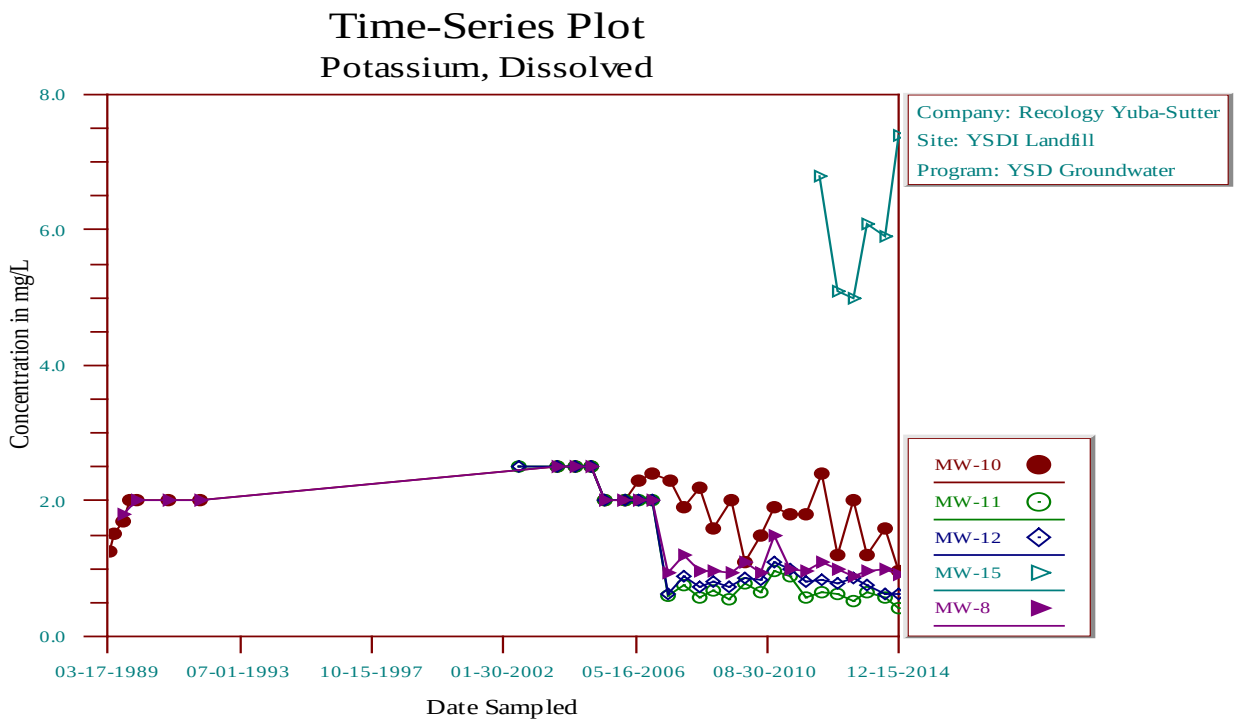

Time-Series Plot
pH
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in s.u.
7.6
7.2
6.8
6.4
6.0
5.6
08-04-1987
02-24-1992
09-16-1996
04-09-2001
10-31-2005
05-24-2010
12-15-2014
Date Sampled
MW-2
MW-2R
MW-3

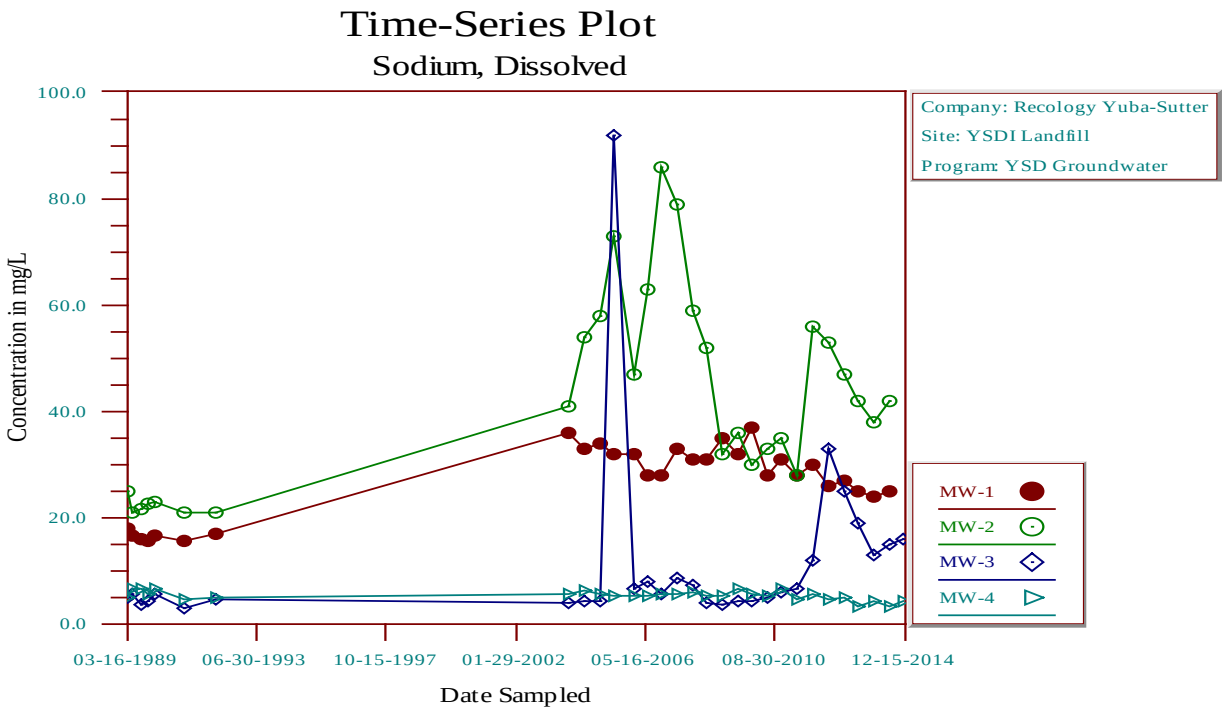

Time-Series Plot
pH
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in s.u.
9.75
9.0
8.25
7.5
6.75
6.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

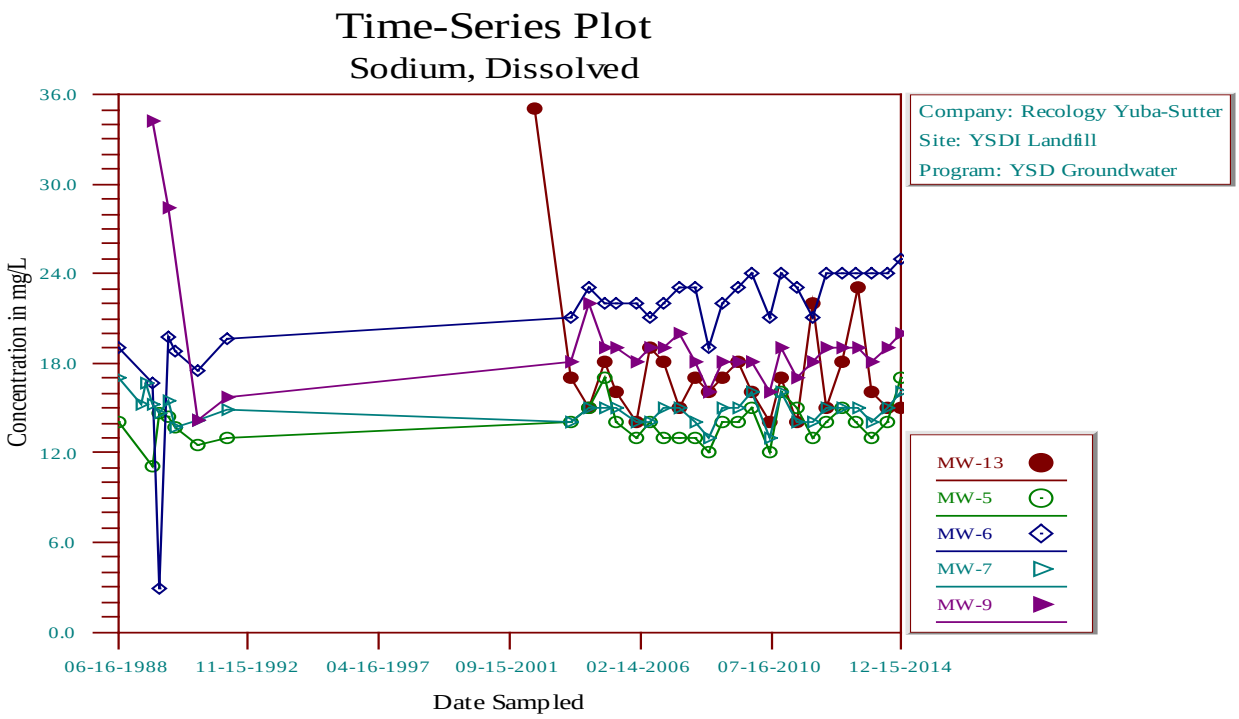

Time-Series Plot
pH
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in s.u.
8.5
8.0
7.5
7.0
6.5
6.0
5.5
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

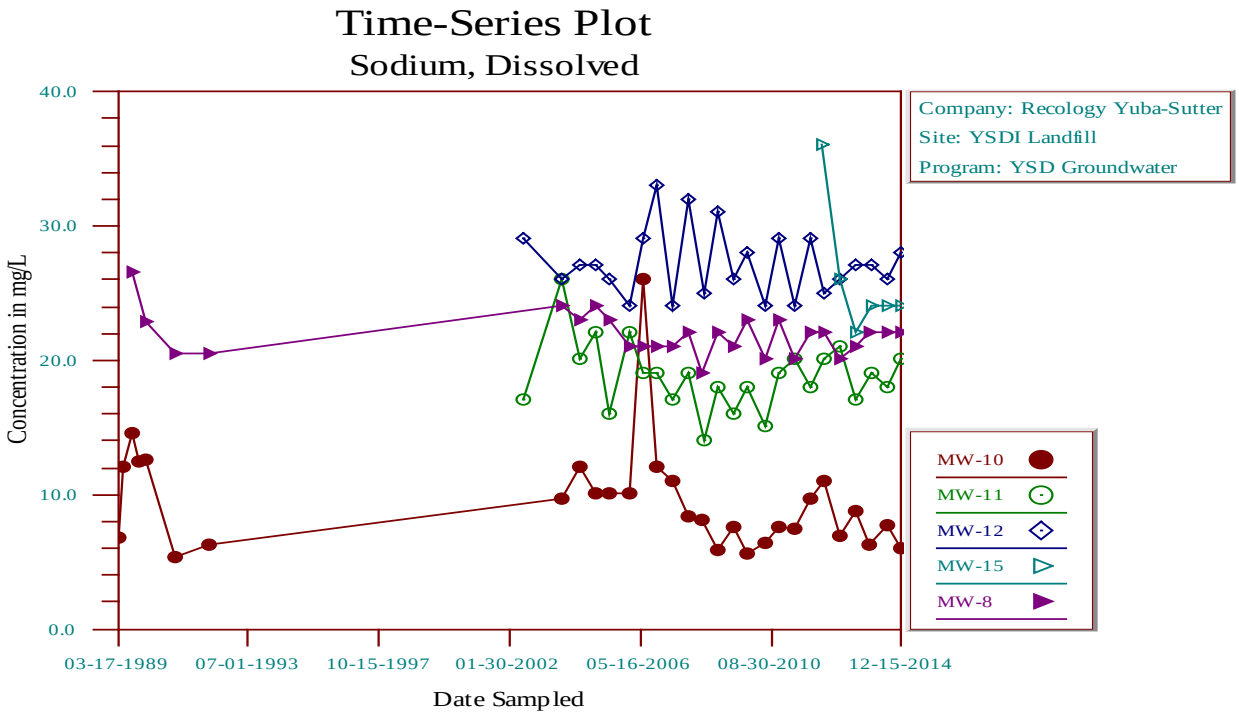

Time-Series Plot
Potassium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-2
MW-3
MW-4
Concentration in mg/L
22.5
15.0
7.5
0.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

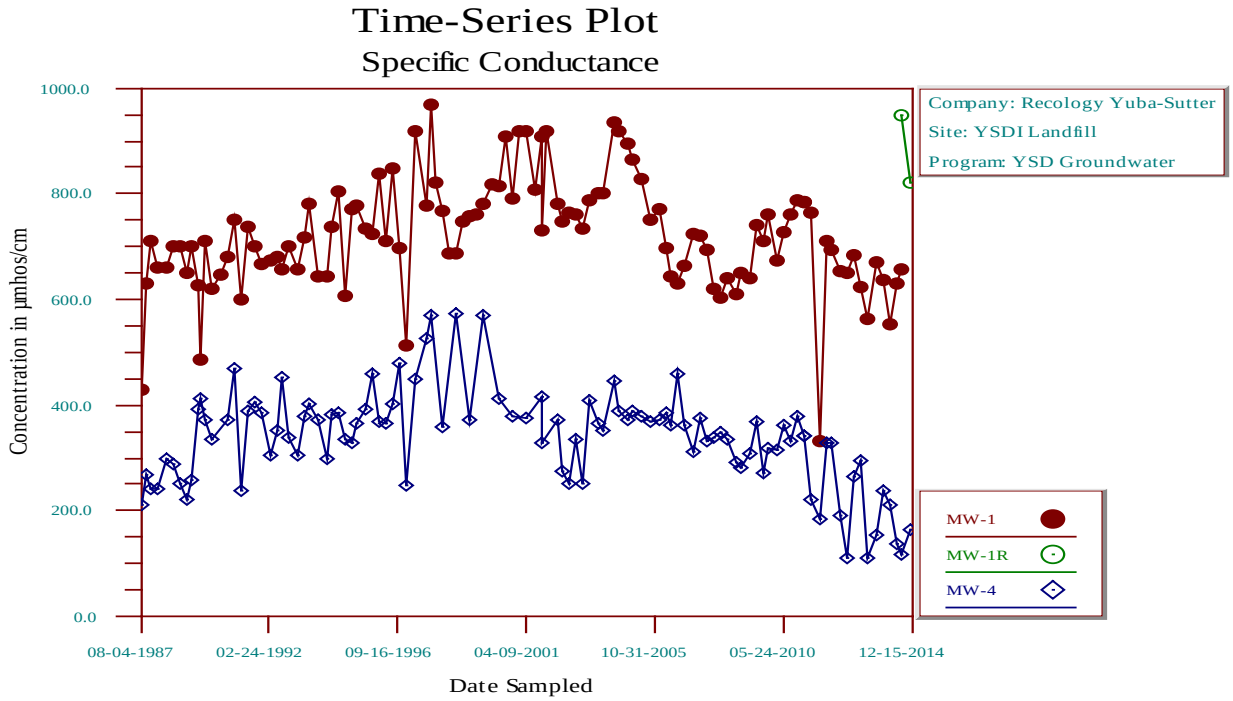

Time-Series Plot
Potassium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-13
MW-5
MW-6
MW-7
MW-9
Concentration in mg/L
2.8
2.1
1.4
0.7
0.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled

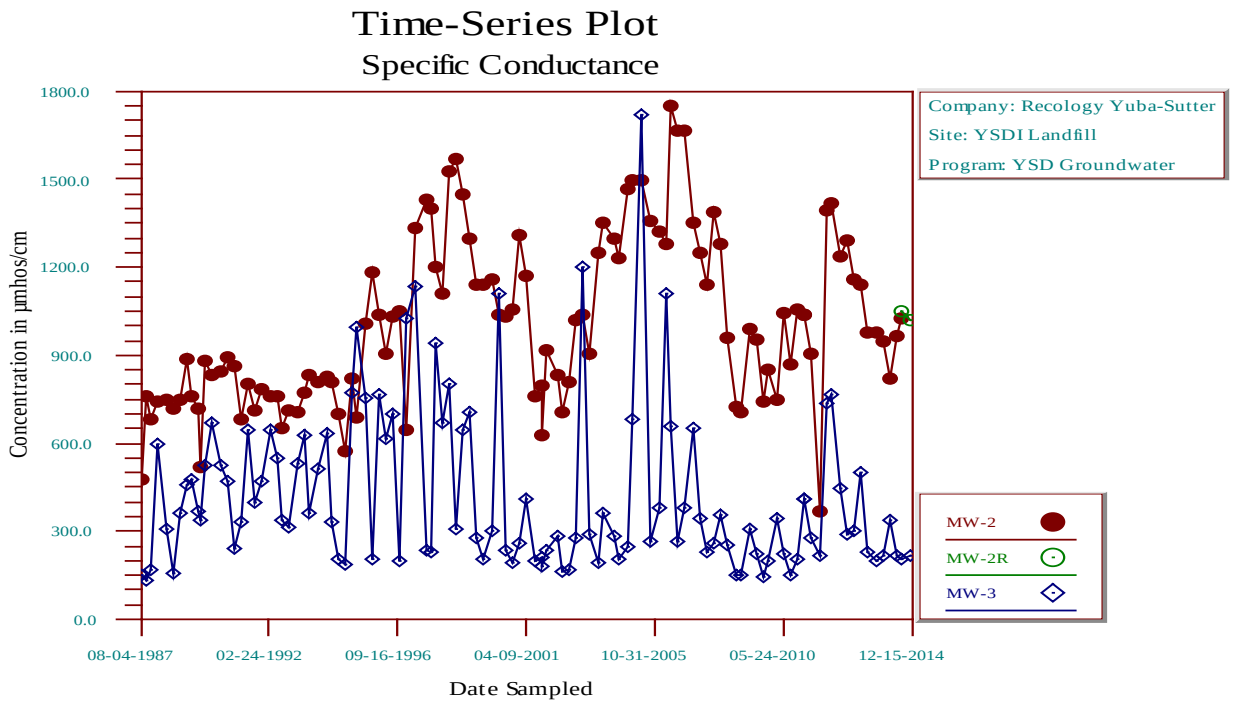

Time-Series Plot
Potassium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-10
MW-11
MW-12
MW-15
MW-8
Concentration in mg/L
8.0
6.0
4.0
2.0
0.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

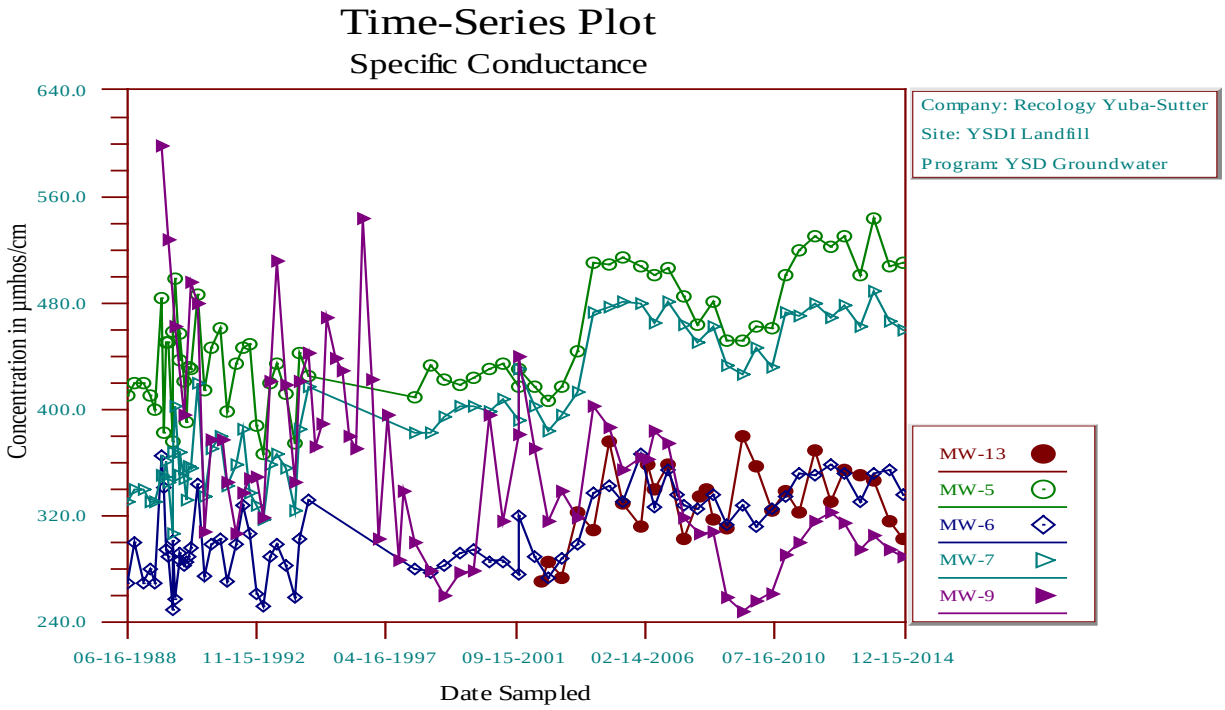

Time-Series Plot
Sodium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-2
MW-3
MW-4
Concentration in mg/L
100.0
80.0
60.0
40.0
20.0
0.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

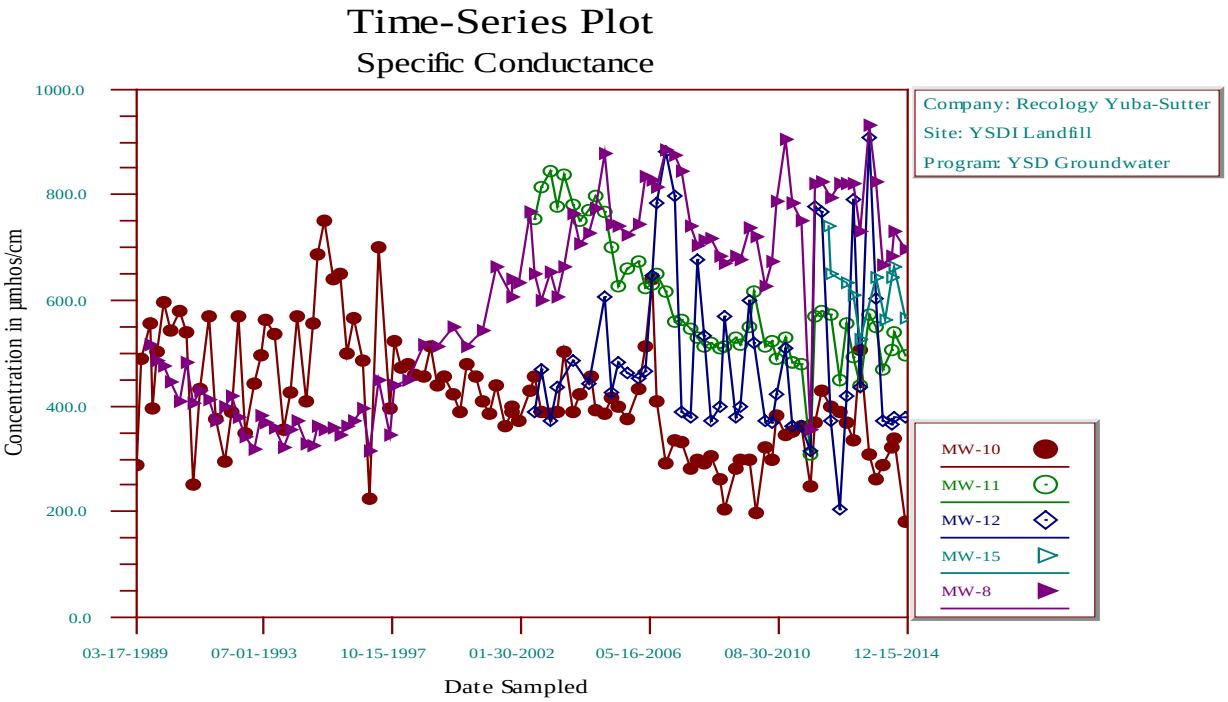

Time-Series Plot
Sodium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
36.0
30.0
24.0
18.0
12.0
6.0
0.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

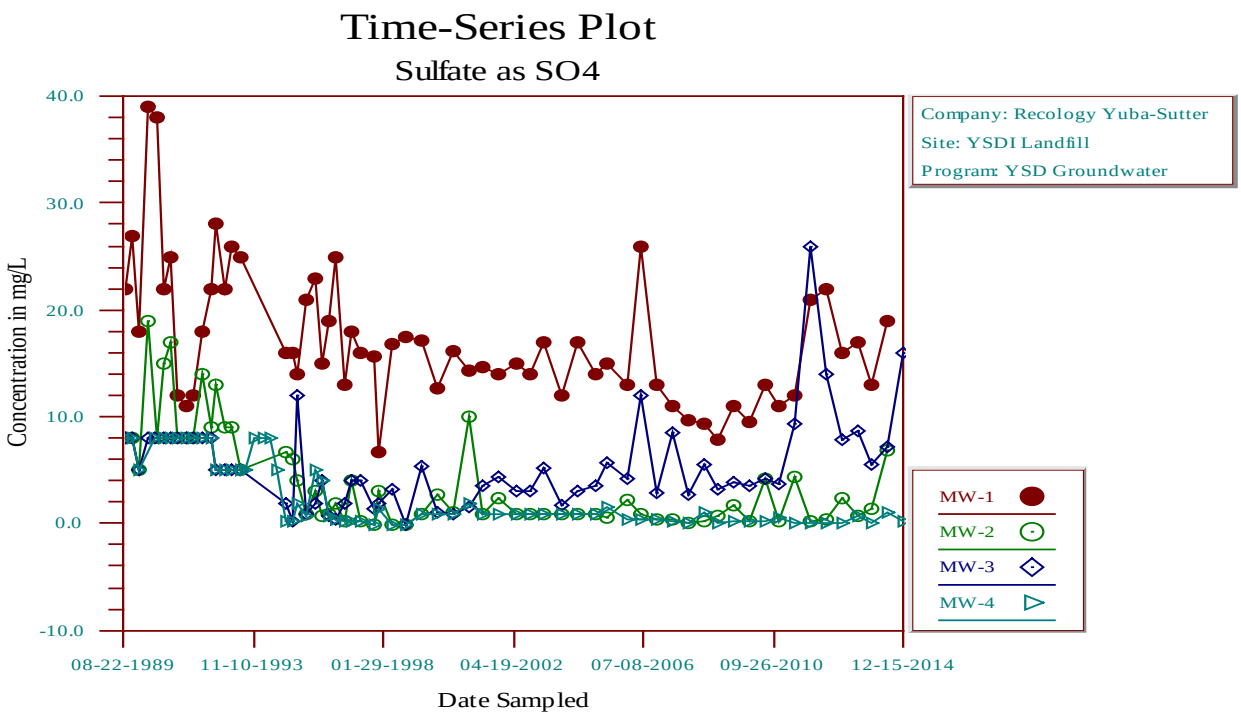

Time-Series Plot
Sodium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
40.0
30.0
20.0
10.0
0.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

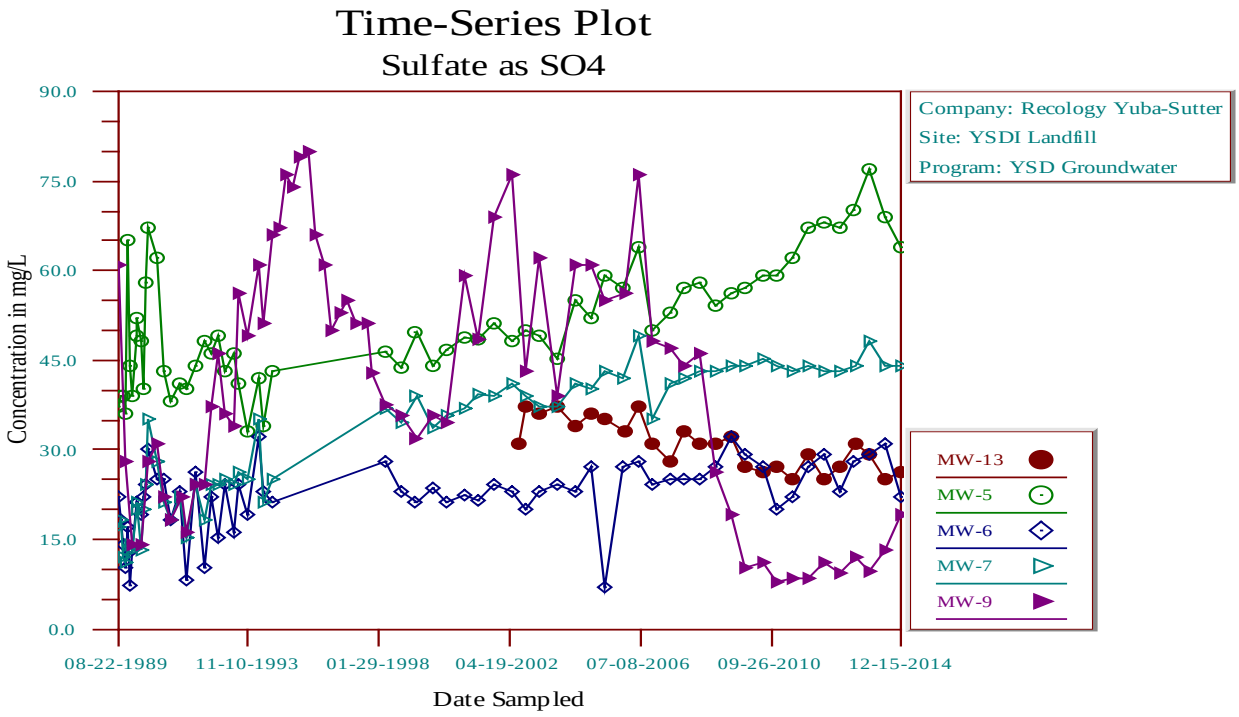

Time-Series Plot
Specific Conductance
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-1R
MW-4
Concentration in µmhos/cm
1000.0
800.0
600.0
400.0
200.0
0.0
08-04-1987
02-24-1992
09-16-1996
04-09-2001
10-31-2005
05-24-2010
12-15-2014
Date Sampled

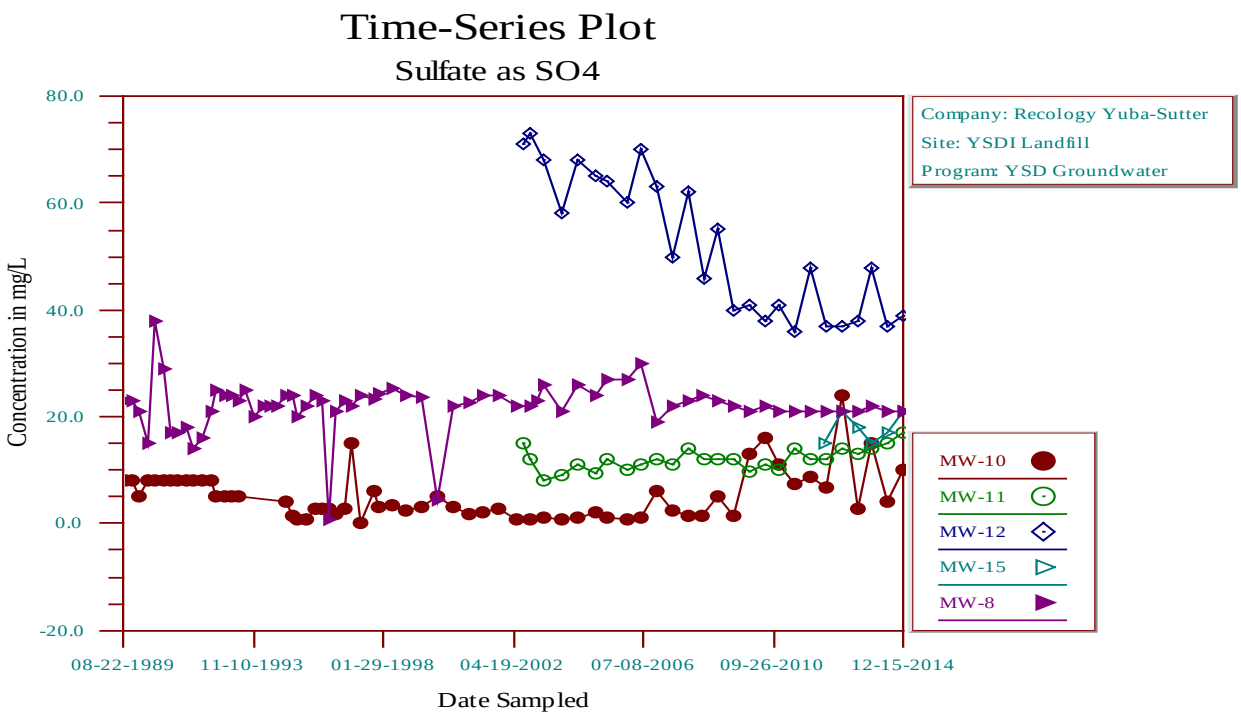

Time-Series Plot
Specific Conductance
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-2
MW-2R
MW-3
Concentration in µmhos/cm
1800.0
1500.0
1200.0
900.0
600.0
300.0
0.0
08-04-1987
02-24-1992
09-16-1996
04-09-2001
10-31-2005
05-24-2010
12-15-2014
Date Sampled

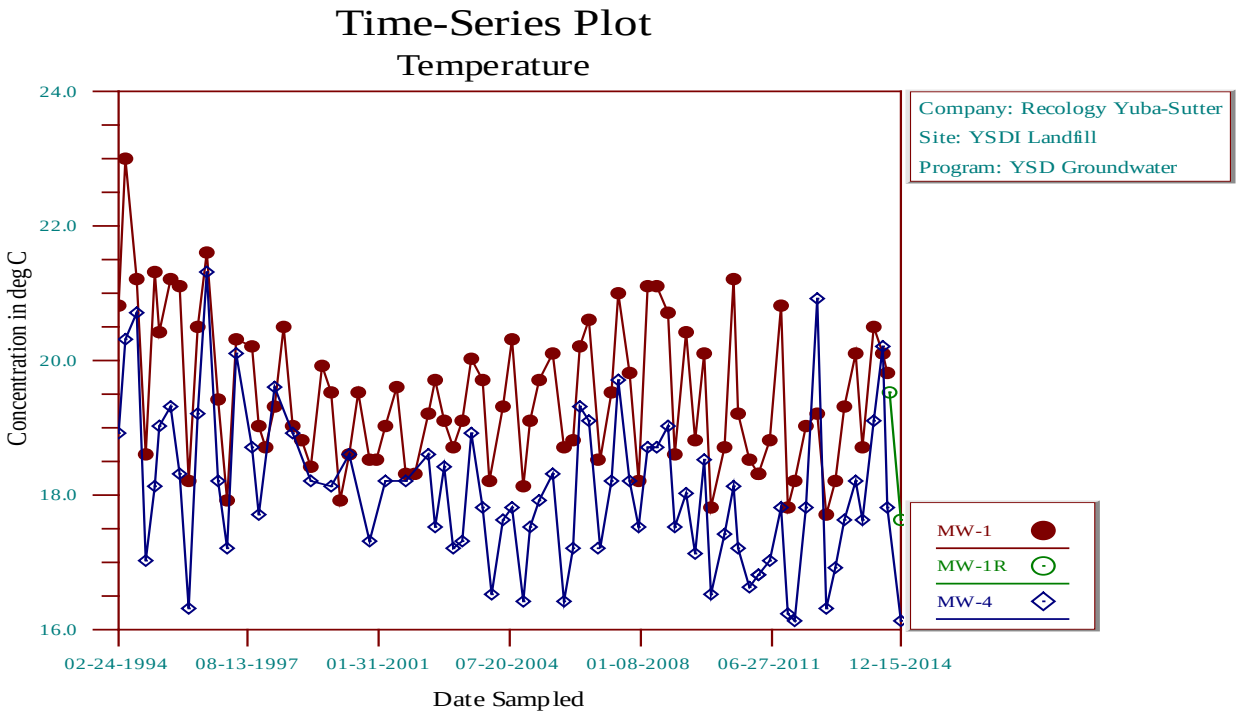

Time-Series Plot
Specific Conductance
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in µmhos/cm
640.0
560.0
480.0
400.0
320.0
240.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

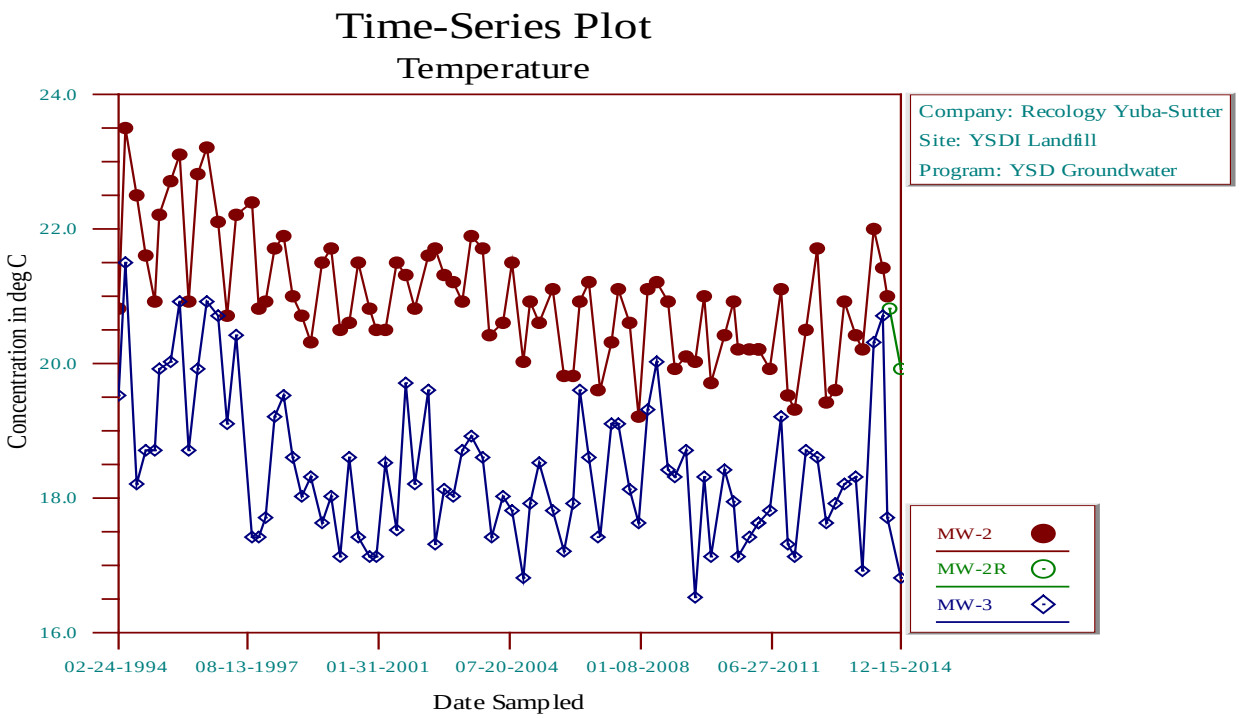

Time-Series Plot
Specific Conductance
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in µmhos/cm
1000.0
800.0
600.0
400.0
200.0
0.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

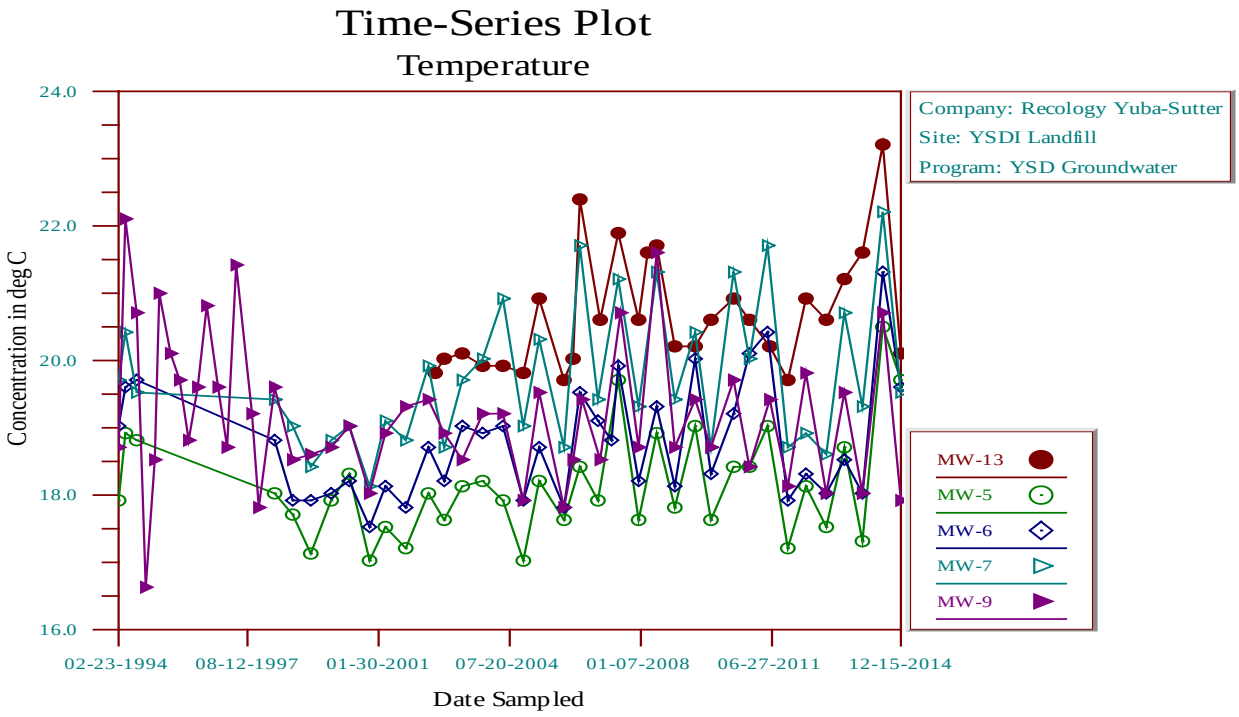

Time-Series Plot
Sulfate as SO4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-2
MW-3
MW-4
Concentration in mg/L
40.0
30.0
20.0
10.0
0.0
-10.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled

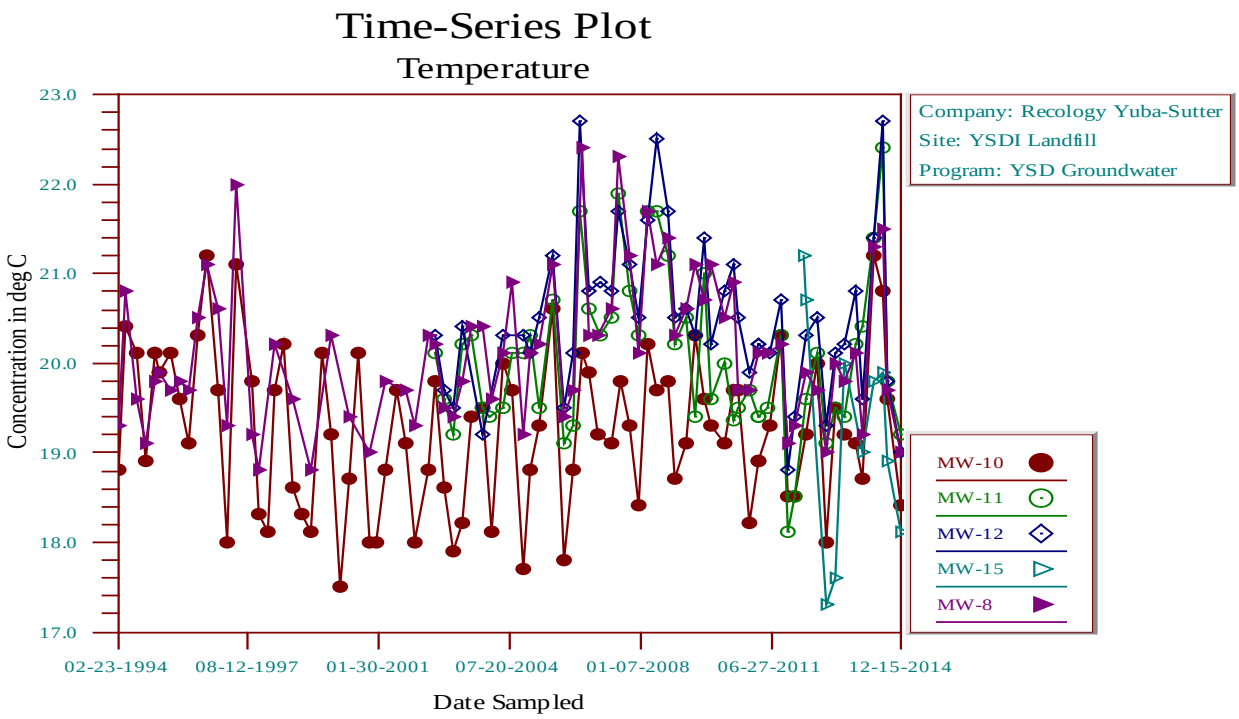

Time-Series Plot
Sulfate as SO4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-13
MW-5
MW-6
MW-7
MW-9
Concentration in mg/L
90.0
75.0
60.0
45.0
30.0
15.0
0.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled

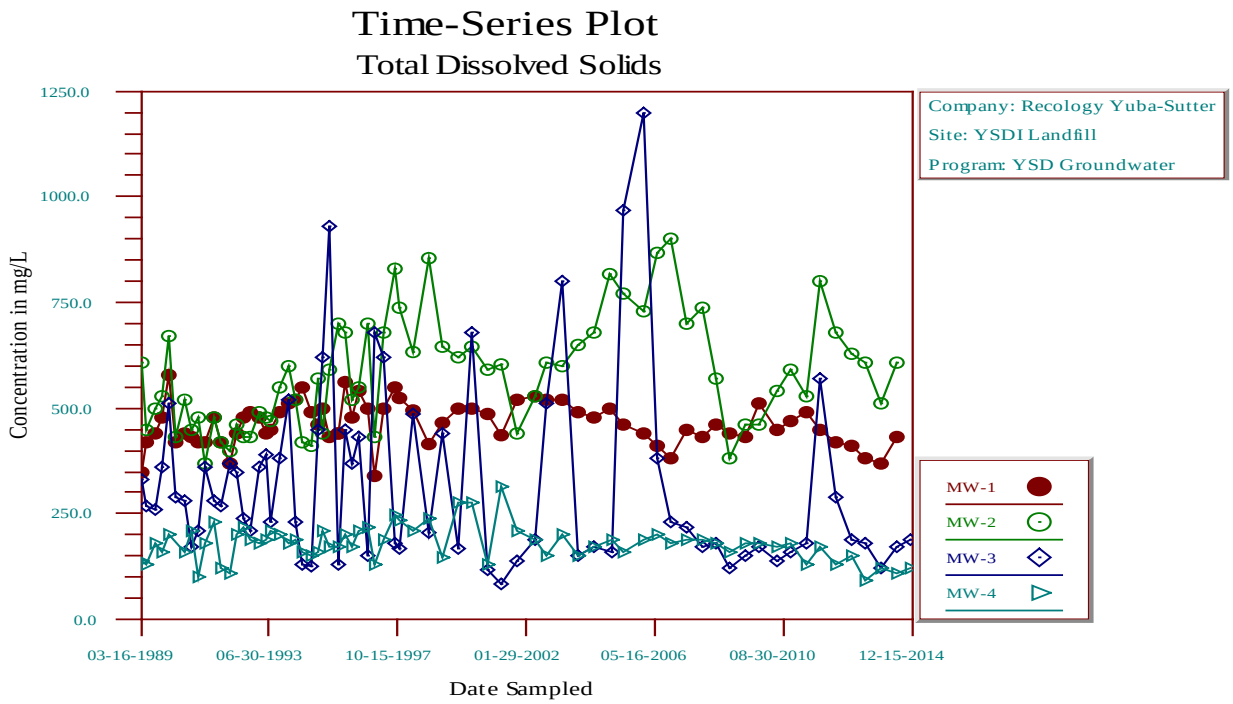

Time-Series Plot
Sulfate as SO4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in mg/L
80.0
60.0
40.0
20.0
0.0
-20.0
08-22-1989
11-10-1993
01-29-1998
04-19-2002
07-08-2006
09-26-2010
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8

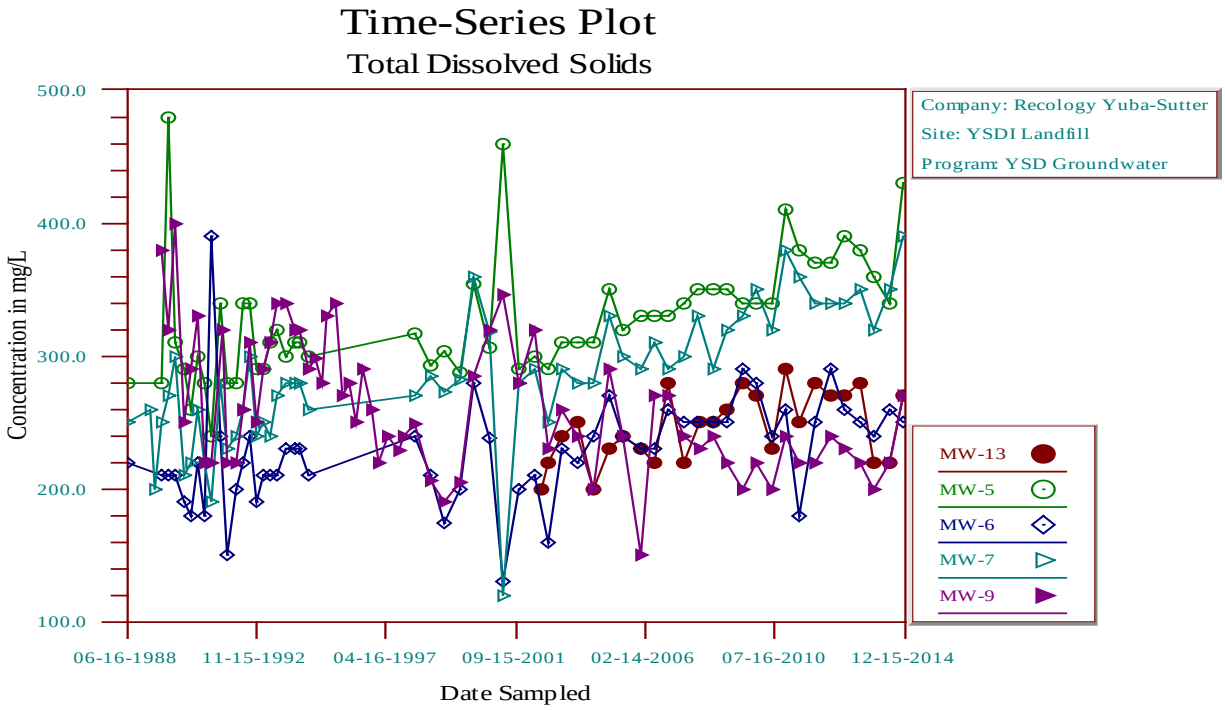

Time-Series Plot
Temperature
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in deg C
24.0
22.0
20.0
18.0
16.0
02-24-1994
08-13-1997
01-31-2001
07-20-2004
01-08-2008
06-27-2011
12-15-2014
Date Sampled
MW-1
MW-1R
MW-4

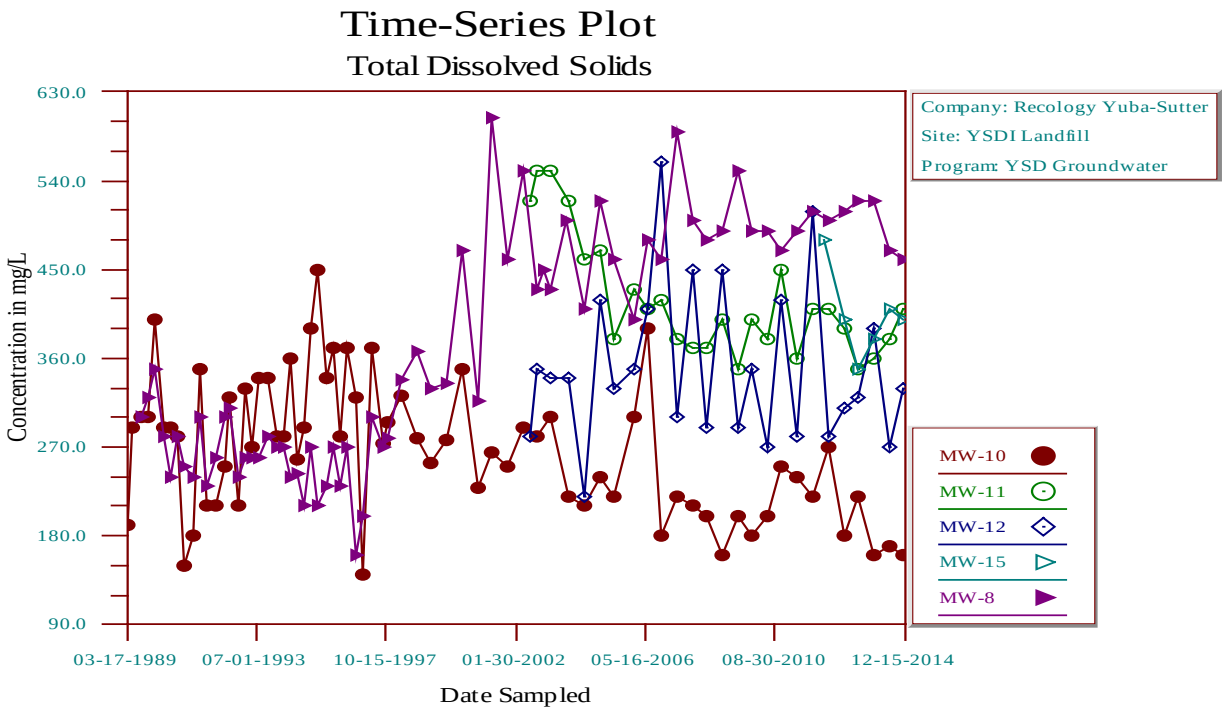

Time-Series Plot
Temperature
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-2
MW-2R
MW-3
Concentration in deg C
24.0
22.0
20.0
18.0
16.0
02-24-1994
08-13-1997
01-31-2001
07-20-2004
01-08-2008
06-27-2011
12-15-2014
Date Sampled

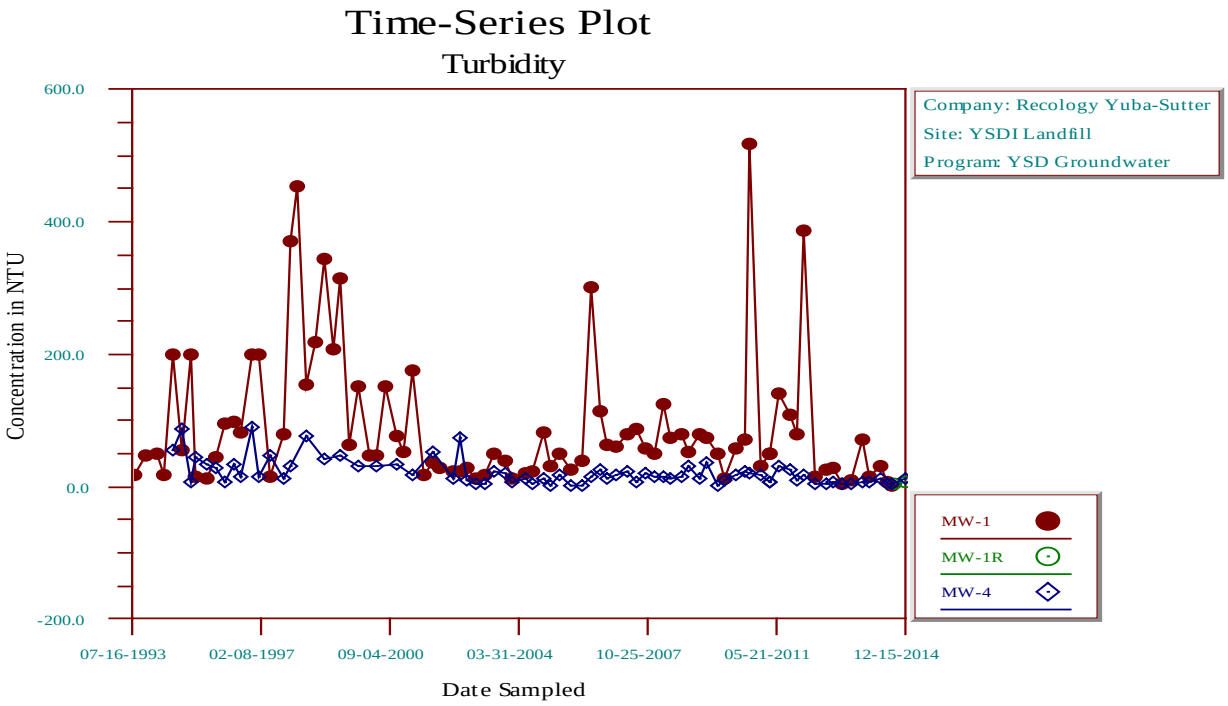

Time-Series Plot
Temperature
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-13
MW-5
MW-6
MW-7
MW-9
Concentration in deg C
24.0
22.0
20.0
18.0
16.0
02-23-1994
08-12-1997
01-30-2001
07-20-2004
01-07-2008
06-27-2011
12-15-2014
Date Sampled

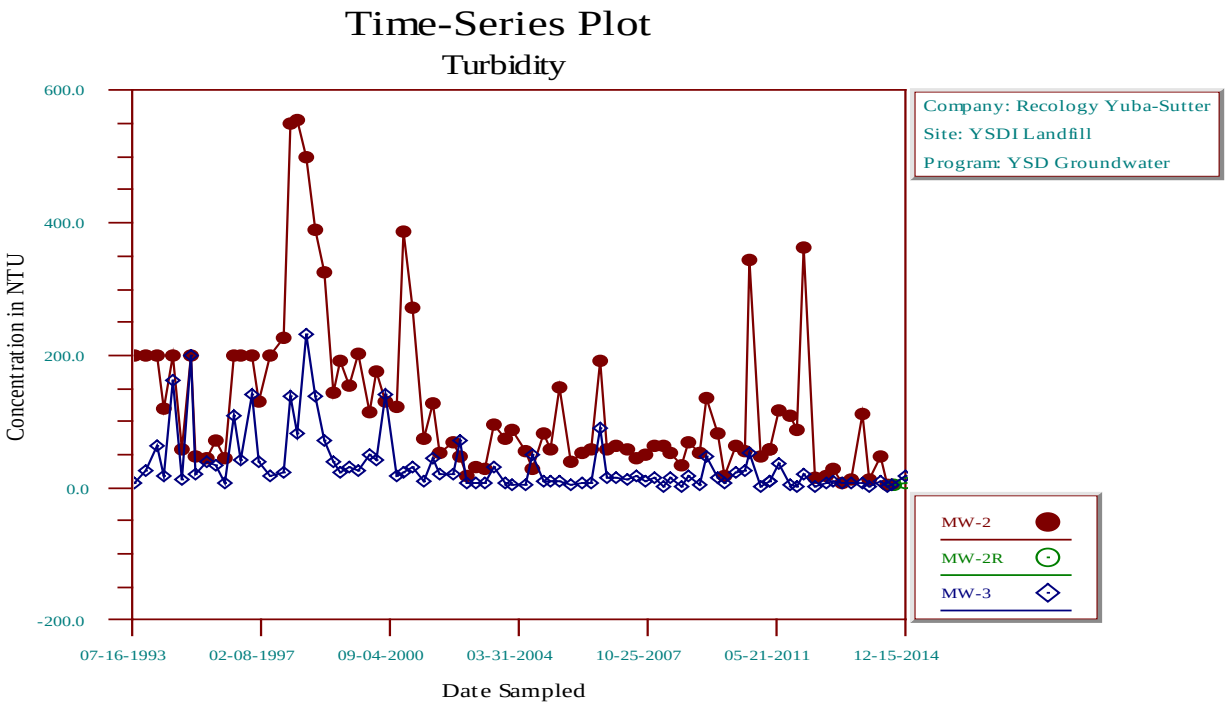

Time-Series Plot
Temperature
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-10
MW-11
MW-12
MW-15
MW-8
Concentration in deg C
23.0
22.0
21.0
20.0
19.0
18.0
17.0
02-23-1994
08-12-1997
01-30-2001
07-20-2004
01-07-2008
06-27-2011
12-15-2014
Date Sampled

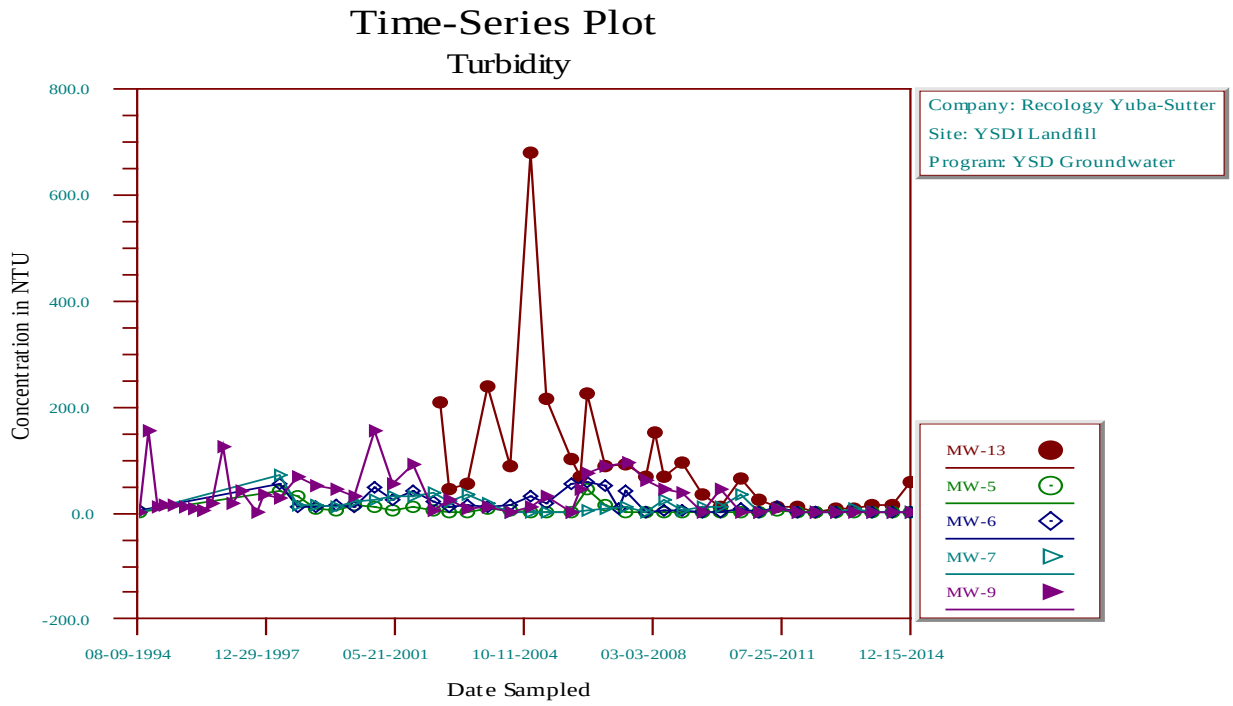

Time-Series Plot
Total Dissolved Solids
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-2
MW-3
MW-4
Concentration in mg/L
1250.0
1000.0
750.0
500.0
250.0
0.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

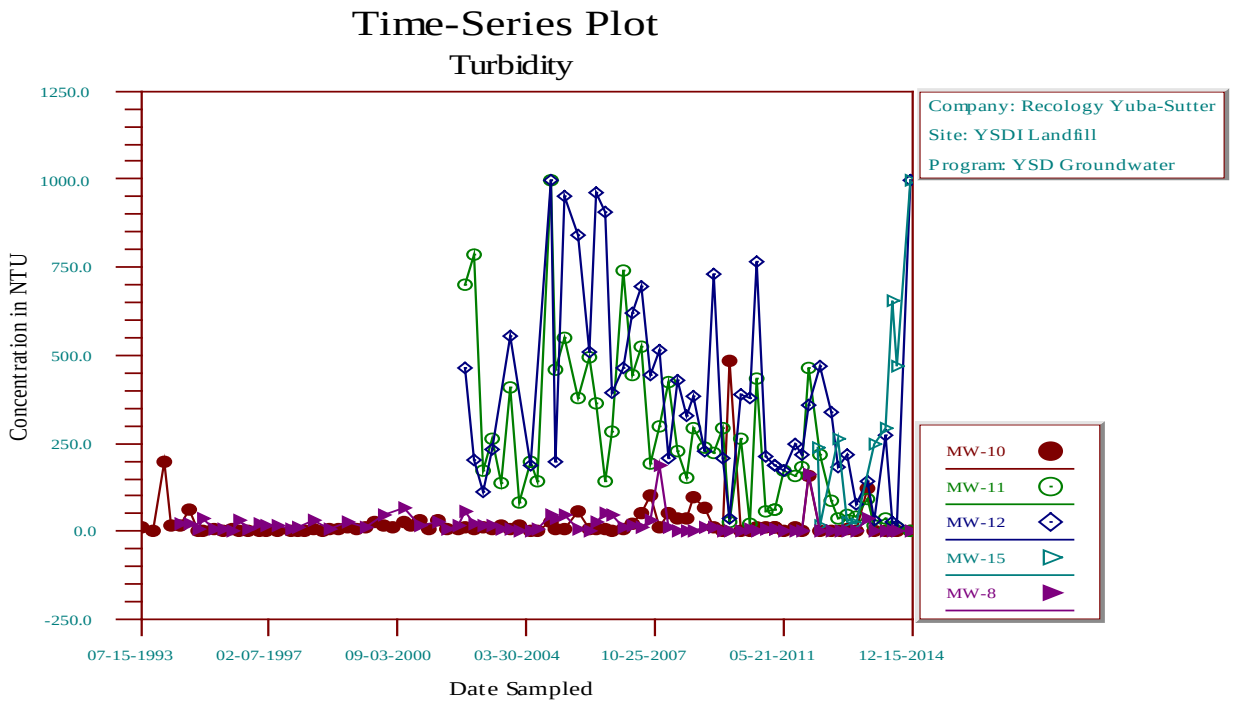

Time-Series Plot
Total Dissolved Solids
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-13
MW-5
MW-6
MW-7
MW-9
Concentration in mg/L
500.0
400.0
300.0
200.0
100.0
06-16-1988
11-15-1992
04-16-1997
09-15-2001
02-14-2006
07-16-2010
12-15-2014
Date Sampled

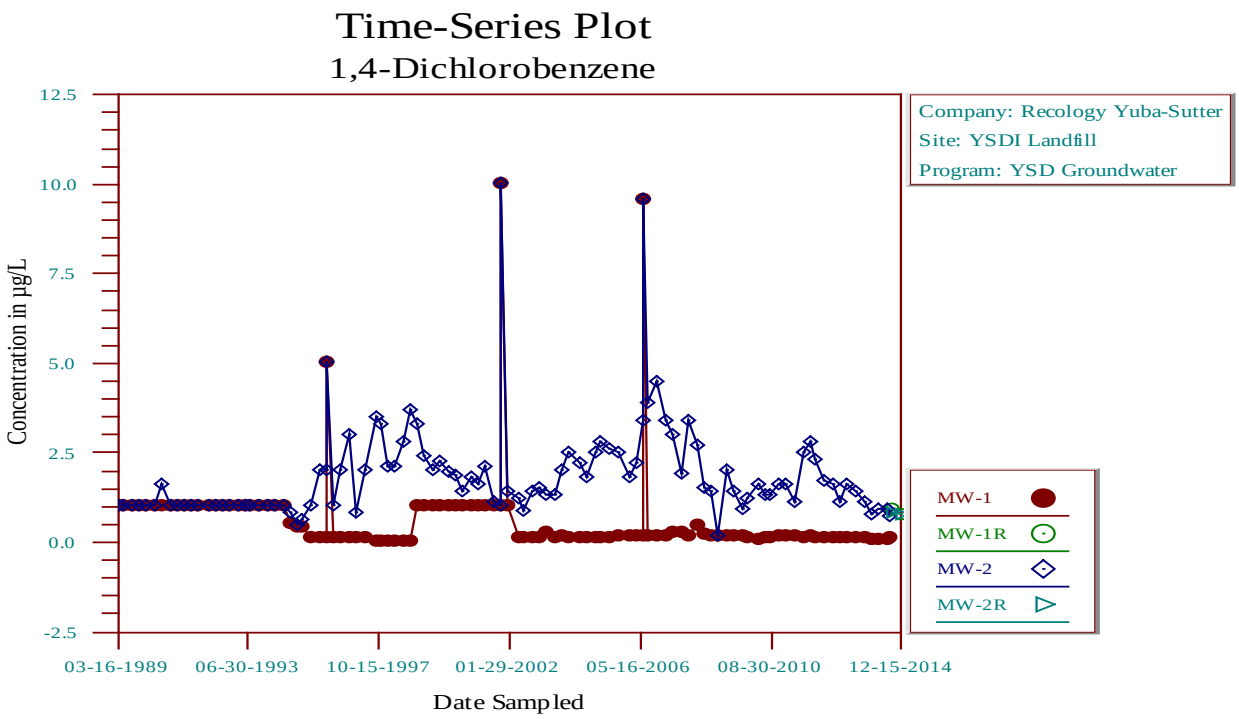

Time-Series Plot
Total Dissolved Solids
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-10
MW-11
MW-12
MW-15
MW-8
Concentration in mg/L
630.0
540.0
450.0
360.0
270.0
180.0
90.0
03-17-1989
07-01-1993
10-15-1997
01-30-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

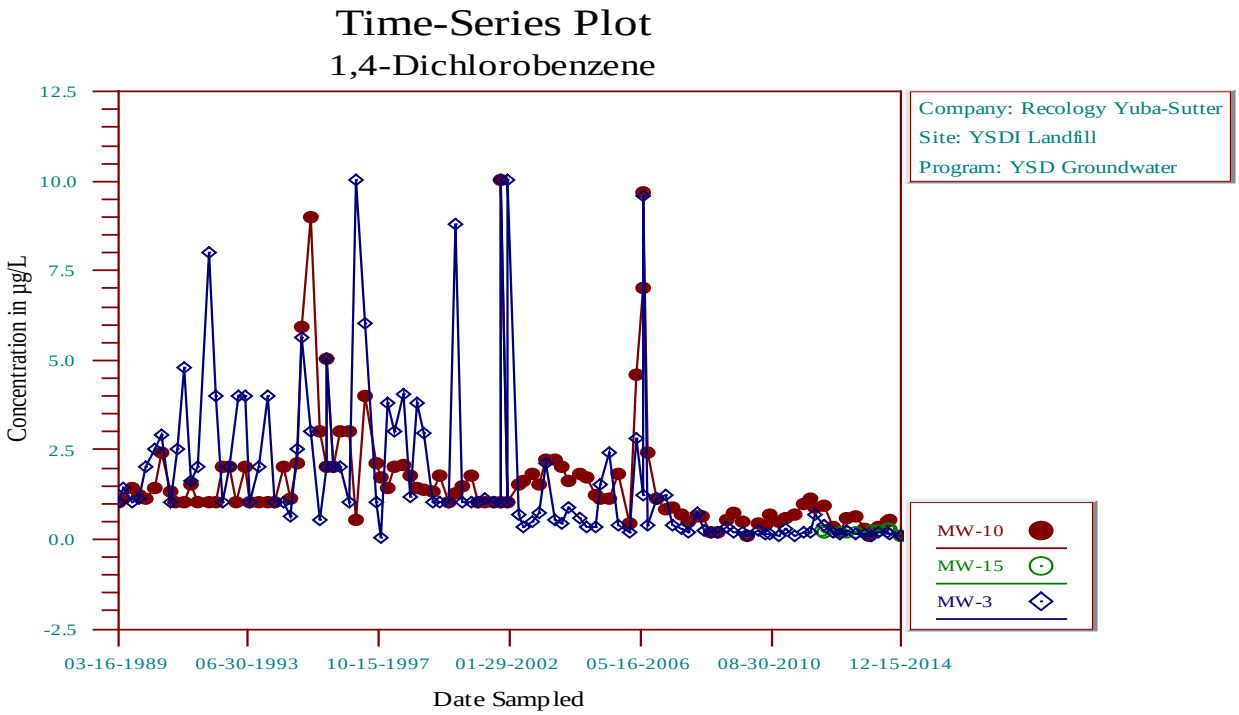

Time-Series Plot
Turbidity
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1
MW-1R
MW-4
Concentration in NTU
600.0
400.0
200.0
0.0
-200.0
07-16-1993
02-08-1997
09-04-2000
03-31-2004
10-25-2007
05-21-2011
12-15-2014
Date Sampled

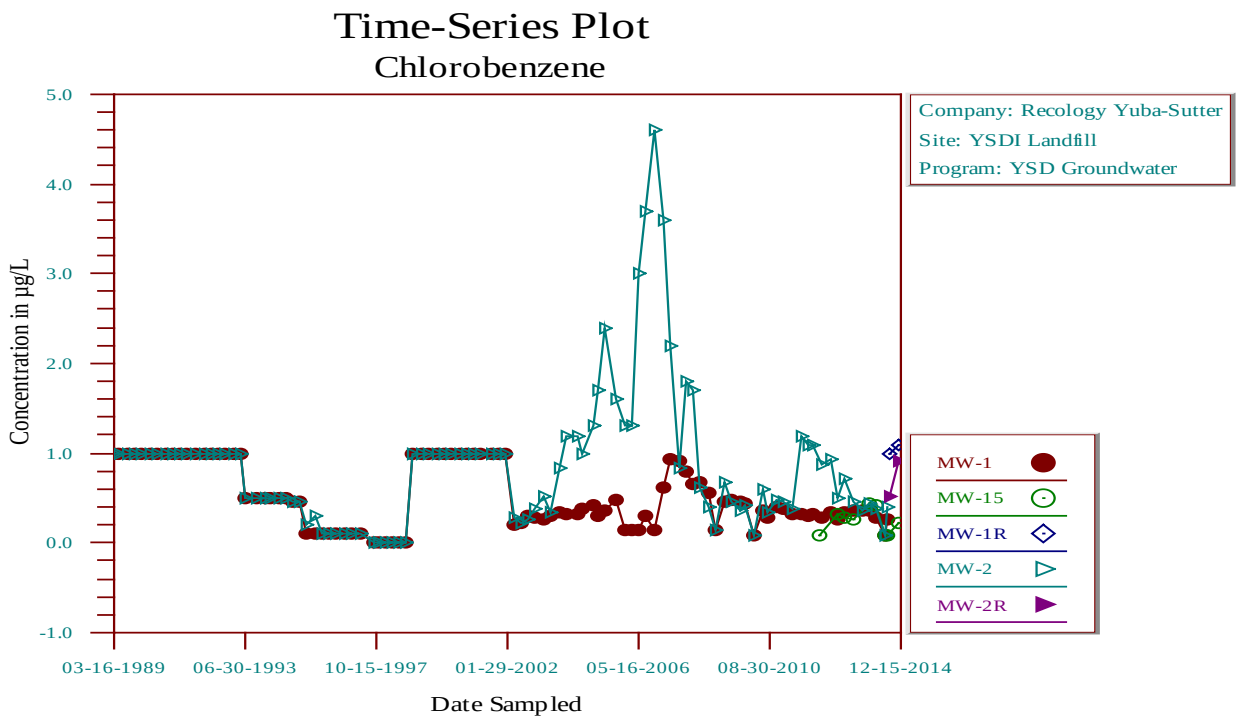

Time-Series Plot
Turbidity
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-2
MW-2R
MW-3
Concentration in NTU
600.0
400.0
200.0
0.0
-200.0
07-16-1993
02-08-1997
09-04-2000
03-31-2004
10-25-2007
05-21-2011
12-15-2014
Date Sampled

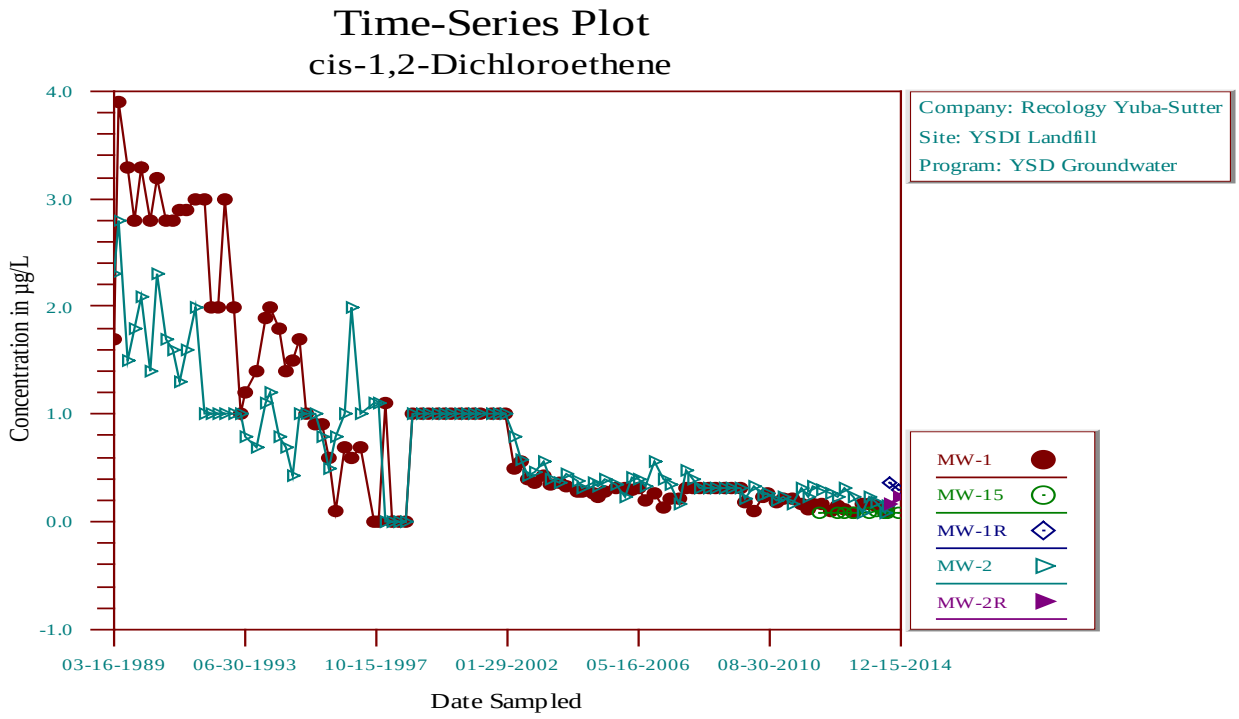

Time-Series Plot
Turbidity
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in NTU
800.0
600.0
400.0
200.0
0.0
-200.0
08-09-1994
12-29-1997
05-21-2001
10-11-2004
03-03-2008
07-25-2011
12-15-2014
Date Sampled
MW-13
MW-5
MW-6
MW-7
MW-9

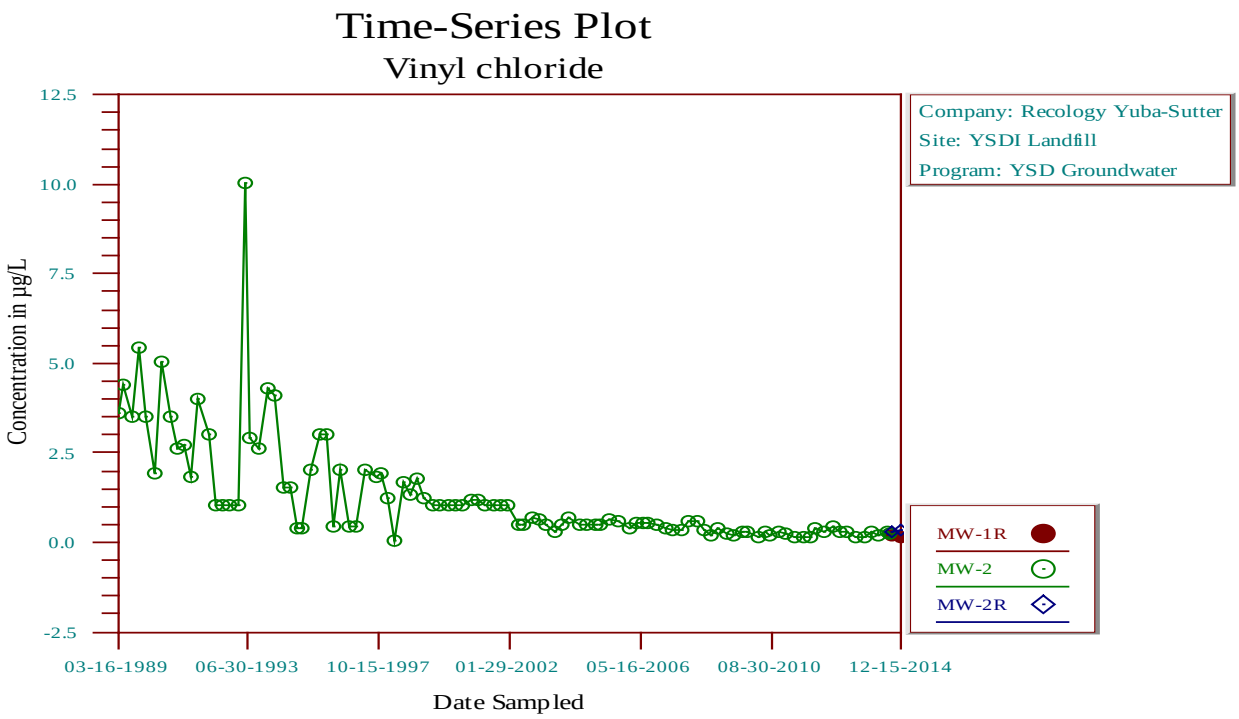

Time-Series Plot
Turbidity
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in NTU
1250.0
1000.0
750.0
500.0
250.0
0.0
-250.0
07-15-1993
02-07-1997
09-03-2000
03-30-2004
10-25-2007
05-21-2011
12-15-2014
Date Sampled
MW-10
MW-11
MW-12
MW-15
MW-8


Time-Series Plot
1,4-Dichlorobenzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-1
MW-1R
MW-2
MW-2R

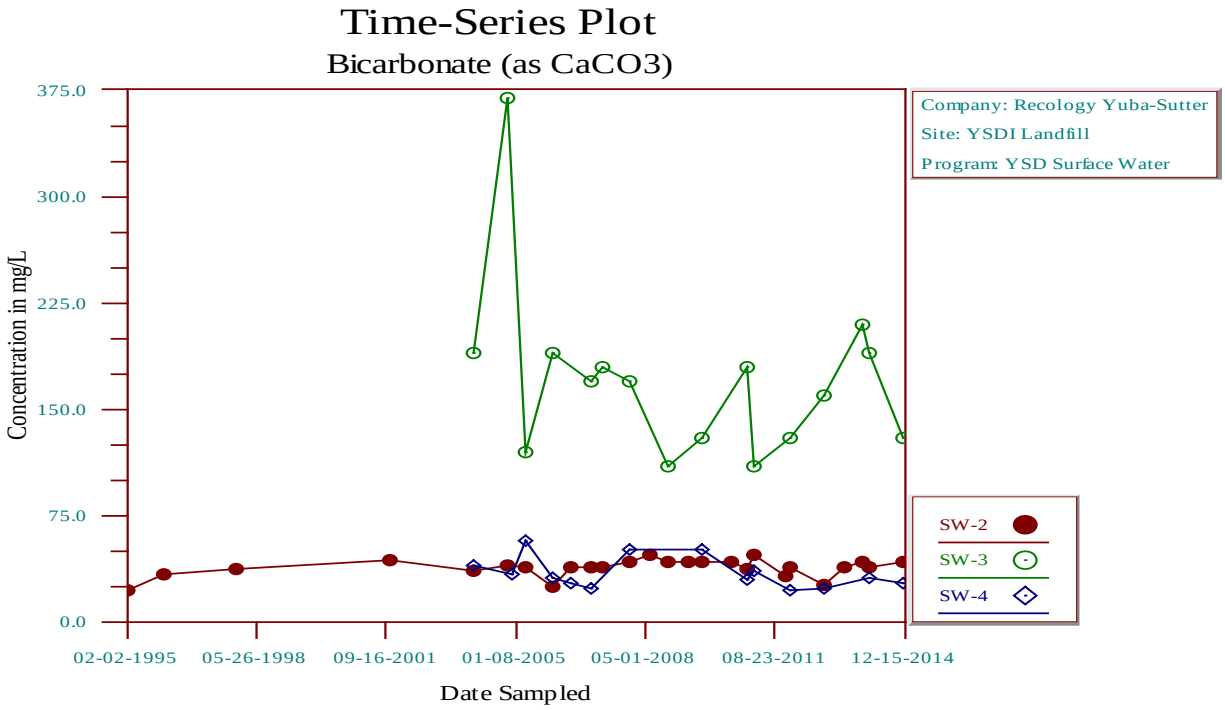

Time-Series Plot
1,4-Dichlorobenzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-10
MW-15
MW-3

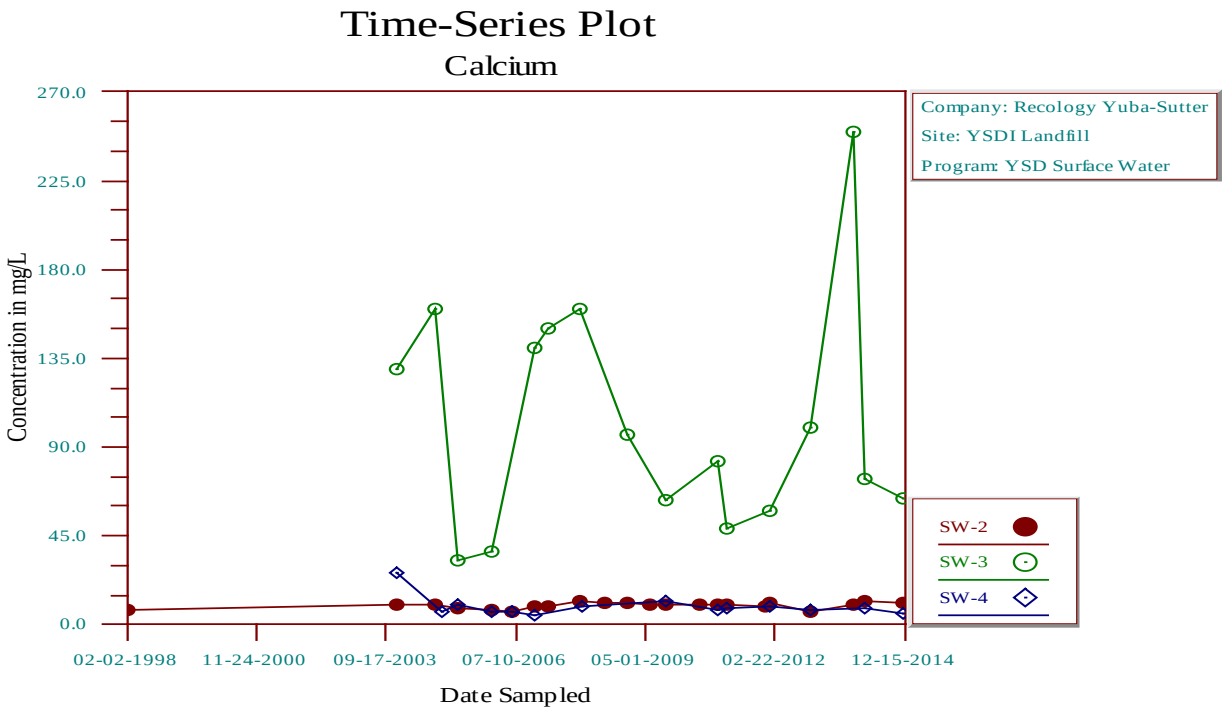

Time-Series Plot
Chlorobenzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in µg/L
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-1
MW-15
MW-1R
MW-2
MW-2R

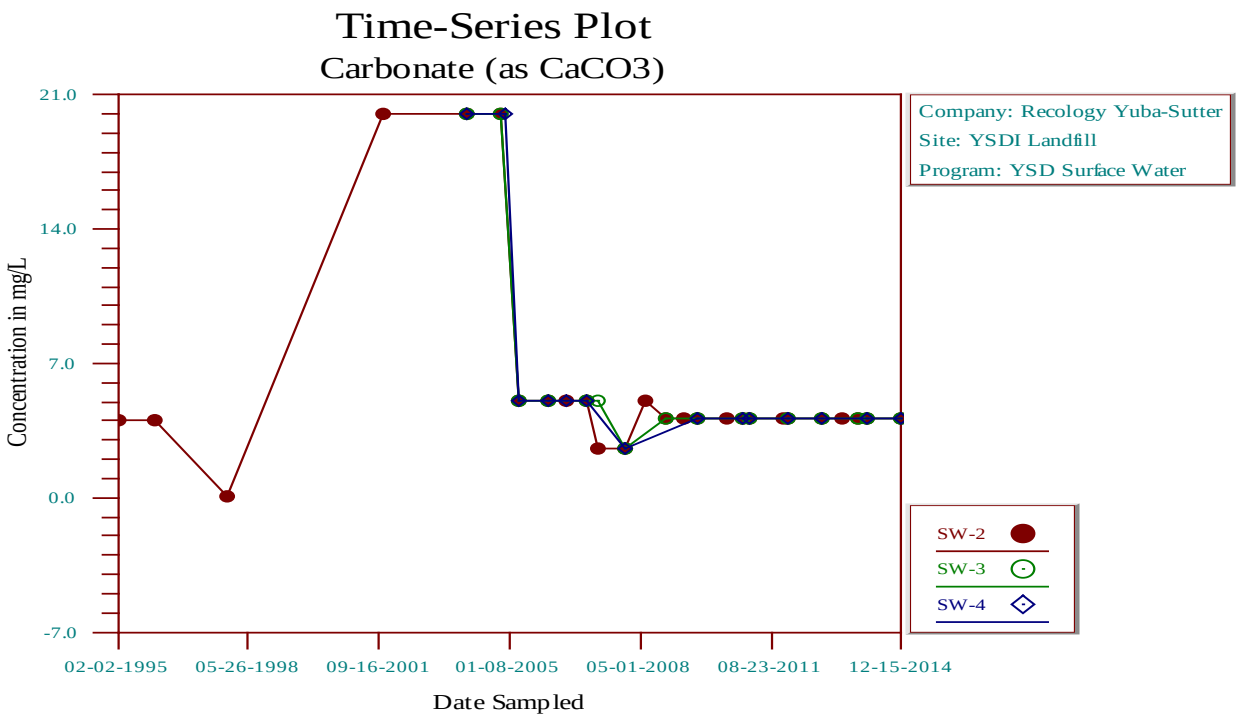

Time-Series Plot
cis-1,2-Dichloroethene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
Concentration in µg/L
4.0
3.0
2.0
1.0
0.0
-1.0
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled
MW-1
MW-15
MW-1R
MW-2
MW-2R

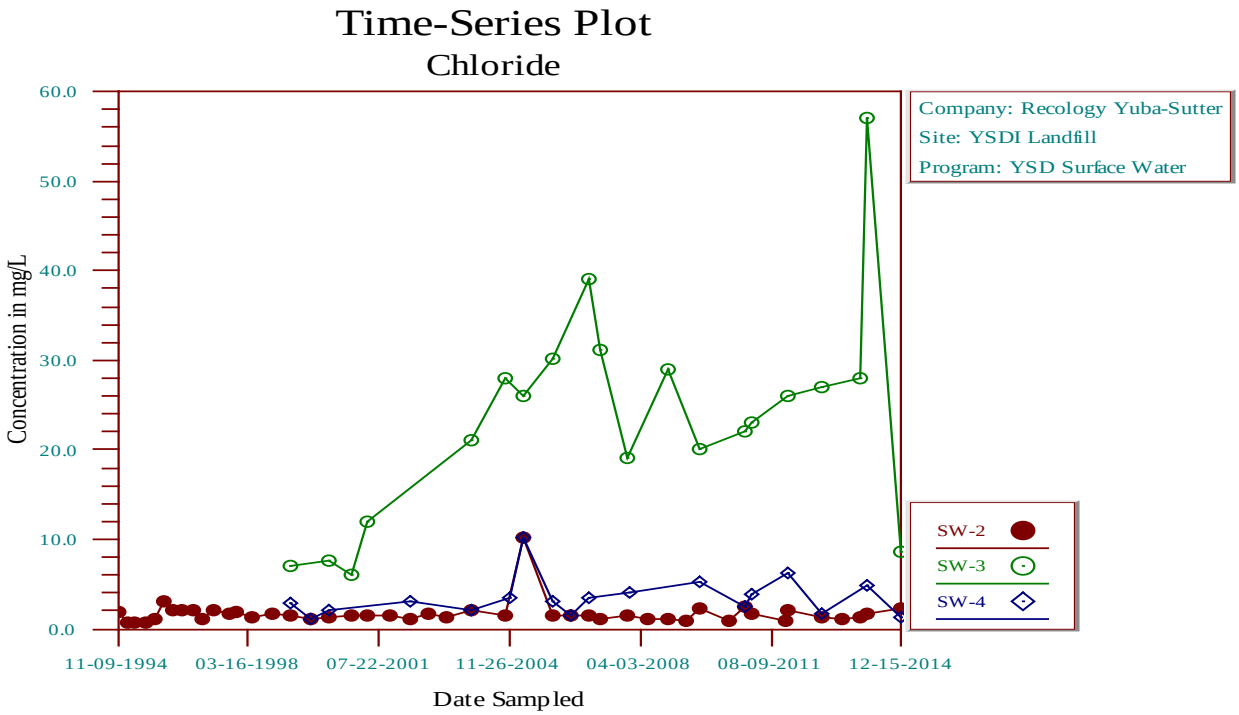

Time-Series Plot
Vinyl chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Groundwater
MW-1R
MW-2
MW-2R
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
03-16-1989
06-30-1993
10-15-1997
01-29-2002
05-16-2006
08-30-2010
12-15-2014
Date Sampled

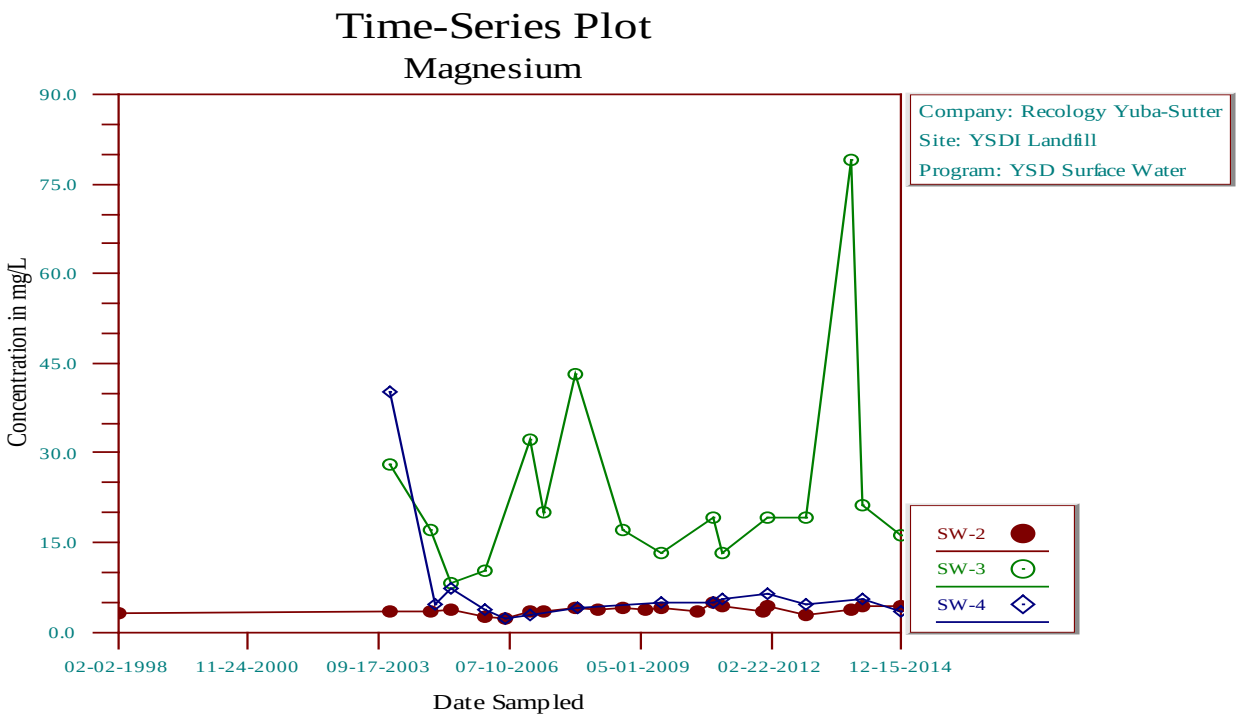
SURFACE WATER

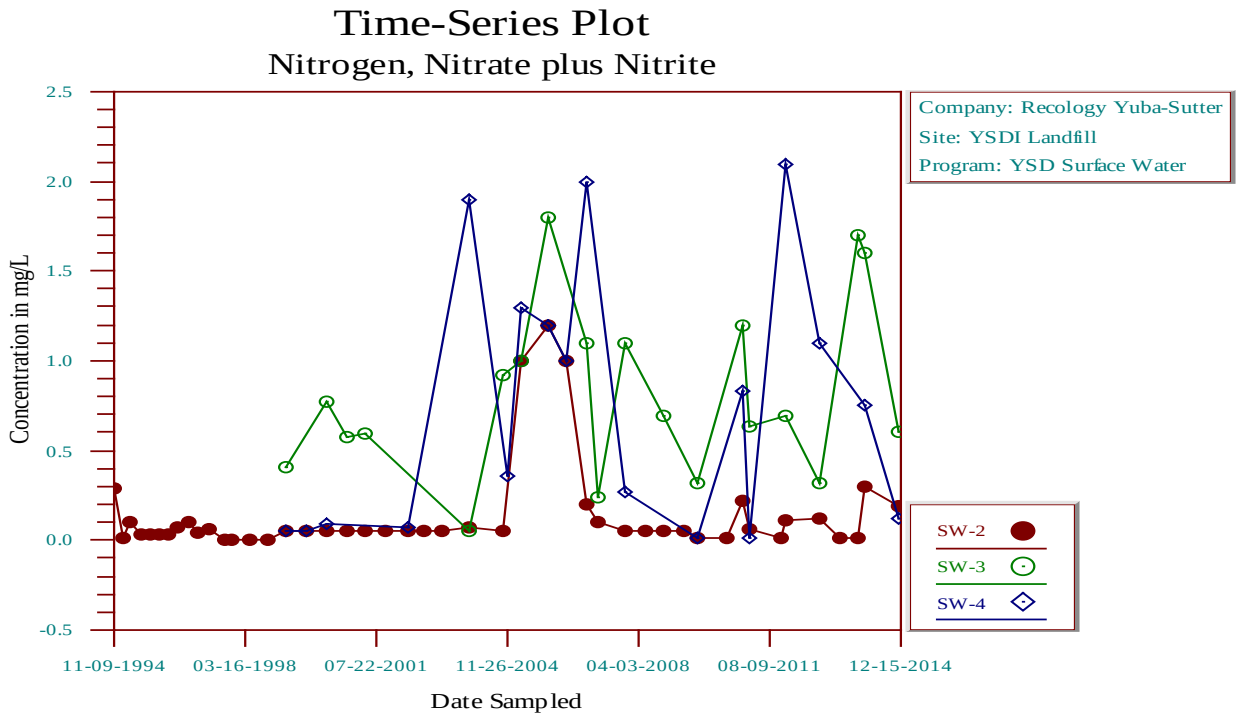

Time-Series Plot
Bicarbonate (as CaCO3)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
375.0
300.0
225.0
150.0
75.0
0.0
02-02-1995
05-26-1998
09-16-2001
01-08-2005
05-01-2008
08-23-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

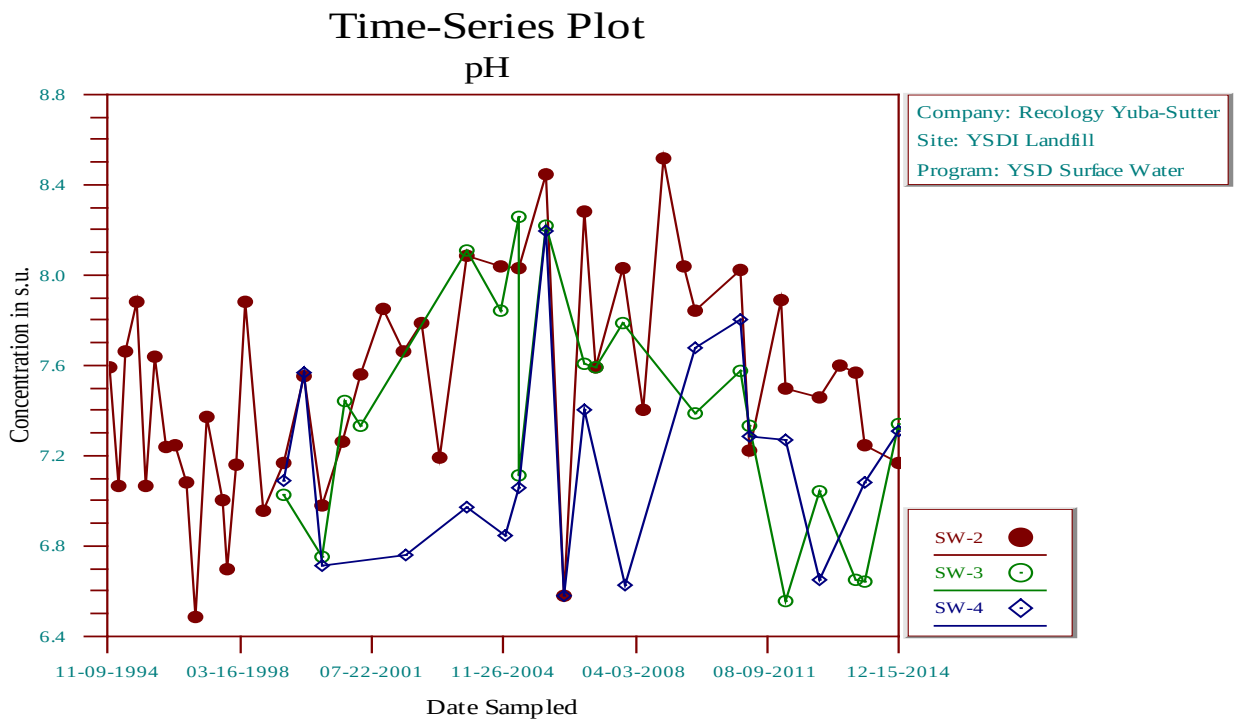

Time-Series Plot
Calcium
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
270.0
225.0
180.0
135.0
90.0
45.0
0.0
02-02-1998
11-24-2000
09-17-2003
07-10-2006
05-01-2009
02-22-2012
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

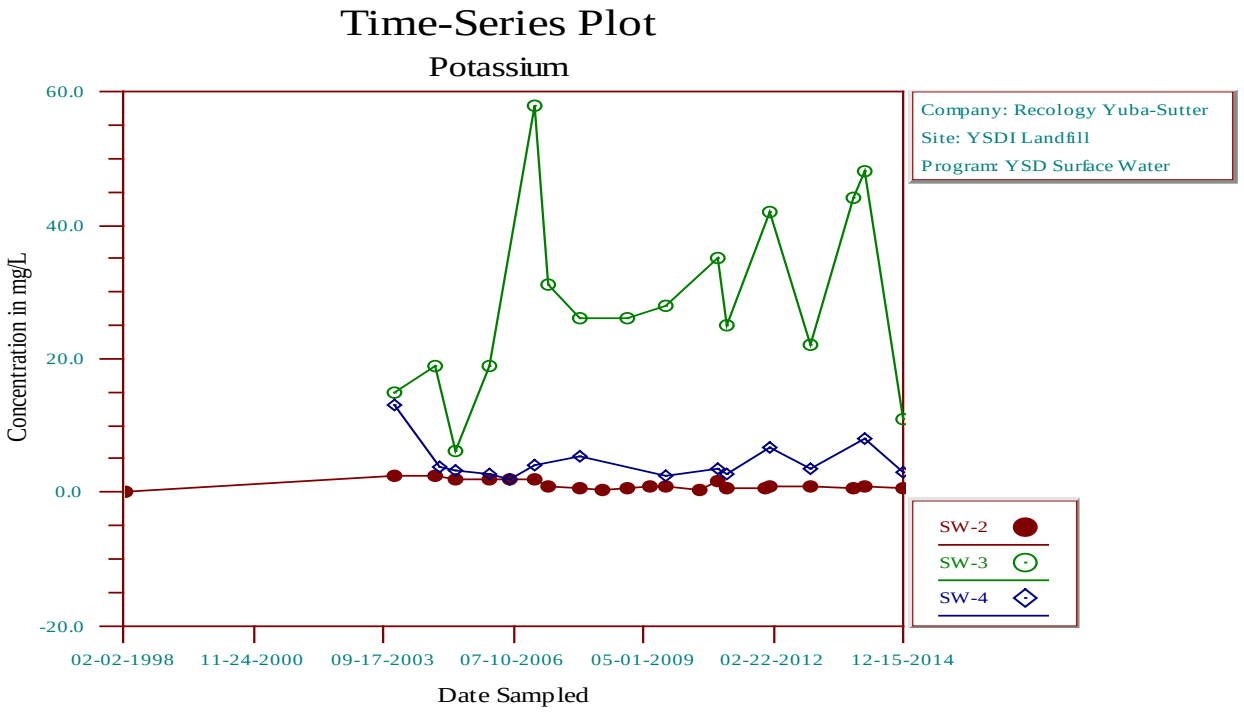

Time-Series Plot
Carbonate (as CaCO3)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
SW-2
SW-3
SW-4
Concentration in mg/L
21.0
14.0
7.0
0.0
-7.0
02-02-1995
05-26-1998
09-16-2001
01-08-2005
05-01-2008
08-23-2011
12-15-2014
Date Sampled

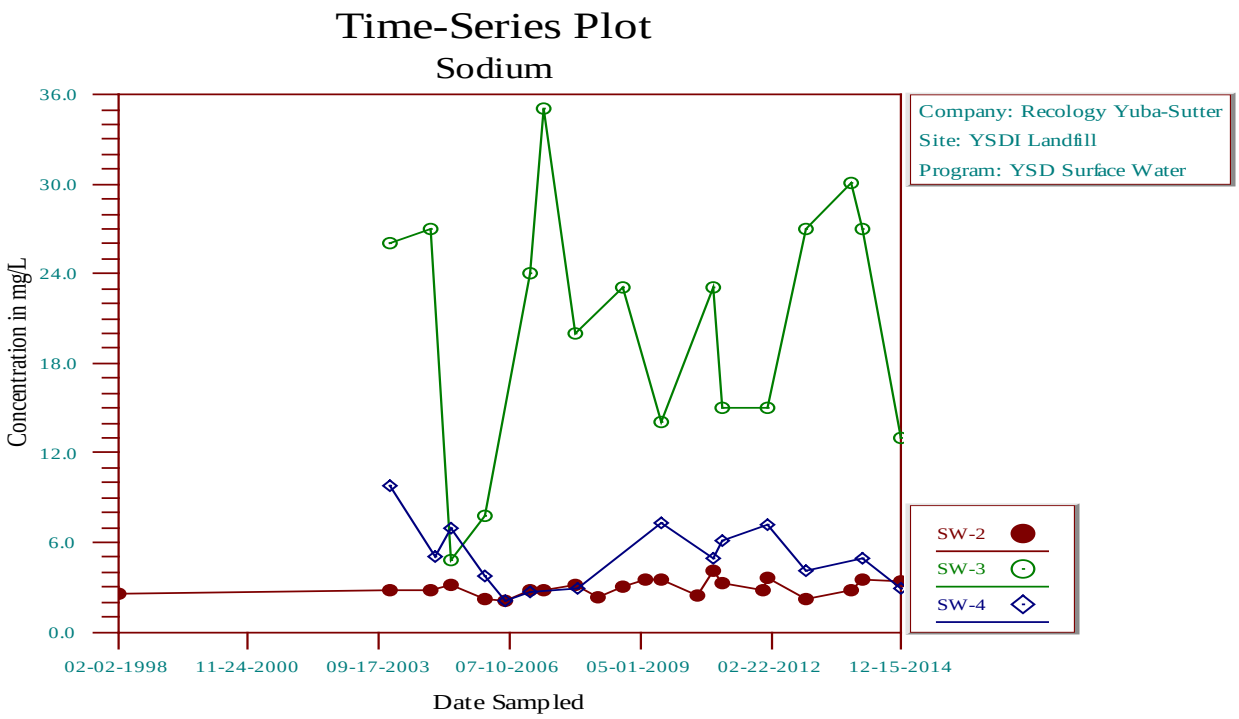

Time-Series Plot
Chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
SW-2
SW-3
SW-4
Concentration in mg/L
60.0
50.0
40.0
30.0
20.0
10.0
0.0
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled

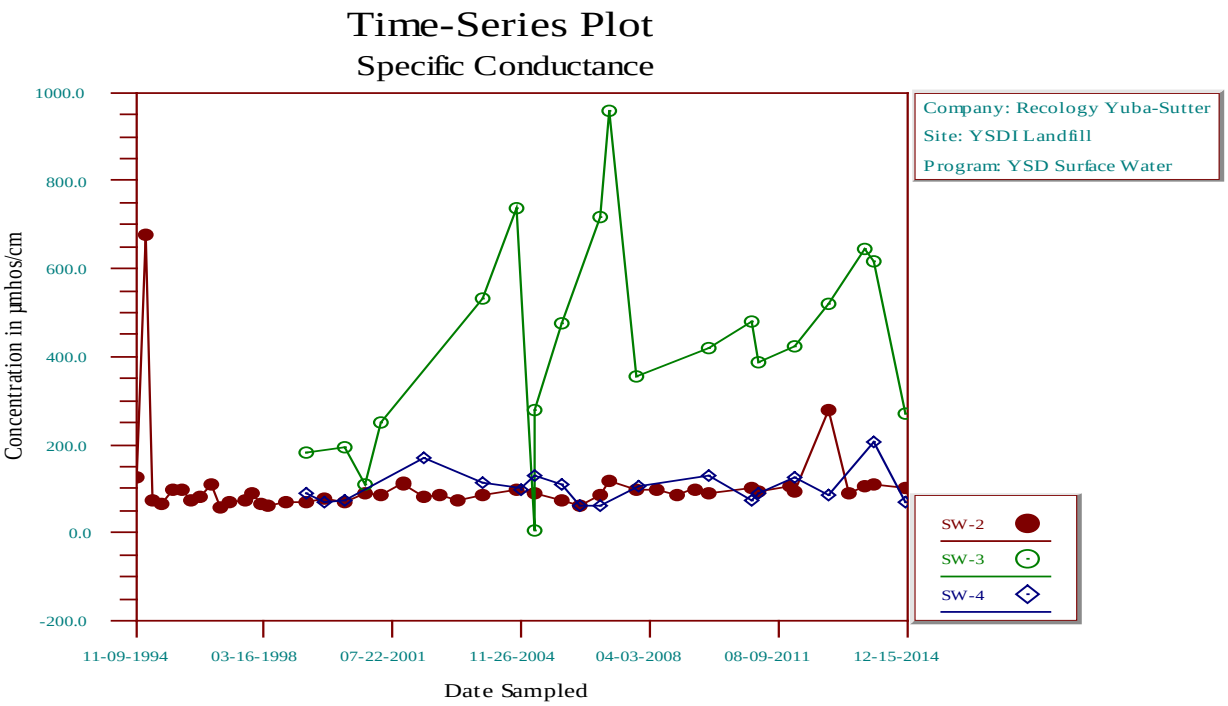

Time-Series Plot
Magnesium
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
90.0
75.0
60.0
45.0
30.0
15.0
0.0
02-02-1998
11-24-2000
09-17-2003
07-10-2006
05-01-2009
02-22-2012
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

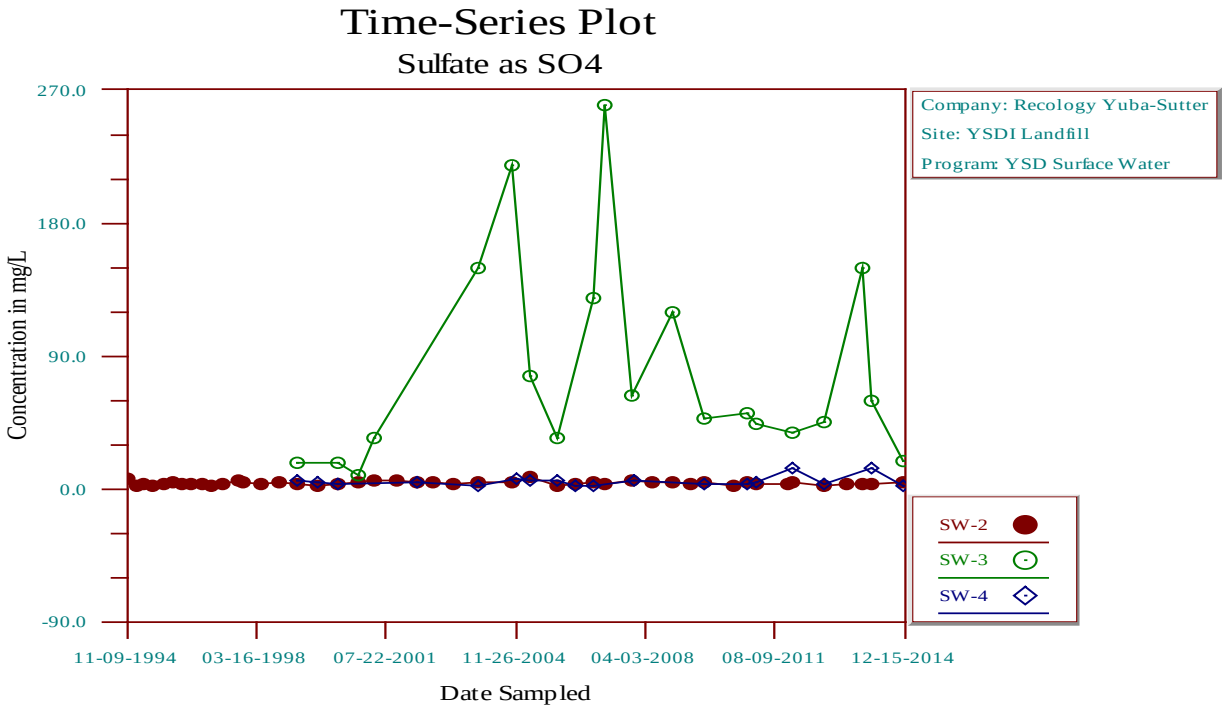

Time-Series Plot
Nitrogen, Nitrate plus Nitrite
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

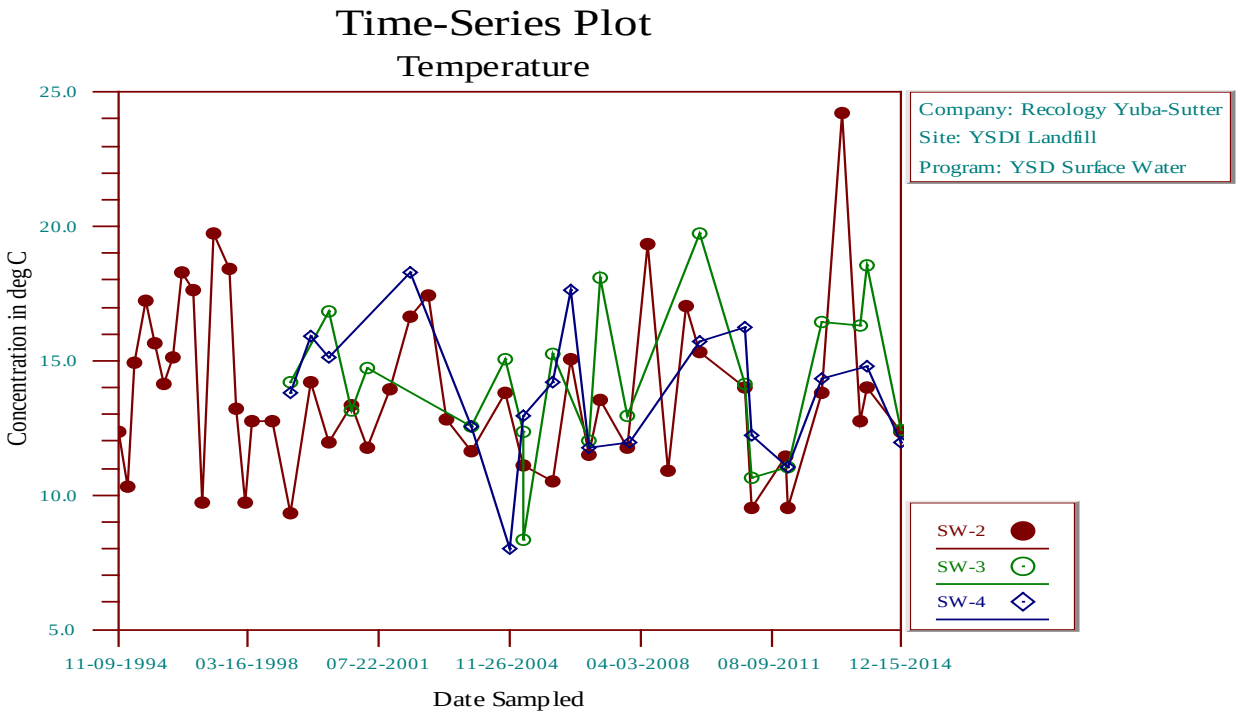

Time-Series Plot
pH
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in s.u.
8.8
8.4
8.0
7.6
7.2
6.8
6.4
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

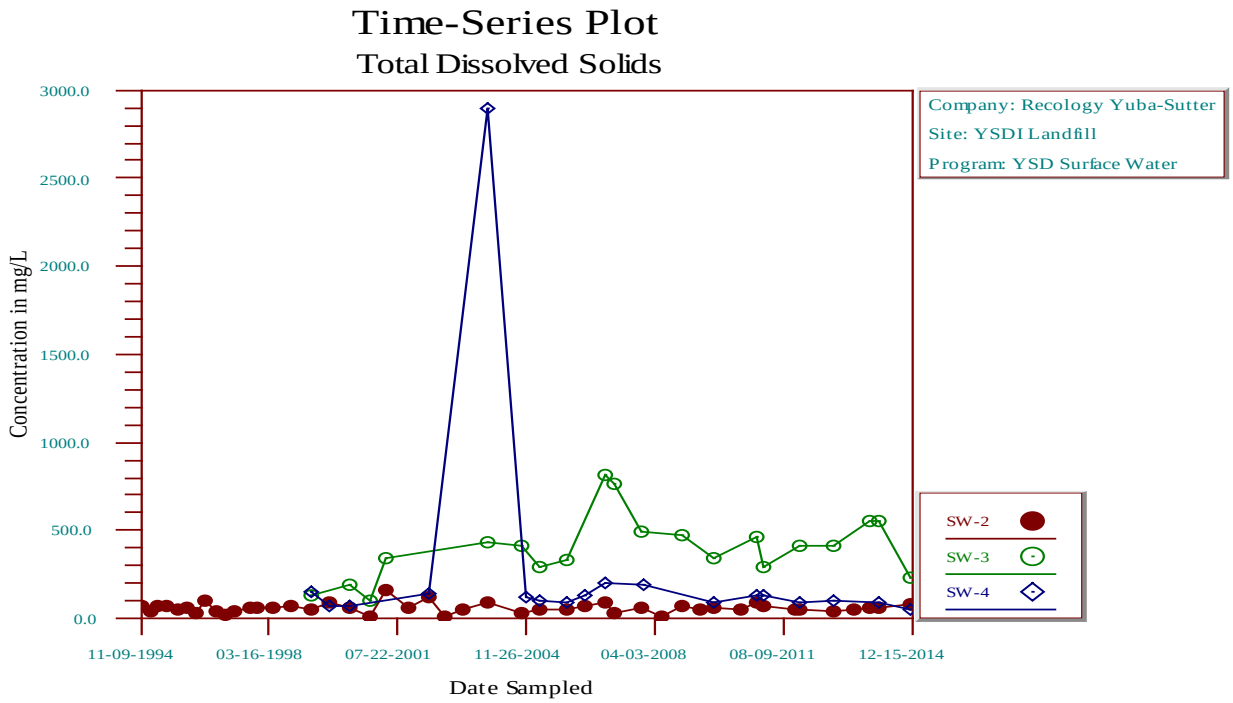

Time-Series Plot
Potassium
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
60.0
40.0
20.0
0.0
-20.0
02-02-1998
11-24-2000
09-17-2003
07-10-2006
05-01-2009
02-22-2012
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

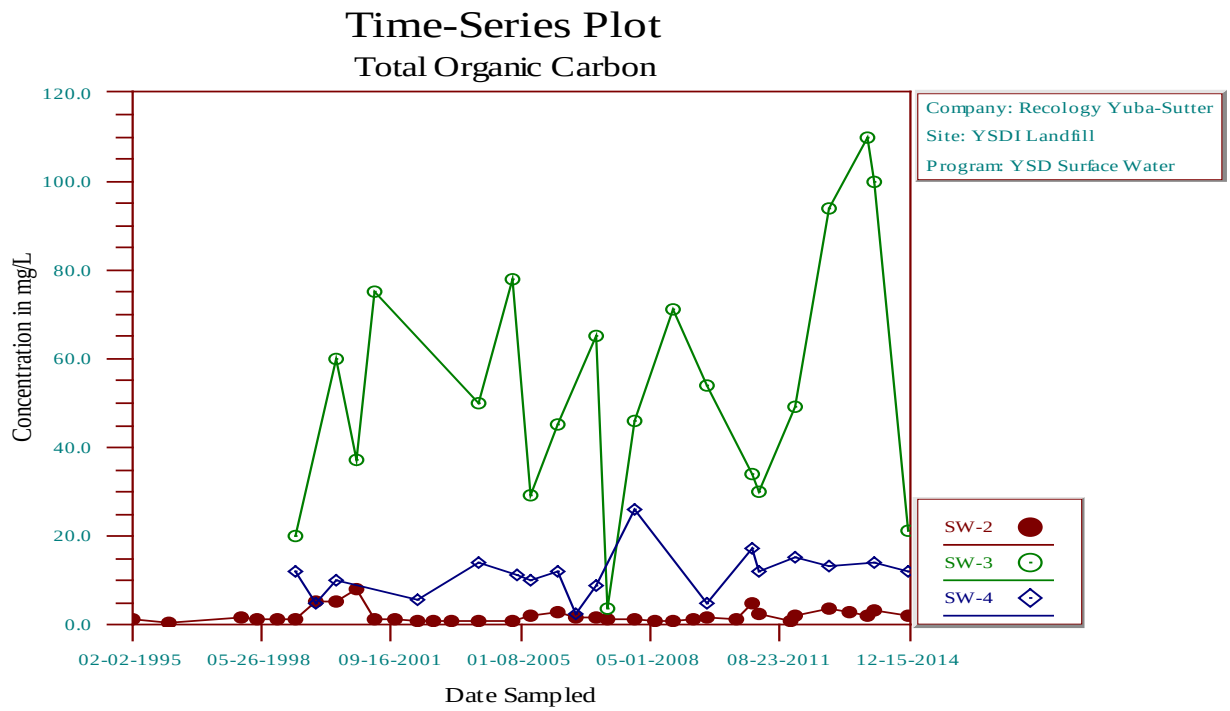

Time-Series Plot
Sodium
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
36.0
30.0
24.0
18.0
12.0
6.0
0.0
02-02-1998
11-24-2000
09-17-2003
07-10-2006
05-01-2009
02-22-2012
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

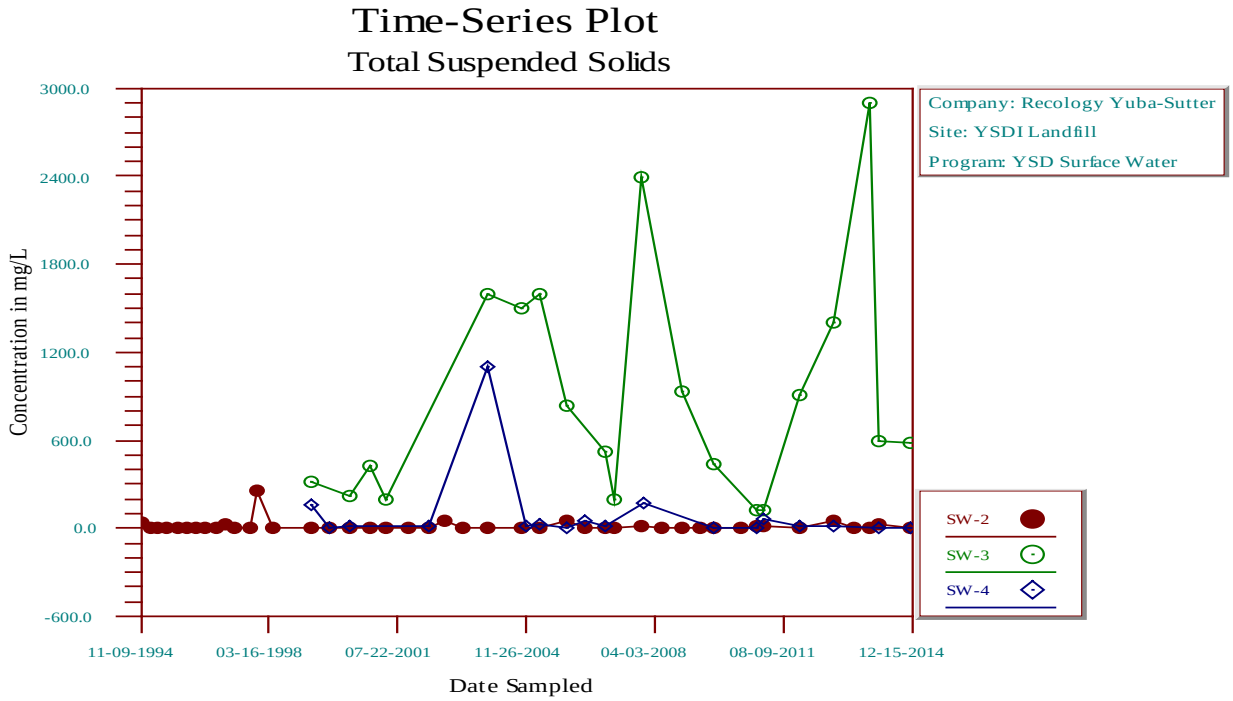

Time-Series Plot
Specific Conductance
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in µmhos/cm
1000.0
800.0
600.0
400.0
200.0
0.0
-200.0
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

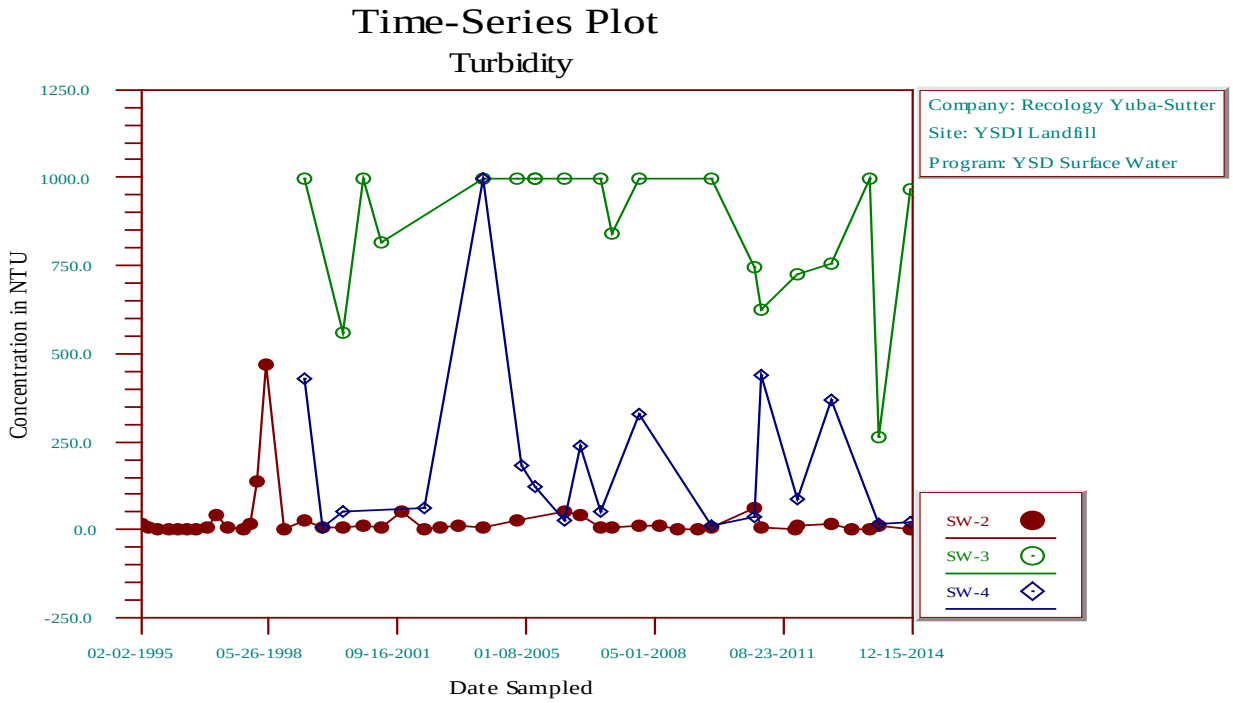

Time-Series Plot
Sulfate as SO4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
270.0
180.0
90.0
0.0
-90.0
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4


Time-Series Plot
Temperature
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in deg C
25.0
20.0
15.0
10.0
5.0
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

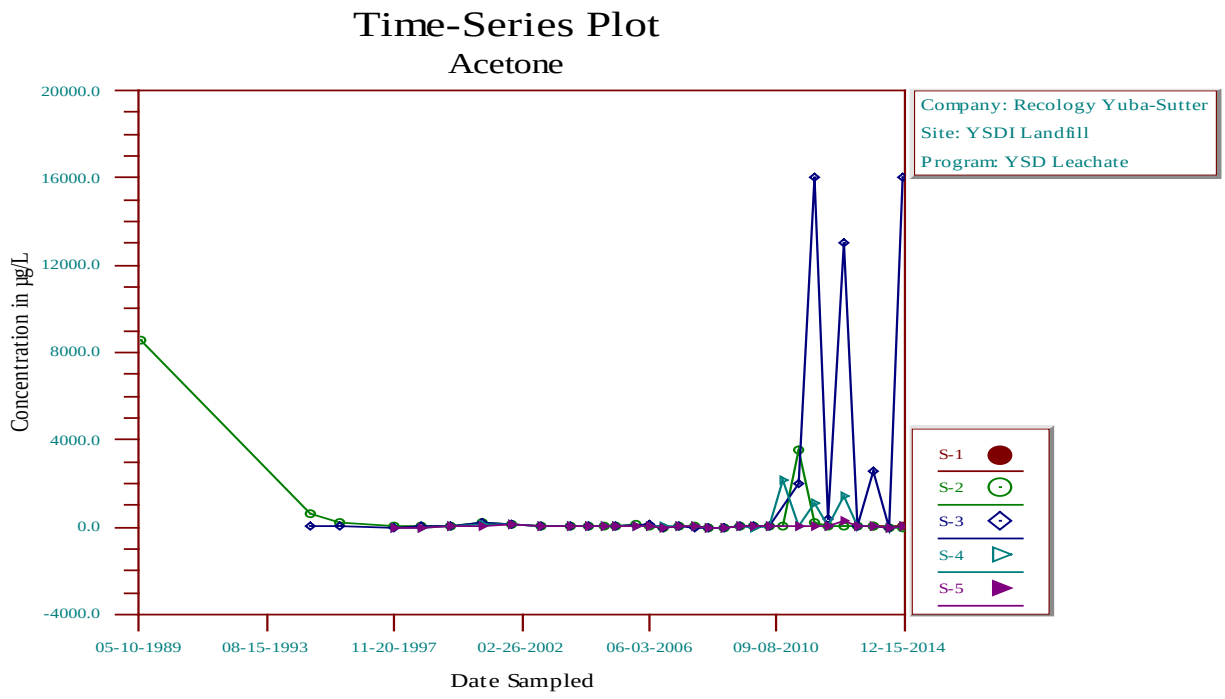

Time-Series Plot
Total Dissolved Solids
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

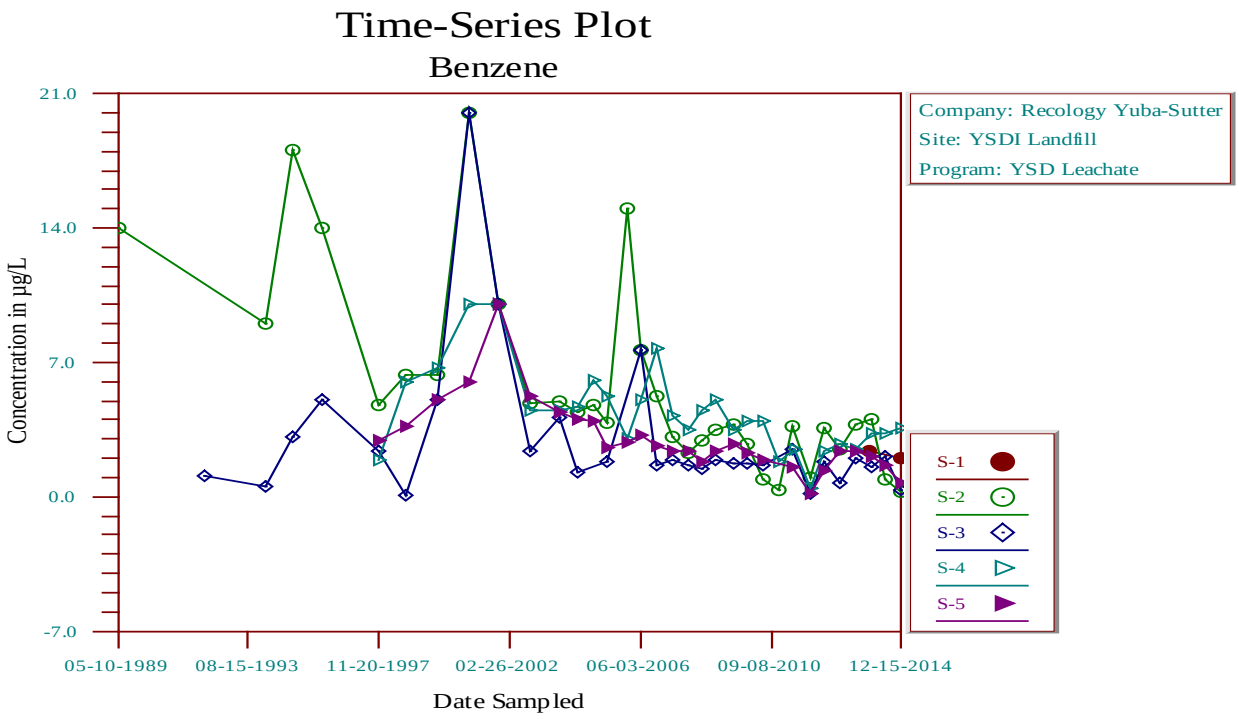

Time-Series Plot
Total Organic Carbon
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
120.0
100.0
80.0
60.0
40.0
20.0
0.0
02-02-1995
05-26-1998
09-16-2001
01-08-2005
05-01-2008
08-23-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

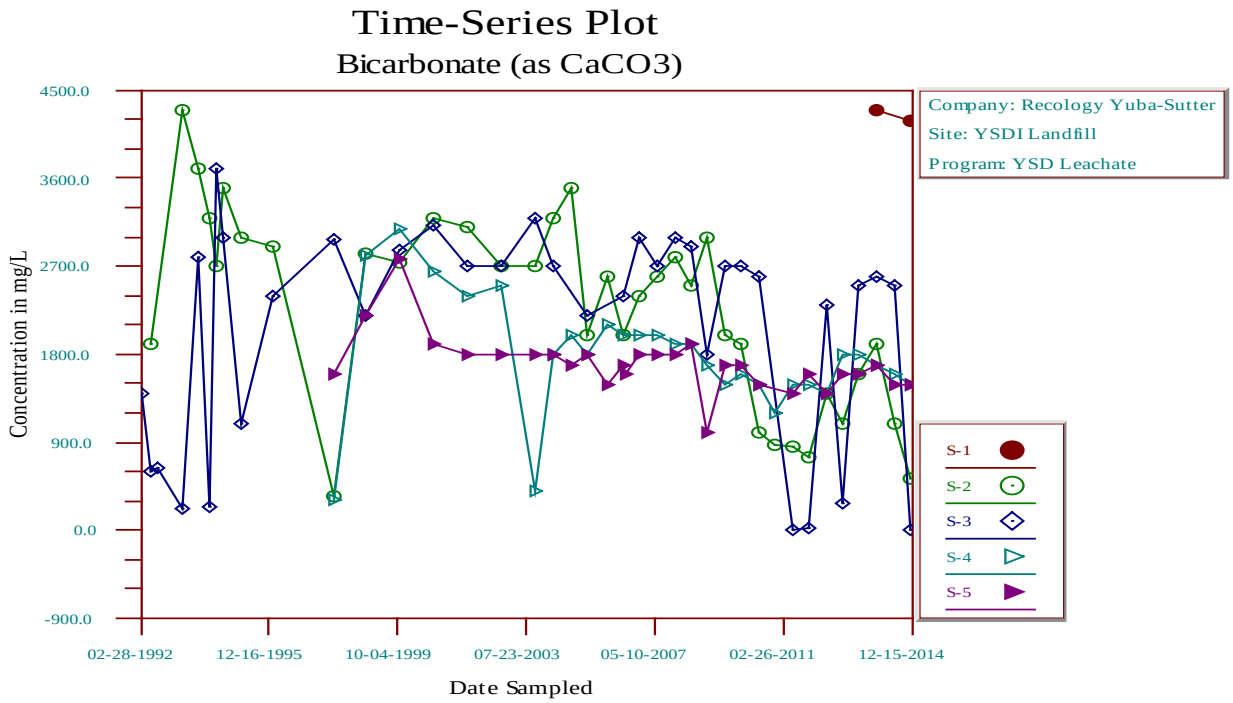

Time-Series Plot
Total Suspended Solids
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in mg/L
3000.0
2400.0
1800.0
1200.0
600.0
0.0
-600.0
11-09-1994
03-16-1998
07-22-2001
11-26-2004
04-03-2008
08-09-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

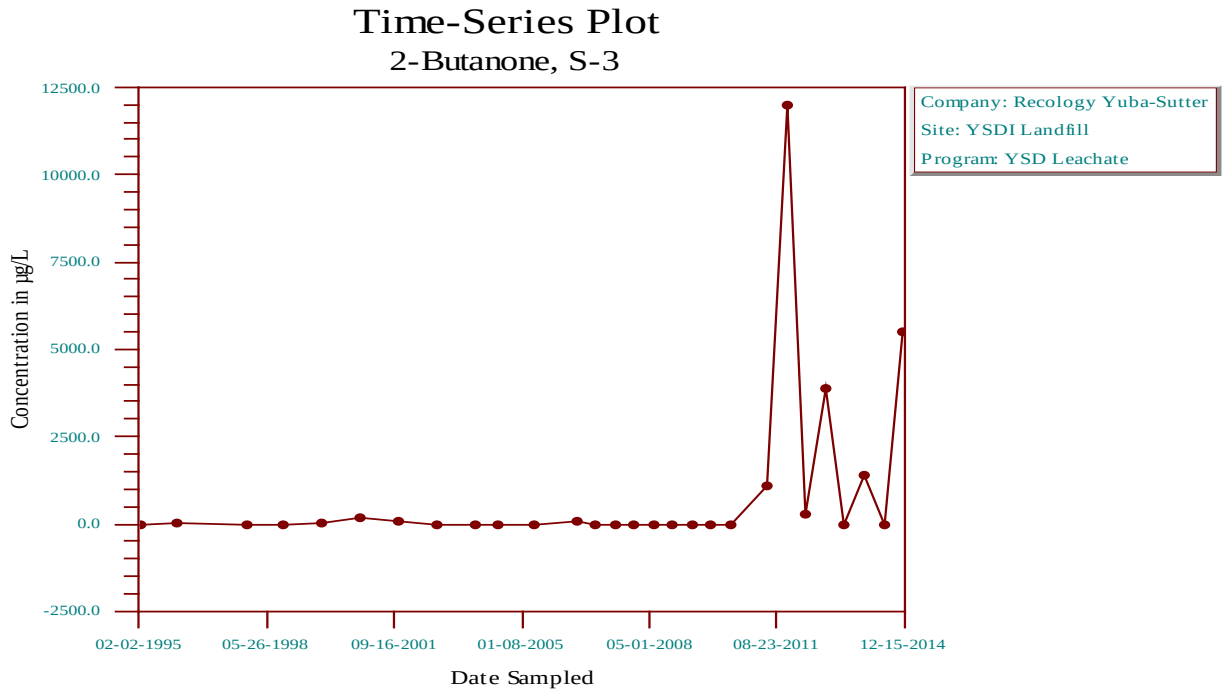

Time-Series Plot
Turbidity
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Surface Water
Concentration in NTU
1250.0
1000.0
750.0
500.0
250.0
0.0
-250.0
02-02-1995
05-26-1998
09-16-2001
01-08-2005
05-01-2008
08-23-2011
12-15-2014
Date Sampled
SW-2
SW-3
SW-4

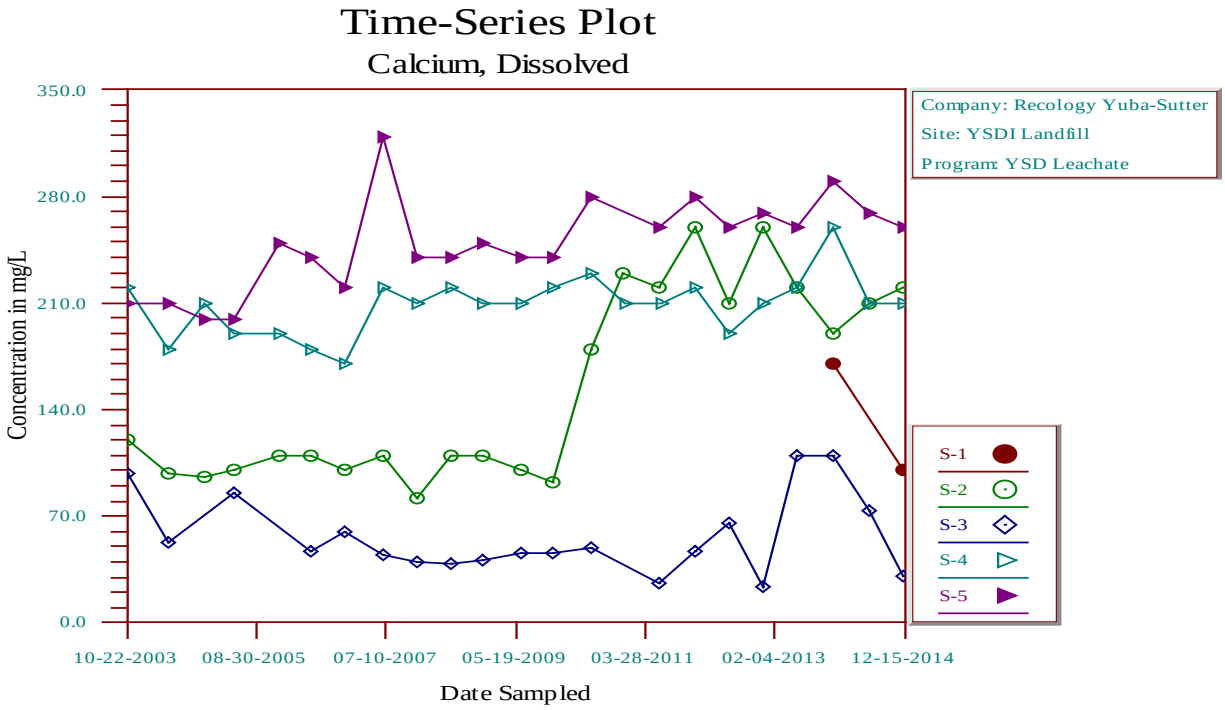
LEACHATE

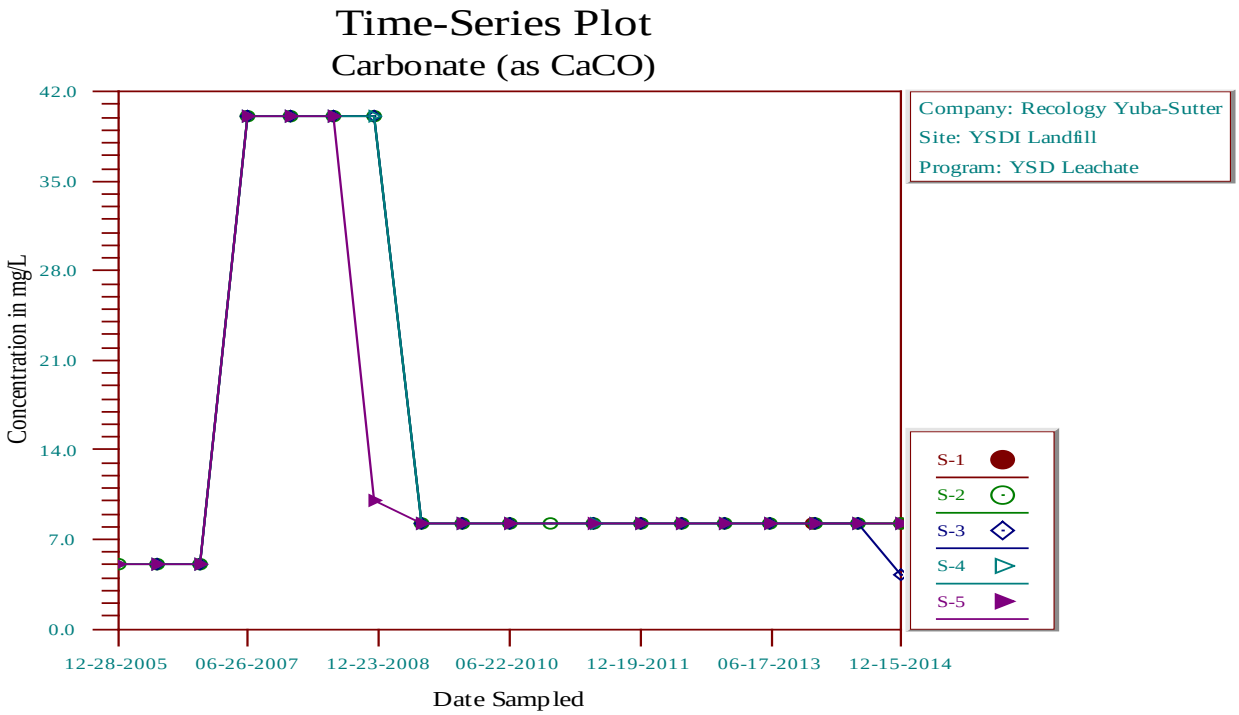

Time-Series Plot
Acetone
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
20000.0
16000.0
12000.0
8000.0
4000.0
0.0
-4000.0
05-10-1989
08-15-1993
11-20-1997
02-26-2002
06-03-2006
09-08-2010
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5

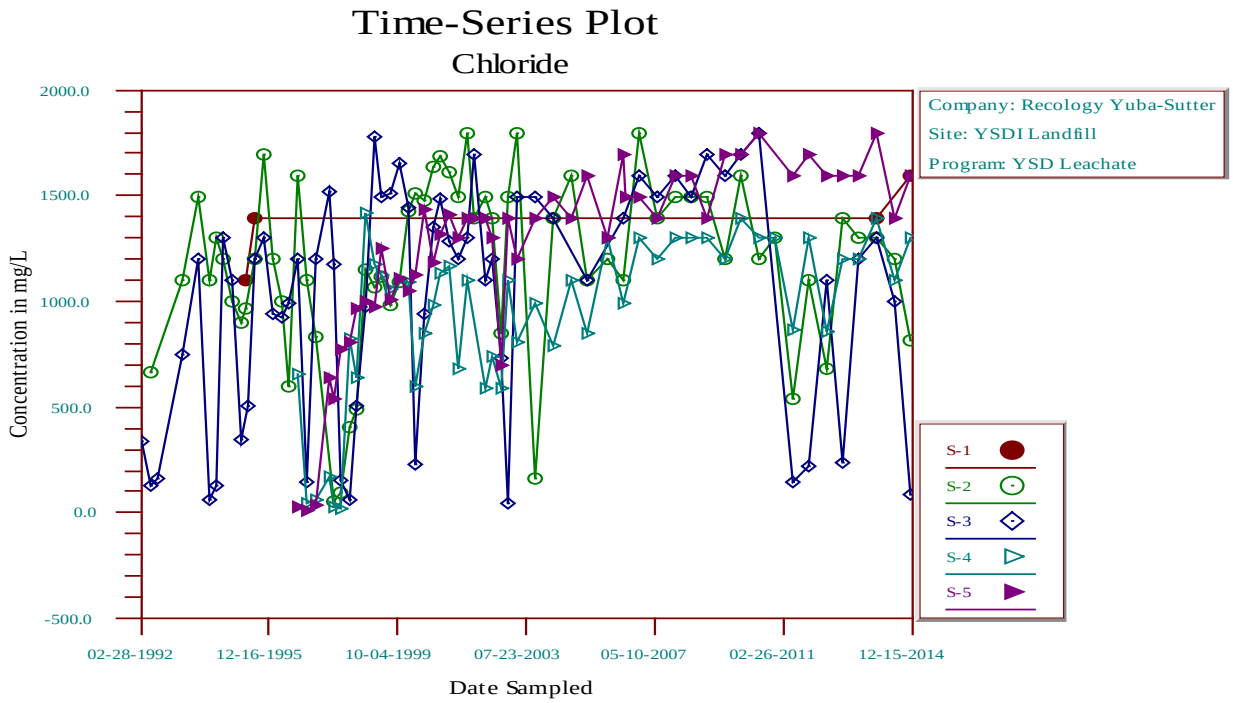

Time-Series Plot
Benzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
21.0
14.0
7.0
0.0
-7.0
05-10-1989
08-15-1993
11-20-1997
02-26-2002
06-03-2006
09-08-2010
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5

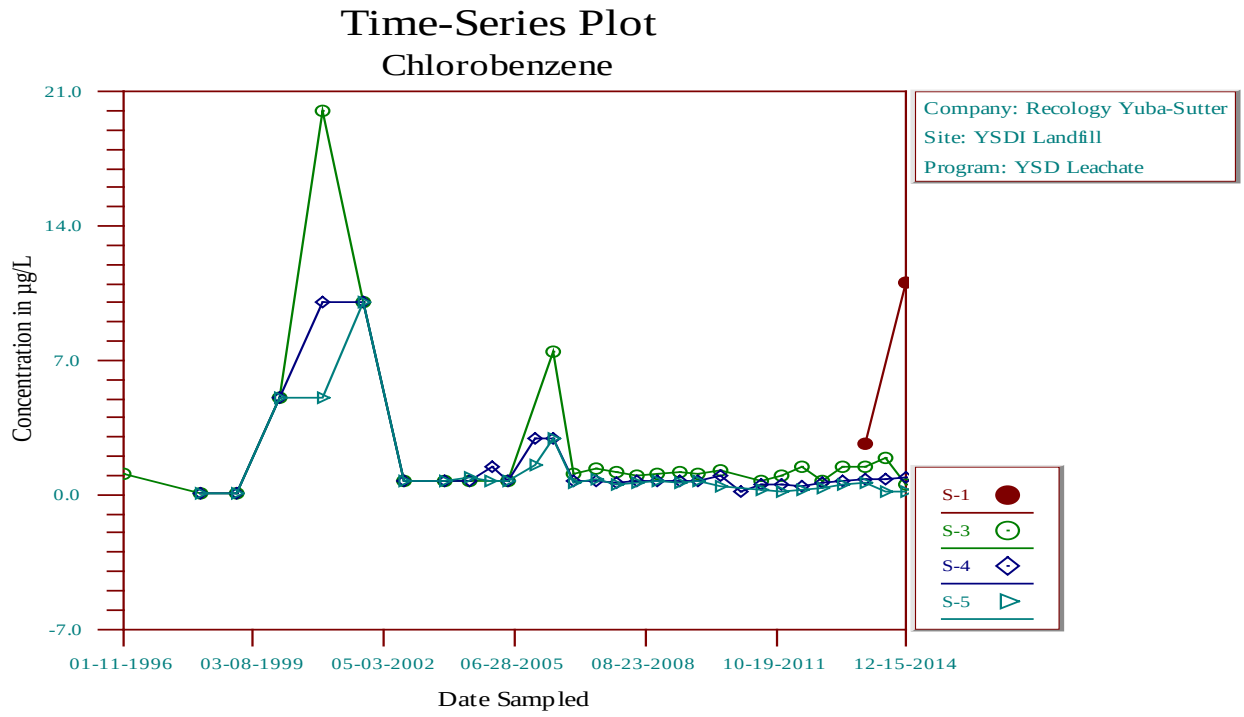

Time-Series Plot
Bicarbonate (as CaCO3)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-2
S-3
S-4
S-5
Concentration in mg/L
4500.0
3600.0
2700.0
1800.0
900.0
0.0
-900.0
02-28-1992
12-16-1995
10-04-1999
07-23-2003
05-10-2007
02-26-2011
12-15-2014
Date Sampled

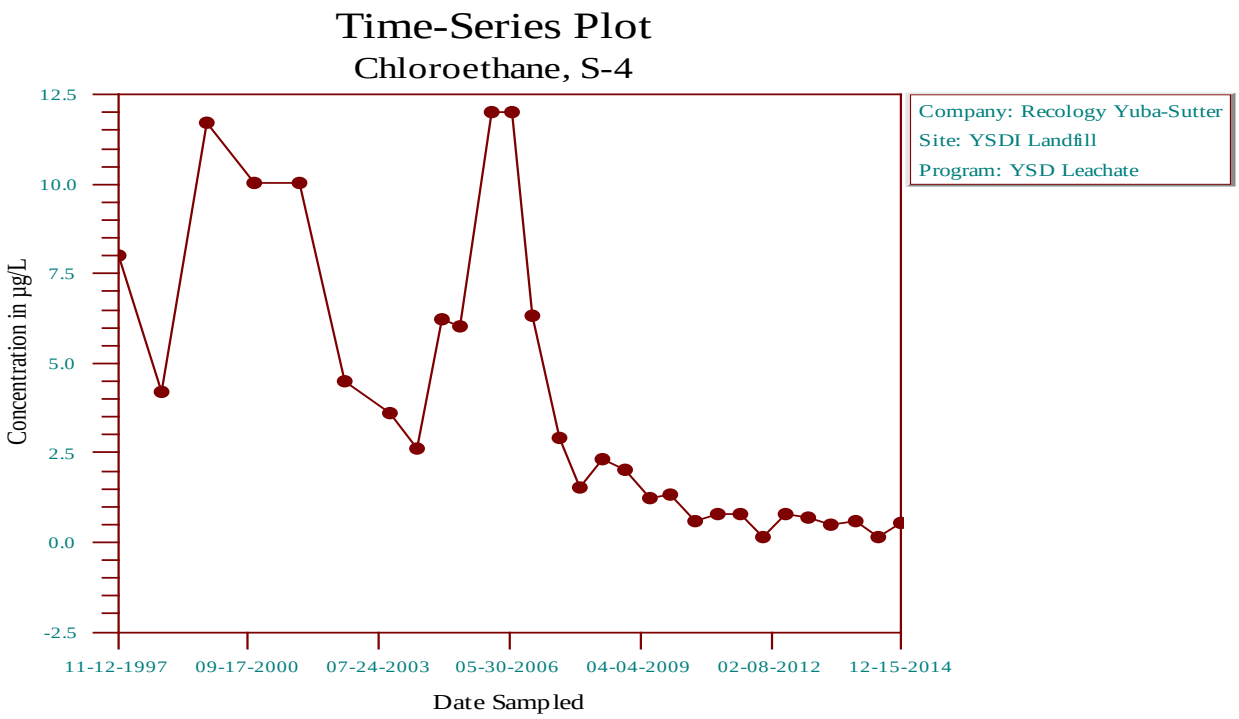

Time-Series Plot
2-Butanone, S-3
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
12500.0
10000.0
7500.0
5000.0
2500.0
0.0
-2500.0
02-02-1995
05-26-1998
09-16-2001
01-08-2005
05-01-2008
08-23-2011
12-15-2014
Date Sampled

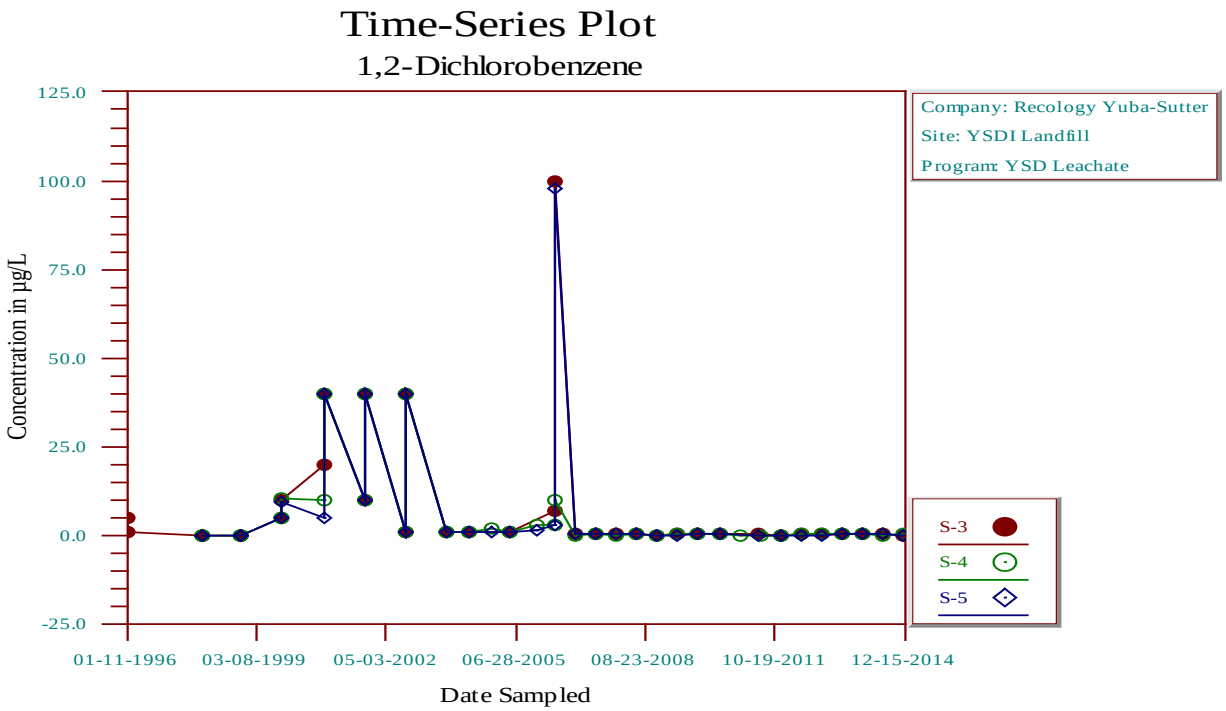

Time-Series Plot
Calcium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in mg/L
350.0
280.0
210.0
140.0
70.0
0.0
10-22-2003
08-30-2005
07-10-2007
05-19-2009
03-28-2011
02-04-2013
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5

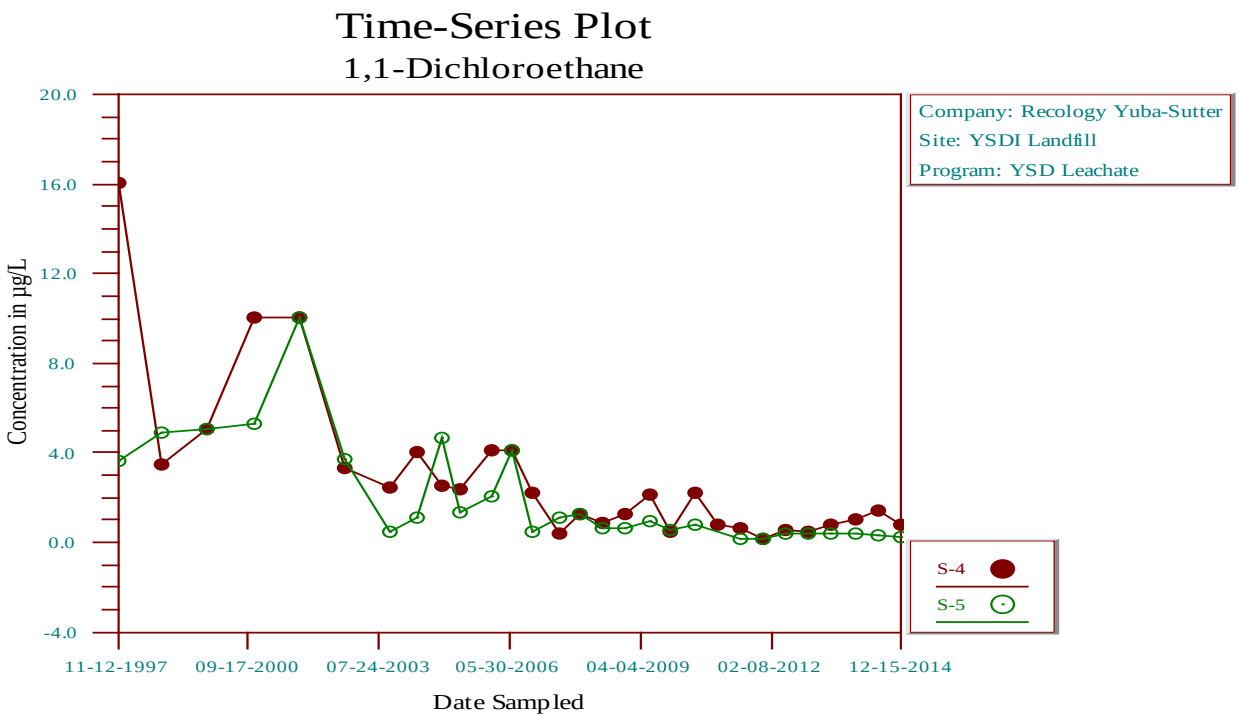

Time-Series Plot
Carbonate (as CaCO)
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in mg/L
42.0
35.0
28.0
21.0
14.0
7.0
0.0
12-28-2005
06-26-2007
12-23-2008
06-22-2010
12-19-2011
06-17-2013
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5

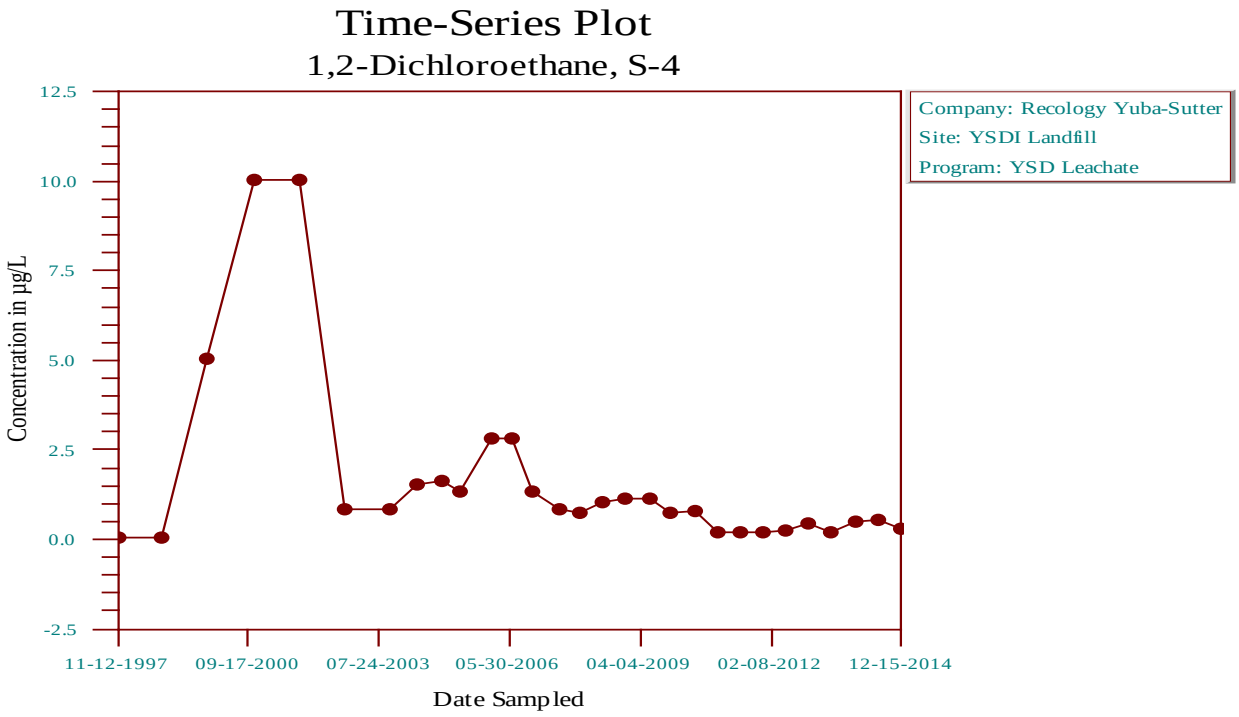

Time-Series Plot
Chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-2
S-3
S-4
S-5
Concentration in mg/L
2000.0
1500.0
1000.0
500.0
0.0
-500.0
02-28-1992
12-16-1995
10-04-1999
07-23-2003
05-10-2007
02-26-2011
12-15-2014
Date Sampled

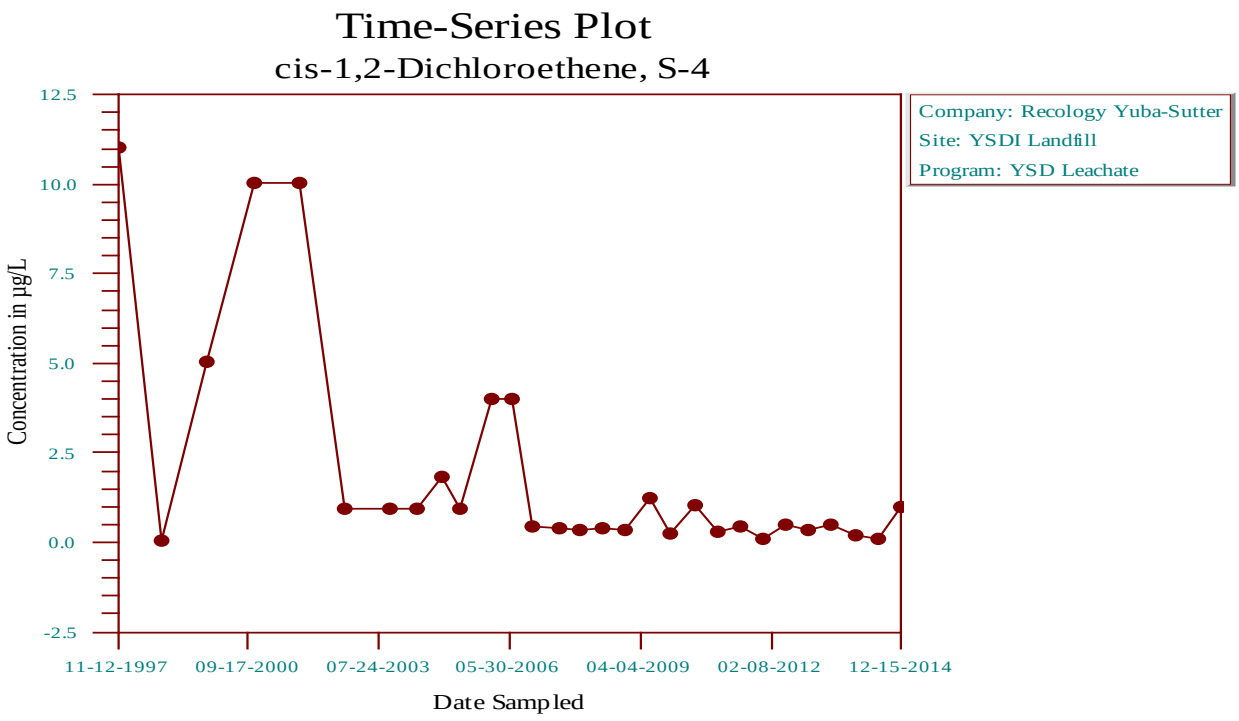

Time-Series Plot
Chlorobenzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-3
S-4
S-5
Concentration in µg/L
21.0
14.0
7.0
0.0
-7.0
01-11-1996
03-08-1999
05-03-2002
06-28-2005
08-23-2008
10-19-2011
12-15-2014
Date Sampled

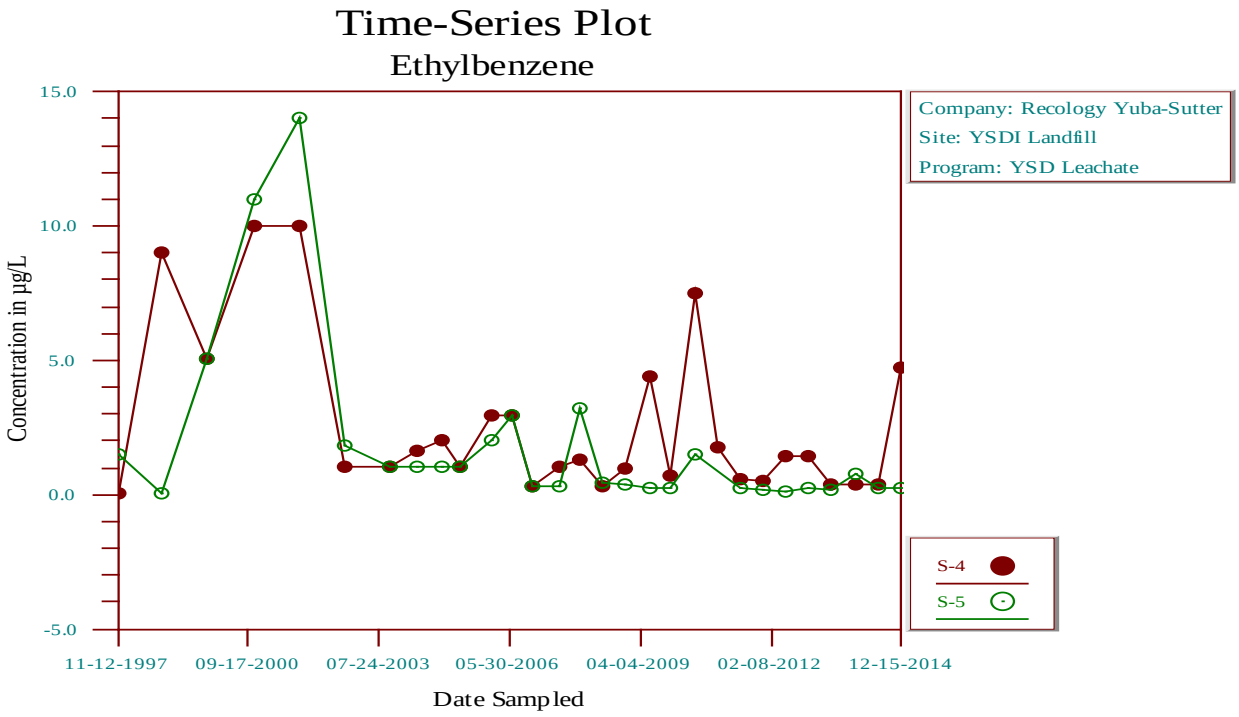

Time-Series Plot
Chloroethane, S-4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled

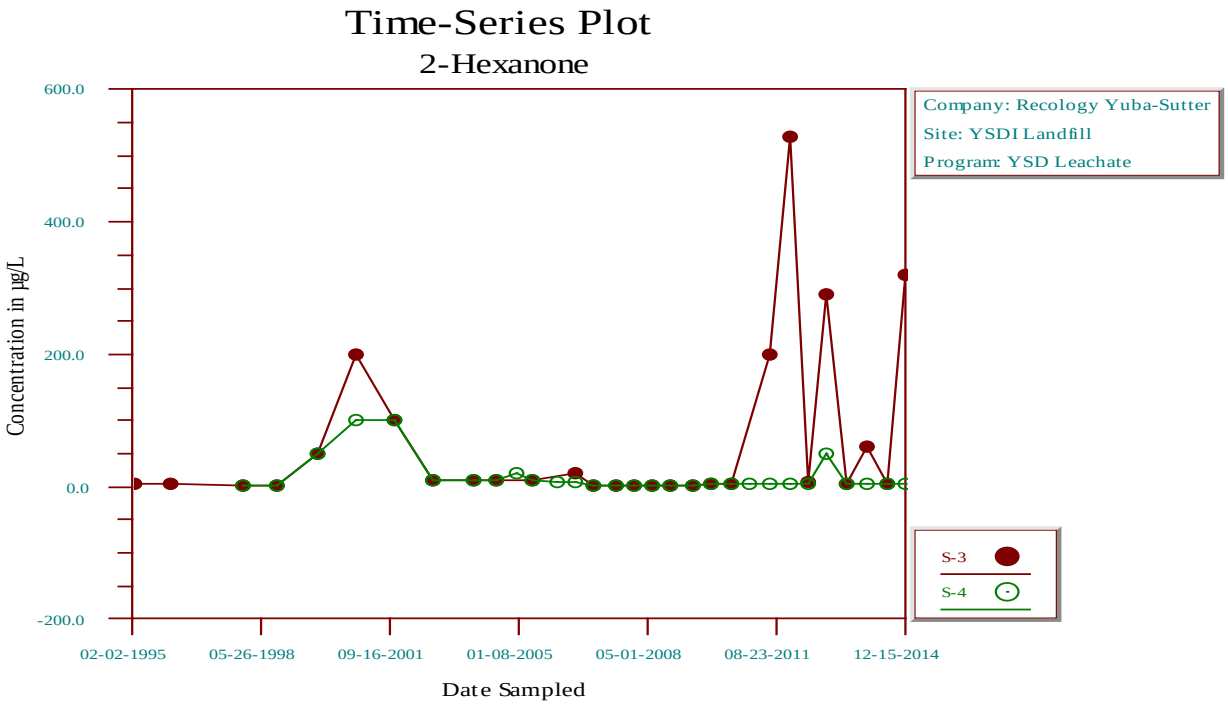

Time-Series Plot
1,2-Dichlorobenzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
125.0
100.0
75.0
50.0
25.0
0.0
-25.0
01-11-1996
03-08-1999
05-03-2002
06-28-2005
08-23-2008
10-19-2011
12-15-2014
Date Sampled
S-3
S-4
S-5

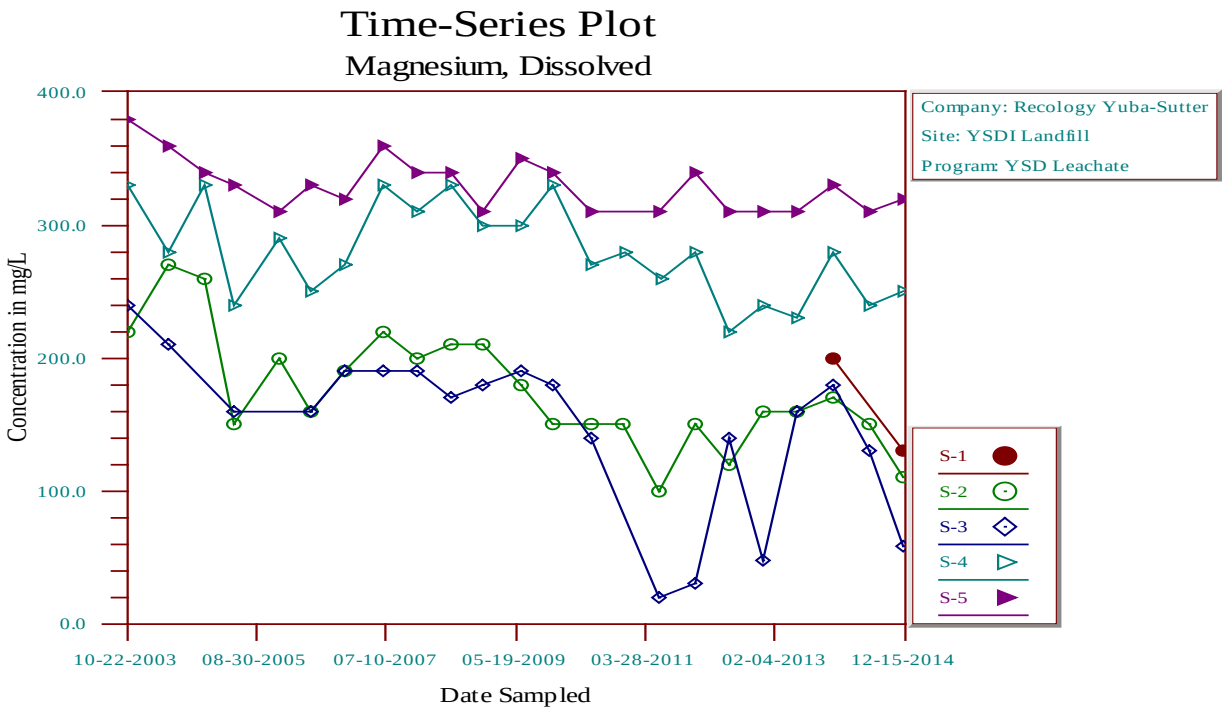

Time-Series Plot
1,1-Dichloroethane
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-4
S-5
Concentration in µg/L
20.0
16.0
12.0
8.0
4.0
0.0
-4.0
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled

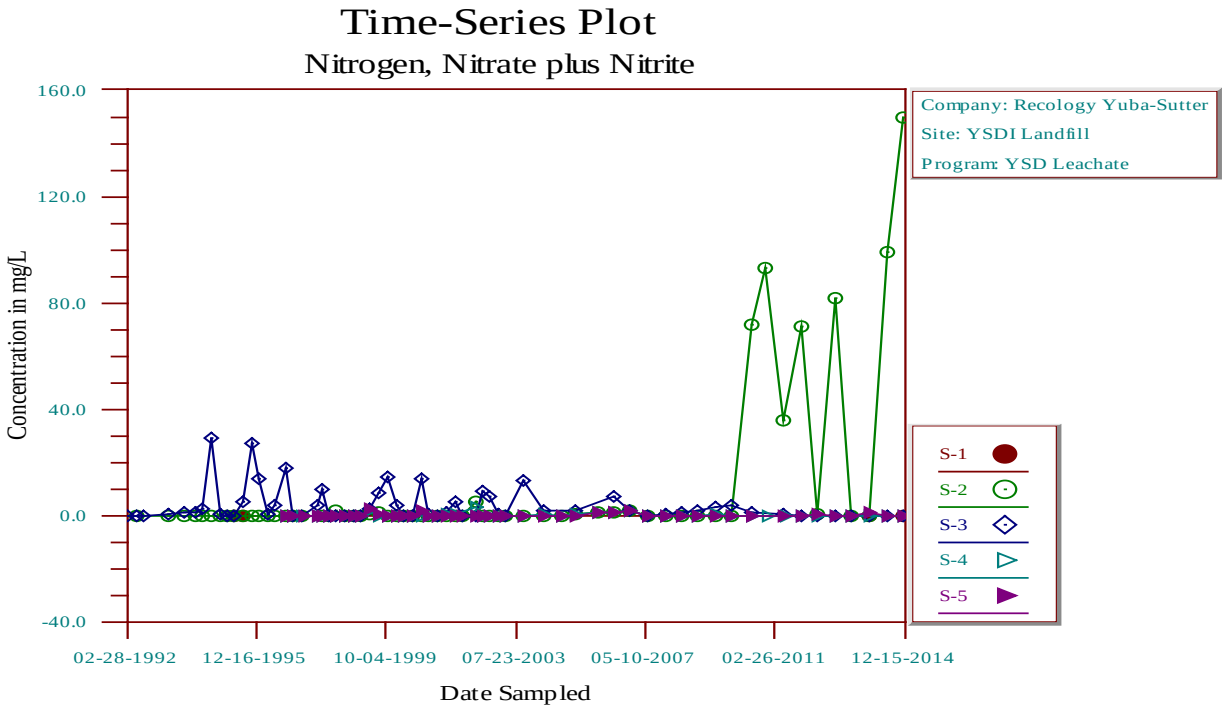

Time-Series Plot
1,2-Dichloroethane, S-4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled

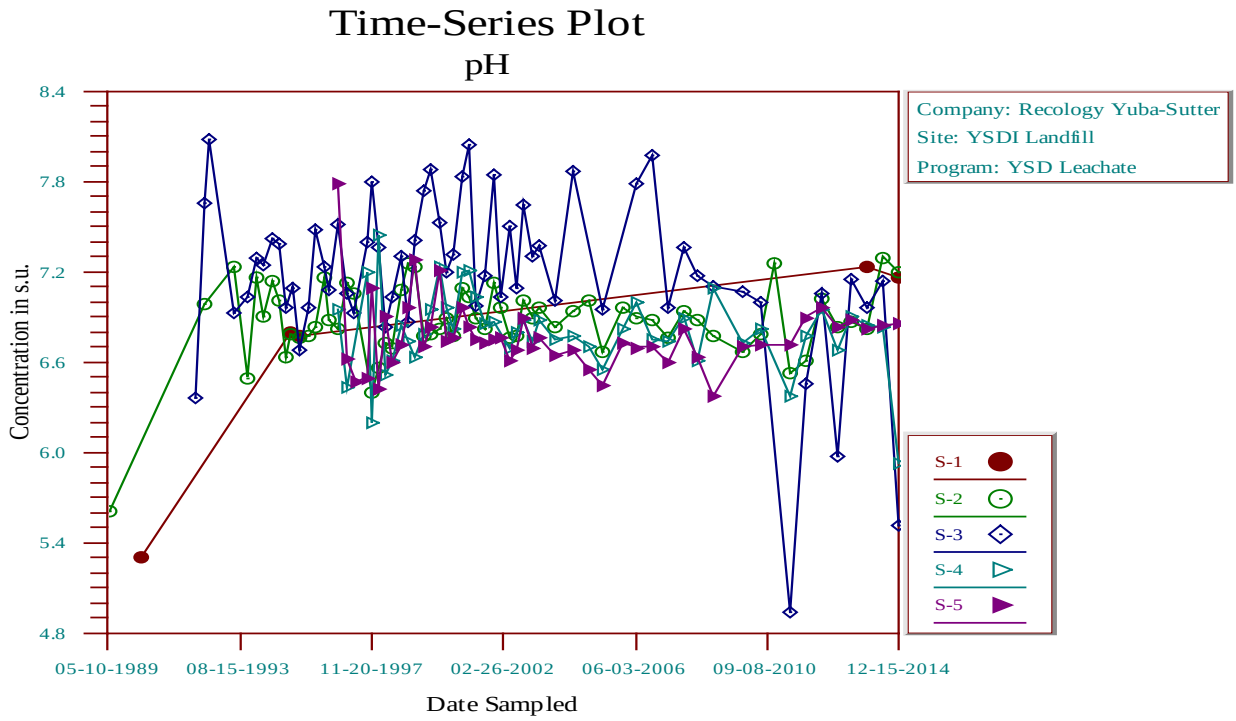

Time-Series Plot
cis-1,2-Dichloroethene, S-4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled

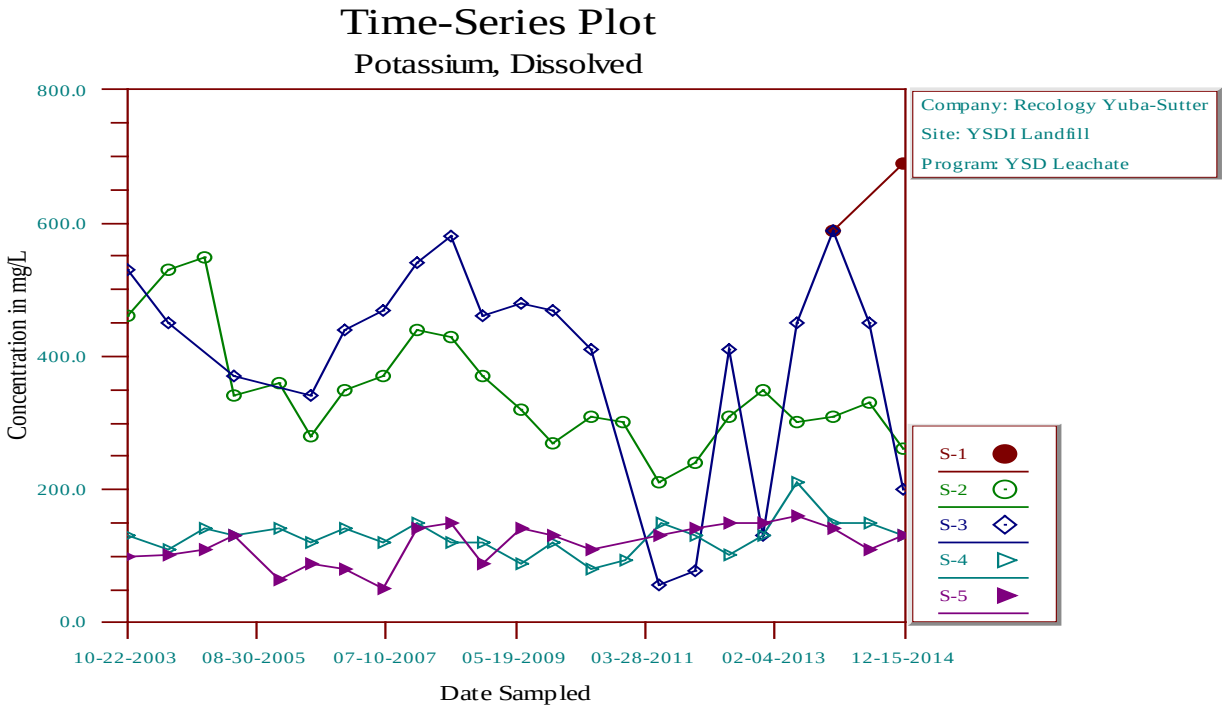

Time-Series Plot
Ethylbenzene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
15.0
10.0
5.0
0.0
-5.0
S-4
S-5
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled

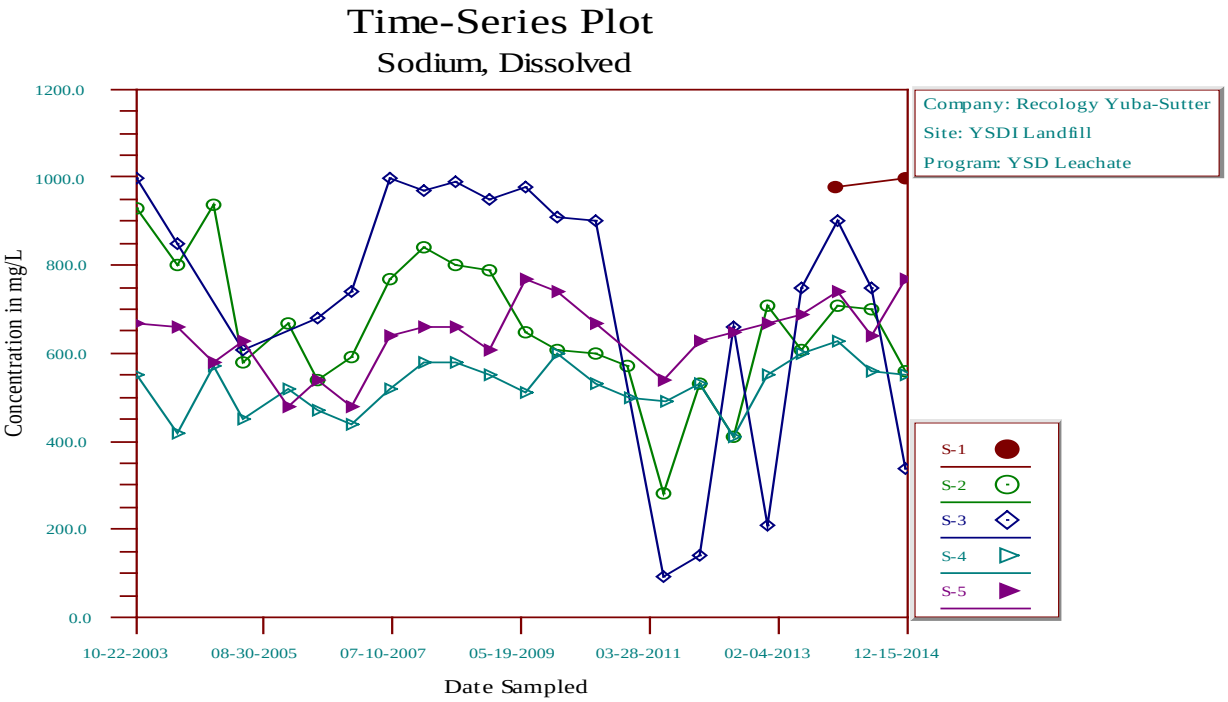

Time-Series Plot
2-Hexanone
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-3
S-4
Concentration in µg/L
600.0
400.0
200.0
0.0
-200.0
02-02-1995
05-26-1998
09-16-2001
01-08-2005
05-01-2008
08-23-2011
12-15-2014
Date Sampled

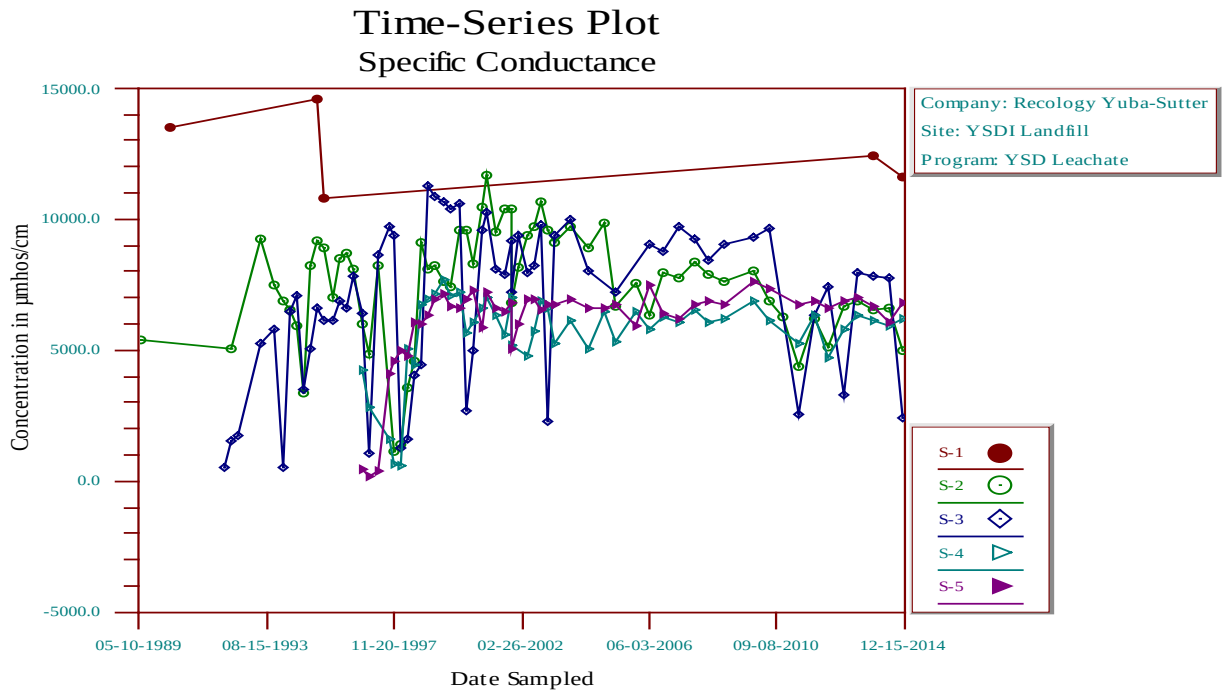

Time-Series Plot
Magnesium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-2
S-3
S-4
S-5
Concentration in mg/L
400.0
300.0
200.0
100.0
0.0
10-22-2003
08-30-2005
07-10-2007
05-19-2009
03-28-2011
02-04-2013
12-15-2014
Date Sampled

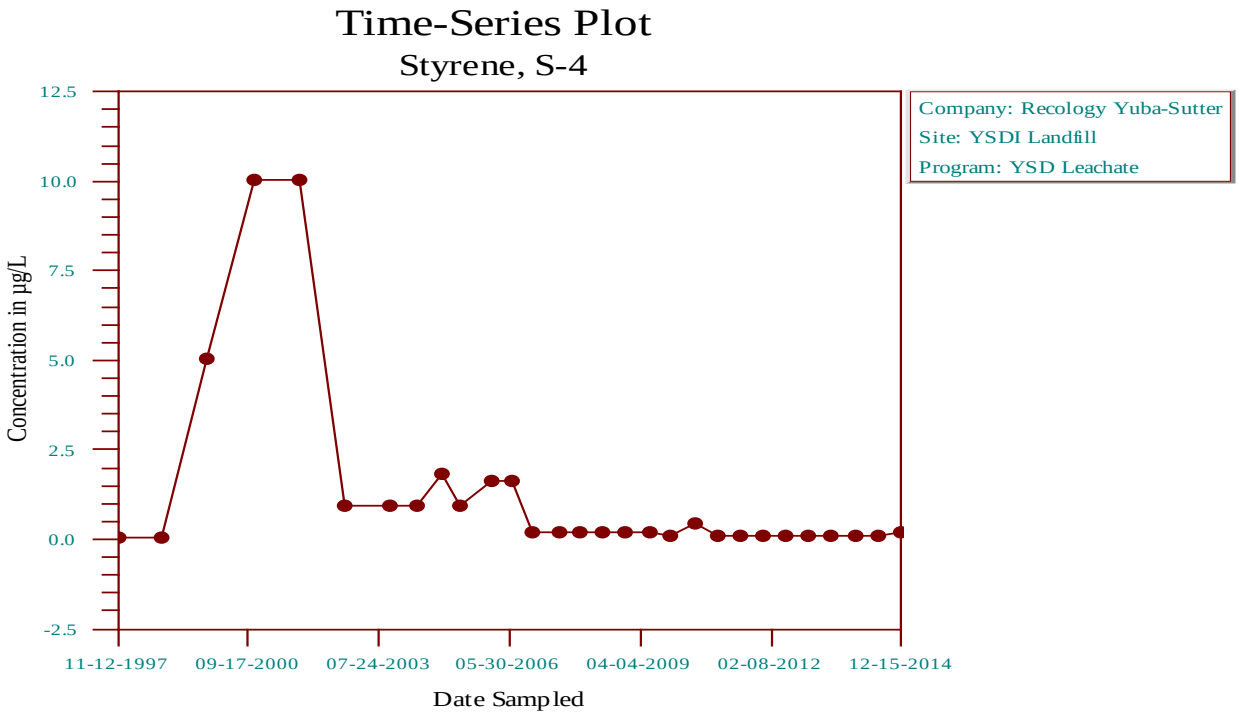

Time-Series Plot
Nitrogen, Nitrate plus Nitrite
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in mg/L
160.0
120.0
80.0
40.0
0.0
-40.0
02-28-1992
12-16-1995
10-04-1999
07-23-2003
05-10-2007
02-26-2011
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5

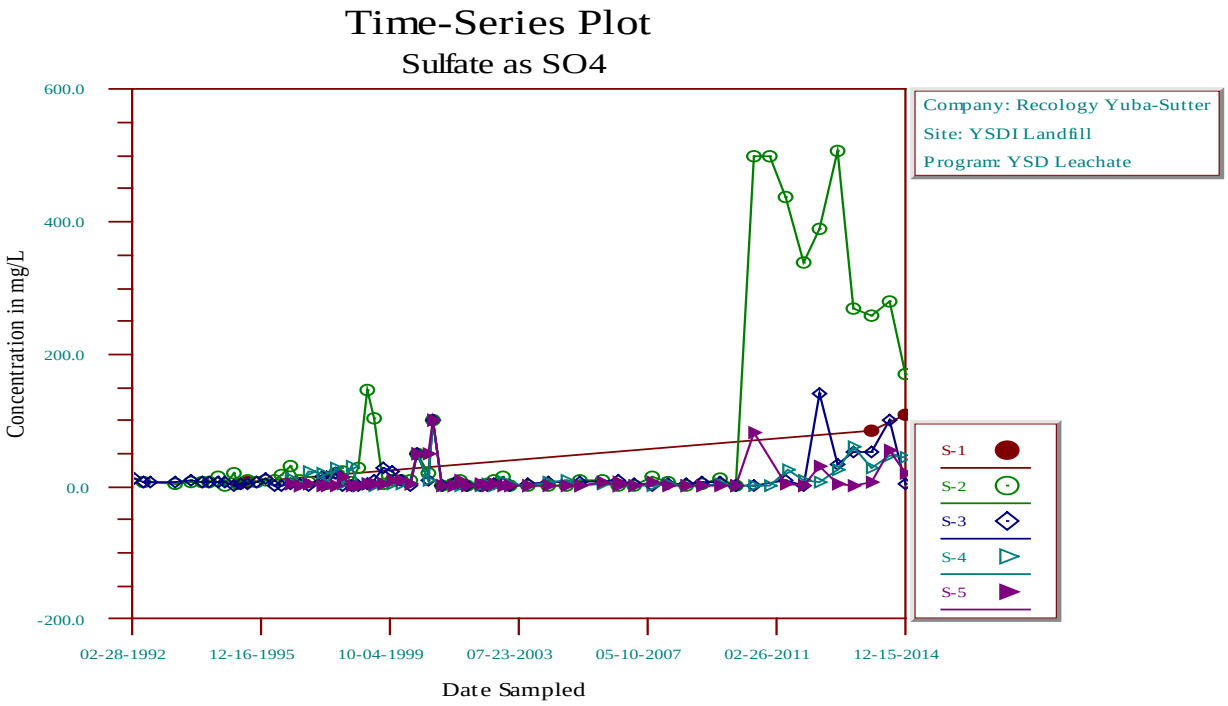

Time-Series Plot
pH
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in s.u.
8.4
7.8
7.2
6.6
6.0
5.4
4.8
05-10-1989
08-15-1993
11-20-1997
02-26-2002
06-03-2006
09-08-2010
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5

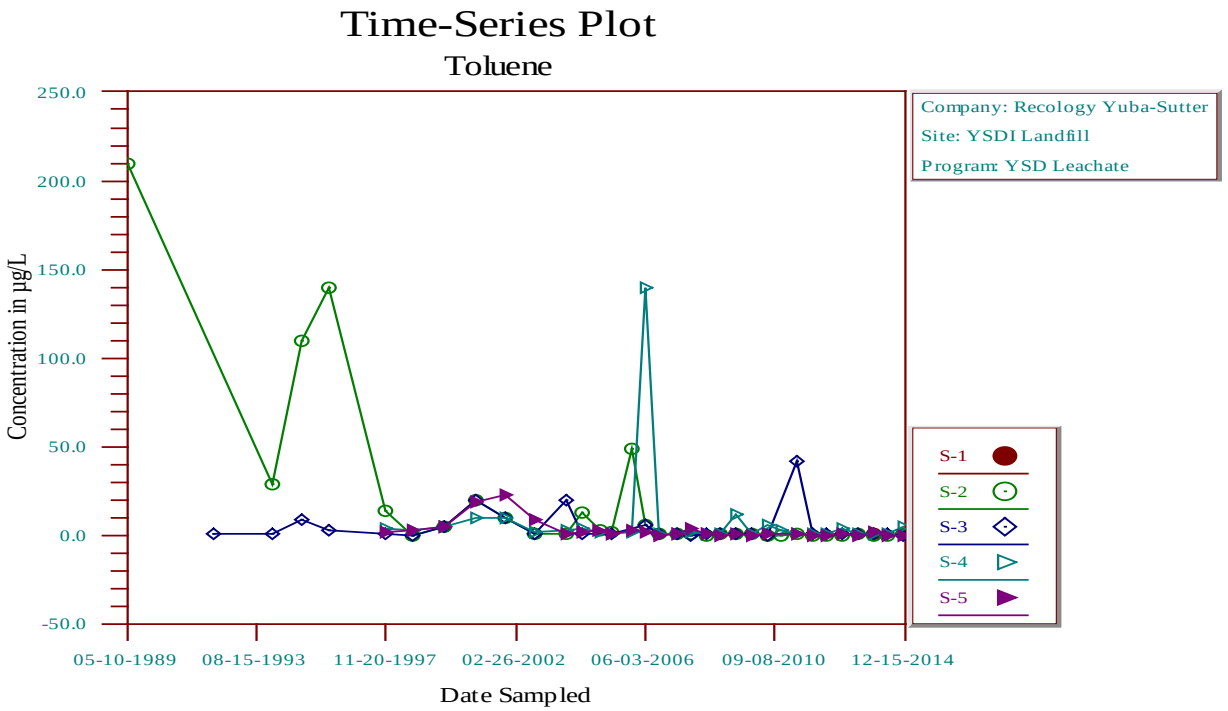

Time-Series Plot
Potassium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-2
S-3
S-4
S-5
Concentration in mg/L
800.0
600.0
400.0
200.0
0.0
10-22-2003
08-30-2005
07-10-2007
05-19-2009
03-28-2011
02-04-2013
12-15-2014
Date Sampled

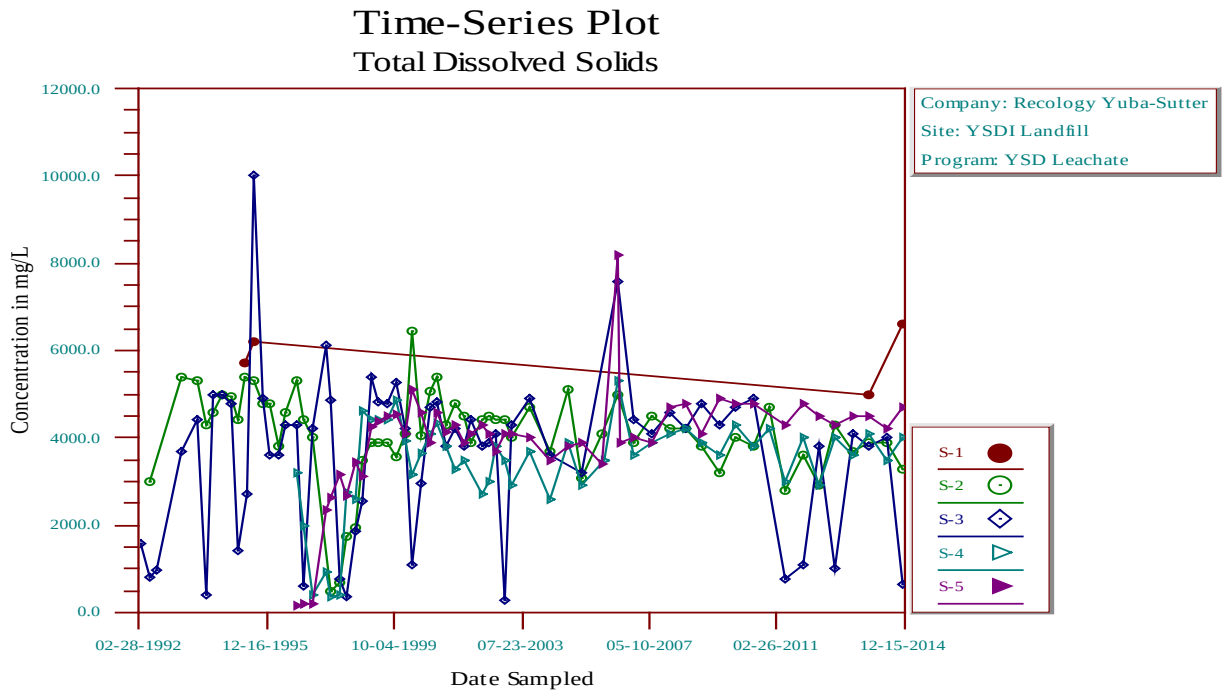

Time-Series Plot
Sodium, Dissolved
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-2
S-3
S-4
S-5
Concentration in mg/L
1200.0
1000.0
800.0
600.0
400.0
200.0
0.0
10-22-2003
08-30-2005
07-10-2007
05-19-2009
03-28-2011
02-04-2013
12-15-2014
Date Sampled

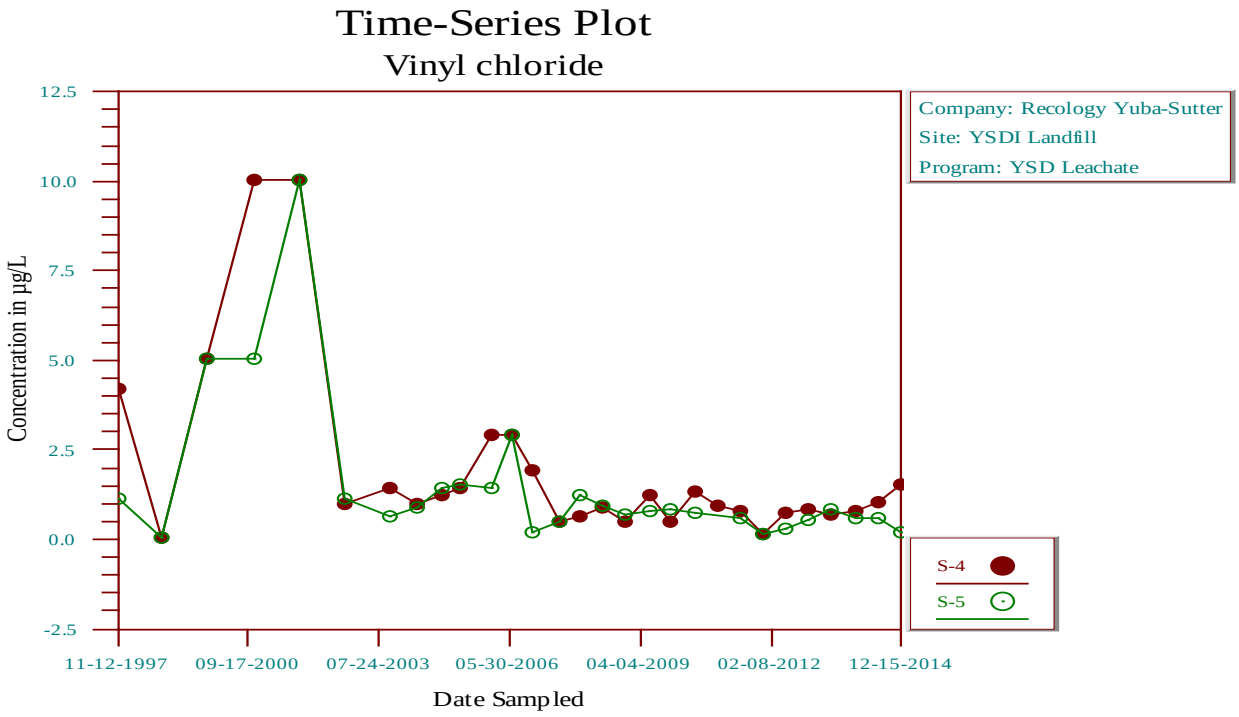

Time-Series Plot
Specific Conductance
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
S-1
S-2
S-3
S-4
S-5
Concentration in µmhos/cm
15000.0
10000.0
5000.0
0.0
-5000.0
05-10-1989
08-15-1993
11-20-1997
02-26-2002
06-03-2006
09-08-2010
12-15-2014
Date Sampled

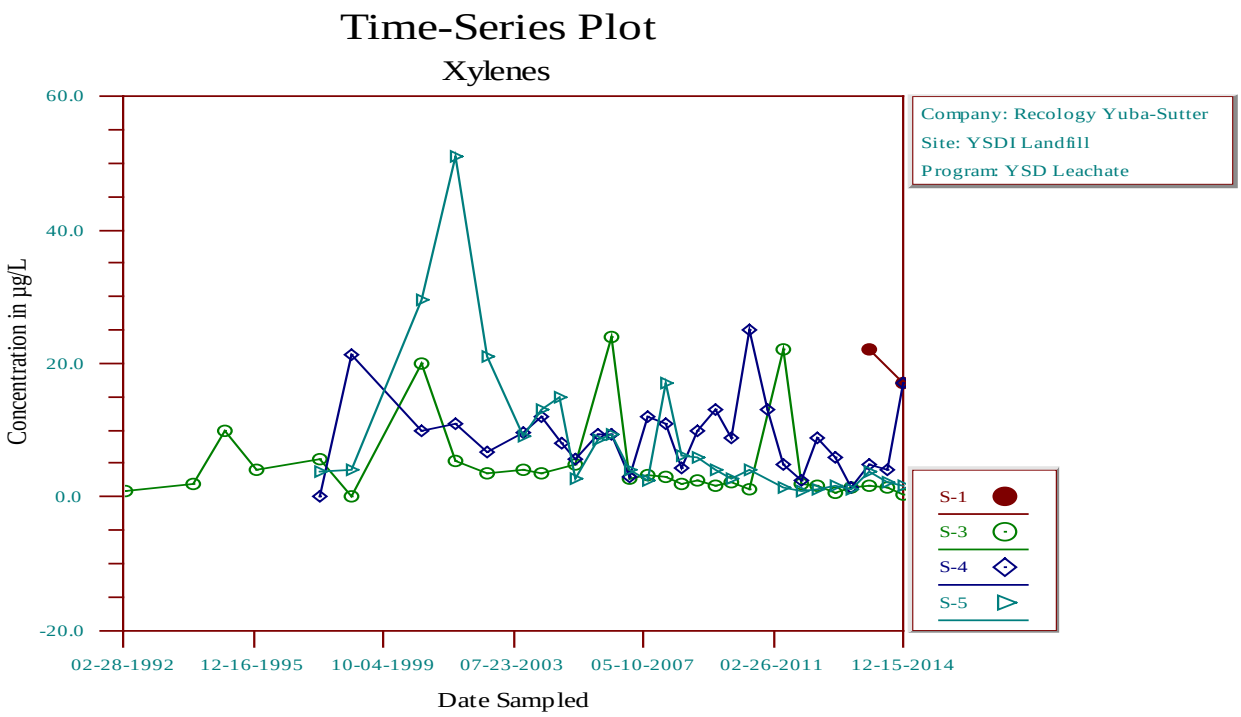

Time-Series Plot
Styrene, S-4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled


Time-Series Plot
Sulfate as SO4
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in mg/L
600.0
400.0
200.0
0.0
-200.0
02-28-1992
12-16-1995
10-04-1999
07-23-2003
05-10-2007
02-26-2011
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5


Time-Series Plot
Toluene
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
250.0
200.0
150.0
100.0
50.0
0.0
-50.0
05-10-1989
08-15-1993
11-20-1997
02-26-2002
06-03-2006
09-08-2010
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5


Time-Series Plot
Total Dissolved Solids
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in mg/L
12000.0
10000.0
8000.0
6000.0
4000.0
2000.0
0.0
02-28-1992
12-16-1995
10-04-1999
07-23-2003
05-10-2007
02-26-2011
12-15-2014
Date Sampled
S-1
S-2
S-3
S-4
S-5


Time-Series Plot
Vinyl chloride
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
11-12-1997
09-17-2000
07-24-2003
05-30-2006
04-04-2009
02-08-2012
12-15-2014
Date Sampled
S-4
S-5


Time-Series Plot
Xylenes
Company: Recology Yuba-Sutter
Site: YSDI Landfill
Program: YSD Leachate
Concentration in µg/L
60.0
40.0
20.0
0.0
-20.0
02-28-1992
12-16-1995
10-04-1999
07-23-2003
05-10-2007
02-26-2011
12-15-2014
Date Sampled
S-1
S-3
S-4
S-5

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Inc.
425 Lakeside Drive
Sunnyvale, CA 94085 USA
Tel: (408) 220-9223
Fax: (408) 220-9224

Golder Associates

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