2013 Remedial Action Annual Effectiveness Report

Alcoa (Point Comfort) / Lavaca Bay Superfund Site

March 31, 2014

ALCOA

2013 REMEDIAL ACTION ANNUAL EFFECTIVENESS REPORT

ALCOA (POINT COMFORT) / LAVACA BAY SUPERFUND SITE

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LIST OF ACRONYMS

CAPA	Chlor-Alkali Process Area
CCND	Calhoun County Navigation District
CD	Consent Decree
CDF	Confined Disposal Facility
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DMPA	Dredge Material Placement Area
DNAPL	Dense Non-Aqueous Phase Liquid
EE/CA	Engineering Evaluation/Cost Analysis
ESD	Explanation of Significant Differences
FERC	Federal Energy Regulatory Commission
FS	Feasibility Study
GPA	Gypsum Placement Area
GPM	Gallons Per Minute
LNG	Liquid Natural Gas

MLT	Mean Low Tide
MSL	Mean Sea Level
NGVD	National Geodetic Vertical Datum
OMMP	Operation, Maintenance and Monitoring Plan
PAH	Polyaromatic Hydrocarbon
PCO	Point Comfort Operations
PCOR	Preliminary Close Out Report
RAAER	Remedial Action Annual Effectiveness Report
RAO	Remedial Action Objective
RAP	Response Action Plan
RAWP	Remedial Action Work Plan
RDR	Remedial Design Report
RI	Remedial Investigation
ROD	Record of Decision
SOW	Statement of Work
TSS	Total Suspended Solids
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

1.1 Objective

This 2013 Remedial Action Annual Effectiveness Report (RAAER) for the Alcoa (Point Comfort)/Lavaca Bay Superfund Site (Site) in Point Comfort, Texas satisfies the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Consent Decree/Statement of Work (CD/SOW) between Alcoa (Alcoa Inc. and Alcoa World Alumina Atlantic, L.L.C.), the United States of America and the State of Texas, entered in the United States District Court, Southern District on the effective date of March 1, 2005 (United States et al., 2005).

The objective of the RAAER is to create an integrated assessment of the progress towards achieving the overall Site remediation goals using results from all monitoring performed subsequent to the lodging of the CD.

1.2 CD/SOW Requirements for the RAAER

Per the SOW attached to the CD, the RAAER:

> *"...shall be prepared to evaluate the effectiveness of the RA [Remedial Action] including, but not limited to, an evaluation of the performance of the hydraulic control system at CAPA, natural recovery of sediments in Lavaca Bay, trends in fish/shellfish tissue values, and an evaluation of O&M activities. In preparing the report, Settling Defendants shall use the O&M and Performance Monitoring data collected and any data collected during construction of the remedy. The Annual Effectiveness Report shall be submitted to EPA in accordance with the schedule contained in the Remedial Action Work Plan."*

The Remedial Action Work Plan (RAWP) (Alcoa, 2005a) specifies that the RAAER be submitted by March 31 of the year following the completion of each monitoring program.

The SOW attached to the CD states that specific topics to be discussed in the RAAER include:

- Site information;
- Media description;
- Treatment system description;
- Treatment system performance;
- Observations and lessons learned; and
- Verification that site conditions have not changed and there have been no land use or property development changes that may affect the remedial action.

1.3 Site Description and Status of Remedial Activities

The Site is defined in the CD as:

> *"...the Alcoa/Lavaca Bay Superfund Site, generally consisting of the Plant, Dredge Island, Formosa Tract, and portions of Lavaca Bay, Cox Bay, Cox Creek, Cox Cove, Cox Lake (Cox Creek, Cox Cove, and Cox Lake are also known as Huisache Creek, Cove and Lake) and western Matagorda Bay located in Calhoun County, Texas, and areas containing hazardous substances depicted generally on the map attached as Appendix C." (Note: map from Consent Decree not presented herein).*

Although all areas of the Site were investigated during the Remedial Investigation (RI), the risk assessments indicated that only certain parts of Lavaca Bay, the Dredge Island, and two areas on the Plant/Mainland (the Chlor-Alkali Process Area [CAPA] and the Witco Area) required development of remedial action objectives and subsequent remediation. Remediation of the Site, as described in the Record of Decision (ROD) (USEPA, 2001), consisted of actions that were initiated prior to the ROD (some of which were completed prior to the ROD and some of which are ongoing), and several future actions. This RAAER presents monitoring information that reflects the effects of both the completed actions and the ongoing activities. The following remedial actions have either been completed or represent an ongoing activity at the Site:

- Stabilization of the Dredge Island (completed as a non-time critical removal action prior to the ROD);
- Removal of CAPA sediment and sediment near Dredge Island (completed as a treatability study prior to the ROD);
- Extraction and treatment of groundwater at the CAPA (initiated as a treatability study prior to the ROD and continuing as an ongoing remedial action pursuant to the CD);
- Dredging of the Witco Channel (completed as part of routine plant maintenance prior to the ROD);
- Installation of a soil cap at the CAPA, with institutional controls to manage exposure to soil (completed prior to the ROD);
- Removal of Building R-300 at the CAPA (completed prior to the ROD);
- Natural recovery of sediments (ongoing activity);
- Institutional controls to manage exposure to finfish/shellfish (ongoing activity);
- Installation of a Dense Non-Aqueous Phase Liquid (DNAPL) containment system (slurry wall vertical barrier) at the Witco Area (installed in 2006);
- Installation of soil caps at the Witco Area, with institutional controls to manage exposure to soil (installed in 2006); and
- Dredging of the Witco Marsh (completed in 2006).

On May 23, 2007, the United States Environmental Protection Agency (USEPA) published notice that an Explanation of Significant Differences (ESD) had been signed for the Site. The

ESD indicates that enhanced natural recovery north of Dredge Island is no longer a necessary component of remedial action for the Site. The notice states:

> *"Although the remediation goal for sediment in open water areas of Lavaca Bay has been achieved, Alcoa will continue to monitor mercury levels in fish and marsh sediment. Results from the ongoing monitoring will be updated in the annual Remedial Action Effectiveness Report. EPA will review the report to determine if the remedy continues to be protective of human health and the environment. If EPA determines that the remedy is not protective, EPA can require Alcoa to undertake additional response actions."*

The Preliminary Close Out Report (PCOR) for the Alcoa/Lavaca Bay site was signed by USEPA on July 23, 2007. The PCOR documents that all construction activities required by the Record of Decision were completed. Long term monitoring of red drum and blue crab is required to evaluate the recovery of mercury levels in finfish and shellfish.

The CD specifies certain performance monitoring activities to evaluate the effectiveness of the remedy. The scopes of each of these monitoring activities are contained in the Remedial Design Reports (RDRs) and/or Operation, Maintenance and Monitoring Plans (OMMPs) attached to the Consent Decree. The CD documents that govern operation, maintenance and monitoring for currently completed or ongoing activities are:

- Chlor-Alkali Process Area RDR and OMMP (CD, Appendix A);
- Lavaca Bay Sediment Remediation and Long-Term Monitoring Plan OMMP (CD, Appendix H);
- Lavaca Bay Finfish and Shellfish OMMP (CD, Appendix I);
- Dredge Island OMMP (CD, Appendix D);
- Chlor-Alkali Process Area Soils RDR and OMMP (CD, Appendix F);
- Witco Tank Farm DNAPL Containment System RDR and OMMP (CD, Appendix B); and
- Witco Area Soils RDR and OMMP (CD, Appendix G).

The RDRs/OMMPs provide detailed descriptions of the performance monitoring that is summarized in this RAAER. Although the general scopes of the relevant OMMPs are described subsequently, the reader is directed to the RDR/OMMP documents for specific details about each monitoring program. Due to the large size of the RDR/OMMP documents, they are not reproduced here.

USEPA issued the First 5-year Review Report in June 2011 (USEPA, 2011) and provided the following summary. The review concluded:

> *". . . that the completed and ongoing remedial activities and natural recovery processes have resulted in downward trends of mercury concentrations in open water sediment and marsh sediment. Overall, a significant amount of sediment recovery has occurred since sampling conducted during the RI in 1996. Small localized areas of open water sediment are not recovering as quickly as predicted in the Feasibility Study. Average*

mercury concentrations of red drum tissue measured in the Closed Area of Lavaca Bay continue to exhibit positive and negative inter-annual fluctuations. The fluctuations appear to be related in part to remediation and in part to physical, chemical and biological conditions not influenced by remedial activities.

Based on the data review, document review, and site inspection, the following issues have been identified:

- Empirical sediment recovery rates indicate that natural recovery of open-water sediment mercury concentrations is occurring, but at somewhat slower rate than predicted in the Feasibility Study (FS). The Marsh 14 Island left by the Dredge Island non-time critical removal action, and perhaps to a lesser extent Mainland Shoreline No. 3 and the Witco Harbor and channel appear to serve as an ongoing source of mercury-contaminated soil and sediment to Lavaca Bay. These soils and sediment appear to be decreasing the rate of sediment recovery predicted in the FS.
- Due to bimodal and/or outlier data distributions, it is difficult to determine temporal trends in marsh sediment concentrations. In order to calculate an accurate average sediment concentration in marshes, it is appropriate to review the statistical design of the marsh sediment monitoring program to assess whether the number and placement of samples should be modified to better capture the variability in sediment concentrations and to improve the understanding of temporal trends.
- Mercury studies performed at the beginning of the RI indicated that methylation occurs at a shallow depth (often one or two centimeters at depth). A smaller core sample interval, closer to the sediment surface may provide more useful information about where and how methyl mercury enters the food web.
- Inspections at Dredge Island are conducted quarterly and indicate that the island is in good shape and the performance objectives are met. Erosion of the interior side slopes of the Confined Disposal Facility (CDF) caused by wave action of water in the CDF continues to be the most significant maintenance issue. Other items that need to be addressed on Dredge Island include: 1) erosion of the un-vegetated areas of the exterior side-slopes, 2) possible damage to the northeast decant structure below the mud line, 3) corrosion of metal portions of the decant structures, and 4) vegetation within the stone armor on the exterior side-slopes.

To address the issues identified during the first five-year review, the following recommendations and follow-up actions have been identified:

- Develop a plan to perform a focused, additional remedial measure in the area of the Dredge Island stabilization project, in order to assess whether the rate of finfish/shellfish tissue recovery can be accelerated.
- Assess the statistical design of the marsh sediment monitoring program to determine whether the number or placement of samples can be modified to better capture the variability in sediment concentrations and to improve the understanding of temporal trends.

- Evaluate a smaller core sample interval, closer to the sediment surface for future sediment sampling to provide more useful information about where and how methyl mercury enters the food web.
- Address the following issues related to the Dredge Island Stabilization Project:
    - Erosion of the interior side slops of the CDF caused by wave action of water in the CDF continues to be the most significant maintenance issue.
    - Erosion of the un-vegetated areas of the exterior side-slopes.
    - Possible damage to the northeast decant structure below the mud line.
    - Corrosion of metal portions of the decant structures.
    - Vegetation within the stone armor on the exterior side-slopes."

The recommendations and follow-up actions addressed in the 2012 RAAER were:

1. Remedial plan for the north end of Dredge Island (Marsh 14 removal),
2. Statistical Design of Marsh Sampling Plan,
3. Evaluation of Smaller Sediment Core Interval, and
4. Dredge Island Stabilization Project Maintenance Issues.

The Marsh 14 Removal Project was performed during 2013, as summarized in Section 1.4.

The USEPA agreed to suspend the sediment and tissue monitoring activities in Lavaca Bay during 2013 as the samples might be biased by the short-term temporary disturbances created by the Marsh 14 Project. Therefore the 2013 RAAER does not present any new sediment and tissue monitoring data. The normal sediment and tissue monitoring programs will resume in the fall of 2014.

1.4 Summary of Response Actions Performed in 2013

A five year review report issued by USEPA in June 2011 for the Alcoa (Point Comfort)/Lavaca Bay Superfund Site recommended that additional remedial measures be conducted, focused in the area of the Dredge Island stabilization project, to assess whether the rate of finfish/shellfish tissue recovery can be accelerated. In response to the five-year review, the 2012 Five-Year Review Response Action Plan (RAP) was prepared which addressed EPA's recommendation through the development of a program for the Marsh 14 area of the Site. The plan described actions for removal by dredging of a small island and sediments from areas adjacent to Marsh 14. Soils and sediments in these areas had been shown through sampling and analysis to contain elevated total mercury concentrations, which became the basis of the plan and led to the dredging of 12.66 acres of material.

Orion Marine Group (Orion) performed dredging operations in June 2013 as described in the RAP for the Marsh 14 area and utilized the northern Dredge Island CDF for disposal of the sediments and soils which were removed. Dredging occurred within an area encircled by a turbidity curtain and water quality monitoring and testing was performed outside of the curtained area. The testing results confirmed that water quality standards for turbidity, Total Suspended Solids (TSS) and total mercury were achieved for the duration of dredging operations. Dredging

operations were complete in June 2013 but decanting of water from Dredge Island continued until August 2013. Discharge was routed through the island's southwest outfall and sampling and analysis conducted during decanting confirmed that water quality standards for TSS and total mercury were achieved throughout.

The RAP specified that dredging be performed to a depth of -3 feet (ft.) Mean Low Tide (MLT). However, the stratigraphy of the target area was hard clay material underlying soft sediments with very shallow water depths which posed a risk to the dredge vessels' cooling systems if mud was allowed to block the intake grills. More powerful dredging equipment was needed than was originally anticipated and resulted in a deeper dredge prism which was in the range of -5.5 to -8 ft. MLT

Dredging operations resulted in the mass removal of approximately 148,300 cubic yards of sediment, including the material that contained elevated total mercury levels identified during prior characterization studies. This fulfilled the USEPA recommendation that additional remedial measures be conducted, focused in the area of Dredge Island, to help accelerate the rate of finfish/shellfish tissue recovery.

2.0 OVERVIEW OF O&M AND PERFORMANCE MONITORING PROGRAMS

2.1 CAPA Groundwater Extraction and Treatment System

The CAPA groundwater extraction and treatment system began full-scale operation in May 1998. The primary system components are four groundwater extraction wells, an air stripper that removes volatile organic compounds from the groundwater, and a series of carbon vessels that remove mercury. Ancillary piping, filters, pumps, tanks, etc. comprise the rest of the system. The objective of the groundwater extraction system is to provide hydraulic control of that portion of the dissolved mercury plume that was believed to contribute over 98 percent of the mercury mass flux from Zone B groundwater to Lavaca Bay prior to groundwater control. A treatability test conducted in 1997/1998 indicated that an aggregate extraction rate of approximately 10 Gallons Per Minute (GPM) from the four extraction wells creates a cone of depression that extends parallel to the shoreline along the line of wells.

The system has operated continuously since 1998, with only minor interruptions for maintenance or trouble-shooting, or during power interruptions at the Point Comfort Operations (PCO) facility. Detailed information for the CAPA groundwater extraction and treatment system, including the results of investigations and system design, is provided in the CAPA Focused Investigation Data Report (Alcoa, 1998) and CAPA Groundwater Treatability Study Data Report (Alcoa, 1999).

Operations, maintenance, and monitoring were conducted in 2013 in accordance with the CAPA Groundwater RDR/OMMP (CD, Appendix A). The various maintenance activities, operational checks and sampling requirements are summarized in Table 3-3 of the RDR/OMMP. The discharge standards for the system effluent are shown in Table 3-1 of the RDR/OMMP. A summary of the CAPA groundwater extraction and treatment system performance for 2013 is provided in Section 3.1 of this report.

2.2 CAPA Offshore Surface Water Sampling

As discussed in the 2006 RAAER (Alcoa, 2007), the performance objective for this component of the OMMP was achieved in 2006 and it is no longer part of the annual monitoring program.

2.3 Lavaca Bay Sediment Monitoring

As explained in Section 1.3, no sediment samples were collected in 2013. Thus there are no new data to present and evaluate in this year's RAAER. Please refer to the 2012 RAAER for the most recent presentation of Lavaca Bay sediment data.

2.4 Finfish and Shellfish Monitoring

As explained in Section 1.3, no finfish or shellfish tissue samples were collected in 2013. Thus there are no new data to present and evaluate in this year's RAAER. Please refer to the 2012 RAAER for the most recent presentation of Lavaca Bay finfish and shellfish data.

2.5 Dredge Island Inspections

An Engineering Evaluation/Cost Analysis (EE/CA) for a non-time-critical removal action was conducted by Alcoa for the Dredge Island in 1997 (Alcoa, 1997). A streamlined risk evaluation, prepared as part of the EE/CA, indicated that mercury from Dredge Island could enter Lavaca Bay via erosion of mercury-contaminated soils. Based on that finding, the EE/CA documented the selection of a removal action that minimized the potential for the release of mercury from the island due to either uncontrolled erosion during normal storm events or due to the effects of more intense storms (e.g., hurricanes).

The removal action was conducted between 1998 and 2001, and is referred to as the "Dredge Island Stabilization Project." The project included relocating the contents of the Dredge Materials Placement Areas (DMPAs) that contained elevated levels of mercury (approximately 523,000 cubic yards) into the Gypsum Placement Areas (GPAs). In addition, the containment dikes surrounding the GPAs were raised so that they would not be overtopped during a 100-year storm event (i.e., a storm event that has a probability of occurring once within 100 years). This required increasing 10,700 linear feet of dike to an approximate elevation of 30 feet mean Sea Level (MSL). As part of this work, most of the marshes on the north end of the island were removed. Erosion protection and runoff control structures were also installed on the island. The final design and as-built drawings for the Dredge Island remedy are contained in the Dredge Island Removal Action Plan, Volume 4 - Phase 1 Dredge Island Stabilization Completion Report (Alcoa, 2002).

The performance objective for the Dredge Island remedy is to interrupt the potential direct exposure pathway of contaminants in soils and sediments from Dredge Island as a result of a significant storm event or uncontrolled erosion during storm water runoff. The removal action and reconfiguration of Dredge Island was designed to achieve this objective through engineering means. Remaining tasks for Alcoa include preservation of the integrity of the reconfigured island through periodic inspections and maintenance and/or repairs, as needed.

The requirements provided in the OMMP for Dredge Island include inspection of the following primary components:

- The access bridge from mainland to northern shore of Dredge Island;
- The 10,500 lineal feet of the Alcoa CDF containment dikes;
- The storm protection on the Alcoa CDF dike exterior, including the armor layer, under-layer, and dike toe protection;
- The gravel erosion protection on the exterior dike slopes above the armor protections and the interior dike slopes above 26.5 ft. (NGVD 1929);
- The 25-ft. long concrete emergency spillway;
- The two dredge decant structures including the discharge structures;

- The two water stops installed in the Calhoun County Navigation District (CCND) CDF dikes; and
- The road on the Alcoa CDF dikes.

The access bridge was damaged during Hurricane Claudette in 2003 and subsequent Dredge Island inspections have not included detailed inspection of the bridge. However, Alcoa continues to maintain signage and navigational lighting to prevent access to and collision with the bridge.

Several Dredge Island maintenance issues were identified in the First Five Year Review Report. These issues were addressed during a maintenance event conducted in 2011, as described in the 2011 RAAER.

2.6 CAPA Soil Cap Inspections

Soils contaminated with mercury greater than the applicable risk-based values were identified during the RI at the CAPA. These soils were generally associated with the area to the west of former Building R-300, and encompassed an area of approximately 1.8 acres. The remedial action objective for CAPA soils was to reduce the future exposure potential of site workers to mercury in soils at the CAPA. A clay/gravel cap was installed, which was graded for storm water drainage, and the storm water management structures were modified to collect only surface runoff. The grading objective was met by compaction of a clay sub-grade over the entire area, from approximately several inches thick at the perimeter to 1.2 feet thick at the center. A six-inch crushed limestone material was then placed over the compacted clay sub-grade. To limit usage of the area by Plant and contractor personnel, three-by-six feet warning signs were placed on the north and west sides of the capped area. Also, a memorandum was distributed to Plant employees to inform workers of the upgrades made to the area, the restrictions on the capped area, and disciplinary actions for not complying with the restrictions. Additional information is contained in the CAPA Soils RDR/OMMP. A similar memorandum is distributed annually for review by Site workers.

An inspection and maintenance program was developed for the capped area, as described in the RDR/OMMP. This program consists of quarterly inspections, and maintenance as required. The main components of the inspection are:

- Cap integrity (e.g., signs of vehicular traffic, burrowing, erosion, etc.);
- Vegetation growth;
- Signage integrity (e.g., upright and legible);
- Storm drains free of debris; and
- No equipment or waste storage.

All items noted on the inspections are corrected as soon as practicable.

2.7 Witco Area Inspections

Containment of DNAPL containing Polyaromatic Hydrocarbons (PAHs) and capping of PAH-impacted soils at the Witco Area were components of the remedy as described in the CD. DNAPL and sediments/soil visibly contaminated with PAHs had been observed at several locations at the Witco Area during previous investigations. In addition, surface soils in portions of the Witco Area exhibited elevated concentrations of PAHs that exceeded Response Action Objectives (RAOs) associated with potential on-site worker exposure to surface soils. Additional information is contained in the Former Witco Area DNAPL Containment System and Witco Area Soils RDR/OMMPs.

Construction was performed during the period March 8, 2006 to December 29, 2006. The following remedial construction activities were performed:

- Construction of a new drainage channel, including the removal of visually-impacted sediments;
- Construction of a 100-foot long soil attapulgite slurry wall;
- Construction of a soil cap in the former tank farm area; and
- Removal of an oil/water separator and construction of a soil cap in the former processing area.

A Construction Completion Report was submitted in June 2007, and operations and maintenance activities were initiated in July 2007, as follows:

- Quarterly inspections (for two years, annual thereafter) of the drainage channel;
- Quarterly inspections of the soil caps at the former tank farm and oil/water separator;
- Placement of signage regarding prohibition of activities at the site (a Management Memo was developed and distributed at the facility);
- Inspections of the DNAPL collection sump (monthly for six months, quarterly thereafter until two years after construction, frequency to be reviewed at that time based on findings); and
- Removal of any DNAPL that collects in the sump.

A memorandum was distributed to PCO plant employees to inform workers of upgrades made to the area, the capped area restrictions and disciplinary actions for not complying with restrictions. A similar memorandum has been submitted annually for review by Site workers.

3.0 MONITORING RESULTS

3.1 CAPA Groundwater Extraction and Treatment System

The primary monitoring results for the CAPA groundwater extraction and treatment system are provided in Tables 3.1-1, 3.1-2, 3.1-3, 3.1-4, and 3.1-5. Selected potentiometric data are shown on Figures 3.1-1, 3.1-2, 3.1-3, and 3.1-4. The potentiometric contours for the areas near Lavaca Bay utilize a surface water elevation for Lavaca Bay measured at a tidal gauge located south of the CAPA ("CA Bay" as shown on Figures 3.1-1 through 3.1-4). In other words, contouring assumes that Lavaca Bay is in hydraulic connection with Zone B, as has been demonstrated previously due to the deep dredging of the Alcoa Industrial Channel. Graphs showing the concentrations of mercury and carbon tetrachloride in samples from the recovery wells over time are shown on Figures 3.1-5 and 3.1-6. The concentrations of mercury and carbon tetrachloride in the samples from the recovery wells have decreased over time since the groundwater extraction and treatment system has been operating. Field records and logs from system operational checks and maintenance activities are kept in project binders and maintained in the project filing system.

The data collected from the treatment system indicates that it is operating efficiently and as designed. Hydraulic control has been achieved and appears to be effectively reducing the potential for migration of mercury-impacted groundwater in Zone B west of former Building R-300 to Lavaca Bay. This conclusion is based on the evaluation of potentiometric surfaces created from water-level data collected from pumping and observation wells located at the CAPA. Concentrations of mercury and volatile organic compounds in system effluent samples were all less than the discharge standards listed in the RDR/OMMP. Therefore, all performance standards were met during 2013.

3.2 CAPA Offshore Surface Water Sampling

As stated in Section 2.2 of this report, the performance objective for this component of the OMMP was achieved in 2006 and it is no longer part of the annual monitoring program.

3.3 Sediment Monitoring

Please refer to the 2012 RAAER for the most recent presentation of Lavaca Bay sediment data.

3.4 Finfish and Shell Fish Monitoring

Please refer to the 2012 RAAER for the most recent presentation of Lavaca Bay finfish and shellfish monitoring data.

3.5 Dredge Island Inspections

Dredge Island inspections were conducted quarterly throughout 2013. The inspection records are provided in Appendix A. The inspections indicate that the island is in stable condition and the performance objectives are met. Erosion of the interior side slopes of the CDF caused by wave action of water in the CDF continues to be the most significant maintenance issue but no repairs are required at this time

3.6 CAPA Soil Cap Inspections

Quarterly inspections were conducted during 2013 as required by the RDRs/OMMPs. The inspection records are contained in Appendix B. The most common maintenance issue is the presence of vegetation, which must be controlled to maintain cap integrity. A soil sterilizer is used to control vegetation.

3.7 Witco Area Inspections

Inspections were conducted at the Witco Area in 2013 as required by the RDRs/OMMPs. Inspections records are contained in Appendix C.

The major conclusions of the 2013 inspections are as follows:

- No DNAPL has been observed in the collection sump since its installation. Several methods have been used to detect the presence of DNAPL, including the use of an interface probe, a weighted bailer, and weighted rope (to check for visual evidence of dark or oily substances).
- The soil caps are functioning well and no damage has been observed. Mowing is now performed on a regular basis.

Inspections and maintenance will continue at the frequency described in the RDR/OMMPs.

3.8 Verification of Site Conditions and Land Use

Site conditions and land uses within the Site remain consistent with those described in the ROD. The Texas Department of Health Order against taking of finfish and shellfish within the Closed Area remains current. The Alcoa PCO plant continues to operate and periodic maintenance dredging in the Alcoa and Matagorda Ship Channel continues to occur.

The 2006 RAAER reported that permit applications had been submitted for industrial developments within the CCND harbor and that a project to widen and deepen the Matagorda Ship Channel had been proposed. The permitting process for both of these activities involved input and coordination with USEPA and Alcoa to assure that the remediation objectives of the Site are met and that construction is consistent with the sediment management framework

contained in the CERCLA FS. The permit to widen and deepen the Matagorda Ship Channel was issued by the U.S. Army Corps of Engineers on November 15, 2010.

Excelerate Energy® L.P. is proceeding to develop the first US floating liquefaction facility at Point Comfort. The Lavaca Bay Liquid Natural Gas (LNG) project will be located on Port of Calhoun County property, south of the Alcoa facility. The Excelerate facility will interconnect to the region's existing pipeline system in order to obtain natural gas and liquefy it onboard the vessel. The LNG will then be loaded onto tankers for export. The Point Comfort location being developed by Excelerate Energy has previously received Federal Energy Regulatory Commission (FERC) approval as an LNG import facility, which should facilitate the permitting process. Construction of the facility will require widening and deepening of the ship channel using the approved permit for the Matagorda Ship Channel widening and deepening project. Additionally, the Excelerate project will require dredging of a turning basin. We understand that the US EPA is involved in the Excelerate project process.

Additionally, Sargas Texas is proceeding with planning and permitting of a 2 unit, 500MW natural gas fired power project immediately southeast of the Port. Using Sargas technology, up to 90 percent of the carbon dioxide will be captured, and exported via pipeline to oil fields for Enhanced Oilfield Recovery programs. The power facility will be constructed off-Site and imported to the Port location on barges. Channels will have to be dredged as part of this project. Similar to the Excelerate project, the permitting process for the Sargas project involves input and coordination with USEPA and Alcoa to assure that the remediation objectives of the Site are met and that construction is consistent with the sediment management framework contained in the CERCLA FS.

4.0 CONCLUSIONS

4.1 Comparisons to Performance Standards

Monitoring data collected in 2013 support the following conclusions:

- The CAPA groundwater extraction and treatment system continues to effectively control the discharge of mercury to the Bay System from Zone B groundwater beneath the CAPA. This conclusion is supported by the system effluent concentration data and the potentiometric data obtained from the groundwater extraction and treatment system.
- The 2013 inspections of Dredge Island indicate that the island is in stable condition and the performance objectives are met.
- No significant maintenance issues were noted for the CAPA soil cap during inspections performed in 2013.
- Inspections of the Witco Area in 2013 indicate that no DNAPL has accumulated and that soil caps are functioning well.

4.2 Plans for Subsequent Monitoring

All required annual monitoring activities will be performed in 2014 (CAPA groundwater extraction and treatment system, red drum and juvenile blue crab tissue, and marsh sediment sampling). Inspections of Dredge Island, CAPA and Witco soil caps and the Witco DNAPL collection system will also be conducted.

4.3 Summary of Overall Remedy Effectiveness

The CAPA groundwater extraction and treatment system, CAPA and Witco capping systems, and the Dredge Island Stabilization Project continue to serve as an effective remedy. The Marsh 14 area was remediated during 2013 to accelerate the rate of marsh sediment and tissue recovery in Lavaca Bay.

4.4 Recommendations

Future sediment and tissue monitoring data collected after the Marsh 14 remediation project will be used to assess effectiveness of the remediation project, and the need for additional remediation, if required.

5.0 REFERENCES

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TABLES

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-C[7]	5/18/98		0.0019		<	0.001		<	0.001		<	0.001		<	0.001		<	0.001			
	5/29/98		0.00035		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	6/4/98		0.00021		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	6/9/98																			7.00	
	6/10/98		0.00041		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	6/18/98		0.00021		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	6/24/98		0.00027		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	7/1/98		0.00017			0.00041	J	<	0.001		<	0.002		<	0.001		<	0.001			
	7/1/98		0.0009																		Duplicate
	7/2/98																			5.17	
	7/8/98		0.00016		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		5.20	
	7/15/98		0.00018		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.00	
	7/22/98		0.00027		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	7/28/98		0.00042		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.45	
	8/5/98		0.00047		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.42	
	8/12/98		0.00042		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.52	
	8/19/98		0.00075		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	8/25/98		0.00052		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.86	
	9/2/98		-0.0007	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.73	
	9/9/98		0.00027	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.82	
	9/16/98		0.0010		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	9/23/98		0.0010		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		7.10	
	10/1/98		0.00076		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			
	10/7/98		0.00090		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		7.12	
	10/14/98		0.00173		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.40	
	10/21/98		0.00053		<	0.001		<	0.001		<	0.002			0.0001	J	<	0.001		6.23	
	10/28/98		0.00050		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.31	
	11/4/98		0.00053		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.41	
	11/11/98		0.00007		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.45	
	11/18/98		0.00045		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.56	
	11/24/98		0.00012	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.51	
	12/2/98		0.00034		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.64	
	12/9/98		0.00038		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.85	
	12/16/98		0.00070		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.89	
	12/22/98		0.0010		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.92	
	12/29/98		0.0008			0.00028	J	<	0.001		<	0.002		<	0.001		<	0.001		5.53	
	1/6/99		0.00073		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		6.03	
	1/13/99		0.00033	J	<	0.001		<	0.001			0.00008	J	<	0.001		<	0.001		5.74	
	1/20/99																				
	1/26/99		0.00048		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		5.70	
	2/3/99		0.00058		<	0.001		<	0.001			0.001	J		0.00029	J	<	0.001		7.08	
	2/17/99		0.00078	J	<	0.001		<	0.001			0.0012	J		0.00036	J	<	0.001		7.13	
	2/24/99		0.00128		<	0.001		<	0.001			0.0019	J		0.00037	J	<	0.001		6.63	
	3/5/99		0.00159		<	0.001		<	0.001			0.0018	J		0.00036	J	<	0.001		6.65	
	3/10/99		0.00116		<	0.001		<	0.001			0.0017	J	<	0.001		<	0.001		6.68	
	3/17/99		0.00064		<	0.001		<	0.001		<	0.002		<	0.001		<	0.001		7.08	
	3/24/99		0.00002	J	<	0.001		<	0.001			0.0016	J		0.000042	J	<	0.001		7.06	
	4/1/99		0.00023	J	<	0.001			0.00027	J		0.0022			0.00014	J	<	0.001		6.96	
	4/6/99		0.00020	J	<	0.001		<	0.001			0.0019	J	<	0.001		<	0.001		6.87	
	4/13/99		0.00070	J	<	0.001			0.00075	J		0.002	J	<	0.001		<	0.001		6.98	
	4/21/99		0.00120		<	0.001			0.00104			0.0018	J	<	0.001		<	0.001		6.98	
	4/28/99		0.00110		<	0.001			0.00224		<	0.002			0.00037	J	<	0.001		6.97	
	5/5/99		0.00066		<	0.001			0.00363		<	0.002			0.00029	J	<	0.001		7.00	
	5/12/99		0.00143			0.00065	J		0.00644		<	0.002		<	0.001		<	0.001		7.15	
	5/19/99		0.00169			0.00039	J		0.00482			0.00076	J	<	0.001		<	0.001		6.82	
	5/26/99		0.00135			0.00131			0.00884			0.00051	J	<	0.001		<	0.001		7.25	
	6/2/99		0.00201			0.00261			0.01224			0.00046	J	<	0.001		<	0.001		6.93	
	6/9/99		0.00181			0.00915			0.01922			0.000302	J	<	0.001		<	0.001		7.02	
	6/16/99		0.00148			0.01192			0.02667			0.00022	J	<	0.001		<	0.001		6.92	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																			pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			**0.01**			**0.38**			**0.325**			**NA[6]**			**0.164**			**NA**			**6.0 - 9.0**	
ST-C Continued	6/23/99		0.00228			0.0214			0.03472			0.000117	J	<	0.001		<	0.001			7.23	
	6/30/99		0.00076			0.01999			0.03766		<	0.002		<	0.001		<	0.001			6.68	
	7/14/99																				7.04	
ST-A	7/22/99																				7.82	Carbon change out
	7/28/99																				7.82	
	8/4/99																				7.23	
	8/11/99																				7.51	
	8/18/99																				6.92	
	8/25/99		0.00086			0.004364			0.000146	J	<	0.002		<	0.001		<	0.001			6.94	
	9/1/99		0.00014	J		0.00486		<	0.001		<	0.002		<	0.001		<	0.001			6.95	
	9/8/99		0.000425	J		0.003008		<	0.001		<	0.002		<	0.001		<	0.001			7.21	
	9/15/99		0.00043	J		0.002892			0.000185	J	<	0.002		<	0.001		<	0.001			7.06	
	9/22/99		0.00089			0.002616			0.000152	J	<	0.002		<	0.001		<	0.001			7.21	
	9/29/99		0.00006	J		0.003224		<	0.001		<	0.002		<	0.001		<	0.001			7.27	
	10/6/99		0.00018	J		0.002757			0.000408		<	0.002		<	0.001		<	0.001			7.49	
	10/13/99		0.00021	J		0.00291			0.000788	J	<	0.002		<	0.001		<	0.001			7.36	
	10/20/99		0.00059			0.00136			0.001111		<	0.002		<	0.001		<	0.001			7.28	
	10/27/99		0.00033	J		0.003327			0.00275		<	0.002		<	0.001		<	0.001			7.22	
	11/3/99		0.00002	J		0.003567			0.004421		<	0.002		<	0.001		<	0.001			7.61	
	11/10/99		0.00118	J		0.003112			0.00622		<	0.002		<	0.001		<	0.001			7.50	
	11/17/99		0.00089	J		0.004599			0.009552		<	0.002		<	0.001		<	0.001			7.65	
	11/23/99		0.00062	J		0.007814			0.012587		<	0.002		<	0.001		<	0.001			7.22	
	12/2/99		0.00072	J		0.012289			0.016635		<	0.002		<	0.001		<	0.001			7.14	
	12/8/99		0.00072	J		0.011109			0.017479		<	0.002		<	0.001		<	0.001			7.33	
	12/15/99		0.00041	J		0.014068			0.013601		<	0.002		<	0.001		<	0.001			7.37	
	12/22/99		0.00040	J		0.01353			0.013122		<	0.002		<	0.001		<	0.001			7.40	
	12/29/99		0.00013	J		0.010233			0.016454		<	0.002		<	0.001		<	0.001			7.00	
	1/5/00		0.00074	J		0.021707			0.025836		<	0.002		<	0.001		<	0.001			7.41	
	1/12/00		0.00011	J		0.035346			0.036077		<	0.002		<	0.001		<	0.001			7.38	
	1/19/00		0.00061	J		0.062926			0.048082		<	0.002		<	0.001		<	0.001			7.06	
	1/26/00		0.00044	J		0.07067			0.042044		<	0.002		<	0.001		<	0.001			6.86	
	2/2/00		0.00010	J		0.115509			0.052529		<	0.002		<	0.001		<	0.001			6.82	
	2/9/00		0.00014	J		0.155503			0.059467		<	0.002		<	0.001		<	0.001			7.01	
	2/16/00		0.00016	J		0.177621			0.060686		<	0.002		<	0.001		<	0.001			6.80	
	2/24/00		0.00097			0.00194		<	0.001		<	0.002		<	0.001		<	0.001			7.66	
ST-B	3/3/00		0.00026	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			8.90	Carbon change out
	3/9/00		0.00011	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			7.20	
	3/15/00		0.00034	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			7.70	
	3/22/00		0.00002	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			7.10	
	3/29/00		0.00030	J	<	0.001		<	0.001		<	0.002		<	0.001		<	0.001			7.05	
	4/4/00		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			6.58	
	4/12/00		0.00060			0.008		<	0.001		<	0.005		<	0.001		<	0.001			7.10	
	4/19/00	<	0.00020		<	0.001		<	0.001		<	0.005			0.004		<	0.001			7.06	
	4/26/00	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			7.60	
	5/3/00	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			6.57	
	5/10/00	<	0.00040		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			6.49	
	5/17/00	<	0.00040		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			6.55	
	5/24/00		0.00110		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			6.45	
	5/31/00	<	0.00020		<	0.001			0.003		<	0.005		<	0.001		<	0.001			6.80	
	6/7/00	<	0.00020			0.01			0.005		<	0.005		<	0.001		<	0.001			6.87	
	6/14/00	<	0.00020		<	0.001			0.011		<	0.005		<	0.001		<	0.001				
	6/21/00		0.00030		<	0.001			0.019		<	0.005		<	0.001		<	0.001				
	6/29/00	<	0.00020			0.01			0.022		<	0.005		<	0.001		<	0.001				
	7/6/00		0.00020			0.013			0.029		<	0.005		<	0.001		<	0.001			6.75	
	7/12/00	<	0.00040			0.012			0.026		<	0.005		<	0.001		<	0.001			6.57	
	7/19/00	<	0.00020			0.02			0.032		<	0.005		<	0.001		<	0.001			7.05	
	7/26/00	<	0.00020			0.026			0.041		<	0.005		<	0.001		<	0.001			6.58	
	8/2/00		0.00030			0.038			0.037		<	0.005		<	0.001		<	0.001			6.35	
	8/9/00		0.00020			0.055			0.042		<	0.005		<	0.001		<	0.001				
	8/16/00		0.00030			0.07			0.05		<	0.005		<	0.001		<	0.001			6.41	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-B Continued	8/23/00		0.00030			0.076			0.051		<	0.005		<	0.001		<	0.001		6.80	
	8/29/00		0.00020			0.095			0.052		<	0.005		<	0.001		<	0.001		6.43	
ST-C	9/6/00		0.00580		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		8.43	Carbon change out
	9/12/00	<	0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.91	
	9/19/00	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		8.27	
	9/27/00		0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.12	
	10/3/00	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.97	
	10/11/00	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.21	
	10/18/00		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.88	
	10/25/00		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.95	
	11/1/00		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.13	
	11/8/00		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.18	
	11/15/00		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.40	
	11/21/00		0.00040		<	0.001			0.001		<	0.005		<	0.001		<	0.001		7.36	
	11/28/00		0.00040		<	0.001			0.002		<	0.005		<	0.001		<	0.001		7.01	
	12/6/00		0.00040		<	0.001			0.002		<	0.005		<	0.001		<	0.001		7.56	
	12/13/00		0.00030			0.001			0.002		<	0.005		<	0.001		<	0.001		6.98	
	12/20/00		0.00040			0.002			0.003		<	0.005		<	0.001		<	0.001		7.34	
	12/27/00		0.00030			0.003			0.004		<	0.005		<	0.001		<	0.001		7.64	
	1/3/01		0.00020			0.003			0.003		<	0.005		<	0.001		<	0.001		7.14	
	1/10/01		0.0004			0.007			0.005		<	0.005		<	0.001		<	0.001		7.20	
	1/17/01		0.0004			0.011			0.006		<	0.005		<	0.001		<	0.001		7.48	
	1/24/01		0.00030			0.014			0.007		<	0.005		<	0.001		<	0.001		7.27	
	1/30/01		0.00040			0.018			0.008		<	0.005		<	0.001		<	0.001		7.29	
	2/6/01		0.00030			0.021			0.009		<	0.005		<	0.001		<	0.001		7.30	
	2/14/01		0.00040			0.026			0.01		<	0.005		<	0.001		<	0.001		7.36	
	2/22/01		0.00030			0.032			0.011		<	0.005		<	0.001		<	0.001		7.40	
	2/28/01		0.00030			0.033			0.011		<	0.005		<	0.001		<	0.001		7.38	
	3/7/01		0.00630			0.039			0.013		<	0.005		<	0.001		<	0.001		7.48	
	3/15/01		0.00040			0.071			0.02		<	0.005		<	0.001		<	0.001		7.16	
	3/21/01		0.00040			0.087			0.023		<	0.005		<	0.001		<	0.001		6.89	
	3/28/01		0.00040			0.087			0.02		<	0.005		<	0.001		<	0.001		6.79	
	4/4/01		0.00050			0.12			0.025		<	0.005		<	0.001		<	0.001		6.54	
	4/11/01		0.00040			0.14			0.03		<	0.005		<	0.001		<	0.001		7.49	
ST-A	4/19/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		8.98	Carbon change out
	4/26/01	<	0.00020			0.0001		<	0.001		<	0.005		<	0.001		<	0.001		8.71	
	5/2/01	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.80	
	5/9/01		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.08	
	5/16/01	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.95	
	5/23/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.90	
	5/30/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.92	
	6/7/01	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.05	
	6/13/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.85	
	6/20/01	<	0.00020			0.002		<	0.001		<	0.005		<	0.001		<	0.001		7.04	
	6/27/01	<	0.00020			0.002		<	0.001		<	0.005		<	0.001		<	0.001		6.94	
	7/3/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.96	
	7/11/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.94	
	7/17/01	<	0.00200			0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	7/25/01	<	0.00020			0.18			0.01		<	0.005		<	0.001		<	0.001		6.99	
	8/1/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.01	
	8/9/01	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.93	
	8/15/01		0.00020			0.001			0.002		<	0.005		<	0.001		<	0.001		6.80	
	8/21/01	<	0.00020			0.001			0.003		<	0.005		<	0.001		<	0.001		6.90	
	8/30/01		0.00030			0.001			0.004		<	0.005		<	0.001		<	0.001		6.96	
	9/5/01		0.00020			0.002			0.005		<	0.005		<	0.001		<	0.001		6.98	
	9/14/01	<	0.00020			0.003			0.009		<	0.005		<	0.001		<	0.001			
	9/21/01	<	0.00020			0.005			0.012		<	0.005		<	0.001		<	0.001		6.94	
	9/24/01		0.00020			0.006			0.012		<	0.005		<	0.001		<	0.001		6.98	
	10/1/01	<	0.00020			0.006			0.01		<	0.005		<	0.001		<	0.001		7.01	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			**0.01**			**0.38**			**0.325**			**NA[6]**			**0.164**			**NA**		**6.0 - 9.0**	
ST-A Continued	10/9/01	<	0.00100			0.006			0.011		<	0.005		<	0.001		<	0.001		6.91	
	10/15/01	<	0.00100			0.008			0.011		<	0.005		<	0.001		<	0.001		6.94	
	10/22/01	<	0.00020			0.009			0.013		<	0.005		<	0.001		<	0.001		7.44	
	10/29/01		0.00050			0.014			0.013		<	0.005		<	0.001		<	0.001		7.03	
	11/5/01	<	0.00100			0.16			0.015		<	0.005		<	0.001		<	0.001		7.07	
	11/12/01	<	0.00100			0.019			0.015		<	0.005		<	0.001		<	0.001		7.51	
	11/20/01	<	0.00100			0.015			0.012		<	0.005		<	0.001		<	0.001		7.73	
	11/28/01		0.00100			0.014			0.011		<	0.005		<	0.001		<	0.001		7.30	
	12/4/01	<	0.00100			0.02			0.013		<	0.005		<	0.001		<	0.001		7.49	
	12/10/01		0.00020			0.022			0.013		<	0.005		<	0.001		<	0.001		7.44	
	12/21/01		0.00020			0.038			0.015		<	0.005		<	0.001		<	0.001		7.26	
	12/27/01		0.00030			0.046			0.015		<	0.005		<	0.001		<	0.001		7.21	
	1/2/02	<	0.00020			0.0039			0.014		<	0.005		<	0.001		<	0.001		7.20	
	1/7/02	<	0.00020			0.038			0.013		<	0.005		<	0.001		<	0.001		7.20	
	1/14/02		0.00030			0.055			0.17		<	0.005		<	0.001		<	0.001		7.14	
	1/21/02		0.00020			0.066			0.017		<	0.005		<	0.001		<	0.001		7.18	
	1/29/02		0.00030			0.066			0.017		<	0.005		<	0.001		<	0.001		7.11	
	2/4/02	<	0.00020			0.066			0.016		<	0.005		<	0.001		<	0.001		7.11	
	2/11/02	<	0.00020			0.069			0.014		<	0.005		<	0.001		<	0.001		7.15	
ST-B	2/21/02		0.07500		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		8.11	Carbon change out
	2/25/02		0.03100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.69	
	3/4/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.32	
	3/11/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.17	
	3/18/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.14	
	3/25/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.07	
	4/2/02	<	0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.09	
	4/8/02	<	0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.07	
	4/15/02		0.02200		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.08	
	4/22/02		0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.11	
	4/30/02	<	0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.92	
	5/6/02		0.04800		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.98	
	5/13/02		0.14		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.03	
	5/20/02	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.10	
	5/29/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.14	
	6/3/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.11	
	6/10/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.02	
	6/18/02		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.10	
	6/24/02		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.07	
	7/1/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.05	
	7/8/02		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.13	
	7/15/02		0.00040		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.02	
	7/23/02		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.10	
	7/29/02		0.00050		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.00	
	8/5/02		0.00050		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	8/12/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		8.16	
	8/19/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.10	
	8/26/02		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.04	
	9/3/02	<	0.00020		<	0.001			0.001		<	0.005		<	0.001		<	0.001		7.16	
	9/11/02	<	0.00020		<	0.001			0.001		<	0.005		<	0.001		<	0.001		7.04	
	9/16/02	<	0.00020		<	0.001			0.002		<	0.005		<	0.001		<	0.001		7.06	
	9/23/02	<	0.00020		<	0.001			0.003		<	0.005		<	0.001		<	0.001		6.96	
	9/30/02	<	0.00020			0.002			0.005		<	0.005		<	0.001		<	0.001		6.99	
	10/8/02	<	0.00020			0.002			0.006		<	0.005		<	0.001		<	0.001			
	10/15/02	<	0.00020			0.002			0.006		<	0.005		<	0.001		<	0.001			
	10/22/02		0.00020			0.005			0.008		<	0.005		<	0.001		<	0.001		6.77	
	10/28/02		0.00040			0.008			0.01		<	0.005		<	0.001		<	0.001		7.13	
	11/4/02		0.00060			0.009			0.011		<	0.005		<	0.001		<	0.001		7.07	
	11/13/02	<	0.00020			0.013			0.011		<	0.005		<	0.001		<	0.001		6.80	
	11/20/02		0.00030			0.017			0.011		<	0.005		<	0.001		<	0.001		6.73	
	11/25/02		0.00020			0.018			0.013		<	0.005		<	0.001		<	0.001		6.91	
	12/2/02	<	0.00020			0.02			0.014		<	0.005		<	0.001		<	0.001		6.95	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-B Continued	12/9/02	<	0.00020			0.027			0.014		<	0.005		<	0.001		<	0.001		7.20	
ST-C	12/16/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.91	Carbon change out
	12/23/02	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.22	
	1/3/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.13	
	1/6/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.04	
	1/14/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.21	
	1/22/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.43	
	1/27/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.15	
	2/3/03		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.10	
	2/11/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.22	
	2/18/03		0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.04	
	2/24/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.15	
	3/3/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.11	
	3/10/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.17	
	3/18/03		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	3/24/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.20	
	4/3/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.88	
	4/8/03	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.15	
	4/15/03		0.00060		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.12	
	4/22/03	<	0.00020		<	0.001			0.001		<	0.005		<	0.001		<	0.001		6.61	
	4/29/03	<	0.00020		<	0.001			0.001		<	0.005		<	0.001		<	0.001		7.12	
	5/5/03	<	0.00020		<	0.001			0.002		<	0.005		<	0.001		<	0.001		7 01	
	5/13/03	<	0.00020		<	0.001			0.002		<	0.005		<	0.001		<	0.001			
	5/19/03	<	0.00020		<	0.001			0.003		<	0.005		<	0.001		<	0.001		7.10	
	5/28/03	<	0.00020		<	0.001			0.003		<	0.005		<	0.001		<	0.001		7.24	
	6/2/03	<	0.00020		<	0.001			0.004		<	0.005		<	0.001		<	0.001		7.21	
	6/9/03		0.00060		<	0.001			0.004		<	0.005		<	0.001		<	0.001		6.97	
	6/17/03		0.00040		<	0.001			0.005		<	0.005		<	0.001		<	0.001		6.84	
	6/23/03		0.00030		<	0.001			0.005		<	0.005		<	0.001		<	0.001		7.06	
	6/30/03	<	0.00020		<	0.001			0.005		<	0.005		<	0.001		<	0.001		7.14	
	7/8/03	<	0.00020		<	0.001			0.005		<	0.005		<	0.001		<	0.001		7.04	
	7/14/03	<	0.00020		<	0.001			0.005		<	0.005		<	0.001		<	0.001		7.03	
	7/21/03	<	0.00020		<	0.001			0.006		<	0.005		<	0.001		<	0.001		7.14	
	7/28/03	<	0.00020			0.001			0.007		<	0.005		<	0.001		<	0.001		7.12	
	8/5/03	<	0.00020			0.003			0.008		<	0.005		<	0.001		<	0.001		6.99	
	8/11/03	<	0.00020			0.003			0.008		<	0.005		<	0.001		<	0.001		6.93	
	8/20/03	<	0.00020			0.006			0.011		<	0.005		<	0.001		<	0.001		7.10	
	8/29/03	<	0.00020			0.006			0.01		<	0.005		<	0.001		<	0.001		7.24	
	9/1/03	<	0.00020			0.006			0.01		<	0.005		<	0.001		<	0.001		8.61	
	9/8/03	<	0.0002			0.011			0.009		<	0.005		<	0.001		<	0.001		6.89	
	9/17/03	<	0.0002			0.011			0.009		<	0.005		<	0.001		<	0.001		6.95	
	9/22/03	<	0.00020			0.016			0.01		<	0.005		<	0.001		<	0.001		6.90	
	9/29/03	<	0.00020			0.017			0.01		<	0.005		<	0.001		<	0.001		6.88	
	10/6/03	<	0.00020			0.025			0.013		<	0.005		<	0.001		<	0.001		6.98	
	10/13/03	<	0.00020			0.027			0.011		<	0.005		<	0.001		<	0.001		6.92	
	10/20/03	<	0.00020			0.03			0.011		<	0.005		<	0.001		<	0.001		7.00	
	10/27/03	<	0.00020			0.033			0.01		<	0.005		<	0.001		<	0.001		7.00	
	11/3/03	<	0.00020			0.041			0.012		<	0.005		<	0.001		<	0.001		6.97	
	11/11/03		0.00030			0.036			0.01		<	0.005		<	0.001		<	0.001		6.68	
	11/17/03	<	0.00020			0.046			0.011		<	0.005		<	0.001		<	0.001		6.70	
	11/25/03	<	0.00020			0.036			0.008		<	0.005		<	0.001		<	0.001		6.95	
ST-A	12/2/03		0.00140		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.01	Carbon change out
	12/8/03		0.00170		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.04	
	12/15/03		0.00140		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.73	
	12/22/03		0.00200		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.95	
	1/1/04		0.00220		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.90	
	1/7/04		0.00150		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.97	
	1/13/04		0.00220		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.86	
	1/21/04		0.00180		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.85	
	1/27/04		0.00140		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.90	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			**0.01**			**0.38**			**0.325**			**NA[6]**			**0.164**			**NA**		**6.0 - 9.0**	
ST-A Continued	2/4/04		0.00170		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.88	
	2/10/04		0.00140		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.89	
	2/17/04		0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.87	
	2/23/04		0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.88	
	3/1/04		0.00080		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.88	
	3/8/04		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.10	
	3/19/04	<	0.00020			0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.32	
	3/22/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.74	
	4/2/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.87	
	4/5/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.18	
	4/12/04		0.00060		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.00	
	4/20/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.72	
	5/5/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.68	
	5/10/04		0.00040		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.56	
	5/20/04		0.00030		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.83	
	5/24/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.15	
	6/1/04	<	0.00020		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.82	
	6/8/04		0.00050		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.80	
	6/14/04		0.00070		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.67	
	6/22/04		0.00070		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.87	
	6/30/04		0.00130		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.77	
	7/7/04		0.00140		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.92	
	7/13/04		0.00060		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.00	
	7/22/04		0.00100		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.70	
	7/27/04		0.00060		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.86	
	8/2/04		0.00100		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.89	
	8/10/04		0.00120		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.73	
	8/18/04		0.00150		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.68	
	8/25/04		0.00150		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.60	
	9/3/04		0.00120		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.78	
	9/8/04		0.00140		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.79	
	9/13/04		0.00040		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.82	
	9/20/04		0.00070		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.80	
	9/27/04		0.00120		<	0.001			0.002		<	0.005		<	0.001		<	0.001		6.88	
	10/6/04		0.00170			0.001			0.002		<	0.005		<	0.001		<	0.001		6.83	
	10/11/04		0.00100			0.001			0.002		<	0.005		<	0.001		<	0.001		7.02	
	10/21/04		0.00050			0.001			0.002		<	0.005		<	0.001		<	0.001		6.79	
	10/26/04	<	0.00020		<	0.005		<	0.005		<	0.05		<	0.005		<	0.005		6.73	
	11/1/04		0.00210			0.001			0.002		<	0.005		<	0.001		<	0.001		6.77	
	11/8/04		0.00120			0.002			0.003		<	0.005		<	0.001		<	0.001		6.71	
	11/15/04		0.00160			0.003			0.004		<	0.005		<	0.001		<	0.001		6.52	
	11/22/04		0.00160			0.004			0.003		<	0.005		<	0.001		<	0.001		7.03	
ST-B	11/29/04		0.00130		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.35	Carbon change out
	12/8/04		0.00070		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.80	
	12/13/04		0.00090		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.13	
	12/20/04		0.00130		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.95	
	12/28/04		0.00080		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.87	
	1/3/05		0.0022		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.69	
	1/11/05		0.003		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		8.66	
	1/17/05		0.0003		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.73	
	1/25/05		0.0005		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.14	
	2/1/05		0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.60	
	2/9/05		0.0003		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.00	
	2/14/05		0.0002		<	0.005		<	0.005		<	0.005		<	0.005		<	0.005		6.94	
	2/21/05		0.0004		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.91	
	2/28/05		0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.98	
	3/7/05		0.00028		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.08	
	3/14/05	B	0.00013		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.05	
	3/21/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.84	
	3/29/05		0.00029		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		7.15	
	4/5/05		0.00023		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001		6.87	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																				pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE					
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG			
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA				6.0 - 9.0	
ST-B Continued	4/11/05		0.00033		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.84	
	4/19/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.72	
	4/27/05	B	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.12	
	5/2/05	B	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.14	
	5/9/05		0.00051		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.90	
	5/16/05	B	0.00026		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.71	
	5/24/05		0.00051		<	0.001		J	0.0002		<	0.005		<	0.001		<	0.001				6.83	
	5/30/05		0.00074		<	0.001		J	0.0002		<	0.005		<	0.001		<	0.001				6.83	
	6/6/05		0.00035		<	0.001		J	0.0004		<	0.005		<	0.001		<	0.001				6.88	
	6/13/05	<	0.0002	B	<	0.001		J	0.0004		<	0.005		<	0.001		<	0.001				7.00	
	6/23/05	<	0.0002		<	0.001		J	0.0003		<	0.005		<	0.001		<	0.001				6.40	
	6/27/05		0.0005		J	0.0002		J	0.0006		<	0.005		<	0.001		<	0.001				7.82	
ST-C	7/7/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.40	Carbon change out 6/29/05
	7/11/05		0.00032		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				8.07	
	7/18/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.82	
	7/25/05		0.00037		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.85	
	8/2/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.82	
	8/9/05	B	0.00014		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.36	
	8/15/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.68	
	8/23/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.89	
	8/29/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.80	
	9/6/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.90	
	9/13/05		0.00065		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.77	
	9/20/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.59	
	9/30/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.76	
	10/4/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.91	
	10/12/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.68	
	10/17/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.77	
	10/25/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.78	
	11/2/05	B	0.00011		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.79	
	11/9/05	B	0.00018		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.56	
	11/14/05		0.0004		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.82	
	11/23/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.77	
	11/29/05	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.68	
	12/5/05	<	0.0001		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.55	
	12/16/05	<	0.0001		<	0.001		<	0.001		J	0.0005		<	0.001		<	0.001				6.75	
	12/19/05	<	0.0001		<	0.001		<	0.001		J	0.0002		<	0.001		<	0.001				7.60	
	12/28/05	<	0.0001	Y	<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				7.60	
	1/5/06	B	0.0001		<	0.001		<	0.001		J	0.0002		<	0.001		<	0.001				6.63	
	1/10/06	B	0.0001		<	0.001		<	0.001		J	0.0003		<	0.001		<	0.001				6.68	
	1/17/06		0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.82	
	1/25/06	B	0.00017		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.89	
	1/31/06		0.00024		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.79	
	2/6/06	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.85	
	2/13/06	<	0.0002		<	0.001		<	0.001		<	0.005		<	0.001		<	0.001				6.78	
	2/24/06	J	0.00019		<	0.0002		<	0.0002		<	0.0002		<	0.0002		<	0.0002				6.42	
	2/27/06	<	0.0001		<	0.0002		<	0.0002		<	0.0002		<	0.0002		<	0.0002				7.36	
	3/6/06	<	0.0001		H, <	0.0001		H, <	0.0002		H, <	0.0002		H, <	0.0002		H, <	0.0002				6.75	
	3/13/06		0.00057		<	0.0002		<	0.0002		<	0.0002		<	0.0002		<	0.0002				6.77	
	3/20/06		0.00032		<	0.0002		<	0.0002		<	0.0002		<	0.0002		<	0.0002				7.00	
	3/27/06	<	0.0001		<	0.0002		<	0.0002		<	0.0002		<	0.0002		<	0.0002				6.66	
	4/3/06	J	0.00018		<	0.0002		<	0.0002		<	0.0002		<	0.0002		<	0.0002				7.23	
	4/11/06	<	0.00013		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.86	
	4/18/06	<	0.00013		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.40	
	4/25/06	<	0.00013		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.76	
	5/3/06	<	0.00013		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.30	
	5/11/06		0.00052		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.86	
	5/17/06		0.00038		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.82	
	5/22/06	<	0.00013		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				7.06	
	5/30/06	J	0.00015		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				6.95	
	6/5/06	<	0.00013		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032				7.14	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-C Continued	6/12/06	B	0.00038		<	0.00025		J	0.00026		<	0.00053		<	0.0002		<	0.00032		6.81	
	6/23/06	J	0.00016		<	0.00025		J	0.00039		<	0.00053		<	0.0002		<	0.00032		6.97	
	6/27/06	J	0.00018		<	0.00025		<	0.0002		<	0.00053		<	0.0002		<	0.00032		7.24	
	7/6/06	<	0.00013		<	0.00025		J	0.00048		<	0.00053		<	0.0002		<	0.00032		6.96	
	7/11/06	<	0.00013		<	0.00025		J	0.00053		<	0.00053		<	0.0002		<	0.00032		6.96	
	7/17/06	<	0.00013		<	0.00025			0.001		<	0.00053		<	0.0002		<	0.00032		7.01	
	7/24/06	B	0.00028		<	0.00025			0.001		<	0.00053		<	0.0002		<	0.00032		6.81	
	7/31/06		0.00026		J	0.00031			0.0017		<	0.00053		<	0.0002		<	0.00032		6.90	
	8/7/06		0.00022		J	0.00042			0.0017		<	0.00053		<	0.0002		<	0.00032		6.98	
	8/16/06	<	0.00013		J	0.0007			0.0024		<	0.00053		<	0.0002		<	0.00032		6.64	
	8/23/06	J	0.00018		J	0.00069			0.0026		<	0.00053		<	0.0002		<	0.00032		6.80	
	8/29/06	<	0.00013		J	0.00088			0.0029		<	0.00053		<	0.0002		<	0.00032		6.73	
	9/6/06	J	0.00017		J	0.00057			0.0022		<	0.00053		<	0.0002		<	0.00032		6.77	
	9/13/06	J	0.00017		J	0.00095			0.0027		<	0.00053		<	0.0002		<	0.00032		6.58	
	9/18/06	<	0.00013			0.001			0.0033		<	0.00053		<	0.0002		<	0.00032		6.94	
	9/26/06	<	0.00013			0.0015			0.0038		<	0.00053		<	0.0002		<	0.00032		6.88	
	10/3/06	<	0.00013			0.0017			0.0037		<	0.00053		<	0.0002		<	0.00032		6.78	
	10/9/06		0.00046			0.0015			0.0031		<	0.00053		<	0.0002		<	0.00032		6.88	
	10/17/06		0.00022		J	0.00084			0.0026		<	0.00053		<	0.0002		<	0.00032		6.58	
	10/24/06		0.00026			0.0013			0.0038		<	0.00053		<	0.0002		<	0.00032		7.06	
	11/2/06		0.00024			0.0016			0.0036		<	0.00053		<	0.0002		<	0.00032		6.67	
	11/8/06	<	0.00013			0.0015			0.004		<	0.00053		<	0.0002		<	0.00032		7.04	
	11/15/06	<	0.00013			0.0014		B	0.0035		<	0.00053		<	0.0002		<	0.00032		6.78	
	11/21/06	<	0.00013			0.0016			0.0031		<	0.00053		<	0.0002		<	0.00032		7.00	
	11/27/06		0.00034			0.0019			0.0039		<	0.00053		<	0.0002		<	0.00032		7.26	
	12/5/06		0.00071			0.0021			0.0034		<	0.00053		<	0.0002		<	0.00032		6.67	
	12/14/06	<	0.00013			0.0027			0.0037		<	0.00053		<	0.0002		<	0.00032		6.93	
	12/20/06		0.00022			0.0032			0.0034		<	0.00053		<	0.0002		<	0.00032		7.08	
	12/27/06		0.00051			0.0029			0.003		<	0.00053		<	0.0002		<	0.00032		7.04	
	1/2/07	<	0.00013			0.0026			0.0026		<	0.00053		<	0.0002		<	0.00032		6.70	
	1/11/07	<	0.00013			0.0029			0.003		<	0.00053		<	0.0002		<	0.00032		6.88	
	1/18/07	J	0.00016			0.0023			0.0022		<	0.00053		<	0.0002		<	0.00032		6.40	
	1/25/07		0.00023			0.0026			0.0025		<	0.00053		<	0.0002		<	0.00032		6.58	
	2/1/07	<	0.00013			0.0023			0.0023		<	0.00053		<	0.0002		<	0.00032		6.63	
	2/8/07		0.00025			0.003			0.0028		<	0.00053		<	0.0002		<	0.00032		6.70	
	2/13/07		0.00023			0.0026			0.0023		<	0.00053		<	0.0002		<	0.00032		6.90	
	2/20/07		0.00035			0.0045			0.0032		<	0.00053		<	0.0002		<	0.00032		6.96	
	3/1/07	<	0.00013			0.0036			0.0029		<	0.00053		<	0.0002		<	0.00032		6.65	
	3/8/07	<	0.00013			0.0039			0.0032		<	0.00053		<	0.0002		<	0.00032		6.58	
	3/16/07	<	0.00013			0.003			0.0027		<	0.00053		<	0.0002		<	0.00032		6.61	
	3/19/07	<	0.00013			0.0034			0.0032		<	0.00053		<	0.0002		<	0.00032		6.56	
	3/27/07	<	0.00013			0.0026			0.0026		<	0.00053		<	0.0002		<	0.00032		6.86	
	4/3/07	<	0.00013			0.0045			0.0031		<	0.00053		<	0.0002		<	0.00032		6.40	
	4/12/07	<	0.00013			0.0036			0.0025		<	0.00053		<	0.0002		<	0.00032		6.36	
	4/19/07	<	0.00013			0.0042			0.0024		<	0.00053		<	0.0002		<	0.00032		6.29	
	4/24/07	J	0.00013			0.005			0.0031		<	0.00053		<	0.0002		<	0.00032		6.30	
	5/1/07	<	0.00013			0.0051			0.0026		<	0.00053		<	0.0002		<	0.00032		6.80	
	5/10/07	<	0.00013			0.0032			0.0025		<	0.00053		<	0.0002		<	0.00032		6.63	
	5/18/07	<	0.00013			0.0032			0.0023		<	0.00053		<	0.0002		<	0.00032		6.50	
	5/25/07	B	0.00033			0.0038			0.0029		<	0.00053		<	0.0002		<	0.00032		5.49	
	5/31/07	B	0.00073			0.0047			0.0022		<	0.00053		<	0.0002		<	0.00032		6.51	
	6/6/07		0.00031			0.0039			0.0021		<	0.00053		<	0.0002		<	0.00032		6.32	
	6/15/07		0.00038			0.0058			0.0022		<	0.00053		<	0.0002		<	0.00032		6.19	
	6/21/07		0.00038			0.0066			0.0024		<	0.00053		<	0.0002		<	0.00032		6.90	
	6/25/07	<	0.00013			0.0056			0.0025		<	0.00053		<	0.0002		<	0.00032		6.87	
	7/6/07		0.00027			0.0053			0.0019		<	0.00053		<	0.0002		<	0.00032		6.88	
	7/11/07		0.0002			0.0055			0.0021		<	0.00053		<	0.0002		<	0.00032		6.89	
ST-A	7/20/07		0.00096		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		7.32	Carbon change out 7/16/07
	7/23/07		0.00027		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.82	
	7/30/07		0.00027		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		7.38	
	8/6/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.48	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-A Continued	8/13/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.93	
	8/20/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.38	
	8/29/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.93	
	9/5/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.92	
	9/12/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.93	
	9/20/07	J	0.00019		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.19	
	9/26/07		0.00021		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.78	
	10/1/07	J	0.00014		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.78	
	10/10/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.78	
	10/18/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.78	
	10/25/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.97	
	10/29/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.65	
	11/7/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.20	
	11/16/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		5.98	
	11/19/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.81	
	11/29/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.28	
	12/3/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.30	
	12/11/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.38	
	12/17/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.66	
	12/26/07	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.38	
	1/3/08	J	0.0014		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.99	
	1/9/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.20	
	1/14/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.35	
	1/23/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.43	
	2/1/08		0.00027		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.22	
	2/7/08		0.00023		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.47	
	2/13/08		0.00031	B	<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.22	
	2/22/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032			
	2/27/08		0.00024		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		5.68	
	3/5/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		7.47	
	3/11/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.38	
	3/20/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.33	
	3/26/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.60	
	4/4/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.68	
	4/10/08	J	0.00017		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.65	
	4/18/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.49	
	4/24/08		0.00027		<	0.00025		<	0.0002		<	0.001		J,B	0.00089		<	0.00032		6.32	
	4/28/08		0.00022		<	0.00025		<	0.0002		<	0.001		J,B	0.00049		<	0.00032		6.33	
	5/8/08		0.00021		<	0.00025		J	0.00038		<	0.001		<	0.0002		<	0.00032		6.56	
	5/15/08	J	0.00019		<	0.00025		J	0.00048		<	0.001		<	0.0002		<	0.00032		6.35	
	5/22/08		0.00021		<	0.00025		J	0.00061		<	0.001		<	0.0002		<	0.00032		6.19	
	5/28/08	<	0.00013		<	0.00025		J	0.00071		<	0.001		<	0.0002		<	0.00032		6.05	
	6/4/08	<	0.00013		<	0.00025		<	0.0002		<	0.001		<	0.0002		<	0.00032		6.96	
	6/11/08	<	0.00013		<	0.00025		J	0.00097		<	0.001		<	0.0002		<	0.00032		6.88	
	6/20/08	<	0.00013		<	0.00025			0.0011		<	0.001		<	0.0002		<	0.00032		6.88	
	6/27/08		0.00049		<	0.00025			0.0012		<	0.001		<	0.0002		<	0.00032		6.76	
	7/2/08	<	0.00013		<	0.00025			0.0013		<	0.001		<	0.0002		<	0.00032		6.75	
	7/8/08	J	0.00016		<	0.00025			0.0013		<	0.002		<	0.0002		<	0.00032		6.75	
	7/14/08		0.00033		<	0.00025			0.0014		<	0.002		<	0.0002		<	0.00032		7.07	
	7/22/08	J	0.00016		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.88	
	7/31/08	<	0.00013			0.0011			0.0016		<	0.002		<	0.0002		<	0.00032		6.74	
	8/4/08		0.00021		J	0.00083			0.0021		<	0.002		<	0.0002		<	0.00032		6.74	
	8/11/08	<	0.00013			0.0011			0.0019		<	0.002		<	0.0002		<	0.00032		6.34	
	8/21/08		0.00026			0.0018			0.002		<	0.002		<	0.0002		<	0.00032		6.74	
	8/25/08		0.00028			0.0036			0.0018		<	0.002		<	0.0002		<	0.00032		6.55	
	9/4/08		0.00051			0.033			0.0033		<	0.002		<	0.0002		<	0.00032		6.77	
	9/8/08		0.00038			0.057			0.005		<	0.002		<	0.0002		<	0.00032		6.74	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																			pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			**0.01**			**0.38**			**0.325**			**NA[6]**			**0.164**			**NA**		**6.0 - 9.0**	
ST-A Continued	9/19/08	<	0.00013			0.065			0.0071		<	0.002		<	0.0002		<	0.00032		6.67	
	9/25/08	<	0.00013			0.09			0.0089		<	0.002		<	0.0002		<	0.00032		6.93	
ST-B	10/3/08		0.00072			0.0017		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.64	Carbon change out 10/2/08
	10/9/08		0.00086		J	0.00096		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.64	
	10/13/08		0.00091		J	0.00059		<	0.0002		<	0.002		<	0.0002		<	0.00032		7.01	
	10/22/08		0.00071		J	0.00062		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.95	
	10/27/08		0.00093		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.95	
	11/6/08		0.00048		J	0.0007		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.93	
	11/14/08		0.00038		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.44	
	11/21/08		0.00027		J	0.00043		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.93	
	11/26/08		0.00055		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.66	
	12/3/08		0.00032		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.77	
	12/11/08		0.00029		J	0.00044		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.60	
	12/19/08		0.00025		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.90	
	12/22/08		0.00033		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		7.01	
	12/31/08		0.00022		<	0.00025		<	0.0002		<	0.002		<	0.0002		<	0.00032		6.84	
	1/7/09		0.000419		U	0.0005		U	0.0005		J	0.00076		U	0.0006		U	0.0005		6.70	ALS Laboratory Group (2009)
	1/13/09		0.00026		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.97	
	1/23/09		0.00119		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.97	
	1/29/09		0.000288		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.07	
	2/4/09		0.000282		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.04	
	2/10/09	J	0.00009		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.72	
	2/19/09	J	0.000091		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.59	
	2/26/09	J	0.000079		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.98	
	3/4/09	J	0.0016		J	0.0017		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.77	
	3/10/09	J	0.00012		J	0.0022		J	0.00069		U	0.0005		U	0.0006		U	0.0005		6.90	
	3/19/09	J	0.000057		J	0.0025		J	0.00079		U	0.0005		U	0.0006		U	0.0005		6.60	
	3/26/09	J	0.000191		U	0.0005		J	0.0013		U	0.0005		U	0.0006		U	0.0005		6.65	
	4/2/09		0.000213			0.0072		J	0.0018		U	0.0005		U	0.0006		U	0.0005		7.11	
	4/7/09	J	0.000196			0.0074		J	0.0018		U	0.0005		U	0.0006		U	0.0005		6.61	
	4/17/09	J	0.000155			0.0099		J	0.0024		U	0.0005		U	0.0006		U	0.0005		6.75	
	4/23/09		0.00021			0.014		J	0.0031		U	0.0005		U	0.0006		U	0.0005		6.67	
	5/1/09	J	0.000045			0.012		J	0.0032		U	0.0005		U	0.0006		U	0.0005		6.72	
	5/5/09	J	0.000151			0.015		J	0.0034		U	0.0005		U	0.0006		U	0.0005		7.18	
	5/15/09	J	0.00017			0.019		J	0.0044		U	0.0005		U	0.0006		U	0.0005		6.90	
	5/21/09		0.000357			0.023		J	0.0041		U	0.0005		U	0.0006		U	0.0005		7.16	
	5/29/09		0.000266			0.018		J	0.0044		U	0.0005		U	0.0006		U	0.0005		7.01	
	6/1/09		0.000251			0.025			0.0051		U	0.0005		U	0.0006		U	0.0005		6.98	
	6/8/09		0.000379			0.031			0.0056		U	0.0005		U	0.0006		U	0.0005		6.87	
	6/18/09		0.000284			0.03			0.0059		U	0.0005		J	0.00065		U	0.0005		7.13	
	6/22/09		0.000222			0.03			0.0059		U	0.0005		U	0.0006		U	0.0005		7.20	
ST-C	7/3/09	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.94	
	7/9/09	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.40	
	7/15/09	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.95	
	7/22/09	J	0.000074		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.93	
	7/31/09	J	0.000065		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.05	
	8/7/09	J	0.000074		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.03	
	8/13/09	J	0.000082		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.59	
	8/20/09	J	0.000096		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.38	
	8/26/09	J	0.000094		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.40	
	9/3/09	J	0.000111		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.18	
	9/11/09	J	0.00014		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.09	
	9/15/09	J	0.000158		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.20	
	9/25/09	J	0.000126		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.36	
	10/1/09	J	0.000127		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.93	
	10/6/09	J	0.000188		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.76	
	10/16/09	J	0.000096		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.90	
	10/22/09	J	0.00014		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.04	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-C Continued	10/28/09	J	0.000176		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.99	
	11/4/09	J	0.000156		J	0.0027		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.00	
	11/10/09	J	0.000106		U	0.0005		J	0.0005		U	0.0005		U	0.0006		U	0.0005		7.09	
	11/16/09	J	0.000122		U	0.0005		J	0.00061		U	0.0005		U	0.0006		U	0.0005		6.99	
	11/24/09	J	0.000132		U	0.0005		J	0.00065		U	0.0005		U	0.0006		U	0.0005		7.05	
	11/30/09	J	0.000165		J	0.0027		J	0.00091		U	0.0005		U	0.0006		U	0.0005		6.97	
	12/8/09	J	0.00014		J	0.0015		J	0.0011		U	0.0005		U	0.0006		U	0.0005		7.04	
	12/15/09	J	0.00014		U	0.005		J	0.0013		U	0.0005		U	0.0006		U	0.0005		7.05	
	12/21/09	J	0.000096			0.0052		J	0.0014		U	0.0005		U	0.0006		U	0.0005		6.97	
	12/28/09	J	0.000165		J	0.0045		J	0.0016		U	0.0005		U	0.0006		U	0.0005		7.17	
	1/5/10	J	0.000096			0.0063		J	0.0017		U	0.0005		U	0.0006		U	0.0005		7.08	
	1/12/10	J	0.000131			0.0116		J	0.0046		J	0.002		U	0.0006		U	0.0005		6.42	
	1/19/10	J	0.000131			0.0069		J	0.0026		U	0.0005		U	0.0006		U	0.0005		6.18	
	1/25/10	J	0.000092		J	0.0039		J	0.0018		U	0.0005		U	0.0006		U	0.0005		6.38	
	2/1/10	J	0.000139			0.013		J	0.0037		U	0.0005		U	0.0006		U	0.0005		7.73	
	2/11/10	J	0.000141			0.033			0.0076		U	0.0005		U	0.0006		U	0.0005		6.60	
	2/17/10	J	0.000144			0.036			0.0082		U	0.0005		U	0.0006		U	0.0005		7.32	
	2/22/10	J	0.000108			0.032			0.0089		U	0.0005		U	0.0006		U	0.0005		6.77	
	3/2/10	J	0.000145			0.038			0.0083		U	0.0005		U	0.0006		U	0.0005		7.03	
	3/10/10	J	0.00016			0.044			0.009		U	0.0005		U	0.0006		U	0.0005		6.39	
ST-A	3/17/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		8.14	Carbon change out
	3/22/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		8.46	
	3/31/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.03	
	4/6/10	J	0.000084		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.20	
	4/12/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.63	
	4/22/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.44	
	4/28/10	J	0.000083		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.87	
	5/4/10	J	0.000043		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.62	
	5/10/10	J	0.000081		U	0.0005		J	0.00078		U	0.0005		U	0.0006		U	0.0005		6.75	
	5/20/10	U	0.000042		U	0.0005		J	0.0014		J	0.00077		U	0.0006		U	0.0005		6.58	
	5/24/10	J	0.000149		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.76	
	6/2/10	U	0.000042		U	0.0005		J	0.0017		U	0.0005		U	0.0006		U	0.0005		7.02	
	6/7/10	J	0.000066		J	0.0043		J	0.0019		U	0.0005		U	0.0006		U	0.0005		7.00	
	6/14/10	J	0.000088		J	0.0011		J	0.0021		U	0.0005		U	0.0006		U	0.0005		7.28	
	6/23/10	J	0.000159		J	0.0025		J	0.0032		U	0.0005		U	0.0006		U	0.0005		6.71	
	7/1/10	U	0.000042		J	0.0032		J	0.0044		U	0.0005		U	0.0006		U	0.0005		6.51	
	7/6/10	J	0.000049			0.066		J	0.0042		U	0.0005		U	0.0006		U	0.0005		6.48	
	7/12/10	U	0.000042			0.0061			0.0055		U	0.0005		U	0.0006		U	0.0005		6.99	
	7/22/10	J	0.000092			0.0084			0.007		U	0.0005		U	0.0006		U	0.0005		7.64	
	7/26/10	J	0.000069			0.0085			0.0071		U	0.0005		U	0.0006		U	0.0005		7.61	
	8/2/10	J	0.000069			0.015			0.0076		U	0.0005		U	0.0006		U	0.0005		7.40	
	8/12/10	U	0.000042			0.012			0.0081		U	0.0005		U	0.0006		U	0.0005		6.39	
	8/18/10	J	0.000078			0.016			0.0082		U	0.0005		U	0.0006		U	0.0005		6.51	
	8/23/10	J	0.00008			0.021			0.0096		U	0.0005		U	0.0006		U	0.0005		6.79	
	8/30/10	J	0.000075			0.02			0.0096		U	0.0005		U	0.0006		U	0.0005		6.85	
	9/8/10	U	0.000042			0.021			0.0092		U	0.0005		U	0.0006		U	0.0005		6.34	Carbon change out 9/10/10
ST-C	9/14/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		8.53	
	9/20/10	J	0.000043		U	0.0005		U	0.0005		U	0.0005		J	0.0011		U	0.0005		7.37	
	9/27/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		8.12	
	10/4/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.15	
	10/12/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.13	
	10/18/10		0.000439		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.18	
	10/28/10	J	0.000043		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.86	
	11/4/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.62	
	11/8/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.15	
	11/15/10	J	0.000048		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.43	
	11/23/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.33	
	11/29/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.96	
	12/6/10	J	0.000043		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		7.11	
	12/14/10	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.83	
	12/21/10	J	0.000075		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.88	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																				pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE					
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG			
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			**0.01**			**0.38**			**0.325**			**NA[6]**			**0.164**			**NA**				**6.0 - 9.0**	
ST-C Continued	12/28/10	J	0.000061		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				4.78	
	1/3/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.16	
	1/13/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				6.86	
	1/17/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.78	
	1/24/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.53	
	1/31/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.51	
	2/7/11	J	0.000058		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				6.58	
	2/14/11	J	0.000052		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.63	
	2/24/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.79	
	3/1/11	J	0.000057		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				8.36	
	3/11/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.80	
	3/18/11	J	0.000060		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.66	
	3/25/11	J	0.000054		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.10	
	4/1/11	J	0.000084		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				8.22	
	4/6/11	J	0.000055		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				8.44	
	4/13/11	U	0.000042		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				8.36	
	4/19/11	J	0.000055		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				8.07	
	4/25/11	J	0.000076		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				8.04	
	5/3/11	J	0.000049		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				7.18	
	5/13/11	J	0.000045		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				6.73	
	5/20/11	J	0.000048		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				6.75	
	5/26/11	J	0.000047		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005				6.81	
	6/2/11	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.02	
	6/8/11	J	0.000060		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.60	
	6/16/11	J	0.000079		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.43	
	6/22/11	J	0.000084		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.23	
	6/30/11	J	0.000104		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.32	
	7/7/11	J	0.000078		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.50	
	7/11/11	J	0.000126		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.25	
	7/22/11	J	0.000092		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.38	
	7/29/11	J	0.000101		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.38	
	8/4/11	J	0.000079		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.27	
	8/8/11	J	0.000082		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.34	
	8/19/11	J	0.000104		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.14	
	8/25/11	J	0.000108		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.39	
	9/1/11	J	0.000077		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.17	
	9/6/11	J	0.000102		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.00	
	9/12/11	J	0.000110		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				6.82	
	9/19/11		0.00195		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.26	
	9/26/11	J	0.000049		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				6.99	
	10/3/11	J	0.000084		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.22	
	10/10/11	J	0.000051		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.24	
	10/17/11	J	0.000091		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.20	
	10/27/11	J	0.001100		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011				7.18	
	11/4/11	U	0.000042		U	0.0018		J	0.0015		U	0.0013		U	0.0017		U	0.0011				6.58	
	11/11/11	J	0.000084		U	0.0018		J	0.0013		U	0.0013		U	0.0017		U	0.0011				6.85	
	11/16/11	J	0.000071		U	0.0018		J	0.0016		U	0.0013		U	0.0017		U	0.0011				6.50	
	11/20/11	J	0.000063		U	0.0018		J	0.0017		U	0.0013		U	0.0017		U	0.0011				6.35	
	12/2/11	U	0.000042		U	0.0018		J	0.0014		U	0.0013		U	0.0017		U	0.0011				6.58	
	12/9/11	J	0.000052		U	0.0018		J	0.0014		U	0.0013		U	0.0017		U	0.0011				6.58	
	12/16/11		0.001480		U	0.0018		J	0.0015		U	0.0013		U	0.0017		U	0.0011				6.42	
	12/20/11	J	0.000048		U	0.0018		J	0.0016		U	0.0013		U	0.0017		U	0.0011				6.64	
	12/30/11	J	0.000046		U	0.0018		J	0.0013		U	0.0013		U	0.0017		U	0.0011				7.25	
	1/5/12	J	0.000113		U	0.0018		J	0.0012		U	0.0013		U	0.0017		U	0.0011				7.02	
	1/12/12	J	0.000097		U	0.0018		J	0.0010		U	0.0013		U	0.0017		U	0.0011				6.90	
	1/17/12	J	0.000150		U	0.0018		J	0.0016		U	0.0013		U	0.0017		U	0.0011				7.39	
	1/23/12	J	0.000094		U	0.0018		J	0.0015		U	0.0013		U	0.0017		U	0.0011				7.20	
	2/1/12	J	0.000138		U	0.0018		J	0.0022		U	0.0013		U	0.0017		U	0.0011				7.48	
	2/6/12	J	0.000063			0.0400		J	0.0150		U	0.0013		U	0.0017		U	0.0011				8.66	
	2/15/12	J	0.000180			0.0240		J	0.0049		U	0.0013		U	0.0017		U	0.0011				7.41	
	2/22/12	J	0.000169			0.0390			0.0063		U	0.0013		U	0.0017		U	0.0011				7.65	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																			pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-C Continued	2/27/12	J	0.000152			0.0540			0.0068		U	0.0013		U	0.0017		U	0.0011		7.14	
ST-A	3/9/12	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011		7.20	Carbon change out 3/8/12
	3/12/12	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011		7.30	
	3/23/12	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011		7.41	
	3/28/12	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011		7.32	
	4/4/12	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011		6.82	
	4/12/12	U	0.000042		U	0.0018		U	0.0010		U	0.0013		U	0.0017		U	0.0011		6.69	
ST-B	4/17/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.74	Carbon change out 4/16/12
	4/25/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.96	
	5/2/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.68	
	5/10/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.79	
	5/18/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.68	
	5/25/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.64	
	5/31/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.26	
	6/6/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.23	
	6/11/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.62	
	6/18/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.71	
	6/27/12	U	0.000042		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.54	
	7/2/12	J	0.000059		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		6.64	
	7/13/12	J	0.000048		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.62	
	7/20/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.46	
	7/24/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.62	
	8/2/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.53	
	8/10/12	See Note 8 below			U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.43	
	8/15/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.43	
	8/23/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.28	
	8/29/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		7.27	
	9/7/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		7.27	
	9/13/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		7.88	
	9/21/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.36	
	9/28/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.72	
	10/3/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.35	
	10/10/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.05	
	10/18/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.16	
	10/26/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.21	
	11/2/12	J	0.000056		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.15	
	11/8/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.46	
	11/15/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.67	
	11/19/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.51	
	11/29/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		7.33	
	12/6/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		7.00	
	12/13/12	J	0.000052		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.59	
	12/19/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.14	
	12/28/12	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.18	
	1/3/13	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.56	
	1/10/13	J	0.000052		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.44	
	1/14/13	J	0.000046		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.38	
	1/25/13	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.21	
	2/1/13	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.25	
	2/5/13	J	0.000044		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.28	
	2/11/13	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.44	
	2/18/13	J	0.000046		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.24	
	2/24/13	U	0.000042		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.45	
	3/7/13	J	0.000044		U	0.001		J	0.0013		U	0.001		U	0.001		U	0.001		6.41	
	3/15/13	J	0.000044		U	0.001		J	0.0020		U	0.001		U	0.001		U	0.001		6.36	
	3/21/13	J	0.000068		U	0.001		J	0.0023		U	0.001		U	0.001		U	0.001		7.15	
	3/27/13	J	0.000056		U	0.001		J	0.0022		U	0.001		U	0.001		U	0.001		8.08	
	4/4/13	U	0.000042		U	0.001		J	0.0033		U	0.001		U	0.001		U	0.001		7.80	
	4/11/13	U	0.000042		U	0.001		J	0.0028		U	0.001		U	0.001		U	0.001		7.29	
	4/17/13	J	0.000086		U	0.001		J	0.0039		U	0.001		U	0.001		U	0.001		7.17	
	4/26/13	J	0.000046		U	0.001		J	0.0045		U	0.001		U	0.001		U	0.001		7.15	

TABLE 3.1-1
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
TREATMENT SYSTEM EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
TREATED GROUNDWATER DISCHARGE STANDARDS (mg/L)[5]			0.01			0.38			0.325			NA[6]			0.164			NA		6.0 - 9.0	
ST-B Continued	5/2/13	J	0.000118		U	0.001		J	0.0046		U	0.001		U	0.001		U	0.001		7.16	
	5/9/13	J	0.000047		U	0.001		J	0.0049		U	0.001		U	0.001		U	0.001		7.15	
	5/15/13	U	0.000042		U	0.001		J	0.0045		U	0.001		U	0.001		U	0.001		7.20	
	5/23/13	U	0.000042		J	0.0012		J	0.0047		U	0.001		U	0.001		U	0.001		6.90	
	5/28/13	U	0.000042		J	0.0015		J	0.0044		U	0.001		U	0.001		U	0.001		7.13	
	6/4/13	U	0.000042		J	0.0021		J	0.0042		U	0.001		U	0.001		U	0.001		7.19	
	6/11/13	J	0.000073		J	0.0025		J	0.0037		U	0.001		U	0.001		U	0.001		7.05	
	6/19/13	J	0.000075		J	0.0032		J	0.0042		U	0.001		U	0.001		U	0.001		7.68	
	6/24/13	J	0.000074		J	0.0032		J	0.0040		U	0.001		U	0.001		U	0.001		7.15	
	7/2/13	J	0.000061		J	0.0034		J	0.0039		U	0.001		U	0.001		U	0.001		7.30	
	7/10/13	J	0.000043		J	0.0041		J	0.0037		U	0.001		U	0.001		U	0.001		6.91	
	7/16/13	J	0.000091		J	0.0048		J	0.0037		U	0.001		U	0.001		U	0.001		6.87	
	7/23/13	J	0.000061		J	0.0061		J	0.0039		U	0.001		U	0.001		U	0.001		6.81	
	8/2/13	U	0.000040		J	0.0065		J	0.0041		U	0.001		U	0.001		U	0.001		6.83	
	8/6/13	J	0.000086			0.0078		J	0.0045		U	0.001		U	0.001		U	0.001		6.68	
	8/15/13	J	0.000075			0.0086		J	0.0037		U	0.001		U	0.001		U	0.001		6.76	
	8/22/13	J	0.000074			0.0083		J	0.0042		U	0.001		U	0.001		U	0.001		6.79	
	8/26/13	J	0.000093			0.0082		J	0.0041		U	0.001		U	0.001		U	0.001		6.81	
	9/5/13	J	0.000092			0.011		J	0.0043		U	0.001		U	0.001		U	0.001		6.74	
	9/13/13	J	0.000072			0.014		J	0.0039		U	0.001		U	0.001		U	0.001		6.70	
ST-C	9/20/13	J	0.000086		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.84	Carbon change out 9/16/13
	9/26/13	J	0.000053		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.77	
	10/1/13	U	0.00004		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.61	
	10/7/13	U	0.00004		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.67	
	10/17/13	U	0.00004		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.43	
	10/25/13	J	0.000076		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.56	
	10/31/13	J	0.000059		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.39	
	11/7/13	J	0.000095		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.48	
	11/15/13	J	0.000105		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.44	
	11/18/13	J	0.00006		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.42	
	11/25/13	J	0.000057		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.39	
	12/5/13	J	0.000069		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.40	
	12/13/13	J	0.00004		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.43	
	12/17/13	J	0.000054		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.44	
	12/23/13	J	0.000052		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		6.41	

NOTES:
1) mg/L - milligrams per liter
2) Grey cells indicate analyses not requested
3) Q - Qualifier
< - Not detected (ND) at a value greater than the reporting limit (RL), for data prior to 2/24/06.
< - Not detected at a value greater than the method detection limit (MDL). (noted in Result column, for data 2/24/06 to 12/31/08.)
U - Not detected at a value greater than the method detection limit (MDL). (MDL noted in Result column, for data 12/31/08 to present)
B - Indicates that a value for an inorganic analysis is an estimate. It is used when a compound is determined to be 12/31/08 but at a concentration less than the quantitation limit of the method, for data prior to 2/24/06.
B - Indicates that the compound was found in the blank sample for both inorganic and metals analysis, for data 2/24/06 to 12/31/08.
H - Indicates a sample was prepped or analyzed beyond the specified holding time
J - Value for an organic analysis is an estimate, for data prior to 2/24/06.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value, for data 2/24/06 to present.
* - LCS or LCSD exceeds the control limits
4) Flag
B - Indicates that an analyte is present in the method blank as well as in the sample.
J - Value is an estimate; result falls within the MDL and the limit of quantitation (LQ) (Lancaster Laboratories).
Y - Used to identify a spike or spike duplicate recovery is outside the specified quality control limits
5) Treated groundwater discharge limitations recommended by the EPA in a letter dated 7/20/1998 to Mr. Ron Weddell.
6) NA - Not applicable
7) ST - Sample tap; sample tap either (A, B, or C) depends on arrangement of carbon canisters, which changes after each carbon change out.
8) Metals sample container was not received by laboratory.

TABLE 3.1-2
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
RECOVERY WELLS

SAMPLE LOCATION	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
CAO50B	5/18/98		3.9			52			1.3		<	0.5			0.33		<	0.5			
	5/29/98		4.2			116			1.8		<	0.2			0.34		<	0.1			
	7/1/98		4.0			125			2.1		<	0.1			0.34		<	0.1			
	7/28/98		3.3			128			1.9		<	0.2			0.31		<	0.1			
	8/25/98		3.4			130			2.0		<	0.2			0.29		<	0.1			
	12/22/98		2.2			142			2.3			0.012	J		0.24			0.004	J		
	4/28/99		1.8			89			1.6		<	0.2			0.19		<	0.1			
	6/30/99		1.7			50			1.4		<	0.1			0.16		<	0.05			
	10/20/99		1.52			44.3			0.9		<	0.1			0.099		<	0.05			
	2/2/00		1.46			77.4			0.9		<	0.05			0.11		<	0.025			
	9/27/00		0.44			40			1.1		<	1		<	0.2		<	0.2			
	1/10/01		1.08			74			1.1		<	2		<	0.4		<	0.4			
	5/30/01		0.94			74			1.1		<	2		<	0.5		<	0.5			
	10/22/01		0.78			75			0.9		<	4		<	0.8		<	0.8			
	3/25/02		0.45			14			0.5		<	0.5		<	0.1		<	0.1			
	8/12/02		0.69			53			0.7		<	2		<	0.5		<	0.5			
	1/3/03		0.7			65			0.7		<	2		<	0.5		<	0.5			
	5/19/03		0.87			70			0.8		<	2		<	0.4		<	0.4			
	10/6/03		0.79			64			0.8		<	2		<	0.5		<	0.5			
	2/23/04		0.41			64			0.9		<	2		<	0.5		<	0.5			
	7/13/04		0.71			68			0.8		<	2		<	0.5		<	0.5			
	11/29/04		0.96			78			0.8		<	2		<	0.4		<	0.4			
	5/16/05		0.813			34			0.5		<	1		J	0.11		<	0.2			
	5/3/06		0.59			38			0.6		J,B	0.13		J	0.14		<	0.064			
	9/20/07		1.6			69			0.7		<	0.4		J	0.26		<	0.13			
	10/13/08		0.54			39			0.5		<	0.8		J	0.14		<	0.12			
	7/9/09		0.503			40			0.4		U	0.0005			0.12			0.013			
	7/9/09		0.503			40			0.4		<	0.0005			0.12			0.013			
	7/6/10		0.393			52			0.5		U	0.0005			0.14			0.013			
	7/22/11		0.404			35.0			0.45		U	0.065		J	0.11		U	0.055		6.81	
	9/28/12		0.394			25.0			0.34		U	0.025		J	0.08		U	0.025		7.00	
	9/26/13		0.35			31.0			0.33		U	0.025		J	0.08		U	0.025		6.89	
CAO51B	5/18/98		0.98			73			1.20		<	0.5		<	0.5		<	0.5			
	5/29/98		0.88			94			1.60		<	0.2			0.11		<	0.1			
	7/1/98		0.76			79			1.80		<	0.2			0.11		<	0.1			
	7/28/98		0.61			69			1.50		<	0.1			0.078		<	0.05			
	8/25/98		0.54			64			1.60		<	0.05			0.075			0.007	J		
	12/22/98		0.36			59			2.00		<	0.02			0.083		<	0.02			
	4/28/99		0.37			37			1.60		<	0.05			0.061			0.004	J		
	6/30/99		0.33			29			1.60			0.005	J		0.063			0.004	J		
	10/20/99		0.342			37.2			1.50		<	0.02			0.072			0.006452	J		
	2/2/00		0.312			40.5			1.40		<	0.02			0.06			0.00478	J		
	9/27/00		0.201			21			1.50		<	1		<	0.2		<	0.2			
	1/10/01		0.37			11			0.98		<	0.2			0.06		<	0.05			
	5/30/01		0.16			12			1.00		<	0.5		<	0.1		<	0.1			
	10/22/01		0.56			52			7.00		<	2		<	0.4		<	0.4			
	3/25/02		0.045			13			1.20		<	0.5		<	0.1		<	0.1			
	8/12/02		0.072			15			1.20		<	0.005			0.05			0.005			
	1/3/03		0.067			5.6			0.92		<	0.001			0.04		<	0.002			
	5/19/03		0.101			17			0.87		<	0.1			0.04		<	0.02			
	10/6/03		0.096			15			0.90		<	0.5		<	0.1		<	0.1			
	2/23/04		0.049			4.4			0.73		<	0.1			0.04		<	0.02			
	7/13/04		0.04			4.3			0.83		<	0.1			0.05		<	0.02			
	11/29/04		0.15			21			0.90		<	1		<	0.2		<	0.2			
	5/16/05		0.116			9.7			0.73		<	0.25		J	0.038		<	0.05			
	5/3/06		0.081			12			0.72		J,B	0.052		J	0.045		<	0.016			
	9/20/07		0.13			12			0.75		<	0.08		J	0.029		<	0.026			
	10/13/08		0.065			12			0.54		<	0.16		J	0.04		<	0.025			
	7/9/09		0.0958			8.5			0.41		U	0.0005			0.03		J	0.0044			
	7/9/09		0.0958			8.5			0.41		<	0.0005			0.03		J	0.0044			
	7/6/10		0.0134			1.6			0.32		U	0.0005			0.02		J	0.0067			
	7/22/11		0.0268			5.0			0.44		U	0.0065		J	0.025		U	0.0055		6.60	
	9/28/12		0.0204			9.8			0.36		U	0.010		J	0.019		U	0.010		6.71	
	9/26/13		0.00702			1.8			0.25		U	0.001			0.020			0.0053		6.70	

TABLE 3.1-2
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
RECOVERY WELLS

SAMPLE LOCATION	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
CAO52B	5/18/98		5.8			49			1.8		<	0.5			1.4		<	0.5			
	5/29/98		0.30			64			2.5		<	0.2			1.8			0.092	J		
	6/24/98		0.23																		
	7/1/98		0.32			66			2.2		<	0.2			1.5			0.076	J		
	7/28/98		0.24			72			1.6		<	0.1			1.0			0.051			
	8/25/98		0.27			207			1.8		<	0.2			1.2			0.062	J		
	4/28/99		0.25			34			1.4		<	0.1			0.4			0.02	J		
	6/30/99		0.09			23			0.9		<	0.04			0.4			0.016	J		
	10/20/99		0.87			55.1			2.3			0.029			0.48			0.025	J		
	2/2/00		0.0472			12			0.7			0.00125	J		0.15			0.00795			
	9/27/00		0.044			25			1.1		<	1		<	0.2		<	0.2			
	1/10/01		0.06			16			0.6		<	0.5		<	0.1		<	0.1			
	5/30/01		0.031			21			0.8		<	0.5			0.1		<	0.1			
	10/22/01		0.036			21			0.6		<	1		<	0.2		<	0.2			
	3/25/02		0.024			22			0.6		<	1		<	0.2		<	0.2			
	8/12/02		0.025			22			0.5		<	0.5			0.1		<	0.1			
	1/3/03		0.025			16			0.6		<	0.5			0.1		<	0.1			
	5/19/03		0.025			17			0.5		<	0.5			0.1		<	0.1			
	10/6/03		0.023			18			0.5		<	0.5			0.1		<	0.1			
	2/23/04		0.025			18			0.5		<	0.5			0.1		<	0.1			
	7/13/04		0.018			19			0.4		<	0.5			0.2		<	0.1			
	11/29/04		0.02			17			0.4		<	0.5			0.1		<	0.1			
	5/16/05		0.0197			12			0.39		<	0.5		J	0.077		<	0.1			
	5/3/06		0.016			10			0.38		J,B	0.11		J	0.079		<	0.032			
	9/20/07		0.025			13			0.4		<	0.08			0.14		<	0.026			
	10/13/08		0.014			8			0.3		<	0.16		J	0.056		<	0.025			
	7/9/09		0.0134			10			0.27		<	0.0005			0.074		J	0.0027			
	7/9/09		0.0134			10			0.3		U	0.0005			0.074		J	0.0027			
	7/6/10		0.007			8.8			0.26		U	0.0005			0.098		J	0.0031			
	7/22/11		0.00559			9.9			0.3		U	0.032		J	0.079		U	0.028		6.83	
	9/28/12		0.00503			8.7			0.24		U	0.020		J	0.070		U	0.020		6.89	
	9/26/13		0.00299			8.7			0.20		U	0.010			0.064		U	0.010		6.93	
CAOU23B	5/18/98		3.9			88			2.6		<	0.5		<	0.5		<	0.5			
	5/29/98		2.5			118			3.4			0.04	J		0.64			0.026	J		
	7/1/98		2.4			112			3.4			0.055	J		0.63			0.025	J		
	7/28/98		2.4			119			3.4			0.025	J		0.62		<	0.1			
	8/25/98		2.8			124			3.4			0.032			0.55		<	0.1			
	12/22/98		1.4			127			3.6			0.039	J		0.79			0.044			
	4/28/99		1.2			81			2.8		<	0.2			0.60		<	0.1			
	6/30/99		1.2			54			3.0			0.043	J		0.59			0.031	J		
	10/20/99		0.0887			23.6			0.8			0.004479	J		0.30			0.016			
	2/2/00		0.705			58.9			2.2			0.01564	J		0.47			0.0258			
	9/27/00		0.78			45			2.0		<	1			0.40		<	0.2			
	1/10/01		0.044			48			2.0		<	1			0.40		<	0.2			
	5/30/01		0.5			25			0.8		<	1			0.20		<	0.2			
	10/22/01		0.41			38			1.3		<	1			0.50		<	0.2			
	3/25/02		0.22			52			19.0		<	2			0.50		<	0.4			
	8/12/02		0.45			36			1.3		<	1			0.40		<	0.2			
	1/3/03		0.49			44			1.4		<	2			0.50		<	0.4			
	5/19/03		0.23			31			1.8		<	1			0.40		<	0.2			
	10/6/03		0.26			31			2.2		<	1			0.50		<	0.2			
	2/23/04		0.27			32			2.0		<	1			0.60		<	0.2			
	7/13/04		0.3			36			1.5		<	1			0.60		<	0.2			
	11/29/04		0.31			40			1.6		<	1			0.60		<	0.2			
	5/16/05		0.259			36			1.6		J	0.042			0.52		J	0.064			
	5/3/06		0.14			28			1.7		J,B	0.15			0.41		<	0.064			
	9/20/07		0.25			26			1.2		<	0.2			0.38		J	0.076			
	10/13/08		0.14			21			1.1		<	0.4			0.35		<	0.063			
	7/9/09		0.141			20			1.0		J	0.0036			0.31			0.039			
	7/6/10		0.123			20			1.2		J	0.0034			0.45			0.051			
	7/22/11		0.102			15			0.9		U	0.032			0.31		J	0.031		6.77	
	9/28/12		0.085			14.0			0.77		U	0.025			0.25		J	0.029		6.86	

TABLE 3.1-2
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
RECOVERY WELLS

SAMPLE LOCATION	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																		pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
CAOU23B Continued	9/26/13		0.0837			14.0			0.82		U	0.01			0.30		J	0.03		7.09	

NOTE:
1) mg/L - milligrams per liter
2) Grey cells indicate analyses not requested.
3) Q - Qualifier
< - Not detected (ND) at a value greater than the reporting limit (RL), for data prior to 2/24/06.
< - Not detected at a value greater than the method detection limit (MDL), noted in Result column, for data 2/24/06 to 12/31/08.
U - Not detected at a value greater than the method detection limit (MDL), noted in Result column, for data 12/31/08 to present.
B - Indicates that the compound was found in the blank sample for both inorganic and metals analysis, for data 2/24/06 to 12/31/08.
J - Value for an organic analysis is an estimate, for data prior to 2/24/06.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value, for data 2/24/06 to present.
4) Flag
J - Value is an estimate; result falls within the MDL and the limit of quantitation (LQ) (Lancaster Laboratories).

TABLE 3.1-3
CAPA GROUNDWATER TREATMENT SYSTEM
ANALYTICAL RESULTS
STRIPPER EFFLUENT

SAMPLE TAP	DATE	ANALYTICAL RESULTS (mg/L)[1,2]																pH	COMMENTS
		MERCURY			CARBON TETRACHLORIDE			CHLOROFORM			METHYLENE CHLORIDE			TETRACHLOROETHENE			TRICHLOROETHENE				
		Q[3]	RESULT	FLAG[4]	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG	Q	RESULT	FLAG		
ST-9	5/18/98					0.63			0.034			0.0016			0.002		<	0.001			
	5/29/98		1.7																		
	6/10/98		1.0																		
	6/24/98		0.6																		
	7/1/98					0.33			0.018			0.00047	J		0.00079	J	<	0.001			
	7/28/98					0.32			0.019			0.00017	J		0.00062	J	<	0.001			
	8/25/98					0.26			0.018		<	0.002			0.00062	J	<	0.001			
	9/23/98					0.17			0.013		<	0.002			0.001		<	0.001			
	10/1/98					0.29			0.021		<	0.002			0.0008	J	<	0.001			
	10/7/98					0.037			0.006		<	0.002		<	0.001		<	0.001			
	12/16/98					0.026			0.0009		<	0.002		<	0.001		<	0.001			
	2/17/99					0.146			0.00324		<	0.002			0.001		<	0.001			
	3/10/99					0.050415			0.001822		<	0.002			0.00034	J	<	0.001			
	4/6/99					0.30273			0.006957		<	0.002			0.003346		<	0.001			
	5/5/99					0.872			0.062		<	0.002			0.007			0.0004	J		
	9/1/99					0.178			0.007		<	0.002			0.000979	J	<	0.001			
	9/29/99					0.033			0.0009		<	0.002			0.000204	J	<	0.001			
	10/27/99					11.931			0.516	J	<	0.002			0.172	J	<	0.001			
	2/24/00					0.00607			0.000256	J	<	0.002		<	0.001		<	0.001			
	8/9/00				<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	10/5/00					0.048			0.011		<	0.005		<	0.001		<	0.001			
	1/10/01					0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	5/30/01					0.005			0.021		<	0.005		<	0.001		<	0.001			
	10/22/01				<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	3/25/02				<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	8/12/02				<	0.001			0.006		<	0.005		<	0.001		<	0.001			
	1/3/03					0.003		<	0.001		<	0.005		<	0.001		<	0.001			
	5/19/03					0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	10/6/03					0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	11/3/03					0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	2/23/04					0.002		<	0.001		<	0.005		<	0.001		<	0.001			
	7/13/04				<	0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	11/29/04					0.001		<	0.001		<	0.005		<	0.001		<	0.001			
	5/16/05					0.001		J	0.4		<	0.005		<	0.001		<	0.001			
	6/13/05		0.106	B																	
	1/5/06				J	0.0007		J	0.0002		<	0.005		<	0.001		<	0.001			
	9/18/06				<	0.00025			0.001		<	0.00053		<	0.0002		<	0.00032			
	7/20/07				<	0.00025			0.0016		<	0.001		<	0.0002		<	0.00032			
	11/29/07				J	0.00042		<	0.0002		<	0.001		<	0.0002		<	0.00032			
	3/20/08				J	0.00073		<	0.0002		<	0.001		<	0.0002		<	0.00032			
	10/22/08					0.034			0.0014		<	0.002		J	0.0005		<	0.00032			
	11/26/08					0.0023		J	0.0002		<	0.002		<	0.0002		<	0.00032			
	3/4/09				J	0.0016		U	0.0005		U	0.0005		U	0.0006		U	0.0005			ALS Laboratory Group (2009)
	12/8/09				J	0.00069		U	0.0005		U	0.0005		U	0.0006		U	0.0005			
	3/10/10				U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005			
	8/18/10				J	0.0038		J	0.0037		U	0.0005		U	0.0006		U	0.0005			
	8/30/10		0.18		U	0.0005		U	0.0005		U	0.0005		U	0.0006		U	0.0005		6.77	
	3/18/11		0.188		J	0.0016		U	0.0005		U	0.0005		U	0.0006		U	0.0005		8.03	
	7/29/11		0.177		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		7.8	
	3/23/12		0.142		U	0.0018		U	0.001		U	0.0013		U	0.0017		U	0.0011		7.89	
	9/28/12		0.117		J	0.0011		U	0.001		U	0.001		U	0.001		U	0.001		6.91	
	3/27/13		0.124		U	0.001		U	0.001		U	0.001		U	0.001		U	0.001		8.54	
	9/26/13		0.124		J	0.0018		U	0.001		U	0.001		U	0.001		U	0.001		7.21	

NOTES:
1) mg/L - milligrams per liter
2) Grey cells indicate analyses not requested.
3) Q - Qualifier
< - Not detected (ND) at a value greater than the reporting limit (RL), for data prior to 2/24/06.
< - Not detected at a value greater than the method detection limit (MDL). (noted in Result column, for data 2/24/06 to 12/31/08.)
U - Not detected at a value greater than the method detection limit (MDL). (MDL noted in Result column, for data 12/31/08 to present)
J - Value for an organic analysis is an estimate, for data prior to 2/24/06.
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value, for data 2/24/06 to present.
4) Flag
B - Indicates that an analyte is present in the method blank as well as in the sample.
J - Value is an estimate; result falls within the MDL and the limit of quantitation (LQ) (Lancaster Laboratories).

TABLE 3.1-4
CAPA GROUNDWATER TREATMENT SYSTEM
RECOVERY WELL PUMPING DATA

YEAR	MONTH	CA050B	CA051B	CA052B	CA0U23B	TOTAL INFLUENT
		(gal)[1]	(gal)	(gal)	(gal)	(gal)
1998	June	94,940	120,650	44,346	59,007	318,943
	July	94,464	143,035	46,670	103,993	388,162
	August	82,659	123,384	0	86,436	292,479
	September	52,560	168,124	27,020	13,602	261,306
	October	148,429	106,740	0	45,082	300,251
	November	84,170	70,057	0	90,008	244,235
	December	134,556	143,925	0	140,915	419,396
	TOTAL	**691,778**	**875,915**	**118,036**	**539,043**	**2,224,772**
1999	January	56,244	58,568	38,400	57,835	211,047
	February	43,480	41,230	14,454	66,873	166,037
	March	32,402	52,900	17,521	57,332	160,155
	April	86,908	73,850	25,635	89,265	275,658
	May	52,110	43,020	30,810	53,470	179,410
	June	51,070	50,110	32,000	52,310	185,490
	July	94,520	137,330	70,210	98,850	400,910
	August	60,300	91,700	62,790	63,870	278,660
	September	54,440	84,460	55,250	61,830	255,980
	October	59,750	118,130	65,400	82,860	326,140
	November	61,620	84,320	63,950	67,910	277,800
	December	33,170	41,080	38,180	37,680	150,110
	TOTAL	**686,014**	**876,698**	**514,600**	**790,085**	**2,867,397**
	CUMULATIVE TOTAL, ALL WELLS					**5,092,169**
2000	January	63,290	84,390	71,800	77,950	297,430
	February	77,580	96,090	84,360	79,630	337,660
	March	79,810	101,600	81,090	70,760	333,260
	April	58,820	75,800	63,660	56,470	254,750
	May	90,340	67,330	76,340	74,720	308,730
	June	94,060	111,140	73,990	83,730	362,920
	July	88,230	65,640	46,950	67,490	268,310
	August	60,300	91,700	62,790	63,870	278,660
	September	37,980	84,460	55,250	61,830	239,520
	October	103,210	67,430	77,250	96,270	344,160
	November	102,960	71,210	91,510	93,480	359,160
	December	90,830	2,450	76,480	41,210	210,970
	TOTAL	**947,410**	**919,240**	**861,470**	**867,410**	**3,595,530**
	CUMULATIVE TOTAL, ALL WELLS					**8,687,699**
2001	January	106,250	57,650	83,430	88,310	335,640
	February	65,070	29,070	75,050	100,330	269,520
	March	69,460	62,430	65,310	86,790	283,990
	April	71,520	57,640	52,830	63,090	245,080
	May	120,620	79,750	81,700	52,480	334,550
	June	61,820	56,160	89,260	47,550	254,790
	July	52,500	61,180	74,640	66,440	254,760
	August	69,270	72,300	118,580	81,120	341,270
	September	44,410	49,250	77,680	77,570	248,910
	October	107,030	33,520	66,620	47,870	255,040
	November	59,710	16,210	53,650	48,180	177,750
	December	81,500	81,500	71,100	60,800	294,900
	TOTAL	**909,160**	**656,660**	**909,850**	**820,530**	**3,296,200**
	CUMULATIVE TOTAL, ALL WELLS					**11,983,899**
2002	January	98,390	36,800	95,520	61,250	291,960
	February	74,600	28,450	72,020	52,110	227,180
	March	42,770	58,080	55,110	54,960	210,920
	April	84,520	85,820	75,770	82,670	328,780
	May	50,210	49,080	68,130	70,820	238,240
	June	83,990	77,020	64,090	73,860	298,960
	July	103,700	91,110	123,550	89,760	408,120
	August	79,220	75,700	80,840	73,170	308,930
	September	68,450	67,680	65,470	57,150	258,750
	October	83,260	83,700	83,860	86,470	337,290
	November	47,870	49,790	71,700	70,480	239,840
	December	83,500	74,330	67,720	82,790	308,340
	TOTAL	**900,480**	**777,560**	**923,780**	**855,490**	**3,457,310**
	CUMULATIVE TOTAL, ALL WELLS					**15,441,209**
2003	January	84,500	58,060	51,490	73,880	267,930
	February	49,680	48,730	52,040	23,230	173,680
	March	110,080	110,650	62,330	75,600	358,660
	April	83,350	64,460	73,230	60	221,100
	May	56,140	67,810	66,560	36,000	226,510
	June	80,680	89,200	62,490	35,640	268,010
	July	91,660	93,820	96,350	39,310	321,140
	August	64,540	77,480	94,940	29,610	266,570
	September	94,950	104,220	127,540	49,560	376,270
	October	36,780	83,190	100,920	68,590	289,480
	November	231,100	38,770	88,930	58,910	417,710
	December	110,190	27,090	108,400	24,090	269,770
	TOTAL	**1,093,650**	**863,480**	**985,220**	**514,480**	**3,456,830**
	CUMULATIVE TOTAL, ALL WELLS					**18,898,039**
2004	January	129,290	55,140	128,330	4,280	317,040
	February	97,630	59,860	58,300	35,060	250,850
	March	118,330	82,990	104,600	80,830	386,750
	April	76,220	51,410	52,430	61,080	241,140
	May	46,090	57,900	43,250	44,740	191,980
	June	66,830	62,810	64,390	49,780	243,810
	July	65,080	47,690	60,780	44,380	217,930
	August	67,980	79,900	61,700	45,780	255,360
	September	16,150	98,950	71,040	51,720	237,860
	October	15,930	42,940	69,920	50,340	179,130
	November	103,390	93,870	93,770	54,780	345,810
	December	64,540	77,000	76,890	56,320	274,750
	TOTAL	**867,460**	**810,460**	**885,400**	**579,090**	**3,142,410**
	CUMULATIVE TOTAL, ALL WELLS					**22,040,449**

TABLE 3.1-4
CAPA GROUNDWATER TREATMENT SYSTEM
RECOVERY WELL PUMPING DATA

YEAR	MONTH	CA050B	CA051B	CA052B	CA0U23B	TOTAL INFLUENT
		(gal)[1]	(gal)	(gal)	(gal)	(gal)
2005	January	78,750	35,700	65,760	47,560	227,770
	February	103,650	88,410	92,250	65,270	349,580
	March	95,120	47,260	78,380	51,580	272,340
	April	96,680	51,890	81,280	51,610	281,460
	May	103,370	102,640	89,680	38,940	334,630
	June	95,330	11,800	29,580	16,830	153,540
	July	64,660	54,670	56,790	18,940	195,060
	August	74,190	68,130	64,470	22,380	229,170
	September	73,810	75,280	63,620	38,040	250,750
	October	84,450	20,350	73,040	52,010	229,850
	November	125,440	18,950	99,370	38,910	282,670
	December	94,040	62,280	53,740	16,780	226,840
	TOTAL	**1,089,490**	**637,360**	**847,960**	**458,850**	**3,033,660**
	CUMULATIVE TOTAL, ALL WELLS					**25,074,109**
2006	January	91,090	65,510	62,440	67,880	286,920
	February	99,040	69,830	180	24,420	193,470
	March	82,410	69,150	40,220	50,430	242,210
	April	107,470	96,190	105,340	43,880	352,880
	May	130,240	79,280	127,530	73,690	410,740
	June	95,670	96,640	102,141	57,010	351,461
	July	114,830	110,010	131,199	67,870	423,909
	August	86,450	83,190	108,970	57,850	336,460
	September	5,190	113,640	146,870	74,010	339,710
	October	0	95,820	99,390	16,770	211,980
	November	36,240	93,710	68,760	43,920	242,630
	December	93,760	66,030	48,040	27,460	235,290
	TOTAL	**942,390**	**1,039,000**	**1,041,080**	**605,190**	**3,627,660**
	CUMULATIVE TOTAL, ALL WELLS					**28,701,769**
2007	January	56,240	73,810	0	59,320	189,370
	February	47,980	68,410	33,980	28,040	178,410
	March	41,510	41,310	34,260	33,140	150,220
	April	56,420	67,350	57,220	51,730	232,720
	May	57,130	55,440	56,500	28,740	197,810
	June	76,370	79,230	68,240	45,520	269,360
	July	86,610	70,410	43,660	31,250	231,930
	August	22,350	100,910	6,030	41,540	170,830
	September	58,700	73,050	51,800	12,340	195,890
	October	81,650	115,960	88,890	18,300	304,800
	November	17,440	77,710	80,430	50	175,630
	December	39,410	83,380	101,580	30,440	254,810
	TOTAL	**641,810**	**906,970**	**622,590**	**380,410**	**2,551,780**
	CUMULATIVE TOTAL, ALL WELLS					**31,253,549**
2008	January	75,870	85,800	71,610	48,490	281,770
	February	49,440	52,010	49,930	21,670	173,050
	March	28,360	89,270	77,750	34,140	229,520
	April	115,960	111,690	123,590	54,420	405,660
	May	61,950	65,360	97,900	43,270	268,480
	June	117,100	59,990	77,420	24,440	278,950
	July	90,450	96,410	113,900	51,380	352,140
	August	89,370	94,570	86,520	57,080	327,540
	September	77,560	88,830	37,870	56,980	261,240
	October	111,200	119,510	130,040	49,750	410,500
	November	117,320	89,360	107,970	45,400	360,050
	December	118,970	99,220	109,240	44,320	371,750
	TOTAL	**1,053,550**	**1,052,020**	**1,083,740**	**531,340**	**3,720,650**
	CUMULATIVE TOTAL, ALL WELLS					**34,974,199**
2009	January	102,620	98,940	68,640	39,400	309,600
	February	89,130	133,220	88,930	42,180	353,460
	March	89,510	97,320	84,060	44,870	315,760
	April	120,620	66,890	106,260	63,360	357,130
	May	78,350	90,300	101,380	60,280	330,310
	June	80,660	77,260	88,190	45,520	291,630
	July	91,040	100,080	98,360	53,990	343,470
	August	75,240	72,520	88,650	39,080	275,490
	September	89,350	75,160	91,560	46,250	302,320
	October	96,500	95,480	102,630	49,900	344,510
	November	113,300	99,640	111,400	52,860	377,200
	December	105,430	124,530	76,840	46,590	353,390
	TOTAL	**1,131,750**	**1,131,340**	**1,106,900**	**584,280**	**3,954,270**
	CUMULATIVE TOTAL, ALL WELLS					**38,928,469**
2010	January	52,720	57,060	56,230	38,510	204,520
	February	83,730	89,630	91,960	59,560	324,880
	March	65,750	84,780	103,060	63,970	317,560
	April	90,970	89,470	94,390	34,190	309,020
	May	61,190	68,940	84,160	55,090	269,380
	June	60,580	60,580	81,780	55,590	258,530
	July	87,350	93,790	89,940	66,060	337,140
	August	75,280	80,100	98,830	77,610	331,820
	September	78,290	68,920	82,540	28,350	258,100
	October	70,800	62,941	86,310	45,620	265,671
	November	84,990	93,090	87,220	71,100	336,400
	December	80,300	74,120	78,910	62,000	295,330
	TOTAL	**891,950**	**923,421**	**1,035,330**	**657,650**	**3,508,351**
	CUMULATIVE TOTAL, ALL WELLS					**42,436,820**

TABLE 3.1-4
CAPA GROUNDWATER TREATMENT SYSTEM
RECOVERY WELL PUMPING DATA

YEAR	MONTH	CA050B	CA051B	CA052B	CA0U23B	TOTAL INFLUENT
		(gal)[1]	(gal)	(gal)	(gal)	(gal)
2011	January	78,430	71,580	92,590	63,870	306,470
	February	63,050	55,840	48,380	34,460	201,730
	March	76,350	36,750	82,880	58,020	254,000
	April	71,410	53,250	90,600	75,830	291,090
	May	99,970	12,790	82,730	51,340	246,830
	June	44,800	162,810	32,220	68,900	308,730
	July	99,970	103,510	78,120	64,040	345,640
	August	101,610	102,590	75,780	65,340	345,320
	September	98,190	95,810	81,800	66,250	342,050
	October	89,080	71,740	92,250	74,890	327,960
	November	54,220	61,580	67,800	46,580	230,180
	December	46,060	35,400	53,940	28,430	163,830
	TOTAL	**923,140**	**863,650**	**879,090**	**697,950**	**3,363,830**
	CUMULATIVE TOTAL, ALL WELLS					**45,800,650**
2012	January	62,760	58,550	77,300	55,730	254,340
	February	116,490	115,930	130,622	87,250	450,292
	March	55,560	54,010	62,618	40,490	212,678
	April	86,230	88,490	85,780	62,650	323,150
	May	127,780	127,410	117,720	80,910	453,820
	June	98,460	69,470	97,250	53,250	318,430
	July	103,630	123,240	118,450	71,570	416,890
	August	120,300	137,100	142,630	61,240	461,270
	September	91,690	97,780	61,210	55,010	305,690
	October	91,890	87,080	124,050	66,130	369,150
	November	124,220	106,210	125,230	65,740	421,400
	December	116,910	85,380	116,720	45,790	364,800
	TOTAL	**1,195,920**	**1,150,650**	**1,259,580**	**745,760**	**4,351,910**
	CUMULATIVE TOTAL, ALL WELLS					**50,152,560**
2013	January	113,370	77,990	116,270	66,770	374,400
	February	112,590	95,460	75,310	70,800	354,160
	March	98,780	92,420	96,280	66,770	354,250
	April	89,340	82,670	90,170	61,090	323,270
	May	116,300	65,810	132,000	80,830	394,940
	June	125,010	82,630	106,160	44,350	358,150
	July	121,530	84,250	108,210	62,060	376,050
	August	141,140	90,940	125,180	72,250	429,510
	September	105,950	81,600	96,240	56,930	340,720
	October	125,250	115,720	115,850	78,450	435,270
	November	107,610	83,470	90,570	62,050	343,700
	December	130,840	79,140	105,340	70,960	386,280
	TOTAL	**1,387,710**	**1,032,100**	**1,257,580**	**793,310**	**4,470,700**
	CUMULATIVE TOTAL, ALL WELLS					**54,623,260**

NOTE:
1) gal - gallons

TABLE 3.1-5
CAPA GROUNDWATER TREATMENT SYSTEM
APPROXIMATE MASS OF MERCURY REMOVED
RECOVERY WELLS

YEAR	MONTH	CA050B			CA051B			CA052B			CA0U23B			MERCURY REMOVED, ALL WELLS
		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		
		(gal)[1]	(mg/L)[2,3]	(lbs)[4]	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(lbs)
1998	June	94,940	4.2	3.33	120,650	0.88	0.89	44,346	0.30	0.11	59,007	2.5	1.23	5.56
	July	94,464	4	3.15	143,035	0.76	0.91	46,670	0.32	0.12	103,993	2.4	2.08	6.27
	August	82,659	3.3	2.28	123,384	0.61	0.63	0	0.24	0.00	86,436	2.4	1.73	4.64
	September	52,560	3.4	1.49	168,124	0.54	0.76	27,020	0.27	0.06	13,602	2.8	0.32	2.63
	October	148,429	3.4	4.21	106,740	0.54	0.48	0	0.27	0.00	45,082	2.8	1.05	5.75
	November	84,170	3.4	2.39	70,057	0.54	0.32	0	0.27	0.00	90,008	2.8	2.10	4.81
	December	134,556	3.4	3.82	143,925	0.54	0.65	0	0.27	0.00	140,915	2.8	3.29	7.76
	TOTAL	**691,778**		**20.67**	**875,915**		**4.62**	**118,036**		**0.30**	**539,043**		**11.81**	**37.40**
1999	January	56,244	2.2	1.03	58,568	0.36	0.18	38,400	0.27	0.09	57,835	1.4	0.68	1.97
	February	43,480	2.2	0.80	41,230	0.36	0.12	14,454	0.27	0.03	66,873	1.4	0.78	1.74
	March	32,402	2.2	0.59	52,900	0.36	0.16	17,521	0.27	0.04	57,332	1.4	0.67	1.46
	April	86,908	2.2	1.60	73,850	0.36	0.22	25,635	0.27	0.06	89,265	1.4	1.04	2.92
	May	52,110	1.8	0.78	43,020	0.37	0.13	30,810	0.25	0.06	53,470	1.2	0.54	1.52
	June	51,070	1.8	0.77	50,110	0.37	0.15	32,000	0.25	0.07	52,310	1.2	0.52	1.51
	July	94,520	1.7	1.34	137,330	0.33	0.38	70,210	0.09	0.05	98,850	1.2	0.99	2.76
	August	60,300	1.7	0.86	91,700	0.33	0.25	62,790	0.09	0.05	63,870	1.2	0.64	1.79
	September	54,440	1.7	0.77	84,460	0.33	0.23	55,250	0.09	0.04	61,830	1.2	0.62	1.67
	October	59,750	1.7	0.85	118,130	0.33	0.33	65,400	0.09	0.05	82,860	1.2	0.83	2.05
	November	61,620	1.52	0.78	84,320	0.342	0.24	63,950	0.87	0.46	67,910	0.0887	0.05	1.54
	December	33,170	1.52	0.42	41,080	0.342	0.12	38,180	0.87	0.28	37,680	0.0887	0.03	0.84
	TOTAL	**686,014**		**10.59**	**876,698**		**2.51**	**514,600**		**1.28**	**790,085**		**7.39**	**21.77**
	CUMULATIVE TOTAL	***1,377,792***		***31.26***	***1,752,613***		***7.14***	***632,636***		***1.58***	***1,329,128***		***19.20***	***59.17***
2000	January	63,290	1.52	0.80	84,390	0.342	0.24	71,800	0.87	0.52	77,950	0.0887	0.06	1.62
	February	77,580	1.46	0.95	96,090	0.312	0.25	84,360	0.0472	0.03	79,630	0.705	0.47	1.70
	March	79,810	1.46	0.97	101,600	0.312	0.26	81,090	0.0472	0.03	70,760	0.705	0.42	1.69
	April	58,820	1.46	0.72	75,800	0.312	0.20	63,660	0.0472	0.03	56,470	0.705	0.33	1.27
	May	90,340	1.46	1.10	67,330	0.312	0.18	76,340	0.0472	0.03	74,720	0.705	0.44	1.75
	June	94,060	1.46	1.15	111,140	0.312	0.29	73,990	0.0472	0.03	83,730	0.705	0.49	1.96
	July	88,230	1.46	1.08	65,640	0.312	0.17	46,950	0.0472	0.02	67,490	0.705	0.40	1.66
	August	60,300	1.46	0.73	91,700	0.312	0.24	62,790	0.0472	0.02	63,870	0.705	0.38	1.37
	September	37,980	1.46	0.46	84,460	0.312	0.22	55,250	0.0472	0.02	61,830	0.705	0.36	1.07
	October	103,210	0.44	0.38	67,430	0.201	0.11	77,250	0.044	0.03	96,270	0.78	0.63	1.15
	November	102,960	0.44	0.38	71,210	0.201	0.12	91,510	0.044	0.03	93,480	0.78	0.61	1.14
	December	90,830	0.44	0.33	2,450	0.201	0.00	76,480	0.044	0.03	41,210	0.78	0.27	0 63
	TOTAL	**947,410**		**9.05**	**919,240**		**2.28**	**861,470**		**0.83**	**867,410**		**4.85**	**17.00**
	CUMULATIVE TOTAL	***2,325,202***		***40.30***	***2,671,853***		***9.42***	***1,494,106***		***2.40***	***2,196,538***		***24.05***	***76.17***
2001	January	106,250	1.08	0.96	57,650	0.37	0.18	83,430	0.06	0.04	88,310	0.044	0.03	1.21
	February	65,070	1.08	0.59	29,070	0.37	0.09	75,050	0.06	0.04	100,330	0.044	0.04	0.75
	March	69,460	1.08	0.63	62,430	0.37	0.19	65,310	0.06	0.03	86,790	0.044	0.03	0.88
	April	71,520	1.08	0.64	57,640	0.37	0.18	52,830	0.06	0.03	63,090	0.044	0.02	0.87
	May	120,620	1.08	1.09	79,750	0.37	0.25	81,700	0.06	0.04	52,480	0.044	0.02	1.39
	June	61,820	0.94	0.48	56,160	0.16	0.07	89,260	0.031	0.02	47,550	0.5	0.20	0.78
	July	52,500	0.94	0.41	61,180	0.16	0.08	74,640	0.031	0.02	66,440	0.5	0.28	0.79
	August	69,270	0.94	0.54	72,300	0.16	0.10	118,580	0.031	0.03	81,120	0.5	0.34	1.01
	September	44,410	0.94	0.35	49,250	0.16	0.07	77,680	0.031	0.02	77,570	0.5	0.32	0.76
	October	107,030	0.94	0.84	33,520	0.16	0.04	66,620	0.031	0.02	47,870	0.5	0.20	1.10
	November	59,710	0.78	0.39	16,210	0.56	0.08	53,650	0.036	0.02	48,180	0.41	0.16	0.65
	December	81,500	0.78	0.53	81,500	0.56	0.38	71,100	0.036	0.02	60,800	0 41	0.21	1.14
	TOTAL	**909,160**		**7.45**	**656,660**		**1.71**	**909,850**		**0.33**	**820,530**		**1.85**	**11.34**
	CUMULATIVE TOTAL	***3,234,362***		***47.75***	***3,328,513***		***11.13***	***2,403,956***		***2.73***	***3,017,068***		***25.90***	***87.51***

TABLE 3.1-5
CAPA GROUNDWATER TREATMENT SYSTEM
APPROXIMATE MASS OF MERCURY REMOVED
RECOVERY WELLS

YEAR	MONTH	CA050B			CA051B			CA052B			CA0U23B			MERCURY REMOVED, ALL WELLS
		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		
		(gal)[1]	(mg/L)[2,3]	(lbs)[4]	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(lbs)
2002	January	98,390	0.78	0.64	36,800	0.56	0.17	95,520	0.036	0.03	61,250	0.41	0.21	1.05
	February	74,600	0.78	0.49	28,450	0.56	0.13	72,020	0.036	0.02	52,110	0.41	0.18	0.82
	March	42,770	0.78	0.28	58,080	0.56	0.27	55,110	0.036	0.02	54,960	0.41	0.19	0.75
	April	84,520	0.45	0.32	85,820	0.045	0.03	75,770	0.024	0.02	82,670	0.22	0.15	0.52
	May	50,210	0.45	0.19	49,080	0.045	0.02	68,130	0.024	0.01	70,820	0.22	0.13	0.35
	June	83,990	0.45	0.32	77,020	0.045	0.03	64,090	0.024	0.01	73,860	0.22	0.14	0.49
	July	103,700	0.45	0.39	91,110	0.045	0.03	123,550	0.024	0.02	89,760	0.22	0.16	0.61
	August	79,220	0.69	0.46	75,700	0.072	0.05	80,840	0.025	0.02	73,170	0.45	0.27	0.79
	September	68,450	0.69	0.39	67,680	0.072	0.04	65,470	0.025	0.01	57,150	0.45	0.21	0.66
	October	83,260	0.69	0.48	83,700	0.072	0.05	83,860	0.025	0.02	86,470	0.45	0.32	0.87
	November	47,870	0.69	0.28	49,790	0.072	0.03	71,700	0.025	0.01	70,480	0.45	0.26	0.59
	December	83,500	0.69	0.48	74,330	0.072	0.04	67,720	0.025	0.01	82,790	0.45	0.31	0.85
	TOTAL	**900,480**		**4.70**	**777,560**		**0.90**	**923,780**		**0.21**	**855,490**		**2.55**	**8.36**
	CUMULATIVE TOTAL	***4,134,842***		***52.45***	***4,106,073***		***12.03***	***3,327,736***		***2.94***	***3,872,558***		***28.45***	***95.87***
2003	January	84,500	0.7	0.49	58,060	0.067	0.03	51,490	0.025	0.01	73,880	0.49	0.30	0.84
	February	49,680	0.7	0.29	48,730	0.067	0.03	52,040	0.025	0.01	23,230	0.49	0.09	0.42
	March	110,080	0.7	0.64	110,650	0.067	0.06	62,330	0.025	0.01	75,600	0.49	0.31	1.03
	April	83,350	0.7	0.49	64,460	0.067	0.04	73,230	0.025	0.02	60	0.49	0.00	0.54
	May	56,140	0.7	0.33	67,810	0.067	0.04	66,560	0.025	0.01	36,000	0.49	0.15	0.53
	June	80,680	0.87	0.59	89,200	0.101	0.08	62,490	0.025	0.01	35,640	0.23	0.07	0.74
	July	91,660	0.87	0.67	93,820	0.101	0.08	96,350	0.025	0.02	39,310	0.23	0.08	0.84
	August	64,540	0.87	0.47	77,480	0.101	0.07	94,940	0.025	0.02	29,610	0.23	0.06	0.61
	September	94,950	0.87	0.69	104,220	0.101	0.09	127,540	0.025	0.03	49,560	0.23	0.10	0.90
	October	36,780	0.79	0.24	83,190	0.096	0.07	100,920	0.023	0.02	68,590	0.26	0.15	0.48
	November	231,100	0.79	1.52	38,770	0.096	0.03	88,930	0.023	0.02	58,910	0.26	0.13	1.70
	December	110,190	0.79	0.73	27,090	0.096	0.02	108,400	0.023	0.02	24,090	0.26	0.05	0.82
	TOTAL	**1,093,650**		**7.14**	**863,480**		**0.62**	**985,220**		**0.20**	**514,480**		**1.48**	**9.45**
	CUMULATIVE TOTAL	***5,228,492***		***59.60***	***4,969,553***		***12.65***	***4,312,956***		***3.14***	***4,387,038***		***29.93***	***105.32***
2004	January	129,290	0.79	0.85	55,140	0.096	0.04	128,330	0.023	0.02	4,280	0.26	0.01	0.93
	February	97,630	0.79	0.64	59,860	0.096	0.05	58,300	0.023	0.01	35,060	0.26	0.08	0.78
	March	118,330	0.41	0.40	82,990	0.049	0.03	104,600	0.025	0.02	80,830	0.27	0.18	0.64
	April	76,220	0.41	0.26	51,410	0.049	0.02	52,430	0.025	0.01	61,080	0.27	0.14	0.43
	May	46,090	0.41	0.16	57,900	0.049	0.02	43,250	0.025	0.01	44,740	0.27	0.10	0.29
	June	66,830	0.41	0.23	62,810	0.049	0.03	64,390	0.025	0.01	49,780	0.27	0.11	0.38
	July	65,080	0.71	0.39	47,690	0.04	0.02	60,780	0.018	0.01	44,380	0.3	0.11	0.52
	August	67,980	0.71	0.40	79,900	0.04	0.03	61,700	0.018	0.01	45,780	0.3	0.11	0.55
	September	16,150	0.71	0.10	98,950	0.04	0.03	71,040	0.018	0.01	51,720	0.3	0.13	0.27
	October	15,930	0.71	0.09	42,940	0.04	0.01	69,920	0.018	0.01	50,340	0.3	0.13	0.25
	November	103,390	0.71	0.61	93,870	0.04	0.03	93,770	0.018	0.01	54,780	0.3	0.14	0.80
	December	64,540	0.96	0.52	77,000	0.15	0.10	76,890	0.02	0.01	56,320	0.31	0.15	0.77
	TOTAL	**867,460**		**4.66**	**610,460**		**0.41**	**885,400**		**0.16**	**579,090**		**1.38**	**6.61**
	CUMULATIVE TOTAL	***6,095,952***		***64.25***	***5,780,013***		***13.07***	***5,198,356***		***3.30***	***4,966,128***		***31.31***	***111.93***
2005	January	78,750	0.96	0.63	35,700	0.15	0.04	65,760	0.02	0.01	47,560	0.31	0.12	0.81
	February	103,650	0.96	0.83	88,410	0.15	0.11	92,250	0.02	0.02	65,270	0.31	0.17	1.13
	March	95,120	0.96	0.76	47,260	0.15	0.06	78,380	0.02	0.01	51,580	0.31	0.13	0.97
	April	96,680	0.96	0.77	51,890	0.15	0.06	81,280	0.02	0.01	51,610	0.31	0.13	0.99
	May	103,370	0.813	0.70	102,640	0.116	0.10	89,680	0.0197	0.01	38,940	0.259	0.08	0.90
	June	95,330	0.813	0.65	11,800	0.116	0.01	29,580	0.0197	0.00	16,830	0.259	0.04	0.70
	July	64,660	0.813	0.44	54,670	0.116	0.05	56,790	0.0197	0.01	18,940	0.259	0.04	0.54
	August	74,190	0.813	0.50	68,130	0.116	0.07	64,470	0.0197	0.01	22,380	0.259	0.05	0.63
	September	73,810	0.813	0.50	75,280	0.116	0.07	63,620	0.0197	0.01	38,040	0.259	0.08	0.67
	October	84,450	0.813	0.57	20,350	0.116	0.02	73,040	0.0197	0.01	52,010	0.259	0.11	0.72
	November	125,440	0.813	0.85	18,950	0.116	0.02	99,370	0.0197	0.02	38,910	0.259	0.08	0.97
	December	94,040	0.813	0.64	62,280	0.116	0.06	53,740	0.0197	0.01	16,780	0.259	0.04	0.74
	TOTAL	**1,089,490**		**7.85**	**637,360**		**0.68**	**847,960**		**0.14**	**458,850**		**1.08**	**9.76**
	CUMULATIVE TOTAL	***7,185,442***		***72.11***	***6,417,373***		***13.75***	***6,046,316***		***3.44***	***5,424,978***		***32.39***	***121.68***

TABLE 3.1-5
CAPA GROUNDWATER TREATMENT SYSTEM
APPROXIMATE MASS OF MERCURY REMOVED
RECOVERY WELLS

YEAR	MONTH	CA050B			CA051B			CA052B			CA0U23B			MERCURY REMOVED, ALL WELLS
		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		
		(gal)[1]	(mg/L)[2,3]	(lbs)[4]	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(lbs)
2006	January	91,090	0.813	0.62	65,510	0.116	0.06	62,440	0.0197	0.01	67,880	0.259	0.15	0.84
	February	99,040	0.813	0.67	69,830	0.116	0.07	180	0.0197	0.00	24,420	0.259	0.05	0.79
	March	82,410	0.813	0.56	69,150	0.116	0.07	40,220	0.0197	0.01	50,430	0.259	0.11	0.74
	April	107,470	0.813	0.73	96,190	0.116	0.09	105,340	0.0197	0.02	43,880	0.259	0.09	0.93
	May	130,240	0.59	0.64	79,280	0.081	0.05	127,530	0.016	0.02	73,690	0.14	0.09	0.80
	June	95,670	0.59	0.47	96,640	0.081	0.07	102,141	0.016	0.01	57,010	0.14	0.07	0.62
	July	114,830	0.59	0.57	110,010	0.081	0.07	131,199	0.016	0.02	67,870	0.14	0.08	0.74
	August	86,450	0.59	0.43	83,190	0.081	0.06	108,970	0.016	0.01	57,850	0.14	0.07	0.56
	September	5,190	0.59	0.03	113,640	0.081	0.08	146,870	0.016	0.02	74,010	0.14	0.09	0.21
	October	0	0.59	0.00	95,820	0.081	0.06	99,390	0.016	0.01	16,770	0.14	0.02	0.10
	November	36,240	0.59	0.18	93,710	0.081	0.06	68,760	0.016	0.01	43,920	0.14	0.05	0.30
	December	93,760	0.59	0.46	66,030	0.081	0.04	48,040	0.016	0.01	27,460	0.14	0.03	0.54
	TOTAL	**942,390**		**5.35**	**1,039,000**		**0.79**	**1,041,080**		**0.15**	**605,190**		**0.89**	**7.18**
	CUMULATIVE TOTAL	***8,127,832***		***77.45***	***7,456,373***		***14.54***	***7,087,396***		***3.58***	***6,030,168***		***33.28***	***128.86***
2007	January	56,240	0.59	0.28	73,810	0.081	0.05	0	0.016	0.00	59,320	0.14	0.07	0.40
	February	47,980	0.59	0.24	68,410	0.081	0.05	33,980	0.016	0.00	28,040	0.14	0.03	0.32
	March	41,510	0.59	0.20	41,310	0.081	0.03	34,260	0.016	0.00	33,140	0.14	0.04	0.28
	April	56,420	0.59	0.28	67,350	0.081	0.05	57,220	0.016	0.01	51,730	0.14	0.06	0.39
	May	57,130	0.59	0.28	55,440	0.081	0.04	56,500	0.016	0.01	28,740	0.14	0.03	0.36
	June	76,370	0.59	0.38	79,230	0.081	0.05	68,240	0.016	0.01	45,520	0.14	0.05	0.49
	July	86,610	0.59	0.43	70,410	0.081	0.05	43,660	0.016	0.01	31,250	0.14	0.04	0.52
	August	22,350	0.59	0.11	100,910	0.081	0.07	6,030	0.016	0.00	41,540	0.14	0.05	0.23
	September	58,700	0.59	0.29	73,050	0.081	0.05	51,800	0.016	0.01	12,340	0.14	0.01	0.36
	October	81,650	1.6	1.09	115,960	0.13	0.13	88,890	0.025	0.02	18,300	0.25	0.04	1.27
	November	17,440	1.6	0.23	77,710	0.13	0.08	80,430	0.025	0.02	50	0.25	0.00	0.33
	December	39,410	1.6	0.53	83,380	0.13	0.09	101,580	0.025	0.02	30,440	0.25	0.06	0.70
	TOTAL	**641,810**		**4.33**	**906,970**		**0.73**	**622,590**		**0.10**	**380,410**		**0.49**	**5.65**
	CUMULATIVE TOTAL	***8,769,642***		***81.78***	**8,363,343**		***15.26***	***7,709,986***		***3.69***	***6,410,578***		***33.77***	***134.50***
2008	January	75,870	1.6	1.01	85,800	0.13	0.09	71,610	0.025	0.01	48,490	0.25	0.10	1.22
	February	49,440	1.6	0.66	52,010	0.13	0.06	49,930	0.025	0.01	21,670	0.25	0.05	0.77
	March	28,360	1.6	0.38	89,270	0.13	0.10	77,750	0.025	0.02	34,140	0.25	0.07	0.56
	April	115,960	1.6	1.55	111,690	0.13	0.12	123,590	0.025	0.03	54,420	0.25	0.11	1.81
	May	61,950	1.6	0.83	65,360	0.13	0.07	97,900	0.025	0.02	43,270	0.25	0.09	1.01
	June	117,100	1.6	1.56	59,990	0.13	0.07	77,420	0.025	0.02	24,440	0.25	0.05	1.70
	July	90,450	1.6	1.21	96,410	0.13	0.10	113,900	0.025	0.02	51,380	0.25	0.11	1.44
	August	89,370	1.6	1.19	94,570	0.13	0.10	86,520	0.025	0.02	57,080	0.25	0.12	1.43
	September	77,560	1.6	1.04	88,830	0.13	0.10	37,870	0.025	0.01	56,980	0.25	0.12	1.26
	October	111,200	0.54	0.50	119,510	0.065	0.06	130,040	0.014	0.02	49,750	0.14	0.06	0.64
	November	117,320	0.54	0.53	89,360	0.065	0.05	107,970	0.014	0.01	45,400	0.14	0.05	0.64
	December	118,970	0.54	0.54	99,220	0.065	0.05	109,240	0.014	0.01	44,320	0 14	0.05	0.65
	TOTAL	**1,053,550**		**10.99**	**1,052,020**		**0.97**	**1,083,740**		**0.19**	**531,340**		**0.98**	**13.14**
	CUMULATIVE TOTAL	***9,823,192***		***92.77***	***9,415,363***		***16.24***	***8,793,726***		***3.88***	***6,941,918***		***34.75***	***147.65***
2009	January	102,620	0.54	0.46	98,940	0.065	0.05	68,640	0.014	0.01	39,400	0.14	0.05	0.57
	February	89,130	0.54	0.40	133,220	0.065	0.07	88,930	0.014	0.01	42,180	0.14	0.05	0.53
	March	89,510	0.54	0.40	97,320	0.065	0.05	84,060	0.014	0.01	44,870	0.14	0.05	0.52
	April	120,620	0.54	0.54	66,890	0.065	0.04	106,260	0.014	0.01	63,360	0.14	0.07	0.67
	May	78,350	0.54	0.35	90,300	0.065	0.05	101,380	0.014	0.01	60,280	0.14	0.07	0.48
	June	80,660	0.54	0.36	77,260	0.065	0.04	88,190	0.014	0.01	45,520	0.14	0.05	0.47
	July	91,040	0.503	0.38	100,080	0.0958	0.08	98,360	0.0134	0.01	53,990	0.141	0.06	0.54
	August	75,240	0.503	0.32	72,520	0.0958	0.06	88,650	0.0134	0.01	39,080	0.141	0.05	0.43
	September	89,350	0.503	0.38	75,160	0.0958	0.06	91,560	0.0134	0.01	46,250	0.141	0.05	0.50
	October	96,500	0.503	0.41	95,480	0.0958	0.08	102,630	0.0134	0.01	49,900	0.141	0.06	0.55
	November	113,300	0.503	0.48	99,640	0.0958	0.08	111,400	0.0134	0.01	52,860	0.141	0.06	0.63
	December	105,430	0.503	0.44	124,530	0.0958	0.10	76,840	0.0134	0.01	46,590	0.141	0.05	0.61
	TOTAL	**1,131,750**		**4.92**	**1,131,340**		**0.76**	**1,106,900**		**0.13**	**584,280**		**0.69**	**6.50**
	CUMULATIVE TOTAL	***10,954,942***		***97.70***	**10,546,703**		***17.00***	***9,900,626***		***4.01***	***7,526,198***		***35.44***	***154.14***

TABLE 3.1-5
CAPA GROUNDWATER TREATMENT SYSTEM
APPROXIMATE MASS OF MERCURY REMOVED
RECOVERY WELLS

YEAR	MONTH	CA050B			CA051B			CA052B			CA0U23B			MERCURY REMOVED, ALL WELLS
		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		CUMULATIVE FLOW	MERCURY		
		(gal)[1]	(mg/L)[2,3]	(lbs)[4]	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(gal)	(mg/L)	(lbs)	(lbs)
2010	January	52,720	0.503	0.22	57,060	0.0958	0.05	56,230	0.0134	0.01	38,510	0.141	0.05	0.32
	February	83,730	0.503	0.35	89,630	0.0958	0.07	91,960	0.0134	0.01	59,560	0.141	0.07	0.50
	March	65,750	0.503	0.28	84,780	0.0958	0.07	103,060	0.0134	0.01	63,970	0.141	0.08	0.43
	April	90,970	0.503	0.38	89,470	0.0958	0.07	94,390	0.0134	0.01	34,190	0.141	0.04	0.50
	May	61,190	0.503	0.26	68,940	0.0958	0.06	84,160	0.0134	0.01	55,090	0.141	0.06	0.39
	June	60,580	0.503	0.25	60,580	0.0958	0.05	81,780	0.0134	0.01	55,590	0.141	0.07	0.38
	July	87,350	0.393	0.29	93,790	0.0134	0.01	89,940	0.007	0.01	66,060	0.123	0.07	0.37
	August	75,280	0.393	0.25	80,100	0.0134	0.01	98,830	0.007	0.01	77,610	0.123	0.08	0.34
	September	78,290	0.393	0.26	68,920	0.0134	0.01	82,540	0.007	0.00	28,350	0.123	0.03	0.30
	October	70,800	0.393	0.23	62,941	0.0134	0.01	86,310	0.007	0.01	45,620	0.123	0.05	0.29
	November	84,990	0.393	0.28	93,090	0.0134	0.01	87,220	0.007	0.01	71,100	0.123	0.07	0.37
	December	80,300	0.393	0.26	74,120	0.0134	0.01	78,910	0.007	0.00	62,000	0.123	0.06	0.34
	TOTAL	**891,950**		**3.31**	**923,421**		**0.41**	**1,035,330**		**0.09**	**657,650**		**0.72**	**4.53**
	CUMULATIVE TOTAL	***11,846,892***		***101.00***	***11,470,124***		***17.41***	***10,935,956***		***4.10***	***8,183,848***		***36.16***	***158.67***
2011	January	78,430	0.393	0.26	71,580	0.0134	0.01	92,590	0.007	0.01	63,870	0.123	0.07	0.34
	February	63,050	0.393	0.21	55,840	0.0134	0.01	48,380	0.007	0.00	34,460	0.123	0.04	0.25
	March	76,350	0.393	0.25	36,750	0.0134	0.00	82,880	0.007	0.00	58,020	0.123	0.06	0.32
	April	71,410	0.393	0.23	53,250	0.0134	0.01	90,600	0.007	0.01	75,830	0.123	0.08	0.32
	May	99,970	0.393	0.33	12,790	0.0134	0.0014	82,730	0.007	0.00	51,340	0.123	0.05	0.39
	June	44,800	0.393	0.15	162,810	0.0134	0.02	32,220	0.007	0.00	68,900	0.123	0.07	0.24
	July	99,970	0.404	0.34	103,510	0.0268	0.02	78,120	0.0056	0.00	64,040	0.102	0.05	0.42
	August	101,610	0.404	0.34	102,590	0.0268	0.02	75,780	0.0056	0.00	65,340	0.102	0.06	0.42
	September	98,190	0.404	0.33	95,810	0.0268	0.02	81,800	0.0056	0.00	66,250	0.102	0.06	0.41
	October	89,080	0.404	0.30	71,740	0.0268	0.02	92,250	0.0056	0.00	74,890	0.102	0.06	0.38
	November	54,220	0.404	0.18	61,580	0.0268	0.01	67,800	0.0056	0.00	46,580	0.102	0.04	0.24
	December	46,060	0.404	0.16	35,400	0.0268	0.01	53,940	0.0056	0.00	28,430	0.102	0.02	0.19
	TOTAL	**923,140**		**3.07**	**883,650**		**0.15**	**879,090**		**0.05**	**697,950**		**0.66**	**3.92**
	CUMULATIVE TOTAL	***12,770,032***		***104.08***	***12,333,774***		***17.56***	***11,815,046***		***4.14***	***8,881,798***		***36.82***	***162.59***
2012	January	62,760	0.404	0.21	58,550	0.0268	0.01	77,300	0.0056	0.00	55,730	0.102	0.05	0.28
	February	116,490	0.404	0.39	115,930	0.0268	0.03	130,622	0.0056	0.01	87,250	0.102	0.07	0.50
	March	55,560	0.404	0.19	54,010	0.0268	0.01	62,618	0.0056	0.00	40,490	0.102	0.03	0.24
	April	86,230	0.404	0.29	88,490	0.0268	0.02	85,780	0.0056	0.00	62,650	0.102	0.05	0.37
	May	127,780	0.404	0.43	127,410	0.0268	0.0285	117,720	0.0056	0.01	80,910	0.102	0.07	0.53
	June	98,460	0.404	0.33	69,470	0.0268	0.02	97,250	0.0056	0.00	53,250	0.102	0.05	0.40
	July	103,630	0.404	0.35	123,240	0.0268	0.03	118,450	0.0056	0.01	71,570	0.102	0.06	0.44
	August	120,300	0.404	0.41	137,100	0.0268	0.03	142,630	0.0056	0.01	61,240	0.102	0.05	0.50
	September	91,690	0.394	0.30	97,780	0.0204	0.02	61,210	0.005	0.00	55,010	0.085	0.04	0.36
	October	91,890	0.394	0.30	87,080	0.0204	0.01	124,050	0.005	0.01	66,130	0.085	0.05	0.37
	November	124,220	0.394	0.41	106,210	0.0204	0.02	125,230	0.005	0.01	65,740	0.085	0.05	0.48
	December	116,910	0.394	0.38	85,380	0.0204	0.01	116,720	0.005	0.00	45,790	0.085	0.03	0.44
	TOTAL	**1,195,920**		**4.00**	**1,150,650**		**0.24**	**1,259,580**		**0.06**	**745,760**		**0.60**	**4.89**
	CUMULATIVE TOTAL	***13,965,952***		***108.07***	***13,484,424***		***17.80***	***13,074,626***		***4.20***	***9,627,558***		***37.42***	***167.49***
2013	January	113,370	0.394	0.37	77,990	0.0204	0.01	116,270	0.005	0.00	66,770	0.085	0.05	0.44
	February	112,590	0.394	0.37	95,460	0.0204	0.02	75,310	0.005	0.00	70,800	0.085	0.05	0.44
	March	98,780	0.394	0.32	92,420	0.0204	0.02	96,280	0.005	0.00	66,770	0.085	0.05	0.39
	April	89,340	0.394	0.29	82,670	0.0204	0.01	90,170	0.005	0.00	61,090	0.085	0.04	0.35
	May	116,300	0.394	0.38	65,810	0.0204	0.0112	132,000	0.005	0.01	80,830	0.085	0.06	0.46
	June	125,010	0.394	0.41	82,630	0.0204	0.01	106,160	0.005	0.00	44,350	0.085	0.03	0.46
	July	121,530	0.394	0.40	84,250	0.0204	0.01	108,210	0.005	0.00	62,060	0.085	0.04	0.46
	August	141,140	0.394	0.46	90,940	0.0204	0.02	125,180	0.005	0.01	72,250	0.085	0.05	0.54
	September	105,950	0.35	0.31	81,600	0.007	0.00	96,240	0.003	0.00	56,930	0.0837	0.04	0.36
	October	125,250	0.35	0.37	115,720	0.007	0.01	115,850	0.003	0.00	78,450	0.0837	0.05	0.43
	November	107,610	0.35	0.31	83,470	0.007	0.00	90,570	0.003	0.00	62,050	0.0837	0.04	0.36
	December	130,840	0.35	0.38	79,140	0.007	0.00	105,340	0.003	0.00	70,960	0.0837	0.05	0.44
	TOTAL	**1,387,710**		**4.39**	**1,032,100**		**0.14**	**1,257,580**		**0.05**	**793,310**		**0.56**	**5.13**
	CUMULATIVE TOTAL	***15,353,662***		***112.46***	***14,516,524***		***17.93***	***14,332,206***		***4.24***	***10,420,868***		***37.98***	***172.62***

Notes:
1) gal - gallons
2) mg/L - milligrams per liter
3) Mercury samples collected during the month were reported as that months' concentration. If a sample was not collected during a specific month, the previous month's result was reported.
4) lbs - pounds

FIGURES

Path: Y:\LAVACA_BAY\114-021515\mxd\Fig 1 Location of Marsh 14 Removal Area.mxd

Legend

Marsh 14 Island Response Action Area

Surrounding Marsh 14 Response Action Areas

N

0 1,000 2,000 Feet

SOURCE: General Land Office 2009 0.5 Meter DOQQ Imagery

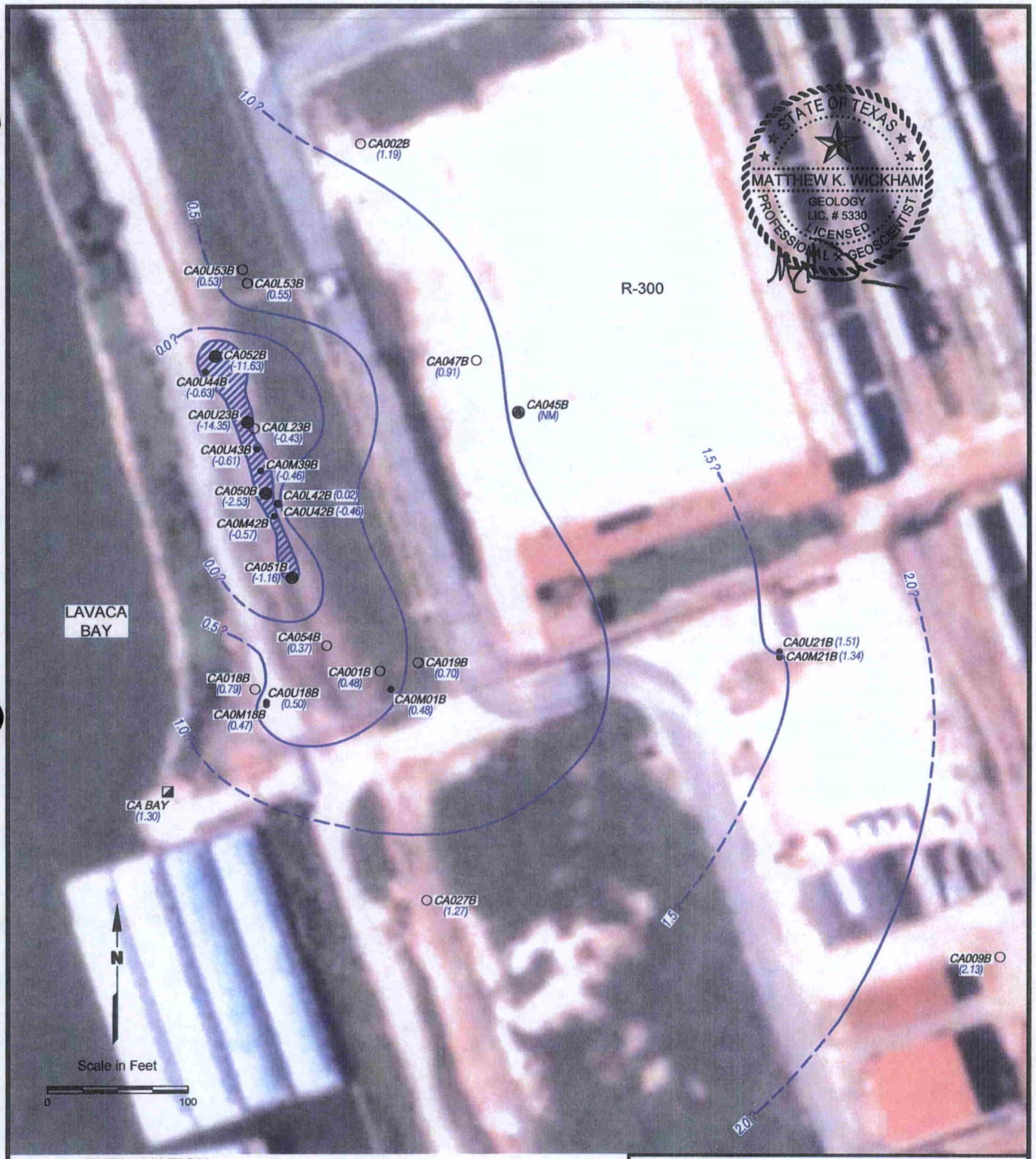
ALCOA
Point Comfort Operations

FIGURE 1

LOCATION OF MARSH 14 REMOVAL AREA

PROJECT: 021515	DATE: MARCH 2014	
REV: 00	BY: SMM	CHECKED: GTF

TETRA TECH
COMPLEX WORLD, CLEAR SOLUTIONS



STATE OF TEXAS
MATTHEW K. WICKHAM
GEOLOGY
LIC. # 5330
LICENSED
PROFESSIONAL GEOSCIENTIST

EXPLANATION

- *CA018B* — Well Designation
- ○ — Monitoring Well
- • — Piezometer
- ● — Recovery Well
- ◪ — Tidal Gauge
- —1.5— Estimated Potentiometric Surface Contour (Ft) C.I. = 0.5 Ft
- Area of Drawdown of Potentiometric Surface Caused by Pumping (not contoured)

Notes:
1. Groundwater elevations measured in pumping wells are probably influenced by well inefficiencies.
2. Groundwater elevations are corrected for salinity effects.
3. NM = Not measured.
4. Only wells measured for water levels are shown on this figure.
5. Surface water elevation used for contouring is from tidal gauge located south west of CAPA (CA Bay).

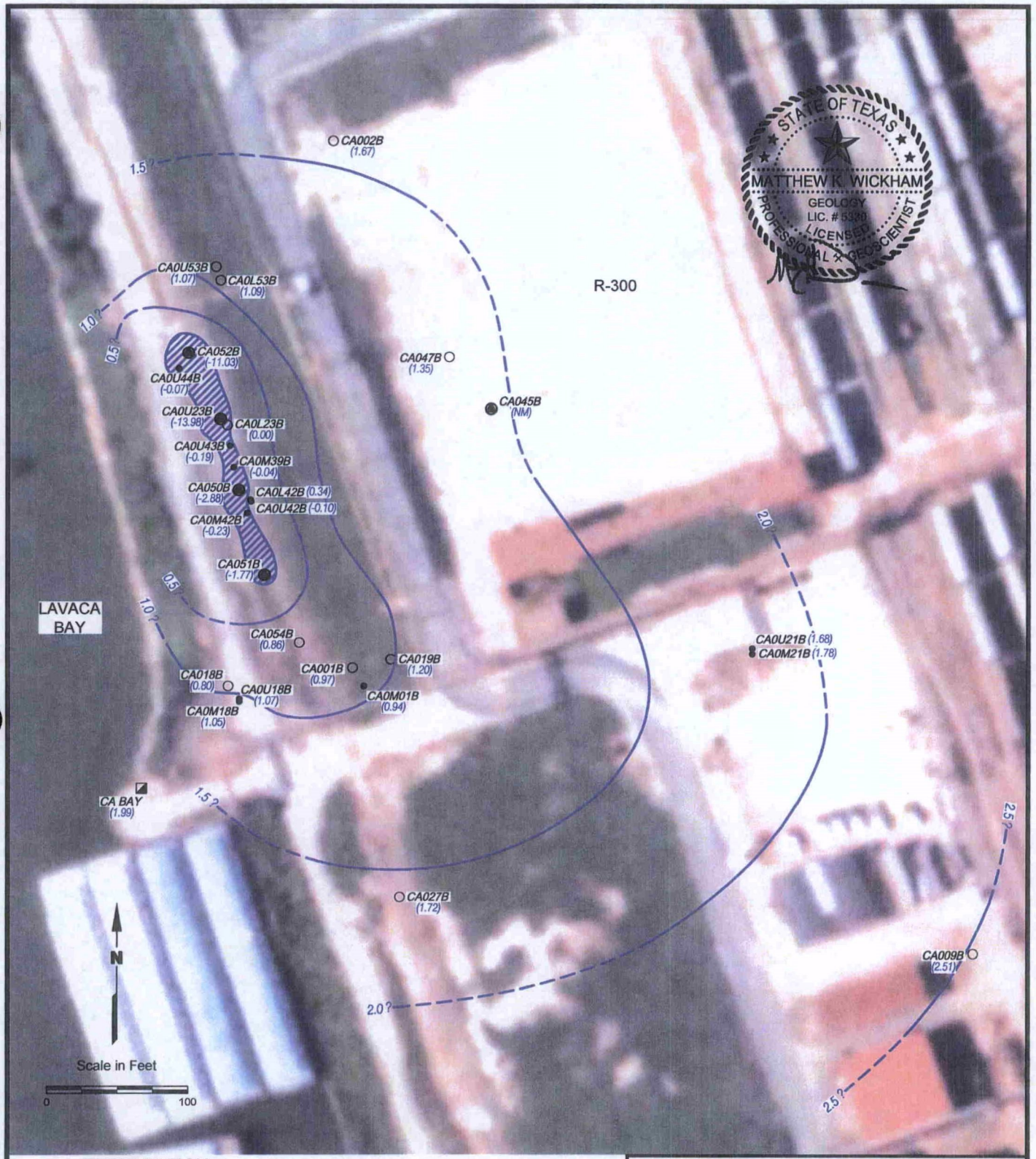
SOURCE:
Aerial image from Lanmon Aerial Photography Inc, dated 9/20/12.

ALCOA

FIGURE 3.1-1
POTENTIOMETRIC SURFACE OF ZONE B GROUNDWATER (3/27/2013)

PROJECT: 3318	DATE: MARCH, 2014	
REV:	BY: AJD	CHECKED: MKW

ALCOA
Point Comfort Operations



STATE OF TEXAS
MATTHEW K. WICKHAM
GEOLOGY
LIC. # 5338
LICENSED
PROFESSIONAL GEOSCIENTIST

EXPLANATION

- CA018B — Well Designation
- ○ — Monitoring Well
- • — Piezometer
- ◉ — Recovery Well
- ◪ — Tidal Gauge
- —1.5— Estimated Potentiometric Surface Contour (Ft) C.I. = 0.5 Ft
- Area of Drawdown of Potentiometric Surface Caused by Pumping (not contoured)

Notes:
1. Groundwater elevations measured in pumping wells are probably influenced by well inefficiencies.
2. Groundwater elevations are corrected for salinity effects.
3. NM = Not measured.
4. Only wells measured for water levels are shown on this figure.
5. Surface water elevation used for contouring is from tidal gauge located south west of CAPA (CA Bay).

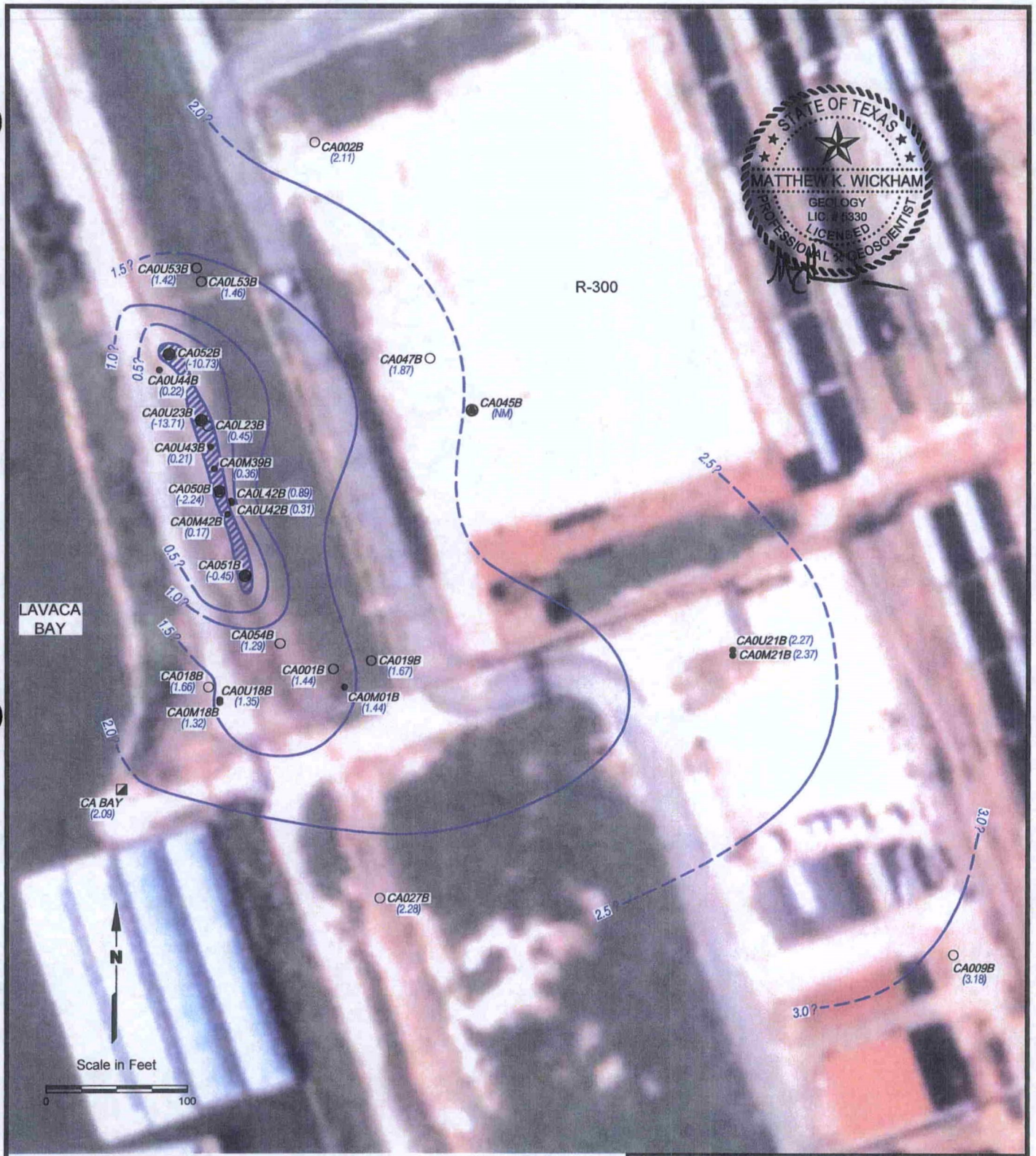
SOURCE:
Aerial image from Lanmon Aerial Photography Inc, dated 9/20/12.

ALCOA

FIGURE 3.1-2
POTENTIOMETRIC SURFACE OF ZONE B GROUNDWATER (6/11/2013)

PROJECT: 3318	DATE: MARCH, 2014	
REV:	BY: AJD	CHECKED: MKW

ALCOA
Point Comfort Operations



STATE OF TEXAS
MATTHEW K. WICKHAM
GEOLOGY
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EXPLANATION

- CA018B — Well Designation
- ○ — Monitoring Well
- • — Piezometer
- ● — Recovery Well
- ◪ — Tidal Gauge
- —1.5— Estimated Potentiometric Surface Contour (Ft) C.I. = 0.5 Ft
- Area of Drawdown of Potentiometric Surface Caused by Pumping (not contoured)

Notes:
1. Groundwater elevations measured in pumping wells are probably influenced by well inefficiencies.
2. Groundwater elevations are corrected for salinity effects.
3. NM = Not measured.
4. Only wells measured for water levels are shown on this figure.
5. Surface water elevation used for contouring is from tidal gauge located south west of CAPA (CA Bay).

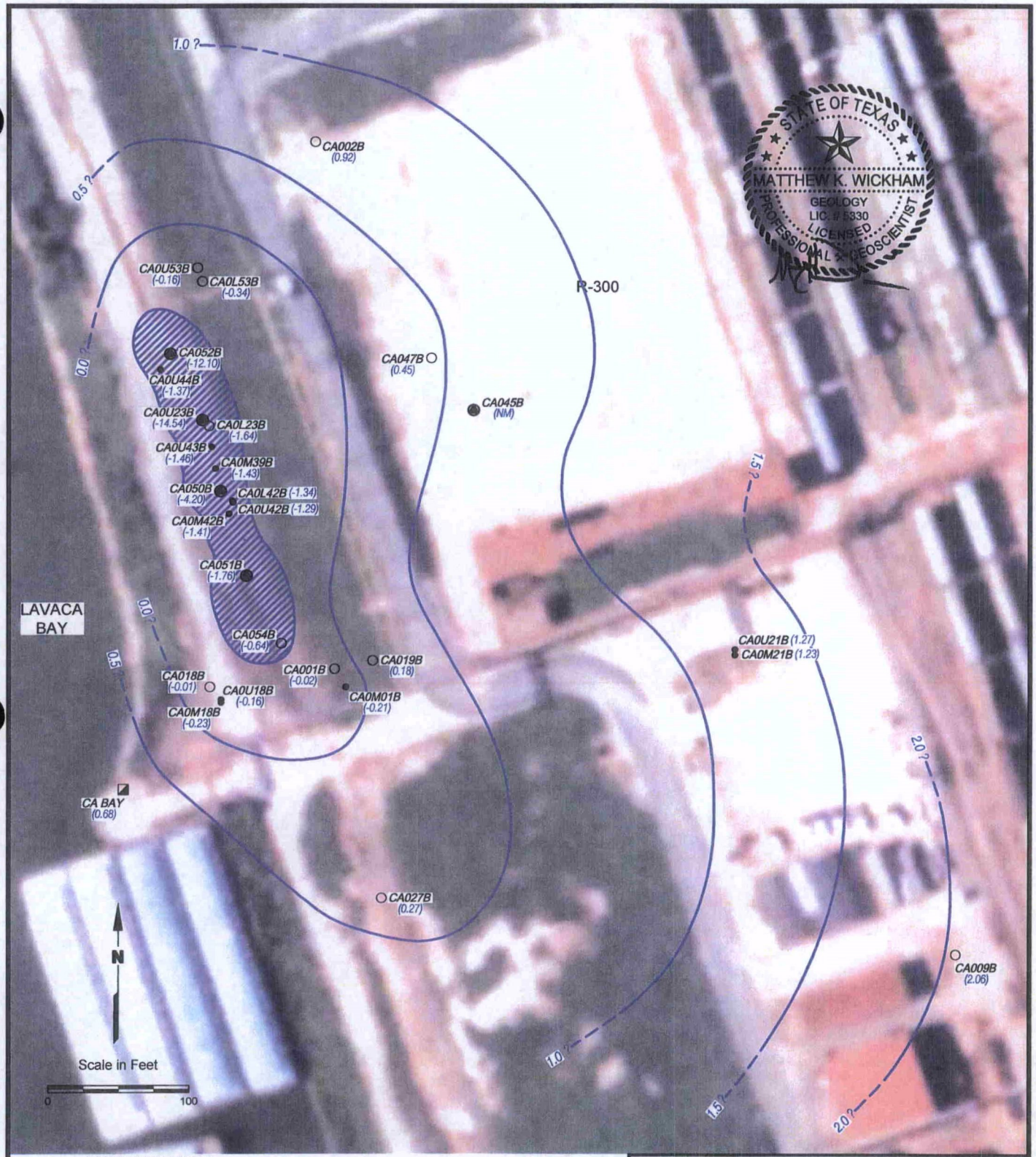
SOURCE:
Aerial image from Lanmon Aerial Photography Inc, dated 9/20/12.

ALCOA

FIGURE 3.1-3
POTENTIOMETRIC SURFACE OF ZONE B GROUNDWATER (9/26/2014)

PROJECT: 3318	DATE: MARCH, 2014	
REV:	BY: AJD	CHECKED: MKW

ALCOA
Point Comfort Operations



EXPLANATION

- CA018B — Well Designation
- ○ — Monitoring Well
- • — Piezometer
- ● — Recovery Well
- ◪ — Tidal Gauge
- —1.5— Estimated Potentiometric Surface Contour (Ft) C.I. = 0.5 Ft
- Area of Drawdown of Potentiometric Surface Caused by Pumping (not contoured)

Notes:
1. Groundwater elevations measured in pumping wells are probably influenced by well inefficiencies.
2. Groundwater elevations are corrected for salinity effects.
3. NM = Not measured.
4. Only wells measured for water levels are shown on this figure.
5. Surface water elevation used for contouring is from tidal gauge located south west of CAPA (CA Bay).

SOURCE:
Aerial image from Lanmon Aerial Photography Inc, dated 9/20/12.

ALCOA

FIGURE 3.1-4
POTENTIOMETRIC SURFACE OF ZONE B GROUNDWATER (12/23/2013)

PROJECT: 3308	DATE: MARCH, 2014	
REV:	BY: AJD	CHECKED: MKW

ALCOA
Point Comfort Operations

FIGURE 3.1-5
CAPA GROUNDWATER TREATMENT SYSTEM
Recovery Wells - Analytical Results
Mercury (Hg) vs. Time

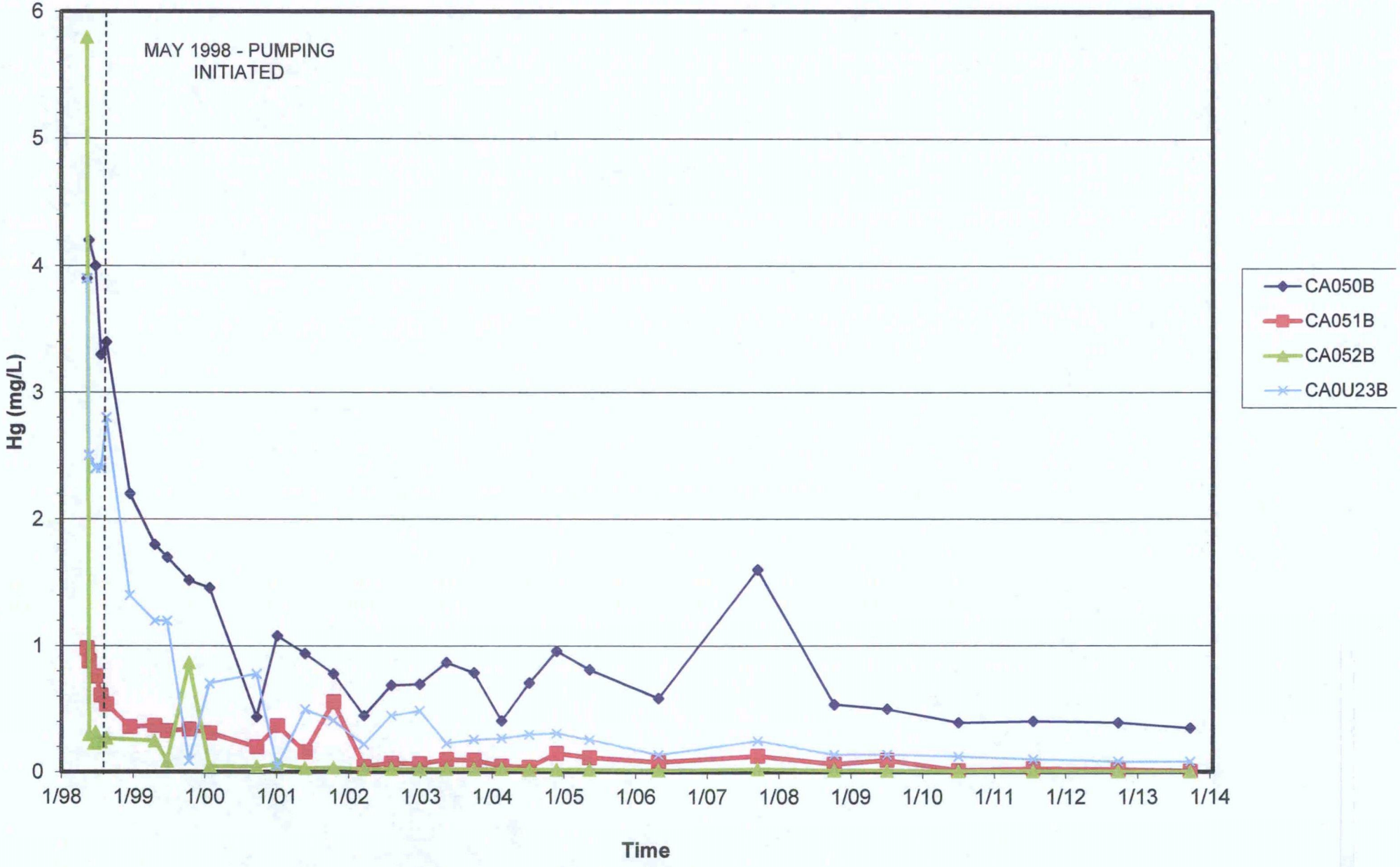
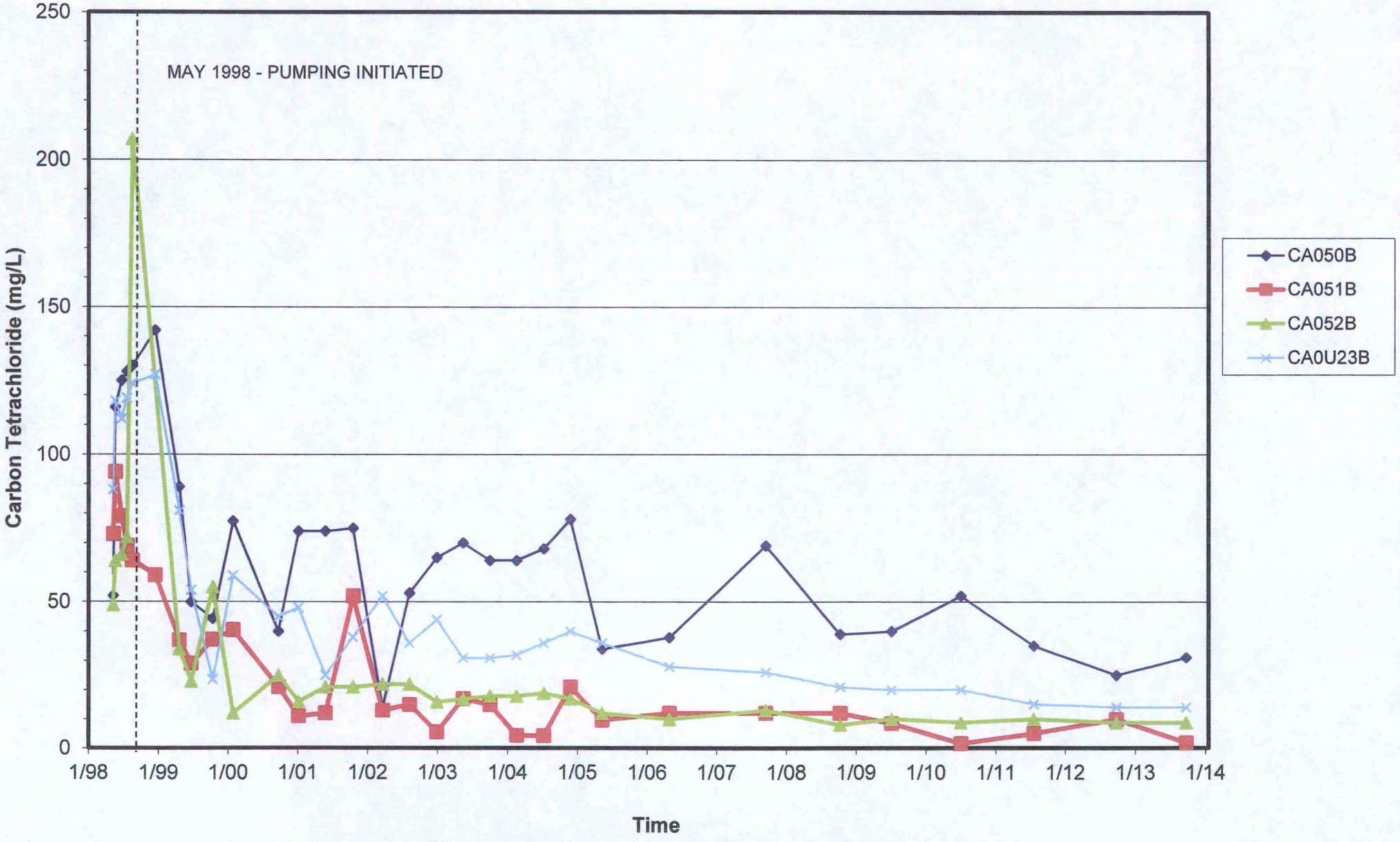


FIGURE 3.1-6
CAPA GROUNDWATER TREATMENT SYSTEM
Recovery Wells - Analytical Results
Carbon Tetrachloride vs. Time



APPENDIX A

DREDGE ISLAND INSPECTION RECORDS 2013

DREDGE ISLAND INSPECTION RECORD

Inspector's Name: Kevin Dworsky
Weather: Clear Sky
Temperature: 50° F
KBD accompanied by Brett Soutar of Benchmark Ecological Services Inc. during inspection.

Date: 03/27/2013 (1Q13)
Time Begin: 1000
Time End: 1130
Inspector's Signature:

SPECIFIC ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS OBSERVED		COMMENTS OR CORRECTIVE ACTION(S) IMPLEMENTED AND DATES
		NORMAL	ABNORMAL	
General Dredge Island	Erosion	X	☐	All original vehicular signs and some of the reflectors on Island are damaged. New signs have been placed in a few locations during 2011maintenance event on the island. Slight vegetation on the road and moderate vegetation along the sides of the roads, interior dikes, outer dikes, and on toes of the exterior dikes. Hard to inspect some areas of the dikes and ramps thoroughly due to the heavy vegetation. Large trees/bushes are forming in the gravel along the roads and in the armor. Action will need to be taken in the future to remove all unwanted vegetation.
	Deterioration	X	☐	
	Settling/Ponding	X	☐	
	Uplift	X	☐	
	Washouts	X	☐	
	Rodent Holes	X	☐	
	Vegetation	☐	X	
Access Bridge	Deterioration	☐	X	Conditions similar to previous 4Q12 report. Bridge abutments severely eroded. Hazard signs indicating presence of water hazards appear in good condition. Detailed inspection of the bridge was not performed as part of this site visit. Bridge abutments are severely eroded.
	Damage	☐	X	
	Navigation Lights	☐	X	
CDF Dike	Erosion	X	☐	North interior CDF dike and access ramp appear to be in generally good condition. Minor erosion has been noted on the interior dikes and on the access ramp in several locations. There is no water inside the CDF. Minor erosion observed in areas of the exterior dike side slope where the entry ramp meets the dike. The exterior CDF dike appears to be in good condition. The CDF dike appears stable and there is no required action at this time, however, water levels in the CDF should be maintained as low as possible, and erosion rills on the dike's interior and exterior should continue to be monitored during quarterly inspections. Minor to moderate geomembrane exposed along the interior dike on all sides of the dike. Action in the near future may be necessary. The geomembrane component of the water stop on the CCND dike, near the ALCOA CDF station 23+00, is exposed due to severe erosion of the overlying topsoil. Erosion in this area currently does not appear to impact the CDF dikes but should continue to be monitored during quarterly inspections. Was unable to view exterior for seepage due to large amounts of vegetation and low tidal conditions. There was none noted from the dike.
	Deterioration	X	☐	
	Damage	X	☐	
	Vegetation	X	☐	
Stone Storm Protection	Erosion	X	☐	No damage observed. Significant vegetation present. The amount of trees/bushes that are pushing through the armor has remained the same. Action to remove the vegetation will be necessary.
	Settlement	X	☐	
	Stone Deterioration	X	☐	
	Stone Movement	X	☐	

	Fabric Exposure Damage Vegetation	X X □	□ □ X	Due to safety concerns associated with walking on the armor stone, this inspection was conducted without traversing the stone on the exterior dike slopes. The exterior dike locations were observed via the dike crest or by waterside inspection from the boat.
Gravel Erosion Protection	Erosion Fabric Exposure Deterioration Damage	□ □ □ □	X X X X	The inside slope of the north and northwest dikes have been repaired several times since the construction of the CDF due to erosion but geotextile fabric and overlying gravel erosion protection originally constructed on the interior slope was not placed as part of the work. These sections are currently showing minor to moderate erosion. Most of the remaining sections of the dikes' inside slope exhibit minor to moderate erosion and loss of gravel protection. No immediate action is required at these locations but they should continue to be monitored. Lack of geotextile and overlying gravel erosion protection on the slope interiors does not appear to be problematic as long as the water levels are kept low to prevent severe interior erosion.
Emergency Spillway	Obstructions Cracks in Concrete Deterioration Damage	X X X X	□ □ □ □	Generally good condition. Slight erosion and some cracks in the concrete. Slight erosion has occurred along the outer and inner edge of the spillway. Some localized concrete deterioration observed.
Decant Structures	Weir Board Elevation Depth of Water Obstructions Deterioration Rust/Corrosion Damage Overflow Quality (NA) Overflow Quantity Flap Gate	X X X □ □ X □ X X	□ □ □ X X □ □ □ □	As of January 2012, the North Structure will be placed under restricted access until a thorough structural and safety inspection of this structure can be performed by a qualified structural engineer. All inspections will be completed visually from the dike. This recommendation was made due to the severe corrosion of the structural I-beam sections. North Structure: Coated surfaces on structure exhibiting moderate to severe rusting and pitting on handrails. Channel iron also exhibits moderate to severe corrosion. Severe corrosion of the structural I-beam sections was observed. The majority of the structural I-beams are not visible without removal of the grates and access of the structure interior. Therefore, the interior I-beam was not observed during this inspection. Plastic around the top of structure is in good condition. There is no discharge observed coming from the North Decant Structure. South Structure: Minor rust observed on handrails and channel iron. A section of angle iron used to guide the stoplogs in the slots has broken loose from the welds. The plastic around the top of the structure is in good condition. The area around the structure is dry (7.83' below the base plate to the top of the sediment). There is very little water in the structure. Inside the structure, the water level is 17.66' below base plate. The total depth of the decant structure is 18.08'. There is no discharge observed coming from the South Decant Structure.
Gravel Road	Potholes Ponding	X X	□ □	Generally in good condition. Some rutting at several locations. Vegetation present over most of road. There has been some slight erosion of the

DREDGE ISLAND INSPECTION RECORD

	Deterioration Washouts Vegetation	X X □	□ □ X	sides of the road. Several areas of thin gravel and geomembrane exposure. Action will need to be taken to remove the vegetation from the roadways in the near future.
Water Stops	Erosion Membrane Exposed Deterioration Damage	□ □ X X	X X □ □	Severe erosion, fines accumulation, and geomembrane exposed at water stop on CCND dike as previously reported. Continue to monitor.
Reflectors Station Tags	Intact/Reflecting Intact/Legibility	X X	□ □	Some reflectors and traffic signage observed to be leaning or entirely down on the ground. If the island is to be used for vehicular traffic in the future, a more detailed review of the reflectors and traffic signage should be completed.

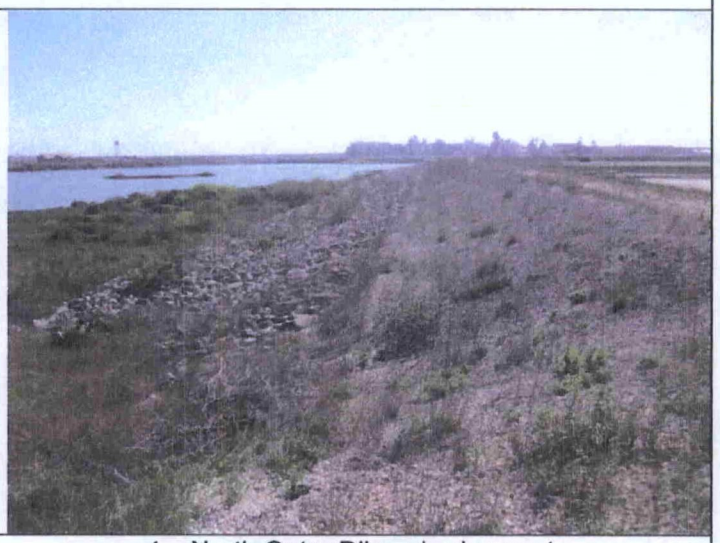
DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 – Viewing road toward damaged bridge

2 – North Ramp, viewing vegetation

3 – North Ramp, viewing washout



4 – North Outer Dike, viewing east

5 – North Inner Dike, viewing erosion damage

6 – Northeast Corner Outer Dike, viewing west

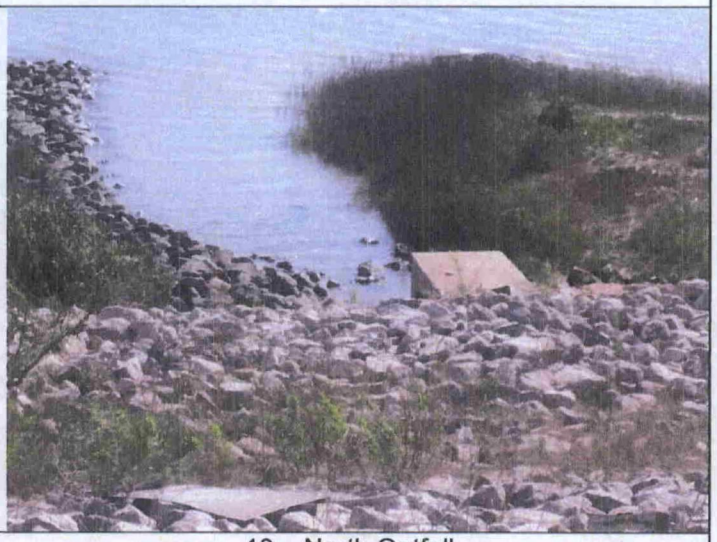
DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

7 – Northeast Corner Inner Dike, viewing west

8 – Northeast Corner Inner Dike, viewing south

9 – East Outer Dike, viewing north



10 – North Outfall

11 – North Decant Structure

12 –Intrusive trees and vegetation in exterior armor

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

13 – Southeast Inner Dike, viewing southwest

14 – Southeast Outer Dike, historic seepage area

15 – Southeast Corner Outer Dike, viewing north

16 – Southeast Corner Inner Dike, viewing north

17 – Southeast Corner Inner Dike, viewing west

18 – Southeast Corner Outer Dike, viewing west

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

19 – South Dike, viewing exposed geofabric

20 – Southwest Corner Inner Dike, viewing north

21 – Southwest Corner Outer Dike, viewing north

22 – South Outfall

23 – South Decant Structure

24 – West Inner Dike, viewing exposed geofabric

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

25 – Northwest Corner Outer Dike, viewing south

26 – Northwest Corner Inner Dike, viewing south

27 – Emergency Spillway, viewing minor washout

28 – Northwest Corner Outer Dike, viewing east

29 – Northwest Corner Inner Dike, viewing east

30 – Northwest Corner, viewing amount of water in structure

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

31 – East CPA Outer Dike, viewing erosion rills

32 – East CPA Inner Dike, viewing erosion and exposure of liner

33 – Viewing sign that was knocked down due to wind

34 – Viewing location where the sign has been repaired

36 – Viewing large ant mound in the gravel

37 – Viewing tear of the geofabric in the road

DREDGE ISLAND INSPECTION RECORD

Inspector's Name: Kevin Dworsky
Weather: Mostly Cloudy Sky
Temperature: 82° F
KBD accompanied by members of PBW, Alcoa, and Orion during inspection.

Date: 05/23/2013 (2Q13)
Time Begin: 1100
Time End: 1230
Inspector's Signature:

SPECIFIC ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS OBSERVED		COMMENTS OR CORRECTIVE ACTION(S) IMPLEMENTED AND DATES
		NORMAL	ABNORMAL	
General Dredge Island	Erosion	X	☐	All original vehicular signs and some of the reflectors on Island are damaged. New signs have been placed in a few locations during 2011maintenance event on the island. These signs are in good condition. Slight to moderate vegetation on the road and moderate vegetation along the sides of the roads, interior dikes, outer dikes, and on toes of the exterior dikes. Hard to inspect some areas of the dikes and ramps thoroughly due to the heavy vegetation. Large trees/bushes are forming in the gravel along the roads and in the armor. Action will need to be taken in the future to remove all unwanted vegetation.
	Deterioration	X	☐	
	Settling/Ponding	X	☐	
	Uplift	X	☐	
	Washouts	X	☐	
	Rodent Holes	X	☐	
	Vegetation	☐	X	
Access Bridge	Deterioration	☐	X	Conditions similar to previous 1Q13 report. Bridge abutments severely eroded. Hazard signs indicating presence of water hazards appear in good condition. Detailed inspection of the bridge was not performed as part of this site visit. Bridge abutments are severely eroded.
	Damage	☐	X	
	Navigation Lights	☐	X	
CDF Dike	Erosion	X	☐	Conditions similar to the previous 1Q13 report. North interior CDF dike and access ramp appear to be in generally good condition. Minor erosion has been noted on the interior dikes and on the access ramp in several locations. There is no water inside the CDF. Minor erosion observed in areas of the exterior dike side slope where the entry ramp meets the dike. The exterior CDF dike appears to be in good condition. The CDF dike appears stable and there is no required action at this time, however, water levels in the CDF should be maintained as low as possible, and erosion rills on the dike's interior and exterior should continue to be monitored during quarterly inspections. Minor to moderate geomembrane exposed along the interior dike on all sides of the dike. Action in the near future may be necessary. The geomembrane component of the water stop on the CCND dike, near the ALCOA CDF station 23+00, is exposed due to severe erosion of the overlying topsoil. Erosion in this area currently does not appear to impact the CDF dikes but should continue to be monitored during quarterly inspections. Was unable to view exterior for seepage due to large amounts of vegetation and low tidal conditions. There was none noted from the dike.
	Deterioration	X	☐	
	Damage	X	☐	
	Vegetation	X	☐	

DREDGE ISLAND INSPECTION RECORD

Stone Storm Protection	Erosion	X	☐	Conditions similar to the previous 1Q13 report.
	Settlement	X	☐	
	Stone Deterioration	X	☐	No damage observed. Significant vegetation present. The amount of trees/bushes that are pushing through the armor has remained the same. Action to remove the vegetation will be necessary.
	Stone Movement	X	☐	
	Fabric Exposure	X	☐	
	Damage	X	☐	
	Vegetation	☐	X	Due to safety concerns associated with walking on the armor stone, this inspection was conducted without traversing the stone on the exterior dike slopes. The exterior dike locations were observed via the dike crest or by waterside inspection from the boat.
Gravel Erosion Protection	Erosion	☐	X	Conditions similar to the previous 1Q13 report.
	Fabric Exposure	☐	X	
	Deterioration	☐	X	The inside slope of the north and northwest dikes have been repaired several times since the construction of the CDF due to erosion but geotextile fabric and overlying gravel erosion protection originally constructed on the interior slope was not placed as part of the work. These sections are currently showing minor to moderate erosion.
	Damage	☐	X	
				Most of the remaining sections of the dikes' inside slope exhibit minor to moderate erosion and loss of gravel protection. No immediate action is required at these locations but they should continue to be monitored.
				Lack of geotextile and overlying gravel erosion protection on the slope interiors does not appear to be problematic as long as the water levels are kept low to prevent severe interior erosion.
Emergency Spillway	Obstructions	X	☐	Conditions similar to the previous 1Q13 report.
	Cracks in Concrete	X	☐	
	Deterioration	X	☐	Generally good condition. Slight erosion and some cracks in the concrete. Slight erosion has occurred along the outer and inner edge of the spillway. Some localized concrete deterioration observed.
	Damage	X	☐	
Decant Structures	Weir Board Elevation	X	☐	Conditions similar to the previous 1Q13 report.
	Depth of Water	X	☐	
	Obstructions	X	☐	As of January 2012, the North Structure will be placed under restricted access until a thorough structural and safety inspection of this structure can be performed by a qualified structural engineer. All inspections will be completed visually from the dike. This recommendation was made due to the severe corrosion of the structural I-beam sections.
	Deterioration	☐	X	
	Rust/Corrosion	☐	X	
	Damage	X	☐	
	Overflow Quality (NA)	☐	☐	
	Overflow Quantity	X	☐	
	Flap Gate	X	☐	North Structure: Coated surfaces on structure exhibiting moderate to severe rusting and pitting on handrails. Channel iron also exhibits moderate to severe corrosion. Severe corrosion of the structural I-beam sections was observed. The majority of the structural I-beams are not visible without removal of the grates and access of the structure interior. Therefore, the interior I-beam was not observed during this inspection. Plastic around the top of structure is in good condition. There is no discharge observed coming from the North Decant Structure.
				South Structure: Minor rust observed on handrails and channel iron. A section of angle iron used to

DREDGE ISLAND INSPECTION RECORD

				guide the stoplogs in the slots has broken loose from the welds. The plastic around the top of the structure is in good condition. The area around the structure is dry (7.83' below the base plate to the top of the sediment). There is very little water in the structure. Inside the structure, the water level is 17.65' below base plate. The total depth of the decant structure is 18.08'. There is no discharge observed coming from the South Decant Structure.
Gravel Road	Potholes Ponding Deterioration Washouts Vegetation	X X X X □	□ □ □ □ X	Conditions similar to the previous 1Q13 report. Generally in good condition. Some rutting at several locations. Vegetation present on road. There has been some slight erosion of the sides of the road. Several areas of thin gravel and geomembrane exposure. Action will need to be taken to remove the vegetation from the roadways in the near future.
Water Stops	Erosion Membrane Exposed Deterioration Damage	□ □ X X	X X □ □	Conditions similar to the previous 1Q13 report. Severe erosion, fines accumulation, and geomembrane exposed at water stop on CCND dike as previously reported. Continue to monitor.
Reflectors Station Tags	Intact/Reflecting Intact/Legibility	X X	□ □	Conditions similar to the previous 1Q13 report. Some reflectors and traffic signage observed to be leaning or entirely down on the ground. If the island is to be used for vehicular traffic in the future, a more detailed review of the reflectors and traffic signage should be completed.

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 – Viewing east slope of the North Ramp

2 – Viewing west slope of the North Ramp

3 – North Ramp, viewing washout

4 – North Inner Dike, viewing erosion damage

– Northeast Corner Inner Dike, viewing conditions inside the CDF

6 – Northeast Corner Outer Dike, viewing west

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

7 – Northeast Corner Inner Dike, viewing west

8 – Northeast Corner Inner Dike, viewing south

9 – Northeast Conner Outer Dike, viewing south

10 – North Outfall, viewing west side of structure

11 – North Decant Structure

12 –Intrusive trees and vegetation in exterior gravel

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

13 – Southeast Inner Dike, viewing southwest

14 – Southeast Outer Dike, historic seepage area

15 – Southeast Corner Outer Dike, viewing north

16 – Southeast Corner Inner Dike, viewing north

17 – Southeast Corner Inner Dike, viewing west

18 – Southeast Corner Outer Dike, viewing west

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

19 – South Dike, viewing exposed geomembrane

20 – Southwest Corner Inner Dike, viewing north

21 – Southwest Corner Outer Dike, viewing north

22 – South Outfall

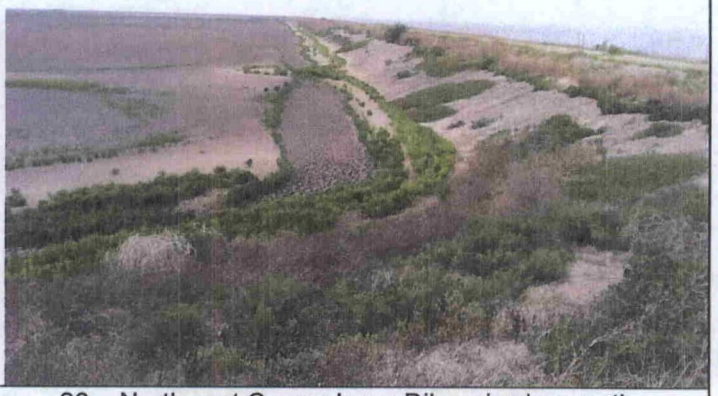
23 – South Decant Structure

24 – West Inner Dike, viewing exposed geomembrane

DREDGE ISLAND INSPECTION PHOTO LOG

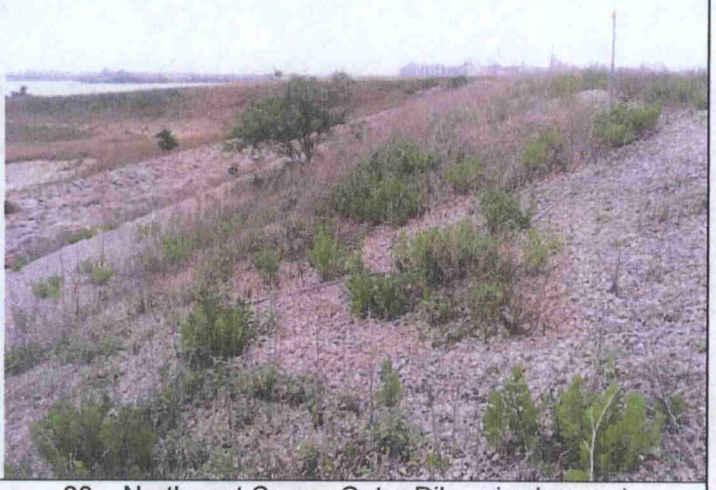
ALCOA PCO – Point Comfort, Texas

25 – Northwest Corner Outer Dike, viewing south



26 – Northwest Corner Inner Dike, viewing south

27 – Emergency Spillway, viewing minor washout



28 – Northwest Corner Outer Dike, viewing east

29 – Northwest Corner Inner Dike, viewing east

30 – Northwest Corner, viewing amount of water in structure

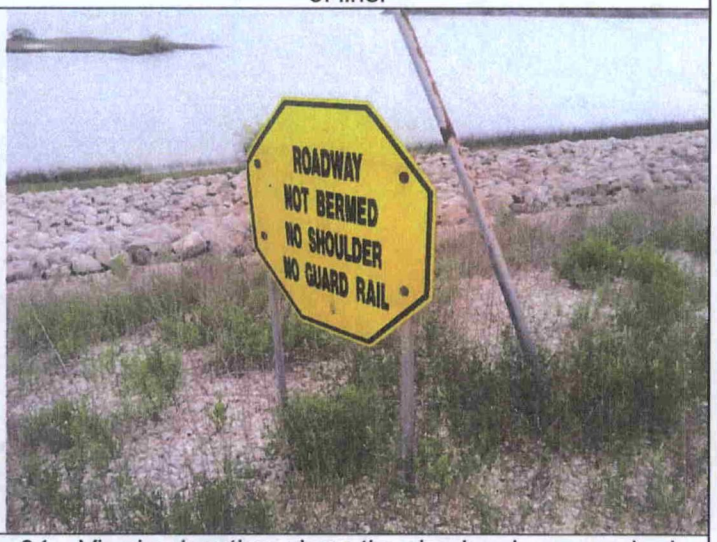
DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

31 – East CPA Outer Dike, viewing erosion rills

32 – East CPA Inner Dike, viewing erosion and exposure of liner

33 – Viewing sign that was knocked down due to wind



34 – Viewing location where the sign has been repaired

36 – Viewing large ant mound in the gravel

37 – Viewing tear of the geomembrane in the road

DREDGE ISLAND INSPECTION RECORD

Inspector's Name: Kevin Dworsky
Weather: Mostly Clear Sky
Temperature: 83° F
KBD accompanied by Benchmark Ecological Services, Inc. during the inspection.

Date: 09/29/2013 (3Q13)
Time Begin: 1000
Time End: 1200
Inspector's Signature:

SPECIFIC ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS OBSERVED		COMMENTS OR CORRECTIVE ACTION(S) IMPLEMENTED AND DATES
		NORMAL	ABNORMAL	
General Dredge Island	Erosion	X	☐	A dredging event occurred previous to the inspection. The South Decant Structure was used to decant the water out of the CDF. All material was placed along the North Inner Dike. All original vehicular signs and some of the reflectors on Island are damaged. New signs have been placed in a few locations during 2011maintenance event on the island. These signs are in good condition. Slight vegetation on the road and moderate vegetation along the sides of the roads, interior dikes, outer dikes, and on toes of the exterior dikes. Hard to inspect some areas of the dikes and ramps thoroughly due to the heavy vegetation. Some rutting of the road on the northeast side of the CDF caused by the heavy equipment used during the dredging event. Large trees/bushes are forming in the gravel along the roads and in the armor. Action will need to be taken in the future to remove all unwanted vegetation.
	Deterioration	X	☐	
	Settling/Ponding	X	☐	
	Uplift	X	☐	
	Washouts	X	☐	
	Rodent Holes	X	☐	
	Vegetation	☐	X	
Access Bridge	Deterioration	☐	X	Conditions similar to previous 2Q13 report. Bridge abutments severely eroded. Hazard signs indicating presence of water hazards appear in good condition. Detailed inspection of the bridge was not performed as part of this site visit. Bridge abutments are severely eroded.
	Damage	☐	X	
	Navigation Lights	☐	X	
CDF Dike	Erosion	X	☐	Minor erosion has been noted on the interior dikes and on the access ramp in several locations. There is water inside the CDF from the recent dredging event. The amount of water has been minimized by decanting through the South Decant Structure. Minor erosion observed in areas of the exterior dike side slope where the entry ramp meets the dike. The exterior CDF dike appears to be in good condition. The CDF dike appears stable and there is no required action at this time, however, water levels in the CDF should be maintained as low as possible, and erosion rills on the dike's interior and exterior should continue to be monitored during quarterly inspections. The material placed during the dredging event appears to be at the same elevation as the dike in a few locations. These location may need to be leveled out so that the material is below the top of the dike. Minor to moderate geomembrane exposed along the portions of the interior dike on all sides of the dike. Action in the near future may be necessary.
	Deterioration	X	☐	
	Damage	X	☐	
	Vegetation	X	☐	

DREDGE ISLAND INSPECTION RECORD

				The geomembrane component of the water stop on the CPA dike, near the ALCOA CDF station 23+00, is exposed due to severe erosion of the overlying topsoil. There are also large erosion rills on the exterior of the dike. Erosion in this area currently does not appear to impact the CDF dikes but should continue to be monitored during quarterly inspections. Was unable to view exterior for seepage due to large amounts of vegetation and low tidal conditions. There was no seepage noted from the dike.
Stone Storm Protection	Erosion Settlement Stone Deterioration Stone Movement Fabric Exposure Damage Vegetation	X X X X X X ☐	☐ ☐ ☐ ☐ ☐ ☐ X	Conditions similar to the previous 1Q13 report. No damage observed. Significant vegetation present. The amount of trees/bushes that are pushing through the armor has remained the same. Action to remove the vegetation will be necessary. Due to safety concerns associated with walking on the armor stone, this inspection was conducted without traversing the stone on the exterior dike slopes. The exterior dike locations were observed via the dike crest or by waterside inspection from the boat.
Gravel Erosion Protection	Erosion Fabric Exposure Deterioration Damage	☐ ☐ ☐ ☐	X X X X	Conditions similar to the previous 1Q13 report. The inside slope of the north and northwest dikes have been repaired several times since the construction of the CDF due to erosion but geotextile fabric and overlying gravel erosion protection originally constructed on the interior slope was not placed as part of the work. These sections are currently showing minor to moderate erosion. Most of the remaining sections of the dikes' inside slope exhibit minor to moderate erosion and loss of gravel protection. No immediate action is required at these locations but they should continue to be monitored. Lack of geotextile and overlying gravel erosion protection on the slope interiors does not appear to be problematic as long as the water levels are kept low to prevent severe interior erosion.
Emergency Spillway	Obstructions Cracks in Concrete Deterioration Damage	X X X X	☐ ☐ ☐ ☐	Conditions similar to the previous 1Q13 report. Generally good condition. Slight erosion and some cracks in the concrete. Slight erosion has occurred along the outer and inner edge of the spillway. Some localized concrete deterioration observed.
Decant Structures	Weir Board Elevation Depth of Water Obstructions Deterioration Rust/Corrosion Damage Overflow Quality (NA) Overflow Quantity Flap Gate	X X X ☐ ☐ X ☐ X X	☐ ☐ ☐ X X ☐ ☐ ☐ ☐	As of January 2012, the North Structure will be placed under restricted access until a thorough structural and safety inspection of this structure can be performed by a qualified structural engineer. All inspections will be completed visually from the dike. This recommendation was made due to the severe corrosion of the structural I-beam sections. North Structure: Coated surfaces on structure exhibiting moderate to severe rusting and pitting on handrails. Channel iron also exhibits moderate to severe corrosion. Severe corrosion of the

				structural I-beam sections was observed. The majority of the structural I-beams are not visible without removal of the grates and access of the structure interior. Therefore, the interior I-beam was not observed during this inspection. Plastic around the top of structure is in good condition. There is no discharge observed coming from the North Decant Structure. The area around the structure is dry (4.75' below the base plate to the top of the sediment). Inside the structure, the water level is 17.71' below base plate. South Structure: Several stop logs were removed to allow water to decant during the dredging event. Minor rust observed on handrails and channel iron. A section of angle iron used to guide the stop logs in the slots has broken loose from the welds. The plastic around the top of the structure is in good condition. The water level around the structure is 7.15' below the base plate. There is very little water in the structure. Inside the structure, the water level is 17.65' below base plate. The total depth of the decant structure is 18.08'. There is no discharge observed coming from the South Decant Structure.
Gravel Road	Potholes Ponding Deterioration Washouts Vegetation	X X X X □	□ □ □ □ X	Generally in good condition. Some rutting at several locations. Moderate rutting on north east side of CDF due to the heavy equipment used during the dredging event. Some vegetation present on road. There is some slight erosion of the sides of the road. Several areas of thin gravel and geomembrane exposure. Action will need to be taken to remove the vegetation from the roadways in the near future.
Water Stops	Erosion Membrane Exposed Deterioration Damage	□ □ X X	X X □ □	Conditions similar to the previous 1Q13 report. Severe erosion, fines accumulation, and geomembrane exposed at water stop on the inside CPA dike as previously reported. Moderate erosion on the exterior of the East CPA Dike. Severe erosion on the exterior of the West CPA Dike. Continue to monitor.
Reflectors Station Tags	Intact/Reflecting Intact/Legibility	X X	□ □	Conditions similar to the previous 1Q13 report. Some reflectors and traffic signage observed to be leaning or entirely down on the ground. If the island is to be used for vehicular traffic in the future, a more detailed review of the reflectors and traffic signage should be completed.

DREDGE ISLAND INSPECTION PHOTO LOG

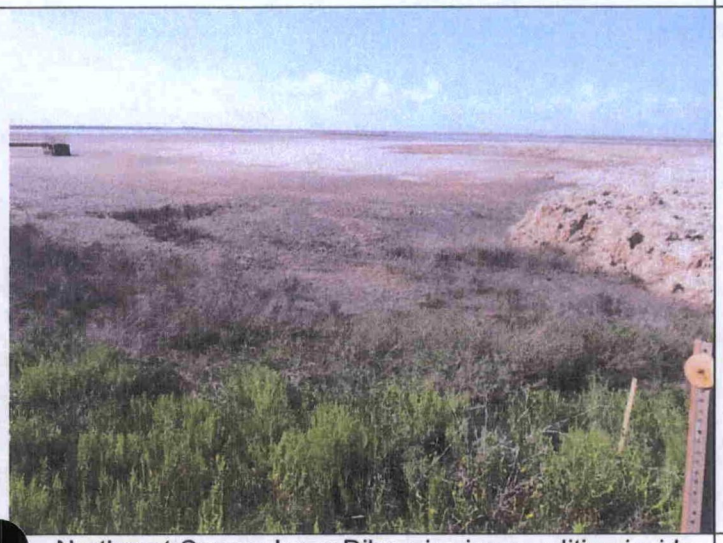
ALCOA PCO – Point Comfort, Texas

1 – Viewing of damaged bridge

2 – Viewing road to the North Ramp

3 – North Ramp, viewing washout

4 – North Inner Dike, viewing erosion damage



– Northeast Conner Inner Dike, viewing condition inside the CDF

6 – Northeast Corner Outer Dike, viewing west

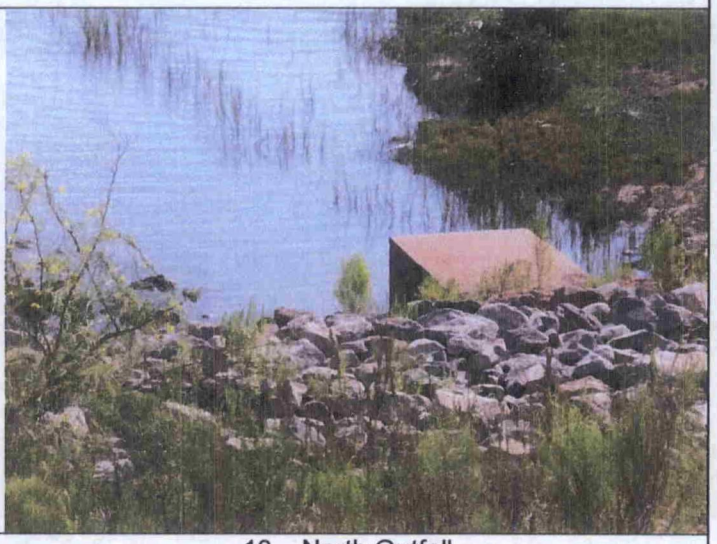
DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

7 – Northeast Corner Inner Dike, viewing west

8 – Northeast Corner Inner Dike, viewing south

9 – East Outer Dike, viewing north



10 – North Outfall

11 – North Decant Structure

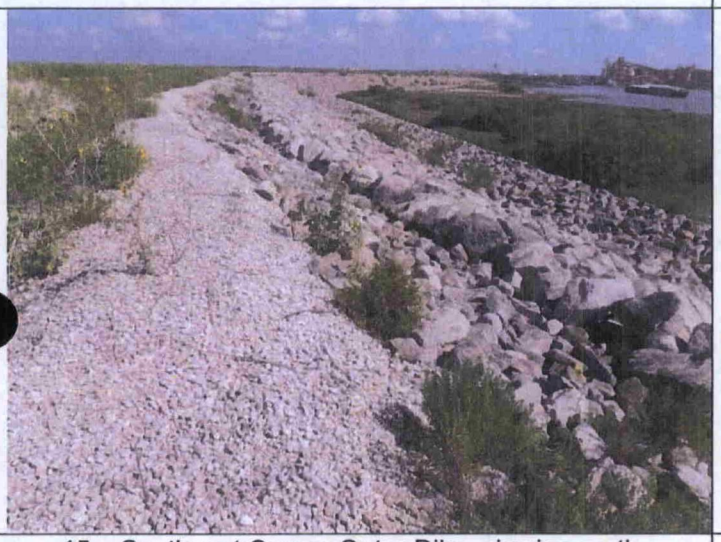
12 –Intrusive trees and vegetation in exterior gravel protection

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

13 – Southeast Inner Dike, viewing southwest

14 – Southeast Outer Dike, historic seepage area



15 – Southeast Corner Outer Dike, viewing north

16 – Southeast Corner Inner Dike, viewing north

17 – Southeast Corner Inner Dike, viewing west

18 – Southeast Corner Outer Dike, viewing west

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

19 – South Dike, viewing exposed geofabric

20 – Southwest Corner Inner Dike, viewing north

21 – Southwest Corner Outer Dike, viewing north

22 – South Outfall

23 – South Decant Structure

24 – West Inner Dike, viewing exposed geofabric

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

25 – Northwest Corner Outer Dike, viewing south

26 – Northwest Corner Inner Dike, viewing south

27 – Emergency Spillway, viewing minor washout

28 – North Ramp, viewing west

29 – Northwest Corner Inner Dike, viewing east

30 – Northwest Corner, viewing amount of water in structure

DREDGE ISLAND INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

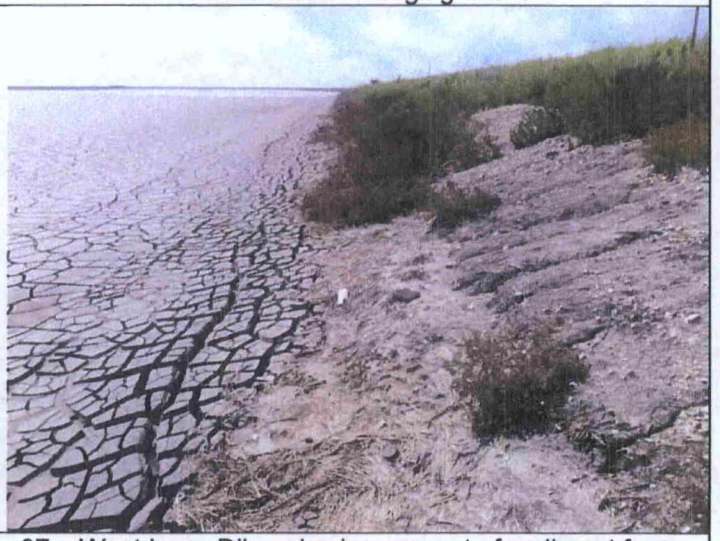
31 – North Decant Structure, viewing new sediment from dredging event

32 – East CPA Inner Dike, viewing erosion and exposure of liner

33 – Viewing sign that was knocked down due to wind

34 – South Decant Structure, viewing amount of water and sediment from dredging event

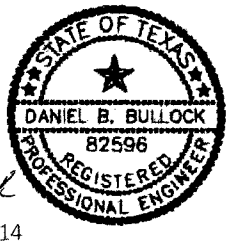
36 – South Decant Structure, viewing amount of water in CDF



37 – West Inner Dike, viewing amount of sediment from dredging event and erosion rills in slope

SITE INSPECTION LOG

Inspector's Name: Dan Bullock, P.E. (BBA, LLC)
Weather: Cloudy
Temperature: Approx. 68 F



Daniel B. Bullock
2/10/14

Inspector's Signature:
Daniel B. Bullock

Inspection Date: 12-04-13
Time Begin: Approx. 10:30 a.m.
Time End: Approx. 12:20 p.m.

Sheet: 1 of 2

Specific Item to Inspect	Typical Problems Encountered	Conditions Observed		Comments or Corrective Action(s) Implemented and Dates
		Normal	Abnormal	
General Dredge Island	Erosion Deterioration Settling/Ponding Uplift Washouts Rodent Holes	☒ ☒ ☒ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐ ☐	Shoreline bank cut observed near northeast dike toe of exterior slope. Appears possibly associated with recent dredging. Cut does not extend to dike cross section but future erosion could eventually chase back into toe of dike. Monitor as part of future inspections. Minor erosion observed on North entry ramp, along edges of ramp crest. Dredge material recently placed in northeast corner of CDF should be graded to enhance runoff to CDF interior. Vehicle traffic signs and reflectors need replacement/repair if island to be used for vehicular traffic – which is currently not the case.
Access Bridge	Deterioration Damage Navigation Lights	☐ ☐ ☐	☒ ☒ ☒	Conditions similar to those observed and reported in 12/19/06 inspection report. Detailed inspection of bridge not performed as part of this site visit. Bridge abutments severely eroded.
CDF Dike	Erosion Deterioration Damage Vegetation	☒ ☒ ☒ ☒	☐ ☐ ☐ ☐	The geomembrane component of the water stop on the CCND dike, near the Alcoa CDF Station 23+00, is exposed due to severe erosion of the overlying topsoil cover material (see attached photos) as noted in previous inspections. Some small (approx. 1 inch dia.) holes observed in exposed geomembrane. Erosion in this area currently does not appear to impact the CDF dikes but should continue to be monitored during quarterly inspections. CDF dikes appear in generally good condition.
Stone Storm Protection	Erosion Settlement Stone Deterioration Stone Movement Fabric Exposure Damage	☒ ☒ ☒ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐ ☐	No damage observed. Vegetative growth within stone protection of exterior slopes observed – should continue to implement weed control and periodic visual monitoring.
Gravel Erosion Protection	Erosion Fabric Exposure Deterioration Damage	☐ ☐ ☐ ☐	☒ ☒ ☒ ☒	The inside slopes of north dike, and north section of west and east dikes, have been repaired a couple of times since CDF construction (due to erosion issues) but geotextile fabric and overlying gravel erosion protection originally constructed on the interior slopes were not replaced as part of the repair work. Most of the remaining sections (generally along the south) of dike inside slope areas exhibit minor erosion and loss of gravel protection, no immediate action is required at these locations but they should continue to be monitored. Lack of geotextile and overlying gravel erosion protection on slope interiors does not appear to be problematic as long as water levels are kept low to prevent interior erosion.
Emergency Spillway	Obstructions Cracks in Concrete Deterioration Damage	☒ ☒ ☒ ☒	☐ ☐ ☐ ☐	Generally good condition. Some localized, minor, surficial concrete deterioration observed. Minor erosion, likely from localized rainfall runoff (not discharge) from concrete structure observed at upstream and downstream inverts of structure.

Decant Structures	Weir Board Elevation Depth of Water Obstructions Deterioration Rust/Corrosion Damage Overflow Quality (NA) Overflow Quantity Flap Gate	☒ ☒ ☒ ☐ ☐ ☒ ☐ ☒ ☒	☐ ☐ ☐ ☒ ☒ ☐ ☐ ☐ ☐	North Structure: Severe corrosion of structural I-beam sections was observed during this limited visual inspection. The majority of structural I-beam is not visible without removal of grates and access of structure interior and was therefore not observed as part of this inspection, but may be in similar condition to the exposed I-beam sections observed. Based on site observations (see attached photos) it is recommended that personnel access to this structure (beyond access walkway), and use of the structure for operational purposes, be restricted until a thorough structural and safety inspection of this structure can be performed by a qualified structural engineer. Handrails and channel iron slots containing the stoplogs on the structure exhibit severe corrosion, per attached photos. CDF surface at decant was dry during inspection, with no on-going discharge. Approximately 4 inches of water observed standing in the bottom of the structure. Plastic wrap around structure in place. South Structure: Generally minor to moderate rust observed on south decant structure hand rails and channel iron slots containing the stoplogs, with a few isolated areas of severe corrosion. Conditions appear to have worsened since last annual inspection. Adjustment of stoplogs likely difficult in areas due to corrosion of structure and broken welds. Outside decant structure was dry. Inside decant structure contained approximately 4 inches of standing water in the bottom. No discharge operations observed at south structure location. Plastic wrap around structure in place.
Gravel Road	Potholes Ponding Deterioration Washouts	☒ ☒ ☒ ☒	☐ ☐ ☐ ☐	Generally good condition, some rutting at Station 105+00 and thin gravel surface observed at approximate Sta 65+00. Vegetation growth within gravel road – should implement weed control program and continue to monitor.
Water Stops	Erosion Membrane Exposed Deterioration Damage	☐ ☐ ☒ ☒	☒ ☒ ☐ ☐	Erosion and fines accumulation observed near water stop areas. Observed in previous inspections. Appears to be associated with CCND dikes. Geomembrane exposed on CCND dike water stop as discussed under the CDF dike inspection item above. Continue to monitor.
Reflectors Station Tags	Intact/Reflecting Intact/Legibility	☒ ☒	☐ ☐	Some reflectors and traffic signage observed to be leaning or entirely down on the ground, if island is to be used for vehicular traffic in the future (currently it is not due to no access bridge), a more detailed review of reflectors and traffic signage should be completed.

Note:
Due to identified safety concerns associated with walking on armor stone, this inspection was conducted without traversing the stone on exterior dike slopes. Exterior dike locations were observed via dike crest or by waterside inspection from a boat.

FIGURE 4-3
Typical Inspection Log

URS

No Flow Observed

1 2 3

Cut Near Shoreline Bank
Possibly Associated
with Recent Dredging

No Discharge
Observed

Station Tag Mounted
on Reflector Post (Typ.)

Severe Corrosion on North
Decant Structure as Discussed
In Report and Shown on Photos.
Standing water in CDF Bed,
Dry at decant structure.
Approx 4 Inches of Water
Standing in Bottom of Decant.

Station Tag Locations
Sta. 1+00
Sta. 5+00
Sta. 10+00
Sta. 15+30
Sta. 20+00
Sta. 25+00
Sta. 30+00
Sta. 35+00
Sta. 40+00
Sta. 45+00
Sta. 50+00
Sta. 55+00
Sta. 60+00
Sta. 65+00
Sta. 70+00
Sta. 75+00
Sta. 80+00
Sta. 85+00
Sta. 90+30
Sta. 95+00
Sta. 100+00
Sta. 105+00

LEGEND:

1 Apparent Seep Location

Contained Disposal Facility (CDF)

Note: Standing water in CDF, dry at North Decant, standing shallow water outside of South Decant location (water surface outside of Decant is 78 inches below deck of structure).

Dry 7

Apparent Seep Area 8 was only observed in 2010 (not observed during previous inspections), during active South Decant operations. Water observed in 2010 may have been from decant water that collected along dike toe in this location, and not seepage water (was not able to be further investigated in 2010 due to access restrictions). No apparent seepage observed during 2011, 2012 or 2013 inspections.

BOP STA 0+00.00
EOP 105+40.58

4 Slight Flow

5 Standing Water - No Apparent Flow

CDF Bed Surface Dry at Decant.
Approx 4 Inches of Water
Standing in Bottom of Decant. No
Discharge observed.

8 No Flow

Moderate to Severe Erosion
(CCND DIKES)

6 Dry

Severe Erosion
(CCND DIKES)

N

0 100 200 300 400
SCALE IN FEET

FIGURE 4-2
STATION NUMBER LOCATIONS

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

North Entry Ramp (facing North)

CDF – North Exterior Slope (facing East)

CDF – At North Entry Ramp Facing East

CDF – At North Entry Ramp Facing NW Corner

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

CDF North, Dredge Material, North Decant Structure

Dike Crest, North Decant Structure, Facing South

North Decant Structure

North Decant Structure

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

North Decant Structure Corrosion

North Decant Structure Corrosion

North Decant Structure Corrosion

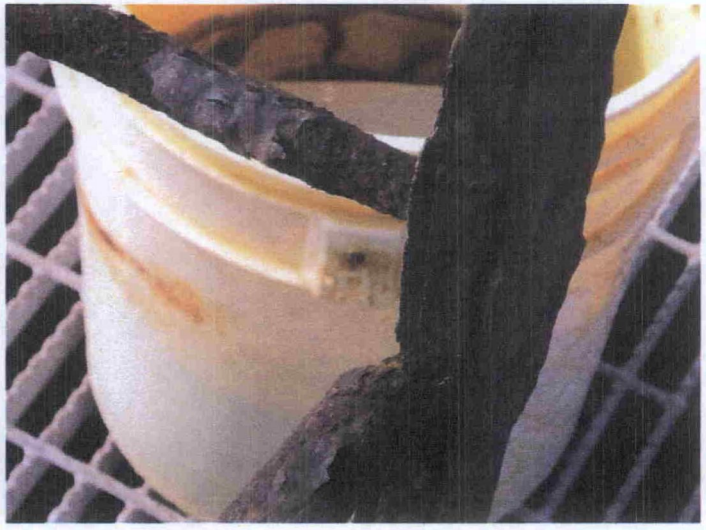
North Decant Structure Corrosion

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

North Decant Structure Corrosion

North Decant Structure Corrosion

North Decant Structure Corrosion



North Decant Structure Corrosion

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

East Side CDF, Historic Seep 4 on left, 5 Upper Right

Southeast CDF, Exterior Slope Armor

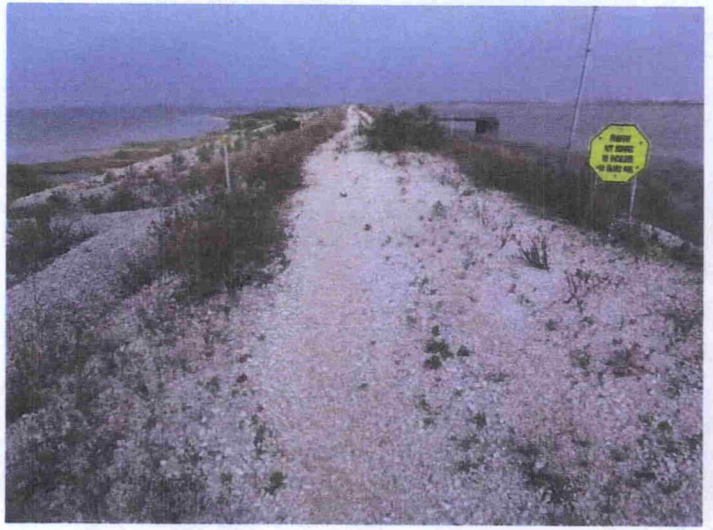
CCND Tie-in to CDF SE Corner, CCND Erosion Rills

CCND Water Stop FML Exposed, Erosion (previously noted)

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

Facing West, CDF South Dike Exterior in Background

CDF South Dike Crest



CDF Southwest Corner Dike Crest, South Decant Structure

CDF Southwest Corner Exterior Slope, Facing North

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

South Decant Structure

CDF Southwest Dike Interior (facing North)

South Decant Structure

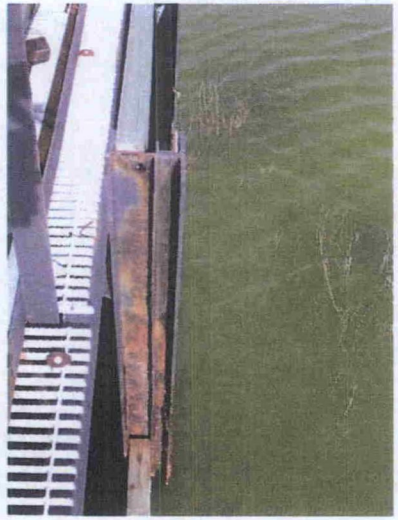
South Decant Structure

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

South Decant Structure Corrosion

South Decant Structure Corrosion

South Decant Structure Corrosion



South Decant Structure Corrosion

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

South Decant Structure Corrosion

South Decant Structure

Spillway, West Side Dike Crest, Facing North

Southeast Corner, South Dike Interior Slope in Background

DREDGE ISLAND SITE INSPECTION PHOTOGRAPHS
12/04/2013

Historic DI Bridge Damage

North Decant Outfall

South Decant Outfall

Cut at Shoreline

APPENDIX B

CAPA SOIL CAP INSPECTION RECORDS 2013

CAPA CAP INSPECTION RECORD

Date: 3/27/13 **Time Started:** 9:00 **Time Ended:** 9:15

Weather Conditions: 50° F, Clear Sky

Observations/Comments:

ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Cap	Erosion	√		Southwest corner is showing signs of erosion during heavy rain storms
	Settling	√		None observed
	Ponding	√		Some minor ponding in various locations
	Washouts	√		None observed
	Holes	√		None observed
	Vehicle Ruts	√		Some ruts from herbicide treatment and on edge of cap from mowing. Northeast corner continues to be driven over.
	Intrusive Vegetation	√		Minimal amount of vegetation - continue herbicide treatment.
Signage	In Place	√		Good condition
	Legible	√		Legible
Storm Drains	Grates	√		Intrusive vegetation on grates
	Debris		√	Some drains covered by soil and/or vegetation.
Equipment or Wastes	Proper Storage	√		Waste stored in system containment or at satellite collection station.
Extraction Wells	Controllers	√		In good working order.
	Boxes	√		Good condition
	Electrical	√		Good condition
	Conduit	√		Good condition
	Transfer Piping	√		Good condition. Secondary containment piping has been broken away from the boxes.
Treatment System	Equipment	√		Good condition
	Leaks	√		None observed
	Odors	√		None observed

Additional Comments or Observations: Cap and system is in good condition.

Inspector:
Kevin Dworsky

Inspectors Signature:

PASTOR, BEHLING & WHEELER, LLC
620 E. Airline
Victoria, Texas 77901
Phone: 361-573-6443 Fax: 361-573-6449

CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 - Cap, view Northeast from Southwest corner

2 - Cap, storm sewer drain at R-301

3 – Cap, West storm sewer drain

4 – Cap, Northwest corner storm drain

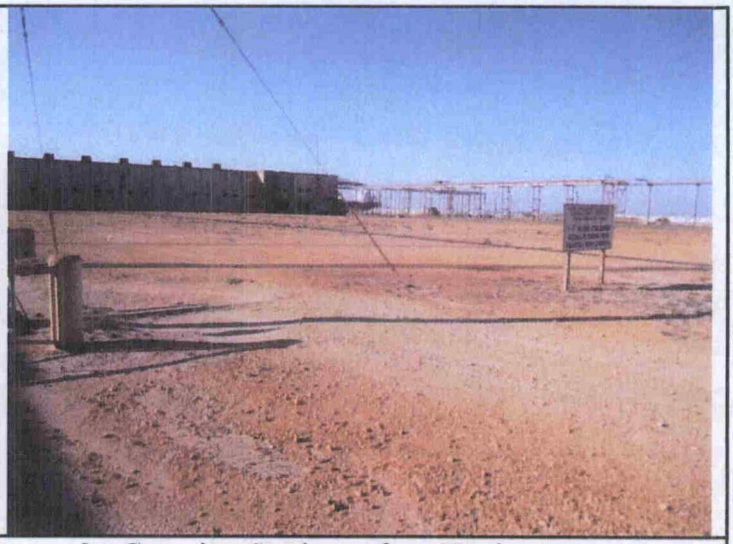
5 – Cap, North storm drain

6 – Cap, North storm drain

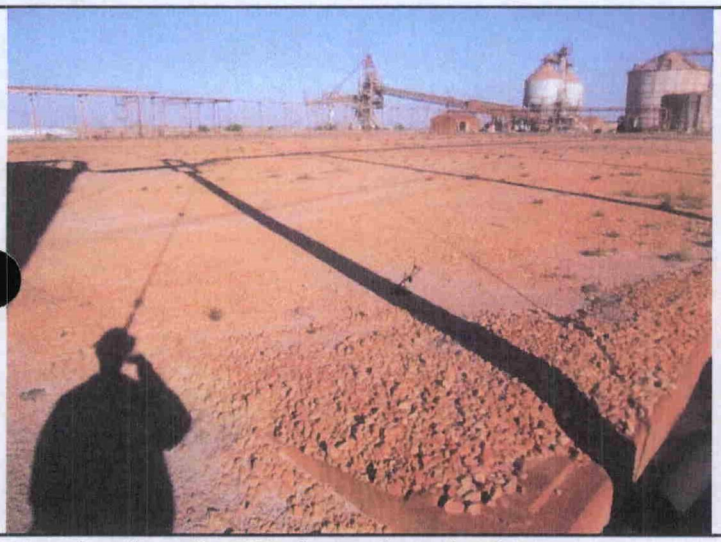
CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

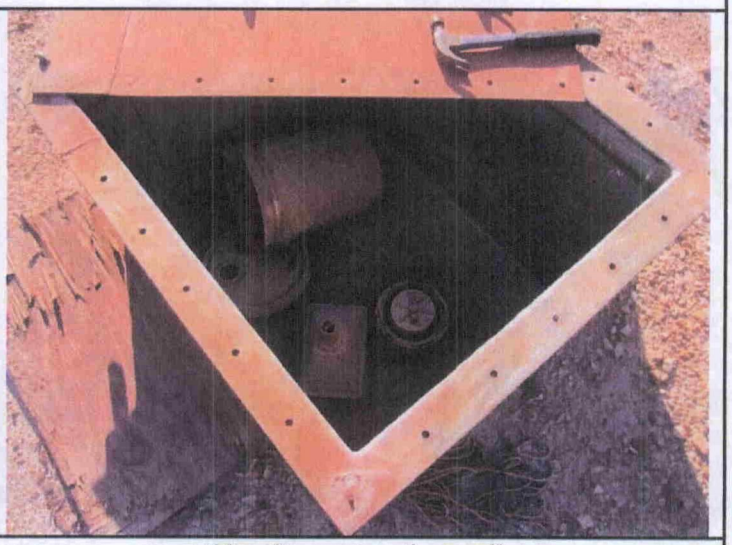
7 – Cap, view Southeast from Northwest corner



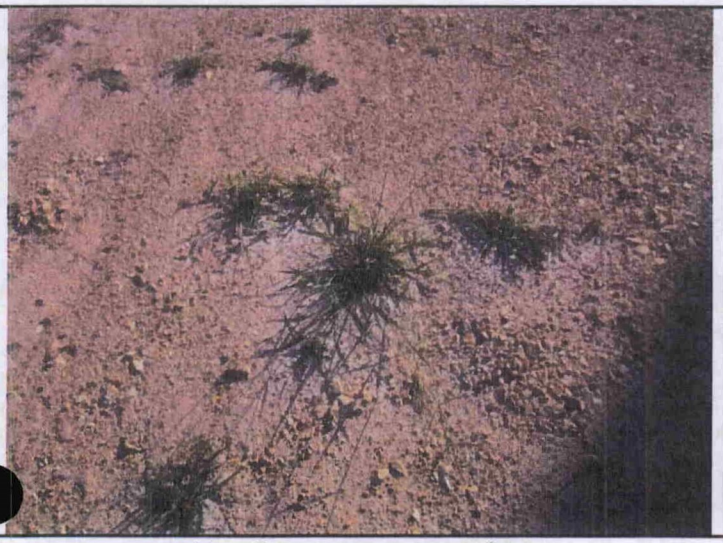
8 – Cap, view Southwest from Northeast corner



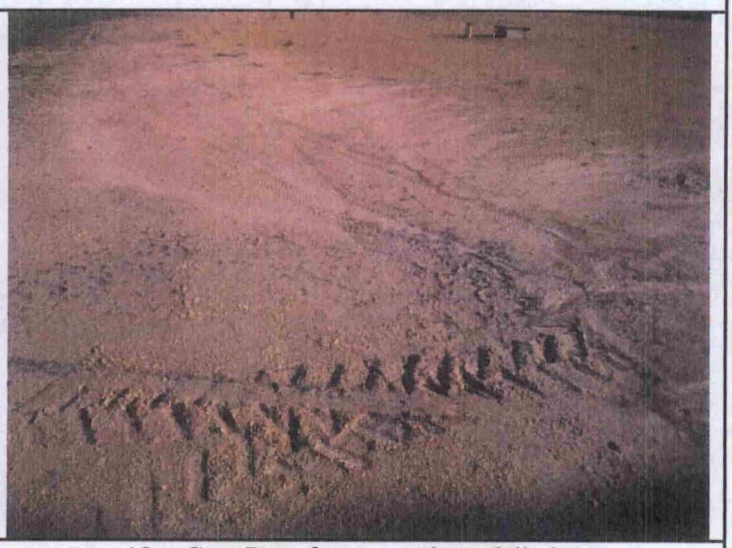
9 – Cap, view Northwest from Southeast corner



10 – Cap, extraction well



11 – Cap, current vegetation



12 – Cap, Ruts from mowing of ditches

CAPA CAP INSPECTION RECORD

Date: 6/7/13 **Time Started:** 11:45 **Time Ended:** 12:05

Weather Conditions: 85° F, Partly Cloudy Sky

Observations/Comments:

ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Cap	Erosion	√		Southwest corner is showing signs of erosion during heavy rain storms
	Settling	√		None observed
	Ponding	√		Some minor ponding in various locations
	Washouts	√		None observed
	Holes	√		None observed
	Vehicle Ruts	√		Some ruts from herbicide treatment Northeast corner continues to be driven over
	Intrusive Vegetation	√		Minimal amount of vegetation - continue herbicide treatment
Signage	In Place	√		Good condition
	Legible	√		Legible
Storm Drains	Grates	√		Some intrusive vegetation on some of the grates
	Debris	√		Some debris on a few of the drains
Equipment or Wastes	Proper Storage	√		Waste stored in system containment or at satellite collection station
Extraction Wells	Controllers	√		In good working order
	Boxes	√		Good condition
	Electrical	√		Good condition
	Conduit	√		Good condition
	Transfer Piping		√	Good condition. Secondary containment piping has broken away from the boxes.
Treatment System	Equipment	√		Good condition
	Building	√		Some support memebers showing signs of rust and pieces of the roof are loose.
	Leaks	√		None observed
	Odors	√		None observed

Additional Comments or Observations: Cap and system is in good condition.

Inspector:
Kevin Dworsky

Inspectors Signature:

PASTOR, BEHLING & WHEELER, LLC
620 E. Airline
Victoria, Texas 77901
Phone: 361-573-6443 Fax: 361-573-6449

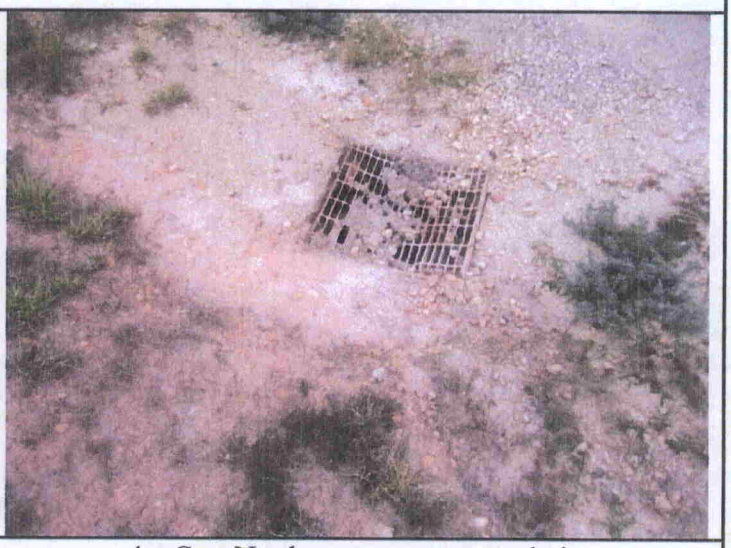
CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 - Cap, view Northeast from Southwest corner

2 - Cap, storm sewer drain at R-301

3 – Cap, West storm sewer drain



4 – Cap, Northwest corner storm drain

5 – Cap, North storm drain

6 – Cap, North storm drain

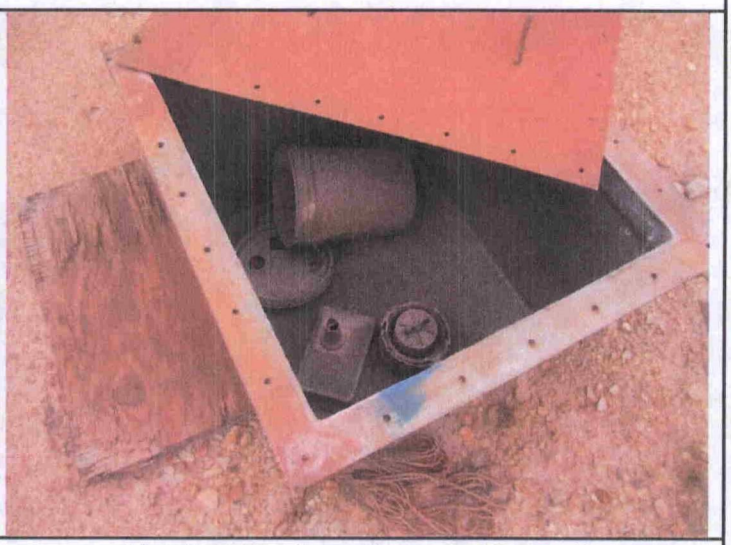
CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

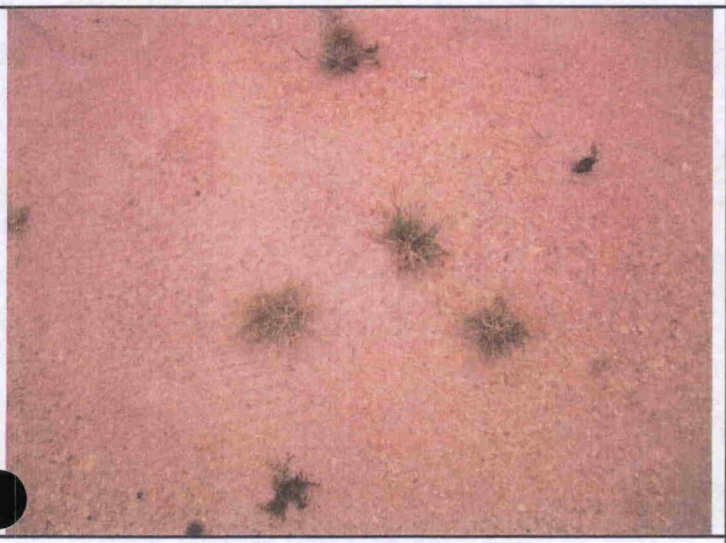
7 – Cap, view Southeast from Northwest corner

8 – Cap, view Southwest from Northeast corner

9 – Cap, view Northwest from Southeast corner



10 – Cap, Not in service extraction well



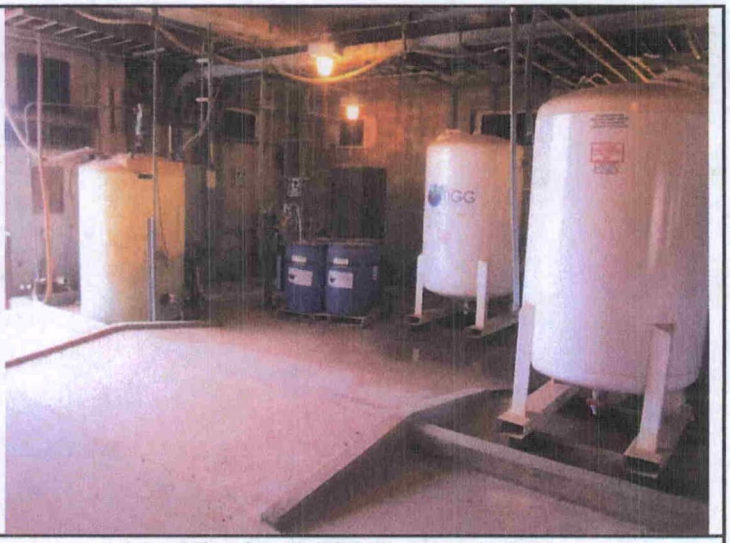
11 – Cap, current vegetation

12 – Cap, Ruts from herbicide treatment

CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

13 – Cap, Northeast corner showing vehicle compaction

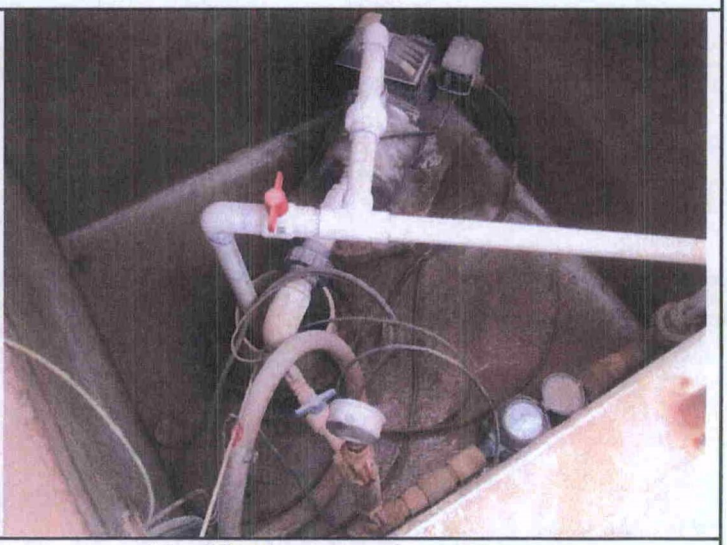


14 – Viewing CAPA Treatment System

15 – Viewing Satellite Collection Area

16 – Extraction Well – view South from North end

17 – Viewing extraction well control box



18 – Viewing extraction well pump

CAPA CAP INSPECTION RECORD

Date: 9/26/13 **Time Started:** 13:30 **Time Ended:** 14:00

Weather Conditions: 89° F, Partly Cloudy Sky

Observations/Comments:

ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Cap	Erosion	√		Southwest corner is showing signs of erosion during heavy rain storms
	Settling	√		None observed
	Ponding	√		Some minor ponding in various locations
	Washouts	√		None observed
	Holes	√		None observed
	Vehicle Ruts	√		Some ruts from herbicide treatment Northeast corner continues to be driven over
	Intrusive Vegetation	√		Minimal amount of vegetation - continue herbicide treatment
Signage	In Place	√		Good condition
	Legible	√		Legible
Storm Drains	Grates	√		Some intrusive vegetation on some of the grates
	Debris	√		Some debris on a few of the drains
Equipment or Wastes	Proper Storage	√		Waste stored in system containment or at satellite collection station
Extraction Wells	Controllers	√		In good working order
	Boxes	√		Good condition
	Electrical	√		Good condition
	Conduit	√		Good condition
	Transfer Piping		√	Good condition. Secondary containment piping has broken away from the boxes.
Treatment System	Equipment	√		Good condition
	Building	√		Some support memebers showing signs of rust and pieces of the roof are loose. There are large leaks that occur during a heavy rain storm. Stairway has been boarded up.
	Leaks	√		None observed
	Odors	√		None observed

Additional Comments or Observations: Cap and system is in good condition. All well piping from the wells to the system will be replaced next year. All secondary piping will be fixed at that time.

Inspector:

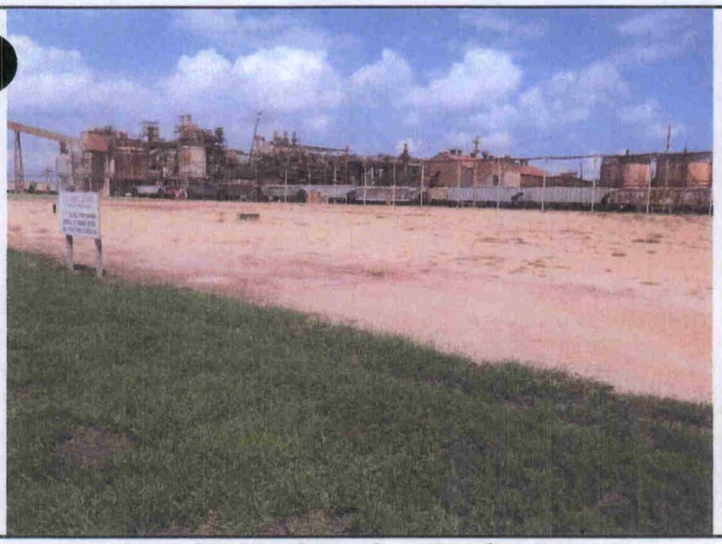
evin Dworsky

Inspectors Signature:

PASTOR, BEHLING & WHEELER, LLC
620 E. Airline
Victoria, Texas 77901
Phone: 361-573-6443 Fax: 361-573-6449

CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas



1 - Cap, view Northeast from Southwest corner

2 - Cap, storm sewer drain at R-301

3 – Cap, West storm sewer drain

4 – Cap, Northwest corner storm drain

5 – Cap, North storm drain

6 – Cap, North storm drain

CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

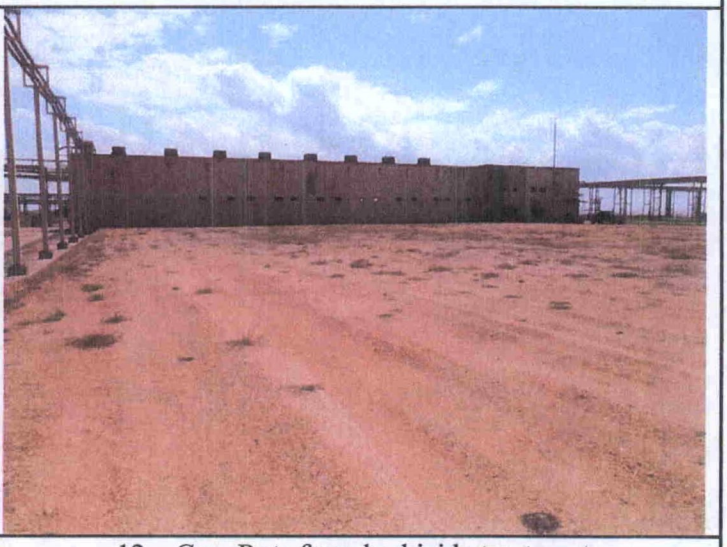
7 – Cap, view Southeast from Northwest corner

8 – Cap, view Southwest from Northeast corner

9 – Cap, view Northwest from Southeast corner

10 – Cap, Not in service extraction well

11 – Cap, current vegetation

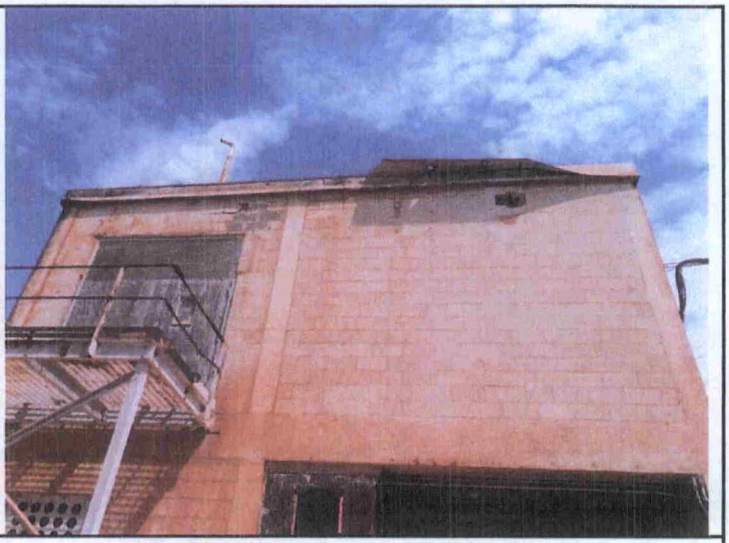


12 – Cap, Ruts from herbicide treatment

CAPA CAP INSPECTION PHOTO LOG

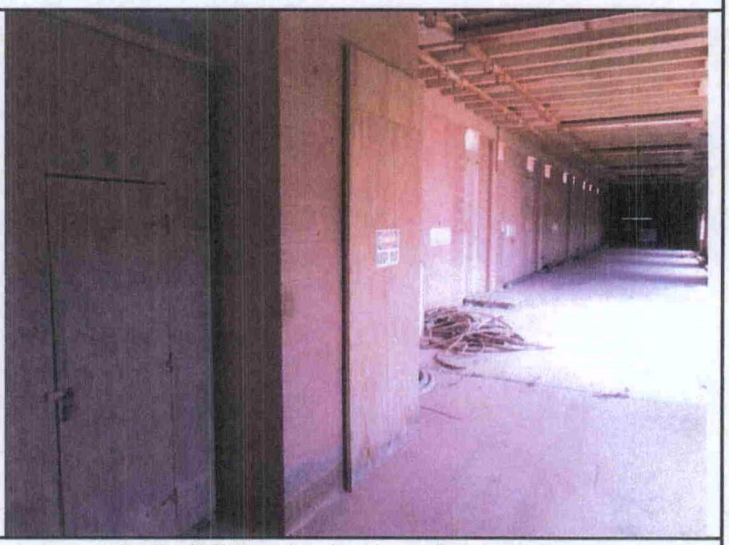
ALCOA PCO – Point Comfort, Texas

13 – Viewing northern side of building



14 – Building, showing damaged roof

15 – Building, viewing rusted support structure



16 – Building, viewing boarded up stairway

17 – Viewing monitoring wells and recovery wells

18 – Viewing electrical conduit

CAPA CAP INSPECTION RECORD

Date: 12/24/13 **Time Started:** 10:45 **Time Ended:** 11:15

Weather Conditions: 55° F, Mostly Cloudy Sky

Observations/Comments:

ITEM TO INSPECT	TYPICAL PROBLEMS ENCOUNTERED	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Cap	Erosion	√		Southwest corner is showing signs of erosion during heavy rain storms
	Settling	√		None observed
	Ponding	√		Some minor ponding in various locations of the site
	Washouts	√		None observed
	Holes	√		None observed
	Vehicle Ruts	√		Some ruts from herbicide treatment Northeast corner continues to be driven over
	Intrusive Vegetation	√		Minimal amount of vegetation - continue herbicide treatment
Signage	In Place	√		Good condition
	Legible	√		Legible
Storm Drains	Grates	√		Some intrusive vegetation on some of the grates
	Debris	√		Large amount of debris on a few of the drains
Equipment or Wastes	Proper Storage	√		Waste stored in system containment or at satellite collection station
Extraction Wells	Controllers	√		In good working order
	Boxes	√		Good condition
	Electrical	√		Good condition
	Conduit	√		Good condition
	Transfer Piping		√	Good condition. Secondary containment piping has broken away from the boxes.
Treatment System	Equipment	√		Good condition
	Building	√		Some support memebers showing signs of rust and pieces of the roof are loose. There are large leaks that occur during a heavy rain storm. Stairway has been boarded up. There is severe damage to the roof.
	Leaks	√		None observed
	Odors	√		None observed

Additional Comments or Observations: Cap and system is in good condition. All well piping from the wells to the system will be replaced next year. All secondary piping will be fixed at that time.

Inspector:
Kevin Dworsky

Inspectors Signature:

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Victoria, Texas 77901
Phone: 361-573-6443 Fax: 361-573-6449

CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

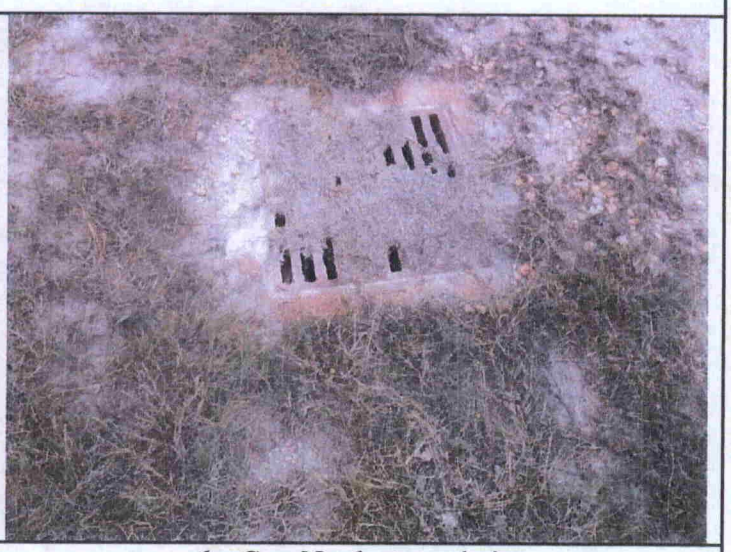
1 - Cap, view Northeast from Southwest corner

2 - Cap, storm sewer drain at R-301

3 – Cap, West storm sewer drain

4 – Cap, Northwest corner storm drain

5 – Cap, North storm drain



6 – Cap, North storm drain

CAPA CAP INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

7 – Cap, view Southeast from Northwest corner

8 – Cap, view Southwest from Northeast corner

9 – Cap, view Northwest from Southeast corner

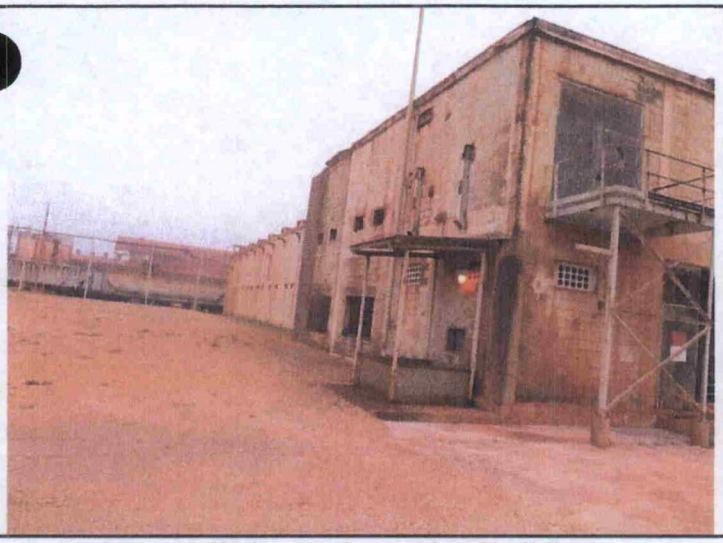
10 – Cap, Not in service extraction well

11 – Cap, current vegetation

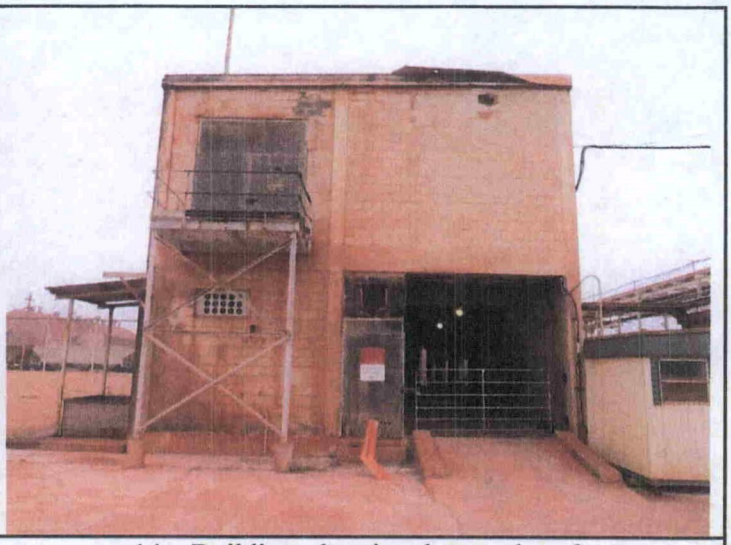
12 – Cap, Ruts from herbicide treatment

CAPA CAP INSPECTION PHOTO LOG

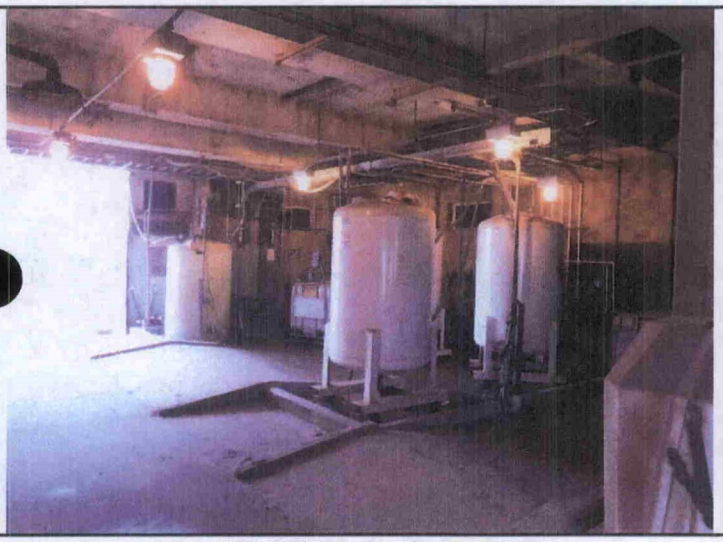
ALCOA PCO – Point Comfort, Texas



13 – Viewing northern side of building



14 – Building, showing damaged roof



15 – Building, viewing system

16 – Building, viewing corridor

17 – Viewing monitoring wells and recovery wells

18 – Viewing electrical conduit

APPENDIX C

WITCO AREA INSPECTION RECORDS 2013

WITCO AREA INSPECTION RECORD

Date: 03/27/2013 **Time Started:** 14:45 **Time Ended:** 15:15

Weather Conditions: 58° F, Mostly clear sky

Observations/Comments:

AREA	ITEM	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Drainage Channel	Cracks in Concrete	√		Few old cracks, no new ones.
	Obstructions	√		None observed. Continue to keep vegetation from growing down into the channel.
	Erosion	√		Slight erosion.
	Deterioration		√	Marks on concrete, cause is unknown. Areas of the old drainage channel show severe signs of deterioration.
	Washouts		√	Slight erosion seen under new channel lip.
	Rip Rap	√		Slight movement and some vegetation.
Soil Cap (Tank Farm)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Slightly stressed due to the lack of rain, continue with shredding of cap.
	Intrusive Trees	√		None observed.
	Drainage/Rip Rap	√		Moderate to heavy vegetation. Need to control the vegetation.
	Animal Damage	√		None observed.
	Vehicle Ruts	√		None observed.
	Damage	√		None observed.
Soil Cap (O/W Separator)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Slightly stressed due to the lack of rain, continue with shredding of cap.
	Damage	√		None observed.
Slope from Cap to Channel	Erosion		√	Geofabric is torn in areas cause erosion rills along the slope.
	Slumping	√		None observed.
	Vegetation	√		Stressed due to the lack of rain and areas of erosion.
Signage	Damage	√		Good condition
	Illegible	√		Good condition
DNAPL Collection Sump	Damage	√		WL in sump = 4.78' BMP, no DNAPL, 12.66' TD
	Other			

Additional Comments or Observations: Continue shredding the Witco Area and remove vegetation from the rip rap area of the cap drainage. Slope will need to have the geofabric repaired and soil brought in to fix the erosion rills. The lip of the new drainage channel needs to be repaired to prevent undermining of the new portion of the channel. Notification need to be made to Alcoa RWG and the plant to inform them of the deterioration of the old portions of the channel.

Inspector:
Kevin Dworsky

Inspectors Signature:

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WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 - Northeast corner, viewing Southwest

2 - Northwest corner, viewing Southeast

3 – Southwest corner, viewing Northeast

4 - Southeast corner of cap, viewing Northwest

5 - Slope between tank farm and drainage channel/marsh

6 - Slope between tank farm and drainage channel/marsh

WITCO INSPECTION PHOTO LOG

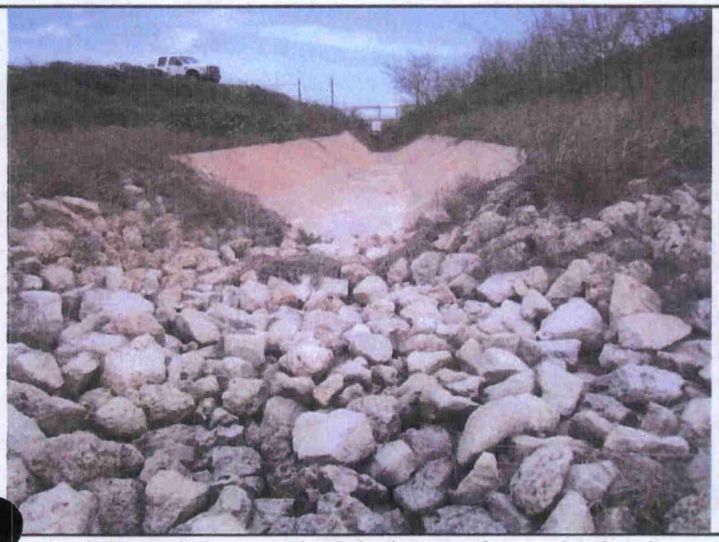
ALCOA PCO – Point Comfort, Texas

7 – Silt fence between the tank farm slope and drainage channel

8 - Northeast Witco Cap, viewing South

9 - View of rip rap at the end of the drainage channel

10 - View of West end of drainage channel, viewing West



11 - View of East end of drainage channel, viewing East

12 - View of drainage rip rap from tank farm cap

WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

13 - View of drainage rip rap from drainage channel

14 - View of erosion at lip of drainage channel

15 - View of torn geofabric and slight erosion along slope between tank farm and drainage channel

16 - View of monitoring wells

17 – View of deteriorating side slope on channel

18 - View of DNAPL monitoring well

WITCO AREA INSPECTION RECORD

Date: 06/07/2013 **Time Started:** 16:45 **Time Ended:** 17:15

Weather Conditions: 90° F, Mostly cloudy sky

Observations/Comments:

AREA	ITEM	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Drainage Channel	Cracks in Concrete	√		Few old cracks, no new ones.
	Obstructions	√		Slight vegetation forming in the drainage channel east of the cap rip rap.
	Erosion	√		None observed.
	Deterioration	√		Marks on concrete, cause is unknown. Areas of the old drainage channel show severe signs of deterioration.
	Washouts	√		Channel lip has been repaired
	Rip Rap	√		Slight movement and some vegetation.
Soil Cap (Tank Farm)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Slightly stressed due to the lack of rain, continue with shredding of cap.
	Intrusive Trees	√		None observed.
	Drainage/Rip Rap	√		Moderate to heavy vegetation. Need to control the vegetation.
	Animal Damage	√		None observed.
	Vehicle Ruts	√		None observed.
	Damage	√		None observed.
Soil Cap (O/W Separator)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Slightly stressed due to the lack of rain, continue with shredding of cap.
	Damage	√		None observed.
Slope from Cap to Channel	Erosion	√		Slope has been repaired.
	Slumping	√		None observed.
	Vegetation	√		Stressed due to the lack of rain. Repaired areas have not been vegetated yet.
Signage	Damage	√		Good condition
	Illegible	√		Good condition
DNAPL Collection Sump	Damage	√		WL in sump = 4.81' BMP, no DNAPL, 12.66' TD
	Other			

Additional Comments or Observations: Continue shredding the Witco Area and remove vegetation from the rip rap area of the cap drainage. The slope from the caped tank farm to the march has been repaired by re-sloping, placing new soil, and placing erosion nets down. The drainage channel lip and sidewall has also been repaired with epoxy sealer. The deterioration of the old portion of the drainage channel and the heavy vegetation in it is currently not a concern unless the flow is restricted or there are signs of seepage from the cap.

Inspector:
Kevin Dworsky

Inspectors Signature:

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WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 - Northeast corner, viewing Southwest

2 - Northwest corner, viewing Southeast

3 – Southwest corner, viewing Northeast

4 - Southeast corner of cap, viewing Northwest

5 - Slope between tank farm and drainage channel/marsh

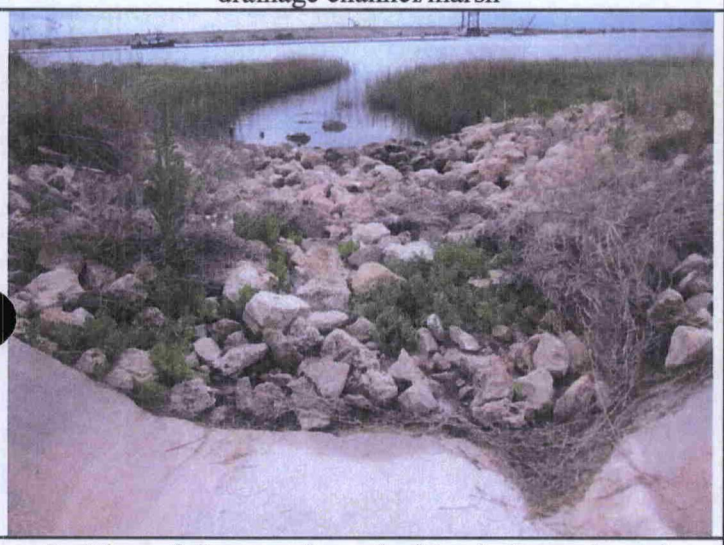
6 - Slope between tank farm and drainage channel/marsh

WITCO INSPECTION PHOTO LOG

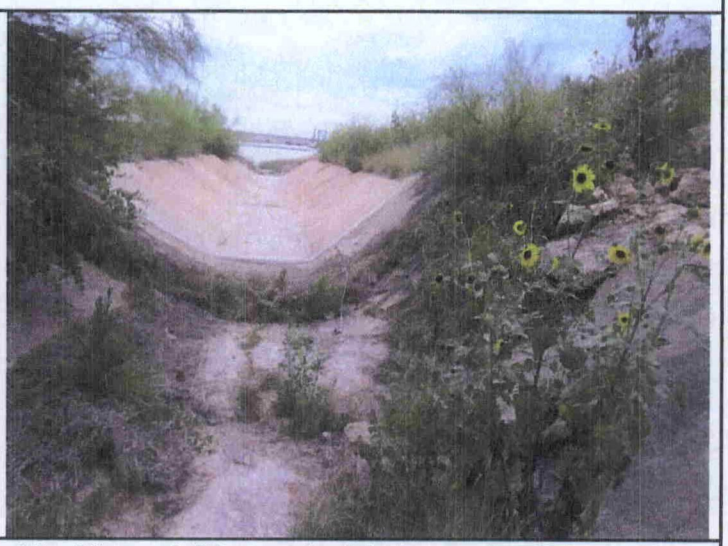
ALCOA PCO – Point Comfort, Texas

7 – View of repaired slope between the tank farm and drainage channel/marsh

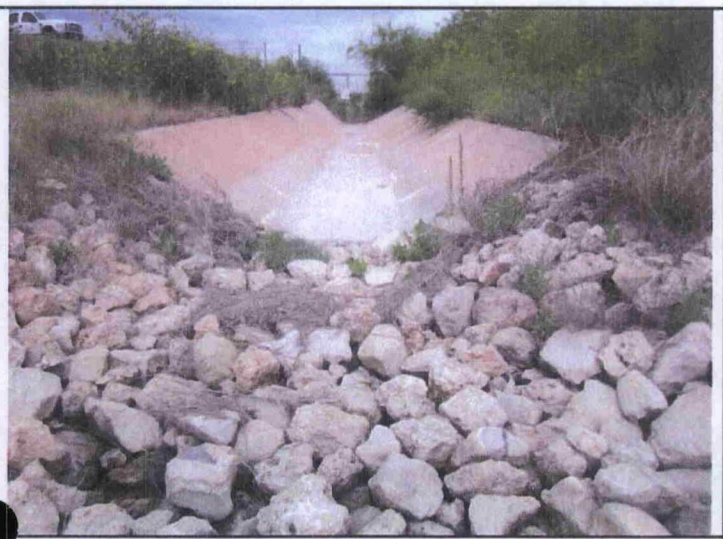
8 - Northeast Witco Cap, viewing South



9 - View of rip rap at the end of the drainage channel



10 - View of West end of drainage channel, viewing West

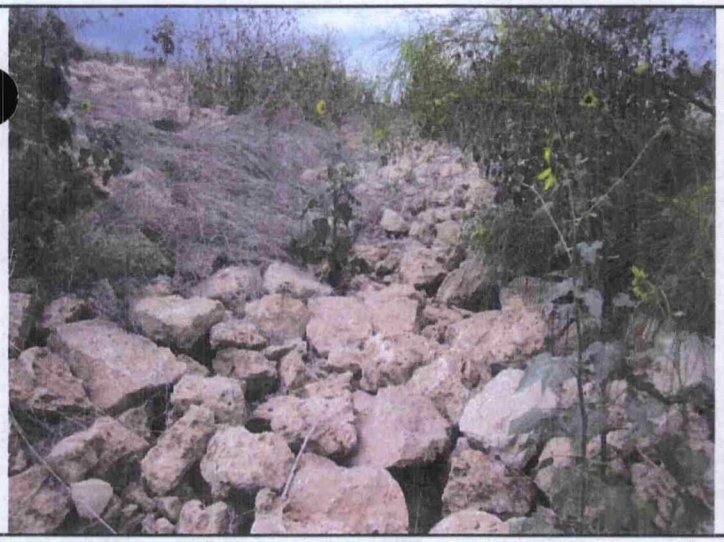


11 - View of East end of drainage channel, viewing East

12 - View of drainage rip rap from tank farm cap

WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas



13 - View of drainage rip rap from drainage channel

14 - View of repaired lip of drainage channel

15 - View of repaired sidewall of drainage channel

16 - View of monitoring wells

17 – View of deteriorating side slope on channel

18 - View of DNAPL monitoring well

WITCO AREA INSPECTION RECORD

Date: 09/26/2013 **Time Started:** 14:00 **Time Ended:** 14:45

Weather Conditions: 89° F, Partly cloudy sky

Observations/Comments:

AREA	ITEM	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Drainage Channel	Cracks in Concrete	√		Few old cracks, no new ones.
	Obstructions	√		Vegetation is starting to hang into the drainage channel.
	Erosion	√		None observed.
	Deterioration	√		Marks on concrete, cause is unknown. Areas of the old drainage channel show severe signs of deterioration.
	Washouts	√		None observed.
	Rip Rap	√		Slight movement and some vegetation.
Soil Cap (Tank Farm)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Healthy vegetation, continue with shredding of cap.
	Intrusive Trees	√		None observed.
	Drainage/Rip Rap	√		Heavy vegetation. Need to control the vegetation.
	Animal Damage	√		None observed.
	Vehicle Ruts	√		None observed.
	Damage	√		None observed.
Soil Cap (O/W Separator)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Healthy vegetation, continue with shredding of cap.
	Damage	√		None observed.
Slope from Cap to Channel	Erosion	√		None observed.
	Slumping	√		None observed.
	Vegetation	√		Healthy vegetation. The repaired areas has some vegetation.
Signage	Damage	√		Good condition
	Illegible	√		Good condition
DNAPL Collection Sump	Damage	√		WL in sump = 3.78' BMP, no DNAPL, 12.69' TD
	Other			

Additional Comments or Observations: Continue shredding the Witco Area and remove vegetation from the rip rap area of the cap drainage and the edge of the drainage channel. The deterioration of the old portion of the drainage channel and the heavy vegetation in it is currently not a concern unless the flow is restricted or there are signs of seepage from the cap.

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WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 - Northeast corner, viewing Southwest

2 - Northwest corner, viewing Southeast

3 – Southwest corner, viewing Northeast

4 - Southeast corner of cap, viewing Northwest

5 - Slope between tank farm and drainage channel/marsh

6 - Slope between tank farm and drainage channel/marsh

WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

7 – View of silt fence located at the bottom of the cap slope

8 - Northeast Witco Cap, viewing South

9 - View of rip rap at the end of the drainage channel

10 - View of West end of drainage channel, viewing West

11 - View of East end of drainage channel, viewing East

12 - View of drainage rip rap from tank farm cap

WITCO INSPECTION PHOTO LOG

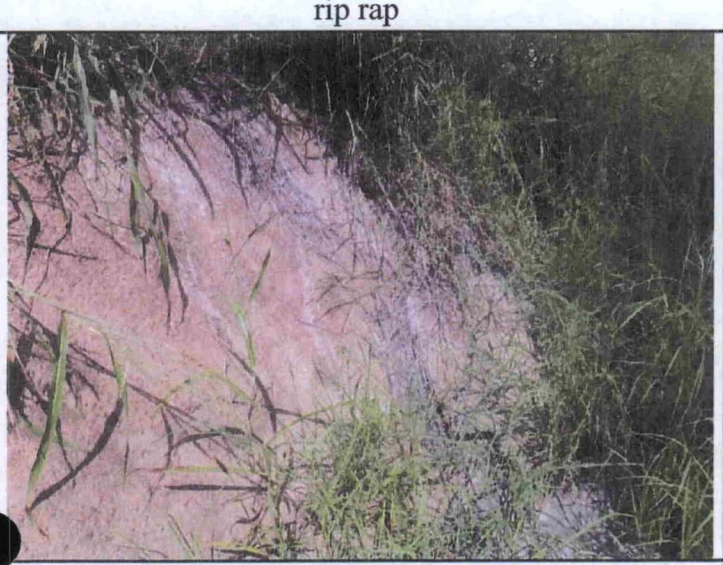
ALCOA PCO – Point Comfort, Texas

13 - View of drainage rip rap from drainage channel

14 - View of repaired lip of drainage channel

15 - View of heavily vegetated channel east of the cap rip rap

16 - View of vegetation growing through old portions of the drainage channel



17 – View of deteriorating side slope on channel

18 - View of DNAPL monitoring well

WITCO AREA INSPECTION RECORD

Date: 12/24/2013 **Time Started:** 12:45 **Time Ended:** 13:20

Weather Conditions: 55° F, Mostly cloudy sky

Observations/Comments:

AREA	ITEM	CONDITIONS		COMMENTS, CORRECTIVE ACTIONS NEEDED, COORECTIVE ACTIONS IMPLEMENTED (WITH DATE)
		Normal	Abnormal	
Drainage Channel	Cracks in Concrete	√		Few old cracks, no new ones in new channel.
	Obstructions	√		Vegetation is hanging into the drainage channel.
	Erosion	√		None observed.
	Deterioration	√		Marks on concrete, cause is unknown. Areas of the old drainage channel continues to deteriorate.
	Washouts	√		Slight movement of rip rap at the toe of the drainage channel.
	Rip Rap	√		Slight movement and some vegetation.
Soil Cap (Tank Farm)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Healthy vegetation; continue with shredding of cap.
	Intrusive Trees	√		None observed.
	Drainage/Rip Rap	√		Slight vegetation and intrusive trees; continue with vegetation controls.
	Animal Damage	√		None observed.
	Vehicle Ruts	√		Some vehicle ruts located in low spot on the south edge of the cap.
	Damage	√		None observed.
Soil Cap (O/W Separator)	Erosion	√		None observed.
	Settlement	√		None observed.
	Vegetation	√		Healthy vegetation; continue with shredding of cap.
	Damage	√		None observed.
Slope from Cap to Channel	Erosion	√		Slight erosion at the top and toe of the slope in a couple areas; continue to monitor.
	Slumping	√		None observed.
	Vegetation	√		Heavy vegetation in area. Repaired area of slope vegetation is spotty.
Signage	Damage	√		Good condition
	Illegible	√		Good condition
DNAPL Collection Sump	Damage	√		Unable to place cap on sump due to location of lid.
	Product Level	√		WL in sump = 4.68' BMP, no DNAPL, 12.72' TD

Additional Comments or Observations: Continue shredding the Witco Area and remove vegetation from the rip rap area of the cap drainage and the edge of the drainage channel. Institute vegetaion control for the slope which includes weedeating of the vegetation. The deterioration of the old portion of the drainage channel and the heavy vegetation in it is currently not a concern unless the flow is restricted or there are signs of seepage from the cap.

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Kevin Dworsky

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WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

1 - Northeast corner, viewing Southwest

2 - Northwest corner, viewing Southeast

3 – Southwest corner, viewing Northeast

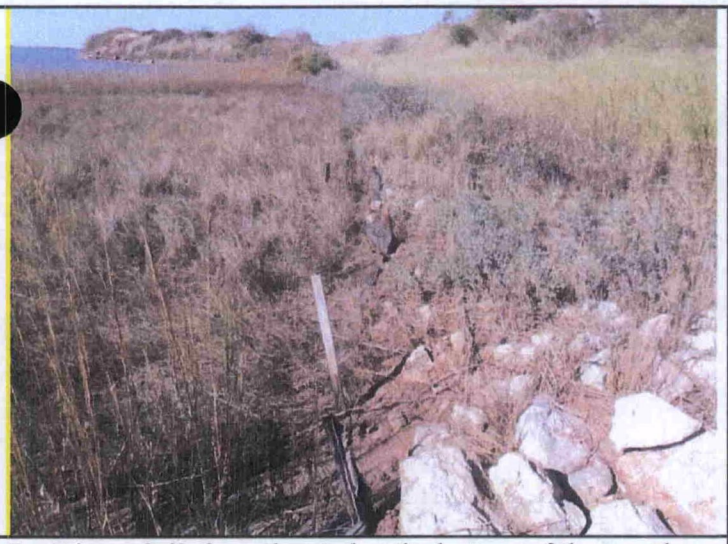
4 - Southeast corner, viewing Northwest

5 - Slope between tank farm and drainage channel/marsh

6 - Slope between tank farm and drainage channel/marsh

WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas

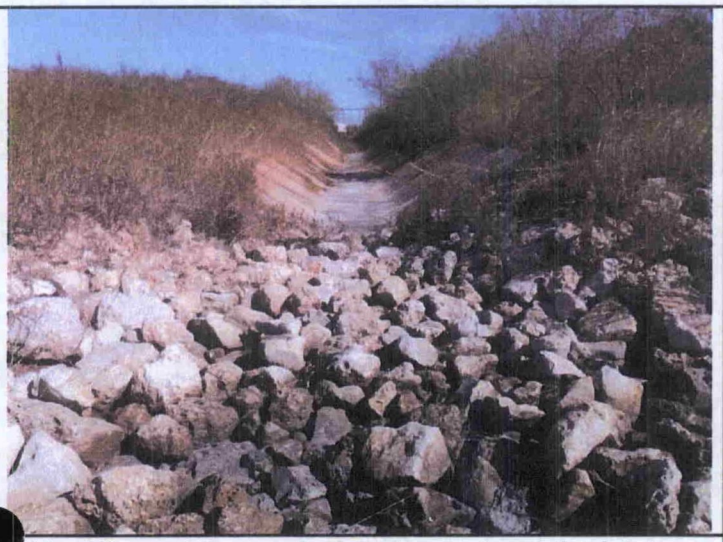


7 – View of silt fence located at the bottom of the cap slope

8 - Northeast Witco Cap, viewing South

9 - View of rip rap at the end of the drainage channel

10 - View of West end of drainage channel, viewing West

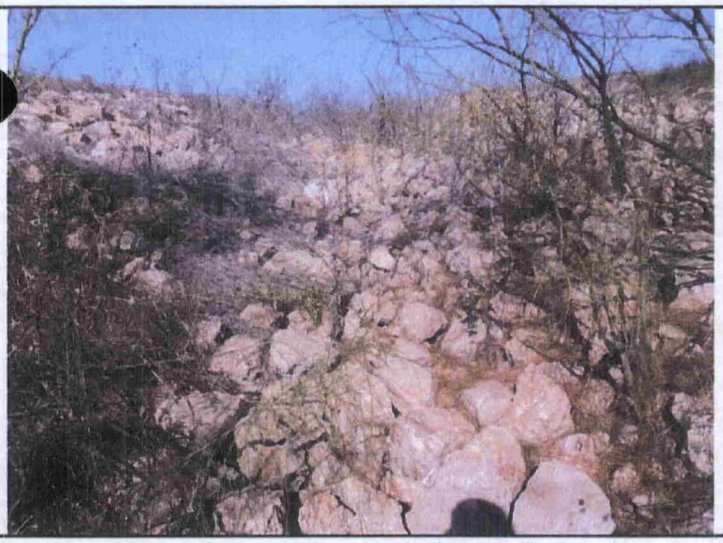


11 - View of East end of drainage channel, viewing East

12 - View of drainage rip rap from tank farm cap

WITCO INSPECTION PHOTO LOG

ALCOA PCO – Point Comfort, Texas



13 - View of vegetation in drainage rip rap from drainage channel

14 - View of heavily vegetated channel east of the cap rip rap

15 - View of deteriorating side slope on channel

16 - View of minor movement of rip rap at the end of the drainage channel

17 – View of ruts on the cap from previous shredding

18 - View of monitoring well