DRAFT
REMOVAL ACTION COMPLETION REPORT

REMOVAL ACTION
NW NATURAL "GASCO" SITE

Prepared for Submittal to

U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue
Seattle, Washington 98101

Prepared by

Anchor Environmental, L.L.C.
6650 SW Redwood Lane Suite 110
Portland, Oregon 97224

On behalf of

NW Natural
220 NW Second Avenue
Portland, Oregon 97209

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Table of Contents

1 INTRODUCTION 1
1.1 Site Background 1
1.2 Removal Action Objectives 2

2 SUMMARY OF REMOVAL DESIGN 4
2.1 Removal Action Work Plan 4
2.1.1 Physical Characterization 5
2.1.2 Surface Tar Body Extent 6
2.1.3 Physical Consistency 7
2.1.4 Elutriate Testing 8
2.1.5 Disposal Suitability 9
2.1.6 General Chemical Characterization 9
2.1.7 Cultural Resources Characterization 10
2.2 Final Removal Design 11
2.2.1 Roles and Responsibilities 11
2.2.2 Removal 11
2.2.3 Transportation and Disposal 13
2.2.4 Pilot Capping/Cover 15
2.2.5 Environmental Controls 16
2.2.5.1 Sheen and Spill Prevention and Response 17
2.2.5.2 Dredging 17
2.2.5.3 Transportation and Offloading 19
2.2.5.4 Capping and Cover Placement 20
2.2.6 Water Quality and Sediment Monitoring 20
2.2.7 Health and Safety 21

3 REVIEW OF CONSTRUCTION ACTIVITIES, TIMELINE, AND DEVIATIONS FROM THE DESIGN 23
3.1 Mobilization 23
3.1.1 Gasco Site 23
3.1.2 Offloading Facility 24
3.2 Dredging 24
3.2.1 Summary of Dredging Activities 24
3.2.2 Bathymetry Surveys 26
3.2.3 Visual Monitoring and Diver Surveys 26
3.2.4 Environmental Monitoring and Contingency Response 26
3.2.5 Health and Safety Monitoring 28
3.3 Transportation, Offloading, and Disposal 29
3.3.1 Summary of Transportation, Offloading and Disposal 29
3.3.2 Environmental Monitoring and Contingency Response 31
3.3.3 Health and Safety Monitoring 32
3.4 Capping 33
3.4.1 Summary of Capping Activities 33

3.4.2 Environmental Monitoring and Contingency Response 34
3.5 Demobilization 35
3.5.1 Gasco Site 35
3.5.2 Offloading Facility 35
3.6 Design Deviations 36
3.6.1 Dredging 36
3.6.1.1 Inner Removal Area Containment System 36
3.6.1.2 Dredging Operation 37
3.6.1.3 Barge Elutriate Filtration System 39
3.6.1.4 Sediment Drying Process 40
3.6.2 Transportation, Offloading, and Disposal 40
3.6.3 Capping 41

4 DOCUMENTATION OF PERFORMANCE STANDARDS ATTAINMENT 42
4.1 Attainment of Dredging Performance Standards 42
4.2 Attainment of Capping Performance Standards 43
4.3 Attainment of Disposal Performance Standards 45

5 SUMMARY OF MONITORING RESULTS 48
5.1 Water Quality Monitoring Results 48
5.1.1 Gasco Site 48
5.1.1.1 Field Parameters 49
5.1.1.2 Laboratory Parameters 50
5.1.1.3 Preliminary Conclusions 54
5.1.2 Transfer Station 55
5.2 Visual Monitoring Results 55
5.3 Transfer Barge Dewater Monitoring Results 56
5.4 Silt Curtain Containment Monitoring Results 57
5.5 Fish Removal 57
5.6 River Velocity Monitoring 58
5.7 Post-Dredge Surface Sediment Monitoring Results 58
5.8 Suspended Sediment Monitoring Results 58
5.9 Sediment Stake Monitoring Results 59
5.10 Cultural Resources Characterization 60
5.11 Transportation and Disposal Documentation 61
5.12 Transfer Station Off-Site Tracking Monitoring Results 61
5.13 Health and Safety Monitoring Results 62

6 QUALITY ASSURANCE/QUALITY CONTROL DOCUMENTATION 64
6.1 Field Monitoring QA/QC 64
6.1.1 Bathymetry Surveys 64
6.1.2 Water Quality Monitoring 65
6.1.3 Post-Dredge Surface Sediment Characterization 65
6.1.4 Suspended Sediment Monitoring 66

6.1.5 Offloading Offsite Tracking Monitoring 66
6.1.6 Monitoring Laboratory Data QA/QC 67
6.1.6.1 Laboratory QC Criteria 67
6.2 Data Validation 67

7 CERTIFICATIONS AND INSTITUTIONAL CONTROLS 70
7.1 Final EPA Approval 70
7.2 Institutional Controls 70

8 REMOVAL ACTION CONTACT INFORMATION 71

9 REFERENCES 74

List of Tables

Table 1 Design Characterization Sample Station Geographic Coordinates
Table 2 Lateral and Vertical Extents of the Tar Body Zone
Table 3 Lateral and Vertical Extents of the Visually Contaminated Zone
Table 4 Water Quality Triggers for Additional Environmental Controls
Table 5 Summary of Major Events and Milestones—Gasco Removal Action
Table 6 Record of Truckloads of Material Transported from Transfer Station to Landfill
Table 7 Summary of Debris and Water Taken from Transfer Station to Landfill
Table 8 Transportation and Disposal Performance Standards (as described in EPA's letter dated January 14, 2005 regarding "Waste Material Disposal")—Compliance Summary
Table 9 Offloading Facility Off-Site Tracking Soil Analytical Results
Table 10 Water Quality Sampling Station Location Descriptions
Table 11 Background Water Quality Survey Results—Gasco Site, September 1 and 2, 2005
Table 12 Background Water Quality Survey Summary Statistics with 95% Confidence Limits (CL)—Gasco Site, September 1 and 2, 2005
Table 13 Water Quality Monitoring Results (Field Parameters) Compared to Triggers—Gasco Site
Table 14 Exceedences of Water Quality Monitoring Criteria (Field Parameters)—Gasco Site
Table 15 Background Water Quality Survey Results—Laboratory Parameters
Table 16 Additional Background Water Quality Monitoring Results Compared to Triggers—Laboratory Parameters

Table 17 Water Quality Monitoring Results Compared to Triggers—Laboratory Parameters
Table 18 Background Water Quality Survey Results—Transfer Facility, August 17 and 18, 2005
Table 19 Background Water Quality Survey Summary Statistics with 95% Confidence Limits (CL)—Transfer Facility
Table 20 Water Quality Monitoring Results Compared to Triggers—Transfer Facility
Table 21 Visual Monitoring Descriptions from each Sampling Station—Gasco Site
Table 22 Visual Monitoring Descriptions from each Sampling Station—Transfer Facility
Table 23 Water Quality Monitoring Results Compared to Triggers—Transfer Barge Dewatering Samples
Table 24 Visual Descriptions of Water Samples Collected at the Silt Curtain—Mudline Interface
Table 25 Velocity Monitoring Results—Gasco Site
Table 26 Post-Dredge Baseline Surface Sediment Characterization Collection Information
Table 27 Post-Dredge Surface Sediment Analytical Results
Table 28 Pre- and Post-Construction Sediment Trap Monitoring Collection Information
Table 29 Pre- and Post-Construction Sediment Trap Analytical Results
Table 30 Gasco Transfer Station Monitoring Surface Soil Characterization Collection Information
Table 31 QA/QC Water Quality Monitoring Results—Laboratory Parameters
Table 32 QA/QC Post-Dredge Characterization Monitoring Results

List of Figures

Figure 1 Vicinity Map
Figure 2 Summary of Sampling Locations in Vicinity of Tar Body Prior to Design
Figure 3 Lateral and Vertical Extents of Surface Tar Body
Figure 4 Design Dredge Plan and Cross Section Locations
Figure 5a Design Cross Sections at Stations 0+50 and 1+00
Figure 5b Design Cross Sections at Stations 1+50 and 2+100
Figure 6 Design Pre-Dredge and Post-Dredge Bathymetry
Figure 7a Design Inner Removal Area—Non-Rigid Containment Configuration
Figure 7b Design Outer Removal Area—Non-Rigid Containment Configuration

Figure 8a Design Inner Removal Area—Haul Barge Holding Area and Transfer Location
Figure 8b Design Outer Removal Area—Haul Barge Holding Area and Transfer Location
Figure 9 Design Post Cap and Cover Bathymetry
Figure 10a As-Built Post-Dredge Bathymetry and Compliance Cross-Section Locations
Figure 10b As-Built Post-Dredge Cross-Section—Stations A-A′ through D-D′
Figure 10c As-Built Post-Dredge Cross-Section—Stations E-E′ through G-G′
Figure 11 Water Quality Monitoring Stations—Gasco Site
Figure 12 Post-Dredge Surface Sediment Characterization Stations
Figure 13 Sediment Stake Monitoring Locations
Figure 14 Water Quality Monitoring Stations—Transfer Station
Figure 15 Transfer Station Haul Route and Sampling Locations
Figure 16 As-Built Post-Cap and Cover Bathymetry and Organo-Clay Mat Location
Figure 17 Sediment Trap Monitoring Station Locations
Figure 18 Revised Design Pre-Dredge and Post-Dredge Bathymetry Accounting for Pipeline Offsets
Figure 19a As-Built Isopach Surface Verifying Compliance with Capping (6 inch) Design Elevations
Figure 19b As-Built Isopach Surface Verifying Compliance with Fringe Cover Design Elevations

List of Appendices

Appendix A EPA Minimum Performance Standards for Offsite Landfill Disposal – Letter Dated January 14, 2005
Appendix B Construction Quality Assurance Officer Logs – Site
Appendix C Construction Quality Assurance Officer Logs – Transfer Station
Appendix D Organo-Clay Design and Installation Recommendations
Appendix E Cap and Fringe Cover Material Physical and Chemical Characterization Results
Appendix F Water Quality Monitoring Logs – Site
Appendix G Water Quality Monitoring Logs – Transfer Facility
Appendix H Post-Dredge Surface Sediment Characterization Logs
Appendix I Sediment Trap Sampling Logs
Appendix J Cultural Resources Investigation Oversight Report
Appendix K Transfer Station Soil Sampling Logs
Appendix L Health and Safety Monitoring Documentation – Site

Appendix M Health and Safety Monitoring Documentation – Transfer Station
Appendix N Chemical Analytical Data Validation Reports

AINW	Archeological Investigations Northwest
Anchor	Anchor Environmental, L.L.C.
ARAR	Applicable or Relevant and Appropriate Requirements
BMP	Best Management Practice
BTEX	Butane, toluene, ethylbenzene, and xylene
BWE	Blue Water Engineering
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHASP	Construction Health and Safety Plan
cm	centimeters
CMWNW	Chemical Waste Management North West
CQAO	Construction Quality Assurance Officer
CQAP	Construction Quality Assurance Plan
CQCP	Construction Quality Control Plan
cy	cubic yard
DEQ	Oregon Department of Environmental Quality
DMEF	Dredged Material Evaluation Framework
DO	Dissolved oxygen
DRET	Dredging elutriate test
EE/CA	Engineering Evaluation/Cost Analysis
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionarily significant unit
H:V	Horizontal:vertical
H_2S	Hydrogen sulfide
HDPE	High density polyethylene
MARP	Monitoring and Reporting Plan
MS/MSD	Matrix Spike/Matrix Spike Duplicates
NCP	National Contingency Plan
NMFS	National Marine Fisheries Service
NPL	National Priorities List
NUC	Northwest Underwater Construction
NW Natural	Northwest Natural Gas Company
Opinion	National Marine Fisheries Services Biological Opinion
Order	Administrative Order on Consent
OSC	On-Scene Coordinator
OSHA	Occupation Safety and Health Administration

PAH	polycyclic aromatic hydrocarbon
PARCC	precision, accuracy, representativeness, completeness, and comparability
PCB	polychlorinated biphenyl
ppb	parts per billion
ppm	parts per million
PQL	Practical quantitation limit
QA/QC	quality assurance/quality control
QAPP	Quality Assurance Project Plan
RACR	Removal Action Completion Report
RAEPP	Removal Action Environmental Protection Plan
RAPP	Removal Action Project Plan
RAWP	Removal Action Work Plan
RPD	Relative percent difference
SAP	Sampling and Analysis Plan
Sevenson	Sevenson Environmental Services
sf	Square foot
SOW	Statement of Work
SSO	Site Safety Officer
SVOC	Semivolatile organic compound
TCLP	Toxicity Characteristic Leaching Procedure
TDP	Transportation and Disposal Plan
TPS	Total petroleum hydrocarbon
TS	Total solids
tsf	Tons per square foot
TSS	total suspended solids
USACE	U.S. Army Corps of Engineers
VOC	Volatile organic compound
WQC	Water Quality Certification
WSMP	Water and Sediment Monitoring Plan

CERTIFICATION STATEMENTS

The Removal Action has been constructed in accordance with the Final Design specifications in the matter of the Portland Harbor Superfund Site, Gasco Facility, Portland, Oregon. U.S. Environmental Protection Agency, Region X, CERCLA Docket No. 10-2004-0068. NW Natural (a.k.a. Northwest Natural Gas Company) Respondent.

Eric J. Schwarz
Anchor Environmental, L.L.C.
Date: January 17, 2006

Robert J. Wyatt
Northwest Natural Gas Company
Date: January 17, 2006

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EXPIRATION DATE: 30 June 06

As required by Paragraph 22 of the April 2004 Administrative Order on Consent for Removal Action at the Gasco Facility, Portland, Oregon, the following statement certifies the contents of this document:

> *"Under penalty of perjury under the laws of the United States, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Carl Stivers, Anchor Environmental, L.L.C.
NW Natural Project Coordinator

Date: 1/07/06
January 17, 2006

1 INTRODUCTION

NW Natural entered into an Administrative Order on Consent (Order) (EPA 2004a) with the U.S. Environmental Protection Agency (EPA) on April 28, 2004 to perform a time-critical removal action at the "Gasco" site (Site) on the Willamette River in Portland, Oregon (Figure 1). The Order requires that NW Natural perform a number of actions associated with removing a tar body (as defined in the Order) at the surface of the nearshore sediment adjacent to the Site. NW Natural initiated construction of the removal in August 2005 and completed the removal action in early November 2005. This Removal Action Completion Report (RACR) summarizes the removal design and construction activities conducted to implement the removal. This RACR was developed by Anchor Environmental, L.L.C. (Anchor) and is submitted to EPA pursuant to Section VIII.21 of the Order. This RACR conforms to the requirements set forth in Section 300.165 of the National Contingency Plan (NCP) entitled "OSC Reports" and provides the following information as required by the Statement of Work (SOW):

- Description of work as presented in the Removal Action Work Plan (RAWP) and work actually performed
- Record ("As-built") drawings showing the area and depth of the location remediated
- Information on materials moved off-site and final destination(s) of those materials
- Presentation of the analytical results of all sampling and analyses performed
- Relevant documentation generated during the removal action
- Description of institutional or engineering controls necessary to sustain the removal.

1.1 Site Background

Following entering into the Order in April 2004 (EPA 2004a), NW Natural submitted a RAWP (Anchor 2004a) pursuant to Section VIII.16.a of the Order. The final approved RAWP was sent to EPA on August 30, 2004. NW Natural subsequently submitted an interim deliverable on preliminary design (Anchor 2004b) in response to EPA comments (EPA 2004b) on the RAWP (Anchor 2004a). Consistent with Section 3.A of the SOW (Appendix B of the Order, EPA 2004a) and Section 3 of the RAWP, planning and preliminary design of the removal action started in May 2004 and continued through November 2004, when NW Natural submitted a Draft Final Removal Action Project Plan (RAPP) to EPA.

In December 2004, it became apparent to EPA that the removal planning process would exceed 6 months. Where a 6 month planning period exists, preparation of an Engineering Evaluation/Cost Analysis (EE/CA) is required. Consequently, NW Natural was directed by EPA in February 2005 to prepare an EE/CA consistent with a Non-Time-Critical Removal Action and in accordance with EPA's *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA* (EPA 1993). Following several comment and response iterations, EPA solicited public comment on the draft EE/CA (Anchor 2005a) in May and June of 2005. Taking into consideration the EE/CA public comments and multiple meetings with the NW Natural consultant teams, EPA drafted an Action Memorandum selecting the removal action (signed on June 20, 2005) (EPA 2005b). The removal action included dredging to remove the surface tar body and capping to isolate the post-removal surface from the waterway and aquatic organisms.

The Final RAPP, which detailed the plans and design documents for implementation of EPA's selected action, was submitted to EPA in July 2005 (Anchor 2005b). The Final RAPP was developed by Anchor and Sevenson Environmental Services, Inc. (Sevenson), the construction contractor for the project. Pursuant to Section 7(a)(2) of the Endangered Species Act (ESA), National Marine Fisheries Services (NMFS) prepared a biological and conference opinion (Opinion) for the removal action (dated August 19, 2005, NMFS 2005). Following receipt of the Opinion, NW Natural initiated the dredging and capping removal action in late August 2005. In-water construction of the removal and disposal of material generated was completed in early November 2005.

1.2 Removal Action Objectives

The objectives and scope of the removal action are described in the Statement of Work (Appendix B of the Order, EPA 2004a). In general, the objectives are to:

- Remove tar containing high concentrations of total polycyclic aromatic hydrocarbons (TPAH) in river sediments and the riverbank adjacent to the Gasco facility ("the tar body").
- Remove the tar body to a depth that leaves a surface of lesser TPAH concentration, upon which thin barrier placement or a pilot cap will be evaluated. A thin barrier would be a layer of clean material placed over the exposed sediment and would not be intended to provide complete isolation or a permanent barrier to any residual

contamination. A pilot cap would be a layer of clean material placed over the exposed sediment and would be designed to evaluate the potential use of a cap for isolation or permanent barrier to residual contamination.

- If technically appropriate (based upon the design characterization study, field observations, or other data) consider the creation of a bathymetric "low spot" after removal has occurred, such that potential seepage of material may be captured in a localized area for future response. (Seepage of product-type material has not been observed in previous investigations, but additional investigations are currently being directed by Oregon Department of Environmental Quality (DEQ) to further evaluate the potential for product-type seepage.)
- Prevent potential contaminant migration of tar from the tar body to adjacent sites through early removal of the tar body.
- Monitor to determine if seepage from upland sources occurs that recontaminates the removal action area (if any seepage is found) and evaluate to determine if additional removal is necessary, as described in an approved Monitoring and Reporting Plan.
- Demonstrate compliance with Applicable or Relevant and Appropriate Requirements (ARARs) of environmental laws, to the extent practicable, including, but not limited to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Clean Water Act Section 404 (404), ESA, and other ARARs.
- To the extent practicable, contribute to the efficient performance of any anticipated long-term remedial action with respect to the release of hazardous substances from the facility.

2 SUMMARY OF REMOVAL DESIGN

As required by the SOW, the RACR "…shall contain a description of the Work described in the Removal Action Work Plan and the Work that was actually performed." Accordingly, this section summarizes the design characterization activities proposed in the RAWP (Anchor 2004a) and the design characterization results. In addition, this section summarizes the EPA-approved removal described in the RAPP (Anchor 2005b). Section 3 describes the work as actually completed and discusses any deviations between the design and the constructed removal action.

2.1 Removal Action Work Plan

The RAWP (Anchor 2004a) was submitted to EPA pursuant to Section VIII.16.a of the Order (EPA 2004a). The RAWP (Anchor 2004a) proposed additional design characterization sampling activities necessary to support evaluations of a preferred remedy for the Site. The preliminary design was conducted in parallel with the design characterization, incorporating information from the characterization task as it was collected. The objective of the design characterization was to gather data required to refine the scope of the removal action and to identify protective measures and contingencies that would need to be included in the design. As discussed in Appendix A of the RAWP (Anchor 2004a), sediment cores and samples from those cores were collected to:

- Better define the lateral and vertical extent of the tar body
- Assess the potential for water quality impacts during the removal action
- Profile the material to be removed to determine a suitable disposal location
- Characterize physical and chemical properties of the sediment beneath the tar body

The primary purpose of the coring was to physically characterize the location and extent of the tar body per the first objective. Select samples of the tar body and underlying sediments were retained for laboratory analyses as detailed in the Sampling and Analysis Plan (SAP, Appendix A of the RAWP, Anchor 2004a) to attain the other three objectives. Sampling was performed in July 2004 in general accordance with the EPA-approved RAWP (Anchor 2004a), the SAP (Appendix A of the RAWP, Anchor 2004a), and the Health and Safety Plan (HASP) (Appendix B of the RAWP, Anchor 2004a). In summary, sediment cores were collected from 20 sampling stations within and surrounding the perimeter of the previously identified extent of the surface tar body (Figure 2). The geographic locations of the coring

stations are provided in Table 1. Three of the sampling stations (i.e., RAA-18, RAA-19, and RAA-20) were added during the field sampling effort to obtain additional data for sediments/soils in the zone between the uplands and the nearshore zone.

As the vertical extent of the surface tar body was unknown prior to the design characterization sampling, a single 40-foot core was advanced approximately in the middle of the surface tar body (RAA-09) to determine the depth of visual contamination and guide the sampling depths for the remaining coring stations. Visible contamination at this location extended to a depth of approximately 16 feet below mudline, with tar extending approximately 13 feet below mudline. Following discussions with EPA regarding these data, all additional cores were advanced to a depth of 20 feet below mudline. At each station, the full penetration depth was logged and the depths of the tar body zone, visually contaminated zone, and visually uncontaminated zone were identified. In addition, at each station subsamples were collected from each of these zones for potential physical and chemical analyses.

The remainder of this section discusses in further detail the physical and chemical characterization results collected during completion of the RAWP (Anchor 2004a) field activities and the results of the cultural resources characterization.

2.1.1 Physical Characterization

During evaluation of the cores, Anchor and EPA reached consensus on the depth(s) of the zones (i.e., tar body zone, visually contaminated zone, and visually uncontaminated zone) present at each station for the purposes of sampling. To maintain a consistent definition of each zone throughout the characterization, each zone was identified through the presence of particular physical characteristics. The core logs for the design characterization cores are presented in Appendix G of the RAPP (Anchor 2005b).

Observations of the tar body showed much variation, including:

- Thin tar laminations bounded by sediments
- Lenses of tar
- Somewhat soft, sticky masses of tar
- Dense brittle fragments of tar containing little or no sediments

Observations of the visually contaminated zone included sediments:

- Sediment saturated (i.e., visibly detectable) with dense sticky non-flowing oil
- Sediment saturated with tar and tar-like substances (but composed primarily of sediments)
- Sediment with a heavy sheen
- Sediment with blebs of dense sticky non-flowing oil and/or tar
- Sediment with a slight sheen

Sediments with no sheen, oil, tar, or petroleum odor noted were identified as the visually uncontaminated zone.

2.1.2 Surface Tar Body Extent

Based on the physical definitions discussed above for defining the presence of tar body and discussions with EPA, the lateral and vertical extents of the tar body were delineated (Figure 3). The elevations and thicknesses of the surface tar body and visually contaminated zones are provided in Tables 2 and 3. The vast majority of the surface tar body was upstream of the overhead pipeway, with only a small portion underneath the pipeway. Representative sampling underneath the dock itself was not physically possible, and the presence or absence of tar in the area immediately under the dock could not be confirmed. However, the original diver visual survey of surface tar described in the RAWP (Anchor 2004a) did not find surface tar underneath the oil pipeline structure.

The presence of tar was also noted in subsurface layers in two cores collected immediately upstream (AN 2-1 through AN 2-4) and two cores shoreward (RAA-19 and 20) of the surface tar body. The tar in these cores was covered by 1.5 to several feet of sediment or soil type material and the tar itself was approximately 1.5 to 5 feet thick (Table 2). The removal design in this area (see Section 2.2) included bisection of these subsurface tar layers. However, because this approach would result in a net reduction in the exposure of surface tar and the entire area would be covered with clean sand, removal of the surface tar shown in Figure 3 was expected to meet the objectives of the SOW (Appendix A of the Order, EPA 2004a).

As noted in Table 2, there was lack of recovery in a number of cores. Where there were gaps in core recovery, the entire core was examined for the deepest location of observed tar. In these cases, it was assumed that tar was present in all unrecovered segments above this level. Where a gap existed below observed tar within a single four foot core segment, it was assumed that tar was present until the end of that segment. This method provided the maximum possible estimate of the vertical extent of continuous tar that may be present at the locations where tar was observed.

2.1.3 Physical Consistency

Field observations and laboratory results (discussed below) indicated that the physical characteristics of the tar and sediments within the removal action area were spatially heterogeneous. The physical characteristics of the tar material varied in consistency from soft, sticky, or plastic to stiff, firm, or brittle. The brittle material was generally gravel-size lumps of tarry sand that appeared to have weathered. Much of the brittle tar was found on the sediment surface, and was generally found at stations closer into the shoreline in areas that had been exposed to air during low flow conditions. Small pieces of this material were also found at depth in some cores. Most of the tar present below this weathered layer was a softer consistency. Although it smeared on surfaces it touched, it was too viscous to flow noticeably, and the intermixed sands and non-plastic silt/sands prohibited it from acting viscid when sheared in place. None of the tar layers identified exhibited a noticeable sheen.

The visually contaminated zone varied in consistency from sediments with a slight hydrocarbon odor, slight sheen, slight oil staining, and minor blebs of dense sticky non-flowing oil and/or tar to sediments with more extreme hydrocarbon odor, heavy sheen, and sediments more heavily saturated in dense sticky non-flowing oil and/or tar blebs. No free hydrocarbon product beyond small scattered oily blebs was identified in any of the cores either in tar or in visually contaminated sediments. All oily sediments encountered were dense and sticky, felt viscous to the touch, were intermixed in a mostly sand/silt matrix, and did not flow noticeably during the core cutting and sampling procedure.

Following completion of the sampling and evaluation of the core logs, several samples containing a substantial visual fraction of silts and clays were submitted for Atterberg limits tests, and percent fines analysis were performed on four samples to obtain additional information on the consistency of material in the visually contaminated and uncontaminated zones with a substantial fraction of silts and clays. Most of the samples were predominately sand (for all samples the average sand or coarser material content is 51 percent) and were consistent with substantial resistance found at many locations during coring. Similarly, most of the Atterberg tests results were "non-plastic" indicating that the fined grained material would not act as cohesive sediment. The grain size and Atterberg limits results are presented in the RAPP (Anchor 2005b).

A representative tar body sample from station RAA-07SD was analyzed for total solids and specific gravity to quantify the buoyancy of tar body fragments potentially mobilized into the water column during dredging. The specific gravity of this sample was 1.23 g/ml. This is somewhat denser than water and would indicate that tar particles released into the water column would sink over time.

In addition, a bench scale test was conducted with representative samples of surface tar/sediments to estimate the amount of drying reagent that would need to be mixed into the material to pass paint filter test and a bearing capacity of 1 ton per square foot (tsf), which were two requirements for disposal at the landfill. The results of this test are shown in Appendix J of the RAPP (Anchor 2005b). In summary, it was determined that approximately 5 percent (by weight) Portland cement would meet the 1 tsf requirement in one day of curing time. Greater than 5 percent cement would be needed to pass the paint filter test in the same one day curing time and/or a greater curing time would be needed.

2.1.4 Elutriate Testing

To provide information for a detailed removal water quality analysis two samples were collected from both the surface tar body and visually contaminated zones and analyzed using the U.S. Army Corps of Engineers (USACE) Dredging Elutriate Test (DRET) method (DiGiano et. al 1995). The elutriate water samples obtained from the DRET procedures were analyzed for semivolatile organic compounds (SVOCs), volatile

organic compounds (VOCs), total petroleum hydrocarbons (TPH), total and amenable cyanide, and total and dissolved arsenic, chromium, copper, nickel, lead and zinc. The DRET method is intended as bench scale simulation of conditions that might be present in the water column very close to the dredge (within a few feet). This information can be used in quantitative evaluations of potential water quality impacts associated with dredging.

The results of the DRET were summarized and compared against appropriate water quality guidelines in the RAPP (Anchor 2005b). Several PAH and benzene, toluene, ethylbenzene, and xylene (BTEX) compounds were detected in both the tar body and visually contaminated sediment elutriate waters. It was also noted during elutriate testing of tar samples that a light sheen was visible at the surface of the test vessel after the elutriate procedure was conducted. This sheen was light and did not have a measurable thickness of non-aqueous phase liquid. No such sheen was observed in DRET analyses for visually contaminated sediments. The presence of detected chemicals in the elutriate test water was consistent with the presence of a visible sheen in the tar DRET tests.

2.1.5 Disposal Suitability

As directed by EPA, samples of the tar body were analyzed following the Toxicity Characteristic Leaching Procedure (TCLP) to profile the material for disposal. The results were compared to maximum concentration limits for the toxicity characteristic (40 CFR 261.24). The results of this comparison were presented in the RAPP (Anchor 2005b). In summary, the two tar body samples had benzene results greater than the toxicity criterion for benzene.

2.1.6 General Chemical Characterization

Select samples of the visually contaminated and visually uncontaminated sediments underneath the tar body were analyzed for bulk sediment chemistry. The purpose for collecting these data was to understand the concentrations of chemicals in sediments that might be incidentally removed with the tar due to design or construction logistical considerations, as well as sediments that might remain after the tar was removed. The chemistry results are presented in the RAPP (Anchor 2005b). In summary, the visually

contaminated sediments had relatively high organic carbon content (likely associated with the presence of oil and tar blebs) and TPH and PAH concentrations, whereas the visually uncontaminated sediments contained relatively normal levels of organic carbon for river sediments and substantially less TPH and PAH. Neither sediment zone had elevated levels of metals. Cyanide was detected in visually contaminated sediments and only detected at low levels in four out of 11 visually uncontaminated sediment samples. Most volatile chemicals were not detected in both sediment layers, except BTEX compounds, which were often detected in the visually contaminated sediments. It is notable that BTEX compounds were not detected in the deeper visually uncontaminated sediment layers, with only a few low level exceptions.

A comparison of the tar TPAH concentrations to the concentrations in sediments that would comprise the new sediment surface after removal based on the designed dredge prism is presented in the RAPP (Anchor 2005b). The post-dredge surface would include both visually contaminated and visually uncontaminated materials. The results for samples representative of this new surface range averaged 0.67 percent TPAH, while a representative tar TPAH concentration (obtained from a historical sample containing tar given no TPAH analysis was conducted for tar during the design characterization) was 2.64 percent TPAH. This analysis indicates that removal of the tar would result in a lower concentration of TPAH in the removal action area following the tar body removal.

2.1.7 Cultural Resources Characterization

Archeological Investigations Northwest, Inc. (AINW) determined that sediment cores advanced 50 feet shoreward or riverward of the ordinary low water line (7.91 feet NAVD 88) should be inspected by AINW for evidence of cultural resources at the Site. Ten stations fell within the 50 foot distance, and AINW was on site to evaluate each of those cores. AINW has written a cultural resources characterization report per the RAWP (AINW 2004) and this report has been submitted to EPA (November 2004). AINW was present to inspect the nearshore portion (50 feet shoreward or riverward of the ordinary low water line) of the excavation during the characterization activities. No evidence of the presence of cultural resources was identified during the characterization activities.

2.2 Final Removal Design

The EPA-approved removal action for the Site was summarized in the RAPP (Anchor 2005b). The removal design incorporated public and EPA comments on the EE/CA (Anchor 2005a) and was in accordance with the EPA Action Memorandum (EPA 2005b) and EPA-defined performance standards (EPA 2005a) (Appendix A). The Construction Quality Assurance Plan (CQAP) (Appendix C of the RAPP, Anchor 2005b) provided specific details about the quality assurance/quality control (QA/QC) responsibilities necessary to accurately evaluate achievement of the performance standards for each construction activity.

2.2.1 Roles and Responsibilities

EPA designated Sean Sheldrake as the On-Scene Coordinator (OSC) and project coordinator to oversee implementation of the final design. Anchor and Sevenson jointly prepared the design documents[1]. In addition, Anchor served as NW Natural's Construction Manager for the removal action. Sevenson contracted with Hickey Marine Services to implement the in-water construction activities at the Site, Tidewater Marine to transport the material by barge to the offloading facility and offload the material, and Waste Management for transportation of the material by trucks from the offloading facility to the landfill for disposal of the material at the Chem-Waste Subtitle C facility at Arlington, Oregon.

2.2.2 Removal

To achieve the primary objective of the SOW, the removal action design involved the removal of the tar body within the removal area as described in the RAPP (Anchor 2005b). Based on field observations from the design characterization and previous investigations, the lateral and vertical extents of the surface tar body were identified and a removal plan was created to remove sediments at least 1 foot below the surface tar body (Figure 3). The designed removal plan and associated cross-sections are shown in Figures 4, 5a, and 5b. This removal plan led to a design removal volume between 14,000 to 15,000 cubic yards (cy) including an allowable overdredge of 6 inches. The designed pre- and post-removal bathymetry is shown in Figure 6. The removal plan included 2.5

[1] Anchor prepared the design documents with review and input from Sevenson throughout the design development and finalization.

horizontal to 1 vertical (2.5H:1V) slopes based on a slope stability analysis (detailed in Appendix H of the RAPP, Anchor 2005b). Based on this analysis, the proposed 2.5H:1V dredge cut is considered to be stable under static conditions. Note: to effectively remove the deeper outer limits of the surface tar body and maintain stable 2.5H:1V dredge slopes, significant dredging below the extent of surface tar body was required (see Figures 4, 5a, and 5b).

The removal was designed to be accomplished using a dredge bucket deployed from a derrick barge. Depending on the water depths, removal was designed within an inner and outer removal area. Removal within each area was designed within a full containment barrier (i.e., silt curtain and bedload baffles) to minimize potential water quality impacts outside of the removal area (Figures 7a and 7b). The design included placing the removed material directly onto a floating haul barge deck for initial sediment drying, followed by transferring this material via a second derrick barge into a sealed haul barge where sediment drying agent was added (Figures 8a and 8b). Strict environmental controls were included in the design as detailed in the Removal Action Environmental Protection Plan (RAEPP) (Appendix E of the RAPP, Anchor 2005b) and summarized in Section 2.2.5.

The performance standards for the removal included the following:

- Verification that the construction contractor achieved compliance with the final design elevation(s) as per the RAPP (Anchor 2005b)
- Protection of the pipeline support piles during dredging as per the RAPP (Anchor 2005b)

The design specified that compliance with the final design elevation requirements would be documented through daily progress surveys (or less frequently, if approved by the Project Engineer) to establish actual excavated depths and extent of dredging and concurrence by EPA that the design elevations were achieved. If water depths prohibited surveying portions of the dredge prism (i.e., along the shoreline), the elevation changes in these areas would be measured using standard terrestrial survey equipment. If successive side-slope sloughing in a portion of the dredge prism occurred inhibiting the contractor from reaching the final design elevation, the Anchor Project Coordinator was to notify the EPA OSC to discuss which further action, if any, might be

necessary in that portion of the dredge prism. The second performance standard was to identify an appropriate removal offset from the pipeline supports (see Figure 4) to prevent damage to the structural stability of the pipeline. Verification of this standard was designed to be assessed by review of the post-dredge bathymetry surrounding the pipeline support piles. Attainment of these removal performance standards are described in Section 4.

2.2.3 Transportation and Disposal

Transportation and disposal of the dredged material is described in detail in the Transportation and Disposal Plan (TDP) (Appendix A of the RAPP, Anchor 2005b). The TDP (Appendix A of the RAPP, Anchor 2005b) proposed that a derrick crane and dredge bucket would excavate the material and load the material onto a contained flat deck transfer barge. Excess water in the transfer barge would be decanted using pumps placed in the barges' four corners into the inside of the silt curtain primary containment within the active dredge prism. From the transfer barge, the material would be rehandled by another derrick and crane into a second sealed haul barge. As determined by a pre-design sediment drying bench scale test (see Section 2.1.3 of the RAPP, Anchor 2005b), a minimum of 5 percent sediment drying agent (i.e., Portland cement) would be added to the haul barge during this step to facilitate drying of the removed material and an increase in the material's bearing capacity. Because this percentage of Portland cement was determined based on limited bench scale data, the design maintained flexibility by allowing the percentage of sediment drying agent to be varied based on field observations at the Site and transfer station. The reagent and dredged material would be mixed in the haul barge using the transfer crane bucket.

To minimize spillage between the dredge bucket and the transfer barge, as well as between transfer and haul barges, the design specified three cantilevered spill aprons to be attached to these barges to direct any spilled material into the barges. Under the design, no part of any bucket swing path would be allowed to occur over open water outside the primary silt curtain barriers in each configuration. The full haul barge would then be covered with a tarp and transported by river to the transfer station. Prior to exiting the containment, the contractor would visually inspect the barge to ensure that

no spilled material was present along the barge gunnels or present with the potential to enter the river during transport to the transfer station.

Once at the Port of Morrow transfer station located in Boardman, Oregon, the tarp covering the barge was to be removed and the material transferred from haul barges to trucks by Tidewater Marine. Where the material contained no visible free water and/or passed the paint filter test, the crane with a standard clamshell bucket would remove material from the haul barge and place it directly into an upland hopper, which would guide the material into the transport trucks. If necessary, additional drying reagent would be added where free water existed until the material passed the paint filter test. Following the loading of each truck, the truck and area immediately around the truck would be inspected for spilled material and the truck would be covered. Once the truck was cleared to leave the facility following inspection, the load would be documented on a manifest that would be carried by the driver. The truck would then proceed to the Chemical Waste Management North West (CWMNW) Subtitle C landfill near Arlington, Oregon. Once the load was approved by CWMNW and the loaded truck was weighed, the driver would be instructed where to unload the material. The driver would take the truck to the designated unloading area at the landfill working face and discharge the load. The driver would proceed with the empty truck to the truck wash area where the truck would have the wheels and undercarriage washed, if necessary. The empty truck would be weighed, and the weight would be recorded to calculate the tare weight of the material delivered to the landfill. The driver would obtain completed disposal paperwork from the CWMNW clerk before leaving the landfill facility. Copies of all project records, including manifests and weigh tickets, would be maintained in the project file.

Performance standards for transportation and disposal activities included the following:

- EPA-defined transportation and disposal standards (letter dated January 14, 2005, Appendix A)
- Waste Management's CWMNW landfill-specific requirements (pass paint filter test and have a minimum of 1 tsf bearing capacity)
- Document no loss of material from the trucks during transport from the transfer station to the landfill

- Document no off-site tracking of the material from the transfer station through collection of pre- and post-construction soil samples at the transfer station

Attainment of these performance standards is described in Section 4.

2.2.4 Pilot Capping/Cover

To achieve the second objective of the SOW (Appendix A of the Order, EPA 2004a), the design proposed placement of a pilot cap over the majority of the removal action area surrounded by a perimeter of fringe cover as described in the RAPP (Anchor 2005b). The purpose of the pilot cap is to provide a barrier over the removal area that can be monitored, to evaluate the potential effectiveness of capping as a remedy and to assist in the evaluation of upland groundwater plume migration. The monitoring information collected in the future will be used to help understand the potential effectiveness of capping as long-term remedial action for portions of the Gasco sediments. The cap was designed to withstand erosive forces that might reasonably be expected until the site-wide remedy is implemented. It was not designed as a long-term remedy for this area. The purpose of the fringe cover material was to place a sand layer (similar in grain size to existing sandy substrate at the Site) over the outer lateral edge of the removal area and side slopes to provide a new clean surface over top of any dredge residuals. This clean sand was designed to reduce the level of chemical exposures in the biologically active zone. The fringe cover was not designed to provide long-term isolation or a permanent barrier to any residual contamination.

The pilot cap was designed as a 12-inch "cap" layer overlain with a 6-inch "armor" layer whereas the fringe cover was designed as a 6-inch layer of clean sand (Figure 9). The designed pilot cap area is approximately 16,800 square feet (sf) consisting of approximately 700 cy of pilot cap material and 300 cy of armor material. The designed fringe cover was approximately 46,000 sf consisting of approximately 850 cy of fringe material. The design specified that the supplier of the cap/cover materials would provide test data demonstrating that the materials meet the gradation and chemical analytical specifications. Per the design, the cap/cover materials would be barged to the Site and placed by the derrick barge using a mechanical bucket. The design indicated that the pilot capping armor material would be placed in one 6-inch lift, cap material in

either two 6-inch lifts or one 12-inch lift, and fringe cover material in one 6-inch lift. The bucket would be lowered through the water column prior to releasing cap materials and placed with sufficient control to meet the design thickness for that layer. Strict environmental controls were included in the design as detailed in the RAEPP (Appendix E of the RAPP, Anchor 2005b) and summarized in Section 2.2.5.

The primary performance standards for the capping included the following:

- Ensuring the cover/cap has the appropriate physical and chemical characteristics as per the RAPP (Anchor 2005b)
- Achieving material placement over the required areas and to the required thickness as per the RAPP (Anchor 2005b)

Per the design, the first performance standard would be verified through documentation of the source of the cover/cap material and documentation of the material physical and chemical characteristics. Prior to placement of the cover/cap materials, the contractor was to provide documentation of material sampling and characterization (including physical and chemical testing) to ensure that the imported material would uniformly meet the specifications specified in the RAPP (Anchor 2005b). The second performance standard would be verified through completion of bathymetric surveys to document that the cover meets the design elevations. Attainment of these performance standards are described in Section 4.

2.2.5 Environmental Controls

The RAEPP (Appendix E of the RAPP, Anchor 2005b) identifies the environmental controls and the best management practices (BMPs) designed (as well as contingency measures and additional controls that could be implemented should specific circumstances arise) to minimize potential adverse short-term impacts during the removal action. The RAEPP (Appendix E of the RAPP, Anchor 2005b) also defined the water quality measurements and action levels to assess water quality impacts and trigger additional contingency measures, as necessary (Table 4). These action levels were designed to serve as a measure of the effectiveness of the implemented controls. The remainder of this section briefly summarizes the design for various types of environmental controls for each of the construction activities.

The design includes three general types of controls, which are defined as:

- Standard – controls that are typically employed during contaminated sediment removal projects and would be employed at all times during the applicable operation regardless of any water quality measurements or other observations regarding environmental impacts. These controls are intended to minimize the potential impacts that might otherwise be expected without such controls.
- Project Specific – controls that were selected specifically for the conditions of this project based on EPA and partner agency comments regarding concerns about potential water quality and other impacts. These controls were to be employed at all times during the applicable operation regardless of any water quality measurements or other observations regarding environmental impacts.
- Additional – controls that would be employed as contingency measures if and when certain specific conditions are measured or observed. These additional controls were intended to minimize any potential impacts that occurred despite the use of standard and project specific controls. Generally, additional controls were to be implemented in a step-wise and issue-specific fashion as necessary to reduce any potential impacts that were measured or observed.

2.2.5.1 Sheen and Spill Prevention and Response

Per the design, a spill response team would be notified and on standby over the course of the operations. The spill response team would have available for use at the Site and/or transfer station an oil skimming boat, additional absorbent booms, and absorbent pads. Environmental controls specified in the design to minimize sheen and prevent spills included the following:

- Containment Curtain Opening Procedures (Project Specific Control)
- Dredge Derrick Spill Prevention Inspection (Standard Control)
- Transfer Facility Spill Prevention (Standard Control)
- Sheen Contingency Response (Additional Control)
- Spill Response (Additional Control)
- Procedure for accidental truck spill (Additional Control)

2.2.5.2 Dredging

The design separated dredging environmental controls into three main categories: containment barriers, operational controls, and types of dredging equipment. The

efficacy of each of these controls was related to site-specific variables (e.g., sediment physical properties and water currents). Components of each of these controls are outlined below.

Containment Barriers

- Inner and Outer Area Containment Systems (Figures 7a and 7b) (Project Specific Control)
- Cease/Modify Operations in High Currents/Waves (Additional Control)
- Containment Monitoring and Correction (Standard Control)
- Curtain Opening Procedures (Project Specific Control)

Operational Controls

- No Multiple Bites (Standard Control)
- No Bottom Stockpiling (Standard Control)
- No Dragging of the Dredge Bucket (Project Specific Control)
- No Lateral Movement of the Dredge Bucket Under Water (Project Specific Control)
- Pausing Construction Before Opening Silt Curtains (Project Specific Control)
- Use of Spill Apron (Project Specific Control)
- Increased Cycle Time (Additional Control)
- Reduce or Stop Dredging During Peak Currents (Additional Control)
- No Dredging During Night Time Hours (Additional Control)

Dredging Equipment

- Closed Dredge Bucket (Project Specific Control)
- Spill Prevention Apron (Project Specific Control)

Piling Removal

- Pulling Rather Than Digging Out Piles (Standard Control)
- All Piling Removal Within Containment Barriers (Standard Control)
- Any Woody Debris that Was Lost to the Water Column Would be Retrieved (Standard Control)

Fish and Bird Protection

- Measures to Protect Fish From Entrapment Summarized (Project Specific Control)
- Cease Operations if Dead or Dying Fish or Birds Observed and Methods for Recommencing Work (Additional Control)
- Measures to Protect Birds Summarized (Project Specific Control)

Sediment Drying Agent Addition and Mixing

- Sediment Spill Protection (Standard Control)
- Containment of Additives (Project Specific Control)
- Mixing of Additives and Dredged Material (Standard Control)
- Work Stoppage and Additional Controls in the Event of Multiple Spills (Additional Control)
- Limit Operations to Appropriate Weather (Additional Control)

2.2.5.3 Transportation and Offloading

The standard, project specific, and additional environmental controls described in design for the transportation and offloading activities are summarized below.

Barge Loading

- No Release of Water Outside Silt Curtains (Project Specific Control)
- Barge Spill Controls Identified (Project Specific Control)
- Fill Barge to Only 85 percent Capacity/Rain Control (Project Specific Control)
- Barge Inspection Prior to Hauling (Project Specific Control)
- Material Transported in Contained (i.e., sealed) Barges (Project Specific Control)
- Alteration of Dredge Water Release Methods within Primary Containment (Additional Control)
- Limit Operations to Appropriate Weather (Additional Control)

Barge and Dredge Decontamination

- Decontamination Procedures Identified (Project Specific Control)

Material Transferal at the Transfer Station

- Sediment Spill Protection Identified (Standard Control)

- Prevent Return Material/Water (Project Specific Control)
- Dewater Control Identified (Project Specific Control)
- Use of Upland Transport Lined/Watertight Containers (Standard Control)
- Upland Transport Loading Capacity Identified (Standard Control)
- Upland Area Sweeping (Standard Control)
- Loadout Pad Lining Installed (Project Specific Control)
- Access Area Inspection (Standard Control)
- Area and Equipment Decontamination Identified (Standard Control)
- Containment of Additives Identified (Standard Control)
- Limit Operations to Appropriate Weather (Additional Control)

2.2.5.4 Capping and Cover Placement

The standard, project specific, and additional environmental controls described in the design for the capping activities are summarized below.

- Quality of Cover/Cap Material verified (Standard Control)
- Placement Methods Identified (Standard Control)
- Use of Containment Barriers During Placement (Project Specific Control)

2.2.6 Water Quality and Sediment Monitoring

The Construction Water and Sediment Monitoring Plan (WSMP) (Appendix D of the RAPP, Anchor 2005b) defines the water quality measurements and levels that were designed to determine water quality impacts and trigger additional protective measures, if necessary. The WSMP (Appendix D of the RAPP, Anchor 2005b) presents the types, locations, frequency, equipment, and methods of measurements as well as data reporting that were to be used in the RAEPP (Appendix E of the RAPP, Anchor 2005b) determinations. The WSMP (Appendix D of the RAPP, Anchor 2005b) was designed to satisfy the substantive requirements of Clean Water Act Section 401 and 404(b)(1) in terms of monitoring for compliance with these regulations.

Construction operations covered by the WSMP (Appendix D of the RAPP, Anchor 2005b) include dredging (and related activities such as piling removal and monitoring of the silt curtain), addition of the sediment drying reagent, transfer of dredged materials to upland transport, and placement of cover/cap material at the Site following

completion of dredging. The WSMP (Appendix D of the RAPP, Anchor 2005b) described the following monitoring activities and specific objectives during each of the construction operations:

- Water quality monitoring (field and laboratory parameters) during dredging, capping, and offloading operations to determine water quality impacts during these activities and trigger additional protective measures, if necessary
- Near-bottom surface water samples directly adjacent (channel ward) of the silt curtain containment to evaluate the effectiveness of the silt curtain containment
- Suspended sediment sampling at the Site prior to and following completion of the in-water construction activities to monitor for site-related contaminants suspending and settling in the vicinity of the removal action area
- Post-dredge surface sediment characterization to determine the baseline conditions in the area prior to capping and potential later use for comparison to longer-term cap monitoring results
- River velocity monitoring to ensure the velocities do not exceed the threshold for use of the containment barriers (i.e., silt curtains) discussed in the RAEPP (Appendix E of the RAPP, Anchor 2005b)
- Soil sampling at the transfer station prior to and following completion of offloading activities to evaluate potential offsite tracking of contaminants from the transfer station.

2.2.7 Health and Safety

The Construction Health and Safety Plan (CHASP) (Appendix B of the RAPP, Anchor 2005b) was written, developed, and maintained by Sevenson for the duration of the project. The objective of the CHASP (Appendix B of the RAPP, Anchor 2005b) is to guide the protection of health of all workers during the performance of all work under the Order and SOW (EPA 2004a), including construction, construction monitoring, and long-term monitoring activities at the Site and the transfer station. The CHASP (Appendix B of the RAPP, Anchor 2005b) was prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 2002) and complies with all currently applicable Occupational Safety and Health Administration (OSHA) regulations identified in 29 C.F.R. Part 1910.

In summary, the CHASP (Appendix B of the RAPP, Anchor 2005b) presents the following safety elements:

- Project organization and responsibilities
- Potential chemical and physical hazards that may be associated with the proposed field activities and presents control measures to address these potential hazards
- Boundaries of the various in-water and shoreline work zones
- Safe work practices and personal protective equipment
- Monitoring practices (limited to air and medical monitoring)
- Decontamination protocols
- Training requirements and record keeping

3 REVIEW OF CONSTRUCTION ACTIVITIES, TIMELINE, AND DEVIATIONS FROM THE DESIGN

This section summarizes the actual construction activities that were completed to implement the designed removal (Section 2.2). Unless specified, all construction activities were conducted in accordance with the design specifications in the RAPP (Anchor 2005b) as summarized in Section 2 above. All deviations from the design and the reasons for those deviations are described separately in Section 3.6 below. Specific details of all day-to-day activities throughout the construction process have also been previously provided to EPA in the Weekly and Monthly Progress Reports. The chronology of major events for the project is shown in Table 5.

3.1 Mobilization

3.1.1 Gasco Site

Mobilization at the Site occurred from August 22 through September 6, 2005. Mobilization activities included preparation of an upland project coordination area, installation of the bubble curtain system, installation of the inner removal area and secondary containment systems, and mobilization of the marine equipment to the Site.

Preparation of the upland project coordination area included construction of a gravel parking area, and installing three portable construction office trailers, restroom facilities, electrical service, communication lines, and a secured storage container. Sevenson cleared vegetation to create an access point to the project area shoreline and installed power to the project coordination area. Installation of the bubble curtain system (used to deter fish from entering the construction area) included constructing a graveled upland area for the primary and backup air compressors used to supply the system, fabrication of the "out-of-water" supply piping of the bubble curtain, and fabrication of the "in-water" air distribution components of the system. The anchor system for the inner removal area silt curtain was installed and the silt curtain was placed in the water and secured into place. Installation of the anchor system for the bedload baffle curtain, which surrounded the outer extent of the dredge prism was completed and the bedload baffle curtain was also deployed. Sorbent oil booms were attached directly to the inside of the inner removal area silt curtain flotation boom. The secondary containment boom was secured into place using a series of heavy boat anchors. A redundant containment "oil boom," outside of the bubble curtain was also installed. Lighted buoys and "no

wake zone" buoys were placed channel-ward of the outer oil-boom containment system to prevent damage of the system by marine traffic and pleasure craft.

Marine equipment was initially mobilized to the Site on August 23. This marine equipment included: the dredge derrick (Sea Vulture), several tugs for moving equipment and barges, two supply barges loaded with the silt curtain sections and anchoring materials, a work skiff, and two vessels used for diver related activities. The derrick used for the addition and mixing of the sediment drying agent (i.e., Sea Hawk), the dewatering/transfer barge, the bin barge supplied with the sediment drying agent, and the waste hauling barge (first of three to be used during the removal activities) were mobilized to the Site on September 6.

Miscellaneous mobilization activities, including installation of a tide gauge and survey work required for construction controls were also completed prior to beginning construction activities at the Site.

3.1.2 Offloading Facility

Equipment for the transfer station was mobilized to the Port of Morrow between September 1 – September 8. The mobilization included excavating a sump beneath the truck load-out pad, installing a high-density polyethylene (HDPE) liner (60 mil thickness) secondary containment system within the sump, gravel for the load-out pad, a drip pan on a 20-foot container, and a truck loading hopper.

Two additional open top containers and a trackhoe were mobilized to the transfer station on September 24 and 25, and the truck-loading operation was changed on September 26 to eliminate the use of a hopper (further described in Section 3.6.2).

3.2 Dredging

3.2.1 Summary of Dredging Activities

Dredging began on September 7, 2005 and continued through October 19, 2005 in accordance with the specifications in the RAPP (Anchor 2005b). Copies of the daily construction quality assurance officer (CQAO) logs during removal at the Site are provided in Appendix B. Dredging occurred in two areas at the Site; the inner removal

area and the outer removal area. A total of approximately 15,300 cy of material were removed from the inner and outer containment areas. Dredging occurred using a "closed" (cable arm) bucket and a "digging" bucket. Dredging in the inner removal area was completed prior to beginning dredging in the outer removal area. Prior to completing dredging in the inner removal area, divers installed anchors for the outer removal area silt curtain and bedload baffle system. Installation of the outer removal area containment system and bedload baffle was completed while the inner area containment system remained in place. Following completion of the outer area curtain system, the inner area containment system was removed and dredging commenced in the outer area.

In accordance with the RAPP (Anchor 2005b), dredged material removed from the inner and outer removal areas was loaded onto a transfer barge and then rehandled by a second derrick to a haul barge where it was mixed with a sediment drying agent (i.e., Portland cement) (Figures 8a and 8b). In accordance with the pre-design sediment drying bench scale results, the drying agent was initially added to the dredged materials on the haul barge at a rate of approximately 5 percent (by weight). This percentage was increased to approximately 10 percent following several barge loads that arrived at the transfer station with more than anticipated free water on the surface of the barge. The haul barges were loaded until they were approximately 85 percent full. The haul barges were then prepared for transport to the offloading facility. Transport preparation included inspection of the barge to remove any material with the potential to fall overboard during transport. The dredged material was then completely covered with a one-piece tarp to minimize infiltration of water into the material during transport and the potential spillage of material during transport.

As required by the RAPP (Anchor 2005b), an archeologist from AINW observed nearshore dredging within 50 feet of the ordinary low water elevation to prevent the loss of any cultural resources. No evidence of any cultural resources was identified during the removal activities. The results of this oversight monitoring are summarized in Section 5.10.

3.2.2 Bathymetry Surveys

Progress bathymetry surveys were conducted by Sevenson throughout the removal activities as necessary to evaluate and document the dredging progress and to identify areas requiring further dredging to meet the design specifications. Following completion of dredging in the outer removal area, final verification activities were performed to confirm that dredging had been completed according to design elevations in the RAPP (Anchor 2005b). The Sevenson surveyor (NW Hydro) and Anchor's independent bathymetry surveyor (Blue Water Engineering [BWE]) conducted separate surveys of the dredge prism to verify that dredging had been completed to the design elevations in both the inner and outer removal areas. Capping was not initiated until EPA reviewed the bathymetry surveys and provided approval that the design elevations were effectively achieved. The cross-section locations and cross-sections showing the as-built post-dredge surface (immediately prior to capping) relative to the design elevations is provided in Figures 10a, 10b and 10c.

3.2.3 Visual Monitoring and Diver Surveys

In accordance with the RAPP (Anchor 2005b), divers from Northwest Underwater Construction (NUC) initially performed weekly (at a minimum) inspections of the primary containment system to identify and immediately repair any separations or rips in the curtain. In addition, continual topside monitoring of the containment area was conducted and any evidence of a breach of the curtain would trigger diver inspection. Following identification and repair of a small rip in the silt curtain on September 19, 2005, the diver inspection frequency was increased to every 4 to 5 days with topside daily visual inspections. The diver survey frequency was further increased to every 3 days on September 29, 2005 following EPA's direction.

3.2.4 Environmental Monitoring and Contingency Response

Monitoring activities were conducted according to the WSMP (Appendix D of the RAPP, Anchor 2005b) during dredging (and related activities such as piling removal and removal of the silt curtain) and during the addition of the sediment drying agent at the Site. Following completion of the background water quality survey (September 1-2), daily water quality monitoring was conducted during dredging between September 7

through September 13. Sampling was conducted at the water quality monitoring stations shown in Figure 11.

Following installation of the silt curtain and prior to the start of dredging, fish seining was performed in the containment area to remove any fish within the containment barrier. On September 13, a dead coho salmon was identified along the nearshore area within the inner containment barrier. The next day, on September 14, three distressed fish were noticed in the inner containment area consisting of one crappie, one bluegill, and one sunfish. National Marine Fisheries Service (NMFS) recommended that a sonar fish survey be conducted within the inner containment area. Trained biologists from Anchor conducted the survey using a portable sonar unit. The survey yielded no indications that additional fish were present within the silt curtain enclosure. In addition, on September 26 a distressed pan fish (blue gill or sunfish) was identified inside the containment area. An attempt was made to catch the fish and remove it, but it escaped. In addition, eight small dead pan fish between 0.75 and 2.0 inches long were found and removed from inside the inner containment area. Mitch Fong of NMFS Enforcement was called per the requirements of the RAPP. Per requirements of the WQC, water samples were collected inside the primary containment area for DO and total sulfides analysis (further discussed in Section 5.2).

On September 14, Anchor received laboratory data identifying an exceedence of acute water quality criteria. Upon receipt of this data NW Natural shut down operations until EPA was consulted and approval to recommence dredging activities using revised BMPs was received. In accordance with the RAEPP (Appendix E of the RAPP, Anchor 2005b) and in consultation with EPA, the following additional BMPs were employed:

- Moving the bucket more quickly from the water surface to the transfer barge thereby allowing less of the highly turbid water to drain back into the water column
- Extra water on the transfer barge resulting from the above BMP was pumped through a series of carbon filters before being released back into the containment area
- Additional water chemistry monitoring was conducted 150 feet downstream of the dredge containment area before dredging recommenced (September 16) to

help determine whether observed wave resuspension on the nearby shoreline in the absence of any dredging activities may have contributed to increased ambient concentrations.

- Additional water chemistry sampling was conducted downstream and at the background station once dredging recommenced to help judge the efficacy of the additional BMPs employed.
- Dredging cycle time was decreased within the water column including slower descent and ascent of the dredge bucket.
- The dredging operator made best efforts to minimize overly full buckets.

To obtain additional information on water quality while no dredging was taking place, EPA directed additional sampling during down time in the dredging on September 16 and again on September 29. In addition, EPA required additional chemistry samples (beyond the frequency identified in the WSMP [Appendix D of the RAPP, Anchor 2005b]) be taken everyday while dredging was taking place. This increased chemistry sampling (along with the design field parameter measurements) continued throughout the remainder of the construction period with some minor modifications to sample quantity and locations (see Section 5.1.1).

In accordance with the WSMP (Appendix D of the RAPP, Anchor 2005b), water quality monitoring adjacent to the silt curtain containment was conducted during dredging. Post-dredge surface sediment characterization and sediment stake sampling was also conducted immediately following EPA approval that the design removal depth was achieved. The actual post-dredge surface sediment and proposed (i.e., installed but not retrieved) sediment stake sampling stations are shown on Figures 12 and 13, respectively. The results of all environmental monitoring activities conducted during the removal activities are discussed in Section 5.

3.2.5 Health and Safety Monitoring

In accordance with the CHASP (Appendix B of the RAPP, Anchor 2005b), Sevenson conducted health and safety monitoring at the Site. The CHASP (Appendix B of the RAPP, Anchor 2005b) was made available to all personnel and subcontractors involved in the implementation of the removal action activities. The Site Safety Officer (SSO)

conducted the following activities: 1) on-site monitoring to determine appropriate levels and use of PPE; 2) site surveillance, hazard identification, and health risk analysis; 3) implementation of procedures and programs to eliminate risk to Site personnel, including initiating changes to the CHASP (Appendix B of the RAPP, Anchor 2005b); 4) implementation of site control measures; 5) assisting in conducting and documenting daily health and safety briefings; 6) maintaining health and safety field log books; and 7) instructing all Site personnel on the content of the CHASP (Appendix B of the RAPP, Anchor 2005b). Crew self monitoring and air monitoring was performed at the frequencies defined in the CHASP (Appendix B of the RAPP, Anchor 2005b). The air monitoring results are described in Section 5.13.

All activities performed from a vessel were performed using basic principles of water safety, including, but not limited to, the following:

- Using Coast Guard-approved life jackets or other approved flotation garments or devices for all off-shore activities.
- Avoiding standing near edge of boat; if work must be conducted over edge, securing workers with lifeline.
- Using caution when transferring from land to water. Making sure barges and boats are firmly secured to dock or pier before boarding or disembarking.
- Following all Coast Guard rules for safe boating.

All activities associated with diving (i.e., installation and monitoring of the various containment barriers and bubble curtain, installation and retrieval of the sediment traps, and installation and attempted retrieval of the sediment stakes) were conducted in accordance with the EPA-reviewed dive plans. All activities associated with water quality monitoring, river velocity monitoring, sediment trap and sediment stake installation, and post-dredge characterization sampling were conducted in accordance with the CHASP (Appendix B of the RAPP, Anchor 2005b).

3.3 Transportation, Offloading, and Disposal

3.3.1 Summary of Transportation, Offloading and Disposal

Transportation, offloading, and disposal activities occurred from September 14, 2005 through November 9, 2005 in accordance with the RAPP (Anchor 2005b) and the EPA

disposal standards (Appendix A). Copies of the daily CQAO logs during offloading at the Port of Morrow transfer station in Boardman, Oregon are provided in Appendix C. The temporary transfer station was operated by Waste Management and Tidewater Marine. Dredged material was transported by barges and tugboat from the Site (river mile 6.3) to the transfer station (river mile 270) via the Willamette and Columbia Rivers. The trip from the Site to the transfer station generally took between 20 and 24 hours. As barges arrived at the transfer station, they were tied off to the dock face and the tarp covering the load was removed. The dredged material was initially transferred from the barge to an upland hopper using a 12-cy closed bucket suspended from a crane. The material was distributed via the hopper into lined trucks. The trucks carried the dredged material from the transfer station (41 miles) to the CWMNW Subtitle C landfill near Arlington, Oregon.

The transfer operation was modified after September 23 because the consistency of the dredged material was prohibiting effective transfer through the type of hopper being used and significantly decreasing the offloading efficiency. Between September 14 and 23, several attempts were made to improve the operation of the hopper but these actions proved ineffective. Waste Management received approval from the DEQ to modify the transfer operation, and beginning on September 26 the crane moved the dredged material from the barge to two open-top containers, which were placed on the secondary containment pad adjacent to the hopper. The dredged material was transferred from the containers to the lined trucks using a trackhoe with a 3-cy bucket. This modified transfer method greatly improved truck loading efficiency and was used for the remainder of the project.

As trucks arrived at the CWMNW landfill, they were weighed and directed to the inspection and sampling shed. Most truckloads were found to be consistent with the waste profile and were then directed to one of the active landfill cells for disposal. For truckloads of material that failed to pass the paint filter test, the truck was directed to a portion of the landfill facility where diatomaceous earth was mixed into the load to absorb the excess free water. Once the material was stabilized sufficiently to pass the paint filter test, the truck was directed to an open landfill cell to dispose of the load. Documentation of the required stabilization is maintained on file by Anchor.

Over the course of the project, three different barges of varying capacity carried a total of eight loads of dredged material from the Site to the transfer station. To efficiently track the transportation of this material, each barge load was assigned a two-digit bill-of-lading number (from 01 through 08). In addition, following transfer of the material to trucks, each truckload was assigned a unique waste manifest number before the truck left the transfer station and this manifest was retained in the truck during transport to the landfill. The manifests were numbered with a five-digit code: the first two digits of the manifest number were assigned the bill-of-lading number associated with that barge load of material and the remaining three digits of the manifest number were sequentially assigned (e.g., the 55th truckload from the sixth barge was assigned the manifest number 06055). Table 6 documents the date and time that each truckload of material left the transfer station, the manifest number of the load, the weight of the load, and the date and time that the load was received at the landfill for disposal.

In addition to disposal of dredged material, debris, and waste material removed from the Site (i.e., silt curtain) as well as excess water drained from the haul barges were also disposed at the CWMNW landfill. The debris was composed of materials other than sediment, predominantly pilings and waste material (e.g., silt curtain). The water was composed of excess water that separated from the sediment on the barge during transport between the Site and the transfer station and water generated during decontamination of barges and other transfer equipment at the end of the project. The excess water was pumped from the barges to an upland Baker tank at the transfer station. The decontamination water was either pumped to the Baker tank or removed by vacuum trucks. All of the water was taken to the CWMNW landfill for disposal in the evaporation pond. At the end of the project, sludge was removed from the Baker tank and taken to the CWMNW landfill for stabilization and disposal. The loads of debris and water transported from the transfer facility to the CWMNW landfill are documented in Table 7.

3.3.2 Environmental Monitoring and Contingency Response

As discussed in the WSMP (Appendix D of the RAPP, Anchor 2005b) and summarized above in Section 2.2.5.3, water quality monitoring was performed during the offloading

activities at the transfer station. The water quality monitoring stations are shown in Figure 14. During offloading at the transfer station, field parameters were monitored hourly for the first 4 hours of offloading and every 4 hours thereafter at one upcurrent station 300 feet from the offloading barge (TF-WCU) and three downcurrent stations 150 feet from the offloading barge (TF-WCD1, TF-WCD2, and TF-WCD3). Samples were collected at three depths—1 foot below the surface, mid-depth, and 1 foot above the bottom. No exceedences of the field parameter triggers were identified, and therefore, no additional environmental controls were initiated during the offloading operations. The water quality monitoring results are described in Section 5.1.2.

In accordance with the TDP (Appendix A of the RAPP, Anchor 2005b), soil sampling was conducted in the tire path of the trucking route within the transfer station and on the shoulder of the public road just outside the transfer station to monitor tracking of contaminants from the transfer station (Figure 15). The pre-operation samples were collected on September 13, 2005 and the post-operation samples were collected on November 11, 2005. The pre- and post-operation samples at each sampling location were slightly offset to minimize sampling artifacts (e.g., disturbance from sampling). Three of the four samples were collected from the first 2 centimeters (cm) below grade as specified in the TDP. The fourth sample (the post-operation sample collected within the transfer station) was collected from approximately 9 cm below grade because this shallower material was all coarse gravel, unsuitable for analysis. The transfer station monitoring results are summarized in Section 5.12.

3.3.3 Health and Safety Monitoring

In accordance with the CHASP (Appendix B of the RAPP, Anchor 2005b), Sevenson conducted health and safety monitoring at the transfer station. The CHASP (Appendix B of the RAPP, Anchor 2005b) was made available to all personnel and subcontractors involved in the implementation of the offloading activities. The SSO conducted the same actions as described above in Section 3.2.5 to maintain and document health and safety at the transfer station. Crew self monitoring and air monitoring was performed at the frequencies defined in the CHASP (Appendix B of the RAPP, Anchor 2005b). The air monitoring results are described in Section 5.13.

All activities performed from a vessel were performed using basic principles of water safety. All activities associated with water quality monitoring, river velocity monitoring, sediment trap and sediment stake installation, and post-dredge characterization sampling were conducted in accordance with the CHASP (Appendix B of the RAPP, Anchor 2005b).

3.4 Capping

3.4.1 Summary of Capping Activities

Capping began October 20, 2005 and continued through October 29, 2005 in accordance with the specifications in the RAPP (Anchor 2005b). Copies of the daily CQAO logs during capping at the Site are provided in Appendix B. Capping activities consisted of placement of the pilot cap and fringe cap material. Approximately 7,560 tons of material were placed during capping activities. Approximately 1,225 tons of pilot cap sand were placed over 0.39 acres in the dredge prism area and approximately 670 tons of the specified armor stone was placed over the same area of pilot cap sand in order to minimize erosion of the pilot cap. Approximately 5,515 tons of fringe cap sand were placed around the pilot cap and within the outer containment extents to cover a fringe area of 2.27 acres. Approximately 160 tons of quarry spalls were placed along the shoreward cut of the dredge prism in order to protect the approximately 220 linear feet of organo-clay mat installation (an EPA-required design revision).

In accordance with the RAPP (Anchor 2005b), a 1-foot-thick layer of non-contaminated (as defined in the RAPP, Anchor 2005b) cap sand material was placed in the pilot cap area of 0.39 acres followed by placement of the 0.5-foot-thick pilot cap armor layer on top of the sand. Sevenson placed the cap material as defined in the Construction Quality Control Plan (reviewed by EPA). In this plan they proposed a grid system and a material volume per grid area to control cap thickness. Sevenson conducted bathymetry surveys and diver push-probe surveys to confirm that pilot cap sand material had been placed according to the design specifications prior to placement of the armor layer. At EPA's direction on October 19, the area of the fringe cover sand material (design thickness of 6 inches) was significantly expanded to include placement within the entire extent of the outer silt curtain containment (aerial extent of 2.27 acres). The aerial extents of the fringe cover proposed in the RAPP (Anchor 2005b) limited the placement

of fringe cover to within 50 feet upriver of the dredge prism (aerial extent of 1.06 acres, Figure 9). Following completion of capping as identified by the Sevenson surveyor, an independent bathymetry survey of the capping area was conducted by BWE to confirm that pilot cap and fringe cover material had been placed according to the design specifications. The as-built post-cap and cover bathymetry at the Site is provided in Figure 16.

In addition, as required by EPA during construction, an organo-clay mat was installed along the nearshore dredge cut to control a sheen observed in this area during removal (Figure 16). The mat was installed per the specifications described in an EPA-reviewed design addendum memorandum (Appendix D). The organo-clay mat was installed onto a layer of pilot cap sand bedding approximately 6 inches thick (served to prevent ripping of the mat on the underlying riprap). The mat was anchored at the shoreward edge with stakes and sandbags both horizontally and vertically along the length of the mat. A 6-inch layer of fringe cap sand and quarry spall was then placed overtop the nearshore cut to armor the organo-clay mat installation and minimize erosion in this area (area of wave action). Note that the extreme shoreward extents of the mat was placed above the high water line observed during construction and could not be surveyed using water-based techniques. The thickness of material placed along this portion of the mat was verified through point measurements conducted from the bank using land-based survey techniques.

3.4.2 Environmental Monitoring and Contingency Response

Monitoring activities were conducted according to the WSMP (Appendix D of the RAPP, Anchor 2005b) during placement of cap and fringe cover materials and installation of the organo-clay mat at the Site. Due to the water quality exceedences identified during the removal activities, EPA required additional chemistry samples (beyond the frequency identified in the WSMP [Appendix D of the RAPP, Anchor 2005b]) be taken everyday during the capping and organo-clay mat installation activities. This increased chemistry sampling (along with planned field parameter measurements) continued with some minor modifications to sample quantity and locations throughout the capping activities. The water quality monitoring locations were co-located with the locations occupied during the removal activities (Figure 11). In addition to the water quality monitoring,

sediment trap sampling was conducted in accordance with the WSMP (Appendix D of the RAPP, Anchor 2005b) shortly following (approximately 1 week) completion of capping. The sediment trap sampling stations are shown in Figure 17. The environmental monitoring results are summarized in Section 5.

3.5 Demobilization

3.5.1 Gasco Site

Demobilization at the Site was initiated following completion of dredging and finalized following EPA-approval of the capping. The following descriptions summarize the chronology of demobilization at the Site:

- The barge dewatering carbon treatment system components were removed from the Site on October 20 following the completion of dredging and prior to capping.
- Dismantling of the bubble curtain containment system occurred from October 17 through October 23 following the completion of dredging and prior to capping.
- Removal of the outer silt curtain and bedload baffle containment structure began on October 22 and continued through October 23 following placement of the pilot cap material to the design thickness.
- The remaining capping equipment was removed from the Site on November 1.
- Sevenson continued demobilization of its land-based operations from November 2 through November 4.

3.5.2 Offloading Facility

Demobilization at the transfer station was initiated following completion of dredging at the Site and finalized following offloading of the final barges of material. The following descriptions summarize the chronology of demobilization at the transfer station:

- Decontamination of the haul barges was completed at the transfer station from October 20 through November 11.
- Decontamination of the hopper, the crane and trackhoe used to transfer material from the barges to the haul trucks, and the Baker tank occurred from November 7 through November 10.
- The HDPE liner material and gravel used to set up the transfer station were removed on November 11.

Decontamination of most of the equipment was accomplished with a high-pressure water wash. The decks of the barges had accumulations of hardened cement, which were removed by scraping or jack-hammering, as necessary. Following decontamination, the barges and the hopper were returned to Tidewater Marine's facility in Vancouver, Washington. The crane, which belongs to Tidewater Marine and is used for normal operations at the Port of Morrow, remained on-site. The trackhoe bucket used to transfer material from the open bins to the trucks was decontaminated and returned to Del Hur Industries, Inc. The beds of the haul trucks were decontaminated at the landfill, and the open-top containers, which are owned by the CWMNW landfill, were returned to the landfill.

All of the materials (i.e., solids and water) generated during decontamination were taken to the CWMNW landfill for disposal. The HDPE liner material and gravel used to set up the transfer station were removed after all of the decontamination activities were completed and taken to the CWMNW landfill for disposal.

3.6 Design Deviations

3.6.1 Dredging

Dredging design deviations were coordinated with EPA prior to implementation and were generally implemented to keep the project on schedule, minimize environmental impacts, and/or adjust to Site conditions discovered in the field. As described below, design deviations were related to the general dredging operation, the inner removal area containment system, and the barge elutriate filtration system.

3.6.1.1 Inner Removal Area Containment System

Design changes related to the inner removal area containment system are listed below:

- Following finalization of the design, the silt curtain manufacturer revised the anchoring design based on further evaluation of the physical characteristics of the sediments beneath the mudline. The design called for a 15,000-pound holding capacity by earth anchors. The silt curtain manufacturer concluded the use of a Platipus anchor assembly reduced the necessary holding capacity

to 4,000 pounds. All anchors were installed to the revised 4,000-pound holding capacity. Throughout construction this revised holding capacity was shown to be sufficient.

- Installation of the anchor system in nearshore areas could not be completed because the anchors could not be driven through the existing riprap and rubble. Instead, existing pilings or concrete ballast blocks in these areas were used to secure the containment system. It was determined in the field that the containment would hold sufficiently without these anchors.
- The installation plan for the bedload baffle specified placing two lengths of steel chain at the mud line to serve as ballast (see Figure E-3 of RAPP, Anchor 2005b). The two lengths of chain did not sufficiently sink the baffle floatation system; therefore, a third length of ballast chain was added to sink the baffle to the mud line. In addition, concrete ecology blocks were placed at the corners of the baffle configuration providing additional strength to the anchoring system.
- On September 19, 2005 divers from NUC repaired a tear in the inner silt curtain along the portion of the curtain parallel to the river channel (this section of curtain was impermeable). Due to the location of the tear, two sections of the curtain were replaced. The cause of the tear could not be determined.
- On September 26, a tear in the flotation system (above water line) for the inner containment silt curtain was detected. The tear was located beneath the oil-pipeline walkway, and was approximately 10 to 12 inches in length. The tear was confined to the flotation portion of the curtain, and did not extend into the permeable curtain. Divers from NUC repaired the tear on September 27.

3.6.1.2 Dredging Operation

The following design changes were made relating to general dredging operations:

- Initial dredging activities occurred using a 15-cy "environmental" or "closed-cable arm" bucket. The bucket performed well on the outer edges of the dredge prism; however, as the operator began removing stiffer material near the center of the dredge prism, the environmental bucket became ineffective at removing material. Dredging continued using a heavier 8-cy digging

bucket following coordination with EPA and verbal acceptance of this deviation. The top of the digging bucket was outfitted with "mud flaps" to reduce material loss into the water column.

- At the beginning of the dredging operations, it was noted that there was a potential for dredged material to fall beneath the spill plates installed between the inner removal area and the transfer barge, and between the drying agent barge and haul barge. To address this potential issue, Hickey Marine staff installed drapes of heavy geo-textile material to prevent dredged material from falling into the water in these two locations.
- Based on a review of the pipeline support pile as-built drawings, the removal design specified a 15-foot perimeter offset surrounding the two pipeline supports adjacent to the dredge prism (Figure 4). This offset was calculated from the final design elevation rather than the water surface. Therefore, the offsets shown underestimated the offset distance at the water surface from the sloping pipeline support structure. The marine contractor requested that the offset from the pipeline structure be shown on revised figures so that the dredge operator could directly account for the appropriate offset at the water surface in the field. Anchor prepared revised figures showing the offset at the water surface from the shoreward support and corner dolphin. This revised offset was not accounted for the in the original figures showing the design post-dredge elevation surface (Figure 4) or the original design cross-sections (Figures 5a and 5b). A revised design figure showing the revised offsets and the resulting dredge prism around the supports is shown in Figure 18, and was approved by EPA prior to the completion of dredging. These offsets and revised design prism were accounted for during verification that the removal design elevations were achieved, as shown in Figures 10a, 10b and 10c.
- Approximately 40 to 50 cy were dredged from outside of the dredge prism at the request of EPA during dredging. This additional dredge area was located just upstream and channel ward of the inner removal area boundary. The area was identified by the EPA on-site representative as an additional area of tar body that should be added to the dredge prism.

3.6.1.3 Barge Elutriate Filtration System

The potential for filtering of barge dewater fluids should water quality exceedences (as identified at the 150-foot compliance zone monitoring locations) occur was recognized in the design and is not considered a "deviation" from the design. However, no description of the implementation of such a system was discussed in the RAPP (Anchor 2005b) and therefore this information is described below.

Due to the identification of water quality exceedences, EPA required NW Natural to initiate filtering of all barge dewater fluids prior to release within the containment system. Hickey Marine initiated barge dewater filtration on September 19. Transfer barge elutriate was passed through an oil-water separator, a bag filter system, and a carbon vessel prior to discharge. To monitor the effectiveness of the filtration system, water samples were collected from the "pre" (i.e., influent) and "post" (i.e., effluent) treated water on each day of operation. Changes made to the filtration system throughout its operation are provided below.

- Heavy sediment loads in the water generated from the transfer barge were causing constant overloading of the bag filter system during the first two days of treatment system operation. To resolve the problem, Hickey Marine staff created a settling basin by installing a dike of concrete retaining blocks up gradient of the transfer pump inlet on the transfer barge. This revision to the treatment system reduced the frequency of bag filter replacement.
- On September 30, Hickey Marine installed a new carbon vessel (2,000-pound) for the transfer barge dewatering filtration system as a replacement for the existing 1,000-pound vessel.
- As requested by EPA, on October 4 a secondary carbon vessel (1,000-pound) was delivered to the Site and connected in series with the primary carbon vessel (2,000-pound) as the final step of the dewatering treatment system.
- On October 8, an additional water treatment system was employed to increase pumping and treatment capacity for water generated on the transfer barge (B47).
- On October 13, Hickey Marine replaced the primary carbon filter vessel of the transfer barge water treatment system.

3.6.1.4 Sediment Drying Process

In accordance with the pre-design sediment drying bench scale results (results presented in the RAPP, Anchor 2005b), sediment drying agent (i.e., Portland cement) was added to the dredged materials in the first haul barge at a rate of approximately 5 percent (by weight). Upon arrival at the transfer station, this haul barge contained more than anticipated free standing water on the surface of the material. To decrease the amount of free standing water for all future barge loads, the proportion of sediment drying agent was increased to approximately 10 to 12 percent (by weight). This increase in drying agent and additional mixing significantly reduced the amount of free standing water present following transportation to the transfer station.

3.6.2 Transportation, Offloading, and Disposal

Design changes coordinated with EPA and implemented during transportation, offloading, and disposal activities included the following:

- Several haul barges arrived at the transfer facility with pockets of standing free water. Given each haul barge was covered with tarps at the Site to reduce infiltration of water into the barge during transit to the transfer station, this free water was very likely released from the material due to vibrations during transportation from the Site. Once at the transfer facility, the material was worked within the haul barges to separate the overlying free water and create mounds of drier material suitable for offloading. Free water was pumped off the barges into Baker tank prior to offloading of the material. This handling of small amounts of free water is consistent with the contingencies of the design and the transfer facility's DEQ permit.
- The consistency of the dredged material and hopper design caused plugging of material in the hopper rather than falling through the hopper into the beds of the haul trucks. Several unsuccessful attempts were made to modify the operation to encourage the material to fall through the hopper into the trucks. After the efforts failed to improve the operation of the hopper, the transfer station operations were modified on September 26, with the approval of EPA and the DEQ. The hopper was eliminated and material was transferred, with appropriate spill BMPs, via the crane from the barges to two open top 48-foot-

by8-foot containers located on the secondary containment pad. A trackhoe was mobilized to the transfer station and used to move the material from the containers to the haul trucks. The modification, with appropriate spill BMPs, was inspected by DEQ and EPA's contractor on August 26, 2005 and approved for use.

- As trucks arrived at the CWMNW landfill, they were weighed and directed to the inspection and sampling shed. Vibration of the material during trucking caused further settling of the solids that liberated free liquid in some truckloads. For truckloads of material that failed to pass the paint filter test, the truck was directed to a portion of the landfill facility where diatomaceous earth was mixed into the load to absorb the excess free water. Stabilization of some truckloads at the landfill was an anticipated contingency in the design, although the specific use of diatomaceous earth was not described in the design. As appropriate based on observations of the material, trucks were either sent to the stabilization unit where the entire truckload of material was dumped into a pan and diatomaceous earth was added and mixed in, or the material was "dusted" within the truck with diatomaceous earth. Once the material was stabilized to pass the paint filter test the truck was directed to an open landfill cell to dispose of the load. Documentation of the required stabilization is maintained on file by Anchor.

3.6.3 Capping

Design changes that occurred in coordination with EPA during capping activities included the following:

- Installation of an organo-clay mat along the nearshore dredge cut (Figure 16). The mat was anchored at the shoreward edge with stakes and sandbags.
- Installation of quarry spalls along the nearshore dredge cut to minimize potential erosion of the bank and organo-clay mat (Figure 16).
- Placement of fringe cap over the entire extent of the outer removal area (2.27 acres, Figure 16), rather than limited to 50 feet upstream of the upstream dredge extents (1.06 acres) as described in the RAPP (Anchor 2005b).

4 DOCUMENTATION OF PERFORMANCE STANDARDS ATTAINMENT

4.1 Attainment of Dredging Performance Standards

The primary performance standard for the removal was to verify that the construction contractor achieved compliance with the final design elevation(s) as per the RAPP (Anchor 2005b). A secondary performance standard was to ensure protection of the pipeline supports (through the designed dredging offsets adjacent to the supports) during dredging. It is important to note that there were no chemical-based performance standards for the removal. Post-dredge chemical characterization was conducted to understand the baseline chemical concentrations beneath the cap for use in post-removal monitoring only.

Attainment of the removal performance standard (i.e., design elevations) was verified through bathymetry surveys conducted in accordance with the CQAP (Appendix C of the RAPP, Anchor 2005b). Bathymetry surveys (single beam surveys using integrated Hypack software and differential global positioning unit for horizontal control) were conducted frequently to monitor changes in bottom elevation throughout dredging. Following each progress survey, Sevenson and Anchor reviewed the elevation data to determine what areas of the dredge prism required further dredging to achieve the design elevations. In addition, several cross-sections would be cut through the dredge area to determine how the observed grade was potentially affected by side-slope sloughing and or offsets from the pipeline supports. This iterative process continued until the Sevenson progress survey indicated the entire dredge prism satisfied the design elevations.

To ensure the survey was accurate, BWE performed an independent bathymetry survey throughout the removal action area using similar equipment. The Sevenson and BWE surveys were compared and, in coordination with EPA, it was determined that both were very similar to each other, indicating a few small areas that required minimal additional "clean up" dredging. Following these "clean up" passes, Anchor and Parametrix (EPA's oversight consultant) conducted lead line surveys with Hickey Marine staff to verify that grade deficiencies indicated in the final bathymetry surveys had been addressed by the final "clean up" dredge passes. All survey information was reviewed in coordination with EPA's consultant to verify completion of the removal. The plan and cross-section locations and cross-sections showing the as-built post-dredge surface relative to the design elevations are shown in Figures 10a, 10b, and 10c.

Review of the cross-section comparisons of as-built to design elevations in Figures 10b and 10c indicates that the performance elevations were met over the vast majority of the dredge area. Figure A-A′ shows that a small pocket of sediment between the pipeway support offsets was higher than the design elevation. However this deviation was acceptable, given that this small area was confined between the two pipeway support offsets the ability to actually dredge this pocket to the design elevation was limited without impacting either support structure. EPA concurred that this area not be dredged to the design elevation because of the danger of impacting either pipeway support structure.

4.2 Attainment of Capping Performance Standards

There were two performance standards associated with placement of the pilot cap and fringe cover materials:

- Ensuring the cover/cap has the appropriate physical and chemical characteristics as per the RAPP (Anchor 2005b)
- Achieving material placement over the required areas and to the required thickness as per the RAPP (Anchor 2005b).

Attainment of the first performance standard was achieved through comparison of the chemical and physical characteristics of the proposed borrow materials (i.e., pilot cap material, pilot cap armor material, and fringe cover material) to the chemical and physical characteristics identified in the RAPP (Anchor 2005b). To confirm that the imported material was environmentally acceptable, EPA requested the design include the following text excerpted from the specifications established for the McCormick & Baxter Superfund capping project, "cap material to be used for construction of the sediment cap will be imported, clean, granular material free of roots, organic material, contaminants, and all other deleterious and objectionable material" (Ecology and the Environment 2003). To evaluate whether the material was free of contaminants the imported material was analyzed for conventional parameters (i.e., ammonia, percent solids, and percent volatile solids), pesticides, polychlorinated biphenyls (PCBs), SVOCs, and metals. As shown in Appendix E, the pesticide and PCB concentrations for each material were below the detection limit. The concentrations of all SVOCs for each material were below the detection limits, except for bis(2-ethylhexl)phthalate. Because bis(2-ethylhexl)phthalate was the only detected analyte

and that it is a common artifact of sample handling or laboratory contamination, these low level detections were likely due to sampling and/or laboratory contamination. All metals concentrations were below the detection limit except for copper, nickel, and zinc (in each material). To ensure the detected concentrations for these three metals were below potential adverse effects thresholds, the concentrations were compared to the Draft Dredged Material Evaluation Framework (DMEF, USACE 1998) screening levels. Each of the detected concentrations was below the associated screening level. EPA reviewed the chemical results for the cap material and notified NW Natural to proceed with capping using these materials on October 19, 2005.

The physical characteristics of the borrow material (Appendix E) were compared to the grain size specifications identified in the RAPP (Anchor 2005b). The physical characteristics of the pilot cap material (quarry name "Fill Sand"), pilot cap armor material (quarry name "3 ½ X ¾ Crushed Open") and fringe cover (quarry name "River Sand – Screened") were in general accordance with the physical specifications described in the RAPP (Anchor 2005b). The physical characteristics of the quarry spalls (quarry name "Jaw Run") placed over top the organo-clay mat were in accordance with the organo-clay mat design addendum memorandum (Appendix D).

Attainment of the capping design elevations was verified through progress bathymetry surveys conducted in accordance with the CQAP (Appendix C of the RAPP, Anchor 2005b). The bathymetry surveys (single beam surveys using integrated Hypack software and differential global positioning unit for horizontal control) were conducted during capping to monitor changes in bottom elevation. Progress surveys were conducted during placement of the pilot cap material, the pilot cap armor material, and fringe cover material to ensure the design elevations for each layer were achieved. Following each progress survey for these layers, Sevenson and Anchor would review the elevation data to determine what areas of the dredge prism required further capping to achieve the design elevations. This iterative process continued until the most recent survey indicated design elevations were achieved in the pilot cap and fringe cover areas.

Consistent with the CQAP (Appendix C of the RAPP, Anchor 2005b), BWE performed an independent bathymetry survey throughout the removal action area to verify the Sevenson

survey findings. Isopach maps showing comparisons of the as-built cap elevations relative to the constructed post-dredge surface and as-built fringe cover elevations to the post-construction elevations are provided in Figures 19A and 19B, respectively. Review of these figures indicates that capping and cover achieved the performance standard thicknesses over the vast majority of the areas addressed. For the pilot cap, a small area near the pipeway support offsets was less than the theoretical design thickness, but this was due to the same access issues discussed above for dredging. In addition, in a few steep slope areas of the pilot cap and fringe cover, the capping or cover material would not stand up on the slope at the design thickness. In these slope areas, Sevenson attempted to place additional material but subsequent bathymetry surveys showed that the slope was too great to maintain additional cap material.

In addition, as required by EPA, an organo-clay mat was installed along the nearshore dredge cut to help minimize the heavy sheen in this area (Figure 17). The design for the mat included placement of a bedding layer of pilot cap sand bedding approximately 6 inches thick, followed by placement of the mat, followed by a 6-inch layer of fringe cap sand, and finally an approximate 2-foot-thick layer of quarry spall. Verification of the placement thicknesses was assessed from the landside (where applicable) using point measurements and via bathymetry where water levels permitted. The final elevations in the vicinity of the mat are shown in Figure 17.

4.3 Attainment of Disposal Performance Standards

The primary performance standards for transportation and disposal activities included the following:

- EPA-defined transportation and disposal standards (letter dated January 14, 2005)
- Waste Management's CWMNW landfill-specific requirements (pass paint filter test and contain minimum of 1 tsf bearing capacity)
- Documentation of no loss of material from the trucks during transport from the transfer station to the landfill
- Documentation of no off-site tracking of the material from the transfer station through collection of pre- and post-construction soil samples at the transfer station

The EPA-defined transportation and disposal standards were identified in a letter to NW Natural dated January 14, 2005. These disposal standards were broken into the following elements: risk of release during transport, worker protection, and risk of release from disposal facility. Compliance with each of the performance standards within these elements is presented in Table 8.

Attainment of the CWMNW landfill-specific requirements (pass paint filter test and contain minimum of 1 tsf bearing capacity) were evaluated during the construction process. Paint filter tests were conducted for each truck at the CWMNW landfill except for loads that, based on visual observation, would obviously fail the test. Each load that did not pass the paint filter test (or was rejected based on visual observation) was sent to another portion of the landfill where additional sediment drying agent (i.e., diatomaceous earth) was added until the paint filter test was passed. Attainment of the 1 tsf bearing capacity was verified during the pre-design sediment drying bench scale tests (see Section 2.1.3 of the RAPP, Anchor 2005b). These tests concluded that the addition of a minimum 5 percent (by weight) Portland cement would achieve the 1 tsf bearing capacity. Throughout the removal, a minimum of 5 percent sediment drying agent was added to achieve the 1 tsf bearing capacity.

To document that no loss of material occurred during transportation of the material to the landfill from the transfer station, Anchor tracked differences in the weight between the onboard truck scales and the weight on the scale at CWMNW landfill. Of the 694 loads of dredged material, 678 loads were within the 10 percent tolerance specified in the RAPP (Anchor 2005b). For the other 16 loads, the differences in the weights were attributed to inaccurate reporting of onboard weights by the truckers or to imprecision of the onboard scales.

To document that no off-site tracking of contaminants occurred from the transfer station, two surface soil samples were collected from the shoulder of the main haul route immediately prior to initiating offloading and immediately following demobilization of the transfer station. The analytical results for these pre- and post-operation samples are summarized in Table 9. The pre- and post-construction samples from the nearest road outside the transfer facility indicate no appreciable difference between the two samples. In

both cases, the PAH concentrations are detected at or below the project detection limits. This indicates that off-site tracking of dredged materials is not observable in the post-construction sample. This is consistent with visual observations, which indicated no visual tracking of material off the loading pad or outside the transfer facility. Both the sample results and the visual observations indicate that the performance standard for no off-site tracking of material was met.

The post-construction sample from within the transfer facility had higher detectable PAH concentrations than the pre-construction sample. The post-construction concentrations in this case are one to two orders of magnitude higher than the pre-construction concentrations. Given no visual tracking of material off the loading pad or outside the transfer facility was identified, it is difficult to attribute this relatively substantial change in concentrations due to tracking of material off the pad. For such a large difference, it would be expected that some increasing discoloration of the ground just outside the loading pad over time would have been observable over the course of the operation and/or numerous spills would have been reported, neither of which occurred. As noted in weekly reports to EPA, two small spills of material occurred just off the pad in the first days of the operation when the day-to-day logistics of transfer were still being worked out. In both cases, the small patch of affected soil was dug up and placed in a haul truck. Consequently, it appears that the post-construction sample result inside the facility indicates some pre-existing isolated spot of contamination in these soils, (which are very near the spot of the preconstruction sampling but not exactly in the same spot). Such contamination could have been due a small oil leak from a truck standing over the spot or similar type of equipment or truck leakage unrelated to this transfer operation. Other vehicles and port equipment were continually using the site during the transfer operations.

5 SUMMARY OF MONITORING RESULTS

Monitoring activities were conducted according to the WSMP (Appendix D of the RAPP, Anchor 2005b) for the following construction activities: dredging (and related activities such as piling removal and monitoring of the silt curtain), addition of the sediment drying reagent, transfer of dredged materials to upland transport, and placement of cover/cap material at the Site after dredging was complete. Specific monitoring activities and results are described below.

As required in the SOW, a Performance Monitoring and Water Quality Monitoring report is to be submitted as an appendix to the RACR. This section of the RACR contains the required final performance monitoring and water quality monitoring information; therefore, a separate report with this information will not be submitted.

5.1 Water Quality Monitoring Results

In accordance with the WSMP, water quality monitoring for field parameters occurred prior to the beginning of construction at the Site, during dredging/capping operations at the Site, prior to the beginning of construction at the transfer facility, and during offloading and barge decontamination operations at the transfer facility. In addition, water quality monitoring for laboratory parameters also occurred at the Site prior to construction and during the dredging and capping operations.

5.1.1 Gasco Site

Consistent with the WSMP, field parameters (turbidity, temperature, dissolved oxygen [DO], and pH) and laboratory parameters (PAHs [anthracene, benzo(b)anthracene, benzo(a)pyrene, dibenzofuran, fluoranthene, fluorene, naphthalene, and phenanthrene] and cyanide) were collected as described below prior to and during construction at the Site. Figure 11 shows the locations of each water quality monitoring station at the Site. Field and laboratory parameter measurements were generally collected at three depths—1 foot below the surface, mid-depth, and 1 foot above the bottom. The water quality monitoring forms for the Site are provided in Appendix F.

5.1.1.1 Field Parameters

Sampling Approach

A summary of the sampling approach for collection of field parameters is summarized below. This sampling approach did not change throughout the duration of the construction activities at the Site. Sample station locations are provided on Figure 11 and sample station descriptions are provided in Table 10.

- Background sampling—one station sampled (i.e., RAA-WBGU) August 17 and 18, 2005 and September 1 and 2, 2005:
- Standard RAPP sampling during normal flow conditions (i.e., river flow in the down-river direction)—four stations sampled under normal flow conditions between September 7 and October 29, 2005:
  - RAA-WCU
  - RAA-WCD1
  - RAA-WCD2
  - RAA-WCD3
- Standard RAPP sampling during reversed flow conditions (i.e., river flow in the up-river direction)—four stations sampled under reverse flow conditions between September 7 and October 29, 2005:
  - RAA-WCD8
  - RAA-WCU4
  - RAA-WCU5
  - RAA-WCU6

Results

Prior to the beginning of construction operations, a background water quality survey was conducted on August 17 and 18, 2005 and September 1 and 2, 2005, as described in the WSMP. Due to equipment calibration issues, the survey data collected on August 17 and 18, 2005 may have been compromised so this data was not used and the second survey was conducted. During this survey, eight independent measurements (at the top, middle and bottom water depths) were made at a station 300 feet upstream (RAA-WBGU) of the designed location of containment barriers around the removal action area over the course of a 2-day period. For each field parameter, the 95th percentile upper confidence limit on the mean was determined and used to represent initial background conditions. The initial background

conditions for field parameters were used to evaluate triggers for protective procedures provided in Table 4. Results of this survey along with the 95 percentile upper confidence limit are provided in Tables 11 and 12.

During dredging and capping activities at the Site, field parameters were monitored hourly for the first 4 hours of the activity and every 4 hours thereafter at one upcurrent station 300 feet from the inner containment area (RAA-WCU) and three downcurrent stations 150 feet from the inner containment area (RAA-WCD1, RAA-WCD2, and RAA-WCD3). When the flow of the river at the Site was reversed due to flood tide conditions, the upcurrent background station was re-located downriver (RAA-WCD8) and the downcurrent compliance stations were re-located upriver (RAA-WCU4, RAA-WCU5, and RAA-WCU6).

The field parameter results during construction are summarized for the Site in Table 13 and are compared to the triggers (Table 4). No exceedences were identified for DO, temperature, or pH parameters during the monitoring events for the duration of the construction project. Turbidity exceedences of the triggers (Table 4) were identified during the dredging and capping activities as shown in Table 14; however, evaluation of early turbidity data in coordination with EPA indicated that these exceedences were not related to the dredging. Therefore, EPA approved continuing dredging without modification during these initial exceedences.

5.1.1.2 Laboratory Parameters

Sampling Approach

The sampling approach for collection of laboratory parameters changed frequently throughout the duration of the removal action as directed by EPA. A chronology of the laboratory sampling activities and station locations are described below for the duration of the removal action. Sample station locations are shown on Figure 11 and station location descriptions are provided in Table 10.

- Background sampling—two stations sampled August 17 and 18, 2005 are:
  - RAA-WBGU
  - RAA-WBGD

- Standard RAPP sampling during normal flow conditions (i.e., river flow in the downriver direction)—one station (i.e., RAA-WCD1) sampled September 7 through 14, 2005:
- Sampling during no dredge conditions during normal flow conditions (i.e., river flow in the downriver direction)—eight stations sampled on September 16, 2005: Note, EPA directed this sampling and approved the selected locations but did not specifically identify the sampling locations relative to the containment barriers:
  - RAA-WCD1
  - RAA-WCD4
  - RAA-WCD5
  - RAA-WCD6
  - RAA-WCD7
  - RAA-WCU1
  - RAA-WCU2
  - RAA-WCU3
- EPA directed expanded sampling from September 19 to September 26, 2005 based on water quality results. Sampling stations during normal flow conditions (i.e., river flow in the downriver direction) are provided below:
  - RAA-WCD1
  - RAA-WCU
  - RAA-INSIDE
  - RAA-OUTSIDE
- EPA directed expanded sampling from September 19 to September 26, 2005 based on water quality results. Sampling stations during reversed flow conditions (i.e., river flow in the upriver direction) are provided below:
  - RAA-WCD8
  - RAA-WCU4 or RAA-WCU5
- EPA directed expanded sampling from September 27 to October 11, 2005 based on water quality results. Sampling stations during normal flow conditions (i.e., river flow in the downriver direction) are provided below:
  - RAA-WCD1
  - RAA-WCD4

- RAA-WCU
- RAA-INSIDE
- RAA-OUTSIDE

- EPA directed expanded sampling from September 27 to October 11, 2005 based on water quality results. Sampling stations during reversed flow conditions (i.e., river flow in the upriver direction) are provided below:
  - RAA-WCD8
  - RAA-WCU4
  - RAA-WCU3
- EPA directed sampling during no dredge conditions during normal flow conditions (i.e., river flow in the downriver direction) on September 29, 2005 at these stations:
  - RAA-WCD1
  - RAA-WCD4
  - RAA-WCU
  - RAA-INSIDE
  - RAA-OUTSIDE
- EPA directed expanded sampling from October 12 to October 29, 2005 based on water quality results. Sampling stations during normal flow conditions (i.e., river flow in the downriver direction) are provided below:
  - RAA-WCD1
  - RAA-WCD9
  - RAA-WCU
  - RAA-INSIDE
  - RAA-OUTSIDE
- EPA directed expanded sampling from October 12 to October 29, 2005 based on water quality results. Sampling stations during reversed flow conditions (i.e., river flow in the upriver direction) are provided below:
  - RAA-WCD8
  - RAA-WCU4
  - RAA-WCU7

Results

Background Survey

Prior to the beginning of construction operations, a water quality survey was conducted to establish "background" concentrations of chemical constituents in the vicinity of the Site. One sample was collected 1 foot above the mudline at a station 300 feet from the expected location of the primary containment (RAA-WCU). In addition, two grab water samples were collected immediately over the dredge prism 1 foot above the mudline (RAA-WBGDB) and one foot below the water surface (RAA-WBGDS). The initial background conditions for laboratory parameters are provided in Table 15 and were used to evaluate triggers for protective procedures provided in Table 4 during construction.

EPA Directed Water Quality Monitoring While No Dredging Taking Place

In addition to the initial background survey, EPA directed NW Natural to evaluate water quality conditions during no dredging to more thoroughly evaluate river conditions following chronic and acute water quality exceedences of PAH triggers following cessation of dredging operations. On two separate occasions (September 16 and 29, 2005), water samples were collected following cessation of dredging for at least 12 hours. Results from this additional river sampling are provided in Table 16.

Standard RAPP and Extended RAPP Water Quality Monitoring

As described in the RAPP (Anchor 2005b), water quality monitoring for laboratory parameters occurred during dredging and capping operations at the Site. The design specified only one downstream station (RAA-WCD1 or RAA-WCD2) to be sampled per day. However, in response to chemical exceedences identified during the first few weeks of construction, EPA required samples for laboratory analyses to be collected on a daily basis during dredging and capping at the locations described in the beginning of this section.

At each station, samples were collected at three different depths—1 foot below the surface, mid-depth, and 1 foot above the bottom. Results from the laboratory parameter samples collected throughout the construction period and comparisons to the appropriate chronic and acute trigger levels (Table 4) are provided in Table 17. Exceedences of acute and chronic criteria for various PAHs (i.e., anthracene,

benzo(a)anthracene, benzo(a)pyrene, fluoranthene, fluorene, naphthalene) were detected throughout the dredging and capping activities. No exceedences of the acute or chronic criteria were identified for dibenzofuran or phenanthrene.

5.1.1.3 Preliminary Conclusions

Overall, the water quality data and observations during the construction indicate that several potential issues contributed to the water quality exceedences observed downstream and upstream of the dredging operation. Because exceedences were observed upstream and downstream of dredging operations, some chemicals present in the water may not have been associated with dredging operations. The presence of these chemicals in the water column may have been related to resuspension caused by wave action, the bubble curtain operation, river currents, and or release of chemicals outside the silt curtains due to vibrations caused by the overall operations. In general, because the upstream exceedences were much lower than the downstream exceedences, it appears that the majority of the observed downstream exceedences were related to the dredging activities. Further, under most conditions the concentrations observed downstream of the operation generally decreased with distance from the operation. The chemical concentrations inside the curtain were much higher than outside the silt curtain indicating that the curtains and bedload baffles were an effective barrier in terms of reducing the magnitude of potential impacts to the river.

In addition, overall the concentrations observed downstream of the operation decreased with time over the course of the operation. The difference is particularly notable between the inner dredging and outer dredging operations. The reasons for this trend are not clear, but may be related to physical/chemical differences between the dredged material in the inner versus outer areas or the volume of material removed in the two areas, which was much smaller in the outer removal area. Also, the outer containment area contained a much larger proportion of river water to volume of material dredged as compared to the inner removal area.

5.1.2 Transfer Station

Consistent with the WSMP, field parameters (turbidity, temperature, DO, and pH) were measured at the transfer facility. Unlike monitoring performed at the Gasco Site, laboratory measurements were not conducted at the transfer station. The water quality monitoring logs for the transfer station are provided in Appendix G. Prior to the beginning of construction operations, a background water quality survey was also conducted at the transfer station as described in the WSMP. Nine independent measurements (at all applicable water depths) were made at a station 300 feet upstream (TF-WBGU) of the barge offloading location over the course of a 2-day period. For each field parameter, the 95th percentile upper confidence limit on the mean was determined and used to represent initial background conditions. The initial background conditions for field parameters were used to evaluate triggers for protective procedures provided in Table 4. Initial background samples were collected on August 17 and 18, 2005. Results of this survey along with the 95th percentile upper confidence limit are provided in Tables 18 and 19, respectively.

During offloading at the transfer station, field parameters were monitored hourly for the first 4 hours of offloading and every 4 hours thereafter at one upcurrent station 300 feet from the offloading barge (TF-WCU) and three downcurrent stations 150 feet from the offloading barge (TF-WCD1, TF-WCD2, and TF-WCD3). Station locations are shown on Figure 15. Samples were collected at three depths—1 foot below the surface, mid-depth, and 1 foot above the bottom. The field parameter results collected throughout the construction period and comparisons to the appropriate chronic and acute trigger levels (Table 4) are provided in Table 20. No exceedences of the triggers were identified for any of the field parameters for the duration of offloading activities at the transfer station.

5.2 Visual Monitoring Results

Visual monitoring occurred whenever construction was actively underway at the Site and transfer station as described in the WSMP. A summary of the visual observations taken at each sampling location is provided in Table 21 and Table 22 at the Site and transfer station, respectively. In addition to this tabulated summary, dead or distressed fish (one adult coho salmon, crappie, blue gill, and sunfish) were observed within the containment area on three separate occasions. The following is a summary of the distressed fish observed:

- On September 13, a coho salmon was identified. This coho was potentially from the Lower Columbia River evolutionarily significant unit (ESU), which is a federally listed threatened species. Therefore, in accordance with the Biological Opinion (BO), following identification of the coho salmon, field personnel reported the incident to NMFS, and preserved the fish by freezing as directed by the NMFS agent. In addition, NMFS recommended that a sonar fish survey be conducted within the inner containment area. Staff from Anchor conducted the survey using a portable sonar unit. The survey yielded no indications that fish were present within the silt curtain enclosure. The BO permits the take of five adult species from within the listed ESUs. Since this was the first (and only) identified casualty to a species within a listed ESU, work was allowed to resume.
- On September 14 three distressed fish were noticed in the inner containment area including one crappie, one bluegill, and one sunfish. Attempts to revive the fish failed. Again, the fish were reported to NMFS, and were preserved by freezing. Per requirements of the Water Quality Certification (WQC), water samples were collected inside the primary containment area for DO and total sulfides analysis. Results show that DO level inside the curtain was 8.77 mg/L while DO outside the curtain was 10.03 mg/L. The total sulfides concentrations were non-detect for both samples.
- On September 26, a distressed pan fish (blue gill or sunfish) was identified inside the containment area. An attempt was made to catch the fish and remove it, but it escaped. In addition, eight small dead pan fish between 0.75 and 2.0 inches long were found and removed from inside the inner containment area. Mitch Fong of NMFS Enforcement was called per the requirements of the RAPP. Per requirements of the WQC, water samples were collected inside the primary containment area for DO and total sulfides analysis. The DO level inside the curtain was 9.57 mg/L and total sulfides concentration was non-detect.

5.3 Transfer Barge Dewater Monitoring Results

In response to exceedences of chemical criteria observed in the water column monitoring of laboratory parameters, EPA directed NW Natural to conduct testing (identical analyte list as water column laboratory parameters) of the barge dewatering "pre" (i.e., influent) and "post" (i.e., effluent) treated water. This testing began September 17, 2005 and continued

through October 19, 2005 (the last day of dredging). The influent water is the raw water that accumulated within the transfer barge (RAA-B47PRE) and the effluent water is the filtered water that was subsequently discharged within the inner-containment curtain (RAA-B47POST). EPA directed that this sampling be performed on a daily basis.

Table 23 shows the barge effluent water quality monitoring results. Acute and chronic exceedences of some PAHs and cyanide were observed in both influent and effluent samples.

5.4 Silt Curtain Containment Monitoring Results

As described in the WSMP, water samples were collected with a van Dorn sampler from the bottom depth just downstream from the silt curtain containment to monitor the effectiveness of the containment at the mudline interface. All samples were collected from the same location where the inner and outer area silt curtain containment crossed underneath the pipeline (see Figures 7a and 7b). One water sample per day was collected for the duration of construction activities where active dredging and/or capping were occurring. The curtain was removed on October 22, 2005 and no samples were collected after this date. A summary of water sample descriptions is provided in Table 24 for each day that a water sample was collected. None of the samples collected during the construction period contained evidence of tar or sheen.

5.5 Fish Removal

According to procedures outlined in the RAEPP (Appendix E of the RAPP, Anchor 2005b), on September 6, 2005 a fish seining operation was performed within the inner removal area after the inner area silt curtain configuration had been fully deployed. Seven seine net sets were deployed in areas without obstructions (e.g., piling) over the entire inner containment area. All collected fish were identified to the species level, placed into containers with Site water, and released outside of the containment area into the Willamette River. No endangered species were captured during the seining procedure. Approximately 164 fish consisting of eight different species were captured and released, including: 94 shad, 19 yellow perch, 45 small mouth bass, one large mouth bass, two starry flounder, one sculpin, and one crayfish. Note, no salmon, crappy, blue gill, or sunfish were captured, but were later found in a distressed state.

5.6 River Velocity Monitoring

River velocities were monitored according to the WSMP during all in-water removal activities within the silt curtain containment configuration. Monitoring was conducted to ensure that the river velocities did not exceed the threshold (1 foot per second) for use of the containment barriers as discussed in the RAEPP (Appendix E of the RAPP, Anchor 2005b). Monitoring locations included at least one of the following: the middle of the channel, the upstream sampling location (RAA-WCU), and the downstream sampling location (WCD-1). Table 25 summarizes the results of the velocity monitoring. No velocity trigger exceedences (i.e., 1 foot per second) were identified during the removal action activities.

5.7 Post-Dredge Surface Sediment Monitoring Results

Surface sediment samples were collected on October 19, 2005 as described in the WSMP (Appendix D of the RAPP, Anchor 2005b) immediately following the completion of sediment removal (as approved by EPA) and prior to cap placement. The sampling locations were determined in coordination with EPA and are shown on Figure 12. Samples were collected from 15 sampling stations within the pilot cap and fringe cover areas. The collected samples were submitted to the laboratory for analysis of physical and chemical parameters including TOC, TS, grain size, BTEX, PAHs, TPH, cyanide, pesticides, PCBs and total metals. The results will be used to determine the baseline conditions in the removal action area prior to cap placement and may be useful for later comparison to longer-term cap monitoring results. To monitor the quality of the decontamination and homogenization procedures, a rinsate blank and homogenization duplicate, respectively, were collected and were analyzed for the identical list identified above. A summary of the surface sediment collection information and analytical results are provided in Tables 26 and 27, respectively. The surface sediment collection logs are provided in Appendix H.

5.8 Suspended Sediment Monitoring Results

The EPA Action Memorandum (2005b) required that NW Natural perform baseline and action specific monitoring in the vicinity of the removal action area for Site related contaminants suspending and settling in the vicinity of the removal action area. In accordance with EPA's direction and the protocols described in the WSMP (Appendix D of the RAPP, Anchor 2005b), sediment traps were deployed at the Site in the three locations

shown on Figure 13. Baseline sampling was performed prior to initiation of the in-water construction activities. The sediment traps were installed on July 14, 2005 and sampled on August 17 – 18, 2005 (duration of approximately 35 days). Following subsampling in August, the sediment traps were decontaminated and replaced at the identical locations. Post-construction sampling was performed following completion of in-water construction activities and demobilization on November 8, 2005 (duration of 82 days). The sediment trap collection information and analytical results are summarized in Tables 28 and 29, respectively. These data show that most chemical concentrations were higher after construction at both the upstream and downstream stations. The difference in concentrations between the two sampling events at the upstream station was much smaller than at the downstream stations. The sediment trap sampling log forms are provided in Appendix I.

5.9 Sediment Stake Monitoring Results

Following submittal of the Draft Final RAPP in July 2005, EPA commented (RAPP General Comment #4) that the design for the fringe cover placement in the upstream direction (the RAPP specified a 25-foot offset from upstream edge of dredge prism) was insufficient and that an additional 25 feet should be specified (resulting in a 50-foot offset in upstream direction). In addition, EPA indicated that additional fringe cover would be required in the upstream direction if accumulations of sediment are observed beyond the extent of the proposed fringe cover. EPA required NW Natural to evaluate these accumulations via sampling. In accordance with this requirement, NW Natural installed a series of sediment stakes upstream of the dredge prism to evaluate accumulations at variable depths and distances from the dredge prism. The sediment stake locations were installed on August 17, 2005 in the locations shown on Figure 13. An attempt was made to monitor the sediment stake locations immediately following completion of placement of the pilot cap. The divers attempted several times to re-locate the sampling locations (each marked with rope lines to facilitate relocation) but were unable to locate the stakes. Throughout the area where the sediment stakes were installed, large divots in the mudline were identified. These divots were likely due to placement of the derrick barge spuds during times where the derrick needed to provide access to monitoring personnel (i.e., bathymetry progress surveys, post-dredge sampling, and diver inspection of the silt curtain). Because no evaluation of

sediment accumulations was possible due to loss of the stakes, EPA directed NW Natural to extend the fringe cover to the upstream extent of the outer removal area (see Figure 16).

5.10 Cultural Resources Characterization

During the design characterization sampling in 2004, AINW completed an assessment of the potential for significant archaeological or historical resources at the Site. The AINW assessment included a comprehensive review of information on the geology, past environmental setting, archaeology, Native peoples, and historical development of the project location. Although AINW's research found an unconfirmed report of a prehistoric archaeological site at the Site, no evidence of any archaeological deposits or materials was observed in the sediment samples that were monitored (Ellis and Baker 2004). AINW concluded that there was a low potential for archaeological resources in the proposed removal area. The planned method of removing the tar body also made it unlikely that any evidence of archaeological deposits could be observed during the removal process. Therefore, AINW did not recommend any further studies or actions pertaining to archaeological or historical resources. However, EPA requested that removal activities in the nearshore area ("50 feet shoreward or riverward of the ordinary low water line") be inspected or monitored by AINW. In accordance with this request, AINW conducted oversight for all removal conducted within this area.

AINW monitored nearshore tar body and sediment removal on September 26 – 27, 29 – 30, and October 3 – 5, 6 – 7, 2005. All archaeological monitors were professional archaeologists who meet the Secretary of the Interior's professional qualification standards and had completed the 40-hour Hazardous Waste Operations and Emergency Response course and relevant 8-hour refresher courses (as identified in OSHA 29 CFR 1910.120). All monitoring was conducted from the above viewing platform (i.e., pipeline channel ward dolphin) located within the contaminant reduction zone. Personal protective equipment required for entrance into the contaminant reduction zone consisted of Level D protection.

No archaeological deposits were observed during the monitoring. Observed sediments consisted of very dark brown to black contaminated (tar-laden) sand or silt. A closer examination of the sediments and soil characterization was not possible. Several pilings that were located within the dredge prism were removed during the excavations. No other

evidence of previous industrial activities was identified, and no prehistoric artifacts were observed during the sediment removal. In summary, it was AINW's professional opinion that no significant archaeological resources were impacted by this sediment removal. A copy of the AINW report is provided in Appendix J.

5.11 Transportation and Disposal Documentation

During the project, Anchor tracked each load of dredged material, debris, and water sent from the transfer station to the CWMNW landfill. Anchor maintains in the project files the original manifests, weigh tickets, and Certificates of Disposal for each load of dredged material, debris, and water. The information contained in the manifests and weigh tickets is summarized in Tables 6 and 7 including the date and time the load left the transfer station, the identity of the truck carrying the load, the manifest number, the weight of the load, and the date and time the load was received at the landfill. In addition, daily operation of the transfer station is documented in the transfer station CQAO logs (Appendix C).

5.12 Transfer Station Off-Site Tracking Monitoring Results

Soil samples were collected before transfer station operations began and after decontamination and demobilization were completed to monitor offsite tracking of contaminants caused by the offloading activities. In accordance with the TDP (Appendix A of the RAPP, Anchor 2005b) one set of before and after soil samples (location designated GTM-01) was collected close to the exit of the load-out pad, in the tire path of trucks leaving the secondary containment after they were loaded with material. The "after" soil sample collected at GTM-01 was collected from the shallowest available fine-grained material, approximately 9 cm below grade. The three other samples were all collected from the first 2 cm below grade. The second set of soil samples (location designated GTM-02) was collected from the shoulder of the public road within 50 feet of the end of the access road to the Port of Morrow. The sampling locations are shown on Figure 15. Note, the pre- and post-construction samples were slightly offset (i.e., several feet) to avoid sampling disturbance from the pre-construction sampling. The soil collection information and the chemical analytical results are summarized in Tables 30 and 31. No contaminant tracking was believed to have occurred. A brief evaluation of the sampling analytical results is provided in Section 4.3. The soil collection log forms are provided in Appendix K.

5.13 Health and Safety Monitoring Results

Construction activities at the Site were conducted under the guidelines presented within the site-specific CHASP (Appendix B of the RAPP, Anchor 2005b) prepared by Sevenson and approved by EPA. Sevenson provided an SSO at the project Site and at the transfer station to conduct all monitoring and record keeping as required by the CHASP. No recordable injuries were reported during the removal action.

Air monitoring was conducted at the Site (initiated on August 23, 2005 prior to initiating dredging and terminated with EPA approval on October 18, 2005) during all dredging activities and at the transfer station during active offloading activities (initiated September 12, 2005 and terminated on October 19, 2005) in accordance with the CHASP (Appendix B of the RAPP, Anchor 2005b). VOCs and hydrogen sulfide (H_2S) were monitored in real-time using a BW Gas Alert Micro 5 and the RAE MultiRAE Plus PGM-50. Compound specific (i.e., benzene) detector tubes manufactured by Sensidyne were also used to determine the concentrations of benzene when elevated levels of VOCs were detected. Particulates were monitored in real-time using the TSI Dust TRAC model 8520 aerosol monitor. These instruments were maintained and calibrated according to the manufacturers' recommendations.

Air monitoring at the Site was performed prior to the beginning of intrusive work to establish background levels for VOCs, H_2S, and particulates. During dredging, sediment drying addition, and off-loading activities, real-time air monitoring was conducted in the breathing zone of workers as well as upwind and downwind of the active work in accordance with the CHASP (Appendix B of the RAPP, Anchor 2005b). The air monitoring data showed that during the course of removal activities, action levels for the contaminants of concern were not exceeded. Background levels for particulates at the transfer station were elevated due to high winds and the existing dust conditions at the facility. During the early stages of dredging at the Site there were transitory (less than 5 minutes long) readings of VOCs as high as 3 parts per million (ppm). Benzene detector tubes were then used and indicated no detectable benzene concentrations indicating the elevated VOC concentrations were not caused by benzene. Occasional elevations of particulates were noted during mixing of sediment drying agent with the dredged material at the Site. However, the identified concentrations did not exceed the 15 minute action level as stipulated in the

CHASP (Appendix B of the RAPP, Anchor 2005b). Engineering controls such as slowing the mixing rate along with halting mixing during high wind gusts were implemented to minimize such occurrences. The health and safety monitoring forms recorded throughout the duration of the project from the Site and the transfer facility are provided in Appendix L and M, respectively.

6 QUALITY ASSURANCE/QUALITY CONTROL DOCUMENTATION

6.1 Field Monitoring QA/QC

The following sections provide a summary of the QA/QC activities conducted during the construction activities to ensure the collection of high quality data.

6.1.1 Bathymetry Surveys

The Sevenson surveyor (i.e., Northwest Hydro) and Anchor independent surveyor (i.e., BWE) utilized a state-of-the-art automated hydrographic survey system onboard their survey vessels. Both survey systems were comparable and were comprised of the PC-base data acquisition software system Hypack Max (v4.3), single-beam acoustical echosounder and a Trimble DGPS. Calibration and verification of the survey system was completed prior to each days survey work. The horizontal positioning system was verified with known control points established from existing project survey control. The depth sounding equipment was verified through a combination of bar-checks and velocity casts with a digital velocity meter. All of the quality control steps were completed prior to any survey work being initiated to verify that all soundings would exceed the accuracy standards required by the project specification.

The bathymetry survey throughout the removal action area was conducted on a 15-foot line spacing interval. The Hypack Max hydrographic survey software confirmed this line spacing facilitated complete coverage of the survey area. Quality control check-lines were also surveyed orientated perpendicular to the main survey lines to verify proper calibration of the hydrographic survey system and to provide additional survey coverage to verify dredging performance.

Northwest Hydro installed a tide staff (affixed to a pipeline support pile) at the Site prior to initiation of the project. The elevations on the tide board were marked in 0.2-foot increments and were surveyed to a known benchmark. These data were recorded in a hand-written logbook approximately every half-hour during the survey. BWE used the same tide staff with similar recording intervals to maintain consistency between the two data sets.

6.1.2 Water Quality Monitoring

QA/QC procedures were followed during the collection of both field and laboratory parameters according to procedures described in the WSMP (Appendix D of the RAPP, Anchor 2005b) and FSP (Appendix A of the RAWP). For field parameters, monitoring equipment was calibrated prior to its use following the manufacturer's instructions. Calibrations for the water quality meter were conducted once per day at the beginning of each sampling day and were noted in the meter's calibration tracking notebook. In addition, a calibration check was performed on the turbidity probe at the end of each day and as necessary throughout the day and logged in the calibration tracking notebook. For laboratory parameters, duplicate samples (total of seven samples) were collected during the dredging and capping activities to assess the heterogeneity of the chemical analytical results at a single station and depth. The analytical results for each of the duplicate samples (Table 17) are nearly identical to the original sample analytical results indicating very little heterogeneity in chemical concentrations at a particular station and depth.

Equipment rinsate samples (total of three samples) were also collected following decontamination of the van Dorn to assess the efficacy of the decontamination procedures. The analytical results for the rinsate blank samples are provided in Table 31. Very low levels of naphthalene and phenanthrene were identified in each sample and on September 21, 2005 a chronic criteria exceedence of benzo(a)pyrene was identified in the rinsate blank. Given the identified naphthalene, phenanthrene and benzo(a)pyrene concentrations were very low (i.e., just above the method reporting limits) and orders of magnitude lower than the associated concentrations identified in the water samples collected at that station, no data were qualified.

6.1.3 Post-Dredge Surface Sediment Characterization

QA/QC procedures were followed during the collection of the post-dredge surface sediment samples according to procedures described in the WSMP (Appendix D of the RAPP, Anchor 2005b) and SAP (Appendix A of the RAWP, Anchor 2004a). A field split (i.e., homogenization duplicate) and field blanks were collected to evaluate field QA/QC. A single field split (RAA-PD52-051019) was collected from the sediment collected at station RAA-PD02. The field split consisted of collecting twice the amount of volume

necessary for analyses and splitting it into two unique samples (the original sample and a duplicate). The samples were processed in exactly the same way as the original sample and were submitted to the laboratory as blind samples. The samples were analyzed for TS, TOC, grain size, PAHs, BTEX, total cyanide, TPH, pesticides, PCBs, and total metals to evaluate potential analytical variations in homogenized sample concentrations. The analytical results are provided in Table 27 adjacent to the original samples. The SVOC chemical concentrations are generally two times higher in the homogenization duplicate indicating sample homogenization was incomplete or a very high variability in the chemical concentrations in the collected sample volume. None of the sample results were qualified due to these QA/QC results.

Field blank samples were collected to evaluate the efficiency of field decontamination procedures. One rinsate blank (RAA-PDRB-051019) and one field blank (RAA-PDFB-051019) were collected and analyzed for PAHs, BTEX, total cyanide, TPH, pesticides, PCBs, and metals. The rinsate blank consisted of rinsing down the grab sampler and homogenization equipment after sample collection and decontamination, and collecting the rinsate. The field blank consisted of distilled water poured directly into the sampling containers. The analytical results are provided in Table 32. All analytical concentrations were below the method reporting limit so no data were qualified based on these QA/QC samples.

6.1.4 Suspended Sediment Monitoring

Due to volume limitations, no field splits were collected as part of the suspended sediment monitoring. In addition, given the sediment retrieved in each trap was poured directly into sampling jars, no rinsate or field blanks were necessary.

6.1.5 Offloading Offsite Tracking Monitoring

Consistent with the TDP (Appendix A of the RAPP, Anchor 2005b), no field QA/QC samples were collected as part of the offsite tracking sampling.

6.1.6 Monitoring Laboratory Data QA/QC

6.1.6.1 Laboratory QC Criteria

Results of the QC samples from each sample group were reviewed by the analyst immediately after a sample group was analyzed. The QC sample results were then evaluated to determine if control limits were exceeded. If control limits were exceeded in the sample group, the Project QA Manager was contacted immediately, and corrective action (e.g., method modifications followed by reprocessing the affected samples) was initiated prior to processing a subsequent group of samples.

All primary chemical standards and standard solutions used in this project were traceable to documented, reliable, commercial sources. Standards were validated to determine their accuracy by comparison with an independent standard. Any impurities found in the standard were documented.

Both Severn Trent Laboratories (STL) and Columbia Analytical Services (CAS) conducted initial and continuing calibration, and prepared and analyzed laboratory duplicates, matrix spikes and matrix spike duplicates, and method blanks in accordance with the WSMP (Appendix D of the RAPP, Anchor 2005b) and QAPP (attachment to the RAWP, Anchor 2004a).

6.2 Data Validation

Once data were received from the laboratory, a number of QC procedures were followed to provide an accurate evaluation of the data quality. Specific procedures were followed to assess data precision, accuracy, and completeness. A data quality review was performed by a qualified Data Validation Specialist on the data, in accordance with EPA National Functional Guidelines and the methods described in the QAPP (attachment to the RAWP, Anchor 2004a). All chemical data were reviewed with regard to the following, as appropriate to the particular analysis:

- Chain of custody/documentation of log-in and sample receipt
- Holding times
- Initial instrument calibration
- Continuing calibrations
- Tune criteria

- Method blanks
- Detection limits, Reporting limits, Practical Quantitation limits
- Surrogate recoveries
- Field QA/QC samples
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory control sample recoveries
- Laboratory and field duplicate relative percent differences (RPDs)
- Target analyte identification (sample calculations were not verified)
- EPA Region 10 guidance for data deliverables from laboratories for pesticide and PCB data (8081A/8082) (pertaining to detectable sample quantitation confirmation) (Draft April 11, 2005)

The results of the data quality review, including text assigning qualifiers in accordance with the EPA National Functional Guidelines (EPA 1999, 2004) and a tabular summary of qualifiers, were generated by the Data Validation Specialists and submitted to the Project QA Officer for final review and confirmation of the validity of the data. A summary and copies of the complete review are provided in Appendix N.

In summary, data was acquired under four categories: water quality laboratory parameters, post-dredge surface sediment characterization, off-loading offsite tracking monitoring, and suspended sediment monitoring. A review of the validated data and associated qualifiers against the QAPP (Appendix B of the RAWP, Anchor 2005a) precision, accuracy, representativeness, completeness and comparability (PARCC) parameters indicates the following deviations and notations to the QAPP (Appendix B of the RAWP, Anchor 2005a) criteria were noted in the laboratory data sample delivery groups:

Water Quality Laboratory

- Cyanide requested practical quantitation limits (PQLs) of 5.2 ppm were exceeded (the majority of samples contained PQLs of either 5.6 or 50 ppm).
- The barge dewatering post-treatment sample contained elevated PQLS for the PAH flouranthene (September 26, 2005).
- Total of 428 water quality samples were analyzed for laboratory parameters and three field QA/QC samples collected (which is less than the QAPP designation of

1:20). This deviation resulted from the substantially increased frequency and density of sampling directed by EPA. The number of QA/QC samples analyzed during the project is consistent with the WSMP (Appendix D of the RAPP, Anchor 2005b). EPA did not direct an increase in the number of QA/QC samples to reflect the required increase in sampling frequency and density.

Post Dredge Surface Sediment Characterization

- Sample RAA-PD11-051019 for pesticide analysis was rejected due to low surrogate recovery (less than 10 percent recovery).
- Sample RAA-WCD1-B-050916 for PAH analysis of benzo(a)pyrene was rejected.
- Several samples for volatile organic analysis indicated the toluene PQL was elevated in theses samples because the elevated level of toluene detected in the sample required dilutions.
- QA/QC field samples (single homogenization duplicate, rinsate, and field blank) were collected in accordance with WSMP (Appendix D of the RAPP, Anchor 2005b).

Off-Loading Offsite Tracking Monitoring

- No data were rejected in these data sets.
- No QA/QC samples proposed in the WSMP (Appendix D of the RAPP, Anchor 2005b) or collected.
- Slightly elevated PAH PQLs (5.1 parts per billion [ppb] rather than 5.0 ppb) at the post-construction GTM-02 sample station.

Suspended Sediment Monitoring

- No data were rejected in these data sets, all PQLS achieved.
- No QA/QC samples were proposed in the WSMP (Appendix D of the RAPP, Anchor 2005b) or collected.

There are two data sets still outstanding from the data validator: data groups 580-388-01 (suspended sediment field QA/QC samples) and 580-255-01 (suspended sediment bulk sediment data). A summary of the validation findings for these data groups will be provided in the final RACR.

7 CERTIFICATIONS AND INSTITUTIONAL CONTROLS

7.1 Final EPA Approval

Because this is a draft document, EPA has not provided formal written approval of the project consistent with this RACR. Description of EPA's final approval will be provided in the Final RACR. It should be noted that EPA approved both the completion of the dredging and capping operations sufficient for equipment to be removed from the Site in writing via email on the dates shown in Table 5.

7.2 Institutional Controls

Institutional controls for the Site were proposed in the draft Monitoring and Reporting Plan (MARP) submitted to EPA on October 13, 2005. This document is currently under revision for final approval for EPA. Institutional controls will be implemented at that time consistent with the final MARP.

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TABLES

Table 1
Design Characterization Sample Station Geographical Coordinates

Station ID	Geographical Coordinates (NAD 83)	
	Latitiude (DD.mmm)	Longitude (DDD.mmm)
RAA-01	45.57977374	122.75795025
RAA-02	45.57982789	122.75792804
RAA-03	45.58007390	122.75794293
RAA-04	45.57971933	122.75805875
RAA-05	45.57985022	122.75809311
RAA-06	45.58001600	122.75808147
RAA-07	45.58011224	122.75818444
RAA-08	45.57982296	122.75845286
RAA-09	45.57990589	122.75826530
RAA-10	45.580043205	122.75827003
RAA-11	45.58003730	122.75844474
RAA-12	45.58016669	122.7585000
RAA-13	45.5801794	122.7583667
RAA-14	45.58022110	122.7582523
RAA-15	45.57996370	122.75874391
RAA-16	45.58005925	122.75862963
RAA-17	45.58014987	122.75872767
RAA-18	45.57968324	122.75810387
RAA-19	45.57976742	122.75854962
RAA-20	45.57975098	122.75829940

Table 2
Lateral and Vertical Extents of the Tar Body Zone

Station ID	Mudline Elevation of Core in feet NAVD 88	Tar Body					
		Tar Observed at Surface (upper foot)?	Depth to Tar Body Bottom in feet	Depth to Bottom with Recovery Correction	Assumed Thickness in feet	Bottom Elevation in feet (1)	Core Log Notes
Removal Action Design Characterization Sampling							
RAA-01	5.9	No	0.0	0.0	0.0	NA	Sand saturated with sticky oil at surface, but no tar body (1.5 of 5 ft recovered). Next core showed no tar, so assumed no tar present.
RAA-02	3.4	Yes	0.5	4.0	4.0	-0.6	Sandy tar in 0.5 of 4 ft recovered. No recovery until 10 ft. Assumed entire 4 foot of first core contains tar.
RAA-03	-18.3	Yes	1.5	8.0	7.8	-26.3	Black firm tar layers in top 0.2 to 1.5 (of 1.5 ft recovered). No recovery to 8 ft, where no tar present, so assumed 7.8 ft of tar.
RAA-04	7.9	Yes	1.0	2.0	2.0	5.9	Sandy tar in top 1 ft (2.5 of 5 ft recovered). No tar observed below 1 ft, so 2 ft of tar assumed with recovery correction.
RAA-05	5.7	Yes	1.3	2.8	2.8	2.8	Tar in top 1.3 ft (2.3 of 5 ft recovered). No tar observed below 1.5 ft, so 2.8 ft of tar observed with recovery correction.
RAA-06	2.5	Yes	1.3	3.0	2.5	-0.5	Tar with silty sand from 0.5 to 1.3 ft (2.2 of 5 ft recovered). No tar below 1.3 ft, so assumed 2.5 ft of tar with correction factor.
RAA-07	-7.1	No Recovery	13.0	13.0	13.0	-20.1	No recovery in first 5 ft. Layer tar found in 6 to 12 ft with 70% recovery throughout. No tar observed below 13 ft, so assumed 13 ft of tar.
RAA-08	8.9	No	0.0	0.0	0.0	NA	Sand with oil/tar saturation found at 1-2 ft and 6-7.5 ft.
RAA-09	6.7	Yes	1.5	4.0	4.0	2.7	1.5 feet of tar observed in 0 to 4 foot core with 1.5 feet recovery, SAND observed in drive shoe; in a second boring at same location, 1.8 feet of tar observed in 0 to 5 foot core with 2 feet recovery. Tar body assumed less than 4 feet.
RAA-10	3.6	No	0.0	0.0	0.0	3.6	No tar found, but because this station is in center of tar body, may want to assume some depth of removal.
RAA-11	5.5	Yes	1.1	1.7	1.7	3.8	Tar found in top 1.1 feet (3.3 of 5 ft recovered) with no tar below, so assumed 1.7 ft of tar with recovery correction.
RAA-12	4.1	No	0.0	0.0	0.0	NA	No tar found in 1.5 of 5 ft recovered. Very fine (0.1 ft) tar layer found at 12 ft, otherwise silt with oil or sheen.
RAA-13	-12.1	No Recovery	10.0	10.0	10.0	-22.1	No recovery to 7 ft but noted oil/tar on core tube. Tar observed at 8-10 ft, with silt and sand below, so assumed 10 ft of tar.
RAA-14	-23.5	Yes	1.1	?	10.0	-33.5	Tar observed in top 1.1 ft (6, 0.1 ft lenses). No recovery to 10 ft. Last tar observed at 13.5 ft, so assumed 10 ft thick tar.
RAA-15	10.9	No	0.0	0.0	0.0	NA	No tar observed.
RAA-16	4.5	No	0.0	0.0	0.0	NA	No tar observed.
RAA-17	4.2	No	0.0	0.0	0.0	NA	No tar observed.
RAA-18	10.6	No	0.0	0.0	0.0	NA	No tar observed.
RAA-19	11.2	No	7.3	10.0	5.0	1.2	No tar observed in top 2.5 of 5ft recovered. 2 ft thick layer of tar is at least 5 feet beneath mudline.
RAA-20	11.6	No	2.3	4.6	1.6	7.0	No tar observed in top 1.5 ft (2.5 of 5 ft recovered). 0.8 ft thick layer of tar observed is at least 1.5 ft beneath mudline.
Historical Sediment Characterization Results in Tar Body Vicinity							
AN2-1	2.0	No	5.9	5.9	1.7	-3.9	1.7 ft of tar observed 4.2 ft below mudline (not continuous)
AN2-2	-5.0	No	5.6	5.6	3.8	-10.5	3.8 ft of tar observed at 1.8 ft below mudline (not continuous)
AN2-3	-10.0	No	5.1	5.1	2.2	-15.1	2.2 ft of tar observed at 2.9 ft below mudline (1.1 ft gap of sediments between two tar layers)
AN2-4	-26.0	No	6.6	6.6	3.9	-32.6	2 segments - 2.3 ft of tar observed 2.7 ft below mudline, and 0.6 ft of tar observed at 6 ft below mudline

Table 3
Lateral and Vertical Extents of Visually Contaminated Zone

Core ID	Mudline Elevation of Core in feet NAVD 88	Visually Contaminated Sediments				
		Depth to Bottom VC in feet	Depth to Bottom VC with Recovery Correction	Assumed VC Thickness in feet)	Bottom Elevation VC in feet NAVD 88	Core Log Notes
Removal Action Design Characterization Sampling						
RAA-01	5.9	5.3	5.4	5.4	0.4	
RAA-02	3.4	17.5	18.6	14.6	-15.2	
RAA-03	-18.3	13.0	13.0	5.0	-31.3	
RAA-04	7.9	6.0	6.0	4.0	1.9	
RAA-05	5.7	10.0	10.0	7.2	-4.4	
RAA-06	2.5	18.0	18.0	15.0	-15.6	
RAA-07	-7.1	15.5	16.0	3.0	-23.1	
RAA-08	8.9	6.5	8.8	8.8	0.1	
RAA-09	6.7	16.0	16.0	12.0	-9.4	
RAA-10	3.6	12.0	12.5	12.5	-9.0	
RAA-11	5.5	12.0	12.5	10.8	-7.1	
RAA-12	4.1	18.0	18.0	18.0	-14.0	
RAA-13	-12.1	18.5	18.5	8.5	-30.6	
RAA-14	-23.5	13.5	13.5	3.5	-37.0	
RAA-15	10.9	6.0	6.3	6.3	4.9	Some sheen in possible sluff at 6 ft (only 1 ft thick)
RAA-16	4.5	10.0	10.0	10.0	-5.6	
RAA-17	4.2	13.0	13.0	13.0	-8.9	
RAA-18	10.6	0.0	0.0	0.0	10.6	
RAA-19	11.2	5.0	5.0	5.0	6.2	VC above tar layer
RAA-20	11.6	5.6	5.6	1.0	6.0	
Historical Sediment Characterization Results in Tar Body Vicinity						
AN2-1	2.0	8.0	8.0	2.1	-2.2	VC above tar layer
AN2-2	-5.0	1.8	1.8	1.8	-6.8	VC above tar layer
AN2-3	-10.0	NA	NA	NA	NA	No visual contamination outside tar layers
AN2-4	-26.0	10.0	10.0	3.0	-28.6	VC above

VC= visually contaminated

Table 4
Water Quality Triggers for Additional Environmental Controls

Parameter	Unit	Location	Trigger[a]	Action Triggered
Turbidity	Nephalometric Turbidity Units (NTU)	150 feet downstream of operations[b]	>3 NTU over background (where background <50 NTU)[c] >10% over background (where background >50 NTU)[c] >50 NTU over background[c]	Inspect construction and select an additional control(s) that focus on cause of exceedence If >50 NTU over background, also cease work and select additional controls
Dissolved Oxygen (DO)	mg/L	150 feet downstream of operations[b]	<6.5 modify operations <6.0 cease operations[d]	Inspect construction and select an additional control(s) that focus on cause of exceedence
pH	Standard units	150 feet downstream of operations[b]	<6.5 or >8.5	Inspect construction and select an additional control(s) that focus on cause of exceedence
Oil/Sheen	Visual Observation	Outside of outer containment barrier	(1) Any project related sheen (2) Substantial sheen (3) Large contiguous, heavy, or persistent oily releases	Per Section 3.1: (1) Deploy additional controls and inspect construction (2) Cease work and conduct Step 1 (3) Cease work and deploy spill response team.
Tar Particles/Oil	Visual Observation	Immediately outside base of full length silt curtain or bedload baffle	Substantial particles of tar and/or oil blebs in water samples taken immediately above bottom	Inspect silt curtains and baffles and make adjustments as necessary.
Anthracene	µg/L	150 feet downstream of containment barriers[b]	Chronic – 0.73[e] Acute – 13	For chronic, confirm standard controls and increase monitoring to once per day (see text for exceedences of more than four consecutive days). For acute, inspect construction and select an additional control(s) that focus on cause of exceedence.
Benzo(a)pyrene	µg/L		Chronic – 0.014[e] Acute – 0.24	
Benzo(a)anthracene	µg/L		Chronic – 0.027[e] Acute – 0.49	
Dibenzofuran	µg/L		Chronic – 3.7[e] Acute – 66	
Fluoranthene	µg/L		Chronic – 6.16[e] Acute – 3980	
Fluorene	µg/L		Chronic – 3.9[e] Acute – 70	
Naphthalene	µg/L		Chronic – 12[e] Acute – 190	
Pheneanthrene	µg/L		Chronic – N/AV[e] Acute – N/AV	
Cyanide	µg/L		Chronic – 5.2[e] Acute – 22	
Water Velocity	fps	Upstream and immediately in line with operation	1.0 fps	Stop operations and secure silt curtains and other containment barriers
Distressed or Dead Fish or Birds	Visual Observation	Anywhere in proximity to site.	Any distressed, dying, or dead fish or birds.	Stop all operations, collect fish or birds, determine species, notify Services if listed species present, apply controls required by Biological Opinion and/or additional controls for non-listed species (see Section 3.2.5 for handling of distressed or dead fish)

Table 4
Water Quality Triggers for Additional Environmental Controls

Table 4 Notes:

a If field parameter monitoring results exceed trigger, then the same field parameter will be measured within 30 minutes of the determination of the exceedence. If the exceedence continues, the additional controls discussed in Section 3 will be implemented.

b Sampling will occur at the specified distance from the edge of the primary (silt curtain) containment barrier. Although flow reversals due to tidal fluctuations are rare, if such reversals are observed, sampling will be conducted up current (background) and down current for field parameters, as appropriate.

c Trigger is exceeded where downstream conditions exceed the specified amounts relative to both the event-specific background and the preconstruction background survey.

d If DO levels fall below 6.5 mg/L, additional controls discussed in Section 3 will be implemented. If DO levels fall below 6.0 mg/L, operations will cease until DO levels rise above 6.0 mg/L and additional controls discussed in Section 3 will be implemented before resumption of work.

e If chronic levels are exceeded, see text for description of activities. If acute levels are exceeded, operations will be stopped while additional controls will be applied where activities are still consistent with activities at the time the sampling occurred.

Table 5
Summary of Major Events and Milestones – Gasco Removal Action

Event or Milestone	Date
Administrative Order on Consent Signed	April 15, 2004
Design Characterization Sampling	July 2004
Pre-Design Submittal	July 2004
Engineering Evaluation/Cost Assessment Submittal	May 2005
Final Removal Action Design Submitted to EPA	July 2005
Mobilization and Site Preparation	August 22 – September 6, 2005
In-water Construction Begins	September 6, 2005
Inner Removal Area Dredging	September 6 - October 6, 2005
Additional Dredging BMPs Instituted	September 14, 2005
Outer Removal Area Dredging	October 12 - October 19, 2005
Transfer and Disposal of Material	September 14 - November 9, 2005
Pilot Cap Placement	October 20 – October 23, 2005
Fringe Cover Placement	October 21 – October 29, 2005
EPA Acceptance of Final Dredge/Cap Elevations	November 1, 2005
Demobilization	November 1 – November 11, 2005
Removal Action Complete	November 11, 2005
Year 0 sampling for MARP	January/February 2006

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
Chetco	001	18	9-14-05 1220	9-14-05 1112	66,100
BOL: 01	002	20	9-14-05 1600	9-14-05 1753	53,750
9-14-05 300	003	20	9-17-05 1015	9-17-05 1122	57,500
	004	18	9-17-05 1055	9-17-05 1146	58,500
	005	15	9-17-05 1116	9-17-05 1300	57,100
	006	12	9-17-05 1139	9-17-05 1258	65,800
	007	6	9-17-05 1156	9-17-05 1319	53,150
	008	16	9-17-05 1220	9-17-05 1333	63,200
	009	21	9-17-05 1425	9-17-05 1548	54,050
	010	23	9-17-05 1450	9-17-05 1600	59,050
	011	20	9-17-05 1510	9-17-05 1611	60,650
	012	18	9-17-05 1539	9-17-05 1641	66,550
	013	12	9-17-05 1610	9-17-05 1719	63,450
	014	15	9-17-05 1627	9-17-05 1728	74,400
	015	6	9-17-05 1647	9-17-05 1751	59,000
	016	16	9-17-05 1700	9-17-05 1752	60,600
	017	21	9-17-05 1805	9-17-05 1911	58,500
	018	23	9-17-05 1820	9-17-05 1912	62,450
	019	20	9-19-05 0809	9-19-05 0859	55,400
	020	M369	9-19-05 0835	9-19-05 0951	51,150
	021	M169	9-19-05 0905	9-19-05 1030	57,450
	022	K6	9-19-05 1125	9-19-05 1228	64,500
	023	K5	9-19-05 1155	9-19-05 1255	60,650
	024	K4	9-19-05 1223	9-19-05 1330	70,350
	025	20	9-19-05 1233	9-19-05 1349	61,000
	026	K1	9-19-05 1340	9-19-05 1506	56,500
	027	K2	9-19-05 1414	9-19-05 1540	74,450
	028	M169	9-19-05 1445	9-19-05 1610	62,000
	029	M369	9-19-05 1515	9-19-05 1619	57,200
	030	K6	9-19-05 1522	9-19-05 1629	64,000

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	031	K5	9-19-05 1540	9-19-05 1629	66,200
	032	20	9-19-05 1632	9-19-05 1713	58,200
	033	K4	9-19-05 1741	9-19-05 1841	62,400
	034	K1	9-19-05 1815	9-19-05 1921	61,250
	035	K2	9-19-05 1825	9-19-05 1922	63,600
	036	20	9-20-05 0729	9-20-05 0826	58,550
	037	K5	9-20-05 0746	9-20-05 0915	64,850
	038	K6	9-20-05 0815	9-20-05 0920	65,350
	039	K4	9-20-05 0840	9-20-05 0950	64,800
	040	K2	9-20-05 0900	9-20-05 1026	64,050
	041	K1	9-20-05 0925	9-20-05 1043	62,750
	042	M369	9-20-05 0952	9-20-05 1105	57,700
	043	M169	9-20-05 1010	9-20-05 1136	58,000
	044	C16	9-20-05 1100	9-20-05 1202	65,650
	045	C18	9-20-05 1122	9-20-05 1151	63,550
	046	D41	9-20-05 1138	9-20-05 1242	61,650
	047	20	9-20-05 1204	9-20-05 1304	60,300
	048	K6	9-20-05 1350	9-20-05 1443	68,700
	049	K5	9-20-05 1408	9-20-05 1518	70,100
	050	K4	9-20-05 1430	9-20-05 1545	66,300
	051	K2	9-20-05 1515	9-20-05 1618	65,400
	052	K1	9-20-05 1600	9-20-05 1704	64,400
	053	M169	9-20-05 1625	9-20-05 1716	61,300
	054	M369	9-20-05 1635	9-20-05 1727	65,300
	055	C16	9-20-05 1655	9-20-05 1746	64,650
	056	C18	9-20-05 1735	9-20-05 1817	61,450
	057	20	9-20-05 1755	9-20-05 1839	60,700
	058	M2	9-20-05 1830	9-20-05 1937	65,750
	059	20	9-21-05 0739	9-21-05 0841	61,050
	060	K5	9-21-05 0755	9-21-05 0859	67,150

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	061	C16	9-21-05 0816	9-21-05 0916	61,750
	062	C18	9-21-05 0841	9-22-05 1132	68,400
	063	K6	9-21-05 0858	9-21-05 0953	66,150
	064	K4	9-21-05 0920	9-21-05 1101	63,050
	065	K2	9-21-05 1012	9-21-05 1142	73,650
	066	K1	9-21-05 1130	9-21-05 1235	63,400
	067	M169	9-21-05 1155	9-21-05 1306	61,250
	068	M369	9-21-05 1205	9-21-05 1311	52,850
	069	M2	9-21-05 1235	9-21-05 1334	67,780
	070	20	9-21-05 1248	9-21-05 1343	62,270
	071	K5	9-21-05 1320	9-21-05 1435	58,550
B-10	001	C16	9-21-05 1710	9-21-05 1754	59,150
BOL: 02	002	K6	9-21-05 1820	9-21-05 1901	55,650
9/21/05 1013	003	20	9-22-05 0808	9-22-05 0802	60,650
	004	C16	9-22-05 0900	9-22-05 0940	63,950
	005	K4	9-22-05 1035	9-22-05 1143	61,950
	006	K5	9-22-05 1057	9-22-05 1157	68,500
	007	K6	9-22-05 1115	9-22-05 1214	66,650
	008	K2	9-22-05 1137	9-22-05 1242	69,150
	009	K1	9-22-05 1212	9-22-05 1408	66,050
	010	20	9-22-05 1313	9-22-05 1412	58,500
	011	K4	9-22-05 1438	9-22-05 1559	64,700
	012	M169	9-22-05 1505	9-22-05 1614	60,550
	013	K2	9-22-05 1525	9-22-05 1616	67,000
	014	K6	9-22-05 1553	9-22-05 1641	65,150
	015	20	9-22-05 1700	9-22-05 1748	64,500
	016	K5	9-22-05 1715	9-22-05 1757	69,200
	017	K1	9-22-05 1735	9-22-05 1841	64,300
	018	20	9-23-05 0742	9-23-05 0855	64,450
	019	K4	9-23-05 0808	9-23-05 0915	73,300

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	020	K6	9-23-05 0807	9-23-05 0907	66,450
	021	K2	9-23-05 0828	9-23-05 0845	74,150
	022	K1	9-23-05 0856	9-23-05 0947	60,950
	023	K5	9-23-05 0920	9-23-05 1015	70,250
	024	M169	9-23-05 0950	9-23-05 1134	66,500
	025	20	9-23-05 1135	9-23-05 1233	63,000
	026	K6	9-23-05 1200	9-23-05 1257	67,450
	027	K4	9-23-05 1231	9-23-05 1327	63,050
	028	K2	9-23-05 1250	9-23-05 1345	69,200
	029	K1	9-23-05 1310	9-23-05 1443	63,800
	030	K5	9-23-05 1330	9-23-05 1438	65,650
	031	AH6	9-23-05 1508	9-23-05 1607	64,850
	032	M169	9-23-05 1535	9-23-05 1638	65,450
	033	M1	9-23-05 1611	9-23-05 1712	66,650
	034	20	9-23-05 1705	9-23-05 1746	16,100
	035	AH6	9-26-05 0815	9-26-05 0911	65,850
	036	M1	9-26-05 0828	9-26-05 0922	67,400
	037	M169	9-26-05 0850	9-26-05 1002	61,100
	038	M369	9-26-05 0922	9-26-05 1032	63,550
	039	20	9-26-05 0925	9-26-05 1035	61,400
	040	C8	9-26-05 1045	9-26-05 1135	64,750
	041	K1	9-26-05 1142	9-26-05 1250	67,600
	042	K2	9-26-05 1150	9-26-05 1254	69,500
	043	AH6	9-26-05 1203	9-26-05 1308	66,350
	044	K6	9-26-05 1212	9-26-05 1309	66,900
	045	M1	9-26-05 1235	9-26-05 1336	71,850
	046	M169	9-26-05 1256	9-26-05 1350	58,700
	047	20	9-26-05 1252	9-26-05 1343	62,250
	048	M369	9-26-05 1308	9-26-05 1406	68,700
	049	C18	9-26-05 1319	9-26-05 1416	63,700

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	050	G3	9-26-05 1352	9-26-05 1458	63,350
	051	C8	9-26-05 1410	9-26-05 1454	65,650
	052	K2	9-26-05 1525	9-26-05 1620	64,850
	053	K1	9-26-05 1534	9-26-05 1632	66,250
	054	AH6	9-26-05 1542	9-26-05 1630	65,700
	055	20	9-26-05 1552	9-26-05 1722	62,600
	056	M1	9-26-05 1614	9-26-05 1715	66,850
	057	M369	9-26-05 1630	9-26-05 1723	61,100
	058	M169	9-26-05 1645	9-26-05 1741	61,350
	059	20	9-27-05 0650	9-27-05 0745	63,100
	060	AH6	9-27-05 0721	9-27-05 0811	64,800
	061	M369	9-27-05 0731	9-27-05 0834	65,000
	062	K1	9-27-05 0742	9-27-05 0847	66,200
	063	K2	9-27-05 0748	9-27-05 0856	66,500
	064	M169	9-27-05 0809	9-27-05 0907	65,150
	065	M1	9-27-05 0811	9-27-05 0913	68,400
	066	23	9-27-05 0838	9-27-05 0931	66,550
	067	12	9-27-05 0843	9-27-05 0937	64,300
	068	18	9-27-05 0857	9-27-05 0949	67,350
	069	16	9-27-05 0903	9-27-05 1001	67,800
	070	15	9-27-05 0914	9-27-05 1018	63,950
	071	21	9-27-05 0922	9-27-05 1024	65,300
	072	20	9-27-05 1010	9-27-05 1106	64,000
	073	K5	9-27-05 1032	9-27-05 1131	66,650
	074	K4	9-27-05 1056	9-27-05 1201	62,050
	075	AH6	9-27-05 1050	9-27-05 1150	64,800
	076	K6	9-27-05 1108	9-27-05 1205	68,350
	077	M369	9-27-05 1150	9-27-05 1305	64,150
	078	K1	9-27-05 1133	9-27-05 1255	67,300
	079	K2	9-27-05 1134	9-27-05 1239	67,950

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	080	M1	9-27-05 1153	9-27-05 1244	62,200
	081	23	9-27-05 1155	9-27-05 1246	64,750
	082	M169	9-27-05 1215	9-27-05 1310	61,800
	083	C8	9-27-05 1221	9-27-05 1302	65,150
	084	12	9-27-05 1220	9-27-05 1301	67,000
	085	18	9-27-05 1235	9-27-05 1325	64,850
	086	16	9-27-05 1239	9-27-05 1346	67,000
	087	21	9-27-05 1252	9-27-05 1354	61,700
	088	15	9-27-05 1300	9-27-05 1335	64,000
	089	M269	9-27-05 1325	9-27-05 1447	65,300
	090	20	9-27-05 1330	9-27-05 1420	63,150
	091	18	9-27-05 1341	9-27-05 1439	61,550
	092	5	9-27-05 1352	9-27-05 1431	66,050
	093	AH6	9-27-05 1403	9-27-05 1446	62,750
	094	K4	9-27-05 1419	9-27-05 1519	63,950
	095	K6	9-27-05 1423	9-27-05 1529	66,850
	096	K2	9-27-05 1450	9-27-05 1554	67,600
	097	23	9-27-05 1501	9-27-05 1553	68,200
	098	M1	9-27-05 1512	9-27-05 1611	67,500
	099	12	9-27-05 1525	9-27-05 1618	63,900
	100	K1	9-27-05 1535	9-27-05 1629	67,400
	101	C8	9-27-05 1540	9-27-05 1628	65,550
	102	M369	9-27-05 1551	9-27-05 1635	62,100
	103	M169	9-27-05 1559	9-27-05 1711	62,200
	104	18	9-27-05 1617	9-27-05 1709	67,900
	105	16	9-27-05 1620	9-27-05 1729	68,550
	106	21	9-27-05 1630	9-27-05 1733	62,850
GC-183	001	C8	9-28-05 0740	9-28-05 0833	66,000
BOL:03	002	C18	9-28-05 0750	9-28-05 0841	63,850
9/27/05 0930	003	K5	9-28-05 0758	9-28-05 0848	67,200

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	004	K1	9-28-05 0812	9-28-05 0920	63,600
	005	K4	9-28-05 0819	9-28-05 0926	63,550
	006	M169	9-28-05 0827	9-28-05 0937	65,100
	007	K6	9-28-05 0840	9-28-05 0934	68,450
	008	M369	9-28-05 0850	9-28-05 0941	63,700
	009	M2	9-28-05 0905	9-28-05 0959	67,600
	010	K2	9-28-05 0915	9-28-05 1005	68,550
	011	C8	9-28-05 1057	9-28-05 1149	67,500
	012	K5	9-28-05 1102	9-28-05 1157	66,950
	013	C18	9-28-05 1120	9-28-05 1216	64,200
	014	K6	9-28-05 1157	9-28-05 1247	67,350
	015	K4	9-28-05 1230	9-28-05 1306	61,950
	016	M369	9-28-05 1240	9-28-05 1321	61,650
	017	M169	9-28-05 1250	9-28-05 1349	61,650
	018	K2	9-28-05 1255	9-28-05 1350	68,850
	019	M2	9-28-05 1321	9-28-05 1413	70,800
	020	K5	9-28-05 1400	9-28-05 1451	66,100
	021	K6	9-28-05 1458	9-28-05 1604	67,550
	022	K4	9-28-05 1530	9-28-05 1622	66,150
	023	M369	9-28-05 1545	9-28-05 1634	62,750
	024	K2	9-28-05 1559	9-28-05 1649	66,600
	025	M169	9-28-05 1633	9-28-05 1723	65,000
	026	M2	9-28-05 1637	9-28-05 1722	66,850
	027	M369	9-29-05 0650	9-29-05 0749	63,550
	028	K5	9-29-05 0705	9-29-05 0808	65,700
	029	M2	9-29-05 0724	9-29-05 0814	67,300
	030	M169	9-29-05 0800	9-29-05 0842	62,250
	031	K2	9-29-05 0804	9-29-05 0851	67,050
	032	K4	9-29-05 0810	9-29-05 0915	64,450
	033	K6	9-29-05 0815	9-29-05 0858	66,550

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	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	034	K1	9-29-05 0831	9-29-05 0925	64,550
	035	K5	9-29-05 0957	9-29-05 1057	68,350
	036	M369	9-29-05 1015	9-29-05 1112	62,550
	037	M2	9-29-05 1036	9-29-05 1129	63,750
	038	K6	9-29-05 1113	9-29-05 1203	66,600
	039	M169	9-29-05 1140	9-29-05 1234	63,550
	040	K4	9-29-05 1203	9-29-05 1316	63,950
	041	K1	9-29-05 1213	9-29-05 1318	64,550
	042	K5	9-29-05 1257	9-29-05 1351	66,750
	043	C20	9-29-05 1324	9-29-05 1422	62,400
	044	C5	9-29-05 1350	9-29-05 1439	61,650
	045	M2	9-29-05 1406	9-29-05 1457	64,900
	046	G3	9-29-05 1432	9-29-05 1517	63,250
	047	K6	9-29-05 1433	9-29-05 1522	67,050
	048	M169	9-29-05 1519	9-29-05 1610	64,100
	049	K4	9-29-05 1523	9-29-05 1629	65,650
	050	K1	9-29-05 1550	9-29-05 1645	64,150
	051	K5	9-29-05 1551	9-29-05 1654	66,550
	052	M2	9-29-05 1708	9-30-05 0728	65,650
	053	M369	9-29-05 1714	9-30-05 0727	62,700
Chetco	001	C20	9-30-05 0735	9-30-05 0831	62,850
BOL:04	002	C5	9-30-05 0755	9-30-05 0844	60,350
9/30/05 0600	003	G3	9-30-05 0808	9-30-05 0903	63,100
	004	K1	9-30-05 0828	9-30-05 0933	65,050
	005	M169	9-30-05 0835	9-30-05 0924	64,000
	006	K6	9-30-05 0840	9-30-05 0934	66,200
	007	K4	9-30-05 0857	9-30-05 0951	65,100
	008	K5	9-30-05 0914	9-30-05 1008	66,200
	009	M2	9-30-05 1028	9-30-05 1123	65,100
	010	M369	9-30-05 1035	9-30-05 1127	63,850

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	011	G3	9-30-05 1113	10-03-05 0701	63,100
	012	M169	9-30-05 1144	9-30-05 1254	63,350
	013	K6	9-30-05 1153	9-30-05 1241	66,900
	014	K1	9-30-05 1206	9-30-05 1305	62,550
	015	K4	9-30-05 1214	9-30-05 1323	64,100
	016	K5	9-30-05 1223	9-30-05 1322	65,700
	017	M2	9-30-05 1341	9-30-05 1451	66,950
	018	M369	9-30-05 1341	9-30-05 1451	63,000
	019	K6	9-30-05 1458	9-30-05 1542	65,500
	020	K1	9-30-05 1524	9-30-05 1620	65,050
	021	M69	9-30-05 1530	9-30-05 1623	62,300
	022	M169	9-30-05 1549	9-30-05 1641	65,500
	023	K4	9-30-05 1552	9-30-05 1659	65,150
	024	K5	9-30-05 1605	9-30-05 1700	66,750
	025	AH6	10-03-05 0710	10-03-05 0806	66,100
	026	M369	10-03-05 0730	10-03-05 0836	63,800
	027	20	10-03-05 0731	10-03-05 0823	66,550
	028	M269	10-03-05 0750	10-03-05 0855	66,850
	029	M169	10-03-05 0830	10-03-05 0932	63,900
	030	G3	10-03-05 0957	10-03-05 1107	63,650
	031	AH6	10-03-05 0134	10-03-05 1128	66,200
	032	20	10-03-05 0144	10-03-05 1140	63,250
	033	M269	10-03-05 0103	10-03-05 1256	66,700
	034	K6	10-03-05 0127	10-03-05 1312	65,800
	035	K4	10-03-05 0130	10-03-05 1336	65,650
	036	M169	10-03-05 0134	10-03-05 1346	63,250
	037	K2	10-03-05 0134	10-03-05 1329	70,150
	038	C20	10-03-05 0159	10-03-05 1408	63,650
	039	C5	10-03-05 0110	10-03-05 1410	60,350
	040	G3	10-03-05 0128	10-03-05 1423	64,450

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	041	AH6	10-03-05 0150	10-03-05 1442	66,900
	042	20	10-03-05 0100	10-03-05 1508	63,150
	043	M369	10-03-05 0120	10-03-05 1514	63,200
	044	M269	10-03-05 0113	10-03-05 1602	65,500
	045	K6	10-03-05 0130	10-03-05 1618	66,500
	046	K4	10-03-05 0155	10-03-05 1649	65,550
	047	K2	10-03-05 0108	10-03-05 1650	67,850
	048	M169	10-03-05 0140	10-03-05 1726	62,500
	049	G3	10-03-05 0158	10-03-05 1736	63,300
	050	G3	10-04-05 0659	10-04-05 0749	62,750
	051	20	10-04-05 0705	10-04-05 0753	64,100
	052	AH6	10-04-05 0712	10-04-05 0758	66,250
	053	C20	10-04-05 0723	10-04-05 0812	62,900
	054	C5	10-04-05 0736	10-04-05 0822	62,750
	055	M369	10-04-05 0736	10-04-05 0825	63,550
	056	K4	10-04-05 0745	10-04-05 0834	65,200
	057	K2	10-04-05 0755	10-04-05 0849	66,200
	058	M269	10-04-05 0832	10-04-05 0922	66,300
	059	M169	10-04-05 0847	10-04-05 0942	62,800
	060	G3	10-04-05 1006	10-04-05 1050	64,150
	061	20	10-04-05 1013	10-04-05 1102	64,100
	062	AH6	10-04-05 1019	10-04-05 1109	66,950
	063	C20	10-04-05 1026	10-04-05 1119	65,650
	064	C5	10-04-05 1035	10-04-05 1128	58,800
	065	M369	10-04-05 1039	10-04-05 1134	63,500
	066	K4	10-04-05 1047	10-04-05 1137	66,450
	067	K2	10-04-05 1105	10-04-05 1153	66,700
	068	M269	10-04-05 1132	10-04-05 1227	65,100
	069	K1	10-04-05 1210	10-04-05 1301	65,000
	070	20	10-04-05 1306	10-04-05 1356	63,050

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	071	AH6	10-04-05 1316	10-04-05 1403	65,300
	072	C20	10-04-05 1338	10-04-05 1427	67,200
	073	C5	10-04-05 1349	10-04-05 1435	59,600
	074	M369	10-04-05 1354	10-04-05 1443	62,000
	075	K4	10-04-05 1411	10-04-05 1508	66,750
	076	K2	10-04-05 1425	10-04-05 1525	64,050
	077	M269	10-04-05 1435	10-04-05 1545	64,650
	078	K1	10-04-05 1444	10-04-05 1622	62,850
	079	20	10-04-05 1602	10-04-05 1647	62,950
	080	AH6	10-04-05 1606	10-04-05 1649	65,700
	081	C20	10-04-05 1636	10-04-05 1720	62,000
	082	C5	10-04-05 1652	10-04-05 1738	60,550
	083	M369	10-04-05 1655	10-04-05 1743	61,800
	084	K4	10-04-05 1706	10-04-05 1800	64,200
	085	K2	10-04-05 1716	10-04-05 1801	65,850
	086	M269	10-04-05 1736	10-04-05 1823	65,450
	087	20	10-05-05 0642	10-05-05 0748	64,200
	088	AH6	10-05-05 0700	10-05-05 0800	64,800
	089	C20	10-05-05 0720	10-05-05 0812	65,350
	090	C5	10-05-05 0728	10-05-05 0824	61,400
	091	M369	10-05-05 0729	10-05-05 0921	62,600
	092	M169	10-05-05 0740	10-05-05 0836	63,800
	093	M269	10-05-05 0745	10-05-05 0854	66,600
	094	K1	10-05-05 0759	10-05-05 0901	63,700
	095	K4	10-05-05 0809	10-05-05 0947	66,150
	097	K2	10-05-05 0823	10-05-05 0950	68,700
B-10	001	K4	10-06-05 1028	10-06-05 1128	64,800
BOL: 05	002	K2	10-06-05 1028	10-06-05 1125	67,050
10/5/05, 10:00 AM	003	K1	10-06-05 1102	10-06-05 1155	66,250
	004	M2	10-06-05 1142	10-06-05 1309	65,900

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	005	C20	10-06-05 1207	10-06-05 1301	66,600
	006	C18	10-06-05 1214	10-06-05 1314	66,200
	007	AH6	10-06-05 1340	10-06-05 1444	66,300
	008	20	10-06-05 1347	10-06-05 1445	63,600
	009	K2	10-06-05 1403	10-06-05 1505	67,200
	010	M269	10-06-05 1414	10-06-05 1509	64,100
	011	M369	10-06-05 1419	10-03-05 1519	63,100
	012	K4	10-06-05 1431	10-06-05 1532	65,650
	013	K1	10-06-05 1443	10-06-05 1600	65,400
	014	M169	10-06-05 1533	10-06-05 1641	61,700
	015	20	10-07-05 0605	10-07-05 0700	62,350
	016	AH6	10-07-05 0611	10-07-05 0707	64,900
	017	K4	10-07-05 0635	10-07-05 0740	67,350
	018	K1	10-07-05 0645	10-07-05 0745	63,350
	019	M169	10-07-05 0655	10-07-05 0754	64,450
	020	C20	10-07-05 0710	10-07-05 0820	66,650
	021	K2	10-07-05 0715	10-07-05 0822	66,150
	022	C18	10-07-05 0727	10-07-05 0834	65,000
	023	M269	10-07-05 0735	10-07-05 0844	64,750
	024	M2	10-07-05 0750	10-07-05 0852	68,450
	025	K4	10-07-05 0945	10-07-05 1053	64,500
	026	AH8	10-07-05 0958	10-07-05 1052	64,750
	027	20	10-07-05 1006	10-07-05 1107	62,200
	028	K1	10-07-05 1033	10-07-05 1129	64,500
	029	K5	10-07-05 1040	10-07-05 1145	66,950
	030	K2	10-07-05 1100	10-07-05 1154	67,250
	031	K4	10-07-05 1355	10-07-05 1455	65,250
	032	20	10-07-05 1406	10-07-05 1503	62,900
	033	AH6	10-07-05 1413	10-07-05 1506	61,250
	034	K1	10-07-05 1425	10-07-05 1548	62,900

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	035	K5	10-07-05 1434	10-07-05 1557	64,750
	036	K2	10-07-05 1442	10-07-05 1558	68,750
	037	16	10-10-05 0914	10-10-05 1020	68,750
	038	AH6	10-10-05 0916	10-10-05 1015	75,000
	039	M369	10-10-05 0926	10-10-05 1026	61,950
	040	M2	10-10-05 0940	10-10-05 1043	68,400
	041	M69	10-10-05 0956	10-10-05 1051	62,600
	042	M169	10-10-05 0958	10-10-05 1055	63,400
	043	K6	10-10-05 1148	10-10-05 1253	66,850
	044	K5	10-10-05 1148	10-10-05 1256	65,850
	045	K4	10-10-05 1236	10-10-05 1335	63,000
	046	K2	10-10-05 1240	10-10-05 1404	67,050
	047	16	10-10-05 1250	10-10-05 1339	67,300
	048	M2	10-10-05 1330	10-10-05 1423	66,850
	049	M169	10-10-05 1347	10-10-05 1449	65,600
	050	M69	10-10-05 1405	10-10-05 1505	62,500
	051	AH6	10-10-05 1450	10-10-05 1556	67,150
	052	K5	10-10-05 1457	10-10-05 1551	66,400
	053	K6	10-10-05 1523	10-10-05 1606	67,350
	054	K4	10-10-05 1548	10-10-05 1640	67,150
	055	16	10-10-05 1600	10-10-05 1655	67,400
	056	K2	10-10-05 1613	10-10-05 1720	68,600
	057	M369	10-10-05 1625	10-10-05 1727	65,500
	058	K1	10-10-05 1710	10-11-05 0739	64,400
	059	K5	10-11-05 0641	10-11-05 0734	67,700
	060	K4	10-11-05 0654	10-11-05 0758	64,500
	061	K6	10-11-05 0658	10-11-05 0745	67,350
	062	16	10-11-05 0707	10-11-05 0801	65,700
	063	M169	10-11-05 0720	10-11-05 0818	63,950
	064	AH6	10-11-05 0720	10-11-05 0817	66,250

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	065	M69	10-11-05 0738	10-11-05 0838	62,650
	066	M369	10-11-05 0736	10-11-05 0835	65,100
	067	M2	10-11-05 0749	10-11-05 0900	68,050
	068	K2	10-11-05 0751	10-11-05 0903	68,650
	069	K5	10-11-05 0938	10-11-05 1028	66,300
	070	K6	10-11-05 0955	10-11-05 1042	69,400
	071	16	10-11-05 1016	10-11-05 1103	67,300
	072	K4	10-11-05 1021	10-11-05 1114	66,000
	073	AH6	10-11-05 1038	10-11-05 1124	64,750
	074	K1	10-11-05 1051	10-11-05 1139	63,950
	075	M369	10-11-05 1111	10-11-05 1209	65,200
	076	M169	10-11-05 1128	10-11-05 1227	63,850
	077	M2	10-11-05 1131	10-11-05 1223	60,300
	078	K2	10-11-05 1132	10-11-05 1221	66,100
	079	M69	10-11-05 1150	10-11-05 1248	61,450
	080	K6	10-11-05 1248	10-11-05 1341	67,400
	081	K5	10-11-05 1248	10-11-05 1332	68,150
	082	16	10-11-05 1310	10-11-05 1411	67,450
	083	AH6	10-11-05 1325	10-11-05 1415	65,400
	084	K4	10-11-05 1341	10-11-05 1459	63,750
	085	K1	10-11-05 1347	10-11-05 1500	63,950
	086	M369	10-11-05 1413	10-11-05 1506	65,800
	087	M2	10-11-05 1439	10-11-05 1535	66,700
	088	K2	10-11-05 1445	10-11-05 1536	67,250
	089	M169	10-11-05 1457	10-11-05 1558	66,150
	090	M69	10-11-05 1520	10-11-05 1659	62,750
	091	M369	10-12-05 0645	10-12-05 0746	67,400
	092	M2	10-12-05 0701	10-12-05 0802	66,150
	093	M169	10-12-05 0713	10-12-05 0803	66,400
	094	K6	10-12-05 0728	10-12-05 0815	67,650

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	095	M69	10-11-05 0720	10-12-05 0850	64,050
	096	K5	10-12-05 0735	10-12-05 0841	66,100
	097	K4	10-12-05 0740	10-12-05 0854	63,050
	098	K2	10-12-05 0750	10-12-05 0849	67,350
	099	K1	10-12-05 0811	10-12-05 0912	63,500
	100	M2	10-12-05 1026	10-12-05 1117	64,450
	101	M169	10-12-05 1028	10-12-05 1126	65,200
	102	M369	10-12-05 1032	10-12-05 1124	65,500
	103	K6	10-12-05 1039	10-12-05 1201	67,550
	104	K5	10-12-05 1047	10-12-05 1202	65,600
	105	K1	10-12-05 1145	10-12-05 1235	62,700
	106	M69	10-12-05 1145	10-12-05 1302	62,950
	107	K4	10-12-05 1152	10-12-05 1255	63,450
	108	K2	10-12-05 1205	10-12-05 1256	67,200
GC-183	001	K2	10-13-05 0917	10-13-05 1032	67,750
BOL:06	002	K4	10-13-05 0935	10-13-05 1054	64,100
10/12/05, 6:00 AM	003	K1	10-13-05 0950	10-13-05 1049	64,300
	004	K6	10-13-05 1021	10-13-05 1127	67,000
	005	K2	10-13-05 1257	10-13-05 1400	66,750
	006	K4	10-13-05 1259	10-13-05 1441	63,550
	007	K1	10-13-05 1342	10-13-05 1441	63,250
	008	K6	10-13-05 0000	10-13-05 1446	67,350
	009	K6	10-14-05 0644	10-14-05 0747	68,000
	010	K4	10-14-05 0650	10-14-05 0752	64,400
	011	K2	10-14-05 0700	10-03-05 0801	67,450
	012	K1	10-14-05 0710	10-14-05 0820	62,550
	013	K4	10-14-05 1018	10-14-05 1112	64,400
	014	K6	10-14-05 1100	10-14-05 1201	66,400
	015	K1	10-14-05 1131	10-14-05 1244	64,650
	016	K2	10-14-05 1119	10-14-05 1230	67,350

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	017	M269	10-14-05 1314	10-14-05 1429	64,250
	018	M169	10-14-05 1431	10-14-05 1526	62,500
	019	K5	10-17-05 1105	10-17-05 1207	67,650
	020	K6	10-17-05 1117	10-17-05 1246	64,150
	021	K4	10-17-05 1128	10-17-05 1238	67,650
	022	K2	10-17-05 1135	10-17-05 1251	67,550
	023	K1	10-17-05 1141	10-17-05 1256	67,200
	024	18	10-17-05 1358	10-17-05 1458	69,100
	025	K5	10-17-05 1425	10-17-05 1528	68,600
	026	K6	10-17-05 1500	10-17-05 1546	66,900
	027	K2	10-17-05 1509	10-17-05 1558	67,650
	028	K1	10-17-05 1523	10-17-05 1617	66,750
	029	K4	10-17-05 1531	10-17-05 1617	65,850
	030	M369	10-17-05 1542	10-17-05 1646	61,050
	031	M169	10-17-05 1644	10-18-05 0717	63,750
	032	18	10-17-05 1720	10-18-05 0728	69,550
	033	K5	10-18-05 0635	10-18-05 0747	70,200
	034	K6	10-18-05 0645	10-18-05 0748	69,050
	035	K4	10-18-05 0651	10-18-05 0841	66,850
	036	M369	10-18-05 0704	10-18-05 0831	65,900
	037	23	10-18-05 0714	10-18-05 0835	68,750
	038	12	10-18-05 0722	10-18-05 0904	64,800
	039	K2	10-18-05 0735	10-18-05 0850	67,250
	040	K1	10-18-05 0745	10-18-05 0849	63,150
	041	K5	10-18-05 1015	10-18-05 1130	66,350
	042	K6	10-18-05 1201	10-18-05 1131	67,300
	043	M169	10-18-05 1042	10-18-05 1135	65,050
	044	K4	10-18-05 1109	10-18-05 1222	64,000
	045	K2	10-18-05 1116	10-18-05 1228	67,550
	046	23	10-18-05 1122	10-18-05 1235	66,350

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	047	K1	10-18-05 1135	10-18-05 1246	64,400
	048	12	10-18-05 1144	10-18-05 1240	65,300
	049	M369	10-18-05 1158	10-18-05 1252	64,500
	050	K5	10-18-05 1355	10-18-05 1450	66,900
	051	12	10-18-05 1500	10-18-05 1553	65,700
	052	23	10-18-05 1508	10-18-05 1556	67,250
	053	K2	10-18-05 1512	10-18-05 1600	66,950
	054	K4	10-18-05 1519	10-18-05 1626	65,300
	055	K1	10-18-05 1548	10-18-05 1633	66,050
Chetco	001	12	10-25-05 0718	10-25-05 0817	67,850
BOL:07	002	CM19	10-25-05 0755	10-25-05 0930	58,950
	003	CM6	10-25-05 0810	10-25-05 0932	62,250
	004	K4	10-25-05 0935	10-25-05 0152	62,350
	005	K6	10-25-05 0945	10-11-05 0453	67,300
	006	K5	10-25-05 1012	10-25-05 1054	65,700
	007	12	10-25-05 1039	10-25-05 1130	66,150
	008	K2	10-25-05 1111	10-25-05 1213	69,650
	009	K1	10-25-05 1121	10-25-05 1217	65,800
	010	20	10-25-05 1112	10-25-05 1211	64,200
	011	M369	10-25-05 1124	10-25-05 1223	66,250
	012	M169	10-25-05 1213	10-25-05 1259	66,300
	013	CM19	10-25-05 1246	10-25-05 1339	63,400
	014	CM6	10-25-05 1246	10-25-05 1337	56,800
	015	K4	10-25-05 1312	10-25-05 1407	63,500
	016	K6	10-25-05 1327	10-25-05 1408	70,050
	017	K5	10-25-05 1340	10-25-05 1412	66,550
	018	12	10-25-05 1357	10-25-05 1447	65,700
	019	K2	10-25-05 1445	10-25-05 1538	68,350
	020	K1	10-25-05 1455	10-25-05 1544	64,800
	021	M369	10-25-05 1504	10-25-05 1550	64,100

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	022	20	10-25-05 1515	10-25-05 1602	63,750
	023	M169	10-25-05 1528	10-25-05 1605	62,300
	024	CM19	10-25-05 1645	10-25-05 1746	59,300
	025	CM3	10-25-05 1658	10-25-05 1745	61,650
	026	K5	10-26-05 0645	10-26-05 0743	66,000
	027	20	10-26-05 0704	10-26-05 0750	63,400
	028	12	10-26-05 0715	10-26-05 0811	65,350
	029	K4	10-26-05 0717	10-26-05 0828	65,400
	030	K6	10-26-05 0723	10-26-05 0825	68,250
	031	CM19	10-26-05 0803	10-26-05 0914	49,800
	032	CM3	10-26-05 0807	10-26-05 0912	64,000
	033	M169	10-26-05 0810	10-26-05 0901	64,800
	034	K2	10-26-05 0819	10-26-05 0906	67,950
	035	M369	10-26-05 0822	10-26-05 0914	65,350
	036	K1	10-26-05 0830	10-26-05 0922	66,050
	037	K5	10-26-05 1003	10-26-05 1050	68,150
	038	20	10-26-05 1030	10-26-05 1113	63,900
	039	22	10-26-05 1032	10-26-05 1118	67,150
	040	12	10-26-05 1035	10-26-05 1122	64,100
	041	K6	10-26-05 1040	10-26-05 1126	67,500
	042	K4	10-26-05 1100	10-26-05 1158	63,300
	043	K2	10-26-05 1122	10-26-05 1208	66,850
	044	M169	10-26-05 1134	10-26-05 1227	67,600
	045	M369	10-26-05 1139	10-26-05 1243	64,200
	046	K1	10-26-05 1200	10-26-05 1252	66,150
	047	CM19	10-26-05 1230	10-26-05 1333	55,450
	048	CM3	10-26-05 1221	10-26-05 1330	62,300
	049	K5	10-26-05 1255	10-26-05 1342	67,350
	050	20	10-26-05 1316	10-26-05 1406	64,050
	051	22	10-26-05 1332	10-26-05 1423	67,000

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	052	12	10-26-05 1339	10-26-05 1426	66,150
	053	K6	10-26-05 1346	10-26-05 1433	68,350
	054	K4	10-26-05 1420	10-26-05 1515	64,550
	055	K2	10-26-05 1428	10-26-05 1518	67,750
	056	M169	10-26-05 1442	10-26-05 1531	67,200
	057	M369	10-26-05 1454	10-26-05 1535	67,600
	058	K1	10-26-05 1504	10-26-05 1555	65,300
	059	CM19	10-26-05 1625	10-26-05 1715	53,850
	060	CM3	10-26-05 1625	10-26-05 1714	62,200
	061	K5	10-27-05 0700	10-27-05 0747	67,250
	062	12	10-27-05 0711	10-27-05 0759	65,900
	063	K4	10-27-05 0719	10-27-05 0806	65,500
	064	K6	10-27-05 0725	10-27-05 0830	64,950
	065	M369	10-27-05 0728	10-27-05 0838	61,950
	066	K1	10-27-05 0737	10-27-05 0837	63,650
	067	20	10-27-05 0743	10-27-05 0836	61,950
	068	CM3	10-27-05 0752	10-27-05 0855	59,400
	069	CM19	10-27-05 0759	10-27-05 0849	56,300
	070	K2	10-27-05 0805	10-27-05 0900	68,000
	071	M169	10-27-05 0813	10-27-05 0905	66,800
	072	K5	10-27-05 0957	10-27-05 1047	66,700
	073	12	10-27-05 1013	10-27-05 1058	66,350
	074	K4	10-27-05 1020	10-27-05 1111	64,750
	075	M369	10-27-05 1057	10-27-05 1139	64,750
	076	K6	10-27-05 1124	10-27-05 1215	68,050
	077	K2	10-27-05 1132	10-27-05 1222	66,950
	078	K1	10-27-05 1141	10-27-05 1233	65,750
	079	CM19	10-27-05 1209	10-27-05 1301	57,700
	080	M169	10-27-05 1200	10-27-05 1253	62,900
	081	CM3	10-27-05 1209	10-27-05 1302	61,750

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	082	K5	10-27-05 1311	10-27-05 1412	65,900
	083	K4	10-27-05 1320	10-27-05 1412	63,650
	084	12	10-27-05 1328	10-27-05 1421	66,850
	085	M369	10-27-05 1408	10-27-05 1455	64,200
	086	K6	10-27-05 1440	10-27-05 1524	67,200
	087	K2	10-27-05 1449	10-27-05 1539	67,900
	088	K1	10-27-05 1509	10-27-05 1555	63,900
	089	M169	10-27-05 1522	10-27-05 1558	64,350
	090	CM19	10-27-05 1543	10-27-05 1637	56,150
	091	CM3	10-27-05 1558	10-27-05 1635	63,050
	092	K4	10-28-05 0610	10-28-05 0719	67,600
	093	K5	10-28-05 0619	10-28-05 0723	66,550
	094	K6	10-28-05 0632	10-28-05 0721	66,600
	095	K2	10-28-05 0635	10-28-05 0731	68,100
	096	K1	10-28-05 0645	10-28-05 0745	64,750
	097	CM19	10-28-05 0700	10-28-05 0819	56,150
	098	CM3	10-28-05 0700	10-28-05 0812	58,150
	099	K6	10-28-05 0936	10-28-05 1029	66,800
	100	K5	10-28-05 0943	10-28-05 1043	68,500
	101	K4	10-28-05 0950	10-28-05 1100	67,550
	102	K2	10-28-05 1020	10-28-05 1123	69,050
	103	K1	10-28-05 1020	10-28-05 1117	64,200
B-10	001	12	11-02-05 0810	11-02-05 0957	62,950
BOL:08	002	20	11-02-05 0816	11-02-05 1020	64,200
	003	K2	11-02-05 1053	11-02-05 1313	67,600
	004	K1	11-02-05 1115	11-02-05 1307	63,300
	005	12	11-02-05 1204	10-11-05 1357	63,550
	006	20	11-02-05 1210	11-02-05 1359	64,050
	007	C20	11-02-05 1325	11-02-05 1514	62,000
	008	M2	11-02-05 1341	11-02-05 0000	64,650

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	009	C16	11-02-05 1442	11-02-05 1652	67,500
	010	M169	11-02-05 1445	11-02-05 1657	63,600
	011	K1	11-02-05 1528	11-02-05 1712	64,350
	012	K2	11-02-05 1535	11-02-05 1717	66,500
	013	12	11-02-05 1542	11-02-05 1727	64,600
	014	20	11-02-05 1620	11-02-05 1745	62,500
	015	12	11-03-05 0612	11-03-05 0814	64,300
	016	C20	11-03-05 0622	11-03-05 0822	64,050
	017	C16	11-03-05 0627	11-03-05 0828	68,650
	018	20	11-03-05 0637	11-03-05 0836	64,850
	019	M2	11-03-05 0704	11-03-05 0900	69,050
	020	M169	11-03-05 0710	11-03-05 0901	65,650
	021	K2	11-03-05 0723	11-03-05 0915	68,450
	022	K1	11-03-05 0738	11-03-05 0934	64,850
	023	12	11-03-05 0938	11-03-05 1122	64,700
	024	C20	11-03-05 0946	11-03-05 1129	63,350
	025	20	11-03-05 0953	11-03-05 1135	62,250
	026	M169	11-03-05 1006	11-03-05 1159	62,950
	027	C16	11-03-05 1015	11-03-05 1202	66,000
	028	M2	11-03-05 1032	11-03-05 1232	67,850
	029	K4	11-03-05 1036	11-03-05 1316	64,350
	030	22	11-03-05 1053	11-03-05 1240	70,750
	031	K2	11-03-05 1100	11-03-05 1246	68,400
	032	K1	11-03-05 1114	11-03-05 1303	65,400
	033	C20	11-03-05 1254	11-03-05 1447	71,950
	034	20	11-03-05 1309	11-03-05 1509	64,100
	035	12	11-03-05 1319	11-03-05 1510	66,550
	036	C16	11-03-05 1329	11-03-05 1519	69,200
	037	M169	11-03-05 1343	11-03-05 1544	66,350
	038	M2	11-03-05 1415	11-03-05 1608	67,800

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	039	K2	11-03-05 1425	11-03-05 1612	67,450
	040	22	11-03-05 1436	11-03-05 1630	69,450
	041	K1	11-03-05 1445	11-03-05 1647	64,850
	042	K4	11-03-05 1453	11-03-05 1649	65,350
	043	22	11-04-05 0605	11-04-05 0807	67,350
	044	12	11-04-05 0616	11-04-05 0809	65,900
	045	20	11-04-05 0620	11-04-05 0813	64,300
	046	K4	11-04-05 0630	11-04-05 0836	65,700
	047	C20	11-04-05 0640	11-04-05 0837	65,250
	048	C16	11-04-05 0650	11-04-05 0838	68,900
	049	M2	11-04-05 0658	11-04-05 0904	66,750
	050	M169	11-04-05 0708	11-04-05 0902	64,350
	051	K2	11-04-05 0715	11-04-05 0958	67,150
	052	K1	11-04-05 0735	11-04-05 1000	64,750
	053	22	11-04-05 0945	11-04-05 1140	67,450
	054	12	11-04-05 0953	11-04-05 1141	63,700
	055	K4	11-04-05 1004	11-04-05 1150	65,400
	056	C20	11-04-05 1012	11-04-05 1153	66,050
	057	M169	11-04-05 1017	11-04-05 1201	64,850
	058	M2	11-04-05 1025	11-04-05 1221	75,350
	059	C16	11-04-05 1037	11-04-05 1219	68,500
	060	20	11-04-05 1040	11-04-05 1221	63,300
	061	K5	11-04-05 1051	11-04-05 1232	67,100
	062	K6	11-04-05 1100	11-04-05 1241	68,550
	063	K1	11-04-05 1108	11-04-05 1301	65,150
	064	K2	11-04-05 1112	11-04-05 1257	67,650
	065	K1	11-07-05 1052	11-07-05 1346	66,000
	066	K2	11-07-05 1124	11-07-05 1343	67,550
	067	K4	11-07-05 1130	11-07-05 1345	65,550
	068	M2	11-07-05 1503	11-07-05 1656	66,900

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	069	K1	11-07-05 1523	11-07-05 1721	61,850
	070	K4	11-07-05 1525	11-07-05 1722	64,800
	071	K2	11-07-05 1536	11-07-05 1723	67,500
	072	K4	11-08-05 0619	11-08-05 0826	64,300
	073	C8	11-08-05 0632	11-08-05 0835	66,350
	074	C16	11-08-05 0644	11-08-05 0836	69,250
	075	M2	11-08-05 0651	11-08-05 0902	69,200
	076	K2	11-08-05 0655	11-08-05 0856	68,300
	077	M269	11-08-05 0711	11-08-05 0906	65,750
	078	M169	11-08-05 0724	11-08-05 0917	66,350
	079	K6	11-08-05 0938	11-08-05 1135	65,750
	080	K5	11-08-05 0945	11-08-05 1138	69,900
	081	K4	11-08-05 0954	11-08-05 1141	63,750
	082	C8	11-08-05 0959	11-08-05 1148	64,050
	083	C16	11-08-05 1013	11-08-05 1153	67,700
	084	K2	11-08-05 1053	11-08-05 1240	66,150
	085	M2	11-08-05 1105	11-08-05 1257	66,250
	086	M269	11-08-05 1110	11-08-05 1308	62,600
	087	M169	11-08-05 1117	11-08-05 1320	64,700
	088	C8	11-08-05 1310	11-08-05 1509	63,950
	089	C16	11-08-05 1316	11-08-05 1512	67,550
	090	K5	11-08-05 1330	11-08-05 1522	66,150
	091	K6	11-08-05 1340	11-08-05 1534	67,000
	092	K4	11-08-05 1340	11-08-05 1550	62,900
	093	K2	11-08-05 1344	11-08-05 1537	66,700
	094	M2	11-08-05 1458	11-08-05 1652	67,050
	095	M269	11-08-05 1510	11-08-05 1646	65,400
	096	M169	11-08-05 1519	11-08-05 1657	65,750
	097	K4	11-09-05 0716	11-09-05 0947	67,250
	098	M2	11-09-05 0735	11-09-05 0941	61,900

Table 6
Record of Truckloads of Material Transported from Transfer Station to the Landfill

Barge ID/Bill of Lading No./Date and Time Received at Port of Morrow	Transfer to Truck				
	Manifest Extension (Truck)	Truck ID	Date and Time Out of Port of Morrow	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW
	099	K2	11-09-05 1028	11-09-05 1218	68,050
	100	K4	11-09-05 0000	11-09-05 1309	63,750
	101	M2	11-09-05 0000	11-09-05 1448	65,900
	102	K2	11-09-05 0000	11-09-05 1644	67,300

Table 7
Summary of Debris and Water Taken from Transfer Station to Landfill

Manifest	Date and Time Logged in at CWMNW	Recorded Weight at CWMNW (pounds)	Volume of Water (gallons)	Description
DEB01	10-12-05 1541	36,000	NA	Debris (pilings, etc.)
WC001	10-14-05 1150	20,700	2,464	Water
BAKR1	10-14-05 0902	28,450	3,428	Water
BAKR2	10-14-05 1218	31,100	NA	Water
BAKR3	10-14-05 1549	30,700	3,655	Water
BAKR04	10-18-05 0000	38,050	4,584	Water
BAK05	10-20-05 0854	31,900	3,798	Water
BAK06	10-21-05 0837	1,450	167	Water
BAK07	10-28-05 0936	35,900	4,325	Water
BAK08	10-31-05 0955	37,200	4,429	Water
1888A	11-05-05 1243	10,050	1,182	Water
DEB02	11-08-05 1314	8,900	NA	Debris
22803	11-08-05 1519	32,070	NA	Debris
22801	11-09-05 1439	45,750	NA	Debris
BAK09	11-10-05 0841	37,500	4,464	Water
22802	11-10-05 1259	12,590	NA	Debris
DEB03	11-10-05 1427	37,200	NA	Debris
DEB05	11-11-05 0958	30,950	NA	Debris
22805	11-11-05 1315	34,750	NA	Debris
BAK10	11-11-05 1342	15,200	1,821	Water
DEB06	11-11-05 1422	12,250	NA	Debris
DEB07	11-11-05 1452	21,150	NA	Debris

Notes:
NA = Not applicable
CWMNW = Columbia Waste Management Northwest Subtitle C Landfill Facility

Table 8
Transportation and Disposal Performance Standards (as described in EPA's Letter dated January 14, 2005 regarding "Waste Material Disposal") - Compliance Summary

Disposal Performance Standard	Compliance with Standard
Risk of Release During Transport	
1. Measures taken at the disposal facility shall be commensurate with those at the on-site transloading facility to ensure offsite tracking is controlled at the disposal facility tipping pad area(s) (e.g. chemical testing, disposable truck pad, dry brushing, etc.).	In compliance with its operating permit (RCRA Subtitle C), Chemical Waste Management of the Northwest, Inc. (CWMNW) inspects and decontaminates trucks prior to releasing them from the working area of the landfill.
2. Transporting vehicles shall be sealed and tarped to limit contaminant migration.	All vehicles transporting material from the Gasco removal action will be sealed and tarped.
3. Spill response and contingency plans for over water and overland transport of waste material shall be included in the RAPP.	Spill response and contingency measures are included in the final TDP.
Worker protection	
1. NW Natural has indicated that the material may be treated to eliminate free liquid prior to disposal. Treatment may include dewatering directly within the haul barge and application of a drying agent (Portland cement, quicklime, or paper-based additive). The primary concern to worker health and safety with the sediment waste material is the presence of elevated concentrations of benzene as a result of dewatering/treatment. This information shall be included in the revised RAPP and provided to the disposal facility for inclusion into the special waste management plan.	Water will be removed from dredged material via application of a drying agent at the Site. All of the transportation and disposal contractors that will work on the removal action have been provided the waste profile and summary of the analytical data. The special waste management plan is a requirement that is applicable to Municipal Landfills and does not apply to hazardous waste landfills, such as CWMNW. Monitoring for volatile air emissions and safety precautions (e.g., donning respirators if specified levels are exceeded) is included in the Construction Health and Safety Plan (CHASP) (Appendix B).
2. Based on conversations with the landfill operators, landfill personnel at the Columbia Ridge Landfill and the Wasco County Landfill are not, in general, trained for handling of hazardous waste in accordance with OSHA regulations 29 CFR 1910.120. In addition, they are generally not equipped for spill response or have the necessary monitoring equipment to ensure worker safety for materials such as the contaminated sediment removed from the Gasco site. It is required that all site personnel working with the Gasco material be adequately trained to safely perform their assigned job duties. Specifically, landfill personnel and offloading facility personnel who have the potential to come into contact with the Gasco waste shall be OSHA 40-hour trained for hazardous waste operations (HAZWOPER). Documentation will be required from landfill operators demonstrating that landfill workers have current training prior to approving a specific disposal facility.	Disposal at a Subtitle C facility was selected in the EE/CA. Workers at the CWMNW landfill comply with the applicable OSHA regulations, including the requirement for 24-hour HAZWOPER training. CWMNW maintains training records and is regularly audited.
3. Airborne contaminants (specifically benzene) can present a threat to the health and safety of site workers. NW Natural is required to evaluate respirator use for all personnel handling the waste. This may be accomplished through air monitoring. NW Natural must ensure that no worker is exposed to a substance that exceeds the 8-hour time weighted average exposure value, short-term exposure value, or ceiling limit, as appropriate. Air monitoring may be reduced or eliminated after sufficient air quality data has been established.	Air monitoring will be performed, per the CHASP. All workers at the disposal facility in contact with waste, including truck drivers, will comply with the CWMNW HASP, which requires that workers have respirators.

Table 8
Transportation and Disposal Performance Standards (as described in EPA's Letter dated January 14, 2005 regarding "Waste Material Disposal") -
Compliance Summary

Disposal Performance Standard	Compliance with Standard
4. Health and safety information shall be conveyed to workers via formal briefing sessions and daily health and safety meetings. The meetings shall include potential hazardous contaminant issues, required PPE, physical hazards, other issues as appropriate.	A preconstruction briefing and daily meetings will be held to review the work to be performed, associated hazards, and appropriate safety equipment and protocol.
5. Site inspections shall be conducted on a daily basis by an independent entity (e.g. NWN contractor construction quality assurance personnel) at the disposal landfill and offloading facilities to ensure compliance with the special waste management plan, the RAPP, and other relevant requirements. EPA will conduct periodic site inspections of the landfill facility and offloading facility during the course of the project.	Independent inspections will be performed at the transfer station and the disposal facility to monitor for compliance with the RAPP and other relevant requirements. A special waste management plan is not required for Subtitle C disposal facilities.
6. A site control plan shall be developed and implemented at the disposal facility and offloading facility in order to prevent unauthorized worker or public contact with waste material. Due to the use of municipal landfills (Subtitle D) by the general public, a specific work zone shall be set up and used exclusively for the Gasco material. The work zone shall be located away from any area of the site that has public access. In addition, landfill personnel who are not adequately trained and equipped to handle the waste material will not be allowed in the work zone. It is required that the site control plan and associated methods and procedures be included in the special waste management plan and RAPP.	CWMNW strictly controls access to the landfill as required by its operating permit. As the EE/CA concluded that the material will be managed at a Subtitle C facility, there is no potential for public access to the material at the disposal site and a special waste management plan (which is required for municipal landfills by Oregon solid waste regulations) is not required.
7. It should be noted that all personnel working at the Chemical Waste Management Landfill are appropriately OSHA 40-hour trained for hazardous waste operations. In addition, ***all site workers within the landfill area wear respirators at all times*** when handling waste at the facility. Air monitoring equipment is used on site and available for the type of contaminants expected (primarily VOCs). Therefore, if the Chemical Waste Management Landfill is selected as the disposal facility, significant modifications to their procedures are not expected.	CWMNW is the selected disposal facility. As noted in the comment, significant modifications to the facility's procedures are not required. Workers at the landfill are required to carry respirators and workers at the working face of the landfill wear respirators. See compliance statement above regarding required training.
Risk of release from disposal facility	
1. Decontamination of heavy equipment at the offloading facility or disposal landfill is required to prevent tracking to other parts of the facility(s). Decontamination protocols, as presented in the RAPP do not provide sufficient detail regarding barge, dredge, truck, and landfill equipment decontamination protocols. Specific information about decontamination methods, waste handling, containment, performance measures, and action triggers are necessary. NW Natural shall present a detailed decontamination plan that includes location specific information, frequency, decontamination areas and controls, and methods to demonstrate the effectiveness of equipment decontamination. Equipment shall be decontaminated at a minimum to a visually clean standard.	The final TDP (Appendix A) contains descriptions of the operating procedures, including requirements for inspection and decontamination of vehicles and equipment, at the transfer station and the disposal facility.

Table 8
Transportation and Disposal Performance Standards (as described in EPA's Letter dated January 14, 2005 regarding "Waste Material Disposal") - Compliance Summary

Disposal Performance Standard	Compliance with Standard
2. If possible the landfill should use dedicated machinery during the course of the project which would significantly reduce the amount of decontamination required and limit offsite tracking.	Equipment at the working face of the landfill generally remains at the location. CWMNW can not guarantee that equipment will be dedicated to the Gasco project. This requirement was probably intended for municipal landfills, which are no longer in consideration for management of the material from the removal action.
3. The decontamination procedures and best management practices shall be included in the special waste management plan.	The decontamination procedures and best management practices are included in the final TDP (Appendix A). There is no special waste management plan, as the material will not be managed at a municipal landfill.
4. Wet material shall be ***dewatered*** and/or treated to eliminate potential releases of contaminated liquids during transfer/disposal.	The material will be dried to meet the paint-filter test through application of Portland cement.
5. Based on the samples collected, benzene appears to be highly leachable from the tar material and special precautions shall be taken for placement of the material within the landfill to minimize the potential for benzene (and other contaminants) to leach into the landfill leachate collection system. Maximizing the underlying thickness of solid waste should increase the biodegradation of benzene and other organics before they enter the leachate disposal system. The material shall be placed such that at least 20 feet of other landfill waste is present between the Gasco sediment material and the bottom of the landfill cell, or as otherwise approved in the special waste management plan.	This requirement applied to municipal landfills and is no longer applicable to the project as the material will be managed at a Subtitle C facility.
6. All disposed Gasco material shall be covered at the end of each work day with a minimum of 2 feet of daily cover to prevent any site personnel or the public from contacting the waste material. The cover will also limit the potential for offgasing of benzene or other volatile contaminants.	This requirement applied to municipal landfills and is no longer applicable to the project as the material will be managed at a Subtitle C facility.
7. The special waste management plan and RAPP shall address spill response procedures, equipment, and personnel in the event of a spill of the Gasco sediment waste.	The final TDP (Appendix A) describes spill response procedures, equipment, and personnel. The special waste management plan is a requirement that is applicable to Municipal Landfills and does not apply to hazardous waste landfills, such as CWMNW.
8. Waste material shall be taken to a facility with leak detection, leachate collection, and a double-underliner system.	The CWMNW landfill has leak detection, leachate collection, and a double liner.
Treatment	
1. Alternately, the material may be treated to limit benzene leachability to the TCLP standard and be taken to a single-underliner landfill (all other requirements still apply).	This alternate approach is not part of the EE/CA selected alternative, although some reductions in benzene leaching are expected from the application of the drying agent.

Table 8
Transportation and Disposal Performance Standards (as described in EPA's Letter dated January 14, 2005 regarding "Waste Material Disposal") -
Compliance Summary

Disposal Performance Standard	Compliance with Standard
2. Treatment of the material shall be verified by chemical testing. 10% of trucks will be tested each day after appropriate cure time and composited into one sample. First, the material will be tested for benzene concentration as fast as possible, but with a turnaround time (results reported to EPA) not to exceed 24 hours. Should this test fail the 1:20 dilution factor rule, TCLP will be run as quickly as is commercially available, but with a turnaround time not to exceed 48 hours. If approved by ODEQ and acceptable to the receiving facility, receipt of test results may lag disposal of materials at the landfill.	This alternate approach is not part of the EE/CA selected alternative.
3. Should any results indicate that treatment is ineffective in achieving a passing result for TCLP, treatment will be modified immediately (e.g. increased reagent ratio) before any additional offsite shipment. NWN shall propose a number of possible treatment modifications to address this possibility.	This alternate approach is not part of the EE/CA selected alternative.

Table 9
Offloading Facility Off-Site Tracking Soil Analytical Results

Location ID	GTM-01		GTM-02	
Sample ID	GTM-01SO-02	GTM-111S-0-0.3-TP	GTM-02SO-02	GTM-111S-0-0.3-RD
Sample Date	9/13/2005	11/11/2005	9/13/2005	11/11/2005
Depth Interval	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Sample Description	Baseline	Post-Construction	Baseline	Post-Construction
Chemical Name				
Conventionals (%)				
Total Solids	--	**94.8**	**99.1**	**93.6**
Total Organic Carbon	**0.49 J**	**0.59**	**0.43 J**	**0.81**
SVOCs (µg/kg)				
2-Methylnaphthalene	**0.91 J**	**20**	**0.89 J**	**0.96 J**
Acenaphthene	**0.20 J**	**88**	**0.18 J**	2.7 U
Acenaphthylene	5.0 U	**65**	5.10 U	**0.29 J**
Anthracene	5.0 U	**180**	5.10 U	**0.33 J**
Benzo(a)anthracene	**1.60 J**	**300**	**1.40 J**	**2.3 J**
Benzo(a)pyrene	**1.40 J**	**420**	**1.80 J**	**2.8**
Benzo(b)fluoranthene	**3.00 J**	**310**	**5.00 J**	**4.1**
Benzo(g,h,i)perylene	**2.90 J**	**400**	**3.30 J**	**3.8**
Benzo(k)fluoranthene	**1.40 J**	**240**	**1.70 J**	**2.8**
Chrysene	**3.40 J**	**470**	**4.70 J**	**4.4**
Dibenzo(a,h)anthracene	**0.79 J**	**39**	**0.60 J**	**0.54 J**
Dibenzofuran	**0.84 J**	**8.1**	**0.60 J**	**0.42 J**
Fluoranthene	**3.90 J**	**1300**	**3.60 J**	**5.4**
Fluorene	5.0 U	**59**	5.1 U	**0.27 J**
Indeno(1,2,3-cd)pyrene	**1.60 J**	**370**	**2.00 J**	**3.0**
Naphthalene	5.0 U	**84**	5.1 U	**1.8 J**
Phenanthrene	5.0 U	**730**	5.1 U	**2.5 J**
Pyrene	**5.10**	**2000**	5.1 U	**6.0**

Notes:

Bold Analyte detected at provided concentration.

U Non-Detect

J Analyte estimated due to detection below instrument reporting limit

Table 10
Description of Water Quality Monitoring Sampling Locations

Sample Station ID	Location Description
RAA-WBGU	300 feet from where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-WBGD	over the dredge prism measured 50 feet from the “elbow” of the pier
RAA-WCD1	on an arc 150 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B. When a barge moored at the pier blocked this station, station RAA-WCD2 was sampled
RAA-WCD2	on an arc 150 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B. This was a compliance sampling station
RAA-WCD3	on an arc 150 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B. This was a compliance sampling station
RAA-WCD4	approximately 300 feet downstream of RAA-WCD1, or in other words, approximately 450 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B.
RAA-WCD5	150 feet downstream of WCD1 or in other words approximately 300 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B, and approximately 100 feet channelward of the pier face
RAA-WCD6	approximately in line with RAA-WCD1 and in front of the U.S. Moorings property
RAA-WCD7	approximately 200 to 300 feet further downstream from RAA-WCD6 and approximately 100 to 150 feet shoreward
RAA-WCD8	300 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B
RAA-WCD9	approximately 600 feet from where the inner and outer silt curtains connect on the down-river side of the containment area, also known as Point B
RAA-WCU	300 feet from where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-WCU1	approximately 150 to 200 feet from where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-WCU2	approximately 50 to 100 feet upstream of RAA-WCU1 and channelward of the dredge prism
RAA-WCU3	approximately 400 feet upstream of where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-WCU4	on an arc 150 feet from where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E.
RAA-WCU5	on an arc 150 feet from where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-WCU6	on an arc 150 feet from where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-WCU7	approximately 600 feet upstream of where the inner and outer silt curtains connect on the up-river side of the containment area, also known as Point E
RAA-INSIDE	on the inside of the inner containment curtain at Point B taken from the pier
RAA-OUTSIDE	on the outside of the inner containment curtain at Point B taken from the pier
RAA-B47PRE	barge effluent collected prior to treatment system
RAA-B47POST	barge effluent collected after going through the treatment system

Table 11
Background Water Quality Survey Results (Field Parameters) - Gasco Site
September 1 and 2, 2005

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Temperature (deg C)	Turbidity (NTU)	pH
RAA-WBGU	9/1/2005	1450	45.57934	122.75555	1	8.26	22.54	7	7.23
RAA-WBGU	9/1/2005	1450	45.57934	122.75555	19	7.43	22.55	11	7.09
RAA-WBGU	9/1/2005	1450	45.57934	122.75555	37	7.49	21.46	15	7.12
RAA-WBGU	9/1/2005	1530	45.57934	122.75555	1	8.27	22.52	5	7.29
RAA-WBGU	9/1/2005	1530	45.57934	122.75555	19	7.67	21.73	7	7.17
RAA-WBGU	9/1/2005	1530	45.57934	122.75555	37	7.29	21.50	17	7.11
RAA-WBGU	9/1/2005	1600	45.57934	122.75555	1	8.08	22.14	6	7.26
RAA-WBGU	9/1/2005	1600	45.57934	122.75555	18	7.77	21.95	7	7.20
RAA-WBGU	9/1/2005	1600	45.57934	122.75555	35	7.52	21.70	8	7.17
RAA-WBGU	9/2/2005	950	45.57934	122.75555	1	7.57	21.44	8	7.17
RAA-WBGU	9/2/2005	950	45.57934	122.75555	16	7.39	21.41	9	7.15
RAA-WBGU	9/2/2005	950	45.57934	122.75555	32	7.27	21.35	15	7.13
RAA-WBGU	9/2/2005	1100	45.57934	122.75555	1	7.89	21.50	4	7.23
RAA-WBGU	9/2/2005	1100	45.57934	122.75555	16	7.41	21.40	10	7.16
RAA-WBGU	9/2/2005	1100	45.57934	122.75555	32	7.30	21.36	12	7.14
RAA-WBGU	9/2/2005	1140	45.57934	122.75555	1	8.01	21.62	4	7.27
RAA-WBGU	9/2/2005	1140	45.57934	122.75555	14	7.62	21.41	7	7.19
RAA-WBGU	9/2/2005	1140	45.57934	122.75555	30	7.29	21.34	14	7.14
RAA-WBGU	9/2/2005	1220	45.57934	122.75555	1	8.18	21.84	11	7.29
RAA-WBGU	9/2/2005	1220	45.57934	122.75555	17	7.65	21.44	8	7.18
RAA-WBGU	9/2/2005	1220	45.57934	122.75555	33	7.34	21.36	13	7.13

Notes:

[1]Datum for coordinates is NAD 83.

Table 12
Background Water Quality Survey Summary Statistics with 95% Confidence Limits (CL) - Gasco Site
September 1 and 2, 2005

Sample Depth	Temperature (deg C)	Turbidity (NTUs)	DO (mg/L)	pH
All Depths				
Mean	21.69	9.43	7.65	7.18
Upper CL	21.87	11.04	7.80	7.21
Lower CL	21.52	7.81	7.51	7.16
Surface Depth				
Mean	21.94	6.43	8.04	7.25
Upper CL	22.29	8.29	8.22	7.28
Lower CL	21.60	4.57	7.85	7.22
Mid Depth				
Mean	21.70	8.43	7.56	7.16
Upper CL	22.02	9.63	7.67	7.19
Lower CL	21.38	7.23	7.45	7.14
Bottom Depth				
Mean	21.44	13.43	7.36	7.13
Upper CL	21.54	15.56	7.43	7.15
Lower CL	21.34	11.30	7.28	7.12

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCU[3]	9/7/2005	1350	45.57954	122.75578	1	8.63	NA	NA	21.34	NA	NA	5	NA	NA	7.30	NA	NA
RAA-WCU	9/7/2005	1350	45.57954	122.75578	10	8.41	NA	NA	21.12	NA	NA	5	NA	NA	7.26	NA	NA
RAA-WCU	9/7/2005	1350	45.57954	122.75578	20	7.94	NA	NA	20.88	NA	NA	13	NA	NA	7.18	NA	NA
RAA-WCD1	9/7/2005	1415	45.58060	122.75912	1	8.3	<6.5	<6.5	21.02	21.64	22.59	**13**	8	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/7/2005	1415	45.58060	122.75912	17	8.22	<6.5	<6.5	21.00	21.42	22.32	**16**	8	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/7/2005	1415	45.58060	122.75912	37	8.15	<6.5	<6.5	20.99	21.18	21.84	**19**	16	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/7/2005	1610	45.57954	122.75578	1	8.75	NA	NA	21.33	NA	NA	5	NA	NA	7.31	NA	NA
RAA-WCU	9/7/2005	1610	45.57954	122.75578	17.5	8.4	NA	NA	21.11	NA	NA	5	NA	NA	7.22	NA	NA
RAA-WCU	9/7/2005	1610	45.57954	122.75578	34	7.64	NA	NA	20.79	NA	NA	18	NA	NA	7.07	NA	NA
RAA-WCD2[4]	9/7/2005	1635	45.58085	122.75897	1	8.33	<6.5	<6.5	20.97	21.63	22.59	**18**	8	11.29	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/7/2005	1635	45.58085	122.75897	21.5	8.26	<6.5	<6.5	20.92	21.41	22.32	**18**	8	12.63	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/7/2005	1635	45.58085	122.75897	42	8.16	<6.5	<6.5	20.85	21.09	21.84	15	21	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1625	45.58096	122.75883	1	8.33	<6.5	<6.5	20.84	21.63	22.59	**13**	8	11.29	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1625	45.58096	122.75883	22.5	8.28	<6.5	<6.5	20.87	21.41	22.32	**17**	8	12.63	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1625	45.58096	122.75883	43	8.19	<6.5	<6.5	20.86	21.09	21.84	15	21	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/7/2005	1700	45.57954	122.75578	1	8.52	NA	NA	21.07	NA	NA	6	NA	NA	7.26	NA	NA
RAA-WCU	9/7/2005	1700	45.57954	122.75578	19	8.22	NA	NA	20.99	NA	NA	7	NA	NA	7.20	NA	NA
RAA-WCU	9/7/2005	1700	45.57954	122.75578	32	7.74	NA	NA	20.64	NA	NA	20	NA	NA	7.11	NA	NA
RAA-WCD2[4]	9/7/2005	1730	45.58085	122.75897	1	8.43	<6.5	<6.5	21.04	21.37	22.59	8	9	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/7/2005	1730	45.58085	122.75897	22	8.31	<6.5	<6.5	21.03	21.29	22.32	10	10	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/7/2005	1730	45.58085	122.75897	43	8.13	<6.5	<6.5	20.92	20.94	21.84	15	23	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1715	45.58096	122.75883	1	8.39	<6.5	<6.5	21.11	21.37	22.59	10	9	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1715	45.58096	122.75883	22	8.27	<6.5	<6.5	20.99	21.29	22.32	12	10	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1715	45.58096	122.75883	43	8.16	<6.5	<6.5	20.92	20.94	21.84	15	23	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/7/2005	1745	45.57954	122.75578	1	8.57	NA	NA	20.98	NA	NA	19	NA	NA	7.22	NA	NA
RAA-WCU	9/7/2005	1745	45.57954	122.75578	18	8.43	NA	NA	21.06	NA	NA	15	NA	NA	7.18	NA	NA
RAA-WCU	9/7/2005	1745	45.57954	122.75578	39	8.37	NA	NA	21.04	NA	NA	19	NA	NA	7.18	NA	NA
RAA-WCD2[4]	9/7/2005	1752	45.58085	122.75897	1	8.35	<6.5	<6.5	21.02	21.28	22.59	8	22	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/7/2005	1752	45.58085	122.75897	22	8.3	<6.5	<6.5	21.05	21.36	22.32	9	18	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/7/2005	1752	45.58085	122.75897	43	8.21	<6.5	<6.5	21.02	21.34	21.84	9	22	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1750	45.58096	122.75883	1	8.52	<6.5	<6.5	21.02	21.28	22.59	8	22	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1750	45.58096	122.75883	22	8.34	<6.5	<6.5	21.02	21.36	22.32	7	18	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/7/2005	1750	45.58096	122.75883	44	8.02	<6.5	<6.5	20.80	21.34	21.84	14	22	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/8/2005	915	45.57954	122.75578	1	8.09	NA	NA	20.58	NA	NA	8	NA	NA	7.22	NA	NA
RAA-WCU	9/8/2005	915	45.57954	122.75578	15	8.04	NA	NA	20.58	NA	NA	10	NA	NA	7.21	NA	NA
RAA-WCU	9/8/2005	915	45.57954	122.75578	34	7.95	NA	NA	20.57	NA	NA	11	NA	NA	7.20	NA	NA
RAA-WCD1	9/8/2005	1010	45.58060	122.75912	1	8.11	<6.5	<6.5	20.59	20.88	22.59	**14**	11	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/8/2005	1010	45.58060	122.75912	17	8.07	<6.5	<6.5	20.59	20.88	22.32	**17**	13	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/8/2005	1010	45.58060	122.75912	33	8.02	<6.5	<6.5	20.59	20.87	21.84	18	14	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	940	45.58085	122.75897	1	8.08	<6.5	<6.5	20.62	20.88	22.59	10	11	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	940	45.58085	122.75897	23	8.03	<6.5	<6.5	20.61	20.88	22.32	11	13	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	940	45.58085	122.75897	45	7.99	<6.5	<6.5	20.61	20.87	21.84	17	14	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	930	45.58096	122.75883	1	8.09	<6.5	<6.5	20.62	20.88	22.59	10	11	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	930	45.58096	122.75883	23	8.01	<6.5	<6.5	20.61	20.88	22.32	10	13	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	930	45.58096	122.75883	46	7.95	<6.5	<6.5	20.62	20.87	21.84	12	14	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCU	9/8/2005	1300	45.57954	122.75578	1	8.34	NA	NA	21.30	NA	NA	4	NA	NA	7.29	NA	NA
RAA-WCU	9/8/2005	1300	45.57954	122.75578	11	7.96	NA	NA	20.63	NA	NA	9	NA	NA	7.20	NA	NA
RAA-WCU	9/8/2005	1300	45.57954	122.75578	35	7.72	NA	NA	20.59	NA	NA	20	NA	NA	7.16	NA	NA
RAA-WCD2[4]	9/8/2005	1315	45.58085	122.75897	1	8.18	<6.5	<6.5	20.68	21.60	22.59	10	7	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	1315	45.58085	122.75897	22	8.13	<6.5	<6.5	20.69	20.93	22.32	12	12	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	1315	45.58085	122.75897	43	8.05	<6.5	<6.5	20.68	20.89	21.84	14	23	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	1310	45.58096	122.75883	1	8.2	<6.5	<6.5	20.71	21.60	22.59	10	7	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	1310	45.58096	122.75883	23	8.09	<6.5	<6.5	20.66	20.93	22.32	11	12	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	1310	45.58096	122.75883	44	8.05	<6.5	<6.5	20.66	20.89	21.84	12	23	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/8/2005	1700	45.57954	122.75578	1	8.89	NA	NA	21.32	NA	NA	5	NA	NA	7.42	NA	NA
RAA-WCU	9/8/2005	1700	45.57954	122.75578	15	8.17	NA	NA	21.01	NA	NA	8	NA	NA	7.23	NA	NA
RAA-WCU	9/8/2005	1700	45.57954	122.75578	31	7.62	NA	NA	20.56	NA	NA	18	NA	NA	7.11	NA	NA
RAA-WCD1	9/8/2005	1725	45.58060	122.75912	1	8.36	<6.5	<6.5	21.14	21.62	22.59	11	8	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/8/2005	1725	45.58060	122.75912	15	8.28	<6.5	<6.5	20.98	21.31	22.32	12	11	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/8/2005	1725	45.58060	122.75912	30	8.16	<6.5	<6.5	20.91	20.86	21.84	15	21	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	1718	45.58085	122.75897	1	8.39	<6.5	<6.5	21.20	21.62	22.59	11	8	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	1718	45.58085	122.75897	22	8.25	<6.5	<6.5	20.88	21.31	22.32	12	11	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/8/2005	1718	45.58085	122.75897	43	8.19	<6.5	<6.5	20.89	20.86	21.84	14	21	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	1705	45.58096	122.75883	1	8.37	<6.5	<6.5	21.17	21.62	22.59	11	8	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	1705	45.58096	122.75883	22	8.24	<6.5	<6.5	20.87	21.31	22.32	**14**	11	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/8/2005	1705	45.58096	122.75883	43	8.18	<6.5	<6.5	20.83	20.86	21.84	13	21	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/9/2005	1140	45.57954	122.75578	1	8.12	NA	NA	20.37	NA	NA	1	NA	NA	7.32	NA	NA
RAA-WCU	9/9/2005	1140	45.57954	122.75578	20	7.96	NA	NA	20.35	NA	NA	7	NA	NA	7.26	NA	NA
RAA-WCU	9/9/2005	1140	45.57954	122.75578	39	7.88	NA	NA	20.35	NA	NA	6	NA	NA	7.26	NA	NA
RAA-WCD1	9/9/2005	1212	45.58060	122.75912	1	8.15	<6.5	<6.5	20.37	20.67	22.59	4	4	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/9/2005	1212	45.58060	122.75912	17	8.06	<6.5	<6.5	20.38	20.65	22.32	7	10	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/9/2005	1212	45.58060	122.75912	33	8.01	<6.5	<6.5	20.38	20.65	21.84	7	9	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/9/2005	1206	45.58085	122.75897	1	8.16	<6.5	<6.5	20.38	20.67	22.59	7	4	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/9/2005	1206	45.58085	122.75897	22	8.08	<6.5	<6.5	20.38	20.65	22.32	7	10	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/9/2005	1206	45.58085	122.75897	45	8.00	<6.5	<6.5	20.38	20.65	21.84	8	9	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/9/2005	1159	45.58096	122.75883	1	8.11	<6.5	<6.5	20.38	20.67	22.59	6	4	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/9/2005	1159	45.58096	122.75883	23	8.03	<6.5	<6.5	20.38	20.65	22.32	6	10	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/9/2005	1159	45.58096	122.75883	45	7.98	<6.5	<6.5	20.38	20.65	21.84	7	9	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/12/2005	1040	45.57954	122.75578	1	8.22	NA	NA	19.81	NA	NA	10	NA	NA	7.29	NA	NA
RAA-WCU	9/12/2005	1040	45.57954	122.75578	10	8.17	NA	NA	19.82	NA	NA	12	NA	NA	7.28	NA	NA
RAA-WCU	9/12/2005	1040	45.57954	122.75578	25	8.15	NA	NA	19.84	NA	NA	12	NA	NA	7.28	NA	NA
RAA-WCD1	9/12/2005	1120	45.58060	122.75912	1	8.29	<6.5	<6.5	19.99	20.11	22.59	8	13	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/12/2005	1120	45.58060	122.75912	15.5	8.22	<6.5	<6.5	19.89	20.12	22.32	9	15	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/12/2005	1120	45.58060	122.75912	30	8.12	<6.5	<6.5	19.86	20.14	21.84	9	15	18.56	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1105	45.58085	122.75897	1	8.30	<6.5	<6.5	20.00	20.11	22.59	8	13	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1105	45.58085	122.75897	21	8.23	<6.5	<6.5	19.87	20.12	22.32	10	15	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1105	45.58085	122.75897	42	8.04	<6.5	<6.5	19.85	20.14	21.84	13	15	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1055	45.58096	122.75883	1	8.31	<6.5	<6.5	19.87	20.11	22.59	9	13	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1055	45.58096	122.75883	22	8.20	<6.5	<6.5	19.85	20.12	22.32	11	15	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1055	45.58096	122.75883	43	8.13	<6.5	<6.5	19.86	20.14	21.84	11	15	18.56	7.28	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCU	9/12/2005	1430	45.57954	122.75578	1	8.49	NA	NA	21.36	NA	NA	3	NA	NA	7.30	NA	NA
RAA-WCU	9/12/2005	1430	45.57954	122.75578	12.5	8.36	NA	NA	20.01	NA	NA	8	NA	NA	7.23	NA	NA
RAA-WCU	9/12/2005	1430	45.57954	122.75578	30	8.24	NA	NA	19.94	NA	NA	10	NA	NA	7.21	NA	NA
RAA-WCD1	9/12/2005	1500	45.58060	122.75912	1	8.43	<6.5	<6.5	20.18	21.66	22.59	**14**	6	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/12/2005	1500	45.58060	122.75912	17	8.34	<6.5	<6.5	20.03	20.31	22.32	**14**	11	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/12/2005	1500	45.58060	122.75912	31	8.30	<6.5	<6.5	20.03	20.24	21.84	14	13	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1510	45.58085	122.75897	1	8.39	<6.5	<6.5	20.07	21.66	22.59	**12**	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1510	45.58085	122.75897	22	8.37	<6.5	<6.5	20.06	20.31	22.32	**15**	11	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1510	45.58085	122.75897	44	8.32	<6.5	<6.5	20.04	20.24	21.84	17	13	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1445	45.58096	122.75883	1	8.40	<6.5	<6.5	20.04	21.66	22.59	11	6	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1445	45.58096	122.75883	22	8.37	<6.5	<6.5	20.02	20.31	22.32	12	11	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1445	45.58096	122.75883	44	8.26	<6.5	<6.5	20.01	20.24	21.84	14	13	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/12/2005	1705	45.57954	122.75578	1	9.48	NA	NA	21.87	NA	NA	4	NA	NA	7.49	NA	NA
RAA-WCU	9/12/2005	1705	45.57954	122.75578	16	8.10	NA	NA	19.90	NA	NA	12	NA	NA	7.26	NA	NA
RAA-WCU	9/12/2005	1705	45.57954	122.75578	32	7.92	NA	NA	19.83	NA	NA	16	NA	NA	7.19	NA	NA
RAA-WCD1	9/12/2005	1740	45.58060	122.75912	1	8.60	<6.5	<6.5	20.24	22.17	22.59	9	7	11.29	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/12/2005	1740	45.58060	122.75912	16	8.49	<6.5	<6.5	20.13	20.20	22.32	11	15	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/12/2005	1740	45.58060	122.75912	30	8.46	<6.5	<6.5	20.12	20.13	21.84	12	19	18.56	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1735	45.58085	122.75897	1	8.61	<6.5	<6.5	20.15	22.17	22.59	10	7	11.29	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1735	45.58085	122.75897	22	8.48	<6.5	<6.5	20.11	20.20	22.32	11	15	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/12/2005	1735	45.58085	122.75897	42	8.44	<6.5	<6.5	20.13	20.13	21.84	12	19	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1725	45.58096	122.75883	1	8.57	<6.5	<6.5	20.12	22.17	22.59	10	7	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1725	45.58096	122.75883	22	8.49	<6.5	<6.5	20.07	20.20	22.32	11	15	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/12/2005	1725	45.58096	122.75883	44	8.38	<6.5	<6.5	20.10	20.13	21.84	11	19	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	9/13/2005	1340	45.58091	122.75964	1	8.77	NA	NA	20.24	NA	NA	6	NA	NA	7.30	NA	NA
RAA-WCD8	9/13/2005	1340	45.58091	122.75964	22	8.39	NA	NA	19.80	NA	NA	8	NA	NA	7.23	NA	NA
RAA-WCD8	9/13/2005	1340	45.58091	122.75964	44	8.24	NA	NA	19.52	NA	NA	10	NA	NA	7.20	NA	NA
RAA-WCU4	9/13/2005	1350	45.57937	122.75626	1	8.88	<6.5	<6.5	20.02	20.54	22.59	9	9	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/13/2005	1350	45.57937	122.75626	6	8.65	<6.5	<6.5	19.66	20.10	22.32	12	11	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/13/2005	1350	45.57937	122.75626	11	8.67	<6.5	<6.5	19.66	19.82	21.84	13	13	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/13/2005	1405	45.57959	122.75603	1	8.67	<6.5	<6.5	19.69	20.54	22.59	**12**	9	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/13/2005	1405	45.57959	122.75603	20.5	8.58	<6.5	<6.5	19.69	20.10	22.32	12	11	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/13/2005	1405	45.57959	122.75603	40	8.50	<6.5	<6.5	19.67	19.82	21.84	12	13	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/13/2005	1411	45.57986	122.75613	1	8.76	<6.5	<6.5	19.73	20.54	22.59	**12**	9	11.29	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/13/2005	1411	45.57986	122.75613	21	8.61	<6.5	<6.5	19.71	20.10	22.32	11	11	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/13/2005	1411	45.57986	122.75613	41	8.55	<6.5	<6.5	19.75	19.82	21.84	13	13	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/13/2005	1655	45.57954	122.75578	1	9.40	NA	NA	20.35	NA	NA	6	NA	NA	7.40	NA	NA
RAA-WCU	9/13/2005	1655	45.57954	122.75578	18	8.72	NA	NA	19.73	NA	NA	8	NA	NA	7.21	NA	NA
RAA-WCU	9/13/2005	1655	45.57954	122.75578	36	8.45	NA	NA	19.62	NA	NA	13	NA	NA	7.16	NA	NA
RAA-WCD1	9/13/2005	1725	45.58060	122.75912	1	8.77	<6.5	<6.5	19.97	20.65	22.59	**13**	9	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/13/2005	1725	45.58060	122.75912	16	8.57	<6.5	<6.5	19.82	20.03	22.32	**15**	11	12.63	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/13/2005	1725	45.58060	122.75912	31	8.56	<6.5	<6.5	19.80	19.92	21.84	16	16	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/13/2005	1710	45.58085	122.75897	1	8.84	<6.5	<6.5	19.80	20.65	22.59	9	9	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/13/2005	1710	45.58085	122.75897	22	8.70	<6.5	<6.5	19.78	20.03	22.32	11	11	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/13/2005	1710	45.58085	122.75897	43	8.64	<6.5	<6.5	19.78	19.92	21.84	13	16	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCD3	9/13/2005	1715	45.58096	122.75883	1	8.88	<6.5	<6.5	19.79	20.65	22.59	9	9	11.29	7.37	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/13/2005	1715	45.58096	122.75883	23	8.74	<6.5	<6.5	19.76	20.03	22.32	9	11	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/13/2005	1715	45.58096	122.75883	45	8.68	<6.5	<6.5	19.77	19.92	21.84	9	16	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/14/2005	910	45.57954	122.75578	1	8.73	NA	NA	19.30	NA	NA	7	NA	NA	7.31	NA	NA
RAA-WCU	9/14/2005	910	45.57954	122.75578	13	8.63	NA	NA	19.30	NA	NA	7	NA	NA	7.31	NA	NA
RAA-WCU	9/14/2005	910	45.57954	122.75578	27	8.43	NA	NA	19.22	NA	NA	11	NA	NA	7.26	NA	NA
RAA-WCD1	9/14/2005	955	45.58060	122.75912	1	8.64	<6.5	<6.5	19.21	19.60	22.59	**12**	10	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/14/2005	955	45.58060	122.75912	20	8.58	<6.5	<6.5	19.20	19.60	22.32	**13**	10	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/14/2005	955	45.58060	122.75912	37	8.45	<6.5	<6.5	19.21	19.52	21.84	15	14	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/14/2005	930	45.58085	122.75897	1	8.68	<6.5	<6.5	19.18	19.60	22.59	11	10	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/14/2005	930	45.58085	122.75897	22	8.59	<6.5	<6.5	19.19	19.60	22.32	12	10	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/14/2005	930	45.58085	122.75897	44	8.48	<6.5	<6.5	19.19	19.52	21.84	14	14	18.56	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/14/2005	920	45.58096	122.75883	1	8.68	<6.5	<6.5	19.17	19.60	22.59	9	10	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/14/2005	920	45.58096	122.75883	22	8.61	<6.5	<6.5	19.19	19.60	22.32	9	10	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/14/2005	920	45.58096	122.75883	44	8.54	<6.5	<6.5	19.19	19.52	21.84	8	14	18.56	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	9/16/2005	1525	45.58091	122.75964	1	9.12	NA	NA	18.90	NA	NA	5	NA	NA	7.33	NA	NA
RAA-WCD8	9/16/2005	1525	45.58091	122.75964	21	8.87	NA	NA	18.86	NA	NA	7	NA	NA	7.31	NA	NA
RAA-WCD8	9/16/2005	1525	45.58091	122.75964	42	8.79	NA	NA	18.87	NA	NA	9	NA	NA	7.30	NA	NA
RAA-WCU4	9/16/2005	1538	45.57937	122.75626	1	9.13	<6.5	<6.5	18.87	19.20	22.59	10	8	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/16/2005	1538	45.57937	122.75626	6	9.05	<6.5	<6.5	18.88	19.16	22.32	10	10	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/16/2005	1538	45.57937	122.75626	11	9.03	<6.5	<6.5	18.88	19.17	21.84	10	12	18.56	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/16/2005	1545	45.57959	122.75603	1	9.22	<6.5	<6.5	18.74	19.20	22.59	10	8	11.29	7.36	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/16/2005	1545	45.57959	122.75603	18	9.03	<6.5	<6.5	18.88	19.16	22.32	10	10	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/16/2005	1545	45.57959	122.75603	35	8.96	<6.5	<6.5	18.89	19.17	21.84	10	12	18.56	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/16/2005	1548	45.57986	122.75613	1	9.12	<6.5	<6.5	18.90	19.20	22.59	9	8	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/16/2005	1548	45.57986	122.75613	22	9.02	<6.5	<6.5	18.91	19.16	22.32	8	10	12.63	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/16/2005	1548	45.57986	122.75613	41	8.99	<6.5	<6.5	18.91	19.17	21.84	8	12	18.56	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	9/19/2005	1646	45.58091	122.75964	1	9.92	NA	NA	18.65	NA	NA	1	NA	NA	7.43	NA	NA
RAA-WCD8	9/19/2005	1646	45.58091	122.75964	23	9.20	NA	NA	18.26	NA	NA	4	NA	NA	7.21	NA	NA
RAA-WCD8	9/19/2005	1646	45.58091	122.75964	45	8.90	NA	NA	17.92	NA	NA	6	NA	NA	7.15	NA	NA
RAA-WCU4[6]	9/19/2005	1600	45.57937	122.75626	1	9.85	<6.5	<6.5	18.75	18.95	22.59	2	4	11.29	7.57	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/19/2005	1600	45.57937	122.75626	9	8.95	<6.5	<6.5	17.98	18.56	22.32	4	7	12.63	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/19/2005	1606	45.57959	122.75603	1	9.21	<6.5	<6.5	18.04	18.95	22.59	4	4	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/19/2005	1606	45.57959	122.75603	17	9.06	<6.5	<6.5	17.94	18.56	22.32	4	7	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/19/2005	1606	45.57959	122.75603	34	8.87	<6.5	<6.5	17.88	18.22	21.84	6	9	18.56	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/19/2005	1633	45.57986	122.75613	1	9.28	<6.5	<6.5	18.14	18.95	22.59	6	4	11.29	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/19/2005	1633	45.57986	122.75613	21	9.21	<6.5	<6.5	18.08	18.56	22.32	7	7	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/19/2005	1633	45.57986	122.75613	41	9.12	<6.5	<6.5	18.07	18.22	21.84	6	9	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/20/2005	950	45.57954	122.75578	1	9.07	NA	NA	17.77	NA	NA	5	NA	NA	7.21	NA	NA
RAA-WCU	9/20/2005	950	45.57954	122.75578	11	9.01	NA	NA	17.75	NA	NA	6	NA	NA	7.24	NA	NA
RAA-WCU	9/20/2005	950	45.57954	122.75578	22	8.97	NA	NA	17.74	NA	NA	6	NA	NA	7.25	NA	NA
RAA-WCD2[4]	9/20/2005	1045	45.58085	122.75897	1	9.12	<6.5	<6.5	17.79	18.07	22.59	8	8	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/20/2005	1045	45.58085	122.75897	23	9.06	<6.5	<6.5	17.79	18.05	22.32	8	9	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/20/2005	1045	45.58085	122.75897	45	9.00	<6.5	<6.5	17.78	18.04	21.84	9	9	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/20/2005	1105	45.58096	122.75883	1	9.11	<6.5	<6.5	17.87	18.07	22.59	7	8	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCD3	9/20/2005	1105	45.58096	122.75883	23	9.04	<6.5	<6.5	17.83	18.05	22.32	8	9	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/20/2005	1105	45.58096	122.75883	45	8.93	<6.5	<6.5	17.82	18.04	21.84	9	9	18.56	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU[7]	9/21/2005	1150	45.57877	122.75517	1	9.24	NA	NA	17.95	NA	NA	4	NA	NA	7.32	NA	NA
RAA-WCU	9/21/2005	1150	45.57877	122.75517	8	9.27	NA	NA	17.89	NA	NA	4	NA	NA	7.42	NA	NA
RAA-WCU	9/21/2005	1150	45.57877	122.75517	15	9.17	NA	NA	17.80	NA	NA	4	NA	NA	7.41	NA	NA
RAA-WCD2[4]	9/21/2005	1218	45.58085	122.75897	1	9.20	<6.5	<6.5	17.77	18.25	22.59	8	7	11.29	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/21/2005	1218	45.58085	122.75897	23	9.15	<6.5	<6.5	17.74	18.19	22.32	8	7	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/21/2005	1218	45.58085	122.75897	45	9.06	<6.5	<6.5	17.73	18.10	21.84	10	7	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/21/2005	1212	45.58096	122.75883	1	9.14	<6.5	<6.5	17.81	18.25	22.59	5	7	11.29	7.37	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/21/2005	1212	45.58096	122.75883	23	9.08	<6.5	<6.5	17.73	18.19	22.32	7	7	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/21/2005	1212	45.58096	122.75883	45	9.04	<6.5	<6.5	17.73	18.10	21.84	7	7	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	9/23/2005	1020	45.58091	122.75964	1	9.12	NA	NA	17.55	NA	NA	5	NA	NA	7.33	NA	NA
RAA-WCD8	9/23/2005	1020	45.58091	122.75964	23	9.01	NA	NA	17.49	NA	NA	6	NA	NA	7.32	NA	NA
RAA-WCD8	9/23/2005	1020	45.58091	122.75964	44	8.93	NA	NA	17.49	NA	NA	5	NA	NA	7.15	NA	NA
RAA-WCU4	9/23/2005	930	45.57937	122.75626	1	9.20	<6.5	<6.5	17.57	17.85	22.59	7	8	11.29	7.43	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/23/2005	930	45.57937	122.75626	6	9.25	<6.5	<6.5	17.53	17.79	22.32	7	9	12.63	7.40	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/23/2005	930	45.57937	122.75626	12	9.18	<6.5	<6.5	17.49	17.79	21.84	7	8	18.56	7.43	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/23/2005	945	45.57959	122.75603	1	9.23	<6.5	<6.5	17.59	17.85	22.59	7	8	11.29	7.37	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/23/2005	945	45.57959	122.75603	19	9.16	<6.5	<6.5	17.51	17.79	22.32	7	9	12.63	7.35	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/23/2005	945	45.57959	122.75603	37	9.11	<6.5	<6.5	17.51	17.79	21.84	8	8	18.56	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/23/2005	1015	45.57986	122.75613	1	9.13	<6.5	<6.5	17.54	17.85	22.59	2	8	11.29	7.35	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/23/2005	1015	45.57986	122.75613	22	9.14	<6.5	<6.5	17.49	17.79	22.32	6	9	12.63	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/23/2005	1015	45.57986	122.75613	42	9.10	<6.5	<6.5	17.51	17.79	21.84	8	8	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/23/2005	1254	45.57954	122.75578	1	9.31	NA	NA	17.89	NA	NA	4	NA	NA	7.42	NA	NA
RAA-WCU	9/23/2005	1254	45.57954	122.75578	19	9.07	NA	NA	17.55	NA	NA	6	NA	NA	7.34	NA	NA
RAA-WCU	9/23/2005	1254	45.57954	122.75578	37	8.96	NA	NA	17.51	NA	NA	9	NA	NA	7.25	NA	NA
RAA-WCD1	9/23/2005	1305	45.58060	122.75912	1	9.28	<6.5	<6.5	17.63	18.19	22.59	9	7	11.29	7.34	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/23/2005	1305	45.58060	122.75912	16	9.18	<6.5	<6.5	17.61	17.85	22.32	10	9	12.63	7.36	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/23/2005	1305	45.58060	122.75912	32	9.09	<6.5	<6.5	17.59	17.81	21.84	11	12	18.56	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/23/2005	1315	45.58085	122.75897	1	9.24	<6.5	<6.5	17.61	18.19	22.59	7	7	11.29	7.33	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/23/2005	1315	45.58085	122.75897	22	9.20	<6.5	<6.5	17.61	17.85	22.32	11	9	12.63	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/23/2005	1315	45.58085	122.75897	40	9.13	<6.5	<6.5	17.60	17.81	21.84	11	12	18.56	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/23/2005	1325	45.58096	122.75883	1	9.22	<6.5	<6.5	17.60	18.19	22.59	7	7	11.29	7.34	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/23/2005	1325	45.58096	122.75883	24	9.19	<6.5	<6.5	17.57	17.85	22.32	9	9	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/23/2005	1325	45.58096	122.75883	45	9.07	<6.5	<6.5	17.55	17.81	21.84	8	12	18.56	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/26/2005	1025	45.57954	122.75578	1	9.21	NA	NA	16.83	NA	NA	9	NA	NA	7.28	NA	NA
RAA-WCU	9/26/2005	1025	45.57954	122.75578	10	9.13	NA	NA	16.80	NA	NA	8	NA	NA	7.35	NA	NA
RAA-WCU	9/26/2005	1025	45.57954	122.75578	22	9.06	NA	NA	16.79	NA	NA	10	NA	NA	7.28	NA	NA
RAA-WCD2[4]	9/26/2005	1000	45.58085	122.75897	1	9.21	<6.5	<6.5	16.89	17.13	22.59	11	12	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1000	45.58085	122.75897	21	9.14	<6.5	<6.5	16.79	17.10	22.32	**14**	11	12.63	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1000	45.58085	122.75897	42	9.06	<6.5	<6.5	16.79	17.09	21.84	17	13	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	955	45.58096	122.75883	1	9.25	<6.5	<6.5	16.86	17.13	22.59	10	12	11.29	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	955	45.58096	122.75883	21	9.20	<6.5	<6.5	16.79	17.10	22.32	12	11	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	955	45.58096	122.75883	42	9.08	<6.5	<6.5	16.79	17.09	21.84	15	13	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/26/2005	1405	45.57954	122.75578	1	9.32	NA	NA	17.41	NA	NA	6	NA	NA	7.33	NA	NA

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCU	9/26/2005	1405	45.57954	122.75578	16	9.22	NA	NA	16.98	NA	NA	8	NA	NA	7.25	NA	NA
RAA-WCU	9/26/2005	1405	45.57954	122.75578	30	9.21	NA	NA	16.97	NA	NA	9	NA	NA	7.23	NA	NA
RAA-WCD1	9/26/2005	1445	45.58060	122.75912	1	9.45	<6.5	<6.5	17.28	17.71	22.59	9	9	11.29	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/26/2005	1445	45.58060	122.75912	17	9.37	<6.5	<6.5	16.99	17.28	22.32	9	11	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/26/2005	1445	45.58060	122.75912	34	9.24	<6.5	<6.5	16.98	17.27	21.84	12	12	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1430	45.58085	122.75897	1	9.42	<6.5	<6.5	17.20	17.71	22.59	6	9	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1430	45.58085	122.75897	23	9.33	<6.5	<6.5	17.01	17.28	22.32	8	11	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1430	45.58085	122.75897	45	9.20	<6.5	<6.5	17.01	17.27	21.84	11	12	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	1420	45.58096	122.75883	1	9.45	<6.5	<6.5	17.54	17.71	22.59	6	9	11.29	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	1420	45.58096	122.75883	23	9.33	<6.5	<6.5	17.06	17.28	22.32	7	11	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	1420	45.58096	122.75883	45	9.24	<6.5	<6.5	17.04	17.27	21.84	8	12	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/26/2005	1610	45.57954	122.75578	1	9.55	NA	NA	18.24	NA	NA	4	NA	NA	7.26	NA	NA
RAA-WCU	9/26/2005	1610	45.57954	122.75578	16	9.21	NA	NA	16.93	NA	NA	7	NA	NA	7.17	NA	NA
RAA-WCU	9/26/2005	1610	45.57954	122.75578	33	9.07	NA	NA	16.87	NA	NA	10	NA	NA	7.12	NA	NA
RAA-WCD1	9/26/2005	1645	45.58060	122.75912	1	9.22	<6.5	<6.5	17.21	18.54	22.59	**12**	7	11.29	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/26/2005	1645	45.58060	122.75912	17	9.30	<6.5	<6.5	17.03	17.23	22.32	10	10	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/26/2005	1645	45.58060	122.75912	34	9.00	<6.5	<6.5	17.08	17.17	21.84	15	13	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1635	45.58085	122.75897	1	9.27	<6.5	<6.5	17.10	18.54	22.59	8	7	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1635	45.58085	122.75897	23	9.30	<6.5	<6.5	17.03	17.23	22.32	8	10	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/26/2005	1635	45.58085	122.75897	44	9.21	<6.5	<6.5	17.03	17.17	21.84	9	13	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	1630	45.58096	122.75883	1	9.35	<6.5	<6.5	17.15	18.54	22.59	9	7	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	1630	45.58096	122.75883	23	9.30	<6.5	<6.5	17.04	17.23	22.32	8	10	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/26/2005	1630	45.58096	122.75883	45	9.22	<6.5	<6.5	17.02	17.17	21.84	8	13	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5,8]	9/27/2005	1445	45.58091	122.75964	1	9.19	NA	NA	17.39	NA	NA	3	NA	NA	7.31	NA	NA
RAA-WCD8	9/27/2005	1445	45.58091	122.75964	23	9.04	NA	NA	17.01	NA	NA	4	NA	NA	7.25	NA	NA
RAA-WCD8	9/27/2005	1445	45.58091	122.75964	45	8.86	NA	NA	16.92	NA	NA	4	NA	NA	7.17	NA	NA
RAA-WCU4[6,8]	9/27/2005	1310	45.57937	122.75626	1	9.33	<6.5	<6.5	17.04	17.69	22.59	6	6	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/27/2005	1310	45.57937	122.75626	10	9.38	<6.5	<6.5	16.87	17.31	21.84	5	7	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5[8]	9/27/2005	1320	45.57959	122.75603	1	9.40	<6.5	<6.5	17.02	17.69	22.59	5	6	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/27/2005	1320	45.57959	122.75603	18	9.28	<6.5	<6.5	16.89	17.31	22.32	5	7	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/27/2005	1320	45.57959	122.75603	35	9.23	<6.5	<6.5	16.86	17.22	21.84	6	7	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6[8]	9/27/2005	1405	45.57986	122.75613	1	9.26	<6.5	<6.5	17.04	17.69	22.59	5	6	11.29	7.37	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/27/2005	1405	45.57986	122.75613	22	9.21	<6.5	<6.5	17.00	17.31	22.32	4	7	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/27/2005	1405	45.57986	122.75613	42	9.15	<6.5	<6.5	16.96	17.22	21.84	5	7	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	9/29/2005	1019	45.57954	122.75578	1	9.31	NA	NA	16.61	NA	NA	4	NA	NA	7.24	NA	NA
RAA-WCU	9/29/2005	1019	45.57954	122.75578	9	9.32	NA	NA	16.62	NA	NA	4	NA	NA	7.23	NA	NA
RAA-WCU	9/29/2005	1019	45.57954	122.75578	17	9.21	NA	NA	16.50	NA	NA	5	NA	NA	7.23	NA	NA
RAA-WCD1	9/29/2005	1048	45.58060	122.75912	1	9.41	<6.5	<6.5	16.59	16.92	22.59	6	7	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/29/2005	1048	45.58060	122.75912	15	9.32	<6.5	<6.5	16.55	16.80	22.32	6	8	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/29/2005	1048	45.58060	122.75912	29	9.25	<6.5	<6.5	16.54	16.89	21.84	6	9	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/29/2005	1127	45.58085	122.75897	1	9.38	<6.5	<6.5	16.58	16.92	22.59	5	7	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/29/2005	1127	45.58085	122.75897	22	9.28	<6.5	<6.5	16.52	16.80	22.32	5	8	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	9/29/2005	1127	45.58085	122.75897	43	9.22	<6.5	<6.5	16.52	16.89	21.84	5	9	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/29/2005	1134	45.58096	122.75883	1	9.33	<6.5	<6.5	16.58	16.92	22.59	5	7	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	9/29/2005	1134	45.58096	122.75883	22	9.29	<6.5	<6.5	16.53	16.80	22.32	5	8	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCD3	9/29/2005	1134	45.58096	122.75883	43	9.18	<6.5	<6.5	16.53	16.89	21.84	5	9	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	9/29/2005	1445	45.58091	122.75964	1	9.40	NA	NA	16.99	NA	NA	3	NA	NA	7.29	NA	NA
RAA-WCD8	9/29/2005	1445	45.58091	122.75964	16	9.30	NA	NA	16.82	NA	NA	3	NA	NA	7.22	NA	NA
RAA-WCD8	9/29/2005	1445	45.58091	122.75964	35	9.25	NA	NA	16.82	NA	NA	4	NA	NA	7.18	NA	NA
RAA-WCU4	9/29/2005	1410	45.57937	122.75626	1	9.50	<6.5	<6.5	16.66	17.29	22.59	5	6	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/29/2005	1410	45.57937	122.75626	6	9.47	<6.5	<6.5	16.63	17.12	22.32	6	6	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	9/29/2005	1410	45.57937	122.75626	11	9.45	<6.5	<6.5	16.61	17.12	21.84	6	7	18.56	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/29/2005	1415	45.57959	122.75603	1	9.41	<6.5	<6.5	16.65	17.29	22.59	5	6	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/29/2005	1415	45.57959	122.75603	16	9.36	<6.5	<6.5	16.58	17.12	22.32	6	6	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	9/29/2005	1415	45.57959	122.75603	33	9.27	<6.5	<6.5	16.58	17.12	21.84	7	7	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/29/2005	1426	45.57986	122.75613	1	9.40	<6.5	<6.5	16.66	17.29	22.59	5	6	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/29/2005	1426	45.57986	122.75613	21	9.36	<6.5	<6.5	16.60	17.12	22.32	5	6	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	9/29/2005	1426	45.57986	122.75613	41	9.22	<6.5	<6.5	16.54	17.12	21.84	5	7	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU[8]	9/30/2005	1400	45.57954	122.75578	1	NC[9]	NA	NA	16.53	NA	NA	3	NA	NA	7.26	NA	NA
RAA-WCU	9/30/2005	1400	45.57954	122.75578	13	NC	NA	NA	16.50	NA	NA	3	NA	NA	7.27	NA	NA
RAA-WCU	9/30/2005	1400	45.57954	122.75578	21	NC	NA	NA	16.51	NA	NA	3	NA	NA	7.26	NA	NA
RAA-WCD1[8]	9/30/2005	1315	45.58060	122.75912	1	8.38 [10]	<6.5	<6.5	16.47	16.83	22.59	5	6	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/30/2005	1315	45.58060	122.75912	16	NC	<6.5	<6.5	16.47	16.80	22.32	6	6	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	9/30/2005	1315	45.58060	122.75912	31	NC	<6.5	<6.5	16.47	16.81	21.84	6	6	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/3/2005	1045	45.57954	122.75578	1	9.22	NA	NA	15.71	NA	NA	4	NA	NA	7.34	NA	NA
RAA-WCU	10/3/2005	1045	45.57954	122.75578	20	9.17	NA	NA	15.62	NA	NA	5	NA	NA	7.30	NA	NA
RAA-WCU	10/3/2005	1045	45.57954	122.75578	38	9.11	NA	NA	15.60	NA	NA	5	NA	NA	7.26	NA	NA
RAA-WCD1	10/3/2005	1145	45.58060	122.75912	1	9.23	<6.5	<6.5	15.63	16.01	22.59	10	7	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/3/2005	1145	45.58060	122.75912	15	9.23	<6.5	<6.5	15.64	15.92	22.32	10	8	12.63	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/3/2005	1145	45.58060	122.75912	32	9.14	<6.5	<6.5	15.64	15.90	21.84	9	8	18.56	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/3/2005	1130	45.58085	122.75897	1	9.24	<6.5	<6.5	15.63	16.01	22.59	8	7	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/3/2005	1130	45.58085	122.75897	23	9.26	<6.5	<6.5	15.65	15.92	22.32	6	8	12.63	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/3/2005	1130	45.58085	122.75897	45	9.16	<6.5	<6.5	15.64	15.90	21.84	6	8	18.56	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/3/2005	1120	45.58096	122.75883	1	9.31	<6.5	<6.5	15.70	16.01	22.59	7	7	11.29	7.33	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/3/2005	1120	45.58096	122.75883	23	9.25	<6.5	<6.5	15.65	15.92	22.32	5	8	12.63	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/3/2005	1120	45.58096	122.75883	45	9.20	<6.5	<6.5	15.64	15.90	21.84	5	8	18.56	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/3/2005	1450	45.57954	122.75578	1	9.14	NA	NA	16.60	NA	NA	4	NA	NA	7.35	NA	NA
RAA-WCU	10/3/2005	1450	45.57954	122.75578	15	9.19	NA	NA	15.62	NA	NA	4	NA	NA	7.33	NA	NA
RAA-WCU	10/3/2005	1450	45.57954	122.75578	32	9.11	NA	NA	15.59	NA	NA	5	NA	NA	7.27	NA	NA
RAA-WCD1	10/3/2005	1515	45.58060	122.75912	1	9.25	<6.5	<6.5	15.76	16.90	22.59	7	7	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/3/2005	1515	45.58060	122.75912	17	9.24	<6.5	<6.5	15.66	15.92	22.32	6	7	12.63	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/3/2005	1515	45.58060	122.75912	33	9.21	<6.5	<6.5	15.66	15.89	21.84	7	8	18.56	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/3/2005	1510	45.58085	122.75897	1	9.33	<6.5	<6.5	15.76	16.90	22.59	6	7	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/3/2005	1510	45.58085	122.75897	22	9.26	<6.5	<6.5	15.65	15.92	22.32	6	7	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/3/2005	1510	45.58085	122.75897	44	9.20	<6.5	<6.5	15.64	15.89	21.84	6	8	18.56	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/3/2005	1500	45.58096	122.75883	1	9.36	<6.5	<6.5	15.73	16.90	22.59	6	7	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/3/2005	1500	45.58096	122.75883	23	9.29	<6.5	<6.5	15.64	15.92	22.32	6	7	12.63	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/3/2005	1500	45.58096	122.75883	45	9.22	<6.5	<6.5	15.64	15.89	21.84	6	8	18.56	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/5/2005	1005	45.57954	122.75578	1	9.32	NA	NA	15.32	NA	NA	3	NA	NA	7.26	NA	NA
RAA-WCU	10/5/2005	1005	45.57954	122.75578	17	9.26	NA	NA	15.31	NA	NA	4	NA	NA	7.28	NA	NA

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCU	10/5/2005	1005	45.57954	122.75578	33	9.18	NA	NA	15.31	NA	NA	4	NA	NA	7.25	NA	NA
RAA-WCD1	10/5/2005	1055	45.58060	122.75912	1	9.41	<6.5	<6.5	15.48	15.62	22.59	4	6	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/5/2005	1055	45.58060	122.75912	15	9.41	<6.5	<6.5	15.34	15.61	22.32	7	7	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/5/2005	1055	45.58060	122.75912	31	9.34	<6.5	<6.5	15.34	15.61	21.84	6	7	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/5/2005	1045	45.58085	122.75897	1	9.43	<6.5	<6.5	15.34	15.62	22.59	7	6	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/5/2005	1045	45.58085	122.75897	23	9.35	<6.5	<6.5	15.33	15.61	22.32	10	7	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/5/2005	1045	45.58085	122.75897	45	9.25	<6.5	<6.5	15.33	15.61	21.84	12	7	18.56	7.12	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/5/2005	1040	45.58096	122.75883	1	9.48	<6.5	<6.5	15.33	15.62	22.59	5	6	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/5/2005	1040	45.58096	122.75883	24	9.36	<6.5	<6.5	15.33	15.61	22.32	5	7	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/5/2005	1040	45.58096	122.75883	47	9.25	<6.5	<6.5	15.33	15.61	21.84	5	7	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/5/2005	1440	45.57954	122.75578	1	9.31	NA	NA	15.97	NA	NA	5	NA	NA	7.17	NA	NA
RAA-WCU	10/5/2005	1440	45.57954	122.75578	12	9.32	NA	NA	15.52	NA	NA	5	NA	NA	7.12	NA	NA
RAA-WCU	10/5/2005	1440	45.57954	122.75578	23	9.21	NA	NA	15.36	NA	NA	5	NA	NA	7.17	NA	NA
RAA-WCD1	10/5/2005	1515	45.58060	122.75912	1	9.44	<6.5	<6.5	15.43	16.27	22.59	7	8	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/5/2005	1515	45.58060	122.75912	15	9.42	<6.5	<6.5	15.38	15.82	22.32	6	8	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/5/2005	1515	45.58060	122.75912	29	9.40	<6.5	<6.5	15.37	15.66	21.84	7	8	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/5/2005	1530	45.58085	122.75897	1	9.45	<6.5	<6.5	15.39	16.27	22.59	5	8	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/5/2005	1530	45.58085	122.75897	22	9.40	<6.5	<6.5	15.39	15.82	22.32	7	8	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/5/2005	1530	45.58085	122.75897	43	9.32	<6.5	<6.5	15.38	15.66	21.84	8	8	18.56	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/5/2005	1540	45.58096	122.75883	1	9.48	<6.5	<6.5	15.40	16.27	22.59	5	8	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/5/2005	1540	45.58096	122.75883	24	9.41	<6.5	<6.5	15.38	15.82	22.32	5	8	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/5/2005	1540	45.58096	122.75883	46	9.33	<6.5	<6.5	15.37	15.66	21.84	5	8	18.56	7.02	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8 [5]	10/5/2005	1750	45.58091	122.75964	1	9.47	NA	NA	15.54	NA	NA	5	NA	NA	7.24	NA	NA
RAA-WCD8	10/5/2005	1750	45.58091	122.75964	18	9.36	NA	NA	15.51	NA	NA	4	NA	NA	7.15	NA	NA
RAA-WCD8	10/5/2005	1750	45.58091	122.75964	36	9.31	NA	NA	16.50	NA	NA	4	NA	NA	7.06	NA	NA
RAA-WCU4	10/5/2005	1723	45.57937	122.75626	1	9.52	<6.5	<6.5	15.47	15.84	22.59	6	8	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/5/2005	1723	45.57937	122.75626	8	9.49	<6.5	<6.5	15.47	15.81	22.32	5	7	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/5/2005	1723	45.57937	122.75626	15	9.47	<6.5	<6.5	15.47	16.80	21.84	5	7	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/5/2005	1730	45.57959	122.75603	1	9.57	<6.5	<6.5	15.54	15.84	22.59	5	8	11.29	7.42	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/5/2005	1730	45.57959	122.75603	22	9.41	<6.5	<6.5	15.45	15.81	22.32	5	7	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/5/2005	1730	45.57959	122.75603	43	9.34	<6.5	<6.5	15.43	16.80	21.84	5	7	18.56	7.03	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/5/2005	1735	45.57986	122.75613	1	9.58	<6.5	<6.5	15.53	15.84	22.59	6	8	11.29	7.35	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/5/2005	1735	45.57986	122.75613	22	9.45	<6.5	<6.5	15.47	15.81	22.32	5	7	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/5/2005	1735	45.57986	122.75613	44	9.27	<6.5	<6.5	15.42	16.80	21.84	5	7	18.56	7.00	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/6/2005	1140	45.57954	122.75578	1	9.28	NA	NA	15.45	NA	NA	3	NA	NA	7.23	NA	NA
RAA-WCU	10/6/2005	1140	45.57954	122.75578	16	9.21	NA	NA	15.38	NA	NA	4	NA	NA	7.21	NA	NA
RAA-WCU	10/6/2005	1140	45.57954	122.75578	32	9.14	NA	NA	15.37	NA	NA	4	NA	NA	7.23	NA	NA
RAA-WCD1	10/6/2005	1220	45.58060	122.75912	1	9.35	<6.5	<6.5	15.40	15.75	22.59	4	6	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/6/2005	1220	45.58060	122.75912	18	9.31	<6.5	<6.5	15.39	15.68	22.32	5	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/6/2005	1220	45.58060	122.75912	35	9.27	<6.5	<6.5	15.39	15.67	21.84	5	7	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/6/2005	1245	45.58085	122.75897	1	9.38	<6.5	<6.5	15.42	15.75	22.59	5	6	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/6/2005	1245	45.58085	122.75897	23	9.27	<6.5	<6.5	15.38	15.68	22.32	5	7	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/6/2005	1245	45.58085	122.75897	45	9.17	<6.5	<6.5	15.38	15.67	21.84	4	7	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/6/2005	1250	45.58096	122.75883	1	9.41	<6.5	<6.5	15.38	15.75	22.59	3	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/6/2005	1250	45.58096	122.75883	23	9.24	<6.5	<6.5	15.37	15.68	22.32	4	7	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCD3	10/6/2005	1250	45.58096	122.75883	46	9.16	<6.5	<6.5	15.37	15.67	21.84	4	7	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/11/2005	1510	45.57954	122.75578	1	9.97	NA	NA	15.77	NA	NA	1	NA	NA	7.17	NA	NA
RAA-WCU	10/11/2005	1510	45.57954	122.75578	20	9.87	NA	NA	14.35	NA	NA	2	NA	NA	6.99	NA	NA
RAA-WCU	10/11/2005	1510	45.57954	122.75578	39	9.77	NA	NA	14.30	NA	NA	3	NA	NA	6.93	NA	NA
RAA-WCD1	10/11/2005	1530	45.58060	122.75912	1	9.98	<6.5	<6.5	14.98	16.07	22.59	1	4	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/11/2005	1530	45.58060	122.75912	17	9.84	<6.5	<6.5	14.58	14.65	22.32	2	5	12.63	7.06	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/11/2005	1530	45.58060	122.75912	34	9.83	<6.5	<6.5	14.42	14.60	21.84	3	6	18.56	7.08	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/11/2005	1550	45.58085	122.75897	1	10.12	<6.5	<6.5	15.27	16.07	22.59	1	4	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/11/2005	1550	45.58085	122.75897	22	9.95	<6.5	<6.5	14.48	14.65	22.32	2	5	12.63	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/11/2005	1550	45.58085	122.75897	44	9.76	<6.5	<6.5	14.41	14.60	21.84	4	6	18.56	7.02	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/11/2005	1600	45.58096	122.75883	1	9.92	<6.5	<6.5	14.87	16.07	22.59	3	4	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/11/2005	1600	45.58096	122.75883	23	9.81	<6.5	<6.5	14.47	14.65	22.32	2	5	12.63	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/11/2005	1600	45.58096	122.75883	45	9.73	<6.5	<6.5	14.39	14.60	21.84	3	6	18.56	7.05	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/12/2005	1350	45.58091	122.75964	1	10.01	NA	NA	14.53	NA	NA	4	NA	NA	7.23	NA	NA
RAA-WCD8	10/12/2005	1350	45.58091	122.75964	19	10.01	NA	NA	14.35	NA	NA	3	NA	NA	7.18	NA	NA
RAA-WCD8	10/12/2005	1350	45.58091	122.75964	37	9.87	NA	NA	14.33	NA	NA	4	NA	NA	7.16	NA	NA
RAA-WCU4	10/12/2005	1310	45.57937	122.75626	1	9.90	<6.5	<6.5	14.55	14.83	22.59	7	7	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/12/2005	1310	45.57937	122.75626	16	9.93	<6.5	<6.5	14.32	14.65	22.32	8	6	12.63	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/12/2005	1310	45.57937	122.75626	25	9.88	<6.5	<6.5	14.31	14.63	21.84	7	7	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/12/2005	1325	45.57959	122.75603	1	10.00	<6.5	<6.5	14.58	14.83	22.59	5	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/12/2005	1325	45.57959	122.75603	20	9.94	<6.5	<6.5	14.32	14.65	22.32	6	6	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/12/2005	1325	45.57959	122.75603	40	9.83	<6.5	<6.5	14.32	14.63	21.84	7	7	18.56	7.12	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/12/2005	1330	45.57986	122.75613	1	9.94	<6.5	<6.5	14.51	14.83	22.59	5	7	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/12/2005	1330	45.57986	122.75613	21	9.92	<6.5	<6.5	14.32	14.65	22.32	5	6	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/12/2005	1330	45.57986	122.75613	42	9.83	<6.5	<6.5	14.31	14.63	21.84	6	7	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/12/2005	1730	45.57954	122.75578	1	10.13	NA	NA	14.67	NA	NA	5	NA	NA	7.30	NA	NA
RAA-WCU	10/12/2005	1730	45.57954	122.75578	12	9.99	NA	NA	14.40	NA	NA	5	NA	NA	7.23	NA	NA
RAA-WCU	10/12/2005	1730	45.57954	122.75578	23	9.89	NA	NA	14.37	NA	NA	5	NA	NA	7.21	NA	NA
RAA-WCD1	10/12/2005	1738	45.58060	122.75912	1	10.00	<6.5	<6.5	14.52	14.97	22.59	3	8	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/12/2005	1738	45.58060	122.75912	21	9.92	<6.5	<6.5	14.36	14.70	22.32	4	8	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/12/2005	1738	45.58060	122.75912	41	9.85	<6.5	<6.5	14.35	14.67	21.84	4	8	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/12/2005	1739	45.58085	122.75897	1	10.20	<6.5	<6.5	14.49	14.97	22.59	5	8	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/12/2005	1739	45.58085	122.75897	23	9.92	<6.5	<6.5	14.37	14.70	22.32	5	8	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/12/2005	1739	45.58085	122.75897	44	9.83	<6.5	<6.5	14.36	14.67	21.84	4	8	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/12/2005	1740	45.58096	122.75883	1	10.13	<6.5	<6.5	14.52	14.97	22.59	5	8	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/12/2005	1740	45.58096	122.75883	23	9.90	<6.5	<6.5	14.36	14.70	22.32	4	8	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/12/2005	1740	45.58096	122.75883	45	9.87	<6.5	<6.5	14.36	14.67	21.84	5	8	18.56	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/13/2005	920	45.57954	122.75578	1	9.44	NA	NA	14.54	NA	NA	3	NA	NA	7.25	NA	NA
RAA-WCU	10/13/2005	920	45.57954	122.75578	14	9.45	NA	NA	14.45	NA	NA	4	NA	NA	7.23	NA	NA
RAA-WCU	10/13/2005	920	45.57954	122.75578	27	9.38	NA	NA	14.42	NA	NA	4	NA	NA	7.17	NA	NA
RAA-WCD1	10/13/2005	945	45.58060	122.75912	1	9.44	<6.5	<6.5	14.51	14.84	22.59	3	6	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/13/2005	945	45.58060	122.75912	12	9.45	<6.5	<6.5	14.38	14.75	22.32	3	7	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/13/2005	945	45.58060	122.75912	23	9.42	<6.5	<6.5	14.36	14.72	21.84	3	7	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/13/2005	1025	45.58085	122.75897	1	9.46	<6.5	<6.5	14.49	14.84	22.59	3	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/13/2005	1025	45.58085	122.75897	21	9.41	<6.5	<6.5	14.37	14.75	22.32	3	7	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCD2	10/13/2005	1025	45.58085	122.75897	40	9.35	<6.5	<6.5	14.36	14.72	21.84	3	7	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/13/2005	1032	45.58096	122.75883	1	9.44	<6.5	<6.5	14.47	14.84	22.59	3	6	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/13/2005	1032	45.58096	122.75883	22	9.39	<6.5	<6.5	14.37	14.75	22.32	4	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/13/2005	1032	45.58096	122.75883	44	9.32	<6.5	<6.5	14.37	14.72	21.84	3	7	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/13/2005	1215	45.57954	122.75578	1	9.47	NA	NA	14.81	NA	NA	3	NA	NA	7.22	NA	NA
RAA-WCU	10/13/2005	1215	45.57954	122.75578	14	9.45	NA	NA	14.62	NA	NA	2	NA	NA	7.27	NA	NA
RAA-WCU	10/13/2005	1215	45.57954	122.75578	31	9.45	NA	NA	14.47	NA	NA	4	NA	NA	7.23	NA	NA
RAA-WCD1	10/13/2005	1225	45.58060	122.75912	1	9.44	<6.5	<6.5	14.56	15.11	22.59	3	6	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/13/2005	1225	45.58060	122.75912	17.5	9.42	<6.5	<6.5	14.44	14.92	22.32	3	5	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/13/2005	1225	45.58060	122.75912	35	9.35	<6.5	<6.5	14.43	14.77	21.84	3	7	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/13/2005	1232	45.58085	122.75897	1	9.44	<6.5	<6.5	14.54	15.11	22.59	3	6	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/13/2005	1232	45.58085	122.75897	21	9.41	<6.5	<6.5	14.45	14.92	22.32	3	5	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/13/2005	1232	45.58085	122.75897	42	9.33	<6.5	<6.5	14.42	14.77	21.84	4	7	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/13/2005	1240	45.58096	122.75883	1	9.42	<6.5	<6.5	14.60	15.11	22.59	4	6	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/13/2005	1240	45.58096	122.75883	22	9.39	<6.5	<6.5	14.43	14.92	22.32	4	5	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/13/2005	1240	45.58096	122.75883	44	9.30	<6.5	<6.5	14.43	14.77	21.84	4	7	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/13/2005	1615	45.58091	122.75964	1	9.41	NA	NA	14.66	NA	NA	8	NA	NA	7.28	NA	NA
RAA-WCD8	10/13/2005	1615	45.58091	122.75964	23	9.42	NA	NA	14.52	NA	NA	9	NA	NA	7.26	NA	NA
RAA-WCD8	10/13/2005	1615	45.58091	122.75964	44	9.32	NA	NA	14.52	NA	NA	9	NA	NA	7.20	NA	NA
RAA-WCU4[6]	10/13/2005	1625	45.57937	122.75626	1	9.48	<6.5	<6.5	14.68	14.96	22.59	3	11	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/13/2005	1625	45.57937	122.75626	7	9.46	<6.5	<6.5	14.60	14.82	22.32	3	12	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/13/2005	1630	45.57959	122.75603	1	9.50	<6.5	<6.5	14.63	14.96	22.59	4	11	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/13/2005	1630	45.57959	122.75603	21	9.43	<6.5	<6.5	14.52	14.82	22.32	3	12	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/13/2005	1630	45.57959	122.75603	41	9.33	<6.5	<6.5	14.51	14.82	21.84	4	12	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/13/2005	1635	45.57986	122.75613	1	9.48	<6.5	<6.5	14.61	14.96	22.59	5	11	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/13/2005	1635	45.57986	122.75613	22	9.41	<6.5	<6.5	14.51	14.82	22.32	3	12	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/13/2005	1635	45.57986	122.75613	43	9.33	<6.5	<6.5	14.50	14.82	21.84	4	12	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/14/2005	1200	45.57954	122.75578	1	9.45	NA	NA	14.85	NA	NA	4	NA	NA	7.21	NA	NA
RAA-WCU	10/14/2005	1200	45.57954	122.75578	20	9.37	NA	NA	14.66	NA	NA	4	NA	NA	7.17	NA	NA
RAA-WCU	10/14/2005	1200	45.57954	122.75578	40	9.31	NA	NA	14.63	NA	NA	4	NA	NA	7.14	NA	NA
RAA-WCD1	10/14/2005	1100	45.58060	122.75912	1	9.41	<6.5	<6.5	14.97	15.15	22.59	4	7	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/14/2005	1100	45.58060	122.75912	17	9.37	<6.5	<6.5	14.66	14.96	22.32	3	7	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/14/2005	1100	45.58060	122.75912	35	9.30	<6.5	<6.5	14.60	14.93	21.84	3	7	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/14/2005	1240	45.58085	122.75897	1	9.45	<6.5	<6.5	14.97	15.15	22.59	3	7	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/14/2005	1240	45.58085	122.75897	22	9.37	<6.5	<6.5	14.66	14.96	22.32	4	7	12.63	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/14/2005	1240	45.58085	122.75897	43	9.28	<6.5	<6.5	14.63	14.93	21.84	4	7	18.56	7.10	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/14/2005	1255	45.58096	122.75883	1	9.43	<6.5	<6.5	14.77	15.15	22.59	4	7	11.29	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/14/2005	1255	45.58096	122.75883	23	9.36	<6.5	<6.5	14.63	14.96	22.32	4	7	12.63	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/14/2005	1255	45.58096	122.75883	46	9.28	<6.5	<6.5	14.61	14.93	21.84	4	7	18.56	7.12	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/15/2005	930	45.57954	122.75578	1	9.45	NA	NA	14.83	NA	NA	3	NA	NA	7.28	NA	NA
RAA-WCU	10/15/2005	930	45.57954	122.75578	15	9.45	NA	NA	14.65	NA	NA	3	NA	NA	7.24	NA	NA
RAA-WCU	10/15/2005	930	45.57954	122.75578	30	9.38	NA	NA	14.62	NA	NA	4	NA	NA	7.25	NA	NA
RAA-WCD1	10/15/2005	952	45.58060	122.75912	1	9.37	<6.5	<6.5	14.81	15.13	22.59	2	6	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/15/2005	952	45.58060	122.75912	17	9.33	<6.5	<6.5	14.66	14.95	22.32	3	6	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/15/2005	952	45.58060	122.75912	35	9.29	<6.5	<6.5	14.64	14.92	21.84	6	7	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCD2	10/15/2005	1015	45.58085	122.75897	1	9.39	<6.5	<6.5	14.80	15.13	22.59	3	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/15/2005	1015	45.58085	122.75897	23	9.37	<6.5	<6.5	14.65	14.95	22.32	5	6	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/15/2005	1015	45.58085	122.75897	45	9.28	<6.5	<6.5	14.64	14.92	21.84	7	7	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/15/2005	1020	45.58096	122.75883	1	9.44	<6.5	<6.5	14.78	15.13	22.59	4	6	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/15/2005	1020	45.58096	122.75883	23	9.43	<6.5	<6.5	14.65	14.95	22.32	5	6	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/15/2005	1020	45.58096	122.75883	45	9.28	<6.5	<6.5	14.65	14.92	21.84	9	7	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8	10/15/2005	1450	45.58091	122.75964	1	9.43	NA	NA	14.76	NA	NA	4	NA	NA	7.12	NA	NA
RAA-WCD8	10/15/2005	1450	45.58091	122.75964	30	9.34	NA	NA	14.67	NA	NA	3	NA	NA	7.04	NA	NA
RAA-WCD8	10/15/2005	1450	45.58091	122.75964	55	9.33	NA	NA	14.71	NA	NA	5	NA	NA	7.15	NA	NA
RAA-WCU4	10/15/2005	1504	45.57937	122.75626	1	9.41	<6.5	<6.5	14.70	15.06	22.59	5	7	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/15/2005	1504	45.57937	122.75626	8	9.43	<6.5	<6.5	14.70	14.97	22.32	5	6	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/15/2005	1504	45.57937	122.75626	12	9.40	<6.5	<6.5	14.70	15.01	21.84	5	8	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/15/2005	1520	45.57959	122.75603	1	9.46	<6.5	<6.5	14.73	15.06	22.59	6	7	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/15/2005	1520	45.57959	122.75603	24	9.37	<6.5	<6.5	14.70	14.97	22.32	6	6	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/15/2005	1520	45.57959	122.75603	47	9.26	<6.5	<6.5	14.69	15.01	21.84	6	8	18.56	7.03	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/15/2005	1511	45.57986	122.75613	1	9.46	<6.5	<6.5	14.73	15.06	22.59	5	7	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/15/2005	1511	45.57986	122.75613	22	9.38	<6.5	<6.5	14.70	14.97	22.32	5	6	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/15/2005	1511	45.57986	122.75613	43	9.30	<6.5	<6.5	14.70	15.01	21.84	5	8	18.56	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8	10/15/2005	1610	45.58091	122.75964	1	9.46	NA	NA	14.77	NA	NA	2	NA	NA	7.21	NA	NA
RAA-WCD8	10/15/2005	1610	45.58091	122.75964	20	9.39	NA	NA	14.74	NA	NA	2	NA	NA	7.15	NA	NA
RAA-WCD8	10/15/2005	1610	45.58091	122.75964	40	9.30	NA	NA	14.74	NA	NA	2	NA	NA	7.11	NA	NA
RAA-WCU4	10/15/2005	1615	45.57937	122.75626	1	9.44	<6.5	<6.5	14.88	15.07	22.59	4	5	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/15/2005	1615	45.57937	122.75626	7	9.41	<6.5	<6.5	14.89	15.04	22.32	5	5	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/15/2005	1615	45.57937	122.75626	14	9.37	<6.5	<6.5	14.76	15.04	21.84	6	5	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/15/2005	1625	45.57959	122.75603	1	9.47	<6.5	<6.5	14.78	15.07	22.59	4	5	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/15/2005	1625	45.57959	122.75603	22	9.37	<6.5	<6.5	14.75	15.04	22.32	4	5	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/15/2005	1625	45.57959	122.75603	43	9.31	<6.5	<6.5	14.75	15.04	21.84	5	5	18.56	7.10	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/15/2005	1620	45.57986	122.75613	1	9.51	<6.5	<6.5	14.78	15.07	22.59	4	5	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/15/2005	1620	45.57986	122.75613	23	9.39	<6.5	<6.5	14.75	15.04	22.32	4	5	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/15/2005	1620	45.57986	122.75613	45	9.30	<6.5	<6.5	14.75	15.04	21.84	4	5	18.56	7.05	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/16/2005	905	45.57954	122.75578	1	9.46	NA	NA	14.63	NA	NA	5	NA	NA	7.28	NA	NA
RAA-WCU	10/16/2005	905	45.57954	122.75578	11	9.53	NA	NA	14.61	NA	NA	5	NA	NA	7.29	NA	NA
RAA-WCU	10/16/2005	905	45.57954	122.75578	19	9.46	NA	NA	14.61	NA	NA	5	NA	NA	7.30	NA	NA
RAA-WCD1	10/16/2005	925	45.58060	122.75912	1	9.38	<6.5	<6.5	14.66	14.93	22.59	3	8	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/16/2005	925	45.58060	122.75912	18	9.33	<6.5	<6.5	14.63	14.91	22.32	5	8	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/16/2005	925	45.58060	122.75912	35	9.25	<6.5	<6.5	14.63	14.91	21.84	8	8	18.56	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/16/2005	940	45.58085	122.75897	1	9.45	<6.5	<6.5	14.64	14.93	22.59	5	8	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/16/2005	940	45.58085	122.75897	23	9.37	<6.5	<6.5	14.62	14.91	22.32	5	8	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/16/2005	940	45.58085	122.75897	45	9.29	<6.5	<6.5	14.62	14.91	21.84	6	8	18.56	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/16/2005	945	45.58096	122.75883	1	9.50	<6.5	<6.5	14.63	14.93	22.59	7	8	11.29	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/16/2005	945	45.58096	122.75883	24	9.40	<6.5	<6.5	14.62	14.91	22.32	8	8	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/16/2005	945	45.58096	122.75883	47	9.30	<6.5	<6.5	14.62	14.91	21.84	7	8	18.56	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/16/2005	1315	45.57954	122.75578	1	9.55	NA	NA	14.70	NA	NA	4	NA	NA	7.22	NA	NA
RAA-WCU	10/16/2005	1315	45.57954	122.75578	10	9.44	NA	NA	14.80	NA	NA	6	NA	NA	7.24	NA	NA
RAA-WCU	10/16/2005	1315	45.57954	122.75578	19	9.44	NA	NA	14.62	NA	NA	5	NA	NA	7.27	NA	NA

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCD1	10/16/2005	1320	45.58060	122.75912	1	9.49	<6.5	<6.5	14.78	15.00	22.59	4	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/16/2005	1320	45.58060	122.75912	16	9.41	<6.5	<6.5	14.64	15.10	22.32	5	9	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/16/2005	1320	45.58060	122.75912	32	9.34	<6.5	<6.5	14.65	14.92	21.84	7	8	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/16/2005	1330	45.58085	122.75897	1	9.42	<6.5	<6.5	14.74	15.00	22.59	4	7	11.29	7.31	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/16/2005	1330	45.58085	122.75897	22	9.38	<6.5	<6.5	14.64	15.10	22.32	6	9	12.63	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/16/2005	1330	45.58085	122.75897	43	9.37	<6.5	<6.5	14.66	14.92	21.84	6	8	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/16/2005	1335	45.58096	122.75883	1	9.54	<6.5	<6.5	14.69	15.00	22.59	6	7	11.29	7.32	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/16/2005	1335	45.58096	122.75883	22	9.39	<6.5	<6.5	14.69	15.10	22.32	6	9	12.63	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/16/2005	1335	45.58096	122.75883	45	9.32	<6.5	<6.5	14.65	14.92	21.84	6	8	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/17/2005	955	45.57954	122.75578	1	9.62	NA	NA	14.58	NA	NA	4	NA	NA	7.19	NA	NA
RAA-WCU	10/17/2005	955	45.57954	122.75578	19	9.56	NA	NA	14.55	NA	NA	4	NA	NA	7.18	NA	NA
RAA-WCU	10/17/2005	955	45.57954	122.75578	38	9.47	NA	NA	14.54	NA	NA	6	NA	NA	7.17	NA	NA
RAA-WCD1	10/17/2005	1020	45.58060	122.75912	1	9.66	<6.5	<6.5	14.64	14.88	22.59	4	7	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/17/2005	1020	45.58060	122.75912	17	9.56	<6.5	<6.5	14.55	14.85	22.32	5	7	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/17/2005	1020	45.58060	122.75912	32	9.48	<6.5	<6.5	14.56	14.84	21.84	6	9	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/17/2005	1045	45.58085	122.75897	1	9.58	<6.5	<6.5	14.63	14.88	22.59	7	7	11.29	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/17/2005	1045	45.58085	122.75897	23	9.51	<6.5	<6.5	14.57	14.85	22.32	7	7	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/17/2005	1045	45.58085	122.75897	45	9.37	<6.5	<6.5	14.56	14.84	21.84	11	9	18.56	7.06	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/17/2005	1055	45.58096	122.75883	1	9.58	<6.5	<6.5	14.64	14.88	22.59	4	7	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/17/2005	1055	45.58096	122.75883	22	9.53	<6.5	<6.5	14.55	14.85	22.32	4	7	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/17/2005	1055	45.58096	122.75883	44	9.43	<6.5	<6.5	14.56	14.84	21.84	8	9	18.56	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/17/2005	1835	45.57954	122.75578	1	9.62	NA	NA	14.83	NA	NA	3	NA	NA	7.12	NA	NA
RAA-WCU	10/17/2005	1835	45.57954	122.75578	20	9.55	NA	NA	14.73	NA	NA	3	NA	NA	7.17	NA	NA
RAA-WCU	10/17/2005	1835	45.57954	122.75578	39	9.47	NA	NA	14.69	NA	NA	3	NA	NA	7.14	NA	NA
RAA-WCD1	10/17/2005	1851	45.58060	122.75912	1	9.61	<6.5	<6.5	14.82	15.13	22.59	5	6	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/17/2005	1851	45.58060	122.75912	18	9.53	<6.5	<6.5	14.80	15.03	22.32	5	6	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/17/2005	1851	45.58060	122.75912	35	9.48	<6.5	<6.5	14.79	14.99	21.84	6	6	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/17/2005	1846	45.58085	122.75897	1	9.67	<6.5	<6.5	14.79	15.13	22.59	8	6	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/17/2005	1846	45.58085	122.75897	24	9.51	<6.5	<6.5	14.80	15.03	22.32	9	6	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/17/2005	1846	45.58085	122.75897	47	9.45	<6.5	<6.5	14.79	14.99	21.84	8	6	18.56	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/17/2005	1842	45.58096	122.75883	1	9.62	<6.5	<6.5	14.76	15.13	22.59	6	6	11.29	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/17/2005	1842	45.58096	122.75883	25	9.53	<6.5	<6.5	14.71	15.03	22.32	3	6	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/17/2005	1842	45.58096	122.75883	48	9.47	<6.5	<6.5	14.69	14.99	21.84	3	6	18.56	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/18/2005	900	45.57954	122.75578	1	9.33	NA	NA	14.65	NA	NA	6	NA	NA	7.25	NA	NA
RAA-WCU	10/18/2005	900	45.57954	122.75578	10	9.35	NA	NA	14.64	NA	NA	6	NA	NA	7.25	NA	NA
RAA-WCU	10/18/2005	900	45.57954	122.75578	23	9.26	NA	NA	14.64	NA	NA	6	NA	NA	7.24	NA	NA
RAA-WCD2[4]	10/18/2005	925	45.58085	122.75897	1	9.35	<6.5	<6.5	14.65	14.95	22.59	10	9	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/18/2005	925	45.58085	122.75897	23	9.25	<6.5	<6.5	14.65	14.94	22.32	11	9	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/18/2005	925	45.58085	122.75897	46	9.17	<6.5	<6.5	14.66	14.94	21.84	12	9	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/18/2005	940	45.58096	122.75883	1	9.37	<6.5	<6.5	14.64	14.95	22.59	9	9	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/18/2005	940	45.58096	122.75883	23	9.25	<6.5	<6.5	14.67	14.94	22.32	8	9	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/18/2005	940	45.58096	122.75883	46	9.16	<6.5	<6.5	14.66	14.94	21.84	13	9	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/20/2005	1335	45.57954	122.75578	1	9.58	NA	NA	14.83	NA	NA	4	NA	NA	7.28	NA	NA
RAA-WCU	10/20/2005	1335	45.57954	122.75578	13	9.50	NA	NA	14.81	NA	NA	5	NA	NA	7.27	NA	NA
RAA-WCU	10/20/2005	1335	45.57954	122.75578	25	9.44	NA	NA	14.79	NA	NA	5	NA	NA	7.26	NA	NA

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCD1	10/20/2005	1345	45.58060	122.75912	1	9.50	<6.5	<6.5	14.84	15.13	22.59	10	7	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/20/2005	1345	45.58060	122.75912	18	9.48	<6.5	<6.5	14.85	15.11	22.32	8	8	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/20/2005	1345	45.58060	122.75912	35	9.44	<6.5	<6.5	14.87	15.09	21.84	11	8	18.56	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/20/2005	1415	45.58085	122.75897	1	9.46	<6.5	<6.5	14.87	15.13	22.59	8	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/20/2005	1415	45.58085	122.75897	22	9.42	<6.5	<6.5	14.83	15.11	22.32	**15**	8	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/20/2005	1415	45.58085	122.75897	44	9.34	<6.5	<6.5	14.83	15.09	21.84	17	8	18.56	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/20/2005	1425	45.58096	122.75883	1	9.43	<6.5	<6.5	14.92	15.13	22.59	8	7	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/20/2005	1425	45.58096	122.75883	23	9.41	<6.5	<6.5	14.83	15.11	22.32	**13**	8	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/20/2005	1425	45.58096	122.75883	45	9.34	<6.5	<6.5	14.82	15.09	21.84	**19**	8	18.56	7.06	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/20/2005	1640	45.57954	122.75578	1	9.53	NA	NA	14.90	NA	NA	3	NA	NA	7.19	NA	NA
RAA-WCU	10/20/2005	1640	45.57954	122.75578	13	9.45	NA	NA	14.80	NA	NA	4	NA	NA	7.20	NA	NA
RAA-WCU	10/20/2005	1640	45.57954	122.75578	21	9.39	NA	NA	14.81	NA	NA	5	NA	NA	7.20	NA	NA
RAA-WCD1	10/20/2005	1703	45.58060	122.75912	1	9.50	<6.5	<6.5	14.88	15.20	22.59	9	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/20/2005	1703	45.58060	122.75912	18	9.40	<6.5	<6.5	14.86	15.10	22.32	8	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/20/2005	1703	45.58060	122.75912	35	9.33	<6.5	<6.5	14.84	15.11	21.84	9	8	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/20/2005	1656	45.58085	122.75897	1	9.54	<6.5	<6.5	14.86	15.20	22.59	9	6	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/20/2005	1656	45.58085	122.75897	23	9.44	<6.5	<6.5	14.84	15.10	22.32	9	7	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/20/2005	1656	45.58085	122.75897	46	9.33	<6.5	<6.5	14.84	15.11	21.84	10	8	18.56	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/20/2005	1648	45.58096	122.75883	1	9.54	<6.5	<6.5	14.86	15.20	22.59	9	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/20/2005	1648	45.58096	122.75883	23	9.43	<6.5	<6.5	14.84	15.10	22.32	9	7	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/20/2005	1648	45.58096	122.75883	46	9.33	<6.5	<6.5	14.83	15.11	21.84	9	8	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/21/2005	1105	45.57954	122.75578	1	9.59	NA	NA	14.80	NA	NA	5	NA	NA	7.26	NA	NA
RAA-WCU	10/21/2005	1105	45.57954	122.75578	16	9.53	NA	NA	14.76	NA	NA	5	NA	NA	7.26	NA	NA
RAA-WCU	10/21/2005	1105	45.57954	122.75578	31	9.49	NA	NA	14.75	NA	NA	5	NA	NA	7.24	NA	NA
RAA-WCD1	10/21/2005	1030	45.58060	122.75912	1	9.56	<6.5	<6.5	14.74	15.10	22.59	**17**	8	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/21/2005	1030	45.58060	122.75912	16	9.55	<6.5	<6.5	14.75	15.06	22.32	**16**	8	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/21/2005	1030	45.58060	122.75912	31	9.47	<6.5	<6.5	14.74	15.05	21.84	17	8	18.56	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/21/2005	1127	45.58085	122.75897	1	9.62	<6.5	<6.5	14.78	15.10	22.59	**16**	8	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/21/2005	1127	45.58085	122.75897	22	9.53	<6.5	<6.5	14.77	15.06	22.32	**13**	8	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/21/2005	1127	45.58085	122.75897	43	9.46	<6.5	<6.5	14.77	15.05	21.84	15	8	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/21/2005	1122	45.58096	122.75883	1	9.55	<6.5	<6.5	14.70	15.10	22.59	**15**	8	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/21/2005	1122	45.58096	122.75883	23	9.48	<6.5	<6.5	14.76	15.06	22.32	**18**	8	12.63	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/21/2005	1122	45.58096	122.75883	46	9.41	<6.5	<6.5	14.76	15.05	21.84	**19**	8	18.56	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/22/2005	944	45.58091	122.75964	1	9.52	NA	NA	14.85	NA	NA	4	NA	NA	7.21	NA	NA
RAA-WCD8	10/22/2005	944	45.58091	122.75964	17	9.47	NA	NA	14.78	NA	NA	4	NA	NA	7.25	NA	NA
RAA-WCD8	10/22/2005	944	45.58091	122.75964	34	9.41	NA	NA	14.78	NA	NA	4	NA	NA	7.24	NA	NA
RAA-WCU4	10/22/2005	1015	45.57937	122.75626	1	9.51	<6.5	<6.5	14.94	15.15	22.59	5	7	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/22/2005	1015	45.57937	122.75626	6	9.51	<6.5	<6.5	14.81	15.08	22.32	5	7	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/22/2005	1015	45.57937	122.75626	11	9.51	<6.5	<6.5	14.81	15.08	21.84	6	7	18.56	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/22/2005	1047	45.57959	122.75603	1	9.57	<6.5	<6.5	14.95	15.15	22.59	3	7	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/22/2005	1047	45.57959	122.75603	20	9.47	<6.5	<6.5	14.79	15.08	22.32	5	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/22/2005	1047	45.57959	122.75603	35	9.37	<6.5	<6.5	14.79	15.08	21.84	4	7	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/22/2005	1050	45.57986	122.75613	1	9.56	<6.5	<6.5	14.92	15.15	22.59	4	7	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/22/2005	1050	45.57986	122.75613	22	9.48	<6.5	<6.5	14.79	15.08	22.32	4	7	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/22/2005	1050	45.57986	122.75613	43	9.37	<6.5	<6.5	14.78	15.08	21.84	5	7	18.56	7.08	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCU	10/22/2005	1336	45.57954	122.75578	1	9.51	NA	NA	15.14	NA	NA	4	NA	NA	7.28	NA	NA
RAA-WCU	10/22/2005	1336	45.57954	122.75578	13	9.43	NA	NA	14.85	NA	NA	6	NA	NA	7.23	NA	NA
RAA-WCU	10/22/2005	1336	45.57954	122.75578	25	9.40	NA	NA	14.82	NA	NA	5	NA	NA	7.17	NA	NA
RAA-WCD1	10/22/2005	1315	45.58060	122.75912	1	9.58	<6.5	<6.5	15.14	15.44	22.59	6	7	11.29	7.05	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/22/2005	1315	45.58060	122.75912	18	9.43	<6.5	<6.5	14.90	15.15	22.32	6	9	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/22/2005	1315	45.58060	122.75912	34	9.35	<6.5	<6.5	14.88	15.12	21.84	6	8	18.56	7.09	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/22/2005	1320	45.58085	122.75897	1	9.60	<6.5	<6.5	15.14	15.44	22.59	5	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/22/2005	1320	45.58085	122.75897	21	9.45	<6.5	<6.5	14.89	15.15	22.32	7	9	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/22/2005	1320	45.58085	122.75897	44	9.32	<6.5	<6.5	14.88	15.12	21.84	9	8	18.56	7.01	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/22/2005	1325	45.58096	122.75883	1	9.51	<6.5	<6.5	15.01	15.44	22.59	7	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/22/2005	1325	45.58096	122.75883	23	9.40	<6.5	<6.5	14.88	15.15	22.32	10	9	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/22/2005	1325	45.58096	122.75883	45	9.29	<6.5	<6.5	14.85	15.12	21.84	11	8	18.56	6.96	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/22/2005	1635	45.57954	122.75578	1	9.53	NA	NA	15.06	NA	NA	4	NA	NA	7.09	NA	NA
RAA-WCU	10/22/2005	1635	45.57954	122.75578	15	9.57	NA	NA	14.87	NA	NA	6	NA	NA	7.09	NA	NA
RAA-WCU	10/22/2005	1635	45.57954	122.75578	29	9.44	NA	NA	14.85	NA	NA	6	NA	NA	7.00	NA	NA
RAA-WCD1	10/22/2005	1640	45.58060	122.75912	1	9.78	<6.5	<6.5	15.39	15.36	22.59	6	7	11.29	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/22/2005	1640	45.58060	122.75912	17	9.47	<6.5	<6.5	15.02	15.17	22.32	7	9	12.63	7.10	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/22/2005	1640	45.58060	122.75912	34	9.35	<6.5	<6.5	14.90	15.15	21.84	10	9	18.56	6.99	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/22/2005	1645	45.58085	122.75897	1	9.76	<6.5	<6.5	15.36	15.36	22.59	6	7	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/22/2005	1645	45.58085	122.75897	23	9.47	<6.5	<6.5	14.95	15.17	22.32	9	9	12.63	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/22/2005	1645	45.58085	122.75897	45	9.31	<6.5	<6.5	14.89	15.15	21.84	17	9	18.56	6.93	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/22/2005	1650	45.58096	122.75883	1	9.59	<6.5	<6.5	15.39	15.36	22.59	7	7	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/22/2005	1650	45.58096	122.75883	23	9.41	<6.5	<6.5	14.95	15.17	22.32	7	9	12.63	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/22/2005	1650	45.58096	122.75883	45	9.37	<6.5	<6.5	14.84	15.15	21.84	6	9	18.56	6.95	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/23/2005	1305	45.57954	122.75578	1	9.54	NA	NA	14.99	NA	NA	6	NA	NA	6.96	NA	NA
RAA-WCU	10/23/2005	1305	45.57954	122.75578	16	9.37	NA	NA	14.87	NA	NA	6	NA	NA	7.18	NA	NA
RAA-WCU	10/23/2005	1305	45.57954	122.75578	31	9.32	NA	NA	14.87	NA	NA	6	NA	NA	7.19	NA	NA
RAA-WCD1	10/23/2005	1330	45.58060	122.75912	1	9.45	<6.5	<6.5	14.91	15.29	22.59	10	9	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/23/2005	1330	45.58060	122.75912	19	9.38	<6.5	<6.5	14.97	15.17	22.32	9	9	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/23/2005	1330	45.58060	122.75912	38	9.32	<6.5	<6.5	14.89	15.17	21.84	9	9	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/23/2005	1337	45.58085	122.75897	1	9.46	<6.5	<6.5	14.90	15.29	22.59	9	9	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/23/2005	1337	45.58085	122.75897	22	9.35	<6.5	<6.5	14.89	15.17	22.32	6	9	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/23/2005	1337	45.58085	122.75897	44	9.27	<6.5	<6.5	14.88	15.17	21.84	7	9	18.56	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/23/2005	1340	45.58096	122.75883	1	9.48	<6.5	<6.5	14.90	15.29	22.59	5	9	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/23/2005	1340	45.58096	122.75883	23	9.38	<6.5	<6.5	14.88	15.17	22.32	5	9	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/23/2005	1340	45.58096	122.75883	45	9.28	<6.5	<6.5	14.85	15.17	21.84	6	9	18.56	7.05	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/24/2005	1205	45.58091	122.75964	1	9.47	NA	NA	15.12	NA	NA	3	NA	NA	7.21	NA	NA
RAA-WCD8	10/24/2005	1205	45.58091	122.75964	20	9.33	NA	NA	14.93	NA	NA	4	NA	NA	7.17	NA	NA
RAA-WCD8	10/24/2005	1205	45.58091	122.75964	40	9.23	NA	NA	14.90	NA	NA	4	NA	NA	7.12	NA	NA
RAA-WCU4	10/24/2005	1225	45.57937	122.75626	1	9.45	<6.5	<6.5	15.29	15.42	22.59	5	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/24/2005	1225	45.57937	122.75626	7	9.43	<6.5	<6.5	15.08	15.23	22.32	5	7	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/24/2005	1225	45.57937	122.75626	17	9.39	<6.5	<6.5	15.01	15.20	21.84	5	7	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/24/2005	1305	45.57959	122.75603	1	9.45	<6.5	<6.5	15.62	15.42	22.59	4	6	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/24/2005	1305	45.57959	122.75603	25	9.34	<6.5	<6.5	14.96	15.23	22.32	4	7	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/24/2005	1305	45.57959	122.75603	50	9.23	<6.5	<6.5	14.92	15.20	21.84	8	7	18.56	7.05	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCU6	10/24/2005	1310	45.57986	122.75613	1	9.52	<6.5	<6.5	15.66	15.42	22.59	4	6	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/24/2005	1310	45.57986	122.75613	26	9.34	<6.5	<6.5	14.93	15.23	22.32	5	7	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/24/2005	1310	45.57986	122.75613	50	9.23	<6.5	<6.5	14.91	15.20	21.84	7	7	18.56	6.99	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/24/2005	1552	45.57954	122.75578	1	9.62	NA	NA	15.65	NA	NA	5	NA	NA	7.25	NA	NA
RAA-WCU	10/24/2005	1552	45.57954	122.75578	14	9.42	NA	NA	15.03	NA	NA	4	NA	NA	7.06	NA	NA
RAA-WCU	10/24/2005	1552	45.57954	122.75578	27	9.36	NA	NA	14.94	NA	NA	8	NA	NA	7.01	NA	NA
RAA-WCD1	10/24/2005	1559	45.58060	122.75912	1	9.62	<6.5	<6.5	15.45	15.95	22.59	6	8	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/24/2005	1559	45.58060	122.75912	16	9.41	<6.5	<6.5	15.13	15.33	22.32	7	7	12.63	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/24/2005	1559	45.58060	122.75912	32	9.33	<6.5	<6.5	14.98	15.24	21.84	9	11	18.56	7.02	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/24/2005	1604	45.58085	122.75897	1	9.62	<6.5	<6.5	15.37	15.95	22.59	7	8	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/24/2005	1604	45.58085	122.75897	22	9.33	<6.5	<6.5	15.05	15.33	22.32	6	7	12.63	7.08	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/24/2005	1604	45.58085	122.75897	43	9.29	<6.5	<6.5	14.94	15.24	21.84	12	11	18.56	6.94	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/24/2005	1613	45.58096	122.75883	1	9.51	<6.5	<6.5	15.15	15.95	22.59	5	8	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/24/2005	1613	45.58096	122.75883	23	9.37	<6.5	<6.5	14.97	15.33	22.32	7	7	12.63	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/24/2005	1613	45.58096	122.75883	44	9.28	<6.5	<6.5	14.93	15.24	21.84	11	11	18.56	6.90	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/25/2005	1010	45.58091	122.75964	1	9.41	NA	NA	14.95	NA	NA	3	NA	NA	7.18	NA	NA
RAA-WCD8	10/25/2005	1010	45.58091	122.75964	15	9.31	NA	NA	14.91	NA	NA	4	NA	NA	7.13	NA	NA
RAA-WCD8	10/25/2005	1010	45.58091	122.75964	30	9.26	NA	NA	14.91	NA	NA	4	NA	NA	7.11	NA	NA
RAA-WCU4	10/25/2005	1055	45.57937	122.75626	1	9.37	<6.5	<6.5	14.97	15.25	22.59	5	6	11.29	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/25/2005	1055	45.57937	122.75626	6	9.31	<6.5	<6.5	14.95	15.21	22.32	5	7	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/25/2005	1055	45.57937	122.75626	12	9.31	<6.5	<6.5	14.95	15.21	21.84	5	7	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/25/2005	1115	45.57959	122.75603	1	9.40	<6.5	<6.5	14.96	15.25	22.59	3	6	11.29	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/25/2005	1115	45.57959	122.75603	20	9.30	<6.5	<6.5	14.93	15.21	22.32	4	7	12.63	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/25/2005	1115	45.57959	122.75603	40	9.20	<6.5	<6.5	14.91	15.21	21.84	5	7	18.56	7.08	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/25/2005	1116	45.57986	122.75613	1	9.38	<6.5	<6.5	14.97	15.25	22.59	3	6	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/25/2005	1116	45.57986	122.75613	21	9.32	<6.5	<6.5	14.93	15.21	22.32	4	7	12.63	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/25/2005	1116	45.57986	122.75613	42	9.16	<6.5	<6.5	14.91	15.21	21.84	6	7	18.56	7.04	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/25/2005	1410	45.57954	122.75578	1	9.44	NA	NA	15.16	NA	NA	3	NA	NA	7.17	NA	NA
RAA-WCU	10/25/2005	1410	45.57954	122.75578	16	9.38	NA	NA	15.06	NA	NA	3	NA	NA	7.17	NA	NA
RAA-WCU	10/25/2005	1410	45.57954	122.75578	32	9.32	NA	NA	14.98	NA	NA	3	NA	NA	7.10	NA	NA
RAA-WCD1	10/25/2005	1445	45.58060	122.75912	1	9.47	<6.5	<6.5	15.07	15.46	22.59	5	6	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/25/2005	1445	45.58060	122.75912	18	9.40	<6.5	<6.5	15.04	15.36	22.32	9	6	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/25/2005	1445	45.58060	122.75912	34	9.34	<6.5	<6.5	15.02	15.28	21.84	13	6	18.56	7.09	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/25/2005	1425	45.58085	122.75897	1	9.48	<6.5	<6.5	15.09	15.46	22.59	3	6	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/25/2005	1425	45.58085	122.75897	23	9.37	<6.5	<6.5	14.99	15.36	22.32	3	6	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/25/2005	1425	45.58085	122.75897	45	9.26	<6.5	<6.5	14.97	15.28	21.84	13	6	18.56	6.92	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/25/2005	1415	45.58096	122.75883	1	9.54	<6.5	<6.5	15.15	15.46	22.59	4	6	11.29	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/25/2005	1415	45.58096	122.75883	24	9.38	<6.5	<6.5	15.00	15.36	22.32	3	6	12.63	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/25/2005	1415	45.58096	122.75883	48	9.24	<6.5	<6.5	14.95	15.28	21.84	5	6	18.56	7.04	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/25/2005	1645	45.57954	122.75578	1	9.44	NA	NA	15.02	NA	NA	3	NA	NA	7.14	NA	NA
RAA-WCU	10/25/2005	1645	45.57954	122.75578	19	9.34	NA	NA	14.97	NA	NA	3	NA	NA	7.10	NA	NA
RAA-WCU	10/25/2005	1645	45.57954	122.75578	36	9.25	NA	NA	14.96	NA	NA	4	NA	NA	7.08	NA	NA
RAA-WCD1	10/25/2005	1710	45.58060	122.75912	1	9.41	<6.5	<6.5	15.00	15.32	22.59	6	6	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/25/2005	1710	45.58060	122.75912	17	9.33	<6.5	<6.5	14.96	15.27	22.32	7	6	12.63	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/25/2005	1710	45.58060	122.75912	33	9.31	<6.5	<6.5	14.97	15.26	21.84	10	7	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
RAA-WCD2	10/25/2005	1700	45.58085	122.75897	1	9.37	<6.5	<6.5	14.99	15.32	22.59	2	6	11.29	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/25/2005	1700	45.58085	122.75897	23	9.31	<6.5	<6.5	14.95	15.27	22.32	4	6	12.63	7.10	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/25/2005	1700	45.58085	122.75897	45	9.23	<6.5	<6.5	14.96	15.26	21.84	10	7	18.56	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/25/2005	1655	45.58096	122.75883	1	9.42	<6.5	<6.5	15.01	15.32	22.59	4	6	11.29	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/25/2005	1655	45.58096	122.75883	23	9.34	<6.5	<6.5	15.00	15.27	22.32	3	6	12.63	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/25/2005	1655	45.58096	122.75883	45	9.25	<6.5	<6.5	14.96	15.26	21.84	4	7	18.56	7.07	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/26/2005	920	45.57954	122.75578	1	9.34	NA	NA	15.00	NA	NA	5	NA	NA	7.23	NA	NA
RAA-WCU	10/26/2005	920	45.57954	122.75578	18	9.32	NA	NA	14.87	NA	NA	5	NA	NA	7.22	NA	NA
RAA-WCU	10/26/2005	920	45.57954	122.75578	36	9.27	NA	NA	14.83	NA	NA	5	NA	NA	7.22	NA	NA
RAA-WCD1	10/26/2005	950	45.58060	122.75912	1	9.33	<6.5	<6.5	15.01	15.30	22.59	6	8	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/26/2005	950	45.58060	122.75912	16	9.32	<6.5	<6.5	14.89	15.17	22.32	6	8	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/26/2005	950	45.58060	122.75912	32	9.27	<6.5	<6.5	14.80	15.13	21.84	6	8	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/26/2005	1015	45.58085	122.75897	1	9.32	<6.5	<6.5	15.00	15.30	22.59	11	8	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/26/2005	1015	45.58085	122.75897	21	9.31	<6.5	<6.5	14.87	15.17	22.32	9	8	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/26/2005	1015	45.58085	122.75897	41	9.20	<6.5	<6.5	14.84	15.13	21.84	9	8	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/26/2005	1025	45.58096	122.75883	1	9.32	<6.5	<6.5	15.06	15.30	22.59	7	8	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/26/2005	1025	45.58096	122.75883	22	9.29	<6.5	<6.5	14.86	15.17	22.32	8	8	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/26/2005	1025	45.58096	122.75883	45	9.21	<6.5	<6.5	14.85	15.13	21.84	8	8	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/26/2005	1355	45.58091	122.75964	1	9.30	NA	NA	15.00	NA	NA	4	NA	NA	7.22	NA	NA
RAA-WCD8	10/26/2005	1355	45.58091	122.75964	18	9.24	NA	NA	14.93	NA	NA	4	NA	NA	7.22	NA	NA
RAA-WCD8	10/26/2005	1355	45.58091	122.75964	32	9.22	NA	NA	14.92	NA	NA	5	NA	NA	7.21	NA	NA
RAA-WCU4	10/26/2005	1335	45.57937	122.75626	1	9.37	<6.5	<6.5	15.20	15.30	22.59	4	7	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/26/2005	1335	45.57937	122.75626	6	9.36	<6.5	<6.5	15.15	15.23	22.32	3	7	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/26/2005	1335	45.57937	122.75626	12	9.35	<6.5	<6.5	15.04	15.22	21.84	5	8	18.56	7.30	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/26/2005	1340	45.57959	122.75603	1	9.32	<6.5	<6.5	15.12	15.30	22.59	4	7	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/26/2005	1340	45.57959	122.75603	20	9.29	<6.5	<6.5	14.93	15.23	22.32	6	7	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/26/2005	1340	45.57959	122.75603	40	9.21	<6.5	<6.5	14.91	15.22	21.84	7	8	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/26/2005	1345	45.57986	122.75613	1	9.35	<6.5	<6.5	15.10	15.30	22.59	4	7	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/26/2005	1345	45.57986	122.75613	22	9.27	<6.5	<6.5	14.92	15.23	22.32	5	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/26/2005	1345	45.57986	122.75613	43	9.17	<6.5	<6.5	14.90	15.22	21.84	9	8	18.56	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/26/2005	1625	45.57954	122.75578	1	9.28	NA	NA	15.18	NA	NA	4	NA	NA	7.26	NA	NA
RAA-WCU	10/26/2005	1625	45.57954	122.75578	17	9.27	NA	NA	14.95	NA	NA	5	NA	NA	7.23	NA	NA
RAA-WCU	10/26/2005	1625	45.57954	122.75578	33	9.21	NA	NA	14.92	NA	NA	7	NA	NA	7.20	NA	NA
RAA-WCD1	10/26/2005	1655	45.58060	122.75912	1	9.32	<6.5	<6.5	15.10	15.48	22.59	7	7	11.29	7.29	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/26/2005	1655	45.58060	122.75912	17	9.31	<6.5	<6.5	14.96	15.25	22.32	7	8	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/26/2005	1655	45.58060	122.75912	33	9.24	<6.5	<6.5	14.93	15.22	21.84	8	10	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/26/2005	1640	45.58085	122.75897	1	9.35	<6.5	<6.5	15.13	15.48	22.59	4	7	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/26/2005	1640	45.58085	122.75897	23	9.27	<6.5	<6.5	14.94	15.25	22.32	5	8	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/26/2005	1640	45.58085	122.75897	46	9.17	<6.5	<6.5	14.90	15.22	21.84	6	10	18.56	7.16	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/26/2005	1635	45.58096	122.75883	1	9.37	<6.5	<6.5	15.09	15.48	22.59	4	7	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/26/2005	1635	45.58096	122.75883	23	9.29	<6.5	<6.5	14.94	15.25	22.32	4	8	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/26/2005	1635	45.58096	122.75883	45	9.18	<6.5	<6.5	14.90	15.22	21.84	6	10	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/27/2005	930	45.57954	122.75578	1	9.48	NA	NA	14.89	NA	NA	6	NA	NA	7.25	NA	NA
RAA-WCU	10/27/2005	930	45.57954	122.75578	15	9.49	NA	NA	14.72	NA	NA	7	NA	NA	7.26	NA	NA
RAA-WCU	10/27/2005	930	45.57954	122.75578	31	9.42	NA	NA	14.69	NA	NA	7	NA	NA	7.24	NA	NA

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCD1	10/27/2005	1000	45.58060	122.75912	1	9.48	<6.5	<6.5	14.91	15.19	22.59	6	9	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/27/2005	1000	45.58060	122.75912	16	9.52	<6.5	<6.5	14.72	15.02	22.32	6	10	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/27/2005	1000	45.58060	122.75912	31	9.45	<6.5	<6.5	14.69	14.99	21.84	6	10	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/27/2005	955	45.58085	122.75897	1	9.53	<6.5	<6.5	14.86	15.19	22.59	8	9	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/27/2005	955	45.58085	122.75897	20.5	9.47	<6.5	<6.5	14.69	15.02	22.32	6	10	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/27/2005	955	45.58085	122.75897	39	9.41	<6.5	<6.5	14.68	14.99	21.84	12	10	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/27/2005	950	45.58096	122.75883	1	9.55	<6.5	<6.5	14.87	15.19	22.59	7	9	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/27/2005	950	45.58096	122.75883	22	9.51	<6.5	<6.5	14.70	15.02	22.32	7	10	12.63	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/27/2005	950	45.58096	122.75883	44	9.42	<6.5	<6.5	14.68	14.99	21.84	16	10	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/27/2005	1415	45.58091	122.75964	1	9.55	NA	NA	14.91	NA	NA	5	NA	NA	7.22	NA	NA
RAA-WCD8	10/27/2005	1415	45.58091	122.75964	24	9.51	NA	NA	14.74	NA	NA	5	NA	NA	7.21	NA	NA
RAA-WCD8	10/27/2005	1415	45.58091	122.75964	46	9.40	NA	NA	14.70	NA	NA	6	NA	NA	7.18	NA	NA
RAA-WCU4	10/27/2005	1352	45.57937	122.75626	1	9.58	<6.5	<6.5	15.01	15.21	22.59	**15**	8	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/27/2005	1352	45.57937	122.75626	6	9.46	<6.5	<6.5	14.95	15.04	22.32	**13**	8	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/27/2005	1352	45.57937	122.75626	15	9.48	<6.5	<6.5	14.77	15.00	21.84	8	9	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/27/2005	1400	45.57959	122.75603	1	9.49	<6.5	<6.5	14.88	15.21	22.59	6	8	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/27/2005	1400	45.57959	122.75603	11	9.50	<6.5	<6.5	14.79	15.04	22.32	**13**	8	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/27/2005	1400	45.57959	122.75603	27	9.47	<6.5	<6.5	14.74	15.00	21.84	**20**	9	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/27/2005	1407	45.57986	122.75613	1	9.57	<6.5	<6.5	14.85	15.21	22.59	7	8	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/27/2005	1407	45.57986	122.75613	21.5	9.50	<6.5	<6.5	14.73	15.04	22.32	7	8	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/27/2005	1407	45.57986	122.75613	41	9.44	<6.5	<6.5	14.71	15.00	21.84	9	9	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/27/2005	1545	45.58091	122.75964	1	9.68	NA	NA	14.89	NA	NA	6	NA	NA	7.24	NA	NA
RAA-WCD8	10/27/2005	1545	45.58091	122.75964	24	9.51	NA	NA	14.74	NA	NA	4	NA	NA	7.22	NA	NA
RAA-WCD8	10/27/2005	1545	45.58091	122.75964	47	9.38	NA	NA	14.71	NA	NA	10	NA	NA	7.12	NA	NA
RAA-WCU4[6]	10/27/2005	1605	45.57937	122.75626	1	9.74	<6.5	<6.5	14.87	15.19	22.59	8	9	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/27/2005	1605	45.57937	122.75626	6	9.55	<6.5	<6.5	14.88	15.04	22.32	7	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/27/2005	1558	45.57959	122.75603	1	9.49	<6.5	<6.5	15.00	15.19	22.59	**15**	9	11.29	6.92	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/27/2005	1558	45.57959	122.75603	15	9.50	<6.5	<6.5	14.86	15.04	22.32	7	7	12.63	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/27/2005	1558	45.57959	122.75603	27	9.46	<6.5	<6.5	14.76	15.01	21.84	7	13	18.56	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/27/2005	1544	45.57986	122.75613	1	9.53	<6.5	<6.5	14.94	15.19	22.59	6	9	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/27/2005	1544	45.57986	122.75613	22	9.49	<6.5	<6.5	14.74	15.04	22.32	5	7	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/27/2005	1544	45.57986	122.75613	38	9.29	<6.5	<6.5	14.70	15.01	21.84	13	13	18.56	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/28/2005	910	45.57954	122.75578	1	9.51	NA	NA	14.54	NA	NA	8	NA	NA	7.17	NA	NA
RAA-WCU	10/28/2005	910	45.57954	122.75578	16	9.45	NA	NA	14.54	NA	NA	8	NA	NA	7.22	NA	NA
RAA-WCU	10/28/2005	910	45.57954	122.75578	31	9.38	NA	NA	14.52	NA	NA	6	NA	NA	7.22	NA	NA
RAA-WCD1	10/28/2005	1012	45.58060	122.75912	1	9.50	<6.5	<6.5	14.45	14.84	22.59	10	11	11.29	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/28/2005	1012	45.58060	122.75912	18	9.41	<6.5	<6.5	14.51	14.84	22.32	11	11	12.63	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/28/2005	1012	45.58060	122.75912	37	9.36	<6.5	<6.5	14.53	14.82	21.84	10	9	18.56	7.27	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/28/2005	1103	45.58085	122.75897	1	9.45	<6.5	<6.5	14.51	14.84	22.59	9	11	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/28/2005	1103	45.58085	122.75897	22	9.34	<6.5	<6.5	14.52	14.84	22.32	9	11	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/28/2005	1103	45.58085	122.75897	43	9.28	<6.5	<6.5	14.51	14.82	21.84	11	9	18.56	7.13	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/28/2005	1052	45.58096	122.75883	1	9.44	<6.5	<6.5	14.54	14.84	22.59	8	11	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/28/2005	1052	45.58096	122.75883	22	9.34	<6.5	<6.5	14.53	14.84	22.32	7	11	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/28/2005	1052	45.58096	122.75883	44	9.26	<6.5	<6.5	14.52	14.82	21.84	11	9	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/28/2005	1350	45.58091	122.75964	1	9.56	NA	NA	14.60	NA	NA	7	NA	NA	7.30	NA	NA

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCD8	10/28/2005	1350	45.58091	122.75964	18	9.49	NA	NA	14.59	NA	NA	7	NA	NA	7.30	NA	NA
RAA-WCD8	10/28/2005	1350	45.58091	122.75964	37	9.37	NA	NA	14.57	NA	NA	9	NA	NA	7.18	NA	NA
RAA-WCU4	10/28/2005	1420	45.57937	122.75626	1	9.47	<6.5	<6.5	14.57	14.90	22.59	9	10	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/28/2005	1420	45.57937	122.75626	7	9.49	<6.5	<6.5	14.57	14.89	22.32	9	10	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/28/2005	1420	45.57937	122.75626	16	9.43	<6.5	<6.5	14.57	14.87	21.84	10	12	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/28/2005	1414	45.57959	122.75603	1	9.51	<6.5	<6.5	14.56	14.90	22.59	9	10	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/28/2005	1414	45.57959	122.75603	22	9.47	<6.5	<6.5	14.57	14.89	22.32	9	10	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/28/2005	1414	45.57959	122.75603	43	9.36	<6.5	<6.5	14.57	14.87	21.84	10	12	18.56	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/28/2005	1410	45.57986	122.75613	1	9.51	<6.5	<6.5	14.58	14.90	22.59	**12**	10	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/28/2005	1410	45.57986	122.75613	22	9.43	<6.5	<6.5	14.58	14.89	22.32	8	10	12.63	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD6	10/28/2005	1410	45.57986	122.75613	44	9.36	<6.5	<6.5	14.57	14.87	21.84	9	12	18.56	7.04	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/28/2005	1650	45.57954	122.75578	1	9.52	NA	NA	14.56	NA	NA	10	NA	NA	7.25	NA	NA
RAA-WCU	10/28/2005	1650	45.57954	122.75578	15	9.46	NA	NA	14.57	NA	NA	9	NA	NA	7.23	NA	NA
RAA-WCU	10/28/2005	1650	45.57954	122.75578	28	9.40	NA	NA	14.57	NA	NA	11	NA	NA	7.19	NA	NA
RAA-WCD1	10/28/2005	1636	45.58060	122.75912	1	9.53	<6.5	<6.5	14.58	14.86	22.59	10	13	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/28/2005	1636	45.58060	122.75912	18	9.46	<6.5	<6.5	14.60	14.87	22.32	10	12	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/28/2005	1636	45.58060	122.75912	36	9.36	<6.5	<6.5	14.59	14.87	21.84	10	14	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/28/2005	1630	45.58085	122.75897	1	9.55	<6.5	<6.5	14.58	14.86	22.59	9	13	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/28/2005	1630	45.58085	122.75897	22	9.44	<6.5	<6.5	14.58	14.87	22.32	10	12	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/28/2005	1630	45.58085	122.75897	44	9.35	<6.5	<6.5	14.57	14.87	21.84	18	14	18.56	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/28/2005	1643	45.58096	122.75883	1	9.68	<6.5	<6.5	14.55	14.86	22.59	6	13	11.29	7.26	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/28/2005	1643	45.58096	122.75883	24	9.46	<6.5	<6.5	14.57	14.87	22.32	11	12	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/28/2005	1643	45.58096	122.75883	47	9.33	<6.5	<6.5	14.57	14.87	21.84	12	14	18.56	7.11	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU	10/29/2005	930	45.57954	122.75578	1	9.43	NA	NA	14.40	NA	NA	4	NA	NA	7.30	NA	NA
RAA-WCU	10/29/2005	930	45.57954	122.75578	9	9.41	NA	NA	14.34	NA	NA	4	NA	NA	7.27	NA	NA
RAA-WCU	10/29/2005	930	45.57954	122.75578	20	9.40	NA	NA	14.26	NA	NA	4	NA	NA	7.27	NA	NA
RAA-WCD1	10/29/2005	1040	45.58060	122.75912	1	9.35	<6.5	<6.5	14.40	14.70	22.59	5	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/29/2005	1040	45.58060	122.75912	17	9.37	<6.5	<6.5	14.28	14.64	22.32	7	7	12.63	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD1	10/29/2005	1040	45.58060	122.75912	33	9.35	<6.5	<6.5	14.26	14.56	21.84	7	7	18.56	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/29/2005	1100	45.58085	122.75897	1	9.35	<6.5	<6.5	14.40	14.70	22.59	4	7	11.29	7.25	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/29/2005	1100	45.58085	122.75897	23	9.32	<6.5	<6.5	14.25	14.64	22.32	4	7	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD2	10/29/2005	1100	45.58085	122.75897	47	9.24	<6.5	<6.5	14.25	14.56	21.84	8	7	18.56	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/29/2005	950	45.58096	122.75883	1	9.68	<6.5	<6.5	14.43	14.70	22.59	4	7	11.29	7.28	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/29/2005	950	45.58096	122.75883	23	9.32	<6.5	<6.5	14.26	14.64	22.32	5	7	12.63	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD3	10/29/2005	950	45.58096	122.75883	46	9.25	<6.5	<6.5	14.25	14.56	21.84	5	7	18.56	7.21	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/29/2005	1400	45.58091	122.75964	1	9.33	NA	NA	14.48	NA	NA	3	NA	NA	7.21	NA	NA
RAA-WCD8	10/29/2005	1400	45.58091	122.75964	18	9.32	NA	NA	14.31	NA	NA	3	NA	NA	7.20	NA	NA
RAA-WCD8	10/29/2005	1400	45.58091	122.75964	36	9.27	NA	NA	14.29	NA	NA	4	NA	NA	7.19	NA	NA
RAA-WCU4	10/29/2005	1300	45.57937	122.75626	1	9.35	<6.5	<6.5	14.48	14.78	22.59	5	6	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/29/2005	1300	45.57937	122.75626	6	9.36	<6.5	<6.5	14.43	14.61	22.32	5	6	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/29/2005	1300	45.57937	122.75626	11.5	9.37	<6.5	<6.5	14.36	14.59	21.84	4	7	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/29/2005	1330	45.57959	122.75603	1	9.34	<6.5	<6.5	14.44	14.78	22.59	4	6	11.29	7.19	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/29/2005	1330	45.57959	122.75603	21	9.39	<6.5	<6.5	14.25	14.61	22.32	5	6	12.63	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/29/2005	1330	45.57959	122.75603	42	9.29	<6.5	<6.5	14.24	14.59	21.84	8	7	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/29/2005	1345	45.57986	122.75613	1	9.37	<6.5	<6.5	14.42	14.78	22.59	3	6	11.29	7.18	<6.5 or >8.5	<6.5 or >8.5

Table 13
Water Quality Monitoring Results (Field Parameters) Compared to Triggers - Gasco Site

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
RAA-WCU6	10/29/2005	1345	45.57986	122.75613	22	9.38	<6.5	<6.5	14.25	14.61	22.32	3	6	12.63	7.18	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/29/2005	1345	45.57986	122.75613	43	9.30	<6.5	<6.5	14.23	14.59	21.84	10	7	18.56	7.17	<6.5 or >8.5	<6.5 or >8.5
RAA-WCD8[5]	10/29/2005	1700	45.58091	122.75964	1	9.33	NA	NA	14.36	NA	NA	3	NA	NA	7.22	NA	NA
RAA-WCD8	10/29/2005	1700	45.58091	122.75964	19	9.26	NA	NA	14.38	NA	NA	3	NA	NA	7.20	NA	NA
RAA-WCD8	10/29/2005	1700	45.58091	122.75964	38	9.23	NA	NA	14.36	NA	NA	3	NA	NA	7.17	NA	NA
RAA-WCU4	10/29/2005	1600	45.57937	122.75626	1	9.47	<6.5	<6.5	14.31	14.66	22.59	4	6	11.29	7.24	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/29/2005	1600	45.57937	122.75626	7	9.37	<6.5	<6.5	14.31	14.68	22.32	3	6	12.63	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU4	10/29/2005	1600	45.57937	122.75626	13	9.38	<6.5	<6.5	14.31	14.66	21.84	3	6	18.56	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/29/2005	1615	45.57959	122.75603	1	9.43	<6.5	<6.5	14.32	14.66	22.59	3	6	11.29	7.22	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/29/2005	1615	45.57959	122.75603	20	9.36	<6.5	<6.5	14.33	14.68	22.32	3	6	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU5	10/29/2005	1615	45.57959	122.75603	39	9.26	<6.5	<6.5	14.32	14.66	21.84	4	6	18.56	7.15	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/29/2005	1645	45.57986	122.75613	1	9.64	<6.5	<6.5	14.19	14.66	22.59	5	6	11.29	7.23	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/29/2005	1645	45.57986	122.75613	21	9.36	<6.5	<6.5	14.32	14.68	22.32	3	6	12.63	7.20	<6.5 or >8.5	<6.5 or >8.5
RAA-WCU6	10/29/2005	1645	45.57986	122.75613	42	9.24	<6.5	<6.5	14.32	14.66	21.84	10	6	18.56	7.14	<6.5 or >8.5	<6.5 or >8.5

Notes:

[1]Datum for coordinates is NAD 83.

[2]Trigger is exceeded where downstream conditions exceed the specified amounts relative to both the event-specific background and the pre-construction background survey (95% upper confidence limit on the mean for temperature and turbidity parameters).

[3]RAA-WCU is the upstream event-specific background station.

[4]Station WCD1 could not be accessed because there was a barge tied to the FAMM pier.

[5]Flow was reversed during this round of sampling; therefore the upcurrent station was RAA-WCD8 and the downcurrent stations were RAA-WCU4, RAA-WCU5, and RAA-WCU6.

[6]Water depth at this station was less than 12 feet; therefore, only 2 depths were sampled.

[7]This station was moved upstream due to the presence of divers in the water at original station location.

[8]Turbidity measurements made using the Hach Turbidimeter 2100P due to problems with the Hydrolab instrument.

[9]NC = No data was collected due to problems with the Hydrolab instrument.

[10]Dissolved oxygen meaurement obtained by the Winkler method.

BOLD indicates an exceedance

Table 14
Exceedences of Water Quality Monitoring Criteria (Field Parameters) - Gasco Site

Station ID	Date	Time	Construction Activity	Depth	Turbidity (NTU)	Turbidity Triggers[1]	
						Event Specific Background	Pre-construction Background
RAA-WCD1	9/7/2005	1415	Dredging	surface	13	8	11.29
RAA-WCD1	9/7/2005	1415	Dredging	mid	16	8	12.63
RAA-WCD1	9/7/2005	1415	Dredging	bottom	19	16	18.56
RAA-WCD2	9/7/2005	1635	Dredging	surface	18	8	11.29
RAA-WCD2	9/7/2005	1635	Dredging	mid	18	8	12.63
RAA-WCD3	9/7/2005	1625	Dredging	surface	13	8	11.29
RAA-WCD3	9/7/2005	1625	Dredging	mid	17	8	12.63
RAA-WCD1	9/8/2005	1010	Dredging	surface	14	11	11.29
RAA-WCD1	9/8/2005	1010	Dredging	mid	17	13	12.63
RAA-WCD3	9/8/2005	1705	Dredging	mid	14	11	12.63
RAA-WCD1	9/12/2005	1500	Dredging	surface	14	6	11.29
RAA-WCD1	9/12/2005	1500	Dredging	mid	14	11	12.63
RAA-WCD2	9/12/2005	1510	Dredging	surface	12	6	11.29
RAA-WCD2	9/12/2005	1510	Dredging	mid	15	11	12.63
RAA-WCU5	9/13/2005	1405	Dredging	surface	12	9	11.29
RAA-WCU6	9/13/2005	1411	Dredging	surface	12	9	11.29
RAA-WCD1	9/13/2005	1725	Dredging	surface	13	9	11.29
RAA-WCD1	9/13/2005	1725	Dredging	mid	15	11	12.63
RAA-WCD1	9/14/2005	955	Dredging	surface	12	10	11.29
RAA-WCD1	9/14/2005	955	Dredging	mid	13	10	12.63
RAA-WCD2	9/26/2005	1000	Dredging	mid	14	11	12.63
RAA-WCD1	9/26/2005	1645	Dredging	surface	12	7	11.29
RAA-WCD2	10/20/2005	1415	Capping	mid	15	8	12.63
RAA-WCD3	10/20/2005	1425	Capping	mid	13	8	12.63
RAA-WCD3	10/20/2005	1425	Capping	bottom	19	8	18.56
RAA-WCD1	10/21/2005	1030	Capping	surface	17	8	11.29
RAA-WCD1	10/21/2005	1030	Capping	mid	16	8	12.63
RAA-WCD2	10/21/2005	1127	Capping	surface	16	8	11.29
RAA-WCD2	10/21/2005	1127	Capping	mid	13	8	12.63
RAA-WCD3	10/21/2005	1122	Capping	surface	15	8	11.29
RAA-WCD3	10/21/2005	1122	Capping	mid	18	8	12.63
RAA-WCD3	10/21/2005	1122	Capping	bottom	19	8	18.56
RAA-WCU4	10/27/2005	1352	Capping	surface	15	8	11.29
RAA-WCU4	10/27/2005	1352	Capping	mid	13	8	12.63
RAA-WCU5	10/27/2005	1400	Capping	mid	13	8	12.63
RAA-WCU5	10/27/2005	1400	Capping	bottom	20	9	18.56
RAA-WCU5	10/27/2005	1558	Capping	surface	15	9	11.29
RAA-WCU6	10/28/2005	1410	Capping	surface	12	10	11.29

1 - Trigger is exceeded where downstream conditions exceed the specified amounts relative to both the event-specific background and the pre-construction background survey (95% upper confidence limit on the mean for temperature and turbidity parameters).

Table 15
Background Survey Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample Depth Sample Date Chemical Name	Unit	Chronic Criteria	Acute Criteria	RAA-WBGUB Bottom Depth 8/17/2005 Background	RAA-WBGDB Bottom Depth 8/18/2005 Background	RAA-WBGDS Surface Depth 8/18/2005 Background	RAA-WBGUB Bottom Depth 8/18/2005 Background	RAA-WBGDB Bottom Depth 8/19/2005 Background	RAA-WBGDS Surface Depth 8/19/2005 Background
Conventionals									
Cyanide	µg/l	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U
SVOC									
Anthracene	µg/l	0.73	13	0.0188 U	**0.00561 J**	**0.00461 J**	**0.00646 J**	**0.00483 J**	**0.0055 J**
Benzo(a)anthracene	µg/l	0.02	0.49	0.0188 U	**0.0128 J**	**0.0112 J**	**0.00602 J**	0.0202 U	0.0211 U
Benzo(a)pyrene	µg/l	0.01	0.24	0.0188 U	**0.0532 ***	0.02 U	**0.0306**	**0.0485 ***	0.0211 U
Dibenzofuran	µg/l	3.7	66	0.188 U	0.218 U	0.20 U	0.188 U	0.202 U	0.211 U
Fluoranthene	µg/l	6.16	3980	**0.0123 J**	**0.0425**	**0.0233**	**0.0134 J**	**0.0398**	**0.0169 J**
Fluorene	µg/l	3.9	70	0.0188 U	**0.0126 J**	**0.0154 J**	**0.00807 J**	**0.00905 J**	**0.00663 J**
Naphthalene	µg/l	12	190	0.0471 U	**0.148**	**0.108**	**0.0193 J**	**0.0516**	**0.111**
Phenanthrene	µg/l	--	--	0.0188 U	**0.0382**	**0.0218**	**0.0148 J**	**0.0208**	**0.00869 J**

Notes:

µg/l	micrograms per liter
U	Non-detect
J	Estimated, the result is below the reportnig limit and above the lab MDL.
*	Exceedance of Chronic Criteria

Table 16
Additional Background Water Quality Monitoing Results Compared to Triggers - Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-A-050916 9/16/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050916 9/16/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-050916 9/16/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-050916 9/16/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-050916 9/16/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-050916 9/16/2005 Bottom Depth	RAA-WCD5 RAA-WCD5-A-050916 9/16/2005 Surface Depth	RAA-WCD5 RAA-WCD5-B-050916 9/16/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.195**	**0.167**	**0.173**	**0.0763**	**0.0504**	**0.0789**	**0.121**	**0.22**
Benzo(a)anthracene	0.02	0.49	**0.137 ***	**0.219 J ***	**0.136 ***	**0.0485 ***	**0.0414 ***	**0.0686 ***	**0.0817 ***	**0.113 ***
Benzo(a)pyrene	0.01	0.24	**0.21 ***	R	**0.274 * #**	**0.0963 J ***	**0.0846 ***	**0.151 J ***	**0.133 ***	**0.167 ***
Dibenzofuran	3.7	66	0.191 U	**0.0528 J**	**0.0214 J**	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Fluoranthene	6.16	3980	**0.481**	**0.54**	**0.523**	**0.138**	**0.136**	**0.248**	**0.276**	**0.38**
Fluorene	3.9	70	**0.114**	**0.294 J**	**0.111**	**0.045**	**0.042**	**0.0616**	**0.0807**	**0.115**
Naphthalene	12	190	**0.0862**	**0.0735**	**0.0423 J**	**0.234**	**0.21**	**0.229**	**0.328**	**0.371**
Phenanthrene	--	--	**0.409**	**0.652**	**0.343**	**0.166**	**0.161**	**0.314**	**0.312**	**0.425**

Notes:

U Non-Detect

J Estimated, the result is below the reporting limit and above the lab MDL

Exceedance of Acute Criteria

Exceedance of Chronic Criteria

Table 16
Additional Background Water Quality Monitoing Results Compared to Triggers - Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD5 RAA-WCD5-C-050916 9/16/2005 Bottom Depth	RAA-WCD6 RAA-WCD6-B-050916 9/16/2005 Mid Depth	RAA-WCD7 RAA-WCD7-B-050916 9/16/2005 Mid Depth	RAA-WCU1 RAA-WCU1-A-050916 9/16/2005 Surface Depth	RAA-WCU1 RAA-WCU1-B-050916 9/16/2005 Mid Depth	RAA-WCU1 RAA-WCU1-C-050916 9/16/2005 Bottom Depth	RAA-WCU2 RAA-WCU2-A-050916 9/16/2005 Surface Depth
Conventionals (µg/L)									
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOCs (µg/L)									
Anthracene	0.73	13	**0.206**	**0.053**	**0.025**	**0.00546 J**	**0.00729 J**	**0.00586 J**	**0.00417 J**
Benzo(a)anthracene	0.02	0.49	**0.134 ***	**0.0395 ***	**0.0258 J ***	**0.00914 J**	**0.0103 J**	**0.00834 J**	**0.00686 J**
Benzo(a)pyrene	0.01	0.24	**0.475 J * #**	**0.0837 ***	**0.193 J ***	**0.0516 ***	**0.0193 UJ**	**0.0547 ***	**0.0495 ***
Dibenzofuran	3.7	66	**0.0249 J**	0.19 U	0.194 UJ	0.19 U	0.193 U	0.196 U	0.191 U
Fluoranthene	6.16	3980	**0.50**	**0.171**	**0.0614**	**0.0262**	**0.0311**	**0.0235**	**0.0168 J**
Fluorene	3.9	70	**0.14**	**0.033**	**0.0787 J**	0.019 U	0.0193 U	0.0196 U	0.0191 U
Naphthalene	12	190	**0.253**	**0.0416 J**	**0.17**	0.0475 U	0.0483 U	0.0491 U	0.0477 U
Phenanthrene	--	--	**0.463**	**0.0836**	**0.179**	**0.0142 J**	**0.025**	**0.0119 J**	**0.0132 J**

Notes:

U Non-Detect

J Estimated, the result is below the reporting limit and above the lab MDL

Exceedance of Acute Criteria

Exceedance of Chronic Criteria

Table 16
Additional Background Water Quality Monitoing Results Compared to Triggers - Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU2 RAA-WCU2-B-050916 9/16/2005 Mid Depth	RAA-WCU2 RAA-WCU2-C-050916 9/16/2005 Bottom Depth	RAA-WCU3 RAA-WCU3-A-050916 9/16/2005 Surface Depth	RAA-WCU3 RAA-WCU3-B-050916 9/16/2005 Mid Depth	RAA-WCU3 RAA-WCU3-C-050916 9/16/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-050929-2 9/29/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050929-2 9/29/2005 Mid Depth
Conventionals (µg/L)									
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOCs (µg/L)									
Anthracene	0.73	13	**0.00872 J**	**0.00697 J**	**0.0037 J**	**0.00558 J**	**0.00985 J**	**1.1 ***	0.2 UJ
Benzo(a)anthracene	0.02	0.49	**0.00675 J**	**0.00806 J**	**0.00734 J**	**0.0107 J**	**0.013 J**	**0.8 J * #**	0.2 UJ
Benzo(a)pyrene	0.01	0.24	**0.049 ***	**0.0498 ***	**0.0496 ***	**0.0512 ***	**0.0543 ***	**1.3 * #**	0.2 UJ
Dibenzofuran	3.7	66	0.192 U	0.191 U	0.19 U	0.193 U	0.19 U	2.1 UJ	2 UJ
Fluoranthene	6.16	3980	**0.0127 J**	**0.0139 J**	**0.0167 J**	**0.0236**	**0.0299**	**3.7 J**	0.2 UJ
Fluorene	3.9	70	0.0192 U	0.0191 U	0.019 U	0.0193 U	**0.00923 J**	**0.45**	0.2 UJ
Naphthalene	12	190	0.048 U	0.0477 U	0.0475 U	0.0484 U	**0.0289 J**	0.52 U	0.5 UJ
Phenanthrene	--	--	**0.00915 J**	**0.0083 J**	**0.0125 J**	**0.0137 J**	**0.0202**	**1.7 J**	0.2 UJ

Notes:

U Non-Detect

J Estimated, the result is below the reporting limit and above the lab MDL

Exceedance of Acute Criteria

Exceedance of Chronic Criteria

Table 16
Additional Background Water Quality Monitoing Results Compared to Triggers - Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-C-050929-2 9/29/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050929-1 9/29/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050929-1 9/29/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050929-1 9/29/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-050929-1 9/29/2005 Surface Depth	RAA-WCD4 RAA-WCD4-A-050929-2 9/29/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-050929-1 9/29/2005 Mid Depth	RAA-WCD4 RAA-WCD4-B-050929-2 9/29/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.99 ***	**0.94 ***	0.2 U	0.19 U	**0.85 J ***	**0.3**	0.2 U	**0.46**
Benzo(a)anthracene	0.02	0.49	**0.83 J * #**	**0.75 J * #**	0.2 UJ	0.19 UJ	**0.62 J * #**	**0.22 J ***	0.2 UJ	**0.31 J ***
Benzo(a)pyrene	0.01	0.24	**1.2 * #**	**1.1 * #**	**0.22 ***	0.19 U	**0.84 J * #**	**0.46 * #**	**0.24 ***	**0.61 * #**
Dibenzofuran	3.7	66	1.9 UJ	2 UJ	2 UJ	1.9 UJ	2.1 UJ	2 UJ	2 UJ	2.2 UJ
Fluoranthene	6.16	3980	**3.7 J**	**3.5 J**	0.2 UJ	0.19 UJ	**2.5 J**	**0.99 J**	**0.25 J**	**1.9 J**
Fluorene	3.9	70	**0.38**	**0.37**	0.2 U	0.19 U	**1.7 J**	**0.24**	0.2 U	**0.22**
Naphthalene	12	190	0.48 U	0.5 U	0.5 U	0.48 U	**110 J ***	0.5 U	0.49 U	0.54 U
Phenanthrene	--	--	**1.8 J**	**1.5 J**	0.2 UJ	0.19 UJ	**6 J**	**0.84 J**	0.2 UJ	**0.96 J**

Notes:

U Non-Detect

J Estimated, the result is below the reporting limit and above the lab MDL

Exceedance of Acute Criteria

Exceedance of Chronic Criteria

Table 16
Additional Background Water Quality Monitoing Results Compared to Triggers - Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD4 RAA-WCD4-B-050929-2-DU 9/29/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-050929-1 9/29/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-C-050929-2 9/29/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-050929-1 9/29/2005 Inside Curtain	RAA-WCIN RAA-INSIDE-050929-2 9/29/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-050929-1 9/29/2005 Outside Curtain	RAA-WCOUT RAA-OUTSIDE-050929-2 9/29/2005 Outside Curtain	RAA-WCU RAA-WCU-A-050929-1 9/29/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.49**	0.19 UJ	**0.62**	**0.85 ***	**25 J * #**	0.2 UJ	**0.69 J**	0.2 U
Benzo(a)anthracene	0.02	0.49	**0.38 J ***	0.19 UJ	**0.44 J ***	**0.69 J * #**	**12 J * #**	0.2 UJ	**0.61 J * #**	0.2 UJ
Benzo(a)pyrene	0.01	0.24	**0.69 * #**	0.19 UJ	**0.72 * #**	**1.3 * #**	**16 J * #**	**0.36 J * #**	**1.4 J * #**	0.2 U
Dibenzofuran	3.7	66	1.9 UJ	1.9 UJ	2 UJ	2.2 UJ	**2.2 J**	2 UJ	1.9 UJ	2 UJ
Fluoranthene	6.16	3980	**1.8 J**	0.19 UJ	**1.9 J**	**7.5 J ***	**67 J ***	**1.1 J**	**2.8 J**	0.2 UJ
Fluorene	3.9	70	**0.29**	0.19 UJ	**0.34**	0.22 U	**32 J ***	0.2 UJ	**0.28 J**	0.2 U
Naphthalene	12	190	0.49 U	0.48 UJ	0.5 U	0.55 U	**2.6 J**	0.5 UJ	0.48 UJ	0.51 U
Phenanthrene	--	--	**1 J**	0.19 UJ	1.1 UJ	**0.68 J**	**66 J**	**0.29 J**	**1.7 J**	0.2 UJ

Notes:

U Non-Detect

J Estimated, the result is below the reporting limit and above the lab MDL

Exceedance of Acute Criteria

Exceedance of Chronic Criteria

Table 16
Additional Background Water Quality Monitoing Results Compared to Triggers - Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-050929-2 9/29/2005 Surface Depth	RAA-WCU RAA-WCU-B-050929-1 9/29/2005 Mid Depth	RAA-WCU RAA-WCU-B-050929-2 9/29/2005 Mid Depth	RAA-WCU RAA-WCU-C-050929-1 9/29/2005 Bottom Depth	RAA-WCU RAA-WCU-C-050929-2 9/29/2005 Bottom Depth
Conventionals (µg/L)							
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U
SVOCs (µg/L)							
Anthracene	0.73	13	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U
Benzo(a)anthracene	0.02	0.49	0.2 UJ	0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ
Benzo(a)pyrene	0.01	0.24	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U
Dibenzofuran	3.7	66	2 UJ	2 UJ	2 UJ	1.9 UJ	2 UJ
Fluoranthene	6.16	3980	0.2 UJ	0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ
Fluorene	3.9	70	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U
Naphthalene	12	190	0.49 U	0.5 U	0.51 U	0.48 U	0.5 U
Phenanthrene	--	--	0.2 UJ	0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ

Notes:

U Non-Detect

J Estimated, the result is below the reporting limit and above the lab MDL

Exceedance of Acute Criteria

Exceedance of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-A-050907 9/7/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050907 9/7/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-050907 9/7/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050908 9/8/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050908 9/8/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050908 9/8/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-050909 9/9/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050909 9/9/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**2.06 ***	**2.64 ***	**3.76 ***	**0.739 ***	**1.63 ***	**5.53 ***	**0.591 J**	**0.33 J**
Benzo(a)anthracene	0.02	0.49	**1.42 * #**	**2.05 * #**	**2.65 * #**	**0.593 * #**	**1.29 * #**	**5.86 * #**	**0.385 ***	**0.267 ***
Benzo(a)pyrene	0.01	0.24	**2.01 * #**	**2.24 * #**	**2.89 * #**	**0.781 * #**	**1.79 * #**	**6.58 * #**	**1.15 J * #**	**0.859 J * #**
Dibenzofuran	3.7	66	**0.267**	**0.385 J**	**0.473**	1.98 U	1.94 U	20.3 U	2.00 U	**0.0425 J**
Fluoranthene	6.16	3980	**5.54**	**7.65 ***	**9.17 ***	**2.42**	**4.93**	**19.0 ***	**1.65**	**1.28**
Fluorene	3.9	70	**1.85**	**2.31**	**2.78**	**0.437**	**1.08**	**3.43**	**0.423**	**0.232**
Naphthalene	12	190	**22.7 ***	**35.4 ***	**45.8 ***	**4.41**	**10.8**	**31.5 ***	0.501 U	**0.127**
Phenanthrene			**10.4**	**14.6**	**17.9**	**3.35**	**8.46**	**29.5**	**1.40**	**0.795**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-C-050909 9/9/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050912 9/12/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050912 9/12/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050912 9/12/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-050913 9/13/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050913 9/13/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-050913 9/13/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050914 9/14/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	**25 J * #**	50 U	50 U	50 UJ	50 UJ	50 UJ	50 UJ
SVOC (µg/L)										
Anthracene	0.73	13	**0.516 J**	**0.00715 J**	**0.0256 J**	**0.055 J**	**0.804 J ***	**10.3 J ***	**4.31 J ***	**7.41 J ***
Benzo(a)anthracene	0.02	0.49	**0.419 ***	0.0221 U	**0.024 ***	**0.0444 ***	**0.541 J * #**	**5.68 J * #**	**2.36 J * #**	**4.51 J * #**
Benzo(a)pyrene	0.01	0.24	**1.00 J * #**	**0.0164 J ***	**0.0342 ***	**0.0479 ***	**0.768 J * #**	**7.03 J * #**	**1.19 J * #**	**5.75 J * #**
Dibenzofuran	3.7	66	2.00 U	0.221 U	0.202 U	0.197 U	**0.163 J**	**0.419**	**0.215 J**	**0.701**
Fluoranthene	6.16	3980	**1.57**	**0.027**	**0.09**	**0.151**	**1.88 J**	**20.4 J ***	**7.87 J ***	**16.8 J ***
Fluorene	3.9	70	**0.288**	**0.0126 J**	**0.0269**	**0.0319**	**1.78 J**	**5.69 J ***	**2.81 J**	**5.11 J ***
Naphthalene	12	190	0.501 U	**0.0281 J**	**0.0665**	**0.0858**	**0.13 J**	**1.02 J**	**9.25 J**	**62.2 J ***
Phenanthrene			**1.24**	**0.0367**	**0.0835**	**0.133**	**1.11 J**	**22.8 J**	**7.42 J**	**29.2 J**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD2 RAA-WCD2-B-050914 9/14/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050914 9/14/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-050916 9/16/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050916 9/16/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-050916 9/16/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-050916 9/16/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-050916 9/16/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-050916 9/16/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 UJ	50 UJ	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**4.00 J ***	**6.82 J ***	**0.195**	**0.167**	**0.173**	**0.0763**	**0.0504**	**0.0789**
Benzo(a)anthracene	0.02	0.49	**2.23 J * #**	**4.26 J * #**	**0.137 ***	**0.219 J ***	**0.136 ***	**0.0485 ***	**0.0414 ***	**0.0686 ***
Benzo(a)pyrene	0.01	0.24	**3.18 J * #**	**5.36 J * #**	**0.21 ***	R	**0.274 * #**	**0.0963 J ***	**0.0846 ***	**0.151 J ***
Dibenzofuran	3.7	66	**0.376 J**	**0.678**	0.191 U	**0.0528 J**	**0.0214 J**	0.19 U	0.19 U	0.19 U
Fluoranthene	6.16	3980	**88.7 J ***	**15.4 J ***	**0.481**	**0.54**	**0.523**	**0.138**	**0.136**	**0.248**
Fluorene	3.9	70	**2.58 J**	**4.63 J ***	**0.114**	**0.294 J**	**0.111**	**0.045**	**0.042**	**0.0616**
Naphthalene	12	190	**16.9 J ***	**47.5 J ***	**0.0862**	**0.0735**	**0.0423 J**	**0.234**	**0.21**	**0.229**
Phenanthrene			**16.1 J**	**27.1 J**	**0.409**	**0.652**	**0.343**	**0.166**	**0.161**	**0.314**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD5 RAA-WCD5-A-050916 9/16/2005 Surface Depth	RAA-WCD5 RAA-WCD5-B-050916 9/16/2005 Mid Depth	RAA-WCD5 RAA-WCD5-C-050916 9/16/2005 Bottom Depth	RAA-WCD6 RAA-WCD6-B-050916 9/16/2005 Mid Depth	RAA-WCD7 RAA-WCD7-B-050916 9/16/2005 Mid Depth	RAA-WCU1 RAA-WCU1-A-050916 9/16/2005 Surface Depth	RAA-WCU1 RAA-WCU1-B-050916 9/16/2005 Mid Depth	RAA-WCU1 RAA-WCU1-C-050916 9/16/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.121**	**0.22**	**0.206**	**0.053**	**0.025**	**0.00546 J**	**0.00729 J**	**0.00586 J**
Benzo(a)anthracene	0.02	0.49	**0.0817 ***	**0.113 ***	**0.134 ***	**0.0395 ***	**0.0258 J ***	**0.00914 J**	**0.0103 J**	**0.00834 J**
Benzo(a)pyrene	0.01	0.24	**0.133 ***	**0.167 ***	**0.475 J * #**	**0.0837 ***	**0.193 J ***	**0.0516 ***	0.0193 UJ	**0.0547 ***
Dibenzofuran	3.7	66	0.19 U	0.19 U	**0.0249 J**	0.19 U	0.194 UJ	0.19 U	0.193 U	0.196 U
Fluoranthene	6.16	3980	**0.276**	**0.38**	**0.50**	**0.171**	**0.0614**	**0.0262**	**0.0311**	**0.0235**
Fluorene	3.9	70	**0.0807**	**0.115**	**0.14**	**0.033**	**0.0787 J**	0.019 U	0.0193 U	0.0196 U
Naphthalene	12	190	**0.328**	**0.371**	**0.253**	**0.0416 J**	**0.17**	0.0475 U	0.0483 U	0.0491 U
Phenanthrene			**0.312**	**0.425**	**0.463**	**0.0836**	**0.179**	**0.0142 J**	**0.025**	**0.0119 J**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU2 RAA-WCU2-A-050916 9/16/2005 Surface Depth	RAA-WCU2 RAA-WCU2-B-050916 9/16/2005 Mid Depth	RAA-WCU2 RAA-WCU2-C-050916 9/16/2005 Bottom Depth	RAA-WCU3 RAA-WCU3-A-050916 9/16/2005 Surface Depth	RAA-WCU3 RAA-WCU3-B-050916 9/16/2005 Mid Depth	RAA-WCU3 RAA-WCU3-C-050916 9/16/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-050919 9/19/2005 Surface Depth	RAA-WCD8 RAA-WCD8-B-050919 9/19/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.00417 J**	**0.00872 J**	**0.00697 J**	**0.0037 J**	**0.00558 J**	**0.00985 J**	**0.00371 J**	**0.0286**
Benzo(a)anthracene	0.02	0.49	**0.00686 J**	**0.00675 J**	**0.00806 J**	**0.00734 J**	**0.0107 J**	**0.013 J**	**0.00699 J**	**0.0153 J**
Benzo(a)pyrene	0.01	0.24	**0.0495 ***	**0.049 ***	**0.0498 ***	**0.0496 ***	**0.0512 ***	**0.0543 ***	**0.0497 ***	**0.0591 ***
Dibenzofuran	3.7	66	0.191 U	0.192 U	0.191 U	0.19 U	0.193 U	0.19 U	0.202 U	0.202 U
Fluoranthene	6.16	3980	**0.0168 J**	**0.0127 J**	**0.0139 J**	**0.0167 J**	**0.0236**	**0.0299**	**0.0107 J**	**0.066**
Fluorene	3.9	70	0.0191 U	0.0192 U	0.0191 U	0.019 U	0.0193 U	**0.00923 J**	0.0202 U	**0.0265**
Naphthalene	12	190	0.0477 U	0.048 U	0.0477 U	0.0475 U	0.0484 U	**0.0289 J**	**0.0197 J**	**0.241**
Phenanthrene			**0.0132 J**	**0.00915 J**	**0.0083 J**	**0.0125 J**	**0.0137 J**	**0.0202**	**0.0133 J**	**0.101**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD8 RAA-WCD8-C-050919 9/19/2005 Bottom Depth	RAA-WCU5 RAA-WCU5-A-050919 9/19/2005 Surface Depth	RAA-WCU5 RAA-WCU5-B-050919 9/19/2005 Mid Depth	RAA-WCU5 RAA-WCU5-B-050919-DUP 9/19/2005 Mid Depth	RAA-WCU5 RAA-WCU5-C-050919 9/19/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050920 9/20/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050920 9/20/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050920 9/20/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.0143 J**	**0.0747**	**1.27 ***	**0.166**	**0.257**	**0.241**	**1.64 ***	**0.584**
Benzo(a)anthracene	0.02	0.49	**0.0221 J ***	**0.043 ***	**0.678 * #**	**0.107 ***	**0.143 ***	**0.101 ***	**0.892 * #**	**0.316 ***
Benzo(a)pyrene	0.01	0.24	**0.0866 J ***	**0.0983 ***	**1.00 * #**	**0.194 ***	**0.212 ***	**0.162 ***	**1.59 J * #**	**0.42 * #**
Dibenzofuran	3.7	66	0.196 UJ	0.201 U	**0.0976 J**	0.205 U	**0.0241 J**	0.20 U	**0.172 J**	**0.0579 J**
Fluoranthene	6.16	3980	**0.0545**	**0.164**	**2.29**	**0.408**	**0.552**	**0.376**	**3.31**	**1.28**
Fluorene	3.9	70	**0.0404 J**	**0.0525**	**0.766**	**0.138**	**0.169**	**0.123**	**1.25**	**0.445**
Naphthalene	12	190	**0.162**	**1.01**	**11.9**	**2.28**	**2.81**	**1.88**	**22.3 ***	**8.20**
Phenanthrene			**0.105**	**0.276**	**4.29**	**0.665**	**0.878**	**0.614**	**6.14**	**2.16**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

Z See Case Narrative.

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-050920 9/20/2005 Surface Depth	RAA-WCU RAA-WCU-B-050920 9/20/2005 Mid Depth	RAA-WCU RAA-WCU-C-050920 9/20/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050921 9/21/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050921 9/21/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050921 9/21/2005 Bottom Depth	RAA-WCU RAA-WCU-A-050921 9/21/2005 Surface Depth	RAA-WCU RAA-WCU-B-050921 9/21/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.0207 J**	**0.0335**	**0.0289**	**1.98 J ***	**1.74 J ***	**4.36 J ***	**0.0185 J**	**0.0468 J**
Benzo(a)anthracene	0.02	0.49	**0.0133 J**	**0.0223 ***	**0.022 ***	**1.32 J * #**	**1.14 J * #**	**2.76 J * #**	**0.0136 J**	**0.0185 J**
Benzo(a)pyrene	0.01	0.24	**0.0641 ***	**0.0703 J ***	**0.0712 ***	**1.56 J * #**	**1.33 J * #**	**5.94 J * #**	**0.093 J ***	**0.0614 J ***
Dibenzofuran	3.7	66	0.221 U	0.213 U	0.211 U	**0.182 J**	**0.145 J**	**1.14 J**	0.213 U	0.204 UJ
Fluoranthene	6.16	3980	**0.0484**	**0.0705**	**0.0808**	**4.02 J**	**3.74 J**	**11.3 J ***	**0.0562 J**	**0.0662 J**
Fluorene	3.9	70	**0.0193 J**	**0.0279**	**0.0262**	**1.39**	**1.16**	**3.61**	**0.0326**	**0.0408 J**
Naphthalene	12	190	**0.184**	**0.262**	**0.27**	**16.8 ***	**14.0 ***	**42.8 ***	**0.391**	**0.667 J**
Phenanthrene			**0.0746**	**0.111**	**0.111**	**7.68 J**	**6.70 J**	**20.2 J**	**0.0903 J**	**0.156 J**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-C-050921 9/21/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-050923 9/23/2005 Surface Depth	RAA-WCD8 RAA-WCD8-B-050923 9/23/2005 Mid Depth	RAA-WCD8 RAA-WCD8-C-050923 9/23/2005 Bottom Depth	RAA-WCU5 RAA-WCU5-A-050923 9/23/2005 Surface Depth	RAA-WCU5 RAA-WCU5-B-050923 9/23/2005 Mid Depth	RAA-WCU5 RAA-WCU5-C-050923 9/23/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-050926-RINS 9/26/2005 Rinsate Blank
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.0285 J**	**0.0184 J**	**0.0177 J**	**0.0413**	**0.615**	**0.498**	**0.424**	**0.0163 J**
Benzo(a)anthracene	0.02	0.49	**0.0175 J**	**0.0497 ***	**0.0496 J ***	**0.0607 ***	**0.431 J ***	**0.338 J ***	**0.276 ***	0.0208 U
Benzo(a)pyrene	0.01	0.24	**0.0651 J ***	**0.0699 J ***	**0.0742 ***	**0.0836 J ***	**0.556 J * #**	**0.428 J * #**	**0.359 J * #**	0.0208 UJ
Dibenzofuran	3.7	66	0.206 U	0.193 U	0.192 U	0.194 U	**0.0616 J**	**0.051 J**	**0.0521 J**	0.208 U
Fluoranthene	6.16	3980	**0.0611 J**	**0.0526**	**0.0529**	**0.117**	**1.64**	**1.36**	**1.02**	**0.0198 J**
Fluorene	3.9	70	**0.0241**	**0.0108 J**	**0.0115 J**	**0.0162 J**	**0.455**	**0.391**	**0.339**	**0.0152 J**
Naphthalene	12	190	**0.181**	**0.034 J**	**0.0231 J**	**0.0334 J**	**3.88**	**3.65**	**3.69**	**0.114**
Phenanthrene			**0.0791 J**	**0.0324**	**0.0283**	**0.0535**	**2.16**	**1.81**	**1.53**	**0.0791 J**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD2 RAA-WCD2-A-050926 9/26/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050926 9/26/2005 Mid Depth	RAA-WCD2 RAA-WCD2-B-050926 DUP 9/26/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-050926 9/26/2005 Bottom Depth	RAA-WCU RAA-WCU-A-050926 9/26/2005 Surface Depth	RAA-WCU RAA-WCU-B-050926 9/26/2005 Mid Depth	RAA-WCU RAA-WCU-C-050926 9/26/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-050927 9/27/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**2.97 ***	**2.91 ***	**3.17 ***	**2.31 ***	**0.0141 J**	**0.00755 J**	**0.0307**	**0.0317**
Benzo(a)anthracene	0.02	0.49	**1.99 * #**	**2.22 * #**	**2.13 * #**	**1.92 J * #**	**0.0142 J**	0.0191 UJ	**0.0136 J**	**0.0158 J**
Benzo(a)pyrene	0.01	0.24	**2.46 J * #**	**2.77 J * #**	**2.76 J * #**	**3.41 J * #**	**0.0791 J ***	0.0191 UJ	**0.0723 J ***	**0.0772 ***
Dibenzofuran	3.7	66	**0.338**	**0.341**	**0.385**	**0.751**	0.198 U	0.191 UJ	0.193 U	0.203 U
Fluoranthene	6.16	3980	**7.00 J ***	**9.41 J ***	**7.56 J ***	**1.92 J**	**0.0325 J**	0.0191 UJ	**0.0614 J**	**0.127**
Fluorene	3.9	70	**2.25**	**2.72**	**25.1 ***	**2.50 J**	**0.0454**	**0.0569 J**	**0.0231**	**0.0848**
Naphthalene	12	190	**30.2 ***	**15.4 ***	**35.2 ***	**30.8 ***	**0.478**	**0.0168 J**	**0.0242 J**	**1.08 J**
Phenanthrene			**11.2 J**	**14.2 J**	**12.7 J**	**13.3 J**	**0.0828 J**	**0.118 J**	**0.0909 J**	**0.246**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD8 RAA-WCD8-B-050927 9/27/2005 Mid Depth	RAA-WCD8 RAA-WCD8-B-050927DUP 9/27/2005 Mid Depth	RAA-WCD8 RAA-WCD8-C-050927 9/27/2005 Bottom Depth	RAA-WCIN RAA-INSIDE1-B-050927 9/27/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE1-B-050927 9/27/2005 Outside Curtain	RAA-WCU3 RAA-WCU3-A-050927 9/27/2005 Surface Depth	RAA-WCU3 RAA-WCU3-B-050927 9/27/2005 Mid Depth
Conventionals (µg/L)									
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)									
Anthracene	0.73	13	**0.0222**	**0.0379**	**0.0452**	**29.0 * #**	**0.363**	**0.091**	**0.0225**
Benzo(a)anthracene	0.02	0.49	**0.0122 J**	**0.0235 J ***	**0.0289 ***	**9.53 * #**	**0.241 ***	**0.0491 ***	**0.0127 J**
Benzo(a)pyrene	0.01	0.24	**0.0732 ***	**1.57 J * #**	**0.095 ***	**16.6 * #**	**0.328 * #**	**0.114 ***	**0.0728 ***
Dibenzofuran	3.7	66	0.203 U	0.249 U	0.21 U	**7.31 J ***	**0.0567 J**	**0.0354 J**	0.199 U
Fluoranthene	6.16	3980	**0.0701**	**0.148**	**0.155**	**59.7 ***	**1.03**	**0.253**	**0.0715**
Fluorene	3.9	70	**0.0446**	**0.0927**	**0.0738**	**52.1 ***	**0.392**	**0.103**	**0.0439**
Naphthalene	12	190	**0.537 J**	**1.14 J**	**0.875 J**	**584 J * #**	**3.77 J**	**0.966 J**	**0.54 J**
Phenanthrene			**0.126**	**0.271**	**0.217**	**165**	**1.50**	**0.359**	**0.123**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU3 RAA-WCU3-C-050927 9/27/2005 Bottom Depth	RAA-WCU4 RAA-WCU4-A-050927 9/27/2005 Surface Depth	RAA-WCU4 RAA-WCU4-C-050927 9/27/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-050929-2 9/29/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050929-2 9/29/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-050929-2 9/29/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-050929-1 9/29/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-050929-1 9/29/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.118**	**0.204**	**0.122**	**1.1 ***	0.2 UJ	**0.99 ***	**0.94 ***	0.2 U
Benzo(a)anthracene	0.02	0.49	**0.0795 ***	**0.106 ***	**0.0869 ***	**0.8 J * #**	0.2 UJ	**0.83 J * #**	**0.75 J * #**	0.2 UJ
Benzo(a)pyrene	0.01	0.24	**0.174 ***	**0.176 ***	**0.169 ***	**1.3 * #**	0.2 UJ	**1.2 * #**	**1.1 * #**	**0.22 ***
Dibenzofuran	3.7	66	**0.0731 J**	**0.0425 J**	0.204 U	2.1 UJ	2 UJ	1.9 UJ	2 UJ	2 UJ
Fluoranthene	6.16	3980	**0.397**	**0.46**	**0.374**	**3.7 J**	0.2 UJ	**3.7 J**	**3.5 J**	0.2 UJ
Fluorene	3.9	70	**0.15**	**0.166**	**0.123**	**0.45**	0.2 UJ	**0.38**	**0.37**	0.2 U
Naphthalene	12	190	**1.52 J**	**1.49 J**	**1.10 J**	0.52 U	0.5 UJ	0.48 U	0.5 U	0.5 U
Phenanthrene			**0.538**	**0.613**	**0.454**	**1.7 J**	0.2 UJ	**1.8 J**	**1.5 J**	0.2 UJ

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD2 RAA-WCD2-C-050929-1 9/29/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-050929-1 9/29/2005 Surface Depth	RAA-WCD4 RAA-WCD4-A-050929-2 9/29/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-050929-1 9/29/2005 Mid Depth	RAA-WCD4 RAA-WCD4-B-050929-2 9/29/2005 Mid Depth	RAA-WCD4 RAA-WCD4-B-050929-2-DUP 9/29/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-050929-1 9/29/2005 Bottom Depth
Conventionals (µg/L)									
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)									
Anthracene	0.73	13	0.19 U	**0.85 J ***	**0.3**	0.2 U	**0.46**	**0.49**	0.19 UJ
Benzo(a)anthracene	0.02	0.49	0.19 UJ	**0.62 J * #**	**0.22 J ***	0.2 UJ	**0.31 J ***	**0.38 J ***	0.19 UJ
Benzo(a)pyrene	0.01	0.24	0.19 U	**0.84 J * #**	**0.46 * #**	**0.24 ***	**0.61 * #**	**0.69 * #**	0.19 UJ
Dibenzofuran	3.7	66	1.9 UJ	2.1 UJ	2 UJ	2 UJ	2.2 UJ	1.9 UJ	1.9 UJ
Fluoranthene	6.16	3980	0.19 UJ	**2.5 J**	**0.99 J**	**0.25 J**	**1.9 J**	**1.8 J**	0.19 UJ
Fluorene	3.9	70	0.19 U	**1.7 J**	**0.24**	0.2 U	**0.22**	**0.29**	0.19 UJ
Naphthalene	12	190	0.48 U	**110 J ***	0.5 U	0.49 U	0.54 U	0.49 U	0.48 UJ
Phenanthrene			0.19 UJ	**6 J**	**0.84 J**	0.2 UJ	**0.96 J**	**1 J**	0.19 UJ

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD4 RAA-WCD4-C-050929-2 9/29/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-050929-1 9/29/2005 Inside Curtain	RAA-WCIN RAA-INSIDE-050929-2 9/29/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-050929-1 9/29/2005 Outside Curtain	RAA-WCOUT RAA-OUTSIDE-050929-2 9/29/2005 Outside Curtain	RAA-WCU RAA-WCU-A-050929-1 9/29/2005 Surface Depth	RAA-WCU RAA-WCU-A-050929-2 9/29/2005 Surface Depth
Conventionals (µg/L)									
Cyanide	5.2	20	50 U	50 U	50 U	50 U	50 U	50 U	50 U
SVOC (µg/L)									
Anthracene	0.73	13	**0.62**	**0.85 ***	**25 J * #**	0.2 UJ	**0.69 J**	0.2 U	0.2 U
Benzo(a)anthracene	0.02	0.49	**0.44 J ***	**0.69 J * #**	**12 J * #**	0.2 UJ	**0.61 J * #**	0.2 UJ	0.2 UJ
Benzo(a)pyrene	0.01	0.24	**0.72 * #**	**1.3 * #**	**16 J * #**	**0.36 J * #**	**1.4 J * #**	0.2 U	0.2 U
Dibenzofuran	3.7	66	2 UJ	2.2 UJ	**2.2 J**	2 UJ	1.9 UJ	2 UJ	2 UJ
Fluoranthene	6.16	3980	**1.9 J**	**7.5 J ***	**67 J ***	**1.1 J**	**2.8 J**	0.2 UJ	0.2 UJ
Fluorene	3.9	70	**0.34**	0.22 U	**32 J ***	0.2 UJ	**0.28 J**	0.2 U	0.2 U
Naphthalene	12	190	0.5 U	0.55 U	**2.6 J**	0.5 UJ	0.48 UJ	0.51 U	0.49 U
Phenanthrene			1.1 UJ	**0.68 J**	**66 J**	**0.29 J**	**1.7 J**	0.2 UJ	0.2 UJ

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-B-050929-1 9/29/2005 Mid Depth	RAA-WCU RAA-WCU-B-050929-2 9/29/2005 Mid Depth	RAA-WCU RAA-WCU-C-050929-1 9/29/2005 Bottom Depth	RAA-WCU RAA-WCU-C-050929-2 9/29/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-050930 9/30/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-050930 9/30/2005 Mid Depth	RAA-WCD1 RAA-WCD1-B-050930-DUP 9/30/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-050930 9/30/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	50 U	50 U	50 U	50 U	**5.8 J ***	5.6 U	5.6 U	**5.8 J ***
SVOC (µg/L)										
Anthracene	0.73	13	0.2 U	0.2 U	0.19 U	0.2 U	**0.36 J**	**0.91 ***	**1.1 ***	**0.97 ***
Benzo(a)anthracene	0.02	0.49	0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ	**0.26 J ***	**0.68 * #**	**0.82 * #**	**0.75 * #**
Benzo(a)pyrene	0.01	0.24	0.2 U	0.2 U	0.19 U	0.2 U	**0.45 J * #**	**1.1 * #**	**1.2 * #**	**1.1 * #**
Dibenzofuran	3.7	66	2 UJ	2 UJ	1.9 UJ	2 UJ	0.2 UJ	0.2 U	0.19 U	0.2 U
Fluoranthene	6.16	3980	0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ	**1.3 J**	**3**	**3.6**	**3.4**
Fluorene	3.9	70	0.2 U	0.2 U	0.19 U	0.2 U	**0.093 J**	**0.27**	**0.33**	**0.32**
Naphthalene	12	190	0.5 U	0.51 U	0.48 U	0.5 U	**0.058 J**	**0.15**	**0.2**	**0.16**
Phenanthrene			0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ	**0.35 J**	**0.89**	**0.98**	**0.98**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

Z See Case Narrative.

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD4 RAA-WCD4-A-050930 9/30/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-050930 9/30/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-050930 9/30/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-050930 9/30/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-050930 9/30/2005 Outside Curtain	RAA-WCU RAA-WCU-A-050930 9/30/2005 Surface Depth	RAA-WCU RAA-WCU-B-050930 9/30/2005 Mid Depth	RAA-WCU RAA-WCU-C-050930 9/30/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	**14 ***	**11 ***	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.59**	0.02 UJ	**0.87 ***	**9.7 ***	**0.047 J**	0.2 U	0.2 U	0.2 U
Benzo(a)anthracene	0.02	0.49	**0.37 ***	0.02 UJ	**0.65 * #**	**7.8 * #**	**0.039 J ***	0.2 U	0.2 U	0.2 U
Benzo(a)pyrene	0.01	0.24	**0.57 * #**	**0.026 J ***	**0.99 * #**	**11 * #**	**0.11 J ***	**0.27 * #**	**0.24 ***	**0.21 ***
Dibenzofuran	3.7	66	0.2 U	0.2 UJ	0.2 U	0.19 U	0.19 UJ	2 U	2 U	2 U
Fluoranthene	6.16	3980	**1.7**	**0.02 J**	**3**	**36 ***	**0.17 J**	0.2 U	0.2 U	0.2 U
Fluorene	3.9	70	**0.31**	0.02 UJ	**0.38**	**0.73**	0.019 UJ	**0.25**	0.2 U	0.2 U
Naphthalene	12	190	**0.11**	0.049 UJ	**0.13**	**1.4**	0.048 UJ	0.5 U	0.5 U	0.49 U
Phenanthrene			**0.8**	0.02 UJ	**0.9**	**5.1**	**0.052 J**	**0.44**	0.2 U	0.2 U

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-A-051003 10/3/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051003 10/3/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051003 10/3/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-051003 10/3/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-051003 10/3/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-051003 10/3/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051003 10/3/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051003 10/3/2005 Outside Curtain
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	**2.1 ***	**2.2 ***	**0.79 ***	**2 ***	**2.4 ***	**0.57 J**	**22 * #**	**4.6 ***
Benzo(a)anthracene	0.02	0.49	**1.2 * #**	**1.1 * #**	**0.48 ***	**1.1 * #**	**1.4 * #**	**0.26 J ***	**9.5 * #**	**2.5 * #**
Benzo(a)pyrene	0.01	0.24	**1.5 * #**	**1.4 * #**	**0.82 * #**	**1.4 * #**	**1.8 * #**	**0.37 J * #**	**9.9 * #**	**3.3 * #**
Dibenzofuran	3.7	66	0.2 U	0.2 U	0.2 U	0.19 U	0.2 U	0.2 UJ	**2.2**	**0.42**
Fluoranthene	6.16	3980	**5**	**4.7**	**1.7**	**4.5**	**6**	**1 J**	**39 ***	**9.2 ***
Fluorene	3.9	70	**1.4**	**1.2**	**0.53**	**1.3**	**1.4**	**0.32 J**	**15 ***	**3.4**
Naphthalene	12	190	**25 ***	**26 ***	**12**	**18 ***	**26 ***	**6.1 J**	**280 * #**	**60 ***
Phenanthrene			**8.5**	**8.2**	**3.7**	**7.2**	**9.5**	**1.7 J**	**81**	**15**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-051003 10/3/2005 Surface Depth	RAA-WCU RAA-WCU-B-051003 10/3/2005 Mid Depth	RAA-WCU RAA-WCU-B-051003-DUP 10/3/2005 Mid Depth	RAA-WCU RAA-WCU-C-051003 10/3/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051005 10/4/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051005 10/4/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051005 10/4/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-051005 10/4/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	0.019 U	**0.036**	**0.023**	0.02 U	**1.6 J ***	**2 J ***	**1.2 ***	**0.76 ***
Benzo(a)anthracene	0.02	0.49	0.019 U	**0.027 ***	0.02 U	0.02 U	**1 J * #**	**1.6 J * #**	**0.82 * #**	**0.43 ***
Benzo(a)pyrene	0.01	0.24	0.019 U	**0.033 ***	**0.029 ***	**0.026 ***	**1.3 J * #**	**4.1 J * #**	**1 * #**	**0.52 * #**
Dibenzofuran	3.7	66	0.19 U	0.2 U	0.2 U	0.2 U	0.2 UJ	**0.3 J**	0.2 U	0.21 U
Fluoranthene	6.16	3980	0.019 U	**0.1**	**0.021**	**0.042**	**3.2**	**5**	**2.7**	**1.8**
Fluorene	3.9	70	0.019 U	**0.025**	**0.035**	0.02 U	**1.2 J**	**1.9 J**	**0.96**	**0.77**
Naphthalene	12	190	**0.06**	**0.38**	**1.8**	0.05 U	**14 ***	**15 ***	**8.5**	**8.1**
Phenanthrene			0.019 U	**0.14**	**0.089**	0.02 U	**5.1**	**7.2**	**3.7**	**2.7**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD4 RAA-WCD4-B-051005 10/4/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-051005 10/4/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051005 10/4/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051005 10/4/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051005 10/4/2005 Surface Depth	RAA-WCU RAA-WCU-B-051005 10/4/2005 Mid Depth	RAA-WCU RAA-WCU-B-051005-DUP 10/4/2005 Mid Depth	RAA-WCU RAA-WCU-C-051005 10/4/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	**5.7 J ***	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	**1.7 ***	**1.5 J ***	**7.6 ***	**0.83 ***	0.021 U	0.02 U	0.02 UJ	**1.2 ***
Benzo(a)anthracene	0.02	0.49	**1.1 J * #**	**0.96 J * #**	**3.6 * #**	**0.48 ***	0.021 U	0.02 U	0.02 UJ	**0.72 J * #**
Benzo(a)pyrene	0.01	0.24	**1.3 J * #**	**1.4 J * #**	**4.4 * #**	**0.62 * #**	**0.032 ***	**0.023 ***	**0.11 J ***	**0.89 J * #**
Dibenzofuran	3.7	66	0.2 U	0.2 UJ	**1.5**	0.19 U	0.21 U	0.2 U	0.2 UJ	0.2 U
Fluoranthene	6.16	3980	**3.6**	**3.3**	**19 ***	**2**	**0.032**	**0.028**	**0.02 J**	**2.8**
Fluorene	3.9	70	**1.3**	**1.1 J**	**10 ***	**0.91**	0.021 U	0.02 U	0.02 UJ	**1.3**
Naphthalene	12	190	**13 ***	**12**	**43 ***	**10**	0.053 U	0.049 U	0.05 U	**14 ***
Phenanthrene			**5.4**	**4.9**	**28**	**3**	**0.027**	**0.02**	**0.036 J**	**4.3**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-A-051006 10/6/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051006 10/6/2005 Mid Depth	RAA-WCD1 RAA-WCD1-B-051006-DUP 10/6/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051006 10/6/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-051006 10/6/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-051006 10/6/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-051006 10/6/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051006 10/6/2005 Inside Curtain
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.21 J**	**0.47**	**0.36**	**0.51**	**0.31 J**	--	**0.25**	**2.8 ***
Benzo(a)anthracene	0.02	0.49	**0.15 J ***	**0.3 ***	**0.26 ***	**0.41 ***	**0.34 J ***	--	**0.24 ***	**2.2 * #**
Benzo(a)pyrene	0.01	0.24	**0.21 J ***	**0.39 * #**	**0.36 * #**	**0.52 * #**	**0.29 J * #**	--	**1.8 * #**	**2.2 * #**
Dibenzofuran	3.7	66	0.2 UJ	0.21 U	0.21 U	0.2 U	0.2 UJ	--	0.2 U	**0.4**
Fluoranthene	6.16	3980	**0.57 J**	**1.1**	**0.97**	**1.3**	**0.75 J**	--	**0.83**	**6.4 ***
Fluorene	3.9	70	**0.14 J**	**0.36**	**0.26**	**0.38**	**0.17 J**	--	**0.29**	**3.3**
Naphthalene	12	190	**1.3 J**	**3.3**	**2.9**	**2.7**	**2.1 J**	--	**2.1**	**14 ***
Phenanthrene			**0.8 J**	**1.6**	**1.4**	**2.1**	**1.1 J**	--	**1.3**	**9.8**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCOUT RAA-OUTSIDE-051006 10/6/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051006 10/6/2005 Surface Depth	RAA-WCU RAA-WCU-B-051006 10/6/2005 Mid Depth	RAA-WCU RAA-WCU-C-051006 10/6/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051011 10/11/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051011 10/11/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051011 10/11/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-051011 10/11/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	**1.8 ***	0.02 U	0.02 U	0.02 U	0.019 UJ	**0.025 J**	0.019 UJ	**0.023 J**
Benzo(a)anthracene	0.02	0.49	**1 * #**	0.02 UJ	0.02 UJ	0.02 UJ	0.019 UJ	**0.025 J ***	0.019 UJ	0.02 UJ
Benzo(a)pyrene	0.01	0.24	**1.4 * #**	0.02 U	0.02 U	**0.021 J ***	**0.028 J ***	**0.043 J ***	**0.033 J ***	**0.035 J ***
Dibenzofuran	3.7	66	0.19 U	0.2 U	0.2 U	0.2 U	0.19 UJ	0.19 UJ	0.19 UJ	0.2 UJ
Fluoranthene	6.16	3980	**3.7**	**0.022**	0.02 U	0.02 U	**0.061 J**	**0.098 J**	**0.065 J**	**0.075 J**
Fluorene	3.9	70	**1.3**	0.02 U	0.02 U	0.02 U	0.019 UJ	**0.031 J**	**0.022 J**	**0.021 J**
Naphthalene	12	190	**12**	0.049 U	0.05 U	0.049 U	**0.077**	**0.17**	**0.091**	**0.065**
Phenanthrene			**5.2**	**0.02**	0.02 U	0.02 U	**0.052 J**	**0.086 J**	**0.055 J**	**0.053 J**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD4 RAA-WCD4-B-051011 10/11/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-051011 10/11/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051011 10/11/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051011 10/11/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051011 10/11/2005 Surface Depth	RAA-WCU RAA-WCU-B-051011 10/11/2005 Mid Depth	RAA-WCU RAA-WCU-C-051011 10/11/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-051012 10/12/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	**0.023 J**	**0.03 J**	**0.47 J**	**0.093 J**	0.019 UJ	0.019 UJ	0.019 UJ	0.022 U
Benzo(a)anthracene	0.02	0.49	0.019 UJ	**0.022 J ***	**0.57 J * #**	**0.1 J ***	0.019 UJ	0.019 UJ	0.019 UJ	0.022 U
Benzo(a)pyrene	0.01	0.24	**0.029 J ***	**0.041 J ***	**0.67 J * #**	**0.14 J ***	**0.028 J ***	**0.022 J ***	**0.022 J ***	**0.031 J ***
Dibenzofuran	3.7	66	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.22 UJ
Fluoranthene	6.16	3980	**0.064 J**	**0.081 J**	**1.8 J**	**0.34 J**	**0.034 J**	0.019 UJ	0.019 UJ	**0.039 J**
Fluorene	3.9	70	0.019 UJ	**0.024 J**	**0.19 J**	**0.056 J**	0.019 UJ	0.019 UJ	0.019 UJ	0.022 U
Naphthalene	12	190	**0.082**	**0.11**	**0.082**	0.048 U	0.048 U	0.048 U	0.049 U	**0.094**
Phenanthrene			**0.056 J**	**0.071 J**	**0.7 J**	**0.18 J**	**0.023 J**	0.019 UJ	0.019 UJ	**0.062**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD8 RAA-WCD8-B-051012 10/12/2005 Mid Depth	RAA-WCD8 RAA-WCD8-C-051012 10/12/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051012 10/12/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051012 10/12/2005 Outside Curtain	RAA-WCU4 RAA-WCU4-A-051012 10/12/2005 Surface Depth	RAA-WCU4 RAA-WCU4-B-051012 10/12/2005 Mid Depth	RAA-WCU4 RAA-WCU4-C-051012 10/12/2005 Bottom Depth	RAA-WCU7 RAA-WCU7-A-051012 10/12/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOC (µg/L)										
Anthracene	0.73	13	0.02 U	**0.021**	**1.6 ***	**0.73**	**0.96 ***	**1.3 ***	**1.4 ***	**0.71**
Benzo(a)anthracene	0.02	0.49	0.02 U	**0.028 ***	**1.3 * #**	**0.86 * #**	**0.66 * #**	**0.77 * #**	**0.88 * #**	**0.55 * #**
Benzo(a)pyrene	0.01	0.24	0.02 U	**0.027 ***	**1 * #**	**0.57 * #**	**0.88 * #**	**1.1 * #**	**0.94 * #**	**0.64 * #**
Dibenzofuran	3.7	66	0.2 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.22 UJ	0.2 UJ	0.2 UJ	0.23 UJ
Fluoranthene	6.16	3980	**0.047 J**	**0.066 J**	**2.5 J**	**1.6 J**	**2.2 J**	**2.9 J**	**3.3 J**	**1.8 J**
Fluorene	3.9	70	0.02 U	0.019 U	**0.98**	**0.59**	**0.7**	**0.8**	**0.82**	**0.51**
Naphthalene	12	190	**0.12**	**0.096**	**12**	**8.2**	**11**	**8.3**	**9**	**7.8**
Phenanthrene			**0.073**	**0.086**	**4.7**	**2.6**	**3.8**	**4.2**	**4.8**	**3.2**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU7 RAA-WCU7-B-051012 10/12/2005 Mid Depth	RAA-WCU7 RAA-WCU7-C-051012 10/12/2005 Bottom Depth
Conventionals (µg/L)				
Cyanide	5.2	20	5.6 U	5.6 U
SVOC (µg/L)				
Anthracene	0.73	13	**1 ***	**1.1 ***
Benzo(a)anthracene	0.02	0.49	**0.58 * #**	**0.56 * #**
Benzo(a)pyrene	0.01	0.24	**0.86 * #**	**0.74 * #**
Dibenzofuran	3.7	66	0.2 UJ	0.19 UJ
Fluoranthene	6.16	3980	**2.1 J**	**1.9 J**
Fluorene	3.9	70	**0.7**	**0.66**
Naphthalene	12	190	**10**	**9.5**
Phenanthrene			**3.7**	**2.9**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
Z	See Case Narrative.
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-A-051013 10/13/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051013 10/13/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051013 10/13/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051013 10/13/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051013 10/13/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051013 10/13/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051013 10/13/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051013 10/13/2005 Outside Curtain
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	--	--	--	--	--	--	**1.9 ***	**0.2**
Benzo(a)anthracene	0.02	0.49	--	--	--	--	--	--	**1.1 * #**	**0.12 ***
Benzo(a)pyrene	0.01	0.24	--	--	--	--	--	--	**1.3 * #**	**0.2 ***
Dibenzofuran	3.7	66	--	--	--	--	--	--	**0.22**	0.19 U
Fluoranthene	6.16	3980	--	--	--	--	--	--	**5.7**	**0.56**
Fluorene	3.9	70	--	--	--	--	--	--	**1.4**	**0.23**
Naphthalene	12	190	--	--	--	--	--	--	**8.4**	**2**
Phenanthrene	--	--	--	--	--	--	--	--	**3.3**	**0.71**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-051013 10/13/2005 Surface Depth	RAA-WCU RAA-WCU-B-051013 10/13/2005 Mid Depth	RAA-WCU RAA-WCU-C-051013 10/13/2005 Bottom Depth	RAA-WD1 RAA-WD1-A-051013 10/13/2005 Surface Depth	RAA-WD1 RAA-WD1-B-051013 10/13/2005 Mid Depth	RAA-WD1 RAA-WD1-C-051013 10/13/2005 Bottom Depth	RAA-WD9 RAA-WD9-A-051013 10/13/2005 Surface Depth	RAA-WD9 RAA-WD9-B-051013 10/13/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	--	--	--	--	--
SVOCs (µg/L)										
Anthracene	0.73	13	0.021 U	0.019 U	0.024 U	**0.22**	**0.095**	**0.097**	**0.19**	**0.18**
Benzo(a)anthracene	0.02	0.49	0.021 U	0.019 U	0.024 U	**0.13 ***	**0.067 ***	**0.064 ***	**0.14 ***	**0.12 ***
Benzo(a)pyrene	0.01	0.24	0.021 U	0.019 U	0.024 U	**0.22 ***	**0.14 ***	**0.14 ***	**0.23 ***	**0.22 ***
Dibenzofuran	3.7	66	0.21 U	0.19 U	0.24 U	0.22 U	0.2 U	0.19 U	0.19 U	0.2 U
Fluoranthene	6.16	3980	**0.034**	**0.02**	0.024 U	**0.61**	**0.3**	**0.29**	**0.63**	**0.56**
Fluorene	3.9	70	0.021 U	0.019 U	0.024 U	**0.22**	**0.11**	**0.12**	**0.22**	**0.17**
Naphthalene	12	190	0.052 U	0.048 U	0.059 U	**2.1**	**1.1**	**1.1**	**2.1**	**1.4**
Phenanthrene	--	--	**0.024**	0.019 U	0.024 U	**0.76**	**0.4**	**0.41**	**0.8**	**0.66**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WD9 RAA-WD9-C-051013 10/13/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051014 10/14/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051014 10/14/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051014 10/14/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051014 10/14/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051014 10/14/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051014 10/14/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051014 10/14/2005 Inside Curtain
Conventionals (µg/L)										
Cyanide	5.2	20	--	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	0.019 U	**0.32**	**0.19**	**0.17**	**0.055**	**0.2**	**0.083**	**0.46**
Benzo(a)anthracene	0.02	0.49	0.019 U	**0.21 ***	**0.12 ***	**0.11 ***	**0.049 ***	**0.11 ***	**0.062 ***	**0.39 ***
Benzo(a)pyrene	0.01	0.24	0.019 U	**0.32 * #**	**0.2 J ***	**0.21 ***	**0.13 ***	**0.21 ***	**0.14 ***	**0.49 * #**
Dibenzofuran	3.7	66	0.19 U	0.2 U	0.19 U	0.2 U	0.24 U	0.2 U	0.2 U	0.19 U
Fluoranthene	6.16	3980	0.019 U	**0.88**	**0.44**	**0.47**	**0.19**	**0.46**	**0.24**	**1.8**
Fluorene	3.9	70	0.019 U	**0.22**	**0.13**	**0.11**	**0.058**	**0.13**	**0.055**	**0.3**
Naphthalene	12	190	0.048 U	**0.96**	**1.7**	**1.4**	**0.43**	**1.6**	**0.61**	**0.098**
Phenanthrene	--	--	0.019 U	**0.73**	**0.49**	**0.52**	**0.16**	**0.52**	**0.19**	**0.41**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCOUT RAA-OUTSIDE-051014 10/14/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051014 10/14/2005 Surface Depth	RAA-WCU RAA-WCU-B-051014 10/14/2005 Mid Depth	RAA-WCU RAA-WCU-C-051014 10/14/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051015 10/15/2005 Surface Depth	RAA-WCD1 RAA-WCD1-A-051015-DUP 10/15/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051015 10/15/2005 Mid Depth
Conventionals (µg/L)									
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	**6.6 J ***	**5.7 J ***	**7.2 J ***
SVOCs (µg/L)									
Anthracene	0.73	13	**0.16**	0.019 U	0.02 U	**0.02**	**0.053**	**0.053**	**0.081**
Benzo(a)anthracene	0.02	0.49	**0.13 ***	0.019 U	0.02 U	**0.023 ***	**0.042 ***	**0.042 ***	**0.089 ***
Benzo(a)pyrene	0.01	0.24	**0.22 ***	0.019 UJ	0.02 U	**0.09 ***	**0.11 ***	**0.11 ***	**0.14 ***
Dibenzofuran	3.7	66	0.19 U	0.19 U	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U
Fluoranthene	6.16	3980	**0.56**	0.019 U	0.02 U	**0.069**	**0.18**	**0.17**	**0.3**
Fluorene	3.9	70	**0.13**	0.019 U	0.02 U	0.019 U	**0.055**	**0.067**	**0.11**
Naphthalene	12	190	**0.53**	0.049 U	0.049 U	**0.18**	**0.54**	**0.65**	**1.2**
Phenanthrene	--	--	**0.29**	0.019 U	0.02 U	**0.065**	**0.14**	**0.15**	**0.3**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-C-051015 10/15/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051015 10/15/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051015 10/15/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051015 10/15/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051015 10/15/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051015 10/15/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051015 10/15/2005 Surface Depth	RAA-WCU RAA-WCU-B-051015 10/15/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	**6.5 J ***	**6.1 J ***	**7 J ***	**6.7 J ***	**6.4 J ***	**11 ***	**6 J ***
SVOCs (µg/L)										
Anthracene	0.73	13	**0.38**	**0.21**	**0.2**	**0.74 ***	**0.53**	**0.16**	0.02 U	0.02 U
Benzo(a)anthracene	0.02	0.49	**0.28 ***	**0.13 ***	**0.069 ***	**0.5 * #**	**0.3 ***	**0.11 ***	0.02 U	0.02 U
Benzo(a)pyrene	0.01	0.24	**0.38 * #**	**0.2 ***	**0.14 ***	**0.61 J * #**	**0.39 * #**	**0.2 ***	0.02 U	0.02 U
Dibenzofuran	3.7	66	0.2 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.2 U
Fluoranthene	6.16	3980	**1.1**	**0.51**	**0.27**	**2.2**	**1.3**	**0.48**	0.02 U	0.02 U
Fluorene	3.9	70	**0.35**	**0.22**	**0.11**	**0.6**	**0.38**	**0.18**	0.02 U	0.02 U
Naphthalene	12	190	**2.3**	**2.9**	**1.3**	**4.9**	**2.8**	**1.7**	0.049 U	0.049 U
Phenanthrene	--	--	**0.95**	**0.62**	**0.33**	**1.6**	**1**	**0.44**	0.02 U	0.02 U

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-C-051015 10/15/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051016 10/16/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051016 10/16/2005 Mid Depth	RAA-WCD1 RAA-WCD1-B-051016-DUP 10/16/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051016 10/16/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051016 10/16/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051016 10/16/2005 Mid Depth
Conventionals (µg/L)									
Cyanide	5.2	20	**6.5 J ***	5.6 U	5.6 U	5.6 U	5.6 U	**6.1 J ***	5.6 U
SVOCs (µg/L)									
Anthracene	0.73	13	0.02 U	**0.15**	**0.32**	**0.25**	**0.56**	**0.12**	**0.25**
Benzo(a)anthracene	0.02	0.49	0.02 U	**0.068 ***	**0.2 ***	**0.17 ***	**0.41 ***	**0.072 ***	**0.19 ***
Benzo(a)pyrene	0.01	0.24	0.02 U	**0.079 ***	**0.23 ***	**0.21 ***	**0.47 * #**	**0.09 ***	**0.21 ***
Dibenzofuran	3.7	66	0.2 U	0.19 U	0.19 U	0.24 U	0.2 U	0.19 U	0.19 U
Fluoranthene	6.16	3980	**0.031**	**0.31**	**0.74**	**0.65**	**1.4**	**0.31**	**0.66**
Fluorene	3.9	70	0.02 U	**0.16**	**0.26**	**0.23**	**0.42**	**0.13**	**0.2**
Naphthalene	12	190	0.05 U	**2.2**	**3.9**	**2.8**	**6.8**	**1.6**	**2.3**
Phenanthrene	--	--	0.02 U	**0.44**	**0.72**	**0.68**	**1.3**	**0.35**	**0.62**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD9 RAA-WCD9-C-051016 10/16/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051016 10/16/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051016 10/16/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051016 10/16/2005 Surface Depth	RAA-WCU RAA-WCU-B-051016 10/16/2005 Mid Depth	RAA-WCU RAA-WCU-C-051016 10/16/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051017 10/17/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051017 10/17/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	**6 J ***	**6.2 J ***	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.52**	**0.12**	**0.13**	0.019 U	0.02 U	0.02 U	**0.041**	**0.51**
Benzo(a)anthracene	0.02	0.49	**0.39 ***	**0.082 ***	**0.1 ***	**0.02**	0.02 U	**0.02**	**0.035 J ***	**0.32 J ***
Benzo(a)pyrene	0.01	0.24	**0.43 * #**	**0.1 ***	**0.13 ***	**0.043 ***	**0.033 ***	**0.038 ***	**0.045 ***	**0.29 * #**
Dibenzofuran	3.7	66	0.19 U	0.19 U	0.32 U	0.19 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Fluoranthene	6.16	3980	**1.4**	**0.29**	**0.43**	**0.04**	**0.039**	**0.045**	**0.15**	**1.1**
Fluorene	3.9	70	**0.41**	**0.11**	**0.13**	0.019 U	0.02 U	0.02 U	**0.035**	**0.29**
Naphthalene	12	190	**6.9**	**1.4**	**0.81**	0.049 U	0.049 U	0.049 U	**0.32 J**	**1.7 J**
Phenanthrene	--	--	**1.1**	**0.37**	**0.17**	**0.028**	**0.027**	**0.035**	**0.12**	**0.99**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-B-051017-DUP 10/17/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051017 10/17/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051017 10/17/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051017 10/17/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051017 10/17/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051017 10/17/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051017 10/17/2005 Outside Curtain
Conventionals (µg/L)									
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	**6.3 J ***	5.6 U
SVOCs (µg/L)									
Anthracene	0.73	13	**0.53**	**0.94 ***	**0.13**	**0.27**	**0.47**	**0.25**	**0.59**
Benzo(a)anthracene	0.02	0.49	**0.42 J ***	**0.56 J * #**	**0.074 J ***	**0.18 J ***	**0.51 J * #**	**0.2 J ***	**0.4 J ***
Benzo(a)pyrene	0.01	0.24	**0.31 * #**	**0.46 * #**	0.02 U	**0.19 ***	**0.45 * #**	**0.13 ***	**0.33 * #**
Dibenzofuran	3.7	66	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.19 UJ	0.2 UJ
Fluoranthene	6.16	3980	**1.4**	**1.9**	**0.31**	**0.66**	**1.3**	**0.51**	**1.6**
Fluorene	3.9	70	**0.27**	**0.4**	**0.097**	**0.16**	**0.2**	**0.13**	**0.36**
Naphthalene	12	190	**1.6 J**	**3.6 J**	**0.92 J**	**1.5 J**	**1.5 J**	**1.6 J**	**2.2 J**
Phenanthrene	--	--	**1.1**	**1.6**	**0.39**	**0.71**	**0.87**	**0.84**	**1.4**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-051017 10/17/2005 Surface Depth	RAA-WCU RAA-WCU-B-051017 10/17/2005 Mid Depth	RAA-WCU RAA-WCU-C-051017 10/17/2005 Bottom Depth	RAA-WCD2 RAA-WCD2-A-051018 10/18/2005 Surface Depth	RAA-WCD2 RAA-WCD2-B-051018 10/18/2005 Mid Depth	RAA-WCD2 RAA-WCD2-C-051018 10/18/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051018 10/18/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051018 10/18/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	**6.1 J ***	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	0.02 U	0.02 U	0.019 U	**0.77 ***	**0.94 ***	**1.4 ***	**0.39**	**0.35**
Benzo(a)anthracene	0.02	0.49	0.02 UJ	0.02 UJ	0.019 UJ	**0.67 * #**	**0.74 * #**	**1.1 * #**	**0.33 ***	**0.22 ***
Benzo(a)pyrene	0.01	0.24	0.02 U	0.02 U	0.019 U	**0.79 * #**	**0.92 * #**	**1.3 * #**	**0.47 * #**	**0.33 * #**
Dibenzofuran	3.7	66	0.2 UJ	0.2 UJ	0.19 UJ	0.2 U	0.19 U	0.2 U	0.2 U	0.19 U
Fluoranthene	6.16	3980	**0.034**	**0.026**	0.019 U	**2.5**	**2.9**	**4.2**	**1.1**	**0.86**
Fluorene	3.9	70	0.02 U	0.02 U	0.019 U	**0.43**	**0.39**	**0.57**	**0.29**	**0.23**
Naphthalene	12	190	**0.43 J**	0.049 UJ	0.049 UJ	**0.66**	**0.53**	**0.63**	**2.2**	**1.9**
Phenanthrene	--	--	**0.039**	**0.023**	0.019 U	**1.2**	**1.3**	**2**	**1**	**0.75**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD9 RAA-WCD9-C-051018 10/18/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051018 10/18/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051018 10/18/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051018 10/18/2005 Surface Depth	RAA-WCU RAA-WCU-B-051018 10/18/2005 Mid Depth	RAA-WCU RAA-WCU-C-051018 10/18/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051020 10/20/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051020 10/20/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.56**	**0.97 ***	**0.063**	0.019 U	**0.037**	**0.028**	**0.31 J**	**0.24 J**
Benzo(a)anthracene	0.02	0.49	**0.44 ***	**0.71 * #**	**0.058 ***	**0.023 ***	**0.027 ***	**0.021 ***	**0.2 J ***	**0.32 J ***
Benzo(a)pyrene	0.01	0.24	**0.54 * #**	**0.81 * #**	**0.14 ***	**0.099 ***	**0.1 ***	**0.096 ***	**0.52 J * #**	**0.41 J * #**
Dibenzofuran	3.7	66	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 UJ	0.19 UJ
Fluoranthene	6.16	3980	**1.6**	**2.7**	**0.26**	**0.075**	**0.094**	**0.076**	**0.67 J**	**0.56 J**
Fluorene	3.9	70	**0.37**	**0.41**	**0.059**	0.019 U	0.02 U	0.02 U	**0.15 J**	**0.063 J**
Naphthalene	12	190	**2.7**	**0.71**	**0.45**	0.049 U	**0.056**	**0.078**	**2.1 J**	**0.38 J**
Phenanthrene	--	--	**1.3**	**1.1**	**0.19**	**0.047**	**0.054**	**0.05**	**0.94 J**	**0.55 J**

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-C-051020 10/20/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051020 10/20/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051020 10/20/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051020 10/20/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051020 10/20/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051020 10/20/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051020 10/20/2005 Surface Depth
Conventionals (µg/L)									
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	**5.6 J ***
SVOCs (µg/L)									
Anthracene	0.73	13	**0.63 J**	**0.048 J**	**0.13 J**	**0.35 J**	**0.48 J**	**0.082 J**	0.019 UJ
Benzo(a)anthracene	0.02	0.49	**0.4 J ***	**0.032 J ***	**0.11 J ***	**0.28 J ***	**0.29 J ***	**0.059 J ***	0.019 UJ
Benzo(a)pyrene	0.01	0.24	**0.42 J * #**	**0.034 J ***	**0.26 J * #**	**0.32 J * #**	**0.31 J * #**	**0.081 J ***	0.019 UJ
Dibenzofuran	3.7	66	0.19 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.19 UJ
Fluoranthene	6.16	3980	**1.3 J**	**0.13 J**	**0.39 J**	**0.9 J**	**1.1 J**	**0.25 J**	0.019 UJ
Fluorene	3.9	70	**0.27 J**	**0.043 J**	**0.13 J**	**0.2 J**	**0.24 J**	**0.084 J**	0.019 UJ
Naphthalene	12	190	**2.1 J**	**0.56 J**	**1.1 J**	**2.6 J**	**2.5 J**	**0.61 J**	0.048 UJ
Phenanthrene	--	--	**1.4 J**	**0.21 J**	**0.58 J**	**1 J**	**1.5 J**	**0.27 J**	0.019 UJ

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-051020-RINS 10/20/2005 Rinsate Blank	RAA-WCU RAA-WCU-B-051020 10/20/2005 Mid Depth	RAA-WCU RAA-WCU-C-051020 10/20/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051021 10/21/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051021 10/21/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051021 10/21/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051021 10/21/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051021 10/21/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	0.02 UJ	0.019 UJ	0.019 UJ	**0.21 J**	**0.47 J**	**0.39 J**	**0.11 J**	**0.23 J**
Benzo(a)anthracene	0.02	0.49	0.02 UJ	0.019 UJ	0.019 UJ	**0.14 J ***	0.019 UJ	**0.24 J ***	**0.069 J ***	**0.15 J ***
Benzo(a)pyrene	0.01	0.24	0.02 UJ	0.019 UJ	**0.021 J ***	**0.17 J ***	**0.33 J * #**	**0.3 J * #**	**0.089 J ***	**0.18 J ***
Dibenzofuran	3.7	66	0.2 UJ	0.19 UJ	0.19 UJ	0.2 UJ	0.19 UJ	0.19 UJ	0.2 UJ	0.19 UJ
Fluoranthene	6.16	3980	0.02 UJ	0.019 UJ	0.019 UJ	**0.56 J**	**0.97 J**	**0.88 J**	**0.28 J**	**0.58 J**
Fluorene	3.9	70	0.02 UJ	0.019 UJ	0.019 UJ	**0.17 J**	**0.25 J**	**0.24 J**	**0.1 J**	**0.19 J**
Naphthalene	12	190	**0.15 J**	0.048 UJ	0.048 UJ	**1.8 J**	**2.3 J**	**2 J**	**1.2 J**	**2.1 J**
Phenanthrene	--	--	0.02 UJ	0.019 UJ	0.019 UJ	**0.68 J**	**1 J**	**0.94 J**	**0.35 J**	**0.71 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD9 RAA-WCD9-B-051021-DUP 10/21/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051021 10/21/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051021 10/21/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051021 10/21/2005 Outside Curtain	RAA-WCU RAA-WCU-A-051021 10/21/2005 Surface Depth	RAA-WCU RAA-WCU-B-051021 10/21/2005 Mid Depth	RAA-WCU RAA-WCU-C-051021 10/21/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-051022 10/22/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	**5.7 J ***	5.6 U	5.6 U	5.6 U	5.6 U	**5.7 J ***	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.22 J**	**0.28 J**	**0.28 J**	**0.4 J**	0.021 UJ	0.02 UJ	0.019 UJ	0.02 UJ
Benzo(a)anthracene	0.02	0.49	**0.15 J ***	**0.15 J ***	**0.18 J ***	**0.28 J ***	0.021 UJ	**0.024 J ***	0.019 UJ	0.02 UJ
Benzo(a)pyrene	0.01	0.24	**0.18 J ***	**0.19 J ***	**0.24 J ***	**0.35 J * #**	**0.023 J ***	**0.033 J ***	**0.028 J ***	0.02 UJ
Dibenzofuran	3.7	66	0.19 UJ	0.2 UJ	0.19 UJ	0.19 UJ	0.21 UJ	0.2 UJ	0.19 UJ	0.2 UJ
Fluoranthene	6.16	3980	**0.56 J**	**0.59 J**	**0.72 J**	**1 J**	0.021 UJ	**0.039 J**	**0.024 J**	**0.034 J**
Fluorene	3.9	70	**0.18 J**	**0.19 J**	**0.19 J**	**0.24 J**	0.021 UJ	0.02 UJ	0.019 UJ	0.02 UJ
Naphthalene	12	190	**2 J**	**1.7 J**	**1.5 J**	**1.7 J**	0.053 UJ	0.05 UJ	0.048 UJ	**0.2 J**
Phenanthrene	--	--	**0.67 J**	**0.69 J**	**0.78 J**	**1.1 J**	0.021 UJ	0.02 UJ	0.019 UJ	**0.057 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD8 RAA-WCD8-B-051022 10/22/2005 Mid Depth	RAA-WCD8 RAA-WCD8-C-051022 10/22/2005 Bottom Depth	RAA-WCIN RAA-INSIDE-051022 10/22/2005 Inside Curtain	RAA-WCOUT RAA-OUTSIDE-051022 10/22/2005 Outside Curtain	RAA-WCU4 RAA-WCU4-A-051022 10/22/2005 Surface Depth	RAA-WCU4 RAA-WCU4-B-051022 10/22/2005 Mid Depth	RAA-WCU4 RAA-WCU4-C-051022 10/22/2005 Bottom Depth	RAA-WCU7 RAA-WCU7-A-051022 10/22/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	0.021 UJ	0.019 UJ	**0.37 J**	**0.26 J**	0.019 UJ	**0.02 J**	0.019 UJ	0.019 UJ
Benzo(a)anthracene	0.02	0.49	0.021 UJ	0.019 UJ	**0.27 J ***	**0.22 J ***	0.019 UJ	0.02 UJ	0.019 UJ	0.019 UJ
Benzo(a)pyrene	0.01	0.24	0.021 UJ	**0.032 J ***	**0.34 J * #**	**0.25 J * #**	0.019 UJ	0.02 UJ	**0.039 J ***	**0.02 J ***
Dibenzofuran	3.7	66	0.21 UJ	0.19 UJ	0.19 UJ	0.2 UJ	0.19 UJ	0.2 UJ	0.19 UJ	0.19 UJ
Fluoranthene	6.16	3980	**0.034 J**	**0.052 J**	**1 J**	**0.83 J**	**0.044 J**	**0.049 J**	**0.046 J**	0.019 UJ
Fluorene	3.9	70	0.021 UJ	0.019 UJ	**0.35 J**	**0.31 J**	0.019 UJ	0.02 UJ	0.019 UJ	0.019 UJ
Naphthalene	12	190	**0.077 J**	**0.061 J**	**3.3 J**	**2.8 J**	**0.18 J**	**0.12 J**	**0.11 J**	0.047 UJ
Phenanthrene	--	--	**0.037 J**	**0.043 J**	**1.5 J**	**1 J**	**0.063 J**	**0.061 J**	**0.058 J**	0.019 UJ

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU7 RAA-WCU7-B-051022 10/22/2005 Mid Depth	RAA-WCU7 RAA-WCU7-C-051022 10/22/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051023 10/23/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051023 10/23/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051023 10/23/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-DUP-051023 10/23/2005 Duplicate Sample	RAA-WCD4 RAA-WCD4-A-051023 10/23/2005 Surface Depth
Conventionals (µg/L)									
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)									
Anthracene	0.73	13	0.02 UJ	0.02 UJ	**0.13 J**	**0.16 J**	**0.14 J**	**0.13 J**	**0.054 J**
Benzo(a)anthracene	0.02	0.49	0.02 UJ	0.02 UJ	**0.095 J ***	**0.14 J ***	**0.12 J ***	**0.12 J ***	**0.04 J ***
Benzo(a)pyrene	0.01	0.24	**0.027 J ***	**0.027 J ***	**0.12 J ***	**0.27 J * #**	**0.17 J ***	**0.16 J ***	**0.05 J ***
Dibenzofuran	3.7	66	0.2 UJ	0.2 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ
Fluoranthene	6.16	3980	**0.031 J**	**0.032 J**	**0.39 J**	**0.63 J**	**0.45 J**	**0.47 J**	**0.18 J**
Fluorene	3.9	70	0.02 UJ	0.02 UJ	**0.11 J**	**0.15 J**	**0.12 J**	**0.12 J**	**0.063 J**
Naphthalene	12	190	0.049 UJ	0.049 UJ	**1.2 J**	**1.1 J**	**0.98 J**	**0.84 J**	**0.58 J**
Phenanthrene	--	--	**0.03 J**	**0.024 J**	**0.45 J**	**0.6 J**	**0.49 J**	**0.52 J**	**0.22 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD4 RAA-WCD4-B-051023 10/23/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-051023 10/23/2005 Bottom Depth	RAA-WCU RAA-WCU-A-051023 10/23/2005 Surface Depth	RAA-WCU RAA-WCU-B-051023 10/23/2005 Mid Depth	RAA-WCU RAA-WCU-C-051023 10/23/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-051024 10/24/2005 Surface Depth	RAA-WCD8 RAA-WCD8-B-051024 10/24/2005 Mid Depth	RAA-WCD8 RAA-WCD8-C-051024 10/24/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.11 J**	**0.19 J**	0.019 UJ	**0.026 J**	**0.02 J**	0.019 UJ	**0.098 J**	**0.38 J**
Benzo(a)anthracene	0.02	0.49	**0.098 J ***	**0.15 J ***	0.019 UJ	**0.021 J ***	**0.02 J**	0.019 UJ	**0.065 J ***	**0.25 J ***
Benzo(a)pyrene	0.01	0.24	**0.13 J ***	**0.19 J ***	**0.021 J ***	0.02 UJ	**0.023 J ***	0.019 UJ	**0.079 J ***	**0.32 J * #**
Dibenzofuran	3.7	66	0.21 UJ	0.19 UJ	0.19 UJ	0.2 UJ	0.2 UJ	0.19 UJ	0.19 UJ	0.19 UJ
Fluoranthene	6.16	3980	**0.36 J**	**0.55 J**	**0.061 J**	**0.054 J**	**0.048 J**	**0.041 J**	**0.25 J**	**0.9 J**
Fluorene	3.9	70	**0.11 J**	**0.12 J**	0.019 UJ	0.02 UJ	0.02 UJ	0.019 UJ	**0.055 J**	**0.18 J**
Naphthalene	12	190	**0.86 J**	**0.75 J**	**0.13 J**	**0.082 J**	**0.052 J**	**0.071 J**	**0.31 J**	**1 J**
Phenanthrene	--	--	**0.42 J**	**0.5 J**	**0.069 J**	**0.067 J**	**0.059 J**	**0.049 J**	**0.28 J**	**1 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU4 RAA-WCU4-A-051024 10/24/2005 Surface Depth	RAA-WCU4 RAA-WCU4-B-051024 10/24/2005 Mid Depth	RAA-WCU4 RAA-WCU4-C-051024 10/24/2005 Bottom Depth	RAA-WCU7 RAA-WCU7-A-051024 10/24/2005 Surface Depth	RAA-WCU7 RAA-WCU7-B-051024 10/24/2005 Mid Depth	RAA-WCU7 RAA-WCU7-C-051024 10/24/2005 Bottom Depth	RAA-WCD8 RAA-WCD8-A-051025 10/25/2005 Surface Depth	RAA-WCD8 RAA-WCD8-B-051025 10/25/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.12 J**	**0.17 J**	**0.16 J**	**0.023 J**	**0.12 J**	**0.16 J**	**0.031 J**	**0.046 J**
Benzo(a)anthracene	0.02	0.49	**0.089 J ***	**0.12 J ***	**0.1 J ***	0.019 UJ	**0.073 J ***	**0.11 J ***	**0.027 J ***	**0.039 J ***
Benzo(a)pyrene	0.01	0.24	**0.1 J ***	**0.13 J ***	**0.13 J ***	**0.02 J ***	**0.093 J ***	**0.14 J ***	**0.043 J ***	**0.062 J ***
Dibenzofuran	3.7	66	0.19 UJ	0.22 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ
Fluoranthene	6.16	3980	**0.52 J**	**0.56 J**	**0.45 J**	**0.088 J**	**0.34 J**	**0.5 J**	**0.11 J**	**0.15 J**
Fluorene	3.9	70	**0.18 J**	**0.22 J**	**0.14 J**	**0.046 J**	**0.11 J**	**0.16 J**	**0.041 J**	**0.048 J**
Naphthalene	12	190	**1.5 J**	**2.1 J**	**1.5 J**	**0.39 J**	**1.1 J**	**1.6 J**	**0.41 J**	**0.45 J**
Phenanthrene	--	--	**0.82 J**	**0.89 J**	**0.65 J**	**0.17 J**	**0.52 J**	**0.74 J**	**0.15 J**	**0.2 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD8 RAA-WCD8-C-051025 10/25/2005 Bottom Depth	RAA-WCU4 RAA-WCU4-A-051025 10/25/2005 Surface Depth	RAA-WCU4 RAA-WCU4-B-051025 10/25/2005 Mid Depth	RAA-WCU4 RAA-WCU4-C-051025 10/25/2005 Bottom Depth	RAA-WCU7 RAA-WCU7-A-051025 10/25/2005 Surface Depth	RAA-WCU7 RAA-WCU7-B-051025 10/25/2005 Mid Depth	RAA-WCU7 RAA-WCU7-C-051025 10/25/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051026 10/26/2005 Surface Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	5.6 U	**6.8 J ***
SVOCs (µg/L)										
Anthracene	0.73	13	**0.093 J**	**0.19 J**	**0.21 J**	0.019 UJ	**0.042 J**	**0.18 J**	**0.14 J**	**0.036 J**
Benzo(a)anthracene	0.02	0.49	**0.085 J ***	**0.13 J ***	**0.15 J ***	0.019 UJ	**0.052 J ***	**0.12 J ***	**0.099 J ***	**0.034 J ***
Benzo(a)pyrene	0.01	0.24	**0.1 J ***	**0.19 J ***	**0.19 J ***	0.019 UJ	**0.044 J ***	**0.15 J ***	**0.11 J ***	**0.047 J ***
Dibenzofuran	3.7	66	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.2 UJ
Fluoranthene	6.16	3980	**0.21 J**	**0.59 J**	**0.54 J**	0.019 UJ	**0.17 J**	**0.5 J**	**0.38 J**	**0.12 J**
Fluorene	3.9	70	**0.061 J**	**0.17 J**	**0.15 J**	0.019 UJ	**0.047 J**	**0.15 J**	**0.11 J**	**0.038 J**
Naphthalene	12	190	**0.55 J**	**2 J**	**2 J**	0.048 UJ	**0.93 J**	**1.8 J**	**1.6 J**	**0.47 J**
Phenanthrene	--	--	**0.26 J**	**0.87 J**	**0.78 J**	0.019 UJ	**0.21 J**	**0.63 J**	**0.49 J**	**0.26 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD1 RAA-WCD1-B-051026 10/26/2005 Mid Depth	RAA-WCD1 RAA-WCD1-B-051026-DUP 10/26/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051026 10/26/2005 Bottom Depth	RAA-WCD4 RAA-WCD4-A-051026 10/26/2005 Surface Depth	RAA-WCD4 RAA-WCD4-B-051026 10/26/2005 Mid Depth	RAA-WCD4 RAA-WCD4-C-051026 10/26/2005 Bottom Depth	RAA-WCU RAA-WCU-A-051026 10/26/2005 Surface Depth
Conventionals (µg/L)									
Cyanide	5.2	20	**6.6 J ***	5 U	5 U	5 U	5 U	5 U	5.6 U
SVOCs (µg/L)									
Anthracene	0.73	13	**0.082 J**	**0.057 J**	**0.043 J**	**0.085 J**	0.019 UJ	**0.058 J**	--
Benzo(a)anthracene	0.02	0.49	**0.062 J ***	**0.043 J ***	**0.043 J ***	**0.067 J ***	0.019 UJ	**0.056 J ***	--
Benzo(a)pyrene	0.01	0.24	**0.07 J ***	**0.052 J ***	**0.062 J ***	**0.13 J ***	0.019 UJ	**0.067 J ***	--
Dibenzofuran	3.7	66	0.2 UJ	0.19 UJ	0.19 UJ	0.2 UJ	0.19 UJ	0.19 UJ	--
Fluoranthene	6.16	3980	**0.24 J**	**0.15 J**	**0.15 J**	**0.27 J**	0.019 UJ	**0.23 J**	--
Fluorene	3.9	70	**0.08 J**	**0.043 J**	**0.041 J**	**0.088 J**	0.019 UJ	**0.077 J**	--
Naphthalene	12	190	**0.98 J**	**0.67 J**	**0.53 J**	**1.3 J**	0.047 UJ	**1 J**	--
Phenanthrene	--	--	**0.43 J**	**0.25 J**	**0.18 J**	**0.44 J**	0.019 UJ	**0.41 J**	--

Notes:

µg/l	Micrograms per liter
U	Non-Detect
B	Analyte was detected in the blank
J	Estimated, the result is below the reporting limit and above the lab MDL
E	Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported
*#	Exceedence of Acute Criteria
*	Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-B-051026 10/26/2005 Mid Depth	RAA-WCU RAA-WCU-C-051026 10/26/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051027 10/27/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051027 10/27/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051027 10/27/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051027 10/27/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051027 10/27/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051027 10/27/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5.6 U	**5.9 J ***	5 U	5 U	5 U	5 U	5 U	5 U
SVOCs (µg/L)										
Anthracene	0.73	13	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.02 UJ	0.019 UJ
Benzo(a)anthracene	0.02	0.49	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.02 UJ	0.019 UJ
Benzo(a)pyrene	0.01	0.24	0.019 UJ	**0.022 J ***	0.019 UJ	**0.027 J ***	**0.029 J ***	0.019 UJ	0.02 UJ	0.019 UJ
Dibenzofuran	3.7	66	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.19 UJ	0.2 UJ	0.19 UJ
Fluoranthene	6.16	3980	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	**0.028 J**	0.019 UJ	0.02 UJ	0.019 UJ
Fluorene	3.9	70	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	0.02 UJ	0.019 UJ
Naphthalene	12	190	0.047 UJ	0.048 UJ	0.048 UJ	0.048 UJ	**0.07 J**	**0.049 J**	**0.068 J**	**0.084 J**
Phenanthrene	--	--	0.019 UJ	0.019 UJ	0.019 UJ	**0.028 J**	**0.035 J**	**0.021 J**	**0.021 J**	**0.03 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCU RAA-WCU-A-051027 10/27/2005 Surface Depth	RAA-WCU RAA-WCU-B-051027 10/27/2005 Mid Depth	RAA-WCU RAA-WCU-C-051027 10/27/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051028 10/28/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051028 10/28/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051028 10/28/2005 Bottom Depth	RAA-WCD9 RAA-WCD9-A-051028 10/28/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051028 10/28/2005 Mid Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SVOCs (µg/L)										
Anthracene	0.73	13	0.019 UJ	0.02 UJ	0.019 UJ	0.019 UJ	0.019 U	0.022 U	0.021 U	0.02 UJ
Benzo(a)anthracene	0.02	0.49	0.019 UJ	0.02 UJ	0.019 UJ	0.019 UJ	0.019 U	**0.023 ***	0.021 U	0.02 UJ
Benzo(a)pyrene	0.01	0.24	0.019 UJ	0.02 UJ	**0.025 J ***	0.019 UJ	0.019 UJ	**0.022 J ***	0.021 UJ	0.02 UJ
Dibenzofuran	3.7	66	0.19 UJ	0.2 UJ	0.19 UJ	0.19 UJ	0.19 U	0.22 U	0.21 U	0.2 UJ
Fluoranthene	6.16	3980	0.019 UJ	0.02 UJ	0.019 UJ	**0.058 J**	0.019 U	**0.072**	0.021 U	**0.044 J**
Fluorene	3.9	70	0.019 UJ	0.02 U	0.019 UJ	**0.021 J**	0.019 UJ	**0.022 J**	0.021 UJ	0.02 UJ
Naphthalene	12	190	0.048 UJ	0.05 UJ	0.048 UJ	**0.094 J**	0.048 U	**0.11**	0.053 U	**0.068 J**
Phenanthrene	--	--	0.019 UJ	0.02 UJ	0.019 UJ	**0.08 J**	0.019 U	**0.083**	0.021 U	**0.057 J**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD9 RAA-WCD9-C-051028 10/28/2005 Bottom Depth	RAA-WCU RAA-WCU-A-051028 10/28/2005 Surface Depth	RAA-WCU RAA-WCU-B-051028 10/28/2005 Mid Depth	RAA-WCU RAA-WCU-C-051028 10/28/2005 Bottom Depth	RAA-WCU RAA-WCU-C-051028-DUP 10/28/2005 Bottom Depth	RAA-WCD1 RAA-WCD1-A-051029 10/29/2005 Surface Depth	RAA-WCD1 RAA-WCD1-B-051029 10/29/2005 Mid Depth	RAA-WCD1 RAA-WCD1-C-051029 10/29/2005 Bottom Depth
Conventionals (µg/L)										
Cyanide	5.2	20	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SVOCs (µg/L)										
Anthracene	0.73	13	**0.042**	0.019 U	0.019 U	0.019 U	0.019 U	**0.073**	0.019 U	**0.037**
Benzo(a)anthracene	0.02	0.49	**0.041 ***	0.019 U	0.019 U	0.019 U	0.019 U	**0.086 ***	0.019 U	**0.035 ***
Benzo(a)pyrene	0.01	0.24	**0.043 J ***	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	**0.11 ***	0.019 U	**0.036 ***
Dibenzofuran	3.7	66	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Fluoranthene	6.16	3980	**0.13**	0.019 U	0.019 U	0.019 U	**0.037**	**0.3**	**0.063**	**0.11**
Fluorene	3.9	70	**0.033 J**	0.019 UJ	0.019 UJ	0.019 UJ	0.019 UJ	**0.07**	0.019 U	**0.034**
Naphthalene	12	190	**0.17**	0.048 U	0.048 U	0.048 U	0.047 U	**0.42**	**0.091**	**0.19**
Phenanthrene	--	--	**0.12**	0.019 U	0.019 U	0.019 U	**0.046**	**0.32**	**0.079**	**0.14**

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 17
Water Quality Monitoring Results Compared to Triggers – Laboratory Parameters

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-WCD9 RAA-WCD9-A-051029 10/29/2005 Surface Depth	RAA-WCD9 RAA-WCD9-B-051029 10/29/2005 Mid Depth	RAA-WCD9 RAA-WCD9-C-051029 10/29/2005 Bottom Depth	RAA-WCU RAA-WCU-A-051029 10/29/2005 Surface Depth	RAA-WCU RAA-WCU-B-051029 10/29/2005 Mid Depth	RAA-WCU RAA-WCU-C-051029 10/29/2005 Bottom Depth
Conventionals (µg/L)								
Cyanide	5.2	20	5 U	5 U	5 U	5.6 U	5 U	5 U
SVOCs (µg/L)								
Anthracene	0.73	13	**0.062**	0.019 U	0.019 U	0.02 U	**0.091**	0.019 U
Benzo(a)anthracene	0.02	0.49	**0.068 ***	0.019 U	0.019 U	0.02 U	**0.095 ***	0.019 U
Benzo(a)pyrene	0.01	0.24	**0.076 ***	0.019 U	0.019 U	0.02 U	**0.11 ***	0.019 U
Dibenzofuran	3.7	66	0.2 U	0.19 U	0.19 U	0.2 U	0.2 U	0.19 U
Fluoranthene	6.16	3980	**0.23**	**0.019**	0.019 U	0.02 U	**0.37**	0.019 U
Fluorene	3.9	70	**0.052**	0.019 U	0.019 U	0.02 U	**0.096**	0.019 U
Naphthalene	12	190	**0.28**	0.047 U	0.048 U	0.051 U	**0.53**	0.048 U
Phenanthrene	--	--	**0.22**	**0.022**	0.019 U	0.02 U	**0.42**	0.019 U

Notes:

µg/l Micrograms per liter

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 18
Background Water Quality Survey Results - Transfer Facility
August 17 and 18, 2005

Station ID	Date	Time	Latitude (dd)	Longitude (dd)	Depth (ft)	DO (mg/L)	Temp deg C	Turbidity (NTU)	pH
TF-WBGU	8/17/2005	1045	45.85347	119.67043	1	9.30	21.03	3.74	7.78
TF-WBGU	8/17/2005	1045	45.85347	119.67043	8	9.29	21.05	3.66	7.93
TF-WBGU	8/17/2005	1045	45.85347	119.67043	15	9.26	21.04	3.66	7.97
TF-WBGU	8/17/2005	1135	45.85347	119.67043	1	9.20	21.07	3.22	7.99
TF-WBGU	8/17/2005	1135	45.85347	119.67043	8	9.22	21.06	3.50	8.00
TF-WBGU	8/17/2005	1135	45.85347	119.67043	14	9.17	21.05	4.41	8.02
TF-WBGU	8/17/2005	1230	45.85347	119.67043	1	9.40	21.14	3.58	7.99
TF-WBGU	8/17/2005	1230	45.85347	119.67043	7	9.39	21.08	3.24	8.07
TF-WBGU	8/17/2005	1230	45.85347	119.67043	14	9.39	21.07	3.48	8.09
TF-WBGU	8/17/2005	1425	45.85347	119.67043	1	9.41	21.63	2.95	8.01
TF-WBGU	8/17/2005	1425	45.85347	119.67043	9	9.40	21.24	2.91	8.08
TF-WBGU	8/17/2005	1425	45.85347	119.67043	18	9.33	21.14	2.57	8.09
TF-WBGU	8/17/2005	1435	45.85347	119.67043	1	9.45	21.56	3.14	8.05
TF-WBGU	8/17/2005	1435	45.85347	119.67043	8	9.44	21.19	3.52	8.11
TF-WBGU	8/17/2005	1435	45.85347	119.67043	16	9.35	21.10	3.30	8.09
TF-WBGU	8/17/2005	1530	45.85347	119.67043	1	9.33	21.72	3.00	8.02
TF-WBGU	8/17/2005	1530	45.85347	119.67043	8	9.36	21.18	4.14	8.07
TF-WBGU	8/17/2005	1530	45.85347	119.67043	15	9.29	21.03	3.45	8.02
TF-WBGU	8/18/2005	900	45.85347	119.67043	1	9.19	21.16	2.65	7.95
TF-WBGU	8/18/2005	900	45.85347	119.67043	8	8.99	20.98	2.67	7.99
TF-WBGU	8/18/2005	900	45.85347	119.67043	15	8.97	20.96	3.11	8.00
TF-WBGU	8/18/2005	945	45.85347	119.67043	1	9.23	21.24	2.70	7.97
TF-WBGU	8/18/2005	945	45.85347	119.67043	8	9.20	21.05	2.93	8.00
TF-WBGU	8/18/2005	945	45.85347	119.67043	15	9.14	21.03	2.75	8.04
TF-WBGU	8/18/2005	1000	45.85347	119.67043	1	9.33	21.24	2.22	7.97
TF-WBGU	8/18/2005	1000	45.85347	119.67043	6	9.31	21.22	2.90	8.02
TF-WBGU	8/18/2005	1000	45.85347	119.67043	11	9.22	21.22	2.68	8.05

Table 19
Background Water Quality Survey Summary Statistics with 95% Confidence Limits (CL) - Transfer Facility
August 17 and 18, 2005

Sample Depth	Temperature (deg C)	Turbidity (NTUs)	DO (mg/L)	pH
Surface Depth				
Mean	21.31	3.02	9.32	7.97
Upper CL	21.48	3.33	9.38	8.02
Lower CL	21.14	2.71	9.25	7.92
Mid Depth				
Mean	21.12	3.27	9.29	8.03
Upper CL	21.18	3.58	9.38	8.07
Lower CL	21.06	2.97	9.20	7.99
Bottom Depth				
Mean	21.07	3.27	9.24	8.04
Upper CL	21.12	3.64	9.32	8.07
Lower CL	21.02	2.89	9.15	8.01

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	DO Triggers[2]		Temp (deg C)	Temperature Triggers[2]		Turbidity (NTU)	Turbidity Triggers[2]		pH	pH Triggers[2]	
							Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background		Event Specific Background	Pre-construction Background
TF-WCU[3]	9/14/2005	1045	45.85347	119.67043	1	8.80	NA	NA	19.67	NA	NA	1.74	NA	NA	7.96	NA	NA
TF-WCU	9/14/2005	1045	45.85347	119.67043	8	8.98	NA	NA	19.51	NA	NA	2.41	NA	NA	8.03	NA	NA
TF-WCU	9/14/2005	1045	45.85347	119.67043	14.5	9.03	NA	NA	19.43	NA	NA	2.67	NA	NA	8.06	NA	NA
TF-WCD1	9/14/2005	1015	45.85352	119.67284	1	8.56	<6.5	<6.5	19.61	19.97	21.78	2.43	4.74	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/14/2005	1015	45.85352	119.67284	7.5	8.80	<6.5	<6.5	19.56	19.81	21.48	2.14	5.41	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/14/2005	1015	45.85352	119.67284	14	8.26	<6.5	<6.5	19.58	19.73	21.42	2.31	5.67	6.64	8	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/17/2005	912	45.85347	119.67043	1	8.91	NA	NA	18.53	NA	NA	2.28	NA	NA	7.92	NA	NA
TF-WCU	9/17/2005	912	45.85347	119.67043	6.5	8.85	NA	NA	18.53	NA	NA	1.99	NA	NA	7.98	NA	NA
TF-WCU	9/17/2005	912	45.85347	119.67043	12	8.87	NA	NA	18.54	NA	NA	2.13	NA	NA	7.99	NA	NA
TF-WCD1	9/17/2005	830	45.85352	119.67284	1	8.91	<6.5	<6.5	18.57	18.83	21.78	1.77	5.28	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/17/2005	830	45.85352	119.67284	11.5	8.83	<6.5	<6.5	18.55	18.83	21.48	2.63	4.99	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/17/2005	830	45.85352	119.67284	20.5	8.82	<6.5	<6.5	18.55	18.84	21.42	2.24	5.13	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/17/2005	1300	45.85347	119.67043	1	9.18	NA	NA	18.81	NA	NA	2.04	NA	NA	7.98	NA	NA
TF-WCU	9/17/2005	1300	45.85347	119.67043	7	9.07	NA	NA	18.77	NA	NA	1.93	NA	NA	8.04	NA	NA
TF-WCU	9/17/2005	1300	45.85347	119.67043	13	9.06	NA	NA	18.76	NA	NA	1.86	NA	NA	8.04	NA	NA
TF-WCD1	9/17/2005	1245	45.85352	119.67284	1	8.88	<6.5	<6.5	18.93	19.11	21.78	1.72	5.04	6.33	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/17/2005	1245	45.85352	119.67284	7.5	9.04	<6.5	<6.5	18.92	19.07	21.48	1.79	4.93	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/17/2005	1245	45.85352	119.67284	14.5	9.09	<6.5	<6.5	18.92	19.06	21.42	1.69	4.86	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/17/2005	1645	45.85347	119.67043	1	9.43	NA	NA	19.36	NA	NA	1.70	NA	NA	8.08	NA	NA
TF-WCU	9/17/2005	1645	45.85347	119.67043	6.5	9.32	NA	NA	19.35	NA	NA	1.78	NA	NA	8.13	NA	NA
TF-WCU	9/17/2005	1645	45.85347	119.67043	12	9.41	NA	NA	19.30	NA	NA	1.69	NA	NA	8.15	NA	NA
TF-WCD1	9/17/2005	1600	45.85352	119.67284	1	9.03	<6.5	<6.5	19.40	19.66	21.78	1.77	4.70	6.33	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/17/2005	1600	45.85352	119.67284	8.5	9.10	<6.5	<6.5	19.39	19.65	21.48	1.80	4.78	6.58	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/17/2005	1600	45.85352	119.67284	16.5	9.07	<6.5	<6.5	19.35	19.60	21.42	2.29	4.69	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/19/2005	1005	45.85347	119.67043	1	9.13	NA	NA	18.77	NA	NA	2.00	NA	NA	7.95	NA	NA
TF-WCU	9/19/2005	1005	45.85347	119.67043	8	9.04	NA	NA	18.76	NA	NA	2.25	NA	NA	8.02	NA	NA
TF-WCU	9/19/2005	1005	45.85347	119.67043	14.5	9.05	NA	NA	18.76	NA	NA	2.20	NA	NA	8.02	NA	NA
TF-WCD1	9/19/2005	949	45.85352	119.67284	1	9.03	<6.5	<6.5	18.80	19.07	21.78	1.82	5.00	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/19/2005	949	45.85352	119.67284	11	8.90	<6.5	<6.5	18.78	19.06	21.48	1.99	5.25	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/19/2005	949	45.85352	119.67284	21	8.91	<6.5	<6.5	18.78	19.06	21.42	1.98	5.20	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/19/2005	1403	45.85347	119.67043	1	9.32	NA	NA	19.09	NA	NA	1.87	NA	NA	7.99	NA	NA
TF-WCU	9/19/2005	1403	45.85347	119.67043	6.5	9.33	NA	NA	19.06	NA	NA	1.89	NA	NA	8.04	NA	NA
TF-WCU	9/19/2005	1403	45.85347	119.67043	12	9.33	NA	NA	19.01	NA	NA	1.99	NA	NA	8.01	NA	NA
TF-WCD1	9/19/2005	1339	45.85352	119.67284	1	9.25	<6.5	<6.5	19.02	19.39	21.78	2.06	4.87	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/19/2005	1339	45.85352	119.67284	12	9.17	<6.5	<6.5	18.97	19.36	21.48	2.09	4.89	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/19/2005	1339	45.85352	119.67284	23	9.21	<6.5	<6.5	18.87	19.31	21.42	2.64	4.99	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/19/2005	1720	45.85347	119.67043	1	8.40	NA	NA	19.20	NA	NA	1.56	NA	NA	8.01	NA	NA
TF-WCU	9/19/2005	1720	45.85347	119.67043	6.5	9.36	NA	NA	19.20	NA	NA	2.50	NA	NA	8.03	NA	NA
TF-WCU	9/19/2005	1720	45.85347	119.67043	12	9.39	NA	NA	19.20	NA	NA	1.69	NA	NA	8.01	NA	NA
TF-WCD1	9/19/2005	1655	45.85352	119.67284	1	9.36	<6.5	<6.5	19.15	19.50	21.78	1.68	4.56	6.33	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/19/2005	1655	45.85352	119.67284	11.5	9.38	<6.5	<6.5	19.13	19.50	21.48	1.77	5.50	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/19/2005	1655	45.85352	119.67284	22	9.29	<6.5	<6.5	19.10	19.50	21.42	2.07	4.69	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/20/2005	1100	45.85347	119.67043	1	9.25	NA	NA	19.18	NA	NA	1.51	NA	NA	8.05	NA	NA
TF-WCU	9/20/2005	1100	45.85347	119.67043	6.5	9.06	NA	NA	18.96	NA	NA	1.98	NA	NA	8.15	NA	NA
TF-WCU	9/20/2005	1100	45.85347	119.67043	12	9.12	NA	NA	18.87	NA	NA	2.26	NA	NA	8.19	NA	NA
TF-WCD1	9/20/2005	955	45.85352	119.67284	1	9.05	<6.5	<6.5	19.05	19.48	21.78	2.01	4.51	6.33	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/20/2005	955	45.85352	119.67284	8.5	9.03	<6.5	<6.5	18.99	19.26	21.48	1.81	4.98	6.58	8.13	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/20/2005	955	45.85352	119.67284	16	9.02	<6.5	<6.5	18.98	19.17	21.42	2.05	5.26	6.64	8.14	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1028	45.85359	119.67266	1	9.17	<6.5	<6.5	19.14	19.48	21.78	1.94	4.51	6.33	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1028	45.85359	119.67266	11.5	8.92	<6.5	<6.5	18.98	19.26	21.48	1.79	4.98	6.58	8.13	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1028	45.85359	119.67266	22	8.94	<6.5	<6.5	18.88	19.17	21.42	2.62	5.26	6.64	8.09	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD3	9/20/2005	1046	45.85361	119.67239	1	9.16	<6.5	<6.5	19.16	19.48	21.78	1.59	4.51	6.33	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1046	45.85361	119.67239	12.5	8.95	<6.5	<6.5	18.99	19.26	21.48	1.89	4.98	6.58	8.13	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1046	45.85361	119.67239	24	9.00	<6.5	<6.5	18.92	19.17	21.42	2.39	5.26	6.64	8.10	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/20/2005	1446	45.85347	119.67043	1	8.94	NA	NA	20.00	NA	NA	1.51	NA	NA	7.96	NA	NA
TF-WCU	9/20/2005	1446	45.85347	119.67043	6.5	9.02	NA	NA	19.36	NA	NA	1.73	NA	NA	8.13	NA	NA
TF-WCU	9/20/2005	1446	45.85347	119.67043	12	9.00	NA	NA	19.09	NA	NA	2.11	NA	NA	8.13	NA	NA
TF-WCD1	9/20/2005	1400	45.85352	119.67284	1	9.11	<6.5	<6.5	20.10	20.30	21.78	1.53	4.51	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/20/2005	1400	45.85352	119.67284	6	9.11	<6.5	<6.5	19.79	19.66	21.48	1.46	4.73	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/20/2005	1400	45.85352	119.67284	11	8.90	<6.5	<6.5	19.05	19.39	21.42	1.81	5.11	6.64	8.10	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1417	45.85359	119.67266	1	9.05	<6.5	<6.5	20.32	20.30	21.78	1.86	4.51	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1417	45.85359	119.67266	11.5	9.14	<6.5	<6.5	19.19	19.66	21.48	1.76	4.73	6.58	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1417	45.85359	119.67266	23.5	8.95	<6.5	<6.5	18.88	19.39	21.42	2.09	5.11	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1427	45.85361	119.67239	1	8.99	<6.5	<6.5	20.40	20.30	21.78	1.30	4.51	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1427	45.85361	119.67239	12	9.16	<6.5	<6.5	19.20	19.66	21.48	1.65	4.73	6.58	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1427	45.85361	119.67239	23	8.98	<6.5	<6.5	18.84	19.39	21.42	2.32	5.11	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/20/2005	1828	45.85347	119.67043	1	9.01	NA	NA	20.02	NA	NA	1.28	NA	NA	8.11	NA	NA
TF-WCU	9/20/2005	1828	45.85347	119.67043	7	8.96	NA	NA	19.08	NA	NA	1.77	NA	NA	8.09	NA	NA
TF-WCU	9/20/2005	1828	45.85347	119.67043	13	8.59	NA	NA	18.96	NA	NA	2.39	NA	NA	8.04	NA	NA
TF-WCD1	9/20/2005	1750	45.85352	119.67284	1	9.25	<6.5	<6.5	19.48	20.32	21.78	1.87	4.28	6.33	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/20/2005	1750	45.85352	119.67284	9.5	9.22	<6.5	<6.5	19.20	19.38	21.48	1.72	4.77	6.58	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/20/2005	1750	45.85352	119.67284	18	8.93	<6.5	<6.5	19.01	19.26	21.42	2.07	5.39	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1802	45.85359	119.67266	1	9.24	<6.5	<6.5	19.66	20.32	21.78	1.69	4.28	6.33	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1802	45.85359	119.67266	11.5	8.95	<6.5	<6.5	19.10	19.38	21.48	1.82	4.77	6.58	8.15	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/20/2005	1802	45.85359	119.67266	22.5	8.79	<6.5	<6.5	18.94	19.26	21.42	2.02	5.39	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1812	45.85361	119.67239	1	9.04	<6.5	<6.5	19.94	20.32	21.78	1.38	4.28	6.33	8.16	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1812	45.85361	119.67239	14	9.02	<6.5	<6.5	19.09	19.38	21.48	1.77	4.77	6.58	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/20/2005	1812	45.85361	119.67239	26.5	8.78	<6.5	<6.5	18.94	19.26	21.42	2.27	5.39	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/21/2005	1025	45.85347	119.67043	1	8.79	NA	NA	18.74	NA	NA	1.84	NA	NA	7.93	NA	NA
TF-WCU	9/21/2005	1025	45.85347	119.67043	6.5	8.62	NA	NA	18.64	NA	NA	2.16	NA	NA	8.06	NA	NA
TF-WCU	9/21/2005	1025	45.85347	119.67043	12.5	8.84	NA	NA	18.55	NA	NA	2.65	NA	NA	8.13	NA	NA
TF-WCD1	9/21/2005	933	45.85352	119.67284	1	8.66	<6.5	<6.5	18.71	19.04	21.78	1.98	4.84	6.33	7.61	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/21/2005	933	45.85352	119.67284	7.5	8.91	<6.5	<6.5	18.71	18.94	21.48	1.72	5.16	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/21/2005	933	45.85352	119.67284	14.5	8.67	<6.5	<6.5	18.61	18.85	21.42	2.03	5.65	6.64	8.09	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/21/2005	947	45.85359	119.67266	1	8.83	<6.5	<6.5	18.74	19.04	21.78	2.12	4.84	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/21/2005	947	45.85359	119.67266	11.5	8.79	<6.5	<6.5	18.70	18.94	21.48	2.20	5.16	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/21/2005	947	45.85359	119.67266	22.5	8.77	<6.5	<6.5	18.53	18.85	21.42	2.57	5.65	6.64	8.10	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/21/2005	1000	45.85361	119.67239	1	8.87	<6.5	<6.5	18.90	19.04	21.78	1.94	4.84	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/21/2005	1000	45.85361	119.67239	13	8.78	<6.5	<6.5	18.80	18.94	21.48	2.18	5.16	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/21/2005	1000	45.85361	119.67239	25.5	8.90	<6.5	<6.5	18.60	18.85	21.42	2.26	5.65	6.64	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/21/2005	1647	45.85347	119.67043	1	9.27	NA	NA	19.61	NA	NA	1.79	NA	NA	8.13	NA	NA
TF-WCU	9/21/2005	1647	45.85347	119.67043	7.5	8.73	NA	NA	19.21	NA	NA	1.82	NA	NA	8.10	NA	NA
TF-WCU	9/21/2005	1647	45.85347	119.67043	14	8.73	NA	NA	19.00	NA	NA	2.62	NA	NA	8.04	NA	NA
TF-WCD1	9/21/2005	1702	45.85352	119.67284	1	9.19	<6.5	<6.5	19.66	19.91	21.78	1.84	4.79	6.33	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/21/2005	1702	45.85352	119.67284	9	8.94	<6.5	<6.5	19.10	19.51	21.48	2.03	4.82	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/21/2005	1702	45.85352	119.67284	17.5	8.74	<6.5	<6.5	19.01	19.30	21.42	2.50	5.62	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/21/2005	1718	45.85359	119.67266	1	9.26	<6.5	<6.5	19.63	19.91	21.78	1.58	4.79	6.33	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/21/2005	1718	45.85359	119.67266	12	8.56	<6.5	<6.5	19.04	19.51	21.48	2.16	4.82	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/21/2005	1718	45.85359	119.67266	23.5	8.79	<6.5	<6.5	18.98	19.30	21.42	2.37	5.62	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/21/2005	1731	45.85361	119.67239	1	9.24	<6.5	<6.5	19.62	19.91	21.78	1.34	4.79	6.33	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/21/2005	1731	45.85361	119.67239	12	8.67	<6.5	<6.5	19.01	19.51	21.48	2.57	4.82	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/21/2005	1731	45.85361	119.67239	23.5	8.63	<6.5	<6.5	18.95	19.30	21.42	2.63	5.62	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCU	9/22/2005	1100	45.85347	119.67043	1	8.79	NA	NA	18.81	NA	NA	1.46	NA	NA	7.93	NA	NA
TF-WCU	9/22/2005	1100	45.85347	119.67043	8	8.57	NA	NA	18.62	NA	NA	2.09	NA	NA	8.04	NA	NA
TF-WCU	9/22/2005	1100	45.85347	119.67043	15	8.53	NA	NA	18.51	NA	NA	2.58	NA	NA	8.08	NA	NA
TF-WCD1	9/22/2005	1020	45.85352	119.67284	1	8.67	<6.5	<6.5	18.70	19.11	21.78	1.78	4.46	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/22/2005	1020	45.85352	119.67284	8.5	8.47	<6.5	<6.5	18.68	18.92	21.48	1.70	5.09	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/22/2005	1020	45.85352	119.67284	16	8.43	<6.5	<6.5	18.65	18.81	21.42	1.87	5.58	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1035	45.85359	119.67266	1	8.91	<6.5	<6.5	18.78	19.11	21.78	1.92	4.46	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1035	45.85359	119.67266	12	8.57	<6.5	<6.5	18.62	18.92	21.48	2.02	5.09	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1035	45.85359	119.67266	23	8.56	<6.5	<6.5	18.32	18.81	21.42	1.82	5.58	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1045	45.85361	119.67239	1	8.71	<6.5	<6.5	18.83	19.11	21.78	1.97	4.46	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1045	45.85361	119.67239	12	8.66	<6.5	<6.5	18.64	18.92	21.48	1.81	5.09	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1045	45.85361	119.67239	23.5	8.56	<6.5	<6.5	18.60	18.81	21.42	1.93	5.58	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/22/2005	1408	45.85347	119.67043	1	8.87	NA	NA	19.27	NA	NA	1.64	NA	NA	7.99	NA	NA
TF-WCU	9/22/2005	1408	45.85347	119.67043	7	8.69	NA	NA	19.14	NA	NA	1.66	NA	NA	8.06	NA	NA
TF-WCU	9/22/2005	1408	45.85347	119.67043	12.5	8.77	NA	NA	19.02	NA	NA	1.55	NA	NA	8.10	NA	NA
TF-WCD1	9/22/2005	1336	45.85352	119.67284	1	8.69	<6.5	<6.5	19.28	19.57	21.78	2.01	4.64	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/22/2005	1336	45.85352	119.67284	8	8.84	<6.5	<6.5	19.25	19.44	21.48	1.76	4.66	6.58	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/22/2005	1336	45.85352	119.67284	14.5	8.48	<6.5	<6.5	19.25	19.32	21.42	1.56	4.55	6.64	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1345	45.85359	119.67266	1	8.77	<6.5	<6.5	19.21	19.57	21.78	1.98	4.64	6.33	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1345	45.85359	119.67266	7.5	8.56	<6.5	<6.5	19.18	19.44	21.48	1.83	4.66	6.58	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1345	45.85359	119.67266	13.5	8.69	<6.5	<6.5	19.18	19.32	21.42	1.48	4.55	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1354	45.85361	119.67239	1	8.83	<6.5	<6.5	19.28	19.57	21.78	1.38	4.64	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1354	45.85361	119.67239	12.5	8.86	<6.5	<6.5	19.13	19.44	21.48	1.63	4.66	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1354	45.85361	119.67239	24	8.78	<6.5	<6.5	19.03	19.32	21.42	1.64	4.55	6.64	8.09	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/22/2005	1645	45.85347	119.67043	1	9.26	NA	NA	19.56	NA	NA	1.61	NA	NA	8.17	NA	NA
TF-WCU	9/22/2005	1645	45.85347	119.67043	6.5	8.91	NA	NA	19.49	NA	NA	1.43	NA	NA	8.18	NA	NA
TF-WCU	9/22/2005	1645	45.85347	119.67043	12	8.78	NA	NA	18.95	NA	NA	2.15	NA	NA	8.16	NA	NA
TF-WCD1	9/22/2005	1611	45.85352	119.67284	1	8.85	<6.5	<6.5	19.45	19.86	21.78	1.72	4.61	6.33	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/22/2005	1611	45.85352	119.67284	10	8.91	<6.5	<6.5	19.42	19.79	21.48	1.57	4.43	6.58	8.10	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/22/2005	1611	45.85352	119.67284	19	8.64	<6.5	<6.5	18.80	19.25	21.42	2.51	5.15	6.64	8.09	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1623	45.85359	119.67266	1	8.98	<6.5	<6.5	19.49	19.86	21.78	2.10	4.61	6.33	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1623	45.85359	119.67266	12	8.85	<6.5	<6.5	18.95	19.79	21.48	1.98	4.43	6.58	8.10	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/22/2005	1623	45.85359	119.67266	22.5	8.60	<6.5	<6.5	18.85	19.25	21.42	2.27	5.15	6.64	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1632	45.85361	119.67239	1	8.94	<6.5	<6.5	19.47	19.86	21.78	1.79	4.61	6.33	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1632	45.85361	119.67239	12.5	8.64	<6.5	<6.5	19.10	19.79	21.48	1.48	4.43	6.58	8.13	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/22/2005	1632	45.85361	119.67239	24	8.46	<6.5	<6.5	18.78	19.25	21.42	2.20	5.15	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/23/2005	858	45.85347	119.67043	1	8.43	NA	NA	18.38	NA	NA	3.05	NA	NA	7.84	NA	NA
TF-WCU	9/23/2005	858	45.85347	119.67043	7.5	8.30	NA	NA	18.39	NA	NA	2.73	NA	NA	7.94	NA	NA
TF-WCU	9/23/2005	858	45.85347	119.67043	14	8.54	NA	NA	18.34	NA	NA	2.84	NA	NA	7.94	NA	NA
TF-WCD1	9/23/2005	827	45.85352	119.67284	1	8.48	<6.5	<6.5	18.50	18.68	21.78	2.77	6.05	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/23/2005	827	45.85352	119.67284	9	8.38	<6.5	<6.5	18.52	18.69	21.48	2.73	5.73	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/23/2005	827	45.85352	119.67284	17	8.45	<6.5	<6.5	18.52	18.64	21.42	2.86	5.84	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	839	45.85359	119.67266	1	8.51	<6.5	<6.5	18.52	18.68	21.78	2.83	6.05	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	839	45.85359	119.67266	12.5	8.32	<6.5	<6.5	18.53	18.69	21.48	2.93	5.73	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	839	45.85359	119.67266	24	8.41	<6.5	<6.5	18.52	18.64	21.42	2.50	5.84	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	848	45.85361	119.67239	1	8.49	<6.5	<6.5	18.51	18.68	21.78	2.70	6.05	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	848	45.85361	119.67239	12.5	8.32	<6.5	<6.5	18.51	18.69	21.48	2.72	5.73	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	848	45.85361	119.67239	24	8.40	<6.5	<6.5	18.50	18.64	21.42	2.65	5.84	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/23/2005	1440	45.85347	119.67043	1	9.09	NA	NA	18.89	NA	NA	1.85	NA	NA	8.02	NA	NA
TF-WCU	9/23/2005	1440	45.85347	119.67043	7	8.92	NA	NA	18.69	NA	NA	2.12	NA	NA	8.10	NA	NA
TF-WCU	9/23/2005	1440	45.85347	119.67043	14.5	8.25	NA	NA	18.58	NA	NA	2.41	NA	NA	8.16	NA	NA

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD1	9/23/2005	1318	45.85352	119.67284	1	9.03	<6.5	<6.5	18.69	19.19	21.78	2.06	4.85	6.33	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/23/2005	1318	45.85352	119.67284	8	8.99	<6.5	<6.5	18.67	18.99	21.48	2.08	5.12	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/23/2005	1318	45.85352	119.67284	15	8.98	<6.5	<6.5	18.66	18.88	21.42	2.03	5.41	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	1345	45.85359	119.67266	1	9.13	<6.5	<6.5	18.70	19.19	21.78	1.69	4.85	6.33	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	1345	45.85359	119.67266	12	9.07	<6.5	<6.5	18.65	18.99	21.48	2.09	5.12	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	1345	45.85359	119.67266	23	9.02	<6.5	<6.5	18.62	18.88	21.42	1.95	5.41	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	1405	45.85361	119.67239	1	9.06	<6.5	<6.5	18.80	19.19	21.78	1.92	4.85	6.33	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	1405	45.85361	119.67239	12.5	9.03	<6.5	<6.5	18.66	18.99	21.48	1.64	5.12	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	1405	45.85361	119.67239	24	9.05	<6.5	<6.5	18.64	18.88	21.42	1.78	5.41	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/23/2005	1700	45.85347	119.67043	1	9.12	NA	NA	19.16	NA	NA	1.98	NA	NA	8.08	NA	NA
TF-WCU	9/23/2005	1700	45.85347	119.67043	7	8.86	NA	NA	18.90	NA	NA	2.15	NA	NA	8.16	NA	NA
TF-WCU	9/23/2005	1700	45.85347	119.67043	13	8.96	NA	NA	18.71	NA	NA	2.75	NA	NA	8.16	NA	NA
TF-WCD1	9/23/2005	1620	45.85352	119.67284	1	9.02	<6.5	<6.5	18.18	19.46	21.78	2.16	4.98	6.33	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/23/2005	1620	45.85352	119.67284	9	8.73	<6.5	<6.5	18.89	19.20	21.48	2.09	5.15	6.58	8.10	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/23/2005	1620	45.85352	119.67284	16.5	8.73	<6.5	<6.5	18.78	19.01	21.42	2.33	5.75	6.64	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	1636	45.85359	119.67266	1	9.13	<6.5	<6.5	19.19	19.46	21.78	1.99	4.98	6.33	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	1636	45.85359	119.67266	12	9.02	<6.5	<6.5	18.79	19.20	21.48	2.31	5.15	6.58	8.11	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/23/2005	1636	45.85359	119.67266	23.5	8.74	<6.5	<6.5	18.71	19.01	21.42	2.80	5.75	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	1650	45.85361	119.67239	1	9.01	<6.5	<6.5	19.14	19.46	21.78	2.09	4.98	6.33	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	1650	45.85361	119.67239	12.5	8.65	<6.5	<6.5	18.82	19.20	21.48	2.13	5.15	6.58	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/23/2005	1650	45.85361	119.67239	24	8.88	<6.5	<6.5	18.69	19.01	21.42	2.90	5.75	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/26/2005	1000	45.85347	119.67043	1	8.57	NA	NA	18.17	NA	NA	1.75	NA	NA	7.86	NA	NA
TF-WCU	9/26/2005	1000	45.85347	119.67043	6.5	8.51	NA	NA	18.05	NA	NA	2.18	NA	NA	7.98	NA	NA
TF-WCU	9/26/2005	1000	45.85347	119.67043	12	8.56	NA	NA	17.84	NA	NA	1.77	NA	NA	8.06	NA	NA
TF-WCD1	9/26/2005	915	45.85352	119.67284	1	8.59	<6.5	<6.5	18.18	18.47	21.78	1.88	4.75	6.33	7.79	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/26/2005	915	45.85352	119.67284	7	8.58	<6.5	<6.5	18.12	18.35	21.48	1.53	5.18	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/26/2005	915	45.85352	119.67284	13.5	8.46	<6.5	<6.5	18.11	18.14	21.42	1.84	4.77	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	935	45.85359	119.67266	1	8.71	<6.5	<6.5	18.19	18.47	21.78	2.12	4.75	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	935	45.85359	119.67266	11.5	8.60	<6.5	<6.5	18.09	18.35	21.48	2.35	5.18	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	935	45.85359	119.67266	22	8.62	<6.5	<6.5	18.02	18.14	21.42	2.02	4.77	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	950	45.85361	119.67239	1	8.70	<6.5	<6.5	18.22	18.47	21.78	1.59	4.75	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	950	45.85361	119.67239	12.5	8.61	<6.5	<6.5	18.03	18.35	21.48	1.91	5.18	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	950	45.85361	119.67239	24	8.64	<6.5	<6.5	17.86	18.14	21.42	1.88	4.77	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/26/2005	1531	45.85347	119.67043	1	8.82	NA	NA	18.86	NA	NA	1.51	NA	NA	8.00	NA	NA
TF-WCU	9/26/2005	1531	45.85347	119.67043	7	8.61	NA	NA	18.69	NA	NA	1.63	NA	NA	8.05	NA	NA
TF-WCU	9/26/2005	1531	45.85347	119.67043	13	8.94	NA	NA	18.57	NA	NA	1.43	NA	NA	8.04	NA	NA
TF-WCD1	9/26/2005	1458	45.85352	119.67284	1	8.95	<6.5	<6.5	18.71	19.16	21.78	1.44	4.51	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/26/2005	1458	45.85352	119.67284	8	8.40	<6.5	<6.5	18.70	18.99	21.48	1.41	4.63	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/26/2005	1458	45.85352	119.67284	15	8.63	<6.5	<6.5	18.71	18.87	21.42	1.47	4.43	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	1510	45.85359	119.67266	1	8.95	<6.5	<6.5	18.80	19.16	21.78	1.26	4.51	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	1510	45.85359	119.67266	12	8.52	<6.5	<6.5	18.65	18.99	21.48	1.49	4.63	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	1510	45.85359	119.67266	23	8.64	<6.5	<6.5	18.64	18.87	21.42	1.60	4.43	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	1520	45.85361	119.67239	1	9.08	<6.5	<6.5	18.89	19.16	21.78	1.60	4.51	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	1520	45.85361	119.67239	12	8.71	<6.5	<6.5	18.62	18.99	21.48	1.69	4.63	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	1520	45.85361	119.67239	23.5	8.46	<6.5	<6.5	18.54	18.87	21.42	1.54	4.43	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/26/2005	1750	45.85347	119.67043	1	8.96	NA	NA	19.08	NA	NA	1.27	NA	NA	8.02	NA	NA
TF-WCU	9/26/2005	1750	45.85347	119.67043	6.5	8.51	NA	NA	18.47	NA	NA	2.10	NA	NA	8.04	NA	NA
TF-WCU	9/26/2005	1750	45.85347	119.67043	12	8.53	NA	NA	18.21	NA	NA	2.35	NA	NA	8.00	NA	NA
TF-WCD1	9/26/2005	1710	45.85352	119.67284	1	9.13	<6.5	<6.5	19.02	19.38	21.78	1.32	4.27	6.33	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/26/2005	1710	45.85352	119.67284	7	8.76	<6.5	<6.5	18.30	18.77	21.48	1.75	5.10	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/26/2005	1710	45.85352	119.67284	13.5	8.57	<6.5	<6.5	18.19	18.51	21.42	2.00	5.35	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD2	9/26/2005	1730	45.85359	119.67266	1	9.03	<6.5	<6.5	19.09	19.38	21.78	1.33	4.27	6.33	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	1730	45.85359	119.67266	11.5	8.56	<6.5	<6.5	18.29	18.77	21.48	1.68	5.10	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/26/2005	1730	45.85359	119.67266	22	8.48	<6.5	<6.5	18.07	18.51	21.42	2.22	5.35	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	1745	45.85361	119.67239	1	9.11	<6.5	<6.5	19.06	19.38	21.78	1.27	4.27	6.33	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	1745	45.85361	119.67239	12.5	8.41	<6.5	<6.5	18.27	18.77	21.48	1.95	5.10	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/26/2005	1745	45.85361	119.67239	24	8.43	<6.5	<6.5	18.11	18.51	21.42	2.21	5.35	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/27/2005	944	45.85347	119.67043	1	8.86	NA	NA	18.16	NA	NA	1.49	NA	NA	7.91	NA	NA
TF-WCU	9/27/2005	944	45.85347	119.67043	6.5	8.84	NA	NA	18.10	NA	NA	1.76	NA	NA	7.97	NA	NA
TF-WCU	9/27/2005	944	45.85347	119.67043	12	8.91	NA	NA	17.94	NA	NA	1.94	NA	NA	8.01	NA	NA
TF-WCD1	9/27/2005	905	45.85352	119.67284	1	8.85	<6.5	<6.5	18.11	18.46	21.78	2.02	4.49	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/27/2005	905	45.85352	119.67284	5.5	8.81	<6.5	<6.5	18.05	18.40	21.48	2.17	4.76	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/27/2005	905	45.85352	119.67284	10.5	8.87	<6.5	<6.5	18.02	18.24	21.42	2.02	4.94	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/27/2005	917	45.85359	119.67266	1	8.77	<6.5	<6.5	18.03	18.46	21.78	1.73	4.49	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/27/2005	917	45.85359	119.67266	12	8.84	<6.5	<6.5	17.97	18.40	21.48	2.28	4.76	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/27/2005	917	45.85359	119.67266	23	8.81	<6.5	<6.5	17.94	18.24	21.42	2.29	4.94	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/27/2005	930	45.85361	119.67239	1	8.95	<6.5	<6.5	18.15	18.46	21.78	1.45	4.49	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/27/2005	930	45.85361	119.67239	12.5	8.79	<6.5	<6.5	17.99	18.40	21.48	2.03	4.76	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/27/2005	930	45.85361	119.67239	24.5	8.79	<6.5	<6.5	17.96	18.24	21.42	1.72	4.94	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/27/2005	1428	45.85347	119.67043	1	9.07	NA	NA	19.00	NA	NA	1.30	NA	NA	8.00	NA	NA
TF-WCU	9/27/2005	1428	45.85347	119.67043	7	8.89	NA	NA	18.76	NA	NA	1.43	NA	NA	8.10	NA	NA
TF-WCU	9/27/2005	1428	45.85347	119.67043	13.5	8.60	NA	NA	18.64	NA	NA	1.54	NA	NA	8.15	NA	NA
TF-WCD1	9/27/2005	1330	45.85352	119.67284	1	8.89	<6.5	<6.5	18.93	19.30	21.78	1.36	4.30	6.33	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/27/2005	1330	45.85352	119.67284	5	9.01	<6.5	<6.5	18.91	19.06	21.48	1.22	4.43	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/27/2005	1330	45.85352	119.67284	9.5	8.80	<6.5	<6.5	18.90	18.94	21.42	1.26	4.54	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/27/2005	1351	45.85359	119.67266	1	8.84	<6.5	<6.5	19.01	19.30	21.78	1.26	4.30	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/27/2005	1351	45.85359	119.67266	12	8.81	<6.5	<6.5	18.84	19.06	21.48	1.46	4.43	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/27/2005	1351	45.85359	119.67266	23	8.73	<6.5	<6.5	18.84	18.94	21.42	2.61	4.54	6.64	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/27/2005	1408	45.85361	119.67239	1	8.85	<6.5	<6.5	19.10	19.30	21.78	1.14	4.30	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/27/2005	1408	45.85361	119.67239	12.5	9.09	<6.5	<6.5	18.84	19.06	21.48	1.29	4.43	6.58	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/27/2005	1408	45.85361	119.67239	24	9.04	<6.5	<6.5	18.65	18.94	21.42	1.99	4.54	6.64	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/28/2005	955	45.85347	119.67043	1	8.86	NA	NA	18.09	NA	NA	1.93	NA	NA	7.81	NA	NA
TF-WCU	9/28/2005	955	45.85347	119.67043	7	8.82	NA	NA	18.05	NA	NA	1.85	NA	NA	8.00	NA	NA
TF-WCU	9/28/2005	955	45.85347	119.67043	13.5	8.80	NA	NA	17.88	NA	NA	2.24	NA	NA	8.05	NA	NA
TF-WCD1	9/28/2005	850	45.85352	119.67284	1	8.80	<6.5	<6.5	18.05	18.39	21.78	1.78	4.93	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/28/2005	850	45.85352	119.67284	7	8.74	<6.5	<6.5	18.06	18.35	21.48	1.65	4.85	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/28/2005	850	45.85352	119.67284	13	8.76	<6.5	<6.5	18.06	18.18	21.42	1.84	5.24	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	920	45.85359	119.67266	1	8.87	<6.5	<6.5	18.06	18.39	21.78	1.96	4.93	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	920	45.85359	119.67266	12.5	8.75	<6.5	<6.5	18.05	18.35	21.48	1.81	4.85	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	920	45.85359	119.67266	24	8.77	<6.5	<6.5	18.04	18.18	21.42	1.75	5.24	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	935	45.85361	119.67239	1	8.78	<6.5	<6.5	18.06	18.39	21.78	1.75	4.93	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	935	45.85361	119.67239	12.5	8.71	<6.5	<6.5	18.06	18.35	21.48	1.74	4.85	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	935	45.85361	119.67239	24	8.75	<6.5	<6.5	18.04	18.18	21.42	1.92	5.24	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/28/2005	1425	45.85347	119.67043	1	9.00	NA	NA	18.56	NA	NA	1.38	NA	NA	8.02	NA	NA
TF-WCU	9/28/2005	1425	45.85347	119.67043	7.5	8.89	NA	NA	18.53	NA	NA	1.61	NA	NA	8.08	NA	NA
TF-WCU	9/28/2005	1425	45.85347	119.67043	14	8.78	NA	NA	18.52	NA	NA	1.28	NA	NA	8.10	NA	NA
TF-WCD1	9/28/2005	1330	45.85352	119.67284	1	9.09	<6.5	<6.5	18.63	18.86	21.78	1.27	4.38	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/28/2005	1330	45.85352	119.67284	4	8.91	<6.5	<6.5	18.59	18.83	21.48	1.13	4.61	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/28/2005	1330	45.85352	119.67284	7.5	8.80	<6.5	<6.5	18.62	18.82	21.42	1.14	4.28	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	1350	45.85359	119.67266	1	9.02	<6.5	<6.5	18.60	18.86	21.78	1.19	4.38	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	1350	45.85359	119.67266	12	8.92	<6.5	<6.5	18.59	18.83	21.48	1.48	4.61	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	1350	45.85359	119.67266	23.5	8.91	<6.5	<6.5	18.59	18.82	21.42	0.98	4.28	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD3	9/28/2005	1410	45.85361	119.67239	1	9.14	<6.5	<6.5	18.62	18.86	21.78	1.43	4.38	6.33	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	1410	45.85361	119.67239	12	8.97	<6.5	<6.5	18.48	18.83	21.48	1.38	4.61	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	1410	45.85361	119.67239	23.5	8.88	<6.5	<6.5	18.38	18.82	21.42	1.78	4.28	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/28/2005	1620	45.85347	119.67043	1	9.18	NA	NA	19.96	NA	NA	1.55	NA	NA	8.02	NA	NA
TF-WCU	9/28/2005	1620	45.85347	119.67043	7	9.11	NA	NA	18.64	NA	NA	1.60	NA	NA	8.03	NA	NA
TF-WCU	9/28/2005	1620	45.85347	119.67043	13.5	9.09	NA	NA	18.57	NA	NA	1.98	NA	NA	8.10	NA	NA
TF-WCD1	9/28/2005	1550	45.85352	119.67284	1	9.17	<6.5	<6.5	18.80	20.26	21.78	2.24	4.55	6.33	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/28/2005	1550	45.85352	119.67284	6	8.94	<6.5	<6.5	18.72	18.94	21.48	1.72	4.60	6.58	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/28/2005	1550	45.85352	119.67284	10.5	8.97	<6.5	<6.5	18.70	18.87	21.42	1.54	4.98	6.64	8.12	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	1600	45.85359	119.67266	1	9.08	<6.5	<6.5	18.78	20.26	21.78	1.49	4.55	6.33	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	1600	45.85359	119.67266	12	9.10	<6.5	<6.5	18.51	18.94	21.48	1.98	4.60	6.58	8.09	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/28/2005	1600	45.85359	119.67266	23.5	8.48	<6.5	<6.5	18.20	18.87	21.42	2.09	4.98	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	1605	45.85361	119.67239	1	9.15	<6.5	<6.5	18.86	20.26	21.78	1.50	4.55	6.33	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	1605	45.85361	119.67239	12.5	9.01	<6.5	<6.5	18.42	18.94	21.48	1.63	4.60	6.58	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/28/2005	1605	45.85361	119.67239	24.5	8.56	<6.5	<6.5	18.22	18.87	21.42	1.89	4.98	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/29/2005	840	45.85347	119.67043	1	8.93	NA	NA	17.74	NA	NA	1.58	NA	NA	7.86	NA	NA
TF-WCU	9/29/2005	840	45.85347	119.67043	6.5	8.81	NA	NA	17.74	NA	NA	1.82	NA	NA	7.89	NA	NA
TF-WCU	9/29/2005	840	45.85347	119.67043	12.5	8.89	NA	NA	17.74	NA	NA	1.85	NA	NA	7.90	NA	NA
TF-WCD1	9/29/2005	735	45.85352	119.67284	1	8.86	<6.5	<6.5	17.75	18.04	21.78	1.97	4.58	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/29/2005	735	45.85352	119.67284	9	8.85	<6.5	<6.5	17.80	18.04	21.48	1.84	4.82	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/29/2005	735	45.85352	119.67284	17	8.87	<6.5	<6.5	17.79	18.04	21.42	2.56	4.85	6.64	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/29/2005	755	45.85359	119.67266	1	8.82	<6.5	<6.5	17.74	18.04	21.78	1.94	4.58	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/29/2005	755	45.85359	119.67266	12.5	8.84	<6.5	<6.5	17.76	18.04	21.48	2.17	4.82	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/29/2005	755	45.85359	119.67266	24	8.81	<6.5	<6.5	17.76	18.04	21.42	2.05	4.85	6.64	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/29/2005	825	45.85361	119.67239	1	8.87	<6.5	<6.5	17.72	18.04	21.78	1.80	4.58	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/29/2005	825	45.85361	119.67239	13	8.89	<6.5	<6.5	17.75	18.04	21.48	2.05	4.82	6.58	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/29/2005	825	45.85361	119.67239	25	8.83	<6.5	<6.5	17.75	18.04	21.42	1.65	4.85	6.64	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/29/2005	1340	45.85347	119.67043	1	9.23	NA	NA	17.95	NA	NA	1.77	NA	NA	7.92	NA	NA
TF-WCU	9/29/2005	1340	45.85347	119.67043	6	9.13	NA	NA	17.95	NA	NA	1.84	NA	NA	7.97	NA	NA
TF-WCU	9/29/2005	1340	45.85347	119.67043	11	9.11	NA	NA	17.95	NA	NA	2.78	NA	NA	8.01	NA	NA
TF-WCD1	9/29/2005	1235	45.85352	119.67284	1	9.15	<6.5	<6.5	17.92	18.25	21.78	1.88	4.77	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/29/2005	1235	45.85352	119.67284	11	9.13	<6.5	<6.5	17.90	18.25	21.48	2.30	4.84	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/29/2005	1235	45.85352	119.67284	20.5	9.12	<6.5	<6.5	17.85	18.25	21.42	2.22	5.78	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/29/2005	1255	45.85359	119.67266	1	9.10	<6.5	<6.5	17.92	18.25	21.78	2.04	4.77	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/29/2005	1255	45.85359	119.67266	12	9.16	<6.5	<6.5	17.93	18.25	21.48	1.77	4.84	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/29/2005	1255	45.85359	119.67266	23.5	9.07	<6.5	<6.5	17.88	18.25	21.42	2.48	5.78	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/29/2005	1319	45.85361	119.67239	1	9.17	<6.5	<6.5	17.95	18.25	21.78	2.29	4.77	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/29/2005	1319	45.85361	119.67239	13	9.14	<6.5	<6.5	17.93	18.25	21.48	2.24	4.84	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/29/2005	1319	45.85361	119.67239	25	9.11	<6.5	<6.5	17.92	18.25	21.42	2.17	5.78	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	9/30/2005	1001	45.85347	119.67043	1	8.95	NA	NA	17.84	NA	NA	2.22	NA	NA	7.91	NA	NA
TF-WCU	9/30/2005	1001	45.85347	119.67043	6	8.99	NA	NA	17.83	NA	NA	1.56	NA	NA	7.88	NA	NA
TF-WCU	9/30/2005	1001	45.85347	119.67043	11	8.91	NA	NA	17.84	NA	NA	1.76	NA	NA	7.89	NA	NA
TF-WCD1	9/30/2005	935	45.85352	119.67284	1	8.87	<6.5	<6.5	17.84	18.14	21.78	2.29	5.22	6.33	7.81	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/30/2005	935	45.85352	119.67284	10	8.80	<6.5	<6.5	17.84	18.13	21.48	2.13	4.56	6.58	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/30/2005	935	45.85352	119.67284	19	8.87	<6.5	<6.5	17.83	18.14	21.42	1.92	4.76	6.64	7.75	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/30/2005	943	45.85359	119.67266	1	8.85	<6.5	<6.5	17.84	18.14	21.78	2.31	5.22	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/30/2005	943	45.85359	119.67266	12	8.79	<6.5	<6.5	17.83	18.13	21.48	2.26	4.56	6.58	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/30/2005	943	45.85359	119.67266	23	8.82	<6.5	<6.5	17.84	18.14	21.42	1.92	4.76	6.64	7.81	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/30/2005	952	45.85361	119.67239	1	8.75	<6.5	<6.5	17.83	18.14	21.78	2.02	5.22	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/30/2005	952	45.85361	119.67239	12.5	8.72	<6.5	<6.5	17.84	18.13	21.48	2.72	4.56	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/30/2005	952	45.85361	119.67239	24.5	8.79	<6.5	<6.5	17.84	18.14	21.42	2.31	4.76	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCU	9/30/2005	1242	45.85347	119.67043	1	9.05	NA	NA	17.89	NA	NA	1.90	NA	NA	7.94	NA	NA
TF-WCU	9/30/2005	1242	45.85347	119.67043	6.5	8.97	NA	NA	17.87	NA	NA	2.33	NA	NA	7.94	NA	NA
TF-WCU	9/30/2005	1242	45.85347	119.67043	12	8.94	NA	NA	17.86	NA	NA	2.40	NA	NA	7.96	NA	NA
TF-WCD1	9/30/2005	1222	45.85352	119.67284	1	8.85	<6.5	<6.5	17.88	18.19	21.78	1.78	4.90	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/30/2005	1222	45.85352	119.67284	7.5	8.77	<6.5	<6.5	17.87	18.17	21.48	1.74	5.33	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	9/30/2005	1222	45.85352	119.67284	14	8.96	<6.5	<6.5	17.86	18.16	21.42	1.96	5.40	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/30/2005	1228	45.85359	119.67266	1	8.93	<6.5	<6.5	17.89	18.19	21.78	2.23	4.90	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/30/2005	1228	45.85359	119.67266	12.5	8.85	<6.5	<6.5	17.87	18.17	21.48	1.51	5.33	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	9/30/2005	1228	45.85359	119.67266	24	8.89	<6.5	<6.5	17.85	18.16	21.42	1.90	5.40	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/30/2005	1238	45.85361	119.67239	1	8.97	<6.5	<6.5	17.88	18.19	21.78	1.80	4.90	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/30/2005	1238	45.85361	119.67239	12.5	8.98	<6.5	<6.5	17.87	18.17	21.48	1.76	5.33	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	9/30/2005	1238	45.85361	119.67239	24	8.89	<6.5	<6.5	17.85	18.16	21.42	1.88	5.40	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/3/2005	900	45.85347	119.67043	1	8.70	NA	NA	17.04	NA	NA	1.94	NA	NA	7.84	NA	NA
TF-WCU	10/3/2005	900	45.85347	119.67043	6.5	8.67	NA	NA	17.03	NA	NA	1.77	NA	NA	7.93	NA	NA
TF-WCU	10/3/2005	900	45.85347	119.67043	12.5	8.70	NA	NA	17.02	NA	NA	2.04	NA	NA	7.95	NA	NA
TF-WCD1	10/3/2005	835	45.85352	119.67284	1	8.65	<6.5	<6.5	16.97	17.34	21.78	1.98	4.94	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/3/2005	835	45.85352	119.67284	8	8.71	<6.5	<6.5	17.01	17.33	21.48	1.92	4.77	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/3/2005	835	45.85352	119.67284	15.5	8.72	<6.5	<6.5	17.00	17.32	21.42	1.87	5.04	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	840	45.85359	119.67266	1	8.75	<6.5	<6.5	16.99	17.34	21.78	2.09	4.94	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	840	45.85359	119.67266	12	8.73	<6.5	<6.5	16.99	17.33	21.48	2.11	4.77	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	840	45.85359	119.67266	23.5	8.76	<6.5	<6.5	16.97	17.32	21.42	1.86	5.04	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	850	45.85361	119.67239	1	8.70	<6.5	<6.5	17.02	17.34	21.78	1.85	4.94	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	850	45.85361	119.67239	12.5	8.72	<6.5	<6.5	17.04	17.33	21.48	1.78	4.77	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	850	45.85361	119.67239	24	8.75	<6.5	<6.5	16.98	17.32	21.42	1.65	5.04	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/3/2005	1450	45.85347	119.67043	1	8.92	NA	NA	17.52	NA	NA	1.18	NA	NA	7.89	NA	NA
TF-WCU	10/3/2005	1450	45.85347	119.67043	6.5	8.95	NA	NA	17.41	NA	NA	1.43	NA	NA	7.98	NA	NA
TF-WCU	10/3/2005	1450	45.85347	119.67043	12.5	9.06	NA	NA	17.36	NA	NA	2.48	NA	NA	8.14	NA	NA
TF-WCD1	10/3/2005	1339	45.85352	119.67284	1	8.82	<6.5	<6.5	17.36	17.82	21.78	1.17	4.18	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/3/2005	1339	45.85352	119.67284	6.5	8.70	<6.5	<6.5	17.39	17.71	21.48	1.23	4.43	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/3/2005	1339	45.85352	119.67284	12.5	8.85	<6.5	<6.5	17.39	17.66	21.42	1.25	5.48	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	1359	45.85359	119.67266	1	8.87	<6.5	<6.5	17.45	17.82	21.78	1.11	4.18	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	1359	45.85359	119.67266	12.5	8.85	<6.5	<6.5	17.44	17.71	21.48	1.40	4.43	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	1359	45.85359	119.67266	24.5	8.76	<6.5	<6.5	17.33	17.66	21.42	1.31	5.48	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	1420	45.85361	119.67239	1	8.83	<6.5	<6.5	17.49	17.82	21.78	1.25	4.18	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	1420	45.85361	119.67239	13	8.84	<6.5	<6.5	17.41	17.71	21.48	1.38	4.43	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	1420	45.85361	119.67239	25	8.90	<6.5	<6.5	17.37	17.66	21.42	1.25	5.48	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/3/2005	1725	45.85347	119.67043	1	9.05	NA	NA	17.58	NA	NA	1.32	NA	NA	7.95	NA	NA
TF-WCU	10/3/2005	1725	45.85347	119.67043	7	9.14	NA	NA	17.49	NA	NA	1.33	NA	NA	8.04	NA	NA
TF-WCU	10/3/2005	1725	45.85347	119.67043	13	9.27	NA	NA	17.37	NA	NA	1.73	NA	NA	8.08	NA	NA
TF-WCD1	10/3/2005	1704	45.85352	119.67284	1	8.93	<6.5	<6.5	17.58	17.88	21.78	1.77	4.32	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/3/2005	1704	45.85352	119.67284	6.5	8.88	<6.5	<6.5	17.56	17.79	21.48	1.58	4.33	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/3/2005	1704	45.85352	119.67284	12	8.81	<6.5	<6.5	17.37	17.67	21.42	1.73	4.73	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	1710	45.85359	119.67266	1	8.90	<6.5	<6.5	17.61	17.88	21.78	1.37	4.32	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	1710	45.85359	119.67266	12.5	8.92	<6.5	<6.5	17.60	17.79	21.48	1.21	4.33	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/3/2005	1710	45.85359	119.67266	24	8.86	<6.5	<6.5	17.28	17.67	21.42	1.87	4.73	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	1717	45.85361	119.67239	1	8.89	<6.5	<6.5	17.57	17.88	21.78	1.31	4.32	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	1717	45.85361	119.67239	12.5	8.90	<6.5	<6.5	17.52	17.79	21.48	1.53	4.33	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/3/2005	1717	45.85361	119.67239	24	8.92	<6.5	<6.5	17.25	17.67	21.42	1.48	4.73	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/4/2005	925	45.85347	119.67043	1	8.51	NA	NA	17.18	NA	NA	1.50	NA	NA	7.81	NA	NA
TF-WCU	10/4/2005	925	45.85347	119.67043	7	8.60	NA	NA	16.93	NA	NA	1.61	NA	NA	7.97	NA	NA
TF-WCU	10/4/2005	925	45.85347	119.67043	13.5	8.60	NA	NA	16.93	NA	NA	2.38	NA	NA	7.97	NA	NA

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD1	10/4/2005	825	45.85352	119.67284	1	8.66	<6.5	<6.5	17.00	17.48	21.78	1.76	4.50	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/4/2005	825	45.85352	119.67284	8	8.63	<6.5	<6.5	17.01	17.23	21.48	1.98	4.61	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/4/2005	825	45.85352	119.67284	15.5	8.60	<6.5	<6.5	16.99	17.23	21.42	2.01	5.38	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	846	45.85359	119.67266	1	8.59	<6.5	<6.5	17.16	17.48	21.78	1.32	4.50	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	846	45.85359	119.67266	12.5	8.67	<6.5	<6.5	17.05	17.23	21.48	1.51	4.61	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	846	45.85359	119.67266	24	8.52	<6.5	<6.5	17.02	17.23	21.42	2.15	5.38	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	906	45.85361	119.67239	1	8.65	<6.5	<6.5	17.18	17.48	21.78	1.48	4.50	6.33	7.79	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	906	45.85361	119.67239	13	8.62	<6.5	<6.5	17.05	17.23	21.48	1.41	4.61	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	906	45.85361	119.67239	25	8.63	<6.5	<6.5	17.01	17.23	21.42	1.43	5.38	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/4/2005	1220	45.85347	119.67043	1	8.72	NA	NA	17.40	NA	NA	1.27	NA	NA	7.89	NA	NA
TF-WCU	10/4/2005	1220	45.85347	119.67043	7	8.56	NA	NA	17.32	NA	NA	1.55	NA	NA	7.99	NA	NA
TF-WCU	10/4/2005	1220	45.85347	119.67043	13	8.64	NA	NA	17.24	NA	NA	1.53	NA	NA	8.01	NA	NA
TF-WCD1	10/4/2005	1158	45.85352	119.67284	1	8.63	<6.5	<6.5	17.40	17.70	21.78	1.40	4.27	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/4/2005	1158	45.85352	119.67284	5.5	8.50	<6.5	<6.5	17.41	17.62	21.48	1.34	4.55	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/4/2005	1158	45.85352	119.67284	9.5	8.53	<6.5	<6.5	17.39	17.54	21.42	1.38	4.53	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	1207	45.85359	119.67266	1	8.81	<6.5	<6.5	17.49	17.70	21.78	1.19	4.27	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	1207	45.85359	119.67266	10.5	8.52	<6.5	<6.5	17.38	17.62	21.48	1.66	4.55	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	1207	45.85359	119.67266	20	8.62	<6.5	<6.5	17.37	17.54	21.42	1.77	4.53	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	1215	45.85361	119.67239	1	8.82	<6.5	<6.5	17.55	17.70	21.78	1.44	4.27	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	1215	45.85361	119.67239	13	8.57	<6.5	<6.5	17.37	17.62	21.48	1.55	4.55	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	1215	45.85361	119.67239	25	8.65	<6.5	<6.5	17.35	17.54	21.42	1.39	4.53	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/4/2005	1552	45.85347	119.67043	1	8.77	NA	NA	17.68	NA	NA	1.37	NA	NA	7.94	NA	NA
TF-WCU	10/4/2005	1552	45.85347	119.67043	7	8.94	NA	NA	17.67	NA	NA	1.26	NA	NA	8.02	NA	NA
TF-WCU	10/4/2005	1552	45.85347	119.67043	13	8.74	NA	NA	17.67	NA	NA	1.48	NA	NA	8.05	NA	NA
TF-WCD1	10/4/2005	1526	45.85352	119.67284	1	8.88	<6.5	<6.5	17.71	17.98	21.78	1.52	4.37	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/4/2005	1526	45.85352	119.67284	5	8.80	<6.5	<6.5	17.71	17.97	21.48	1.21	4.26	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/4/2005	1526	45.85352	119.67284	9.5	8.71	<6.5	<6.5	17.72	17.97	21.42	1.63	4.48	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	1535	45.85359	119.67266	1	8.75	<6.5	<6.5	17.72	17.98	21.78	1.55	4.37	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	1535	45.85359	119.67266	12	8.57	<6.5	<6.5	17.67	17.97	21.48	1.47	4.26	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/4/2005	1535	45.85359	119.67266	23	8.73	<6.5	<6.5	17.66	17.97	21.42	1.34	4.48	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	1541	45.85361	119.67239	1	8.79	<6.5	<6.5	17.69	17.98	21.78	1.72	4.37	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	1541	45.85361	119.67239	13	8.50	<6.5	<6.5	17.68	17.97	21.48	1.55	4.26	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/4/2005	1541	45.85361	119.67239	25	8.63	<6.5	<6.5	17.48	17.97	21.42	1.47	4.48	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/5/2005	900	45.85347	119.67043	1	8.48	NA	NA	17.15	NA	NA		NA	NA	7.81	NA	NA
TF-WCU	10/5/2005	900	45.85347	119.67043	6.5	8.38	NA	NA	17.16	NA	NA		NA	NA	7.93	NA	NA
TF-WCU	10/5/2005	900	45.85347	119.67043	12.5	8.60	NA	NA	17.15	NA	NA		NA	NA	7.92	NA	NA
TF-WCD1	10/5/2005	830	45.85352	119.67284	1	8.50	<6.5	<6.5	17.09	17.45	21.78	1.42	3.00	6.33	7.81	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/5/2005	830	45.85352	119.67284	7	8.46	<6.5	<6.5	17.07	17.46	21.48	1.88	3.00	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/5/2005	830	45.85352	119.67284	13	8.70	<6.5	<6.5	17.01	17.45	21.42	1.85	3.00	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/5/2005	842	45.85359	119.67266	1	8.59	<6.5	<6.5	17.05	17.45	21.78	1.77	3.00	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/5/2005	842	45.85359	119.67266	11.5	8.56	<6.5	<6.5	17.00	17.46	21.48		3.00	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/5/2005	842	45.85359	119.67266	22	8.53	<6.5	<6.5	17.01	17.45	21.42		3.00	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/5/2005	853	45.85361	119.67239	1	8.52	<6.5	<6.5	17.12	17.45	21.78		3.00	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/5/2005	853	45.85361	119.67239	12	8.67	<6.5	<6.5	16.96	17.46	21.48		3.00	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/5/2005	853	45.85361	119.67239	23	8.64	<6.5	<6.5	16.93	17.45	21.42		3.00	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/6/2005	1020	45.85347	119.67043	1	8.50	NA	NA	16.96	NA	NA	1.64	NA	NA	7.81	NA	NA
TF-WCU	10/6/2005	1020	45.85347	119.67043	6.5	8.39	NA	NA	16.97	NA	NA	1.60	NA	NA	7.84	NA	NA
TF-WCU	10/6/2005	1020	45.85347	119.67043	12.5	8.45	NA	NA	16.96	NA	NA	1.54	NA	NA	7.85	NA	NA
TF-WCD1	10/6/2005	955	45.85352	119.67284	1	8.87	<6.5	<6.5	16.93	17.26	21.78	1.98	4.64	6.33	7.75	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/6/2005	955	45.85352	119.67284	5.5	8.81	<6.5	<6.5	16.92	17.27	21.48	2.18	4.60	6.58	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/6/2005	955	45.85352	119.67284	10	8.76	<6.5	<6.5	16.91	17.26	21.42	1.69	4.54	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD2	10/6/2005	1003	45.85359	119.67266	1	8.63	<6.5	<6.5	16.95	17.26	21.78	2.10	4.64	6.33	7.81	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1003	45.85359	119.67266	12	8.72	<6.5	<6.5	16.90	17.27	21.48	1.79	4.60	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1003	45.85359	119.67266	23	8.80	<6.5	<6.5	16.91	17.26	21.42	1.83	4.54	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1011	45.85361	119.67239	1	8.61	<6.5	<6.5	16.95	17.26	21.78	1.97	4.64	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1011	45.85361	119.67239	12.5	8.80	<6.5	<6.5	16.90	17.27	21.48	1.93	4.60	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1011	45.85361	119.67239	24	8.76	<6.5	<6.5	16.88	17.26	21.42	1.84	4.54	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/6/2005	1325	45.85347	119.67043	1	8.72	NA	NA	17.34	NA	NA	1.17	NA	NA	7.86	NA	NA
TF-WCU	10/6/2005	1325	45.85347	119.67043	6.5	8.81	NA	NA	17.28	NA	NA	1.70	NA	NA	7.88	NA	NA
TF-WCU	10/6/2005	1325	45.85347	119.67043	12.5	8.74	NA	NA	17.14	NA	NA	1.77	NA	NA	7.96	NA	NA
TF-WCD1	10/6/2005	1300	45.85352	119.67284	1	8.76	<6.5	<6.5	17.35	17.64	21.78	1.61	4.17	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/6/2005	1300	45.85352	119.67284	5.5	8.67	<6.5	<6.5	17.30	17.58	21.48	1.60	4.70	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/6/2005	1300	45.85352	119.67284	10	8.64	<6.5	<6.5	17.31	17.44	21.42	1.88	4.77	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1308	45.85359	119.67266	1	8.68	<6.5	<6.5	17.30	17.64	21.78	1.59	4.17	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1308	45.85359	119.67266	10.5	8.67	<6.5	<6.5	17.27	17.58	21.48	1.36	4.70	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1308	45.85359	119.67266	20	8.62	<6.5	<6.5	17.26	17.44	21.42	1.17	4.77	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1315	45.85361	119.67239	1	8.61	<6.5	<6.5	17.37	17.64	21.78	1.49	4.17	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1315	45.85361	119.67239	12.5	8.50	<6.5	<6.5	17.28	17.58	21.48	2.21	4.70	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1315	45.85361	119.67239	24.5	8.48	<6.5	<6.5	17.27	17.44	21.42	1.46	4.77	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/6/2005	1712	45.85347	119.67043	1	8.76	NA	NA	17.82	NA	NA	1.60	NA	NA	8.00	NA	NA
TF-WCU	10/6/2005	1712	45.85347	119.67043	6.5	8.80	NA	NA	17.45	NA	NA	1.45	NA	NA	7.94	NA	NA
TF-WCU	10/6/2005	1712	45.85347	119.67043	12.5	8.83	NA	NA	17.09	NA	NA	1.74	NA	NA	8.01	NA	NA
TF-WCD1	10/6/2005	1650	45.85352	119.67284	1	9.04	<6.5	<6.5	17.78	18.12	21.78	1.83	4.60	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/6/2005	1650	45.85352	119.67284	6	8.79	<6.5	<6.5	17.76	17.75	21.48	1.61	4.45	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/6/2005	1650	45.85352	119.67284	11.5	8.54	<6.5	<6.5	17.10	17.39	21.42	1.21	4.74	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1658	45.85359	119.67266	1	8.76	<6.5	<6.5	17.77	18.12	21.78	1.40	4.60	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1658	45.85359	119.67266	10	8.71	<6.5	<6.5	17.13	17.75	21.48	2.02	4.45	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/6/2005	1658	45.85359	119.67266	19.5	8.44	<6.5	<6.5	17.03	17.39	21.42	1.96	4.74	6.64	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1705	45.85361	119.67239	1	8.63	<6.5	<6.5	17.77	18.12	21.78	1.42	4.60	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1705	45.85361	119.67239	12.5	8.59	<6.5	<6.5	17.12	17.75	21.48	1.55	4.45	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/6/2005	1705	45.85361	119.67239	24	8.56	<6.5	<6.5	17.03	17.39	21.42	2.12	4.74	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/7/2005	912	45.85347	119.67043	1	8.75	NA	NA	16.75	NA	NA	2.47	NA	NA	7.78	NA	NA
TF-WCU	10/7/2005	912	45.85347	119.67043	6.5	8.79	NA	NA	16.65	NA	NA	1.56	NA	NA	7.82	NA	NA
TF-WCU	10/7/2005	912	45.85347	119.67043	12	8.79	NA	NA	16.64	NA	NA	1.82	NA	NA	7.89	NA	NA
TF-WCD1	10/7/2005	820	45.85352	119.67284	1	8.93	<6.5	<6.5	16.68	17.05	21.78	1.65	5.47	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/7/2005	820	45.85352	119.67284	8.5	8.79	<6.5	<6.5	16.69	16.95	21.48	1.73	4.56	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/7/2005	820	45.85352	119.67284	17.5	8.75	<6.5	<6.5	16.70	16.94	21.42	2.03	4.82	6.64	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/7/2005	835	45.85359	119.67266	1	8.80	<6.5	<6.5	16.72	17.05	21.78	1.45	5.47	6.33	7.78	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/7/2005	835	45.85359	119.67266	12	8.75	<6.5	<6.5	16.72	16.95	21.48	1.89	4.56	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/7/2005	835	45.85359	119.67266	24.5	8.76	<6.5	<6.5	16.71	16.94	21.42	1.94	4.82	6.64	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/7/2005	858	45.85361	119.67239	1	8.72	<6.5	<6.5	16.67	17.05	21.78	1.80	5.47	6.33	7.78	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/7/2005	858	45.85361	119.67239	12	8.75	<6.5	<6.5	16.65	16.95	21.48	1.75	4.56	6.58	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/7/2005	858	45.85361	119.67239	23.5	8.71	<6.5	<6.5	16.65	16.94	21.42	2.13	4.82	6.64	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/7/2005	1440	45.85347	119.67043	1	9.03	NA	NA	16.81	NA	NA	1.93	NA	NA	7.87	NA	NA
TF-WCU	10/7/2005	1440	45.85347	119.67043	6	9.02	NA	NA	16.81	NA	NA	1.89	NA	NA	7.90	NA	NA
TF-WCU	10/7/2005	1440	45.85347	119.67043	11	9.05	NA	NA	16.82	NA	NA	2.03	NA	NA	7.93	NA	NA
TF-WCD1	10/7/2005	1335	45.85352	119.67284	1	9.86	<6.5	<6.5	16.80	17.11	21.78	1.88	4.93	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/7/2005	1335	45.85352	119.67284	11	8.92	<6.5	<6.5	16.80	17.11	21.48	1.83	4.89	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/7/2005	1335	45.85352	119.67284	21	8.95	<6.5	<6.5	16.79	17.12	21.42	2.87	5.03	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/7/2005	1355	45.85359	119.67266	1	8.91	<6.5	<6.5	16.80	17.11	21.78	1.76	4.93	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/7/2005	1355	45.85359	119.67266	12.5	8.88	<6.5	<6.5	16.79	17.11	21.48	1.82	4.89	6.58	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/7/2005	1355	45.85359	119.67266	24.5	8.86	<6.5	<6.5	16.79	17.12	21.42	1.79	5.03	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD3	10/7/2005	1425	45.85361	119.67239	1	8.94	<6.5	<6.5	16.80	17.11	21.78	1.85	4.93	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/7/2005	1425	45.85361	119.67239	12.5	8.93	<6.5	<6.5	16.80	17.11	21.48	2.01	4.89	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/7/2005	1425	45.85361	119.67239	24	8.87	<6.5	<6.5	16.79	17.12	21.42	2.12	5.03	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/10/2005	918	45.85347	119.67043	1	8.83	NA	NA	16.58	NA	NA	1.64	NA	NA	7.83	NA	NA
TF-WCU	10/10/2005	918	45.85347	119.67043	7.5	8.85	NA	NA	16.52	NA	NA	1.73	NA	NA	7.96	NA	NA
TF-WCU	10/10/2005	918	45.85347	119.67043	14	8.97	NA	NA	16.36	NA	NA	1.74	NA	NA	8.03	NA	NA
TF-WCD1	10/10/2005	850	45.85352	119.67284	1	8.95	<6.5	<6.5	16.62	16.88	21.78	1.40	4.64	6.33	7.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/10/2005	850	45.85352	119.67284	9.5	8.82	<6.5	<6.5	16.54	16.82	21.48	1.86	4.73	6.58	7.62	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/10/2005	850	45.85352	119.67284	18	8.83	<6.5	<6.5	16.48	16.66	21.42	1.80	4.74	6.64	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	900	45.85359	119.67266	1	8.71	<6.5	<6.5	16.56	16.88	21.78	1.74	4.64	6.33	7.78	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	900	45.85359	119.67266	12.5	8.95	<6.5	<6.5	16.52	16.82	21.48	1.73	4.73	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	900	45.85359	119.67266	25	8.87	<6.5	<6.5	16.51	16.66	21.42	1.55	4.74	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	910	45.85361	119.67239	1	8.81	<6.5	<6.5	16.57	16.88	21.78	1.55	4.64	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	910	45.85361	119.67239	13	8.83	<6.5	<6.5	16.54	16.82	21.48	2.15	4.73	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	910	45.85361	119.67239	26.5	8.90	<6.5	<6.5	16.36	16.66	21.42	2.21	4.74	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/10/2005	1323	45.85347	119.67043	1	9.00	NA	NA	16.89	NA	NA	1.26	NA	NA	7.91	NA	NA
TF-WCU	10/10/2005	1323	45.85347	119.67043	7.5	8.85	NA	NA	16.83	NA	NA	1.47	NA	NA	7.99	NA	NA
TF-WCU	10/10/2005	1323	45.85347	119.67043	14	8.88	NA	NA	16.73	NA	NA	1.74	NA	NA	8.03	NA	NA
TF-WCD1	10/10/2005	1255	45.85352	119.67284	1	9.08	<6.5	<6.5	17.02	17.19	21.78	1.55	4.26	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/10/2005	1255	45.85352	119.67284	10	8.85	<6.5	<6.5	16.93	17.13	21.48	1.34	4.47	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/10/2005	1255	45.85352	119.67284	19	8.98	<6.5	<6.5	16.92	17.03	21.42	1.30	4.74	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	1305	45.85359	119.67266	1	9.02	<6.5	<6.5	17.07	18.84	21.78	1.20	4.26	6.33	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	1305	45.85359	119.67266	13	8.96	<6.5	<6.5	16.95	18.87	21.48	1.22	4.47	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	1305	45.85359	119.67266	25	8.93	<6.5	<6.5	16.92	18.85	21.42	1.24	4.74	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	1312	45.85361	119.67239	1	9.05	<6.5	<6.5	17.14	18.84	21.78	1.27	4.26	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	1312	45.85361	119.67239	13.5	9.03	<6.5	<6.5	16.93	18.87	21.48	1.32	4.47	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	1312	45.85361	119.67239	26	8.85	<6.5	<6.5	16.92	18.85	21.42	1.38	4.74	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/10/2005	1720	45.85347	119.67043	1	9.02	NA	NA	16.98	NA	NA	1.46	NA	NA	7.95	NA	NA
TF-WCU	10/10/2005	1720	45.85347	119.67043	7.5	8.81	NA	NA	16.98	NA	NA	1.42	NA	NA	8.02	NA	NA
TF-WCU	10/10/2005	1720	45.85347	119.67043	14	8.74	NA	NA	16.99	NA	NA	1.63	NA	NA	8.04	NA	NA
TF-WCD1	10/10/2005	1655	45.85352	119.67284	1	9.29	<6.5	<6.5	17.08	17.28	21.78	1.58	4.46	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/10/2005	1655	45.85352	119.67284	10	9.14	<6.5	<6.5	17.11	17.28	21.48	1.57	4.42	6.58	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/10/2005	1655	45.85352	119.67284	19.5	8.98	<6.5	<6.5	17.11	17.29	21.42	1.62	4.63	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	1705	45.85359	119.67266	1	9.15	<6.5	<6.5	17.06	17.28	21.78	1.51	4.46	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	1705	45.85359	119.67266	13	9.05	<6.5	<6.5	17.05	17.28	21.48	1.23	4.42	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/10/2005	1705	45.85359	119.67266	25	9.23	<6.5	<6.5	17.05	17.29	21.42	1.44	4.63	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	1713	45.85361	119.67239	1	9.18	<6.5	<6.5	17.03	17.28	21.78	1.54	4.46	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	1713	45.85361	119.67239	13.5	8.96	<6.5	<6.5	17.02	17.28	21.48	1.46	4.42	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/10/2005	1713	45.85361	119.67239	26	8.93	<6.5	<6.5	17.05	17.29	21.42	1.50	4.63	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/11/2005	840	45.85347	119.67043	1	9.04	NA	NA	16.59	NA	NA	2.00	NA	NA	7.86	NA	NA
TF-WCU	10/11/2005	840	45.85347	119.67043	7.5	9.04	NA	NA	16.61	NA	NA	2.32	NA	NA	7.94	NA	NA
TF-WCU	10/11/2005	840	45.85347	119.67043	14.5	9.01	NA	NA	16.62	NA	NA	2.22	NA	NA	7.96	NA	NA
TF-WCD1	10/11/2005	810	45.85352	119.67284	1	9.13	<6.5	<6.5	16.70	16.89	21.78	2.47	5.00	6.33	7.58	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/11/2005	810	45.85352	119.67284	11.5	9.15	<6.5	<6.5	16.71	16.91	21.48	2.01	5.32	6.58	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/11/2005	810	45.85352	119.67284	22	8.99	<6.5	<6.5	16.69	16.92	21.42	1.93	5.22	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	822	45.85359	119.67266	1	9.08	<6.5	<6.5	16.63	16.89	21.78	2.58	5.00	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	822	45.85359	119.67266	13	9.00	<6.5	<6.5	16.65	16.91	21.48	1.85	5.32	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	822	45.85359	119.67266	25	8.99	<6.5	<6.5	16.65	16.92	21.42	1.90	5.22	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	830	45.85361	119.67239	1	9.07	<6.5	<6.5	16.64	16.89	21.78	2.23	5.00	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	830	45.85361	119.67239	13.5	9.00	<6.5	<6.5	16.64	16.91	21.48	1.91	5.32	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	830	45.85361	119.67239	26	8.94	<6.5	<6.5	16.62	16.92	21.42	1.98	5.22	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCU	10/11/2005	1355	45.85347	119.67043	1	9.20	NA	NA	17.31	NA	NA	1.24	NA	NA	7.96	NA	NA
TF-WCU	10/11/2005	1355	45.85347	119.67043	7	8.99	NA	NA	17.21	NA	NA	1.47	NA	NA	8.04	NA	NA
TF-WCU	10/11/2005	1355	45.85347	119.67043	13	9.14	NA	NA	17.06	NA	NA	1.36	NA	NA	8.05	NA	NA
TF-WCD1	10/11/2005	1310	45.85352	119.67284	1	9.17	<6.5	<6.5	17.22	17.61	21.78	1.39	4.24	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/11/2005	1310	45.85352	119.67284	9.5	8.92	<6.5	<6.5	17.19	17.51	21.48	1.46	4.47	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/11/2005	1310	45.85352	119.67284	18	8.96	<6.5	<6.5	17.21	17.36	21.42	1.29	4.36	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	1321	45.85359	119.67266	1	9.18	<6.5	<6.5	17.24	17.61	21.78	1.34	4.24	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	1321	45.85359	119.67266	12.5	8.93	<6.5	<6.5	17.21	17.51	21.48	1.34	4.47	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	1321	45.85359	119.67266	24	8.79	<6.5	<6.5	17.24	17.36	21.42	1.30	4.36	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	1340	45.85361	119.67239	1	9.10	<6.5	<6.5	17.38	17.61	21.78	1.25	4.24	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	1340	45.85361	119.67239	13	8.89	<6.5	<6.5	17.15	17.51	21.48	1.42	4.47	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	1340	45.85361	119.67239	25	9.06	<6.5	<6.5	17.14	17.36	21.42	1.38	4.36	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/11/2005	1652	45.85347	119.67043	1	9.03	NA	NA	17.45	NA	NA	1.18	NA	NA	7.98	NA	NA
TF-WCU	10/11/2005	1652	45.85347	119.67043	6.5	9.08	NA	NA	17.40	NA	NA	1.37	NA	NA	8.02	NA	NA
TF-WCU	10/11/2005	1652	45.85347	119.67043	12.5	9.13	NA	NA	17.03	NA	NA	1.49	NA	NA	8.01	NA	NA
TF-WCD1	10/11/2005	1615	45.85352	119.67284	1	9.02	<6.5	<6.5	17.43	17.75	21.78	1.29	4.18	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/11/2005	1615	45.85352	119.67284	12	9.07	<6.5	<6.5	17.31	17.70	21.48	1.24	4.37	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/11/2005	1615	45.85352	119.67284	23	8.97	<6.5	<6.5	17.00	17.33	21.42	2.34	4.49	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	1633	45.85359	119.67266	1	9.04	<6.5	<6.5	17.44	17.75	21.78	1.47	4.18	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	1633	45.85359	119.67266	12.5	9.02	<6.5	<6.5	17.35	17.70	21.48	1.47	4.37	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/11/2005	1633	45.85359	119.67266	24	8.89	<6.5	<6.5	16.95	17.33	21.42	1.98	4.49	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	1640	45.85361	119.67239	1	9.14	<6.5	<6.5	17.45	17.75	21.78	1.98	4.18	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	1640	45.85361	119.67239	13.5	8.88	<6.5	<6.5	17.32	17.70	21.48	1.22	4.37	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/11/2005	1640	45.85361	119.67239	26	8.93	<6.5	<6.5	16.98	17.33	21.42	1.48	4.49	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/12/2005	906	45.85347	119.67043	1	8.51	NA	NA	16.71	NA	NA	1.92	NA	NA	7.84	NA	NA
TF-WCU	10/12/2005	906	45.85347	119.67043	6.5	8.75	NA	NA	16.70	NA	NA	1.63	NA	NA	7.95	NA	NA
TF-WCU	10/12/2005	906	45.85347	119.67043	12.5	8.85	NA	NA	16.70	NA	NA	1.84	NA	NA	7.92	NA	NA
TF-WCD1	10/12/2005	835	45.85352	119.67284	1	8.83	<6.5	<6.5	16.64	17.01	21.78	1.64	4.92	6.33	7.46	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/12/2005	835	45.85352	119.67284	9.5	8.76	<6.5	<6.5	16.62	17.00	21.48	2.03	4.63	6.58	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/12/2005	835	45.85352	119.67284	18	8.94	<6.5	<6.5	16.53	17.00	21.42	3.73	4.84	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/12/2005	842	45.85359	119.67266	1	8.62	<6.5	<6.5	16.67	17.01	21.78	1.95	4.92	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/12/2005	842	45.85359	119.67266	12.5	8.68	<6.5	<6.5	16.58	17.00	21.48	1.75	4.63	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/12/2005	842	45.85359	119.67266	24	8.82	<6.5	<6.5	16.48	17.00	21.42	1.55	4.84	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/12/2005	854	45.85361	119.67239	1	8.73	<6.5	<6.5	16.69	17.01	21.78	1.91	4.92	6.33	7.79	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/12/2005	854	45.85361	119.67239	13	8.79	<6.5	<6.5	16.71	17.00	21.48	1.86	4.63	6.58	7.79	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/12/2005	854	45.85361	119.67239	25	8.73	<6.5	<6.5	16.56	17.00	21.42	2.00	4.84	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/12/2005	1240	45.85347	119.67043	1	8.92	NA	NA	16.90	NA	NA	1.57	NA	NA	7.90	NA	NA
TF-WCU	10/12/2005	1240	45.85347	119.67043	7	8.76	NA	NA	16.83	NA	NA	1.62	NA	NA	7.98	NA	NA
TF-WCU	10/12/2005	1240	45.85347	119.67043	13	8.72	NA	NA	16.78	NA	NA	1.67	NA	NA	8.02	NA	NA
TF-WCD1	10/12/2005	1212	45.85352	119.67284	1	8.91	<6.5	<6.5	17.05	17.20	21.78	1.27	4.57	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/12/2005	1212	45.85352	119.67284	7.5	8.95	<6.5	<6.5	16.96	17.13	21.48	1.85	4.62	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/12/2005	1212	45.85352	119.67284	14	8.87	<6.5	<6.5	16.95	17.08	21.42	1.56	4.67	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/12/2005	1222	45.85359	119.67266	1	8.92	<6.5	<6.5	17.03	17.20	21.78	1.78	4.57	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/12/2005	1222	45.85359	119.67266	12.5	8.87	<6.5	<6.5	16.91	17.13	21.48	1.48	4.62	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/12/2005	1222	45.85359	119.67266	24	8.69	<6.5	<6.5	16.90	17.08	21.42	1.61	4.67	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/12/2005	1229	45.85361	119.67239	1	8.81	<6.5	<6.5	17.02	17.20	21.78	1.60	4.57	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/12/2005	1229	45.85361	119.67239	12.5	8.90	<6.5	<6.5	16.93	17.13	21.48	1.35	4.62	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/12/2005	1229	45.85361	119.67239	24.5	8.89	<6.5	<6.5	16.90	17.08	21.42	1.59	4.67	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/13/2005	1052	45.85347	119.67043	1	8.88	NA	NA	16.66	NA	NA	1.55	NA	NA	7.80	NA	NA
TF-WCU	10/13/2005	1052	45.85347	119.67043	7	8.86	NA	NA	16.65	NA	NA	1.61	NA	NA	7.85	NA	NA
TF-WCU	10/13/2005	1052	45.85347	119.67043	13	8.89	NA	NA	16.65	NA	NA	2.02	NA	NA	7.83	NA	NA

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD1	10/13/2005	1025	45.85352	119.67284	1	8.90	<6.5	<6.5	16.66	16.96	21.78	2.23	4.55	6.33	7.54	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/13/2005	1025	45.85352	119.67284	11	8.91	<6.5	<6.5	16.66	16.95	21.48	1.79	4.61	6.58	7.81	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/13/2005	1025	45.85352	119.67284	21	8.94	<6.5	<6.5	16.57	16.95	21.42	1.99	5.02	6.64	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/13/2005	1035	45.85359	119.67266	1	8.81	<6.5	<6.5	16.67	16.96	21.78	2.27	4.55	6.33	7.77	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/13/2005	1035	45.85359	119.67266	11.5	8.86	<6.5	<6.5	16.66	16.95	21.48	2.01	4.61	6.58	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/13/2005	1035	45.85359	119.67266	22.5	8.87	<6.5	<6.5	16.63	16.95	21.42		5.02	6.64	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/13/2005	1044	45.85361	119.67239	1	8.92	<6.5	<6.5	16.67	16.96	21.78	1.69	4.55	6.33	7.77	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/13/2005	1044	45.85361	119.67239	13	8.83	<6.5	<6.5	16.64	16.95	21.48	2.19	4.61	6.58	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/13/2005	1044	45.85361	119.67239	25	8.85	<6.5	<6.5	16.62	16.95	21.42	2.34	5.02	6.64	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/13/2005	1408	45.85347	119.67043	1	9.01	NA	NA	16.72	NA	NA	1.77	NA	NA	7.81	NA	NA
TF-WCU	10/13/2005	1408	45.85347	119.67043	7.5	8.96	NA	NA	16.72	NA	NA	1.80	NA	NA	7.88	NA	NA
TF-WCU	10/13/2005	1408	45.85347	119.67043	13	9.04	NA	NA	16.69	NA	NA	1.72	NA	NA	7.92	NA	NA
TF-WCD1	10/13/2005	1320	45.85352	119.67284	1	9.05	<6.5	<6.5	16.72	17.02	21.78	1.42	4.77	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/13/2005	1320	45.85352	119.67284	10.5	8.98	<6.5	<6.5	16.68	17.02	21.48	1.67	4.80	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/13/2005	1320	45.85352	119.67284	20.5	8.99	<6.5	<6.5	16.66	16.99	21.42	2.07	4.72	6.64	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/13/2005	1340	45.85359	119.67266	1	8.95	<6.5	<6.5	16.71	17.02	21.78	1.48	4.77	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/13/2005	1340	45.85359	119.67266	12.5	8.93	<6.5	<6.5	16.67	17.02	21.48	1.52	4.80	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/13/2005	1340	45.85359	119.67266	22.5	8.94	<6.5	<6.5	16.65	16.99	21.42	1.98	4.72	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/13/2005	1355	45.85361	119.67239	1	8.92	<6.5	<6.5	16.69	17.02	21.78	1.67	4.77	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/13/2005	1355	45.85361	119.67239	13.5	8.95	<6.5	<6.5	16.69	17.02	21.48	1.55	4.80	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/13/2005	1355	45.85361	119.67239	26	8.99	<6.5	<6.5	16.65	16.99	21.42	1.55	4.72	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/14/2005	945	45.85347	119.67043	1	8.76	NA	NA	16.40	NA	NA	1.58	NA	NA	7.79	NA	NA
TF-WCU	10/14/2005	945	45.85347	119.67043	7	8.72	NA	NA	16.40	NA	NA	1.70	NA	NA	7.91	NA	NA
TF-WCU	10/14/2005	945	45.85347	119.67043	13	8.72	NA	NA	16.40	NA	NA	1.51	NA	NA	7.93	NA	NA
TF-WCD1	10/14/2005	855	45.85352	119.67284	1	8.90	<6.5	<6.5	16.40	16.70	21.78	1.66	4.58	6.33	7.76	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/14/2005	855	45.85352	119.67284	9	8.74	<6.5	<6.5	16.37	16.70	21.48	1.63	4.70	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/14/2005	855	45.85352	119.67284	17	8.82	<6.5	<6.5	16.35	16.70	21.42	1.56	4.51	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	915	45.85359	119.67266	1	8.83	<6.5	<6.5	16.43	16.70	21.78	1.59	4.58	6.33	7.78	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	915	45.85359	119.67266	12	8.84	<6.5	<6.5	16.32	16.70	21.48	1.68	4.70	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	915	45.85359	119.67266	23.5	8.79	<6.5	<6.5	16.30	16.70	21.42	1.60	4.51	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	930	45.85361	119.67239	1	8.73	<6.5	<6.5	16.40	16.70	21.78	1.86	4.58	6.33	7.78	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	930	45.85361	119.67239	13	8.74	<6.5	<6.5	16.30	16.70	21.48	1.49	4.70	6.58	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	930	45.85361	119.67239	25	8.76	<6.5	<6.5	16.27	16.70	21.42	1.74	4.51	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/14/2005	1218	45.85347	119.67043	1	8.78	NA	NA	16.64	NA	NA	1.50	NA	NA	7.87	NA	NA
TF-WCU	10/14/2005	1218	45.85347	119.67043	7	8.73	NA	NA	16.54	NA	NA	1.70	NA	NA	7.97	NA	NA
TF-WCU	10/14/2005	1218	45.85347	119.67043	13	8.68	NA	NA	16.48	NA	NA	1.35	NA	NA	8.00	NA	NA
TF-WCD1	10/14/2005	1155	45.85352	119.67284	1	8.89	<6.5	<6.5	16.69	16.94	21.78	1.95	4.50	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/14/2005	1155	45.85352	119.67284	7.5	8.95	<6.5	<6.5	16.64	16.84	21.48	1.79	4.70	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/14/2005	1155	45.85352	119.67284	14	8.91	<6.5	<6.5	16.64	16.78	21.42	1.51	4.35	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	1203	45.85359	119.67266	1	8.97	<6.5	<6.5	16.74	16.94	21.78	1.42	4.50	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	1203	45.85359	119.67266	12.5	8.87	<6.5	<6.5	16.58	16.84	21.48	1.48	4.70	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	1203	45.85359	119.67266	24	8.65	<6.5	<6.5	16.57	16.78	21.42	1.72	4.35	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	1208	45.85361	119.67239	1	9.00	<6.5	<6.5	16.67	16.94	21.78	1.34	4.50	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	1208	45.85361	119.67239	12.5	8.92	<6.5	<6.5	16.59	16.84	21.48	1.47	4.70	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	1208	45.85361	119.67239	24.5	8.79	<6.5	<6.5	16.56	16.78	21.42	1.55	4.35	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/14/2005	1450	45.85347	119.67043	1	9.04	NA	NA	16.90	NA	NA	1.79	NA	NA	7.87	NA	NA
TF-WCU	10/14/2005	1450	45.85347	119.67043	7	8.92	NA	NA	16.84	NA	NA	1.67	NA	NA	7.98	NA	NA
TF-WCU	10/14/2005	1450	45.85347	119.67043	13	9.14	NA	NA	16.75	NA	NA	1.24	NA	NA	8.00	NA	NA
TF-WCD1	10/14/2005	1425	45.85352	119.67284	1	8.94	<6.5	<6.5	16.99	17.20	21.78	1.81	4.79	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/14/2005	1425	45.85352	119.67284	7.5	9.03	<6.5	<6.5	16.97	17.14	21.48	1.47	4.67	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/14/2005	1425	45.85352	119.67284	13.5	9.06	<6.5	<6.5	16.94	17.05	21.42	1.34	4.24	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD2	10/14/2005	1431	45.85359	119.67266	1	9.06	<6.5	<6.5	17.10	17.20	21.78	1.29	4.79	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	1431	45.85359	119.67266	12.5	9.01	<6.5	<6.5	16.95	17.14	21.48	1.26	4.67	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/14/2005	1431	45.85359	119.67266	24.5	NC	<6.5	<6.5		17.05	21.42		4.24	6.64		<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	1430	45.85361	119.67239	1	9.00	<6.5	<6.5	16.85	17.20	21.78	1.75	4.79	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	1430	45.85361	119.67239	12.5	9.08	<6.5	<6.5	16.84	17.14	21.48	1.46	4.67	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/14/2005	1430	45.85361	119.67239	24.5	9.07	<6.5	<6.5	16.87	17.05	21.42	1.51	4.24	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/17/2005	1305	45.85347	119.67043	1	9.38	NA	NA	16.24	NA	NA	1.95	NA	NA	7.90	NA	NA
TF-WCU	10/17/2005	1305	45.85347	119.67043	7	9.33	NA	NA	16.18	NA	NA	2.25	NA	NA	7.91	NA	NA
TF-WCU	10/17/2005	1305	45.85347	119.67043	13	9.31	NA	NA	16.18	NA	NA	1.78	NA	NA	7.92	NA	NA
TF-WCD1	10/17/2005	1220	45.85352	119.67284	1	9.41	<6.5	<6.5	16.21	16.54	21.78	2.40	4.95	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/17/2005	1220	45.85352	119.67284	12.5	9.32	<6.5	<6.5	16.18	16.48	21.48	2.18	5.25	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/17/2005	1220	45.85352	119.67284	24	9.28	<6.5	<6.5	16.11	16.48	21.42	1.25	4.78	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/17/2005	1240	45.85359	119.67266	1	9.32	<6.5	<6.5	16.20	16.54	21.78	1.66	4.95	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/17/2005	1240	45.85359	119.67266	13	9.27	<6.5	<6.5	16.16	16.48	21.48	2.34	5.25	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/17/2005	1240	45.85359	119.67266	25	9.29	<6.5	<6.5	16.09	16.48	21.42	2.01	4.78	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/17/2005	1250	45.85361	119.67239	1	9.40	<6.5	<6.5	16.23	16.54	21.78	1.53	4.95	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/17/2005	1250	45.85361	119.67239	14	9.33	<6.5	<6.5	16.20	16.48	21.48	1.78	5.25	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/17/2005	1250	45.85361	119.67239	27	9.28	<6.5	<6.5	16.15	16.48	21.42	1.84	4.78	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/17/2005	1640	45.85347	119.67043	1	9.48	NA	NA	16.30	NA	NA	1.69	NA	NA	7.90	NA	NA
TF-WCU	10/17/2005	1640	45.85347	119.67043	6	9.37	NA	NA	16.28	NA	NA	1.81	NA	NA	7.97	NA	NA
TF-WCU	10/17/2005	1640	45.85347	119.67043	11	9.36	NA	NA	16.29	NA	NA	1.74	NA	NA	7.96	NA	NA
TF-WCD1	10/17/2005	1610	45.85352	119.67284	1	9.43	<6.5	<6.5	16.29	16.60	21.78	2.65	4.69	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/17/2005	1610	45.85352	119.67284	13	9.39	<6.5	<6.5	16.29	16.58	21.48	1.57	4.81	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/17/2005	1610	45.85352	119.67284	25	9.35	<6.5	<6.5	16.28	16.59	21.42	1.61	4.74	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/17/2005	1624	45.85359	119.67266	1	9.38	<6.5	<6.5	16.28	16.60	21.78	1.60	4.69	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/17/2005	1624	45.85359	119.67266	13	9.35	<6.5	<6.5	16.27	16.58	21.48	2.10	4.81	6.58	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/17/2005	1624	45.85359	119.67266	25.5	9.33	<6.5	<6.5	16.28	16.59	21.42	1.61	4.74	6.64	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/17/2005	1630	45.85361	119.67239	1	9.29	<6.5	<6.5	16.28	16.60	21.78	1.88	4.69	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/17/2005	1630	45.85361	119.67239	13.5	9.30	<6.5	<6.5	16.27	16.58	21.48	1.92	4.81	6.58	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/17/2005	1630	45.85361	119.67239	26.5	9.27	<6.5	<6.5	16.26	16.59	21.42	1.48	4.74	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/18/2005	900	45.85347	119.67043	1	9.08	NA	NA	16.08	NA	NA	1.63	NA	NA	7.84	NA	NA
TF-WCU	10/18/2005	900	45.85347	119.67043	7	9.11	NA	NA	16.07	NA	NA	1.69	NA	NA	7.89	NA	NA
TF-WCU	10/18/2005	900	45.85347	119.67043	13	9.04	NA	NA	16.09	NA	NA	1.72	NA	NA	7.88	NA	NA
TF-WCD1	10/18/2005	820	45.85352	119.67284	1	9.01	<6.5	<6.5	16.04	16.38	21.78	2.16	4.63	6.33	7.69	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/18/2005	820	45.85352	119.67284	12	9.05	<6.5	<6.5	15.99	16.37	21.48	1.67	4.69	6.58	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/18/2005	820	45.85352	119.67284	23	8.87	<6.5	<6.5	15.97	16.39	21.42	2.10	4.72	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	840	45.85359	119.67266	1	8.99	<6.5	<6.5	16.08	16.38	21.78	2.21	4.63	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	840	45.85359	119.67266	13	9.01	<6.5	<6.5	16.04	16.37	21.48	1.82	4.69	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	840	45.85359	119.67266	25	9.04	<6.5	<6.5	16.02	16.39	21.42	1.56	4.72	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	850	45.85361	119.67239	1	9.08	<6.5	<6.5	16.10	16.38	21.78	1.90	4.63	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	850	45.85361	119.67239	13	9.02	<6.5	<6.5	16.06	16.37	21.48	1.79	4.69	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	850	45.85361	119.67239	25	9.07	<6.5	<6.5	15.95	16.39	21.42	2.16	4.72	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/18/2005	1328	45.85347	119.67043	1	9.53	NA	NA	16.39	NA	NA	1.38	NA	NA	7.96	NA	NA
TF-WCU	10/18/2005	1328	45.85347	119.67043	6	9.50	NA	NA	16.35	NA	NA	1.24	NA	NA	7.95	NA	NA
TF-WCU	10/18/2005	1328	45.85347	119.67043	11.5	9.46	NA	NA	16.28	NA	NA	1.87	NA	NA	7.98	NA	NA
TF-WCD1	10/18/2005	1300	45.85352	119.67284	1	9.40	<6.5	<6.5	16.56	16.69	21.78	1.51	4.38	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/18/2005	1300	45.85352	119.67284	9.5	9.37	<6.5	<6.5	16.47	16.65	21.48	1.42	4.24	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/18/2005	1300	45.85352	119.67284	18	9.34	<6.5	<6.5	16.43	16.58	21.42	1.09	4.87	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	1310	45.85359	119.67266	1	9.35	<6.5	<6.5	16.53	16.69	21.78	1.35	4.38	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	1310	45.85359	119.67266	13	9.36	<6.5	<6.5	16.45	16.65	21.48	1.10	4.24	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	1310	45.85359	119.67266	25	9.32	<6.5	<6.5	16.41	16.58	21.42	1.57	4.87	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD3	10/18/2005	1318	45.85361	119.67239	1	9.40	<6.5	<6.5	16.57	16.69	21.78	1.16	4.38	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	1318	45.85361	119.67239	13.5	9.37	<6.5	<6.5	16.42	16.65	21.48	1.19	4.24	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	1318	45.85361	119.67239	26	9.37	<6.5	<6.5	16.39	16.58	21.42	1.36	4.87	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/18/2005	1655	45.85347	119.67043	1	9.35	NA	NA	16.57	NA	NA	1.24	NA	NA	7.98	NA	NA
TF-WCU	10/18/2005	1655	45.85347	119.67043	6	9.05	NA	NA	16.55	NA	NA	1.33	NA	NA	8.02	NA	NA
TF-WCU	10/18/2005	1655	45.85347	119.67043	11	9.11	NA	NA	16.46	NA	NA	1.47	NA	NA	8.03	NA	NA
TF-WCD1	10/18/2005	1615	45.85352	119.67284	1	9.41	<6.5	<6.5	16.59	16.87	21.78	1.31	4.24	6.33	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/18/2005	1615	45.85352	119.67284	11.5	9.23	<6.5	<6.5	16.53	16.85	21.48	1.46	4.33	6.58	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/18/2005	1615	45.85352	119.67284	22.5	8.32	<6.5	<6.5	16.47	16.76	21.42	1.43	4.47	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	1630	45.85359	119.67266	1	9.28	<6.5	<6.5	16.60	16.87	21.78	1.20	4.24	6.33	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	1630	45.85359	119.67266	12.5	9.16	<6.5	<6.5	16.47	16.85	21.48	1.50	4.33	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/18/2005	1630	45.85359	119.67266	24.5	9.15	<6.5	<6.5	16.37	16.76	21.42	1.53	4.47	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	1645	45.85361	119.67239	1	9.30	<6.5	<6.5	16.57	16.87	21.78	1.34	4.24	6.33	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	1645	45.85361	119.67239	13.5	9.22	<6.5	<6.5	16.53	16.85	21.48	1.50	4.33	6.58	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/18/2005	1645	45.85361	119.67239	26	8.94	<6.5	<6.5	16.27	16.76	21.42	1.81	4.47	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/19/2005	905	45.85347	119.67043	1	9.15	NA	NA	16.22	NA	NA	1.76	NA	NA	7.86	NA	NA
TF-WCU	10/19/2005	905	45.85347	119.67043	6	9.11	NA	NA	16.25	NA	NA	1.39	NA	NA	7.89	NA	NA
TF-WCU	10/19/2005	905	45.85347	119.67043	11	9.23	NA	NA	16.20	NA	NA	1.52	NA	NA	7.93	NA	NA
TF-WCD1	10/19/2005	830	45.85352	119.67284	1	9.23	<6.5	<6.5	16.22	16.52	21.78	1.74	4.76	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/19/2005	830	45.85352	119.67284	12.5	9.20	<6.5	<6.5	16.24	16.55	21.48	1.80	4.39	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/19/2005	830	45.85352	119.67284	24	9.24	<6.5	<6.5	16.24	16.50	21.42	2.13	4.52	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	841	45.85359	119.67266	1	9.24	<6.5	<6.5	16.22	16.52	21.78	1.79	4.76	6.33	7.68	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	841	45.85359	119.67266	12	9.25	<6.5	<6.5	16.23	16.55	21.48	1.44	4.39	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	841	45.85359	119.67266	23	9.23	<6.5	<6.5	16.23	16.50	21.42	1.52	4.52	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	850	45.85361	119.67239	1	9.11	<6.5	<6.5	16.23	16.52	21.78	1.67	4.76	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	850	45.85361	119.67239	12.5	9.27	<6.5	<6.5	16.21	16.55	21.48	1.38	4.39	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	850	45.85361	119.67239	24.5	9.28	<6.5	<6.5	16.20	16.50	21.42	1.52	4.52	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/19/2005	1305	45.85347	119.67043	1	9.37	NA	NA	16.42	NA	NA	1.52	NA	NA	7.92	NA	NA
TF-WCU	10/19/2005	1305	45.85347	119.67043	6	9.39	NA	NA	16.40	NA	NA	1.58	NA	NA	7.95	NA	NA
TF-WCU	10/19/2005	1305	45.85347	119.67043	11	9.34	NA	NA	16.39	NA	NA	1.65	NA	NA	7.98	NA	NA
TF-WCD1	10/19/2005	1215	45.85352	119.67284	1	9.22	<6.5	<6.5	16.44	16.72	21.78	1.75	4.52	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/19/2005	1215	45.85352	119.67284	12.5	9.19	<6.5	<6.5	16.39	16.70	21.48	1.71	4.58	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/19/2005	1215	45.85352	119.67284	24.5	8.21	<6.5	<6.5	16.37	16.69	21.42	1.44	4.65	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	1232	45.85359	119.67266	1	9.26	<6.5	<6.5	16.42	16.72	21.78	1.63	4.52	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	1232	45.85359	119.67266	13.5	9.25	<6.5	<6.5	16.38	16.70	21.48	1.72	4.58	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	1232	45.85359	119.67266	26	9.24	<6.5	<6.5	16.37	16.69	21.42	1.40	4.65	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	1246	45.85361	119.67239	1	9.38	<6.5	<6.5	16.44	16.72	21.78	1.46	4.52	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	1246	45.85361	119.67239	14	9.26	<6.5	<6.5	16.38	16.70	21.48	1.51	4.58	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	1246	45.85361	119.67239	27	9.25	<6.5	<6.5	16.37	16.69	21.42	1.51	4.65	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/19/2005	1755	45.85347	119.67043	1	9.39	NA	NA	16.46	NA	NA	1.99	NA	NA	7.94	NA	NA
TF-WCU	10/19/2005	1755	45.85347	119.67043	6	9.37	NA	NA	16.47	NA	NA	1.92	NA	NA	7.94	NA	NA
TF-WCU	10/19/2005	1755	45.85347	119.67043	11	9.34	NA	NA	16.48	NA	NA	2.09	NA	NA	7.94	NA	NA
TF-WCD1	10/19/2005	1720	45.85352	119.67284	1	9.41	<6.5	<6.5	16.44	16.76	21.78	1.78	4.99	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/19/2005	1720	45.85352	119.67284	12.5	9.34	<6.5	<6.5	16.45	16.77	21.48	1.93	4.92	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/19/2005	1720	45.85352	119.67284	24	9.28	<6.5	<6.5	16.45	16.78	21.42	1.74	5.09	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	1733	45.85359	119.67266	1	9.35	<6.5	<6.5	16.43	16.76	21.78	1.67	4.99	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	1733	45.85359	119.67266	13	9.29	<6.5	<6.5	16.44	16.77	21.48	1.79	4.92	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/19/2005	1733	45.85359	119.67266	25.5	9.34	<6.5	<6.5	16.46	16.78	21.42	1.86	5.09	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	1743	45.85361	119.67239	1	9.39	<6.5	<6.5	16.45	16.76	21.78	1.90	4.99	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	1743	45.85361	119.67239	14	9.31	<6.5	<6.5	16.45	16.77	21.48	1.97	4.92	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/19/2005	1743	45.85361	119.67239	27	9.28	<6.5	<6.5	16.46	16.78	21.42	1.80	5.09	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCU	10/20/2005	914	45.85347	119.67043	1	9.18	NA	NA	16.14	NA	NA	1.46	NA	NA	7.78	NA	NA
TF-WCU	10/20/2005	914	45.85347	119.67043	6	9.15	NA	NA	16.14	NA	NA	1.45	NA	NA	7.86	NA	NA
TF-WCU	10/20/2005	914	45.85347	119.67043	11	9.14	NA	NA	16.15	NA	NA	1.68	NA	NA	7.86	NA	NA
TF-WCD1	10/20/2005	835	45.85352	119.67284	1	9.16	<6.5	<6.5	16.14	16.44	21.78	1.79	4.46	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/20/2005	835	45.85352	119.67284	13	9.15	<6.5	<6.5	16.14	16.44	21.48	1.61	4.45	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/20/2005	835	45.85352	119.67284	25	9.10	<6.5	<6.5	16.13	16.45	21.42	1.65	4.68	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	849	45.85359	119.67266	1	9.20	<6.5	<6.5	16.13	16.44	21.78	1.52	4.46	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	849	45.85359	119.67266	13	9.10	<6.5	<6.5	16.11	16.44	21.48	1.56	4.45	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	849	45.85359	119.67266	25	8.96	<6.5	<6.5	16.00	16.45	21.42	1.36	4.68	6.64	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	904	45.85361	119.67239	1	9.21	<6.5	<6.5	16.13	16.44	21.78	1.38	4.46	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	904	45.85361	119.67239	13	9.12	<6.5	<6.5	16.10	16.44	21.48	1.58	4.45	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	904	45.85361	119.67239	25.5	9.01	<6.5	<6.5	15.94	16.45	21.42	1.95	4.68	6.64	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/20/2005	1405	45.85347	119.67043	1	9.54	NA	NA	16.28	NA	NA	1.64	NA	NA	7.96	NA	NA
TF-WCU	10/20/2005	1405	45.85347	119.67043	6	9.53	NA	NA	16.27	NA	NA	1.33	NA	NA	7.98	NA	NA
TF-WCU	10/20/2005	1405	45.85347	119.67043	11	9.50	NA	NA	16.25	NA	NA	1.61	NA	NA	8.03	NA	NA
TF-WCD1	10/20/2005	1325	45.85352	119.67284	1	9.34	<6.5	<6.5	16.27	16.58	21.78	1.34	4.64	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/20/2005	1325	45.85352	119.67284	13	9.03	<6.5	<6.5	16.23	16.57	21.48	1.21	4.33	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/20/2005	1325	45.85352	119.67284	25	9.32	<6.5	<6.5	16.22	16.55	21.42	1.36	4.61	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	1339	45.85359	119.67266	1	9.37	<6.5	<6.5	16.27	16.58	21.78	1.32	4.64	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	1339	45.85359	119.67266	14	9.30	<6.5	<6.5	16.25	16.57	21.48	1.32	4.33	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	1339	45.85359	119.67266	27	9.33	<6.5	<6.5	16.23	16.55	21.42	1.73	4.61	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	1349	45.85361	119.67239	1	9.34	<6.5	<6.5	16.28	16.58	21.78	1.26	4.64	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	1349	45.85361	119.67239	13.5	9.37	<6.5	<6.5	16.25	16.57	21.48	1.37	4.33	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	1349	45.85361	119.67239	26.5	9.34	<6.5	<6.5	16.24	16.55	21.42	1.50	4.61	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/20/2005	1710	45.85347	119.67043	1	9.47	NA	NA	16.26	NA	NA	1.68	NA	NA	NC	NA	NA
TF-WCU	10/20/2005	1710	45.85347	119.67043	6	9.39	NA	NA	16.31	NA	NA	1.40	NA	NA	NC	NA	NA
TF-WCU	10/20/2005	1710	45.85347	119.67043	11	9.41	NA	NA	16.21	NA	NA	1.56	NA	NA	NC	NA	NA
TF-WCD1	10/20/2005	1635	45.85352	119.67284	1	9.04	<6.5	<6.5	16.38	16.56	21.78	1.79	4.68	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/20/2005	1635	45.85352	119.67284	13.5	9.02	<6.5	<6.5	16.31	16.61	21.48	1.50	4.40	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/20/2005	1635	45.85352	119.67284	25.5	8.89	<6.5	<6.5	16.26	16.51	21.42	1.66	4.56	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	1647	45.85359	119.67266	1	9.36	<6.5	<6.5	16.31	16.56	21.78	1.92	4.68	6.33	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	1647	45.85359	119.67266	13	9.19	<6.5	<6.5	16.26	16.61	21.48	1.38	4.40	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/20/2005	1647	45.85359	119.67266	25	9.21	<6.5	<6.5	16.22	16.51	21.42	1.71	4.56	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	1658	45.85361	119.67239	1	9.41	<6.5	<6.5	16.31	16.56	21.78	1.83	4.68	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	1658	45.85361	119.67239	14	9.36	<6.5	<6.5	16.26	16.61	21.48	1.72	4.40	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/20/2005	1658	45.85361	119.67239	27	9.33	<6.5	<6.5	16.25	16.51	21.42	1.63	4.56	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/25/2005	921	45.85347	119.67043	1	9.07	NA	NA	15.85	NA	NA	1.76	NA	NA	7.86	NA	NA
TF-WCU	10/25/2005	921	45.85347	119.67043	7	9.15	NA	NA	15.85	NA	NA	1.50	NA	NA	7.96	NA	NA
TF-WCU	10/25/2005	921	45.85347	119.67043	13	9.11	NA	NA	15.86	NA	NA	1.51	NA	NA	7.98	NA	NA
TF-WCD1	10/25/2005	855	45.85352	119.67284	1	9.18	<6.5	<6.5	15.84	16.15	21.78	2.31	4.76	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/25/2005	855	45.85352	119.67284	9	9.09	<6.5	<6.5	15.80	16.15	21.48	1.46	4.50	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/25/2005	855	45.85352	119.67284	17	9.13	<6.5	<6.5	15.73	16.16	21.42	1.71	4.51	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	902	45.85359	119.67266	1	9.16	<6.5	<6.5	15.84	16.15	21.78	1.59	4.76	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	902	45.85359	119.67266	13	9.09	<6.5	<6.5	15.76	16.15	21.48	1.75	4.50	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	902	45.85359	119.67266	25	9.12	<6.5	<6.5	15.72	16.16	21.42	1.44	4.51	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	912	45.85361	119.67239	1	9.12	<6.5	<6.5	15.88	16.15	21.78	1.58	4.76	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	912	45.85361	119.67239	13.5	9.03	<6.5	<6.5	15.87	16.15	21.48	1.50	4.50	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	912	45.85361	119.67239	26	9.06	<6.5	<6.5	15.68	16.16	21.42	1.86	4.51	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/25/2005	1315	45.85347	119.67043	1	9.16	NA	NA	15.85	NA	NA	1.21	NA	NA	7.95	NA	NA
TF-WCU	10/25/2005	1315	45.85347	119.67043	7	8.98	NA	NA	15.84	NA	NA	1.39	NA	NA	7.99	NA	NA
TF-WCU	10/25/2005	1315	45.85347	119.67043	13	9.06	NA	NA	15.77	NA	NA	1.34	NA	NA	8.03	NA	NA

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD1	10/25/2005	1255	45.85352	119.67284	1	9.11	<6.5	<6.5	15.94	16.15	21.78	1.62	4.21	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/25/2005	1255	45.85352	119.67284	8.5	9.19	<6.5	<6.5	15.93	16.14	21.48	1.40	4.39	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/25/2005	1255	45.85352	119.67284	16.5	9.12	<6.5	<6.5	15.90	16.07	21.42	1.38	4.34	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	1301	45.85359	119.67266	1	9.06	<6.5	<6.5	15.97	16.15	21.78	1.49	4.21	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	1301	45.85359	119.67266	13	9.12	<6.5	<6.5	15.93	16.14	21.48	1.42	4.39	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	1301	45.85359	119.67266	25	9.04	<6.5	<6.5	15.92	16.07	21.42	1.26	4.34	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	1308	45.85361	119.67239	1	9.24	<6.5	<6.5	15.99	16.15	21.78	1.26	4.21	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	1308	45.85361	119.67239	13.5	8.95	<6.5	<6.5	15.90	16.14	21.48	1.30	4.39	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	1308	45.85361	119.67239	26.5	8.99	<6.5	<6.5	15.90	16.07	21.42	1.88	4.34	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/25/2005	1729	45.85347	119.67043	1	9.24	NA	NA	15.98	NA	NA	1.38	NA	NA	8.00	NA	NA
TF-WCU	10/25/2005	1729	45.85347	119.67043	7	8.98	NA	NA	15.96	NA	NA	1.42	NA	NA	8.04	NA	NA
TF-WCU	10/25/2005	1729	45.85347	119.67043	13	9.08	NA	NA	15.95	NA	NA	1.39	NA	NA	8.01	NA	NA
TF-WCD1	10/25/2005	1702	45.85352	119.67284	1	9.25	<6.5	<6.5	16.01	16.28	21.78	2.12	4.38	6.33	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/25/2005	1702	45.85352	119.67284	10	8.98	<6.5	<6.5	16.00	16.26	21.48	1.33	4.42	6.58	8.09	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/25/2005	1702	45.85352	119.67284	19	9.16	<6.5	<6.5	15.99	16.25	21.42	1.61	4.39	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	1710	45.85359	119.67266	1	9.12	<6.5	<6.5	15.98	16.28	21.78	1.39	4.38	6.33	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	1710	45.85359	119.67266	13	9.01	<6.5	<6.5	15.97	16.26	21.48	1.52	4.42	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/25/2005	1710	45.85359	119.67266	25	9.04	<6.5	<6.5	15.98	16.25	21.42	1.63	4.39	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	1718	45.85361	119.67239	1	9.05	<6.5	<6.5	15.96	16.28	21.78	1.45	4.38	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	1718	45.85361	119.67239	13.5	9.20	<6.5	<6.5	15.95	16.26	21.48	1.61	4.42	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/25/2005	1718	45.85361	119.67239	26	9.18	<6.5	<6.5	15.96	16.25	21.42	1.66	4.39	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/26/2005	915	45.85347	119.67043	1	9.23	NA	NA	15.50	NA	NA	1.81	NA	NA	7.87	NA	NA
TF-WCU	10/26/2005	915	45.85347	119.67043	5.5	9.12	NA	NA	15.52	NA	NA	1.91	NA	NA	7.88	NA	NA
TF-WCU	10/26/2005	915	45.85347	119.67043	10.5	9.13	NA	NA	15.54	NA	NA	1.81	NA	NA	7.93	NA	NA
TF-WCD1	10/26/2005	845	45.85352	119.67284	1	9.13	<6.5	<6.5	15.53	15.80	21.78	2.29	4.81	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/26/2005	845	45.85352	119.67284	13	9.20	<6.5	<6.5	15.57	15.82	21.48	2.25	4.91	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/26/2005	845	45.85352	119.67284	25	9.16	<6.5	<6.5	15.58	15.84	21.42	1.81	4.81	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	856	45.85359	119.67266	1	9.21	<6.5	<6.5	15.55	15.80	21.78	1.82	4.81	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	856	45.85359	119.67266	13	9.12	<6.5	<6.5	15.54	15.82	21.48	1.61	4.91	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	856	45.85359	119.67266	25	9.18	<6.5	<6.5	15.55	15.84	21.42	1.98	4.81	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	905	45.85361	119.67239	1	9.19	<6.5	<6.5	15.51	15.80	21.78	1.77	4.81	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	905	45.85361	119.67239	12	9.15	<6.5	<6.5	15.57	15.82	21.48	1.80	4.91	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	905	45.85361	119.67239	23.5	9.16	<6.5	<6.5	15.56	15.84	21.42	1.54	4.81	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/26/2005	1305	45.85347	119.67043	1	9.36	NA	NA	15.56	NA	NA	2.07	NA	NA	7.93	NA	NA
TF-WCU	10/26/2005	1305	45.85347	119.67043	6	9.34	NA	NA	15.55	NA	NA	1.52	NA	NA	7.95	NA	NA
TF-WCU	10/26/2005	1305	45.85347	119.67043	11	9.32	NA	NA	15.55	NA	NA	1.38	NA	NA	7.97	NA	NA
TF-WCD1	10/26/2005	1240	45.85352	119.67284	1	9.32	<6.5	<6.5	15.56	15.86	21.78	2.24	5.07	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/26/2005	1240	45.85352	119.67284	13	9.27	<6.5	<6.5	15.57	15.85	21.48	1.88	4.52	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/26/2005	1240	45.85352	119.67284	25	9.25	<6.5	<6.5	15.58	15.85	21.42	1.76	4.38	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	1248	45.85359	119.67266	1	9.29	<6.5	<6.5	15.63	15.86	21.78	1.85	5.07	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	1248	45.85359	119.67266	13.5	9.30	<6.5	<6.5	15.60	15.85	21.48	1.40	4.52	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	1248	45.85359	119.67266	26	9.30	<6.5	<6.5	15.55	15.85	21.42	1.85	4.38	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	1258	45.85361	119.67239	1	9.39	<6.5	<6.5	15.52	15.86	21.78	1.80	5.07	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	1258	45.85361	119.67239	12.5	9.35	<6.5	<6.5	15.54	15.85	21.48	1.70	4.52	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	1258	45.85361	119.67239	24.5	9.34	<6.5	<6.5	15.52	15.85	21.42	1.71	4.38	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/26/2005	1700	45.85347	119.67043	1	9.44	NA	NA	15.51	NA	NA	1.81	NA	NA	8.00	NA	NA
TF-WCU	10/26/2005	1700	45.85347	119.67043	6	9.48	NA	NA	15.52	NA	NA	1.77	NA	NA	7.99	NA	NA
TF-WCU	10/26/2005	1700	45.85347	119.67043	11	9.41	NA	NA	15.53	NA	NA	2.10	NA	NA	8.03	NA	NA
TF-WCD1	10/26/2005	1635	45.85352	119.67284	1	9.37	<6.5	<6.5	15.55	15.81	21.78	2.07	4.81	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/26/2005	1635	45.85352	119.67284	13	9.33	<6.5	<6.5	15.57	15.82	21.48	1.96	4.77	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/26/2005	1635	45.85352	119.67284	25	9.36	<6.5	<6.5	15.58	15.83	21.42	2.04	5.10	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD2	10/26/2005	1645	45.85359	119.67266	1	9.42	<6.5	<6.5	15.55	15.81	21.78	1.68	4.81	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	1645	45.85359	119.67266	13	9.38	<6.5	<6.5	15.56	15.82	21.48	1.92	4.77	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/26/2005	1645	45.85359	119.67266	25	9.33	<6.5	<6.5	15.57	15.83	21.42	1.56	5.10	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	1653	45.85361	119.67239	1	9.32	<6.5	<6.5	15.55	15.81	21.78	1.63	4.81	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	1653	45.85361	119.67239	13.5	9.33	<6.5	<6.5	15.56	15.82	21.48	1.76	4.77	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/26/2005	1653	45.85361	119.67239	26	9.35	<6.5	<6.5	15.56	15.83	21.42	1.70	5.10	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/27/2005	920	45.85347	119.67043	1	9.69	NA	NA	15.06	NA	NA	1.34	NA	NA	7.85	NA	NA
TF-WCU	10/27/2005	920	45.85347	119.67043	7	9.65	NA	NA	14.96	NA	NA	1.19	NA	NA	7.92	NA	NA
TF-WCU	10/27/2005	920	45.85347	119.67043	13	9.64	NA	NA	14.98	NA	NA	1.10	NA	NA	7.95	NA	NA
TF-WCD1	10/27/2005	850	45.85352	119.67284	1	9.48	<6.5	<6.5	15.18	15.36	21.78	2.09	4.34	6.33	7.72	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/27/2005	850	45.85352	119.67284	10	9.45	<6.5	<6.5	15.23	15.26	21.48	1.70	4.19	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/27/2005	850	45.85352	119.67284	19	9.53	<6.5	<6.5	15.22	15.28	21.42	1.66	4.10	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	900	45.85359	119.67266	1	9.57	<6.5	<6.5	15.23	15.36	21.78	1.57	4.34	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	900	45.85359	119.67266	13	9.59	<6.5	<6.5	15.17	15.26	21.48	1.37	4.19	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	900	45.85359	119.67266	25	9.44	<6.5	<6.5	15.10	15.28	21.42	1.27	4.10	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	910	45.85361	119.67239	1	9.60	<6.5	<6.5	15.23	15.36	21.78	1.88	4.34	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	910	45.85361	119.67239	13	9.56	<6.5	<6.5	15.22	15.26	21.48	1.75	4.19	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	910	45.85361	119.67239	25	9.54	<6.5	<6.5	15.13	15.28	21.42	1.35	4.10	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/27/2005	1305	45.85347	119.67043	1	9.79	NA	NA	15.47	NA	NA	0.94	NA	NA	7.93	NA	NA
TF-WCU	10/27/2005	1305	45.85347	119.67043	7	9.51	NA	NA	15.21	NA	NA	1.33	NA	NA	7.98	NA	NA
TF-WCU	10/27/2005	1305	45.85347	119.67043	13	9.46	NA	NA	15.17	NA	NA	1.00	NA	NA	8.03	NA	NA
TF-WCD1	10/27/2005	1240	45.85352	119.67284	1	9.48	<6.5	<6.5	15.47	15.77	21.78	1.41	3.94	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/27/2005	1240	45.85352	119.67284	9.5	9.30	<6.5	<6.5	15.37	15.51	21.48	1.32	4.33	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/27/2005	1240	45.85352	119.67284	18	9.54	<6.5	<6.5	15.36	15.47	21.42	1.28	4.00	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	1247	45.85359	119.67266	1	9.54	<6.5	<6.5	15.37	15.77	21.78	1.15	3.94	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	1247	45.85359	119.67266	13	9.58	<6.5	<6.5	15.35	15.51	21.48	1.10	4.33	6.58	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	1247	45.85359	119.67266	25	9.42	<6.5	<6.5	15.30	15.47	21.42	1.28	4.00	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	1255	45.85361	119.67239	1	9.58	<6.5	<6.5	15.41	15.77	21.78	1.32	3.94	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	1255	45.85361	119.67239	13.5	9.50	<6.5	<6.5	15.31	15.51	21.48	1.14	4.33	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	1255	45.85361	119.67239	26	9.57	<6.5	<6.5	15.30	15.47	21.42	1.01	4.00	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/27/2005	1635	45.85347	119.67043	1	9.62	NA	NA	15.51	NA	NA	1.37	NA	NA	7.91	NA	NA
TF-WCU	10/27/2005	1635	45.85347	119.67043	7	9.76	NA	NA	15.51	NA	NA	1.39	NA	NA	7.96	NA	NA
TF-WCU	10/27/2005	1635	45.85347	119.67043	13	9.66	NA	NA	15.51	NA	NA	0.93	NA	NA	7.99	NA	NA
TF-WCD1	10/27/2005	1610	45.85352	119.67284	1	9.54	<6.5	<6.5	15.54	15.81	21.78	1.47	4.37	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/27/2005	1610	45.85352	119.67284	9	9.56	<6.5	<6.5	15.55	15.81	21.48	1.90	4.39	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/27/2005	1610	45.85352	119.67284	17	9.67	<6.5	<6.5	15.55	15.81	21.42	1.26	3.93	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	1620	45.85359	119.67266	1	9.62	<6.5	<6.5	15.56	15.81	21.78	1.23	4.37	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	1620	45.85359	119.67266	13	9.56	<6.5	<6.5	15.54	15.81	21.48	1.15	4.39	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/27/2005	1620	45.85359	119.67266	25	9.66	<6.5	<6.5	15.55	15.81	21.42	1.17	3.93	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	1628	45.85361	119.67239	1	9.67	<6.5	<6.5	15.51	15.81	21.78	0.94	4.37	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	1628	45.85361	119.67239	13.5	9.61	<6.5	<6.5	15.54	15.81	21.48	1.12	4.39	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/27/2005	1628	45.85361	119.67239	26	9.49	<6.5	<6.5	15.54	15.81	21.42	1.41	3.93	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/28/2005	1435	45.85347	119.67043	1	9.83	NA	NA	15.26	NA	NA	1.42	NA	NA	7.91	NA	NA
TF-WCU	10/28/2005	1435	45.85347	119.67043	7	9.86	NA	NA	15.19	NA	NA	1.30	NA	NA	8.00	NA	NA
TF-WCU	10/28/2005	1435	45.85347	119.67043	13	10.02	NA	NA	15.08	NA	NA	1.51	NA	NA	8.05	NA	NA
TF-WCD1	10/28/2005	1348	45.85352	119.67284	1	9.59	<6.5	<6.5	15.31	15.56	21.78	1.56	4.42	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/28/2005	1348	45.85352	119.67284	10.5	9.60	<6.5	<6.5	15.29	15.49	21.48	1.78	4.30	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/28/2005	1348	45.85352	119.67284	20	9.65	<6.5	<6.5	15.27	15.38	21.42	1.86	4.51	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/28/2005	1405	45.85359	119.67266	1	9.73	<6.5	<6.5	15.32	15.56	21.78	1.21	4.42	6.33	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/28/2005	1405	45.85359	119.67266	13	9.66	<6.5	<6.5	15.25	15.49	21.48	1.42	4.30	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/28/2005	1405	45.85359	119.67266	25	9.68	<6.5	<6.5	15.23	15.38	21.42	1.41	4.51	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD3	10/28/2005	1422	45.85361	119.67239	1	9.64	<6.5	<6.5	15.28	15.56	21.78	1.52	4.42	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/28/2005	1422	45.85361	119.67239	12	9.69	<6.5	<6.5	15.24	15.49	21.48	1.39	4.30	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/28/2005	1422	45.85361	119.67239	23.5	9.67	<6.5	<6.5	15.23	15.38	21.42	1.70	4.51	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/28/2005	1724	45.85347	119.67043	1	9.83	NA	NA	15.21	NA	NA	1.86	NA	NA	7.82	NA	NA
TF-WCU	10/28/2005	1724	45.85347	119.67043	7	9.80	NA	NA	15.23	NA	NA	1.63	NA	NA	7.93	NA	NA
TF-WCU	10/28/2005	1724	45.85347	119.67043	13	9.80	NA	NA	15.23	NA	NA	1.91	NA	NA	7.94	NA	NA
TF-WCD1	10/28/2005	1718	45.85352	119.67284	1	9.77	<6.5	<6.5	15.23	15.51	21.78	1.45	4.86	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/28/2005	1718	45.85352	119.67284	10	9.75	<6.5	<6.5	15.23	15.53	21.48	1.52	4.63	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/28/2005	1718	45.85352	119.67284	19	9.73	<6.5	<6.5	15.22	15.53	21.42	1.83	4.91	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/28/2005	1708	45.85359	119.67266	1	9.85	<6.5	<6.5	15.22	15.51	21.78	1.55	4.86	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/28/2005	1708	45.85359	119.67266	12.5	9.87	<6.5	<6.5	15.23	15.53	21.48	1.93	4.63	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/28/2005	1708	45.85359	119.67266	24	9.83	<6.5	<6.5	15.23	15.53	21.42	1.85	4.91	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/28/2005	1700	45.85361	119.67239	1	9.85	<6.5	<6.5	15.21	15.51	21.78	1.93	4.86	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/28/2005	1700	45.85361	119.67239	13	9.80	<6.5	<6.5	15.23	15.53	21.48	2.21	4.63	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/28/2005	1700	45.85361	119.67239	25	9.79	<6.5	<6.5	15.24	15.53	21.42	1.50	4.91	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/29/2005	1045	45.85347	119.67043	1	9.53	NA	NA	14.82	NA	NA	1.95	NA	NA	7.88	NA	NA
TF-WCU	10/29/2005	1045	45.85347	119.67043	7	9.67	NA	NA	14.79	NA	NA	1.60	NA	NA	7.96	NA	NA
TF-WCU	10/29/2005	1045	45.85347	119.67043	13	9.73	NA	NA	14.70	NA	NA	1.37	NA	NA	7.98	NA	NA
TF-WCD1	10/29/2005	1015	45.85352	119.67284	1	9.62	<6.5	<6.5	14.86	15.12	21.78	2.91	4.95	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/29/2005	1015	45.85352	119.67284	11	9.64	<6.5	<6.5	14.82	15.09	21.48	1.80	4.60	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/29/2005	1015	45.85352	119.67284	23	9.64	<6.5	<6.5	14.78	15.00	21.42	2.09	4.37	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/29/2005	1030	45.85359	119.67266	1	9.57	<6.5	<6.5	14.89	15.12	21.78	2.23	4.95	6.33	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/29/2005	1030	45.85359	119.67266	13	9.60	<6.5	<6.5	14.80	15.09	21.48	2.12	4.60	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/29/2005	1030	45.85359	119.67266	26	9.41	<6.5	<6.5	14.70	15.00	21.42	2.03	4.37	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/29/2005	1033	45.85361	119.67239	1	9.50	<6.5	<6.5	14.79	15.12	21.78	2.14	4.95	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/29/2005	1033	45.85361	119.67239	13	9.66	<6.5	<6.5	14.83	15.09	21.48	2.05	4.60	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/29/2005	1033	45.85361	119.67239	25	9.63	<6.5	<6.5	14.76	15.00	21.42	1.95	4.37	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/29/2005	1603	45.85347	119.67043	1	9.52	NA	NA	14.88	NA	NA	1.90	NA	NA	7.81	NA	NA
TF-WCU	10/29/2005	1603	45.85347	119.67043	7	9.55	NA	NA	14.83	NA	NA	1.64	NA	NA	7.84	NA	NA
TF-WCU	10/29/2005	1603	45.85347	119.67043	13	9.59	NA	NA	14.80	NA	NA	1.73	NA	NA	7.88	NA	NA
TF-WCD1	10/29/2005	1500	45.85352	119.67284	1	9.56	<6.5	<6.5	14.81	15.18	21.78	2.21	4.90	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/29/2005	1500	45.85352	119.67284	11	9.54	<6.5	<6.5	14.81	15.13	21.48	1.94	4.64	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/29/2005	1500	45.85352	119.67284	22	9.55	<6.5	<6.5	14.79	15.10	21.42	1.88	4.73	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/29/2005	1515	45.85359	119.67266	1	9.51	<6.5	<6.5	14.91	15.18	21.78	2.13	4.90	6.33	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/29/2005	1515	45.85359	119.67266	13	9.53	<6.5	<6.5	14.83	15.13	21.48	2.07	4.64	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/29/2005	1515	45.85359	119.67266	25	9.56	<6.5	<6.5	14.80	15.10	21.42	2.02	4.73	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/29/2005	1540	45.85361	119.67239	1	9.59	<6.5	<6.5	14.86	15.18	21.78	1.91	4.90	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/29/2005	1540	45.85361	119.67239	13	9.64	<6.5	<6.5	14.82	15.13	21.48	1.79	4.64	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/29/2005	1540	45.85361	119.67239	26	9.66	<6.5	<6.5	14.80	15.10	21.42	1.58	4.73	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	10/30/2005	958	45.85347	119.67043	1	9.60	NA	NA	14.56	NA	NA	1.71	NA	NA	7.89	NA	NA
TF-WCU	10/30/2005	958	45.85347	119.67043	7	9.51	NA	NA	14.56	NA	NA	1.49	NA	NA	7.97	NA	NA
TF-WCU	10/30/2005	958	45.85347	119.67043	13	9.59	NA	NA	14.52	NA	NA	2.64	NA	NA	8.00	NA	NA
TF-WCD1	10/30/2005	900	45.85352	119.67284	1	9.59	<6.5	<6.5	14.61	14.86	21.78	1.83	4.71	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/30/2005	900	45.85352	119.67284	12	9.53	<6.5	<6.5	14.60	14.86	21.48	1.96	4.49	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/30/2005	900	45.85352	119.67284	23	9.63	<6.5	<6.5	14.60	14.82	21.42	1.81	5.64	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/30/2005	933	45.85359	119.67266	1	9.64	<6.5	<6.5	14.58	14.86	21.78	1.51	4.71	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/30/2005	933	45.85359	119.67266	13	9.75	<6.5	<6.5	14.58	14.86	21.48	1.15	4.49	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/30/2005	933	45.85359	119.67266	24	9.68	<6.5	<6.5	14.57	14.82	21.42	1.65	5.64	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/30/2005	945	45.85361	119.67239	1	9.86	<6.5	<6.5	14.53	14.86	21.78	1.46	4.71	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/30/2005	945	45.85361	119.67239	13	9.45	<6.5	<6.5	14.57	14.86	21.48	1.55	4.49	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/30/2005	945	45.85361	119.67239	26	9.65	<6.5	<6.5	14.56	14.82	21.42	1.66	5.64	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCU	10/30/2005	1445	45.85347	119.67043	1	9.87	NA	NA	14.87	NA	NA	1.41	NA	NA	7.96	NA	NA
TF-WCU	10/30/2005	1445	45.85347	119.67043	6	9.92	NA	NA	14.88	NA	NA	1.39	NA	NA	7.99	NA	NA
TF-WCU	10/30/2005	1445	45.85347	119.67043	13	9.84	NA	NA	14.84	NA	NA	1.14	NA	NA	8.06	NA	NA
TF-WCD1	10/30/2005	1400	45.85352	119.67284	1	9.85	<6.5	<6.5	15.10	15.17	21.78	1.70	4.41	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/30/2005	1400	45.85352	119.67284	7	9.76	<6.5	<6.5	15.00	15.18	21.48	1.18	4.39	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	10/30/2005	1400	45.85352	119.67284	15	9.83	<6.5	<6.5	15.00	15.14	21.42	1.22	4.14	6.64	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/30/2005	1415	45.85359	119.67266	1	9.80	<6.5	<6.5	14.98	15.17	21.78	1.34	4.41	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/30/2005	1415	45.85359	119.67266	13	9.88	<6.5	<6.5	14.98	15.18	21.48	1.39	4.39	6.58	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	10/30/2005	1415	45.85359	119.67266	26	9.94	<6.5	<6.5	14.98	15.14	21.42	1.10	4.14	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/30/2005	1430	45.85361	119.67239	1	9.87	<6.5	<6.5	14.98	15.17	21.78	0.92	4.41	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/30/2005	1430	45.85361	119.67239	13	9.96	<6.5	<6.5	14.96	15.18	21.48	1.04	4.39	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	10/30/2005	1430	45.85361	119.67239	26	9.93	<6.5	<6.5	14.95	15.14	21.42	1.10	4.14	6.64	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/2/2005	1155	45.85347	119.67043	1	9.49	NA	NA	14.03	NA	NA	1.45	NA	NA	7.84	NA	NA
TF-WCU	11/2/2005	1155	45.85347	119.67043	7	9.45	NA	NA	14.04	NA	NA	1.64	NA	NA	7.86	NA	NA
TF-WCU	11/2/2005	1155	45.85347	119.67043	13	9.47	NA	NA	14.05	NA	NA	1.55	NA	NA	7.90	NA	NA
TF-WCD1	11/2/2005	1130	45.85352	119.67284	1	9.83	<6.5	<6.5	14.13	14.33	21.78	1.88	4.45	6.33	7.74	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/2/2005	1130	45.85352	119.67284	7.5	9.37	<6.5	<6.5	14.11	14.34	21.48	1.34	4.64	6.58	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/2/2005	1130	45.85352	119.67284	14	9.46	<6.5	<6.5	14.11	14.35	21.42	1.50	4.55	6.64	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/2/2005	1138	45.85359	119.67266	1	9.32	<6.5	<6.5	14.16	14.33	21.78	1.60	4.45	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/2/2005	1138	45.85359	119.67266	13	9.30	<6.5	<6.5	14.12	14.34	21.48	1.75	4.64	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/2/2005	1138	45.85359	119.67266	25	9.22	<6.5	<6.5	14.11	14.35	21.42	1.55	4.55	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/2/2005	1146	45.85361	119.67239	1	9.38	<6.5	<6.5	14.16	14.33	21.78	1.41	4.45	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/2/2005	1146	45.85361	119.67239	13.5	9.30	<6.5	<6.5	14.12	14.34	21.48	1.37	4.64	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/2/2005	1146	45.85361	119.67239	26	9.32	<6.5	<6.5	14.12	14.35	21.42	1.09	4.55	6.64	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/2/2005	1558	45.85347	119.67043	1	9.20	NA	NA	14.19	NA	NA	1.85	NA	NA	7.84	NA	NA
TF-WCU	11/2/2005	1558	45.85347	119.67043	5.5	9.32	NA	NA	14.17	NA	NA	1.16	NA	NA	7.87	NA	NA
TF-WCU	11/2/2005	1558	45.85347	119.67043	10.5	9.26	NA	NA	14.18	NA	NA	1.36	NA	NA	7.92	NA	NA
TF-WCD1	11/2/2005	1530	45.85352	119.67284	1	9.17	<6.5	<6.5	14.17	14.49	21.78	1.88	4.85	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/2/2005	1530	45.85352	119.67284	9	9.04	<6.5	<6.5	14.19	14.47	21.48	1.77	4.16	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/2/2005	1530	45.85352	119.67284	17	9.19	<6.5	<6.5	14.20	14.48	21.42	1.39	4.36	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/2/2005	1540	45.85359	119.67266	1	9.18	<6.5	<6.5	14.17	14.49	21.78	1.61	4.85	6.33	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/2/2005	1540	45.85359	119.67266	12.5	9.21	<6.5	<6.5	14.19	14.47	21.48	1.72	4.16	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/2/2005	1540	45.85359	119.67266	24.5	9.19	<6.5	<6.5	14.20	14.48	21.42	1.51	4.36	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/2/2005	1547	45.85361	119.67239	1	9.22	<6.5	<6.5	14.18	14.49	21.78	1.38	4.85	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/2/2005	1547	45.85361	119.67239	13	9.26	<6.5	<6.5	14.19	14.47	21.48	1.22	4.16	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/2/2005	1547	45.85361	119.67239	25.5	9.14	<6.5	<6.5	14.20	14.48	21.42	1.48	4.36	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/3/2005	827	45.85347	119.67043	1	9.34	NA	NA	13.80	NA	NA	1.38	NA	NA	7.89	NA	NA
TF-WCU	11/3/2005	827	45.85347	119.67043	7	9.31	NA	NA	13.82	NA	NA	1.90	NA	NA	7.90	NA	NA
TF-WCU	11/3/2005	827	45.85347	119.67043	13.5	9.30	NA	NA	13.67	NA	NA	1.54	NA	NA	7.97	NA	NA
TF-WCD1	11/3/2005	803	45.85352	119.67284	1	9.31	<6.5	<6.5	13.80	14.10	21.78	1.68	4.38	6.33	7.73	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/3/2005	803	45.85352	119.67284	7	9.23	<6.5	<6.5	13.83	14.12	21.48	1.42	4.90	6.58	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/3/2005	803	45.85352	119.67284	13	9.27	<6.5	<6.5	13.83	13.97	21.42	1.58	4.54	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	813	45.85359	119.67266	1	9.37	<6.5	<6.5	13.85	14.10	21.78	1.86	4.38	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	813	45.85359	119.67266	13	9.28	<6.5	<6.5	13.86	14.12	21.48	1.45	4.90	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	813	45.85359	119.67266	25	9.31	<6.5	<6.5	13.82	13.97	21.42	1.95	4.54	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	820	45.85361	119.67239	1	9.39	<6.5	<6.5	13.89	14.10	21.78	1.27	4.38	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	820	45.85361	119.67239	13	9.36	<6.5	<6.5	13.83	14.12	21.48	1.44	4.90	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	820	45.85361	119.67239	25.5	9.34	<6.5	<6.5	13.82	13.97	21.42	1.59	4.54	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/3/2005	1211	45.85347	119.67043	1	9.25	NA	NA	13.78	NA	NA	1.40	NA	NA	7.86	NA	NA
TF-WCU	11/3/2005	1211	45.85347	119.67043	7	9.35	NA	NA	13.72	NA	NA	1.14	NA	NA	7.90	NA	NA
TF-WCU	11/3/2005	1211	45.85347	119.67043	13.5	9.33	NA	NA	13.53	NA	NA	1.26	NA	NA	7.94	NA	NA

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD1	11/3/2005	1149	45.85352	119.67284	1	9.31	<6.5	<6.5	13.88	14.08	21.78	1.98	4.40	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/3/2005	1149	45.85352	119.67284	5.5	9.29	<6.5	<6.5	13.89	14.02	21.48	1.54	4.14	6.58	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/3/2005	1149	45.85352	119.67284	10.5	9.26	<6.5	<6.5	13.89	13.83	21.42	1.30	4.26	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	1158	45.85359	119.67266	1	9.26	<6.5	<6.5	13.87	14.08	21.78	1.53	4.40	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	1158	45.85359	119.67266	12.5	9.30	<6.5	<6.5	13.88	14.02	21.48	1.32	4.14	6.58	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	1158	45.85359	119.67266	24	9.33	<6.5	<6.5	13.88	13.83	21.42	1.40	4.26	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	1203	45.85361	119.67239	1	9.32	<6.5	<6.5	13.89	14.08	21.78	1.39	4.40	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	1203	45.85361	119.67239	13	9.30	<6.5	<6.5	13.87	14.02	21.48	1.39	4.14	6.58	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	1203	45.85361	119.67239	25	9.29	<6.5	<6.5	13.87	13.83	21.42	1.20	4.26	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/3/2005	1527	45.85347	119.67043	1	9.32	NA	NA	13.88	NA	NA	1.88	NA	NA	7.88	NA	NA
TF-WCU	11/3/2005	1527	45.85347	119.67043	6	9.38	NA	NA	13.89	NA	NA	1.78	NA	NA	7.92	NA	NA
TF-WCU	11/3/2005	1527	45.85347	119.67043	11	9.42	NA	NA	13.81	NA	NA	1.86	NA	NA	7.98	NA	NA
TF-WCD1	11/3/2005	1503	45.85352	119.67284	1	9.42	<6.5	<6.5	13.84	14.18	21.78	1.73	4.88	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/3/2005	1503	45.85352	119.67284	12.5	9.39	<6.5	<6.5	13.85	14.19	21.48	1.31	4.78	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/3/2005	1503	45.85352	119.67284	24.5	9.36	<6.5	<6.5	13.80	14.11	21.42	1.46	4.86	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	1512	45.85359	119.67266	1	9.40	<6.5	<6.5	13.85	14.18	21.78	1.42	4.88	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	1512	45.85359	119.67266	13	9.38	<6.5	<6.5	13.86	14.19	21.48	1.52	4.78	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/3/2005	1512	45.85359	119.67266	25.5	9.41	<6.5	<6.5	13.81	14.11	21.42	1.51	4.86	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	1518	45.85361	119.67239	1	9.46	<6.5	<6.5	13.86	14.18	21.78	1.40	4.88	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	1518	45.85361	119.67239	13.5	9.40	<6.5	<6.5	13.87	14.19	21.48	1.53	4.78	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/3/2005	1518	45.85361	119.67239	26	9.42	<6.5	<6.5	13.85	14.11	21.42	1.57	4.86	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/4/2005	809	45.85347	119.67043	1	9.70	NA	NA	13.17	NA	NA	1.96	NA	NA	7.10	NA	NA
TF-WCU	11/4/2005	809	45.85347	119.67043	6	9.73	NA	NA	13.16	NA	NA	1.83	NA	NA	7.23	NA	NA
TF-WCU	11/4/2005	809	45.85347	119.67043	11	9.67	NA	NA	13.14	NA	NA	1.66	NA	NA	7.28	NA	NA
TF-WCD1	11/4/2005	745	45.85352	119.67284	1	9.65	<6.5	<6.5	13.34	13.47	21.78	2.25	4.96	6.33	7.37	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/4/2005	745	45.85352	119.67284	10.5	9.67	<6.5	<6.5	13.33	13.46	21.48	2.00	4.83	6.58	7.32	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/4/2005	745	45.85352	119.67284	20.5	9.67	<6.5	<6.5	13.33	13.44	21.42	1.58	4.66	6.64	7.34	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/4/2005	752	45.85359	119.67266	1	9.63	<6.5	<6.5	13.32	13.47	21.78	1.83	4.96	6.33	7.16	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/4/2005	752	45.85359	119.67266	13	9.65	<6.5	<6.5	13.37	13.46	21.48	2.49	4.83	6.58	7.26	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/4/2005	752	45.85359	119.67266	25	9.66	<6.5	<6.5	13.36	13.44	21.42	2.53	4.66	6.64	7.25	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/4/2005	800	45.85361	119.67239	1	9.53	<6.5	<6.5	13.33	13.47	21.78	2.13	4.96	6.33	7.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/4/2005	800	45.85361	119.67239	13.5	9.61	<6.5	<6.5	13.35	13.46	21.48	1.75	4.83	6.58	7.19	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/4/2005	800	45.85361	119.67239	26	9.65	<6.5	<6.5	13.34	13.44	21.42	1.76	4.66	6.64	7.20	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/4/2005	1148	45.85347	119.67043	1	9.90	NA	NA	13.41	NA	NA	1.83	NA	NA	7.82	NA	NA
TF-WCU	11/4/2005	1148	45.85347	119.67043	6	9.81	NA	NA	13.37	NA	NA	1.29	NA	NA	7.87	NA	NA
TF-WCU	11/4/2005	1148	45.85347	119.67043	11	9.78	NA	NA	13.37	NA	NA	1.75	NA	NA	7.92	NA	NA
TF-WCD1	11/4/2005	1124	45.85352	119.67284	1	9.58	<6.5	<6.5	13.41	13.71	21.78	1.74	4.83	6.33	7.76	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/4/2005	1124	45.85352	119.67284	12	9.68	<6.5	<6.5	13.39	13.67	21.48	1.77	4.29	6.58	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/4/2005	1124	45.85352	119.67284	23	9.67	<6.5	<6.5	13.39	13.67	21.42	1.57	4.75	6.64	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/4/2005	1130	45.85359	119.67266	1	9.89	<6.5	<6.5	13.42	13.71	21.78	1.87	4.83	6.33	7.79	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/4/2005	1130	45.85359	119.67266	13	9.76	<6.5	<6.5	13.40	13.67	21.48	1.60	4.29	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/4/2005	1130	45.85359	119.67266	25	9.79	<6.5	<6.5	13.39	13.67	21.42	1.72	4.75	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/4/2005	1138	45.85361	119.67239	1	9.87	<6.5	<6.5	13.42	13.71	21.78	1.26	4.83	6.33	7.80	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/4/2005	1138	45.85361	119.67239	13.5	9.81	<6.5	<6.5	13.39	13.67	21.48	1.52	4.29	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/4/2005	1138	45.85361	119.67239	26	9.79	<6.5	<6.5	13.39	13.67	21.42	1.70	4.75	6.64	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/7/2005	1249	45.85347	119.67043	1	9.72	NA	NA	12.55	NA	NA	1.64	NA	NA	7.83	NA	NA
TF-WCU	11/7/2005	1249	45.85347	119.67043	7	9.68	NA	NA	12.57	NA	NA	1.63	NA	NA	7.88	NA	NA
TF-WCU	11/7/2005	1249	45.85347	119.67043	13.5	9.70	NA	NA	12.57	NA	NA	1.69	NA	NA	7.93	NA	NA
TF-WCD1	11/7/2005	1220	45.85352	119.67284	1	9.68	<6.5	<6.5	12.56	12.85	21.78	2.20	4.64	6.33	7.76	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/7/2005	1220	45.85352	119.67284	13	9.67	<6.5	<6.5	12.57	12.87	21.48	1.63	4.63	6.58	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/7/2005	1220	45.85352	119.67284	25	9.61	<6.5	<6.5	12.58	12.87	21.42	1.71	4.69	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD2	11/7/2005	1232	45.85359	119.67266	1	9.63	<6.5	<6.5	12.55	12.85	21.78	1.36	4.64	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/7/2005	1232	45.85359	119.67266	12.5	9.62	<6.5	<6.5	12.56	12.87	21.48	1.57	4.63	6.58	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/7/2005	1232	45.85359	119.67266	24.5	9.57	<6.5	<6.5	12.57	12.87	21.42	1.23	4.69	6.64	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/7/2005	1240	45.85361	119.67239	1	9.66	<6.5	<6.5	12.55	12.85	21.78	1.19	4.64	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/7/2005	1240	45.85361	119.67239	13.5	9.58	<6.5	<6.5	12.56	12.87	21.48	1.29	4.63	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/7/2005	1240	45.85361	119.67239	26	9.62	<6.5	<6.5	12.56	12.87	21.42	1.75	4.69	6.64	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/7/2005	1650	45.85347	119.67043	1	9.71	NA	NA	12.59	NA	NA	1.44	NA	NA	7.80	NA	NA
TF-WCU	11/7/2005	1650	45.85347	119.67043	7	9.67	NA	NA	12.61	NA	NA	1.66	NA	NA	7.86	NA	NA
TF-WCU	11/7/2005	1650	45.85347	119.67043	13	9.65	NA	NA	12.61	NA	NA	2.08	NA	NA	7.86	NA	NA
TF-WCD1	11/7/2005	1630	45.85352	119.67284	1	9.68	<6.5	<6.5	12.66	12.89	21.78	1.99	4.44	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/7/2005	1630	45.85352	119.67284	13	9.74	<6.5	<6.5	12.60	12.91	21.48	1.84	4.66	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/7/2005	1630	45.85352	119.67284	25	9.72	<6.5	<6.5	12.58	12.91	21.42	1.92	5.08	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/7/2005	1636	45.85359	119.67266	1	9.61	<6.5	<6.5	12.61	12.89	21.78	1.90	4.44	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/7/2005	1636	45.85359	119.67266	12.5	9.66	<6.5	<6.5	12.59	12.91	21.48	1.87	4.66	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/7/2005	1636	45.85359	119.67266	24.5	9.72	<6.5	<6.5	12.57	12.91	21.42	1.70	5.08	6.64	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/7/2005	1642	45.85361	119.67239	1	9.67	<6.5	<6.5	12.63	12.89	21.78	1.94	4.44	6.33	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/7/2005	1642	45.85361	119.67239	13	9.60	<6.5	<6.5	12.62	12.91	21.48	2.39	4.66	6.58	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/7/2005	1642	45.85361	119.67239	25	9.70	<6.5	<6.5	12.56	12.91	21.42	NC	5.08	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/8/2005	838	45.85347	119.67043	1	9.03	NA	NA	12.18	NA	NA	2.74	NA	NA	7.83	NA	NA
TF-WCU	11/8/2005	838	45.85347	119.67043	7.5	9.02	NA	NA	12.19	NA	NA	1.39	NA	NA	7.88	NA	NA
TF-WCU	11/8/2005	838	45.85347	119.67043	14.5	9.03	NA	NA	12.17	NA	NA	1.55	NA	NA	7.92	NA	NA
TF-WCD1	11/8/2005	810	45.85352	119.67284	1	9.09	<6.5	<6.5	12.18	12.48	21.78	1.88	5.74	6.33	7.82	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/8/2005	810	45.85352	119.67284	10.5	9.04	<6.5	<6.5	12.13	12.49	21.48	1.58	4.39	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/8/2005	810	45.85352	119.67284	20	9.05	<6.5	<6.5	12.13	12.47	21.42	2.44	4.55	6.64	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	809	45.85359	119.67266	1	9.04	<6.5	<6.5	12.23	12.48	21.78	2.47	5.74	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	809	45.85359	119.67266	12.5	9.01	<6.5	<6.5	12.19	12.49	21.48	1.30	4.39	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	809	45.85359	119.67266	24	9.03	<6.5	<6.5	12.10	12.47	21.42	1.52	4.55	6.64	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	827	45.85361	119.67239	1	9.00	<6.5	<6.5	12.20	12.48	21.78	1.49	5.74	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	827	45.85361	119.67239	13	9.01	<6.5	<6.5	12.12	12.49	21.48	1.18	4.39	6.58	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	827	45.85361	119.67239	25	9.01	<6.5	<6.5	12.10	12.47	21.42	1.42	4.55	6.64	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/8/2005	1200	45.85347	119.67043	1	8.84	NA	NA	12.11	NA	NA	1.40	NA	NA	7.89	NA	NA
TF-WCU	11/8/2005	1200	45.85347	119.67043	6.5	8.93	NA	NA	12.15	NA	NA	1.43	NA	NA	7.86	NA	NA
TF-WCU	11/8/2005	1200	45.85347	119.67043	12	9.09	NA	NA	12.13	NA	NA	1.55	NA	NA	8.05	NA	NA
TF-WCD1	11/8/2005	1134	45.85352	119.67284	1	9.03	<6.5	<6.5	12.22	12.41	21.78	1.53	4.40	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/8/2005	1134	45.85352	119.67284	11	9.01	<6.5	<6.5	12.22	12.45	21.48	1.04	4.43	6.58	8.03	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/8/2005	1134	45.85352	119.67284	21	9.00	<6.5	<6.5	12.23	12.43	21.42	1.25	4.55	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	1141	45.85359	119.67266	1	9.03	<6.5	<6.5	12.26	12.41	21.78	1.17	4.40	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	1141	45.85359	119.67266	12.5	8.99	<6.5	<6.5	12.22	12.45	21.48	1.48	4.43	6.58	8.05	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	1141	45.85359	119.67266	24	9.01	<6.5	<6.5	12.21	12.43	21.42	1.15	4.55	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	1148	45.85361	119.67239	1	9.02	<6.5	<6.5	12.25	12.41	21.78	1.23	4.40	6.33	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	1148	45.85361	119.67239	13	8.98	<6.5	<6.5	12.22	12.45	21.48	1.44	4.43	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	1148	45.85361	119.67239	25.5	8.99	<6.5	<6.5	12.20	12.43	21.42	1.44	4.55	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/8/2005	1608	45.85347	119.67043	1	9.93	NA	NA	12.22	NA	NA	1.34	NA	NA	7.93	NA	NA
TF-WCU	11/8/2005	1608	45.85347	119.67043	8	9.96	NA	NA	12.25	NA	NA	1.51	NA	NA	8.04	NA	NA
TF-WCU	11/8/2005	1608	45.85347	119.67043	15	9.94	NA	NA	12.26	NA	NA	1.38	NA	NA	8.07	NA	NA
TF-WCD1	11/8/2005	1544	45.85352	119.67284	1	9.75	<6.5	<6.5	12.23	12.52	21.78	1.52	4.34	6.33	7.91	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/8/2005	1544	45.85352	119.67284	10.5	9.85	<6.5	<6.5	12.26	12.55	21.48	1.85	4.51	6.58	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/8/2005	1544	45.85352	119.67284	20	9.66	<6.5	<6.5	12.27	12.56	21.42	2.00	4.38	6.64	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	1552	45.85359	119.67266	1	9.71	<6.5	<6.5	12.23	12.52	21.78	1.54	4.34	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	1552	45.85359	119.67266	12.5	9.70	<6.5	<6.5	12.26	12.55	21.48	1.79	4.51	6.58	8.04	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/8/2005	1552	45.85359	119.67266	24	9.75	<6.5	<6.5	12.27	12.56	21.42	1.89	4.38	6.64	8.03	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCD3	11/8/2005	1558	45.85361	119.67239	1	9.78	<6.5	<6.5	12.22	12.52	21.78	1.53	4.34	6.33	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	1558	45.85361	119.67239	12	9.66	<6.5	<6.5	12.26	12.55	21.48	1.47	4.51	6.58	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/8/2005	1558	45.85361	119.67239	23.5	9.80	<6.5	<6.5	12.26	12.56	21.42	1.45	4.38	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/9/2005	1031	45.85347	119.67043	1	9.75	NA	NA	11.68	NA	NA	1.54	NA	NA	7.69	NA	NA
TF-WCU	11/9/2005	1031	45.85347	119.67043	7.5	9.72	NA	NA	11.68	NA	NA	1.65	NA	NA	7.83	NA	NA
TF-WCU	11/9/2005	1031	45.85347	119.67043	14	9.73	NA	NA	11.61	NA	NA	1.45	NA	NA	7.87	NA	NA
TF-WCD1	11/9/2005	1000	45.85352	119.67284	1	9.55	<6.5	<6.5	11.75	11.98	21.78	1.55	4.54	6.33	7.77	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/9/2005	1000	45.85352	119.67284	9	9.53	<6.5	<6.5	11.73	11.98	21.48	1.14	4.65	6.58	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/9/2005	1000	45.85352	119.67284	17	9.66	<6.5	<6.5	11.62	11.91	21.42	1.30	4.45	6.64	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1012	45.85359	119.67266	1	9.60	<6.5	<6.5	11.77	11.98	21.78	1.66	4.54	6.33	7.70	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1012	45.85359	119.67266	12	9.63	<6.5	<6.5	11.68	11.98	21.48	1.54	4.65	6.58	7.85	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1012	45.85359	119.67266	23.5	9.68	<6.5	<6.5	11.61	11.91	21.42	1.46	4.45	6.64	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1020	45.85361	119.67239	1	9.74	<6.5	<6.5	11.73	11.98	21.78	1.52	4.54	6.33	7.69	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1020	45.85361	119.67239	12.5	9.72	<6.5	<6.5	11.75	11.98	21.48	1.47	4.65	6.58	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1020	45.85361	119.67239	24	9.79	<6.5	<6.5	11.63	11.91	21.42	1.73	4.45	6.64	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/9/2005	1421	45.85347	119.67043	1	9.85	NA	NA	11.69	NA	NA	1.43	NA	NA	7.71	NA	NA
TF-WCU	11/9/2005	1421	45.85347	119.67043	7	9.81	NA	NA	11.69	NA	NA	1.25	NA	NA	7.83	NA	NA
TF-WCU	11/9/2005	1421	45.85347	119.67043	13.5	9.91	NA	NA	11.59	NA	NA	1.35	NA	NA	7.90	NA	NA
TF-WCD1	11/9/2005	1350	45.85352	119.67284	1	9.85	<6.5	<6.5	11.85	11.99	21.78	1.34	4.43	6.33	7.74	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/9/2005	1350	45.85352	119.67284	10	9.74	<6.5	<6.5	11.84	11.99	21.48	1.06	4.25	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/9/2005	1350	45.85352	119.67284	19	9.81	<6.5	<6.5	11.84	11.89	21.42	1.32	4.35	6.64	7.89	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1358	45.85359	119.67266	1	9.85	<6.5	<6.5	11.81	11.99	21.78	1.47	4.43	6.33	7.73	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1358	45.85359	119.67266	12.5	9.83	<6.5	<6.5	11.81	11.99	21.48	1.45	4.25	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1358	45.85359	119.67266	24.5	9.81	<6.5	<6.5	11.75	11.89	21.42	1.02	4.35	6.64	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1409	45.85361	119.67239	1	9.87	<6.5	<6.5	11.78	11.99	21.78	1.38	4.43	6.33	7.71	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1409	45.85361	119.67239	13	9.85	<6.5	<6.5	11.79	11.99	21.48	1.39	4.25	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1409	45.85361	119.67239	25	9.89	<6.5	<6.5	11.70	11.89	21.42	1.49	4.35	6.64	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/9/2005	1652	45.85347	119.67043	1	9.81	NA	NA	11.67	NA	NA	1.50	NA	NA	7.73	NA	NA
TF-WCU	11/9/2005	1652	45.85347	119.67043	7	9.94	NA	NA	11.71	NA	NA	1.79	NA	NA	7.82	NA	NA
TF-WCU	11/9/2005	1652	45.85347	119.67043	13.5	9.86	NA	NA	11.73	NA	NA	1.40	NA	NA	7.82	NA	NA
TF-WCD1	11/9/2005	1630	45.85352	119.67284	1	9.82	<6.5	<6.5	11.69	11.97	21.78	1.57	4.50	6.33	7.73	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/9/2005	1630	45.85352	119.67284	11	9.67	<6.5	<6.5	11.74	12.01	21.48	1.34	4.79	6.58	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/9/2005	1630	45.85352	119.67284	20.5	9.68	<6.5	<6.5	11.73	12.03	21.42	1.42	4.40	6.64	7.88	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1637	45.85359	119.67266	1	9.74	<6.5	<6.5	11.71	11.97	21.78	1.38	4.50	6.33	7.72	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1637	45.85359	119.67266	12	9.78	<6.5	<6.5	11.73	12.01	21.48	1.45	4.79	6.58	7.87	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/9/2005	1637	45.85359	119.67266	23.5	9.79	<6.5	<6.5	11.74	12.03	21.42	1.51	4.40	6.64	NC	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1645	45.85361	119.67239	1	9.60	<6.5	<6.5	11.71	11.97	21.78	1.52	4.50	6.33	7.71	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1645	45.85361	119.67239	13	9.73	<6.5	<6.5	11.74	12.01	21.48	1.44	4.79	6.58	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/9/2005	1645	45.85361	119.67239	25	9.75	<6.5	<6.5	11.74	12.03	21.42	1.38	4.40	6.64	7.86	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/10/2005	829	45.85347	119.67043	1	8.97	NA	NA	11.28	NA	NA	1.72	NA	NA	7.82	NA	NA
TF-WCU	11/10/2005	829	45.85347	119.67043	7	8.96	NA	NA	11.26	NA	NA	1.35	NA	NA	7.95	NA	NA
TF-WCU	11/10/2005	829	45.85347	119.67043	12.5	9.07	NA	NA	10.95	NA	NA	1.50	NA	NA	8.00	NA	NA
TF-WCD1	11/10/2005	809	45.85352	119.67284	1	9.16	<6.5	<6.5	11.19	11.58	21.78	1.48	4.72	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/10/2005	809	45.85352	119.67284	11	9.13	<6.5	<6.5	11.18	11.56	21.48	1.68	4.35	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/10/2005	809	45.85352	119.67284	21	9.19	<6.5	<6.5	11.22	11.25	21.42	1.29	4.50	6.64	8.00	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/10/2005	814	45.85359	119.67266	1	9.09	<6.5	<6.5	11.27	11.58	21.78	1.56	4.72	6.33	7.84	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/10/2005	814	45.85359	119.67266	12	9.20	<6.5	<6.5	11.31	11.56	21.48	0.94	4.35	6.58	7.97	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/10/2005	814	45.85359	119.67266	23	9.16	<6.5	<6.5	11.22	11.25	21.42	1.22	4.50	6.64	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/10/2005	821	45.85361	119.67239	1	9.06	<6.5	<6.5	11.37	11.58	21.78	1.46	4.72	6.33	7.83	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/10/2005	821	45.85361	119.67239	12.5	9.05	<6.5	<6.5	11.35	11.56	21.48	1.48	4.35	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/10/2005	821	45.85361	119.67239	24	9.13	<6.5	<6.5	11.19	11.25	21.42	1.24	4.50	6.64	7.99	<6.5 or >8.5	<6.5 or >8.5

Table 20
Water Quality Monitoring Results Compared to Triggers - Transfer Facility

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)[1]	Depth (ft)	DO (mg/L)	Event Specific Background	Pre-construction Background	Temp (deg C)	Event Specific Background	Pre-construction Background	Turbidity (NTU)	Event Specific Background	Pre-construction Background	pH	Event Specific Background	Pre-construction Background
TF-WCU	11/10/2005	1445	45.85347	119.67043	1	9.19	NA	NA	11.58	NA	NA	1.26	NA	NA	7.93	NA	NA
TF-WCU	11/10/2005	1445	45.85347	119.67043	6.5	9.26	NA	NA	11.56	NA	NA	1.48	NA	NA	8.01	NA	NA
TF-WCU	11/10/2005	1445	45.85347	119.67043	13	9.41	NA	NA	11.53	NA	NA	1.52	NA	NA	8.05	NA	NA
TF-WCD1	11/10/2005	1435	45.85352	119.67284	1	9.62	<6.5	<6.5	11.53	11.88	21.78	1.24	4.26	6.33	7.90	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/10/2005	1435	45.85352	119.67284	10	9.20	<6.5	<6.5	11.51	11.86	21.48	1.34	4.48	6.58	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/10/2005	1435	45.85352	119.67284	20	9.28	<6.5	<6.5	11.51	11.83	21.42	0.98	4.52	6.64	8.08	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/10/2005	1415	45.85359	119.67266	1	9.21	<6.5	<6.5	11.54	11.88	21.78	1.36	4.26	6.33	7.92	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/10/2005	1415	45.85359	119.67266	13.5	9.23	<6.5	<6.5	11.50	11.86	21.48	1.34	4.48	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/10/2005	1415	45.85359	119.67266	27	9.16	<6.5	<6.5	11.48	11.83	21.42	0.91	4.52	6.64	8.09	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/10/2005	1420	45.85361	119.67239	1	9.26	<6.5	<6.5	11.58	11.88	21.78	1.87	4.26	6.33	7.93	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/10/2005	1420	45.85361	119.67239	13	9.37	<6.5	<6.5	11.50	11.86	21.48	1.33	4.48	6.58	8.07	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/10/2005	1420	45.85361	119.67239	26	9.16	<6.5	<6.5	11.47	11.83	21.42	1.30	4.52	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCU	11/11/2005	939	45.85347	119.67043	1	9.25	NA	NA	11.57	NA	NA	1.43	NA	NA	7.92	NA	NA
TF-WCU	11/11/2005	939	45.85347	119.67043	7	9.28	NA	NA	11.53	NA	NA	1.27	NA	NA	7.99	NA	NA
TF-WCU	11/11/2005	939	45.85347	119.67043	14	9.33	NA	NA	11.51	NA	NA	1.36	NA	NA	8.02	NA	NA
TF-WCD1	11/11/2005	900	45.85352	119.67284	1	9.53	<6.5	<6.5	11.55	11.87	21.78	1.48	4.43	6.33	7.94	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/11/2005	900	45.85352	119.67284	11	9.31	<6.5	<6.5	11.54	11.83	21.48	1.39	4.27	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD1	11/11/2005	900	45.85352	119.67284	20.5	9.27	<6.5	<6.5	11.51	11.81	21.42	1.21	4.36	6.64	8.02	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/11/2005	912	45.85359	119.67266	1	9.43	<6.5	<6.5	11.51	11.87	21.78	1.59	4.43	6.33	7.96	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/11/2005	912	45.85359	119.67266	13	9.35	<6.5	<6.5	11.50	11.83	21.48	1.33	4.27	6.58	8.01	<6.5 or >8.5	<6.5 or >8.5
TF-WCD2	11/11/2005	912	45.85359	119.67266	26	9.25	<6.5	<6.5	11.50	11.81	21.42	1.09	4.36	6.64	8.06	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/11/2005	925	45.85361	119.67239	1	9.12	<6.5	<6.5	11.57	11.87	21.78	1.44	4.43	6.33	7.95	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/11/2005	925	45.85361	119.67239	13.5	9.23	<6.5	<6.5	11.55	11.83	21.48	1.40	4.27	6.58	7.98	<6.5 or >8.5	<6.5 or >8.5
TF-WCD3	11/11/2005	925	45.85361	119.67239	27	9.37	<6.5	<6.5	11.53	11.81	21.42	1.51	4.36	6.64	8.04	<6.5 or >8.5	<6.5 or >8.5

Notes:

[1]Coordinates provided in North American Datum (NAD) 83 in decimal degrees (dd)

[2]Trigger is exceeded where downstream conditions exceed the specified amounts relative to both the event-specific background and the pre-construction background survey (95% upper confidence limit on the mean for temperature and turbidity parameters).

[3]TF-WCU is the upstream event-specific background station

NC indicates that a parameter was not collected

Table 21
Visual Monitoring Descriptions from each Sampling Station--Gasco Site

Date	Description[1]							
	WCU	WCD1	WCD2	WCD3	WDD8	WCU4	WCU5	WCU6
9/7/2005	algae suspended in water; sheen--not from construction area	sheen floating by--not from construction area	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/8/2005	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/9/2005	green algae suspended in water;	sheen floating by--not from construction area	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/12/2005	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/13/2005	some foam; isolated sheen pocket--not from construction area	surface scum layer; slightly turbid;	slightly turbid	floating bottle; slightly turbid	nothing noted	frothy white scum layer	white floating scum layer; slightly turbid	slightly turbid
9/14/2005	foam, small sheen patches--not from construction area	small sheen pockets inside secondary containment	some sheen particles in water	some surface scum; small sheen "dots"	nothing noted	nothing noted	nothing noted	nothing noted
9/16/2005	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/19/2005					nothing noted	slight patchy sheen--not from construction area	slightly turbid	some small patches of sheen; slightly turbid
9/20/2005	slight turbidity	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/21/2005	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
9/23/2005	suspended particulates	suspended particulates	some wood debris, suspended particulates	suspended particulates	suspended particulates	suspended particulates	suspended particulates	suspended particulates
9/26/2005	substantial sheen, patches 10 to 15' across; bubbled of sheen coming up to the surface--not from construction area; suspended particulates	small wood debris, feathers, bottle cap; suspended particulates	leaves, suspended particulates; spotty sheen	suspended particulates; spotty sheen	nothing noted	nothing noted	nothing noted	nothing noted
9/27/2005					small wood debris	feathers	small patch of sheen--not from construction area	nothing noted
9/29/2005	slight sheen	trash, foam, feathers; spotty sheen	organic detritus, feathers	nothing noted	foam, small wood debris; suspended particulates	nothing noted	nothing noted	nothing noted
9/30/2005	spotty sheen	nothing noted	slight sheen	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
10/3/2005	foam, small wood debris, leaves		foam; small wood debris; patchy sheen	bubbles, paper	nothing noted	nothing noted	nothing noted	nothing noted
10/5/2005	nothing noted	garbage, leaves, surface film, feathers; slight patchy sheen	garbage, small wood debris, foam; small patchy sheen	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
10/6/2005	garbage, leaves, plant debris, feathers	slight sheen	small wood debris, garbage, leaves, feathers, patchy sheen	garbage twigs	nothing noted	nothing noted	nothing noted	nothing noted
10/11/2005	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted

Table 21
Visual Monitoring Descriptions from each Sampling Station--Gasco Site

Date	Description[1]							
	WCU	WCD1	WCD2	WCD3	WDD8	WCU4	WCU5	WCU6
10/12/2005	spotty sheen	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
10/13/2005	pockets of sheen--not from construction area	surface film, pockets of sheen	surface debris (small); small pockets of sheen	small bubbles of sheen; surface film	floating sticks; small circles of sheen	algae, foam; some patches of sheen	foam	foam
10/14/2005	trash, feathers; persistent sheen bubbling from sediment--not from dredging operations	trash, foam	nothing noted	nothing noted				
10/15/2005	bubbles, leaves	nothing noted	nothing noted	nothing noted	nothing noted	bubbles, leaves	nothing noted	nothing noted
10/16/2005	leaves, organic material; pockets of sheen	nothing noted	leaves; trace amounts of sheen	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
10/17/2005	foam, small wood debris, leaves, garbage; spotty sheen	bubbles, small wood debris, leaves, garbage; scattered spotty sheen	small wood debris, leaves	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
10/18/2005	leaves, bubbles	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted	nothing noted
10/20/2005	areas of sheen about 1' in diameter--not from construction area	small pieces of wood debris, foam, garbage	garbage, small pieces of wood debris; slight sheen	thin strips of sheen; garbage, small wood debris	nothing noted	nothing noted	nothing noted	nothing noted
10/21/2005	layer of surface film	layer of surface film, sheen circles (1 inch diameter); turbidity plume	turbidity plume	turbidity plume	nothing noted	nothing noted	nothing noted	nothing noted
10/22/2005	wood debris, leaves, trash, bubbles; spotty sheen; sheen pocket 4'X8' (bubbling)	trash, bubbles	trash, wood debris; one spot of sheen	wood debris, trash	small wood debris, bubbles	leaves, twigs, feathers, trash; persistent sheen bubbling from bottom--not from construction area	twigs, bubbles	wood debris, bubbles
10/23/2005	nothing noted	nothing noted	nothing noted	wood debris, surface film	nothing noted	nothing noted	nothing noted	nothing noted
10/24/2005	spotty sheen; leaves, wood debris	wood debris, foam/surface film	leaves, wood debris, garbage	plant material, bubbles	twigs, bubbles	slight surface sheen	bubbles	organic material, bubbles
10/25/2005	bubbles	pine needles; small spots of sheen	small patches of sheen	pine needles; patch of sheen (2 inch diameter)	nothing noted	one small spot of sheen (2-3 mm in diameter)	nothing noted	bubbles
10/26/2005	foam bubbles; patches of sheen	lots of foam; sheen	some foam; sheen	little foam; 1-2 inch diameter sheen	small streaks of sheen	sticks, wood debris, patches of foam; discontiguous sheen	some foam bubbles	nothing noted
10/27/2005	thin layer of brown floating particulates; small patches of sheen	several small (1 inch) patches of sheen	1 inch patches of sheen	small foam patches; small nickel size patches of sheen	some bubbles	surface film, foam, feathers; sheen patches	small bubbles; 3' patch of sheen	nothing noted
10/28/2005	small patch of sheen	nothing noted	nothing noted	some patches of sheen	organic debris	2 patches (2 to 3') patches of sheen	little patches (1 to 1.5 inches) of sheen	feathers
10/29/2005	slight sheen	slight turbidity	nothing noted	nothing noted	nothing noted	foam from cap material fines; slight turbidity	slight sheen	nothing noted

Notes:
[1] Descriptions compiled from information provided on the field logs collected at each station.

Table 22
Visual Monitoring Descriptions from each Sampling Station--Transfer Facility

Date	Description[1]			
	TF-WCU	TF-WCD1	TF-WCD2	TF-WCD3
9/7/2005	nothing noted	minimal floating debris	nothing noted	nothing noted
9/17/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/19/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/20/2005	nothing noted	wood chips/debris	nothing noted	nothing noted
9/21/2005	aquatic vegetation	aquatic vegetation	aquatic vegetation	aquatic vegetation
9/22/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/23/2005	slightly turbid	slightly turbid and higher water	floating organic debris; slightly turbid	floating organic debris; slightly turbid
9/26/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/27/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/28/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/29/2005	nothing noted	nothing noted	nothing noted	nothing noted
9/30/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/3/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/4/2005	nothing noted	nothing noted	wood chips	nothing noted
10/5/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/6/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/7/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/10/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/11/2005	wood chips	nothing noted	some aquatic vegetation and wood chips	aquatic vegetation
10/12/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/13/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/14/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/17/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/18/2005	aquatic vegetation	nothing noted	nothing noted	aquatic vegetation
10/19/2005	nothing noted	aquatic vegetation	nothing noted	nothing noted
10/20/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/25/2005	wood chips	wood chips	wood chips	nothing noted
10/26/2005	nothing noted	wood chips	wood chips	wood chips, leaves
10/27/2005	nothing noted	aquatic vegetation	nothing noted	nothing noted
10/28/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/29/2005	nothing noted	nothing noted	nothing noted	nothing noted
10/30/2005	nothing noted	nothing noted	nothing noted	nothing noted
11/2/2005	nothing noted	nothing noted	aquatic vegetation	aquatic vegetation
11/3/2005	nothing noted	nothing noted	nothing noted	nothing noted
11/4/2005	nothing noted	nothing noted	nothing noted	nothing noted
11/7/2005	nothing noted	nothing noted	nothing noted	nothing noted
11/8/2005	nothing noted	nothing noted	nothing noted	nothing noted
11/9/2005	nothing noted	aquatic vegetation	aquatic vegetation	aquatic vegetation
11/10/2005	nothing noted	nothing noted	nothing noted	nothing noted
11/11/2005	nothing noted	nothing noted	nothing noted	nothing noted

Notes:
[1] Descriptions compiled from information provided on the field logs collected at each station.

Table 23
Water Quality Monitoring Results Compared to Triggers – Transfer Barge Dewatering Samples

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-B47 RAA-B47-PRE-050919 9/19/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050919 9/19/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-050920 9/20/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050920 9/20/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-050921 9/21/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050921 9/21/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-050923 9/23/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050923 9/23/2005 Post-Treatment
Conventionals (µg/L)										
Cyanide	5.2	20	340 * #	70 * #	1000 * #	70 * #	38 * #	50 U	320 * #	140 * #
SVOCs (µg/L)										
Anthracene	0.73	13	152 * #	1.72 J *	3050 * #	17.1 * #	2.25 J *	2.30 J *	11.2 *	4.45 *
Benzo(a)anthracene	0.02	0.49	80.6 * #	2.07 * #	2540 * #	11.2 * #	1.84 J * #	1.88 J * #	7.80 * #	6.90 * #
Benzo(a)pyrene	0.01	0.24	132 * #	3.47 J * #	2970 * #	12.5 * #	2.75 J * #	2.82 J * #	10.2 * #	9.26 * #
Dibenzofuran	3.7	66	29.2 J *	0.0485 J	368 * #	0.803	1.92 U	0.0486 J	--	19.0 U
Fluoranthene	6.16	3980	328 *	5.13	9080 * #	34.3 *	4.97 J	5.08 J	23.2 *	12.7 *
Fluorene	3.9	70	176 * #	0.383 J	2910 * #	8.23 *	0.51	0.521	13.6 *	0.319 J
Naphthalene	12	190	11400 * #	1.82 J	29700 * #	2.19	0.459 J	0.47	924 * #	4.74 U
Phenanthrene			739	3.52	16000	57.0	5.41 J	5.53 J	54.4	4.14

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL.

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported.

q Value reported is from a dilution

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 23
Water Quality Monitoring Results Compared to Triggers – Transfer Barge Dewatering Samples

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-B47 RAA-B47-PRE-050926 9/26/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050926 9/26/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-050927 9/27/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050927 9/27/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-050928 9/28/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050928 9/28/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-050929 9/29/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050929 9/29/2005 Post-Treatment
Conventionals (µg/L)										
Cyanide	5.2	20	**260 * #**	**110 * #**	**310 * #**	**190 * #**	**110 * #**	50 U	**560 * #**	**31 * #**
SVOCs (µg/L)										
Anthracene	0.73	13	**59.9 * #**	**20.9 * #**	**63.8 * #**	**31.1 * #**	**52 * #**	**8.3 ***	**59 J * #**	**3.6 J ***
Benzo(a)anthracene	0.02	0.49	**28.4 * #**	**16.1 J * #**	**31.9 * #**	**12.5 J * #**	**22 * #**	**4.7 * #**	**24 J * #**	**2.7 J * #**
Benzo(a)pyrene	0.01	0.24	**80.4 * #**	**72.7 * #**	**87.3 * #**	**67.9 * #**	**27 * #**	**5.5 * #**	**36 J * #**	**3.8 J * #**
Dibenzofuran	3.7	66	**20.2 J ***	192 U	**22.5 J ***	191 U	19 U	1.9 U	**14 J ***	0.2 UJ
Fluoranthene	6.16	3980	**147 ***	**56.4 ***	**151 ***	**55.0 ***	**120 ***	**19 ***	**140 J ***	**7.6 J ***
Fluorene	3.9	70	**119 * #**	19.2 U	**126 * #**	**25.9 ***	**110 * #**	**1.3**	**86 J * #**	**0.91 J**
Naphthalene	12	190	**8990 J * #**	**32.4 J ***	**8230 J * #**	**25.2 J ***	**6.4**	**4**	**5100 J * #**	**2.9 J**
Phenanthrene			**390**	**33.9**	**395**	**121**	**430**	**17**	**300 J**	**7.1 J**

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL.

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported.

q Value reported is from a dilution

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 23
Water Quality Monitoring Results Compared to Triggers – Transfer Barge Dewatering Samples

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-B47 RAA-B47-PRE-050930 9/30/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-050930 9/30/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051001 10/1/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051001 10/1/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051003 10/3/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051003 10/3/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051004 10/4/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051004 10/4/2005 Post-Treatment
Conventionals (µg/L)										
Cyanide	5.2	20	310 * #	12 *	270 * #	35 * #	200 * #	79 * #	230 * #	58 * #
SVOCs (µg/L)										
Anthracene	0.73	13	1 J *	7.4 *	16 * #	5.9 *	650 * #	35 * #	84 J * #	7.1 J *
Benzo(a)anthracene	0.02	0.49	0.37 J *	3.7 * #	12 * #	3.6 * #	330 * #	25 * #	58 J * #	5.2 J * #
Benzo(a)pyrene	0.01	0.24	0.6 J * #	6.7 * #	14 * #	5.9 * #	390 * #	32 * #	78 J * #	6.1 J * #
Dibenzofuran	3.7	66	0.24 UJ	0.19 U	0.35	0.25	190 UJ	0.84 J	26 J *	1.9 UJ
Fluoranthene	6.16	3980	1.8 J	13 *	71 *	10 *	1400 *	83 *	260 J *	30 J *
Fluorene	3.9	70	0.57 J	0.92	22 *	1.7	1200 * #	11 *	170 J * #	9.9 J *
Naphthalene	12	190	8.1 J	4.5	2.2	120 *	17000 J * #	6.3	8700 J * #	1.1 J
Phenanthrene			2.6 J	9.9	48	11	4400	91	560 J	20 J

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL.

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported.

q Value reported is from a dilution

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 23
Water Quality Monitoring Results Compared to Triggers – Transfer Barge Dewatering Samples

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-B47 RAA-B47-PRE-051005 10/5/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051005 10/5/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051006 10/6/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051006 10/6/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051007 10/7/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051007 10/7/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051010 10/10/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051010 10/10/2005 Post-Treatment
Conventionals (µg/L)										
Cyanide	5.2	20	90 * #	160 * #	210 * #	180 * #	230 * #	30 * #	210 * #	87 * #
SVOCs (µg/L)										
Anthracene	0.73	13	75 * #	3.3 *	86 * #	39 * #	21 * #	89 * #	19 * #	3.6 *
Benzo(a)anthracene	0.02	0.49	49 * #	3.7 * #	74 * #	49 * #	9.1 J * #	76 J * #	10 J * #	2.3 J * #
Benzo(a)pyrene	0.01	0.24	62 * #	5.2 * #	110 * #	70 * #	15 * #	100 * #	20 J * #	4.2 J * #
Dibenzofuran	3.7	66	16 *	0.19 U	19 U	20 U	8.5 J *	1.9 UJ	1.9 UJ	1.9 UJ
Fluoranthene	6.16	3980	210 *	9.9 *	320 *	100 *	60 J *	170 J *	52 J *	8 J *
Fluorene	3.9	70	100 * #	0.54	100 * #	4.7 *	49 *	11 *	33 J *	0.86 J
Naphthalene	12	190	3900 * #	11	3400 * #	11	560 * #	19 *	11	1.3
Phenanthrene			480	8.2	590	73	160 J	110 J	56 J	5.6 J

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL.

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported.

q Value reported is from a dilution

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 23
Water Quality Monitoring Results Compared to Triggers – Transfer Barge Dewatering Samples

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-B47 RAA-B47-PRE-051012 10/12/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051012 10/12/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051013 10/13/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051013 10/13/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051014 10/14/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051014 10/14/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051015 10/15/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051015 10/15/2005 Post-Treatment
Conventionals (µg/L)										
Cyanide	5.2	20	130 * #	20 *	280 * #	25 * #	150 * #	15 *	120 * #	5.6 U
SVOCs (µg/L)										
Anthracene	0.73	13	37 * #	2.8 *	47 * #	19 * #	91 * #	20 * #	88 * #	1.8 *
Benzo(a)anthracene	0.02	0.49	31 * #	2.6 * #	35 * #	11 * #	73 * #	13 * #	57 * #	1.3 * #
Benzo(a)pyrene	0.01	0.24	33 * #	4.3 * #	35 * #	15 * #	84 * #	17 * #	61 * #	1.7 * #
Dibenzofuran	3.7	66	14 *	0.19 U	18 *	0.2 U	28 *	0.68	26 *	0.19 U
Fluoranthene	6.16	3980	140 *	5.3	150 *	29 *	320 *	45 *	260 *	3.5
Fluorene	3.9	70	78 * #	0.37	96 * #	2	160 * #	6.1 *	150 * #	0.37
Naphthalene	12	190	6300 * #	0.67	6300 * #	3.4	9200 * #	13 *	3200 * #	0.66
Phenanthrene			310	3.5	330	17	780	48	550	3.3

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL.

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported.

q Value reported is from a dilution

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 23
Water Quality Monitoring Results Compared to Triggers – Transfer Barge Dewatering Samples

Location ID Sample ID Sample Date Chemical Name	Chronic Criteria	Acute Criteria	RAA-B47 RAA-B47-PRE-051016 10/16/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051016 10/16/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051017 10/17/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051017 10/17/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051018 10/18/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051018 10/18/2005 Post-Treatment	RAA-B47 RAA-B47-PRE-051019 10/18/2005 Pre-Treatment	RAA-B47 RAA-B47-POST-051019 10/18/2005 Post-Treatment
Conventionals (µg/L)										
Cyanide	5.2	20	150 * #	6.2 J *	740 * #	23 * #	290 * #	8.5 J *	220 * #	6.3 J *
SVOCs (µg/L)										
Anthracene	0.73	13	290 * #	53 * #	160 * #	55 * #	440 * #	1.6 *	26 * #	2.3 *
Benzo(a)anthracene	0.02	0.49	210 * #	40 * #	120 J * #	42 J * #	380 * #	1.7 * #	15 * #	1.9 * #
Benzo(a)pyrene	0.01	0.24	230 * #	59 * #	95 * #	60 * #	440 * #	2.7 * #	14 * #	2.8 * #
Dibenzofuran	3.7	66	61 *	1.9 U	25 J *	1.9 UJ	75 * #	0.19 U	9 *	0.19 U
Fluoranthene	6.16	3980	830 *	92 *	450 *	88 *	1600 *	3.3	80 *	4
Fluorene	3.9	70	370 * #	4.9 *	150 * #	5.7 *	480 * #	0.55	54 *	0.29
Naphthalene	12	190	10000 * #	13 *	5500 J * #	11 J	4900 * #	0.85	1800 * #	1.1
Phenanthrene			1700	56	920	66	2800	1.6	200	2.6

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL.

E Over range, the analyte was detected above the linear range of the curve and is estimated, the sample requires dilution to bring the analyte back into the linear range so that it can be reported.

q Value reported is from a dilution

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 24
Visual Descriptions of Water Samples Collected at the Silt Curtain-Mudline Interface

Date	Description[1]
9/7/2005	No sample collected
9/8/2005	Some sand, silt, vegetative matter present, water slightly turbid, no sheen, no tar
9/9/2005	No sample collected
9/12/2005	Clear and colorless, trace silt/fine sand, no sheen, no tar
9/13/2005	Clear and colorless, trace fines and particulates, very little silt suspended in water, no sheen, no tar
9/14/2005	No sample collected
9/16/2005	No sample collected
9/19/2005	small particulates and suspended algae, no sheen
9/20/2005	small particulates suspended and settling, fine to very fine sand (black particles), no sheen
9/21/2005	clear and colorless with some particulates, no sheen, no tar
9/23/2005	dark gray, turbid water, no solid material, some particles settling over time
9/26/2005	clear, colorless, trace fine particulates
9/27/2005	clear, colorless, some particulate matter and suspended organic particulates
9/29/2005	clear water, very fine-grained black particulates suspended and settling, green-brown organic particulates (1 cm in diameter)
9/30/2005	clean water, very fine floating and suspended particulates
10/3/2005	water clear, trace suspended sediment fine sand and silt sized particles settling
10/5/2005	slightly cloudy, suspended and settling very fine sand-sized black particulates
10/6/2005	slightly cloudy, suspended very fine to fine sand-sized black particluates, no sheen
10/11/2005	slightly cloudy, suspended very fine to fine sand-sized black particluates, no sheen
10/12/2005	slightly cloudy, suspended very fine to fine sand-sized black particluates, no sheen
10/13/2005	clear, some light brown particulates, no floating material, no sheen, no tar
10/14/2005	clear water with fine particulates, no sheen, no tar
10/15/2005	clear water, suspended black sand-sized particulates; more turbid than previous days
10/16/2005	clear no particulates visible
10/17/2005	clear water, suspended fine sand-sized particulates, white colorless with trace black
10/18/2005	clear with small particulates, no sheen, no tar
10/20/2005	clear water with few brown suspended fine particulates
10/21/2005	clear with brown and white fine sand-sized particulates, no tar, no sheen
10/22/2005	clear water no visual particulates

Notes:
[1] Van dorn sampler deployed from the pier above Point B on the outside of the silt curtain.

Table 25
Velocity Monitoring Results - Gasco Site

Date	Location[1]	Velocity[2] (fps)
9/7/2005	WCU	<0.05
9/8/2005		NC[3]
9/9/2005	WCU	0.6
9/12/2005		NC
9/13/2005	CHANNEL	0.62
9/14/2005	WCD1	0.20
9/19/2005	WCU	0.33
9/20/2005	WCD1	0.50
9/21/2005	WCU	0.39
9/23/2005	CHANNEL	0.75
9/26/2005	WCU	0.59
9/27/2005	CHANNEL	0.34
9/29/2005	CHANNEL	0.53
9/30/2005	CHANNEL	0.23
10/3/2005	CHANNEL	0.74
10/5/2005	CHANNEL	0.50
10/6/2005		NC
10/11/2005	CHANNEL	0.37
10/12/2005	CHANNEL	0.16
10/13/2005	CHANNEL	0.55
10/14/2005	CHANNEL	0.35
10/15/2005	CHANNEL	0.63
10/16/2005	CHANNEL	0.31
10/17/2005	CHANNEL	0.31
10/18/2005	CHANNEL	0.95
10/20/2005	CHANNEL	0.76
10/21/2005	WCD1	0.09
10/22/2005[4]	CHANNEL	<0.05

Notes:

[1]All velocities were measured three feet below the water surface at each station.

[2]The highest velocity collected for each day is provided in the table.

[3]NC = measurement not collected

[4]Curtains were removed on October 22, 2005.

Table 26
Post-Dredge Baseline Surface Sediment Characterization Collection Information

		Sample Location (NAD 83)[a]		
Sample ID	**Date Sampled**	**Latitude**	**Longitude**	**Penetration/Sampled Depth (cm)**
RAA-PD01-051019	10/19/2005	45.57976	122.75809	13/10 cm
RAA-PD02-051019	10/19/2005	45.57978	122.75789	11/10 cm
RAA-PD03-051019	10/19/2005	45.57993	122.75829	12/10 cm
RAA-PD04-051019	10/19/2005	45.57983	122.75818	14/10 cm
RAA-PD05-051019	10/19/2005	45.58013	122.75835	12/10 cm
RAA-PD06-051019	10/19/2005	45.58031	122.75803	17/10 cm
RAA-PD07-051019	10/19/2005	45.57990	122.75807	17/10 cm
RAA-PD08-051019	10/19/2005	45.57986	122.75772	16/10 cm
RAA-PD09-051019	10/19/2005	45.58014	122.75821	12/10 cm
RAA-PD10-051019	10/19/2005	45.58000	122.75814	16/10 cm
RAA-PD11-051019	10/19/2005	45.58000	122.75799	12/10 cm
RAA-PD12-051019	10/19/2005	45.58014	122.75799	14/10 cm
RAA-PD13-051019	10/19/2005	45.58041	122.75832	11/10 cm
RAA-PD14-051019	10/19/2005	45.58022	122.75796	17/10 cm
RAA-PD15-051019	10/19/2005	45.58014	122.75763	17/10 cm

Notes:

[a] – Geographical coordinates measured in North American Datum (NAD) 1983 in latitude and longitude decimal degrees

Table 27
Post-Dredge Surface Sediment Analytical Results

Location ID	RAA-PD01	RAA-PD02	RAA-PD02	RAA-PD03	RAA-PD04	RAA-PD05	RAA-PD06	RAA-PD07	RAA-PD08	RAA-PD09	RAA-PD10	RAA-PD11
Sample ID	RAA-PD01-051019	RAA-PD02-051019	RAA-PD52-051019[a]	RAA-PD03-051019	RAA-PD04-051019	RAA-PD05-051019	RAA-PD06-051019	RAA-PD07-051019	RAA-PD08-051019	RAA-PD09-051019	RAA-PD10-051019	RAA-PD11-051019
Sample Date	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005
Depth Interval	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Conventionals												
Total Solids (%)	62.8	65.9	65.6	65.6	64.6	63.8	52	57.2	48.6	67.1	52.2	61.1
Cyanide (mg/kg)	2.5 J	5.4 J	8.5 J	1.3 J	2.2 J	2.1 J	7.3 J	0.48 J	3.6 J	2.3 J	1.8 J	0.19 UJ
TOC (%)	2.18	3.68	2.85	2.62	2.12	2.67	2.61	3.6	5.04	2.43	4.58	2.72
Grain Size (%)												
Gravel	2.5	12.1	2	0.6	16.4	7	1.5	0	0.6	6.4	0	2.8
Sand	44.8	76	82.7	69.5	52.3	56.3	25.2	19.7	31.3	83.7	53.4	52.6
Silt	45.4	9.8	12.3	23.9	22.8	26.7	54.4	60.4	52.9	7	34.6	33.6
Clay	7.4	2.1	3	5.9	8.4	10.1	18.9	19.9	15.1	2.9	12.1	11
Metals (mg/kg)												
Arsenic	7.5 U	4.8 U	5.0 U	4.8 U	6.8 U	6.4 U	7.7 U	7.3 U	7.3 U	5.0 U	7.0 U	5.3 U
Chromium	26	19	20	22	25	23	30	30	25	20	25	26
Copper	39	41	36	21	24	25	44	38	48	17	29	30
Lead	10	14	17	16	20	15	27	21	15	8.5	15	16
Nickel	24	24	22	22	24	23	24	25	26	22	23	22
Zinc	75	87	90	69	73	78	140	96	100	60	78	80
Pesticides (µg/kg)												
4,4'-DDD	19 J	130 J	130	50 U	100 U	160 U	170 J	50 U	130 J	150	110 J	R
4,4'-DDE	10 U	50 U	50 U	50 U	140 J	150 U	51 J	68 U	50 U	45 J	58 U	R
4,4'-DDT	10 U	50 UJ	50 U	50 U	100 U	100 U	22 J	50 U	17 J	50 U	50 U	R
Aldrin	33 J	80	86	110 U	190 U	380 J	16 U	110	94 U	150 J	96 U	27 J
alpha-BHC	10 U	50 U	50 U	50 U	100 U	100 U	10 U	50 U	50 U	50 U	50 U	R
alpha-Chlordane	10 U	50 U	50 U	50 U	100 U	100 U	10 U	61 U	50 U	50 U	50 U	R
beta-BHC	10 U	50 U	50 U	50 U	100 U	100 U	8.3 J	50 U	50 U	50 U	50 U	R
delta-BHC	5.2 J	8.1 J	8.2 J	8.7 J	17 J	33 J	10 U	50 U	50 U	50 U	9.7 J	2.9 J
Dieldrin	7.9 J	50 U	50 U	31 J	100 U	100 U	9.1 J	50 U	50 U	50 U	50 U	R
Endosulfan I	10 U	50 U	50 U	50 U	100 U	100 U	11 J	50 U	50 U	50 U	50 U	R
Endosulfan II	10 U	50 UJ	19 J	50 U	110 U	100 U	10 U	50 U	37 J	50 U	50 U	R
Endosulfan Sulfate	11 U	50 U	50 U	50 U	100 U	160 U	10 U	50 U	50 U	50 U	50 U	R
Endrin	10 U	50 U	50 U	50 U	100 U	100 U	10 U	50 U	50 U	50 U	50 U	R
Endrin aldehyde	10 U	50 U	50 U	50 U	100 U	190 U	16 J	50 U	50 U	99 J	50 U	R
Endrin ketone	10 U	72	50 U	50 U	100 U	100 U	5.9 J	50 U	50 U	50 U	50 U	R
gamma-BHC (Lindane)	10 U	50 U	50 U	50 U	100 U	100 U	10 U	50 U	50 U	50 U	50 U	R
gamma-Chlordane	10 U	50 U	50 U	50 U	100 U	100 U	10 U	50 U	50 U	50 U	50 U	R
Heptachlor	10 U	50 U	50 U	50 U	100 U	100 U	10 U	50 U	50 U	50 U	50 U	R
Heptachlor Epoxide	10 U	28 J	50 U	50 U	100 U	100 U	10 U	50 U	50 U	50 U	50 U	R
Methoxychlor	44 J	150 J	130 J	92	150 J	320	10 U	71 J	96 J	50 U	100 J	33 J
Toxaphene	2000 U	7200 U	6100 U	4500 U	8600 U	19000 U	700 U	2500 U	4900 U	4500 U	5500 U	R
PCBs (µg/kg)												
Aroclor 1016	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Aroclor 1221	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Aroclor 1232	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Aroclor 1242	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Aroclor 1248	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Aroclor 1254	100 U	130 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Aroclor 1260	100 U	100 U	100 U	120 U	100 U	190 U	100 U	100 U	100 U	100 U	100 U	130 U
VOCs (µg/kg)												
Benzene	3800	1100 J	2400 J	24000	410 J	140000	290 J	880 J	140 J	92000 J	2100	520 J
Ethylbenzene	2300	1300 J	2900 J	14000	490 J	8200	660 J	1300 J	850 J	12000 J	1500	2200 J
m,p-Xylenes	2000	700 J	1300 J	12000	520 J	36000	530 J	1100 J	580 J	19000 J	1700	910 J
o-Xylene	1300	780 J	1600 J	6200	300 J	15000	290 J	650 J	390 J	8500 J	870	690 J
Toluene	540	280 U	540 U	11000	280 J	61000	240 J	550 J	92 J	27000 J	410	290 UJ
SVOCs (µg/kg)												
1-Methylnaphthalene	14000	22000	45000	27000	11000	40000	7600	8100	49000	140000	4800	13000
2-Methylnaphthalene	23000	35000	72000	45000	13000	66000	13000	13000	86000	260000	7900	21000
Acenaphthene	28000	44000	96000	53000	39000	41000	20000	24000	80000	220000	14000	38000

Table 27
Post-Dredge Surface Sediment Analytical Results

Location ID	RAA-PD01	RAA-PD02	RAA-PD02	RAA-PD03	RAA-PD04	RAA-PD05	RAA-PD06	RAA-PD07	RAA-PD08	RAA-PD09	RAA-PD10	RAA-PD11
Sample ID	RAA-PD01-051019	RAA-PD02-051019	RAA-PD52-051019[a]	RAA-PD03-051019	RAA-PD04-051019	RAA-PD05-051019	RAA-PD06-051019	RAA-PD07-051019	RAA-PD08-051019	RAA-PD09-051019	RAA-PD10-051019	RAA-PD11-051019
Sample Date	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005	10/19/2005
Depth Interval	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Acenaphthylene	**5600**	**8100**	**18000**	**30000**	**4800**	**110000**	**4600**	**5700**	**9200**	**96000**	**2800**	**3300**
Anthracene	**17000**	**31000**	**70000**	**36000**	**18000**	**62000**	**14000**	**15000**	**46000**	**130000**	**12000**	**20000**
Benzo(a)anthracene	**14000**	**40000**	**90000**	**27000**	**13000**	**49000**	**15000**	**13000**	**45000**	**110000**	**8000**	**16000**
Benzo(a)pyrene	**17000**	**52000**	**120000**	**34000**	**16000**	**69000**	**19000**	**17000**	**60000**	**150000**	**10000**	**22000**
Benzo(g,h,i)perylene	**13000**	**39000**	**92000**	**27000**	**13000**	**53000**	**16000**	**14000**	**47000**	**110000**	**8800**	**19000**
Benzofluoranthenes	**27000**	**75000**	**150000**	**52000**	**27000**	**93000**	**32000**	**27000**	**88000**	**160000**	**17000**	**34000**
Chrysene	**18000**	**46000**	**100000**	**32000**	**17000**	**61000**	**18000**	**16000**	**60000**	**130000**	**13000**	**20000**
Dibenzo(a,h)anthracene	**2000**	**5800**	**13000**	**3500**	**1700**	**6200**	**2200**	**1800**	**6600**	**15000**	**1200**	**2200**
Fluoranthene	**52000**	**140000**	**300000**	**110000**	**59000**	**230000**	**51000**	**52000**	**150000**	**430000**	**33000**	**64000**
Fluorene	**15000**	**25000**	**56000**	**32000**	**15000**	**54000**	**11000**	**11000**	**42000**	**140000**	**6900**	**14000**
Indeno(1,2,3-cd)pyrene	**13000**	**36000**	**84000**	**25000**	**12000**	**49000**	**15000**	**13000**	**45000**	**100000**	**8200**	**17000**
Naphthalene	**190000**	**78000**	**100000**	**330000**	**110000**	**710000**	**180000**	**110000**	**280000**	**1400000**	**40000**	**110000**
Phenanthrene	**92000**	**170000**	**370000**	**200000**	**100000**	**390000**	**76000**	**81000**	**250000**	**780000**	**51000**	**100000**
Pyrene	**64000**	**170000**	**360000**	**140000**	**71000**	**270000**	**64000**	**63000**	**190000**	**510000**	**40000**	**80000**
TPH (mg/kg)												
TPH - Motor Oil Range	**2800 Z**	**12000 Z**	**13000 Z**	**1800 Z**	**550 J**	**6300 J**	**770 Z**	**710 Z**	**1900 J**	**6200 Z**	**1100 Z**	**650 Z**
TPH-Diesel Range	**3700 Z**	**11000 Z**	**16000 Z**	**4000 Z**	**860 J**	**11000 J**	**1700 Z**	**820 Z**	**3000 J**	**18000 Z**	**1300 Z**	**900 Z**
TPH-Gasoline Range	**1100**	**1100**	**1600 J**	**3000**	**190**	**4000**	**250**	**430**	**470**	**740**	**730**	**610 J**

Notes:

[a] Field split collected at station RAA-PD02
µg/kg microgram/kilogram dry weight
mg/kg milligram/kilogram dry weight
Bold Analyte detected at provided concentration
U Non-Detect
Z See laboratory deliverable case narrative

Table 27
Post-Dredge Surface Sediment Analytical Results

Location ID	RAA-PD12	RAA-PD13	RAA-PD14	RAA-PD15
Sample ID	RAA-PD12-051019	RAA-PD13-051019	RAA-PD14-051019	RAA-PD15-051019
Sample Date	10/19/2005	10/19/2005	10/19/2005	10/19/2005
Depth Interval	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Conventionals				
Total Solids (%)	**65.9**	**49**	**48.2**	**44.3**
Cyanide (mg/kg)	**5.7 J**	**16 J**	**15 J**	**1.1 J**
TOC (%)	**6.38**	**4.63**	**3.63**	**2.75**
Grain Size (%)				
Gravel	**4.6**	**0.5**	**0**	**1.3**
Sand	**75.7**	**50.7**	**12.7**	**29.5**
Silt	**15.1**	**38.5**	**58.9**	**51.6**
Clay	**4.5**	**10.3**	**28.3**	**17.6**
Metals (mg/kg)				
Arsenic	4.4 U	5.9 U	7.5 U	8.9 U
Chromium	**17**	**24**	**36**	**30**
Copper	**19**	**30**	**54**	**39**
Lead	**19**	**13**	**51**	**15**
Nickel	**24**	**25**	**31**	**23**
Zinc	**70**	**100**	**330**	**110**
Pesticides (µg/kg)				
4,4'-DDD	**150 J**	**59**	**96 J**	**90**
4,4'-DDE	100 U	10 U	50 U	**15**
4,4'-DDT	100 U	10 U	50 U	10 U
Aldrin	190 U	17 U	**140 J**	16 U
alpha-BHC	100 U	10 U	50 U	10 U
alpha-Chlordane	100 U	10 U	50 U	10 U
beta-BHC	100 U	10 U	50 U	**7.6 J**
delta-BHC	**25 J**	10 U	50 U	10 U
Dieldrin	100 U	10 U	50 U	10 U
Endosulfan I	100 U	**13 J**	50 U	**7.8 J**
Endosulfan II	**59 J**	**14 J**	**23 J**	10 U
Endosulfan Sulfate	100 U	10 U	50 U	10 U
Endrin	100 U	10 U	50 U	10 U
Endrin aldehyde	100 U	10 U	**38 J**	**14**
Endrin ketone	**130**	13 U	**23 J**	**3.7 J**
gamma-BHC (Lindane)	100 U	10 U	50 U	12 U
gamma-Chlordane	100 U	10 U	50 U	10 U
Heptachlor	100 U	10 U	50 U	10 U
Heptachlor Epoxide	100 U	13 U	50 U	10 U
Methoxychlor	**240**	**34**	50 U	**11 J**
Toxaphene	12000 U	1700 U	2600 U	600 U
PCBs (µg/kg)				
Aroclor 1016	100 U	100 U	110 U	100 U
Aroclor 1221	200 U	200 U	200 U	200 U
Aroclor 1232	100 U	100 U	130 U	100 U
Aroclor 1242	100 U	100 U	100 U	100 U
Aroclor 1248	100 U	100 U	140 U	100 U
Aroclor 1254	150 U	100 U	140 U	100 U
Aroclor 1260	100 U	100 U	**230**	100 U
VOCs (µg/kg)				
Benzene	**21000**	**4400**	**1000 J**	**26 J**
Ethylbenzene	**38000**	**5300**	**4800 J**	**150 J**
m,p-Xylenes	**35000**	**4300**	**1500 U**	160 UJ
o-Xylene	**17000**	**2200**	**1100 J**	81 UJ
Toluene	**6100**	**2000**	750 U	81 UJ
SVOCs (µg/kg)				
1-Methylnaphthalene	**380000 J**	**41000**	**39000**	**8300**
2-Methylnaphthalene	**650000 J**	**71000**	**70000**	**13000**
Acenaphthene	**520000**	**71000**	**38000**	**21000**

Table 27
Post-Dredge Surface Sediment Analytical Results

Location ID	RAA-PD12	RAA-PD13	RAA-PD14	RAA-PD15
Sample ID	RAA-PD12-051019	RAA-PD13-051019	RAA-PD14-051019	RAA-PD15-051019
Sample Date	10/19/2005	10/19/2005	10/19/2005	10/19/2005
Depth Interval	0-10 cm	0-10 cm	0-10 cm	0-10 cm
Acenaphthylene	**37000**	**17000**	**4900**	**1500**
Anthracene	**220000**	**47000**	**21000**	**10000**
Benzo(a)anthracene	**180000**	**42000**	**17000**	**8900**
Benzo(a)pyrene	**240000**	**57000**	**18000**	**12000**
Benzo(g,h,i)perylene	**180000**	**45000**	**14000**	**10000**
Benzofluoranthenes	**230000**	**83000**	**31000**	**19000**
Chrysene	**210000**	**52000**	**22000**	**11000**
Dibenzo(a,h)anthracene	**25000**	**5800**	**2300**	**1400**
Fluoranthene	**660000**	**150000**	**61000**	**34000**
Fluorene	**250000**	**37000**	**21000**	**8700**
Indeno(1,2,3-cd)pyrene	**170000**	**42000**	**14000**	**9200**
Naphthalene	**3900000**	**350000**	**64000**	**40000**
Phenanthrene	**1200000**	**230000**	**120000**	**56000**
Pyrene	**750000**	**180000**	**74000**	**42000**
TPH (mg/kg)				
TPH - Motor Oil Range	**5900 Z**	**5000 Z**	**1300 J**	**1300 J**
TPH-Diesel Range	**21000 Z**	**13000 Z**	**1800 J**	**1700 J**
TPH-Gasoline Range	**7300**	**1400**	**840**	**61**

Notes:

[a]	Field split collected at statio
µg/kg	microgram/kilogram dry w
mg/kg	milligram/kilogram dry wei
Bold	Analyte detected at provide
U	Non-Detect
Z	See laboratory deliverable c

Table 28
Pre- and Post-Construction Sediment Trap Monitoring Collection Information

Station ID	Sample ID	Collection Date	Collection Duration (days)	Latitude[a] (Degrees N NAVD 83)	Longitude[a] (Degrees W NAVD 83)	Depth of Accumulated Sediment (cm)	Mass of Accumulated Sediment (g)[b]	Monitoring Observations
RAA-ST-1	RAA-STBU	08/17/2005	35	122.7542911	45.57889639	6.3	89	Brown/grey silt, abundant zooplankton in overlying water, sediment surface flat/undisturbed, spotty sheen upon mixing, no odor
	RAA-STPU	11/08/2005	82	122.7542911	45.57889639	1.5	17	Light brown silt, sediment surface flat/undisturbed, no sheen/odor
RAA-ST-2	RAA-STBM	08/18/2005	35	122.7588663	45.58056284	4.3	59	Brown/grey silt, sediment surface flat/undisturbed, spotty sheen upon mixing, no odor
	RAA-STPM	11/08/2005	82	122.7588663	45.58056284	3.5	94	Light brown silt, live crawdad in container, sediment surface disturbed upon removal of crawdad, no sheen/odor
RAA-ST-3	RAA-STBD	08/17/2005	35	122.7610736	45.58152637	1.0	10	Brown silt, sediment surface flat/undisturbed, spotty sheen upon mixing, no odor
	RAA-STPD	11/08/2005	82	122.7610736	45.58152637	2.5	82	Light brown silt, live crawdad in container, sediment surface disturbed upon removal of crawdad, no sheen/odor

Notes:
[a] - Monitoring stations are approximate based on diver estimations.
[b] – Mass approximated based on percent solids and assumed specific gravity (2.65)

Table 29
Pre- and Post-Construction Sediment Trap Analytical Results

Location ID Sample ID Sample Date Description	RAA-STBD RAA-STBD-050817 8/17/2005 Baseline Downstream	RAA-STPD RAA-STPD-051108 11/8/2005 Post-Construction Downstream	RAA-STBM RAA-STBM-050818 8/18/2005 Baseline Removal Area	RAA-STPM RAA-STPM-051108 11/8/2005 Post-Construction Removal Area	RAA-STBU RAA-STBU-050817 8/17/2005 Baseline Upstream	RAA-STPU RAA-STPU-051108 11/8/2005 Post-Construction Upstream
Conventionals						
Total Solids (%)	**12.5**	**33.8**	**16.0**	**28.6**	**16.5**	**13.1**
Cyanide (mg/kg)	**19.8**	**32.7**	**2.50**	**6.7**	1.00 U	**1.3**
Total Organic Carbon (%)	**3.60 J**	**5.84**	**3.59 J**	**5.99**	**3.43 J**	**3.5**
Grain Size (%)						
Gravel	--	**1.23**	--	**0.07**	**0.00**	**0.14**
Sand, Coarse	--	**2.28**	--	**0.53**	**0.50**	**0.63**
Sand, Fine	--	**13.7**	--	**8.95**	**1.48**	**2.78**
Sand, Medium	--	**5.13**	--	**1.83**	**0.45**	**0.68**
Sand, Very Coarse	--	**1.69**	--	**0.36**	**0.29**	**0.58**
Sand, Very Fine	--	**15.9**	--	**12.5**	**2.00**	**8.90**
Silt	--	**53.8**	--	**69.9**	**80.6**	**76.0**
Clay	--	**2.93**	--	**0.55**	**16.2**	**3.12**
SVOCs (µg/kg)						
2-Methylnaphthalene	**130**	**2600**	**220**	**4700**	**17.0**	**620**
Acenaphthene	**270**	**7400**	**490**	**16000**	**30.0**	**1300**
Acenaphthylene	**150**	**2900**	**440**	**5000**	**26.0**	**1100**
Anthracene	**690**	**14000**	**1100**	**38000**	**75.0**	**3500**
Benzo(a)anthracene	**1400**	**39000**	**3700**	**43000**	**170**	**7300**
Benzo(a)pyrene	**2200**	**53000**	**6100**	**60000**	**270**	**12000**
Benzo(b)fluoranthene	**1400**	**33000**	**4200**	**38000**	**200**	**7200**
Benzo(g,h,i)perylene	**1900**	**37000**	**5300**	**40000**	**260**	**9200**
Benzo(k)fluoranthene	**1100**	**30000**	**3000**	**30000**	**150**	**6400**
Chrysene	**1900**	**48000**	**4600**	**55000**	**250**	**8600**
Dibenzo(a,h)anthracene	**250**	**4200**	**650**	**3900**	**31.0**	**880**
Dibenzofuran	**28.0**	**630**	**62.0**	**1200**	**6.70 J**	**97 J**
Fluoranthene	**2400**	**78000**	**6400**	**140000**	**320**	**18000**
Fluorene	**180**	**4200**	**310**	**10000**	**21.0**	**710**
Indeno(1,2,3-cd)pyrene	**1600**	**35000**	**4900**	**39000**	**210**	**8100**
Naphthalene	**270**	**6000**	**630**	**11000**	**50.0**	**2600**
Phenanthrene	**1600**	**47000**	**3500**	**92000**	**180**	**8000**
Pyrene	**3100**	**110000**	**8000**	**190000**	**400**	**26000**

Notes:

Bold Analyte detected at provided concentration

Table 30
Gasco Transfer Station Monitoring Surface Soil Characterization Collection Information

Station ID	Sample ID	Latitude[a] (Degrees N NAVD 83)	Longitude[a] (Degrees W NAVD 83)	Date Sampled	Penetration/Sampled Depth (centimeter)
GTM-01	GTM-01SO-01	52.592267019	156.995514739	09/13/2005	2/2 cm
	GTM-1115-0-0.3-TP	52.592267019	156.995514739	11/11/2005	9/9 cm*
GTM-02	GTM-01SO-02	52.591360592	156.996120747	09/13/2005	2/2 cm
	GTM-1115-0-0.3-RD	52.591360592	156.996120747	11/11/2005	2/2 cm

Notes:

[a] – Geographical coordinates measured in North American Datum (NAD) 1983 in latitude and longitude decimal degrees

* No fine-grained material was present in the 0 - 2 cm interval at the sampling location because it had been worked down into the gravel by truck traffic or washed down into the gravel by rain or watering for dust-suppression. The sampler dug through the gravel to reach the shallowest fine-grained material for sampling.

Table 31
QA/QC Water Quality Monitoring Results – Laboratory Parameters

Location ID Sample ID-Depth Sample Date Chemical Name	Unit	Chronic Criteria	Acute Criteria	RAA-WCD2 Rinsate 9/21/2005 Field QA/QC	RAA-WCD2 Rinsate 9/26/2005 Field QA/QC	RAA-WCU Rinsate 10/20/2005 Field QA/QC
Conventionals						
Cyanide	µg/l	5.2	20	50 U	50 U	5.6 U
SVOC						
Anthracene	µg/l	0.73	13	**0.00572 J**	**0.0163 J**	0.02 U
Benzo(a)anthracene	µg/l	0.02	0.49	**0.00788 J**	0.0208 U	0.02 U
Benzo(a)pyrene	µg/l	0.01	0.24	**0.054 ***	0.0208 U	0.02 U
Dibenzofuran	µg/l	3.7	66	0.212 U	0.208 U	0.2 U
Fluoranthene	µg/l	6.16	3980	**0.012 J**	**0.0198 J**	0.02 U
Fluorene	µg/l	3.9	70	0.0212 U	**0.0152 J**	0.02 U
Naphthalene	µg/l	12	190	**0.0689**	**0.114**	**0.15**
Phenanthrene	µg/l			**0.0327**	**0.0791**	0.02 U

Notes:

U Non-Detect

B Analyte was detected in the blank

J Estimated, the result is below the reporting limit and above the lab MDL

*# Exceedence of Acute Criteria

* Exceedence of Chronic Criteria

Table 32
QA/QC Post-Dredge Characterization Monitoring Results

Location ID Sample ID-Depth Sample Date Chemical Name	Unit	RAA-PDFB-051019 Field Blank 10/19/2005 Field QA/QC	RAA-PDRB-051019 Rinsate Blank 10/19/2005 Field QA/QC
Conventionals			
Cyanide	mg/l	0.050 U	0.050 U
Total Organic Carbon	mg/l	1.0 U	1.0 U
Metals			
Antimony	mg/l	0.050 U	0.050 U
Arsenic	mg/l	0.050 U	0.050 U
Cadmium	mg/l	0.0050 U	0.0050 U
Chromium	mg/l	0.020 U	0.020 U
Copper	mg/l	0.020 U	0.020 U
Lead	mg/l	0.020 U	0.020 U
Mercury	mg/l	0.00020 U	0.00020 U
Nickel	mg/l	0.020 U	0.020 U
Silver	mg/l	0.010 U	0.010 U
Zinc	mg/l	0.015 U	0.015 U
PCBs			
Aroclor 1016	µg/l	0.20 U	0.20 U
Aroclor 1221	µg/l	0.39 U	0.40 U
Aroclor 1232	µg/l	0.20 U	0.20 U
Aroclor 1242	µg/l	0.20 U	0.20 U
Aroclor 1248	µg/l	0.20 U	0.20 U
Aroclor 1254	µg/l	0.20 U	0.20 U
Aroclor 1260	µg/l	0.20 U	0.20 U
Pesticides			
4,4'-DDD	µg/l	0.0098 U	0.0099 U
4,4'-DDE	µg/l	0.0098 U	0.0099 U
4,4'-DDT	µg/l	0.0098 U	0.0099 U
Aldrin	µg/l	0.0098 U	0.0099 U
alpha-BHC	µg/l	0.0098 U	0.0099 U
beta-BHC	µg/l	0.0098 U	0.0099 U
gamma-BHC (Lindane)	µg/l	0.0098 U	0.0099 U
delta-BHC	µg/l	0.0098 U	0.0099 U
alpha-Chlordane	µg/l	0.0098 U	0.0099 U
Dieldrin	µg/l	0.0098 U	0.0099 U
Endosulfan I	µg/l	0.0098 U	0.0099 U
Endosulfan II	µg/l	0.0098 U	0.0099 U
Endosulfan Sulfate	µg/l	0.0098 U	0.0099 U
Endrin	µg/l	0.0098 U	0.0099 U
Endrin aldehyde	µg/l	0.0098 U	0.0099 U
Heptachlor	µg/l	0.0098 U	0.0099 U
Heptachlor Epoxide	µg/l	0.0098 U	0.0099 U
Methoxychlor	µg/l	0.0098 U	0.0099 U
Toxaphene	µg/l	0.49 U	0.50 U
SVOC			
1-Methylnaphthalene	µg/l	0.098 U	0.098 U
2-Methylnaphthalene	µg/l	0.13 U	0.13 U
Acenaphthene	µg/l	0.098 U	0.098 U
Acenaphthylene	µg/l	0.098 U	0.098 U
Anthracene	µg/l	0.098 U	0.098 U

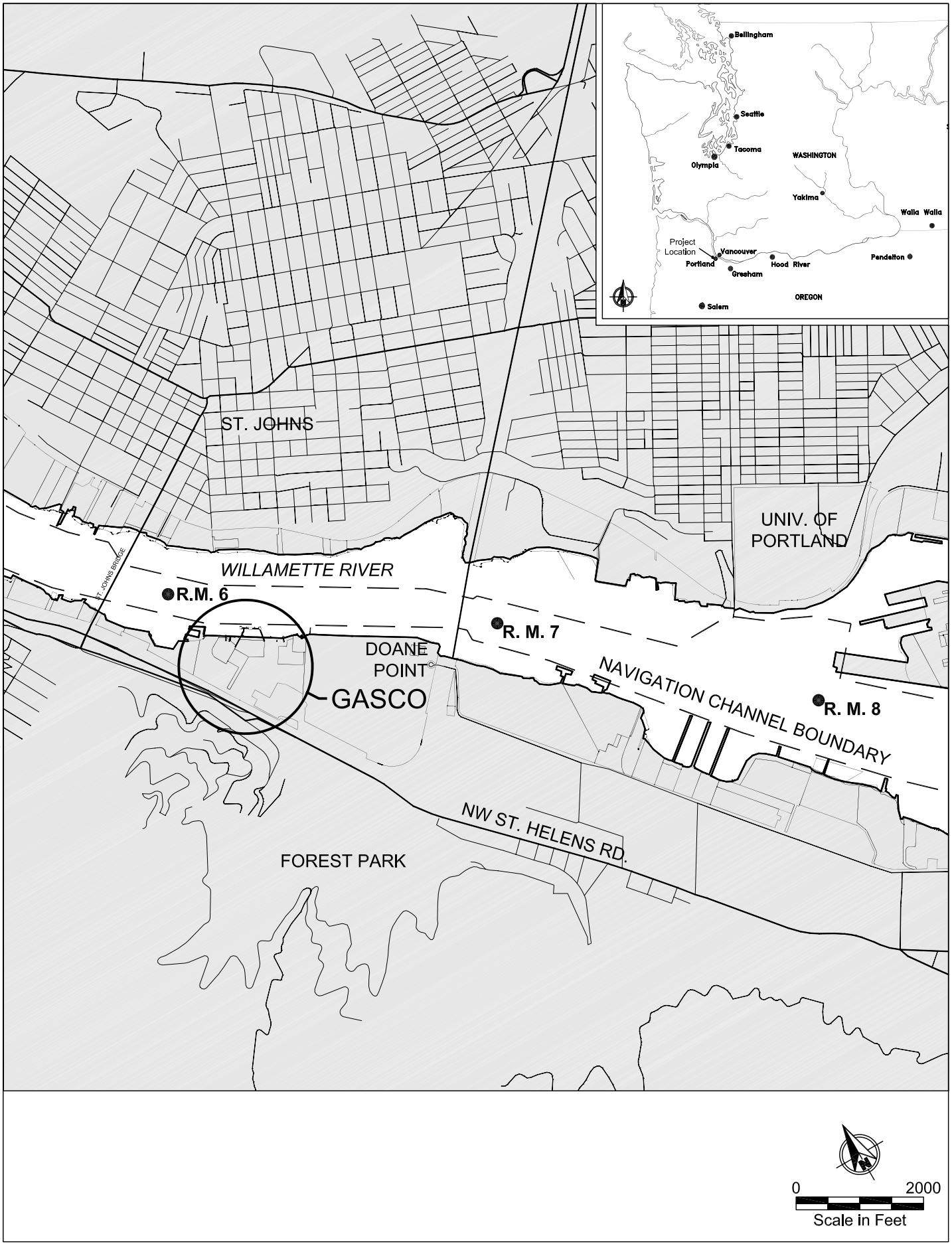
Table 32
QA/QC Post-Dredge Characterization Monitoring Results

Location ID Sample ID-Depth Sample Date Chemical Name		Unit	RAA-PDFB-051019 Field Blank 10/19/2005 Field QA/QC	RAA-PDRB-051019 Rinsate Blank 10/19/2005 Field QA/QC
	Benzo(a)anthracene	µg/l	0.098 U	0.098 U
	Benzo(a)pyrene	µg/l	0.098 U	0.098 U
	Benzo(g,h,i)perylene	µg/l	0.098 U	0.098 U
	Benzofluoranthenes	µg/l	0.20 U	0.20 U
	Chrysene	µg/l	0.098 U	0.098 U
	Dibenzo(a,h)anthracene	µg/l	0.098 U	0.098 U
	Dibenzofuran	µg/l	--	--
	Fluoranthene	µg/l	0.098 U	0.098 U
	Fluorene	µg/l	0.098 U	0.098 U
	Indeno(1,2,3-cd)pyrene	µg/l	0.098 U	0.098 U
	Naphthalene	µg/l	0.098 U	0.098 U
	Phenanthrene	µg/l	0.098 U	0.098 U
	Pyrene	µg/l	0.098 U	0.098 U
TPH				
	TPH-Gasoline Range	mg/l	0.10 U	0.10 U
	TPH-Diesel Range	mg/l	0.24 U	0.24 U
VOC				
	Benzene	mg/l	0.0020 U	0.0020 U
	Ethylbenzene	mg/l	0.0020 U	0.0020 U
	Toluene	mg/l	0.0020 U	0.0020 U
	m,p-Xylenes	mg/l	0.0020 U	0.0020 U
	o-Xylene	mg/l	0.0020 U	0.0020 U

Notes:

U Non-Detect

FIGURES



Aug 20, 2004 2:10pm sdekleva K:\Jobs\000029-GASCO\00002902\00002902-01.dwg FIG 1

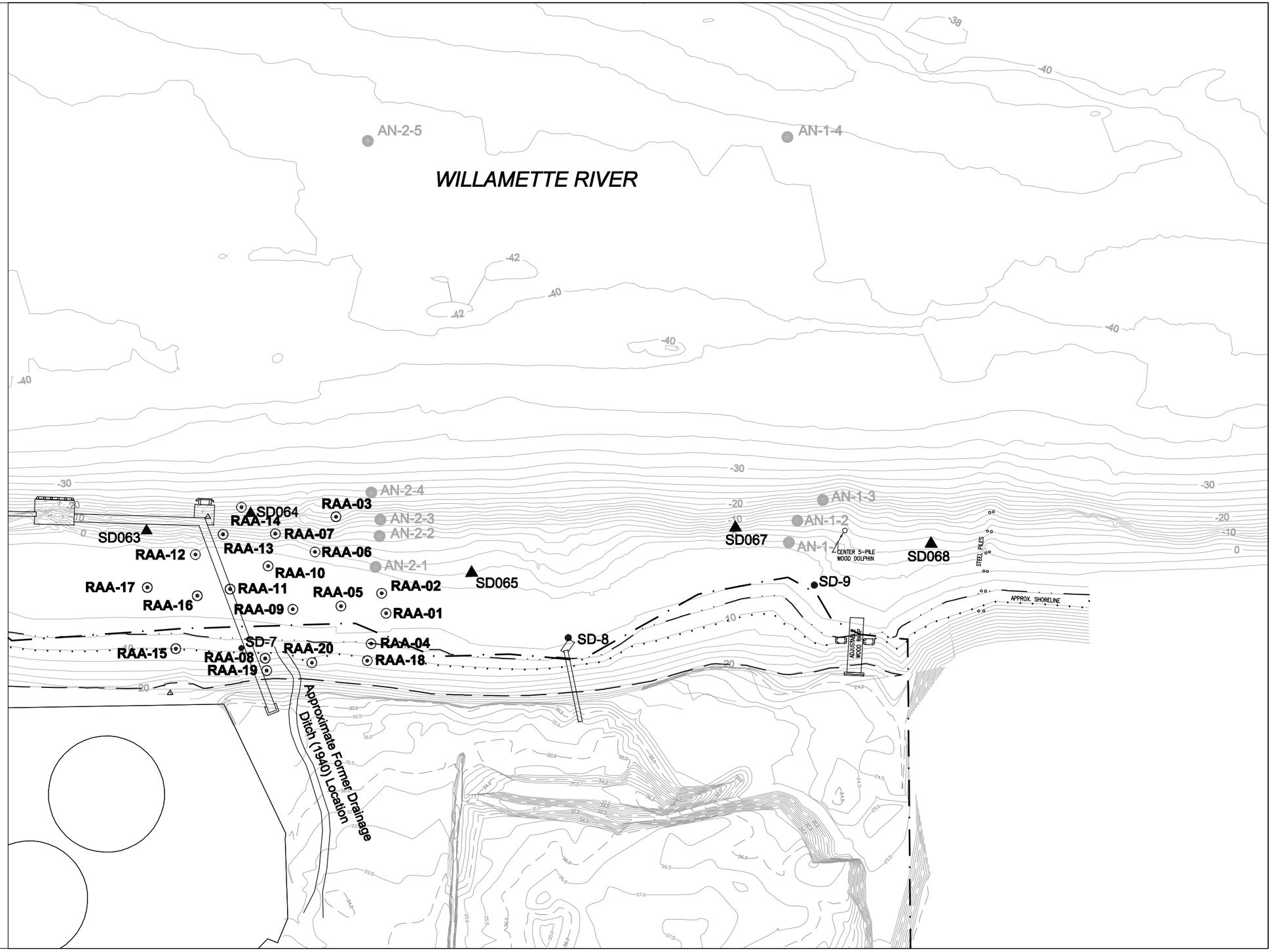
ANCHOR ENVIRONMENTAL, L.L.C.

Figure 1
Vicinity Map
Northwest Natural "Gasco" Site

Legend:

- ⊙ **RAA-01** Design Characterization Sediment Core Location (Anchor 2004)
- AN-2-1 ● Previous Sediment Core Location (Anchor 2002)
- **SD063** ▲ Previous Sediment Core Location (Weston 1998)
- **SD-7** ● Previous Sediment Core Location (HAI 1996)
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88

0 100
Scale in Feet



Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

Dec 28, 2005 10:37am dholmer K:\Jobs\000029-GASCO\00002902\00002902-51.dwg FIG 2

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 2
Summary of Sampling Locations in Vicinity of Tar Body Prior to Design
NW Natural "Gasco" Site

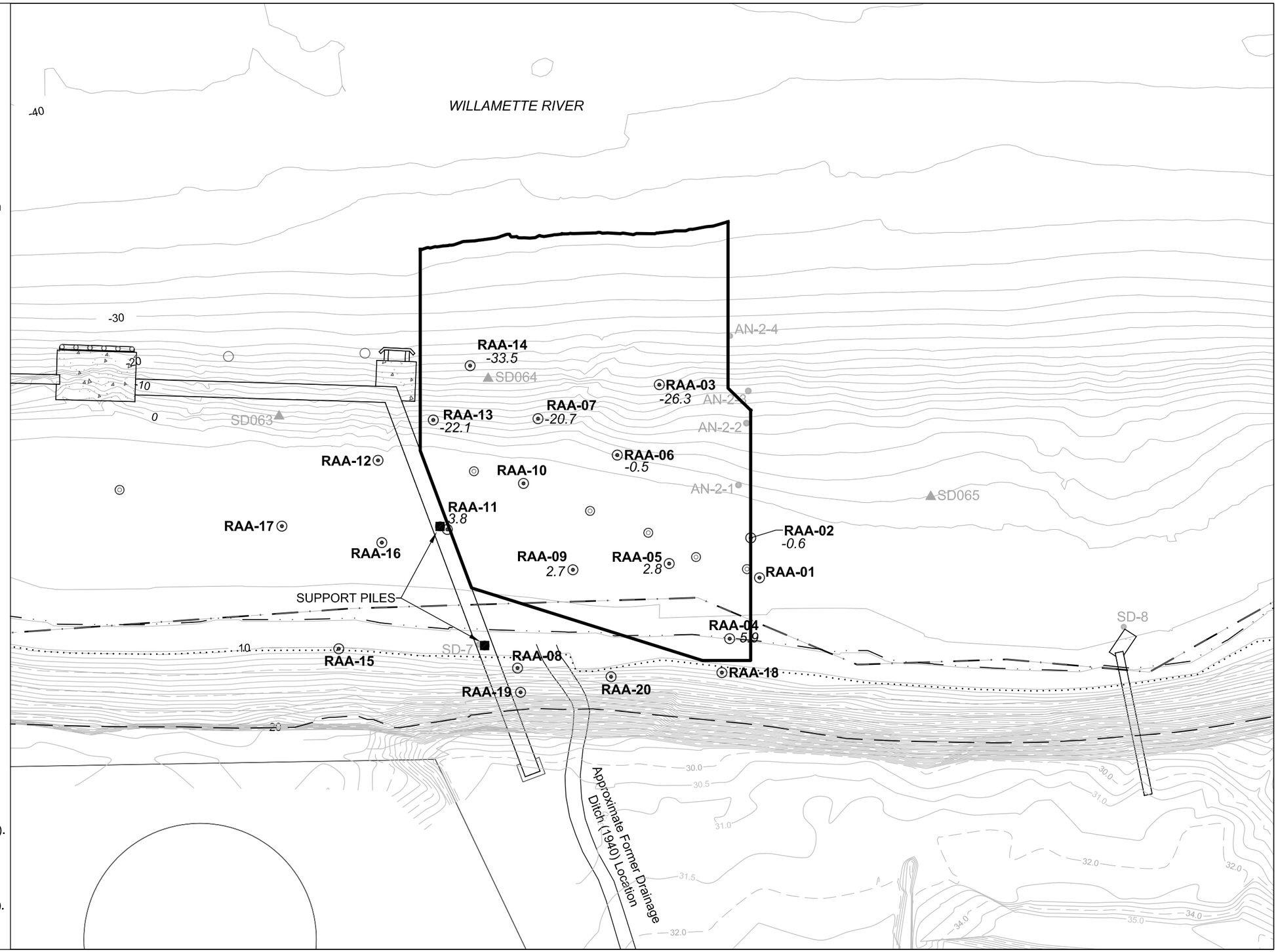
Legend:

- Lateral Extents of Suface Tar Body in Removal Action Area
- RAA-01 Design Characterization Sediment Core Location (Anchor 2004)
- -33.5 Bottom Elevation of Surface Tar Body in Removal Action Area (ft NAVD 88)
- Pile Location (surveyed August 2004)
- AN-2-1 Previous Sediment Core Location (Anchor 2002)
- SD063 Previous Sediment Core Location (Weston 1998)
- SD-7 Previous Sediment Core Location (HAI 1996)
- Support Pile Locations (to be protected during dredging)
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88

0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).



K:\Jobs\000029-GASCO\00002902\00002902-62.dwg FIG 3

Jul 26, 2005 4:01pm dholmer

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 3
Lateral and Vertical Extents of Surface Tar Body
NW Natural "Gasco" Site

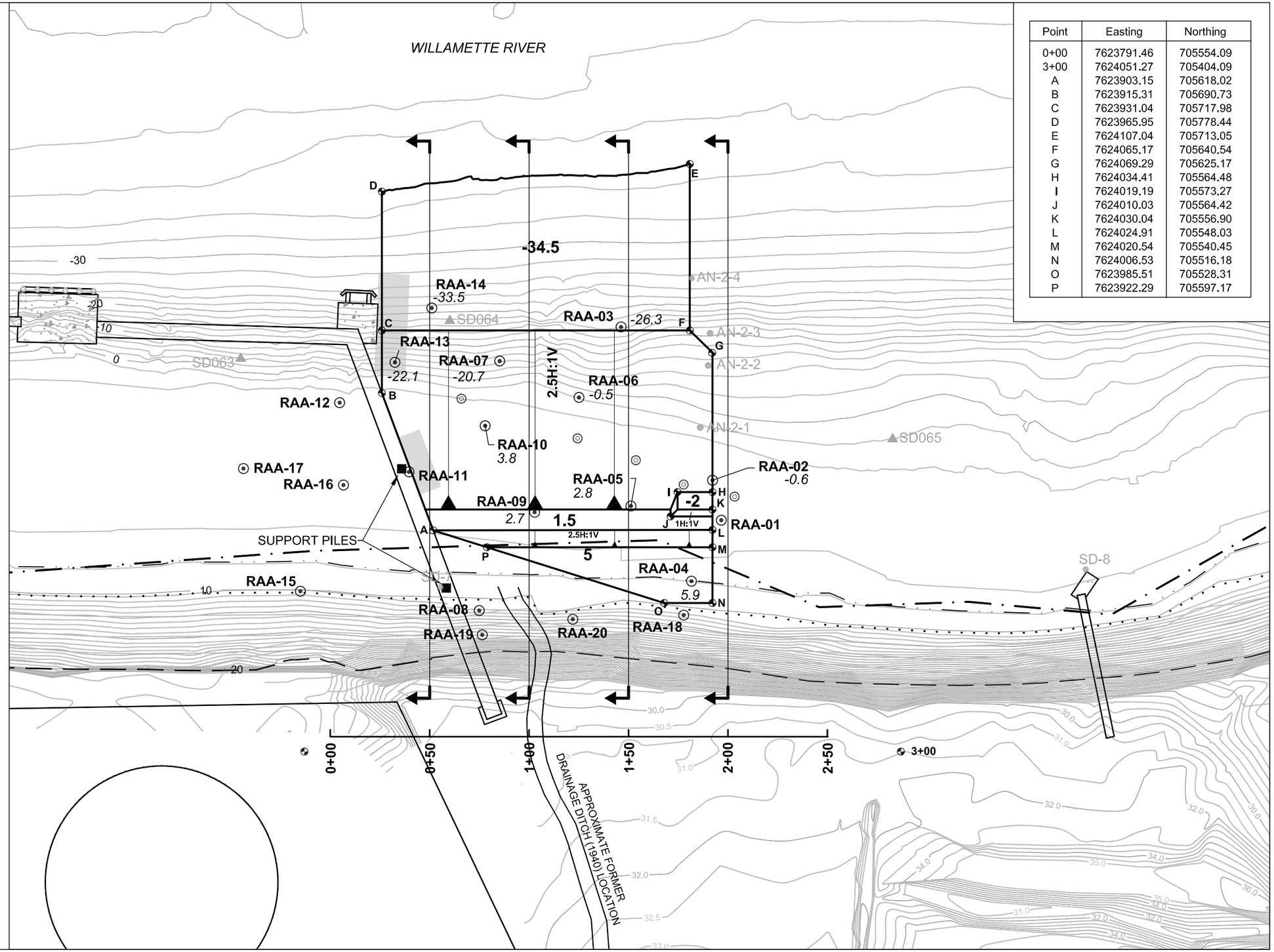
Legend:

- **1.5** Dredge Prism and Dredge Elevation
- RAA-01 Sample Location and Number (July 2004, Anchor)
- -33.5 Bottom Elevation of Surface Tar Body in Removal Action Area (ft NAVD 88)
- AN-2-1 Previous Sediment Core Location (Anchor 2001)
- SD063 Previous Sediment Core Location (Weston 1998)
- SD-7 Previous Sediment Core Location (HAI 1996)
- Pile Location (To be removed during dredging)
- Support Pile Location
- 15' Dredging Offset to Protect Piles
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- A Control Point

0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

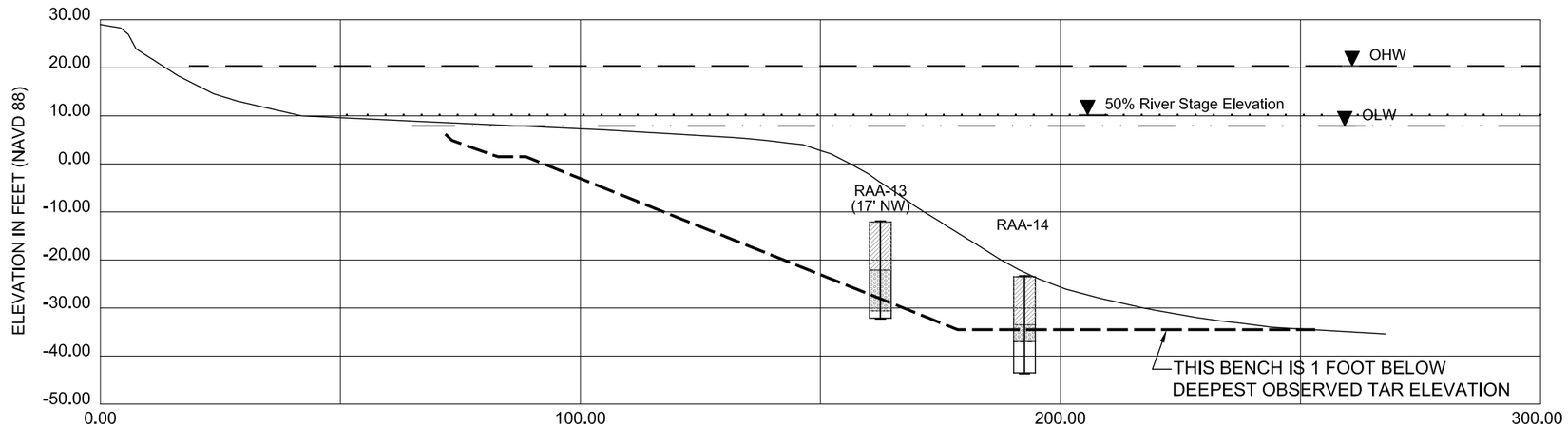


Point	Easting	Northing
0+00	7623791.46	705554.09
3+00	7624051.27	705404.09
A	7623903.15	705618.02
B	7623915.31	705690.73
C	7623931.04	705717.98
D	7623965.95	705778.44
E	7624107.04	705713.05
F	7624065.17	705640.54
G	7624069.29	705625.17
H	7624034.41	705564.48
I	7624019.19	705573.27
J	7624010.03	705564.42
K	7624030.04	705556.90
L	7624024.91	705548.03
M	7624020.54	705540.45
N	7624006.53	705516.18
O	7623985.51	705528.31
P	7623922.29	705597.17

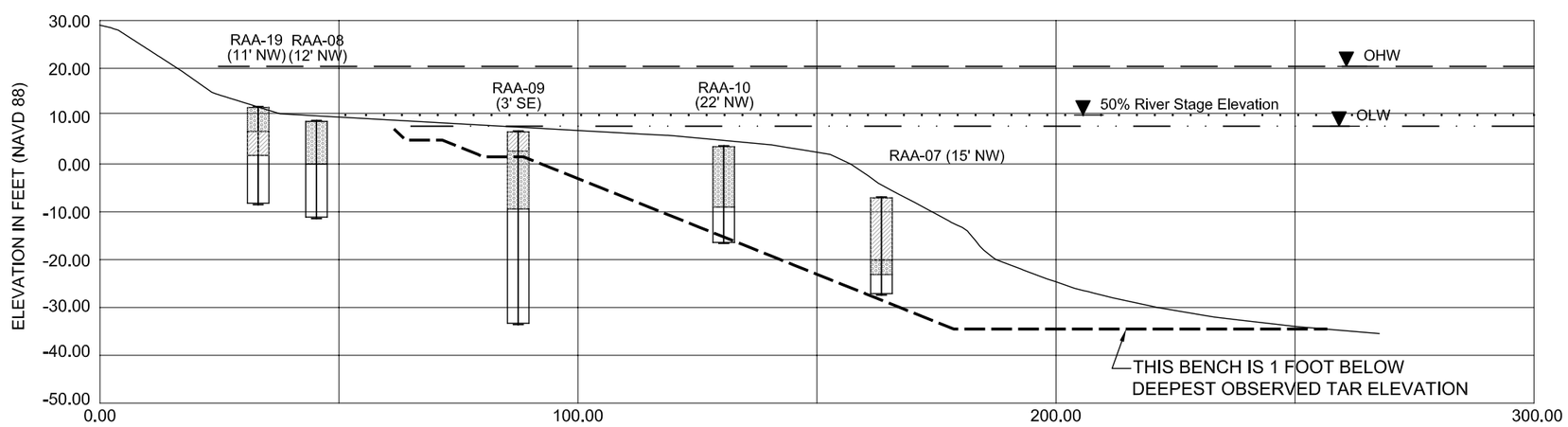
Jan 16, 2006 2:47pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-75.dwg Fig4

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 4
Design Dredge Plan and Cross Section Locations
NW Natural "Gasco" Site



STATION 0+50



STATION 1+00

Legend:

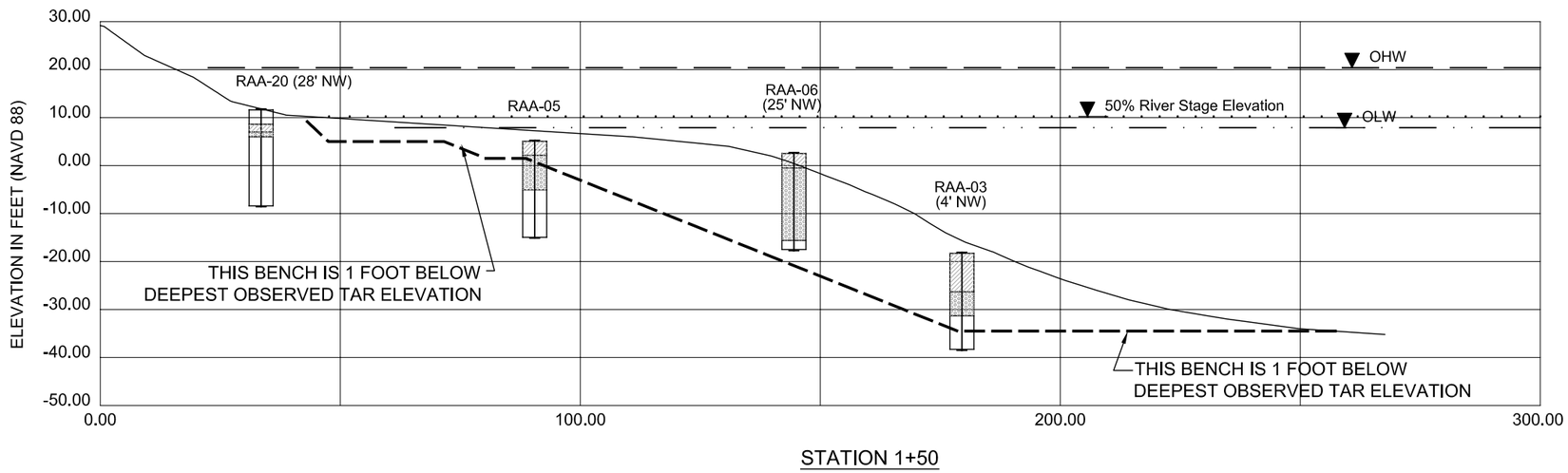
- Existing Surface
- Proposed Dredge Surface (2.5H:1V)
- Tar Present
- Visual Contamination (Oil, Sheen, Pitch, Odor)
- Visually Uncontaminated

0 30
Scale in Feet

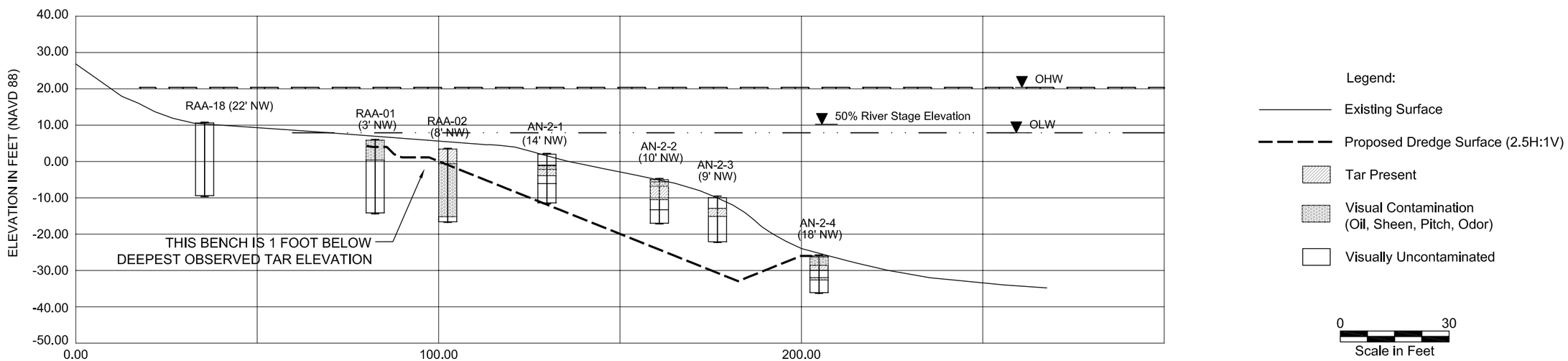
Dec 19, 2005 8:47am dholmer K:\Jobs\000029-GASCO\00002902\00002902-75.dwg Fig5a

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 5a
Design Cross Sections at Stations 0+50 and 1+00
NW Natural "Gasco" Site



STATION 1+50



STATION 2+00

Dec 19, 2005 8:47am dholmer K:\Jobs\000029-GASCO\00002902\00002902-75.dwg Fig5b

ANCHOR ENVIRONMENTAL, L.L.C.

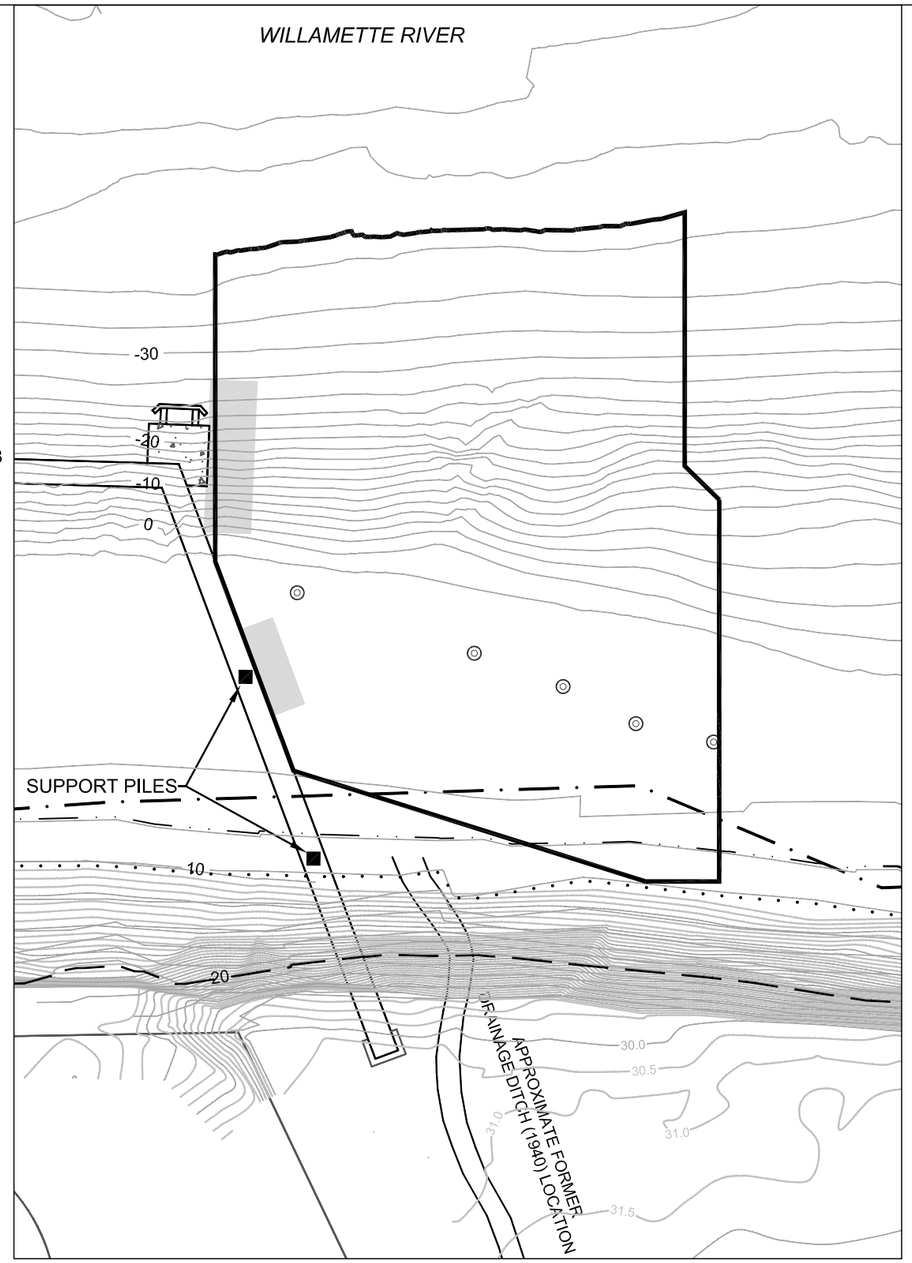
Figure 5b
Design Cross Sections at Stations 1+50 and 2+00
NW Natural "Gasco" Site

Legend:

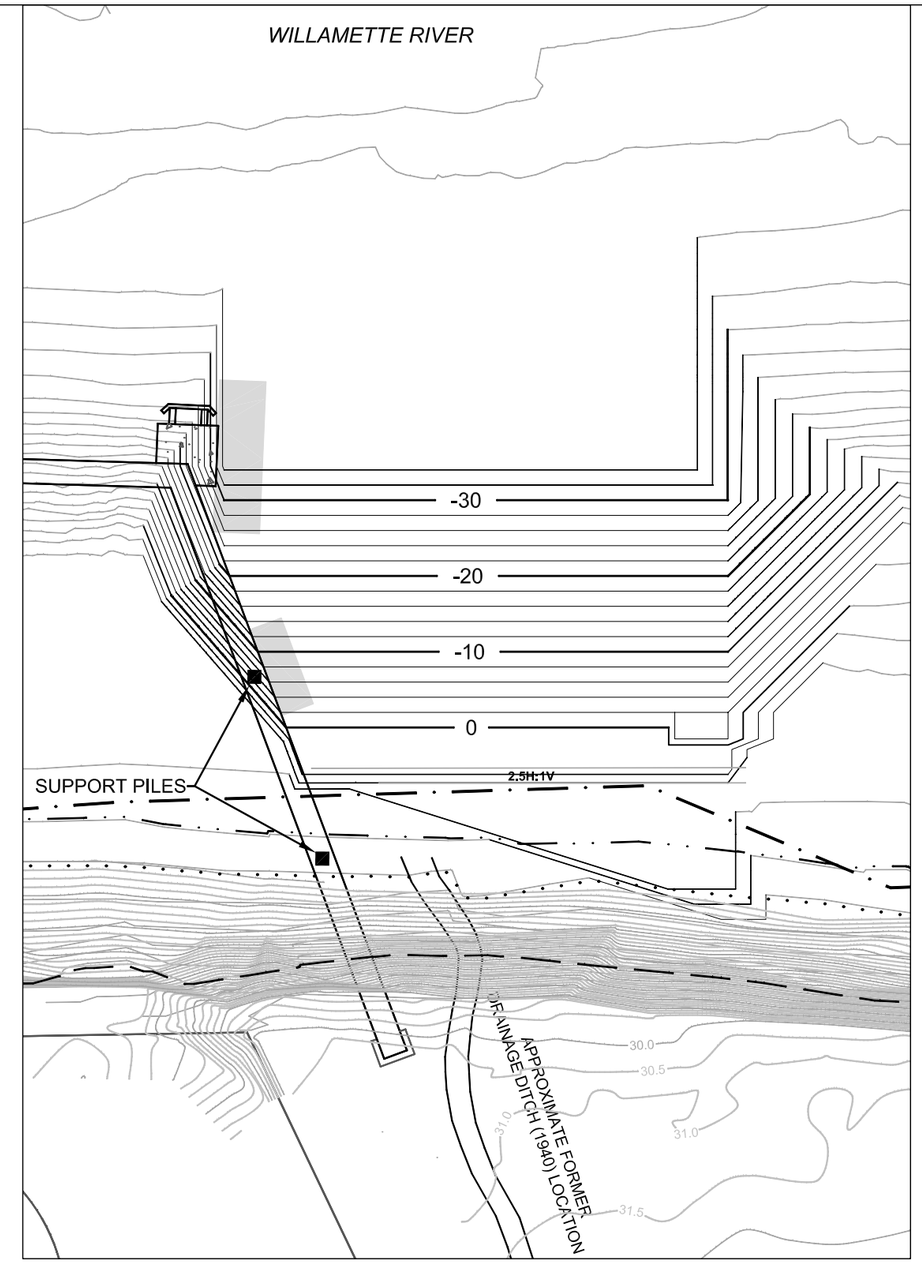
- Lateral Extent of Removal Action Area
- Pile Location (To be removed during dredging)
- Support Pile Location
- 15' Dredging Offset to Protect Piles
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).



Pre-Dredge Bathymetry



Post-Dredge Bathymetry

0 50
Scale in Feet

0 50
Scale in Feet

Dec 19, 2005 8:49am dholmer K:\Jobs\000029-GASCO\00002902\00002902-45.dwg Fig6

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 6
Design Pre-Dredge and Post-Dredge Bathymetry
NW Natural "Gasco" Site

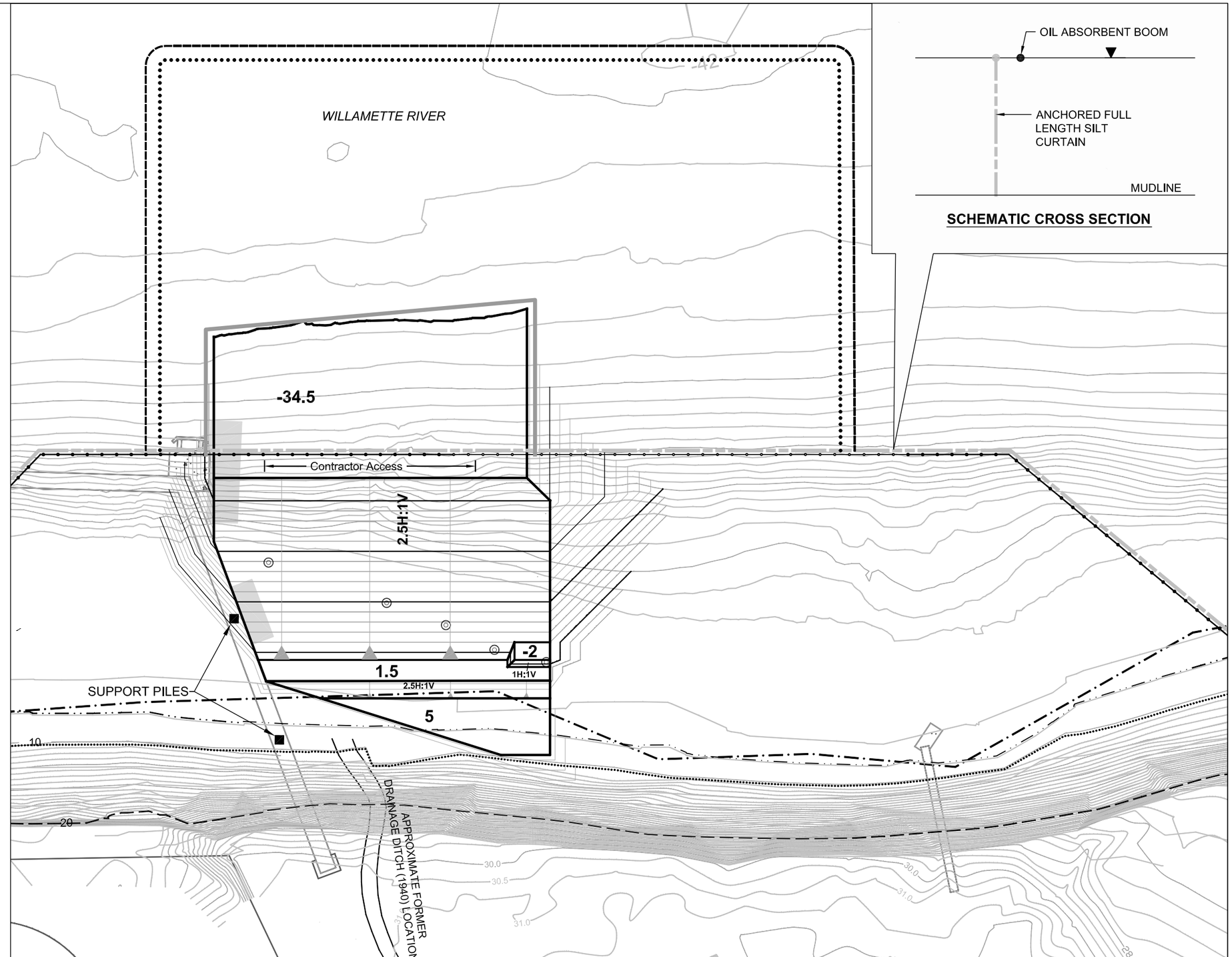
Legend:

- **1.5** Design Dredge Prism and Dredge Elevation
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- Oil Absorbent Boom (Mobile)
- Full Length Silt Curtain (Anchored)
- Oil Containment Boom with Skirt (2 Ft) (Mobile)
- Bed Load Baffle
- Bubble Curtain
- Pile Location (To be removed before dredging)
- Support Pile Location
- Design 15' Dredging Offset to Protect Piles

0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002)
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD88 (feet).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).



Jan 16, 2006 2:54pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-88.dwg FIG 7a

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 7a
Design Inner Removal Area - Non-Rigid Containment Configuration
NW Natural "Gasco" Site

Legend:

- 1.5 — Design Dredge Prism and Dredge Elevation
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- Oil Absorbent Boom (Mobile)
- Full Length Silt Curtain (Anchored)
- Oil Containment Boom with Skirt (2 Ft) (Mobile)
- Partial Length Silt Curtain (Anchored)
- Bed Load Baffle
- Bubble Curtain
- Pile Location (To be removed before dredging)
- Support Pile Location
- Design 15' Dredging Offset to Protect Piles

0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002)
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD88 (feet).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report, Hahn & Associates, 1998.

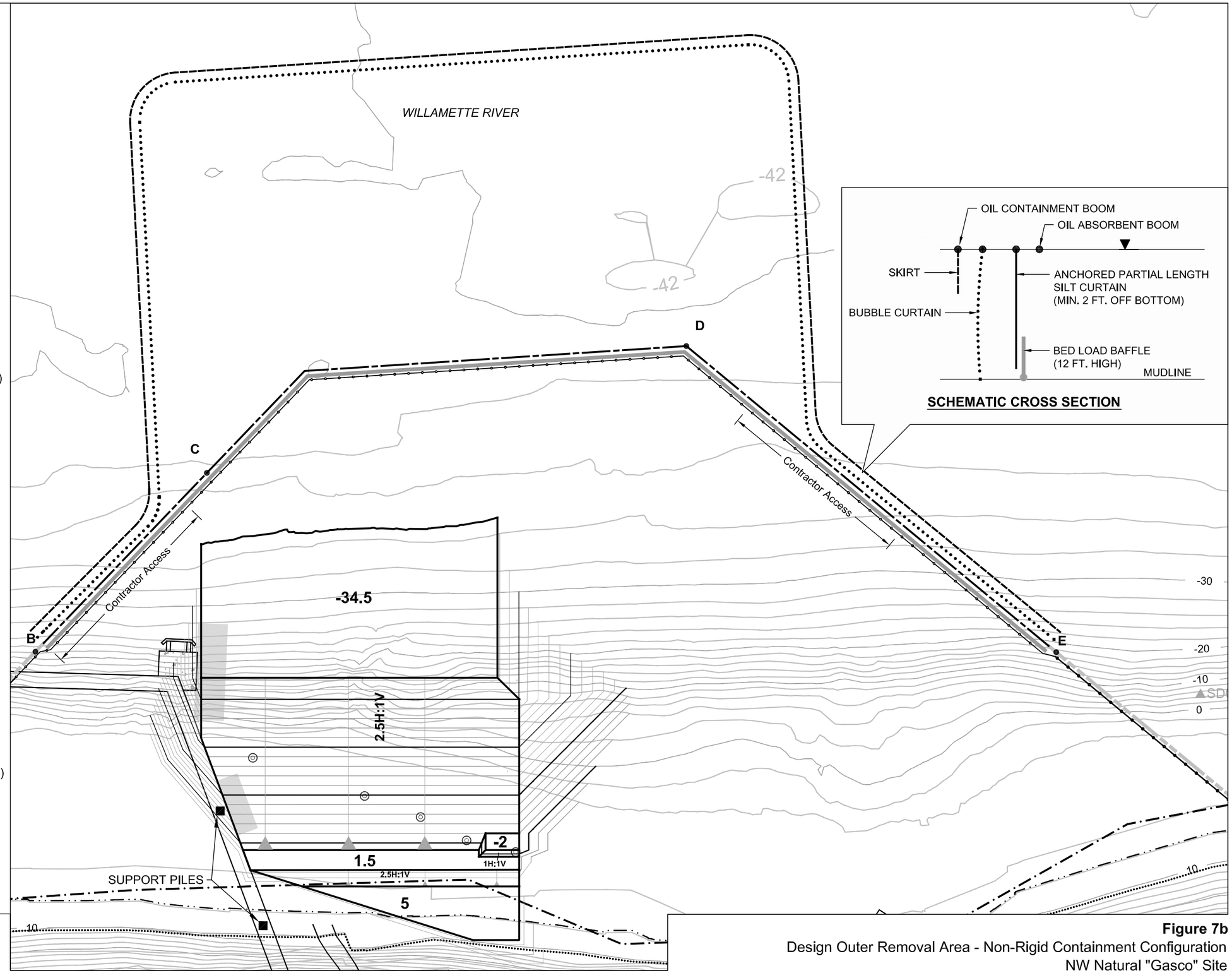


Figure 7b
Design Outer Removal Area - Non-Rigid Containment Configuration
NW Natural "Gasco" Site

ANCHOR ENVIRONMENTAL, L.L.C.

Dec 28, 2005 2:24pm dholmer K:\Jobs\000029-GASCO\00002902\00002902-90.dwg FIG 7b

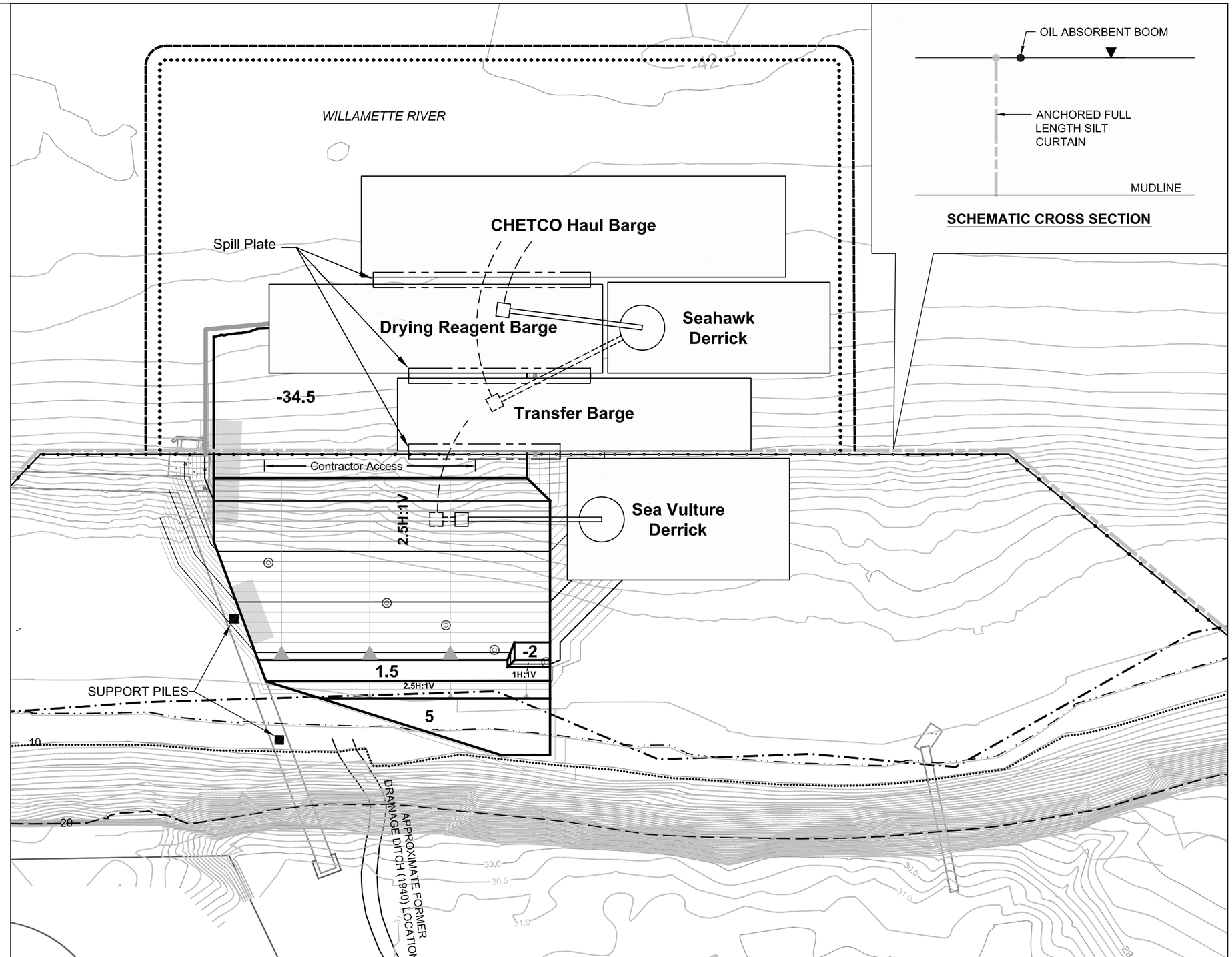
Legend:

- 1.5 Design Dredge Prism and Dredge Elevation
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- Oil Absorbent Boom (Mobile)
- Full Length Silt Curtain (Anchored)
- Oil Containment Boom with Skirt (2 Ft) (Mobile)
- Bed Load Baffle
- Bubble Curtain
- Pile Location (To be removed before dredging)
- Support Pile Location
- Design 15' Dredging Offset to Protect Piles

0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002)
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD88 (feet).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).



Jan 16, 2006 2:54pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-88.dwg FIG 8a

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 8a
Design Inner Removal Area - Haul Barge Holding Area and Transfer Location
NW Natural "Gasco" Site

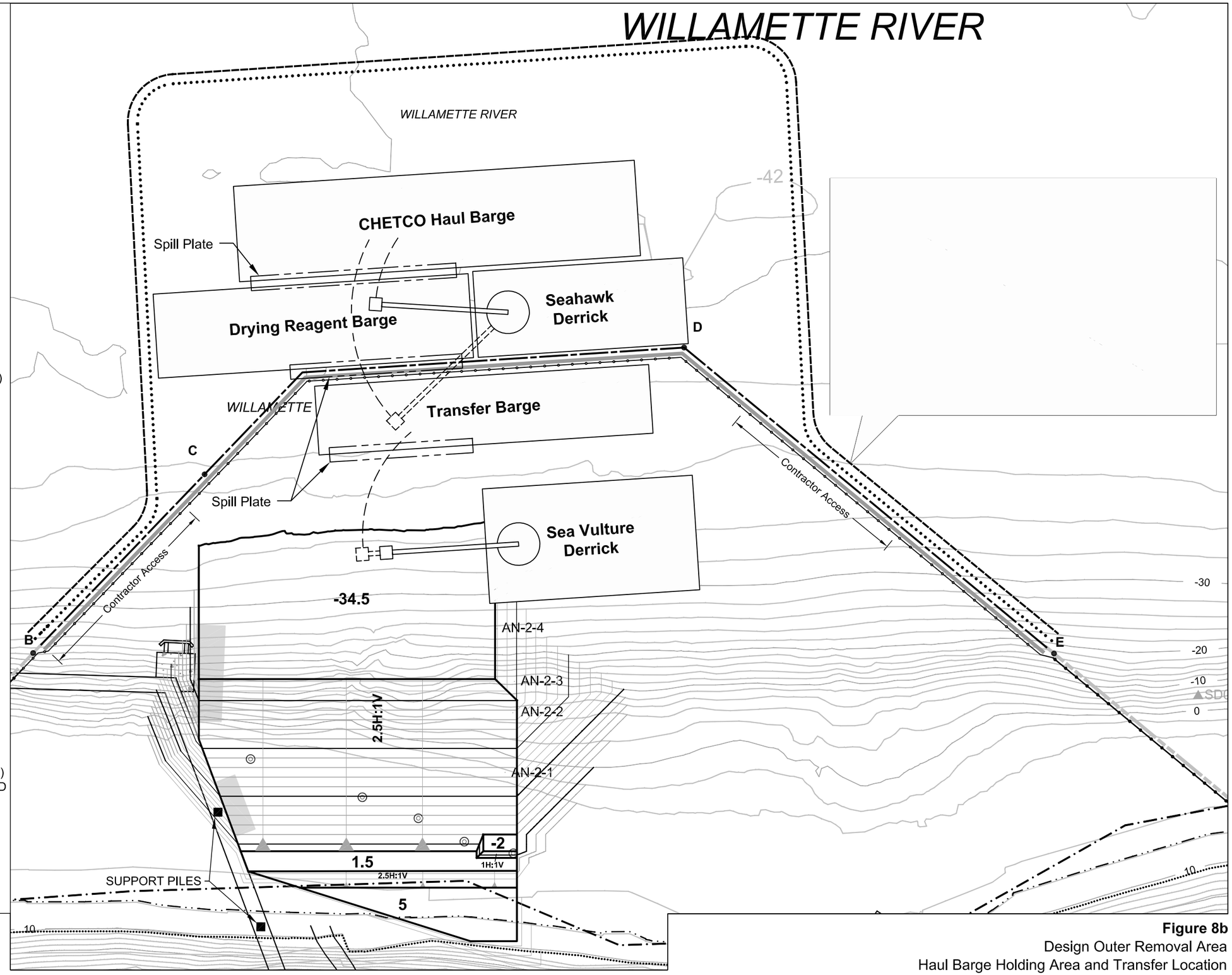
Legend:

- 1.5 Dredge Prism and Dredge Elevation
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- Oil Absorbent Boom (Mobile)
- Full Length Silt Curtain (Anchored)
- Oil Containment Boom with Skirt (2 Ft) (Mobile)
- Partial Length Silt Curtain (Anchored)
- Bed Load Baffle
- Bubble Curtain
- Pile Location (To be removed before dredging)
- Support Pile Location
- 15' Dredging Offset to Protect Piles

0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002)
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD88 (feet).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report, Hahn & Associates, 1998.



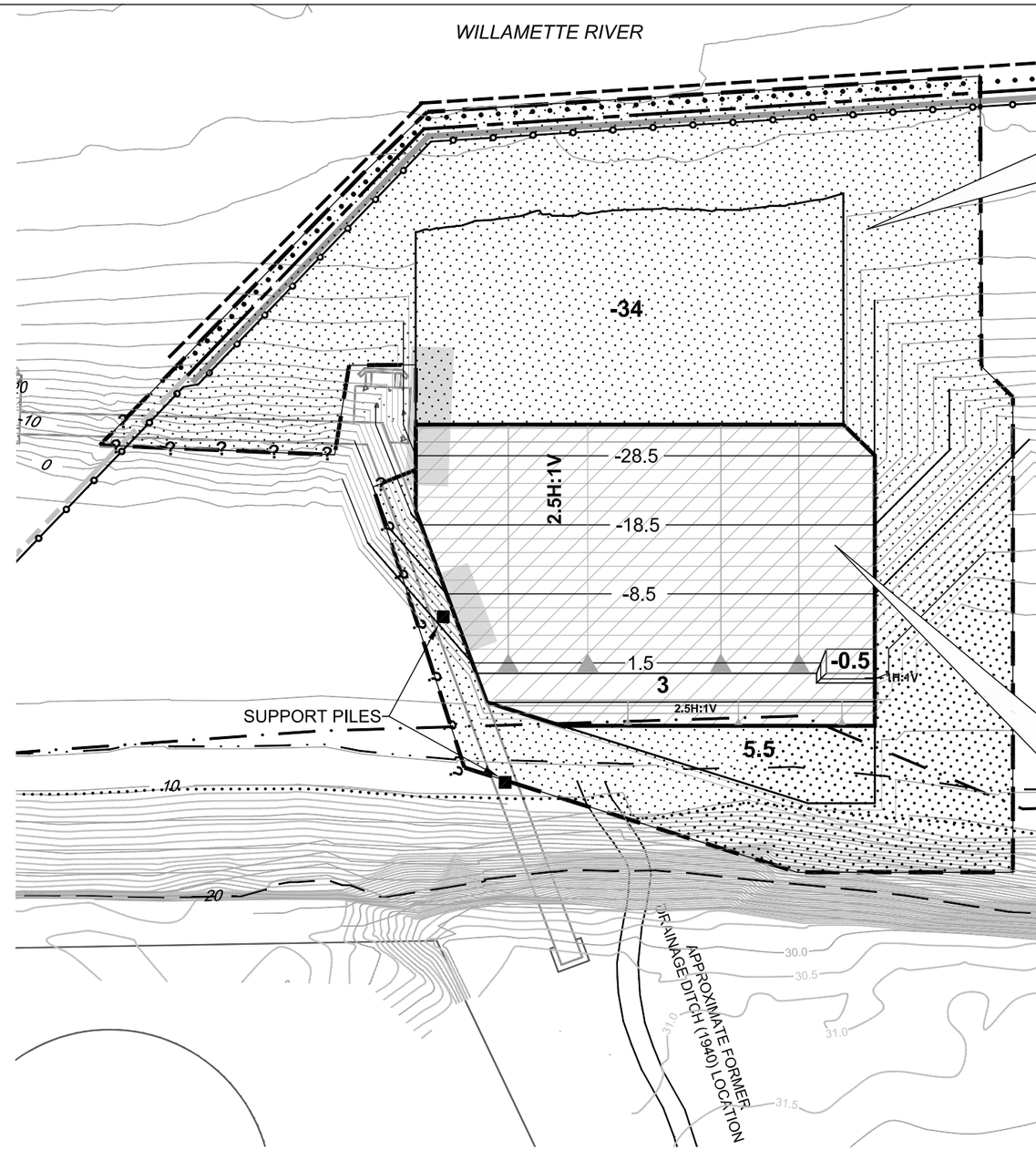
Jan 17, 2006 2:10pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-90.dwg FIG 8b

ANCHOR ENVIRONMENTAL, L.L.C.

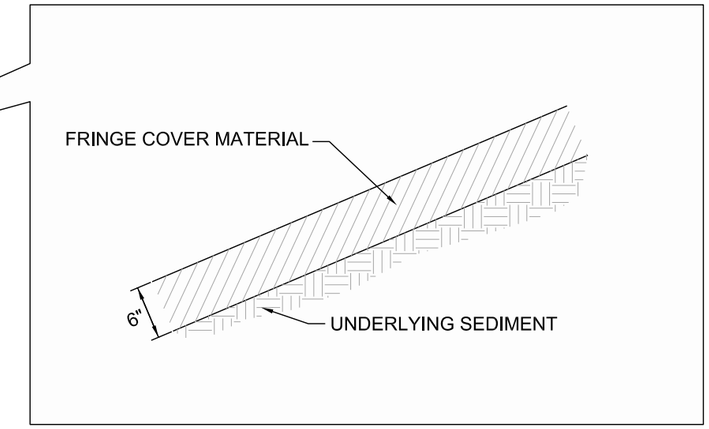
Figure 8b
Design Outer Removal Area
Haul Barge Holding Area and Transfer Location
NW Natural "Gasco" Site

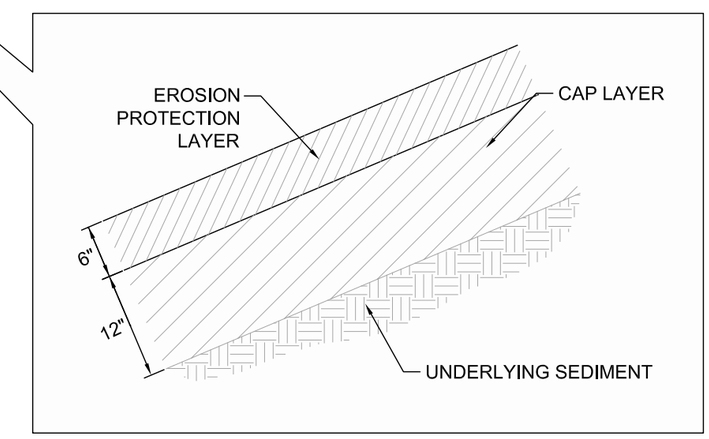
Legend:

- Support Pile Location
- Design 15' Dredging Offset to Protect Piles
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- 3 — Design Extent and Elevation of 18 in Thick Cap
- -34 — Design Extent and Elevation of 6 in Thick Cover
- Oil Absorbent Boom (mobile)
- Full Length Silt Curtain (anchored)
- Oil Containment Boom With Skirt (2 Ft) (mobile)
- Partial Length Silt Curtain (anchored)
- Bed Load Baffle
- Bubble Curtain



Post Cap and Cover Bathymetry





0 50
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).
6. Slope beneath pipeline support structure allowed to settle to angle of repose - shown at 1H:1V.

Dec 28, 2005 2:29pm dholmer K:\Jobs\000029-GASCO\00002902\00002902-83.dwg FIG 9

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 9
Design Post Cap and Cover Bathymetry
NW Natural "Gasco" Site

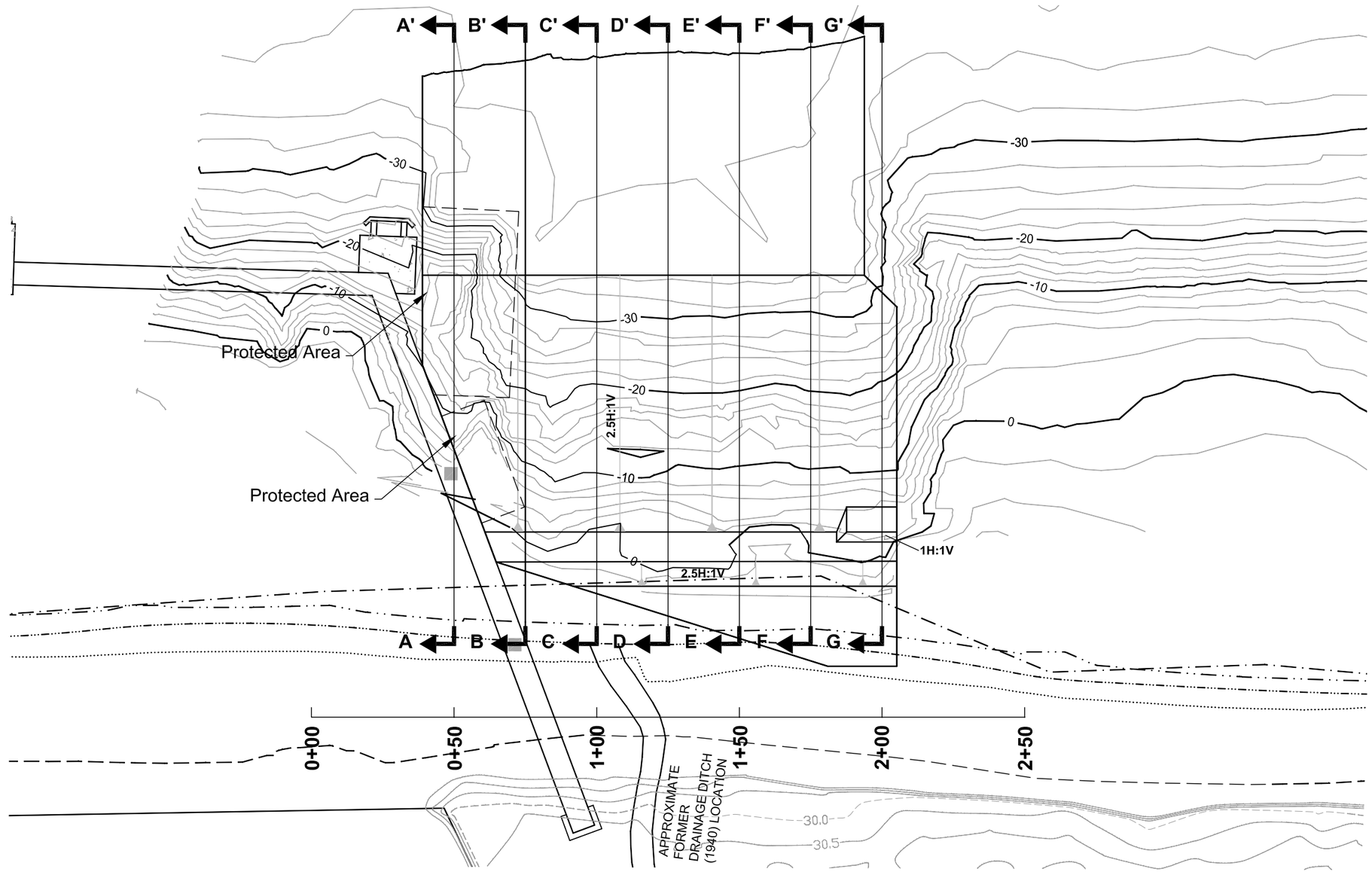
Legend:

- Support Pile Location
- -30 Bathymetry (BWE October 18, 2005)
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- A Cross Section Location

0 40
Scale in Feet

Notes:

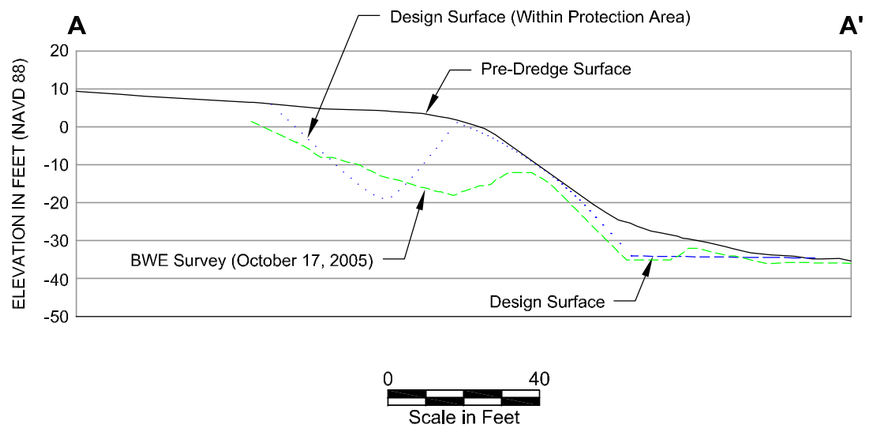
1. Post-dredge bathymetric contours created from survey provided by Blue Water Engineering (BWE) conducted on 10/18/2005.
2. Bathymetric contour interval 1 foot.
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

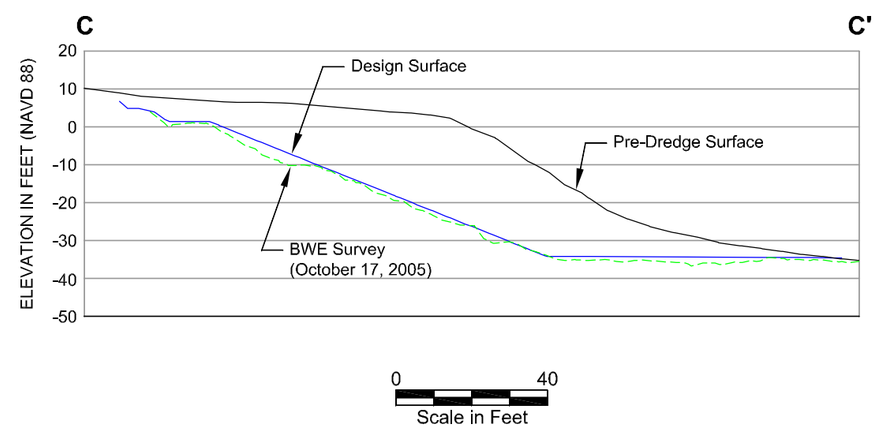


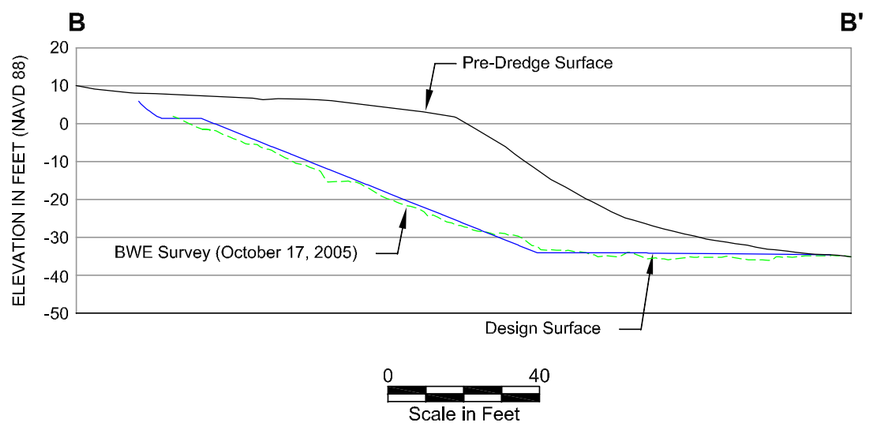
Jan 17, 2006 2:13pm cdavidson K:\Jobs\000029-GASCO\0000290\0002902\0002902-136.dwg FIG 10a As-Built Bathymetry

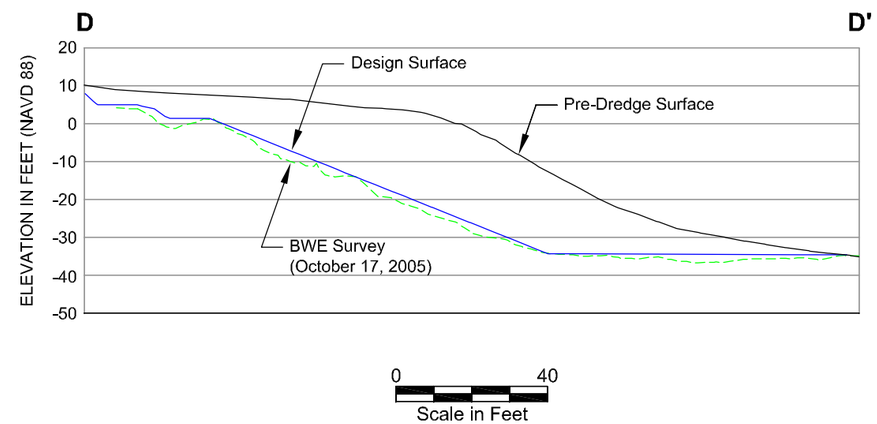
ANCHOR ENVIRONMENTAL, L.L.C.

Figure 10a
As-Built Post-Dredge Bathymetry
and Compliance Cross Section Locations
NW Natural "Gasco" Site





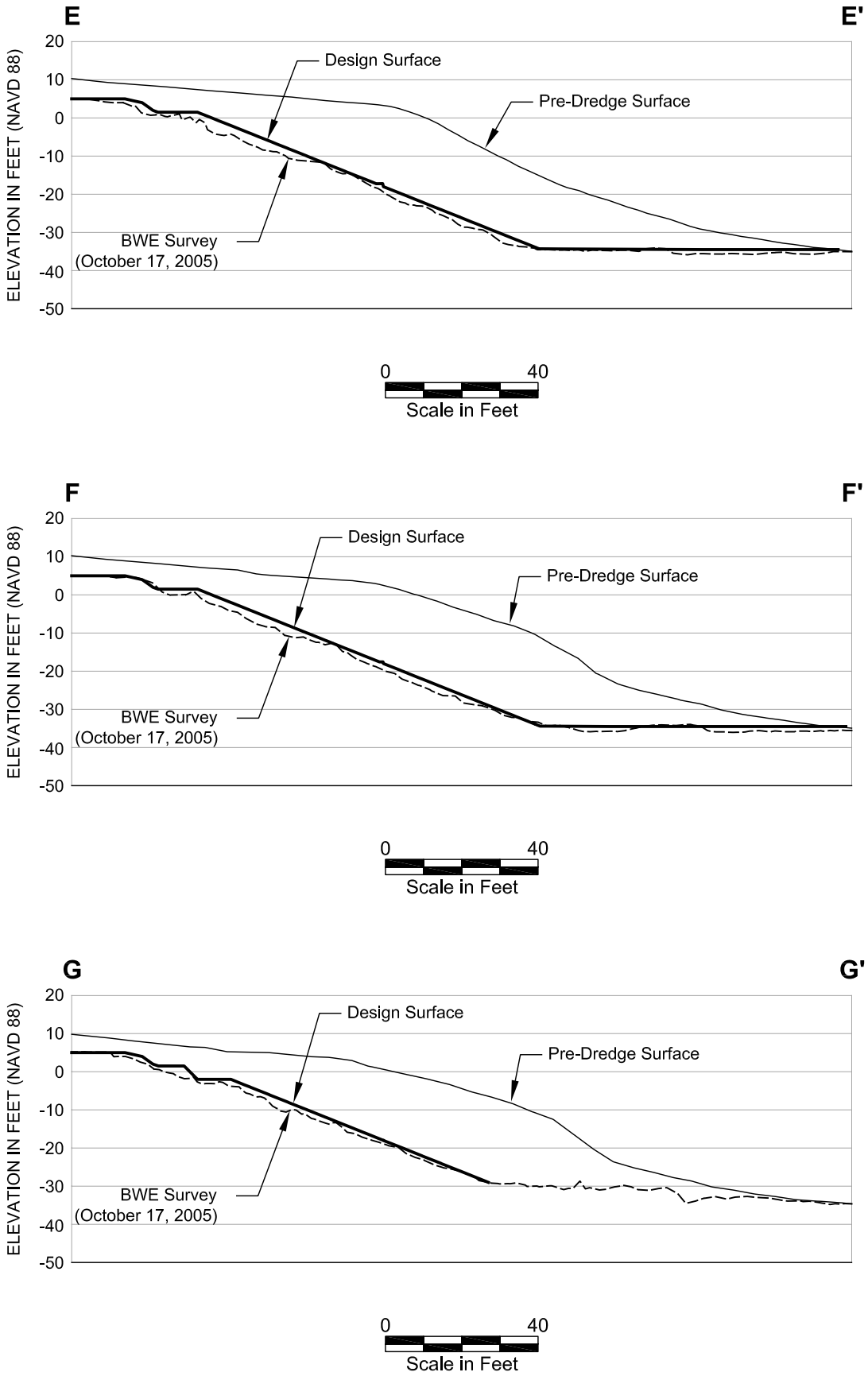




Dec 28, 2005 12:08pm dholmer K:\Jobs\000029-GASCO\00002902\00002902-136.dwg As-Built Cross Sections (A-D)

ANCHOR ENVIRONMENTAL, L.L.C.

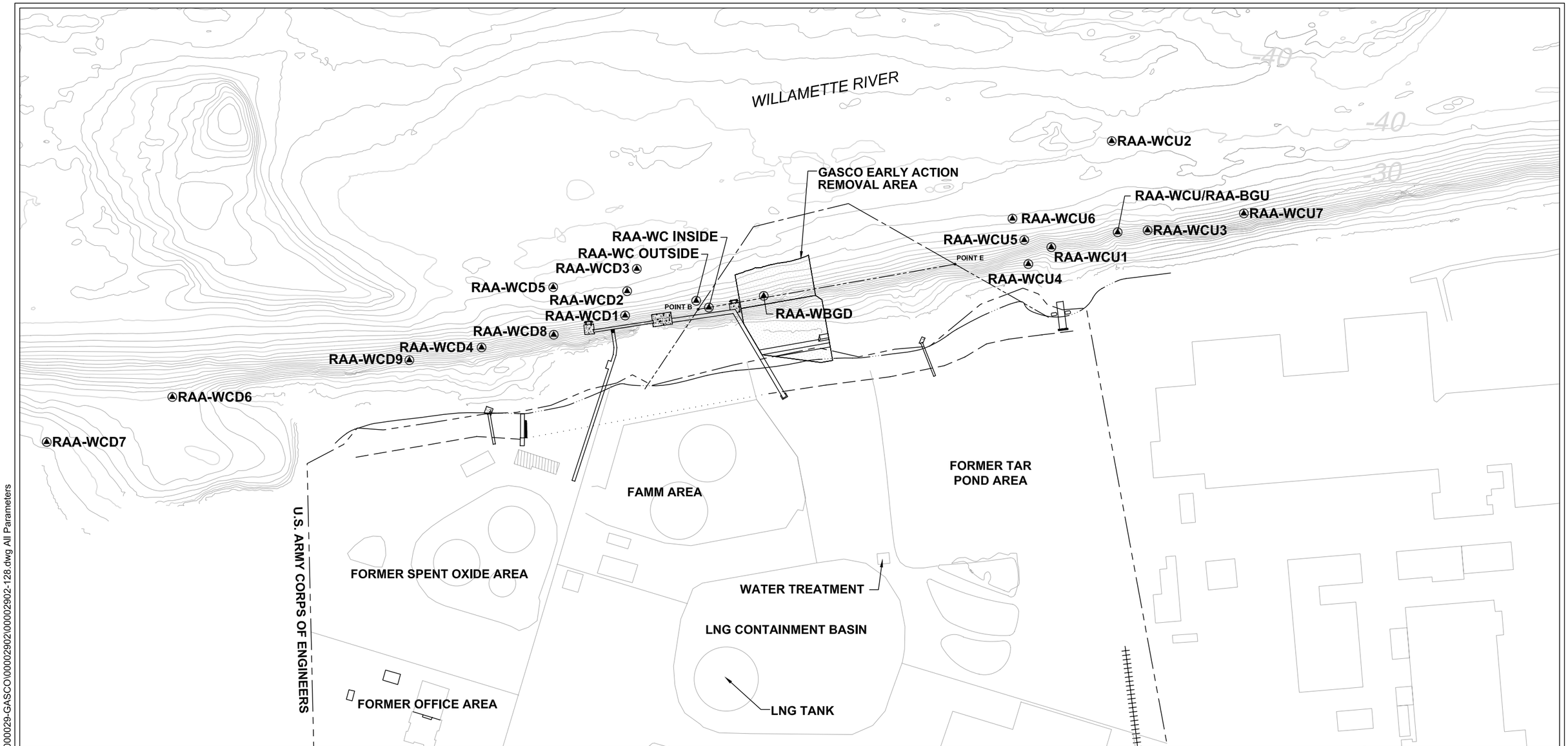
Figure 10b
As-Built Post-Dredge Cross Sections
Stations A-A' through D-D'
NW Natural "Gasco" Site



Jan 10, 2006 11:04am dholmer K:\Jobs\000029-GASCO\00002902\00002902-136.dwg As-Built Cross Sections (D-G)

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 10c
As-Built Post-Dredge Cross Sections
Stations E-E' through G-G'
NW Natural "Gasco" Site



RAA-WCD8 Water Quality Monitoring Station and Designation

Property Boundary

Full Length Silt Curtain (Anchored)

Partial Length Silt Curtain (Anchored)

0 200
Scale in Feet

Notes:
1. May 2003 bathymetry survey provided by LWG.
2. Selected structures surveyed by Chase Jones, December 22, 2004
3. Station locations are based on high accuracy laser range finder measurement from structures.
4. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

Jan 17, 2006 2:15pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-128.dwg All Parameters

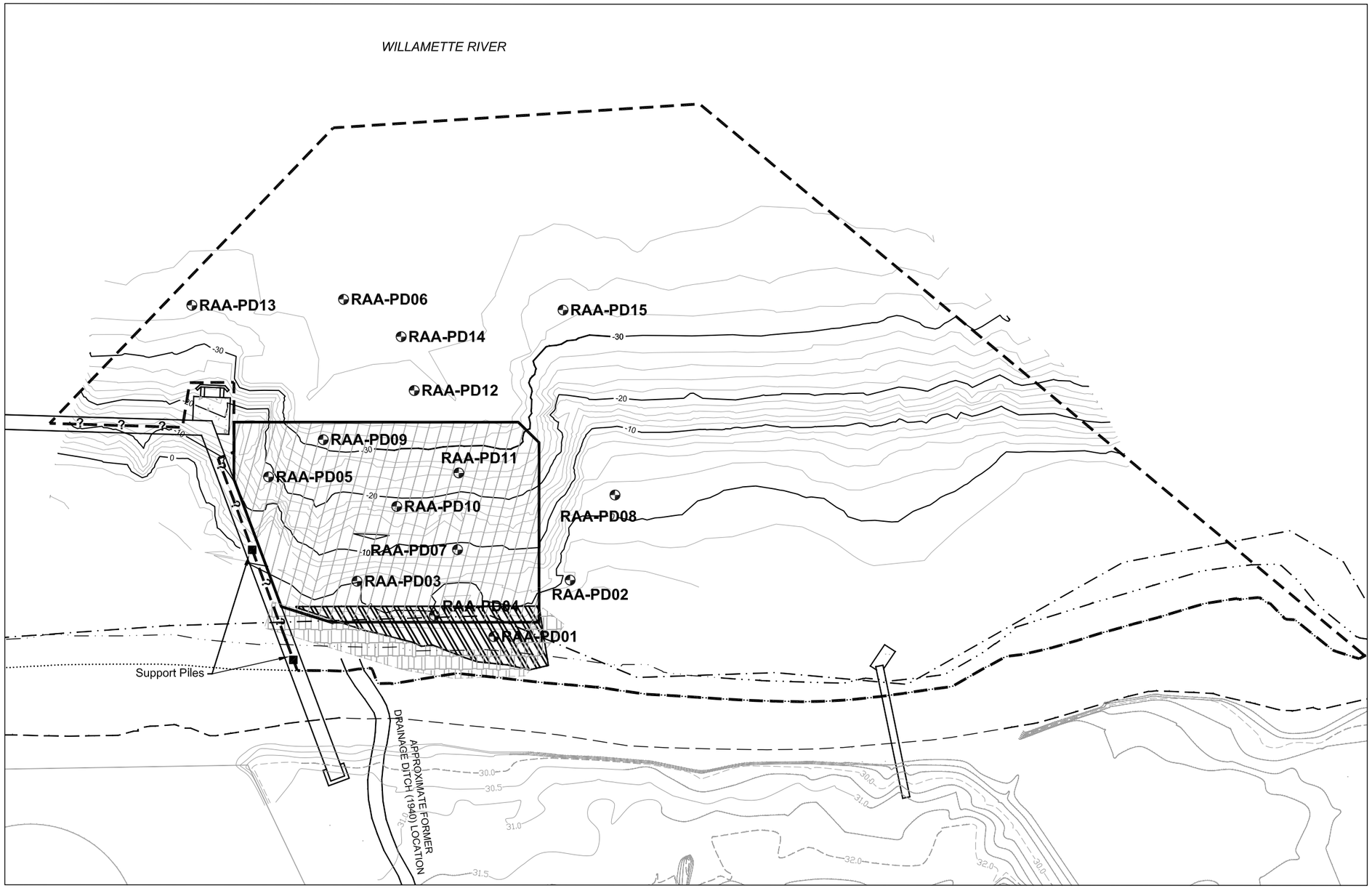
ANCHOR ENVIRONMENTAL, L.L.C.

Figure 11
Water Quality Monitoring Stations - Gasco Site
NW Natural "Gasco" Site

Legend:

- Support Pile Location
- Design Extent and Elevation of 18 in Thick Cap
- Design Extent and Elevation of 6 in Thick Cover
- Extent of Organo-Clay Mat
- Lateral Extents of Surf Zone Armoring d50 = 3 inches (Quarry Spalls)
- RAA-PD13 Post-Dredge Surface Sediment Characterization Station
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88

0 60
Scale in Feet



Notes:
1. Post-dredge bathymetric contours produced from survey provided by Blue Water Engineering dated October 18, 2005.
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

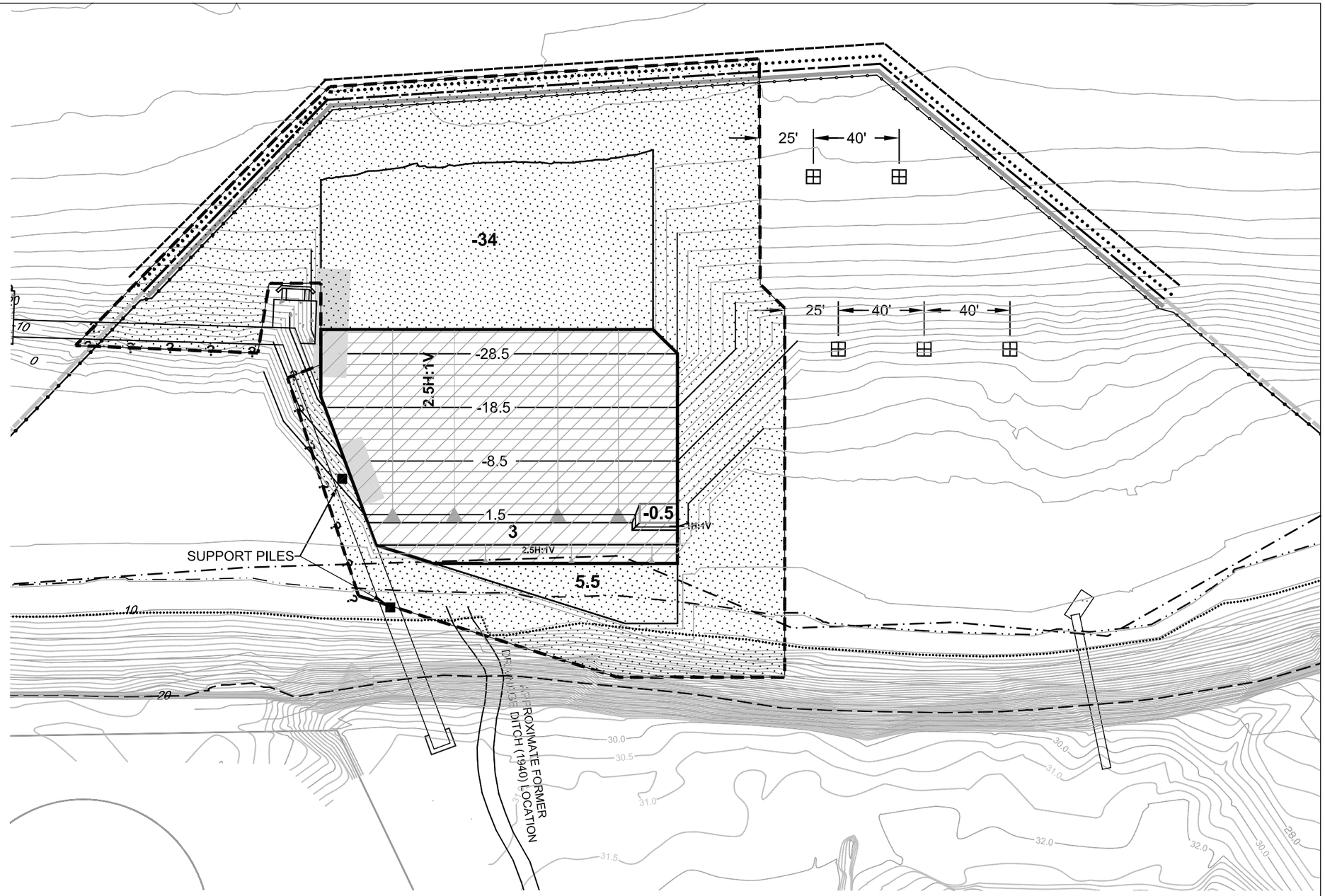
Jan 16, 2006 3:23pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-131.dwg FIG 12

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 12
Post-Dredge Surface Sediment Characterization Stations
NW Natural "Gasco" Site

Legend:

- Sediment Stake Monitoring Location
- Support Pile Location
- 15' Dredging Offset to Protect Piles
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- 3 — Design Extent and Elevation of 18 in Thick Cap
- -34 — Design Extent and Elevation of 6 in Thick Cover
- Oil Absorbent Boom (mobile)
- Full Length Silt Curtain (anchored)
- Oil Containment Boom With Skirt (2 Ft) (mobile)
- Partial Length Silt Curtain (anchored)
- Bed Load Baffle
- Bubble Curtain



Notes:

1. Pre-dredge bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

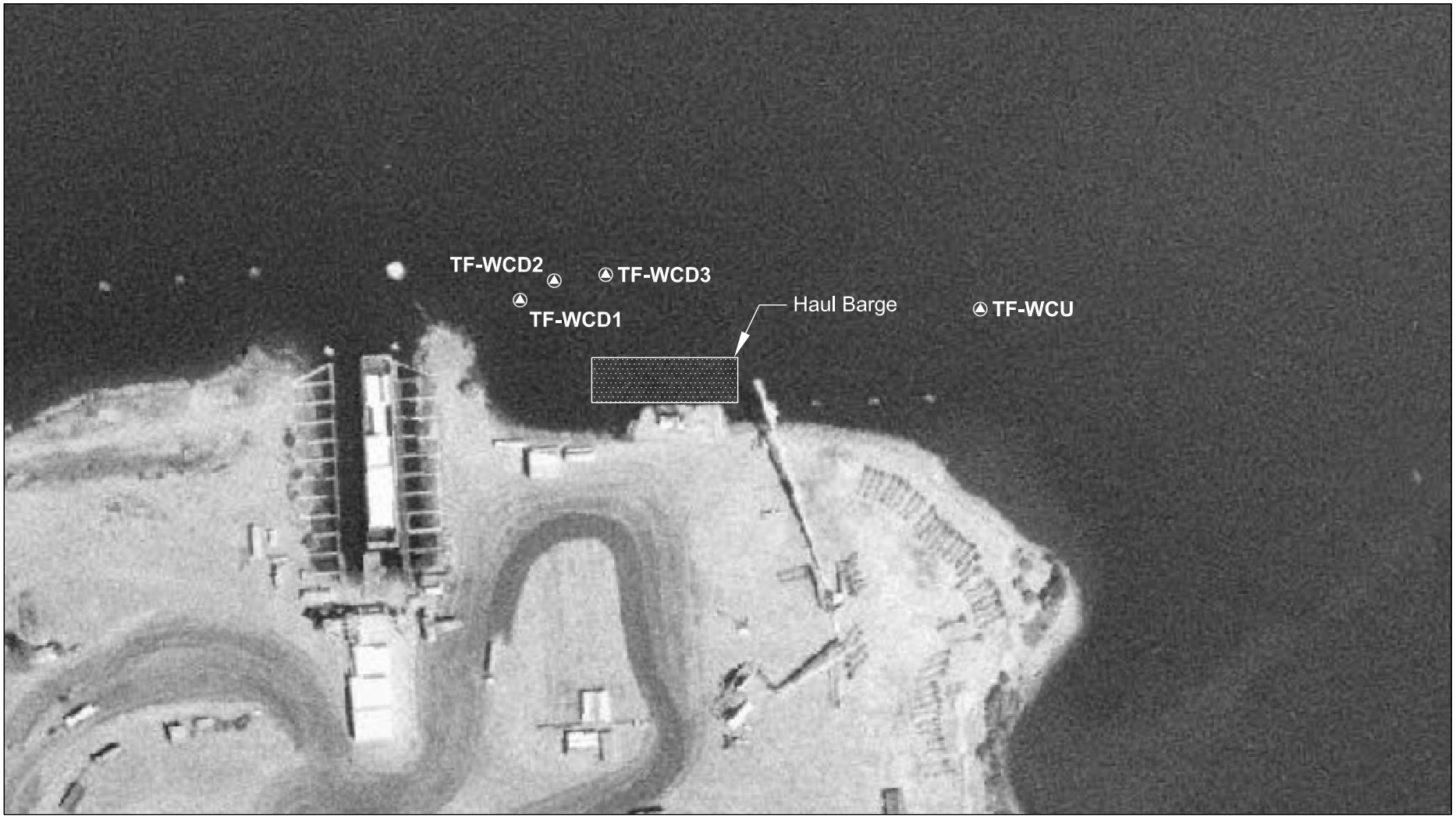
0 50
Scale in Feet

Design Post Cap and Cover Bathymetry

Jan 16, 2006 3:28pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-94.dwg FIG 13

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 13
Sediment Stake Monitoring Locations
NW Natural "Gasco" Site



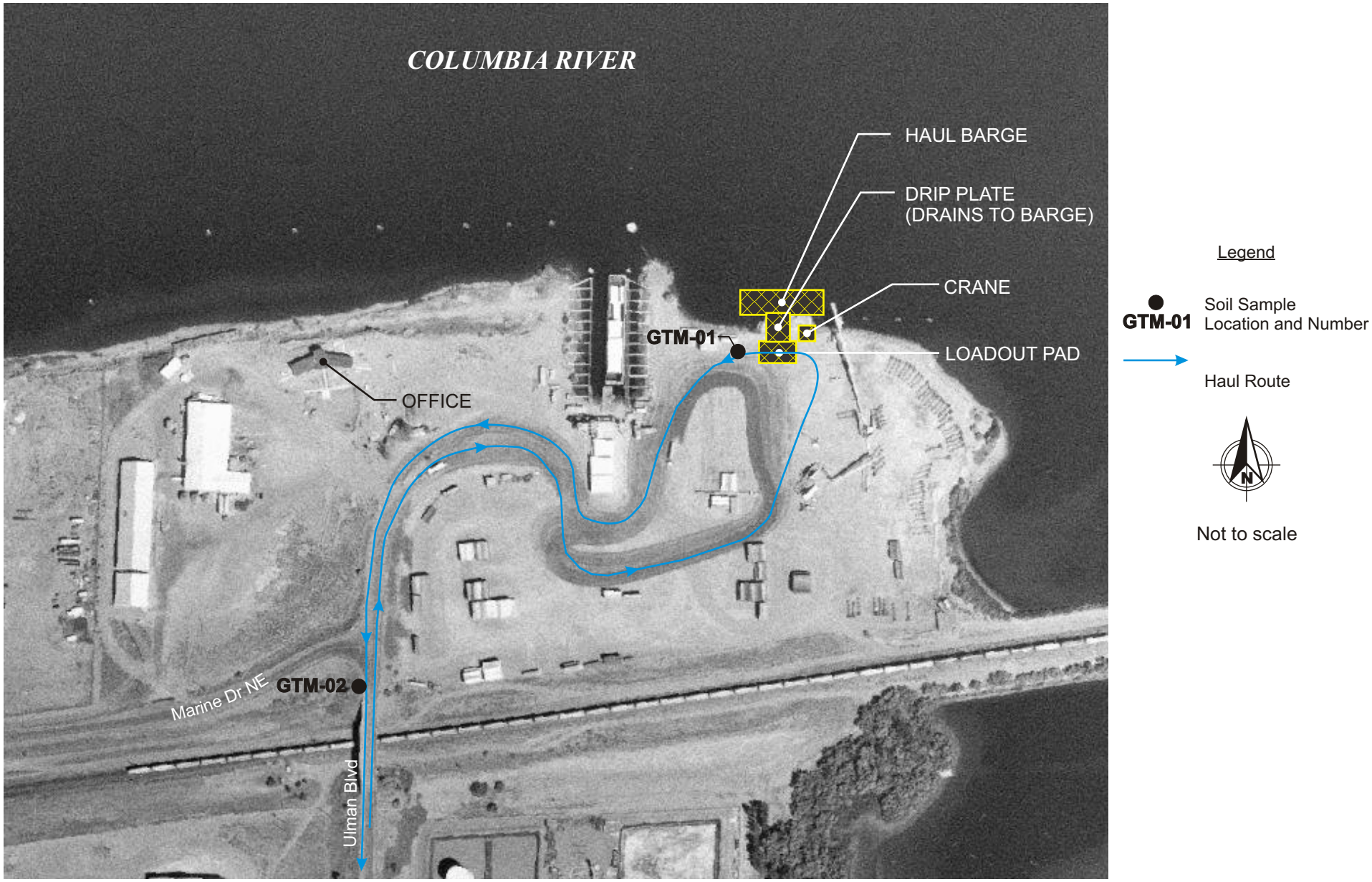
WCD3 Water Quality Monitoring Station

0 200
Scale in Feet

Dec 28, 2005 2:49pm dholmer K:\Jobs\000029-GASCO\00002902\00002902-129.dwg Transfer Facility

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 14
Water Quality Monitoring Stations - Transfer Station
NW Natural "Gasco" Site



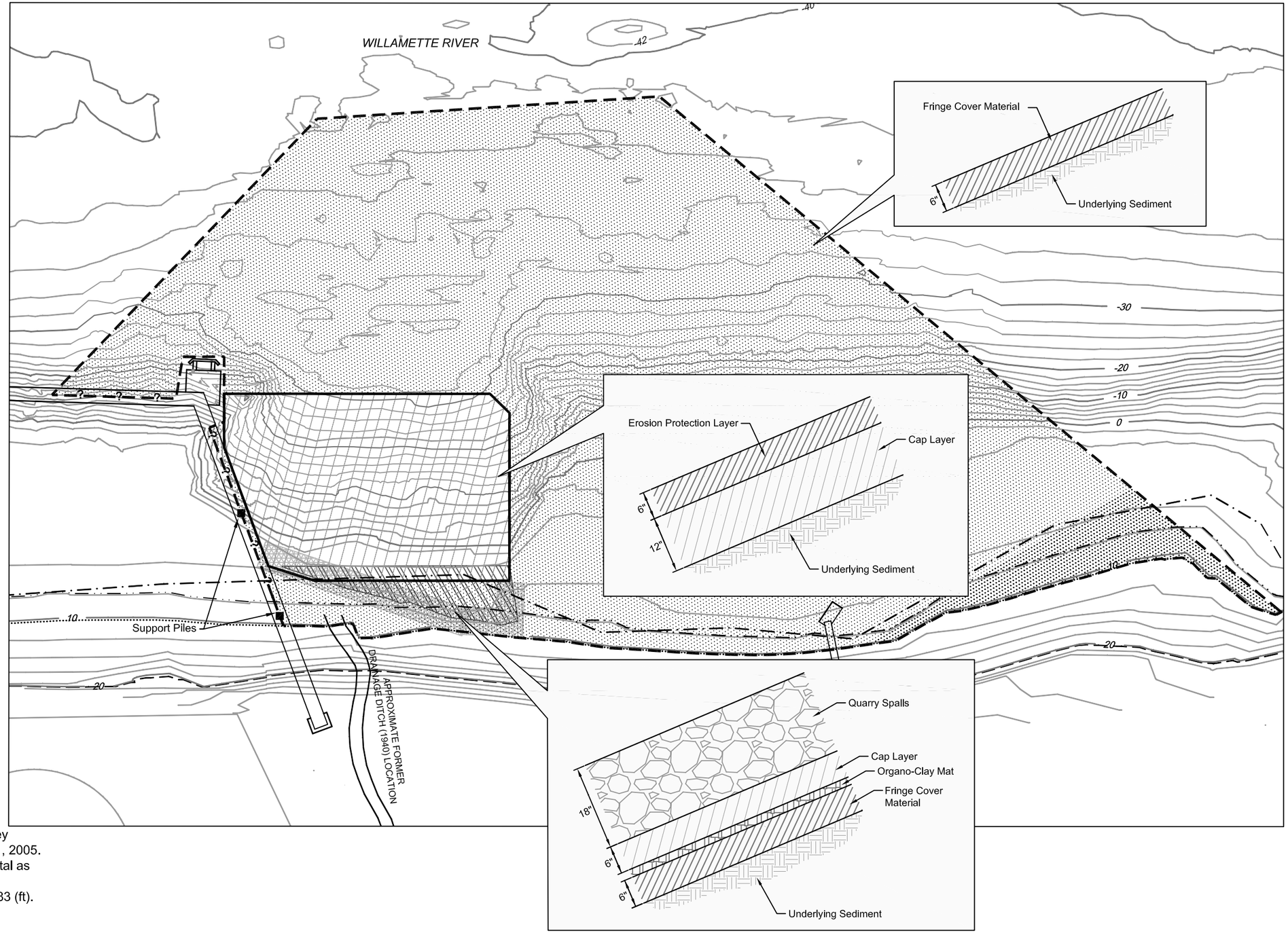
12/28/05 DJH K:\Jobs\000029-GASCO\00002902\FIG 15.cdr

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 15
Transfer Station Haul Route and Sampling Locations
NW Natural "Gasco" Site

Legend:

- Support Pile Location
- Extent and Elevation of 18 in Thick Cap
- Extent and Elevation of 6 in Thick Cover
- Reactive Organo-Clay Mat (RCM) Location
- Lateral Extents of Surf Zone Armoring d50 = 3 inches (Quarry Spalls)
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88



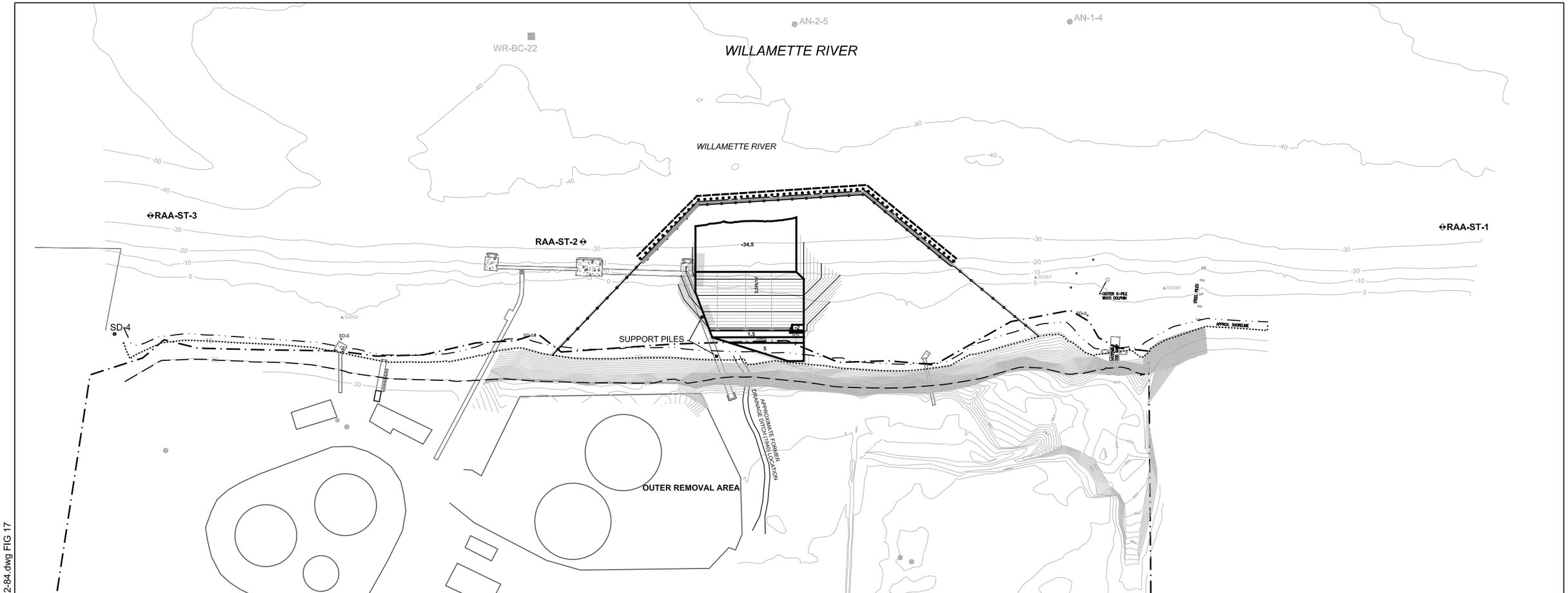
0 60
Scale in Feet

Notes:
1. Post-cap bathymetric contours produced from survey provided by Blue Water Engineering dated October 31, 2005.
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

Jan 16, 2006 3:33pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-130.dwg FIG 16

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 16
As-Built Post-Cap and Cover Bathymetry and Organo-Clay Mat Location
NW Natural "Gasco" Site



LEGEND:

- 1.5 — Design Dredge Prism And Dredge Elevation
- Property Line
- OHW = 20.41 Ft NAVD88
- OLW = 7.91 Ft NAVD 88
- 50% River Stage Elevation = 10.23 Ft NAVD 88
- Oil Absorbent Boom (mobile)
- Full Length Silt Curtain (anchored)
- Oil Containment Boom With Skirt (2 Ft) (mobile)
- Partial Length Silt Curtain (anchored)
- Bed Load Baffle
- Bubble Curtain
- Support Pile Location
- Design 15' Dredging Offset to Protect Piles
- RAA-ST-1 — Sediment Trap Location and Number

0 150
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site Study (2003).
2. Upland topography directed by anchor environmental as part of upland investigation (2002)
3. Horizontal datum: Oregon State Plane North NAD 83 (ft).
4. Vertical datum: NAVD 88 (feet).
5. Former drainage ditch location from Phase 1 Remedial Investigation Summary Report, Hahn & Associates, 1998.

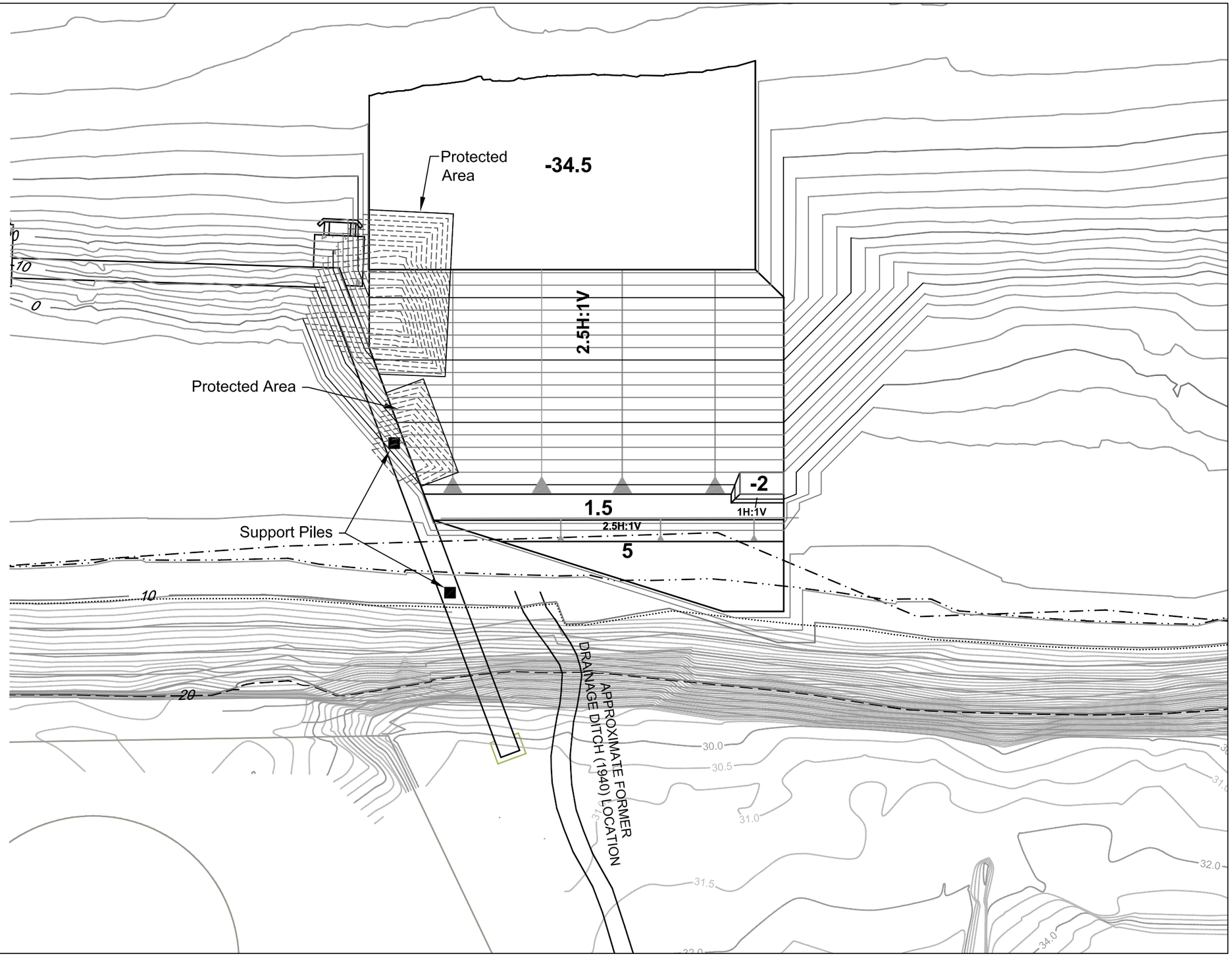
Jan 16, 2006 3:35pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-84.dwg FIG 17

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 17
Sediment Trap Monitoring Station Locations
NW Natural "Gasco" Site

Legend:

- **1.5** Dredge Prism and Dredge Elevation
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88



0 40
Scale in Feet

Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).
6. Slope beneath pipeline support structure allowed to settle to angle of repose - shown at 1H:1V.

Jan 16, 2006 3:44pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-117.dwg Figure 18

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 18
Revised Design Post-Dredge Bathymetry
Accounting for Pipeline Offsets
NW Natural "Gasco" Site

Legend:

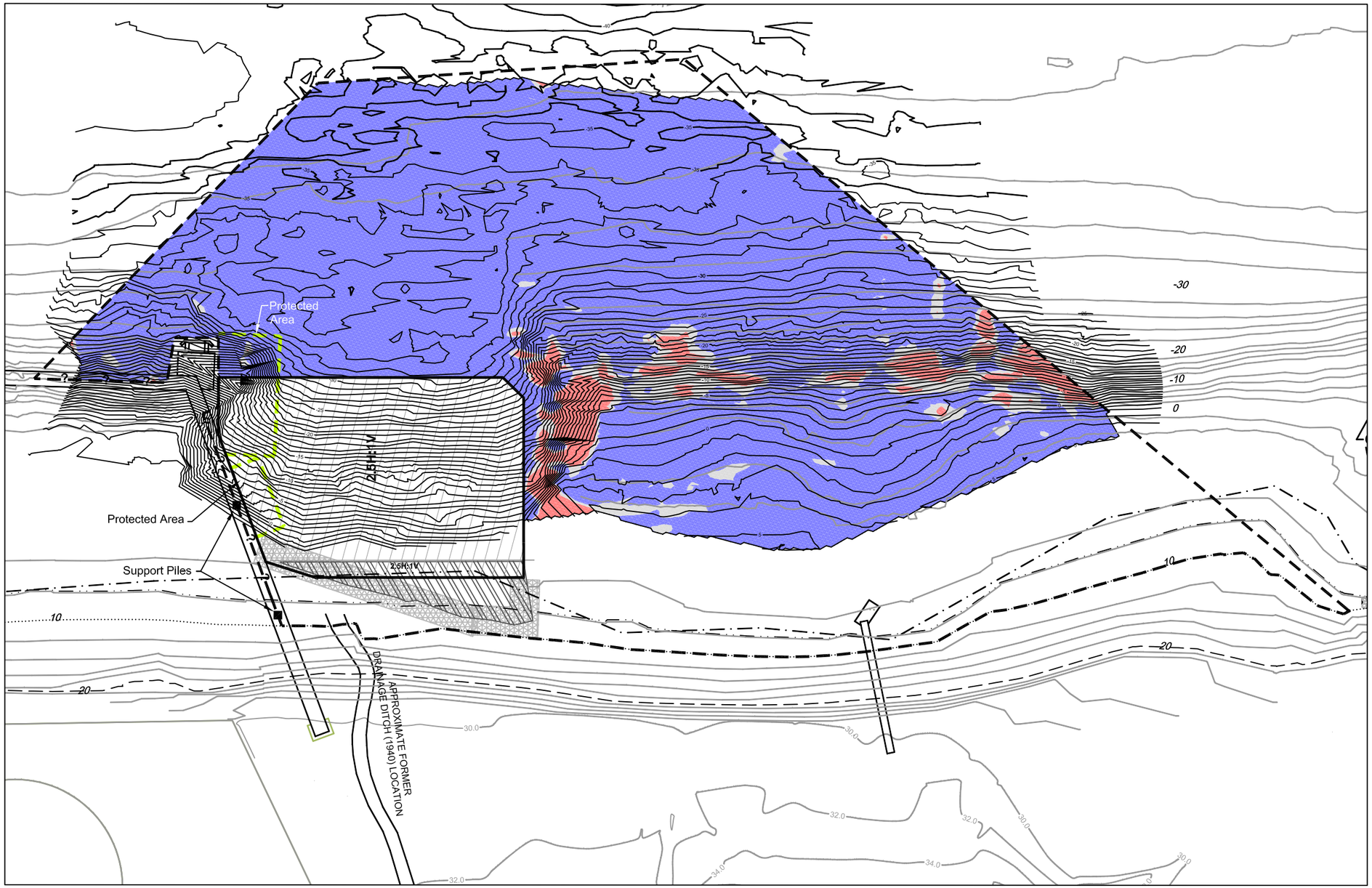
- Support Pile Location
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation =10.23 ft NAVD 88
- Extent and Elevation of 18 in Thick Cap
- Extent and Elevation of 6 in Thick Cover
- Reactive Organo-Clay Mat (RCM) Location
- Lateral Extents of Surf Zone Armoring d50 = 3 inches

Isopach:

- Greater Than 0.5 Feet
- 0.0 to 0.5 Feet
- Less Than 0.0 Feet

Isopach based on the difference between the Post-Dredge survey (10/18/25) and the Post-Cap survey (10/31/2005). The accuracy of the isopach is believed to be 6 inches.

0 60
Scale in Feet



Notes:
1. Bathymetric contours from survey provided by BWE dated October 31, 2005.
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

Jan 16, 2006 3:42pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-133.dwg ISOPACH (6 INCH)

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 19a
As-Built Isopach Surface Verifying Compliance with Capping (6 Inch) Design Elevations
NW Natural "Gasco" Site

Legend:

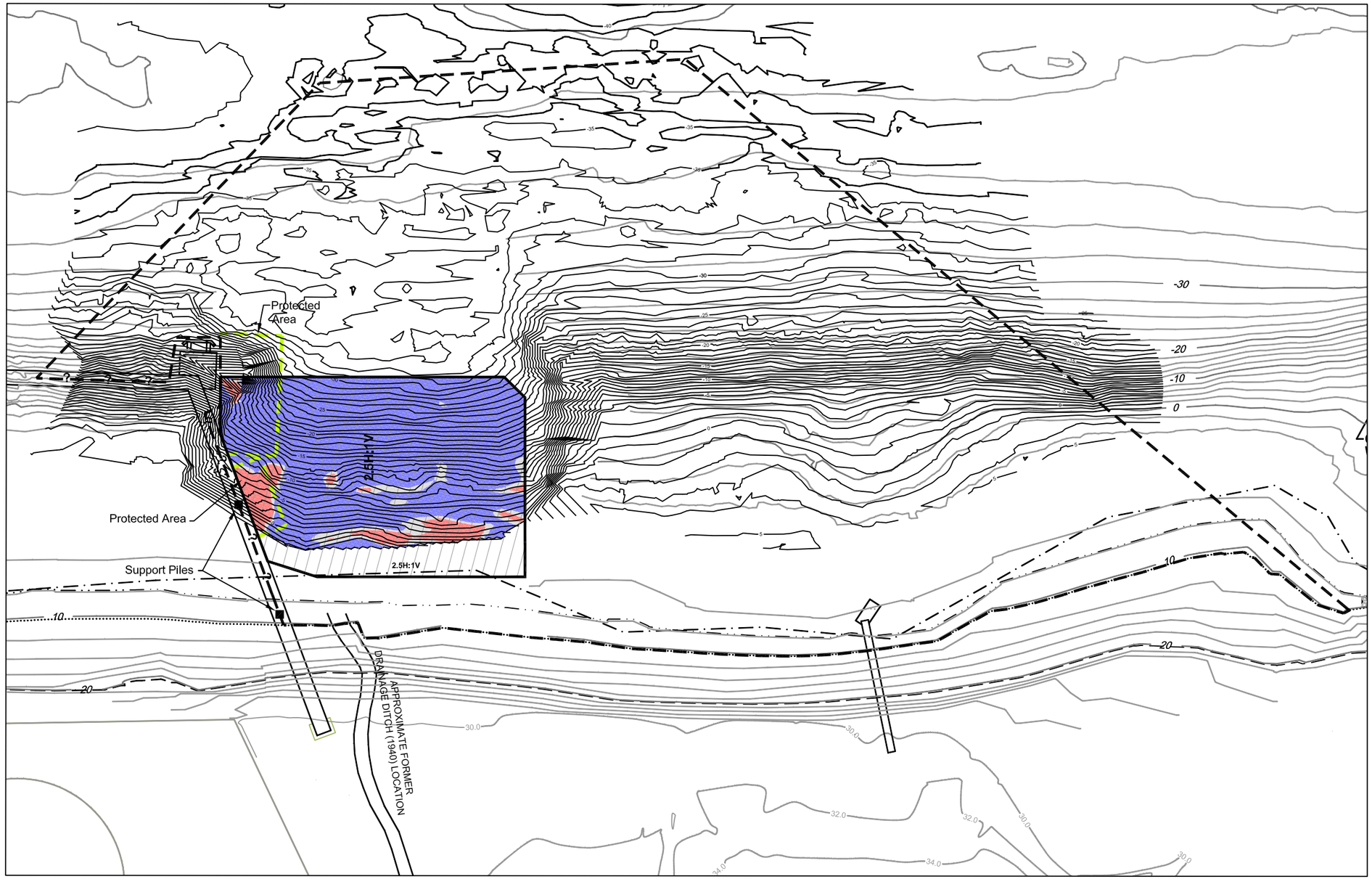
- Support Pile Location
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation =10.23 ft NAVD 88
- Extent and Elevation of 18 in Thick Cap
- Extent and Elevation of 6 in Thick Cover

Isopach:

- Greater Than 1.5 Feet
- 1.0 to 1.5 Feet
- Less Than 1.0 Feet

Isopach based on the difference between the Post-Dredge survey (10/18/25) and the Post-Cap survey (10/31/2005). The accuracy of the isopach is believed to be 6 inches.

0 60
Scale in Feet



Notes:
1. Bathymetric contours from survey provided by BWE dated October 31, 2005.
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).

Jan 16, 2006 3:46pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-134.dwg ISOPACH (18 INCH)

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 19b
As-Built Isopach Surface Verifying Compliance with Capping (18 Inch) Design Elevations
NW Natural "Gasco" Site

APPENDIX A

EPA MINIMUM PERFORMANCE STANDARDS FOR OFFSITE LANDFILL DISPOSAL – LETTER DATED JANUARY 14, 2005

APPENDIX B

CONSTRUCTION QUALITY ASSURANCE OFFICER LOGS – SITE

APPENDIX C

CONSTRUCTION QUALITY ASSURANCE OFFICER LOGS – TRANSFER FACILITY

APPENDIX D

ORGANO-CLAY DESIGN AND INSTALLATION RECOMMENDATIONS

APPENDIX E

CAP AND FRINGE COVER MATERIAL PHYSICAL AND CHEMICAL CHARACTERIZATION RESULTS

APPENDIX F

WATER QUALITY MONITORING LOGS – SITE

APPENDIX G

WATER QUALITY MONITORING LOGS – TRANSFER FACILITY

APPENDIX H

POST DREDGE SURFACE SEDIMENT CHARACTERIZATION LOGS

APPENDIX I

SEDIMENT TRAP SAMPLING LOGS

APPENDIX J

CULTURAL RESOURCES INVESTIGATION OVERSIGHT REPORT

APPENDIX K

TRANSFER STATION SOIL SAMPLING LOGS

APPENDIX L

HEALTH AND SAFETY MONITORING DOCUMENTATION – SITE

APPENDIX M

HEALTH AND SAFETY MONITORING DOCUMENTATION – TRANSFER STATION

APPENDIX N

CHEMICAL ANALYTICAL DATA VALIDATION REPORTS