WEEKLY PROGRESS REPORT

OCTOBER 17 – OCTOBER 23, 2005

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

October 25, 2005

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1 INTRODUCTION

This weekly progress report is a requirement of the U.S. Environmental Protection Agency (EPA) approved Removal Action Project Plan (RAPP) and Section II.5 of the EPA Statement of Work (SOW) for the removal action at the "Gasco" site (Site). The RAPP was prepared to comply with requirements described in the EPA Administrative Order on Consent (Order) for the Site. Consistent with the schedule submitted to EPA (Appendix I of the RAPP), the construction contractor (Sevenson Environmental Services [SES]) initiated construction activities at the Site on August 22, 2005 following the pre-construction meeting. The remainder of this progress report documents the removal action activities that were conducted during the week of October 17 through October 23, 2005.

2 CONSTRUCTION ACTIVITIES

The following section describes the construction activities conducted at the Site from October 17, 2005 through October 23, 2005.

2.1 Site Construction Activities

2.1.1 In-Water Construction Activities

SES conducted the following in-water construction activities:

- On October 17-19 dredging was completed to meet final design grade.
- On October 17, Sevenson conducted a final bathymetry survey of the dredge prism area.
- On October 18, Blue Water Engineering conducted an independent survey of the dredge prism and entire outer containment area.
- On October 19, Anchor Environmental and Parametrix oversight staff 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 dredge passes.
- Divers contracted by Anchor Environmental attempted to locate the sediment stake locations within the outer containment structure area on October 17 and October 18. The sediment stakes were not located. Lowering of the dredge derrick spuds likely disturbed the sediment stakes as evidenced by large divots in the vicinity of the sediment stake locations.
- On October 18 and October 19, Anchor Environmental staff conducted the post-dredge sediment characterization (15 surface sediment samples).
- Water generated on the transfer barge B47 was pumped, treated, and discharged into the outer containment area on October 17 and October 18. Pre- and post-treatment water quality samples were collected from the dewatering system on each of these days.
- The dewatering treatment system components were removed from the site on October 20.
- Dismantling of the bubble curtain containment system continued from October 17 through October 23.

- Placement of the pilot cap sand material occurred from October 20-23. Sevenson conducted bathymetry surveys and diver push-probe surveys to verify compliance with the design specifications.
- 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.
- Installation of the organo-clay mat material at the near-shore dredge cut was completed on October 23. The mat was anchored at the shoreward edge with stakes and sandbags, and the mat was covered with approximately 6 inches of fringe cap sand material.
- Fringe cap placement was conducted on October 21-23.

2.1.2 Waste Transportation and Off-loading

- Cleanout and decontamination of haul barge GC 183 was completed at the Port of Morrow off-loading site on October 20.
- Haul barge #8 (B10) was prepared for transport, tarped, and removed from the project site on October 19.
- On October 20, the transfer barge B47 was removed from site for transport to the Port of Morrow facility for decontamination.

3 MONITORING ACTIVITIES

3.1 Dredge Monitoring – Field Parameter Results

In accordance with Appendix D (i.e., Construction Water Sediment Monitoring Plan [WSMP]) of the RAPP, water quality monitoring for field parameters (turbidity, temperature, dissolved oxygen, pH, and visual monitoring for sheens) occurred during dredging and capping operations at the Site and during offloading and barge decontamination operations at the Transfer Facility in the Port of Morrow.

At the Site, dredging was substantially completed on October 18, 2005 and the removal of "high spots" was completed on October 19, 2005. Capping operations began on October 20, 2005 following EPA approval. During dredging and capping, field parameters were monitored every four hours at one upcurrent station 300 feet from the inner containment area and three downcurrent stations 150 feet from the inner containment area. At the Transfer Facility, barge decontamination activities occurred on October 19 and 20, 2005. During offloading and barge decontamination operations, field parameters were monitored every four hours at one upcurrent station 300 feet from the barge and three downcurrent stations 150 feet from the barge. At all locations, samples were collected at three depths—one foot below the surface, mid-depth, and one foot above the bottom.

The field parameter results are summarized for the Site and the Transfer Facility in Tables 1 and 2 and compared to the triggers (from Table E-1 of the Removal Action Environmental Protection Plan [RAEPP]). At the Site, exceedances of the Table E-1 turbidity triggers were identified on October 20 and 21, 2005 during three separate monitoring events. The turbidity exceedances occurred during capping operations. No other Table E-1 triggers were exceeded at the Site for this monitoring period. At the Transfer Facility, no exceedances of the Table E-1 triggers were identified for any of the field parameters for this monitoring period.

During one monitoring event on October 22, 2005, the flow of the river at the Site was reversed due to flood tide conditions. As a result, the upcurrent background station was re-located downriver and the downcurrent compliance stations were re-located upriver. The station names for a flow reversal event were as follows:

- RAA-WCD8 = upcurrent background station; 300 feet from the inner containment

- RAA-WCU4 = downcurrent compliance station; 150 feet from the inner containment (closest station to shore)
- RAA-WCU5 = downcurrent compliance station; 150 feet from inner containment (middle station)
- RAA-WCU6 = downcurrent compliance station; 150 feet from inner containment (furthest station from shore)

3.2 Dredge Monitoring – Laboratory Parameter Results

In accordance with the WSMP, water quality monitoring at the Site for laboratory parameters (PAHs [anthracene, benzo(b)anthracene, benzo(a)pyrene, dibenzofuran, fluoranthene, fluorene, naphthalene, and phenanthrene] and cyanide) also occurred during dredging operations at the Site. As a result of chemical exceedances identified during previous monitoring events at the Site, EPA required samples for laboratory analyses to be collected on a daily basis (during this week) during dredging at the following locations:

- One upcurrent station (WCU or WCD8 when the flow is reversed)
- Two downcurrent stations (WCD1 [150 feet] and WCD9 [600 feet] or WCU4 [150 feet] and WCU7 [600 feet] when the flow is reversed)
- One station immediately inside the inner containment curtain (RAA-Inside)
- One station immediately outside the inner containment curtain (RAA-outside)

At each station, samples were collected at three different depths--one foot below the surface, mid-depth, and one foot above the bottom. Additional BMPs, including implementing a filtration system to treat excess fluids from the transfer barge prior to discharge to the inner containment area and adjusting dredging cycle times, were employed beginning September 19, 2005 and continued through the end of dredging on October 19, 2005.

No additional results are available at this time.

3.3 Transfer Barge Dewater Monitoring – Laboratory Parameter Results

In addition to the water column monitoring for laboratory parameters, EPA directed NW Natural to conduct testing (identical analyte list as water column laboratory parameters) of the barge dewatering filtration system influent and effluent water. The influent water is the raw water that accumulated within the transfer barge and the effluent water is the filtered

water that was subsequently discharged within the inner-containment curtain. EPA directed that this sampling be performed on a daily basis but indicated that the sampling frequency could be lowered if sampling reflects that the treatment system change out frequencies are working effectively.

No additional results are available at this time.

3.4 Dredge Monitoring – Silt Curtain-Mudline Interface

In addition to the collection of water samples for field and laboratory parameters, water samples were collected at the silt curtain/mudline interface on October 17, 18, 20, 21, and 22, 2005 to monitor the effectiveness of the curtain containment at the mudline interface. One water sample was collected downstream just outside of the primary containment silt curtain. Sample descriptions on all six days indicated clear and colorless water with some particulate matter suspended in the water. None of the samples collected during the time period contained evidence of any tar or sheen.

Removal of the silt curtain began on October 22, 2005, so that was the last day of monitoring the silt curtain-mudline interface.

3.5 Post-Dredge Surface Sediment Characterization

Surface sediment samples were collected as described in Appendix D of the RAPP immediately following the completion of sediment removal (as approved by EPA) and prior to cap placement on October 19, 2005. Samples were collected from 15 EPA-approved sampling stations within the pilot cap and fringing cover areas. The collected samples were submitted to the laboratory for analysis of physical and chemical parameters including TOC, TS, grain size, BTEX, PAHs (i.e., anthracene, benzo(b)anthracene, benzo(a)pyrene, dibenzofuran, fluoranthene, fluorene, naphthalene, and phenanthrene), TPH, cyanide, and total metals (i.e., arsenic, chromium, copper, nickel, lead, and zinc). These results will be used to determine the baseline conditions (i.e., Year 0) 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 will be analyzed for the identical list identified above.

Results from the surface sediment characterization are not available at this time.

3.6 Fish Casualties within the Containment

No fish casualties were identified during this reporting period.

4 PROPOSED WORK FOR WEEK OF OCTOBER 24, 2005

The following activities are proposed for the week beginning October 24, 2005:

- Begin placement of pilot cap armor material.
- Complete the placement of quarry spall protective layer at near-shore cut to protect the clay mat installation zone.
- Continue placement of fringe cap sand within the extents of the outer containment area up to elevation 10.0 feet along the shoreline within the outer containment area upstream of the oil pipeline.
- Continue offloading of dredge material and barge decontamination at the Port of Morrow facility.

TABLES

Table 1
Water Quality Monitoring Results Compared to Triggers - Gasco Site
October 17 through 23, 2005

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)	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]	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	7.2	<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	7.2	<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[6]	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
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	9.70	<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

Table 1
Water Quality Monitoring Results Compared to Triggers - Gasco Site
October 17 through 23, 2005

Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)	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-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[4]	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
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	14.88	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

Table 1
Water Quality Monitoring Results Compared to Triggers - Gasco Site
October 17 through 23, 2005

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)	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	10/22/2005	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

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). DO trigger

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

[4]Flow was reversed during this round of sampling.

[5]Depth at this station was less than 12 feet; therefore only two depths were monitored.

[6]Not all downstream locations could be monitored due to the presence of a barge at the FAMM dock.

BOLD indicates an exceedance

Table 2
Water Quality Field Parameters Monitoring Results Compared to Triggers—Transfer Facility
October 17 through 23, 2005

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)	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	10/17/2005	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
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

Table 2
Water Quality Field Parameters Monitoring Results Compared to Triggers—Transfer Facility
October 17 through 23, 2005

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)	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	10/18/2005	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
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

Table 2
Water Quality Field Parameters Monitoring Results Compared to Triggers—Transfer Facility
October 17 through 23, 2005

							DO Triggers[2]			Temperature Triggers[2]			Turbidity Triggers[2]			pH Triggers[2]	
Station ID	Date	Time	Latitude (dd)[1]	Longitude (dd)	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	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	7.91	<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

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
[3]TF-WCU is the upstream event-specific background station.
BOLD indicates an exceedance
NC indicates that a parameter was not collected

APPENDIX A

GASCO SITE WQ MONITORING LOG SHEETS

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Seattle, Washington 98101
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Fax 206.287-9131
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Water Quality Monitoring Form

Station ID: RAA-WCU-A,B,C-051017	Date: 10/17/05	Time: 0955
Project Name: GASCO	Project Number: 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations:
ebbing, mostly cloudy, low 60's, light wind from W, calm

Status/Description of Operation at Time of Sampling:

Depth to Bottom: 39 (m)'

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)'	9.62	14.58	4
Depth 2: 19 (m)'	9.56	14.55	4
Depth 3: 38 (m)'	9.47	14.54	6
Other:			

Evidence of floating or suspended materials:	foam, wood debris, leaves, spotty sheen, garbage
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	Spotty Sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	0.31 fps in main channel
Color:	green-brown
Odor:	none detected
Other Observations:	

Comments:
pH: 1 7.19 2 7.18 3 7.17
Cond: 1 83 2 84 3 85

Chem Samples
A 1005
B 1010
C 1015

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WC01-A,B,C-051017	Date: 10/17/05	Time: 1020	
Project Name: GASCO	Project Number: 000029-02		
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: light wind from ebbing, partly cloudy, low 60's, NW

Status/Description of Operation at Time of Sampling:

Depth to Bottom: 33 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.66	14.65	4
Depth 2: 17 (m)	9.56	14.55	5
Depth 3: 32 (m)	9.48	14.56	6
Other:			

Evidence of floating or suspended materials:	bubbles, wood debris, leaves scattered spotty sheen, garbage
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	Scattered spotty sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none detected
Other Observations:	

Comments:

pH: 1 7.23 2 7.21 3 7.18

Cond: 1 84 2 85 3 82

Chem Samples
A 1025
DUP B 1030
C 1035

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCD2-ABC-051017		Date: 10/17/05	Time: 1045
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
ebbing, partly sunny, low 60s, wind (light) from NW

Status/Description of Operation at Time of Sampling:

Depth to Bottom: 46 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.58	14.63 ~~15.22~~	7
Depth 2: 23 (m)	9.51	14.57	7
Depth 3: 45 (m)	9.37	14.56	11
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	no sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none detected
Other Observations:	

Comments:
pH: 1 7.20 2 7.19 3 7.06
Cond: 1 81 2 85 3 84

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAM-WCD3-A,B,C-051017		Date: 10/17/05	Time: 1055
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
ebbing, partly/mostly sunny, mid 60's, light wind from NW

Status/Description of Operation at Time of Sampling:

Depth to Bottom: 45' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.58	14.64	4
Depth 2: 22 (m)	9.53	14.55	4
Depth 3: 44 (m)	9.43	14.56	8
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	no sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none detected
Other Observations:	

Comments:
pH: 1 7.26 2 7.20 3 7.07
Cond: 1 79 2 82 3 83

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCD9-A,B,C-051017		Date: 10/17/05	Time: 1105
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
ebbing, mostly sunny, mid 60's, light wind from NW

Status/Description of Operation at Time of Sampling:

Depth to Bottom: 36' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.58	14.75	3
Depth 2: 19 (m)	9.53	14.56	4
Depth 3: 36 (m)	9.42	14.55	6
Other:			

Evidence of floating or suspended materials:	leaf, two spots of sheen (penny-sized and 6" x ~1/8")
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none detected
Other Observations:	

Comments:
pH: 1 7.21 2 7.22 3 7.16
Cond: 1 83 2 83 3 84

Chem Samples
A 1110
B 1115
C 1120

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCU-A,B,C-051017		Date: 10/17/05	Time: 1835
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: slack/ebb (tide chart says flood until 6:59pm) partly cloudy, mid 60's, dusk, light wind from NW

Status/Description of Operation at Time of Sampling: dredging

Depth to Bottom: 40 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.62	14.83	3
Depth 2: 20 (m)	9.55	14.73	3
Depth 3: 39 (m)	9.47	14.69	3
Other:			

Evidence of floating or suspended materials:	leaves, bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	no sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none detected
Other Observations:	barge at D8 + tug - both along the Sanna

Comments:

pH: 1 7.12 2 7.17 3 7.14

Cond 1 81 2 83 3 82

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCDI-A,B,C-051017		**Date:** 10/17/05	**Time:** 1851
Project Name: GASCO		**Project Number:** 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:

Status/Description of Operation at Time of Sampling: dredging

Depth to Bottom: 36 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.61	14.82	5
Depth 2: 18 (m)	9.53	14.80	5
Depth 3: 35 (m)	9.48	14.79	6
Other:			

Evidence of floating or suspended materials:	bubbles, leaves, wood debris, spotty sheen
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	spotty sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	
Other Observations:	

Comments:

pH: 1 7.22 2 7.20 3 7.18

cond: 1 83 2 83 3 83

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCD2-051017 -A,B,C		Date: 10/17/05	Time: 1846
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: See prev

Status/Description of Operation at Time of Sampling: dredging

Depth to Bottom: 48 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.67	14.79	8
Depth 2: 24 (m)	9.51	14.80	9
Depth 3: 47 (m)	9.45	14.79	8
Other:			

Evidence of floating or suspended materials:	wood debris, leaves
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	no sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none
Other Observations:	

Comments:

pH: 1 7.21 2 7.18 3 7.11

cond: 1 81 2 83 3 83

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCD3-A,B,C-051017		**Date:** 10/17/05	**Time:** 1842
Project Name: GASCO		**Project Number:** 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
ebbing/slack — see prev. sheet

Status/Description of Operation at Time of Sampling:
dredging

Depth to Bottom: 49 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.62	14.76	6
Depth 2: 25 (m)	9.53	14.71	3
Depth 3: 48 (m)	9.47	14.69	3
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	no sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none detected
Other Observations:	

Comments:
pH: 1 7.18 2 7.17 3 7.13
cond: 1 84 2 84 3 82

Recorded by: KT Other Monitoring Personnel: JR

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Water Quality Monitoring Form

Station ID: RAA-WCU A/B-051018		**Date:** 10/18/05	**Time:** 900
Project Name: GASCO		**Project Number:** 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
Westerly wind DOWNRIVER = DOWNCURRENT OUTGOING TIDE

Status/Description of Operation at Time of Sampling:
24 DREDGING

Depth to Bottom: 20 ~~(m)~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft	9.33	14.65	6
Depth 2: 10 (m)	9.35	14.64	6
Depth 3: 23 (m)	9.26	14.64	6
Other:	—	—	—

Evidence of floating or suspended materials:	leaves, bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	NO SHEEN
Discoloration and Turbidity:	—
Velocity at stated depth: 3ft below surface	0.70 fps
Color:	GRAYISH-BROWN
Odor:	NONE DETECTED
Other Observations:	

Comments:

pH: 1 7.25 2 7.25 3 7.24

COND: 1 88 2 86 3 88

Chemistry Samples A = 0910 B = 0915 C = 0920

Recorded by: EA Other Monitoring Personnel: BC

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Water Quality Monitoring Form

Station ID: RAA-WCD2 -051018	**Date:** 10/18/05	**Time:** 925
Project Name: GASCO	**Project Number:** 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: OUTGOING TIDE DOWNRIVER = DOWNCURRENT
Westerly wind 60°F OCAST

Status/Description of Operation at Time of Sampling: DREDGING

Depth to Bottom: 47.5 ~~(m)~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft	9.35	14.65	10
Depth 2: 23 (m)	9.25	14.65	11
Depth 3: 46 (m)	9.17	14.66	12
Other:			

Evidence of floating or suspended materials:	NONE
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	NO SHEEN
Discoloration and Turbidity:	NONE
Velocity at stated depth:	—
Color:	GREENISH BROWN
Odor:	NONE DETECTED
Other Observations:	BARGE IN AT FAMM DOCK

Comments:
pH: 1 7.24 2 7.24 3 7.19
COND: 1 90 2 86 3 88

chemistry grab
A: 930
B: 935
C: 940

Recorded by: EA Other Monitoring Personnel: BP

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Water Quality Monitoring Form

Station ID: RAA-WCD3 A/B/C 051018		**Date:** 10/18/05	**Time:** 940
Project Name: GASCO		**Project Number:** 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
OUTGOING TIDE DOWNRIVER = DOWNCURRENT SLIGHT WESTERLY WIND

Status/Description of Operation at Time of Sampling:
DREDGING

Depth to Bottom: 47 (m) ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft	9.37	14.64	9
Depth 2: 23 (m)	9.25	14.67	8
Depth 3: 46 (m)	9.16	14.66	13
Other:			

Evidence of floating or suspended materials:	NONE
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	NO SHEEN
Discoloration and Turbidity:	NO
Velocity at stated depth:	—
Color:	GREENISH BROWN
Odor:	NONE DETECTED
Other Observations:	BARGE AT FAMM DOCK, BLOCKING STATION WCD1

Comments:

pH: 1 7.24 2 7.23 3 7.14

COND 1 92 2 89 3 86

Recorded by: A Other Monitoring Personnel: BP

GRAB SAMPLE FOR WATER CHEMISTRY

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Water Quality Monitoring Form

Station ID: [illegible]-A-WCD9 B-051018		Date: 10/18/05	Time: 945
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: OUTGOING TIDE DOWNRIVER = DOWNCURRENT
SLIGHT [illegible] WESTERLY

Status of Operation at Time of Sampling: DREDGING

Depth to Bottom: 44 (m) Ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: [illegible] Ft	950		
Depth 2: 22 (m)	952		
Depth 3: [illegible]	955		
Other:			

Evidence of floating or suspended materials:	NONE
Evidence of hydrocarbon sheen: (Thickness?, viscous?, size, rate of dissipation)	NO SHEEN
Discoloration or Turbidity:	NONE
Velocity at depth:	—
Color:	GREENISH BROWN
Odor:	NONE DETECTED
Other Observations:	BARGE IN AT FARRIN DOCK

Comments: pH [illegible] 2 [illegible] 3 [illegible]

Recorded by: [illegible] Other Monitoring Personnel: BP

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Water Quality Monitoring Form

Station ID: RAA-WCU-A,B,C-051020	Date: 10/20/05	Time: 1335
Project Name: GASCO	Project Number: 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: OUTGOING TIDE DOWNRIVER = DOWNCURRENT
NO WIND VERY CALM - VERY LIGHT WIND

Status/Description of Operation at Time of Sampling: CAPPING SINCE 12:00 pm

Depth to Bottom: ~~33~~ 26 ~~(m)~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.58	14.83	~~3~~ 4
Depth 2: 13 (m)	9.50	14.81	5
Depth 3: 25 (m)	9.44	14.79	5
Color:			

Evidence of floating or suspended materials:	No
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	AREAS OF SHEEN ~ 1 FOOT IN DIAMETER
Discoloration and Turbidity:	NO
Velocity at stated depth:	—
Color:	GREEN+NS-BROWN
Odor:	NONE DETECTED
Other Observations:	Sample RAA-WCU-A-051020-RINS collected at 1040 using DI water + the Van Dorn

Comments:

1	7.28	2	7.27	3	7.26
Cond 1	[illegible]	2	104	3	105

CHEMISTRY GRABS: A-135
B: 137
C: 139

Recorded by: [illegible]

Other Monitoring Personnel: KT

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V... ...oring Form

S...	RAA-WCDI-A B.C-051020	Date: 10/20/05	Time: 1345
F...	GASCO	Project Number: 000029-02	
C...			
		Long/Easting:	

W... ...rvations: OUTGOING TIDE ; DOWNRIVER = DOWN CURRENT
CALM, NO WIND CLOUDY/RAIN 60°F

S... ...t Time of Sampling:
CAPPING SINCE 12 pm

D... 36.8'

		...solved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
D...p	1	9.50	14.84	10-13
D...	18	9.48	14.85	8-12
D...	35	9.44	14.87	11-12
O...		—	—	—

E... ...materials:	GARBAGE, FOAM, WOOD DEBRIS (small pieces)
E... ...oil/hydro... ...en: (... ...con... ...te of dissipation)	QUARTER SIZE SPOTS/PATCHES OF SHEEN
D... ...ar...	NONE
V... ...ate... ...ep...	—

C... GREENISH BROWN

C... NONE DETECTED

O... ...va...

C... 7.27 2 7.26 3 7.25

Cond... 111 2 102 3 100 CHEMISTRY GRASS A: 1352 B: 1354 C: 1356

R... ...: Other Monitoring Personnel: KT

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...toring Form

RAA-WCD2-A,B,C-051020	Date: 10/20/05	Time: 1415	
GASCO	Project Number: 000029-02		
...es Datum:			
	Long/Easting:		

...Observations: OUTGOING TIDE DOWNRIVER = DOWNCURRENT
CALM NO WIND

...n at Time of Sampling:
CAPPING SINCE 12 pm

	...ssolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
1	9.46	14.87	8
22	9.42	14.83	15
44	9.34	14.83	17
	—	—	—

...ed materials:	GARBAGE & WOOD PIECES
...een: ...ate of dissipation)	SLIGHT SHEEN
	No
	—

GREENISH BROWN

NONE DETECTED

pH 7.28 2 7.24 3 7.26

Cond 101 2 107 3 103

Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station: RAA-WCD3-A,B,C-051020	Date: 10/20/05	Time: 1425
Project Name: GASCO	Project Number: 000029-02	
Coordinates Northing:		
Easting/Northing:	Long/Easting:	

Weather/Water Flow Observations: DOWNRIVER = DOWNCURRENT OUTGOING TIDE CALM NO WIND

Water Conditions at Time of Sampling: CAPPING SINCE 12pm

Depth: 40.9 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth: 1 (m)	9.43	14.92	8
Depth: 23 (m)	9.41	14.83	13
Depth: 45 (m)	9.34	14.82	19
Other:	—	—	—

Suspended materials:	
Sheen: (Intensity, rate of dissipation)	THIN STRIPS OF SHEEN, GARBAGE, SMALL WOOD DEBRIS
	—
	—

GREENISH - BROWN

NONE DETECTED

—

pH 7.24 2 7.26 3 7.06

Cond 107 2 106 3 105

Other Monitoring Personnel: KT

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V[illegible] Qu[illegible] [illegible]ing Form

S[illegible]: RAA-WCD9-A,B,C-051020	Date: 10/20/05	Time: 1448
F[illegible] m[illegible] ASCO	Project Number: 000029-02	
Co[illegible]es D[illegible]:		
Lat/[illegible]	Long/Easting:	

V[illegible] iver[illegible] [illegible]ations: outgoing tide down river = downcurrent
Calm, no wind partly cloudy, 60's

S[illegible] crip[illegible] Time of Sampling: Capping Since 12pm

D[illegible] otto[illegible] 12 [illegible]

	[illegible]ed Oxygen [illegible]ng/L)	Temperature (C)	Turbidity (NTU)
B[illegible] 1	9.63	15.07	5
D[illegible] 2	9.37	14.83	10
D[illegible] 4	9.32	14.82	13
O[illegible]			

[illegible] of [illegible] [illegible]aterials:	Styrofoam - small pieces
[illegible] of oil [illegible] (T[illegible] of dissipation)	no sheen
D[illegible] on [illegible]	none
[illegible] st[illegible]	—
C[illegible]	greenish brown
C[illegible]	none detected
[illegible] rv[illegible]	

pH 1 7.26 2 7.27 3 7.15

Cond 102 2 102 3 104

Chemistry Grabs
A 1435
B 1440
C 1445

Re[illegible]y: [illegible] Other Monitoring Personnel: EA

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W[illegible] Qu[illegible] Monitoring Form

S[illegible]: RAA-WCU-A,B,C-051020	Date: 10/20/05	Time: 1640
F[illegible] GASCO	Project Number: 000029-02	
C[illegible]es		
La[illegible]	Long/Easting:	

W[illegible] Flow [illegible]ions: outgoing tide-approaching slack tide
downs[illegible] [illegible]ber calm, no wind partly cloudy, 60s mostly sunny
S[illegible] [illegible]me of Sampling: capping

De[illegible]

	[illegible]d Oxygen [illegible]g/L)	Temperature (C)	Turbidity (NTU)
D[illegible] 1	9.53	14.90	3
D[illegible] 13	9.45	14.80	4
D[illegible] 21	9.39	14.81	5
O[illegible]			

E[illegible] [illegible]rials:	bubbles
F[illegible] ([illegible] dissipation)	no sheen
D[illegible]	none
V[illegible]	—
C[illegible]	[illegible]ish-brown
O[illegible]	detected
[illegible]	

7.19 7.20 3 7.20

cond 1 108 106 3 104

Other Monitoring Personnel: EA

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W... r ... or ... rm

S... RAA-WCD1A,B,C-051020	Date: 10/20/05	Time: 1703
F...	Project Number: 000029-02	
C...		
...	Long/Easting:	

W... outgoing tide, approaching slack tide
downstr... lm, no wind, mostly sunny, 60s, sunn down behind Forest Park
S... Sampling:
Capping

D... to ...

	...gen	Temperature (C)	Turbidity (NTU)
D... 1	9.50	14.88	9
D... 18	9.70	14.86	8
D... 35	9.33	14.84	9
C...			
D...		none	
E... (... ation)		no sheen	
... ora...		none	
V...		—	

C... n-brown

C... tected

C... rv...

C...

7.27 7.23 3 7.16

Cond 1 97-109 102 3 104

R... b... Other Monitoring Personnel: EA

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...orm

S... RAA-WCD2-A,B,C ...51020	Date: 10/20/05	Time: 1656	
	Project Number: 000029-02		
	Long/Easting:		

...outgoing tide - approaching slack
downs...
...of Sampling: Calm, no wind, mostly sunny, 60s, sun going down behind Forest Park

	...ygen	Temperature (C)	Turbidity (NTU)
1	9.5	14.86	9
23	9.44	14.84	9
46	9.33	14.84	10

...s:	none
...ipation)	small strips of sheen
	none
	—

...ish-brown

...detected

	7.28	7.20	3	7.11
Cond	101	105	3	104

Other Monitoring Personnel: EA

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Form

RAA-WCD3 A,B,C-051020	Date: 10/20/05	Time: 1648
GASCO	Project Number: 000029-02	
	Long/Easting:	

ns: outgoing tide - approaching slack
downst er calm, no wind partly cloudy, 60s
e of Sampling: mostly sunny
Capping

	Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
1	9.54	14.86	9
23	9.43	14.84	9
46	9.[illegible]3	14.83	9

ials:	none
sipation)	no sheen
	none
	—

sh-brown

pH 7.27 7.22 3 7.14

cond 1.102 104 3 105

Other Monitoring Personnel: EA

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Quality Monitoring Form

: RAA-WCU-A,B,C-051021	Date: 10/21/05	Time: 1105	
me: GASCO	Project Number: 000029-02		
es Datum:			
Lat/Northing:		Long/Easting:	

iver Stage/Flow Observations: ebb tide, sunny, upper 50's calm

cription of Operation at Time of Sampling: capping

ottom: 32 ~~(m)~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
1 (m)	9.59	14.80	5
16 (m)	9.53	14.76	5
31 (m)	9.49	14.75	5

of floating or suspended materials:	layer of surface film
f oil/hydrocarbon sheen: , contiguous?, size, rate of dissipation)	NO SHEEN
on and Turbidity:	none
stated depth:	—
	greenish-brown
	none detected
ervations:	

1 7.26 2 7.26 3 7.24

Cond 1 111 2 120 3 119

Chemistry Grabs
A 1108
B 1111
C 1113

y: EA Other Monitoring Personnel: KT

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W[illegible]uality Monitoring Form

S[illegible]	RAA-~~WCU~~ WCD1-A,B,C-051021	Date: 10/21/05	Time: 1030
[illegible]	GASCO	Project Number: 000029-02	
Co[illegible] Datum:			
[illegible]t/Northing:		Long/Easting:	

W[illegible]er Stage/Flow Observations: Slack-beginning of ebb tide foggy, mid to upper 50's, cloudy, calm

[illegible]ion of Operation at Time of Sampling: Capping

De[illegible]orn: 32 ~~(m)~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
D[illegible] 1 (m)	9.56	14.74	17-23
D[illegible] 16 (m)	9.55	14.75	16
D[illegible] 31 (m)	9.47	14.74	17
O[illegible]			

E[illegible]ating or suspended materials:	layer of surface scum
[illegible]/hydrocarbon sheen: (T[illegible]ntiguous?, size, rate of dissipation)	Surface sheen 1" diameter pockets
D[illegible]d Turbidity:	in turbidity plume
[illegible]d depth:	—
[illegible]	greenish-brown to milky brown
[illegible]	none detected
O[illegible]ns:	turbidity plume coming from ~contractor's gate (seemingly) plume=traveling downstream

[illegible] 1 7.27 2 7.26 3 7.26

Cond 1 120 2 119 3 120

Chemistry Grabs
A 1037
B 1039
C 1041

R[illegible] KT Other Monitoring Personnel: EA

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Quality Monitoring Form

RAA-WCD2A-051021	Date: 10/21	Time: 1127	
GASLO	Project Number: 000029-02		
Datum:			
Lat/Northing:		Long/Easting:	

Stage/Flow Observations: ebb tide, sunny, upper 50's, calm, breeze from NW

Description of Operation at Time of Sampling: capping

Depth: 44 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
1 (m)	9.62	14.78	16
22 (m)	9.53	14.77	13
43 (m)	9.46	14.77	15

Floating or suspended materials:	none
Hydrocarbon sheen: (Continuous?, size, rate of dissipation)	NO SHEEN
Visual Turbidity:	inside turbidity plume
Secchi depth:	—
Color	greenish-brown to milky brown
Odor	none detected
Observations:	turbidity plume coming from ~contractor's gate (seemingly)

pH 1 7.24 2 7.24 3 7.19

Cond 1 117 2 118 3 118

Field Technician: KT Other Monitoring Personnel: EA

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...ity Monitoring Form

RAA-WCD3-A,B,C-051021	Date: 10/21/05	Time: 1122	
GASCO	Project Number: 000029-02		
...s Datum:			
...at/Northing:		Long/Easting:	

...age/Flow Observations: ebb tide, sunny, upper 50s, calm, breeze from NW

...n of Operation at Time of Sampling: capping

...pt... P...orm: 47 ~~(m)~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
1	9.55	14.70	15
23	9.48	14.76	18
46	9.41	14.76	19-20

...ng or suspended materials:	leaf
...drocarbon sheen: (...uous?, size, rate of dissipation)	NO sheen
... Turbidity:	inside turbidity plume
... depth:	
	greenish brown to milky brown
	none detected
	turbidity plume coming from ~ contractor gate (seemingly)

pH 1 7.24 2 7.26 3 7.25

cond 1 117 2 118 3 119

...y: KT Other Monitoring Personnel: EA

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Water Quality Monitoring Form

Station ID: RAA-WCD9-A,B,C-051021		Date: 10/21/05	Time: 1135
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: ebb tide, sunny, upper 50's, calm, breeze from NW

Status/Description of Operation at Time of Sampling: capping

Depth to Bottom: 33 ~~(m)~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.56	14.83	10
Depth 2: 17 (m)	9.51	14.76	10
Depth 3: 32 (m)	9.45	14.76	16-17
Other:			

Evidence of floating or suspended materials:	bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	NO SHEEN
Discoloration and Turbidity:	in turbidity plume, less thick here
Velocity at stated depth:	—
Color:	greenish-brown to milky brown
Odor:	none detected
Other Observations:	turbidity plume coming from ~contractors gate (seemingly) → gate opened at ~1136

Comments:

pH: 1 7.24 2 7.25 3 7.22

Cond 1 106 2 119 3 115

Chemistry Grabs
A 1138
B 1140
C 1147

Recorded by: KT Other Monitoring Personnel: EA

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REVERSE FLOW

Water Quality Monitoring Form

Station ID: RAA-WCD 8-A,B,C-051022		Date: 051022	Time: 0944
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Calm, fog has lifted, sunny low 60's

Status/Description of Operation at Time of Sampling: Cap material placement

Depth to Bottom: 35 ~~(m)~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft	9.52	14.85	4
Depth 2: 17 ~~(m)~~ ft	9.47	14.78	4
Depth 3: 34 ~~(m)~~ ft	9.41	14.78	BBS 4
Other:			

Evidence of floating or suspended materials:	bubbles, wood debris
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	<.05 fps in channel center.
Color:	brown-green
Odor:	none
Other Observations:	reverse flow

Comments:

pH: 1 7.21 2 7.25 3 7.24

Cond 1 97 (97-120) 2 106 3 104

TIME
A 0955
B 1000
C 1005

Recorded by: BP Other Monitoring Personnel: KT

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REVERSE FLOW

Water Quality Monitoring Form

Station ID: RAA-WCV4-A,B,C-051022		Date: 051022	Time: 1015
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Calm, sunny, mid 60's, slight breeze from NW

Status/Description of Operation at Time of Sampling: placing cap material

Depth to Bottom: 13 (~~m~~) ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ft	9.51	14.94	5
Depth 2: 6 (~~m~~) ↓	9.51	14.81	5
Depth 3: 11 (~~m~~) ↓	9.51	14.81	6
Other:			

Evidence of floating or suspended materials:	leaves, twigs, feather, trash
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	persistent sheen, bubbles from bottom
Discoloration and Turbidity:	—
Velocity at stated depth:	—

Color:	green-brown
Odor:	creosote - petroleum
Other Observations:	reverse flow

Comments:

pH: 1 7.23 2 7.24 3 7.25

Cond: 1 116 (116-134) 2 104 3 110

TIME
A 1015
B 1020
C 1025

Recorded by: BP Other Monitoring Personnel: KT

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REVERSE FLOW

Water Quality Monitoring Form

Station ID: RAA-WCU5-A,B,C-051022		Date: 051022	Time: 1047
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Calm, sunny, low 60's

Status/Description of Operation at Time of Sampling: placing cap material

Depth to Bottom: 36' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.57	14.95	3
Depth 2: 20 (m)	9.47	14.79	5
Depth 3: 35 (m)	9.37	14.79	4
Other:			

Evidence of floating or suspended materials:	bubbles, tarry
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	—
Other Observations:	reverse flow

Comments:

pH: 1 7.25 2 7.23 3 7.16

Cond: 1 99 2 96 3 99

Recorded by: BP Other Monitoring Personnel: KT

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REVERSE FLOW

Water Quality Monitoring Form

Station ID: RAA-WCU6-D,B,C-051022		Date: 051022	Time: 1050
Project Name: GASCO		Project Number: 000028-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Same as 1047

Status/Description of Operation at Time of Sampling: pause in capping. survey being conducted

Depth to Bottom: 44' (~~m~~)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~)'	9.56	14.92	4
Depth 2: 22 (~~m~~)'	9.48	14.79	4
Depth 3: 43 (~~m~~)'	9.37	14.78	5
Other:			

Evidence of floating or suspended materials:	wood debris, bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—

Color:	green-brown
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.25 2 7.20 3 7.08

1 97 2 97 3 98

Recorded by: BP Other Monitoring Personnel: KT

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REVERSE FLOW

Water Quality Monitoring Form

Station ID: RAA-WCU7-A,B,C-051022		Date: 051022	Time: 1030
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: calm, sunny, low 60s

Status/Description of Operation at Time of Sampling: placing cap material

Depth to Bottom: 41' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1' (m)	9.53	14.80	6
Depth 2: 20' (m)	9.45	14.78	5
Depth 3: 40' (m)	9.39	14.78	5
Other:			

Evidence of floating or suspended materials:	bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	none
Other Observations:	reverse flow

Comments:

pH: 1 7.24 2 7.23 3 7.19

1 104 2 96 3 99

TIME
A 1030
B 1035
C 1040

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCU-A,B,C-051022		Date: 051022	Time: 1336
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Calm water, sunny

Status/Description of Operation at Time of Sampling: Cap material placement

Depth to Bottom: 26 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1' (m)	9.51	15.14	4
Depth 2: 13' (m)	9.43	14.85	6
Depth 3: 25' (m)	9.40	14.82	5
Other:			

Evidence of floating or suspended materials:	wood debris, leaves, trash, bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	spotty sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.28 2 7.23 3 7.17

Cond: 1 100 2 99 3 98

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WQDI-A, B, C, -051022	Date: 051022	Time: 1315
Project Name: GASCO	Project Number: 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: Calm, sunny, high 60's.

Status/Description of Operation at Time of Sampling: Cap material placement silt curtain removal

Depth to Bottom: 35' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1' (m)	9.58	15.14	6
Depth 2: 18' (m)	9.43	14.90	6
Depth 3: 34' (m)	9.35	14.88	6
Other:			

Evidence of floating or suspended materials:	bubbles, trash
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	brown-green
Odor:	none
Other Observations:	—

Comments:

pH: 1 ~~6.94~~ 7.05 (BP) 2 7.21 3 7.09

Cond: 1 104 2 101 3 102

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCD2-A,B,C-051022		Date: 051022	Time: 1320
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Calm, sunny, high 60's

Status/Description of Operation at Time of Sampling: silt curtain removal, cap material placement

Depth to Bottom: 45' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1' (m)	9.60	15.14	5
Depth 2: 21' (m)	9.45	14.89	7
Depth 3: 44' (m)	9.32	14.88	9
Other:			

Evidence of floating or suspended materials:	trash, wood debris, spider
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	one spot of sheen
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.28 2 7.16 3 7.01

Cond: 1 98 2 102 3 102

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCD3-ABC-051022	Date: 051022	Time: 1325
Project Name: GASCO	Project Number: 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: sunny, calm, high 60's. some boat traffic in channel. waves

Status/Description of Operation at Time of Sampling: cap material placement

Depth to Bottom: 46 ~~(m)~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~	9.51	15.01	7
Depth 2: 23 ~~(m)~~	9.40	14.88	10
Depth 3: 45 ~~(m)~~	9.29	14.85	11
Other:			

Evidence of floating or suspended materials:	wood debris, trash
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.28 2 7.19 3 6.96

Cond: 1 102 2 103 3 100

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCV-A,B,C-051022	Date: 051022	Time: 1635
Project Name: GASCO	Project Number: 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: Calm, sun setting, slight breeze low 60's.

Status/Description of Operation at Time of Sampling: Cap material placement

Depth to Bottom: 26-29' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1' (m)	9.53	15.06	4
Depth 2: 15' (m)	9.57	14.87	6
Depth 3: 29' (m)	9.44	14.85	6
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	sheen pocket 4'x8' oil bubbles
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	petroleum
Other Observations:	—

Comments:

pH: 1 7.09 2 7.09 3 7.00

Cond 1 92 (92-108) 2 92 3 91

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCD1-A,B,C-051022		Date: 051022	Time: 1640
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Same as ~~1640~~ 1635

Status/Description of Operation at Time of Sampling: Cap material placement
divers removing curtains

Depth to Bottom: 36 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.78	15.39	6
Depth 2: 17 (m)	9.47	15.02	7
Depth 3: 34 (m)	9.35	14.90	10
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	Creosote
Other Observations:	— divers in water

Comments:

pH: 1 7.18 2 7.10 3 6.99

Cond: 1 100 2 103 3 102

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCD2-A,B,C,051022		Date: 051022	Time: 1645
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Same as 1640

Status/Description of Operation at Time of Sampling: cap material placement
divers removing curtains

Depth to Bottom: 46' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.76	15.36	6
Depth 2: 23 (m)	9.47	14.95	(BP) 8 9
Depth 3: 45 (m)	9.31	14.89	17
Other:			

Evidence of floating or suspended materials:	wood debris, foam, bubbles, trash
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green - brown
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.21 2 7.07 3 6.93

Cond: 1 101 2 98 3 93

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCD3-A,B,C-051022		Date: 051022	Time: 1650
Project Name: GASCO		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: Same as 1640

Status/Description of Operation at Time of Sampling: Cap material placement divers in water removing curtains.

Depth to Bottom: 46' (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.59	15.39	7
Depth 2: 23 (m)	9.41	14.95	7
Depth 3: 45 (m)	9.37	14.84	6
Other:			

Evidence of floating or suspended materials:	wood debris, bubbles
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	green-brown
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.22 2 7.13 3 6.95

Cond: 1 103 2 89 3 89

Recorded by: BP Other Monitoring Personnel: KT

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Water Quality Monitoring Form

Station ID: RAA-WCU-~~B~~C-DS1023		Date: 10/23/05	Time: 1305
Project Name: Gasco		Project Number:	
Coordinates Datum: Same			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: overcast; ~~capping~~; regular flow

Status/Description of Operation at Time of Sampling: capping mat area

Depth to Bottom: 32 (~~m~~) ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ft	9.59	14.~~98~~99	~~5~~.6
Depth 2: 16 (~~m~~)	9.37	14.87	6
Depth 3: 31 (~~m~~)	9.32	14.87	6
Other:	—	—	—

Evidence of floating or suspended materials:	—
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 ~~7.20~~ 6.96 2 7.18 3 7.19

Cond 1 ~~92~~99 2 95 3 94

Recorded by: ~~DK~~ AW

Other Monitoring Personnel: AW, RB

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Grab samples

Water Quality Monitoring Form

Station ID: RAA-WCU-E-051023	Date: 10/23/05	Time: 1305
Project Name:	Project Number:	
Coordinates Datum: same		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: overcast, regular flow

Status/Description of Operation at Time of Sampling: capping mat area

Depth to Bottom: 32 (m) ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft			
Depth 2: 16 (m)			
Depth 3: 31 (m)			
Other:			

Evidence of floating or suspended materials:	—
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 — 2 — 3 —

Recorded by: AW Other Monitoring Personnel: RB

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Water Quality Monitoring Form

Station ID: RAA-WCD1-051023		**Date:** 10/23/05	**Time:** 1330
Project Name: Gasco		**Project Number:**	
Coordinates Datum: same			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: overcast, regular flow

Status/Description of Operation at Time of Sampling: capping mat area

Depth to Bottom: 39 ~~(m)~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft	9.45	14.91	10
Depth 2: 19 (m)	9.38	14.97	9
Depth 3: 38 (m)	9.32	14.89	9
Other:	—	—	—

Evidence of floating or suspended materials:	—
Evidence of oil/hydrocarbon sheen: (Thickness, continuous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.27 2 7.25 3 7.18

Cond 1 93 2 95 3 94

Recorded by: AW Other Monitoring Personnel: RB

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Water Quality Monitoring Form

Station ID: RAA-WCDA-05-1023	Date: 10/23/05	Time: 1330
Project Name: Gasco	Project Number:	
Coordinates Datum: Same		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: overcast, regular flow

Status/Description of Operation at Time of Sampling: capping mat area

Depth to Bottom: 39 (m) ~~39~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft			
Depth 2: 19 (m) ft			
Depth 3: 38 (m) ft			
Other:			

Evidence of floating or suspended materials:	—
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 — 2 — 3 —

Took dup @ 'B' station.

Recorded by: AW Other Monitoring Personnel: RB

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Water Quality Monitoring Form

Station ID: RAA-WCD2-~~B~~ A C 051023		Date: 10/23/05	Time: 1337
Project Name: Gasco		Project Number:	
Coordinates Datum: same			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations: ~~x~~ overcast, regular flow

Status/Description of Operation at Time of Sampling: capping mat area.

Depth to Bottom: 45 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft	9.46	14.90	9
Depth 2: 22 ~~(m)~~ ft	9.35	14.89	~~7~~ 6
Depth 3: 44 ~~(m)~~ ft	9.27	14.88	7
Other:	—	—	—

Evidence of floating or suspended materials:	—
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.25 2 7.23 3 7.13

Cond — 1 ~~92~~ 98 2 93 3 96

Recorded by: AW Other Monitoring Personnel: RB

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Water Quality Monitoring Form

Station ID: RAA-WCD3-051023	Date: 10/23/05	Time: 1340
Project Name: Gasco	Project Number:	
Coordinates Datum: same		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: overcast, regular flow

Status/Description of Operation at Time of Sampling: capping, mat area

Depth to Bottom: 46 ~~(m)~~ ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft	9.48	14.90	5
Depth 2: 23 ~~(m)~~	9.38	14.88	5
Depth 3: 45 ~~(m)~~	9.28	14.85	6
Other:	—	—	—

Evidence of floating or suspended materials:	Wood debris, scum
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 7.28 2 7.20 3 7.05

Cond: 1 94 2 95 3 94

Recorded by: AW Other Monitoring Personnel: RB

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Grab samples.

Water Quality Monitoring Form

Station ID: RAA-WCD4-A/B/C-051023	Date: 10/23/05	Time: 1345
Project Name: Gasco	Project Number:	
Coordinates Datum: Same		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations: overcast, regular flow

Status/Description of Operation at Time of Sampling: capping mat area

Depth to Bottom: 34 (m)/ft

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)/ft			
Depth 2: 17 (m)/ft			
Depth 3: 33 (m)/ft			
Other:			

Evidence of floating or suspended materials:	—
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	—
Discoloration and Turbidity:	—
Velocity at stated depth:	—
Color:	greenish
Odor:	—
Other Observations:	—

Comments:

pH: 1 — 2 — 3 —

Recorded by: AW Other Monitoring Personnel: RB

APPENDIX B

TRANSFER FACILITY WQ MONITORING LOG SHEETS

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-17-05	Time: 1305
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, partly Cloudy, 20-25 mph wind From west

Status/Description of Operation at Time of Sampling:
Waiting for trucks

Depth to Bottom: 14 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.38	16.24	1.95
Depth 2: 7 (m) ft.	9.33	16.18	2.25
Depth 3: 13 (m) ft.	9.31	16.18	1.78
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.90 2 7.91 3 7.92

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-17-05	Time: 1220
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, partly cloudy, approx. 20-25 mph wind from west

Status/Description of Operation at Time of Sampling:
Waiting for trucks

Depth to Bottom: 25 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.41	16.21	2.40
Depth 2: 12.5 (m) ft.	9.32	16.18	2.18
Depth 3: 24 (m) ft.	9.28	16.11	1.25
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.82 2 7.93 3 7.94

Recorded by: Craig Wells Other Monitoring Personnel: Steve Hargquail

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-17-05	Time: 1240
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, party cloudy, 20-25 mph wind from west

Status/Description of Operation at Time of Sampling:
waiting for trucks

Depth to Bottom: 26 (~~m~~) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ft.	9.32	16.20	1.66
Depth 2: 13 (~~m~~) ft.	9.27	16.16	2.34
Depth 3: 25 (~~m~~) ft.	9.29	16.09	2.01
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.89 2 7.95 3 7.93

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harguail

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-17-05	Time: 1250
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, party cloudy, 20-25 mph wind from west

Status/Description of Operation at Time of Sampling:
Waiting for trucks

Depth to Bottom: 28 (m)ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)ft.	9.40	16.23	1.53
Depth 2: 14 (m)ft.	9.33	16.20	1.78
Depth 3: 27 (m)ft.	9.28	16.15	1.84
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.90 2 7.95 3 7.96

Recorded by: Craig Wells Other Monitoring Personnel: Faye Marquail

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-17-05	Time: 1640
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, partly cloudy, 15-20 mph wind from west

Status/Description of Operation at Time of Sampling:
Loading truck

Depth to Bottom: 12 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.48	16.30	1.69
Depth 2: 6 (m) ft.	9.37	16.28	1.81
Depth 3: 11 (m) ft.	9.36	16.29	1.74
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.90 2 7.97 3 7.96

Recorded by: Craig Wells Other Monitoring Personnel: Steve Hargquail

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-17-05	Time: 1610
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, party cloudy, 15-20 mph wind from west

Status/Description of Operation at Time of Sampling:
Waiting for trucks

Depth to Bottom: 26 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.43	16.29	2.65
Depth 2: 13 (m) ft.	9.39	16.29	1.57
Depth 3: 25 (m) ft.	9.35	16.28	1.61
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.92 2 7.99 3 7.97

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-17-05	Time: 1624
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, partly cloudy, 15-20 mph wind from west

Status/Description of Operation at Time of Sampling:
Waiting for trucks

Depth to Bottom: 26.5 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.38	16.28	1.60
Depth 2: 13 (m) ft.	9.35	16.27	2.10
Depth 3: 25.5 (m) ft.	9.33	16.28	1.61
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	

Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.86 2 7.84 3 7.83

Recorded by: Craig Wells Other Monitoring Personnel: Steve Haqua

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-17-05	Time: 1630
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, partly cloudy, 15-20 mph wind from west

Status/Description of Operation at Time of Sampling:
~~Waiting for trucks~~ Loading truck

Depth to Bottom: 27.5 ~~(m)~~ ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m)~~ ft.	9.29	16.28	1.88
Depth 2: 13.5 ~~(m)~~ ft.	9.30	16.27	1.92
Depth 3: 26.5 ~~(m)~~ ft.	9.27	16.26	1.48
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.88 2 7.92 3 7.90

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-18-05	Time: 0900
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
60°, partly cloudy, calm

Status/Description of Operation at Time of Sampling:
Completed first round of trucks

Depth to Bottom: 14 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.08	16.08	1.63
Depth 2: 7 (m) ft.	9.11	16.07	1.69
Depth 3: 13 (m) ft.	9.04	16.09	1.72
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.84 2 7.89 3 7.88

Recorded by: Craig Wells Other Monitoring Personnel: Steve Hargquail

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-18-05	Time: 0820
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
60°, partly cloudy, calm

Status/Description of Operation at Time of Sampling:
Completed first round of trucks

Depth to Bottom: 24 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.01	16.04	2.16
Depth 2: 12 (m) ft.	9.05	15.99	1.67
Depth 3: 23 (m) ft.	8.87	15.97	2.10
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.69 2 7.92 3 7.95

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-18-05	Time: 0840
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
60°, partly cloudy, calm

Status/Description of Operation at Time of Sampling:
Completed First round of trucks

Depth to Bottom: 26 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	8.99	16.08	2.21
Depth 2: 13 (m) ft.	9.01	16.04	1.82
Depth 3: 25 (m) ft.	9.04	16.02	1.56
Other:			

Evidence of floating or suspended materials:	some wood chips
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.82 2 7.89 3 7.89

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-18-05	Time: 0850
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
60°, partly cloudy, calm

Status/Description of Operation at Time of Sampling:
Completed First round of trucks

Depth to Bottom: 26 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.08	16.10	1.90
Depth 2: 13 (m) ft.	9.02	16.06	1.79
Depth 3: 25 (m) ft.	9.07	15.95	2.16
Other:			

Evidence of floating or suspended materials:	
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	
Discoloration and Turbidity:	
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.84 2 7.89 3 7.91

Recorded by: Craig Wells Other Monitoring Personnel: Steve Hargnail

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-18-05	Time: 1328
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, clear, < 5 mph wind from north

Status/Description of Operation at Time of Sampling:
Second round of trucks completed

Depth to Bottom: 12.5 (~~m~~) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ~~ft.~~	9.53	16.39	1.38
Depth 2: 6. (~~m~~) ~~ft.~~	9.50	16.35	1.24
Depth 3: 11.5 (~~m~~) ~~ft.~~	9.46	16.28	1.87
Other:			

Evidence of floating or suspended materials:	
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.96 2 7.95 3 7.98

Recorded by: Craig Wells Other Monitoring Personnel: Steve Hurquail

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-18-05	Time: 1300
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, clear, < 5 mph wind from north

Status/Description of Operation at Time of Sampling:
Second round of trucks completed

Depth to Bottom: 19 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.40	16.56	1.51
Depth 2: 9.5 (m) ~~ft.~~	9.37	16.47	1.42
Depth 3: 18 (m) ~~ft.~~	9.34	16.43	1.09
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.94 2 7.98 3 7.99

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Seattle, Washington 98101
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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-18-05	Time: 1310
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, clear, less than 5 mph wind from north

Status/Description of Operation at Time of Sampling:
second round of trucks completed

Depth to Bottom: 26 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.35	16.53	1.35
Depth 2: 13 (m) ft.	9.36	16.45	1.10
Depth 3: 25 (m) ft.	9.32	16.41	1.57
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.93 2 7.95 3 7.96

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-18-05	Time: 1318
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, clear, < 5 mph wind from north

Status/Description of Operation at Time of Sampling:
Second round of trucks completed

Depth to Bottom: 27 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.40	16.57	1.16
Depth 2: 13.5 (m) ft.	9.37	16.42	1.19
Depth 3: 26 (m) ft.	9.37	16.39	1.36
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.91 2 7.97 3 7.96

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-18-05	Time: 1655
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
73°, Thin overcast, <5 mph wind from north

Status/Description of Operation at Time of Sampling:
Barge empty. Preparing for barge decon

Depth to Bottom: 12 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.35	16.57	1.24
Depth 2: 6 (m) ~~ft.~~	9.05	16.55	1.33
Depth 3: 11 (m) ~~ft.~~	9.11	16.46	1.47
Other:			

Evidence of floating or suspended materials:	Some aquatic vegitation
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.98 2 8.02 3 8.03

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman-Sorensen

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-18-05	Time: 1615
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
73°, Thin overcast, < 5 mph wind from north

Status/Description of Operation at Time of Sampling:
Barge empty. Preparing for barge decon

Depth to Bottom: 23.5 (~~m~~) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ~~ft.~~	9.41	16.59	1.31
Depth 2: 11.5 (~~m~~) ~~ft.~~	9.23	16.53	1.46
Depth 3: 22.5 (~~m~~) ~~ft.~~	8.32	16.47	1.43
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 8.00 2 8.08 3 8.03

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-18-05	Time: 1630
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
73°, thin overcast, <5 mph wind from north

Status/Description of Operation at Time of Sampling:
Barge empty, Preparing for barge decon

Depth to Bottom: 25.5 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.28	16.60	1.20
Depth 2: 12.5 (m) ~~ft.~~	9.16	16.47	1.50
Depth 3: 24.5 (m) ~~ft.~~	9.15	16.37	1.53
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 8.00 2 8.05 3 8.00

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-18-05	Time: 1645
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
73°, thin overcast, < 5 mph wind from north

Status/Description of Operation at Time of Sampling:
Barge empty. Preparing for barge decon

Depth to Bottom: 27 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.30	16.57	1.34
Depth 2: 13.5 (m) ft.	9.22	16.53	1.50
Depth 3: 26 (m) ft.	8.94	16.27	1.81
Other:			

Evidence of floating or suspended materials:	some aquatic vegitation
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.99 2 8.06 3 7.97

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-19-05	Time: 0905
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, showers, 5-10 mph wind from southwest

Status/Description of Operation at Time of Sampling:
Decon of B-183

Depth to Bottom: 12 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.15	16.22	1.76
Depth 2: 6 (m) ~~ft.~~	9.11	16.25	1.39
Depth 3: 11 (m) ~~ft.~~	9.23	16.20	1.52
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.86 2 7.89 3 7.93

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-19-05	Time: 0830
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, showers, 5-10 mph wind from southwest

Status/Description of Operation at Time of Sampling:
Decon of barge B-183

Depth to Bottom: 25 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.23	16.22	1.74
Depth 2: 12.5 (m) ft.	9.20	16.24	1.80
Depth 3: 24 (m) ft.	9.24	16.24	2.13
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.85 2 7.95 3 7.92

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-19-05	Time: 0841
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, showers, 5-10 mph wind from southwest

Status/Description of Operation at Time of Sampling:
Decon of barge B-183

Depth to Bottom: 24 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.24	16.22	1.79
Depth 2: 12 (m) ft.	9.25	16.23	1.44
Depth 3: 23 (m) ft.	9.23	16.23	1.52
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.68 2 7.94 3 7.90

Recorded by: Craig Wells Other Monitoring Personnel: Steve Hargrail

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-19-05	Time: 0850
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, showers, 5-10 mph wind from southwest

Status/Description of Operation at Time of Sampling:
Decon of barge B-183

Depth to Bottom: 25.5 ~~(m) ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m) ft.~~	9.11	16.23	1.67
Depth 2: 12.5 ~~(m) ft.~~	9.27	16.21	1.38
Depth 3: 24.5 ~~(m) ft.~~	9.28	16.20	1.52
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.87 2 7.91 3 7.90

Recorded by: Craig Wells Other Monitoring Personnel: Steve Harquail

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-19-05	Time: 1305
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, partly cloudy, 10-15 mph wind from southwest
up to 24" swells from northwest

Status/Description of Operation at Time of Sampling:
Barge B-183 undergoing decon (Scraping)

Depth to Bottom: 12 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.37	16.42	1.52
Depth 2: 6 (m) ~~ft.~~	9.39	16.40	1.58
Depth 3: 11 (m) ~~ft.~~	9.34	16.39	1.65
Other:			

Evidence of floating or suspended materials:	Spume
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.92 2 7.95 3 7.98

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Seversen

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-19-05	Time: 1215
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, partly cloudy, 10-15 mph wind from southwes
one foot swells from northwest

Status/Description of Operation at Time of Sampling:
Barge B-183 undergoing decon (scraping)

Depth to Bottom: 25.5 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.22	16.44	1.75
Depth 2: 12.5 (m) ~~ft.~~	9.19	16.39	1.71
Depth 3: 24.5 (m) ~~ft.~~	8.21	16.37	1.44
Other:			

Evidence of floating or suspended materials:	some aquatic vegitation
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.89 2 7.96 3 7.93

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-19-05	Time: 1232
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65, partly cloudy, 10-15 mph wind from southwest
swells to 18" from northwest

Status/Description of Operation at Time of Sampling:
Barge B-183 undergoing decon (scraping)

Depth to Bottom: 27 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.26	16.42	1.63
Depth 2: 13.5 (m) ~~ft.~~	9.25	16.38	1.72
Depth 3: 26 (m) ~~ft.~~	9.24	16.37	1.40
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.90 2 7.95 3 7.94

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sorensen

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-19-05	Time: 1246
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
65°, partly cloudy, 10-15 mph wind from southwest up to 18" swells from northwest

Status/Description of Operation at Time of Sampling:
Barge B-183 undergoing decon (scraping)

Depth to Bottom: 28 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.38	16.44	1.46
Depth 2: 14 (m) ft.	9.26	16.38	1.51
Depth 3: 27 (m) ft.	9.25	16.37	1.51
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.90 2 7.95 3 7.95

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sorensen

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Seattle, Washington 98101
Phone 206.287.9130
Fax 206.287-9131
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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-19-05	Time: 1755
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
68°, scattered clouds, winds 20-25 mph from southwest
swells 2-3 feet from northwest

Status/Description of Operation at Time of Sampling:
Pressure washing barge sidewalk

Depth to Bottom: 12 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.39	16.46	1.99
Depth 2: 6 (m) ~~ft.~~	9.37	16.47	1.92
Depth 3: 11 (m) ~~ft.~~	9.34	16.48	2.09
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.94 2 7.94 3 7.94

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Seattle, Washington 98101
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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-19-05	Time: 1720
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
68°, Scattered Clouds, Wind 20-25 mph from southwest

Status/Description of Operation at Time of Sampling:
Pressure Washing Barge sidewalls

Depth to Bottom: 25 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.41	16.44	1.78
Depth 2: 12.5 (m)	9.34	16.45	1.93
Depth 3: 24 (m)	9.28	16.45	1.74
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.93 2 7.97 3 7.96

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Seattle, Washington 98101
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Fax 206.287-9131
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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-19-05	Time: 1733
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
68°, Scattered clouds, 20-25 mph winds from southwest
Swells 2-3 feet from northwest

Status/Description of Operation at Time of Sampling:
Pressure washing barge interior

Depth to Bottom: 26.5 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.35	16.43	1.67
Depth 2: 13 (m) ~~ft.~~	9.29	16.44	1.79
Depth 3: 25.5 (m) ~~ft.~~	9.34	16.46	1.86
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.91 2 7.93 3 7.91

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Seattle, Washington 98101
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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-19-05	Time: 1743
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
68°, scattered clouds, winds 20-25 mph from southwest
swells 2-3 feet from northwest

Status/Description of Operation at Time of Sampling:
Pressure washing barge sidewalls. [redacted]

Depth to Bottom: 28 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.39	16.45	1.90
Depth 2: 14 (m) ~~ft.~~	9.31	16.45	1.97
Depth 3: 27 (m) ~~ft.~~	9.28	16.46	1.80
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.93 2 7.94 3 7.94

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Seattle, Washington 98101
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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-20-05	Time: 0904
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, partly cloudy, wind 8-10 mph from south

Status/Description of Operation at Time of Sampling:
Pressure Washing Barge Interior

Depth to Bottom: 12 ~~(m) ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m) ft.~~	9.18	16.14	1.46
Depth 2: 6 ~~(m) ft.~~	9.15	16.14	1.45
Depth 3: 11 ~~(m) ft.~~	9.14	16.15	1.68
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.78 2 7.86 3 7.86

Recorded by: Craig Wells

Other Monitoring Personnel: John Hinz Tidewater ~~[illegible]~~

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Water Quality Monitoring Form

Station ID: TF-WCD-1	Date: 10-20-05	Time: 0835
Project Name: Gasco	Project Number: 000029-02	
Coordinates Datum:		
Lat/Northing:	Long/Easting:	

Weather/River Stage/Flow Observations:
56°, partly cloudy, wind 8-10 mph from south

Status/Description of Operation at Time of Sampling:
Pressure washing barge interior

Depth to Bottom: 26 (~~m~~)ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~)ft.	9.16	16.14	1.79
Depth 2: 13 (~~m~~)ft.	9.15	16.14	1.61
Depth 3: 25 (~~m~~)ft.	9.10	16.13	1.65
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.82 2 7.91 3 7.90

Recorded by: Craig Wells

Other Monitoring Personnel: John Hinz, Tidewater ~~Kim Rodman~~ ~~Sevensen~~

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-20-05	Time: 0849
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, partly cloudy, wind 8-10 mph from south

Status/Description of Operation at Time of Sampling:
Pressure washing barge interior

Depth to Bottom: 26 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.20	16.13	1.52
Depth 2: 13 (m) ~~ft.~~	9.10	16.11	1.56
Depth 3: 25 (m) ~~ft.~~	8.96	16.00	1.36
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.84 2 7.89 3 7.87

Recorded by: Craig Wells

Other Monitoring Personnel: John Hinz Tidewater ~~Kim Rodman~~ ~~[illegible]~~

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Phone 206.287.9130
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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-20-05	Time: 0904
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
56°, partly cloudy, wind 8-10 mph from south

Status/Description of Operation at Time of Sampling:
Pressure washing barge interior

Depth to Bottom: 26½ (~~m~~) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ~~ft.~~	9.21	16.13	1.38
Depth 2: 13 (~~m~~) ~~ft.~~	9.12	16.10	1.58
Depth 3: 25½ (~~m~~) ~~ft.~~	9.01	15.94	1.95
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.88 2 7.91 3 7.83

Recorded by: Craig Wells

Other Monitoring Personnel: John Hinz, Tidewater ~~[illegible]~~

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Seattle, Washington 98101
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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-20-05	Time: 1325
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, scattered clouds, wind to 10-12 mph from south
swells to 2 ft. from northwest

Status/Description of Operation at Time of Sampling:
Pressure washing barge floor

Depth to Bottom: 26 (m)

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m)	9.34	16.27	1.34
Depth 2: 13 (m)	9.03	16.23	1.21
Depth 3: 25 (m)	9.32	16.22	1.36
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.44 2 7.99 3 7.99

Recorded by: Craig Wells

Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-20-05	Time: 1405
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, scattered clouds, 10-12 mph wind from south up to 2 ft. swells

Status/Description of Operation at Time of Sampling:
Pressure washing barge floor

Depth to Bottom: 12 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.54	16.28	1.64
Depth 2: 6 (m) ft.	9.53	16.27	1.33
Depth 3: 11 (m) ft.	9.50	16.25	1.61
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.96 2 7.98 3 8.03

Recorded by: Craig Wells Other Monitoring Personnel: Kim Radman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCD-2		Date: 10-20-05	Time: 1339
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, scattered clouds, wind 10-12 mph from south
swells to 2 ft. from northwest

Status/Description of Operation at Time of Sampling:
Pressure washing barge floor

Depth to Bottom: 28 ~~(m) ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m) ft.~~	9.37	16.27	1.32
Depth 2: 14 ~~(m) ft.~~	9.30	16.25	1.32
Depth 3: 27 ~~(m) ft.~~	9.33	16.23	1.73
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.91 2 7.98 3 7.98

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-20-05	Time: 1349
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
70°, scattered clouds, wind 10-12 mph from south
Swells to 2ft. from northwest

Status/Description of Operation at Time of Sampling:
Pressure washing barge floor

Depth to Bottom: 27.5 (m) ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ft.	9.34	16.28	1.26
Depth 2: 13.5 (m) ft.	9.37	16.25	1.37
Depth 3: 26.5 (m) ft.	9.34	16.24	1.50
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.96 2 7.97 3 7.96

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Water Quality Monitoring Form

Station ID: TF-WCU		Date: 10-20-05	Time: 1710
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
71°, scattered clouds, wind 5-10 mph from south

Status/Description of Operation at Time of Sampling:
Final barge floor washdown, equipment decon and removal

Depth to Bottom: 12 (m) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) ~~ft.~~	9.47	16.26	1.68
Depth 2: 6 (m) ~~ft.~~	9.39	16.31	1.40
Depth 3: 11 (m) ~~ft.~~	9.41	16.21	1.56
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 ____ 2 ____ 3 ____

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sorensen

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Water Quality Monitoring Form

Station ID: TF-WCD-1		Date: 10-20-05	Time: 1635
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
71°, scattered clouds, 5-10 mph wind from south
Swells < 1 Ft.

Status/Description of Operation at Time of Sampling:
Final wash down of floor & removing equipment

Depth to Bottom: 26.5 (m) Ft.

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (m) Ft.	9.04	16.38	1.79
Depth 2: 13.5 (m) Ft.	9.02	16.31	1.50
Depth 3: 25.5 (m) Ft.	8.89	16.26	1.66
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.89 2 7.93 3 7.91

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sorensen

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Water Quality Monitoring Form

Station ID: TF-WCD2		Date: 10-20-05	Time: 1647
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
71°, scattered clouds, winds 5-10 mph from south
swells < 1 ft. from west

Status/Description of Operation at Time of Sampling:
Final wash down of floor & equipment removal

Depth to Bottom: 26 (~~m~~) ~~ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 (~~m~~) ~~ft.~~	9.36	16.31	1.92
Depth 2: 13 (~~m~~) ~~ft.~~	9.19	16.26	1.38
Depth 3: 25 (~~m~~) ~~ft.~~	9.21	16.22	1.71
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.99 2 8.03 3 8.01

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen

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Seattle, Washington 98101
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Fax 206.287-9131
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Water Quality Monitoring Form

Station ID: TF-WCD-3		Date: 10-20-05	Time: 1658
Project Name: Gasco		Project Number: 000029-02	
Coordinates Datum:			
Lat/Northing:		Long/Easting:	

Weather/River Stage/Flow Observations:
71°, scattered clouds, winds 5-10 mph from south

Status/Description of Operation at Time of Sampling:
Final floor washdown & equipment decon and removal

Depth to Bottom: 28 ~~(m) ft.~~

	Dissolved Oxygen (mg/L)	Temperature (C)	Turbidity (NTU)
Depth 1: 1 ~~(m) ft.~~	9.41	16.31	1.83
Depth 2: 14 ~~(m) ft.~~	9.36	16.26	1.72
Depth 3: 27 ~~(m) ft.~~	9.33	16.25	1.63
Other:			

Evidence of floating or suspended materials:	none
Evidence of oil/hydrocarbon sheen: (Thickness, contiguous?, size, rate of dissipation)	none
Discoloration and Turbidity:	none
Velocity at stated depth:	
Color:	
Odor:	
Other Observations:	

Comments:
pH: 1 7.95 2 7.98 3 8.02

Recorded by: Craig Wells Other Monitoring Personnel: Kim Rodman Sevensen