

Appendix D
Analysis of Anomalous Deep Soil and
Groundwater Results at the Dundalk Marine
Terminal

Analysis of Anomalous Deep Soil and Groundwater Results at the Dundalk Marine Terminal

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Introduction

This technical memorandum presents the results of activities conducted to evaluate groundwater quality within M-Series wells at the Dundalk Marine Terminal (DMT) located in Baltimore, MD. These activities were performed between November 2006 and March 2007 to address Maryland Department of the Environment's (MDE) inquiry concerning groundwater quality within the Lower Patapsco Aquifer. A scope of work was developed to evaluate the groundwater quality which included collection of groundwater from existing intermediate wells using conventional purging and sampling techniques and then comparing these results with data from colocated shallow monitoring wells. The scope also included sampling of soils within the Alluvial and Lower Patapsco sediments for chemical and geotechnical analyses during the installation of five intermediate wells during Phase 1 of the COPR Investigation. The following sections contain a brief description of the scope completed, a summary of the resulting data, and the results of the assessment. The assessment results were previously submitted to MDE on June 12, 2007.

As explained below, multiple lines of evidence indicate that there is no significant vertical migration of COPR-impacted groundwater into the Lower Patapsco Aquifer beneath the DMT. Although low levels of hexavalent chromium were detected in a few highly localized soil samples, these samples are not believed to be representative but are likely caused by cross contamination attributable to the drilling and sampling methods used. Groundwater monitoring wells were installed at each boring with a corresponding soil detection and will serve as long-term monitoring points.

Conventional Purging and Sampling of Existing Monitoring Wells

CH2M HILL performed conventional purging and sampling at monitoring wells EAC-1M, EAC-4M, EA-5M, EA-6M, EA-11M, EA-13M, and EA-15M to monitor geochemical parameters and chromium concentrations at initiation, during, and at completion of well purging. MDE had observed that samples collected from monitoring wells EAC-1M, EAC-

4M, EA-6M, EA-13M, and EA-15M have either had elevated pH values or exhibited increasing pH trends. Monitoring wells EA-5M and EA-11M did not exhibit historically elevated pH values, but served as control wells in this assessment. In addition, a sample was collected from shallow monitoring wells collocated with each of these M-Series wells (EAC-1S, EAC-4S, DMT-25S, EA-6S, EA-11S, P-4, and EA-15S) using low-flow purging and sampling techniques to compare geochemical characteristics with the EA M-Series wells. These wells are shown on Figure 1.

Groundwater samples were collected at the beginning and end of purging of the M-Series wells for chemical analyses. In addition, field parameters including temperature, specific conductance, dissolved oxygen, pH, oxidation reduction potential (ORP), turbidity, and salinity were collected at regular intervals during purging. An attempt was made to purge at least 3 to 5 well volumes from each of the EA M-Series wells to ensure that the collected groundwater was representative of the formation. Efforts were successful in removing a minimum of three well volumes in all of the EA M-Series wells except for EA-5M and EA-11M. Pumping could not be sustained in either of these wells at pumping rates ranging from approximately 1 to 5 gallons a minute and each of these wells went dry. As a result, samples were collected from these wells using lower flow rates that minimized drawdown. A minimum of one well volume was removed from each of these wells prior to sampling.

One sample was collected from each of the collocated shallow monitoring wells using low-flow purging and sampling techniques. Each of the groundwater samples collected for laboratory analyses were handled in accordance with CH2M HILL's 2006 draft "COPR Investigation Work Plan," and laboratory analyses were performed by Accutest Laboratories of Dayton, NJ.

Results of field Parameter Measurements

The field parameter measurements and graphs showing pH values during the well purging process are included in Attachment 1. The following observations have been made from the field parameter measurements:

- Shallow groundwater collected from within areas of known COPR, or located hydraulically downgradient of areas of known COPR (EAC-4S, DMT-25S, EA-6S, P-4, and EA-15S), show pH values greater than 12.0 and lower ORP values than wells located outside of COPR (EAC-1S and EA-11S) where pH values were in the neutral range.
- Each EA M-Series well showed initial pH values higher than those values after purging was completed.
- Each EA M-Series wells exhibiting elevated pH showed a marked decrease in pH during the initial stages of purging and pH values that were generally in the neutral range at the end of the purging with the exception of EAC-4M, which declined from a pH of 9 to a pH of 8.
- Monitoring wells EAC-1M and EAC-5M showed a multiple-unit decrease between the initial reading at commencement of pumping and at completion of purging, but the remaining of the wells showed a decrease in pH of less than one unit.

The initial drop in pH values in the M-Series wells is thought to be the result of the purging of “stagnant” water within the well casing and the stabilization of pH values is considered representative of formation water entering the well screen.

Monitoring well EAC-4M is the only well in which pH values did not stabilize below 8.0; however, pH values did stabilize at 8.03. Well EAC-4M is located outside of the COPR boundary and is screened from approximately 40 to 50 feet below ground surface, which would suggest that EAC-4M is screened within the lower yielding Alluvial Sediments, believed to function as a confining unit at the site. EAC-4M is not considered representative of water quality within the Lower Patapsco, which is the aquifer of concern. Furthermore, a tidal influence evaluation performed on this well for the Chromium Transport Study showed that this well has little to no tidal influence.

Results of Chromium Analyses

The analytical results for the groundwater samples collected from the shallow wells and from the M-Series wells at the initiation and conclusion of purging are included as Attachment 2. The following observations have been made from the total chromium and hexavalent chromium analytical results:

- Elevated total chromium values (above the 100 ug/L Federal Drinking Water Maximum Contaminant Level [MCL]) were detected in filtered and unfiltered samples from each of the shallow groundwater wells installed within or immediately downgradient of known COPR placement.
- Hexavalent chromium was detected in each of the filtered and unfiltered samples from each shallow groundwater wells installed within or downgradient of known COPR placement.
- Total chromium was detected in M-Series wells below the MCL in all samples collected except the initial unfiltered sample collected from well EA-13M. The corresponding filtered sample contained total chromium concentrations well below the MCL.
- At the conclusion of purging EA-13M, total chromium was again detected well below the MCL in the unfiltered sample.
- Hexavalent chromium was detected in the sample collected at the initiation of purging in EA-13M, but was not detected in the corresponding filtered sample or from either the unfiltered or filtered sample at the conclusion of purging.
- Hexavalent chromium was detected at low levels in the unfiltered samples collected at the beginning and conclusion of purging M-Series well EAC-4M at estimated concentrations well below the laboratory reporting limit, but hexavalent chromium was not detected in either filtered samples collected at EAC-4M.

The detection of hexavalent chromium in the initial sample from EA-13M is believed to be the result of turbidity at the initiation of purging and suggests that solids containing hexavalent chromium were present in the well screen. It is not suspected that these solids would enter the well through the well screen from the formation as the well is screened well below any fill material containing COPR. It is more likely that solids would enter the well

either from a damaged well casing or from debris at the surface. Particular attention should be given to future data from EA-13M.

Comparison of Geochemical Data

Groundwater samples were collected from the shallow and M-Series wells for laboratory analyses of geochemical parameters. Attachment 3 contains trilinear diagrams showing the major ion percentages in groundwater for each of the well pairs. Attachment 3 also contains a table summarizing the relative percentage of major ions contained in each of the groundwater samples. The following observations have been made from the geochemical results:

- The trilinear plots clearly illustrate that the geochemical “signature” of the groundwater samples collected at the initiation of purging the M-Series wells is the same as groundwater samples collected at the conclusion of purging, with the exception of the groundwater samples collected at EA-5M. Groundwater could not be purged from EA-5M at a sustained rate, and it is believed that the initial sample collected from EA-5M represents “stagnant” water within the well casing at the initiation of purging, due to limited flow to and through the well.
- Trilinear plots for groundwater samples collected from the colocated shallow wells contain significantly different percentages of major ions than groundwater samples collected from the M-Series wells.
 - The percentage of calcium in shallow groundwater is generally 1½ to 4 times greater than the percentage of calcium in the deep zone.
 - Shallow groundwater, particularly in areas of known COPR, or located hydraulically downgradient of areas of known COPR, contained little to no magnesium, while magnesium generally comprised almost 20 percent of the ionic composition of the deep zone.
 - The anion composition of the deep zone groundwater is dominated by chloride and sulfate, whereas the shallow groundwater composition is dominated by bicarbonate.
- At each colocated well pair, and in general across the site, the carbon dioxide concentration in the deep zone is generally one to two orders of magnitude greater than observed in the shallow groundwater indicating that a fairly significant barrier exists between the two zones, limiting the transfer of carbon dioxide.

The difference in cation and anion composition between the shallow groundwater and deep zone groundwater at the site suggests that there is no connection between shallow groundwater and the M-Series wells at DMT. Furthermore, the large difference in carbon dioxide composition between the two zones suggests that a significant barrier to groundwater flow exists between the two zones.

Results of Soil Analyses

In addition to the collection of groundwater samples from existing wells at DMT, CH2M HILL collected soil samples at various depths through the shallow and deep soils during the installation of five new monitoring wells (DMT-34M through DMT-38M) completed in the

Lower Patapsco sand and gravel unit beneath the site. The results of the soil samples are included as Attachment 4.

Several soil samples collected at depths below the alluvial silts and clays contained low concentration detections of hexavalent chromium (Cr (VI) and/or elevated pH values (defined as >8.5). The concentrations of Cr(VI) detected below COPR and the confining silts and clays are below the USEPA Region 3 soil to groundwater soil screening level (SSL) of 42 mg/kg. The analytical soil data has been evaluated to identify trends or geochemical evidence to determine whether shallow COPR may be impacting soil and groundwater in the Patapsco Formation. Particular attention was paid to the geochemistry, the lithology and the groundwater quality from the associated wells to determine the validity of the detections. Total chromium was not detected at elevated concentrations below COPR and was not evaluated during this process. The following section presents a summary of the evaluation.

Several lines of evidence exist that suggest that both the elevated pH values and low concentration detections of Cr(VI) are anomalous and are not indicative of actual soil conditions:

- Soil sample results from each of the boreholes where COPR was encountered show a significant decrease of pH, total Cr and Cr(VI) immediately below the COPR. Total Cr and Cr(VI) concentrations decrease between one and four orders of magnitude immediately below COPR. The pH values also decrease generally three to four standard units immediately below the COPR. If downward migration of Cr(VI) and high pH groundwater were occurring from the overlying COPR, a more linear trend in soil concentrations would be expected.
- Any downward migration of Cr(VI) in groundwater would pass through the organic rich soils that immediately underlie COPR at the site. These soils drive reduction of Cr(VI). Cr(VI) in groundwater would be reduced to Cr(III), which is relatively immobile at the neutral pH values observed below COPR. This is further demonstrated by the significant decrease in Cr(VI) detections immediately below COPR.
- Unlike the relatively immobile Cr(III), Cr(VI) is soluble and Cr(VI) migrating downward would be detectable in groundwater due to its solubility. Cr(VI) is not routinely detected in groundwater from any of these M-series wells when representative formation waters are sampled and analyzed.
- All detections of Cr(VI) in soils at depth are below or immediately above the laboratory reporting limit. Several different and sample specific laboratory inaccuracies, such as a large variation in laboratory replicates, have been identified for these samples which could indicate that some low level detections were false positive results.
- Several (4) elevated soil pH values were recorded at depth in several of the boreholes. In each borehole where this occurred, multiple soil samples were collected at a shallower depth (between COPR and the sample in question) that showed neutral values. It is unlikely for COPR impacted groundwater to pass through or around each of these zones where neutral soils were observed and impose elevated pH values on soil at depth.

- Soils showing elevated pH values at depth were two to four standard units greater than soil samples collected immediately above and below that were generally collected from the same lithologic unit.
- Groundwater collected from the completed monitoring wells show neutral pH values which are several standard units below the soil samples with elevated pH. The monitoring wells are generally screened within the same lithology as the soil samples in question. The elevated pH values detected in the soils in question cannot exist at several standard units greater than the groundwater in the soil pore spaces and not impact groundwater chemistry.
- Several of the soil samples showing elevated pH were collected from zones of coarse grained material. The soils of the Patapsco Formation are derived from crystalline (igneous and metamorphic) rock and were deposited in a non-marine environment. Thus the mineralogy of the Patapsco Formation does not contain sufficient calcium and magnesium to elevate pH in the surrounding groundwater.

Several potential causes of the anomalous elevated pH values and low level Cr(VI) detections have been identified:

- Each monitoring well was installed with a six-inch diameter steel permanent outer casing that was set in the silt and clay material beneath fill and grouted in place. This steel casing is designed to separate the COPR material in the fill zone from deeper soils in the borehole. There is the potential that an incompletely sealed casing could allow for migration of Cr(VI) by water containing these constituents into the borehole and downward during advancement of the borehole.
- The wells were installed using mud rotary drilling techniques. This technique uses a bentonite slurry (pH>9) that is continuously circulated within the borehole to keep the borehole walls from collapsing during advancement of the borehole. Because soil sampling during the installation of the borehole is accomplished using standard penetration testing through the drilling mud, a layer of drilling mud typically coats the outside of the soil core sample that is submitted to the lab for analysis.
- Despite efforts to decontaminate rotary mud pumps, hoses and equipment, and to limit contaminated mud from entering the annulus after the protective casing has been set, there is always the possibility that small levels of hexavalent chromium may be present as a cross-contaminant in the drilling mud. Any Cr(VI) introduced into the drilling mud would then be circulated with the drilling mud over the length of the borehole. Coarse grained, positive ORP material from the Patapsco formation would have little pH buffering capacity or hexavalent chromium reducing capacity resulting from the intrusion of drilling mud into the sample.
- Inherent and large variation in laboratory replications suggesting that some of the low level detections of Cr(VI) are indistinguishable from a non-detect result.

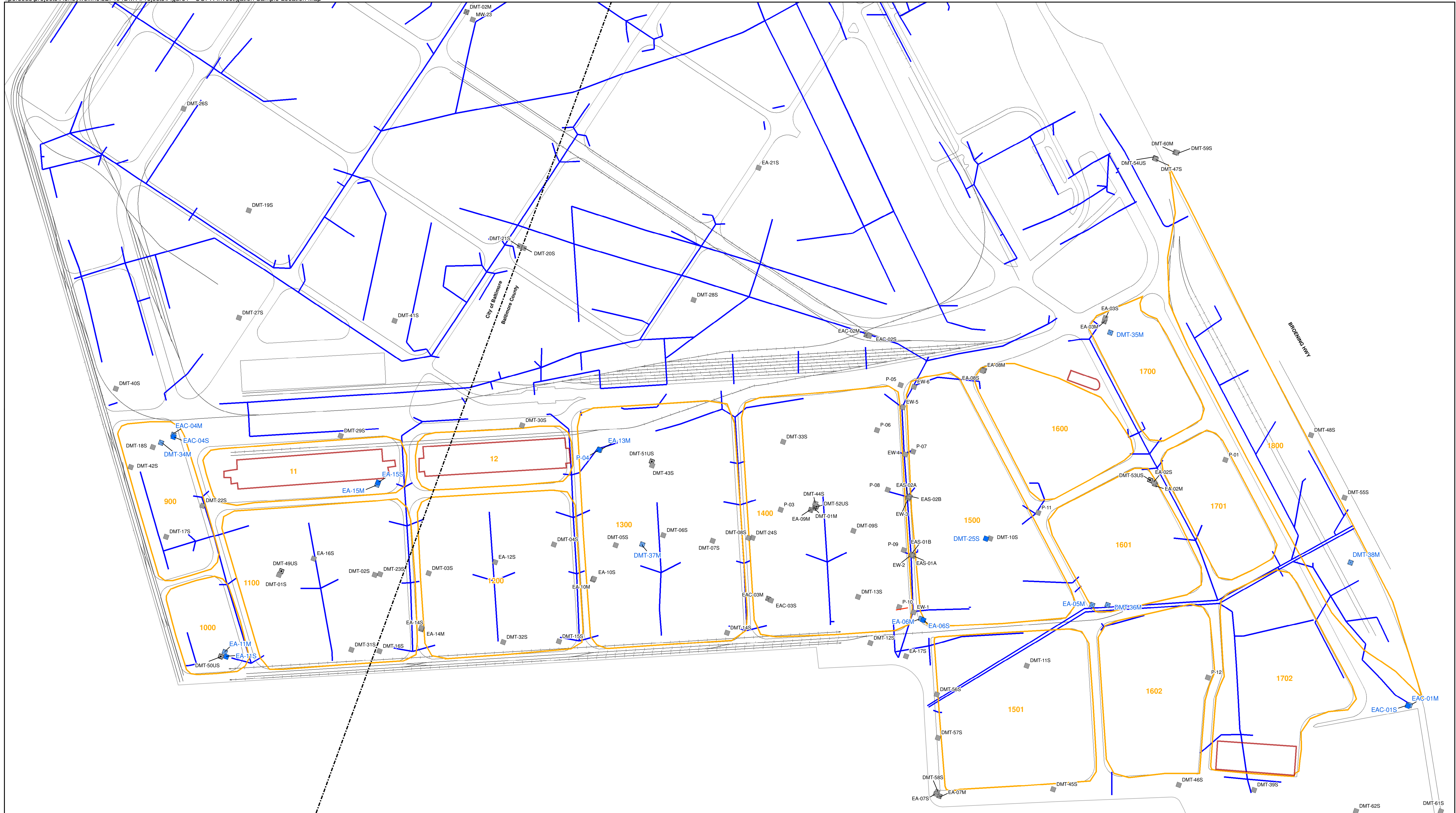
Conclusions

Field recorded pH values in the M-Series monitoring wells suggest that some degree of “stagnation” exists within the well screen prior to significant purging of water within the well. The source of this stagnation is not fully understood but it could be caused by small leakage in well seals or casings. Such small leakage does not necessarily mean that the older monitoring wells are not useful, but rather sampling of these wells should be accomplished using traditional 3 to 5 volume purging techniques.

The following lines of evidence support the conclusion that shallow groundwater is having no meaningful impact on the M-Series wells at DMT:

- pH values were observed in M-Series wells that have historically shown elevated pH during a process of purging multiple well volumes from each well; generally, neutral pH values were recorded in each of these wells at the conclusion of pumping.
- Total chromium values below the Federal drinking water standard were recorded at the end of purging for each of the M-Series wells
- Major cation and anion composition of groundwater collected from shallow and M-Series wells across the site differ significantly suggesting the confining unit is effectively separating the fill unit and Patapsco aquifers.
- A one- to two-orders-of-magnitude difference in carbon dioxide concentrations between the shallow and deep zones supports the existence of a significant barrier between these lithologic zones.
- Low level detections of hexavalent chromium, at or near the analytical detection limit and well below the USEPA Region 3 soil to groundwater soil screening level (SSL) of 42 mg/kg., and slightly elevated pH have been detected in some soil samples during the installation of five new Lower Patapsco wells. The samples showing elevated pH values and containing low level Cr(VI) are believed to be anomalous based upon the lines of evidence presented above, and most likely have resulted from cross contamination due to the drilling and sampling methods employed. Monitoring wells have been installed in each of these boreholes and will be sampled as part of the long-term monitoring plan being developed for the site.

The results of these analyses suggest that no further action outside of routine groundwater monitoring is needed at this time to evaluate potential impacts of shallow, COPR affected groundwater on the Lower Patapsco Aquifer beneath the site. Conventional three-volume purging should be considered for future groundwater sampling events of the M-Series wells to document that a sample representative of formation water is obtained. While it appears that highly localized incidents of cross contamination have been identified for soil results as a consequence of the investigative methods employed, the concentrations are well below regulatory guidance and there appears to be no significant vertical migration of COPR impacted groundwater into the Lower Patapsco. Honeywell and MPA will be developing the Long-term Monitoring Plan for the site in accordance with the Consent Decree. The Plan will include an initial evaluation of monitoring wells that should be retained or decommissioned. In addition, the Plan will include a process for continued evaluation of the integrity and usefulness of monitoring wells within the program.



Legend

Sample Locations

- Shallow Well
- Upper Sand Well
- M-Series Well
- Test Trench
- - - County/City Boundary
- Storm Sewer Line
- Railroad Centerline
- Curb
- Shoreline / Bulkhead
- Areas

Created By: JEP
 Checked By:
 Approved By:

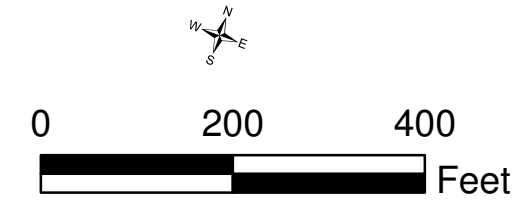


Figure 1
 COPR Investigation Sample Location Map
 Dundalk Marine Terminal
 Baltimore, Maryland

Attachment 1
Well Purge Logs and Select Data Graphs

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EAC-1S
DTW (feet)	5.89
Total Depth (feet)	19.3

Sample 1	1425
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Notes: Total of 8 gal purged. Sample 1=EAC-1S-GWR-112806

Date	11/28/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1300	7.26	0.109	13.9	8.2	21.62	0	67	6.85
1305	7.35	0.106	6.7	7.68	21.75	0	65	7.1
1310	7.36	0.113	4.2	7.45	22.19	0	41	7.12
1315	7.42	0.127	0.7	7.23	22.35	0	20	7.21
1320	7.44	0.143	0	7.06	22.35	0	9	7.22
1325	7.45	0.152	0	6.93	22.21	0	-19	7.28
1330	7.49	0.156	0	6.77	22.43	0	-52	7.34
1335	7.51	0.171	0	6.44	22.54	0	-74	7.36
1340	7.53	0.18	0	6.24	22.5	0	-92	7.38
1345	7.56	0.195	0	6.02	22.51	0	-103	7.38
1350	7.59	0.214	0	5.59	22.65	0	-127	7.61
1355	7.65	0.236	0	5.17	22.33	0	-136	8.13
1400	7.65	0.231	0	4.9	22.36	0	-135	8.13
1405	7.67	0.234	0	4.62	22.48	0	-139	8.09
1410	7.68	0.243	0	4.48	22.35	0	-140	8.02
1415	7.69	0.248	0	4.28	22.4	0	-143	7.97
1420	7.69	0.249	0	4.17	22.42	0	-143	7.97

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EAC-1M
DTW (feet)	12.25
Total Depth (feet)	48.8
1 Well Volume (gal)	23.87
Pump Depth (feet bgs)	43

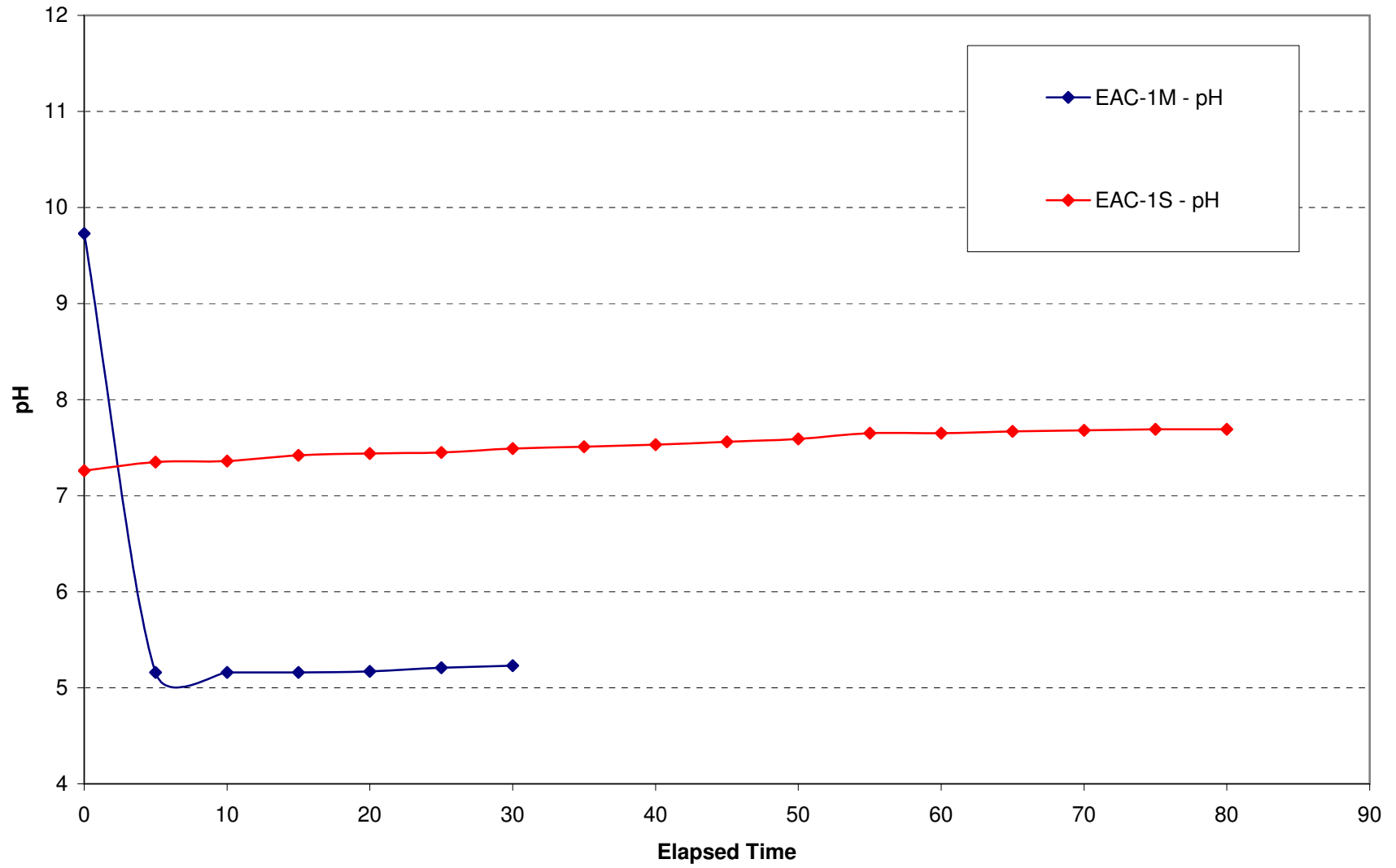
Sample 1	1145
Sample 2	1215

Notes:
Sample 1= EAC-1M-GWR-112806-01
Sample 2= EAC-1M-GWR-112806-02
Total volume purged = 10.5 volumes

Date	11/28/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1140	9.73	0.821	91.9	3.31	20.44	0	159	13.08
1145	5.16	0.917	3.6	0	19.63	0	182	17.11
1150	5.16	0.919	2.9	0	19.59	0	174	16.65
1155	5.16	0.921	0	0	19.58	0	173	17.09
1200	5.17	0.924	0	0	19.61	0	171	17.15
1205	5.21	0.937	0	0	19.65	0	167	17.12
1210	5.23	0.945	0	0	19.63	0	165	17.13

EAC-1M/EAC-1S



Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EAC-4M
DTW (feet)	6.02
Total Depth (feet)	50
1 Well Volume (gal)	28.73
Water Column (ft)	44

Sample 1	8:20
Sample 2	9:00

Notes: Total volume purged = 8.7 volumes (250 gallons)

Date 11/30/2006

TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
815	9	0.939	130	2.82	20.9	0	49	25.01
825	8.24	9.21	525	1.81	20.75	0.5	-135	33.72
830	8.12	11.3	52	0	20.7	0.6	-201	34.51
835	8.09	11.7	39	0	20.68	0.7	-208	34.64
840	8.07	12	12.9	0	20.67	0.7	-216	34.62
845	8.05	12.1	11.7	0	20.65	0.7	-221	34.53
850	8.03	12.1	14	0	20.64	0.7	-223	34.51
855	8.03	12.2	10.2	0	20.65	0.7	-225	34.47

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EAC-4S
DTW (feet)	4.6
Total Depth (feet)	15
1 Well Volume (gal)	6.79
Pump Depth (feet bgs)	10

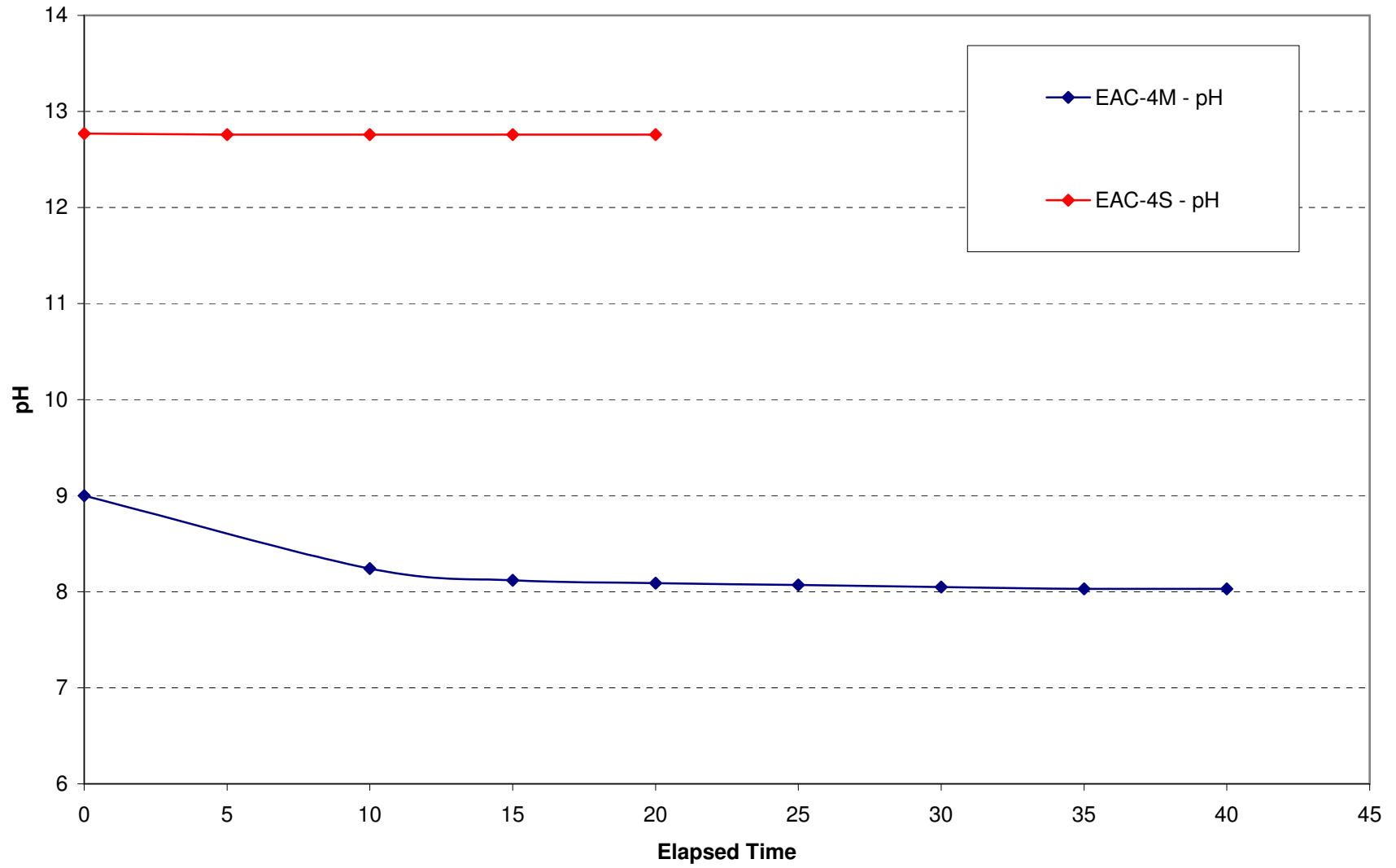
Sample 1	10:55
Sample 2	

Notes:

Date	11/30/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1030	12.77	12	6.6	0.29	21.61	0.7	-190	4.79
1035	12.76	12	1.6	0	22.27	0.7	-218	4.8
1040	12.76	12	0	0	22.42	0.7	-227	4.8
1045	12.76	12	0	0	22.6	0.7	-231	4.81
1050	12.76	12	0	0	22.71	0.7	-235	4.81

EAC-4M/EAC-4S



Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-5M
DTW (feet)	6.46
Total Depth (feet)	61
1 Well Volume (gal)	35.61
Pump Depth (feet bgs)	56

Sample 1	12:25
Sample 2	14:10

Notes: Lowered flow rate so well would not dry out
Total volume purged = 1.7 volumes (60 gallons)

Date	12/4/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1210	8.1	0.277	362	0.1	19.83	0	-208	22.75
1215	7.85	0.241	233	0	20.64	0	-188	32.24
1220	7.72	0	419	8.72	19.62	0	-86	47
1225	8.01	0	450	10.51	14.07	0	26	54
1250	7.09	1.66	-5	4.84	19.03	0.1	-63	52.65
1255	6.93	2.01	-5	2.54	21.77	0.1	-85	52.66
1300	6.96	1.86	-5	2.82	19.67	0.1	-74	52.32
1305	6.94	1.71	-5	2.44	17.68	0.1	-64	51.5
1310	6.93	1.85	-5	1.94	18.59	0.1	-71	51.25
1315	6.92	2.22	-5	0.54	21.24	0.1	-105	51.05
1320	7.1	1.26	789	5.74	20.97	0.1	-69	53.1
1330	6.94	1.47	787	4.51	23.46	0.1	-85	52.82
1335	6.93	1.49	773	4.52	22.32	0.1	-79	53.11
1340	6.97	1.52	784	5.05	17.1	0.1	-63	52.4
1345	6.89	1.35	887	3.99	23.35	0.1	-64	52.02
1350	6.83	2.01	670	2.76	17.08	0.1	-82	51.48
1355	6.84	1.79	628	1.87	20.19	0.1	-79	51.21
1400	6.81	1.87	540	2.04	17.94	0.1	-80	50.61
1405	6.83	1.87	438	2.05	21.26	0.1	-77	50.68
1410	6.85	1.84	463	2.04	17.86	0.1	-80	50.64

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	DMT-25S
DTW (feet)	7.09
Total Depth (feet)	28
1 Well Volume (gal)	14.3
Pump Depth (feet bgs)	23

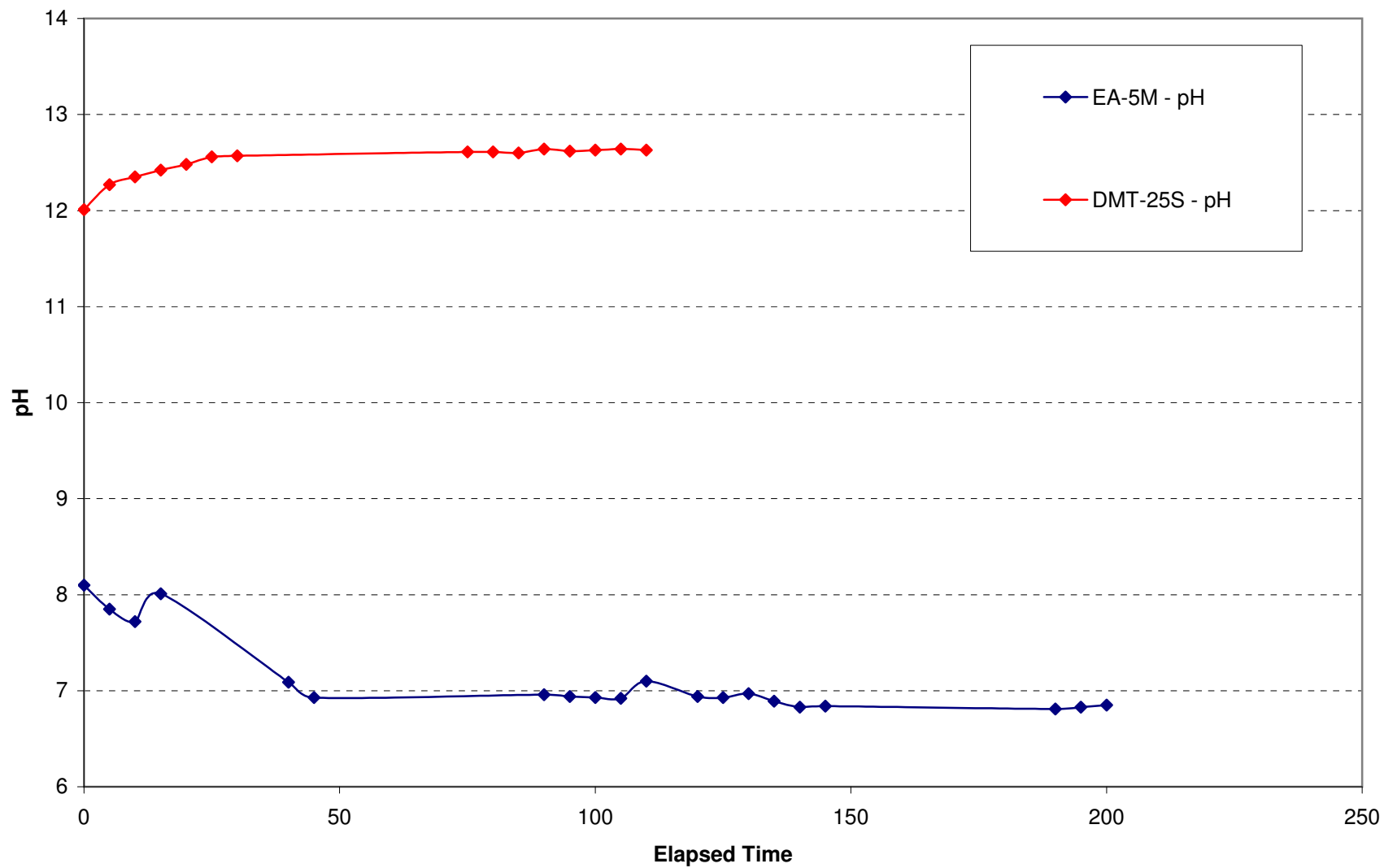
Sample 1	10:40
Sample 2	N/A

Notes: Troll present in well at time of purging and sampling

Date	12/4/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
925	12.01	10.4	3.5	0	20.45	0.6	-475	6.94
930	12.27	10	0	0	21.06	0.6	-519	switched
935	12.35	10	2	0	21.33	0.6	-523	water lev
940	12.42	9.9	1.1	0	21.19	0.6	-523	meter
945	12.48	9.8	0	0	21.77	0.5	-515	7.85
950	12.56	9.8	0.6	0	21.49	0.6	-496	7.86
955	12.57	9.8	0.5	0	21.32	0.5	-492	7.85
1000	12.61	9.8	0	0	21.49	0.5	-475	7.84
1005	12.61	9.8	0	0	21.54	0.5	-471	7.85
1010	12.6	9.8	0	0	22.17	0.6	-423	8.09
1015	12.64	9.8	0	0	21.75	0.5	-365	8.25
1020	12.62	9.8	0	0	22.4	0.5	-360	8.45
1025	12.63	9.8	0	0	22.28	0.5	-339	8.49
1030	12.64	9.8	0	0	22.24	0.5	-334	8.53
1035	12.63	9.8	0	0	22.25	0.5	-330	8.56

EA-5M/DMT-25S



Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-6M
DTW (feet)	7.61
Total Depth (feet)	97.4
1 Well Volume (gal)	58.6
Pump Depth (feet bgs)	90

Sample 1	1000
Sample 2	1045

Notes:
Sample 1= EA-6M-GWR-112906-1
Sample 2= EA-6M-GWR-112906-2
1130/ EB= DMT-EB-112906-1
Total volume purged = 4.3 volumes
(250 gallons)

Date	11/29/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
950	6.5	1.16	65.9	2.27	19.4	0.1	-80	10.74
955	6.17	1.24	364	0.02	19.72	0.1	-89	10.85
1005	6.16	1.25	69.3	0.65	19.52	0.1	-72	11.11
1010	6.15	1.24	54.2	8.73	19.65	0.1	-94	11.13
1015	6.15	1.23	58.3	8.45	19.67	0.1	-101	11.13
1020	6.15	1.23	55.3	8.16	19.69	0.1	-108	11.13
1025	6.16	1.23	90.3	7.69	19.68	0.1	-113	11.14
1030	6.16	1.23	86.6	7.08	19.67	0.1	-117	11.14
1035	6.17	1.23	98.3	6.78	19.68	0.1	-123	11.15
1040	6.17	1.22	88.3	6.77	19.67	0.1	-126	11.15

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-6S
DTW (feet)	5.64
Total Depth (feet)	17.8
Pump Depth (feet bgs)	12

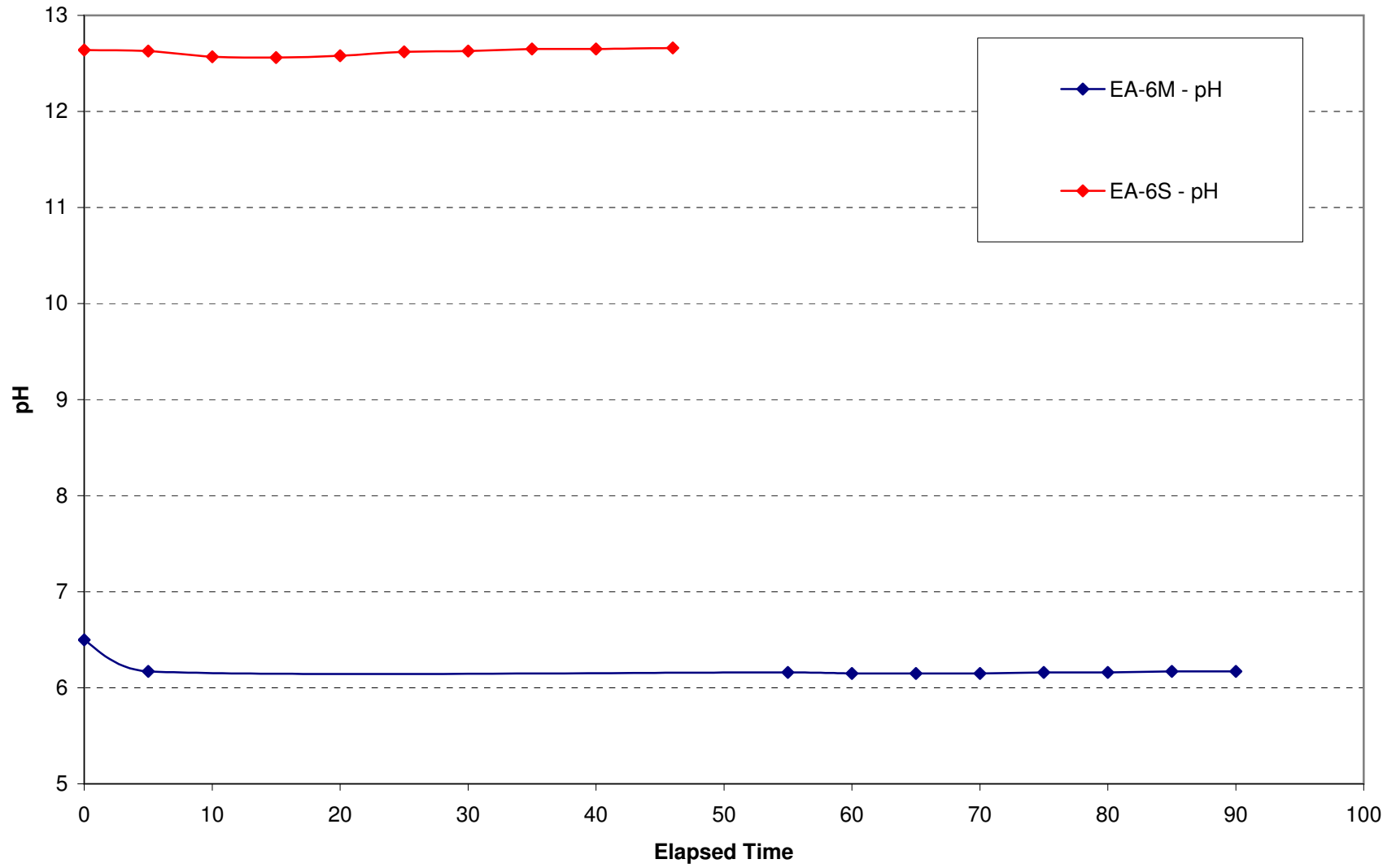
Sample 1	1255
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Notes: Troll present Sample 1= EA-6S-GRW-112906
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Date	11/29/2006
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TIME	FLOW (Lpm)	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1206	0.3	12.64	3.5	22.3	0.25	21.54	0.2	-298	6.04
1211	0.3	12.63	4.31	8.1	0	23.22	0.2	-322	6.44
1216	0.3	12.57	4.31	10.2	0	23.52	0.2	-323	6.6
1221	0.3	12.56	4.23	7.9	0	23.54	0.2	-310	6.79
1226	0.3	12.58	4.42	4.2	0	23.68	0.2	-301	6.8
1231	0.3	12.62	4.81	4.3	0	23.55	0.3	-297	6.81
1236	0.3	12.63	5.09	3.3	0	23.59	0.3	-297	6.82
1241	0.3	12.65	5.49	1.2	0	23.61	0.3	-300	8.63
1246	0.3	12.65	5.51	2.6	0	23.57	0.3	-308	6.83
1252	0.3	12.66	5.53	2.5	0	23.69	0.3	-312	6.82

EA-6M/EA-6S



Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-11M
DTW (feet)	7.13
Total Depth (feet)	102.5
1 Well Volume (gal)	67.27
Pump Depth (feet bgs)	97.5

Sample 1	12:20
Sample 2	13:45

Notes: Well went dry after collection of first sample, switched to low flow conditions. Total volume purged = 1.2 volumes (83 gallons)

Date	12/1/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1210	6.76	1.41	224	8.11	19.31	0.1	-166	20.21
1215	6.76	1.6	115	6.92	19.34	0.1	-166	67.31
1220	6.68	1.57	165	6.66	19.45	0.1	-180	74.13
1318	6.5	1.6	264	0.06	23.55	0.1	-131	89.29
1323	6.57	1.59	261	0	23.06	0.1	-128	88.76
1328	6.56	1.58	226	0	22.9	0.1	-128	88.44
1333	6.56	1.57	210	0	23.02	0.1	-129	88.28
1338	6.55	1.57	208	0	22.78	0.1	-128	88.18

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-11S
DTW (feet)	5.1
Total Depth (feet)	15
1 Well Volume (gal)	6.46
Pump Depth (feet bgs)	10

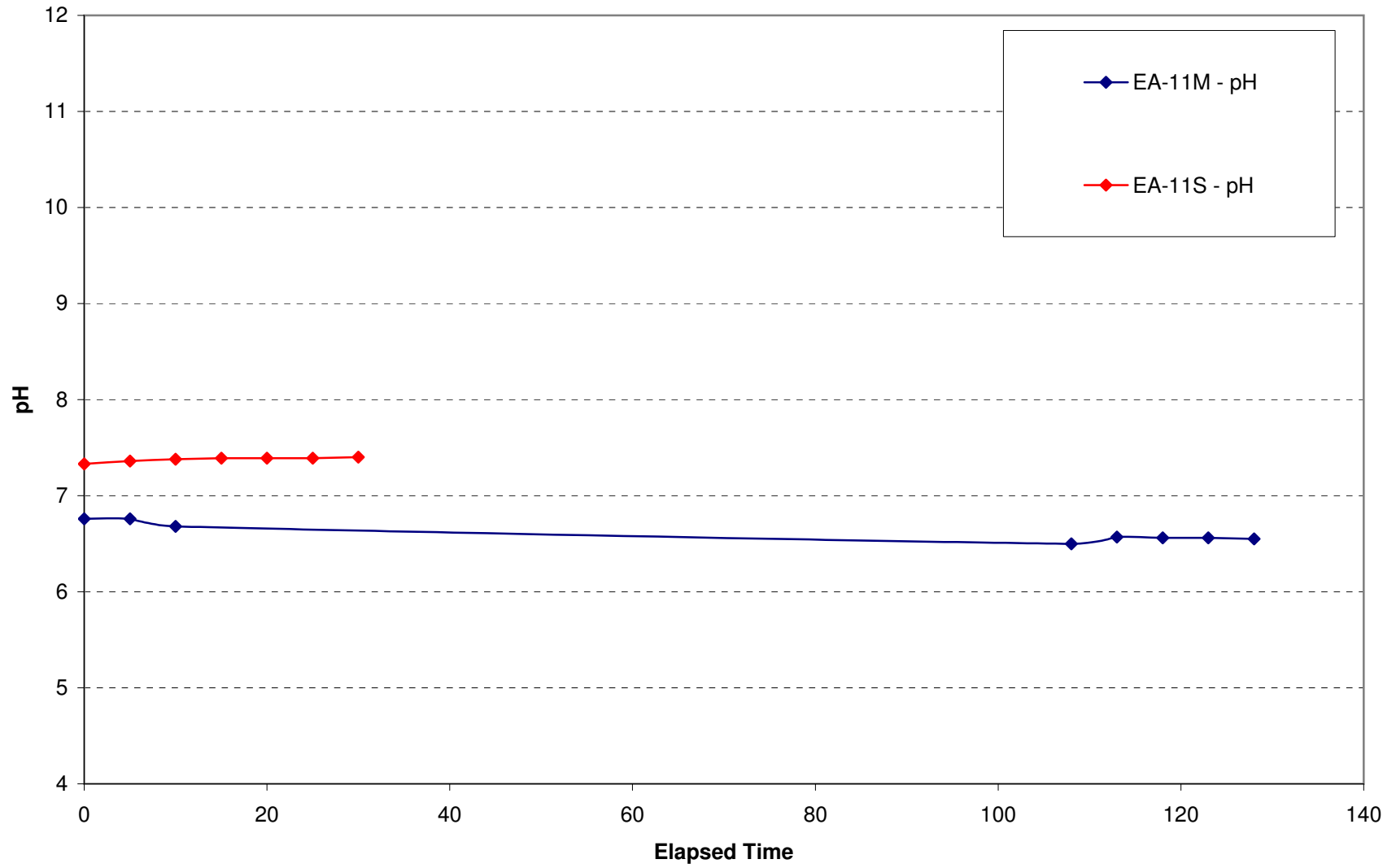
Sample 1	10:45
Sample 2	N/A

Notes:

Date	12/1/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1010	7.33	0.885	55.5	0.04	21.11	0	-68	5.1
1015	7.36	0.89	54.9	0.08	22.27	0	-108	5.11
1020	7.38	0.871	87.8	0.04	21.17	0	-124	5.11
1025	7.39	0.853	99.6	0	22.09	0	-130	5.11
1030	7.39	0.848	105	0	22.1	0	-134	5.1
1035	7.39	0.839	107	0	21.97	0	-135	5.1
1040	7.4	0.838	111	0	21.92	0	-138	5.1

EA-11M/EA-11S



Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-13M
DTW (feet)	8.7
Total Depth (feet)	110
1 Well Volume (gal)	66.15
Pump Depth (feet bgs)	100

Sample 1	8:20
Sample 2	9:40

Notes: Total volume purged = 3.8 volumes (250 gallons)

Date	12/5/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
820	6.36	2.28	-5	0	19.32	0.1	-88	10.55
835	6.44	2.12	818	0	19.78	0.1	-133	10.75
840	6.22	2.21	196	0	19.67	0.1	-94	10.85
845	6.22	2.21	109	0	19.66	0.1	-93	10.89
905	6.19	2.21	65	0	19.15	0.1	-90	10.9
910	6.19	2.21	44	0	19.53	0.1	-90	10.98
915	6.18	2.2	42.2	0	19.53	0.1	-90	11.01
920	6.18	2.19	46.3	0	19.53	0.1	-90	11.06
925	6.18	2.21	0	0	19.68	0.1	-90	11.1
930	6.17	2.2	0	0	19.67	0.1	-90	11.11
935	6.17	2.2	0	0	19.72	0.1	-90	11.13

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	P-4
DTW (feet)	6.44
Total Depth (feet)	16.5
1 Well Volume (gal)	6.57
Pump Depth (feet bgs)	11

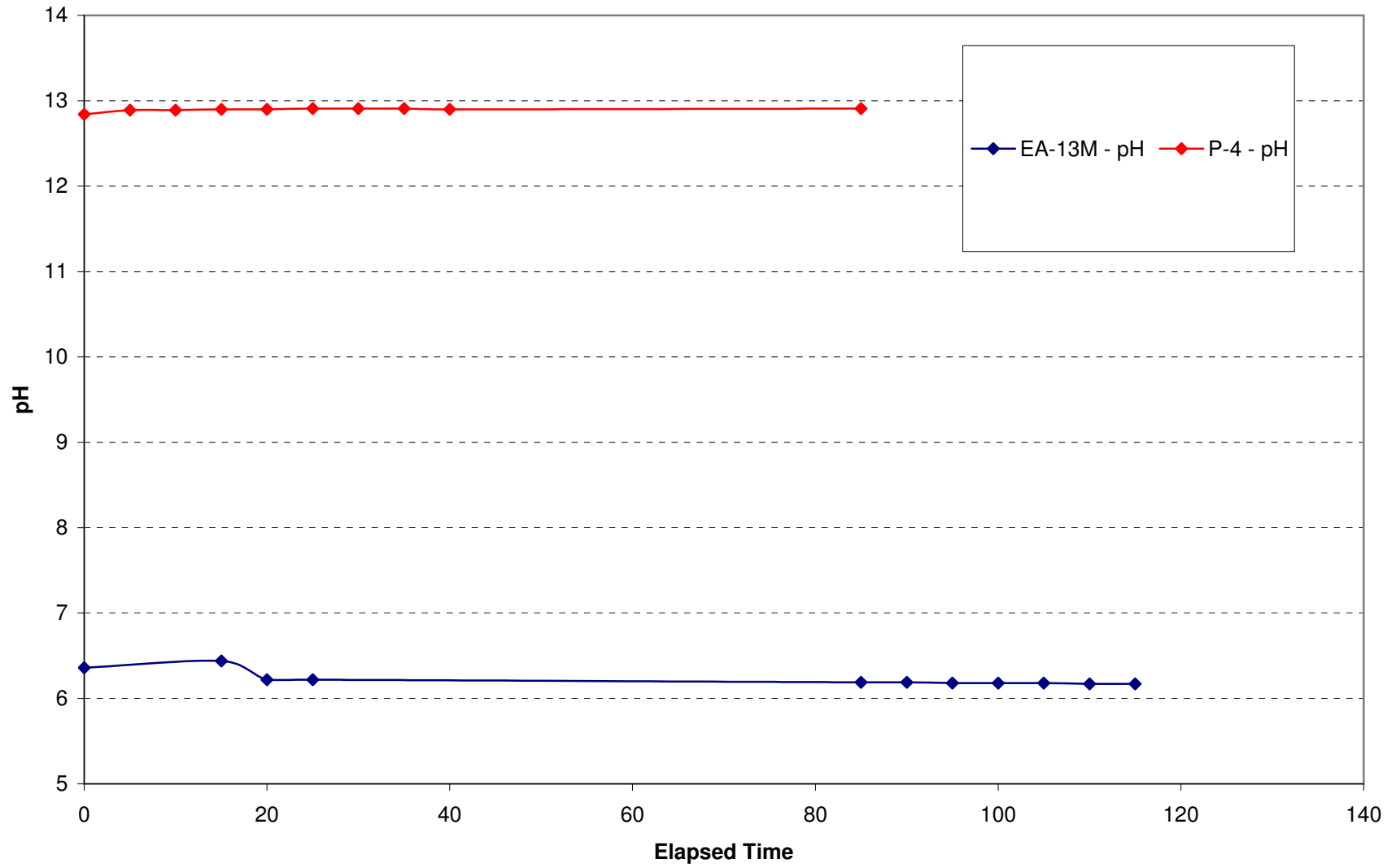
Sample 1	11:05
Sample 2	N/A

Notes:

Date	12/5/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1015	12.84	15.4	129	0.95	18.27	0.9	-226	6.65
1020	12.89	14.3	30.4	0.32	19.02	0.8	-234	6.65
1025	12.89	13.7	0	0.25	19.76	0.8	-225	6.65
1030	12.9	13.9	0	0.02	19.95	0.8	-226	6.66
1035	12.9	14	0	0	19.93	0.8	-228	6.66
1040	12.91	13.9	0	0	19.79	1.1	-228	6.66
1045	12.91	17.7	19.3	0	19.88	1	-228	6.65
1050	12.91	16.7	0	0	20.19	1	-228	6.69
1055	12.9	16.7	0	0	20.39	1	-229	6.7
1100	12.91	16.8	0	0	20.22	1	-228	6.69

EA-13M/P-4



Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-15M
DTW (feet)	9.21
Total Depth (feet)	114
1 Well Volume (gal)	68.43
Pump Depth (feet bgs)	109

Sample 1	8:05
Sample 2	8:35

Notes: Total volume purged = 3 volumes (200 gallons)

Date	12/1/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
755	6.49	4.3	676	0.03	19.82	0.2	-116	9.44
800	6.41	4.27	307	0	19.89	0.2	-117	9.45
805	6.4	4.26	123	0	19.94	0.2	-117	9.45
810	6.39	4.25	15.1	0.56	20.01	0.2	-99	9.53
815	6.39	4.25	4.1	0	20.02	0.2	-105	9.5
820	6.39	4.25	2.5	0	20.03	0.2	-109	9.55
825	6.39	4.25	1.6	0	20.01	0.2	-111	9.55
830	6.39	4.24	1.1	0	20	0.2	-112	9.56

Attachment 1
Field Recorded Data
Dundalk Marine Terminal, Baltimore, MD

Well ID	EA-15S
DTW (feet)	4.45
Total Depth (feet)	15
1 Well Volume (gal)	6.88
Pump Depth (feet bgs)	10

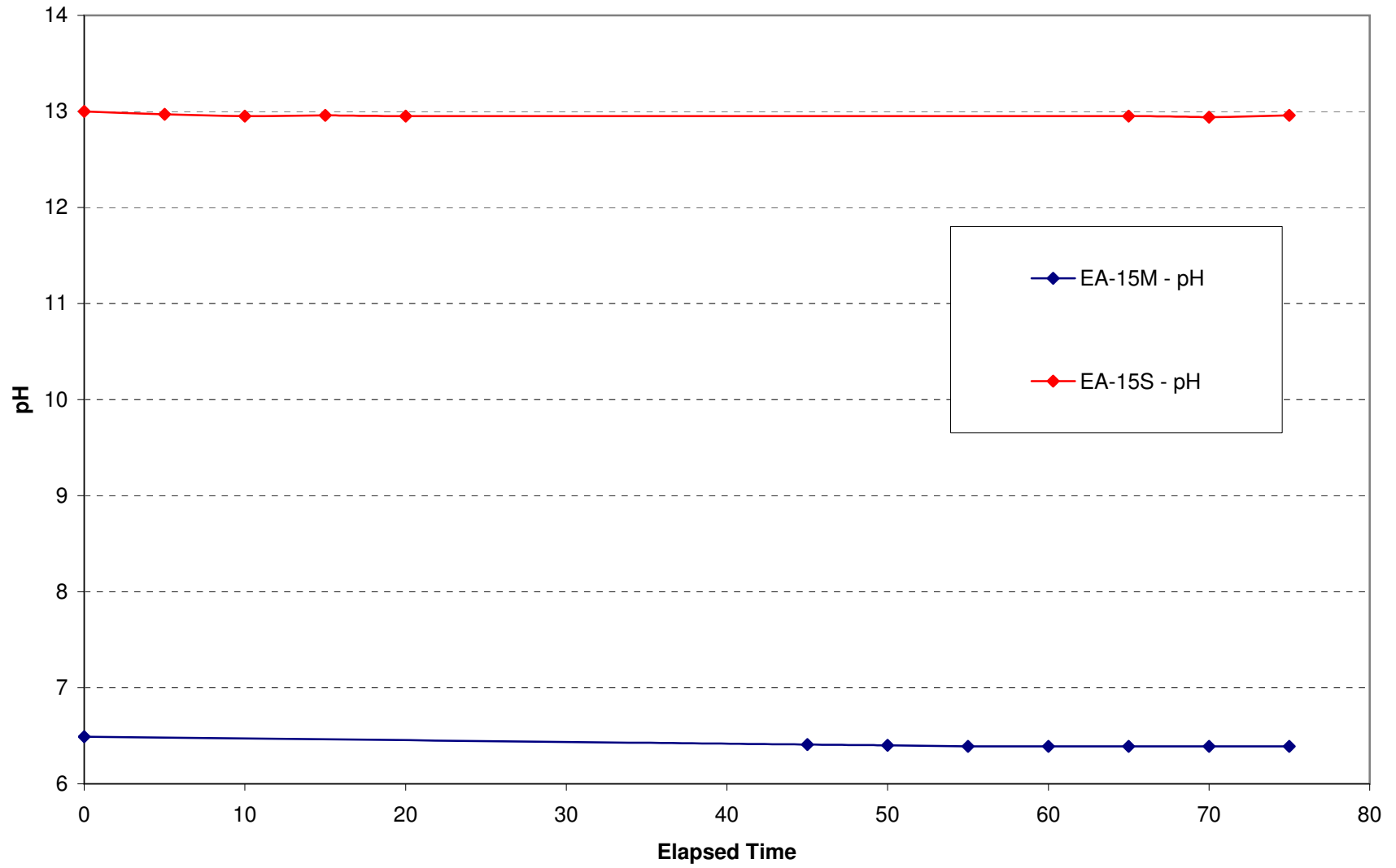
Sample 1	14:15
Sample 2	N/A

Notes:

Date	11/30/2006
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TIME	pH	COND	TURB	DO	TEMP	SAL	ORP	DTW (ft)
1335	13	19.8	0	0.49	22.46	1.2	-165	4.62
1340	12.97	19.7	1	0.38	22.86	1.2	-173	4.58
1345	12.95	19.7	61.3	0.34	23.59	1.2	-173	4.59
1350	12.96	19.6	217	0.28	23.67	1.2	-173	4.85
1355	12.95	19.6	250	0.21	23.77	1.2	-172	4.81
1400	12.95	19.6	247	0.19	23.69	1.2	-177	4.74
1405	12.94	19.5	257	0.21	24.06	1.2	-171	4.77
1410	12.96	19.8	263	0.2	23.67	1.2	-178	4.79

EA-15M/EA-15S



Attachment 2
Analytical Results for Groundwater Samples

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EAC-1M vs EAC-1S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
First Sample - EAC-1M									
Unfiltered									
EAC-1M	EAC-1M-GRW-112806-01	ALUMINUM	11/28/2006	299	ug/l		200	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	IRON	11/28/2006	224	ug/l		100	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	MAGNESIUM	11/28/2006	23800	ug/l		5000	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	MANGANESE	11/28/2006	7090	ug/l		15	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	CHROMIUM	11/28/2006	2.4	ug/l	B	10	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	VANADIUM	11/28/2006	50	ug/l	U	50	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	CALCIUM	11/28/2006	68500	ug/l		5000	N	E200.7
EAC-1M	EAC-1M-GRW-112806-01	SULFATE	11/28/2006	260	mg/l	L	2	N	E300.0
EAC-1M	EAC-1M-GRW-112806-01	CHLORIDE	11/28/2006	187	mg/l		2	N	E300.0
EAC-1M	EAC-1M-GRW-112806-01	FLUORIDE	11/28/2006	0.017	mg/l	J	0.1	N	E300.0
EAC-1M	EAC-1M-GRW-112806-01	BROMIDE	11/28/2006	0.29	mg/l		0.15	N	E300.0
		ALKALINITY, CARBONATE (AS							
EAC-1M	EAC-1M-GRW-112806-01	CACO3)	11/28/2006	11.3	mg/l		5	N	E310.1
EAC-1M	EAC-1M-GRW-112806-01	NITRATE	11/28/2006	0.11	mg/l	U	0.11	N	E353.2
EAC-1M	EAC-1M-GRW-112806-01	NITROGEN, NITRATE-NITRITE	11/28/2006	0.048	mg/l	J	0.1	N	E353.2
EAC-1M	EAC-1M-GRW-112806-01	SILICA	11/28/2006	23.4	mg/l		1	N	E370.1
EAC-1M	EAC-1M-GRW-112806-01	CARBON DIOXIDE	11/28/2006	84	mg/l	L	5	N	SM4500-CO2D
EAC-1M	EAC-1M-GRW-112806-01	NITRITE	11/28/2006	0.0078	mg/l	J	0.01	N	SM4500-NO2B
EAC-1M	EAC-1M-GRW-112806-01	HEXAVALENT CHROMIUM	11/28/2006	10	ug/l	U	10	N	SW7199
Filtered									
EAC-1M	EAC-1M-GRW-112806-01	ALUMINUM	11/28/2006	200	ug/l	U	200	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	IRON	11/28/2006	111	ug/l		100	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	MAGNESIUM	11/28/2006	23400	ug/l		5000	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	MANGANESE	11/28/2006	6970	ug/l		15	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	CHROMIUM	11/28/2006	0.96	ug/l	J	10	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	VANADIUM	11/28/2006	50	ug/l	U	50	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	CALCIUM	11/28/2006	63800	ug/l		5000	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-01	HEXAVALENT CHROMIUM	11/28/2006	10	ug/l	U	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EAC-1M vs EAC-1S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
Second Sample - EAC-1M									
Unfiltered									
EAC-1M	EAC-1M-GRW-112806-02	ALUMINUM	11/28/2006	26.6	ug/l	J	200	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	IRON	11/28/2006	269	ug/l		100	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	MAGNESIUM	11/28/2006	24400	ug/l		5000	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	MANGANESE	11/28/2006	6760	ug/l		15	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	CHROMIUM	11/28/2006	1.2	ug/l	B	10	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	VANADIUM	11/28/2006	50	ug/l	U	50	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	CALCIUM	11/28/2006	65600	ug/l		5000	N	E200.7
EAC-1M	EAC-1M-GRW-112806-02	SULFATE	11/28/2006	266	mg/l	L	2	N	E300.0
EAC-1M	EAC-1M-GRW-112806-02	CHLORIDE	11/28/2006	199	mg/l		2	N	E300.0
EAC-1M	EAC-1M-GRW-112806-02	FLUORIDE	11/28/2006	0.018	mg/l	J	0.1	N	E300.0
EAC-1M	EAC-1M-GRW-112806-02	BROMIDE	11/28/2006	0.32	mg/l		0.15	N	E300.0
EAC-1M	EAC-1M-GRW-112806-02	ALKALINITY, CARBONATE (AS							
EAC-1M	EAC-1M-GRW-112806-02	CACO3)	11/28/2006	15.1	mg/l		5	N	E310.1
EAC-1M	EAC-1M-GRW-112806-02	NITRATE	11/28/2006	0.11	mg/l	U	0.11	N	E353.2
EAC-1M	EAC-1M-GRW-112806-02	NITROGEN, NITRATE-NITRITE	11/28/2006	0.036	mg/l	J	0.1	N	E353.2
EAC-1M	EAC-1M-GRW-112806-02	SILICA	11/28/2006	21.8	mg/l		1	N	E370.1
EAC-1M	EAC-1M-GRW-112806-02	CARBON DIOXIDE	11/28/2006	83.2	mg/l	L	5	N	SM4500-CO2D
EAC-1M	EAC-1M-GRW-112806-02	NITRITE	11/28/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EAC-1M	EAC-1M-GRW-112806-02	HEXAVALENT CHROMIUM	11/28/2006	10	ug/l	U	10	N	SW7199
Filtered									
EAC-1M	EAC-1M-GRW-112806-02	ALUMINUM	11/28/2006	200	ug/l	U	200	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	IRON	11/28/2006	108	ug/l		100	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	MAGNESIUM	11/28/2006	24900	ug/l		5000	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	MANGANESE	11/28/2006	6740	ug/l		15	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	CHROMIUM	11/28/2006	1.1	ug/l	J	10	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	VANADIUM	11/28/2006	50	ug/l	U	50	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	CALCIUM	11/28/2006	67600	ug/l		5000	Y	E200.7
EAC-1M	EAC-1M-GRW-112806-02	HEXAVALENT CHROMIUM	11/28/2006	10	ug/l	U	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EAC-1M vs EAC-1S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
Shallow Well Sample EAC-1S									
Unfiltered									
EAC-1S	EAC-1S-GRW-112806	ALUMINUM	11/28/2006	102	ug/l	J	200	N	E200.7
EAC-1S	EAC-1S-GRW-112806	IRON	11/28/2006	141	ug/l		100	N	E200.7
EAC-1S	EAC-1S-GRW-112806	MAGNESIUM	11/28/2006	5580	ug/l		5000	N	E200.7
EAC-1S	EAC-1S-GRW-112806	MANGANESE	11/28/2006	56.3	ug/l		15	N	E200.7
EAC-1S	EAC-1S-GRW-112806	CHROMIUM	11/28/2006	4.6	ug/l	J	10	N	E200.7
EAC-1S	EAC-1S-GRW-112806	VANADIUM	11/28/2006	50	ug/l	U	50	N	E200.7
EAC-1S	EAC-1S-GRW-112806	CALCIUM	11/28/2006	26900	ug/l		5000	N	E200.7
EAC-1S	EAC-1S-GRW-112806	SULFATE	11/28/2006	34.3	mg/l	L	2	N	E300.0
EAC-1S	EAC-1S-GRW-112806	CHLORIDE	11/28/2006	15.1	mg/l		2	N	E300.0
EAC-1S	EAC-1S-GRW-112806	FLUORIDE	11/28/2006	0.39	mg/l		0.1	N	E300.0
EAC-1S	EAC-1S-GRW-112806	BROMIDE	11/28/2006	0.24	mg/l		0.15	N	E300.0
EAC-1S	EAC-1S-GRW-112806	ALKALINITY, CARBONATE (AS							
EAC-1S	EAC-1S-GRW-112806	CACO3)	11/28/2006	133	mg/l		5	N	E310.1
EAC-1S	EAC-1S-GRW-112806	NITRATE	11/28/2006	0.16	mg/l		0.11	N	E353.2
EAC-1S	EAC-1S-GRW-112806	NITROGEN, NITRATE-NITRITE	11/28/2006	0.17	mg/l		0.1	N	E353.2
EAC-1S	EAC-1S-GRW-112806	SILICA	11/28/2006	5.1	mg/l		1	N	E370.1
EAC-1S	EAC-1S-GRW-112806	CARBON DIOXIDE	11/28/2006	9.4	mg/l	L	5	N	SM4500-CO2D
EAC-1S	EAC-1S-GRW-112806	NITRITE	11/28/2006	0.01	mg/l		0.01	N	SM4500-NO2B
EAC-1S	EAC-1S-GRW-112806	HEXAVALENT CHROMIUM	11/28/2006	10	ug/l	U	10	N	SW7199
Filtered									
EAC-1S	EAC-1S-GRW-112806	ALUMINUM	11/28/2006	200	ug/l	U	200	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	IRON	11/28/2006	89.5	ug/l	J	100	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	MAGNESIUM	11/28/2006	6230	ug/l		5000	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	MANGANESE	11/28/2006	58.5	ug/l		15	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	CHROMIUM	11/28/2006	1.7	ug/l	J	10	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	VANADIUM	11/28/2006	50	ug/l	U	50	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	CALCIUM	11/28/2006	29900	ug/l		5000	Y	E200.7
EAC-1S	EAC-1S-GRW-112806	HEXAVALENT CHROMIUM	11/28/2006	10	ug/l	U	10	Y	SW7199

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

U = Analyte not detected above the reported detection limit.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EAC-4M vs EAC-4S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
First Sample - EAC-4M									
Unfiltered									
EAC-4M	EAC-4M-GRW-113006-01	ALUMINUM	11/30/2006	758	ug/l		200	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	IRON	11/30/2006	2080	ug/l		100	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	MAGNESIUM	11/30/2006	101000	ug/l		5000	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	MANGANESE	11/30/2006	91.3	ug/l		15	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	CHROMIUM	11/30/2006	15.8	ug/l		10	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	VANADIUM	11/30/2006	4.8	ug/l	B	50	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	CALCIUM	11/30/2006	59800	ug/l		5000	N	E200.7
EAC-4M	EAC-4M-GRW-113006-01	FLUORIDE	11/30/2006	0.16	mg/l		0.1	N	E300.0
EAC-4M	EAC-4M-GRW-113006-01	BROMIDE	11/30/2006	5.2	mg/l		0.15	N	E300.0
EAC-4M	EAC-4M-GRW-113006-01	CHLORIDE	11/30/2006	2140	mg/l		20	N	E300.0
EAC-4M	EAC-4M-GRW-113006-01	SULFATE	11/30/2006	10	mg/l	U	10	N	E300.0
		ALKALINITY, CARBONATE (AS							
EAC-4M	EAC-4M-GRW-113006-01	CACO3)	11/30/2006	401	mg/l		5	N	E310.1
EAC-4M	EAC-4M-GRW-113006-01	NITRATE	11/30/2006	0.11	mg/l		0.11	N	E353.2
EAC-4M	EAC-4M-GRW-113006-01	NITROGEN, NITRATE-NITRITE	11/30/2006	0.11	mg/l		0.1	N	E353.2
EAC-4M	EAC-4M-GRW-113006-01	SILICA	11/30/2006	9.8	mg/l		1	N	E370.1
EAC-4M	EAC-4M-GRW-113006-01	CARBON DIOXIDE	11/30/2006	5	mg/l	B	5	N	SM4500-CO2D
EAC-4M	EAC-4M-GRW-113006-01	NITRITE	11/30/2006	0.0047	mg/l	B	0.01	N	SM4500-NO2B
EAC-4M	EAC-4M-GRW-113006-01	HEXAVALENT CHROMIUM	11/30/2006	1.7	ug/l	J	10	N	SW7199
Filtered									
EAC-4M	EAC-4M-GRW-113006-01	ALUMINUM	11/30/2006	200	ug/l	U	200	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	IRON	11/30/2006	245	ug/l		100	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	MAGNESIUM	11/30/2006	162000	ug/l		5000	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	MANGANESE	11/30/2006	50.3	ug/l		15	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	CHROMIUM	11/30/2006	1	ug/l	J	10	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	VANADIUM	11/30/2006	50	ug/l	U	50	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	CALCIUM	11/30/2006	67000	ug/l		5000	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-01	HEXAVALENT CHROMIUM	11/30/2006	2.1	ug/l	B	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EAC-4M vs EAC-4S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
Second Sample - EAC-4M									
Unfiltered									
EAC-4M	EAC-4M-GRW-113006-02	ALUMINUM	11/30/2006	25.9	ug/l	B	200	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	IRON	11/30/2006	477	ug/l		100	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	MAGNESIUM	11/30/2006	224000	ug/l		5000	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	MANGANESE	11/30/2006	68.9	ug/l		15	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	CHROMIUM	11/30/2006	3.1	ug/l	B	10	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	VANADIUM	11/30/2006	3	ug/l	B	50	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	CALCIUM	11/30/2006	76500	ug/l		5000	N	E200.7
EAC-4M	EAC-4M-GRW-113006-02	FLUORIDE	11/30/2006	0.26	mg/l		0.1	N	E300.0
EAC-4M	EAC-4M-GRW-113006-02	BROMIDE	11/30/2006	12.9	mg/l		0.15	N	E300.0
EAC-4M	EAC-4M-GRW-113006-02	CHLORIDE	11/30/2006	3560	mg/l		40	N	E300.0
EAC-4M	EAC-4M-GRW-113006-02	SULFATE	11/30/2006	10	mg/l	U	10	N	E300.0
		ALKALINITY, CARBONATE (AS							
EAC-4M	EAC-4M-GRW-113006-02	CACO3)	11/30/2006	682	mg/l		10	N	E310.1
EAC-4M	EAC-4M-GRW-113006-02	NITRATE	11/30/2006	0.11	mg/l	U	0.11	N	E353.2
EAC-4M	EAC-4M-GRW-113006-02	NITROGEN, NITRATE-NITRITE	11/30/2006	0.1	mg/l	U	0.1	N	E353.2
EAC-4M	EAC-4M-GRW-113006-02	SILICA	11/30/2006	16.3	mg/l		1	N	E370.1
EAC-4M	EAC-4M-GRW-113006-02	CARBON DIOXIDE	11/30/2006	25.9	mg/l		5	N	SM4500-CO2D
EAC-4M	EAC-4M-GRW-113006-02	NITRITE	11/30/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EAC-4M	EAC-4M-GRW-113006-02	HEXAVALENT CHROMIUM	11/30/2006	2.1	ug/l	J	10	N	SW7199
Filtered									
EAC-4M	EAC-4M-GRW-113006-02	ALUMINUM	11/30/2006	200	ug/l	U	200	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	IRON	11/30/2006	367	ug/l		100	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	MAGNESIUM	11/30/2006	225000	ug/l		5000	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	MANGANESE	11/30/2006	65.5	ug/l		15	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	CHROMIUM	11/30/2006	2.8	ug/l	J	10	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	VANADIUM	11/30/2006	2.8	ug/l	B	50	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	CALCIUM	11/30/2006	75400	ug/l		5000	Y	E200.7
EAC-4M	EAC-4M-GRW-113006-02	HEXAVALENT CHROMIUM	11/30/2006	3.2	ug/l	B	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EAC-4M vs EAC-4S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
Shallow Well Sample EAC-4S									
Unfiltered									
EAC-4S	EAC-4S-GRW-113006	ALUMINUM	11/30/2006	1580	ug/l		200	N	E200.7
EAC-4S	EAC-4S-GRW-113006	IRON	11/30/2006	162	ug/l		100	N	E200.7
EAC-4S	EAC-4S-GRW-113006	MAGNESIUM	11/30/2006	197	ug/l	B	5000	N	E200.7
EAC-4S	EAC-4S-GRW-113006	MANGANESE	11/30/2006	3.9	ug/l	B	15	N	E200.7
EAC-4S	EAC-4S-GRW-113006	CHROMIUM	11/30/2006	4980	ug/l		10	N	E200.7
EAC-4S	EAC-4S-GRW-113006	VANADIUM	11/30/2006	50	ug/l	U	50	N	E200.7
EAC-4S	EAC-4S-GRW-113006	CALCIUM	11/30/2006	239000	ug/l		5000	N	E200.7
EAC-4S	EAC-4S-GRW-113006	CHLORIDE	11/30/2006	184	mg/l		2	N	E300.0
EAC-4S	EAC-4S-GRW-113006	FLUORIDE	11/30/2006	0.1	mg/l	U	0.1	N	E300.0
EAC-4S	EAC-4S-GRW-113006	BROMIDE	11/30/2006	0.31	mg/l		0.15	N	E300.0
EAC-4S	EAC-4S-GRW-113006	SULFATE	11/30/2006	3.7	mg/l	B	10	N	E300.0
EAC-4S	EAC-4S-GRW-113006	ALKALINITY, CARBONATE (AS							
EAC-4S	EAC-4S-GRW-113006	CACO3)	11/30/2006	2420	mg/l		50	N	E310.1
EAC-4S	EAC-4S-GRW-113006	NITRATE	11/30/2006	0.2	mg/l	U	0.2	N	E353.2
EAC-4S	EAC-4S-GRW-113006	NITROGEN, NITRATE-NITRITE	11/30/2006	0.82	mg/l		0.1	N	E353.2
EAC-4S	EAC-4S-GRW-113006	SILICA	11/30/2006	0.79	mg/l	B	1	N	E370.1
EAC-4S	EAC-4S-GRW-113006	CARBON DIOXIDE	11/30/2006	5	mg/l	UB	5	N	SM4500-CO2D
EAC-4S	EAC-4S-GRW-113006	NITRITE	11/30/2006	0.75	mg/l		0.1	N	SM4500-NO2B
EAC-4S	EAC-4S-GRW-113006	HEXAVALENT CHROMIUM	11/30/2006	5700	ug/l		200	N	SW7199
Filtered									
EAC-4S	EAC-4S-GRW-113006	ALUMINUM	11/30/2006	1610	ug/l		200	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	IRON	11/30/2006	100	ug/l	U	100	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	MAGNESIUM	11/30/2006	5000	ug/l	U	5000	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	MANGANESE	11/30/2006	15	ug/l	U	15	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	CHROMIUM	11/30/2006	5280	ug/l		10	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	VANADIUM	11/30/2006	50	ug/l	U	50	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	CALCIUM	11/30/2006	241000	ug/l		5000	Y	E200.7
EAC-4S	EAC-4S-GRW-113006	HEXAVALENT CHROMIUM	11/30/2006	5900	ug/l	L	200	Y	SW7199

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

U = Analyte not detected above the reported detection limit.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-5M vs DMT-25S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
First Sample - EA-5M									
Unfiltered									
EA-5M	EA-5M-GRW-120406-01	ALUMINUM	12/4/2006	1900	ug/l		200	N	E200.7
EA-5M	EA-5M-GRW-120406-01	IRON	12/4/2006	4400	ug/l		100	N	E200.7
EA-5M	EA-5M-GRW-120406-01	MAGNESIUM	12/4/2006	3710	ug/l	B	5000	N	E200.7
EA-5M	EA-5M-GRW-120406-01	MANGANESE	12/4/2006	146	ug/l		15	N	E200.7
EA-5M	EA-5M-GRW-120406-01	CHROMIUM	12/4/2006	29	ug/l		10	N	E200.7
EA-5M	EA-5M-GRW-120406-01	VANADIUM	12/4/2006	16.3	ug/l	B	50	N	E200.7
EA-5M	EA-5M-GRW-120406-01	CALCIUM	12/4/2006	23700	ug/l		5000	N	E200.7
EA-5M	EA-5M-GRW-120406-01	SULFATE	12/4/2006	19.4	mg/l		10	N	E300.0
EA-5M	EA-5M-GRW-120406-01	CHLORIDE	12/4/2006	41.2	mg/l		2	N	E300.0
EA-5M	EA-5M-GRW-120406-01	FLUORIDE	12/4/2006	0.061	mg/l	B	0.1	N	E300.0
EA-5M	EA-5M-GRW-120406-01	BROMIDE	12/4/2006	0.08	mg/l	B	0.15	N	E300.0
EA-5M	EA-5M-GRW-120406-01	ALKALINITY, CARBONATE (AS							
EA-5M	EA-5M-GRW-120406-01	CACO3)	12/4/2006	55.9	mg/l		5	N	E310.1
EA-5M	EA-5M-GRW-120406-01	NITRATE	12/4/2006	1.2	mg/l		0.11	N	E353.2
EA-5M	EA-5M-GRW-120406-01	NITROGEN, NITRATE-NITRITE	12/4/2006	1.3	mg/l		0.1	N	E353.2
EA-5M	EA-5M-GRW-120406-01	SILICA	12/4/2006	1	mg/l		1	N	E370.1
EA-5M	EA-5M-GRW-120406-01	CARBON DIOXIDE	12/4/2006	6.1	mg/l		5	N	SM4500-CO2D
EA-5M	EA-5M-GRW-120406-01	NITRITE	12/4/2006	0.11	mg/l		0.01	N	SM4500-NO2B
EA-5M	EA-5M-GRW-120406-01	HEXAVALENT CHROMIUM	12/4/2006	10	ug/l	UL	10	N	SW7199
Filtered									
EA-5M	EA-5M-GRW-120406-01	ALUMINUM	12/4/2006	25	ug/l	B	200	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	IRON	12/4/2006	4740	ug/l		100	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	MAGNESIUM	12/4/2006	20400	ug/l		5000	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	MANGANESE	12/4/2006	834	ug/l		15	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	CHROMIUM	12/4/2006	3.2	ug/l	B	10	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	VANADIUM	12/4/2006	50	ug/l	U	50	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	CALCIUM	12/4/2006	66500	ug/l		5000	Y	E200.7
EA-5M	EA-5M-GRW-120406-01	HEXAVALENT CHROMIUM	12/4/2006	10	ug/l	UL	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-5M vs DMT-25S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
Second Sample - EA-5M									
Unfiltered									
EA-5M	EA-5M-GRW-120406-02	ALUMINUM	12/4/2006	3780	ug/l		200	N	E200.7
EA-5M	EA-5M-GRW-120406-02	IRON	12/4/2006	9230	ug/l		100	N	E200.7
EA-5M	EA-5M-GRW-120406-02	MAGNESIUM	12/4/2006	7870	ug/l		5000	N	E200.7
EA-5M	EA-5M-GRW-120406-02	MANGANESE	12/4/2006	466	ug/l		15	N	E200.7
EA-5M	EA-5M-GRW-120406-02	CHROMIUM	12/4/2006	85.9	ug/l		10	N	E200.7
EA-5M	EA-5M-GRW-120406-02	VANADIUM	12/4/2006	27.6	ug/l	B	50	N	E200.7
EA-5M	EA-5M-GRW-120406-02	CALCIUM	12/4/2006	34700	ug/l		5000	N	E200.7
EA-5M	EA-5M-GRW-120406-02	SULFATE	12/4/2006	77.9	mg/l		10	N	E300.0
EA-5M	EA-5M-GRW-120406-02	CHLORIDE	12/4/2006	325	mg/l		2	N	E300.0
EA-5M	EA-5M-GRW-120406-02	FLUORIDE	12/4/2006	0.12	mg/l		0.1	N	E300.0
EA-5M	EA-5M-GRW-120406-02	BROMIDE	12/4/2006	0.89	mg/l		0.15	N	E300.0
		ALKALINITY, CARBONATE (AS							
EA-5M	EA-5M-GRW-120406-02	CACO3)	12/4/2006	141	mg/l		5	N	E310.1
EA-5M	EA-5M-GRW-120406-02	NITRATE	12/4/2006	0.11	mg/l	U	0.11	N	E353.2
EA-5M	EA-5M-GRW-120406-02	NITROGEN, NITRATE-NITRITE	12/4/2006	0.1	mg/l	U	0.1	N	E353.2
EA-5M	EA-5M-GRW-120406-02	SILICA	12/4/2006	15.4	mg/l		1	N	E370.1
EA-5M	EA-5M-GRW-120406-02	CARBON DIOXIDE	12/4/2006	60.3	mg/l		5	N	SM4500-CO2D
EA-5M	EA-5M-GRW-120406-02	NITRITE	12/4/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-5M	EA-5M-GRW-120406-02	HEXAVALENT CHROMIUM	12/4/2006	10	ug/l	U	10	N	SW7199
Filtered									
EA-5M	EA-5M-GRW-120406-02	ALUMINUM	12/4/2006	23.1	ug/l	B	200	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	IRON	12/4/2006	1660	ug/l		100	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	MAGNESIUM	12/4/2006	8290	ug/l		5000	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	MANGANESE	12/4/2006	466	ug/l		15	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	CHROMIUM	12/4/2006	5.8	ug/l	B	10	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	VANADIUM	12/4/2006	3.6	ug/l	B	50	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	CALCIUM	12/4/2006	36900	ug/l		5000	Y	E200.7
EA-5M	EA-5M-GRW-120406-02	HEXAVALENT CHROMIUM	12/4/2006	10	ug/l	U	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-5M vs DMT-25S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
DMT-25S									
Unfiltered									
DMT-25S	DMT-25S-GWR-120406	ALUMINUM	12/4/2006	6780	ug/l		200	N	E200.7
DMT-25S	DMT-25S-GWR-120406	IRON	12/4/2006	430	ug/l		100	N	E200.7
DMT-25S	DMT-25S-GWR-120406	MAGNESIUM	12/4/2006	109	ug/l	B	5000	N	E200.7
DMT-25S	DMT-25S-GWR-120406	MANGANESE	12/4/2006	5.8	ug/l	B	15	N	E200.7
DMT-25S	DMT-25S-GWR-120406	CHROMIUM	12/4/2006	3450	ug/l		10	N	E200.7
DMT-25S	DMT-25S-GWR-120406	VANADIUM	12/4/2006	97.6	ug/l		50	N	E200.7
DMT-25S	DMT-25S-GWR-120406	CALCIUM	12/4/2006	84900	ug/l		5000	N	E200.7
DMT-25S	DMT-25S-GWR-120406	SULFATE	12/4/2006	30.1	mg/l		10	N	E300.0
DMT-25S	DMT-25S-GWR-120406	CHLORIDE	12/4/2006	84.3	mg/l		2	N	E300.0
DMT-25S	DMT-25S-GWR-120406	BROMIDE	12/4/2006	0.39	mg/l	B	0.4	N	E300.0
DMT-25S	DMT-25S-GWR-120406	FLUORIDE	12/4/2006	1.5	mg/l	B	3	N	E300.0
		ALKALINITY, CARBONATE (AS							
DMT-25S	DMT-25S-GWR-120406	CACO3)	12/4/2006	2030	mg/l		50	N	E310.1
DMT-25S	DMT-25S-GWR-120406	NITRATE	12/4/2006	0.11	mg/l	U	0.11	N	E353.2
DMT-25S	DMT-25S-GWR-120406	NITROGEN, NITRATE-NITRITE	12/4/2006	0.1	mg/l	U	0.1	N	E353.2
DMT-25S	DMT-25S-GWR-120406	SILICA	12/4/2006	11.1	mg/l		10	N	E370.1
DMT-25S	DMT-25S-GWR-120406	CARBON DIOXIDE	12/4/2006	5	mg/l		5	N	SM4500-CO2D
DMT-25S	DMT-25S-GWR-120406	NITRITE	12/4/2006	0.089	mg/l		0.01	N	SM4500-NO2B
DMT-25S	DMT-25S-GWR-120406	HEXAVALENT CHROMIUM	12/4/2006	2500	ug/l	L	100	N	SW7199
Filtered									
DMT-25S	DMT-25S-GWR-120406	ALUMINUM	12/4/2006	6950	ug/l		200	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	IRON	12/4/2006	111	ug/l		100	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	MAGNESIUM	12/4/2006	38.8	ug/l	B	5000	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	MANGANESE	12/4/2006	2	ug/l	B	15	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	CHROMIUM	12/4/2006	3040	ug/l		10	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	VANADIUM	12/4/2006	55.4	ug/l		50	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	CALCIUM	12/4/2006	84700	ug/l		5000	Y	E200.7
DMT-25S	DMT-25S-GWR-120406	HEXAVALENT CHROMIUM	12/4/2006	2600	ug/l	L	100	Y	SW7199

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

U = Analyte not detected above the reported detection limit.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-6M vs EA-6S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
First Sample - EA-6M									
Unfiltered									
EA-6M	EA-6M-GRW-112906-01	ALUMINUM	11/29/2006	1660	ug/l		200	N	E200.7
EA-6M	EA-6M-GRW-112906-01	CALCIUM	11/29/2006	58500	ug/l		5000	N	E200.7
EA-6M	EA-6M-GRW-112906-01	CHROMIUM	11/29/2006	20.4	ug/l		10	N	E200.7
EA-6M	EA-6M-GRW-112906-01	IRON	11/29/2006	33100	ug/l		100	N	E200.7
EA-6M	EA-6M-GRW-112906-01	MAGNESIUM	11/29/2006	34300	ug/l		5000	N	E200.7
EA-6M	EA-6M-GRW-112906-01	MANGANESE	11/29/2006	3680	ug/l		15	N	E200.7
EA-6M	EA-6M-GRW-112906-01	VANADIUM	11/29/2006	5.2	ug/l	B	50	N	E200.7
EA-6M	EA-6M-GRW-112906-01	BROMIDE	11/29/2006	1.2	mg/l		0.15	N	E300.0
EA-6M	EA-6M-GRW-112906-01	CHLORIDE	11/29/2006	289	mg/l		2	N	E300.0
EA-6M	EA-6M-GRW-112906-01	FLUORIDE	11/29/2006	0.07	mg/l	B	0.1	N	E300.0
EA-6M	EA-6M-GRW-112906-01	SULFATE	11/29/2006	176	mg/l		2	N	E300.0
EA-6M	EA-6M-GRW-112906-01	ALKALINITY, CARBONATE (AS							
		CACO3)	11/29/2006	87.6	mg/l		5	N	E310.1
EA-6M	EA-6M-GRW-112906-01	NITRATE	11/29/2006	0.11	mg/l	UB	0.11	N	E353.2
EA-6M	EA-6M-GRW-112906-01	NITROGEN, NITRATE-NITRITE	11/29/2006	0.1	mg/l	U	0.1	N	E353.2
EA-6M	EA-6M-GRW-112906-01	SILICA	11/29/2006	21.1	mg/l		1	N	E370.1
EA-6M	EA-6M-GRW-112906-01	CARBON DIOXIDE	11/29/2006	133	mg/l		5	N	SM4500-CO2D
EA-6M	EA-6M-GRW-112906-01	NITRITE	11/29/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-6M	EA-6M-GRW-112906-01	HEXAVALENT CHROMIUM	11/29/2006	10	ug/l	UL	10	N	SW7199
Filtered									
EA-6M	EA-6M-GRW-112906-01	ALUMINUM	11/29/2006	200	ug/l	U	200	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	CALCIUM	11/29/2006	63700	ug/l		5000	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	CHROMIUM	11/29/2006	0.89	ug/l	B	10	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	IRON	11/29/2006	33300	ug/l		100	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	MAGNESIUM	11/29/2006	37700	ug/l		5000	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	MANGANESE	11/29/2006	4040	ug/l		15	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	VANADIUM	11/29/2006	50	ug/l	U	50	Y	E200.7
EA-6M	EA-6M-GRW-112906-01	HEXAVALENT CHROMIUM	11/29/2006	10	ug/l	UL	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-6M vs EA-6S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
Second Sample - EA-6M									
Unfiltered									
EA-6M	EA-6M-GRW-112906-02	ALUMINUM	11/29/2006	245	ug/l		200	N	E200.7
EA-6M	EA-6M-GRW-112906-02	CALCIUM	11/29/2006	61000	ug/l		5000	N	E200.7
EA-6M	EA-6M-GRW-112906-02	CHROMIUM	11/29/2006	1.5	ug/l	B	10	N	E200.7
EA-6M	EA-6M-GRW-112906-02	IRON	11/29/2006	32000	ug/l		100	N	E200.7
EA-6M	EA-6M-GRW-112906-02	MAGNESIUM	11/29/2006	36100	ug/l		5000	N	E200.7
EA-6M	EA-6M-GRW-112906-02	MANGANESE	11/29/2006	3870	ug/l		15	N	E200.7
EA-6M	EA-6M-GRW-112906-02	VANADIUM	11/29/2006	50	ug/l	U	50	N	E200.7
EA-6M	EA-6M-GRW-112906-02	BROMIDE	11/29/2006	1.2	mg/l		0.15	N	E300.0
EA-6M	EA-6M-GRW-112906-02	CHLORIDE	11/29/2006	288	mg/l		2	N	E300.0
EA-6M	EA-6M-GRW-112906-02	FLUORIDE	11/29/2006	0.086	mg/l	B	0.1	N	E300.0
EA-6M	EA-6M-GRW-112906-02	SULFATE	11/29/2006	179	mg/l		2	N	E300.0
ALKALINITY, CARBONATE (AS									
EA-6M	EA-6M-GRW-112906-02	CACO3)	11/29/2006	87.6	mg/l		5	N	E310.1
EA-6M	EA-6M-GRW-112906-02	NITRATE	11/29/2006	0.11	mg/l	UB	0.11	N	E353.2
EA-6M	EA-6M-GRW-112906-02	NITROGEN, NITRATE-NITRITE	11/29/2006	0.1	mg/l	U	0.1	N	E353.2
EA-6M	EA-6M-GRW-112906-02	SILICA	11/29/2006	24.1	mg/l		1	N	E370.1
EA-6M	EA-6M-GRW-112906-02	CARBON DIOXIDE	11/29/2006	76.5	mg/l		5	N	SM4500-CO2D
EA-6M	EA-6M-GRW-112906-02	NITRITE	11/29/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-6M	EA-6M-GRW-112906-02	HEXAVALENT CHROMIUM	11/29/2006	10	ug/l	U	10	N	SW7199
Filtered									
EA-6M	EA-6M-GRW-112906-02	ALUMINUM	11/29/2006	200	ug/l	U	200	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	CALCIUM	11/29/2006	62900	ug/l		5000	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	CHROMIUM	11/29/2006	1.5	ug/l	B	10	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	IRON	11/29/2006	32800	ug/l		100	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	MAGNESIUM	11/29/2006	37300	ug/l		5000	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	MANGANESE	11/29/2006	3990	ug/l		15	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	VANADIUM	11/29/2006	50	ug/l	U	50	Y	E200.7
EA-6M	EA-6M-GRW-112906-02	HEXAVALENT CHROMIUM	11/29/2006	10	ug/l	U	10	Y	SW7199

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-6M vs EA-6S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
EA-6S									
Unfiltered									
EA-6S	EA-6S-GRW-112906	ALUMINUM	11/29/2006	3800	ug/l		200	N	E200.7
EA-6S	EA-6S-GRW-112906	CALCIUM	11/29/2006	233000	ug/l		5000	N	E200.7
EA-6S	EA-6S-GRW-112906	CHROMIUM	11/29/2006	147	ug/l		10	N	E200.7
EA-6S	EA-6S-GRW-112906	IRON	11/29/2006	73.8	ug/l	B	100	N	E200.7
EA-6S	EA-6S-GRW-112906	MAGNESIUM	11/29/2006	45.7	ug/l	B	5000	N	E200.7
EA-6S	EA-6S-GRW-112906	MANGANESE	11/29/2006	2.1	ug/l	B	15	N	E200.7
EA-6S	EA-6S-GRW-112906	VANADIUM	11/29/2006	1.9	ug/l	B	50	N	E200.7
EA-6S	EA-6S-GRW-112906	BROMIDE	11/29/2006	0.085	mg/l	B	0.15	N	E300.0
EA-6S	EA-6S-GRW-112906	CHLORIDE	11/29/2006	54.7	mg/l		2	N	E300.0
EA-6S	EA-6S-GRW-112906	FLUORIDE	11/29/2006	0.2	mg/l	U	0.2	N	E300.0
EA-6S	EA-6S-GRW-112906	SULFATE	11/29/2006	9.4	mg/l		2	N	E300.0
		ALKALINITY, CARBONATE (AS							
EA-6S	EA-6S-GRW-112906	CACO3)	11/29/2006	1530	mg/l		50	N	E310.1
EA-6S	EA-6S-GRW-112906	NITRATE	11/29/2006	0.11	mg/l	UB	0.11	N	E353.2
EA-6S	EA-6S-GRW-112906	NITROGEN, NITRATE-NITRITE	11/29/2006	0.0081	mg/l	B	0.1	N	E353.2
EA-6S	EA-6S-GRW-112906	SILICA	11/29/2006	1.8	mg/l		1	N	E370.1
EA-6S	EA-6S-GRW-112906	CARBON DIOXIDE	11/29/2006	5	mg/l	UB	5	N	SM4500-CO2D
EA-6S	EA-6S-GRW-112906	NITRITE	11/29/2006	0.0087	mg/l	B	0.01	N	SM4500-NO2B
EA-6S	EA-6S-GRW-112906	HEXAVALENT CHROMIUM	11/29/2006	130	ug/l		10	N	SW7199
Filtered									
EA-6S	EA-6S-GRW-112906	ALUMINUM	11/29/2006	3740	ug/l		200	Y	E200.7
EA-6S	EA-6S-GRW-112906	CALCIUM	11/29/2006	255000	ug/l		5000	Y	E200.7
EA-6S	EA-6S-GRW-112906	CHROMIUM	11/29/2006	166	ug/l		10	Y	E200.7
EA-6S	EA-6S-GRW-112906	IRON	11/29/2006	100	ug/l	U	100	Y	E200.7
EA-6S	EA-6S-GRW-112906	MAGNESIUM	11/29/2006	5000	ug/l	U	5000	Y	E200.7
EA-6S	EA-6S-GRW-112906	MANGANESE	11/29/2006	15	ug/l	U	15	Y	E200.7
EA-6S	EA-6S-GRW-112906	VANADIUM	11/29/2006	50	ug/l	U	50	Y	E200.7
EA-6S	EA-6S-GRW-112906	HEXAVALENT CHROMIUM	11/29/2006	128	ug/l		10	Y	SW7199

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-6M vs EA-6S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
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U = Analyte not detected above the reported detection limit.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-11M vs EA-11S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
First Sample - EA-11M									
Unfiltered									
EA-11M	EA-11M-GRW-120106-01	ALUMINUM	12/1/2006	1340	ug/l		200	N	E200.7
EA-11M	EA-11M-GRW-120106-01	CALCIUM	12/1/2006	54600	ug/l		5000	N	E200.7
EA-11M	EA-11M-GRW-120106-01	CHROMIUM	12/1/2006	8.5	ug/l	J	10	N	E200.7
EA-11M	EA-11M-GRW-120106-01	IRON	12/1/2006	16800	ug/l		100	N	E200.7
EA-11M	EA-11M-GRW-120106-01	MAGNESIUM	12/1/2006	35200	ug/l		5000	N	E200.7
EA-11M	EA-11M-GRW-120106-01	MANGANESE	12/1/2006	2600	ug/l		15	N	E200.7
EA-11M	EA-11M-GRW-120106-01	VANADIUM	12/1/2006	2.4	ug/l	B	50	N	E200.7
EA-11M	EA-11M-GRW-120106-01	BROMIDE	12/1/2006	1.4	mg/l		0.15	N	E300.0
EA-11M	EA-11M-GRW-120106-01	CHLORIDE	12/1/2006	354	mg/l		2	N	E300.0
EA-11M	EA-11M-GRW-120106-01	FLUORIDE	12/1/2006	0.1	mg/l		0.1	N	E300.0
EA-11M	EA-11M-GRW-120106-01	SULFATE	12/1/2006	191	mg/l		20	N	E300.0
		ALKALINITY, CARBONATE							
EA-11M	EA-11M-GRW-120106-01	(AS CaCO3)	12/1/2006	88.7	mg/l		5	N	E310.1
EA-11M	EA-11M-GRW-120106-01	NITRATE	12/1/2006	0.11	mg/l	U	0.11	N	E353.2
EA-11M	EA-11M-GRW-120106-01	NITROGEN, NITRATE-NITRITE	12/1/2006	0.023	mg/l	B	0.1	N	E353.2
EA-11M	EA-11M-GRW-120106-01	SILICA	12/1/2006	13.5	mg/l		1	N	E370.1
EA-11M	EA-11M-GRW-120106-01	CARBON DIOXIDE	12/1/2006	35.4	mg/l		5	N	SM4500-CO2D
EA-11M	EA-11M-GRW-120106-01	NITRITE	12/1/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-11M	EA-11M-GRW-120106-01	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	N	SW7196
Filtered									
EA-11M	EA-11M-GRW-120106-01	ALUMINUM	12/1/2006	200	ug/l	U	200	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	CALCIUM	12/1/2006	55100	ug/l		5000	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	CHROMIUM	12/1/2006	10	ug/l	U	10	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	IRON	12/1/2006	12500	ug/l		100	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	MAGNESIUM	12/1/2006	34900	ug/l		5000	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	MANGANESE	12/1/2006	2550	ug/l		15	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	VANADIUM	12/1/2006	50	ug/l	U	50	Y	E200.7
EA-11M	EA-11M-GRW-120106-01	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	Y	SW7196

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-11M vs EA-11S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
Second Sample - EA-11M									
Unfiltered									
EA-11M	EA-11M-GRW-120106-02	ALUMINUM	12/1/2006	5750	ug/l		200	N	E200.7
EA-11M	EA-11M-GRW-120106-02	CALCIUM	12/1/2006	54800	ug/l		5000	N	E200.7
EA-11M	EA-11M-GRW-120106-02	CHROMIUM	12/1/2006	47.3	ug/l		10	N	E200.7
EA-11M	EA-11M-GRW-120106-02	IRON	12/1/2006	67900	ug/l		100	N	E200.7
EA-11M	EA-11M-GRW-120106-02	MAGNESIUM	12/1/2006	37700	ug/l		5000	N	E200.7
EA-11M	EA-11M-GRW-120106-02	MANGANESE	12/1/2006	2750	ug/l		15	N	E200.7
EA-11M	EA-11M-GRW-120106-02	VANADIUM	12/1/2006	16.5	ug/l	B	50	N	E200.7
EA-11M	EA-11M-GRW-120106-02	BROMIDE	12/1/2006	1.4	mg/l		0.15	N	E300.0
EA-11M	EA-11M-GRW-120106-02	CHLORIDE	12/1/2006	357	mg/l		2	N	E300.0
EA-11M	EA-11M-GRW-120106-02	FLUORIDE	12/1/2006	0.1	mg/l		0.1	N	E300.0
EA-11M	EA-11M-GRW-120106-02	SULFATE	12/1/2006	190	mg/l		20	N	E300.0
		ALKALINITY, CARBONATE							
EA-11M	EA-11M-GRW-120106-02	(AS CaCO3)	12/1/2006	145	mg/l		5	N	E310.1
EA-11M	EA-11M-GRW-120106-02	NITRATE	12/1/2006	0.11	mg/l	U	0.11	N	E353.2
EA-11M	EA-11M-GRW-120106-02	NITROGEN, NITRATE-NITRITE	12/1/2006	0.083	mg/l	B	0.1	N	E353.2
EA-11M	EA-11M-GRW-120106-02	SILICA	12/1/2006	16.5	mg/l		1	N	E370.1
EA-11M	EA-11M-GRW-120106-02	CARBON DIOXIDE	12/1/2006	68	mg/l		5	N	SM4500-CO2D
EA-11M	EA-11M-GRW-120106-02	NITRITE	12/1/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-11M	EA-11M-GRW-120106-02	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	N	SW7196
Filtered									
EA-11M	EA-11M-GRW-120106-02	ALUMINUM	12/1/2006	200	ug/l	U	200	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	CALCIUM	12/1/2006	52500	ug/l		5000	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	CHROMIUM	12/1/2006	1	ug/l	J	10	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	IRON	12/1/2006	47600	ug/l		100	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	MAGNESIUM	12/1/2006	36100	ug/l		5000	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	MANGANESE	12/1/2006	2580	ug/l		15	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	VANADIUM	12/1/2006	50	ug/l	U	50	Y	E200.7
EA-11M	EA-11M-GRW-120106-02	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	Y	SW7196

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-11M vs EA-11S

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
EA-11S									
Unfiltered									
EA-11S	EA-11S-GRW-120106	ALUMINUM	12/1/2006	1580	ug/l		200	N	E200.7
EA-11S	EA-11S-GRW-120106	CALCIUM	12/1/2006	69000	ug/l		5000	N	E200.7
EA-11S	EA-11S-GRW-120106	CHROMIUM	12/1/2006	8.4	ug/l	J	10	N	E200.7
EA-11S	EA-11S-GRW-120106	IRON	12/1/2006	1970	ug/l		100	N	E200.7
EA-11S	EA-11S-GRW-120106	MAGNESIUM	12/1/2006	11500	ug/l		5000	N	E200.7
EA-11S	EA-11S-GRW-120106	MANGANESE	12/1/2006	899	ug/l		15	N	E200.7
EA-11S	EA-11S-GRW-120106	VANADIUM	12/1/2006	4.6	ug/l	B	50	N	E200.7
EA-11S	EA-11S-GRW-120106	BROMIDE	12/1/2006	0.067	mg/l	B	0.15	N	E300.0
EA-11S	EA-11S-GRW-120106	CHLORIDE	12/1/2006	172	mg/l		2	N	E300.0
EA-11S	EA-11S-GRW-120106	FLUORIDE	12/1/2006	0.8	mg/l		0.1	N	E300.0
EA-11S	EA-11S-GRW-120106	SULFATE	12/1/2006	92.9	mg/l		20	N	E300.0
		ALKALINITY, CARBONATE (AS CaCO ₃)	12/1/2006	150	mg/l		5	N	E310.1
EA-11S	EA-11S-GRW-120106	NITRATE	12/1/2006	0.11	mg/l	U	0.11	N	E353.2
EA-11S	EA-11S-GRW-120106	NITROGEN, NITRATE-NITRITE	12/1/2006	0.1	mg/l	U	0.1	N	E353.2
EA-11S	EA-11S-GRW-120106	SILICA	12/1/2006	12.9	mg/l		1	N	E370.1
EA-11S	EA-11S-GRW-120106	CARBON DIOXIDE	12/1/2006	6.8	mg/l		5	N	SM4500-CO2D
EA-11S	EA-11S-GRW-120106	NITRITE	12/1/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-11S	EA-11S-GRW-120106	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	N	SW7196
Filtered									
EA-11S	EA-11S-GRW-120106	ALUMINUM	12/1/2006	200	ug/l	U	200	Y	E200.7
EA-11S	EA-11S-GRW-120106	CALCIUM	12/1/2006	65300	ug/l		5000	Y	E200.7
EA-11S	EA-11S-GRW-120106	CHROMIUM	12/1/2006	10	ug/l	U	10	Y	E200.7
EA-11S	EA-11S-GRW-120106	IRON	12/1/2006	604	ug/l		100	Y	E200.7
EA-11S	EA-11S-GRW-120106	MAGNESIUM	12/1/2006	11100	ug/l		5000	Y	E200.7
EA-11S	EA-11S-GRW-120106	MANGANESE	12/1/2006	788	ug/l		15	Y	E200.7
EA-11S	EA-11S-GRW-120106	VANADIUM	12/1/2006	50	ug/l	U	50	Y	E200.7
EA-11S	EA-11S-GRW-120106	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	Y	SW7196

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

U = Analyte not detected above the reported detection limit.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-13M vs P-4

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
First Sample - EA-13M									
Unfiltered									
EA-13M	EA-13M-GRW-120506-1	ALUMINUM	12/5/2006	20600	ug/l		200	N	E200.7
EA-13M	EA-13M-GRW-120506-1	CALCIUM	12/5/2006	109000	ug/l		5000	N	E200.7
EA-13M	EA-13M-GRW-120506-1	CHROMIUM	12/5/2006	935	ug/l		10	N	E200.7
EA-13M	EA-13M-GRW-120506-1	IRON	12/5/2006	97900	ug/l		100	N	E200.7
EA-13M	EA-13M-GRW-120506-1	MAGNESIUM	12/5/2006	47100	ug/l		5000	N	E200.7
EA-13M	EA-13M-GRW-120506-1	MANGANESE	12/5/2006	4070	ug/l		15	N	E200.7
EA-13M	EA-13M-GRW-120506-1	VANADIUM	12/5/2006	118	ug/l		50	N	E200.7
EA-13M	EA-13M-GRW-120506-1	BROMIDE	12/5/2006	2.3	mg/l		0.15	N	E300.0
EA-13M	EA-13M-GRW-120506-1	CHLORIDE	12/5/2006	580	mg/l		6	N	E300.0
EA-13M	EA-13M-GRW-120506-1	FLUORIDE	12/5/2006	0.087	mg/l	B	0.2	N	E300.0
EA-13M	EA-13M-GRW-120506-1	SULFATE	12/5/2006	221	mg/l		10	N	E300.0
EA-13M	EA-13M-GRW-120506-1	ALKALINITY, CARBONATE (AS							
		CACO3)	12/5/2006	121	mg/l		5	N	E310.1
EA-13M	EA-13M-GRW-120506-1	NITRATE	12/5/2006	0.11	mg/l	U	0.11	N	E353.2
EA-13M	EA-13M-GRW-120506-1	NITROGEN, NITRATE-NITRITE	12/5/2006	0.1	mg/l	U	0.1	N	E353.2
EA-13M	EA-13M-GRW-120506-1	SILICA	12/5/2006	18.7	mg/l		1	N	E370.1
EA-13M	EA-13M-GRW-120506-1	CARBON DIOXIDE	12/5/2006	192	mg/l		5	N	SM4500-CO2D
EA-13M	EA-13M-GRW-120506-1	NITRITE	12/5/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-13M	EA-13M-GRW-120506-1	HEXAVALENT CHROMIUM	12/5/2006	24	ug/l		10	N	SW7196
Filtered									
EA-13M	EA-13M-GRW-120506-1	ALUMINUM	12/5/2006	200	ug/l	U	200	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	CALCIUM	12/5/2006	53100	ug/l		5000	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	CHROMIUM	12/5/2006	3.4	ug/l	B	10	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	IRON	12/5/2006	35800	ug/l		100	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	MAGNESIUM	12/5/2006	48100	ug/l		5000	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	MANGANESE	12/5/2006	3220	ug/l		15	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	VANADIUM	12/5/2006	50	ug/l	U	50	Y	E200.7
EA-13M	EA-13M-GRW-120506-1	HEXAVALENT CHROMIUM	12/5/2006	10	ug/l	U	10	Y	SW7196

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-13M vs P-4

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report		Analytical Method
							Detection Limit	Filtered	
Second Sample - EA-13M									
Unfiltered									
EA-13M	EA-13M-GRW-120506-2	ALUMINUM	12/5/2006	130	ug/l	B	200	N	E200.7
EA-13M	EA-13M-GRW-120506-2	CALCIUM	12/5/2006	52100	ug/l		5000	N	E200.7
EA-13M	EA-13M-GRW-120506-2	CHROMIUM	12/5/2006	5.8	ug/l	B	10	N	E200.7
EA-13M	EA-13M-GRW-120506-2	IRON	12/5/2006	37400	ug/l		100	N	E200.7
EA-13M	EA-13M-GRW-120506-2	MAGNESIUM	12/5/2006	51100	ug/l		5000	N	E200.7
EA-13M	EA-13M-GRW-120506-2	MANGANESE	12/5/2006	3380	ug/l		15	N	E200.7
EA-13M	EA-13M-GRW-120506-2	VANADIUM	12/5/2006	50	ug/l	U	50	N	E200.7
EA-13M	EA-13M-GRW-120506-2	BROMIDE	12/5/2006	2.2	mg/l		0.15	N	E300.0
EA-13M	EA-13M-GRW-120506-2	CHLORIDE	12/5/2006	537	mg/l		4	N	E300.0
EA-13M	EA-13M-GRW-120506-2	FLUORIDE	12/5/2006	0.075	mg/l	B	0.1	N	E300.0
EA-13M	EA-13M-GRW-120506-2	SULFATE	12/5/2006	215	mg/l		10	N	E300.0
		ALKALINITY, CARBONATE (AS							
EA-13M	EA-13M-GRW-120506-2	CACO3)	12/5/2006	125	mg/l		5	N	E310.1
EA-13M	EA-13M-GRW-120506-2	NITRATE	12/5/2006	0.11	mg/l	U	0.11	N	E353.2
EA-13M	EA-13M-GRW-120506-2	NITROGEN, NITRATE-NITRITE	12/5/2006	0.1	mg/l	U	0.1	N	E353.2
EA-13M	EA-13M-GRW-120506-2	SILICA	12/5/2006	20.6	mg/l		1	N	E370.1
EA-13M	EA-13M-GRW-120506-2	CARBON DIOXIDE	12/5/2006	151	mg/l		5	N	SM4500-CO2D
EA-13M	EA-13M-GRW-120506-2	NITRITE	12/5/2006	0.01	mg/l	U	0.01	N	SM4500-NO2B
EA-13M	EA-13M-GRW-120506-2	HEXAVALENT CHROMIUM	12/5/2006	6	ug/l	B	10	N	SW7196
Filtered									
EA-13M	EA-13M-GRW-120506-2	ALUMINUM	12/5/2006	200	ug/l	U	200	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	CALCIUM	12/5/2006	49000	ug/l		5000	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	CHROMIUM	12/5/2006	5.9	ug/l	B	10	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	IRON	12/5/2006	35400	ug/l		100	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	MAGNESIUM	12/5/2006	48900	ug/l		5000	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	MANGANESE	12/5/2006	3240	ug/l		15	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	VANADIUM	12/5/2006	50	ug/l	U	50	Y	E200.7
EA-13M	EA-13M-GRW-120506-2	HEXAVALENT CHROMIUM	12/5/2006	10	ug/l	U	10	Y	SW7196

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-13M vs P-4

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
P-4									
Unfiltered									
P-4	P-4-GRW-120506	ALUMINUM	12/5/2006	364	ug/l		200	N	E200.7
P-4	P-4-GRW-120506	CALCIUM	12/5/2006	529000	ug/l		5000	N	E200.7
P-4	P-4-GRW-120506	CHROMIUM	12/5/2006	23600	ug/l		10	N	E200.7
P-4	P-4-GRW-120506	IRON	12/5/2006	368	ug/l		100	N	E200.7
P-4	P-4-GRW-120506	MAGNESIUM	12/5/2006	256	ug/l	B	5000	N	E200.7
P-4	P-4-GRW-120506	MANGANESE	12/5/2006	4.6	ug/l	B	15	N	E200.7
P-4	P-4-GRW-120506	VANADIUM	12/5/2006	4.1	ug/l	B	50	N	E200.7
P-4	P-4-GRW-120506	BROMIDE	12/5/2006	0.25	mg/l		0.15	N	E300.0
P-4	P-4-GRW-120506	CHLORIDE	12/5/2006	77.3	mg/l		2	N	E300.0
P-4	P-4-GRW-120506	FLUORIDE	12/5/2006	0.35	mg/l	B	0.4	N	E300.0
P-4	P-4-GRW-120506	SULFATE	12/5/2006	5.4	mg/l	B	10	N	E300.0
P-4	P-4-GRW-120506	ALKALINITY, CARBONATE (AS CACO3)	12/5/2006	2740	mg/l		50	N	E310.1
P-4	P-4-GRW-120506	NITRATE	12/5/2006	0.2	mg/l	U	0.2	N	E353.2
P-4	P-4-GRW-120506	NITROGEN, NITRATE-NITRITE	12/5/2006	0.12	mg/l		0.1	N	E353.2
P-4	P-4-GRW-120506	SILICA	12/5/2006	1	mg/l	U	1	N	E370.1
P-4	P-4-GRW-120506	CARBON DIOXIDE	12/5/2006	0.11	mg/l	B	5	N	SM4500-CO2D
P-4	P-4-GRW-120506	NITRITE	12/5/2006	1.1	mg/l		0.1	N	SM4500-NO2B
P-4	P-4-GRW-120506	HEXAVALENT CHROMIUM	12/5/2006	26700	ug/l		1000	N	SW7196
Filtered									
P-4	P-4-GRW-120506	ALUMINUM	12/5/2006	224	ug/l		200	Y	E200.7
P-4	P-4-GRW-120506	CALCIUM	12/5/2006	513000	ug/l		5000	Y	E200.7
P-4	P-4-GRW-120506	CHROMIUM	12/5/2006	23400	ug/l		10	Y	E200.7
P-4	P-4-GRW-120506	IRON	12/5/2006	100	ug/l	U	100	Y	E200.7
P-4	P-4-GRW-120506	MAGNESIUM	12/5/2006	5000	ug/l	U	5000	Y	E200.7
P-4	P-4-GRW-120506	MANGANESE	12/5/2006	15	ug/l	U	15	Y	E200.7
P-4	P-4-GRW-120506	VANADIUM	12/5/2006	50	ug/l	U	50	Y	E200.7
P-4	P-4-GRW-120506	HEXAVALENT CHROMIUM	12/5/2006	23900	ug/l		1000	Y	SW7196

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-13M vs P-4

Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
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U = Analyte not detected above the reported detection limit.

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-15M vs EA-15S									
Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
First Sample - EA-15M									
Unfiltered									
EA-15M	EA-15M-GRW-120106-01	ALUMINUM	12/1/2006	619	ug/l		200	N	E200.7
EA-15M	EA-15M-GRW-120106-01	CALCIUM	12/1/2006	64500	ug/l		5000	N	E200.7
EA-15M	EA-15M-GRW-120106-01	CHROMIUM	12/1/2006	6.9	ug/l	J	10	N	E200.7
EA-15M	EA-15M-GRW-120106-01	IRON	12/1/2006	60600	ug/l		100	N	E200.7
EA-15M	EA-15M-GRW-120106-01	MAGNESIUM	12/1/2006	90300	ug/l		5000	N	E200.7
EA-15M	EA-15M-GRW-120106-01	MANGANESE	12/1/2006	2690	ug/l		15	N	E200.7
EA-15M	EA-15M-GRW-120106-01	VANADIUM	12/1/2006	3.4	ug/l	B	50	N	E200.7
EA-15M	EA-15M-GRW-120106-01	BROMIDE	12/1/2006	4.1	mg/l		0.15	N	E300.0
EA-15M	EA-15M-GRW-120106-01	CHLORIDE	12/1/2006	1210	mg/l		20	N	E300.0
EA-15M	EA-15M-GRW-120106-01	FLUORIDE	12/1/2006	0.13	mg/l		0.1	N	E300.0
EA-15M	EA-15M-GRW-120106-01	SULFATE	12/1/2006	226	mg/l		20	N	E300.0
		ALKALINITY, CARBONATE							
EA-15M	EA-15M-GRW-120106-01	(AS CaCO3)	12/1/2006	235	mg/l		5	N	E310.1
EA-15M	EA-15M-GRW-120106-01	NITRATE	12/1/2006	0.15	mg/l	U	0.15	N	E353.2
EA-15M	EA-15M-GRW-120106-01	NITROGEN, NITRATE-NITRITE	12/1/2006	0.1	mg/l	U	0.1	N	E353.2
EA-15M	EA-15M-GRW-120106-01	SILICA	12/1/2006	16.7	mg/l		1	N	E370.1
EA-15M	EA-15M-GRW-120106-01	CARBON DIOXIDE	12/1/2006	139	mg/l		5	N	SM4500-CO2D
EA-15M	EA-15M-GRW-120106-01	NITRITE	12/1/2006	0.05	mg/l	U	0.05	N	SM4500-NO2B
EA-15M	EA-15M-GRW-120106-01	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	N	SW7196
Filtered									
EA-15M	EA-15M-GRW-120106-01	ALUMINUM	12/1/2006	200	ug/l	U	200	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	CALCIUM	12/1/2006	63800	ug/l		5000	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	CHROMIUM	12/1/2006	3.6	ug/l	J	10	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	IRON	12/1/2006	60200	ug/l		100	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	MAGNESIUM	12/1/2006	91600	ug/l		5000	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	MANGANESE	12/1/2006	2710	ug/l		15	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	VANADIUM	12/1/2006	50	ug/l	U	50	Y	E200.7
EA-15M	EA-15M-GRW-120106-01	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	Y	SW7196

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-15M vs EA-15S									
Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
Second Sample - EA-15M									
Unfiltered									
EA-15M	EA-15M-GRW-120106-02	ALUMINUM	12/1/2006	44.3	ug/l	B	200	N	E200.7
EA-15M	EA-15M-GRW-120106-02	CALCIUM	12/1/2006	60700	ug/l		5000	N	E200.7
EA-15M	EA-15M-GRW-120106-02	CHROMIUM	12/1/2006	3.8	ug/l	J	10	N	E200.7
EA-15M	EA-15M-GRW-120106-02	IRON	12/1/2006	59100	ug/l		100	N	E200.7
EA-15M	EA-15M-GRW-120106-02	MAGNESIUM	12/1/2006	89000	ug/l		5000	N	E200.7
EA-15M	EA-15M-GRW-120106-02	MANGANESE	12/1/2006	2700	ug/l		15	N	E200.7
EA-15M	EA-15M-GRW-120106-02	VANADIUM	12/1/2006	50	ug/l	U	50	N	E200.7
EA-15M	EA-15M-GRW-120106-02	BROMIDE	12/1/2006	4.1	mg/l		0.15	N	E300.0
EA-15M	EA-15M-GRW-120106-02	CHLORIDE	12/1/2006	1200	mg/l		20	N	E300.0
EA-15M	EA-15M-GRW-120106-02	FLUORIDE	12/1/2006	0.13	mg/l		0.1	N	E300.0
EA-15M	EA-15M-GRW-120106-02	SULFATE	12/1/2006	226	mg/l		20	N	E300.0
		ALKALINITY, CARBONATE							
EA-15M	EA-15M-GRW-120106-02	(AS CaCO ₃)	12/1/2006	237	mg/l		5	N	E310.1
EA-15M	EA-15M-GRW-120106-02	NITRATE	12/1/2006	0.15	mg/l	U	0.15	N	E353.2
EA-15M	EA-15M-GRW-120106-02	NITROGEN, NITRATE-NITRITE	12/1/2006	0.035	mg/l	B	0.1	N	E353.2
EA-15M	EA-15M-GRW-120106-02	SILICA	12/1/2006	18.2	mg/l		1	N	E370.1
EA-15M	EA-15M-GRW-120106-02	CARBON DIOXIDE	12/1/2006	125	mg/l		5	N	SM4500-CO2D
EA-15M	EA-15M-GRW-120106-02	NITRITE	12/1/2006	0.05	mg/l	U	0.05	N	SM4500-NO2B
EA-15M	EA-15M-GRW-120106-02	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	N	SW7196
Filtered									
EA-15M	EA-15M-GRW-120106-02	ALUMINUM	12/1/2006	200	ug/l	U	200	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	CALCIUM	12/1/2006	62600	ug/l		5000	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	CHROMIUM	12/1/2006	1.9	ug/l	J	10	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	IRON	12/1/2006	60900	ug/l		100	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	MAGNESIUM	12/1/2006	91300	ug/l		5000	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	MANGANESE	12/1/2006	2780	ug/l		15	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	VANADIUM	12/1/2006	50	ug/l	U	50	Y	E200.7
EA-15M	EA-15M-GRW-120106-02	HEXAVALENT CHROMIUM	12/1/2006	10	ug/l	U	10	Y	SW7196

Attachment 2
Summary of Groundwater Analytical Data
Dundalk Marine Terminal, Baltimore, MD

EA-15M vs EA-15S									
Location ID	Field Sample ID	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Filtered	Analytical Method
EA-15S									
Unfiltered									
EA-15S	EA-15S-GRW-113006	ALUMINUM	11/30/2006	458	ug/l		200	N	E200.7
EA-15S	EA-15S-GRW-113006	IRON	11/30/2006	100	ug/l	U	100	N	E200.7
EA-15S	EA-15S-GRW-113006	MAGNESIUM	11/30/2006	48.9	ug/l	B	5000	N	E200.7
EA-15S	EA-15S-GRW-113006	MANGANESE	11/30/2006	1.5	ug/l	B	15	N	E200.7
EA-15S	EA-15S-GRW-113006	CHROMIUM	11/30/2006	16200	ug/l		10	N	E200.7
EA-15S	EA-15S-GRW-113006	VANADIUM	11/30/2006	50	ug/l	U	50	N	E200.7
EA-15S	EA-15S-GRW-113006	CALCIUM	11/30/2006	289000	ug/l		5000	N	E200.7
EA-15S	EA-15S-GRW-113006	CHLORIDE	11/30/2006	83.3	mg/l		2	N	E300.0
EA-15S	EA-15S-GRW-113006	FLUORIDE	11/30/2006	3.3	mg/l		0.1	N	E300.0
EA-15S	EA-15S-GRW-113006	BROMIDE	11/30/2006	0.31	mg/l		0.15	N	E300.0
EA-15S	EA-15S-GRW-113006	SULFATE	11/30/2006	4.4	mg/l	B	10	N	E300.0
		ALKALINITY, CARBONATE							
EA-15S	EA-15S-GRW-113006	(AS CaCO ₃)	11/30/2006	5700	mg/l		50	N	E310.1
EA-15S	EA-15S-GRW-113006	NITRATE	11/30/2006	0.75	mg/l		0.15	N	E353.2
EA-15S	EA-15S-GRW-113006	NITROGEN, NITRATE-NITRITE	11/30/2006	1.1	mg/l		0.1	N	E353.2
EA-15S	EA-15S-GRW-113006	SILICA	11/30/2006	0.92	mg/l	B	1	N	E370.1
EA-15S	EA-15S-GRW-113006	CARBON DIOXIDE	11/30/2006	5	mg/l	UB	5	N	SM4500-CO2D
EA-15S	EA-15S-GRW-113006	NITRITE	11/30/2006	0.35	mg/l		0.05	N	SM4500-NO2B
EA-15S	EA-15S-GRW-113006	HEXAVALENT CHROMIUM	11/30/2006	17100	ug/l		500	N	SW7199
Filtered									
EA-15S	EA-15S-GRW-113006	ALUMINUM	11/30/2006	373	ug/l		200	Y	E200.7
EA-15S	EA-15S-GRW-113006	IRON	11/30/2006	100	ug/l	U	100	Y	E200.7
EA-15S	EA-15S-GRW-113006	MAGNESIUM	11/30/2006	5000	ug/l	U	5000	Y	E200.7
EA-15S	EA-15S-GRW-113006	MANGANESE	11/30/2006	15	ug/l	U	15	Y	E200.7
EA-15S	EA-15S-GRW-113006	CHROMIUM	11/30/2006	13200	ug/l		10	Y	E200.7
EA-15S	EA-15S-GRW-113006	VANADIUM	11/30/2006	50	ug/l	U	50	Y	E200.7
EA-15S	EA-15S-GRW-113006	CALCIUM	11/30/2006	301000	ug/l		5000	Y	E200.7
EA-15S	EA-15S-GRW-113006	HEXAVALENT CHROMIUM	11/30/2006	15200	ug/l		500	Y	SW7199

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

U = Analyte not detected above the reported detection limit.

Attachment 3
Major Ion Percentages in Groundwater Samples
and Trilinear Diagrams

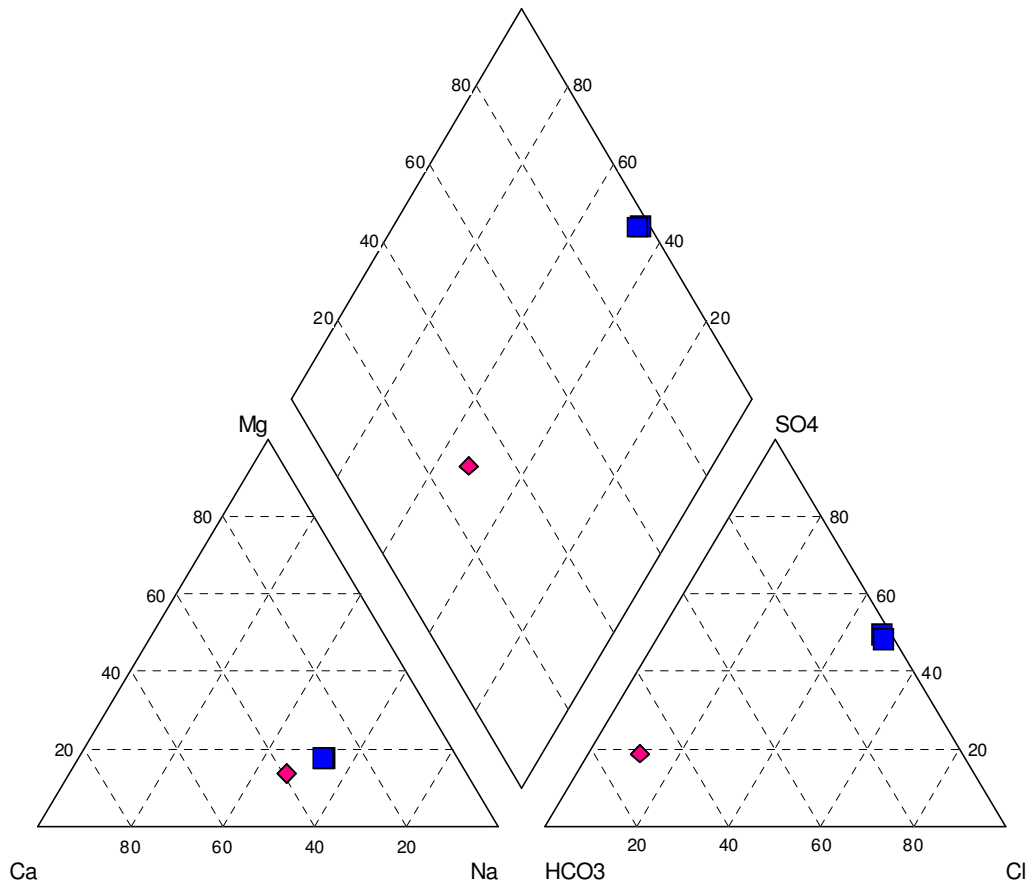
Attachment 3
Relative Percentage of Major Ions in Groundwater
Dundalk Marine Terminal, Baltimore, MD

Field Sample ID	% Calcium	% Magnesium	% Sodium- Potassium	% HCO ₃	% Sulfate	% Chloride
EAC-1M-GRW-112806-	29	18	53	2	50	48
EAC-1M-GRW-112806-	29	18	53	3	48	49
EAC-1S-GRW-112806	39	13	47	70	19	11
EA-5M-GRW-120406-01	44	11	45	42	15	43
EA-5M-GRW-120406-02	14	5	81	21	12	67
DMT-25S-GWR-120406	10	0	90	93	1	5
EA-6M-GRW-112906-01	23	23	54	13	27	60
EA-6M-GRW-112906-02	23	23	54	13	27	60
EA-6S-GRW-112906	39	1	60	95	1	5
EA-11M-GRW-120106-01	17	18	64	11	25	63
EA-11M-GRW-120106-02	15	18	67	17	23	60
EA-11S-GRW-120106	33	9	57	31	20	50
EA-13M-GRW-120506-1	11	17	72	10	20	70
EA-13M-GRW-120506-2	11	18	71	11	20	68
P-4-GRW-120506	45	0	55	96	0.2	4
EA-15M-GRW-120106-01	7	17	75	11	11	78
EA-15M-GRW-120106-02	7	17	75	11	11	78
EA-15S-GRW-113006	13	0	87	98	0.1	2

Legend:

- EAC-1M
- EAC-1S

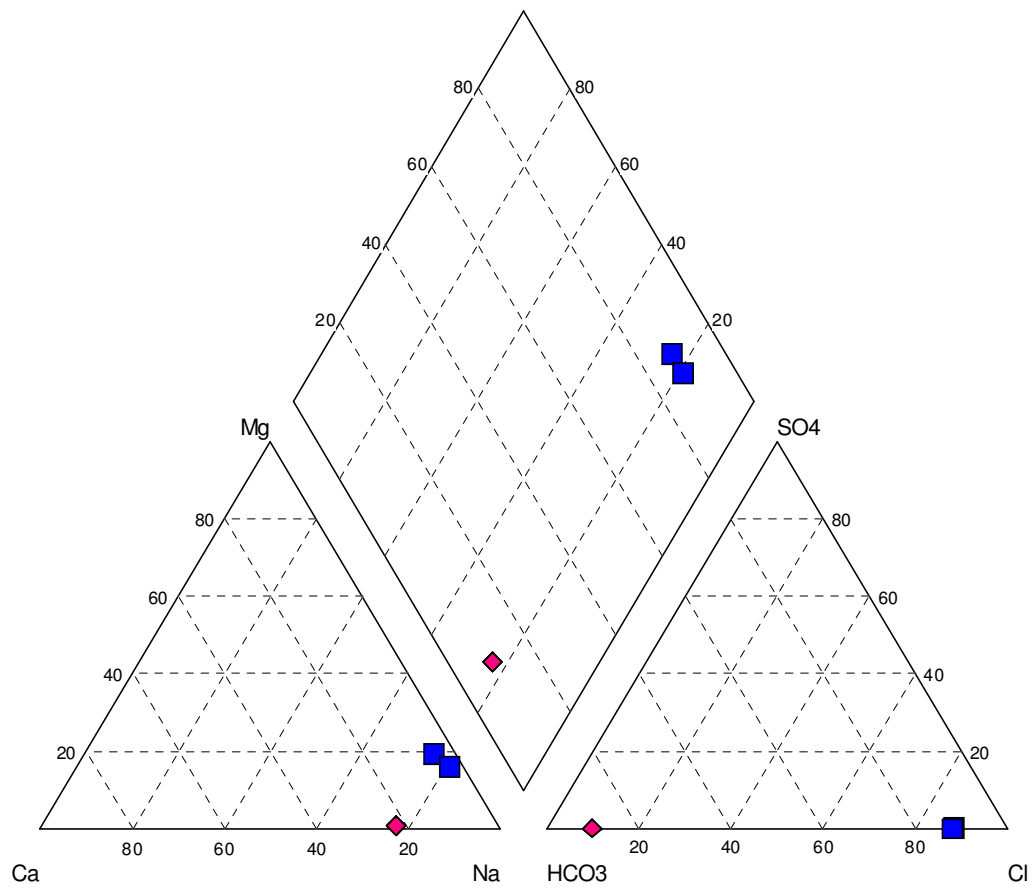
DMT - EAC-1M versus EAC-1S



Legend:

- EAC-4M
- ◆ EAC-4S

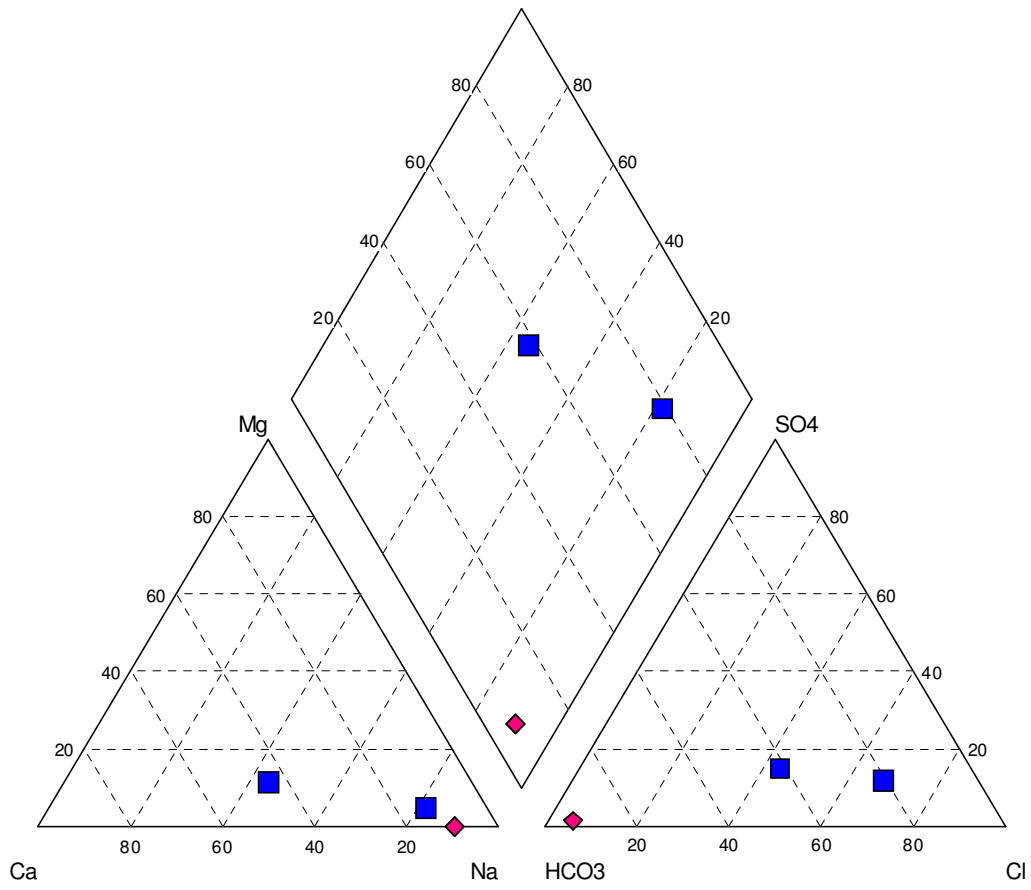
DMT- EAC-4M versus EAC-4S



Legend:

- EA-5M
- DMT-25S

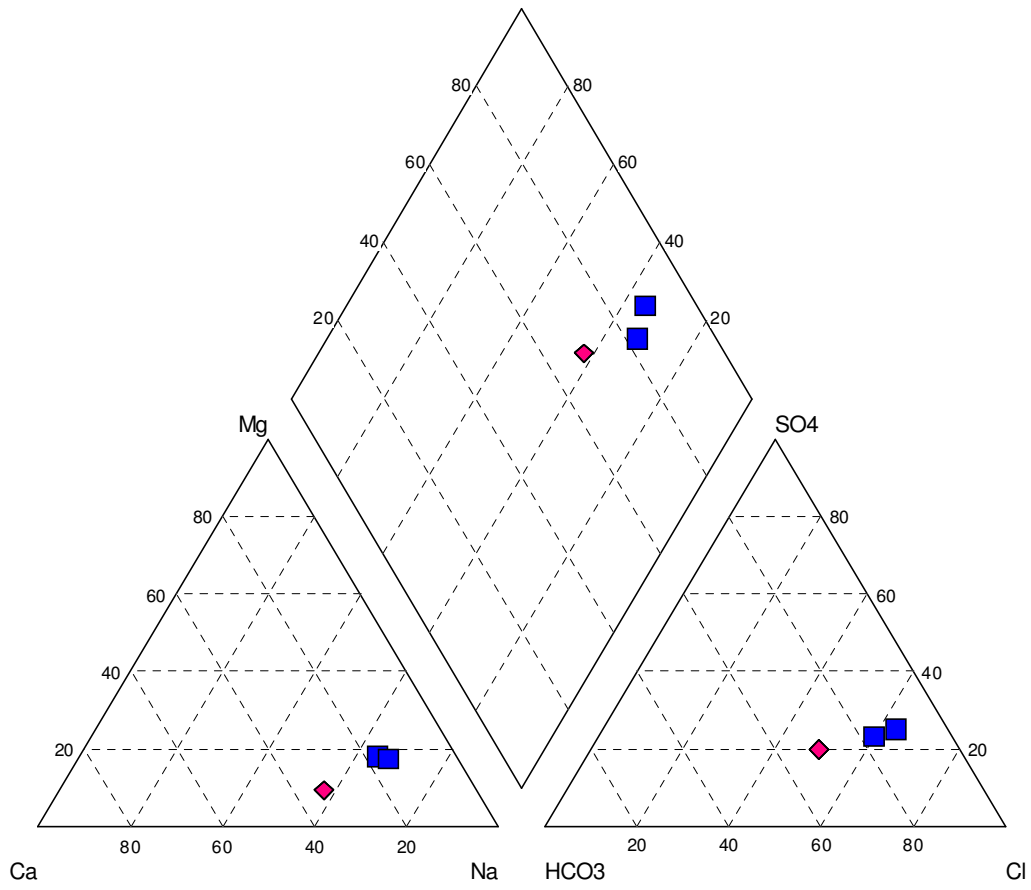
DMT - EA-5M versus DMT-25S



Legend:

- EA-11M
- ◆ EA-11S

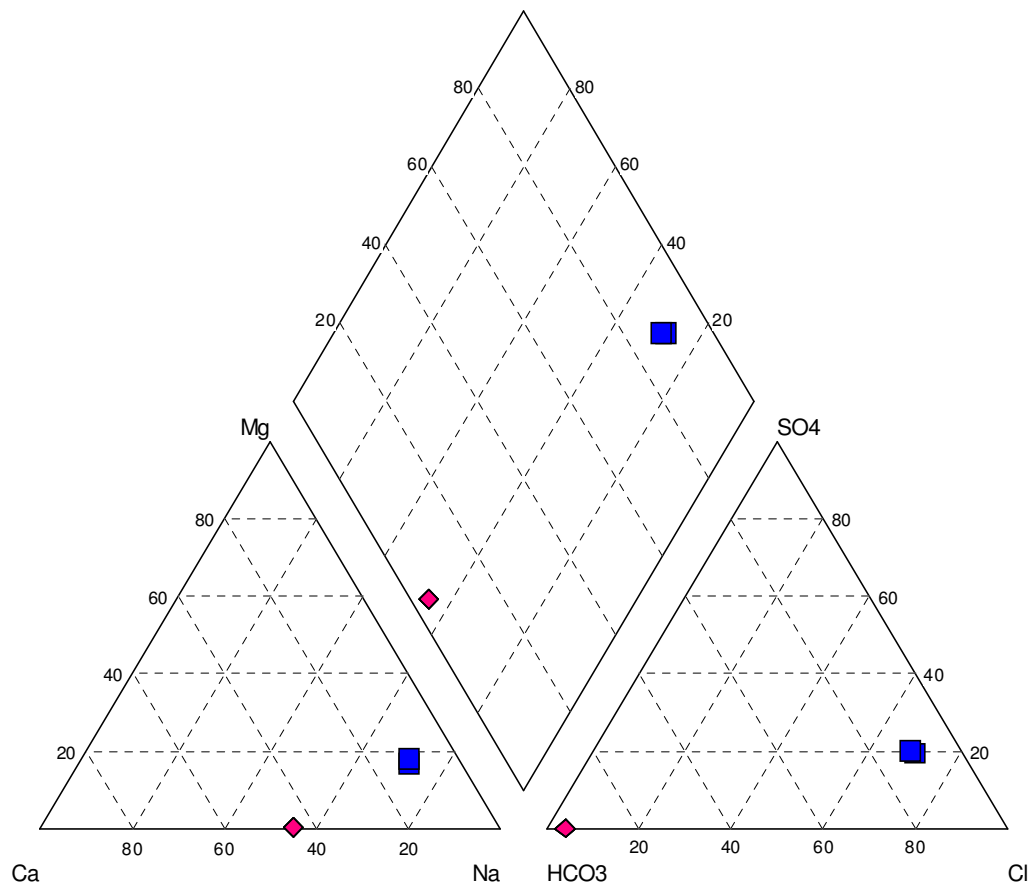
DMT - EA-11M versus EA-11S



Legend:

- EA-13M
- P-4

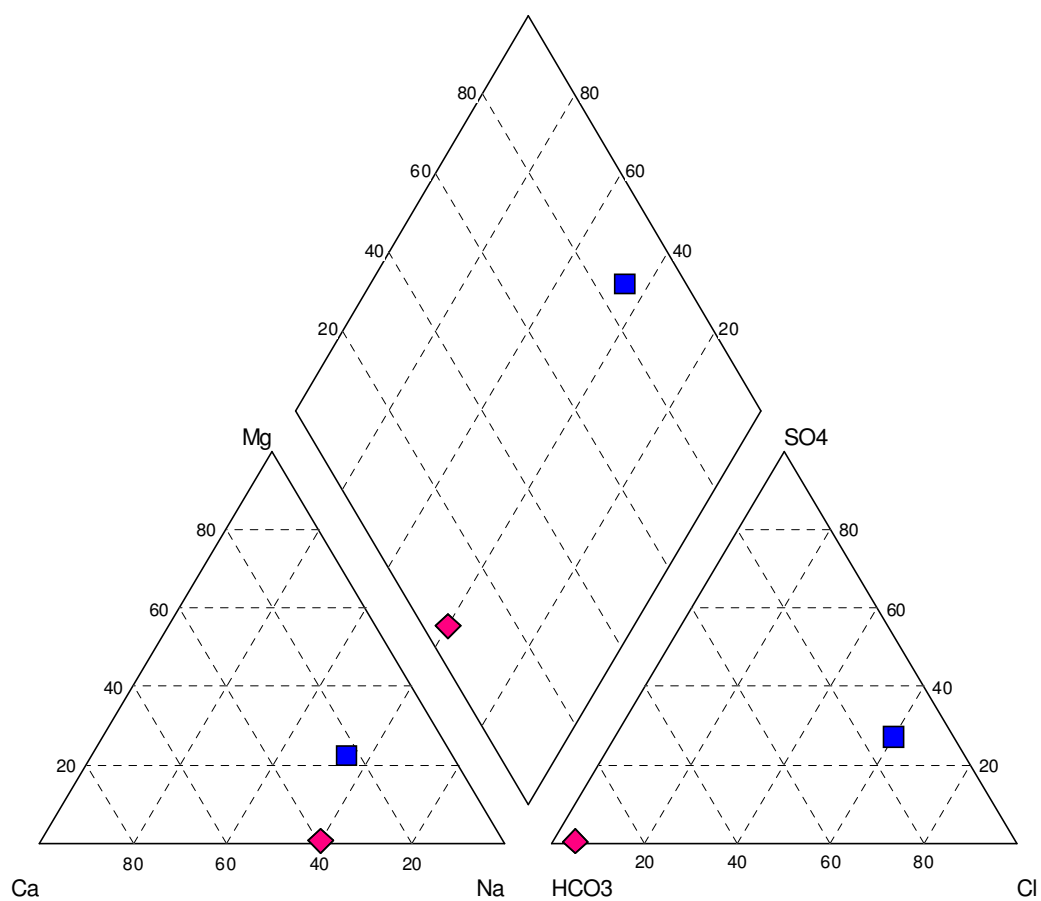
DMT - EA-13M versus P-4



Legend:

- EA-6M
- EA-6S

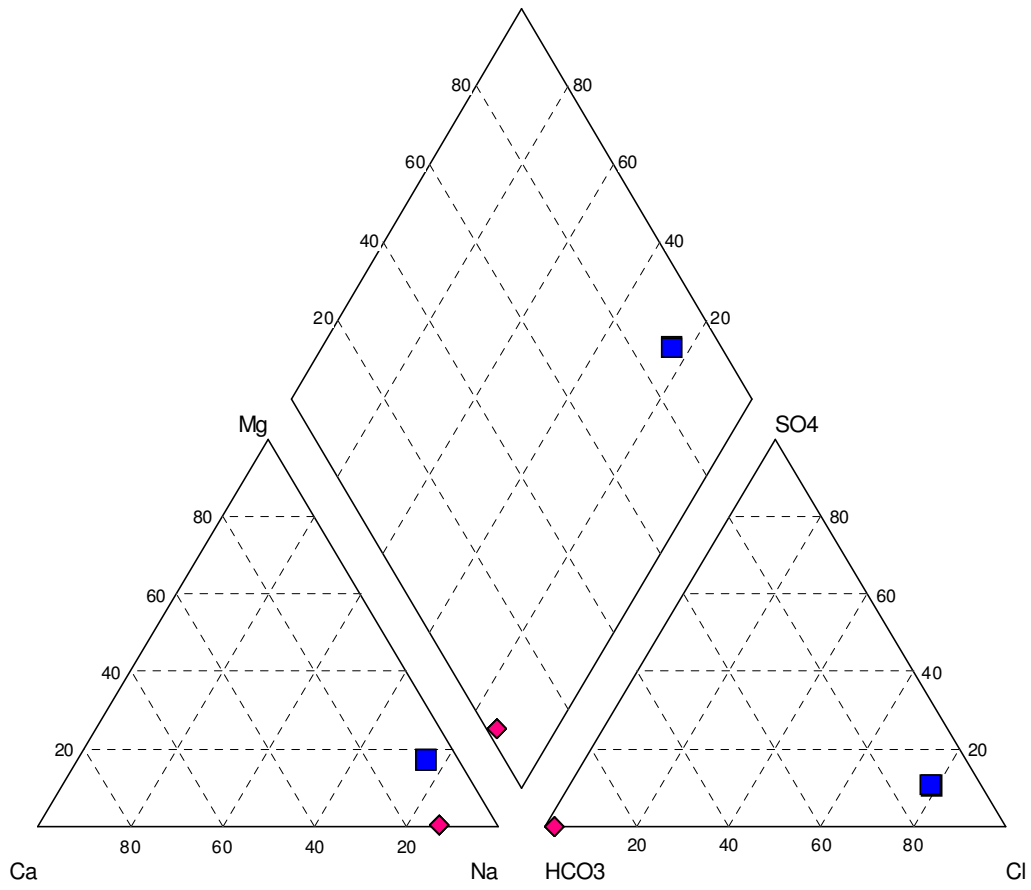
DMT - EA-6M versus EA-6S



Legend:

- EA-15M
- EA-15S

DMT - EA-15M versus EA-15S



Attachment 4
Soil Sample Results

Attachment 4
Intermediate Zone Soil Data
Dundalk Marine Terminal, Baltimore Maryland

Field Sample ID	Sample Interval	Depth Units	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Analytical Method
DMT-38M-SOI-0810	8-10	ft	ALKALINITY, CARBONATE (AS CaCO3)	11/28/2006	103	mg/kg		22	E310.1
DMT-38M-SOI-0810	8-10	ft	ALUMINUM	11/28/2006	5950	mg/kg		2.5	SW6010
DMT-38M-SOI-0810	8-10	ft	CALCIUM	11/28/2006	830	mg/kg		12	SW6010
DMT-38M-SOI-0810	8-10	ft	CARBONATE ALKALINITY	11/28/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-0810	8-10	ft	CHROMIUM	11/28/2006	54.9	mg/kg		0.19	SW6010
DMT-38M-SOI-0810	8-10	ft	HEXAVALENT CHROMIUM	11/28/2006	2.8	mg/kg		0.45	SW7199
DMT-38M-SOI-0810	8-10	ft	IRON	11/28/2006	5610	mg/kg		4.7	SW6010
DMT-38M-SOI-0810	8-10	ft	MAGNESIUM	11/28/2006	522	mg/kg	B	0.64	SW6010
DMT-38M-SOI-0810	8-10	ft	MANGANESE	11/28/2006	42.7	mg/kg		0.034	SW6010
DMT-38M-SOI-0810	8-10	ft	OXIDATION-REDUCTION POTENTIAL	11/28/2006	270	mV		0	ASTM D1498
DMT-38M-SOI-0810	8-10	ft	pH	11/28/2006	9.37	S.U.		0	SW9045
DMT-38M-SOI-0810	8-10	ft	POTASSIUM	11/28/2006	552	mg/kg	B	7.5	SW6010
DMT-38M-SOI-0810	8-10	ft	SILICON	11/28/2006	463	mg/kg		22	SW6010
DMT-38M-SOI-0810	8-10	ft	SODIUM	11/28/2006	208	mg/kg	B	85	SW6010
DMT-38M-SOI-0810	8-10	ft	SULFATE	11/28/2006	90.6	mg/kg	B	4	E300.0
DMT-38M-SOI-0810	8-10	ft	TITANIUM	11/28/2006	70.9	mg/kg		0.21	SW6010
DMT-38M-SOI-0810	8-10	ft	TOTAL CARBON	11/28/2006	5280	mg/kg		550	SW9060
DMT-38M-SOI-0810	8-10	ft	TOTAL INORGANIC CARBON	11/28/2006	4530	mg/kg		2400	SW9060
DMT-38M-SOI-0810	8-10	ft	TOTAL ORGANIC CARBON	11/28/2006	752	mg/kg	B	310	SW9060
DMT-38M-SOI-0810	8-10	ft	VANADIUM	11/28/2006	17.1	mg/kg		0.15	SW6010
DMT-38M-SOI-3839	38-39.5	ft	ALKALINITY, CARBONATE (AS CaCO3)	11/28/2006	33.4	mg/kg	B	22	E310.1
DMT-38M-SOI-3839	38-39.5	ft	ALUMINUM	11/28/2006	691	mg/kg		2.7	SW6010
DMT-38M-SOI-3839	38-39.5	ft	CALCIUM	11/28/2006	109	mg/kg	B	13	SW6010
DMT-38M-SOI-3839	38-39.5	ft	CARBONATE ALKALINITY	11/28/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-3839	38-39.5	ft	CHROMIUM	11/28/2006	3.6	mg/kg		0.21	SW6010
DMT-38M-SOI-3839	38-39.5	ft	HEXAVALENT CHROMIUM	11/28/2006	0.95	mg/kg	U	0.45	SW7199
DMT-38M-SOI-3839	38-39.5	ft	IRON	11/28/2006	896	mg/kg		5.1	SW6010
DMT-38M-SOI-3839	38-39.5	ft	MAGNESIUM	11/28/2006	55	mg/kg	B	0.69	SW6010
DMT-38M-SOI-3839	38-39.5	ft	MANGANESE	11/28/2006	2.7	mg/kg		0.036	SW6010
DMT-38M-SOI-3839	38-39.5	ft	OXIDATION-REDUCTION POTENTIAL	11/28/2006	277	mV		0	ASTM D1498
DMT-38M-SOI-3839	38-39.5	ft	pH	11/28/2006	7.6	S.U.		0	SW9045
DMT-38M-SOI-3839	38-39.5	ft	POTASSIUM	11/28/2006	28.8	mg/kg	B	8.2	SW6010
DMT-38M-SOI-3839	38-39.5	ft	SILICON	11/28/2006	349	mg/kg		24	SW6010
DMT-38M-SOI-3839	38-39.5	ft	SODIUM	11/28/2006	133	mg/kg	B	92	SW6010
DMT-38M-SOI-3839	38-39.5	ft	SULFATE	11/28/2006	68	mg/kg	B	4.2	E300.0

Attachment 4
Intermediate Zone Soil Data
Dundalk Marine Terminal, Baltimore Maryland

Field Sample ID	Sample Interval	Depth Units	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Analytical Method
DMT-38M-SOI-3839	38-39.5	ft	TITANIUM	11/28/2006	27.4	mg/kg		0.23	SW6010
DMT-38M-SOI-3839	38-39.5	ft	TOTAL CARBON	11/28/2006	1200	mg/kg	U	570	SW9060
DMT-38M-SOI-3839	38-39.5	ft	TOTAL INORGANIC CARBON	11/28/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-3839	38-39.5	ft	TOTAL ORGANIC CARBON	11/28/2006	1200	mg/kg	U	320	SW9060
DMT-38M-SOI-3839	38-39.5	ft	VANADIUM	11/28/2006	6.1	mg/kg		0.16	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	ALKALINITY, CARBONATE (AS CaCO3)	11/28/2006	39.2	mg/kg	B	22	E310.1
DMT-38M-SOI-4848	48.05-48.5	ft	ALUMINUM	11/28/2006	295	mg/kg		2.8	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	CALCIUM	11/28/2006	88	mg/kg	B	13	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	CARBONATE ALKALINITY	11/28/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-4848	48.05-48.5	ft	CHROMIUM	11/28/2006	5.3	mg/kg		0.21	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	HEXAVALENT CHROMIUM	11/28/2006	0.67	mg/kg	J	0.46	SW7199
DMT-38M-SOI-4848	48.05-48.5	ft	IRON	11/28/2006	3230	mg/kg		5.2	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	MAGNESIUM	11/28/2006	36.1	mg/kg	B	0.7	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	MANGANESE	11/28/2006	4.8	mg/kg		0.037	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	OXIDATION-REDUCTION POTENTIAL	11/28/2006	292	mV		0	ASTM D1498
DMT-38M-SOI-4848	48.05-48.5	ft	pH	11/28/2006	7.6	S.U.		0	SW9045
DMT-38M-SOI-4848	48.05-48.5	ft	POTASSIUM	11/28/2006	620	mg/kg	U	8.3	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	SILICON	11/28/2006	204	mg/kg		25	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	SODIUM	11/28/2006	141	mg/kg	B	93	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	SULFATE	11/28/2006	131	mg/kg		4.2	E300.0
DMT-38M-SOI-4848	48.05-48.5	ft	TITANIUM	11/28/2006	15.2	mg/kg		0.23	SW6010
DMT-38M-SOI-4848	48.05-48.5	ft	TOTAL CARBON	11/28/2006	1020	mg/kg	B	580	SW9060
DMT-38M-SOI-4848	48.05-48.5	ft	TOTAL INORGANIC CARBON	11/28/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-4848	48.05-48.5	ft	TOTAL ORGANIC CARBON	11/28/2006	1200	mg/kg	U	330	SW9060
DMT-38M-SOI-4848	48.05-48.5	ft	VANADIUM	11/28/2006	9.4	mg/kg		0.16	SW6010
DMT-38M-SOI-5759	57-59	ft	ALKALINITY, CARBONATE (AS CaCO3)	12/12/2006	24.5	mg/kg	B	22	E310.1
DMT-38M-SOI-5759	57-59	ft	ALUMINUM	12/12/2006	489	mg/kg		2.5	SW6010
DMT-38M-SOI-5759	57-59	ft	CALCIUM	12/12/2006	123	mg/kg	B	12	SW6010
DMT-38M-SOI-5759	57-59	ft	CARBONATE ALKALINITY	12/12/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-5759	57-59	ft	CHROMIUM	12/12/2006	3.2	mg/kg		0.19	SW6010
DMT-38M-SOI-5759	57-59	ft	HEXAVALENT CHROMIUM	12/12/2006	0.9	mg/kg	U	0.43	SW7199
DMT-38M-SOI-5759	57-59	ft	IRON	12/12/2006	615	mg/kg		4.6	SW6010
DMT-38M-SOI-5759	57-59	ft	MAGNESIUM	12/12/2006	46.9	mg/kg	B	0.63	SW6010
DMT-38M-SOI-5759	57-59	ft	MANGANESE	12/12/2006	1.6	mg/kg	B	0.033	SW6010
DMT-38M-SOI-5759	57-59	ft	OXIDATION-REDUCTION POTENTIAL	12/12/2006	264	mV		0	ASTM D1498

Attachment 4
Intermediate Zone Soil Data
Dundalk Marine Terminal, Baltimore Maryland

Field Sample ID	Sample Interval	Depth Units	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Analytical Method
DMT-38M-SOI-5759	57-59	ft	pH	12/12/2006	8.8	S.U.		0	SW9045
DMT-38M-SOI-5759	57-59	ft	POTASSIUM	12/12/2006	20.5	mg/kg	B	7.4	SW6010
DMT-38M-SOI-5759	57-59	ft	SILICON	12/12/2006	258	mg/kg		22	SW6010
DMT-38M-SOI-5759	57-59	ft	SODIUM	12/12/2006	98.2	mg/kg	B	84	SW6010
DMT-38M-SOI-5759	57-59	ft	SULFATE	12/12/2006	23.8	mg/kg	B	3.9	E300.0
DMT-38M-SOI-5759	57-59	ft	TITANIUM	12/12/2006	14	mg/kg		0.21	SW6010
DMT-38M-SOI-5759	57-59	ft	TOTAL CARBON	12/12/2006	1100	mg/kg	U	530	SW9060
DMT-38M-SOI-5759	57-59	ft	TOTAL INORGANIC CARBON	12/12/2006	2200	mg/kg	U	2200	SW9060
DMT-38M-SOI-5759	57-59	ft	TOTAL ORGANIC CARBON	12/12/2006	1100	mg/kg	U	300	SW9060
DMT-38M-SOI-5759	57-59	ft	VANADIUM	12/12/2006	3.4	mg/kg	B	0.14	SW6010
DMT-38M-SOI-6769	67-69	ft	ALKALINITY, CARBONATE (AS CaCO3)	12/12/2006	59	mg/kg		22	E310.1
DMT-38M-SOI-6769	67-69	ft	ALUMINUM	12/12/2006	2660	mg/kg		2.7	SW6010
DMT-38M-SOI-6769	67-69	ft	CALCIUM	12/12/2006	153	mg/kg	B	13	SW6010
DMT-38M-SOI-6769	67-69	ft	CARBONATE ALKALINITY	12/12/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-6769	67-69	ft	CHROMIUM	12/12/2006	14.8	mg/kg		0.2	SW6010
DMT-38M-SOI-6769	67-69	ft	HEXAVALENT CHROMIUM	12/12/2006	1.5	mg/kg		0.47	SW7199
DMT-38M-SOI-6769	67-69	ft	IRON	12/12/2006	3300	mg/kg		5	SW6010
DMT-38M-SOI-6769	67-69	ft	MAGNESIUM	12/12/2006	54.8	mg/kg	B	0.68	SW6010
DMT-38M-SOI-6769	67-69	ft	MANGANESE	12/12/2006	1.1	mg/kg	B	0.036	SW6010
DMT-38M-SOI-6769	67-69	ft	OXIDATION-REDUCTION POTENTIAL	12/12/2006	191	mV		0	ASTM D1498
DMT-38M-SOI-6769	67-69	ft	pH	12/12/2006	6.31	S.U.		0	SW9045
DMT-38M-SOI-6769	67-69	ft	POTASSIUM	12/12/2006	352	mg/kg	B	8.1	SW6010
DMT-38M-SOI-6769	67-69	ft	SILICON	12/12/2006	417	mg/kg		24	SW6010
DMT-38M-SOI-6769	67-69	ft	SODIUM	12/12/2006	95.7	mg/kg	B	91	SW6010
DMT-38M-SOI-6769	67-69	ft	SULFATE	12/12/2006	14.6	mg/kg	B	4.2	E300.0
DMT-38M-SOI-6769	67-69	ft	TITANIUM	12/12/2006	14.7	mg/kg		0.23	SW6010
DMT-38M-SOI-6769	67-69	ft	TOTAL CARBON	12/12/2006	1200	mg/kg	U	570	SW9060
DMT-38M-SOI-6769	67-69	ft	TOTAL INORGANIC CARBON	12/12/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-6769	67-69	ft	TOTAL ORGANIC CARBON	12/12/2006	1200	mg/kg	U	320	SW9060
DMT-38M-SOI-6769	67-69	ft	VANADIUM	12/12/2006	20.5	mg/kg		0.16	SW6010
DMT-38M-SOI-7777	77-77.9	ft	ALKALINITY, CARBONATE (AS CaCO3)	12/12/2006	69.6	mg/kg		22	E310.1
DMT-38M-SOI-7777	77-77.9	ft	ALUMINUM	12/12/2006	2240	mg/kg		2.7	SW6010
DMT-38M-SOI-7777	77-77.9	ft	CALCIUM	12/12/2006	644	mg/kg		13	SW6010
DMT-38M-SOI-7777	77-77.9	ft	CARBONATE ALKALINITY	12/12/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-7777	77-77.9	ft	CHROMIUM	12/12/2006	10	mg/kg		0.21	SW6010

Attachment 4
Intermediate Zone Soil Data
Dundalk Marine Terminal, Baltimore Maryland

Field Sample ID	Sample Interval	Depth Units	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Analytical Method
DMT-38M-SOI-7777	77-77.9	ft	HEXAVALENT CHROMIUM	12/12/2006	1.4	mg/kg		0.47	SW7199
DMT-38M-SOI-7777	77-77.9	ft	IRON	12/12/2006	2280	mg/kg		5.1	SW6010
DMT-38M-SOI-7777	77-77.9	ft	MAGNESIUM	12/12/2006	101	mg/kg	B	0.69	SW6010
DMT-38M-SOI-7777	77-77.9	ft	MANGANESE	12/12/2006	5.3	mg/kg		0.036	SW6010
DMT-38M-SOI-7777	77-77.9	ft	OXIDATION-REDUCTION POTENTIAL	12/12/2006	361	mV		0	ASTM D1498
DMT-38M-SOI-7777	77-77.9	ft	pH	12/12/2006	8.23	S.U.		0	SW9045
DMT-38M-SOI-7777	77-77.9	ft	POTASSIUM	12/12/2006	286	mg/kg	B	8.1	SW6010
DMT-38M-SOI-7777	77-77.9	ft	SILICON	12/12/2006	432	mg/kg		24	SW6010
DMT-38M-SOI-7777	77-77.9	ft	SODIUM	12/12/2006	1200	mg/kg	U	92	SW6010
DMT-38M-SOI-7777	77-77.9	ft	SULFATE	12/12/2006	69.5	mg/kg	B	4.1	E300.0
DMT-38M-SOI-7777	77-77.9	ft	TITANIUM	12/12/2006	25	mg/kg		0.23	SW6010
DMT-38M-SOI-7777	77-77.9	ft	TOTAL CARBON	12/12/2006	1200	mg/kg	U	560	SW9060
DMT-38M-SOI-7777	77-77.9	ft	TOTAL INORGANIC CARBON	12/12/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-7777	77-77.9	ft	TOTAL ORGANIC CARBON	12/12/2006	1200	mg/kg	U	320	SW9060
DMT-38M-SOI-7777	77-77.9	ft	VANADIUM	12/12/2006	21.9	mg/kg		0.16	SW6010
DMT-38M-SOI-8787	87-87.5	ft	ALKALINITY, CARBONATE (AS CaCO ₃)	12/13/2006	187	mg/kg		22	E310.1
DMT-38M-SOI-8787	87-87.5	ft	ALUMINUM	12/13/2006	336	mg/kg		2.8	SW6010
DMT-38M-SOI-8787	87-87.5	ft	CALCIUM	12/13/2006	322	mg/kg	B	14	SW6010
DMT-38M-SOI-8787	87-87.5	ft	CARBONATE ALKALINITY	12/13/2006	14.7	mg/kg	B	50	SM4500-CO2D
DMT-38M-SOI-8787	87-87.5	ft	CHROMIUM	12/13/2006	2.9	mg/kg		0.21	SW6010
DMT-38M-SOI-8787	87-87.5	ft	HEXAVALENT CHROMIUM	12/13/2006	1	mg/kg	U	0.48	SW7199
DMT-38M-SOI-8787	87-87.5	ft	IRON	12/13/2006	702	mg/kg		5.3	SW6010
DMT-38M-SOI-8787	87-87.5	ft	MAGNESIUM	12/13/2006	21.4	mg/kg	B	0.71	SW6010
DMT-38M-SOI-8787	87-87.5	ft	MANGANESE	12/13/2006	2.3	mg/kg		0.038	SW6010
DMT-38M-SOI-8787	87-87.5	ft	OXIDATION-REDUCTION POTENTIAL	12/13/2006	188	mV		0	ASTM D1498
DMT-38M-SOI-8787	87-87.5	ft	pH	12/13/2006	11.02	S.U.		0	SW9045
DMT-38M-SOI-8787	87-87.5	ft	POTASSIUM	12/13/2006	19.3	mg/kg	B	8.4	SW6010
DMT-38M-SOI-8787	87-87.5	ft	SILICON	12/13/2006	230	mg/kg		25	SW6010
DMT-38M-SOI-8787	87-87.5	ft	SODIUM	12/13/2006	114	mg/kg	B	95	SW6010
DMT-38M-SOI-8787	87-87.5	ft	SULFATE	12/13/2006	45.8	mg/kg	B	4.2	E300.0
DMT-38M-SOI-8787	87-87.5	ft	TITANIUM	12/13/2006	23.2	mg/kg		0.24	SW6010
DMT-38M-SOI-8787	87-87.5	ft	TOTAL CARBON	12/13/2006	1200	mg/kg	U	570	SW9060
DMT-38M-SOI-8787	87-87.5	ft	TOTAL INORGANIC CARBON	12/13/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-8787	87-87.5	ft	TOTAL ORGANIC CARBON	12/13/2006	453	mg/kg	B	320	SW9060
DMT-38M-SOI-8787	87-87.5	ft	VANADIUM	12/13/2006	6	mg/kg	B	0.16	SW6010

Attachment 4
Intermediate Zone Soil Data
Dundalk Marine Terminal, Baltimore Maryland

Field Sample ID	Sample Interval	Depth Units	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Analytical Method
DMT-38M-SOI-107107	107-107.9	ft	ALKALINITY, CARBONATE (AS CaCO ₃)	12/13/2006	50	mg/kg	U	22	E310.1
DMT-38M-SOI-107107	107-107.9	ft	ALUMINUM	12/13/2006	1840	mg/kg		2.6	SW6010
DMT-38M-SOI-107107	107-107.9	ft	CALCIUM	12/13/2006	144	mg/kg	B	12	SW6010
DMT-38M-SOI-107107	107-107.9	ft	CARBONATE ALKALINITY	12/13/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-107107	107-107.9	ft	CHROMIUM	12/13/2006	7.2	mg/kg		0.2	SW6010
DMT-38M-SOI-107107	107-107.9	ft	HEXAVALENT CHROMIUM	12/13/2006	0.57	mg/kg	J	0.46	SW7199
DMT-38M-SOI-107107	107-107.9	ft	IRON	12/13/2006	688	mg/kg		4.8	SW6010
DMT-38M-SOI-107107	107-107.9	ft	MAGNESIUM	12/13/2006	53.9	mg/kg	B	0.66	SW6010
DMT-38M-SOI-107107	107-107.9	ft	MANGANESE	12/13/2006	2.1	mg/kg		0.035	SW6010
DMT-38M-SOI-107107	107-107.9	ft	OXIDATION-REDUCTION POTENTIAL	12/13/2006	378	mV		0	ASTM D1498
DMT-38M-SOI-107107	107-107.9	ft	pH	12/13/2006	5.85	S.U.		0	SW9045
DMT-38M-SOI-107107	107-107.9	ft	POTASSIUM	12/13/2006	273	mg/kg	B	7.7	SW6010
DMT-38M-SOI-107107	107-107.9	ft	SILICON	12/13/2006	372	mg/kg		23	SW6010
DMT-38M-SOI-107107	107-107.9	ft	SODIUM	12/13/2006	1200	mg/kg	U	87	SW6010
DMT-38M-SOI-107107	107-107.9	ft	SULFATE	12/13/2006	120	mg/kg	U	4	E300.0
DMT-38M-SOI-107107	107-107.9	ft	TITANIUM	12/13/2006	30.6	mg/kg		0.22	SW6010
DMT-38M-SOI-107107	107-107.9	ft	TOTAL CARBON	12/13/2006	1200	mg/kg	U	550	SW9060
DMT-38M-SOI-107107	107-107.9	ft	TOTAL INORGANIC CARBON	12/13/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-107107	107-107.9	ft	TOTAL ORGANIC CARBON	12/13/2006	1200	mg/kg	U	310	SW9060
DMT-38M-SOI-107107	107-107.9	ft	VANADIUM	12/13/2006	6.3	mg/kg		0.15	SW6010
DMT-38M-SOI-117118	117-118	ft	ALKALINITY, CARBONATE (AS CaCO ₃)	12/13/2006	93.5	mg/kg		22	E310.1
DMT-38M-SOI-117118	117-118	ft	ALUMINUM	12/13/2006	425	mg/kg		2.6	SW6010
DMT-38M-SOI-117118	117-118	ft	CALCIUM	12/13/2006	196	mg/kg	B	12	SW6010
DMT-38M-SOI-117118	117-118	ft	CARBONATE ALKALINITY	12/13/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-117118	117-118	ft	CHROMIUM	12/13/2006	2.9	mg/kg		0.2	SW6010
DMT-38M-SOI-117118	117-118	ft	HEXAVALENT CHROMIUM	12/13/2006	0.95	mg/kg	U	0.45	SW7199
DMT-38M-SOI-117118	117-118	ft	IRON	12/13/2006	2920	mg/kg		4.8	SW6010
DMT-38M-SOI-117118	117-118	ft	MAGNESIUM	12/13/2006	19.3	mg/kg	B	0.66	SW6010
DMT-38M-SOI-117118	117-118	ft	MANGANESE	12/13/2006	2.1	mg/kg		0.035	SW6010
DMT-38M-SOI-117118	117-118	ft	OXIDATION-REDUCTION POTENTIAL	12/13/2006	317	mV		0	ASTM D1498
DMT-38M-SOI-117118	117-118	ft	pH	12/13/2006	9.11	S.U.		0	SW9045
DMT-38M-SOI-117118	117-118	ft	POTASSIUM	12/13/2006	60.5	mg/kg	B	7.8	SW6010
DMT-38M-SOI-117118	117-118	ft	SILICON	12/13/2006	166	mg/kg		23	SW6010
DMT-38M-SOI-117118	117-118	ft	SODIUM	12/13/2006	123	mg/kg	B	87	SW6010
DMT-38M-SOI-117118	117-118	ft	SULFATE	12/13/2006	52.9	mg/kg	B	4.2	E300.0

Attachment 4
Intermediate Zone Soil Data
Dundalk Marine Terminal, Baltimore Maryland

Field Sample ID	Sample Interval	Depth Units	Parameter Name	Date Sampled	Report Result	Report Units	Validation Qualifier	Report Detection Limit	Analytical Method
DMT-38M-SOI-117118	117-118	ft	TOTAL CARBON	12/13/2006	1200	mg/kg	U	570	SW9060
DMT-38M-SOI-117118	117-118	ft	TOTAL INORGANIC CARBON	12/13/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-117118	117-118	ft	TOTAL ORGANIC CARBON	12/13/2006	337	mg/kg	B	320	SW9060
DMT-38M-SOI-117118	117-118	ft	VANADIUM	12/13/2006	23.4	mg/kg		0.15	SW6010
DMT-38M-SOI-120121	120-121	ft	ALKALINITY, CARBONATE (AS CaCO ₃)	12/13/2006	50	mg/kg	U	22	E310.1
DMT-38M-SOI-120121	120-121	ft	ALUMINUM	12/13/2006	2800	mg/kg		2.7	SW6010
DMT-38M-SOI-120121	120-121	ft	CALCIUM	12/13/2006	129	mg/kg	B	13	SW6010
DMT-38M-SOI-120121	120-121	ft	CARBONATE ALKALINITY	12/13/2006	50	mg/kg	UB	50	SM4500-CO2D
DMT-38M-SOI-120121	120-121	ft	CHROMIUM	12/13/2006	12.6	mg/kg		0.2	SW6010
DMT-38M-SOI-120121	120-121	ft	HEXAVALENT CHROMIUM	12/13/2006	0.76	mg/kg	J	0.46	SW7199
DMT-38M-SOI-120121	120-121	ft	IRON	12/13/2006	1500	mg/kg		5	SW6010
DMT-38M-SOI-120121	120-121	ft	MAGNESIUM	12/13/2006	99.9	mg/kg	B	0.68	SW6010
DMT-38M-SOI-120121	120-121	ft	MANGANESE	12/13/2006	4	mg/kg		0.036	SW6010
DMT-38M-SOI-120121	120-121	ft	OXIDATION-REDUCTION POTENTIAL	12/13/2006	548	mV		0	ASTM D1498
DMT-38M-SOI-120121	120-121	ft	pH	12/13/2006	5.05	S.U.		0	SW9045
DMT-38M-SOI-120121	120-121	ft	POTASSIUM	12/13/2006	871	mg/kg		8	SW6010
DMT-38M-SOI-120121	120-121	ft	SILICON	12/13/2006	234	mg/kg		24	SW6010
DMT-38M-SOI-120121	120-121	ft	SODIUM	12/13/2006	106	mg/kg	B	91	SW6010
DMT-38M-SOI-120121	120-121	ft	SULFATE	12/13/2006	5.6	mg/kg	B	4	E300.0
DMT-38M-SOI-120121	120-121	ft	TOTAL CARBON	12/13/2006	1530	mg/kg		540	SW9060
DMT-38M-SOI-120121	120-121	ft	TOTAL INORGANIC CARBON	12/13/2006	2400	mg/kg	U	2400	SW9060
DMT-38M-SOI-120121	120-121	ft	TOTAL ORGANIC CARBON	12/13/2006	1270	mg/kg		310	SW9060
DMT-38M-SOI-120121	120-121	ft	VANADIUM	12/13/2006	9	mg/kg		0.16	SW6010

Notes:

J = Reported result is estimated.

B = Indicated reported result is associated with possible blank contamination.

U = Analyte not detected above the reported detection limit.