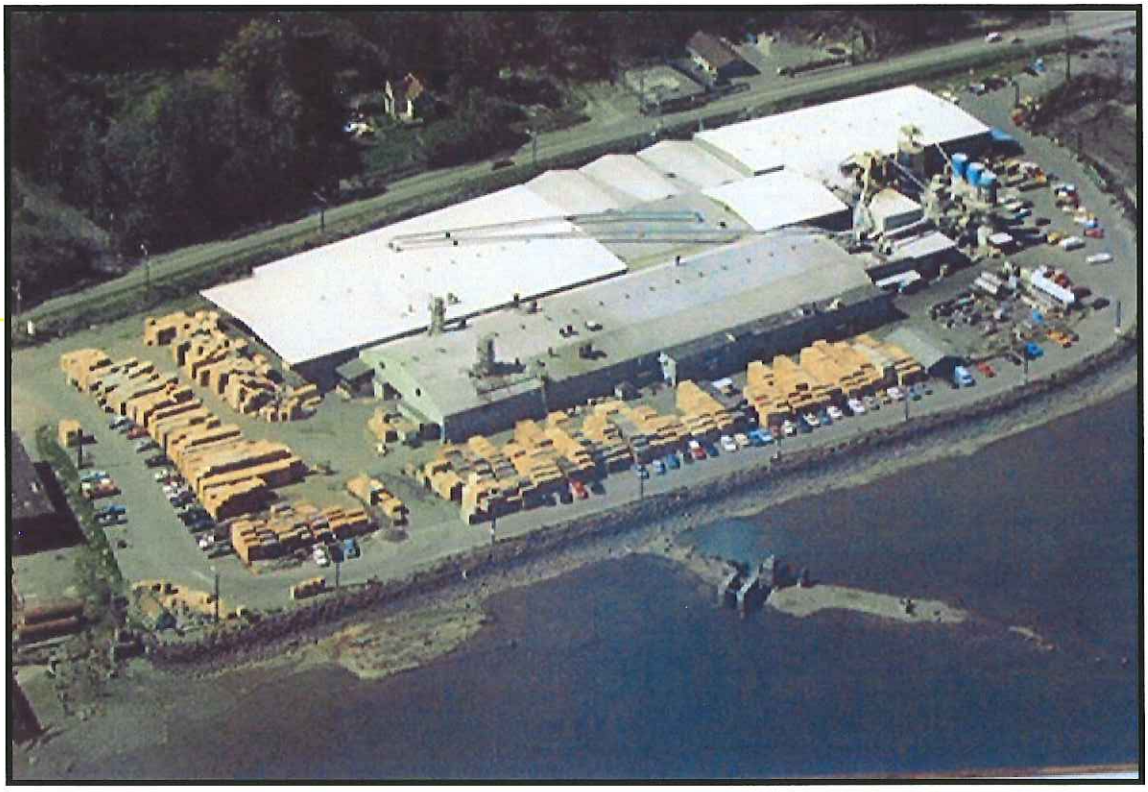
Former Hardel Mutual Plywood Site
1210 West Bay Drive NW
Olympia, Washington

Post - Construction Quarterly Groundwater Monitoring Report



September 22, 2011

Prepared For: Hardel Mutual Plywood Corporation

Prepared By:

GREYLOCK CONSULTING LLC

GC Project No. 0401.4

TABLE OF CONTENTS

Attachments:

1.0 INTRODUCTION

This report documents the results of the third round of quarterly compliance monitoring for groundwater at the former Hardel Mutual Plywood Site, located at 1210 West Bay Drive NW in Olympia, Washington (Figure 1).

The goal of the quarterly groundwater monitoring is to evaluate the long-term effectiveness of the Interim Action cleanup that was completed in October, 2010. Nine monitoring wells from within and down gradient of excavated areas were sampled, and groundwater flow direction and gradient were assessed.

1.1 Site Description

The Former Hardel Mutual Plywood Site (Site) is located at 1210 West Bay Drive NW in Olympia, Washington (Thurston County tax parcel numbers 72600200100 & 91013100000). The property is 17.8 acres in size, consisting of approximately 6.7 acres of uplands and 11.1 acres of tide lands. The upland portion of the property consists primarily of crushed concrete surfacing and asphalt pavement. The property is generally level. It is bordered to the north by Budd Inlet and the former Delson Lumber Site, to the south by the former Reliable Steel Site, to the west by West Bay Drive NW and residential/commercial properties, and to the east by Budd Inlet. The Site is presently vacant.

1.2 Project Background

An Interim Action cleanup which included the excavation of diesel/heavy oil-impacted soils at the Site, was conducted between June and October of 2010 (Greylock, 2010). Greylock staff observed the direct excavation by Wyser Construction of diesel/heavy oil-impacted soils from a total of three areas on the Site in July-September 2010.

Approximately 23,331 tons of diesel/heavy oil-impacted soil and debris was excavated and transported off-site by Envirocon Trucking and Rock-On Trucking to Weyerhauser's permitted landfill in Cowlitz County, Washington.

Treated water from the work area was discharged to the sanitary sewer system between July 9th and September 21st, 2010 in accordance with the LOTT "Discharge Authorization Letter".

The Interim Action report concluded that the removal of free product, the removal of contaminated groundwater, and the removal of diesel/heavy oil-impacted soil in the three

excavated areas was successful in achieving compliance with the Model Toxics Control Act (MTCA) target soil cleanup levels.

Six of the groundwater monitoring wells previously installed at the site by Greylock were decommissioned by ESN Northwest during the Interim Action to accommodate soil excavation activities. The decommissioned wells included MW-1, MW-4, MW-5, MW-7, MW-8, and MW-9. The previously installed monitoring wells MW-2, MW-3, and MW-6 remained intact at the Site. Five new compliance monitoring wells were installed at the site in November, 2010 for post-construction groundwater monitoring (MW-10, through MW-15). Approximate monitoring well locations are shown on Figure 2.

1.3 Purpose

The purpose of this assessment was to acquire groundwater samples from the nine wells for laboratory analyses using low flow purging techniques, to determine groundwater flow direction and gradient, and to determine if groundwater analytical results were in compliance with site cleanup standards. Groundwater samples were submitted to the ESN Northwest's laboratory for the following analyses:

- Total Petroleum Hydrocarbons as Diesel and Motor Oil using Method NWTPH-Dx and
- Polyaromatic Hydrocarbons (PAHs) using EPA Method 8270.

2.0 FIELD ACTIVITIES

2.1 Water Level Measurements

Water levels were measured using a well probe at all nine well locations on August 25, 2011. Water level measurements are provided in Table 1. Shallow groundwater at the site occurred at depths ranging from 2.81 to 4.31 ft below the top of casing (TOC) of monitoring wells.

MW-2, -14, -12, -6, and -10 were filled with surface water upon removing the monument's lids. Surface water was removed from the monument until the water level was below the top of the well casing prior to removing the well cap.

Figure 3 shows the groundwater flow direction across the site on August 25, 2011. In general, groundwater flow is from west to east/southeast across the site.

At the northern part of the site, groundwater flow is to the east with a gradient of approximately 0.03 ft per ft near MW-12. At the southern part of the site, groundwater flow is to the east-

southeast with a gradient of approximately 0.005 ft per ft near MW-3. The groundwater gradient is steepest along the western boundary of the site, and flattens out across the center of the site.

2.2 Groundwater Sampling

Groundwater samples were collected from nine onsite monitoring wells using a peristaltic pump. The wells were purged under low flow conditions until field parameters such as dissolved oxygen, turbidity, temperature, conductivity, and pH reached relatively constant values. Field parameters were measured with a YSI 6820 V2 Multi-meter fitted with a flow through cell. Once field parameters stabilized, the flow through cell was disconnected and the sample containers were filled directly from the tubing. New tubing was used for each groundwater sample.

All samples were collected in accordance with Greylock's standard operating and decontamination procedures. Samples were collected with gloved hands. New nitrile gloves were worn at each sample location. Samples were placed in preconditioned sterilized-containers provided by ESN Northwest, an Ecology accredited analytical laboratory. Samples were stored on ice in a sealed cooler and transported directly to ESN Northwest in Olympia, Washington in this condition.

No sediment was observed in any of the groundwater samples collected.

3.0 ANALYTICAL LABORATORY RESULTS

Groundwater samples were submitted to ESN Northwest, Inc. in Olympia, Washington for laboratory testing as outlined below.

1. Total Petroleum Hydrocarbons by Ecology Method NWTPHD-Dx, and
2. Polyaromatic Hydrocarbons by EPA Method 8270.

Analytical test reports are included in Appendix A. Table 2 compares the results against published Model Toxics Control Act (MTCA) Method A or Method B Cleanup Levels (CLARC, 2011). MTCA Method A cleanup levels were used for screening when available. MTCA Method B Cleanup Levels were used for screening when no Method A Levels were available.

3.1 NWTPH-Dx Results

The NWTPH-Dx Method provides analytical results for diesel and heavy oil range total petroleum hydrocarbons. All nine of the collected groundwater samples analyzed by this method revealed no detectable concentrations above the laboratory's lower reporting limits.

3.2 PAH Results

The EPA 8270 Method provides analytical results for polyaromatic hydrocarbons (PAHs). Groundwater samples from the wells indicated that four wells had no detectable concentrations above the laboratory's reporting limit of 0.1 ug/L. Flourene was detected at MW-2 at 0.6 ug/L, MW-3 at 0.4 ug/L. Flouranthene was detected at MW-10 at 0.4 ug/L, and MW-15 at 0.2 ug/L. 1-Methylnaphthalene was detected at MW-2 at 0.6 ug/L, MW-3 at 0.9 ug/L, MW-10 at 1.0 ug/L, and MW-11 at 0.4 ug/L. 2-Methylnaphthalene was detected at MW-2 at 0.2 ug/L, MW-3 at 0.7 ug/L, MW-10 at 1.4 ug/L, and MW-11 at 0.3 ug/L. Phenanthrene was detected at MW-2 at 0.2 ug/L. Pyrene was detected at MW-10 at 0.2 ug/L, and MW-15 at 0.1 ug/L.

The reported PAH concentrations were below the published WDOE target Method B cleanup standard for Flourene at 640 ug/L, Flouranthene at 640 ug/L, 2-Methylnaphthalene at 32 ug/L, and Pyrene at 480 ug/L. 2-Methylnaphthalene and Phenanthrene cleanup standards are listed as Not Published in the Clean up Levels and Risk Calculation database.

No carcinogenic PAHs by test method 8270 were detected above the laboratory's lower reporting limit of 0.1 ppb for all nine of the analyzed groundwater samples.

4.0 CONCLUSIONS

Based on the results of laboratory testing, groundwater at the nine monitoring well locations sampled during the fourth quarterly "compliance monitoring" event is compliant with Ecology's target Method A or Method B groundwater cleanup levels for diesel/heavy oil-range total-petroleum hydrocarbons and polynuclear aromatic hydrocarbons (PAHs). No carcinogenic PAHs were detected in the nine lab tested groundwater samples collected in the course of this sampling event.

The low concentrations of non-carcinogenic PAHs detected in groundwater sampled from wells MW-2, MW-3, MW-10, MW-11, and MW-15 may be attributable to the presence of remaining buried treated timber piling supports which were historically installed to provide building foundation and floor support for the former on-site plywood/lumber mill structures.

5.0 LIMITATIONS

We have prepared this report for the exclusive use of Hardel Mutual Plywood Corp. and their authorized agents and regulatory agencies as part of their evaluation of the environmental conditions of the site. This report is not intended for use by others, and the information

contained herein is not applicable to other sites. No one except Hardel Mutual Plywood Corp. and their authorized agents should rely on this report without first conferring with Greylock.

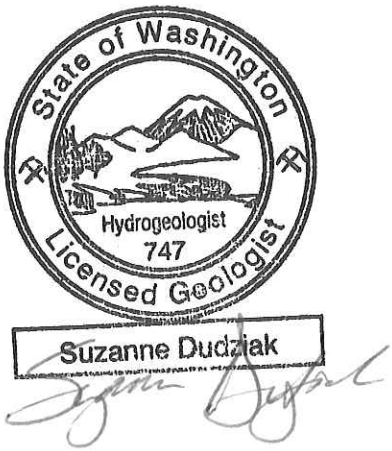
Greylock personnel performed this study in accordance with generally accepted standards of care that existed in the state of Washington at the time of this study. We make no other warranty, either expressed or implied.

This report is based on conditions that existed at the time the study was completed. The findings of this report may be affected by the passage of time or events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, or groundwater fluctuations.

If you have any questions regarding this report, please call us at (253) 661-3520.

Sincerely,
GREYLOCK CONSULTING LLC

Suzanne Dudziak, L.H.G.
Principal Hydrogeologist



6.0 REFERENCES

CLARC, 2011. *Cleanup Levels and Risk Calculations (CLARC) Washington State Department of Ecology.*

Greylock, 2010. Interim Action Closure Report, *Former Hardel Mutual Plywood Site, 1210 NW West Bay Drive, Olympia, Washington.* December 2010.

FIGURES

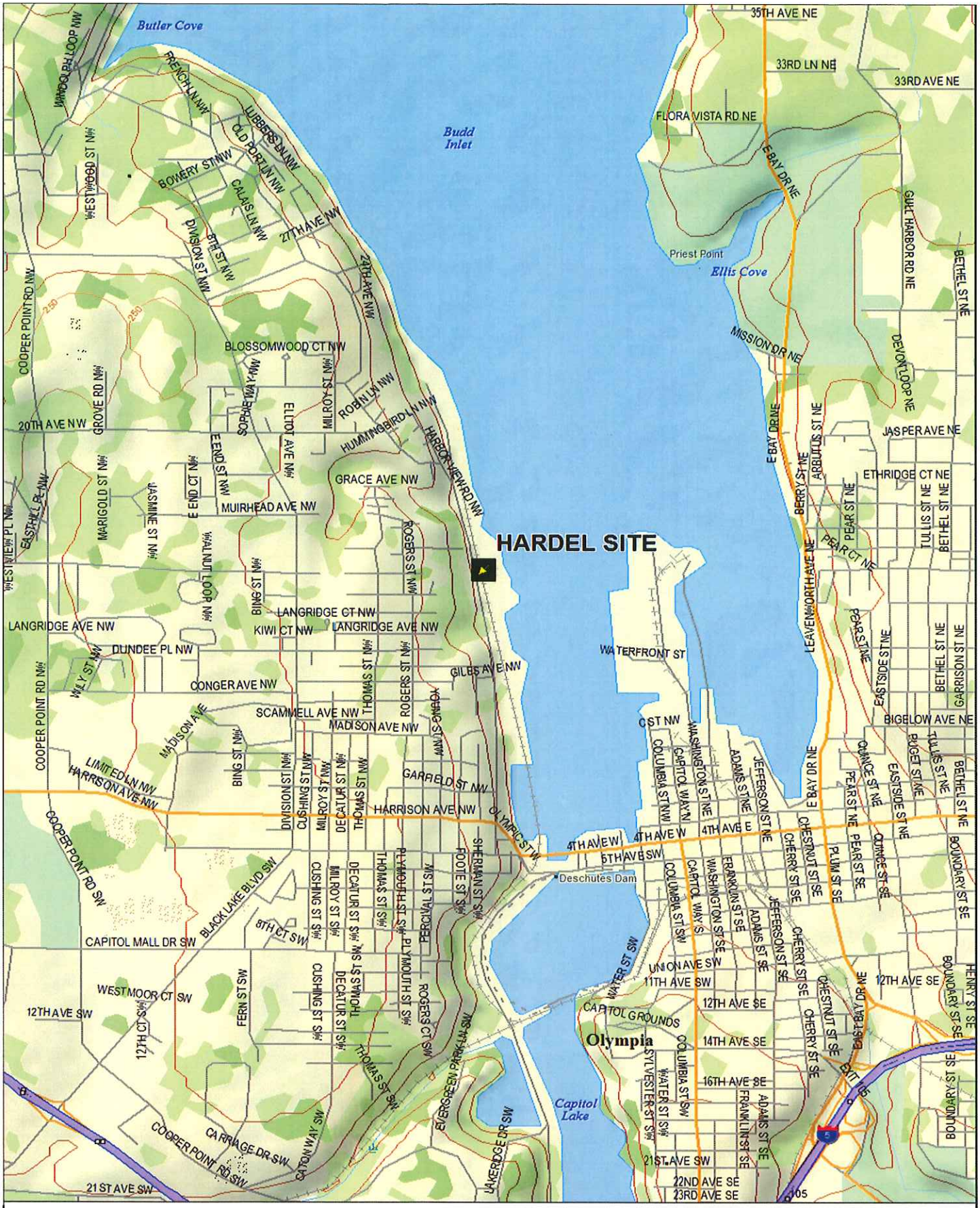
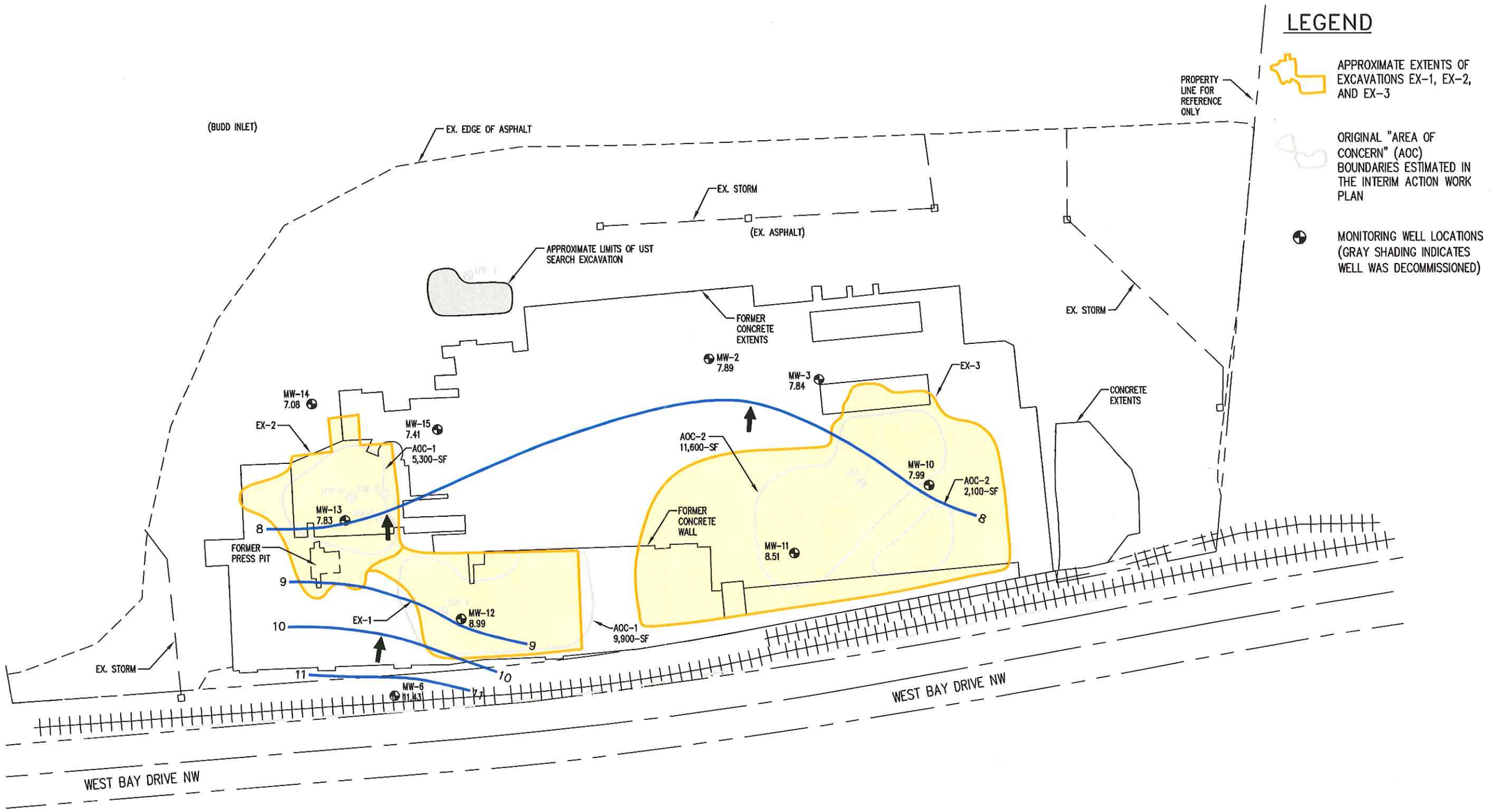


Figure 1 HARDEL SITE
1210 West Bay Drive NW, Olympia, WA 98502

MN (0.0° W)

0 800 1600 2400 3200 4000 ft
Data Zoom 13-0



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GREYLOCK CONSULTING LLC
Water Resources & Environmental Services

Modified from KPFF Demolition and Site Plan, March 2010

0 80 160
APPROXIMATE SCALE IN FEET

FIGURE 2 : INFERRED & GENERALIZED GROUNDWATER CONTOURS – AUGUST 25, 2011

Project : Hardel Mutual Plywood Site
Location : Olympia, Washington
Client : Hardel Mutual Plywood Corp.
Project No : 0401.2

TABLES

Table 1. Groundwater Elevations
Hardel Mutual Plywood Site: 1210 West Bay Drive NW, Olympia, WA

25-Aug-2011		Low Tide -0.07 ft MLLW @ 833 AM		
Station	Time	MW Elevation (ft)	Depth to Water (ft)	Groundwater Elevation (ft)
MW-2	845	11.68	3.79	7.89
MW-3	847	11.40	3.56	7.84
MW-6	916	15.74	4.31	11.43
MW-10	924	11.14	3.15	7.99
MW-11	922	11.32	2.81	8.51
MW-12	858	12.25	3.26	8.99
MW-13	855	10.95	3.12	7.83
MW-14	852	10.53	3.45	7.08
MW-15	849	11.51	4.10	7.41

Table 2: Groundwater Sampling Analytical Results

August 25, 2011 Sampling Event

Former Hardel Mutual Plywood Site, 1210 West Bay Drive NW, Olympia, WA
Test Methods: NWTPH-DX/DX Extended & EPA 8270
All results and limits in parts-per-billion (ppb) or ug/L

Test Method NWTPH-DX Extended / EPA 8270	MTCA Method A or Method B Criteria[1] (ug/L)	Sample ID: / Date Sampled:	MW-2 08/25/11	MW-3 08/25/11	MW-6 08/25/11	MW-10 08/25/11	MW-11 08/25/11	MW-12 08/25/11	MW-13 08/25/11	MW-14 08/25/11	MW-15 08/25/11
Diesel	500	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heavy Oil	500	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenapthene	960	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	NP[2]	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	4,800	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	0.1	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	640	Results (ug/L):	0.6	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	640	Results (ug/L):	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	<0.1	<0.1	0.2
Indeno(1,2,3-cd)pyrene	NP	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Napthalene	160	Results (ug/L):	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-Methylnaphthalene	NP	Results (ug/L):	0.6	0.9	<0.1	1.0	0.4	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	32	Results (ug/L):	0.2	0.7	<0.1	1.4	0.3	<0.1	<0.1	<0.1	<0.1
Phenanthrene	NP	Results (ug/L):	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	480	Results (ug/L):	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	0.1

Notes:

1- Method A soil cleanup level for unrestricted land use as published in the Model Toxics Control Act (MTCA), Chapter 173-340 WAC. MTCA Method B cleanup levels were used for screening when no Method A were available.

2- NP- Not Published: No Method A or Method B standard formula value published in CLARC database for the listed analyte.

APPENDIX A

Analytical Report

ESN NORTHWEST CHEMISTRY LABORATORY

Greylock Consulting
HARDEL MUTUAL PLYWOOD
Client Project #0401-3
Olympia, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Diesel Range Organics & Lube Oil Range Organics in Water by Method NWTPH-Dx

Sample Number	Date Prepared	Date Analyzed	Surrogate Recovery (%)	Diesel Range Organics (ug/L)	Lube Oil Range Organics (ug/L)
Method Blank	8/29/2011	8/29/2011	78%	nd	nd
MW-3	8/29/2011	8/29/2011	116%	nd	nd
MW-2	8/29/2011	8/29/2011	63%	nd	nd
MW-15	8/29/2011	8/29/2011	74%	nd	nd
MW-14	8/29/2011	8/29/2011	80%	nd	nd
MW-13	8/29/2011	8/29/2011	97%	nd	nd
MW-12	8/29/2011	8/29/2011	92%	nd	nd
MW-11	8/29/2011	8/29/2011	74%	nd	nd
MW-10	8/29/2011	8/29/2011	102%	nd	nd
MW-6	8/29/2011	8/29/2011	121%	nd	nd
Reporting Limits				250	500

"nd" Indicates not detected at the listed detection limits.
"int" Indicates that interference prevents determination.

ACCEPTABLE RECOVERY LIMITS FOR SURROGATE : 50% TO 150%
*A sample duplicate was not performed due to insufficient sample volume.

ESN NORTHWEST CHEMISTRY LABORATORY

Greylock Consulting
HARDEL MUTUAL PLYWOOD
Client Project #0401-3
Olympia, Washington

ESN Northwest
1210 Eastside Street SE Suite 200
Olympia, WA 98501
(360) 459-4670 (360) 459-3432 Fax
lab@esnnw.com

Analysis of Polynuclear Aromatic Hydrocarbons in Water by Method 8270

Analytical Results

	Reporting	MTH BLK	LCS	MW-3	MW-2	MW-15	MW-14	MW-13	MW-12	MW-11	MW-10	MW-6
Date extracted	Limits	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11
Date analyzed	(ug/L)	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11	08/29/11
Acenaphthene	0.1	nd	133%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	0.1	nd	108%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	0.1	nd	122%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene*	0.1	nd	95%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene*	0.1	nd	120%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene*	0.1	nd	96%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(ghi)perylene	0.1	nd	113%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene*	0.1	nd	99%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene*	0.1	nd	139%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)anthracene*	0.1	nd	136%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	0.1	nd	128%	**0.40**	**0.60**	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	0.1	nd	136%	nd	nd	**0.20**	nd	nd	nd	nd	**0.40**	nd
Indeno(1,2,3-cd)pyrene*	0.1	nd	137%	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	0.1	nd	117%	nd	nd	nd	nd	nd	nd	nd	nd	nd
1-Methylnaphthalene	0.1	nd	ns	**0.90**	**0.60**	nd	nd	nd	nd	**0.40**	**1.0**	nd
2-Methylnaphthalene	0.1	nd	ns	**0.70**	**0.20**	nd	nd	nd	nd	**0.30**	**1.4**	nd
Phenanthrene	0.1	nd	140%	nd	**0.20**	nd	nd	nd	nd	nd	nd	nd
Pyrene	0.1	nd	130%	nd	nd	**0.10**	nd	nd	nd	nd	**0.20**	nd
Total Carcinogens				nd	nd	nd	nd	nd	nd	nd	nd	nd
Surrogate recoveries:												
2-Fluorobiphenyl		77%	90%	122%	74%	80%	72%	65%	104%	70%	127%	109%
p-Terphenyl-d14		84%	98%	130%	77%	96%	113%	102%	102%	93%	135%	146%

Data Qualifiers and Analytical Comments

* - Carcinogenic Analyte
nd - not detected at listed reporting limits
na - not analyzed
C - coelution with sample peaks
M - matrix interference
J - estimated value
Results reported on dry-weight basis
Acceptable Recovery limits: 50% TO 150%
Acceptable RPD limit: 35%
ns- not in the spiking solution
The MS/MSD analyses were not performed due to insufficient sample volume.

ESN NORTHWEST, INC. Environmental Services Network

CHAIN-OF-CUSTODY RECORD

CLIENT: Greylock Consulting

ADDRESS: 170 333rd SE. Suite 210 Federal Way WA

PHONE: 253-661-3520 FAX:

CLIENT PROJECT #: 0401-3 PROJECT MANAGER: Suzanne Dudziak

DATE: 8-25-11 PAGE OF

PROJECT NAME: Hodel Mutual Plywood

LOCATION: 1210 W. Bay Drive

COLLECTOR: Mark Willoughby DATE OF COLLECTION 8-25-11

Sample Number	Depth	Time	Sample Type	Container Type	ANALYSES: TPH-HCID	TPH - DIESEL & OIL	TPH - GASOLINE	BTEX	VOC 8260CL	VOC 8260	SemiVol 8270	PAH's 8270	PCB's 8082	CL Pesticides 8081	RCRA 8 Metals	MTCA 5 Metals	Pb	Asbestos-PLM	GRO Suite	DRO Suite	WO Suite	NOTES	Total Number of Containers	Laboratory Note Number
1. MW-3		1011	Water	500ml amber		✓						✓												
2. MW-2		1055				✓						✓												
3. MW-15		1137				✓						✓												
4. MW-14		1216				✓						✓												
5. MW-13		1253				✓						✓												
6. MW-12		1348				✓						✓												
7. MW-11		1427				✓						✓												
8. MW-10		1510				✓						✓												
9. MW-6		1612	↓			✓						✓												
10.																								
11.																								
12.																								
13.																								
14.																								
15.																								
16.																								
17.																								
18.																								

RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME
Mark Willoughby	8-25-11	Ann Harnden	8/25/11 5:00pm
RELINQUISHED BY (Signature)	DATE/TIME	RECEIVED BY (Signature)	DATE/TIME

SAMPLE DISPOSAL INSTRUCTIONS

☐ ESN DISPOSAL @ $2.00 each ☐ Return ☐ Pickup

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS Y/N/NA	
SEALS INTACT? Y/N/NA	
RECEIVED GOOD COND./COLD	
NOTES:	

LABORATORY NOTES:

Turn Around Time: 24 HR 48 HR [5 DAY]

APPENDIX B

Well Monitoring Data Sheets

Hardel Mutual Plywood Site

Initial water levels

Date	WELL	Time	DTW (ft)	COMMENTS
8-25-11	MW-3	0847	3.56	
	MW-2	0845	3.79	Water in monument
	MW-15	0849	4.10	
	MW-14	0852	3.45	Water in monument
	MW-13	0855	3.12	
	MW-12	0858	3.26	Water in monument
	MW-6	0916	4.31	Water in monument. Path overgrown with blackberries.
	MW-11	0922	2.81	
↓	MW-10	0924	3.15	Water in monument

Greylock Consulting LLC
720 S. 333rd St. Ste 210, Federal Way, WA 98003
(253) 661-3520

Project:	Harbor Mutual Plywood	Well ID:	MW-6
Client:	Harbor Mutual Plywood Corp	Well Diameter:	
Date:	8-25-11	Well Depth:	
Sampler:	Mark Willoughby	Pump Depth:	
Depth to Product:	NA	Thickness of Product:	NA
Flow Rate:	5C/min	Measuring Point:	Top of PVC
Type of Pump:	Peristaltic		
Depth to Water	~~Pre:~~ 4.73	Post:	

Time	Temp (C) or F ± 0.2°C	pH ± 0.1	Cond. uS ± 3%	DO mg/L ± 10%	Turbidity NTUs ± 10%	Observations
1545	15.15	7.32	100	6.02	755.2	Purge brown
1549	14.76	7.35	99	7.48	660.4	
1553	14.45	7.08	97	8.48	456.7	
1557	14.20	7.04	97	9.14	324.0	Purge clearing up
1601	14.02	7.02	96	9.65	280.4	
1605	13.95	7.01	96	9.79	217.3	
1609	13.76	7.01	96	9.92	226.4	
~~1613~~						

Did well dewater? (Yes) No		Amt. actually evacuated:	2 1/2 gallons
Sampling Time:	1612	Sampling Date:	8-25-11
Sample ID:	MW-6	Laboratory:	ESN
Analyzed For:	TPH diesel/oil, PAH's		
Equip. Blank ID:			

Greylock Consulting LLC
720 S. 333rd St. Ste 210, Federal Way, WA 98003
(253) 661-3520

Project:	Hardel Mutual Plywood	Well ID:	MW-10
Client:	Hardel Mutual Plywood Corp	Well Diameter:	1"
Date:	8-25-11	Well Depth:	
Sampler:	Mark Willoughby	Pump Depth:	7'
Depth to Product:	NA	Thickness of Product:	NA
Flow Rate:	500 mL/min	Measuring Point:	Top of PVC
Type of Pump:	Peristaltic Pump		
Depth to Water	~~Pre:~~ 3.12	~~Post:~~	

Time	Temp (C) or F ± 0.2°C	pH ± 0.1	Cond. uS ± 3%	DO mg/L ± 10%	Turbidity NTUs ± 10%	Observations
1447	19.27	6.42	730	7.27	45.3	Purge slightly Cloudy
1451	18.60	6.39	573	0.79	44.7	
1455	18.06	6.43	513	0.56	24.6	
1459	18.15	6.45	496	0.47	15.3	Purge Clear
1503	18.12	6.47	480	0.41	7.5	
1507	18.13	6.48	470	0.39	5.1	

Did well dewater?	(Yes) No	Amt. actually evacuated:	3 Gallons
Sampling Time:	1510	Sampling Date:	8-25-11
Sample ID:	MW-10	Laboratory:	ESA
Analyzed For:			
Equip. Blank ID:	None		

CALIBRATION performed by: MHW		Meter serial # 10H102271	
		Pre-Measurement	
Parameter	Units	Calibrated Value	Calibration Standard
Dissolved Oxygen	(% saturation)	99.4	100.0
pH	7.00	7.00	7.00
Conductivity	uS	1413	1413
Temperature	(C)	19.94	-
Turbidity	NTU	INT: 1.2 FINAL: 0 INT: 13 FINAL: 12.7	0 12.7

Check out time / Date : 1013 / 8-17-11

Calibration notes: Meter Calibrated successfully. No bubbles under DO membrane. Membrane free of wrinkles.