REPORT
GROUND WATER MONITORING
QUARTERLY REPORT (2QTR09)
HALCO PROPERTIES, LLC
SEATTLE, WASHINGTON

June 30, 2009

5232 SHILSHOLE AVE NW, SEATTLE
11/8/2011 AV

Prepared by:
Chadrick Morse
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REPORT
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SEATTLE, WASHINGTON

1.0 INTRODUCTION

1.1 GENERAL

This report presents the results of our Second Quarter (2009) Ground Water Monitoring of the property located at 5221 Ballard Avenue NW, Seattle, Washington. The subject site currently is owned by the HALCO PROPERTIES LLC. The property is currently operated by the Salmon Bay Sand & Gravel Company. The location of the subject site relative to surrounding physical features is shown in Figure 1. The general layout of the site is shown in Figure 2.

Our monitoring studies concentrated on the existing ground water monitoring well which has historically been positive for petroleum (Gas-fraction) above MTCA Cleanup standards for groundwater..

1.2 PREVIOUS STUDIES AND HISTORICAL INFORMATION

The following reports are available for this site:

Site Assessment C&C Paint Company Report, prepared for C&C Paint Company, prepared by Bison Environmental Northwest Inc., February 19, 1991

Ballard Avenue Landmark Letter, prepared for Mr. Robert Campbell - Cowen Campbell Paint Company, prepared by Ms. Susan Kunimatsu - Ballard Avenue Landmark District Board, April 17, 1991

Buried Tanks in Alley - Cracks in Ballard Hardware South Wall Letter, prepared for Mr. E Arthur Cowman - C&C Paints, prepared by Mr. Charles E. Kitchin - Pacific Testing Laboratories, April 19, 1991

Underground Storage Tank Closure in Place Site Assessment Report - Cowman-Campbell Paint Company, prepared for Cowman-Campbell Paint Company, prepared by Bison Environmental Northwest Inc., November 30, 1992

Groundwater Survey and Monitoring Well Installation - C&C Paint Company Property, prepared for Mr. Robert D. Allen - BettsPatterson & Mines - Attorneys At Law, prepared by Mr. Henry Perrin - Columbia Environmental Inc., December 11, 1995

Phase 2 Environmental *Site* Assessment - C&C Paint Company Property, prepared for Mr. Hal Cowman - CZS Enterprises mc, prepared by Mr. Henry Perrin - Columbia Environmental Inc., February 12, 1996

Cleanup Proposal - C&C Paint Company Property, prepared for Mr. Joseph Hickey - Department of Ecology, prepared by Mr. Ronald D. Allen - Betts, Patterson & Mines, PS., May 17, 1996

Quarterly Groundwater Monitoring Report - C&C Paint Company Property, prepared for Mr. Joseph Hickey - Department of Ecology, prepared by Mr. Ronald D. Allen - Betts, Patterson & Mines, PS, July 26, 1996

Quarterly Groundwater Monitoring Report - C&C Paint Company Property, prepared for Mr. Joseph Hickey - Department of Ecology, prepared by Mr. Ronald D. Allen - Betts, Patterson & Mines, PS, October *15,* 1996

Quarterly Groundwater Monitoring Report - C&C Paint Company Property, prepared for Mr. Joseph Hickey - Department of Ecology, prepared by Mr. Ronald D. Allen - Betts, Patterson & Mines, PS, January 21, 1997

Quarterly Groundwater Monitoring Report - C&C Paint Company Property, prepared for Mr. Joseph Hickey - Department of Ecology, prepared by Mr. Ronald D. Allen - Betts, Patterson & Mines, PS, April *25,* 1997

UST Closure In Place - Site Assessment Report - C&C Paints, prepared for Mr. Hal Cowman -C&C Paint Company, prepared by Mr. Michael Lam - Nowicki & Associates, February 10, 1998

October 2000 Annual Groundwater Monitoring - C&C Paints Site, prepared for Mr. Hal Cowman, prepared by Mr. Michael Lam - Nowicki & Associates, October 28, 2000

300-Gallon Diesel Heating Oil UST Closure Site Assessment Report - C&C Paint, prepared for Mr. Hal Cowman - C&C Paint Company, prepared by Mr. Michael Lam - Nowicki & Associates, November 28, 2000

September 2002 Annual Groundwater Monitoring - C&C Paints Site, prepared for Mr. Hal Cowman, prepared by Mr. Michael Lam - Nowicki & Associates, September 26, 2002

Ground Water Monitoring, Quarterly Report 2ndQTR06, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., June 28, 2006.

Ground Water Monitoring, Quarterly Report 3rdQTR06, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., August 31, 2006.

Ground Water Monitoring, Quarterly Report 4thQTR06, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., December 12, 2006.

Ground Water Monitoring, Quarterly Report 1stQTR07, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., January 2007.

Ground Water Monitoring, Quarterly Report 2ndtQTR07, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., July 7, 2007.

Ground Water Monitoring, Quarterly Report 4thQTR07, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., November 9, 2007.

Ground Water Monitoring, Quarterly Report 1stQTR08, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., March 27, 2008.

Ground Water Monitoring, Quarterly Report 2ndQTR08, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., July 9, 2008.

Ground Water Monitoring, Quarterly Report 3rdQTR08, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., November 13, 2008.

Ground Water Monitoring, Quarterly Report 4thQTR08, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., January 20, 2009.

Ground Water Monitoring, Quarterly Report 1stQTR09, Halco Properties, LLC, Seattle Washington, prepared by Mr. Chadrick Morse, Morse Environmental, Inc., March 24, 2009.

1.3 PURPOSE AND SCOPE

The purpose of our Ground Water Monitoring was to evaluate any residual petroleum soil contamination after the removal of an Underground Storage Tank (UST).

Our specific scope of services included the following:

1. Develop a site safety plan for use by Morse Environmental staff during field activities.
2. Identify measurement of ground water level.
3. Removed (purge) stagnant water within the monitoring well using a peristaltic pump.
4. Obtain well samples using existing bailers.
5. Monitoring of pH, temperature and specific conductance.
6. Obtain one (1) Ground Water Samples for Laboratory Analysis using the NWTPH-Gas/BETX method to quantify.
7. Quarterly Report of Findings.

2.0 SITE DESCRIPTION

2.1 SURFACE CONDITIONS

The site is occupied by the Salmon Bay Sand & Gravel Company. The site is comprised of three parcels that encompass 0.51 acres; the approximate location of the on-site building is shown in Figure 2.

3.0 FINDINGS

3.1 FIELD EXPLORATIONS

Morse Environmental monitored one (1) of the ten (10) wells present on the site. All wells are accessible for testing.

3.2 SUBSURFACE CONDITIONS

3.2.1 Soil

No soil was considered in this evaluation.

3.2.2. Ground Water

Ground water sampling results appear in Table 1. The results a continued presence of hydrocarbons in the gas-solvent range in the monitoring well (MW-1) above the cleanup standard.

3.3 SUBSURFACE ENVIRONMENTAL CONDITIONS

3.3.1 Field Screening Results

Field screening was performed on wells upon arrival. The field screen results are found in Table 1.

Field screening results indicated no probable presence of volatile petroleum in the sample.

3.3.2 Soil Chemical Analyses

No soil samples were taken or analyzed

3.3.3 Ground Water Chemical Analyses

NWTPH-Gas is the qualitative and quantitative method for volatile ("gas-solvent") petroleum products in soil and water. Petroleum products applicable for this include Stoddard solvent, gasoline fractions.

4.0 CONCLUSIONS

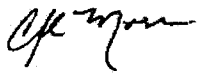
Petroleum hydrocarbons in the gas-solvent range were detected in a Monitoring Well (MW1). No Benzene was present in any of the wells. All residual concentrations (from previous testing) are below the Washington State Cleanup Standard (Method A) except for MW-1; which shows hydrocarbons in the gas range in excess of the cleanup standard.

5.0 LIMITATIONS

Morse Environmental has prepared this report in a professional manner, using the level of skill and care normally exercised for similar projects under similar conditions by reputable and competent environmental consultants currently practicing in the area, and in accordance with the directives provided by the facility management. Morse Environmental is not responsible for conditions or consequences arising from relevant facts that were not disclosed at the time of our visit. We also note that the facts and conditions referenced in this report may change over time, and that the conclusions set forth here are applicable to the facts and conditions at the time of this report. Conclusions were made within the operative constraints of the scope, budget and schedule for this project. We believe that the conditions stated here are factual, but no guarantee is made or implied.

4.0 Signature of Environmental Professional

MORSE ENVIRONMENTAL, INC.



Chadrick Morse

Principal Chemist

TABLE 1

SUMMARY OF GROUND WATER CHEMICAL ANALYTICAL RESULTS

PETROLEUM HYDROCARBONS

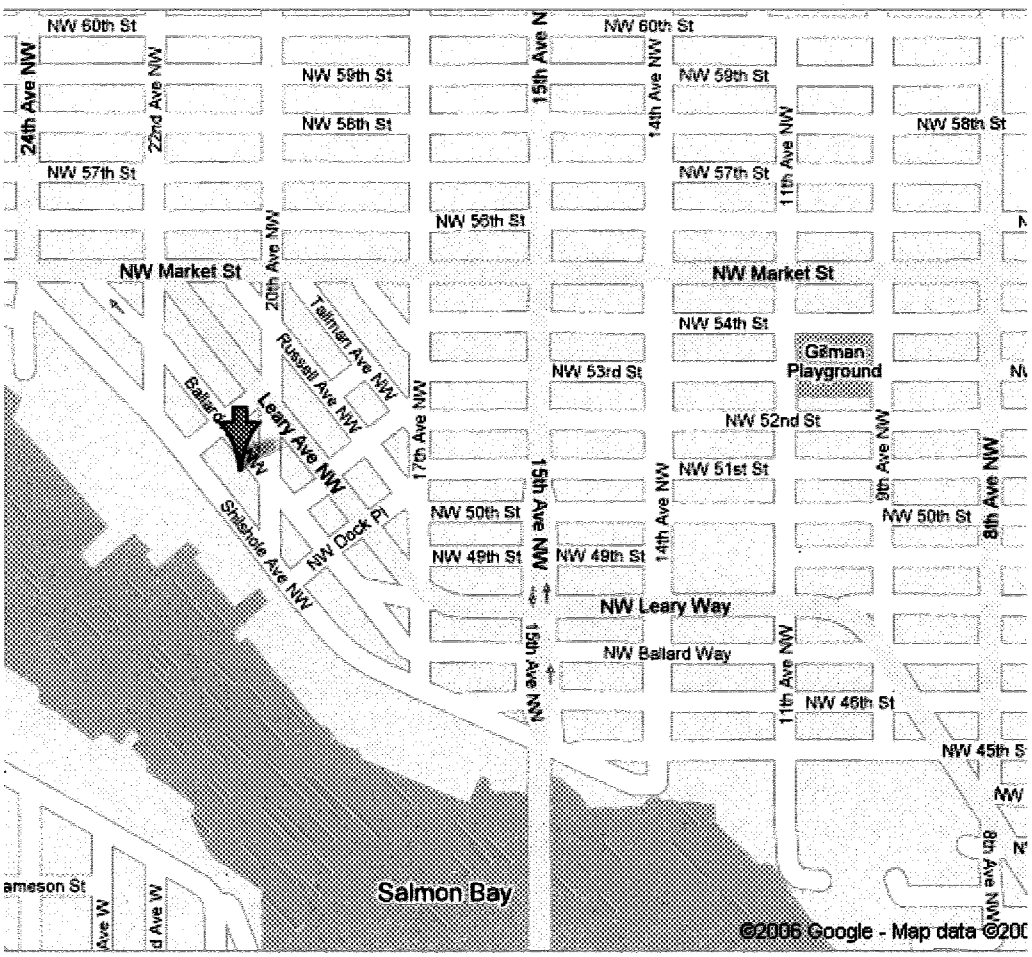
HALCO PROPERTIES LLC

Seattle, Washington

Sample Number	Depth to Water Table	Date Sampled	Sheen	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gas Range[2] Hydrocarbons
MW-1			NS	<10	<10	800	2,500	8,700
MW-2			NT	NT	NT	NT	NT	NT
MW-3			NT	NT	NT	NT	NT	NT
MW-4			NT	NT	NT	NT	NT	NT
MW-5			NT	NT	NT	NT	NT	NT
MW-6			NT	NT	NT	NT	NT	NT
MW-7			NT	NT	NT	NT	NT	NT
MW-8			NT	NT	NT	NT	NT	NT
MW-9			NT	NT	NT	NT	NT	NT
MW-10			NT	NT	NT	NT	NT	NT
MTCA Method A Cleanup[3]								1000[3]

All units in ug/L

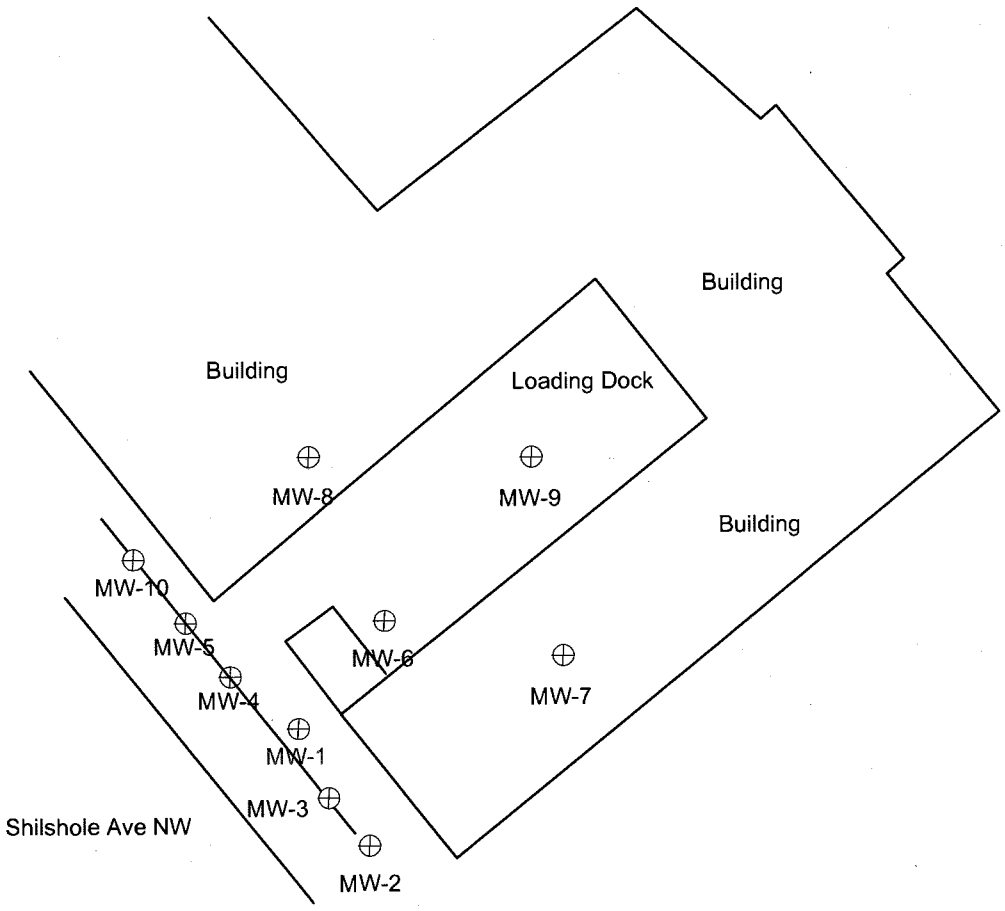
Notes:
[1] Analyzed by Ecology Method TPH-Gas/BETX for Gas-Solvent Range.
Chemical analyses conducted by Friedman & Bruya Lab, Seattle, Washington.
ND=Not Detected above respective detection limits. NT=Not Tested
[3] Gas-Solvent Range Limit When No Benzene in Water Sample is Detected.



Morse Environmental, Inc.

VICINITY MAP

FIGURE 1



Morse Environmental, Inc.

SITE PLAN

FIGURE 2.1

November 19, 2003

NOWICKI & ASSOCIATES
ENERGY & ENVIRONMENTAL MANAGEMENT

Release # 1716
Cowman Campbell Paint
Seattle.
UST # 4806

Mr. Hal Cowman
3257 26th Avenue West
Seattle, WA 98199

RE: November 2003 Annual Groundwater Monitoring
C & C Paint Site
~~5221 Ballard Avenue NW~~ 5232 SHILSHOLE AVE NW
Seattle, Washington
AH 11/8/2011

Dear Mr. Cowman:

Nowicki & Associates, Inc. (NAI) is pleased to submit this 2003 annual groundwater monitoring report for the C & C Paint property located at ~~5221 Ballard Avenue NW~~ 5232 SHILSHOLE AVE NW, Seattle, Washington.

NAI was at the above referenced site on November 14, 2003 to perform the sampling of the groundwater. The scope of work included water sample collection and report documentation. The addition of oxygen releasing compound (ORC) to treat the groundwater is also discussed in the report.

Site Background:

Six USTs were removed from the site in 1990 and mineral spirits impacted soil and groundwater were discovered. Ten monitoring wells were installed to monitor groundwater conditions. Free product was encountered after installation of MW1 in 1991. Attempts were made by Columbia Environmental Inc. (CEI) to remedy the site through free product recovery but they were unsuccessful. The work performed at the site prior to January of 1998 had been under the oversight of CEI. Nowicki & Associates assumes groundwater monitoring in January of 1998 and thereafter.

In October of 2000, a 300-gallon diesel UST located up-gradient of MW2 and MW3 along Shilshole Avenue was removed. Tank removal Site Assessment results are documented by NAI in the report dated November 28, 2000. In addition to diesel, gasoline range hydrocarbons were also detected in the contaminated soil surrounding the removed UST. Because of the presence of sewer and water lines located on the tank excavation sidewalls, contaminated soils were left in-place. The presence of underground utilities is assumed to provide a migration pathway between the monitoring well locations and the diesel tank excavated area.

Interim Remedial Activities:

As an interim remedial activity, oxygen releasing compound (ORC) socks were placed on July 25, 2001 in all monitoring wells except for MW8 and MW10, which are at the contaminant plume perimeter and have been non-detect of contaminants. ORC addition was to oxygenate the groundwater to facilitate natural microbial degradation of gasoline TPHs and BTEX. The addition of ORC appears to have a positive effect of reducing the contaminant concentrations in the monitoring wells. However, the zone of influence of ORC has not been determined.

RECEIVED
DEC 02 2003
DEPT OF ECOLOGY

33516 9th Avenue South
Building #6
Federal Way, Washington 98003
Phone: (253) 927-5233
Fax: (253) 924-0323

Due to the presence of oil sheen (assuming diesel from the former diesel UST onsite) in MW1, product removal was attempted in June of 2002. Because of the thin layer of oil sheen, a floating skimmer pump was assumed ineffective for sheen removal. Thus, as a trial attempt, product removal was completed using a portable groundwater pump, which was continuously re-adjusted to accommodate the change in groundwater depth. Pumping was anticipated to draw any residual diesel oil sheen from the immediate vicinity of MW1. Groundwater along with oil sheen was pumped into 55-gallon polyethylene drum approximately weekly for one month, from June to July of 2002. Groundwater recharge rate was not actually determined but estimated to be approximately 0.5 gallon or less per minute. A total of about 30 gallons of groundwater were removed. No groundwater pumping occurred for approximately two months prior to the 2002 annual groundwater sampling.

Groundwater Sampling:

Groundwater monitoring was conducted in accordance with Washington Sate Department of Ecology's guidelines. Each well was observed for the presence of free product. Groundwater depths below ground surface were measured prior to purging using a carbon steel measuring tape with water indicator paste, to the nearest 1/16 of an inch. The ORC socks were removed from the wells prior to well purging and sampling. At least three well casing volumes were purged from each well or until the well was purged dry. The purged water was stored in the 55-gallon drum at the site. The wells were then allowed to recharge sufficiently before water samples were collected. Well purging and sampling were completed sequentially, starting with the previously documented clean well(s) and finishing with the most contaminated well(s).

Well purging and sampling were accomplished using disposable polyethylene bailers. The bailers were decontaminated with an Alconox detergent solution and rinsed with clean water before and after each use. Water samples for gas and BTEX were collected into laboratory-provided pre-cleaned 40-ml glass vials with septum caps and preserved with hydrochloric acid. Water sample for diesel was collected into 1-liter amber glass jar. All samples were appropriately labeled and logged onto a laboratory chain of custody. Samples were stored in a cooler and immediately delivered to Friedman & Bruya, Inc. Laboratory located at 3012 16th Avenue West, Seattle, Washington.

Field Findings:

No observable free product was noted in any of the sampled wells, even MW1, which was historically detected with heavy oil sheen.

Groundwater depth measurements are listed in Table 1. The general groundwater flow direction remains consistently to the west and southwest.

Table 1. Field Parameters

WELL ID	SURVEYED ELEV. (FT)	DATE	DEPTH TO WATER (FT)	GROUNDWATER ELEV. (FT)
MW1	19.72	11-14-03	4.88	14.48
MW2	19.74	"	-	-
MW3	19.80	"	6.03	13.77
MW4	20.00	"	5.90	14.1
MW5	19.57	"	6.28	13.29
MW6	20.39	"	3.62	16.77
MW7	20.65	"	2.23	18.42
MW8	21.29	"	2.96	18.33
MW9	23.98	"	4.81	19.17
MW10	19.89	"	6.71	13.18

Note:

Surveyed data are obtained from CEI's report.

Laboratory Analysis and Results:

All samples were lab-analyzed by for Gasoline-TPHs and BTEX (benzene, toluene, ethylbenzene, and xylenes) using Method NWTPH-Gx/BTEX. Sample from MW1 was also lab-analyzed for diesel TPHs using method NWTPH-Dx. Laboratory results are summarized in Table 2.

Summary of historical site data is presented in the attached Table 3. As can be seen from Table 3, only MW1 was detected with gasoline TPHs and xylenes above Method A clean up levels. Specifically, gas TPHs decreased from 34 mg/L to 18 mg/L and xylenes from 16 mg/L to 5.5 mg/L. Reduction of contaminants in MW1 is assumed due to the effects of continued treatment with ORC. The previously contaminated wells, particularly MW4, MW5, and MW7 are either non-detect or below cleanup levels for gas TPH and BTEX. The other previously non-detect wells, MW3, MW8, MW9 and MW10 remain non-detect in this sampling round.

Groundwater sampling data are believed to be representative of groundwater conditions in the vicinity of the monitoring wells. However, because of the unknown radius of influence, which may vary depending on soil matrix, groundwater conditions at locations that are not subjected to ORC addition are undetermined.

Table 2. Laboratory Results

WELL	TPH-GAS (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBEN. (PPM)	XYLENES (PPM)
MW1*	18.00*	<0.005	0.080	1.70	5.50
MW2	<0.50	<0.005	<0.005	<0.005	0.019
MW3	<0.05	<0.001	<0.001	<0.001	<0.003
MW4	<0.05	<0.001	<0.001	<0.001	<0.003
MW5	<0.05	<0.001	<0.001	<0.001	<0.003
MW6	<0.05	<0.001	<0.001	<0.001	<0.003
MW7	0.720	<0.005	<0.005	0.130	0.210
MW8	<0.05	<0.001	<0.001	<0.001	<0.003
MW9	<0.05	<0.001	<0.001	<0.001	<0.003
MW10	<0.05	<0.001	<0.001	<0.001	<0.003
MTCA A Level	0.800 with benzene 1.0 no benzene	0.005	1.0	0.7	1.0

nd=non-detect at detection limits

* = Sample was detected with diesel TPHs at 11.0 mg/L, above MTCA Method A level of 0.500 mg/L.

Conclusions & Recommendations:

Gasoline TPHs are below MTCA Method A cleanup level in the upgradient well, MW7, for the first time in this monitoring round. BTEX have remained below cleanup levels. At MW1, gasoline TPHs also decrease along with xylenes, however still exceeding current cleanup levels. Treatment with ORC continues to have positive influence in the degradation of contaminants.

Except for MW1, the down-gradient perimeter wells along Shilshole Avenue remain non-detect or below MTCA Method A levels for gas TPHs and BTEX.

We recommend continuing with groundwater monitoring and treatment with ORC until contaminants in all wells are below current cleanup levels.

Limitations:

This report was intended for the exclusive use of the original client, HALCO Properties. The scope of work performed by NAI was in accordance with the signed proposal dated December 28, 2000 and limited to only the impacted groundwater at the site. The work completed was consistent with the generally accepted practices in environmental science and engineering under similar conditions and conformed to the client's request.

We appreciate the opportunity to be of service on this project. If you have any questions regarding the report, please call.

Sincerely,

Michael Lam
Project Manager

cc: Annett Adamasu – Toxics Clean-up Program Dept of Ecology NW Regional Office

Reference: Columbia Environmental, Inc., April 21, 1997: "Quarterly Groundwater Monitoring, C & C Paints Company Property".

Attachments:

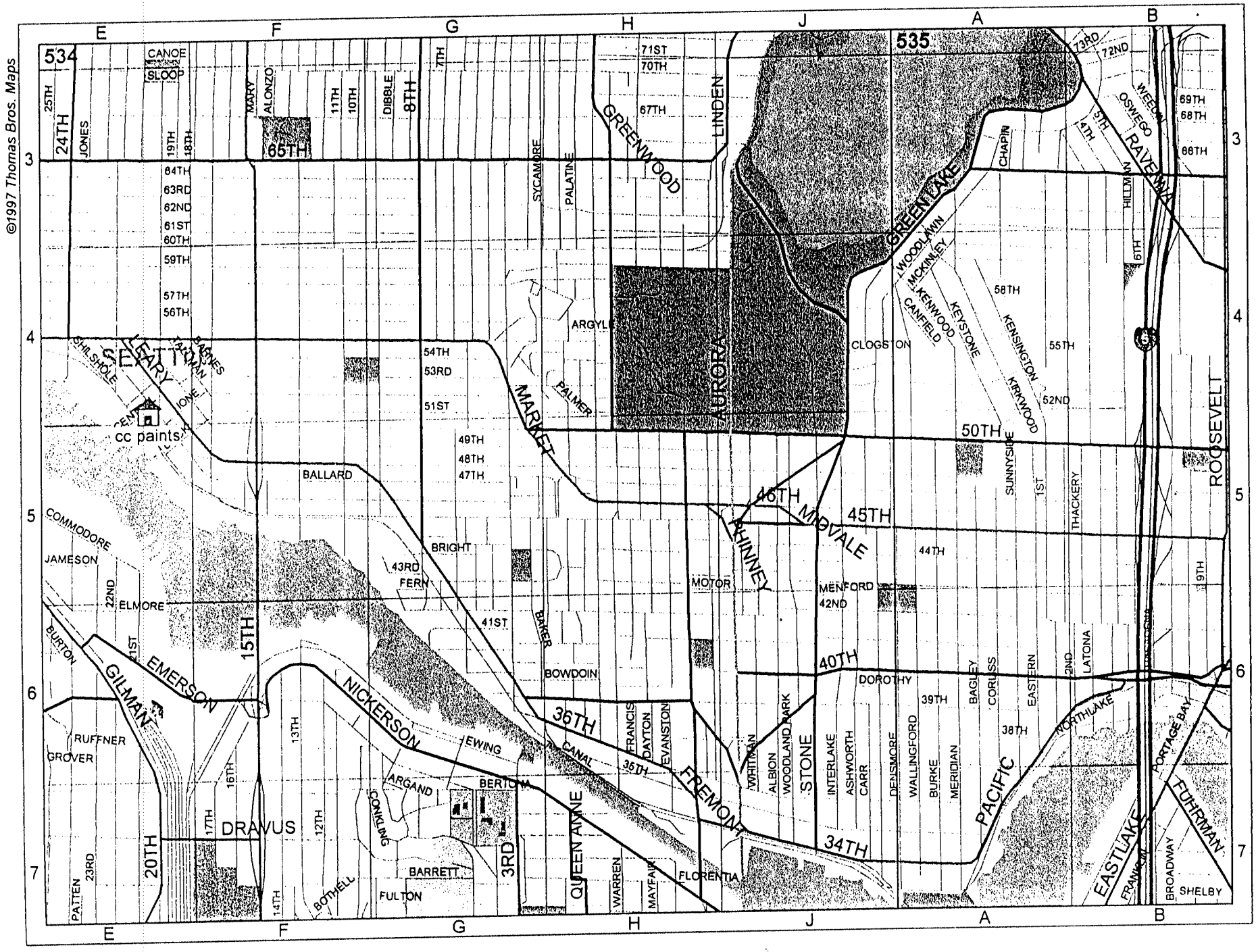
Appendix A:	Site Location Map (1) and CEI's Site Plans (2)
Appendix B:	Laboratory Report
Appendix C:	Summary of Groundwater Data Table 3

Reviewed By:

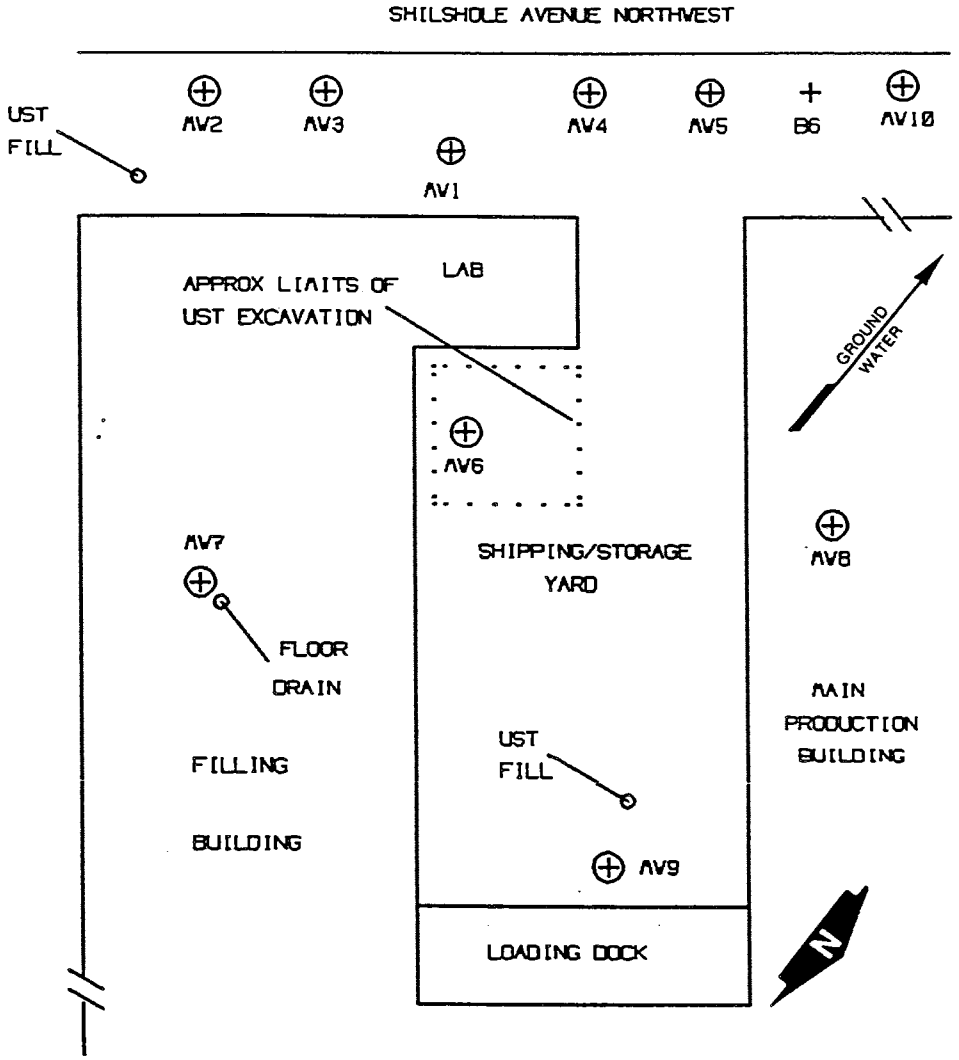
Ronald Nowicki, Principal

Appendix A

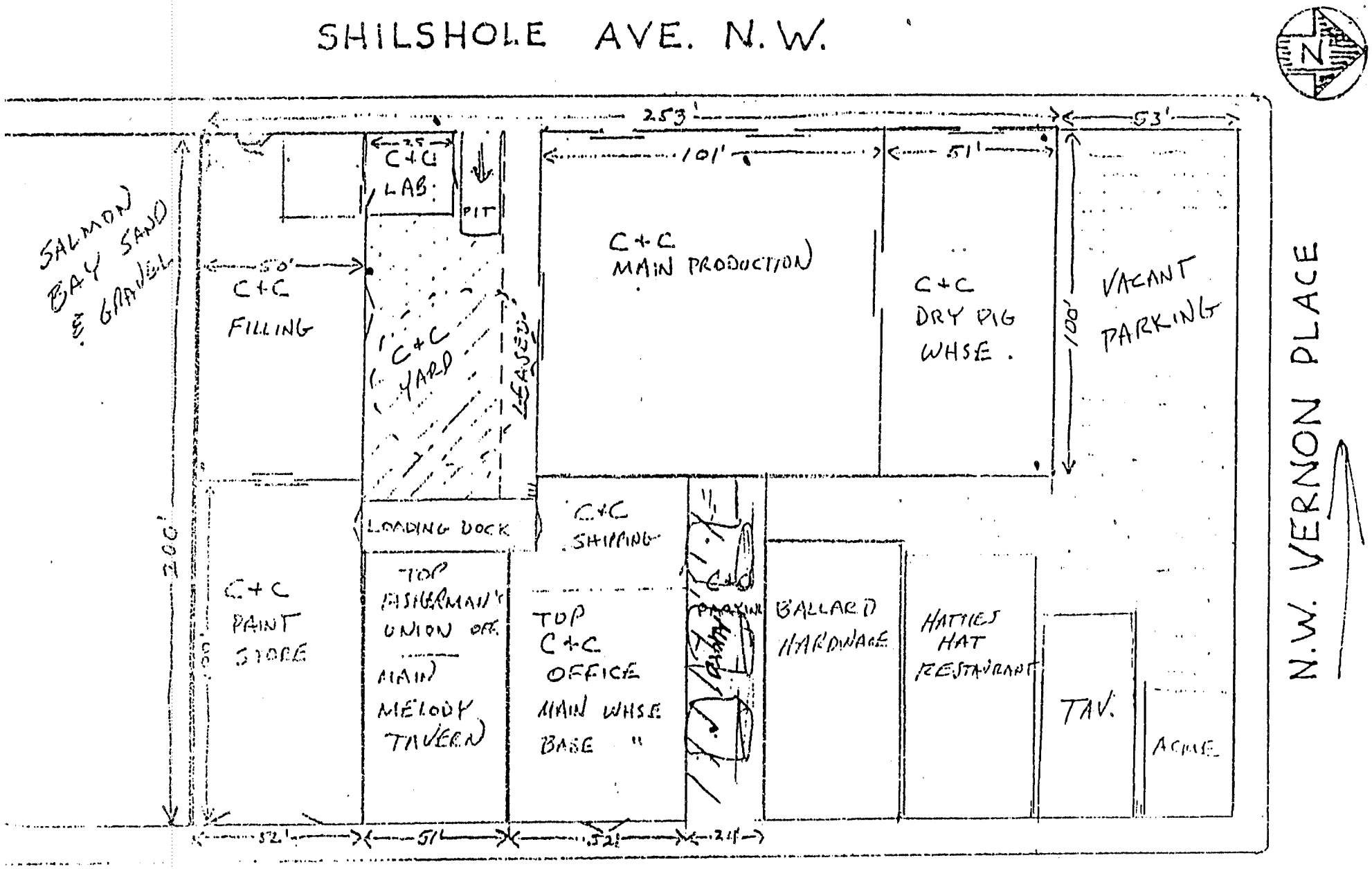
Site Map and CEI's Site Plan



cc paints: 5221 NW Ballard Av, Seattle, 98107, Page & Grid 534 E4



SITE PLAN C&C Paints Seattle, Washington	Columbia Environmental, Inc. Project Number 95603-2 April 1997



SCALE: 1/10" = 4'

HAC 10-13-92

Appendix B

Friedman & Bruya Laboratory Report with Chain of Custody

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

November 20, 2003

Michael Lam, Project Manager
Nowicki and Associates
33516 9th Ave #6
Federal Way, WA 98003

Dear Mr. Lam:

Included are the results from the testing of material submitted on November 14, 2003 from the C&C Paints, F&BI 311131 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
NAI1120R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/20/03
Date Received: 11/14/03
Project: C&C Paints, F&BI 311131
Date Extracted: 11/14/03
Date Analyzed: 11/14/03 and 11/19/03

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 61-136)
MW9 311131-01	<1	<1 ca	<1 ca	<3 ca	<50	83
MW8 311131-02	<1	<1 ca	<1 ca	<3 ca	<50	82
MW5 311131-03	<1	<1 ca	<1 ca	<3 ca	<50	80
MW10 311131-04	<1	<1 ca	<1 ca	<3 ca	<50	85
MW3 311131-05	<1	<1 ca	<1 ca	<3 ca	<50	85
MW4 311131-06	<1	<1 ca	<1 ca	<3 ca	<50	85
MW6 311131-07	<1	<1 ca	<1 ca	<3 ca	<50	83
MW7 d 311131-08	<5	<5	130	210	720	87
MW1 d 311131-09	<5	80	1,700	5,500	18,000	ip
MW2 d 311131-10	<5	<5	<5	<15	<250	82
Method Blank	<1	<1	<1	<3	<50	81

d - The sample was diluted. Detection limits are raised due to dilution.
ca - The calibration results for this range fell outside of acceptance criteria. The value reported is a low estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/20/03
Date Received: 11/14/03
Project: C&C Paints, F&BI 311131
Date Extracted: 11/17/03
Date Analyzed: 11/18/03

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Extended to Include Motor Oil Range Compounds
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Diesel Extended (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 45-147)
MW1 311131-09	11,000	91
Method Blank	<250	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/20/03
Date Received: 11/14/03
Project: C&C Paints, F&BI 311131

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 311099-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	µg/L (ppb)	2	2	0
Toluene	µg/L (ppb)	1	1	0
Ethylbenzene	µg/L (ppb)	<1	<1	nm
Xylenes	µg/L (ppb)	4	4	0
Gasoline	µg/L (ppb)	350	410	16

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	µg/L (ppb)	25	106	114	77-116	7
Toluene	µg/L (ppb)	25	101	108	64-126	7
Ethylbenzene	µg/L (ppb)	25	100	106	67-124	6
Xylenes	µg/L (ppb)	75	98	103	71-121	5
Gasoline	µg/L (ppb)	1,000	90	108	49-119	18

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/20/03
Date Received: 11/14/03
Project: C&C Paints, F&BI 311131

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	µg/L (ppb)	2,500	96	111	77-135	14

311131

SAMPLE CHAIN OF CUSTODY

ME 11/14/03

A05/V3

Send Report To Michael Lam

Company Nowicki & Assoc

Address 33516 9th Ave South #6

City, State, ZIP Fed Way WA 98003

Phone # 253 927 5233 Fax #

SAMPLERS (signature) Michael Lam

PROJECT NAME/NO. C & C PAINTS

PO #

REMARKS

Page # 1 of 1

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☒ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☑ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	NWTPH-Dx	NWTPH-Gx/BTEX			Notes
MW9	01 A-B	11/14/03	1125	GW	2								✓			
MW8	02 A-B		1130													
MW5	03 A-B		1135													
MW10	04 A-B		1140													
MW3	05 A-B		1145													
MW4	06 A-B		1150													
MW6	07 A-B		2110													
MW7	08 A-B		2118		↓											
MW1	09 A-C		2130		3							✓				
MW2	10 A-B	↓	2140	↓	2								↓			

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Lam	MICHAEL LAM	N A E	11/14/03	3:42 pm
Received by:	Nhan Pham	Nhan Pham	F & BI	11/14/03	3:42
Relinquished by:					
Received by:					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

Appendix C

Summary of Groundwater Data

Table 2. Summary of Site Data

Concentrations are expressed in mg/L or part per million (ppm).

Well ID	Well El. (ft)	Date	Depth to GW (ft)	GW El (ft)	TPH-Gas (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl Benz (mg/L)	Xylenes (mg/L)
MW1	19.72	11/27/95	-	-	24,000	0.93	41	550	855
		1/30/96	4.60	15.11	-	-	-	-	-
		6/20/96	-	-	210	0.0085	0.30	14	226
		9/11/96	5.04	14.68	190	nd	nd	13	58
		12/10/96	4.84	14.88	190	0.007	0.27	14	64
		4/3/97	-	-	190	0.0076	0.26	13	65
		1/31/98	3.97	15.75	310	nd	0.23	15	70
		10/10/00	4.96	14.76	410	nd	0.12	16	70.1
		9/23/02	5.46	14.26	34.0*	0.003	0.02	4.5	16.0
		11/14/03	4.88	14.48	18.0**	<0.005	0.080	1.7	5.5
MW2	19.74	11/27/95	-	-	nd	nd	nd	0.0066	0.027
		1/30/96	4.54	15.20	-	-	-	-	-
		6/20/96	4.63	15.11	1.1	-	-	-	-
		9/11/96	5.34	14.40	0.90	nd	0.023	0.079	0.379
		12/10/96	3.14	16.60	nd	nd	nd	0.0011	0.0023
		4/3/97	4.29	15.45	nd	nd	0.0032	nd	nd
		1/31/98	4.33	15.41	nd	nd	nd	nd	nd
		10/10/00	5.02	14.72	0.13	nd	0.036	nd	nd
		9/23/02	6.43	13.31	nd<0.5	nd<0.005	nd<0.005	nd<0.005	nd<0.005
		11/14/03	-	-	<0.50	<0.005	<0.005	<0.050	0.019
MW3	19.80	11/27/95	-	-	nd	nd	nd	nd	Nd
		1/30/96	4.71	15.09	-	-	-	-	-
		6/20/96	-	-	-	-	-	-	-
		9/11/96	5.27	14.53	-	-	-	-	-
		12/10/96	-	-	-	-	-	-	-
		4/3/97	-	-	-	-	-	-	-
		1/31/98	4.66	15.14	nd	nd	nd	nd	nd
		10/10/00	5.58	14.22	nd	nd	nd	nd	0.0016
		9/23/02	6.23	13.75	nd<0.05	nd<0.001	nd<0.001	nd<0.001	nd<0.001
		11/14/03	6.03	13.77	<0.050	<0.001	<0.001	<0.001	<0.003
MW4	20.00	11/27/95	-	-	78	0.004	0.04	4.6	20.8
		1/30/96	5.17	14.83	-	-	-	-	-
		6/20/96	-	-	-	-	-	-	-
		9/11/96	5.72	14.28	-	-	-	-	-
		12/10/96	-	-	-	-	-	-	-
		4/3/97	-	-	-	-	-	-	-
		1/31/98	4.74	15.26	14	nd	0.003	1.3	3.075
		10/10/00	6.60	13.40	0.68	nd	nd	0.037	0.03
		9/23/02	6.18	13.82	0.11	nd<0.001	nd<0.001	0.003	0.016
		11/14/03	5.90	14.10	<0.050	<0.001	<0.001	<0.001	<0.003
MW5	19.57	11/27/95	-	-	28	0.004	0.011	1.5	7.4
		1/30/96	5.19	14.38	-	-	-	-	-
		6/20/96	-		-	-	-	-	-
		9/11/96	5.73	13.84	-	-	-	-	-
		12/10/96	-	-	-	-	-	-	-
		4/3/97	-	-	-	-	-	-	-
		1/31/98	4.81	14.76	1.1	nd	0.0051	0.038	0.211
		10/10/00	5.12	14.45	0.2	0.0011	nd	0.001	0.0049
		9/23/02	6.53	13.04	nd<0.25	nd<0.005	nd<0.005	nd<0.005	0.007
		11/14/03	6.28	13.29	<0.050	<0.001	<0.001	<0.001	<0.003

Table 2 Continued.

Well ID	Well El. (ft)	Date	Depth to GW (ft)	GW El (ft)	TPH-Gas (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethyl Benz (mg/L)	Xylenes (mg/L)
MW6	20.39	1/30/96	4.57	15.82	0.68	0.0035	nd	0.00252	0.112
		6/20/96	-	-	-	-	-	-	-
		9/11/96	3.48	16.91	-	-	-	-	-
		12/10/96	-	-	-	-	-	-	-
		4/3/97	-	-	-	-	-	-	-
		1/31/98	3.86	16.53	0.7	0.0037	nd	nd	0.0017
		10/10/00	3.31	17.08	0.84	0.0019	nd	nd	0.0017
		9/23/02	4.86	15.53	<0.25	nd<0.005	nd<0.005	nd<0.005	0.008
		11/14/03	3.62	16.77	<0.050	<0.001	<0.001	<0.001	<0.003
MW7	20.65	1/30/96	2.97	17.68	61	0.002	0.34	3.5	3.2
		6/20/96	2.08	18.57	-	-	-	-	-
		9/11/96	3.11	17.54	-	-	-	-	-
		12/10/96	2.98	17.67	-	-	-	-	-
		4/3/97	2.77	17.88	-	-	-	-	-
		1/31/98	2.38	18.27	31	0.0012	0.0016	1.6	6.486
		10/10/00	3.02	17.63	4.3	0.0012	nd	0.19	0.36
		9/23/02	4.04	16.61	0.89	nd<0.005	nd<0.005	0.14	0.13
		11/14/03	2.23	18.42	0.570	<0.005	<0.005	0.120	0.150
MW8	21.29	1/30/96	3.90	17.39	nd	nd	nd	nd	0.001
		6/20/96	3.94	17.35	nd	-	-	-	-
		9/11/96	4.14	17.15	nd	nd	nd	nd	nd
		12/10/96	3.97	17.32	nd	-	-	-	-
		4/3/97	3.86	17.43	nd	nd	nd	nd	nd
		1/31/98	3.88	17.41	nd	nd	nd	nd	nd
		10/10/00	3.25	18.04	nd	nd	nd	nd	nd
		9/23/02	3.94	17.35	nd<0.05	nd<0.001	nd<0.001	nd<0.001	0.003
		11/14/03	2.96	18.33	<0.050	<0.001	<0.001	<0.001	<0.003
MW9	23.98	1/30/96	4.32	19.66	nd	nd	nd	nd	nd
		6/20/96	4.47	19.51	nd	-	-		
		9/11/96	4.65	19.33	nd	nd	nd	nd	nd
		12/10/96	4.31	19.67	nd	-	-	-	-
		4/3/97	3.96	20.00	nd	nd	nd	nd	nd
		1/31/98	4.23	19.75	nd	nd	nd	nd	nd
		10/10/00	4.25	19.73	nd	nd	nd	nd	nd
		9/23/02	4.83	19.15	nd<0.05	nd<0.001	nd<0.001	nd<0.001	0.002
		11/14/03	4.81	19.17	<0.050	<0.001	<0.001	<0.001	<0.003
MW10	19.89	1/30/96	6.06	13.83	0.93	nd	nd	0.062	.0397
		6/20/96	5.78	14.11	1.1	-	-	-	-
		9/11/96	6.43	13.46	0.58	nd	nd	0.043	0.171
		12/10/96	5.64	14.25	nd	nd	nd	nd	0.0012
		4/3/97	5.81	14.08	nd	nd	nd	0.0021	0.0052
		1/31/98	5.70	14.19	nd	nd	nd	nd	nd
		10/10/00	6.46	13.43	nd	nd	nd	nd	nd
		9/23/02	7.02	12.87	nd<0.05	nd<0.001	nd<0.001	nd<0.001	0.002
		11/14/03	6.71	13.18	<0.050	<0.001	<0.001	<0.001	<0.003
MTCA METHOD A					0.8	0.005	1.0	0.7	1.0

Note: Data prior to 1/31/98 were obtained from Columbia Environmental Inc. Reports.

* ... Sample was detected with diesel TPHs at 0.910 mg/L.

** ... Sample was detected with diesel TPHs at 11.0 mg/L

- ... Denotes data not available.