WASHINGTON STATE DEPARTMENT OF ECOLOGY

Southwest Regional Office
Toxics Cleanup Program
PO Box 47775
Olympia, WA 98504-7775
360-407-6240

TRANSMITTAL MEMO

Date: March 4, 2013

TO: Mr. Ryan Cain
Mears Gramor, LLC

RE: Lil Colonel Drive In
SW0820

Subject: Explanation of Timeline

NOTE: **The determination date is the date Ecology approved the No Further Action status for the site. Final payment, EIM Data submission, once received, the NFA letter was released.**

Ecology Determination date: December 31, 2012

Email Customer Notification: January 3, 2013

Payment received date: March 16, 2013

EIM Data successfully uploaded: January 7, 2013

Ecology Determination letter mailed/sent: March 26, 2013

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

December 31, 2012

Mr. Ryan Cain
Mears Gramor, LLC
19767 SW 72nd Avenue, Suite 100
Tualatin, OR 97062

Re: No Further Action at the following Site:

- **Site Name:** Lil Colonel Drive In
- **Site Address:** 13309 NE Highway 99, Vancouver
- **Facility/Site No.:** 50743515
- **Cleanup Site ID No.:** 3614
- **VCP Project No.:** SW0820

Dear Mr. Cain:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Lil Colonel Drive In facility (Site). This letter provides our opinion. We are providing this opinion under the authority of the Model Toxics Control Act (MTCA), Chapter 70.105D RCW.

Issue Presented and Opinion

Is further remedial action necessary to clean up contamination at the Site?

NO. Ecology has determined that no further remedial action is necessary to clean up contamination at the Site.

This opinion is based on an analysis of whether the remedial action meets the substantive requirements of MTCA, Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

Description of the Site

This opinion applies only to the Site described below. The Site is defined by the nature and extent of contamination associated with the following release:

- Tetrachloroethylene (PCE) into the Groundwater.

Enclosure A includes a detailed description and diagram of the Site, as currently known to Ecology.

Please note a parcel of real property can be affected by multiple sites. At this time, we have no information that the parcel(s) associated with this Site are affected by other sites.

Basis for the Opinion

This opinion is based on the information contained in the following documents:

1. Second Quarter 2012 and Request for NFA, Groundwater Monitoring Report, Mears Gramor - Center Square - North, NE 20th Avenue & NE Highway 99, Lil' Colonel Drive-In – Ecology VCP #SW0820, Vancouver, Washington, dated October 15, 2012 by Kleinfelder.

2. Letter to Mr. David Copenhaver (Gramor Development, Inc.) from Mr. Scott Rose (Ecology), RE: Partial Sufficiency and Further Action, dated June 23, 2009.

3. Supplemental Site Assessment and Disproportionate Cost Analysis, Mears Gramor - Center Square - North, Lil' Colonel Drive-In, 13309 NE Highway 99, Vancouver, Washington, dated May 19, 2009 by Kleinfelder.

4. First Quarter 2009 Groundwater Monitoring Report, Mears Gramor - Center Square - North, NE 20th Avenue and NE Highway 99, Lil' Colonel Drive-In, Vancouver, Washington, dated April 27, 2009 by Kleinfelder.

5. Supplemental Site Characterization Report, Gramor – Center Square, NE 20th Avenue and NE Highway 99, Lil' Colonel Drive-In – Ecology Site #50743515, Astro #607 – Trail Mart – Ecology Facility #5995, Vancouver, Washington, dated May 12, 2005 by Kleinfelder.

Those documents are kept in the Central Files of the Southwest Regional Office of Ecology (SWRO) for review by appointment only. You can make an appointment by calling the SWRO resource contact at (360) 407-6365.

This opinion is void if any of the information contained in those documents is materially false or misleading.

Analysis of the Cleanup

Ecology has concluded that **no further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

1. Characterization of the Site.

Ecology has determined your characterization of the Site is sufficient to establish cleanup standards and select a cleanup action. The Site is described above and in **Enclosure A.**

Environmental investigations were conducted at the Site in 1990 and 1994 to investigate potential releases associated with a former gasoline station operation. Potential sources associated with this operation included former underground storage tanks (USTs) and a septic system. These investigations included the collection of soil and groundwater samples for analysis for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, and chlorinated volatile organic compounds (VOCs). In 1990, maximum TPH concentrations of 20.5 milligrams per kilogram (mg/kg) were detected, as well as concentrations of PCE up to 0.09 mg/kg in soil adjacent to the former septic tank, and up to 7.2 micrograms per liter (µg/L) in groundwater.

Subsequent investigations, which included the installation of three monitoring wells *(see attached Figure 2)* and the collection of additional soil and groundwater samples from permanent and temporary wells, have confirmed that petroleum contamination is not present at the Site; however, PCE continued to be detected in well KMW-04 at concentrations just above the MTCA Method A cleanup level. Concentrations of PCE in this well above the MTCA Method A cleanup level of 5 µg/L have ranged from 5.41 to 8.75 µg/L *(see attached Table 2)*. Grab groundwater data from around this well have confirmed that the PCE is fairly isolated to this one location.

In an opinion letter dated January 10, 2007, Ecology indicated that a deep monitoring well should be installed on Site to determine whether PCE, which has a tendency to "sink", was present in the deeper aquifer below the confining layer identified on Site. Since that time, Kleinfelder has conducted additional investigations to determine the lateral extent of PCE contamination in groundwater and to supplement the existing information regarding the geology beneath the Site. According to Kleinfelder, all monitoring wells on Site have been screened into the confining silt layer, which is the ideal location for capturing any PCE that may be migrating laterally along the base of the surficial aquifer. Also, a deep well is not cost effective as it would need to be installed to about 170 feet below ground surface (bgs) based on well logs from nearby wells that indicate fine-grained materials to about 80 feet bgs, a blue clay layer from about 80 to 95 feet bgs, cemented gravel from about 95 to 140 feet bgs, and a water beating zone from about 140 to 170 feet bgs. Finally, the presence of PCE (albeit below MTCA cleanup levels) in grab groundwater samples collected across the street and downgradient of KMW-04 suggests that the low concentrations of PCE in the surficial aquifer are moving laterally rather than vertically. As a result, Ecology concurred with not installing a deep well.

2. Establishment of cleanup standards.

Ecology has determined the cleanup levels and points of compliance you established for the Site meet the substantive requirements of MTCA.

MTCA Method A cleanup levels for unrestricted land use were used at the Site.

Standard points of compliance were established for the Site. The point of compliance for protection of groundwater was established in the soils throughout the Site. For soil cleanup

levels based on human exposure via direct contact or other exposure pathways where contact with the soil is required to complete the pathway, the point of compliance was established in the soils throughout the Site from the ground surface to 15 feet bgs. In addition, the point of compliance for the groundwater was established throughout the Site from the uppermost level of the saturated zone extending vertically to the lowest most depth that could potentially be affected by the Site.

3. Selection of cleanup action.

Ecology has determined the cleanup action you selected for the Site meets the substantive requirements of MTCA.

Cleanup actions conducted to date have included a combination source removal via dig and haul of impacted soil, and monitored natural attenuation.

4. Cleanup.

Ecology has determined the cleanup you performed meets the cleanup standards established for the Site.

Not much detail exists regarding the removal of source areas from the Site and associated confirmational sampling. However, subsequent investigations conducted in these areas have not identified concentrations of contaminants above MTCA cleanup levels in soil. PCE has historically been detected in groundwater and had been persistently present in monitoring well KMW-04 at concentrations just above MTCA cleanup levels. However, four consecutive quarters of data below MTCA cleanup levels have been collected from this well to demonstrate compliance *(see attached Table 2)*.

Listing of the Site

Based on this opinion, Ecology will remove the Site from our Confirmed and Suspected Contaminated Sites List.

Limitations of the Opinion

1. Opinion does not settle liability with the state.

Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

2. **Opinion does not constitute a determination of substantial equivalence.**

To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you performed is substantially equivalent. Courts make that determination. *See* RCW 70.105D.080 and WAC 173-340-545.

3. **State is immune from liability.**

The state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. *See* RCW 70.105D.030(1)(i).

Termination of Agreement

Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). This opinion terminates the VCP Agreement governing this project (#SW0820).

For more information about the VCP and the cleanup process, please visit our web site: www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm. If you have any questions about this opinion or the termination of the Agreement, please contact me at (360) 407-6347 or via email at scott.rose@ecy.wa.gov.

Sincerely,

Scott Rose, L.G.
VCP Unit Supervisor
SWRO Toxics Cleanup Program

SIR/ksc: Lil Colonel Drive Inn Site NFA

Enclosures: A – Description and Diagrams of the Site

By certified mail: (7011 1150 0000 7881 5861)

cc: Peter Stroud - Kleinfelder, Inc.
Bryan DeDoncker –Clark County Health Department
Dolores Mitchell – Ecology (w/o enclosures)

Enclosure A

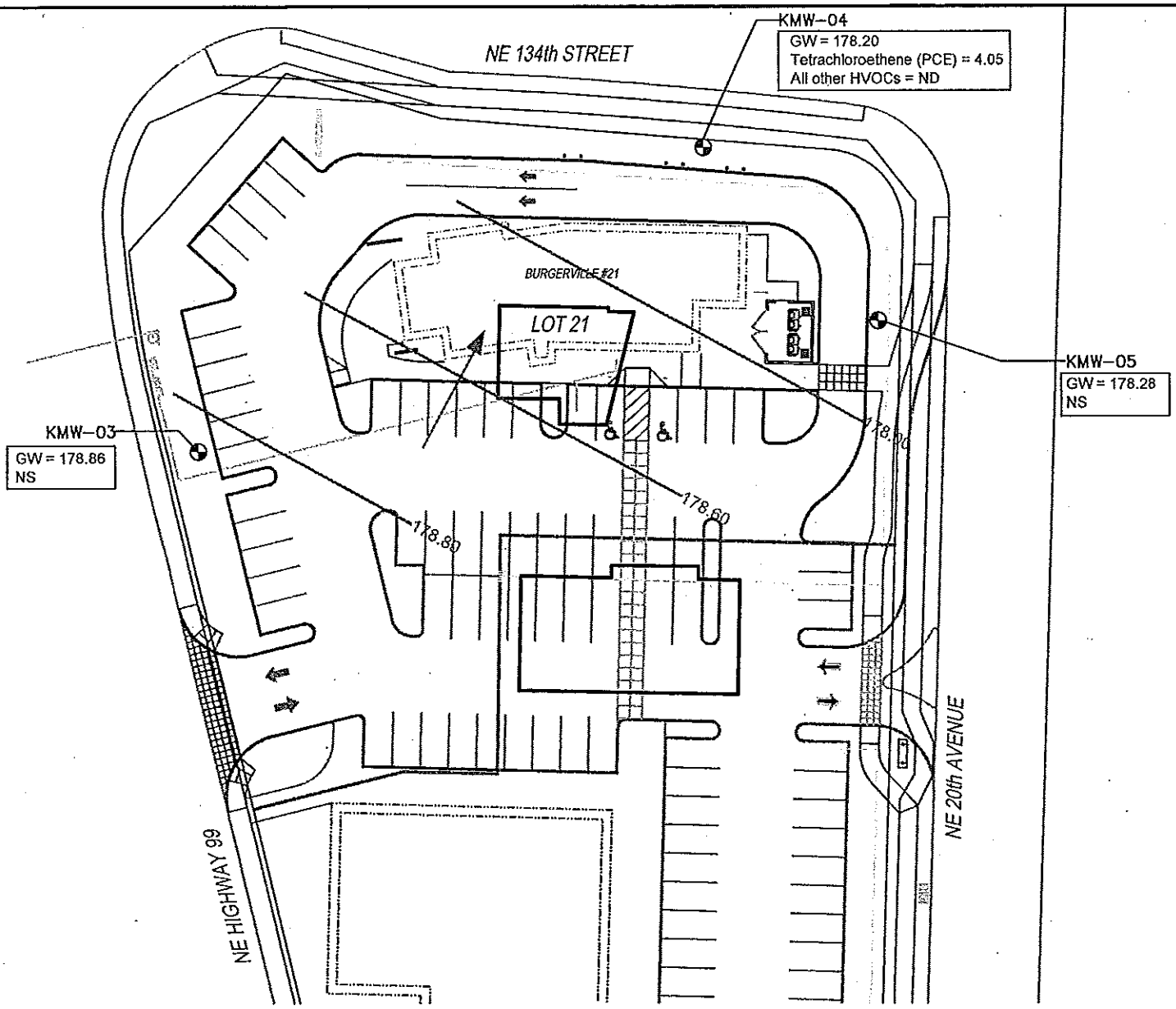
Description and Diagrams of the Site

Site Description

The Lil Colonel Drive In site is located at 13309 NE Highway 99 in Vancouver, Clark County, Washington. The site is located in a commercial district of Vancouver, and is bounded to the south by the Astro Western Station #607 site (VCP# SW0821), to the west by Highway 99, to the north by NE 134th Street, and to the east by NE 20th Avenue. This site was formerly occupied by a house and a general store/gasoline station from about 1928 to 1971, and a café from about 1957 to 1985. The site has been unused since 1985, except for intermittent and informal use as a used car lot. The site is currently occupied by a Burgerville restaurant.

Reportedly, former underground storage tanks (USTs) and a septic tank have been removed from the site; however, one septic tank still exists. No information is available regarding how many USTs may have been located at the site, nor is there any information regarding their capacities and former contents. Tetrachloroethylene identified at the site was presumed to have been released to the subsurface via the old septic system.

Native soils encountered during site exploration generally consisted of unconsolidated clay, silt, and fine sand below fill materials to the maximum depth explored of 28 feet below ground surface (bgs). Groundwater occurs beneath the site at about 18 to 21 feet bgs, and the direction of groundwater flow fluctuates from the north to the northeast.



LEGEND

KMW–05	KLEINFELDER MONITORING WELL	HVOCs	HALOGENATED VOLATILE ORGANIC COMPOUNDS
---·---	SITE IMPROVEMENTS	———	FORMER SITE FEATURES
		GW	GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
		178.80 ———	GROUNDWATER ELEVATION CONTOUR
		——→	INFERRED GROUNDWATER FLOW DIRECTION
		ND	NOT DETECTED AT OR ABOVE LABORATORY LIMITS
		NS	NOT SAMPLED

NOTE: ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER (µg/L)

N W E S

SCALE
25 0 25 50
(in feet)
1 INCH = 50 FT.

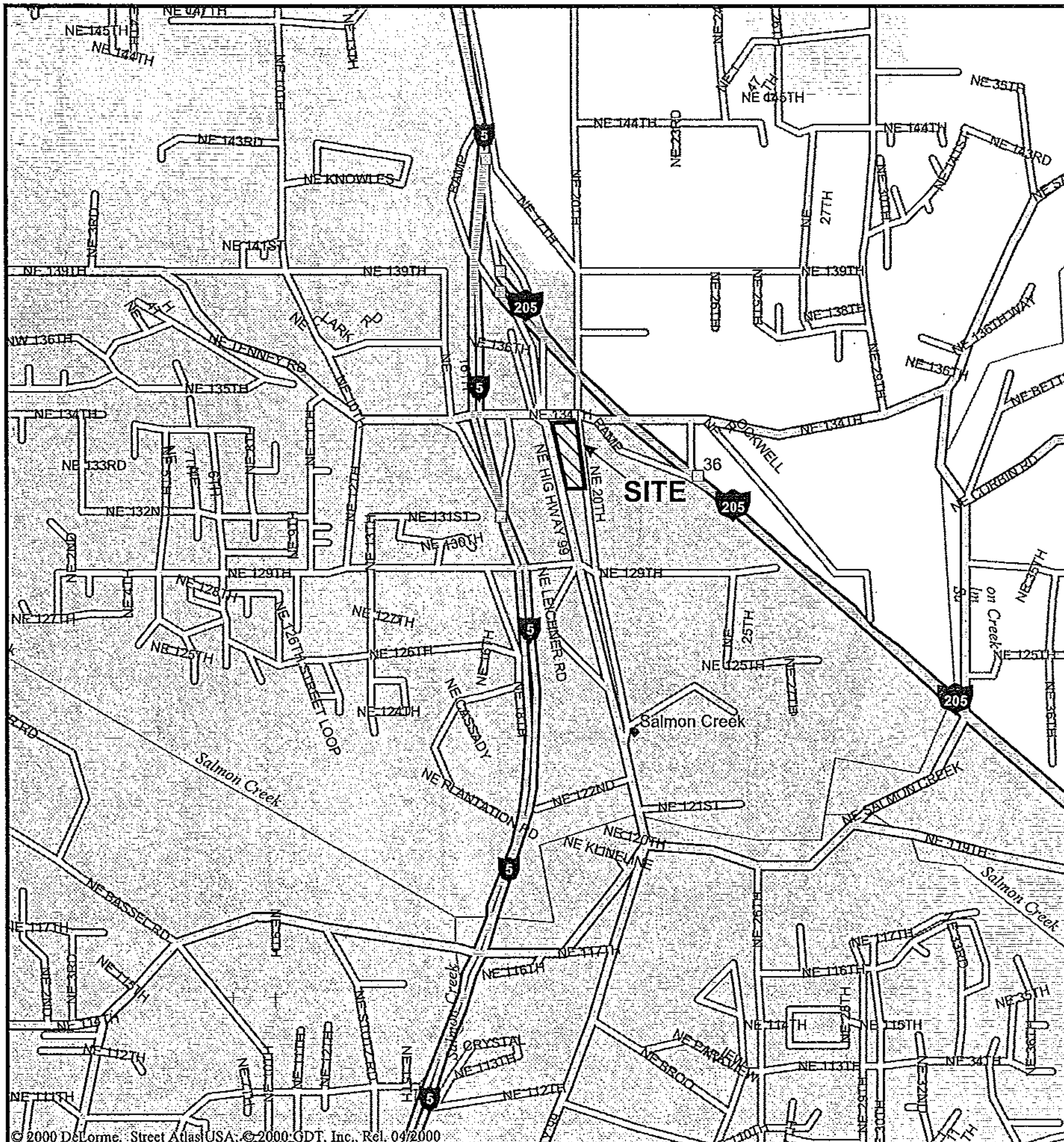
KLEINFELDER
Bright People. Right Solutions.
www.kleinfelder.com

PROJECT NO.	102657
DRAWN:	07/12
DRAWN BY:	JJS
CHECKED BY:	PLS
FILE NAME:	102657F2.dwg

SITE PLAN WITH GROUNDWATER ELEVATION DATA AND SELECT SAMPLE RESULTS - 6/26/2012

MEARS GRAMOR CENTER SQUARE NORTH
NE 20th AVENUE & NE HIGHWAY 99
VANCOUNVER, WASHINGTON

FIGURE
2



Mag 15.00
Tue May 03 10:41 2005
Scale 1:15,625 (at center)

1000 Feet

500 Meters

Local Road
Major Connector
Interstate/Limited Access
Exit
River/Canal
Site

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PROJECT NO.	102657
DRAWN:	07/12
DRAWN BY:	TLK
CHECKED BY:	CW
FILE NAME:	102657.cdr

SITE LOCATION MAP

CENTER SQUARE NORTH
NE 20TH AVENUE AND NE HIGHWAY 99
VANCOUVER, WASHINGTON

FIGURE:
1

TABLE 2
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
SECOND QUARTER 2012 GROUNDWATER MONITORING REPORT
MEARS GRAMOR - CENTER SQUARE - NORTH
NE 20TH STREET & NE HIGHWAY 99
VANCOUVER, WASHINGTON
PROJECT NO. 102657

Monitoring Well Number	Sample Number	Sample Date	TPH - Gasoline [1] µg/L	Benzene [2] µg/L	T/- ne	sec-Butyl-benzene [2] µg/L	Methyl tert-butyl ether (MTBE) [2] µg/L	Vinyl Chloride [2] µg/L	Total Lead [3] µg/L	Dissolved Lead [4] µg/L
LCDI (Previously LOT # 21, Northern)										
KMW03	KMW03-04145	04/14/2005	<100	<0.300						
	KMW03-110905	11/09/2005	<100	<0.300	0	<1.00	<1.00	NR	—	—
	KMW03-020707	02/07/2007	<80.0	<0.500	0	<1.00	<1.00	NR	0.748	<0.10
	KMW03-052307	05/23/2007	-	-	0	<0.500	ND	NR	<1.00	<1.00
	KMW03-112907	11/29/2007	-	-	0	<0.500	ND	NR	<1.00	<1.00
	KMW03-033108	03/31/2008	-	-		-	-	NR	-	-
	KMW03-080108	08/01/2008	-	-		-	-	NR	-	-
	KMW03-121108	12/11/2008	-	-		-	-	NR	-	-
	KMW03-022409	02/24/2009	-	-		-	-	<0.500	-	-
	KMW03-052709*	05/27/2009	-	-		-	-	<0.500	-	-
	NS	08/18/2009	-	-		-	-	<0.500	-	-
	NS	11/20/2009	-	-		-	-	-	-	-
	NS	03/25/2010	-	-		-	-	-	-	-
	NS	05/27/2010	-	-		-	-	-	-	-
	NS	08/25/2010	-	-		-	-	-	-	-
	NS	11/05/2010	-	-		-	-	-	-	-
	NS	03/04/2011	-	-		-	-	-	-	-
	NS	06/22/2011	-	-		-	-	-	-	-
	NS	09/16/2011	-	-		-	-	-	-	-
	NS	01/04/2012	-	-		-	-	-	-	-
	NS	03/27/2012	-	-		-	-	-	-	-
	NS	06/26/2012	-	-		-	-	-	-	-
KMW04	KMW04-04145	04/14/2005	<100	<0.300						
	KMW04-110905	11/09/2005	<100	<0.300		<1.00	<1.00	NR	-	-
	KMW04-020707	02/07/2007	<80.0	<0.500		<1.00	<1.00	NR	9.82	0.24
	KMW04-052307	05/23/2007	-	-		<0.500	ND	NR	<1.00	<1.00
	KMW04-112907	11/29/2007	-	-		<0.500	ND	NR	<1.00	<1.00
	KMW04-033108	03/31/2008	-	-		-	-	NR	-	-
	KMW04-080108	08/01/2008	-	-		-	-	NR	-	-
	KMW04-121108	12/11/2008	-	-		-	-	NR	-	-
	KMW04-022409	02/24/2009	-	-		-	-	<0.500	-	-
	KMW04-052709	05/27/2009	-	-		-	-	<0.500	-	-
	KMW04-081809	08/18/2009	-	-		-	-	<0.500	-	-
	KMW04-112009	11/20/2009	-	-		-	-	<0.500	-	-
	KMW04-032510	03/25/2010	-	-		-	-	<0.500	-	-
	KMW04-052710	05/27/2010	-	-		-	-	<0.500	-	-
	KMW04-082510	08/25/2010	-	-		-	-	<0.500	-	-
	KMW04-110510	11/05/2010	-	-		-	-	<0.500	-	-
	KMW04-030411	03/04/2011	-	-		-	-	<0.500	-	-
	KMW04-062211	06/22/2011	-	-		-	-	<0.500	-	-
	KMW04-091611	09/16/2011	-	-		-	-	<0.500	-	-
	KMW04-010412	01/04/2012	-	-		-	-	<0.500	-	-
	KMW04-032712	03/27/2012	-	-		-	-	<0.500	-	-
	KMW04-062612	06/26/2012	-	-		-	-	<0.500	-	-
KMW05	KMW05-04145	04/14/2005	<100	<0.300						
	KMW05-110905	11/09/2005	<100	<0.300		<1.00	<1.00	NR	-	-
	KMW05-020707	02/07/2007	<80.0	<0.500		<1.00	<1.00	NR	3.36	0.16
	KMW05-052307	05/23/2007	-	-		<0.500	ND	NR	<1.00	<1.00
	NS	11/29/2007	-	-		<0.500	ND	NR	<1.00	<1.00
	KMW05-033108	03/31/2008	-	-		-	-	NR	-	-
	KMW05-080108	08/01/2008	-	-		-	-	NR	-	-
	KMW05-121108	12/11/2008	-	-		-	-	NR	-	-
	KMW05-022409	02/24/2009	-	-		-	-	<0.500	-	-
	KMW05-052709*	05/27/2009	-	-		-	-	<0.500	-	-
	NS	08/18/2009	-	-		-	-	<0.500	-	-
	NS	11/20/2009	-	-		-	-	-	-	-
	NS	03/25/2010	-	-		-	-	-	-	-
	NS	05/27/2010	-	-		-	-	-	-	-
	NS	08/25/2010	-	-		-	-	-	-	-
	NS	11/05/2010	-	-		-	-	-	-	-
	NS	03/04/2011	-	-		-	-	-	-	-
	NS	06/22/2011	-	-		-	-	-	-	-
	NS	09/16/2011	-	-		-	-	-	-	-
	NS	01/04/2012	-	-		-	-	-	-	-
	NS	03/27/2012	-	-		-	-	-	-	-
	NS	06/26/2012	-	-		-	-	-	-	-
MTCA Method A Groundwater Cleanup Levels (DOE, 2007)			800	5		NE	20	0.2	15	NE

1. By Northwest Method
2. By EPA Method 8260
3. By EPA Method 6010
4. By EPA Method 6020

blished by the Washington Department of Ecology (DOE, 2007)

1 in a landscaped area.

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