

May Copy



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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May 25, 2016

Mr. Jonathan Horowitz, PE  
Project Engineer  
510 Allen Street, Suite B  
Kelso, WA 98626

**Re: No Further Action at the following Site:**

**Site Name:** Groat Brothers, Inc.

**Site Address:** 618 and 608 West Scott Avenue, Woodland, WA 98674.

**Facility/Site Number:** 36354352

**Cleanup Site ID Number:** 3586

**VCP Project Number:** SW0519

Dear Mr. Horowitz:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Groat Brothers Inc. Site. This is a follow-up opinion letter to Ecology's "Partial Sufficiency and Further Action" letter of October 4, 2010. The October 4, 2010 letter was issued by Ecology after your soil cleanup met the Model Toxics Control Act (MTCA) Method A cleanup standards for the following:

- Petroleum hydrocarbons and associated constituents in Soil.
- Metals including cadmium, chromium, and lead in Soil.
- Metals including cadmium, chromium, and lead in Groundwater.
- 

This no further action letter provides our opinion regarding the petroleum hydrocarbons and associated constituents in groundwater at the Site. We are providing this opinion under the authority of the MTCA, Chapter 70.105D RCW.

**Issue Presented and Opinion**

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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 the groundwater 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 the implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA"). The analysis is provided below.

**Description of the Site**

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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:

- Petroleum hydrocarbons and related constituents into the Groundwater.

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

Please note the parcels 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**

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This opinion regarding the groundwater at the Site is based on the information contained in the following documents:

1. Hydro Con. Groundwater Monitoring Report (Fifth Quarter), Groat Brothers Inc., 608 West Scott Avenue, Woodland, Washington, dated February 29, 2016.
2. Hydro Con. Technical Memorandum, Fourth Quarter Groundwater Monitoring Results, 608 West Scott Avenue, Woodland, Washington, dated.....
3. Hydro Con. Technical Memorandum, Third Quarter Groundwater Monitoring Results, 608 West Scott Avenue, Woodland, Washington, dated .....
4. Hydro Con. Technical Memorandum, Second Quarter Groundwater Monitoring Results, 608 West Scott Avenue, Washington, dated June 11, 2015.
5. Hydro Con. Technical Memorandum, First Quarter Groundwater Monitoring Results, 608 West Scott Avenue, Woodland, Washington, dated April 17, 2015.

6. Maul Foster & Alongi, Inc. Groundwater Monitoring Report, July 2010, Groat Brothers Inc., Woodland, Washington, dated September 29, 2010.
7. Department of Ecology. Partial Sufficiency and Further Action Determination Letter under WAC 173-340 for the following Hazardous Waste Site: Groat Brothers Inc., 618 and 608 West Scott Avenue, Woodland, Washington 98674, Facility/Site ID Number: 36354352, Voluntary Cleanup Program Number: SW 0519, dated October 4, 2010.
8. Maul Foster & Alongi, Inc. Groundwater and Soil Characterization at Groat Brothers, Inc. Former Service Station, 608 West Scott Avenue, Woodland, Washington, VCP Number: SW 0519, dated June 14, 2007.
9. Maul Foster & Alongi, Inc. Supplemental Investigation of Groundwater at Former Underground Injection Control Well, 608 West Scott Avenue, Woodland, Washington, dated April 6, 2005.
10. Maul Foster & Alongi, Inc. Groundwater Monitoring Remedial Investigation Final Report, Groat Brothers, Inc., Woodland, Washington, dated November 9, 2004.
11. Maul Foster & Alongi, Inc. Characterization of Soil and Groundwater from an Underground Injection Well; Former Service Station, 608 West Scott Avenue, Woodland Avenue, Washington, dated March 26, 2003.

The above 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**

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Ecology has concluded that **no further action** is necessary to clean up the groundwater contamination at the Site. That condition 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**.

The Groat Brothers, Inc. Site is located at 618 and 608 West Scott Avenue in Woodland, Washington. The Property consists of a total of approximately 6.91-acres on two parcels. The parcel at 608 West Scott Avenue was a former Service Station with a gasoline retail station and automobile repair shop.

The Site currently is being used for industrial purposes. Groat Brothers, Inc. (GBI) has been operating heavy hauling and trucking company on the Site from 1978 to the present. The Site includes truck parking and equipment storage areas, a former vehicle washing area, a former fueling area, and a truck maintenance shop. The GBI operated fueling operations using two 10,000-gallons diesel above ground storage tanks (ASTs) and one 500-gallon gasoline underground storage tank (UST). Also a 1,000-gallon UST was used to store the used oil. An underground injection control (UIC) dry well (10-inch diameter cement pipe that extended approximately 5-feet below ground surface) was also located near the service station. The source of soil and groundwater contamination was as a result of routine truck operational activities, spills during filling of former diesel ASTs, suspected plumbing leaks from a former gasoline UST and releases from the UIC well in localized areas within the Site. The diesel ASTs and gasoline UST were removed in 1996. The waste oil storage UST and the UIC well were properly decommissioned/removed in 1990 and 2003, respectively.

Following the Site investigations and during the decommissioning/removal of ASTs, USTs, and UIC well, all the contaminated soil was excavated to MTCA Method A cleanup levels and treated on-site and/or disposed of off-site. As a result, Ecology issued a "Partial Sufficiency and Further Action" opinion letter on October 4, 2010 for Site soils for meeting the MTCA Method A cleanup standards for petroleum hydrocarbons and metals in soils with continued groundwater monitoring for petroleum constituents

### Groundwater

During May, August and October of 2002, groundwater investigations were conducted in three Phases. During Phase 1 and Phase 2 groundwater investigations, a total of 14 reconnaissance groundwater samples were collected from geoprobe borings at four potential source areas. All groundwater samples were analyzed for gasoline-diesel-and -oil-range total petroleum hydrocarbons (TPH-G, TPH-D, and TPH-O), polycyclic aromatic hydrocarbons (PAHs), volatile organic hydrocarbons (VOCs), and metals. TPH-G (7,900 µg/L-160,000 µg/L), TPH-D (471 µg/L-11,000 µg/L), TPH-O (740 µg/L), and lead (25.6 µg/L) were detected exceeding their MTCA Method A cleanup levels of 800 µg/L, 500 µg/L (TPH-D and TPH-O), and 15 µg/L, respectively. In addition, benzene, ethylbenzene, toluene, total xylenes, and naphthalene were also detected at 310 µg/L, 5,200 µg/L, 2,800 µg/L, 24,000 µg/L, and 3,300 µg/L, respectively exceeding their MTCA Method A cleanup levels of 5 µg/L, 700 µg/L, 1,000 µg/L (toluene and total xylenes), and 160 µg/L, respectively.

After the soil cleanup by removing approximately 8,200 cubic yards of contaminated soil, seven groundwater monitoring wells were installed for groundwater monitoring as a part of Phase 3 investigation. Between October 2002 and July 2010, a total of 12 rounds (8 rounds of quarterly and 4 rounds of semi-annual) groundwater monitoring was conducted at the Site. All groundwater samples were analyzed for TPH-G, TPH-D, TPH-O, PAHs, VOCs, and lead. Results of groundwater samples indicated that contaminant concentrations were not detected except for the infrequent (one or two rounds) detections of TPH-D (600 µg/L) and TPH-O (630 µg/L – 790 µg/L) in monitoring wells MW-4, MW-5 and/or MW-7. These concentrations exceeded the MTCA Method A cleanup level of 500 µg/L. As a result of these exceedences, Ecology's "Partial Sufficiency and Further Action" letter of October 4, 2010 required the continued groundwater monitoring on an 18-months frequency until the concentrations reduce to below cleanup levels. However, the groundwater sampling was discontinued in July 2010.

In late 2014, as a result of the periodic review of the Site, the Property Owner restarted the quarterly groundwater monitoring with the intention of obtaining a no further action determination letter for the groundwater portion of the Site. A total of five rounds of quarterly groundwater monitoring was conducted in monitoring wells MW-4 through MW-7 (contaminants were never detected above the MTCA cleanup levels in monitoring wells MW-1 through MW-3 during 12-rounds of monitoring) from October 2014 through February 2016. Results of this groundwater monitoring showed that the TPH-D and TPH-O concentrations were all below the MTCA Method A cleanup level of 500 µg/L for four consecutive sampling events.

Based on the above information provided to Ecology, the Site requires no additional groundwater cleanup or monitoring. All the groundwater monitoring results and the monitoring well locations are included as Enclosure B.

## **2. Establishment of Cleanup Standards**

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

The MTCA Method A cleanup levels for unrestricted uses for the groundwater were used to characterize and determine compliance for the Site.

Standard points of compliance was used for the Site. 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. The groundwater monitoring wells MW-1 through MW-7 located within and along

edge of the property boundary should be adequate as points of compliance. The TPH-D and TPH-O concentrations in these wells will need to be below the MTCA method A cleanup levels.

### **3. Selection of Cleanup Action**

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

The selected cleanup action from the feasibility study for the Site was alternative 1, which included the following:

- Excavation of contaminated soils and on-site treatment and/or off-site disposal as an interim actions.
- Institutional Controls restricting the groundwater use at the Site.
- Monitored Natural Attenuation.

### **4. Cleanup**

Ecology has determined the cleanup you performed has met the cleanup standards at the Site. The cleanup activities conducted so far at the Site included:

As a part of the soil cleanup, a total of approximately 3,200 cubic yards of TPH contaminated soil was excavated to below MTCA Method A cleanup levels and treated on-site and/or disposed of off-site in a permitted landfill. On October 4, 2010, Ecology issued a "Partial Sufficiency and Further Action" opinion letter for meeting the cleanup standards for TPH constituents and metals in soils and metals in groundwater.

#### **Groundwater Cleanup Actions**

Under the Monitored Natural Attenuation (MNA) selected remedy, a total of 12-rounds of quarterly and semiannual groundwater monitoring was conducted from October 2002 through July 2010. During these sampling events all seven monitoring wells (MW-1 through MW-7) were sampled and samples were analyzed for TPH-G, TPH-D, TPH-O, PAHs, VOCs, and lead. Results indicated a sporadic detections of TPH-D (600 µg/L) and TPH-O (563 µg/L - 790 µg/L) in monitoring wells MW-4, MW-5, and/or MW-7 above the MTCA cleanup level of 500 µg/L. As a result, Ecology's "Partial Sufficiency and Further Action" letter of October 4, 2010 required the continued groundwater monitoring on an 18-month frequency until the contaminant concentrations reduce to below cleanup levels. However, the groundwater monitoring was discontinued in July 2010.

The groundwater monitoring was again restarted in 2014 and five rounds of quarterly groundwater monitoring was conducted from October 2014 through February 2016. During these events groundwater samples were collected from four monitoring wells (MW-4 through MW-7) and samples were analyzed for TPH-D and TPH-O. The results of TPH-D and TPH-O during the last four rounds of quarterly groundwater monitoring from March 2015 through February 2016 were all below the MTCA Method A cleanup levels. As a result, no additional groundwater cleanup or monitoring is required at this Site. Groundwater monitoring results and well locations are included as Enclosure-B.

### **Listing of the Site**

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Based on this opinion, Ecology will initiate the process of removing the Site from our lists of hazardous waste sites, including:

- Hazardous Sites List.
- Confirmed and Suspected Contaminated Sites List.

The process includes public notice and opportunity to comment. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdraw this opinion.

### **Limitations of the Opinion**

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#### **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 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).

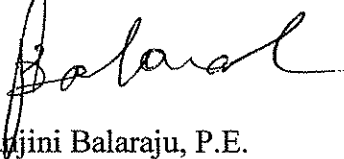
**Contact Information**

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Thank you for cleaning up the Site under the Voluntary Cleanup Program (VCP). As your cleanup progresses, please do not hesitate to request additional services. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: [www.ecy.wa.gov/program/tcp/vcp/vcpmain.htm](http://www.ecy.wa.gov/program/tcp/vcp/vcpmain.htm). If you have any questions about this opinion or the termination of the Agreement, please contact me at (360) 407-6335 or by e-mail at [panjini.balaraju@ecy.wa.gov](mailto:panjini.balaraju@ecy.wa.gov).

Sincerely,



Panjini Balaraju, P.E.  
Periodic Review Coordinator  
Southwest Regional Office  
Toxics Cleanup Program

PB/ksc:SW0519 Groat Brothers NFA letter 05262016

Enclosures: A – Description and Diagram of the Site  
B – Groundwater Monitoring Well Locations and Table of Results

By certified mail: (

cc: Ken Groat  
Netta Groat  
Nick Acklam, Ecology  
Matthew Alexander, Ecology (without Attachments)  
Central Files



Mr. Jonathan Horowitz, PE  
May 26, 2016  
Page 9

**ENCLOSURE - A**

**Site Description and Diagrams of the Site**

## Site Description

In this opinion letter, the Site is defined as the combined 618/608 addresses, and Service Station is defined as the former service station property located at 608 West Street Avenue, Woodland, Washington. The Site is located along Interstate 5 in Woodland, Cowlitz County, Washington. Figure 1, Figure 2 and Figure 3 shows the general location of the Site, Site Plan and relationship of the Service Station to the general Site, respectively.

In the 1950s, the Site reportedly used for residential and agricultural purposes. The Service Station was reportedly used as a gasoline retail station and automobile repair shop by Humble Oil and Refining Company from approximately 1966 until approximately 1990. In 1978 the Site was purchased by Lowell and Netta Groat, Donald Groat, and Eva Groat. Shortly thereafter, the Groats began leasing both the Service Station and the rest of the Site. In 2002, the Service Station was reportedly used as a consignment shop and for repair of used farm and lawn tractors and associated equipment. Currently the Site is owned by Woodridge LLC. The Service Station is leased by Groat Brothers, Inc. (GBI).

GBI conducted fueling operations using two 10,000-gallons diesel above ground storage tanks (ASTs), and one 500-gallons gasoline underground storage tank (UST). Also there was a 500-gallon used oil storage UST for storing the waste oil generated from repair of vehicles and equipment in the truck maintenance shop at the Site. The used-oil UST was removed in 1990 and diesel ASTs and gasoline UST were removed in 1996.

The Site is currently being used for industrial purposes. The property is zoned for highway commercial use. GBI has been operating heavy hauling and trucking company on the Site from 1978 to the present. The Site includes truck parking and equipment storage areas, a former fueling area/former pump island, an Office building, and a truck-maintenance shop. Figure 4 in Enclosure-B shows the current Site Features.

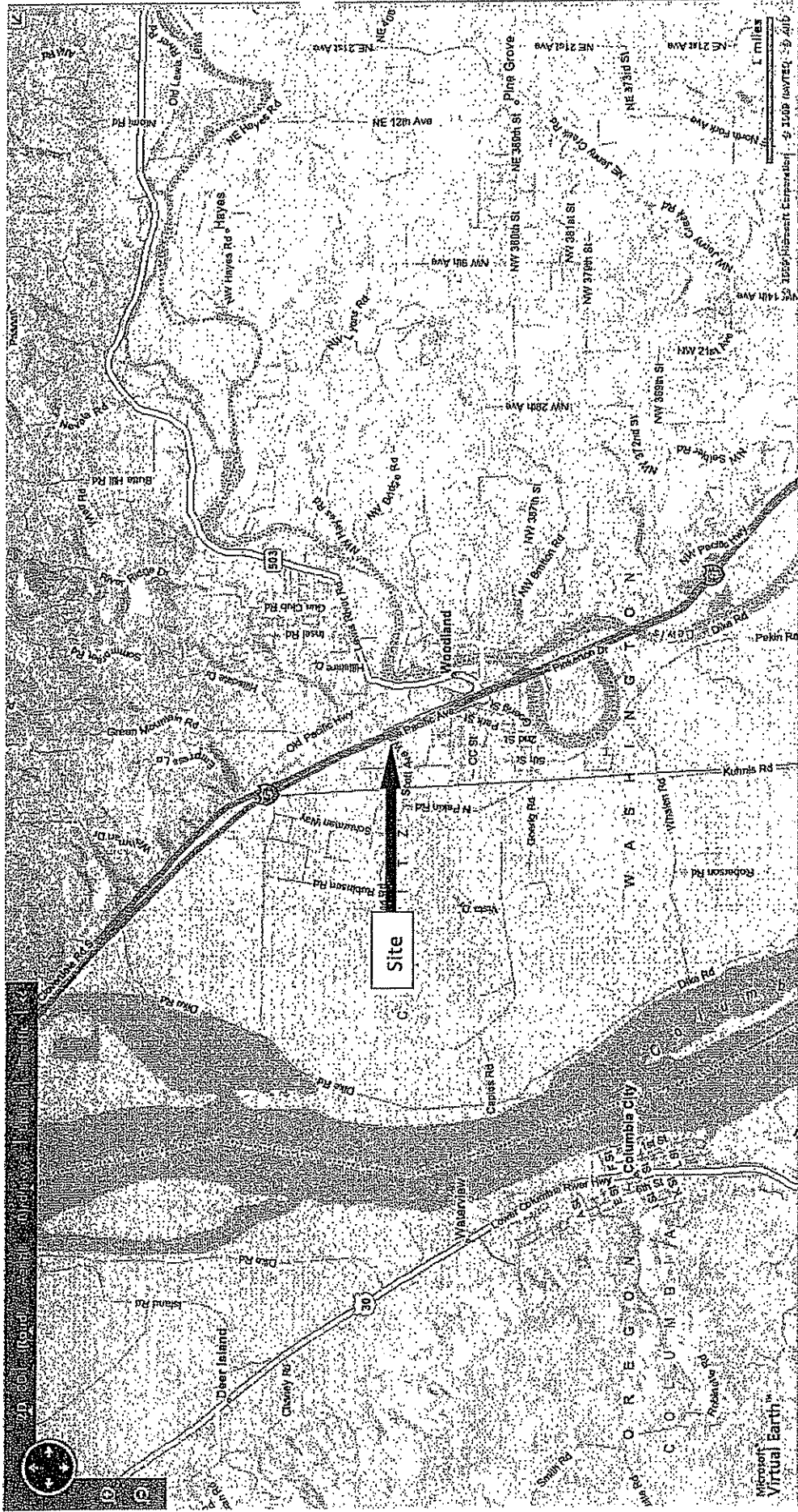
The Site is located along the Interstate 5 corridor, approximately 2,000 feet west of the north fork of the Lewis River. The topography of the Site is relatively flat, with a ground surface elevation of approximately 20 feet above sea level. No surface-water bodies are located on or adjacent to the Site. Although the Lewis River is closer to the facility, the drainage from the Site is routed to the Columbia River. The paved portion of the Site appears to drain to Scott Avenue and nearby catch basin, which ultimately discharges to the Columbia River.

The Site is generally overlain by fill material, which is composed of asphalt, silty sand and gravel approximately 0.5 to 2 feet thick. Underlying the fill are fine-grained alluvial sediments composed of unconsolidated silts and sands. The soils are stratified and typically display gradational contacts between bedding sequences. A dry, dense confining layer was not observed beneath the Site.

Slight variations in moisture content were observed. This variation may be due to wetting and drying of soils due to seasonal water table fluctuations.

Groundwater measurements from the seven on-site monitoring wells during the quarterly and semiannual groundwater monitoring from October 2014 to February 2016 indicate that the top of the water-bearing zone was encountered at depths of 4 to 10 feet below ground surface (bgs). Water levels fluctuated seasonally with precipitation and have been observed as deep as 10 feet bgs. The typical groundwater flow direction on the Site appears to reverse from east to west during the seasonal low-water levels (fall and summer) to west to east during the seasonal high-water levels (spring and winter). Figures 1 through 5 in Enclosure-B show the flow directions at various times of the year. i.e., five rounds of quarterly groundwater monitoring conducted from October 2014 through February 2016.





Groat Brothers, Inc. Site  
608 & 618 West Scott Avenue, Woodland

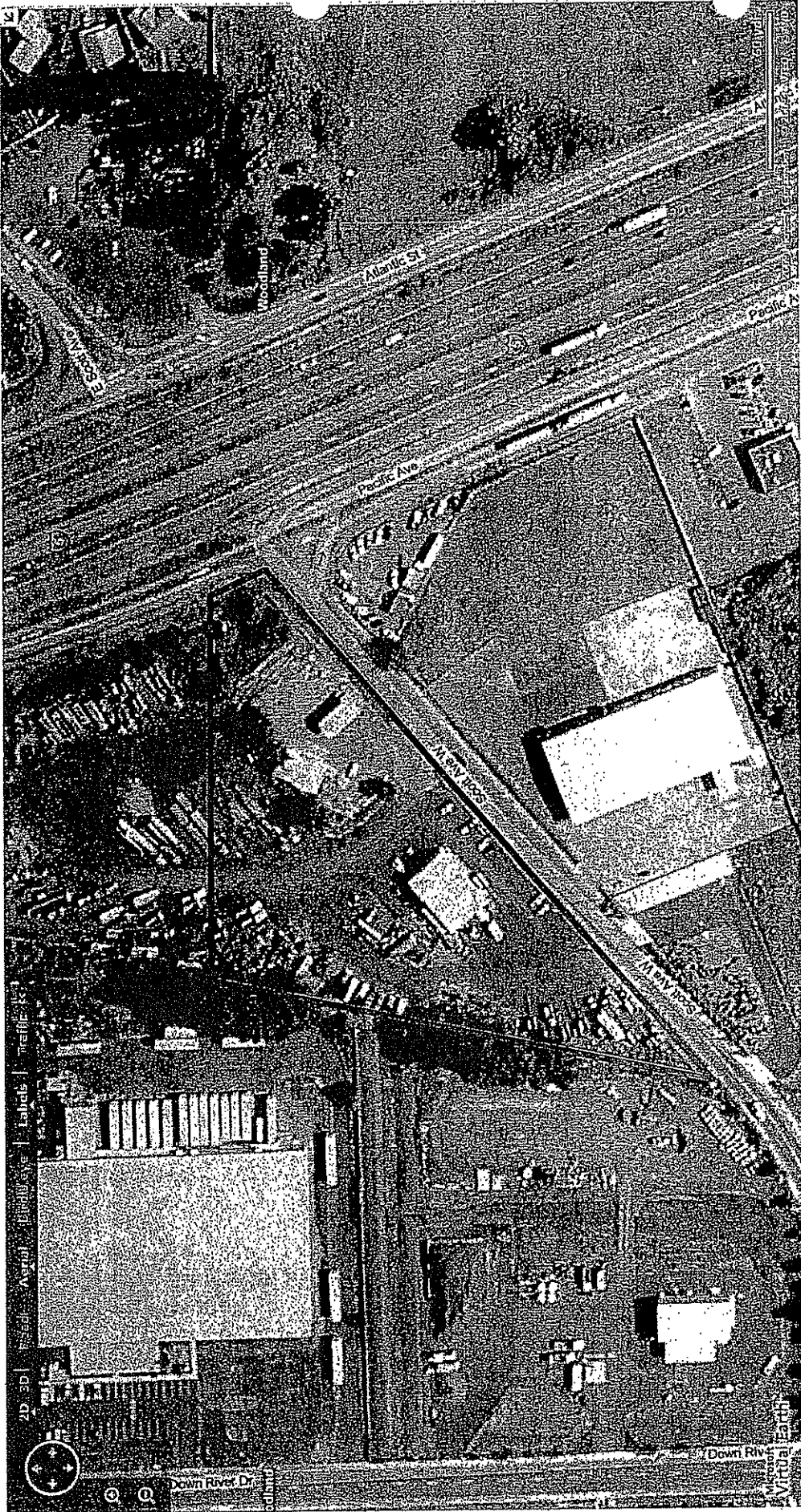
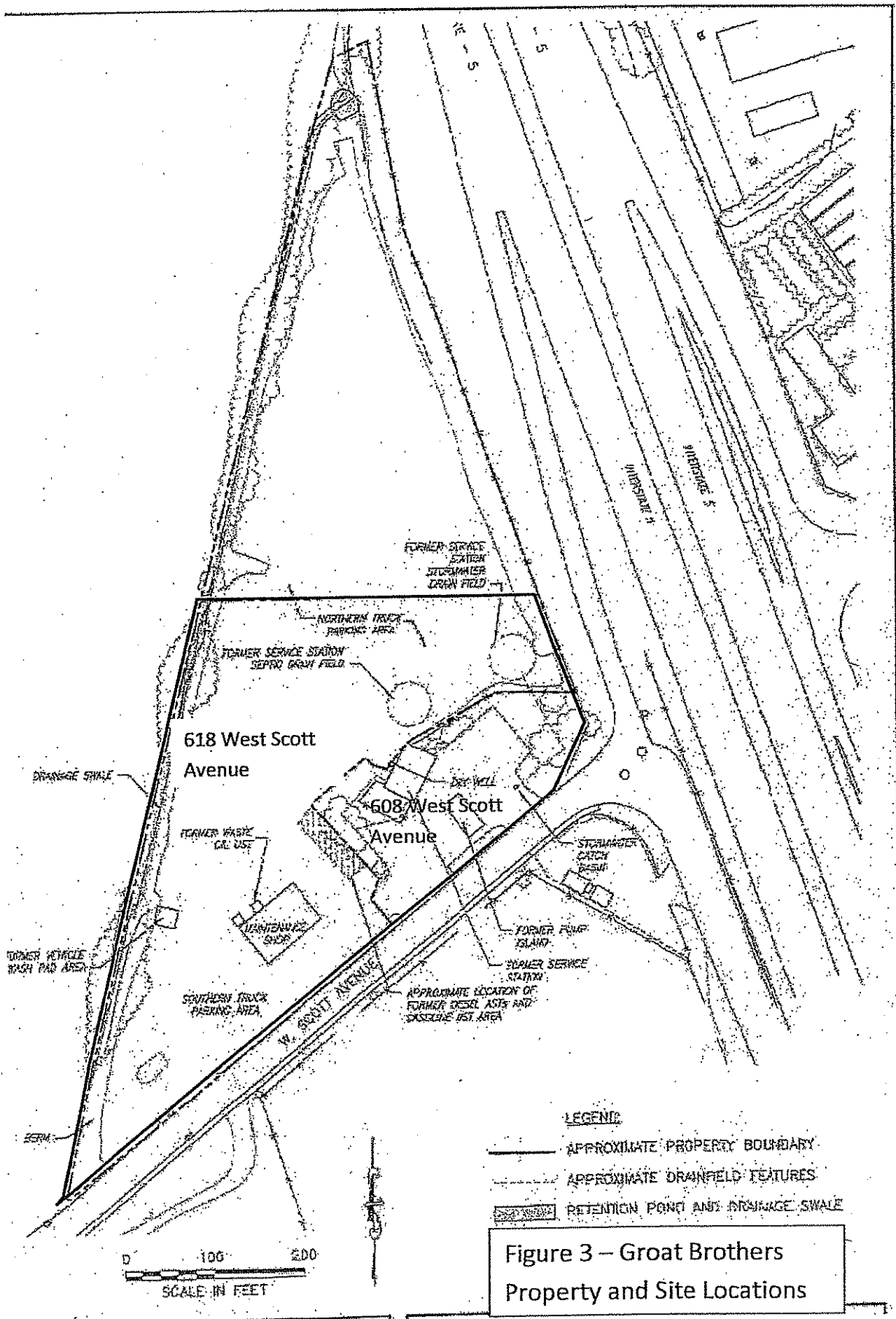
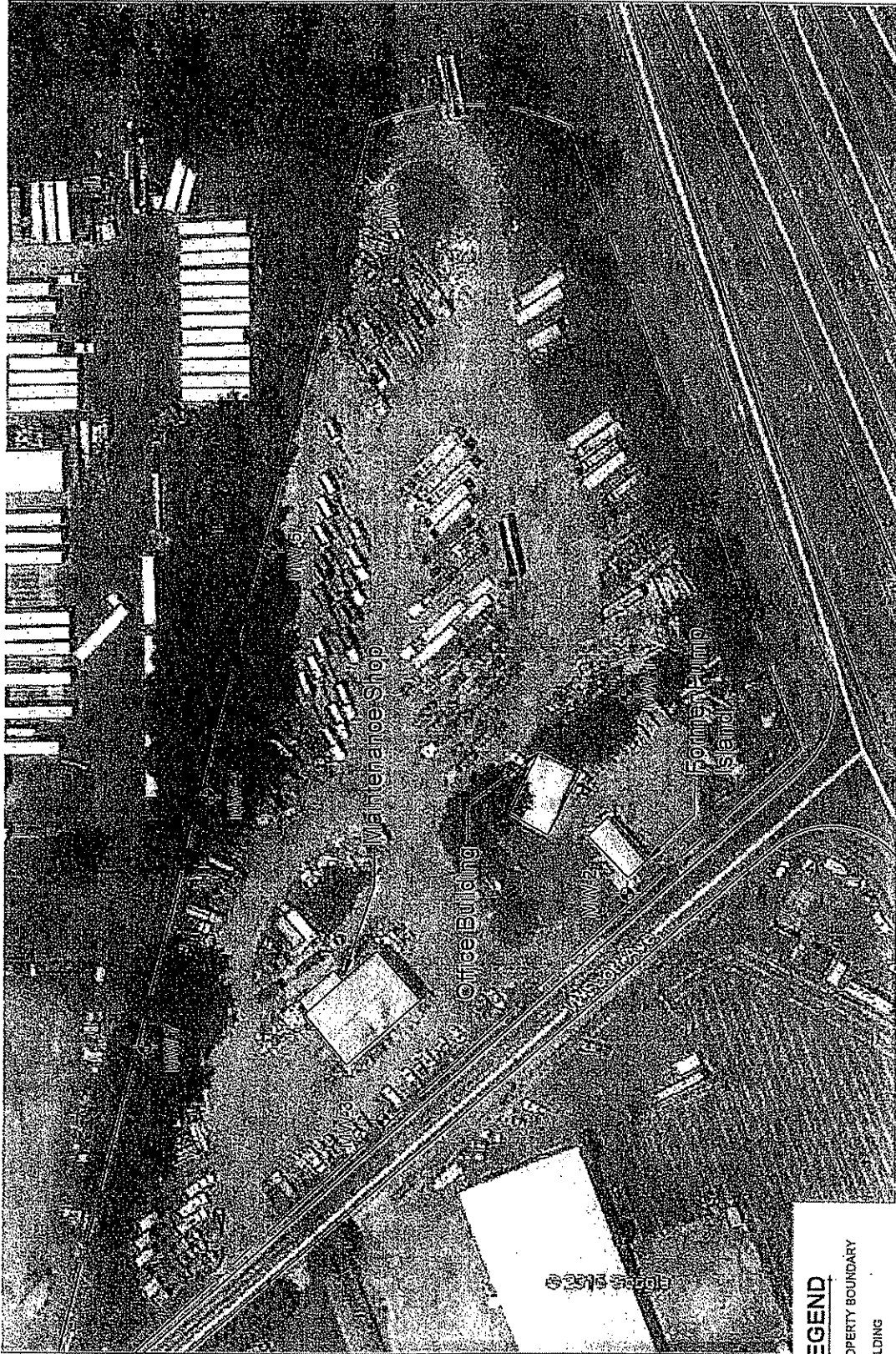


Figure 2 – Groat Brothers Site  
608-618 West Scott Avenue, Woodland



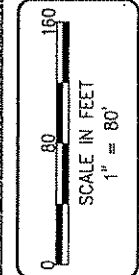
**Figure 3 – Groat Brothers Property and Site Locations**



**Figure 3A**  
**Current Site Features**  
 GROT BROTHERS, INC.  
 608 INDUSTRIAL WAY  
 WOODLAND, WA

DATE: 09-22-16  
 DWN: JH  
 CHK: JH  
 APPROVED:  
 PRJ. MGR: DB  
 PROJECT NO:  
 2015-006

**Hydro Con**  
 501 Allen St Suite B, Kelso WA, 98826



- LEGEND**
- PROPERTY BOUNDARY
  - BUILDING
  - ⊕ MONITORING WELL



**ENCLOSURE - B**

**Groundwater Monitoring Results and Well Locations**

**Table 2**  
**Summary of Groundwater Analytical Results**  
**Groat Brothers Inc.**  
**Woodland, Washington**  
**HydroCon Project Number 2015-006**

Monitoring Well ID	Sample Date	Diesel	Motor Oil
MW-4	10/16/2014	130	<325
	3/26/2015	350	490
	8/18/2015	290	470
	12/14/2015	100	320
	2/11/2016	NS	NS
MW-5	4/16/2015	70	550
	3/26/2015	240	410
	8/18/2015	140	280
	12/14/2015	91	<250
	2/11/2016	90	<250
MW-6	1/14/2015	<50	<250
	3/26/2015	120	<250
	8/18/2015	150	260
	12/14/2015	78	<250
	2/11/2016	NS	NS
MW-7	10/16/2014	260	330
	3/26/2015	240	360
	8/18/2015	180	<250
	12/14/2015	78	<250
	2/11/2016	NS	NS
<b>Ecology MTCA Method A Cleanup Level</b>		500	500

**Notes:**

TPH as Diesel and Oil by NWTPH-Dx.

< = Compound not detected above the laboratory Method Reporting Limits (MRLs).

NS = Not sampled.

µg/L = micrograms per liter (parts per billion)

Color highlighted cells indicate reported concentration exceeds corresponding MTCA Level A Cleanup Value.

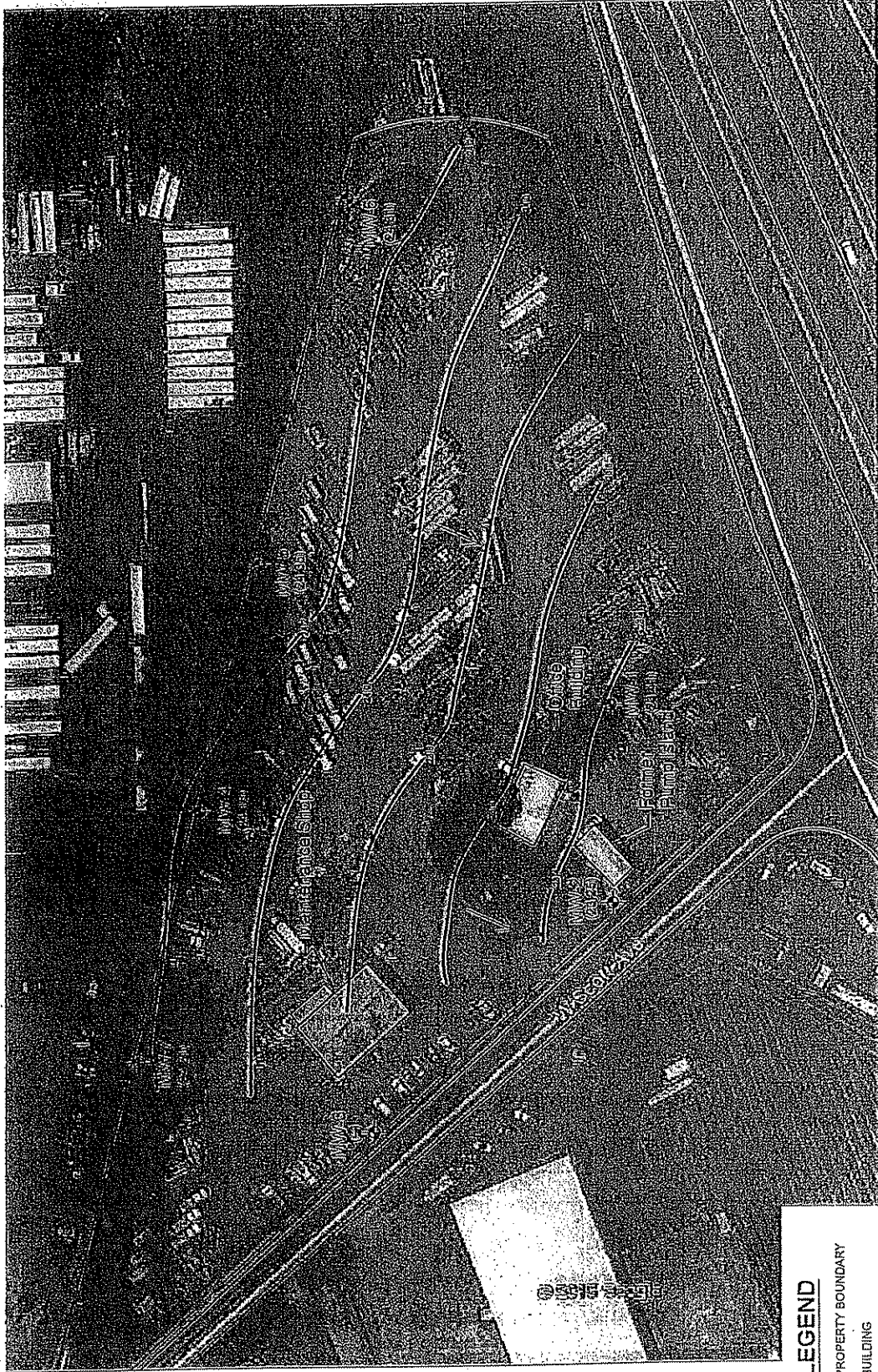
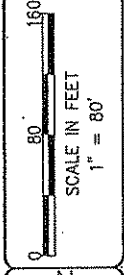
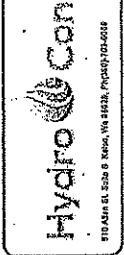


Figure 1

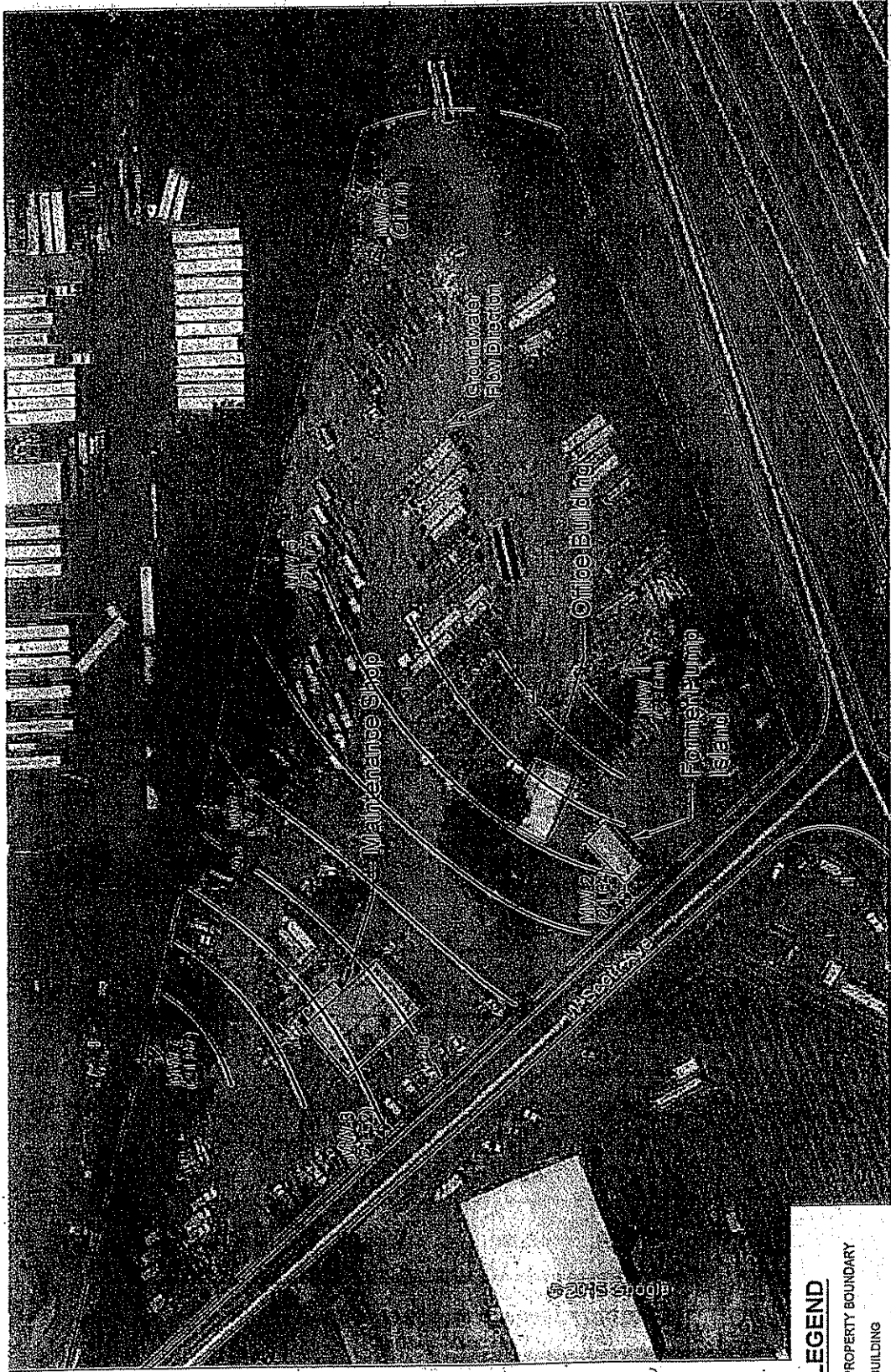
GROUND WATER ELEVATION & CONTOUR MAP  
GREAT BROTHERS, INC.  
688 INDUSTRIAL WAY  
WOODLAND, WA

DATE: 04-06-15  
DWN: JIS  
CHK: JFE  
APPROVED: PRO, MGR: DB  
PROJECT: 2013-005



**LEGEND**

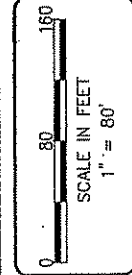
- PROPERTY BOUNDARY
- BUILDING
- MW-01 (XX-XX) MONITORING WELL (GROUNDWATER ELEV.)
- 24.0--- GROUNDWATER CONTOUR



**Figure 2**  
 GROUNDWATER ELEVATIONS & COUNTOUR MAP  
 GROYT BROTHERS, INC.  
 608 INDUSTRIAL WAY  
 WOODLAND, WA

DATE: 06-09-15  
 DWN: MG  
 CHK: JH  
 APPROVED: CH  
 PRL MGR: CH  
 PROJECT NO: 2015-006

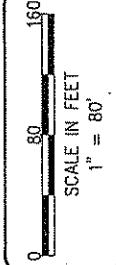
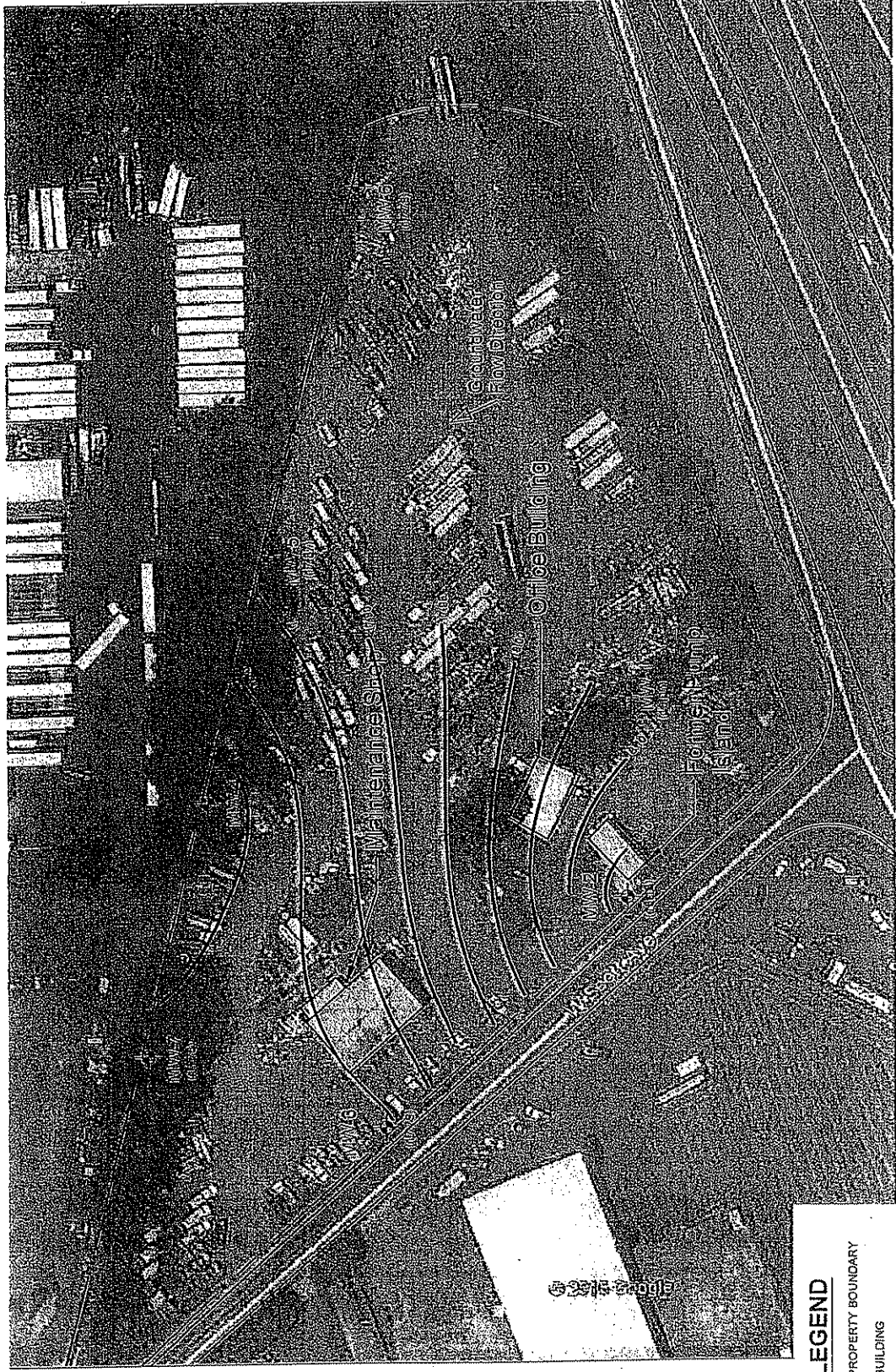
**Hydro Con**  
 501 Allan St Suite B, Kelso WA 98528



\*Note: Groundwater elevation of MW-6 was not utilized for the flow direction calculation

**LEGEND**

- PROPERTY BOUNDARY
- BUILDING
- MONITORING WELL (GROUNDWATER ELEV. NAVD83)



**HydroCon**  
 501 Allen St Suite B, Kelso WA 98626

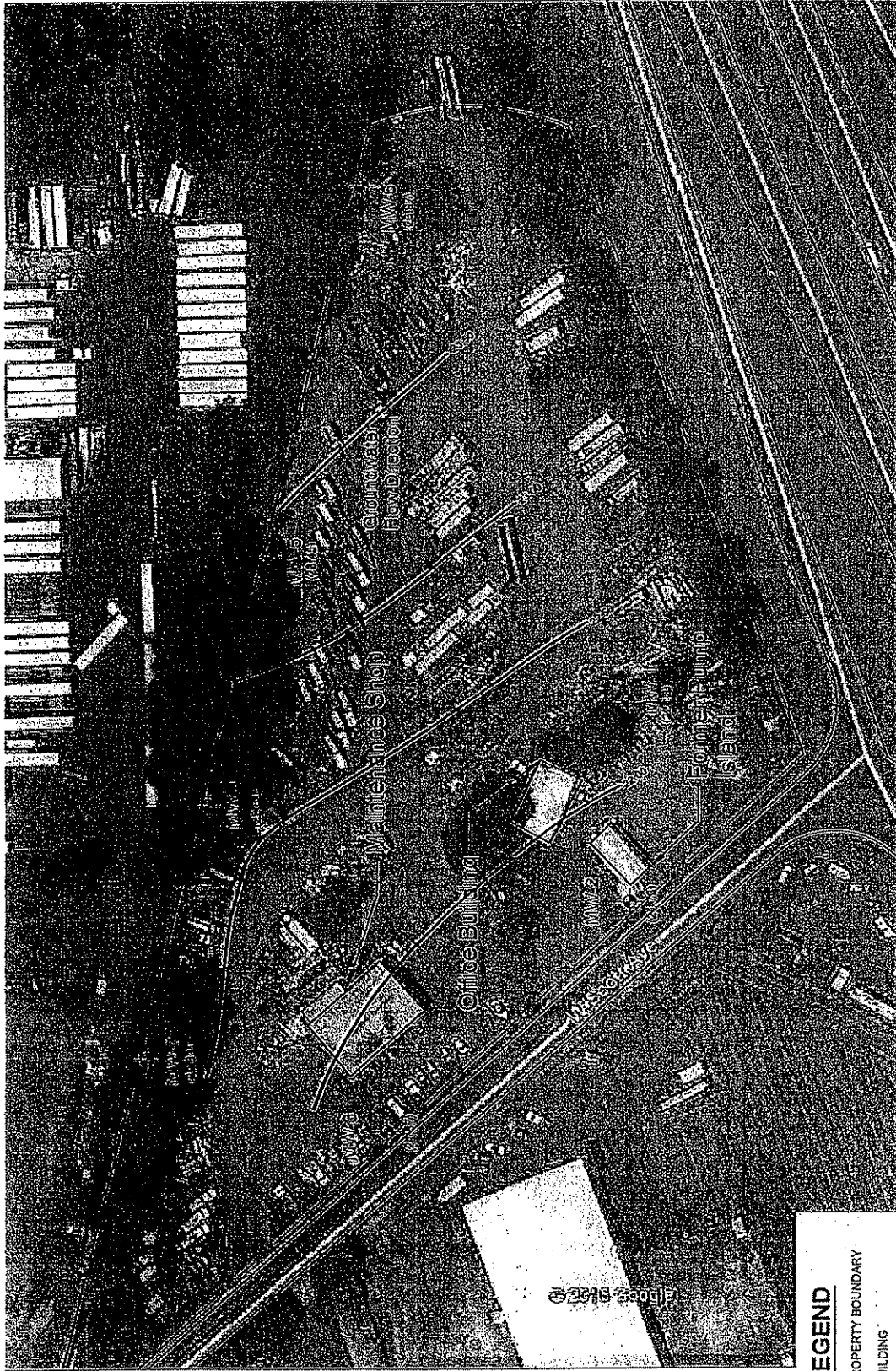
DATE: 09-04-15  
 DWR: JG  
 CAC: JH  
 APPROVED:  
 PRJ. MGR: CH  
 PROJ. NO: 2015-009

**Figure 3**  
 GROUNDWATER ELEVATIONS & COUNTOUR MAP  
 GREAT BROTHERS, INC.  
 608 INDUSTRIAL WAY  
 WOODLAND, WA

**LEGEND**

- PROPERTY BOUNDARY
- BUILDING
- MW-01 (XX-XX) MONITORING WELL (GROUNDWATER ELEV. NAVD89)

\*Note: Groundwater elevation of MW-6 was not utilized for the flow direction calculation



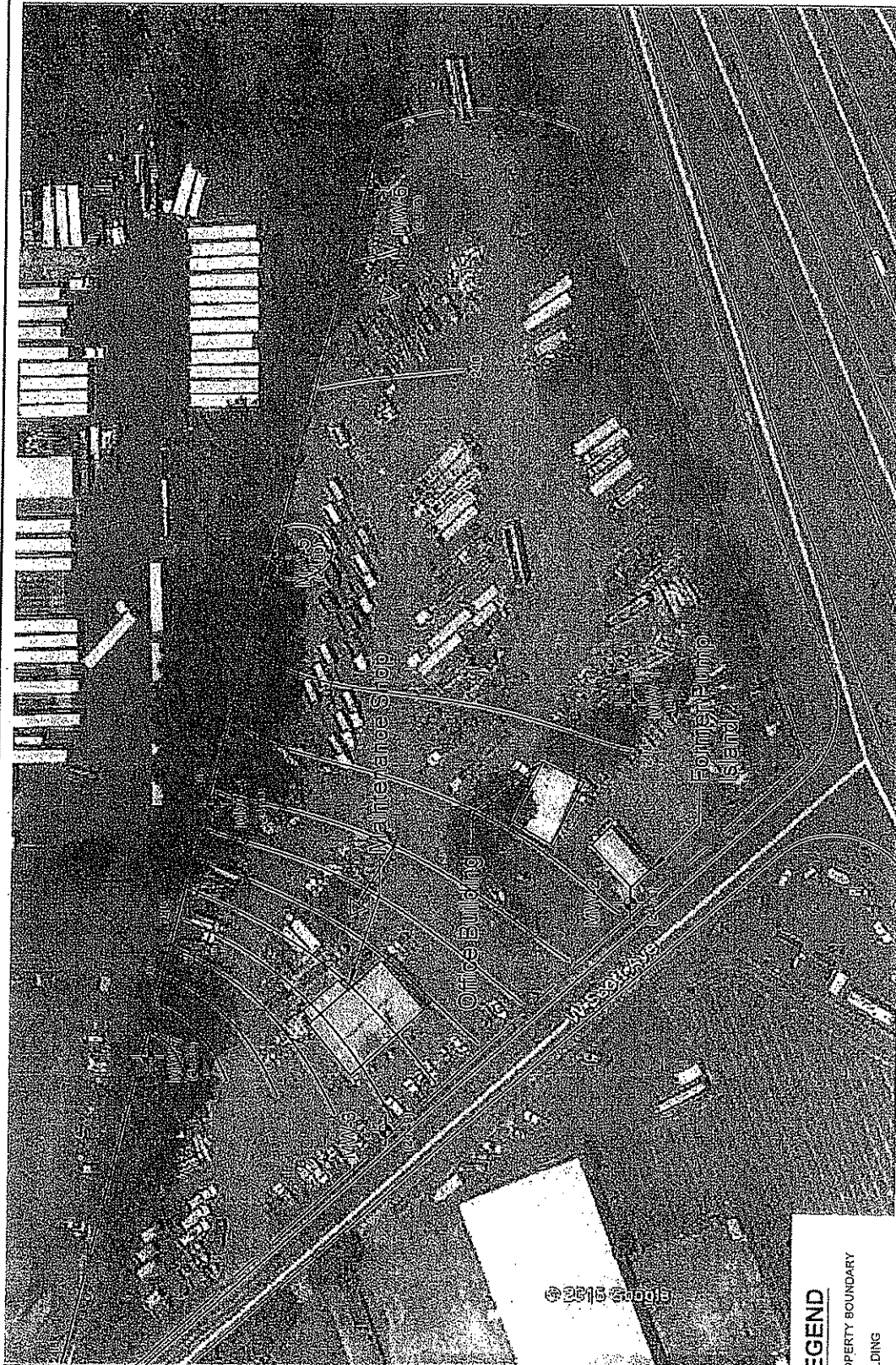
**LEGEND**

- PROPERTY BOUNDARY
- ▬ BUILDING
- MW-01 (XX.XX) MONITORING WELL (GROUNDWATER ELEV. NAVD88)
- GROUNDWATER ELEVATION CONTOUR



DATE: 01-05-16  
 DWN: MG  
 CHK: JH  
 APPROVED: CH  
 PRJ. MGR: CH  
 PROJECT NO: 2015-006

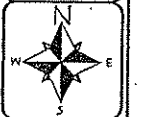
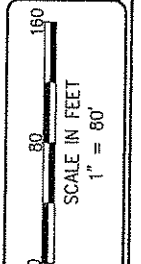
**Figure 4**  
 GROUNDWATER ELEVATIONS & CONTOUR MAP  
 FOR DECEMBER 2015  
 GREAT BROTHERS, INC.  
 608 INDUSTRIAL WAY  
 WOODLAND, WA



**Figure 5.**  
 GROUNDWATER ELEVATIONS & COUNTOUR MAP  
 FOR FEBRUARY 2016  
 GREAT BROTHERS, INC.  
 608 INDUSTRIAL WAY  
 WOODLAND, WA

DATE: 02-22-16  
 DRAWN: JH  
 APPROVED:  
 PEEL MCEL DB  
 PROJECT: 087  
 2015-008

**Hydro Con**  
 501 Allen St Suite B, Kelso WA 98626



GROUNDWATER FLOW  
 DIRECTION

**LEGEND**

- PROPERTY BOUNDARY
- BUILDING
- MONITORING WELL  
(GROUNDWATER ELEV.  
NAVD88)
- GROUNDWATER ELEVATION  
CONTOUR
- GROUNDWATER FLOW  
DIRECTION





**Table 2**  
**Total Petroleum Hydrocarbons in Groundwater (µg/L)**  
**Groat Brothers, Inc.**  
**Woodland, Washington**

Location	Sample Name	Date	Diesel-Range Organics	Residual-Range Organics	Gasoline-Range Organics
MICA Method A Cleanup Levels			500	500	800 <sup>a</sup>
MW-1	MW1-092602	09/26/2002	250 U	500 U	50 U
	MW1-012203	01/22/2003	240 U	480 U	50 U
	MW1-041703	04/17/2003	250 U	500 U	50 U
	MW1-070903	07/09/2003	250 U	500 U	50 U
	MW1-101603	10/16/2003	250 U	500 U	50 U
	MW1-012004	01/20/2004	250 U	500 U	50 U
	MW1-041604	04/16/2004	250 U	500 U	50 U
	MW1-071304	07/13/2004	280 U	560 U	250 U
	MW1-012706	01/27/2006	270 U	530 U	250 U
	MW1-071107	07/11/2007	260 U	520 U	250 U
	MW1-012009	01/20/2009	242 U	483 U	100 U
	MW1-072910	07/29/2010	79 U	200 U	100 U
MW-2	MW2-092602	09/26/2002	250 U	500 U	50 U
	MW2-012203	01/22/2003	240 U	480 U	50 U
	MW2-041703	04/17/2003	250 U	500 U	50 U
	MW2-070903	07/09/2003	250 U	500 U	50 U
	MW2-101603	10/16/2003	250 U	500 U	50 U
	MW2-012004	01/20/2004	250 U	500 U	50 U
	MW2-041604	04/16/2004	250 U	500 U	50 U
	MW2-071304	07/13/2004	260 U	510 U	250 U
	MW2-012706	01/27/2006	260 U	520 U	250 U
	MW2-071107	07/11/2007	270 U	530 U	250 U
	MW2-012009	01/20/2009	237 U	475 U	100 U
	MW2-072910	07/29/2010	80 U	200 U	100 U
MW-3	MW3-092602	09/26/2002	250 U	500 U	50 U
	MW3-012203	01/22/2003	240 U	480 U	50 U
	MW3-041703	04/17/2003	250 U	500 U	50 U
	MW3-070903	07/09/2003	250 U	500 U	50 U
	MW3-101603	10/16/2003	250 U	500 U	50 U
	MW3-012004	01/20/2004	250 U	500 U	50 U
	MW3-041604	04/16/2004	260 U	520 U	50 U
	MW3-071304	07/13/2004	250 U	500 U	250 U
	MW3-012706	01/27/2006	260 U	520 U	250 U
	MW3-071107	07/11/2007	250 U	500 U	250 U
	MW3-012009	01/20/2009	251 U	503 U	100 U
	MW3-072910	07/29/2010	78 U	190 U	100 U

**Table 2**  
**Total Petroleum Hydrocarbons in Groundwater (µg/L)**  
**Groat Brothers, Inc.**  
**Woodland, Washington**

Location	Sample Name	Date	Diesel-Range Organics	Residual-Range Organics	Gasoline-Range Organics
MTC A Method A Cleanup Levels			500	500	800 <sup>a</sup>
MW-4	MW4-092602	09/26/2002	250 U	500 U	50 U
	MW-4-012203	01/22/2003	240 U	480 U	50 U
	MW4-041703	04/17/2003	250 U	500 U	50 U
	MW4-070903	07/09/2003	250 U	500 U	50 U
	MW4-101603	10/16/2003	250 U	500 U	50 U
	MW4-012004	01/20/2004	270 U	530 U	50 U
	MW4-041604	04/16/2004	250 U	500 U	50 U
	MW4-071304	07/13/2004	250 U	500 U	250 U
	MW4-012706	01/27/2006	280 U	550 U	250 U
	MW4-071107	07/11/2007	330	530 U	250 U
	MW4-012009	01/20/2009	261	563	100 U
MW4-072910	07/29/2010	490	790	100 U	
MW-5	MW5-101602	10/16/2002	250 U	500 U	50 U
	MW-5-012203	01/22/2003	240 U	480 U	50 U
	MW5-041703	04/17/2003	250 U	500 U	50 U
	MW5-070903	07/09/2003	250 U	500 U	50 U
	MW5-101603	10/16/2003	250 U	500 U	50 U
	MW5-012004	01/20/2004	250 U	500 U	50 U
	MW5-041604	04/16/2004	260 U	520 U	50 U
	MW5-071304	07/13/2004	260 U	520 U	250 U
	MW5-012706	01/27/2006	260 U	520 U	250 U
	MW5-071107	07/11/2007	600	530 U	250 U
	MW5-012009	01/20/2009	248	569	100 U
MW5-072910	07/29/2010	330	630	100 U	
MW-6	MW6-101602	10/16/2002	250 U	500 U	50 U
	MW-6-012203	01/22/2003	240 U	480 U	50 U
	MW6-041703	04/17/2003	250 U	500 U	50 U
	MW6-070903	07/09/2003	250 U	500 U	50 U
	MW6-101603	10/16/2003	250 U	500 U	50 U
	MW6-012004	01/20/2004	250 U	500 U	50 U
	MW6-041604	04/16/2004	250 U	500 U	50 U
	MW6-071304	07/13/2004	250 U	500 U	250 U
	MW6-012706	01/27/2006	270 U	530 U	250 U
	MW6-012706-Dup	01/27/2006	260 U	520 U	250 U
	MW6-071107	07/11/2007	270	530 U	250 U
	MW6-071107-Dup	07/11/2007	270 U	530 U	250 U
	MW6-012009	01/20/2009	237 U	500	100 U
	MW6-012009-Dup	01/20/2009	237 U	498	100 U
MW6-072910	07/29/2010	150	280	100 U	
MW6-072910-Dup	07/29/2010	160	330	100 U	

**Table 2**  
**Total Petroleum Hydrocarbons in Groundwater (µg/L)**  
**Groat Brothers, Inc.**  
**Woodland, Washington**

Location	Sample Name	Date	Diesel-Range Organics	Residual-Range Organics	Gasoline-Range Organics
MTC A Method A Cleanup Levels			500	500	800 <sup>a</sup>
MW-7	MW7-070903	07/09/2003	250 U	500 U	50 U
	MW7-101603	10/16/2003	250 U	500 U	50 U
	MW7-012004	01/20/2004	260 U	520 U	50 U
	MW7-041604	04/16/2004	250 U	500 U	50 U
	MW7-071304	07/13/2004	260 U	510 U	250 U
	MW7-012706	01/27/2006	290	640	250 U
	MW7-042006	04/20/2006	250 U	500 U	NA
	MW7-071107	07/11/2007	270 U	530 U	250 U
	MW7-012009	01/20/2009	291	639	100 U
	MW7-072910	07/29/2010	220	500	100 U

