



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

June 10, 2016

Mr. Glen Zirkle, President  
WSCO Petroleum Corp  
2929 Northwest 29<sup>th</sup> Avenue  
Portland, OR 97210-1705

**Re: Further Action at the following Site:**

- **Site Name:** Astro 106
- **Site Address:** 1401 W. 1<sup>st</sup> Avenue, Ritzville, WA
- **Facility/Site No.:** 53522166
- **VCP Project No.:** EA0317

Dear Mr. Zirkle:

The Washington State Department of Ecology (Ecology) received your request for an opinion on your independent cleanup of the Astro 106 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 Revised Code of Washington (RCW).

**Issue Presented and Opinion**

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

**YES. Ecology has determined that 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 Washington Administrative Code (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 releases:



- Petroleum hydrocarbons into the Soil.
- Petroleum hydrocarbons and lead 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**

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

- *Phase II Environmental Site Assessment*: WSCO Petroleum, July 19, 2007.
- *Groundwater Monitoring Reports*: Robert D. Miller Consulting, November 2007, February and May 2008, August 2009, September 2010, September 2011, July 2015.
- *Site Assessment for UST Decommissioning & Soil Cleanup*: Robert D. Miller Consulting, January 27, 2009.

Those documents are kept in the Central Files of the Eastern Regional Office of Ecology (ERO) for review by appointment only. You can make an appointment by calling (509) 329-3400.

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 **further remedial action** is necessary to clean up contamination at the Site. That conclusion is based on the following analysis:

#### **1. Cleanup.**

**Ecology has determined the cleanup you performed does not meet cleanup standards at the Site.**

Petroleum hydrocarbons were detected in soil and groundwater during site investigations in 2006. The underground storage tanks (USTs) were decommissioned in 2006 and contaminated soil was excavated and bioremediated on-site. Seven groundwater monitoring wells were installed to determine impacts to groundwater; sample results collected between 2006 and 2015 indicated the presence of petroleum hydrocarbons and lead in groundwater. Only one monitoring well continues to show concentrations of gasoline, diesel, benzene, and lead exceeding cleanup levels.

Your proposed work plan, included in the Groundwater Monitoring Report dated August 23, 2015, includes additional soil excavation, soil bioremediation, groundwater treatment, and groundwater monitoring. **The following comments/recommendations are based on review of the proposed work plan:**

- A UIC permit may be required. The UIC program must be contacted prior to conducting groundwater treatment.
- The groundwater treatment system design plan should be submitted to Ecology for review.
- Spray irrigation will not be allowed, due to the concentrations of petroleum hydrocarbons detected in groundwater.
- If monitoring well MW1 is damaged or decommissioned during excavation activities, a new replacement well will be required.
- Groundwater monitoring should continue until results from four consecutive quarter are below cleanup levels.
- If soil contamination remains after all remedial actions are complete, an environmental covenant well be required.
- All environmental data must be submitted to Ecology's Environmental Information Management database before a final Opinion Letter can be issued for the Site.

### **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 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.**

Mr. Glen Zirkle  
June 10, 2016  
Page 4

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 choosing to clean up the Site under the Voluntary Cleanup Program (VCP). After you have addressed our concerns, you may request another review of your cleanup. Please do not hesitate to request additional services as your cleanup progresses. We look forward to working with you.

For more information about the VCP and the cleanup process, please visit our web site: <http://www.ecy.wa.gov/programs/tcp/vcp/vcpmain.htm>. If you have any questions about this opinion, please contact me by phone at (509) 329-3522 or by e-mail at [patti.carter@ecy.wa.gov](mailto:patti.carter@ecy.wa.gov).

Sincerely,



Patti Carter  
Toxics Cleanup Program, ERO

pc:mr

Enclosures

cc: Robert Miller, Robert D. Miller Consulting  
Matt Alexander, Ecology

## **Enclosure A**

### **Description and Diagrams of the Site**

## Site Description

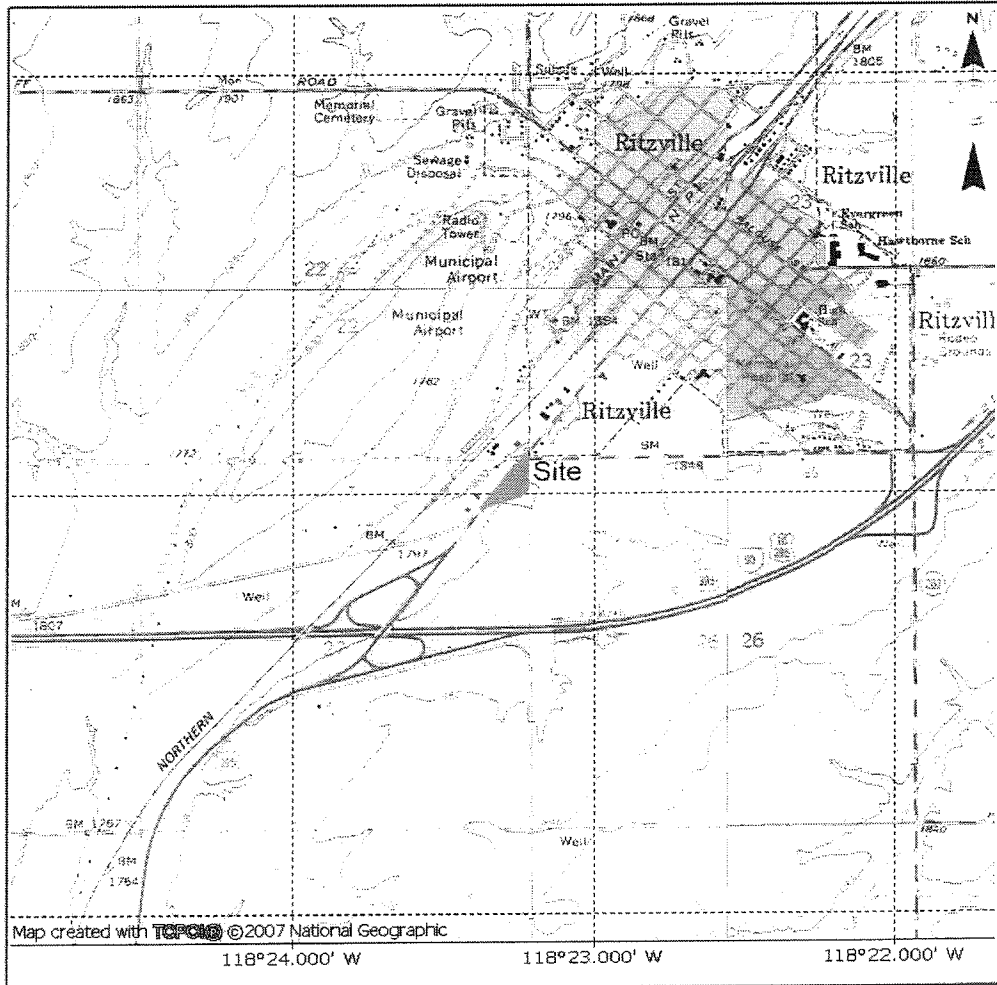
In 2006, four USTs and two pump islands with eight dispensers were located on the property. The tanks were decommissioned in September 2006. The tanks were not replaced and all other improvements were demolished and removed from the Site. No UST systems currently exist and the property is vacant.

Petroleum hydrocarbons were detected in soil and groundwater during site investigations in 2006. Twenty-three direct-push soil probes were installed across the Site in 2006 to determine if contamination was present. Contaminated soil was excavated from the tank nests and associated fuel islands. Approximately 1,650 cubic yards of contaminated material was excavated and bioremediated on-site.

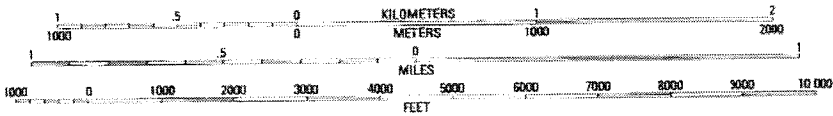
Seven groundwater monitoring wells were installed in 2006. Groundwater samples were collected between 2006 and 2015. Only one monitoring well continues to show concentrations of gasoline, diesel, benzene, and lead exceeding the cleanup levels.

(Sources: WSCO Petroleum, 2007; Robert D. Miller Consulting, 2007 – 2015).

# Site Diagrams



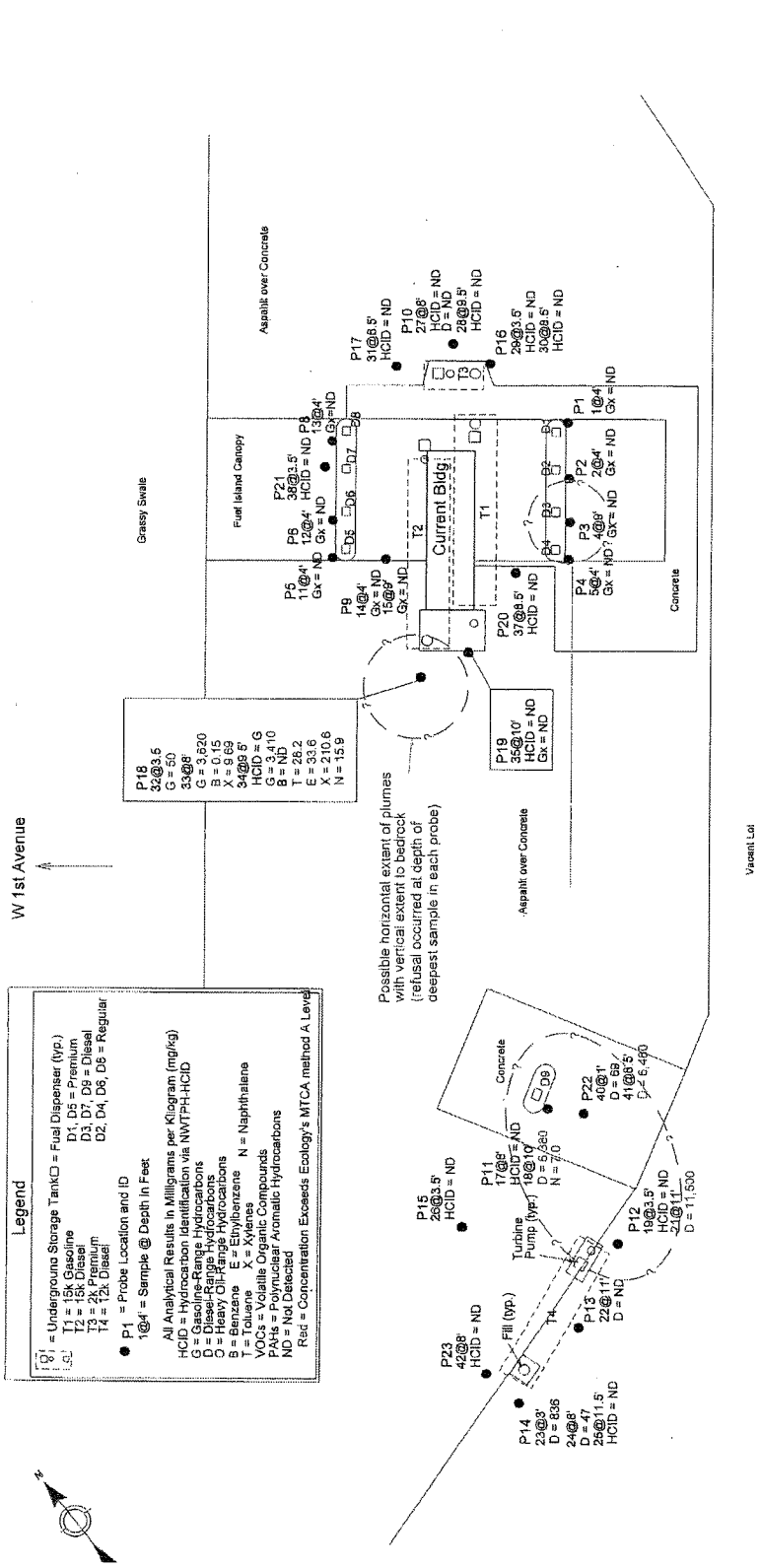
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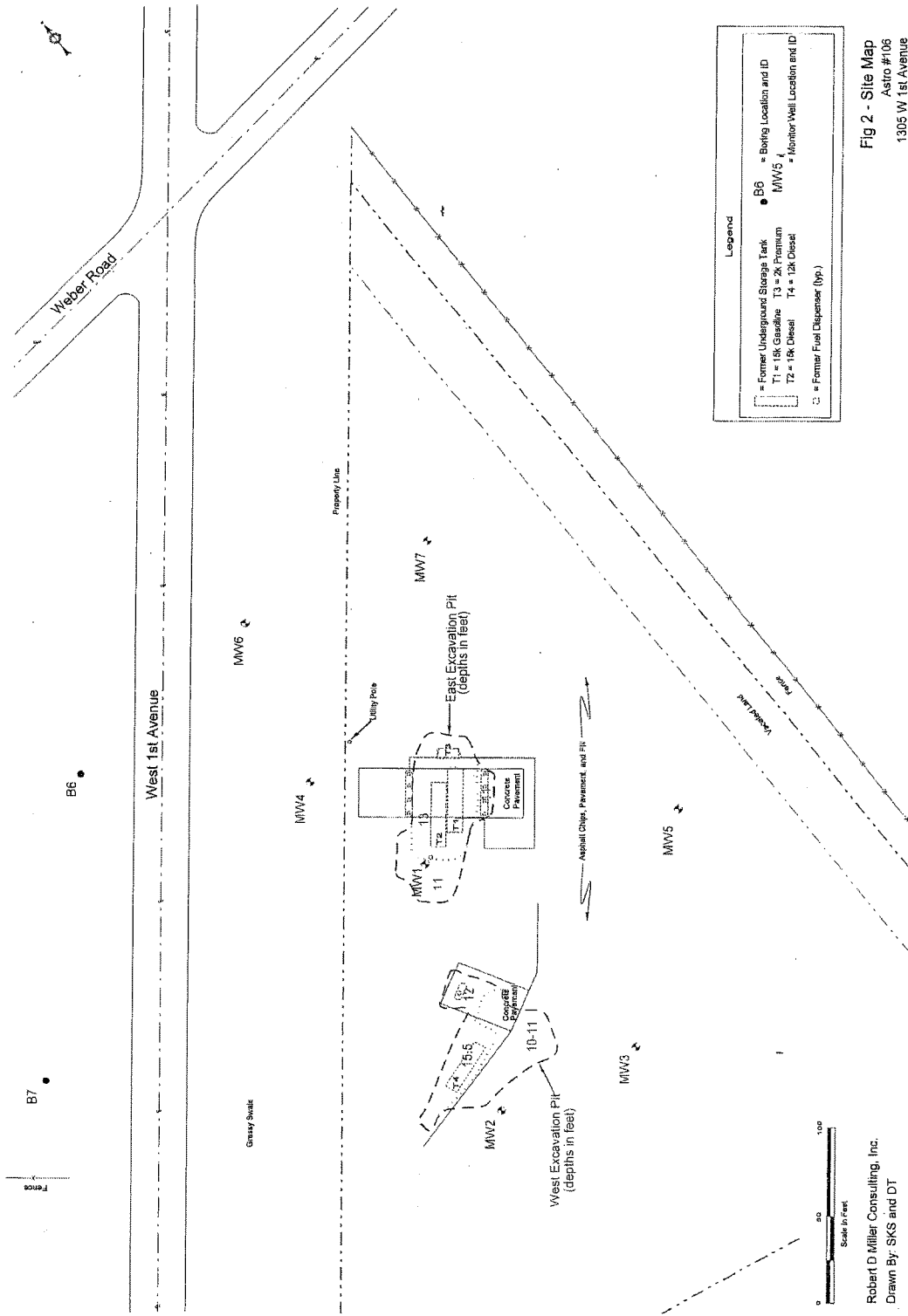
CONTOUR INTERVAL 10 FEET

Robert D Miller Consulting, Inc.  
Reference: USGS 7.5 Minute Topographic Map

Figure 1 - Vicinity Map  
Astro #106  
1305 W 1st Avenue  
Ritzville, Washington 99169







**Legend**

- ☐ = Former Underground Storage Tank
- = Boring Location and ID
- T1 = 18k Gasoline T3 = 2k Premium MW5
- T2 = 18k Diesel T4 = 12k Diesel = Monitor Well Location and ID
- = Former Fuel Dispenser (typ.)

**Fig 2 - Site Map**  
 Astro #106  
 1305 W 1st Avenue  
 Ritzville, Washington 99169

A2

Robert D Miller Consulting, Inc.  
 Drawn By: SKS and DT