

# **APPENDIX E**

## **OTHER REPORTS**

# **APPENDIX E**

## **ADAMS COUNTY RECORDS**



Go to Account Information



Go to Sales Information



Go to Value Information



Map It!

# Adams County Exempt Property Profile

## Account Summary

**Parcel Number:** 0171931423005

**Account Number:** R0065416

**Owners Name and Address:**

CITY OF WESTMINSTER

4800 W 92ND AVE

WESTMINSTER CO 80031-6399

**Property Address:**

7225 BRADBURN BLVD

WESTMINSTER CO

### Legal Description

SUB:HARRIS PARK BLK:39 DESC: PT OF BLK 39 DESC BEG AT SE COR TH N 149 FT TO TRUE POB TH W 180 FT TH N 155 FT TH E 180 FT TH S 155 FT TO TRUE POB (2011 - PARCEL TO THE CITY OF WESTMINSTER (EXEMPT) PER DEED IN RECEPTION NO 2011000055200. PRO-RATED FOR 237 DAYS FOR 2011 AND FULL EXEMPTION FOR 2012.)

### Subdivision Plat

HARRIS PARK

### Account Summary

Account Numbers	Date Added	Tax District	Mill Levy
R0065416	On or Before 01/01/1996	706	93.580

### Permit Cases

N/A

**Note:** Data is updated daily. Above data was updated as of: 02/14/17

**Legal Disclaimer:** Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data

## Adams County Assessor Sales Summary

**Parcel Number:** 0171931423005

**Account Number:** R0065416

**Owners Name and Address:**

CITY OF WESTMINSTER

4800 W 92ND AVE  
WESTMINSTER CO 80031-6399

**Property Address:**

7225 BRADBURN BLVD  
WESTMINSTER CO

### Sales Summary

Sale Date	Sale Price	Deed Type	Reception Number	Book	Page	Grantor	Grantee	Doc. Fee	Doc. Date
05/03/1995	\$0	QC	47044	4509	176			\$0	01/01/1900
10/13/1995	\$57,544.00	WD	53145	4610	267			\$5.75	01/01/1900
08/25/2011	\$400,000.00	SWD	11000055200	2011		CHAVEZ JOHNNY PATRICK AND CHAVEZ GLORIA	CITY OF WESTMINSTER	\$40	08/26/2011

Click [here](#) to go to Clerk / Recorder search page

**Note:** Data is updated daily. Above data was updated as of: 02/14/17

**Legal Disclaimer:** Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data

## Adams County Assessor Valuation Summary

**Parcel Number:** 0171931423005

**Account Number:** R0065416

**Owners Name and Address:**

CITY OF WESTMINSTER

4800 W 92ND AVE

WESTMINSTER CO 80031-6399

**Property Address:**

7225 BRADBURN BLVD

WESTMINSTER CO

### Land Valuation Summary

Land Type	Unit of Measure	Number of Units	Fire District	School District	Vacant/Improved	Actual Value	Assessed Value
Exempt	Acres	0.6410			I	\$55,844.00	\$16,190.00
<b>Land Subtotal:</b>						<b>\$55,844.00</b>	<b>\$16,190.00</b>

### Buildings Valuation Summary

Building Number	Property Type	Actual Value	Assessed Value
1	Commercial		
<b>Improvements Subtotal:</b>		<b>\$30,156.00</b>	<b>\$8,750.00</b>

**Total Property Value**

**\$86,000.00 \$24,940.00**

**Note:** Data is updated daily. Above data was updated as of: 02/14/17

**Legal Disclaimer:** Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data

**Adams County Assessor  
Building Summary**

**Parcel Number:** 0171931423005

**Account Number:** R0065416

**Owners Name and Address:**

CITY OF WESTMINSTER

4800 W 92ND AVE  
WESTMINSTER CO 80031-6399

**Property Address:**

7225 BRADBURN BLVD  
WESTMINSTER CO

**Building Number:** 1

**Individual Built As Detail**

<b>Built As:</b>	Retail Store	<b>Year Built:</b>	1970
<b>Building Type:</b>	Commercial	<b>Construction Type:</b>	
<b>Built As SQ Ft:</b>	1296	<b>Number of Rooms:</b>	0
<b>Number of Baths:</b>	0.00	<b>Number of Bedrooms:</b>	0
<b>Attached Garage SQ Ft:</b>	0	<b>Detached Garage Square Ft:</b>	0
<b>Basement SQ Ft:</b>	0	<b>Finished Basement SQ Ft:</b>	0

**Note:** Data is updated daily. Above data was updated as of: 02/14/17

**Legal Disclaimer:** Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data



th. Center longitude: 105.0390 ° West. Visible Features: 1 features visible on Cities. 1 features visible on County  
tprints. 74 features visible on Parcels. 9 features visible on Streets(12,000). 1 features visible on Rivers (>

Parcel #: 0171931423005

### Description

Property Report - 7225 BRADBURN BLVD  
CITY OF WESTMINSTER

### Hyperlinks

[Link to Property Report](#)

### Details

Parcel Number  
0171931423005

Subdivision  
HARRIS PARK

Parcel Address 1:  
7225 BRADBURN BLVD

Parcel Address 2:  
WESTMINSTER CO

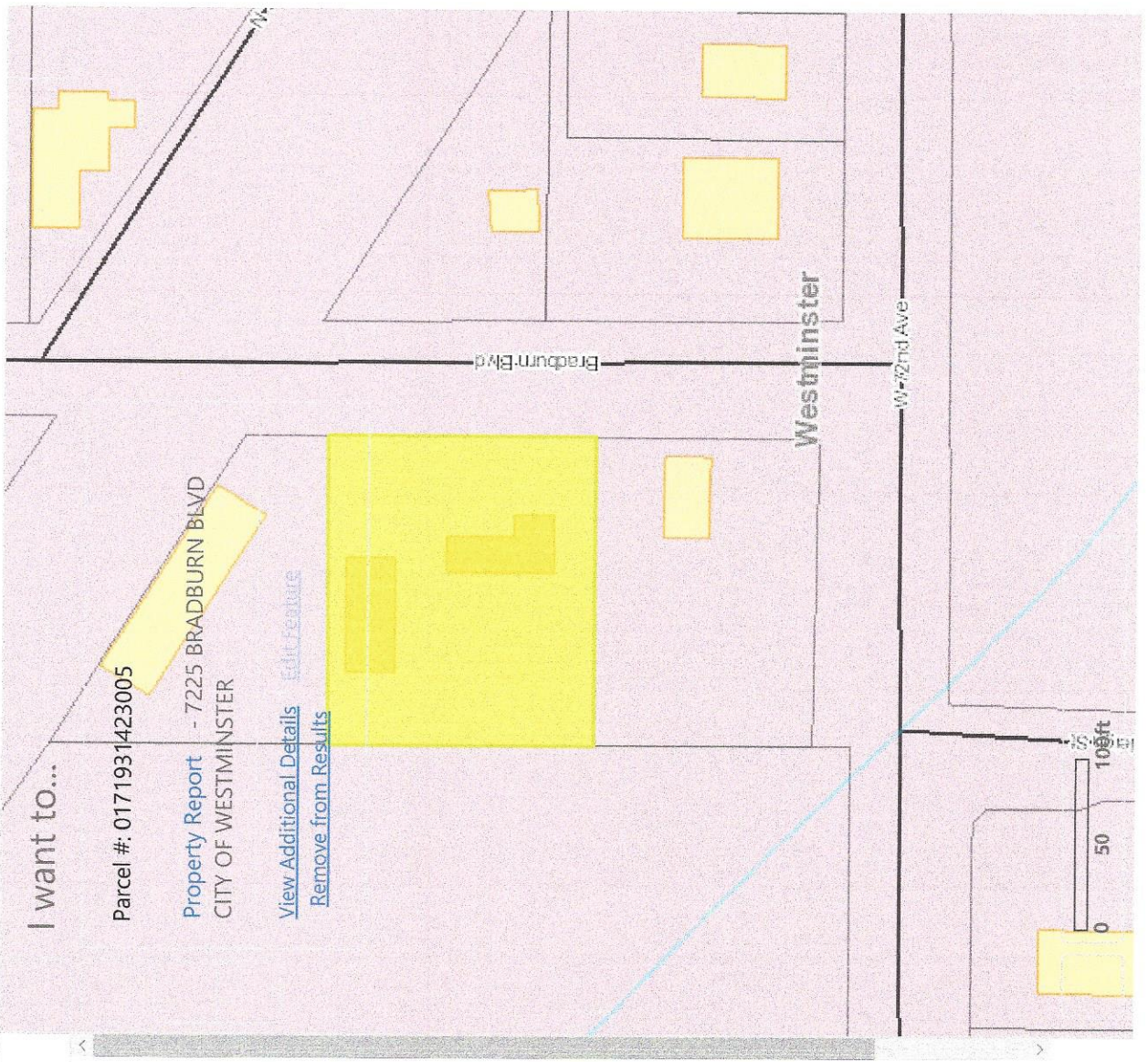
Owner Address:  
4800 W 92ND AVE

Owner City, State, Zip:  
WESTMINSTER CO 80031-6399

Owner  
CITY OF WESTMINSTER



Parcel #: 0171931423005



# **APPENDIX E**

## **FEMA FLOOD MAP**



# **APPENDIX E**

## **SOIL & WETLAND MAPS**

## Adams County Area, Parts of Adams and Denver Counties, Colorado

### PIC—Platner loam, 3 to 5 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tlmz  
*Elevation:* 3,580 to 5,600 feet  
*Mean annual precipitation:* 13 to 19 inches  
*Mean annual air temperature:* 46 to 52 degrees F  
*Frost-free period:* 140 to 165 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Platner and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Platner

##### Setting

*Landform:* Interfluves  
*Landform position (two-dimensional):* Summit  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed eolian deposits over calcareous tertiary alluvium

##### Typical profile

*Ap - 0 to 6 inches:* loam  
*Bt1 - 6 to 11 inches:* clay  
*Bt2 - 11 to 20 inches:* clay  
*Bk1 - 20 to 27 inches:* clay loam  
*Bk2 - 27 to 37 inches:* sandy clay loam  
*C - 37 to 80 inches:* sandy loam

##### Properties and qualities

*Slope:* 3 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.1 to 1.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 7.9 inches)

### **Interpretive groups**

*Land capability classification (irrigated): 4e*  
*Land capability classification (nonirrigated): 4e*  
*Hydrologic Soil Group: C*  
*Ecological site: Loamy Plains (R067BY002CO)*  
*Hydric soil rating: No*

### **Minor Components**

#### **Wages**

*Percent of map unit: 10 percent*  
*Landform: Interfluves*  
*Landform position (two-dimensional): Summit*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Ecological site: Loamy Plains (R067BY002CO)*  
*Hydric soil rating: No*

#### **Stoneham**

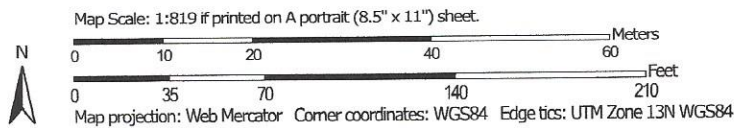
*Percent of map unit: 5 percent*  
*Landform: Interfluves*  
*Landform position (two-dimensional): Summit*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Ecological site: Loamy Plains (R067BY002CO)*  
*Hydric soil rating: No*

## **Data Source Information**





































Soil Survey Area: Adams County Area, Parts of Adams and Denver Counties, Colorado

Survey Area Data: Version 13, Sep 22, 2016

Soil Map—Adams County Area, Parts of Adams and Denver Counties, Colorado



### MAP LEGEND

<b>Area of Interest (AOI)</b>		 Spoil Area	
	Area of Interest (AOI)	 Stony Spot	
<b>Soils</b>		 Very Stony Spot	
	Soil Map Unit Polygons	 Wet Spot	
	Soil Map Unit Lines	 Other	
	Soil Map Unit Points	 Special Line Features	
<b>Special Point Features</b>		<b>Water Features</b>	
	Blowout	 Streams and Canals	
	Borrow Pit	<b>Transportation</b>	
	Clay Spot	 Rails	
	Closed Depression	 Interstate Highways	
	Gravel Pit	 US Routes	
	Gravelly Spot	 Major Roads	
	Landfill	 Local Roads	
	Lava Flow	<b>Background</b>	
	Marsh or swamp	 Aerial Photography	
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County Area, Parts of Adams and Denver Counties, Colorado  
 Survey Area Data: Version 13, Sep 22, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 10, 2014—Aug 21, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Adams County Area, Parts of Adams and Denver Counties, Colorado (CO001)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PIB	Platner loam, 0 to 3 percent slopes	0.1	1.4%
PIC	Platner loam, 3 to 5 percent slopes	3.0	85.2%
UIC	Ulm loam, 3 to 5 percent slopes	0.5	13.4%
<b>Totals for Area of Interest</b>		<b>3.6</b>	<b>100.0%</b>



U.S. Fish and Wildlife Service

# National Wetlands Inventory

Feb 15, 2017

## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverina
- Other



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or contents of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

## **APPENDIX E**

# **BUILDING & FIRE DEPARTMENT RECORDS**



February 15, 2017

Via Email: [fire@cityofwestminster.us](mailto:fire@cityofwestminster.us)

Westminster Fire Department  
9110 Yates Street  
Westminster, CO 80031  
Attention: Ms. Kelly Ehredt

RE: **Request to File Search**

Dear Kelly,

Strategic Environmental Management, LLC (SEM) is conducting a Phase I Environmental Site Assessment on a property located at:

- **7225 Bradburn Boulevard, Westminster, Colorado**

SEM respectfully requests that a file search of department records be conducted to determine if any hazardous materials, fire incidents, code violations, underground storage tanks or spills have occurred at the Subject Property.

Please email to [patlee@strategicenviro.com](mailto:patlee@strategicenviro.com) when completed. If additional information is required, please call me at 720-841-2200.

Thank You.

Sincerely,

A handwritten signature in black ink, appearing to read "Pat Lee", written over a light blue circular stamp.

Patrick E. Lee  
Principal  
Strategic Environmental Management, LLC



## WESTMINSTER

February 21, 2017

Strategic Environmental Management, LLC.  
5030 S Fulton St  
Greenwood Village, CO 80111

City of Westminster  
Fire Department

9110 Yates Street  
Westminster, Colorado  
80031

303-658-4500  
FAX 303-706-3913

**RE: 7225 Bradburn Blvd, Westminster, CO 80030**

Dear Patrick Lee,

I am writing you in regards to your request for Westminster Fire Department inspection records in regards to the Phase I Environmental Assessment requested for the address listed above.

I have diligently researched the Westminster Fire Department Inspection Records, Westminster Fire Department Incident/Hazmat Records, Underground/Above Ground Storage Tank records and the Westminster Fire Department archived records databases.

In regards to the most recent inspections conducted on the above listed property, there are not any current or outstanding code violations for this property. This is based off of their last annual inspection from July of 2016.

In regards to fires and spills of hazardous materials, I did not find any records of hazardous material spills nor did I find any records of structure fires at this site.

I also researched the underground and above ground storage tank records and found record of three (3) permanently closed underground storage tanks. I have attached the state records of these tanks with this letter.

Please let me know if I or the City of Westminster can be of any further assistance to you in your inquiry.

Sincerely,

WESTMINSTER FIRE DEPARTMENT

Kelly Ehredt  
Administrative Assistant  
Fire Prevention Bureau  
[kehredt@cityofwestminster.us](mailto:kehredt@cityofwestminster.us)



Tank

Tag 11304-1

Alternatid 1

Insall Date 5/7/1970

Registration Date

Capacity 12000

Serial No.

Delivery Prohib Date

More Tank Information

Type UST

Manufacturer

Status Permanently Closed

Overfill

Release Detect (Pri.)

Release Detect (Sec.)

Release Detect Date

Material Asphalt Coated or Bare Steel

2nd Option None

Spill Protection

Protection No

Date Added

Mfg

Model

Size 0

Vapor Recovery

Not Req'd

Stage 1

Model Number

Line Size

Piping

Type ZDO NOT USE - PR

Material Galvanized Steel

2nd Option None

Pipe Connection

Dispenser Connection

Owners

Facility 11304 - Westminster U-pump-it

7225 Bradburn

Westminster, CO 80030

Adams County

Facility Owner 1851 - Peerless Tyre Company

5000 Kingston St

Denver, CO 80239

Denver County

Comments

Comments

Log In

Log in is for Oil and Public Safety Employees only. For more detailed information

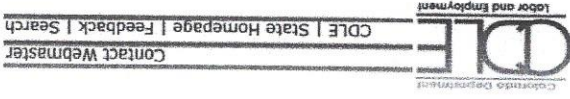
please contact the Public Records Center to schedule a file review at

(303) 318-8525.

Copyright © 2000, Colorado Dept. of Labor and Employment

Developed by Greenbrier & Russell, Inc.

You are currently logged into database COSTIS as Public





Tank

Tag 11304-3  
 Alternated 3  
 Install Date 5/7/1970  
 Registration Date  
 Capacity 12000  
 Serial No.  
 Delivery Prohib Date

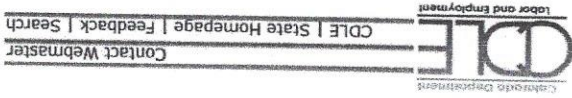
More Tank Information  
 Type UST  
 Manufacturer Status Permanently Closed  
 Overfill  
 Release Detect (Pri.)  
 Release Detect (Sec.)  
 Release Detect Date  
 Material Asphalt Coated or Bare Steel  
 2nd Option None  
 Spill Protection

Protection No  
 Date Added  
 Mfg Model  
 Size 0  
 Vapor Recovery  
 Not Req'd  
 Stage 1  
 Model Number  
 Line Size

Piping  
 Type ZDO NOT USE - PR:  
 Material Galvanized Steel  
 2nd Option None  
 Pipe Connection  
 Dispenser Connection  
 LLD Test Date

Owners  
 Facility 11304 - Westminster Li-pump-it  
 7225 Bradburn  
 Westminster, CO 80030  
 Adams County  
 Facility Owner 1851 - Peerless Tyre Company  
 5000 Kingston St  
 Denver, CO 80239  
 Denver County  
 Comments  
 Comments

Log In  
 Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.



Copyright © 2000, Colorado Dept. of Labor and Employment  
 Developed by Greenbrier & Russell, Inc.  
 You are currently logged into database COSTIS as Public

## **APPENDIX E**

# **ENVIRONMENTAL QUESTIONNAIRE**



PROPERTY QUESTIONNAIRE – Commercial

Project Number: \_\_\_\_\_

GENERAL INFORMATION

Property Name: 7025 Bradburn

Address: 7025 Bradburn Blvd

City, State, Zip: Westminster, CO 80031

PROPERTY INFORMATION

Property Size (in acres): .64 # of Buildings: 2

Building Square Footage: 1,296 sq ft # of Tenant Spaces: \_\_\_\_\_

Net Rentable Square Footage: 1,296 # of Parking Spaces: \_\_\_\_\_

Date of Construction: 1970, 2000, 2005 # of ADA Parking Spaces: \_\_\_\_\_

Please attach a Property Site Plan and a Tenant List or Rent Roll to the returned Questionnaire

UTILITY AND SERVICE PROVIDERS

Electric	<u>Xcel</u>	Pest Control	<u>n/a</u>
Gas	<u>xcel</u>	HVAC Maintenance	<u>City of westminster</u>
Drinking Water	<u>City of westminster</u>	Roof Maintenance	<u>City of westminster</u>
Sanitary Sewer	<u>City of westminster</u>	Fire Systems	<u>n/a</u>
Storm Water	<u>City of westminster</u>	Security Systems	<u>n/a</u>
Solid Waste	<u>n/a</u>	Elevator (if applicable)	<u>n/a</u>
Landscaping	<u>n/a</u>	Other	_____

The questionnaire information was provided by:

Name: Heather Ruddy Title: Program Planner

Signature: Heather Ruddy

Date: 2-16-17

## ENVIRONMENTAL INFORMATION

### PREVIOUS REPORTS, DOCUMENTS AND OWNERS

1. Are you aware if a previous Environmental Assessment has ever been performed on the subject property? If yes, are you aware of the recommendations made in the report or can you provide a copy of the report?

Yes     No     Do Not Know

Phase I & Phase II - SEM  
May 2011      June 2011

2. Do you have any other environmentally associated documents, such as compliance audits, environmental permits (such as an NPDES permit, boiler permit, wastewater permit), registrations (such as for an underground storage tank) or material safety data sheets? If yes, please provide a copy of the document(s).

Yes     No     Do Not Know

3. Can you provide contact information (name and phone number) of the previous owner of the property? If yes, please provide below.

Yes     No     Do Not Know

Johnnie Chavez - phone # unknown

### HISTORICAL & PRESENT USAGE/SITE CONDITIONS - SUBJECT AND ADJOINING PROPERTIES

1. Are you aware of the prior use of the subject property, i.e., any previous development, undeveloped? If so, please describe.

Scrap Business & Gas Station / Auto Repair

2. Has fill dirt ever been brought onto the subject property that originated from a contaminated site or from an unknown source?

Yes     No     Do Not Know

3. Are there currently or have there ever been any pits, ponds or lagoons on the subject property utilized in connection with waste treatment or waste disposal?

Yes     No     Do Not Know

4. Are you currently aware of or have there ever been any hazardous substances, petroleum products, tires, car or industrial batteries, pesticides or other chemicals or waste materials that have been dumped, buried or burned on the subject property?

Yes     No     Do Not Know

5. Have any of the adjoining properties ever been used for industrial purposes? (including but not limited to a gas station, dry cleaner, auto repair facility, landfill, waste treatment, printing facility etc)? If yes, please describe.

Yes     No     Do Not Know

Larry's Auto to the north auto repair & previously served as a dry cleaner

6. Are any of the adjoining properties currently being used for industrial purposes? If yes, please describe.  
 Yes     No     Do Not Know

7. Do you have Auto repair any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?  
 Yes     No     Do Not Know

8. If the subject property is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system or that the well has been designated as contaminated by any government environmental/health agency? If an on-site well is present, please attach a copy of the most recent water quality testing report.  
 Yes     No     Do Not Know

#### AAI and REGULATORY QUESTIONS

In order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, you must provide the following information (if available). Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

1. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?  
 Yes     No     Do Not Know

2. Are you aware of any activity and use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?  
 Yes     No     Do Not Know

3. As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?  
 Yes     No     Do Not Know

4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?  
 Yes     No     Do Not Know *na*

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

(a.) Do you know the past uses of the property? *yes*

(b.) Do you know of specific chemicals that are present or once were present at the property? *no*

(c.) Do you know of spills or other chemical releases that have taken place at the property? *yes*

(d.) Do you know of any environmental cleanups that have taken place at the property? *yes*  
 Yes     No     Do Not Know

6. As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

Yes  No  Do Not Know

#### STORAGE TANKS AND DRAINS

1. Are there currently or are you aware if there have ever previously been any registered or unregistered storage tanks, aboveground or underground, located on the subject property? If so, please attach copies of documentation such as tank closure/removal reports, tank tightness tests or registration/regulatory information.

Yes  No  Do Not Know

2. Are there currently or are you aware if there have ever previously been any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the subject property?

Yes  No  Do Not Know

3. Are there currently or are you aware if there have ever previously been any current evidence of leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the subject property?

Yes  No  Do Not Know

#### TRANSFORMERS AND HYDRAULIC EQUIPMENT

1. Are there any transformers, capacitors, and/or hydraulic equipment on the subject property?

Yes  No  Do Not Know

2. If yes, are there any records indicating the presence of PCBs in this equipment? If so, please attach copies of this documentation.

Yes  No  Do Not Know

3. Are the transformers owned by the subject property or by the local utility? If owned by the utility, please note the name of the utility.

Yes  No  Do Not Know

---

#### ASBESTOS CONTAINING MATERIALS

1. Has the subject property ever been tested for the presence of asbestos containing materials (ACM)?

Yes  No  Do Not Know

2. If yes, are you aware if asbestos containing materials were identified? If so, which ACM materials were identified?

Yes  No  Not Applicable

---

3. Is there an Asbestos Operations and Maintenance Program in place at the subject property?

Yes  No  Do Not Know

RADON

1. Has the subject property ever been tested for the presence of radon?  
 Yes     No     Do Not Know
2. If yes, do you have the results of the testing. If so, please attach.  
 Yes     No     Not Applicable

LEAD-BASED PAINT

1. Has the subject property ever been tested for the presence of lead-based paint (LBP)?  
 Yes     No     Do Not Know
2. If yes, are you aware where on the subject property the LBP was located? If yes, where?  
 Yes     No     Not Applicable

- 
3. Is there a Lead Based Paint Operations and Maintenance Program in place at the subject property?  
 Yes     No     Do Not Know

MOLD

1. Is there any evidence of mold and/or mildew on the subject property? If yes, please provide information as to the location, extent and the cause of the mold/mildew. Please note what actions are or were being taken to address this concern.  
 Yes     No

- 
- 
2. Is there a Mold and Moisture Minimization Program in place at the subject property?  
 Yes     No     Do Not Know

COMMENTS/ADDITIONAL INFORMATION (If necessary, please provide any additional relevant environmental information that has not been discussed above.)

---

# **APPENDIX E**

## **COLORADO DEPARTMENT OF PUBLIC HEALTH and ENVIRONMENT**

### **RECORD & FILE REVIEW**

# STATE OF COLORADO

## COLORADO DEPARTMENT OF HEALTH

4210 East 11th Avenue  
Denver, Colorado 80220-3716  
Phone (303) 320-8333

Telefax:  
(303) 322-9076 (Main Building/Denver)  
(303) 320-1529 (Pitkin Place/Denver)  
(303) 248-7198 (Grand Junction Regional Office)



August 6, 1990

Roy Romer  
Governor

Thomas M. Vernon, M.D.  
Executive Director

Mr. Chuck Starr  
Creative Auto  
7231 Bradburn  
Westminster, CO 80030

RE: Hazardous Waste Compliance Inspection  
EPA ID# NONE

Dear Mr. Starr:

This letter is a follow-up to the inspection performed at Creative Auto on July 11, 1990 to investigate a complaint and determine compliance with the regulations pertaining to the management of hazardous wastes.

Because the inspectors could not verify that the violations alleged in the complaint had occurred, the State does not plan to take any further action as a result of this inspection.

Please be aware, however, that you are responsible for complying with the State hazardous waste regulations and that there are substantial civil and criminal penalties for failing to do so. This letter does not constitute a bar to enforcement action as a result of conditions which the inspectors did not observe, or conditions found during future inspections of your facility.

Your cooperation with this inspection effort is appreciated. If you should have any questions, please contact Paul Nazaryk at (303) 331-4854.

Sincerely,

Frederick R. Dowsett, Unit Leader  
Monitoring & Enforcement  
Hazardous Materials & Waste Management Division

cc: Mr. Tom Butts, Tri-County Health Department

FRD:PN/kjb  
6626K:16

EPA ID. NO. None

COLORADO DEPARTMENT OF HEALTH  
HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION  
HAZARDOUS WASTE INSPECTION REPORT

DATE OF INSPECTION: July 11, 1990

FACILITY: Creative Auto

LOCATION: 7231 Bradburn  
Westminster , CO 80030

FACILITY CONTACT: Mr. Chuck Starr, Owner

TELEPHONE: (303) 428-3709

NOTIFICATION: None

TYPE OF INSPECTION: Citizen Complaint

PARTICIPANTS: Chuck Starr (Creative Auto)  
Larry Pixler (Creative Auto)  
Tom Butts (TCHD)  
Mr. Paul Nazaryk (CDH)

WEATHER CONDITIONS: Fair & mild

TIME IN: 10:50 AM

TIME OUT: 11:15 AM

The inspection was in response to a citizen complaint alleging that Creative Auto was disposing of solvents on it's premises. Prior notification was not given.

The inspectors arrived at the site at approximately 10:50 a.m. and presented their credentials to Mr. Larry Pixler. Mr. Pixler indicated that the owner was Mr. Chuck Starr. Mr. Starr was present at the time of the inspectors arrival but was otherwise busy and deferred to Mr. Pixler to talk to the inspectors.

According to Mr. Pixler, Creative Auto buys automobiles which have been involved in collisions and have been totaled. Creative Auto then rebuilds and sells the cars. He indicated that much of the work is actually contracted out.

Mr. Pixler stated that the company will replace parts, detail, and sand a total car. The actual painting, however, is performed by body shops. Mr. Pixler stated that Creative Auto uses either Custom Specialists, MAACO, or Alberson's Auto Body.

He indicated that no used oil is generated at the site. All vehicles are sent to Grease Monkey. The inspectors asked whether any Radiator work is performed onsite. Mr. Pixler indicated that all Radiator work is contracted out to A-1 Radiator.

The inspectors asked whether any solvents were used. Mr. Pixler indicated that small amounts were used for parts washing. The inspectors asked what was done with the solvent. Mr. Pixler indicated that Creative Auto has a parts washer and that the solvent is recycled.

Mr. Pixler showed the inspectors the parts washer. The inspectors asked how the sludge from the parts washer was managed. Mr. Pixler indicated that it was disposed of outside.

The inspectors asked if Mr. Pixler knew what was in the solvent. He did not. The inspectors asked if he had a MSDS for it. He indicated that he didn't. He stated that the solvent had been purchased from SUNCO at Lamar & 58th (which was in the neighborhood).

The inspectors accompanied by Mr. Pixler, then went outside to look for evidence of contamination. The inspectors found nothing to sample.

The inspection was completed at approximately 11:15 a.m.

On July 12, 1990 Tom Butts of Tri-County Health called and indicated that he had reviewed the MSDS for the solvent used by Creative Auto at SUNCO. According to Tom, the MSDS indicated it contained mineral spirits and no listed hazardous waste.

Page Two  
Creative Auto  
Inspection Report

Summary of Findings:

No apparent violations.

Prepared by:

Paul Nazaryk, \_\_\_\_\_ Date

PN/mm/kjb  
1842K:45-47

**COLORADO DEPARTMENT OF HEALTH  
WASTE MANAGEMENT DIVISION  
4210 EAST 11TH AVENUE DENVER, COLORADO 80220**

**NOTICE OF INSPECTION**

Date <b>7/11/90</b>	Inspector <b>NAZAREK/BUTTS</b>	Hour In: <b>10:50 AM</b> Out: <b>11:10 AM</b>	Inspection Type
Facility Name: <b>CREATIVE AUTO</b>		EPA I.D. #	Generator ( ) G Transporter ( ) T Land Disposal TSDF ( ) L Non-Land Disposal TSDF ( ) F Non-Notifier <input checked="" type="checkbox"/> N
Telephone # <b>428-3707</b>			
Street <b>7231 BRADBURN</b>			Evaluation Type
City <b>Westminster</b>	State <b>CO</b>	Zip <b>80030</b>	Evaluation Inspection ( ) 1 Sampling Inspection ( ) 2 Record Review ( ) 3 Ground Water Monitoring ( ) 4 Enforcement Followup ( ) 5 Citizen Complaint <input checked="" type="checkbox"/> 6 Part B Call-In ( ) 7 Withdrawal Candidate ( ) 8 Closed Facility ( ) 9 Violation Determination ( ) 10
Facility Representative(s) <b>Larry Piller</b>		Title	
Entered by Consent <input checked="" type="checkbox"/> Warrant ( )			
Inspection Arranged Prior to Inspection ( ) YES <input checked="" type="checkbox"/> NO		Initial Evaluation Date	
Samples, Documents, Plans, and / or Photos Collected			Date To Lab
1.			
2.			
3.			
4.			
Samples requested and received by facility: ( ) YES ( ) NO			
If YES: ( ) Duplicate ( ) Split			
Area(s) of Evaluation	Comments		
*Ground Water Monitoring ( ) Closure / Post Closure ( ) Financial Responsibility ( ) Part B ( ) Compliance Schedule ( ) Manifest ( ) Other <b>Site visit</b> <input checked="" type="checkbox"/> Routine Facility Compliance Inspection ( )  * Part of CME Inspection ( )	/		
The facts established by this inspection will be reviewed by State personnel. A final determination of your facility's compliance with State Regulations will be made as a result of this review. The review may reveal additional violations.			
Responsible Agency State <input checked="" type="checkbox"/> EPA ( ) Oversight ( ) Joint ( )			
Receipt of this Notice of Inspection Form is Acknowledged		Lead Inspector <b>Paul Nigh</b>	
		Assisting Inspector(s) <b>Tom Butts, TCHD</b>	
<b>Larry Piller</b> Signature of Facility Representative			

RECEIVED

JAN 30 1991

RECEIVED

ASSIGNMENT OF EPA I.D. NUMBER FOR POTENTIAL NON-NOTIFIER OF HAZARDOUS WASTE ACTIVITY

Hazardous Waste Program

INSTRUCTIONS: EPA Region VIII Hazardous Waste Branch (ZHWM) staff should complete this form for all potential non-notifiers assessed or inspected. Fill out the form as completely as possible, based upon existing information, and submit to Region VIII EPA for EPA ID NO. assignment.

THIS SECTION TO BE COMPLETED BY EPA

INSTALLATION'S EPA I.D. NUMBER

DATE (yr. mo. & day)

9/10/30

89/

Adams

I. NAME OF INSTALLATION

CREATIVE AUTO

II. INSTALLATION MAILING ADDRESS (IF KNOWN)

STREET OR P.O. BOX

7231 BRADBURN

CITY OR TOWN

ST.

ZIP CODE

WESTMINSTER

CO

80030-

III. LOCATION OF INSTALLATION

STREET OR P.O. BOX

SLAME

CITY OR TOWN

ST.

ZIP CODE

IV. INSTALLATION CONTACT (IF KNOWN)

NAME AND TITLE (last, first, & job title)

PHONE NO. (area code & no.)

SITARI CHUCKI

303

428

3709

V. OWNERSHIP (IF KNOWN)

A. NAME OF INSTALLATION'S LEGAL OWNER

Non-Notifier

B. TYPE OF OWNERSHIP

(circle the appropriate letter into box)

F = FEDERAL  
P = NON-FEDERAL

VI. TYPE OF SUSPECTED HAZARDOUS WASTE ACTIVITY

A. GENERATION  
 B. TREATMENT  
 C. STORAGE

VII. DESCRIPTION OF HAZARDOUS WASTE (IF KNOWN)

Enter the four-digit hazardous waste code number for any hazardous wastes known or suspected to be handled by the potential non-notifier.

Grid for hazardous waste code digit 1

Grid for hazardous waste code digit 2

Grid for hazardous waste code digit 3

Grid for hazardous waste code digit 4

Grid for hazardous waste code digit 5

Grid for hazardous waste code digit 6

VIII. SIGNATURE OF ZHWM STAFF PERSON REQUESTING NUMBER ASSIGNMENT

IX. DATE

**APPENDIX E**

**COLORADO DEPARTMENT OF  
EMPLOYMENT AND LABOR**

**DIVISION OF OIL AND PUBLIC SAFETY**

*Received from  
Eaton Metal 11-15-90*

NOV 07 1990

**UNDERGROUND STORAGE TANK REMOVAL**

**PEERLESS TYRE**

**7225 Bradburn**

**Westminster, Colorado 80030**



Prepared for

Eaton Construction Company  
4800 York  
Denver, CO

**HAZWASTE ASSOCIATION, INC.**

5721 S. Spotswood Street Littleton, CO 80120  
(303) 794-5201

**UNDERGROUND STORAGE TANK REMOVAL**

**PEERLESS TYRE**

7225 Bradburn  
Westminster, Colorado 80030

Prepared for

Eaton Construction Company  
4800 York  
Denver, CO 80216

November 3, 1990

Hazwaste Association, Inc.  
5721 S. Spotswood Street  
Littleton, CO 80120  
(303) 794-5201

---

## 1.0 INTRODUCTION

Peerless Tyre, 9251 E. 104th Avenue, Henderson, Colorado 80640 owns/controls three underground storage tanks at 7225 Bradburn Blvd., Westminster, Colorado 80030. On October 15, 1990 Eaton Construction Company removed the tanks. Hazwaste Association, Inc. (HAI) performed an assessment of the site to document the condition of the tanks and soil at the time of removal and to propose remedial action if required.

## 2.0 INSPECTION

The following tanks were removed:

Tank	Capacity (gallons)	Product	Tank Type	Size	Serial Number	Age (yrs)	Time Out of Service (years)
<b>Excavation #1</b>							
1	12,000	Gasoline	Single-wall steel	9'x25'	467453	20+	1.5
2	12,000	Gasoline	Single-wall steel	9'x25'	467450	20+	1.5
<b>Excavation #2</b>							
3	4,000	Gasoline	Single-wall steel	6'x19'	G996960	20+	1.5

HAI inspected the tanks and product lines. The tanks appeared in fair to poor condition. No holes were observed in Tank #1, however Tanks #2 and #3 had several holes ranging in size from 1.8" to 1/2". The product lines appeared in good condition with moderate corrosion and were removed.

## 2.1 Methods

Soil samples were collected and used to 1) visually classify the soils, 2) visually inspect for evidence of petroleum product contamination, 3) test for presence of volatile organic compounds (VOC), and 4) obtain samples for laboratory analysis. Soil samples obtained for VOC analysis in the field were used to quantify the extent of contamination and determine the soil that was to be excavated. Soil samples obtained for VOC analysis were allowed to equilibrate at ambient temperature and the headspace was analyzed for VOC with a Photoionization detector HNU Model P101 (State of California 1989). The

instrument was calibrated to 1 ppm benzene. Soil samples obtained from the bottom of each tank were sent for laboratory analysis. The samples were labeled and placed in a cooler maintained at approximately 40°F until delivered to the laboratory utilizing chain of custody procedures (U.S. EPA 1986a). The soil samples were evaluated for benzene, toluene, ethylbenzene, and total xylenes (BTEX) according to EPA Method 8020 (U.S. EPA 1986b) and for total petroleum hydrocarbons (TPH) according to EPA Method 418.1 (U.S. EPA 1983).

## 2.2 Excavation Inspection

### Excavation #1

The maximum depth of the excavation was 9 feet. The soil conditions consisted of 0-9 feet of dark brown sandy clay overlain by 3 inches of asphalt. No groundwater was encountered. The field (VOC) test results indicated readings between 13 ppm and 180 ppm in the bottom and from 4 ppm to 170 ppm in the walls. A summary of the VOC test results and locations are presented below.

Table 1: Sample results from field evaluations of VOC from Excavation #1.

Test Number	Location	VOC (ppm)
1	Tank 1, bottom, north at 11 feet	13
2	Tank 2, bottom, north at 11 feet	180
3	North wall at 6 feet	17
4	East wall at 6 feet	4
5	Tank 1, bottom, south at 11 feet	20
6	Tank 2, bottom, south at 11 feet	20
7	West wall at 6 feet	7
8	South wall at 6 feet	70

### Excavation #2

The maximum depth of the excavation was 11 feet. The soil conditions consisted of 0-11 feet dark brown sandy clay. No groundwater was encountered. The field VOC test results indicated minor levels of 2 ppm to 5 ppm. The north wall had a slightly higher level of 13 ppm. The excavated soil was stockpiled onsite pending disposal. A summary of the VOC test results and locations are presented below.

**Table 2:** Sample results from field evaluations of VOC from Excavation #2.

Test Number	Location	VOC (ppm)
<b>Excavation #2</b>		
9	North wall at 4 feet	13
10	Tank 3, bottom at 9 feet	5
11	South wall at 4 feet	5
12	East wall at 4 feet	3
13	North stockpile	2
14	South stockpile	3

The laboratory analysis test results of samples PT-1-S and PT-2-S of Excavation #1, indicated detectable levels of BTEX and moderate levels of TPH. The laboratory analysis test results of PT-3-S of Excavation #2, located immediately south of Excavation #1 indicated insignificant levels of BTEX and TPH.

**Table 3:** Laboratory results from excavation

Sample Number	Location	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	TPH (ppm)
<b>Excavation #1</b>						
PT-1-S	Bottom of Tank #1 at 11 feet	ND	ND	ND	ND	5.67
PT-2-S	Bottom of Tank #2 at 11 feet	ND	ND	0.013	0.36	210
<b>Excavation #2</b>						
PT-3-S	Bottom of Tank #3 at 9 feet	ND	ND	ND	0.024	4.11

ND=Not detected, compound analyzed for but below the practical quantitation limit or below 0.01 ppm

### 3.0 RECOMMENDATIONS

The field VOC readings indicate contamination exists in the walls and floors of the excavations. The laboratory analysis from the excavations indicate measurable levels of BTEX and TPH. HAI recommends a further investigation to determine the vertical and horizontal extent of contamination.

Because product has escaped from the tank the following laws and regulations apply:

- The US Resource Conservation and Recovery Act, Section 9003
- 40 CFR Part 280. Subpart E - Release Reporting, Investigation and Confirmation and Subpart F - Release Response and Corrective Action for UST Systems Contained Petroleum or Hazardous Substances.
- Colorado House Bill 1299

The following procedures are recommended.

#### Within 24 hours -

Notify the Colorado Department of Health that a leak has occurred. Phone (303) 331-4830

#### As soon as possible -

Perform initial abatement as follows:

- Prevent further migration of released substances in soil and water.
- Monitor and mitigate fire and safety hazards in sewers, basements and other underground structures.
- Remove soils which were excavated to an approved landfill.
- Investigate the area to determine the possible presence of free product.
- Begin removal of free product, if any is found.

Conduct investigations of the release, release site and surrounding area possibly affected if any of the following conditions exist:

- Free product is found to need recovery,

- There is evidence that contamination in soils may affect groundwater,
- The Colorado Department of Health requests an investigation.

**Within 20 days**

- Submit a report to the Colorado Department of Health summarizing the initial abatement described above.

**Within 45 days**

Submit the following to the Colorado Department of Health:

- Data on the nature and estimated quantity of the release,
- A report of free product removal measures, and
- Site data adequate to characterize the extent of contamination, potential migration pathways and potential or actual environmental damage both on and off the site.


As requested by the Colorado Department of Health

- Submit a corrective action plan for cleanup of the remaining contamination.

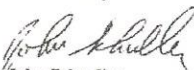
Respectfully submitted,

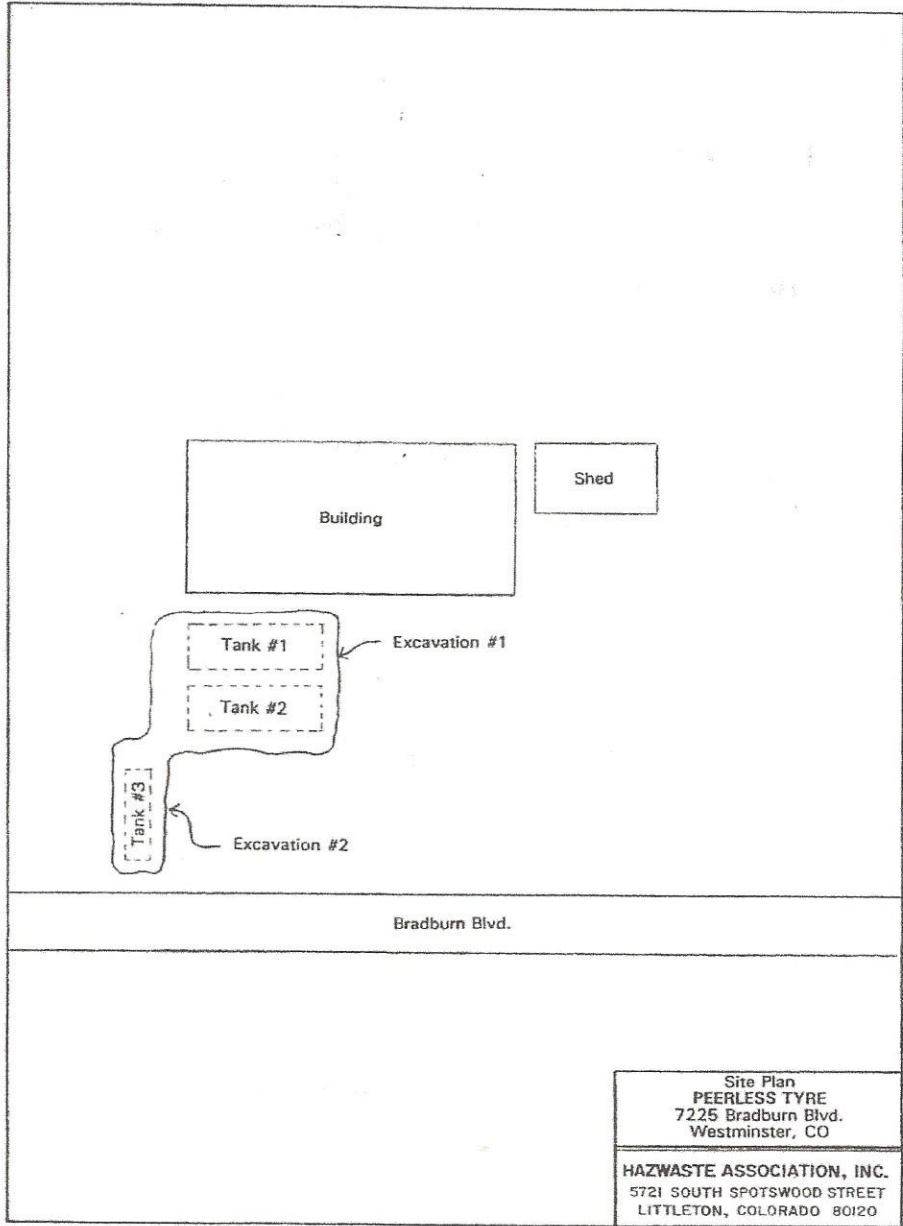
**HAZWASTE ASSOCIATION, INC.**

Prepared by:

  
Chad Dalrymple  
Geologist

Reviewed by:

  
John Schneller  
Senior Geologist



**CORRECTIVE ACTION PLAN**

**FOR  
UNDERGROUND STORAGE TANK RELEASE**

at

**PEERLESS TYRE**  
7225 Bradburn Blvd.  
Westminster, Colorado 80030

Prepared for  
Eaton Construction Company  
4800 York  
Denver, Colorado 80216

February 21, 1991

Harner Environmental Management, Inc.  
5721 S. Spotswood Street  
Littleton, CO 80120  
(303) 794-5201

---

TABLE OF CONTENTS

	<u>Page</u>
Executive Summary . . . . .	ii
1.0 Introduction . . . . .	1
1.1 Background . . . . .	1
1.2 Study Site . . . . .	1
2.0 Remediation . . . . .	4
2.1 Overexcavation . . . . .	4
3.0 Utility Corridors . . . . .	5
4.0 Water Well Data . . . . .	7
5.0 Remedial Action Category (RAC) . . . . .	7
6.0 Geology . . . . .	8
7.0 Conclusions and Recommendations . . . . .	8
8.0 Literature Cited . . . . .	9
 Appendices	
A Hazwaste Association, Inc. Underground Storage Tank Removal Report	
B Colorado Department of Health soil disposal letter Waste Management of North America soil disposal authorization Laboratory analysis Chain of custody	

### EXECUTIVE SUMMARY

Harner Environmental Management, Inc. performed a site assessment of the petroleum product release noted during removal of three underground storage tanks at Peerless Tyre. This report is a further investigation into the fate of the product released. An initial report prepared which presents results of tank and soil contamination removal is contained at Appendix A.

Three underground storage tanks that contained gasoline were removed at the site. The three gasoline tanks were in good to poor condition with moderate corrosion. Tank #1 was in good condition with no holes observed. However, Tank #2 and Tank #3 had several holes ranging in size from 1/8 inch to 1/2 inch. The product lines appeared in good condition with moderate corrosion and were removed.

Remediation was performed by overexcavation of contaminated soil. The excavation was enlarged from 24'x32' to 28'x35' and increased in depth from 11 feet to 30 feet. The final VOC readings indicate 0 ppm in the bottom, north and south wall and 3 ppm to 10 ppm in the west wall and east wall respectively. The soil laboratory analysis indicates 6.28 ppm TRPH in the bottom and 7.71 ppm in the east wall.

Water well data was searched at the state engineer's office to identify the potential impacts on wells in the vicinity. A total of 9 water well locations were identified within a 1/2 mile radius. The nearest well #942R is a municipal well located approximately 835 feet northwest of the site. A conservative Remedial Action Category (RAC) I clean up levels are 25 ppm total BTEX and 100 ppm TRPH.

The utility corridors were searched as a potential to act as conduits for contaminant migration. It is unlikely the service utilities or main utilities would act as conduits for contaminant migration because of their shallow burial and the clayey soil conditions do not promote migration.

This site was conservatively placed in RAC I category. The clean-up levels for soils in contact with the groundwater is 25 ppm BTEX and 100 ppm TRPH. The soil laboratory analysis indicates 6.28 ppm TRPH for the bottom and 7.71 for the east wall. Harner Environmental recommends no further action for this site.

## 1.0 INTRODUCTION

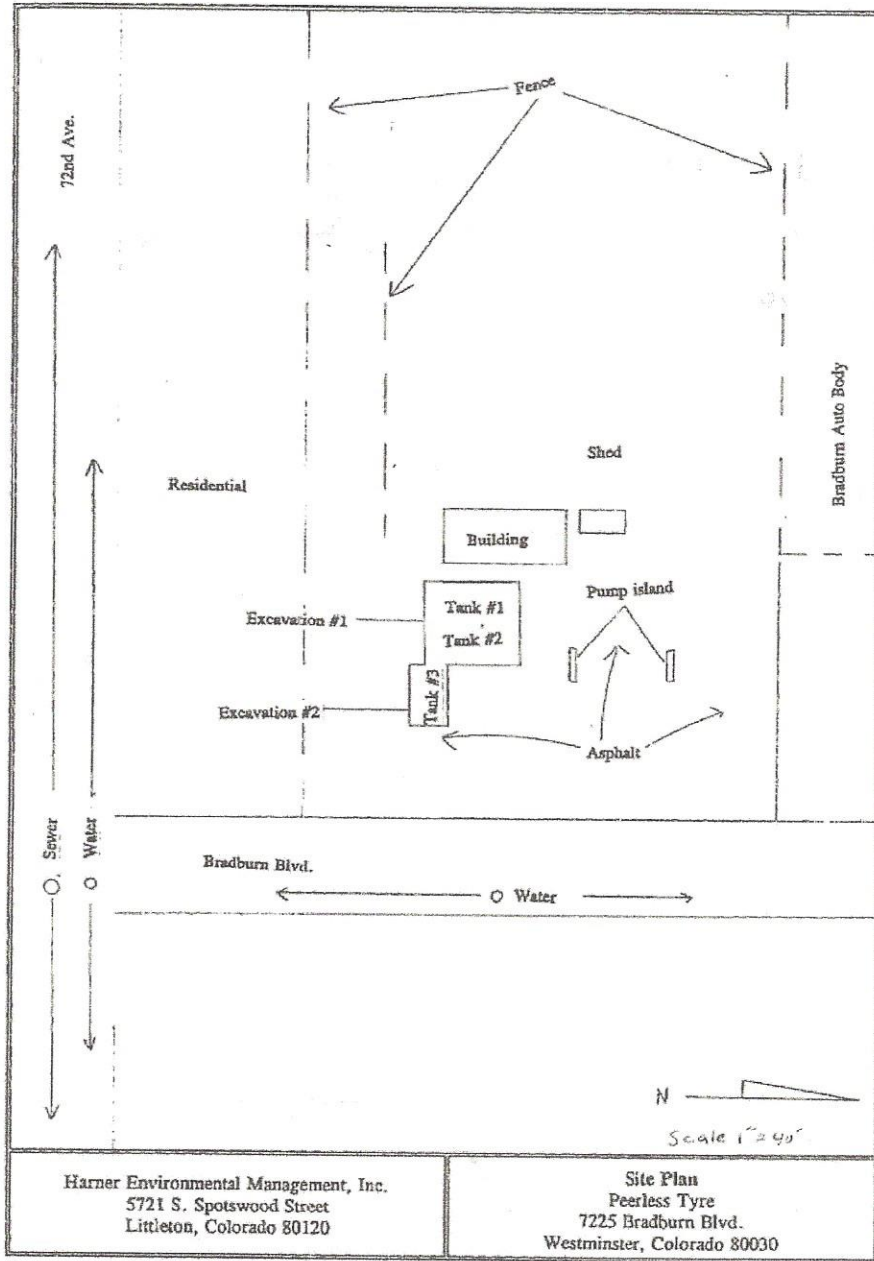
The purpose of this report is to present the results of site investigations and remedial actions as required by 40 CFR Parts 280 and 281 for leaking underground storage tanks. This report presents the results of investigations to determine the extent and locations of soils and groundwater contaminated by product release. It also presents recommendations for further corrective actions as needed. This report is a further investigation into the fate of the product released from the underground storage tanks removed at Peerless Tyre on October 15, 1990 (see site vicinity map). A report, *Underground Storage Tank Removal* dated November 3, 1990 prepared by Hazwaste Association, Inc. (HAI) now known as Harner Environmental Management, Inc., documented the tank removal results (Appendix A).

### 1.1 Background

On October 15, 1990 three underground storage tanks that stored gasoline were removed from the northeast portion of the site located at 7225 Bradburn Blvd., Westminster, Colorado 80030 (see site plan). The three gasoline tanks were in good to poor condition with moderate corrosion. Tank #1 was in good condition with no holes observed. However, Tank #2 and Tank #3 had several holes ranging in size from 1/8 inch to 1/2 inch. The product lines appeared in good condition with moderate corrosion and were removed. The assessment performed by HAI at the time of removal concluded that some contaminated soil remained. Soil laboratory analysis from the bottom of tank #2 indicated a level of 210 ppm TRPH and 0.37 total BTEX. Tanks #1 and #3 soil laboratory analysis indicated non-detectable to 0.02 ppm total BTEX and 5.67 ppm and 4.11 ppm TRPH for Tanks #1 and #3 respectively. contamination. A further investigation was recommended to determine the vertical and horizontal extent of contamination below tank #2.

### 1.2 Study Site

Peerless Tyre is located in the northwest quarter of section 31 Township 2 South Range 68 West approximately 300 feet north of 72nd Avenue and Bradburn Blvd. intersection in Westminster, Colorado (see site plan). The site is bounded by Bradburn Auto Body on the north, a vacant field on the west, a residence and 72nd Avenue on the south, and Bradburn Blvd. on the east. The tanks were located in the northwest portion of the site. The site area was covered with asphalt/concrete.



Harner Environmental Management, Inc.  
5721 S. Spotswood Street  
Littleton, Colorado 80120

Site Plan  
Peerless Tyre  
7225 Bradburn Blvd.  
Westminster, Colorado 80030

## 2.0 REMEDIATION

Remediation of the site was performed by overexcavation of contaminated soil. Soil samples obtained for VOC analysis were allowed to equilibrate to room temperature and the headspace was analyzed for VOC with a photoionization detector (PID) HNU Model P101 (State of California 1989). The instrument was calibrated to 1 ppm benzene. The VOC readings were used to identify contaminated soils and to determine the extent of overexcavation.

### 2.1 Overexcavation

The subsurface conditions consisted of 0 to 25 feet of silty sandy clay underlain by a claystone from 25 to 30 feet.

On January 23, 1991 contaminated soil was removed from below tank #2. The excavation size was enlarged from 24'x32' to 28'x35' and increased in depth from 11 feet to 30 feet under tank #2 (see site plan). Some contaminated soil was removed below tank #3 to a depth of 19 feet. The final field VOC test results indicated no measurable readings in the bottom south wall, and north wall and 3 ppm and 10 ppm in the west and east walls respectively (Table 1).

TABLE 1: Results of final field VOC evaluations from overexcavation of excavation #2.

Sample Number	Sample Description	VOC
1	Bottom, tank #2, south end at 30 feet	0
2	Bottom, tank #2, north end at 30 feet	0
3	Bottom, tank #3, north end at 19 feet	0
4	West wall at 25 feet	3
5	South wall at 25 feet	0
6	East wall at 25 feet	10
7	North wall at 20 feet	0

At the completion of overexcavation, two soil samples were obtained from the east walls and bottom, labelled PT-7-S through PT-8-S and analyzed for total recoverable petroleum hydrocarbons (TRPH) according to EPA Method 418.1 (US EPA 1983). The TRPH analysis indicated detectable levels between 6.28 ppm and 7.71 ppm (Table 2).

TABLE 2: Soil laboratory analysis of excavation following final overexcavation.

Sample Number	Location	TRPH (ppm)
PT-7-S	Bottom at 30 feet	6.28
PT-8-S	East wall at 25 feet	7.71

ND=Not detected, quantities were below the practical quantitation limit (PQL) for BTEX laboratory analysis.

The field VOC analysis indicated no measurable readings in the bottom south and north walls and 3 and 10 ppm in the east and west walls respectively. The soil laboratory analysis indicated levels of 6.28 ppm and 7.71 ppm TRPH in the east wall and bottom respectively (Appendix B). A total of 600 cubic yards of contaminated soil were removed from the site and disposed of at Denver Arapahoe Landfill with the acceptance of the Colorado Department of Health and authorization from Waste Management of North America (Appendix B).

### 3.0 UTILITY CORRIDORS

Utility corridors were researched for the potential to act as conduits for contaminate migration. There are no main utility corridors in the immediate vicinity of the subject site. The nearest main utilities are located in 72nd Avenue that is approximately three hundred feet to the south. These utilities are unlikely to act as a conduit for contaminant migration because of their distance from the excavation and the clayey soil conditions do not promote migration. The service utilities are also unlikely to act as a conduit for contaminant migration because of the clayey soil conditions and their shallow burial at approximately 5 feet.

#### 4.0 WATER WELL DATA

Water well data was researched at the Colorado State Engineer's Office. A total of 9 wells are recorded within a 1/2 mile radius (see water well map). The nearest well to the subject site, well #942R, is located approximately 835 feet to the northwest of the subject site. The well is a municipal well for the City of Westminster and has a well yield of 150 gpm, well depth of 500 feet, and a static water level of 210 feet (Table 3).

TABLE 3: Water wells researched at State Engineer's Office within a 1/2 mile radius.

Well Number	Use	Distance (ft)	Well Yield (gpm)	Depth (ft)	Static Level (ft)
35183	Domestic	1,526	7	210	58
15297	Domestic	1,560	5	37	19
942R	Municipal	835	150	500	210
941R	Municipal	1,040	160	500	200
23256	Domestic	1,530	—	50	—
14669	Domestic	1,875	8	540	380
44967	Domestic	2,220	15	85	40
1196	Domestic	2,300	25	570	310
50913	Domestic	2,300	15	1,080	280

#### 5.0 REMEDIAL ACTION CATEGORY (RAC)

According to the Colorado Department of Health UST Owner/Operator Guidance Documents for Investigation Corrective Action, Use of State Clean-up Action Levels and Management of Contamination dated January 22, 1991, this site will conservatively be considered RAC I. The conservative approach is based on the location of well #942R, a City of Westminster municipal well, that has a depth to the static water level of 280 feet. Although this static level is most likely in a different aquifer, the conservative approach for RAC designation will be taken. The clean-up levels for soils in a RAC I classification are 25 ppm total BTEX and 100 ppm TRPH.

## 6.0 GEOLOGY

The regional geology in the vicinity of Peerless Tyre consists of Holocene and Pleistocene loess that mantle the bedrock from approximately 10 feet to 25 feet. The bedrock consists of the Paleocene and Upper Cretaceous Denver/Arapahoe formations (Lindvall 1979).

The Holocene and Pleistocene loess consist of yellowish brown to light grayish brown sandy silt that may contain appreciable amounts of clay and silty clay.

The Denver/Arapahoe formation consists of brown, yellowish-brown, gray, and blue-gray interbedded sandstone, claystone, siltstone, shale, and conglomerate. The lower conglomerate member of the Arapahoe formation is generally water bearing. The thickness of the Denver/Arapahoe formation in the Westminster area is generally 781 feet.

The geology at the Peerless Tyre site consists of a silty sand clay from 0 to 25 feet underlain by the Denver/Arapahoe formation from 25 feet to 30 feet. No groundwater was encountered at 30 feet.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

Three underground storage tanks that contained gasoline were removed at the site. The three gasoline tanks were in good to poor condition with moderate corrosion. Tank #1 was in good condition with no holes observed. However, Tank #2 and Tank #3 had several holes ranging in size from 1/8 inch to 1/2 inch. The product lines appeared in good condition with moderate corrosion and were removed.

Remediation was performed by overexcavation of contaminated soil. The final VOC readings indicated 0 ppm in the bottom, north, and south walls and 3 ppm to 10 ppm in the east and west walls respectively. The laboratory analysis indicated insignificant TRPH levels of 6.28 ppm in the bottom and 7.71 ppm for the east wall.

The utility corridors were searched as a potential to act as conduits for contaminant migration. It is unlikely the service utilities or main utilities would act as conduits for contaminant migration because of their shallow burial and the clayey soil conditions do not promote migration.

Research was conducted at the state engineer's office for water wells within a 1/2 mile radius. The nearest well is a City of Westminster municipal well located approximately 835 feet northwest of the site. This conservatively places the site into a RAC I. The clean-up levels for soils in contact with the groundwater is 25 ppm BTEX and 100 ppm TRPH. The soil laboratory analysis indicates 6.28 ppm TRPH for the bottom and 7.71 for the east wall. Harner Environmental recommends no further action for this site.

#### 8.0 LITERATURE CITED

Lindvall, R.M. 1978. Geologic map of the Fort Logan Quadrangle, Jefferson, Denver, and Arapahoe Counties, Colorado. U.S. Geological Survey GQ 1427.

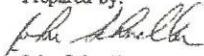
State of California. 1989. Headspace Analysis. *IN*: Luft Field Manual. Water Resources Control Board. State of California.

U.S. Environmental Protection Agency. 1983. Test methods for evaluating chemical analysis of water and waste. March 1983 US EPA 600/4-7-020.

Respectfully submitted,

Harner Environmental Management, Inc.

Prepared by:



John Schneller  
Senior Geologist

Reviewed by:



Richard F. Harner, Ph.D.  
Director, Environmental Programs

HARNER & ASSOCIATES

TEL (303) 794-5306

Jan 5 91 11:03 No.001 P.02

✓  
4566

# Harner Environmental Management, Inc.

December 20, 1990

Mr. Dennis Hotovec  
Colorado Department of Health  
Hazardous Materials and Waste Management Division  
4210 East 11th Avenue  
Denver, CO 80220

SUBJECT: Disposal of petroleum contaminated soils from excavation at 4225 Bradburn Blvd,  
Westminster, Colorado 80030

Dear Mr. Hotovec:

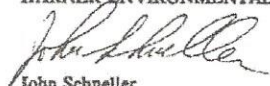
Please find enclosed sample analysis of the petroleum contaminated soils present at the above referenced site. Our client desires to dispose of this material at the Denver Arapahoe Disposal Landfill in Arapahoe County, Colorado.

Harner Environmental estimates approximately 200 cubic yards of contaminated soil will need to be removed from the site.

Would you please contact Mr. Bruce Clabaugh with Waste Management of North America (770-3324) at your earliest convenience regarding your decision. Your help in this matter is greatly appreciated.

Sincerely,

HARNER ENVIRONMENTAL MANAGEMENT, INC.



John Schneller  
Senior Geologist

JS/eb

5721 South Spotswood Street · Littleton, Colorado 80120

(303) 794-5201

FAX (303) 794-5306

ADM-PEE

## STATE OF COLORADO

## COLORADO DEPARTMENT OF HEALTH

4210 East 11th Avenue  
Denver, Colorado 80220  
Phone (303) 320-8333



Roy Romer  
Governor

April 24, 1991

Peerless Tyre  
7225 Bradburn Avenue  
Westminster, Colorado 80030

RE: Corrective Action Plan for Peerless Tyre Located  
at 7225 Bradburn Ave., Westminster, Colorado.  
80030.

Dear Sir/Madam:

In order to verify that the site has been excavated to a level of TPH below 10 ppm, it will be necessary to indicate where PT-7-S is located on the bottom of the pit. Is PT-7-S located near the bottom of tank #2 that originally had a reading of 210 ppm TPH before the excavation?

Please provide the information requested above to this office so that we may proceed with the evaluation of this report.

Your cooperation in dealing properly with this site is appreciated. Should you have any questions concerning this letter feel free to contact me at 303-331-4919.

Sincerely,

Lisa Weers  
Engineer  
UST Program  
Hazardous Materials and  
Waste Management Division

Scott Winters  
Unit Leader  
UST Program

cc: Mike Powell, State Oil Inspector  
Jefferson County Health Department  
Westminster Fire Department

**FILE COPY**

ROY ROMER  
Governor  
JOHN J. DONLON  
Executive Director  
RICHARD O. PIPER  
State Inspector of Oils



DEPARTMENT OF LABOR AND EMPLOYMENT  
Oil Inspection Section  
Tower 3, Suite 525  
1515 Arapahoe Street  
Denver CO 80202-2117  
(303) 620-4300; Fax (303) 620-4303

Direct Sales Tire Company  
9251 East 104th Avenue  
Henderson, Colorado 80640

FILE COPY

December 8, 1995

RE: Closure for Underground Storage Tanks (USTs) at U-Pump-It,  
7225 Bradburn, Westminster, Colorado.

Dear Sir:

The Colorado Department of Labor and Employment, Oil Inspection Section has reviewed the Corrective Action Plan/Site Assessment for the USTs at the above referenced location dated February 21, 1991.

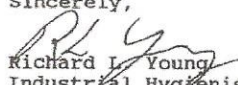
Based upon the information that has been submitted it appears that appropriate actions have been taken to remove the source of the contamination and to reduce the potential for further impacts to occur as a result of the contamination at this property.

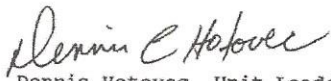
In light of the remedial actions that have been taken at this site, the Colorado Department of Labor and Employment will approve your remedial action and will not require any further investigations or remedial actions at this time. In the event that conditions change at this site, the Department reserves the right to determine if any additional actions are necessary.

Please be aware that we can not release you from any liabilities which may be associated with any contamination that remains at this site.

Should you have any questions, please feel free to contact Richard Young at (303) 620-4031.

Sincerely,

  
Richard L. Young  
Industrial Hygienist  
Storage Tank Remedial Program  
Oil Inspection Section

  
Dennis Hotovec, Unit Leader  
Compliance and Enforcement Unit  
Storage Tank Remedial Program  
Oil Inspection Section

cc: Adams County Health Dept.

admpee.01

ROY ROMER  
Governor  
JON NUMAIR  
Executive Director  
RICHARD O. PIPER  
State Inspector of Oils



DEPARTMENT OF LABOR AND EMPLOYMENT  
Oil Inspection Section  
Tower 3, Suite 610  
1515 Arapahoe Street  
Denver CO 80202-2117  
(303) 620-4300; Fax (303) 620-4028

**FILE COPY**

July 25, 1997

DAVE CANNON  
PEERLESS TYRE COMPANY  
5000 KINGSTON ST  
DENVER CO 80239

RE: Petroleum Storage Tanks (PST) at 7225 Bradburn St., Westminster, Colorado

The Oil Inspection Section (OIS) has reviewed the Corrective Action Plan for the underground storage tank located at the above referenced site dated February 21, 1991.

Based solely upon the information submitted it appears you have removed the source of contamination and reduced the potential for endangerment to human health, safety, and the environment as a result of the contamination at this property. In light of the remedial action taken at this site, the OIS does not require any further investigation or remedial action at this time. If conditions change, the OIS reserves the right to determine if any additional actions are necessary.

**The OIS cannot release you from any liability which may be associated with any contamination at or from this site.**

Please address correspondence regarding this site to me and if you have any questions call me at (303) 620-4321.

Sincerely,

A handwritten signature in black ink, appearing to read "James S. Weeks".

James S. Weeks  
Environmental Protection Specialist  
Remediation Unit

A handwritten signature in black ink, appearing to read "Dennis C. Hotovec".

Dennis C. Hotovec  
Environmental Protection Specialist  
Storage Tank Remediation Program  
Oil Inspection Section





RECEIVED  
12000 Pecos Street  
Suite 300  
Denver, Colorado 80234-2079  
303/452-3600  
FAX: 303/452-5018  
MATERIALS  
PERMIT

April 26, 1994

Colorado Department of Health  
4300 Cherry Creek Drive South  
Denver, Colorado 80222-1530

Attention: Mr. Ed LaRock

Subject: Project Closure  
City of Westminster Park Shop  
3950 West 72nd Avenue  
Westminster, Colorado  
Delta No. 30-93-718

Dear Mr. LaRock:

Delta Environmental Consultants, Inc. (Delta) has completed the ground water monitoring program for the above-referenced facility as requested by the Colorado Department of Health. Representative ground water samples have been collected from all site monitoring wells on a quarterly basis for one hydrologic cycle. During sampling no petroleum hydrocarbon contamination was detected. Ground water monitoring reports from each monitoring event are enclosed for your review. The reports document ground water level data, ground water chemistry and inferred ground water contour maps generated from each monitoring event.

Based on the current and historical analytical data, Delta recommends that no further remedial actions are completed and that site closure be granted.

If you have any questions please call me at (303)452-3600 with any questions you may have.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

A handwritten signature in black ink, appearing to read "Michael H. Adams", is written over a horizontal line.

Michael H. Adams  
Environmental Specialist

MHA/djs

Enclosure

cc: Mr. Frank Grassmug - City of Westminster, Fleet Manager

COPY



**Delta**  
Environmental  
Consultants, Inc.

12000 Pecos Street  
Suite 300  
Denver, Colorado 80234-2079  
303/452-3600  
FAX: 303/452-5018  
**MAILED**  
APR 26 1994

April 26, 1994

City of Westminster  
6777 West 88th Avenue  
Westminster, Colorado 80030

Attention: Mr. Frank Grassmug

Subject: Fourth Quarter Monitoring Summary  
City of Westminster Parks Shop  
3950 West 72nd Avenue  
Westminster, Colorado  
Delta No. 30-93-718

Dear Mr. Grassmug:

Representatives of Delta Environmental Consultants, Inc. (Delta) visited the above-referenced site on March 25, 1994. During the visit, the water levels in monitoring wells MW-1, MW-2, and MW-3 were measured. These measurements are summarized in Table 1. Figure 1 illustrates ground water contours generated from data collected during the recent site visit.

After purging three well volumes of water from each monitoring well, ground water samples were collected and submitted to Technology Laboratory, Inc. of Ft. Collins, Colorado where they were analyzed on April 1, 1994, for benzene, toluene, ethylbenzene and xylenes using EPA Method 8020 and total petroleum hydrocarbons using modified EPA method 8015. The results of the analyses are summarized in Table 2. The laboratory reports are presented in Attachment A.

If you have any questions regarding this information, please contact Mr. Mark R. Mathiowetz or me at (303)452-3600. We are pleased to be of service to the City of Westminster on this project.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Michael H. Adams  
Environmental Specialist

MHA/djs

**TABLE 1**

Ground Water Level Data  
City of Westminster Parks Shop  
3950 West 72nd Avenue  
Westminster, Colorado  
Delta No. 30-93-718

<u>Monitoring Well No.</u>	<u>Date</u>	<u>Relative Reference Elevation (ft)</u>	<u>Depth to Water (ft)</u>	<u>Relative Ground Water Elevation (ft)</u>	<u>Free Product Thickness (ft)</u>
MW-1	06/03/93	99.81	28.95	70.86	NP
	09/09/93		27.94	71.87	NP
	12/17/93		27.92	71.89	NP
	03/25/94		28.90	70.91	NP
MW-2	06/03/93	88.79	18.82	69.97	NP
	09/09/93		17.95	70.84	NP
	12/17/93		18.41	70.38	NP
	03/25/94		28.34	60.45	NP
MW-3	06/03/93	94.32	23.81	70.51	NP
	09/09/93		22.92	71.40	NP
	12/17/93		22.91	71.41	NP
	03/25/94		19.09	75.23	NP

NP = No free product present

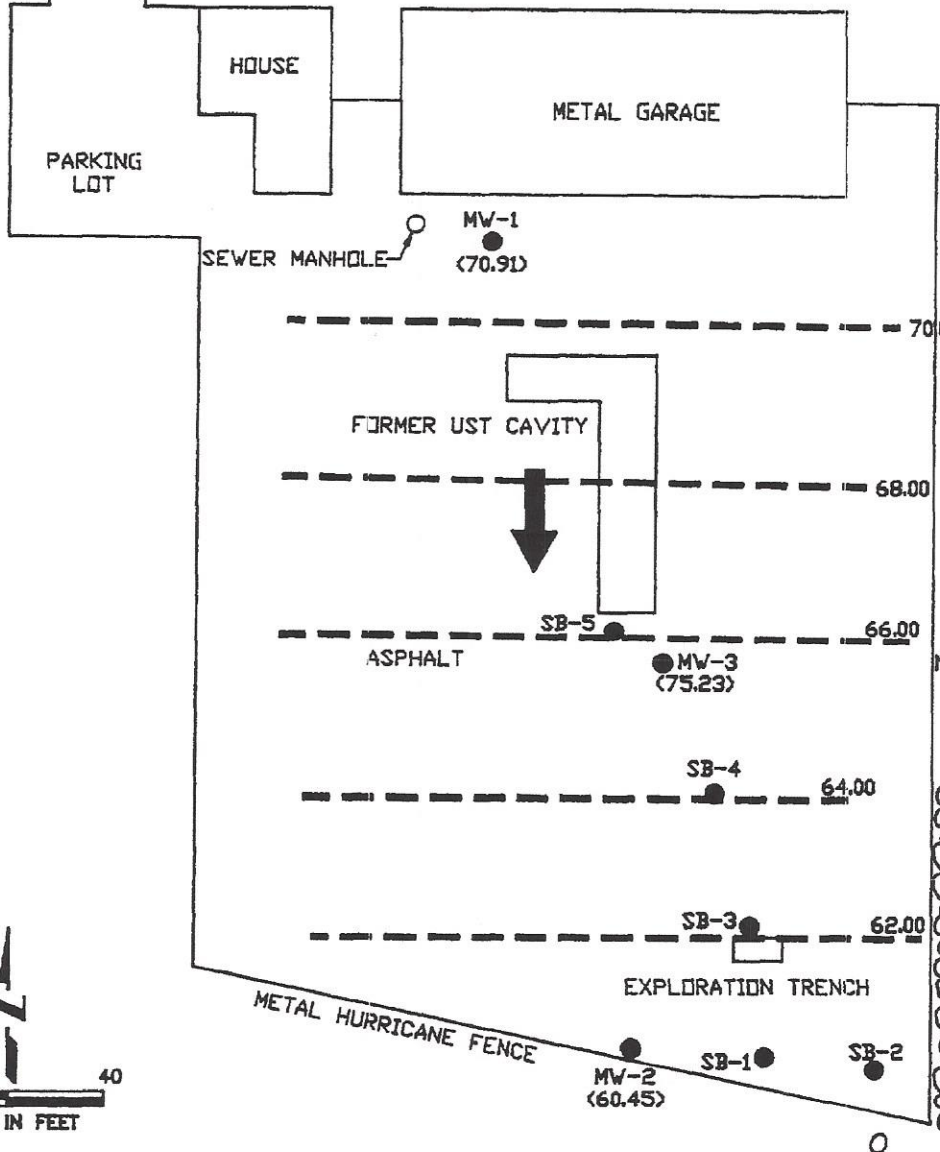
**TABLE 2**

Ground Water Chemistry  
City of Westminster Parks Shop  
3950 West 72nd Avenue  
Westminster, Colorado  
Delta No. 30-93-718

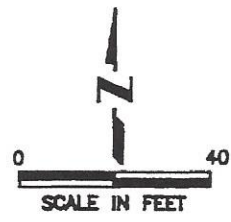
<u>Monitoring Well No.</u>	<u>Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>Total Petroleum Hydrocarbons</u>
MW-1	06/03/93	ND	ND	ND	ND	ND
	09/09/93	ND	ND	ND	ND	ND
	12/17/93	ND	ND	ND	ND	ND
	03/25/94	ND	ND	ND	ND	ND
MW-2	06/03/93	ND	ND	ND	9.7	ND
	09/09/93	ND	ND	ND	ND	ND
	12/17/93	ND	ND	ND	ND	ND
	03/25/94	ND	ND	ND	ND	ND
MW-3	06/03/93	ND	ND	ND	ND	ND
	09/09/93	ND	ND	ND	ND	ND
	12/17/93	ND	ND	ND	ND	ND
	03/25/94	ND	ND	ND	ND	ND

ND = Not detected

WEST 72nd AVENUE




NOTE: THE WELL SEAL WAS NOT IN TACT ON MW-3 DURING THE RECENT SITE VISIT. THE WATER LEVEL IS CONSIDERED AN ANOMALLY.



- LEGEND:**
- SB-4 SOIL BORING LOCATION
  - MW-2 MONITORING WELL LOCATION
  - (60.45) GROUND WATER ELEVATION
  - - - INFERRED GROUND WATER CONTOURS
  - CONTOUR INTERVAL = 2.0 FT.
  - ➔ INFERRED GROUND WATER FLOW DIRECTION

NOTE: THE SEWER MANHOLE WAS USED AS A TEMPORARY BENCHMARK AND ASSIGNED A 100.00 FT. ELEVATION.

**FIGURE 1**  
**SITE AREA MAP WITH**  
**INFERRED GROUND WATER CONTOURS**  
**MARCH 25, 1994**  
**WESTMINSTER PARK SHOP**  
**3950 WEST 72nd AVENUE**  
**WESTMINSTER, COLORADO**

PROJECT NO. 30-93-718	PREPARED BY MHA	DRAWN BY CJM	 <b>DELTA</b> ENVIRONMENTAL CONSULTANTS, INC.
DATE 4/18/94	REVIEWED BY	FILE NO. 718A	

**TECHNOLOGY LABORATORY, INC.**

**CENTRE FOR ADVANCED TECHNOLOGY**  
2401 Research Boulevard, Suite 204  
Fort Collins, Colorado 80526  
(303) 490-1414

**WATER ANALYSIS REPORT**

**DELTA ENVIRONMENTAL CONSULTANTS, INC.**  
12000 Pecos Street, Suite 300  
Denver, Colorado 80234-2079

Date Received: 3/25/94  
Date Analyzed: 4/01/94  
Project No.: 30-93-718.01

<u>Lab ID</u>	<u>Sample ID</u>	<u>Date Sampled</u>	<u>Benzene</u> µg/L	<u>Toluene</u> µg/L	<u>Ethylbenzene</u> µg/L	<u>Xylenes</u> µg/L	<u>TVPH-Purgeable</u> mg/L
7758-1	MW 1910	3/25/94	<0.5	<0.5	<0.5	<0.5	<0.5
7758-2	MW 2915	3/25/94	<0.5	<0.5	<0.5	<0.5	<0.5
7758-3	MW 3930	3/25/94	<0.5	<0.5	<0.5	<0.5	<0.5



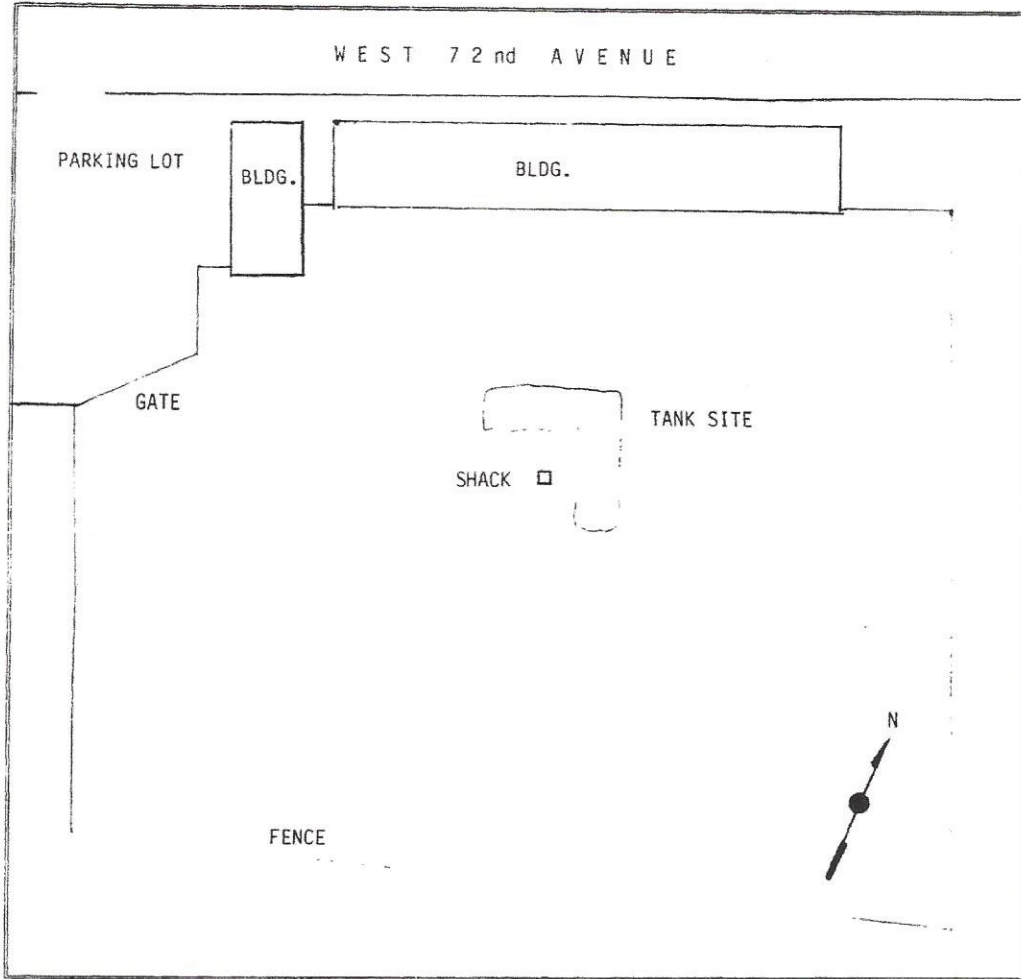
**TECHNOLOGY LABORATORY, INC.**

BTEX Method: EPA-8020  
TVPH-Purgeable Method: EPA-Modified 8015

EXHIBIT 1A  
SITE LAYOUT

UST OWNER/OPERATOR \_\_\_\_\_

(No Scale)



TANK INTEGRITY SYSTEMS, INC.  
7304 S. ALTON WAY, SUITE J  
ENGLEWOOD, CO 80112  
(303) 220-9685



CITY of WESTMINSTER

General Services

4800 West 92nd Avenue  
Westminster, Colorado  
80030

303.430.2400  
FAX 303.428.4564

July 7, 1992

JUL 09 1992

Larry Delin  
Colorado Department of Health  
Hazardous Materials and Waste Management Division  
4210 East 11th. Ave.  
Denver, Colorado 80220-3716

Dear Mr. Delin:

The purpose of this letter is to formally report the existence of the evidence of a historic release, observed during the removal of fuel tanks, at the City of Westminster facility, 3950 W. 72nd Avenue, Westminster, Colorado. This site is commonly referred to as the Old Park's Shop. The first report of this historic release to your office was by telephone on May 26, 1992.

This particular site is in a mixed commercial and residential neighborhood along the Little Dry Creek Storm Drainage System. The site is bordered by a City park to the west and south, a single story building housing a communication business and a City Museum to the east, and a used car dealership across 72nd Ave, to the north. The tanks were part of an active fueling site until 1987, at which time, fueling operations were moved to the Westminster Municipal Service Center. The Old Park's Shop site is now mainly used for storage of City park equipment and sewer maintenance supplies.

Work began on tank removal at this site in November of 1991 with request for proposals, and the actual removal took place in late April of 1992. Upon removal, the site was found to have three underground storage tanks, the oldest installed in 1938, the remaining two in 1957 and 1958 respectively. The tanks ranged in size from 500 gallons (two tanks) to a 1000 gallon tank.

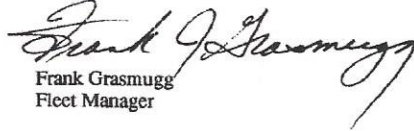


Upon removal of these tanks, evidence of a historic release became evident, and the tank removal firm attempted to trace the extent of that contamination through physical means. While some contaminated soil was removed at that point, it became apparent that the contamination continued outside the immediate tank area. From the location of the contamination in the tank hole, it is likely that the contamination is a result of a combination of overfills and release of product, through corrosion holes in the 1,000 gallon tank. The 1,000 gallon tank had been last used to store gasoline. The amount of the release is unknown. At no point has there been any free product observed, nor has there been any obvious surface impact as a result of this contamination.

A narrow trench has been dug approximately 75 to 100 feet south down grade of the tank site to determine the extent of contamination. Hydrocarbon readings of 120 PPM on a PID meter have been found at this trench, which was dug to a depth of 12 feet. Groundwater was not encountered at the 12 ft. depth. Since the City has become aware of this historic release, we have been soliciting quotations for a site assessment to be performed and for the installation of monitoring wells. To date, two quotations have been received with a third forthcoming.

I will be able to supply you with a copy of the tank removal report shortly and will keep you advised as to the progress of the site assessment. If you have questions, please call me at 430-2400 ext. 2511.

Sincerely,

  
Frank Grasmugg  
Fleet Manager



*Adm/2000*

# STATE OF COLORADO

Roy Romer, Governor  
Patti Shwayder, Acting Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

## HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

4300 Cherry Creek Dr. S.      222 S. 6th Street, Room 232  
Denver, Colorado 80222-1530      Grand Junction, Colorado 81501-2768  
Phone (303) 692-3300      Phone (303) 248-7164  
Fax (303) 759-5355      Fax (303) 248-7198



Colorado Department  
of Public Health  
and Environment

February 1, 1995

Frank Grasmugg  
City of Westminster, Fleet Maintenance  
6777 West 88th Avenue  
Westminster, CO 80030

Re: Underground Storage Tank (UST) Closure at Fire Station #1, 3948 West 73rd Avenue, Westminster, CO

Dear Mr. Grasmugg:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division has reviewed the UST Closure Report and Environmental Assessment for the UST closure at the above referenced location dated November 2, 1994.

Based upon the information that has been submitted it appears that appropriate actions have been taken to remove the source of contamination and to reduce the potential for further impacts to occur as a result of contamination at this property.

In light of the remedial actions that have been taken at this site, the Colorado Department of Public Health and Environment will approve your remedial action and will not require any further investigations or remedial actions at this time. However, in the event that conditions change at this site, we may wish to discuss what if any additional actions may be necessary.

Please be aware that we can not release you from any liabilities which may be associated with any contamination that remains at this site.

Should you have any questions, please feel free to contact Mr. Doug Pratto at (303) 692-3448.

Sincerely,

Douglas J. Pratto  
E.I.T.  
Storage Tank Remedial Section  
Hazardous Materials and  
Waste Management Division

Dennis C. Hotovec, Unit Leader  
Compliance and Enforcement Unit  
Storage Tank Remedial Section  
Hazardous Materials and  
Waste Management Division

/DP

cc: Oil Inspection Section, Colorado Department of Labor  
Tri-County Health Department

RECEIVED

JUL 25 1994

DEPARTMENT OF ENVIRONMENTAL  
HEALTH SERVICES

**UNDERGROUND STORAGE TANK (UST)  
REMOVAL ASSESSMENT REPORT**

*for*

**CITY OF WESTMINSTER  
FIRE STATION #1  
3948 WEST 73RD AVENUE**

**MARCH, 1994**

**TIS PROJECT #94-04**

**UNDERGROUND STORAGE TANK (UST) REMOVAL ASSESSMENT REPORT**

**UST OPERATOR**

Name: City of Westminster  
Address: 4800 West 92nd Avenue  
County: Adams  
City: Westminster State: CO Zip: 80030

**UST OWNER**

Same

**CONTACT PERSON**

Name: Mr. Frank Grasmugg  
Business Address: 6777 West 88th Avenue  
City: Westminster State: CO Zip: 80030  
Business Telephone: (303) 430-2400, Ext. 2511

**TANK REMOVAL INFORMATION**

1. **DATE OF REMOVAL:** UST was removed on 2/4/94
2. **LOCATION:** County: Adams                      **LEGAL:** SW/SE $\frac{1}{4}$ , Sec. 31, T2S, R68W  
Street: 3948 West 73rd Avenue  
City: Westminster State: CO Zip:
3. **NUMBER, SIZE AND LAYOUT OF TANKS:** (See EXHIBIT 1)

One 4000-gallon capacity diesel fuel underground storage tank (UST) was removed from Fire Station #1. The UST was located under an asphalt parking area just south of the station. Both the dispenser pump and vent lines were immediately adjacent to the tank. A diagram illustrating the layout of the UST system prior to its removal can be found at EXHIBIT 1.

4. **TANK CONSTRUCTION:**

The tank and all associated piping were steel. Field observations appear to indicate that this UST system was not cathodically protected. To the best knowledge of Tank Integrity Systems (TIS), this tank has only stored diesel fuel.

5. **REGULATORY INFORMATION:**

There are no known documented occurrences of petroleum being released into the subsurface environment at this site. The UST was scheduled for removal by the City of Westminster as part of their ongoing effort to minimize and consolidate their UST facilities. The services of TIS were retained for removing the UST and obtaining any required samples.

6. **TANK HISTORY:**

According to available state records, this UST was installed on May 7, 1980. As stated earlier, TIS is unaware of any documented occurrences of unwarranted releases of hydrocarbons into the subsurface environment of the site from this UST. The last time TIS tightness-tested this UST, it generated a leak rate of only 0.015 gph, well below the minimum allowable rate of 0.05 gph.

**7. OBSERVED GEOLOGY/GEOHYDROLOGY/ENVIRONMENTAL FACTORS:**

Observed surface topography for this site was relatively flat with no obvious slope. The tank had been installed with the use of pea gravel. The native soil that was encountered during the assessment consisted of a silty to very silty, slightly sandy to sandy clay with some interbedded deposits of clayey and sandy silt. No actual groundwater, or signs of groundwater, were observed within the excavation.

During the removal process, some discolored and odorous fill material was noticed around the fill-pipe of the UST, which was located on the north end of the tank cavity. Discolored and odorous soil was also encountered beneath the base of the dispenser pump which was immediately adjacent to the northeast corner of the UST cavity. This apparent contamination is discussed in detail in the next section of this report.

Prior to leaving the site, the underground components of the removed UST system were examined. Only minor surface corrosion was observed on both tank and piping.

**8. SUBSURFACE CONTAMINATION:**

Subsurface contamination was observed during the removal of the UST. The contamination appeared to be confined to the fill material around the fill-pipe and to soil beneath the former dispenser pump. Starting with this fill material, a separate stockpile was started to keep this material segregated from the material that appeared clean.

Upon removing the UST, it was decided to attempt to remove the discolored and odorous soil beneath the former dispenser pump location through further excavation. An estimated seven cubic yards of contaminated soil were removed from this location prior to the task of soil sampling.

A total of six soil samples were taken from this site. Three were grab samples from the floor of the tank excavation (north end, center, south end). A grab sample was taken from the shallower northeast corner floor where the dispenser pump had been. The last two were composite samples taken from the assumed clean stockpile and the contaminated stockpile. The headspaces of these samples were field-screened with a photoionization detector (PID). The minimum/maximum PID values for samples taken within the excavation, including the northeast corner, were 1.2 parts per million (ppm) and 7.9 ppm. For the assumed clean soil stockpile, the reading was 10.2 ppm, while the contaminated stockpile was 38.9 ppm.

Because of the low PID values and the lack of any noticeable discolored or odorous soil within the excavation, it was thought that the project was completed. Since the site was unsecured (no fencing or gates) and in an area of noticeable pedestrian traffic, it was decided to backfill the excavation with the assumed clean material and clean imported fill material. The six obtained samples were prepared for transport and were direct delivered to the laboratory subcontractor. The requested analyses

were based on the suspected contaminants and on current state guidelines. A table outlining the analytical results can be found below.

<u>Sample ID</u>	<u>Sample Location</u>	<u>Requested Analyses</u>	<u>Results</u>
D-N-END	Excavation Floor: North End	TEH (8015 mod.) BTEX (8020)	TEH = 37 ppm B = ND T = ND E = ND X = ND
D-CENTER	Excavation Floor: Center	Same	TEH = <10 ppm B = ND T = ND E = ND X = ND
D-S-END	Excavation Floor: South End	Same	TEH = <10 ppm B = ND T = ND E = ND X = 3 ppb
D-DISP-F	Floor of Dispenser Area	Same	TEH = 190 ppm B = ND T = ND E = ND X = ND
EXC-SP-1	Assumed Clean	Same	TEH = 29 ppm B = ND T = ND E = ND X = 2 ppb
EXC-SP-2	Contaminated Soil Stockpile	Same	TEH = 120 ppm B = ND T = ND E = 1 ppb X = 6 ppb

A diagram showing the sampling locations, a list of their PID readings, and the laboratory data sheets can be reviewed in EXHIBIT 2.

The initial assessment results indicated that additional excavation would be needed to reduce or eliminate the contamination levels that existed on the north end and in the northeast corner. On February 21, 1994, the backfilled excavation was reopened and the floor of the north end was deepened and the northeast corner was overexcavated as well. Another estimated 13 cubic yards of soil were removed, with the bulk coming from the northeast corner. The new sample from the north end was taken at 13 feet deep, two feet deeper than before, and the new sample from the former dispenser pump area came from 11 feet, six feet deeper than previously. As before, sample headspaces were field-screened with a PID.

The new samples generated a reduced PID reading. A previous/new PID comparison for the north end was 7.9 ppm/1.4 ppm and for the floor of the northeast corner, 6.1 ppm/0.9 ppm. Again, the excavation was backfilled, the samples properly prepared and stored, and then delivered the next day to the subcontracted laboratory. The two new samples were re-analyzed for the same contaminants. A results table can be found below.

<u>Sample ID</u>	<u>Sample Location</u>	<u>Requested Analyses</u>	<u>Results</u>
D-DISP-F(2)	Floor of Dispenser Area	TEH/BTEX	TEH = <10 ppm B = ND T = ND E = ND X = ND
D-N-END(2)	Excavation Floor: North End	TEH/BTEX	TEH = <10 ppm B = ND T = ND E = ND X = ND

A diagram showing sampling locations, a list of PID readings, and the analytical data sheets can be studied in EXHIBIT 3.

The final results of the two samples obtained from this second overexcavation attempt indicate that all questionable levels of petroleum contaminants have been removed and that this site should not pose a threat to the subsurface environment or to the community.

**9. CONTAMINATED SOIL DISPOSITION:**

Presently, there is an estimated 20 cubic yards of diesel-contaminated soil stockpiled at the site. It is the desire of the client that this soil be disposed of at a landfill facility. A composite of this sample will be taken and analyzed in accordance with the landfill's requirements. Should the results be acceptable, the loading and hauling of the soil can be coordinated. At this time, TIS does not foresee a problem with the soil being accepted. Once disposal has been completed, TIS will develop a brief report addendum that will discuss the soil disposal in detail. This addendum will be sent to the proper agencies.

**10. TANK DISPOSITION:**

The removed UST was accepted by a tank disposal subcontractor where it should be dealt with in compliance with all applicable laws. A certificate of disposal can be reviewed in EXHIBIT 4.

**11. LINE DISPOSITION:**

The small amount of steel piping was removed.

12. **TANK CONTENTS:**

Any residual diesel contents of the UST were safely removed, containerized, and kept prior to the UST being removed.

13. **NOTIFICATION STATUS:**

On December 15, 1993, TIS gave notification to the Colorado Oil Inspection Section concerning the planned UST removal at this site. On January 7, 1994, TIS received notification approval from the Oil Inspection Section. Copies of all correspondence can be found in EXHIBIT 5.

14. **OBSERVED SURROUNDING SITE CONDITIONS:**

The study area is bordered on three sides by light commercial/residential developments. To the south lies a railroad right-of-way and an undeveloped field. Slightly further south is the Little Dry Creek. A possible water well was observed on the site, roughly 50 feet north of the former tank cavity. More information on this can be reviewed in the next section of this report.

15. **RESEARCH FROM EXISTING SOURCES AND CONCLUSIONS:**

A review of available geological literature concerning the site area was performed to confirm field observations and to evaluate the sensitivity of the surrounding subsurface environment. According to the United States Geological Survey (USGS) 1979 publication, Geologic Map of the Arvada Quadrangle, Adams, Denver, and Jefferson Counties, Colorado, by Robert M. Lindvall, the immediate subsurface of the site area consists of Holocene and Pleistocene Age loess that is most likely underlain by the Paleocene and Upper Cretaceous Age Denver/Arapahoe Formation. The loess consists of wind-blown deposits of sandy silt, silty clay, and clay. The Denver/Arapahoe Formation is made up of interbedded claystones and siltstones with some shales and conglomerates. This formation can be thick, as much as 781 feet. A lower conglomerate member of this formation has been shown to be water bearing. Additional information can be studied in EXHIBIT 6.

According to the USGS 1983 publication entitled Depth to the Water Table (1976-1977) in the Greater Denver Area, Front Range Urban Corridor, Colorado, by Hillier, Schneider, Jr. and Hutchinson, the water table within the study area is predominant in the Denver/Arapahoe Formation. Other information from this publication indicates that the depth to the water table is generally deeper than 20 feet and commonly more than 100 feet deep. Additional information can be found in EXHIBIT 6.

A review of available well records at the Division of Water Resources of the State Engineer's Office was completed. The review included the south half of Section 31, the southwest quarter of Section 32, the north half of Section 6, and the northwestern quarter of Section 5. A total of 29 wells were located in this area. To determine the relevance of this number, two important concerns must be mentioned.

---

The first is that any shallow (unconsolidated aquifer) groundwater should be hydrogeologically divided by Little Dry Creek, which flows diagonally from northwest to southeast through the reviewed area. This could eliminate as many as 12 wells from the 29 total. The other concern is that only undeveloped land and railroad right-of-way lies between the study area and Little Dry Creek, thus it is logical to say that probably none of the remaining 17 wells would be downgradient of the site.

The only well out of the 29 that should be exposed to any risk would be a deep well, owned and operated by the City of Westminster, that is located approximately 50 feet upgradient from the former UST excavation. According to state records, this well is 500 feet deep with a static water level depth of 210 feet. Taking into consideration this depth, the characteristics of the subsurface environment (discussed in Sections 7 and 15), the chemical nature (high binding affinity and low migration potential) of the residual diesel contaminants, and their relatively low concentrations (TEH=29 ppm, Total BTEX = 3 ppb of Xylenes in part of the excavation backfill), it is highly unlikely that this well would ever be affected.

A list of well records, along with a well density plot, can be studied in EXHIBIT 6.

After reviewing all the field observations discussed in Section 7 and the information contained in this section, TIS is of the professional opinion that the most logical conclusion of this project should be that this site does not present either an immediate or a future threat to the surrounding subsurface environment or the community.

16. **RECOMMENDATIONS:**

Based upon the apparent lack of any immediate or future environmental impact, TIS recommends that this site be considered completed and closed. All gathered data is well within even the most strict of applicable federal and state regulations, and additional investigative work would not generate enough substantial new information to justify the added expenses.

DATE: 6/30/94

REPORT PREPARED BY: Brad S. Van Renterghem  
Brad S. Van Renterghem  
Environmental Geologist

DATE: 7/5/94

REPORT REVIEWED BY: Joseph A. Rush  
Joseph A. Rush  
President

SITE DIAGRAM

73RD AVENUE

WESTMINSTER  
FIRE STATION  
#1

ASPHALT

OSCEOLA STREET

CITY WATER WELL O

DRIVEWAY

FIRE TRUCK  
WATER DISCHARGE  
BASIN

PUMP O LAMP

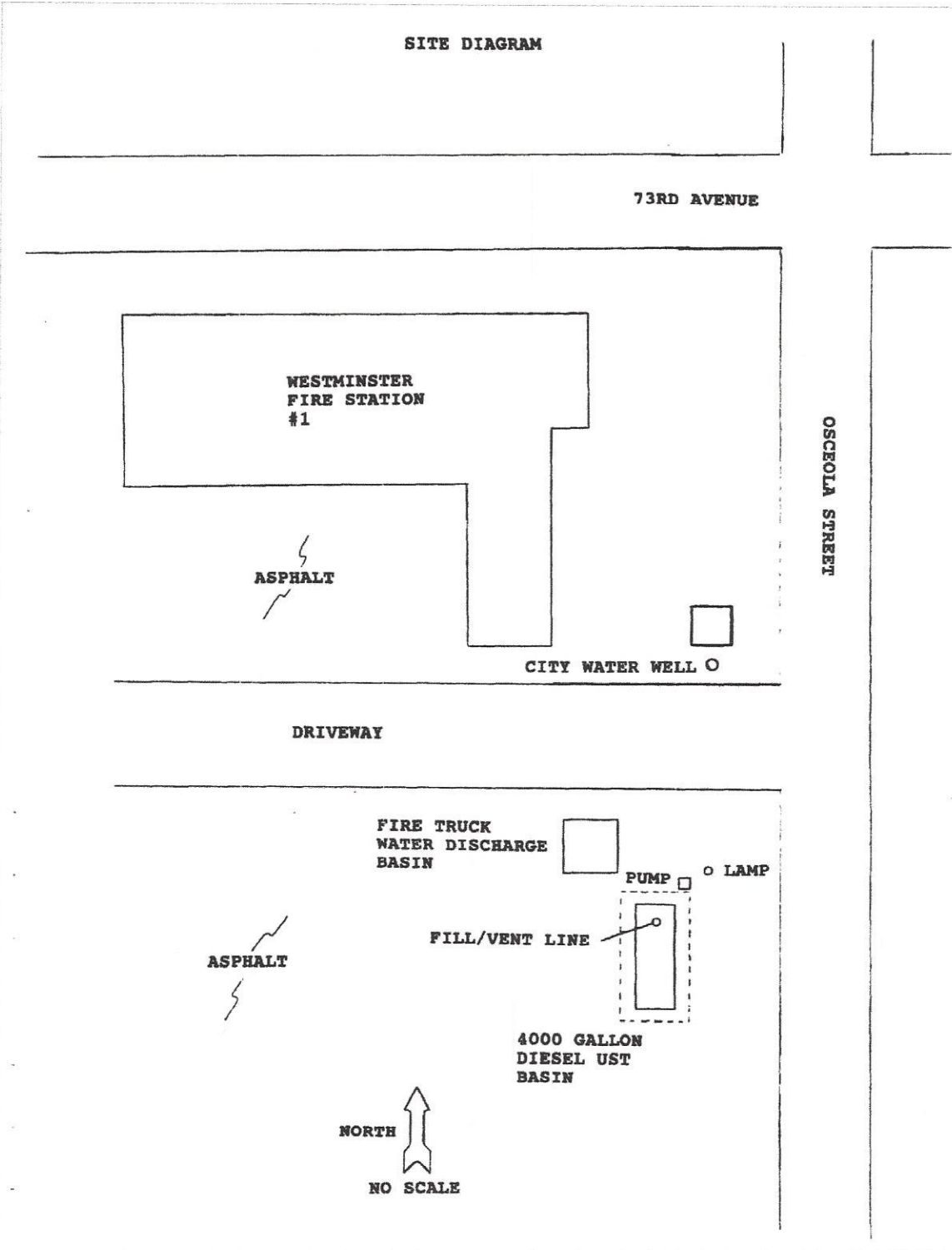
ASPHALT

FILL/VENT LINE

4000 GALLON  
DIESEL UST  
BASIN

NORTH

NO SCALE



**COLORADO STORAGE TANK  
INFORMATION SYSTEM  
(COSTIS)**

**RECORDS**

Facility

**11304 - Westminster U-pump-it**  
7225 Bradburn  
Westminster, CO 80030  
Adams County

**AKA Name:**  
**AKA Address:**

**Facility Telephone:**  
**Contact Name:**  
**Facility Creation Date:**

**A OPERATOR: Dave Cannon**  
**Certification #: 4242**

**B OPERATOR: Dave Cannon**  
**Certification #: 4242**

**Primary Contact: Dave Cannon**  
**Phone Number: 720-274-0612**

**Category: Retail Gas Station**

**Type: Retail**

**Total Tanks: 3 Total Hoses - 0**

**Currently in Use: 0 UST - 0 AST - 0 LPG - 0**

**Temporarily Closed Tanks: 0 UST - 0 AST - 0 LPG - 0**

**Permanently Closed Tanks: 3 UST - 3 AST - 0 LPG - 0**

**Delivery Prohibition Tanks: 0 UST - 0 AST - 0 LPG - 0**

**Delivery Prohibition Date:**

Assigned Inspector

**Non-Retail Inspector: Kagen Kitzman**  
303-883-5760

**Retail Inspector: Kagen Kitzman 303-**  
883-5760

**LPG Inspector: Wayne Reinert 303-**  
883-8323

**OCP/OTA Inspector: Kagen Kitzman**  
303-883-5760

**For further information see Help Menu**

ACP Send   ACP Due  
Date   Date  
November 30   January 31

**Street Map1:**



**Street Map2:**



**Sardonynx Primary ID:**

**Sardonynx Secondary ID:**

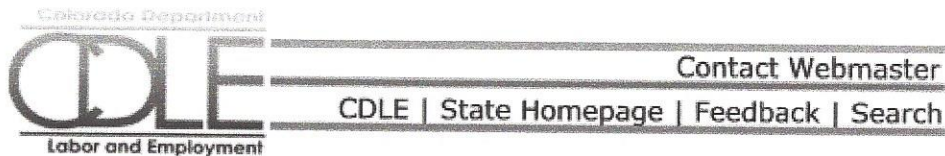
Processes   Tanks

<u>Event - ID:</u>	<u>Process</u>	<u>Date</u>	<u>Status</u>
3699		12/3/1990	Closed



**Log In**

Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.



Event

**Event Id** 3699      **Alt Event Id** 7545-1  
**Logged By**      **On** Monday, December 3, 1990  
**Reviewer** Dennis Hotovec

**Facility**  
11304 - [Westminster U-pump-it](#)  
7225 Bradburn  
Westminster, CO 80030, Adams County  
**Category** Retail Gas Station

**Site Name** Westminster U-pump-it  
**Location1** 7225 Bradburn  
**Location2**  
**Location3**  
**City,County,Zip** Westminster, Jefferson, 80030

**Discovery**  
**Source of Release**

**Status** Closed

**Site Classification**  
**MTBE Classification**  
**Projected Closure Date**

**Cause of Release**

**Sardonix Primary ID:**  
**Sardonix Secondary ID:**


Activity    Classify

<u>Date</u>		<u>Activity</u>
12/3/1990	Confirmed Release Reported	
12/3/1990	Site Investigation Completed	
12/24/1990	General Correspondence	
3/25/1991	CAP - Corrective Action Plan	
6/1/1991	LUST Cleanup Initiated: Petroleum	
7/25/1997	Send Closure Letter - NFA	
7/25/1997	Tank Release Under Control	
7/25/1997	Site Cleanup Completed	
7/25/1997	CR - No Further Action Required	
7/25/1997	REV Cleanup Completed	
7/29/2011	Phone Call Received	



**Log In**

Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.

Colorado Department  
 **CDLE**      [Contact Webmaster](#)  
[CDLE](#) | [State Homepage](#) | [Feedback](#) | [Search](#)  
Labor and Employment

Facility

**1418 - Parks Shop**  
**3950 W 72nd Ave**  
**Westminster, CO 80030**  
**Adams County**

**AKA Name:**  
**AKA Address:**

**Facility Telephone:**  
**Contact Name:**  
**Facility Creation Date:**

**A OPERATOR:**  
**Certification #:**

**B OPERATOR:**  
**Certification #:**

**Primary Contact: Matthew Booco**  
**Phone Number: 303-658-2511**

**Category: State/Local Government**

**Type: Non-Retail**

**Total Tanks: 3 Total Hoses - 0**

**Currently in Use: 0 UST - 0 AST - 0 LPG - 0**

**Temporarily Closed Tanks: 0 UST - 0 AST - 0 LPG - 0**

**Permanently Closed Tanks: 3 UST - 3 AST - 0 LPG - 0**

**Delivery Prohibition Tanks: 0 UST - 0 AST - 0 LPG - 0**

**Delivery Prohibition Date:**

**Assigned Inspector**

**Non-Retail Inspector: Kagen Kitzman**  
**303-883-5760**

**Retail Inspector: Kagen Kitzman 303-**  
**883-5760**

**LPG Inspector: Wayne Reinert 303-**  
**883-8323**

**OCP/OTA Inspector: Kagen Kitzman**  
**303-883-5760**

**For further information see Help Menu**

**ACP Send**    **ACP Due**  
**Date**            **Date**  
**October 31**    **December 31**

**Street Map1:**



**Street Map2:**



**Sardonynx Primary ID:**

**Sardonynx Secondary ID:**

Processes    Tanks

<u>Event - ID:</u>	<u>Process</u>	<u>Date</u>	<u>Status</u>
507		5/26/1992	Closed
2790		12/2/1991	Closed



Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.

Colorado Department

**Contact Webmaster**

**CDLE | State Homepage | Feedback | Search**

**Labor and Employment**

Event

**Event Id** 507  
**Logged By**  
**Reviewer** Ed Larock

**Alt Event Id** 4597-1  
**On** Tuesday, May 26, 1992

**Facility**  
1418 - [Parks Shop](#)  
3950 W 72nd Ave  
Westminster, CO 80030, Adams County  
**Category** State/Local Government

**Site Name** Parks Shop  
**Location1** 3950 W 72nd Ave  
**Location2**  
**Location3**  
**City,County,Zip** Westminster, Jefferson, 80030

**Discovery**  
**Source of Release**

**Status** Closed

**Site Classification**  
**MTBE Classification**  
**Projected Closure Date**

**Cause of Release**

**Sardonix Primary ID:**  
**Sardonix Secondary ID:**

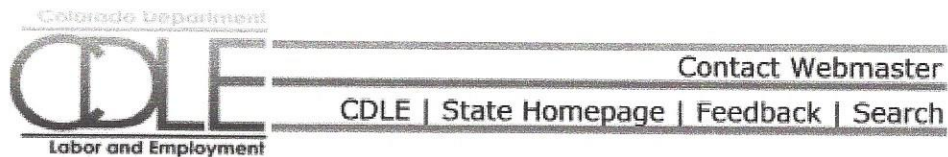
Activity Classify

<u>Date</u>	<u>Activity</u>
5/26/1992	Confirmed Release Reported
6/5/1992	Site Assessment Request
7/30/1992	CR/FAN 2 - Further Action Necessary Priority 2
10/1/1992	LUST Cleanup Initiated: Petroleum
11/4/1992	Site Assessment Request
11/24/1992	SA/FAN 2 - Further Action Necessary Priority 2
1/27/1993	Site Assessment Request
4/29/1994	CR - No Further Action Required
5/16/1994	Tank Release Under Control
5/16/1994	Site Cleanup Completed
5/17/1994	Send Closure Letter - NFA
5/24/1996	REV Cleanup Completed



**Log In**

Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.



Copyright © 2000, Colorado Dept. of Labor and Employment  
Developed by [Greenbrier & Russel, Inc.](#)

You are currently logged into database COSTIS as Public

Facility

**1411 - Westminster Fire Station #1**  
 3948 W 73rd Ave  
 Westminster, CO 80030  
 Adams County

**AKA Name:**  
**AKA Address:**

**Facility Telephone:**  
**Contact Name:**  
**Facility Creation Date:**

**A OPERATOR:**  
**Certification #:**

**B OPERATOR:**  
**Certification #:**

**Primary Contact: Matthew Booco**  
**Phone Number: 303-658-2511**

**Category: State/Local Government**

**Type: Non-Retail**

**Total Tanks: 1 Total Hoses - 0**

**Currently in Use: 0 UST - 0 AST - 0 LPG - 0**

**Temporarily Closed Tanks: 0 UST - 0 AST - 0 LPG - 0**

**Permanently Closed Tanks: 1 UST - 1 AST - 0 LPG - 0**

**Delivery Prohibition Tanks: 0 UST - 0 AST - 0 LPG - 0**

**Delivery Prohibition Date:**

Assigned Inspector

**Non-Retail Inspector: Kagen Kitzman**  
 303-883-5760

**Retail Inspector: Kagen Kitzman 303-883-5760**

**LPG Inspector: Wayne Reinert 303-883-8323**

**OCP/OTA Inspector: Kagen Kitzman**  
 303-883-5760

**For further information see Help Menu**

ACP Send Date  
 October 31

ACP Due Date  
 December 31

Street Map1:



Street Map2:



Sardonynx Primary ID:

Sardonynx Secondary ID:

Processes Tanks

<u>Event - ID:</u>	<u>Process</u>	<u>Date</u>	<u>Status</u>
<a href="#">5495</a>		7/25/1994	Closed
<a href="#">6578</a>		5/8/1980	Closed



**Log In**

Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.

Colorado Department

Labor and Employment

---

Contact Webmaster

---

CDLE | [State Homepage](#) | [Feedback](#) | [Search](#)

Event

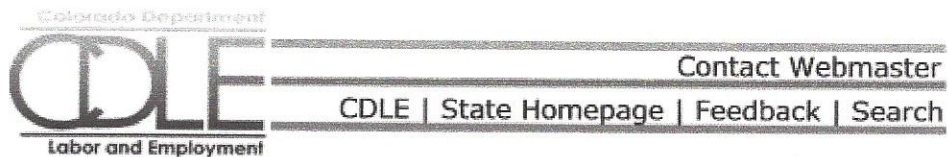
<b>Event Id</b> 5495	<b>Alt Event Id</b> 4595-1	<b>Facility</b>
<b>Logged By</b>	<b>On</b> Monday, July 25, 1994	1411 - <a href="#">Westminster Fire Station #1</a>
<b>Reviewer</b> Dennis Hotovec		3948 W 73rd Ave
		Westminster, CO 80030, Adams County
<b>Site Name</b> Westminster Fire Station #1		<b>Category</b> State/Local Government
<b>Location1</b> 3948 W 73rd Ave		
<b>Location2</b>		
<b>Location3</b>		
<b>City,County,Zip</b> Westminster, Jefferson, 80030		
<b>Discovery</b>		
<b>Source of Release</b>	<b>Status</b> Closed	<b>Site Classification</b>
<b>Cause of Release</b>		<b>MTBE Classification</b>
<b>Sardonox Primary ID:</b>		<b>Projected Closure Date</b>
<b>Sardonox Secondary ID:</b>		

Activity Classify

<u>Date</u>		<u>Activity</u>
7/25/1994	CR/FIN - Further Information Needed	
7/25/1994	LUST Cleanup Initiated: Petroleum	
7/25/1994	Tank Release Under Control	
7/25/1994	Confirmed Release Reported	
10/25/1994	Further Information Needed	
2/1/1995	Send Closure Letter - NFA	
2/1/1995	Site Cleanup Completed	
2/1/1995	CR - No Further Action Required	
11/10/1997	REV Cleanup Completed	



Log in is for Oil and Public Safety Employees only. For more detailed information please contact the Public Records Center to schedule a file review at (303) 318-8525.



## **APPENDIX E**

### **PREVIOUS PHASE I REPORTS**



## Phase I

# Environmental Site Assessment Report

7225 BRADBURN BOULEVARD  
WESTMINSTER, COLORADO  
80030

*Prepared for:*

Mr. Tony Chacon  
Revitalization Projects Coordinator  
Department of Community Development  
4800 West 92<sup>nd</sup> Avenue  
Westminster, Colorado 80031

*Prepared by*

Strategic Environmental Management, LLC  
5030 South Fulton Street  
Greenwood Village, CO 80111

May 6, 2011

**PHASE I  
ENVIRONMENTAL SITE ASSESSMENT  
7225 BRADBURN BOULEVARD  
WESTMINSTER, COLORADO 80030**

**TABLE OF CONTENTS**

EXECUTIVE SUMMARY .....	1
1.0 INTRODUCTION .....	3
2.0 SITE DESCRIPTION .....	6
3.0 RECORDS REVIEW .....	7
4.0 PHYSICAL SETTING .....	11
5.0 HISTORICAL INFORMATION REVIEW.....	12
6.0 INTERVIEWS .....	17
7.0 SITE RECONNAISSANCE .....	18
8.0 OTHER ENVIRONMENTAL CONSIDERATIONS.....	20
9.0 RECOMMENDATIONS AND CONCLUSIONS .....	23
10.0 LIMITATIONS.....	25

**Appendices:**

Appendix A:	Figures – Site and Surrounding Properties Map
Appendix B:	EDR Report
Appendix C:	Photographic Documentation
Appendix D:	Historical Topographical, Aerial, Sanborn Maps, City Directory
Appendix E:	Other Reports
Appendix F:	Resumes and Declaration

## EXECUTIVE SUMMARY

Environmental Management, LLC (SEM) has performed a Phase I Environmental Site Assessment (“ESA”) of 7225 Bradburn Boulevard, Adams County, Westminster, Colorado (the “Subject Property”). SEM was authorized to perform this work on April 19, 2011 by Mr. Tony Chacon, Revitalization Projects Coordinator for the City of Westminster. The ESA was performed in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E 1527-05. This ESA has been performed by an environmental professional (see Declaration in Appendix F) as described in the ASTM standard and 40 C.F.R. Section 312.10. Any exceptions to, or deletions from, this practice are described Section 1.0 of this report.

The Subject Property is made up of a rectangular shaped parcel of land totaling .64 acres. The property has been improved with a single-story, 1,296 square foot, slab-on-grade, wood frame and siding commercial building and a 2,100 square foot wood frame, three-car garage. Asphalt-singles are on both of the buildings. The original building was 720 square feet, had interior metal walls and was built in 1970 and is now being used as a store room. A 576 square foot addition was constructed in 2005 on the south side of the existing building and is being used as an office for a rug cleaning business. The garage was built in 2000 and is being used to store old cars and furniture. The remainder of the property is made up of asphalt driveways and parking areas on the east and north sides of the Subject Property. The west and south sides have overgrown weedy areas with some grass. There is a small, well-kept landscaped area in front of the main building. The legal description for the property is described in detail in Appendix A.

### Recognized Environmental Conditions

SEM has performed an Environmental Site Assessment, in conformance with the Scope of Work developed in cooperation with the client and the provisions of ASTM Practice E 1527-05. This assessment has revealed evidence of recognized environmental conditions in connection with the property

Recognized Environmental Conditions (RECs) are defined by the ASTM Standard Practice E1527- 05 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

1. The Subject Property, known as Westminster U-Pump-It during the 1980’s, was owned by Peerless Tyre and was listed in the Leaking Underground Storage Tanks (“LUST”) database in this ESA investigation. A review of the files at the State of Colorado’s Department of Oil & Public Safety indicated that the facility contained three underground storage tanks; two 12,000 gallon and one 4,000 gallon gasoline tanks. Reports indicate that the tanks, when they were removed on October 15, 1990, were observed to be in good

to poor condition with two of the tanks having  $\frac{1}{4}$  to  $\frac{1}{2}$  inch holes in them. In January 1991, an excavation to a depth of 30 feet resulted in 600 cubic yards of contaminated soil being removed from the site and taken to the Denver Arapahoe Landfill. Later in December 1995 and again in July 1997, the State of Colorado issued No Further Action letters for the site. As a result, this release on the Subject Property qualifies as a Recognized Environmental Condition (“REC”) for the Subject Property.

2. Creative Auto, is now known as Larrys Automotive, and is directly adjacent to the Subject Property approximately 93 feet north. While it had no record of violations, it is directly up gradient of the Subject Property. In addition, this site has had a long history of commercial and automotive use. Not only has it been an auto repair shop for many years it was also a dry cleaning establishment in the early 1970’s. While no visual indications of discharge, such as staining were noted, it is SEM’s experience that the presence of a dry cleaning operation over time is likely to result in some impact to soil or groundwater. SEM considers the dry cleaning operation and the presence of an auto repair shop to be a REC.
3. The Westminster Fire Department is located at 3948 W. 73rd Avenue, approximately 334 feet north east of the Subject Property. A release from a LUST was reported in July 1994 and a No Further Action letter was issued in February 1995. This site is up gradient and slightly cross gradient of the Subject Property and if the groundwater was impacted by the LUST, the plume would pass within 100 feet of the Subject Property and could create hydrocarbon vapor intrusion issues on site. Accordingly, this site is a REC.
4. The Subject Property is currently a commercial building and no residential use is planned. However, the area has been zoned as residential and could be redeveloped in the future. SEM recommends that if redevelopment is considered in the future that asbestos, lead-based paint and radon testing be conducted.

### **Recommendations**

Based on this information, SEM recommends the performance of subsurface sampling of soil and groundwater at the Subject Property for the presence of tetrachloroethylene and petroleum hydrocarbons in the immediate vicinity of the location of the former dry cleaning operation and the former underground storage tanks, to determine the extent of possible contamination.

SEM recognizes that there may be various options for dealing with the concern identified. The options provided by SEM are not necessarily the only acceptable alternatives for dealing with a particular concern. Factors such as planned changes to property use, planned renovations, capital restraints or other variables may change what would be considered the most appropriate or prudent alternative. SEM provides these options solely as guidance for further action.

# **APPENDIX E**

## **PREVIOUS PHASE II REPORTS**



June 8, 2011

Via Email: [tchacon@cityofwestminster.us](mailto:tchacon@cityofwestminster.us)

Mr. Tony Chacon  
Revitalization Projects Coordinator  
Department of Community Development  
4800 West 92<sup>nd</sup> Avenue  
Westminster, Colorado  
80031

RE: **Phase II Subsurface Soil and Groundwater Investigation  
7225 Bradburn Boulevard, Westminster, Colorado**

Dear Mr. Chacon:

Strategic Environmental Management, LLC ("SEM") was retained by the City of Westminster to perform a Phase II Subsurface Soil and Groundwater Investigation ("ESA") for 7225 Bradburn Boulevard, Westminster, Colorado ("Site").

#### **INTRODUCTION**

The purpose of the investigation was to obtain environmental data to evaluate concerns in connection with past uses of the Site and adjacent properties. During the Phase I ESA of the Site completed on May 6, 2011, it was determined that a gasoline station had been present on the Subject Property for 5 to 10 years. In addition, the adjacent and up gradient property had once been a dry cleaning operation. While no visual indications of discharge, such as staining was noted, it is SEM's experience that the presence of a gasoline station and a nearby dry cleaning operation, over time, is likely to result in some impact to soil or groundwater. In light of this information, SEM conducted the Phase II ESA primarily to determine if subsurface soil and groundwater at the Subject Property had been significantly impacted by hydrocarbons and dry

cleaning chemicals in the immediate vicinity of the location of the former underground petroleum storage tanks and dry cleaning operation.

Based on these concerns, SEM gathered soil and groundwater samples. This report includes our methods for gathering data on the subsurface conditions at the Site and our evaluation of the data received.

### **SITE DESCRIPTION**

The Subject Property is located at 7225 Bradburn Boulevard, Westminster, Colorado and as shown on the location map on Figure 1, the Subject Property has been improved with a single-story commercial building and a three-car garage. It was first used as a gasoline station operation until 1984 when it was acquired by the current owner and operated as a carpet cleaning and installation operation. The underground storage tanks were removed in 1990. The adjacent building, located 93 feet north of the Subject Property, originally operated as a dry cleaning operation and then, over the years, automobile repair businesses obtained occupancy. It is currently operating as Larrys Automotive.

### **SOIL AND GROUNDWATER INVESTIGATION**

After clearance to dig was provided by Site Wise, Safe Site and the Westminster Utility Division, SEM installed two temporary groundwater test wells and advanced one shallower soil boring on May 13, 2011. The borings were drilled using a 4-inch diameter, continuous-flight truck-mounted auger complete with split-spoon sampler and hammer. Approximate borehole locations are shown on Figure 2.

#### **Field Screening**

SEM used a Model 3000 MINIRAE 10.6 Organic Vapor Meter (Photo-Ionization Detector or PID) to field screen soil samples at the Site. Soil samples were screened in the first five feet in the groundwater wells and every foot in the soil boring. During field-screening, samples were placed in re-sealable plastic bags for testing with the PID. The bagged samples were allowed to warm to room temperature, roughly 70 degrees F. The vapor headspace inside the bags was then field screened. The PID was equipped with a 10.6 electron-volt lamp and calibrated to isobutylene. The PID detects total vapor volatile organic compounds, therefore, the results of field-screening are identified in volume units of parts-per-million, relative response units.

#### **Test Well Installation**

As shown on Figure 2, two temporary groundwater test wells, BW-1 and BW-2 were drilled to 40 feet and 35 feet deep, respectively. Sample locations were selected as the most likely location of potential contaminants from the historical location of the underground storage tanks and dry cleaning operations to the north. Groundwater was not encountered at the expected depth of 20 to 25 feet below ground surface ("bgs"). In order to ensure that a groundwater sample could be

gathered, the BW-1 was deepened to 40 feet bgs. Once total depth was achieved, the water level test tape determined that water had entered the well bore at approximately 32 feet bgs. A similar water level was achieved in BW-2.

Environmental protocol was used during drilling and sampling activities. A disposable 1.5-inch by 36-inch poly bailer was used to obtain the groundwater samples and sampling materials were decontaminated using an Alconox solution. The sample was collected into laboratory supplied containers, stored on ice and submitted to Pace Analytical Laboratory in Denver, Colorado on May 13, 2011. The samples were then shipped by Pace for testing at their laboratory located in Lenexa, Kansas under standard chain-of-custody procedures.

### **Shallow Soil Borings**

Three shallow soil borings were advanced on May 13, 2011. Figure 2 indicates the relative location of the boreholes that are labeled BW-1, BW-2 and BS-3. Soil samples were taken from the upper 5 feet of the groundwater boreholes and the third sample was taken from a shallower borehole located in the area of the former underground storage fuel tanks.

For boreholes BW-1 and BW-2, a clean truck-mounted auger was used to collect the samples after a 4" hole was cut through the 3" asphalt parking lot pad. The drill bit was then removed and the split-spoon sampler was then attached and the hammer directed blows to a depth of 12 inches. The split spoon was then removed and the sample tested with the PID meter to determine the area of highest concentration of vapors and then that soil sample was placed in into 4-ounce sample jar provided by the laboratory. This process was repeated at each 12 inch interval until the 60 inch depth was achieved. The sample with the highest PID meter reading was selected and placed on ice and submitted to Pace Analytical Laboratory in Denver, Colorado on May 13, 2011.

At borehole BS-1, the borehole was advanced to the 25 foot depth and then a sample of the soil from the 25' to 28' interval was obtained. This is the depth at which the former underground storage tanks were buried.

The split-spoon sampler was decontaminated with Alconox solution followed by a rinse with distilled water before and after collection of each sample. Sample collection was conducted using clean nitrile gloves and the soil sample was packed into laboratory-provided four-ounce jars to minimize headspace. The soil samples were then shipped by Pace for testing at their laboratory located in Lenexa, Kansas under standard chain-of-custody procedures.

### **PID Meter Readings and Drill Log**

The following table summarizes the results of the field readings for the PID meter taken during the drilling of the three boreholes and the description of drill cuttings produced during drilling operations.

BOREHOLE	DEPTH	PID METER READING	DRILLING COMMENTS
	(feet)	(ppm)	
		0	Background
BW-1	1	0	Brown Clay
BW-1	2	0	Hard - Gravel Sand
BW-1	3	0	Black Clay
BW-1	4	0	Black/Brown Clay
BW-1	5	0	BlackBrown Clay
BW-1	5 - 40	0	Dark Clay then Sandy, Gravelly
BW-2	1	14.5	Brown Clay
BW-2	2	17.5	Black Clay
BW-2	3	12.2	Black Clay
BW-2	4	0	Black/Brown Clay
BW-2	5	0	BlackBrown Clay
BW-2	5 - 35	0	Dark Clay then Sandy, Gravelly
BS-1	1	0	Brown Clay
BS-1	2	0.2	Hard - Gravel Sand
BS-1	3	0	Black Clay
BS-1	4	0	Black/Brown Clay
BS-1	5	0	BlackBrown Clay
BS-1	5 - 28	0	Dark Clay

### LABORATORY ANALYSIS

A total of three soil samples and two groundwater samples were submitted to Pace Analytical Laboratories for analysis. All groundwater samples were analyzed for a suite of VOCs including benzene, toluene, ethyl benzene and xylenes (BTEX), MTBE, total recoverable petroleum hydrocarbons (TRPH) and chlorinated compounds using U.S. Environmental Protection Agency (USEPA) Method 8260B for VOCs and GRO, Method 8015 for DRO and will be performed by a certified laboratory by USEPA Method 8260 Volatile Organic Analysis. As shown in the attached Pace Laboratory Report in Attachment 2, all samples tested as Non Detect. No other tested compounds were detected above the laboratory detection limit.

Mr. Tomu Chacon  
7225 Bradburn Blvd. - Phase II ESA

Page 5 of 5  
June 8, 2011

**CONCLUSIONS**

Based on the sample results obtained, no further investigation is warranted at this time.

If we can be of further assistance in discussing the contents of this report, please call.


Sincerely,  
Strategic Environmental Management, LLC



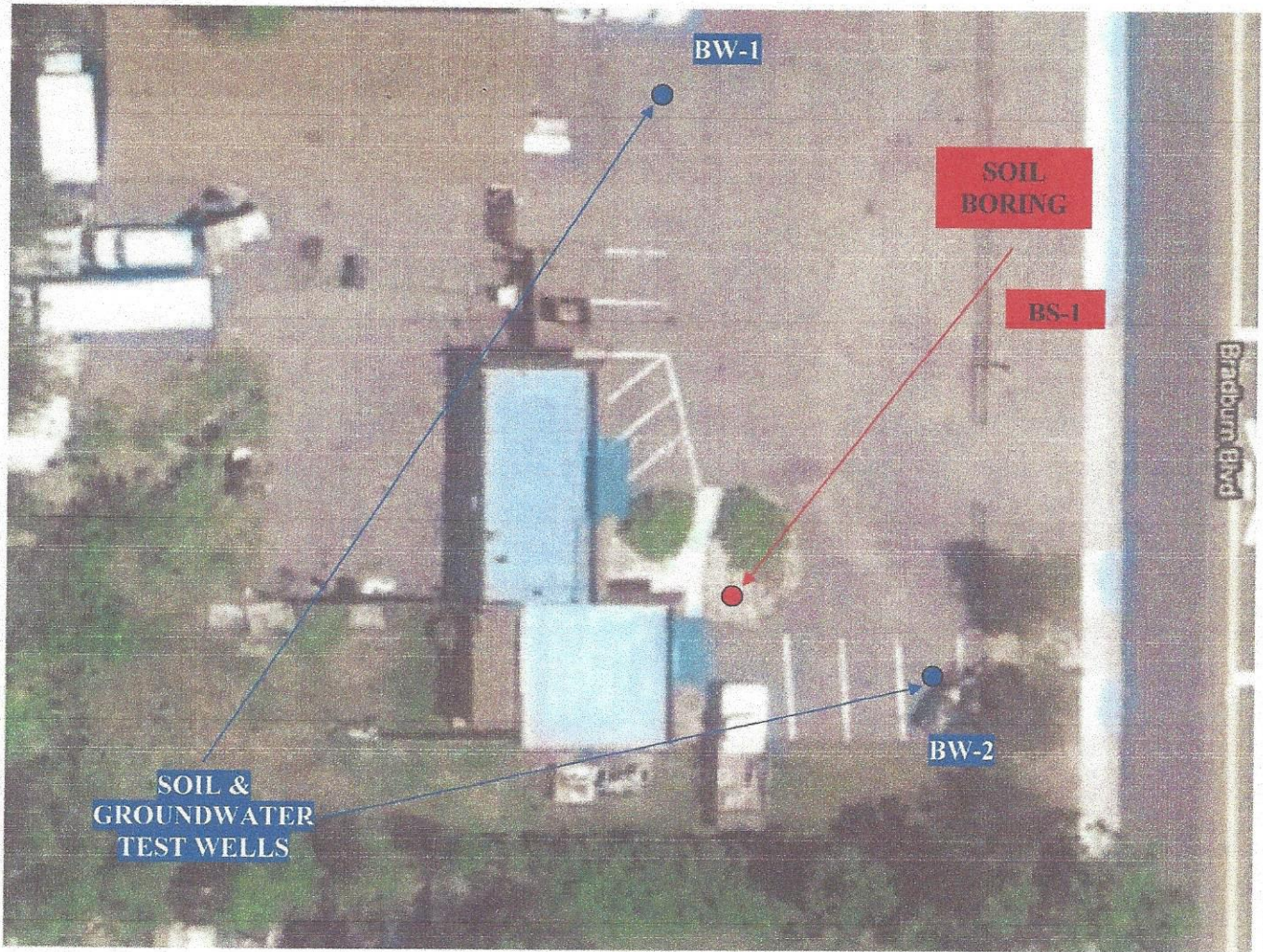
Patrick E. Lee  
Principal


# PROPERTY LOCATION MAP



	June 6, 2011	
7225 BRADBURN BOULEVARD		Scale : 1" = 175 Feet
WESTMINSTER, COLORADO	<b>FIGURE 1</b>	

# BOREHOLE LOCATION MAP



	June 6, 2011	
7225 BRADBURN BOULEVARD	NORTH ↑	Scale : 1" = 50 Feet
WESTMINSTER, COLORADO	<b>FIGURE 2</b>	

**ATTACHMENT 1**

**SITE PHOTOS**

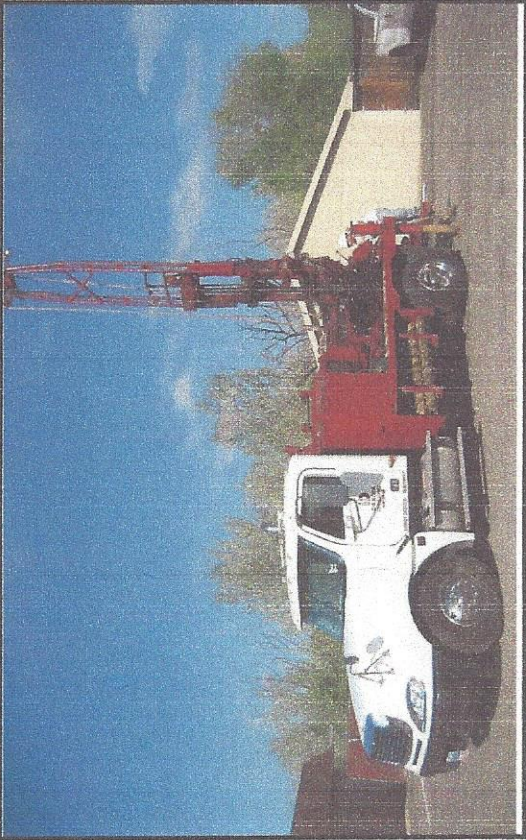


Photo 1:  
Drilling Borehole BS-1

Photo 2:  
Drilling to 28 feet before taking split spoon samples at Borehole BS-1

Photo 3:  
Drilling Borehole BW-1

Phase II  
7225 Bradburn Boulevard  
Westminster, Colorado  
80030





Photo 4:  
Taking Split Spoon Samples  
in Borehole BW-1



Photo 5:  
Water Sampling at Borehole BW-1



Photo 6:  
Borehole BW-2

Phase II  
7225 Bradburn Boulevard  
Westminster, Colorado  
80030





July 28, 2011

Via Email: [tchacon@cityofwestminster.us](mailto:tchacon@cityofwestminster.us)

Mr. Tony Chacon  
Revitalization Projects Coordinator  
Department of Community Development  
4800 West 92<sup>nd</sup> Avenue  
Westminster, Colorado  
80031

RE: **Second Round - Phase II Subsurface Soil and Groundwater Investigation  
7225 Bradburn Boulevard, Westminster, Colorado**

Dear Mr. Chacon:

Strategic Environmental Management, LLC ("SEM") was retained by the City of Westminster to perform a Phase II Subsurface Soil and Groundwater Investigation ("ESA") for 7225 Bradburn Boulevard, Westminster, Colorado ("Site"). This study supplements the investigation performed at the Site on May 13, 2011.

#### **INTRODUCTION**

The purpose of this second round investigation was to obtain additional environmental data to evaluate concerns in connection with past uses of the Site and adjacent properties. The first round of testing was concentrated on the eastern side of the Site while this second round concentrated more on the western side of the Site.

During the Phase I ESA of the Site completed on May 6, 2011, it was determined that a gasoline station had been present on the Site for 5 to 10 years. In addition, the adjacent and up-gradient property had once been a dry cleaning operation and is currently operating as an auto repair facility. While no visual indications of discharge, such as staining was noted, it is SEM's

experience that the presence of a gasoline station and a nearby dry cleaning operation, over time, is likely to result in some impact to soil or groundwater. In light of this information, SEM conducted the Phase II ESA primarily to determine if subsurface soil and groundwater at the Site had been significantly impacted by hydrocarbons and dry cleaning chemicals in the immediate vicinity of the location of the former underground petroleum storage tanks and the dry cleaning operation.

Based on these concerns, SEM gathered soil and groundwater samples. This report includes our methods for gathering data on the subsurface conditions at the Site and our evaluation of the data received.

## **SITE DESCRIPTION**

The Site is located at 7225 Bradburn Boulevard, Westminster, Colorado and as shown on the location map on Figure 1, the Site has been improved with a single-story commercial building and a three-car garage. It was first used as a gasoline station operation until 1984 when it was acquired by the current owner and operated as a carpet cleaning and installation operation. The underground storage tanks were removed in 1990. The adjacent building, located 93 feet north of the Site, originally operated as a dry cleaning operation and then, over the years, automobile repair businesses obtained occupancy. It is currently operating as Larrys Automotive.

## **SOIL AND GROUNDWATER INVESTIGATION**

In order to provide access to the borehole locations, three large vehicles had to be pulled out and relocated on the Site by a tow truck. After clearance to dig was provided by Site Wise, Safe Site and the Westminster Utility Division, SEM installed three temporary groundwater test wells on the western side of the Site on July 20, 2011. The borings were drilled using a hydraulic Geoprobe 7730 DT complete with clear plastic Macro liners for soil sample capture. Approximate borehole locations are shown on Figure 2 and photos taken during the operation are in Attachment 1.

### **Field Screening**

SEM used a Model 3000 MINIRAE 10.6 Organic Vapor Meter (Photo-Ionization Detector or PID) to field screen soil samples at the Site. Soil samples were screened in the first five feet in the three boreholes. The PID was equipped with a 10.6 electron-volt lamp and calibrated to isobutylene. The PID detects total vapor volatile organic compounds, therefore, the results of field-screening are identified in volume units of parts-per-million, relative response units.

### **Groundwater Test Well Installation and Sample Collection**

As shown on Figure 2, three temporary groundwater test wells, BW-3, BW-4 and BW-5 were drilled to 28 feet, 35 feet and 35 feet deep, respectively. Sample locations were selected by Ms.

Carey Rangel, Environmental Analyst with the City of Westminster, as the most likely sites of potential contaminants from the historical dry cleaning and auto repair operations to the north.

The water level in BW-3 was at 24.5 feet and 25.6 feet in BW-4 and collecting water samples from BW-3 and BW-4 was not difficult. However, problems were encountered in BW-5 with hole sloughing issues at the 26 foot level. The first time it occurred the hole was re-entered and the soil removed again to 35 feet. When the hole sloughed again at 26 feet, the borehole was again re-entered and this time a 1" PVC pipe complete with a 10 section of screen with a 2" expendable point was utilized along with 20 more feet of pipe to provide access at the ground surface. Once total depth of 30 feet was achieved, the water level test tape determined that water had entered the well bore at approximately 30 feet bgs. A small amount of water was collected for the VOC test, however the amount of water available for collection diminished and only ½ liter of water for the DRO/GRO test was collected over a five hour period.

Environmental protocol was used during drilling and sampling activities. A disposable 1/2-inch by 36-inch poly bailer was used to obtain the groundwater samples in BW-5 and a 3-inch by 36-inch poly bailer was used for BW-3 and BW-4. All sampling materials were decontaminated using an Alconox-Liquinox solution. The samples were collected into laboratory supplied containers, stored on ice and submitted to Pace Analytical Laboratory in Denver, Colorado on July 20, 2011. The samples were then shipped by Pace for testing at their laboratory located in Lenexa, Kansas under standard chain-of-custody procedures.

#### **Shallow Soil Borings**

Soil samples were taken from the upper 5 feet of the each of the boreholes. After the Geoprobe had retrieved the first 5 foot core sample, the plastic Macro liner was sliced open with a razor blade to expose the core column of soil. The PID meter was then used to locate the area with the highest reading and then a section of the soil was then placed into 4 ounce sample jars provided by the laboratory. If no reading was observed the sample was taken from the top 12 inches.

The Geoprobe drill string was spray washed and then decontaminated with Alconox-Liquinox solution followed by a rinse with distilled water before and after collection of each sample at each borehole. Sample collection was conducted using clean nitrile gloves and the soil sample was packed into laboratory-provided four-ounce jars to minimize headspace. The soil samples were then shipped by Pace for testing at their laboratory located in Lenexa, Kansas under standard chain-of-custody procedures.

#### **PID Meter Readings and Drill Log**

The following table summarizes the results of the field readings for the PID meter taken during the drilling of the three boreholes and the description of borehole cores produced during drilling operations.

BOREHOLE	DEPTH	PID METER READING	DRILLING COMMENTS
	(feet)	(ppm)	
		0	Background
BW-3	1	0	Dark soil
BW-3	2	0	Brown clay
BW-3	3	0	Dark brown clay
BW-3	4	0	Brown Clay
BW-3	5	0	Brown Clay
BW-4	1	0	Dark soil with black streaks
BW-4	2	0.2	Dark Brown Clay
BW-4	3	0	Brown Clay
BW-4	4	0	Black/Brown Clay
BW-4	5	0	BlackBrown Clay
BW-5	1	0	Dark soil with black streaks
BW-5	2	0	Sandy brown clay
BW-5	3	0	Brown Clay
BW-5	4	0	Light Brown Clay
BW-5	5	0	Light Brown Clay

## LABORATORY ANALYSIS

A total of three soil samples and two full and one partial groundwater samples were submitted to Pace Analytical Laboratories for analysis. All groundwater samples were analyzed for a suite of VOCs including benzene, toluene, ethyl benzene and xylenes (BTEX), total recoverable petroleum hydrocarbons (TRPH) and chlorinated compounds using U.S. Environmental Protection Agency (USEPA) Method 8260B for VOCs and GRO, Method 8015 for DRO.

The soil and groundwater sample results are listed Tables 1 and 2 and summarized on Figure 2. All three soil samples tested positive for Diesel Range Organics (DRO) with a detection of methylene chloride in BW-4. In the groundwater, the only detection was in BW-5 for DRO at 2.2 mg/Liter or parts per million (ppm). Laboratory data sheets are provided in Attachment 2.

The Colorado Department of Public Health and Environment (CDPHE) has established Colorado Soil Evaluation Values (CSEV) for most chemical-compounds in soil. While there was laboratory evidence of methylene chloride at a concentration of .105 mg/Kg in the shallows soils in BW-4, it is well under the CSEV of 9 mg/Kg. In addition there was also evidence of DRO in all three soil samples ranging from 19.2 mg/Kg in BW-3 to 141 mg/Kg in BW-5. Although there is no State

cleanup standard for total petroleum hydrocarbons (TPH), a screening level of 500 mg/Kg has been established by the Division of Oil and Public Safety for defining the extent of TPH from fuel releases. Once again the detected levels are well under the State standard.

The CDPHE has also promulgated regulation No. 41, The Standards for Groundwater effective November 30, 2009. These groundwater standards are listed on Tables 1 and 2 along with the sample results. As shown on Table 2, DRO was detected at a concentration of 2.2 mg/Liter in BW-5 and there was not enough water collected to complete a test for Gasoline Range Organics. There is no State standard developed for DRO in groundwater. No other tested compounds were detected above the laboratory detection limit.

#### CONCLUSIONS AND RECOMMENDATIONS

This investigation has revealed a detection of diesel fuel in the groundwater at the north west corner of the Site. While the Site has evidence of low concentrations of DRO in the shallow soils, the cause of the groundwater contamination is more than likely from an up-gradient source. As there is no State cleanup standard for DRO and the concentration is relatively low it is not likely that any groundwater remediation will be required. Furthermore, since the Site is not the cause of the contamination, an application to the State could be made to achieve a No Further Action designation for the Site.

If we can be of further assistance in discussing the contents of this report, please call.

Sincerely,  
Strategic Environmental Management, LLC




Patrick E. Lee  
Principal

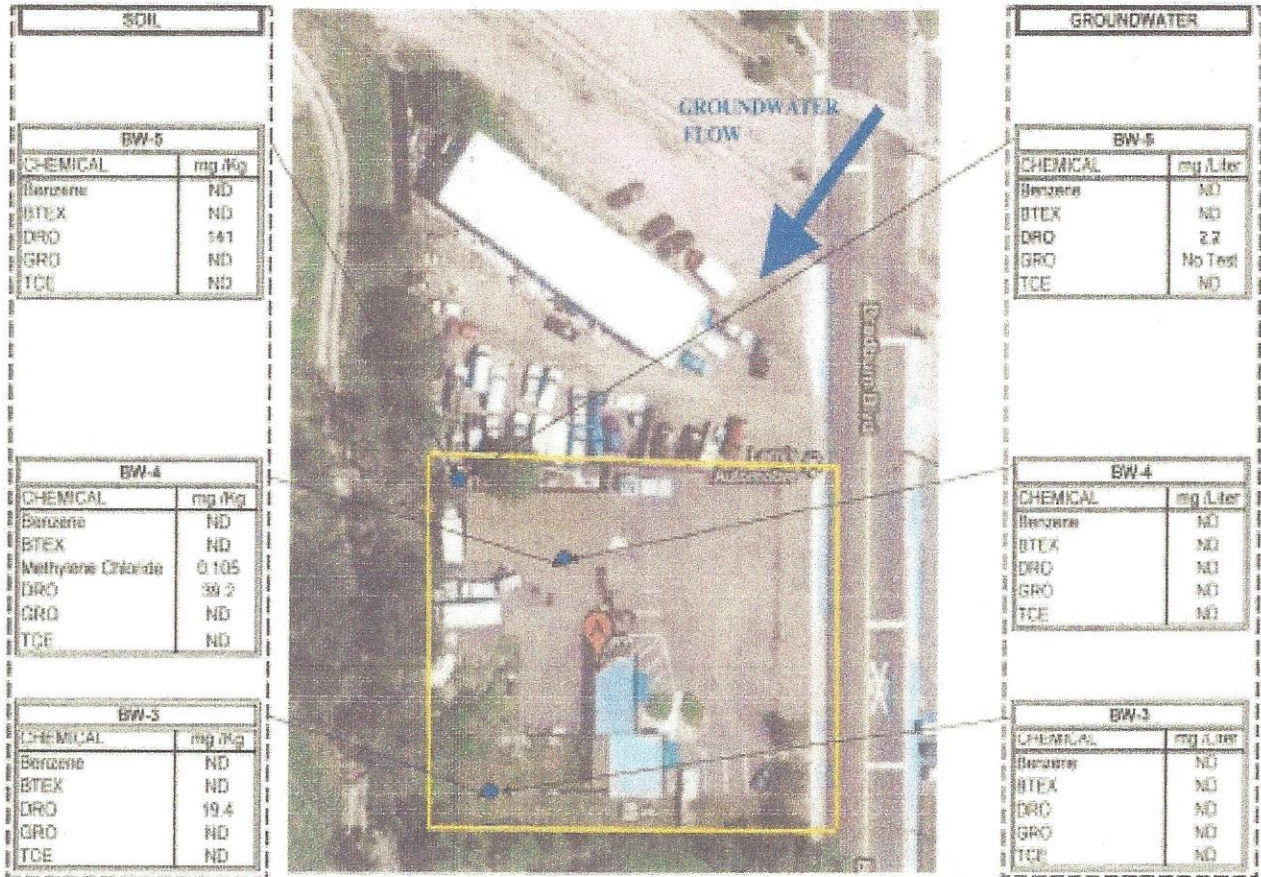
CC: Carey Rangel

# PROPERTY LOCATION MAP



	July 28, 2011	
7225 BRADBURN BOULEVARD		Scale : 1" = 175 Feet
WESTMINSTER, COLORADO	<b>FIGURE 1</b>	 <b>Strategic Environmental Management LLC.</b>

## BOREHOLE LOCATION & LAB RESULTS MAP



	July 28, 2011	
7225 BRADBURN BOULEVARD	NORTH ↑	Scale : 1" = 75 Feet
WESTMINSTER, COLORADO	<b>FIGURE 2</b>	

Table 1  
Petroleum Hydrocarbons and VOC's in Soil

Metal/Chemical	Test/Prep Method	Regulatory Screening Values OPS (mg/Kg)	TEST RESULTS		
			BW-3	BW-4	BW-5
<b>Petroleum Hydrocarbons</b>					
Diesel Range Organics	EPA 8015M/3546	500	19.4	39.2	141
Gasoline Range Organics	EPA 5035A/8260	500	ND	ND	ND
<b>Volatile Organic Compounds</b>					
Benzene	EPA 8260/5035A	1	ND	ND	ND
Toluene	EPA 8260/5035A	1000	ND	ND	ND
Ethyl Benzene	EPA 8260/5035A	1000	ND	ND	ND
Total Xylene	EPA 8260/5035A	280	ND	ND	ND
Methylene Chloride	EPA 8260/5035A	9	ND	0.105	ND
Tetrachloroethene	EPA 8260/5035A	0.45	ND	ND	ND
All Other VOCs	EPA 8260/5035A		ND	ND	ND

Table 2  
Petroleum Hydrocarbons and VOC's in Groundwater

Metal/Chemical	Test Method	Regulatory Screening Values (mg/L)	TEST RESULTS		
			BW-3	BW-4	BW-5
<b>Petroleum Hydrocarbons</b>					
Diesel Range Organics	EPA 5030B/8260	NA	ND	ND	2.2*
Gasoline Range Organics	EPA 5030B/8260	NA	ND	ND	Not Tested
<b>Volatile Organic Compounds</b>					
Benzene	EPA 5030B/8260	0.005	ND	ND	ND
Toluene	EPA 5030B/8260	1	ND	ND	ND
Ethyl Benzene	EPA 5030B/8260	0.7	ND	ND	ND
Total Xylene	EPA 5030B/8260	1.4	ND	ND	ND
Tetrachloroethene	EPA 5030B/8260	0.005	ND	ND	ND
All Other VOCs	EPA 5030B/8260		ND	ND	ND

Notes  
 CSEV - Colorado Soil Evaluation Values - for residential  
 OPS - Oil and Public Safety screening levels for total petroleum hydrocarbons  
 \* - Test Method changed to EPA 8015M/3510C due to volume

**ATTACHMENT 1**

**SITE PHOTOGRAPHS**



Photo 1:  
Drilling Borehole BW-5

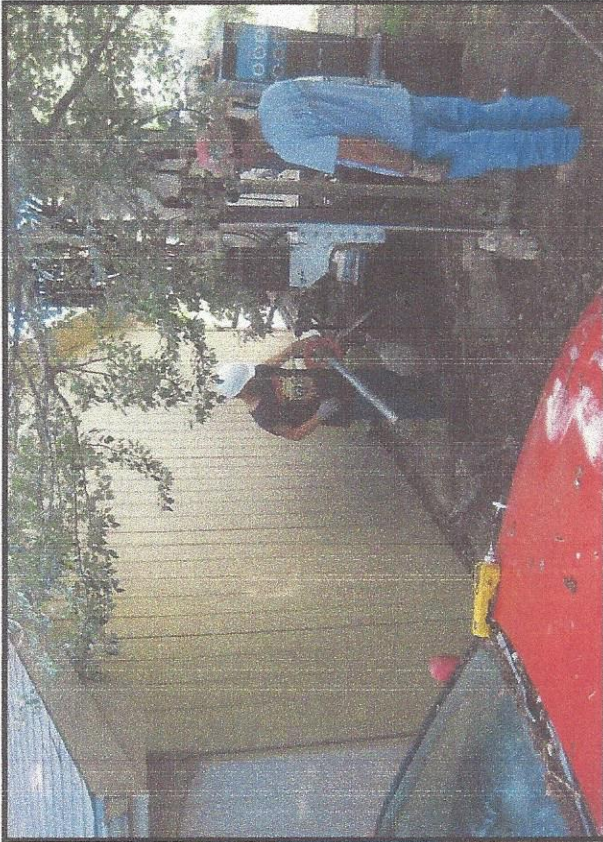


Photo 2:  
Drilling Borehole BW-5



Photo 3:  
Geoprobe on west side of garage at  
Borehole BW-5

**Second Round - Phase II**  
**7225 Bradburn Boulevard**  
**Westminster, Colorado**  
**80030**



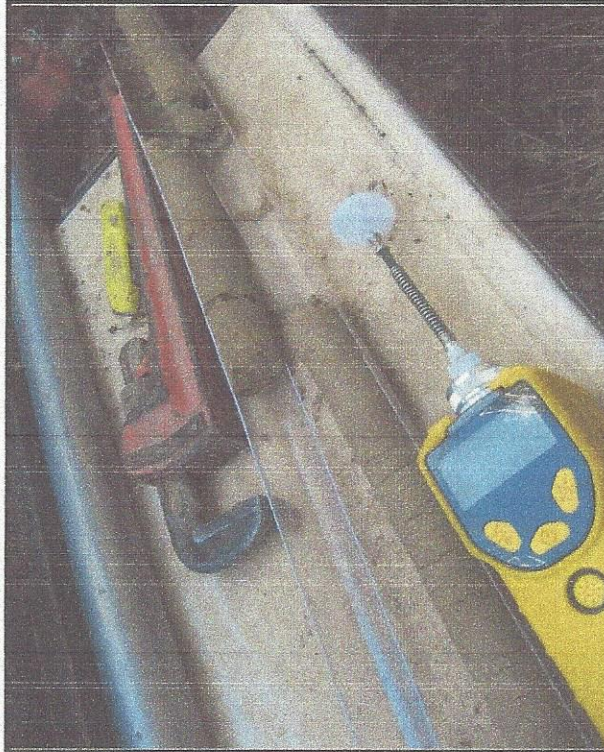
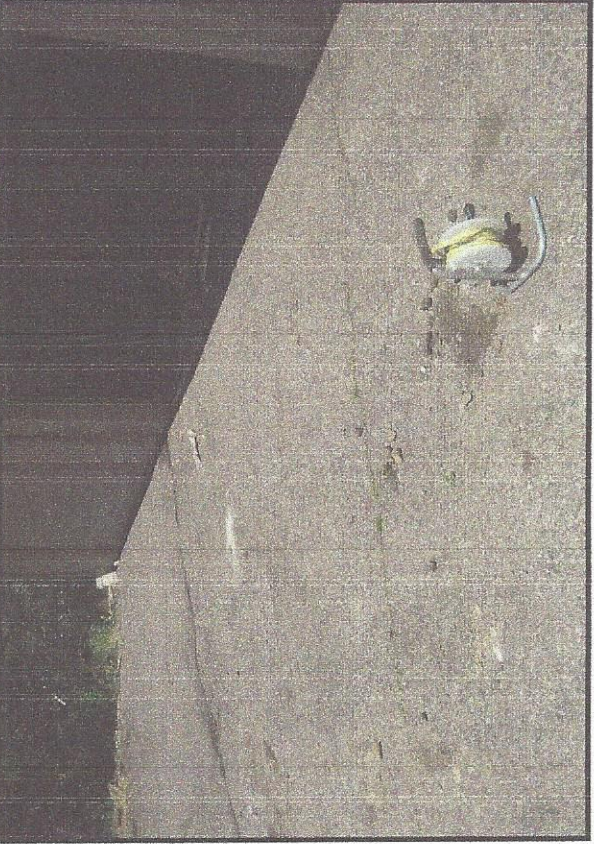
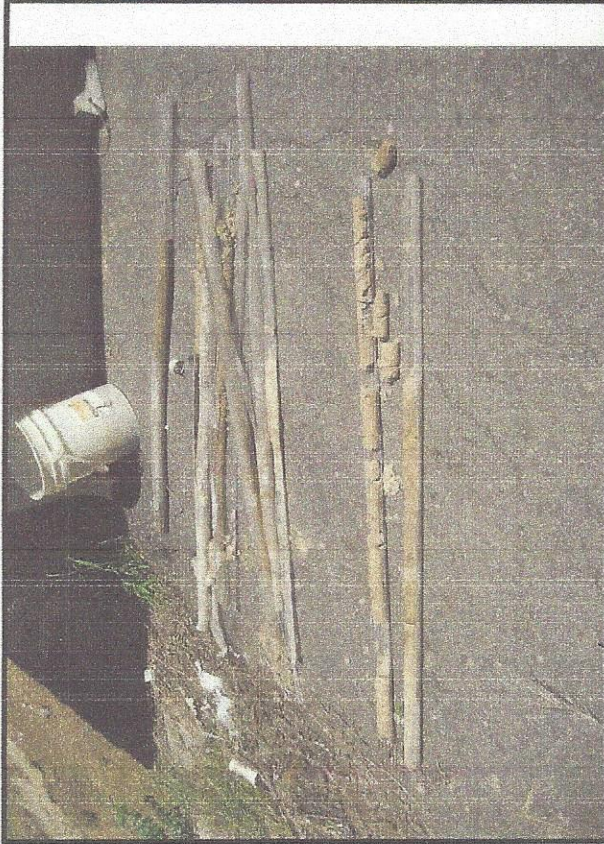


Photo 4:  
Borehole BW-5 cores

Photo 5:  
PID meter reading at 0.0 ppm with core from Borehole BW-4

Photo 6:  
Water Depth Tape at Borehole BW-4

**Second Round - Phase II**  
**7225 Bradburn Boulevard**  
**Westminster, Colorado**  
**80030**



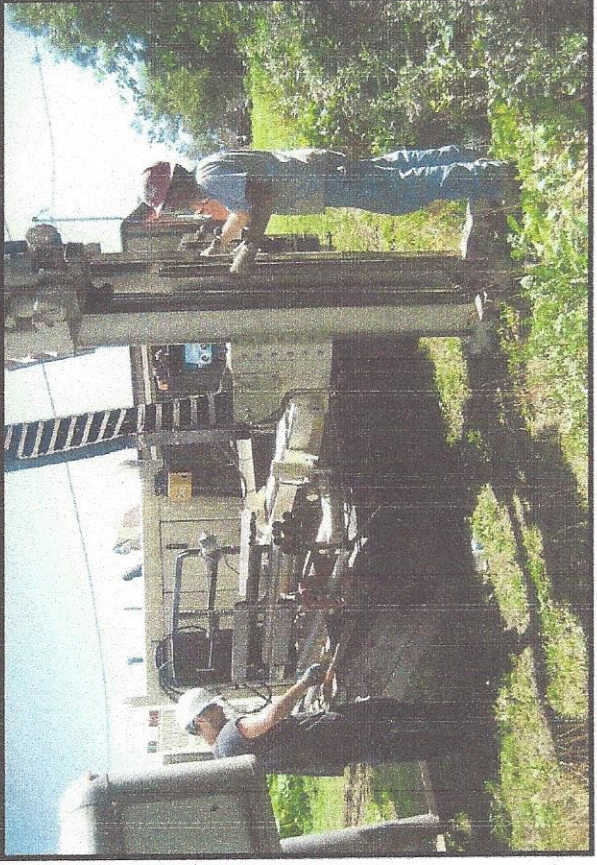


Photo 7:  
Borehole BW-4 cores

Photo 8:  
Drilling Borehole BW-3

Photo 9:  
Drilling Borehole BW-3

Second Round - Phase II  
7225 Bradburn Boulevard  
Westminster, Colorado  
80030

