

ENHANCED PHASE I ENVIRONMENTAL SITE ASSESSMENT

**134 CRESCENT AVENUE
LOT 6, BLOCK 8, PLAN 7810085
PICTURE BUTTE, ALBERTA**



ENVIRONMENTAL SERVICES LTD.

*Serving Albertans for 24 years
2000 - 2024*

PROJECT NO. WA-24-081460

REPORT TO

BUTTE MOTORS AND FARM SUPPLY LTD.

PHASE I

ENHANCED ENVIRONMENTAL SITE ASSESSMENT

134 CRESCENT AVENUE

LOT 6, BLOCK 8, PLAN 7810085

PICTURE BUTTE, ALBERTA



**WA Environmental Services Ltd.
221 Riverpark Blvd., West
Lethbridge
Alberta T1K 0P6**

**Tel: (403) 381-8141
*www.waenvironmental.ca***

September 11th, 2024

EXECUTIVE SUMMARY

Between August 7th and September 11th, 2024, WA Environmental Services Ltd. (WAES) conducted an Enhanced Phase I Environmental Site Assessment of property and buildings located at 134 Crescent Avenue in the Town of Picture Butte, Alberta. The legal description for the site is Lot 6, Block 8, Plan 7810085. It is understood that the assessment is required due to a potential business transaction involving the property.

A summary of environmental concerns identified at the site is presented in Table 1.

The site remained undeveloped until approximately the early 1960s when the Town of Picture Butte rezoned the area for commercial land use. Development occurred on the east side of the subject site in the early 1960s. An additional building was constructed west of the original building in 2018, at which time the original building was renovated to modern specifications.

Adjacent land use to the south and west is residential and the Town of Picture Butte water storage reservoir occupies the property to the north. The property to the east is commercial and formerly occupied by Lees Heating and Air Conditioning who operated on the site since the early 1950s and has only recently closed. Anecdotal information available to WAES indicated that two underground fuel storage tanks (USTs) were removed from this site in the mid-1960s, and an environmental site assessment and site remediation program was completed (by WAES) at the site in 2011. The site was remediated to the residential guidelines in place at the time of the site remediation activities. No environmental issues were identified associated with the adjacent land use.

Due to the age of the newer building (2018) and renovation of the older building also in 2018, no hazardous building materials were observed at the time of the site reconnaissance.

Because of the presence of USTs on the adjacent property to the east at Lees Heating and Air Conditioning it was determined to install a 50 mm diameter monitoring well on the east property line in close proximity to the former remediated area on the adjacent site to confirm whether or not the soil and/or groundwater at the site have become negatively impacted by petroleum hydrocarbons. The analytical results of one soil and one groundwater sample collected from the monitoring well, indicate that the soil and groundwater have not been negatively impacted by petroleum hydrocarbons and/or lead at the borehole location.

Based on the information gathered during this investigation, the Enhanced Phase I Environmental Site Assessment has not revealed any evidence of environmental impact at the site.

No further environmental investigation of the site is recommended at this time.

Table 1 - Summary of Findings and Recommendations			
Potential Source of Contamination	Level of Environmental Contamination	Findings	Recommended Action
Adjacent Properties	Low	The adjacent property to the east formerly utilized USTs to fuel its service vehicles. It underwent a site clean-up in 2011 when contaminated soil was excavated and disposed at an approved disposal facility.	One borehole should be drilled and a monitoring well installed along the south property line on site to confirm whether or not the soil and/or groundwater on site have been negatively impacted by subsurface petroleum hydrocarbons. (Completed on August 28 th , 2024.
Historical Land Use	Low	The site has been used for automotive repairs since the early 1980s	None.
Underground Fuels and Chemicals	None	None observed or reported. Typical household cleaning chemicals were observed to be stored in an orderly fashion.	None.
Aboveground Fuels and Chemicals	Low	Automotive lubricant and products were observed to be stored according to industry standards.	None.
Waste Management	None	Waste at the site is collected in a dumpster and transported by Town of Picture Butte to the Lethbridge Regional Landfill.	None.
Spill and Stain Areas	Low	Typical staining from parked vehicles were observed on the parking lot surface, however, these are not an environmental concern.	None.
Wastewater Discharges	None	Wastewater generated at the site discharges into the Town of Picture Butte sanitary sewer system.	None.
Air Discharges	None	No concerns.	None.
Polychlorinated Biphenyls (PCBs)	None	None observed or reported.	None.
Asbestos	None.	None observed or reported.	None.
UFFI	None	None observed or reported.	None.
Ozone Depleting Substances (ODSs)	None	None observed or reported.	None.
Lead	None	None observed or reported.	None.
Electromagnetic Frequencies	None	None observed or reported.	None.
Radon	None	See radon recommendations in report.	None.
Hydraulic Hoists/Elevators	None	None observed or reported. Hoists are electric free standing units.	None.
Mercury	None	None observed or reported.	None.
Mould	None	None observed or reported.	None.
Water Supply	None	The Town of Picture Butte supplies potable water for the subject site.	None.

Table 1 - Summary of Findings and Recommendations			
Potential Source of Contamination	Level of Environmental Contamination	Findings	Recommended Action
Fill Areas	None	Fill areas on site are likely isolated to the excavation for the foundation, parking areas and shallow utilities.	None.

High - Evidence of actual contamination, **Moderate** - Evidence of potential contamination (significant), **Low** - Evidence of potential contamination (minor),
None - No evidence of contamination

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PHASE I SCOPE AND METHODOLOGY	1
2.1	Scope of Work	1
2.2	Methodology	2
2.2.1	Records Review	2
2.2.2	Interviews.....	2
2.2.3	Site Visit	2
3.0	REGULATORY FRAMEWORK	2
4.0	SITE DESCRIPTION	2
4.1	Property Description	2
4.2	Soil, Topography and Drainage	3
4.3	On-Site Buildings and Structures	4
5.0	ADJACENT PROPERTIES	5
6.0	REVIEW OF HISTORICAL LAND USE AND REGULATORY HISTORY.....	6
6.1	Historical Land Use	6
6.2	Regulatory History	8
7.0	SITE VISIT FINDINGS AND DISCUSSION	9
7.1	Fuel/Chemical Handling and Storage	9
7.2	Waste Management.....	9
7.3	Spill and Stain Areas.....	10
7.4	Wastewater Discharges	10
7.5	Air Discharges	10
7.6	Polychlorinated Biphenyls (PCBs)	10
7.7	Asbestos	10
7.8	Urea Formaldehyde Foam Insulation (UFFI).....	10
7.9	Lead.....	11
7.10	Ozone Depleting Substances (ODSs)	11
7.11	Radon.....	11

7.12	Electromagnetic Frequencies (EMFs).....	11
7.13	Noise and Vibration	12
7.14	Hydraulic Hoist & Elevators.....	12
7.15	Mercury.....	12
7.16	Mould.....	12
7.17	Water Supply.....	12
7.18	Fill Areas.....	12
8.0	SOIL AND GROUNDWATER SAMPLING.....	13
8.1	Analytical Results.....	13
8.0	CONCLUSIONS AND RECOMMENDATIONS	14
9.0	CLOSURE.....	15

LIST OF APPENDICES, TABLES, AND DRAWINGS

APPENDICES

- Appendix A - Site Plans
- Appendix B - Assessor Qualifications and Insurance Certificates
- Appendix C - Resource Information
- Appendix D - Regulations

TABLES

Table 1 - Summary of Findings and Recommendations.....	ii
Table 2 - Property Information	4
Table 3 - Adjacent Properties - Land Use.....	5
Table 4 - Historical Information for the Site	6
Table 5 - Historical Information for Adjoining Properties	7
Table 6 - Soil Analytical Results.....	13
Table 7 - Groundwater Analytical Results.....	14

DRAWINGS

Drawing 1	Site Location Plan.....	Appendix A
Drawing 2	Site Plan Showing Adjacent Land Use	Appendix A

1.0 INTRODUCTION

WA Environmental Services Ltd. (WAES) was retained by Butte Motors and Farm Supply Ltd. to conduct a Phase I Environmental Site Assessment of a property and buildings located at 134 Crescent Avenue in the Town of Picture Butte, Alberta. The legal description for the site is Lot 6, Block 8, Plan 7810085. It is understood that the assessment is required due to a potential business transaction involving the property.

The purpose of the Phase I ESA was to identify any actual or potential environmental contaminants associated with the site that exist as a result of current or past activities.

This report is presented in nine sections. Sections 1 and 2 present general information about the project and describe the scope of work and the methodology used. Section 3 provides a summary of applicable legislation that may be referenced during the assessment. Sections 4 to 6 describe the present and historic conditions of the subject and adjacent properties. Section 7 presents the findings of the site visit. Environmental concerns are identified in this section. The results of the soil and groundwater investigation are discussed in Section 8, Significant environmental concerns and related recommendations are summarized in Section 9. Section 10 discusses the limitations of the assessment and its findings. Supporting information is provided in several appendices at the end of this report. Select photographs are included in the text of this report.

2.0 PHASE I SCOPE AND METHODOLOGY

2.1 Scope of Work

The Phase I ESA carried out by WAES on this property is based on the requirements of the Canadian Standards Association (CSA) Phase I Environmental Site Assessment Information Product, Z768-01, April 2013 (CSA protocol, reaffirmed in 2022) and consists of the following:

- records review;
- interviews with regulatory officials and personnel associated with the site and adjoining properties;
- a site visit; and
- evaluation of information and preparation of the report provided herein.

A Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water or building materials. These activities would be carried out in a Phase II ESA, if required. One enhancement of this assessment was conducted to include the installation of a monitoring well along the east property line. The professional qualifications of the project team and Insurance Certificates are provided in Appendix B. The contract between the Butte Motors and Farm Supply Ltd. and WAES to conduct the Phase I Environmental Site Assessment is confidential and has not been included in this report.

2.2 Methodology

2.2.1 Records Review

The applicable search distance for the records review included properties immediately adjacent to the sites and other properties (as identified by aerial photographs, insurance records, etc.) where the potential for environmental contamination of the subject sites was apparent (e.g., petroleum products storage in the immediate area).

Previous Environmental Site Assessments were not provided for review. A list of records reviewed is included in **Appendix C**.

2.2.2 Interviews

Interviews were carried out to obtain or confirm information on the environmental characteristics of this property. A summary of interviewees and contact information is presented in Appendix C.

2.2.3 Site Visit

The subject property and readily visible and publicly accessible portions of adjacent sites were examined for the presence of actual or potential environmental contamination. All common areas of the property were accessible to WAES during the site visit on August 20th, 2024. All areas of the site were available for assessment.

3.0 REGULATORY FRAMEWORK

Applicable federal, provincial and municipal regulations were reviewed to identify and assess potential or actual environmental contamination at the sites and to develop appropriate recommendations. It should be noted, however, that this assessment did not include a review or audit of operational environmental compliance issues or of any environmental management system (EMS) that may exist for the property. Where required, the documents listed in Appendix D were used as reference material for the completion of the Phase I Assessment.

4.0 SITE DESCRIPTION

4.1 Property Description

The site is located at the east end of the town of Picture Butte, Alberta at 134 Crescent Avenue. The site is zoned as Highway Commercial (C-2), with a plan area of approximately 0.14 ha. The subject property is occupied by two buildings constructed between approximately 1960 and 2018. The legal description for the site is Lot 6, Block 9, Plan 7810085, Picture Butte, Alberta. (Drawing 2, Appendix A).



Photograph 1: View of subject site, looking northwest Crescent Avenue.

4.2 Soil, Topography and Drainage

The site is generally flat. Surface water from the site appears to drain towards the curb located along the perimeter of Crescent Avenue, which discharges into the Town of Picture Butte storm water system. The site soils are typically silt and clay, overlying clay till up to 20 m thick.

Based on local topography, shallow groundwater flow is suspected to be northward towards the Town of Picture Butte reservoir. The direction of regional (i.e., deep) groundwater flow is predicted to be southward towards the Oldman River (Tokarsky, 1974¹).

¹Tokarsky, O. 1974. *Hydrogeology of the Lethbridge-Fernie Area*. Alberta Research Council

It should be noted that topography, geologic materials, development of land and soil disturbances influence localized variances in groundwater movement and pattern. In addition, groundwater levels will fluctuate seasonally and in response to climatic conditions.

No evidence of wells, pits, lagoons, stressed vegetation, or standing water was observed on the property.

4.3 On-Site Buildings and Structures

There are two buildings on the site. A summary of the property information is presented in Table 2.

Table 2 - Summary of Lot Information	
Property	
Current Zoning	Highway Commercial (C-2)
Area	0.3 ha
Services: Sewer, Water, Electricity	Town of Picture Butte for sewer and water, Atco Gas Fortis Inc.
Buildings (2018, 1960)	
Number of Storeys	Two (2018). One (1960).
Exterior Finish	Galvanized metal, glass, both buildings.
Interior Finish	Knockdown drywall, vinyl floor tiles, concrete floors (2018), Concrete floors, wood panelling, (1960).
Roof	Galvanized metal, both buildings.
Foundation	Slab on grade with foundation walls, both buildings.
Basement	None.
Insulation	Fibreglass and spray on foam, both buildings.
Lighting	The building is illuminated by a combination of newer fluorescent fixtures and L.E.D. lighting.
Heating, Ventilating, Air Conditioning	Natural gas fired forced air furnaces.
Sumps, Floor Drains	A floor drain was observed in the main shop area.
Underground and Aboveground Storage Tanks	None observed or reported.



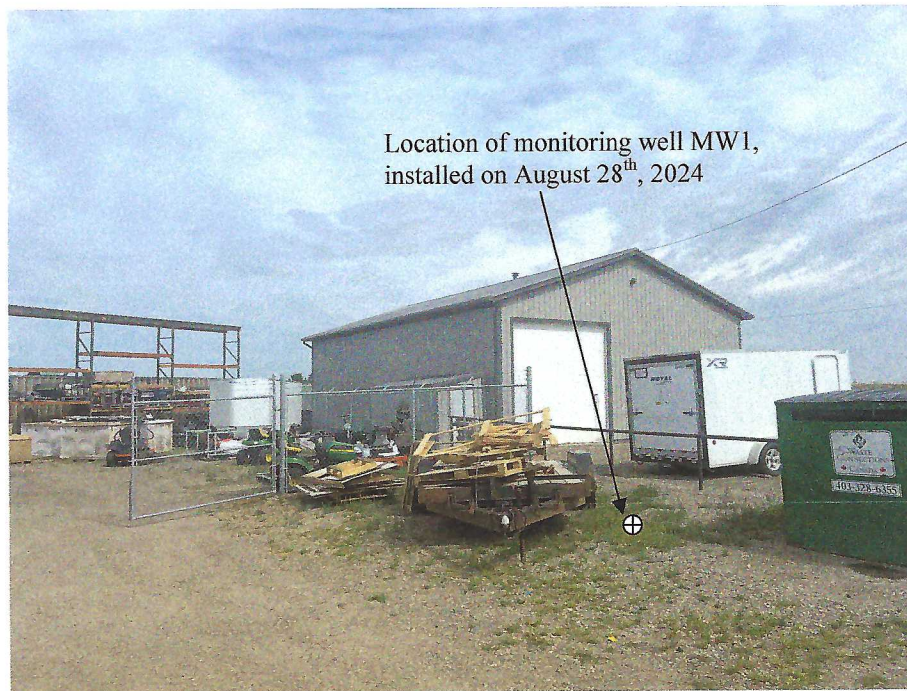
Photograph 2 – View retail area in 2018 building.

5.0 ADJACENT PROPERTIES

Land use of the adjacent properties is identified on Drawing 2 in Appendix A. A summary of this land use is presented in Table 3.

Table 3 - Adjacent Properties - Land Use		
Boundary Side of Site	Current Activity	Potential Sources of Contamination
North	Town of Picture Butte water reservoir across the laneway	None Identified
South	Residential across Crescent Avenue	None identified
East	Commercial: Former Lees Heating & Air Conditioning	Former USTs located <30 m from the site
West	Residential	None identified

Due to the presence of former adjacent underground fuel storage tanks used to fuel service vehicles, one 50 mm diameter monitoring well was installed to confirm whether or not the soil and/or groundwater conditions at the site have been negatively impacted by subsurface petroleum hydrocarbons.



*Photograph 3 – View of former Lees Heating and Air Conditioning.
Note: USTs were located where the white trailer is parked.*

6.0 REVIEW OF HISTORICAL LAND USE AND REGULATORY HISTORY

6.1 Historical Land Use

Historical information describing the site was obtained from a variety of sources as detailed in Appendix C of this report. Lists of historical land uses for the investigated site and adjacent properties are provided in Table 4 and 5, respectively.

Table 4 - Historical Information for the Site		
Period/Date	Land Use	Sources of Information
Prior to late 1950s	Undeveloped/agricultural	Air photographs and interviews
Late 1950s to early 1960s	The site was rezoned to accommodate commercial development.	Air photographs and interviews
Early 1960s to Present Day	The east building was constructed in approximately 1961 and was used primarily for storage until the mid 2000s. The west building was constructed in 2018 and remains to the present day. The east building was heavily renovated in 2018.	Air photographs and interviews

Based on information obtained during the historical review, it is unlikely that the presence of the above land use has adversely impacted the site.

Table 5 - Historical Information for Adjacent Properties		
Boundary Side of Site	Comments	Sources of Information
North	The site to the north was developed into the Town of Picture Butte water reservoir in 1961 which remains to present day.	Air photographs and interviews
South	The property to the south of the subject site, across Crescent Avenue, was developed as residential in the mid 1950s and remains to the present day.	Air photographs and interviews
East	The site to the east was developed as a commercial business in the mid 1950s and operated until recently as Lees Heating and Air Conditioning. USTs, used to fuel the service trucks, were removed, followed by a site remediation in 2011.	Air photographs and interviews
West	The site to the west was developed in the early 1960's as a single family residential property and underwent a total renovation in approximately 2015, to remodel the house into side by side duplex.	Air photographs and interviews

Due to the presence of adjacent former underground fuel storage tanks used to fuel service vehicles, one 50 mm diameter monitoring well was installed to confirm whether or not the soil and/or groundwater conditions at the site have been negatively impacted by subsurface petroleum hydrocarbons.



Photograph 4: Recently renovated adjacent property to the west

6.2 Regulatory History

A summary of information obtained from interviews with and/or written requests from regulatory agencies is provided below:

- **Alberta Environment and Protected Areas, Regulatory Approvals Centre:** Information received from the Regulatory Approvals Centre indicates that they have no record if any approvals having been issued for the site.
- **Alberta Environment and Protected Areas, Environmental Site Assessment Repository:** Information received from the ESAR indicates that they have no records pertaining to the site.
- **Environmental Law Centre:** Information received from the Environmental Law Centre indicates that they have no record of Control Orders, Stop Orders, Prosecutions, or Tickets issued regarding the property owner.
- **Safety Codes Council of Alberta:** Written information received from the SCC states that they have no record of active or abandoned storage tanks registered at the site.
- **Town of Picture Butte Fire Department:** Verbal information received indicated that there are no records of violations (of the 2022 Alberta Fire Code) for the site.
- **Alberta Land Titles:** Written information from Alberta Land Titles indicated that previous ownership of

the land has not revealed evidence of potential environmental contamination of the site.

7.0 SITE VISIT FINDINGS AND DISCUSSION

The site visit was carried out by Mr. Tim Waters, C.Tech on August 20th, 2024. Mr. Gus Buytels accompanied the assessor throughout the visit.

7.1 Fuel/Chemical Handling and Storage

None observed or reported. A waste oil “tote” was observed at the rear of the building which has a double wall and serviced regularly by a recycling contractor. No evidence of fill or vent pipes indicating the possible presence of underground storage tanks was observed on site. Automotive lubricants and other products were observed to be stored according to industry standards. Domestic cleaning chemicals observed to be stored in an orderly fashion.



Photograph 5 – View of automotive products displayed in the main retail area.

7.2 Waste Materials

Solid waste generated at the site is collected and the Town of Picture Butte collects the waste weekly and it is then transported to the Lethbridge Regional Landfill.

7.3 Spill and Stain Areas

Typical staining from parked vehicles were observed on the parking lot surface, however, these are not an environmental concern.

7.4 Wastewater Discharges

No regulated wastewater discharges were identified during the site visit. Sewage generated at the site discharges into the Town of Picture Butte sanitary sewer system. No oil/water separators were observed at the subject site.

7.5 Air Discharges

No sources of air emissions that were suspected to result in residual contamination to the property were observed during the site reconnaissance.

7.6 Polychlorinated Biphenyls (PCBs)

The past use of PCBs in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors was common. The federal *Environmental Contaminants Act*, 1976, prohibited the use of PCBs in heat transfer and electrical equipment installed after September 1, 1977, and in transformers and capacitors installed after July 1, 1980. In addition, storage and disposal of PCB waste materials is regulated. No PCB equipment was observed at the site at the time of the site reconnaissance.

7.7 Asbestos

The common use of potential friable (breakable by hand) asbestos-containing materials (ACMs) (pipe/boiler insulation and fireproofing) in construction generally ceased voluntarily in the mid 1970s. No ACMs were observed at the time of the site reconnaissance.

7.8 Urea Formaldehyde Foam Insulation (UFFI)

The sale and installation of UFFI as thermal insulation began in approximately 1970, and continued until December 1980 when it was banned under the federal *Hazardous Products Act*. UFFI was installed in both new and existing buildings during this period. Evidence of UFFI was not observed during the site reconnaissance, however, intrusive investigation of wall cavities and sampling is not within the scope of a Phase I ESA.

7.9 Lead

In 1976, the lead content in interior paint was limited to 0.5% by weight under the federal *Hazardous Products Act*. Lead is also associated with plumbing solder and old pipes as well as other lead based products such as wall shielding (x-ray rooms). If present, lead-based paint is typically concealed beneath multiple layers of paint applied over a period of years during renovation. Lead-based paint and plumbing equipment are not a direct health risk when concealed (under layer of non lead-based paint) and/or in good condition. Lead-based paint should be considered, however, when planning renovations or demolition, when particles could be released and/or ingested during the course of the work. No evidence of lead based products was observed on-site during the site reconnaissance; however, intrusive sampling for lead and lead based paints is not within the scope of a Phase I ESA.

7.10 Ozone Depleting Substances (ODSs)

In 1994, the federal government filed the *Ozone-depleting Substances Regulations* to amend controls on production and consumption of (chlorofluorocarbons (CFCs). Halons, carbon, tetrachloride and methyl chloroform. ODSs may be associated with operations such as fire extinguishing systems, fumigant and pesticide application, foam manufacturing, prescription metered dose inhalers, refrigeration and air-condition units, solvent cleaning and degreasing facilities. No sources of ozone depleting substances (ODSs) were observed on-site.

7.11 Radon

The geology of Alberta is known to release radon gas in some areas of the province. No testing for radon gas products has reportedly been completed for the site. Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, which can be commonly found in bedrock that contains black shale and/or granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures and tends to accumulate in poorly ventilated basements or other below grade spaces. Health Canada now recommends that all homeowners have their homes tested for radon. Based upon information contained on geological maps or other published documents in Alberta, radon gas products may be expected to be present in basements or below grade areas of buildings and measures as identified in National Building Code – 2023 Alberta Edition which came into force on May 1, 2024 should be implemented.

7.12 Electromagnetic Frequencies (EMFs)

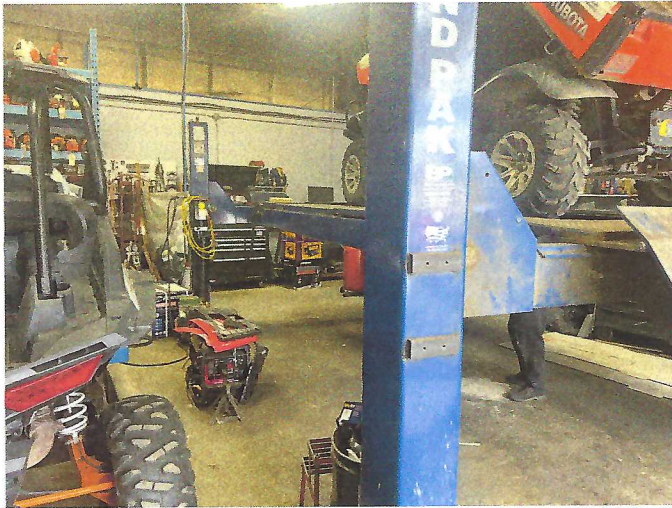
No high-tension transmission lines were observed near the site. Electro-magnetic frequencies are not anticipated to impact the site.

7.13 Noise and Vibration

There were no major sources of noise and vibration identified on or adjacent to the subject property during the site reconnaissance.

7.14 Hydraulic Hoists and Elevators

There were no hydraulic hoists or elevators observed at the subject property during the site reconnaissance. The automotive shop utilizes electrical free standing hoists for the business.



Photograph 6: View of electric free standing hoist located in the main shop areas.

7.15 Mercury

No sources of mercury were observed or reported at the site at the time of the site reconnaissance.

7.16 Mould

Mould can be found anywhere in a building, particularly if a flood or spill/leak has occurred and was not repaired immediately; and mould is usually associated with damp, enclosed areas. A mould assessment was not conducted for the subject site and mould was not observed at the time of the site reconnaissance.

7.17 Water Supply

Potable water for the subject site is supplied by the Town of Picture Butte.

7.18 Fill Areas

Fill areas on site are likely isolated to the excavation for the foundation, parking areas and shallow utilities.

8.0 SOIL AND GROUNDWATER SAMPLING

On August 28th, 2024, WAES installed a 50 mm diameter monitoring well along the east property line shared with the former Lees Heating and Air Conditioning. One soil sample from 1.5 m below existing grade was submitted to the laboratory for analysis. A 50 mm diameter monitoring well was installed in the borehole and identified as MW1. Groundwater was measured at 2.1 m below existing grade and sampled for chemical analysis. Both samples were submitted to Kaizen labs of Calgary, Alberta and analyzed for petroleum hydrocarbons constituents and lead.

8.1 Analytical Results

The soil and groundwater samples were submitted to Kaizen Labs of Calgary, Alberta for determination of benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons F1 to F4 and lead. The analytical results indicate that the soil and groundwater at borehole location MW1 has not been impacted by petroleum hydrocarbons and/or lead exceeding Alberta Environment and Protected Areas 2024 “*Alberta Tier 1 Soil and Groundwater Remediation Guidelines*” for Residential Land Use, fine grained soil (Tables 6 and 7). The detailed analytical reports, as well as the certificate of analyses, are presented in Appendix E. Note: Because there is residential land use located within 30 m of the site, the 2024 Residential Guidelines apply.

TABLE 6 - SOIL ANALYTICAL RESULTS (mg/kg)
August 28th, 2024

Sample Location	Soil Vapours (ppm)	Benzene	Toluene	Ethyl benzene	Xylenes	F1 ¹	F2 ²	F3 ³	F4 ⁴	Lead
MW1 @ 1.5 m	115	<0.005	0.013	<0.010	<0.030	<5	<10	<10	<10	7.2
<i>Applicable Criteria for Fine Grained Soil</i>	Residential	0.046	0.52	0.073	0.99	320	260	2500	6600	260

Table 7 summarizes the analytical results for petroleum hydrocarbons in groundwater:

TABLE 7 - GROUNDWATER ANALYTICAL RESULTS (mg/kg), August 28, 2024

Sample Location	MW Vapours (ppm)	Benzene	Toluene	Ethyl benzene	Xylenes	F1 ¹	F2 ⁴	Lead
MW1	65	<0.001	0.0007	<0.001	<0.003	<0.05	<0.1	<0.00014
<i>Applicable Criteria for Fine Grained Soil</i>	Residential	0.005	0.024	0.0016	0.02	2.2	1.1	0.01*

Notes: F1 = C₆-C₁₀ F2 = C₁₀-C₁₆ Shaded Area = Applicable Criteria

* Guideline for Canadian Drinking Water Quality

9.0 CONCLUSIONS AND RECOMMENDATIONS

The site remained undeveloped until approximately the early 1960s when the Town of Picture Butte rezoned the area for commercial land use. Development occurred on the east side of the subject site in the early 1960s. An additional building was constructed west of the original building in 2018, at which time the original building was renovated to modern specifications.

Adjacent land use to the south and west is residential and the Town of Picture Butte water storage reservoir occupies the property to the north. The property to the east is commercial and formerly occupied by Lees Heating and Air Conditioning who operated on the site since the early 1950s and has only recently closed. Anecdotal information available to WAES indicated that two underground fuel storage tanks (USTs) were removed from this site in the mid-1960s, and an environmental site assessment and site remediation program was completed (by WAES) at the site in 2011. The site was remediated to the residential guidelines in place at the time of the site remediation activities. No environmental issues were identified associated with the adjacent land use.

Due to the age of the newer building (2018) and renovation of the older building also in 2018, no hazardous building materials were observed at the time of the site reconnaissance.

Because of the presence of USTs on the adjacent property to the east at Lees Heating and Air Conditioning it was determined to install a 50 mm diameter monitoring well on the east property line in close proximity to the former remediated area on the adjacent site to confirm whether or not the soil and/or groundwater at the site have become negatively impacted by petroleum hydrocarbons. The analytical results of one soil and one groundwater sample collected from the monitoring well, indicate that the soil and groundwater have not been negatively impacted by petroleum hydrocarbons and/or lead at the borehole location.

Based on the information gathered during this investigation, the Enhanced Phase I Environmental Site Assessment has not revealed any evidence of environmental impact at the site.

No further environmental investigation of the site is recommended at this time.

10.0 CLOSURE

The American Society for Testing and Materials Standard of Practice notes that no environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of a standard environmental site assessment protocol is intended to reduce but not eliminate this uncertainty, given reasonable limits of cost and time.

This report has been prepared for the sole benefit of the Butte Motors and Farm Supply Ltd. This report may not be relied upon by any third party or entity without the express written consent of WA Environmental Services Ltd. and Butte Motors and Farm Supply Ltd.

Any use a third party may make of this report, or any reliance on decisions made based on it, are the responsibility of such third parties. WA Environmental Services Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

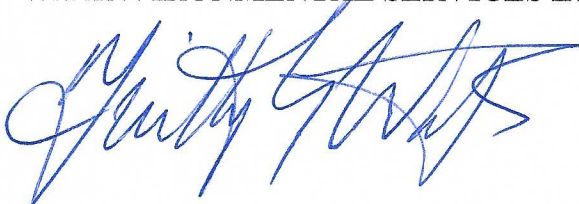
Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, WA Environmental Services Ltd. in certain instances, has been required to assume that the information provided is accurate.

The conclusions presented represent the best judgement of the assessor based on current environmental standards and on the site conditions observed on August 20th and 28th, 2024. Due to the nature of the investigation and the limited data available, the assessor cannot warrant against undiscovered environmental liabilities.

Should additional information become available WA Environmental Services Ltd. requests that this information be brought to our attention so that we may re-assess the conclusions presented herein.

Respectfully submitted,

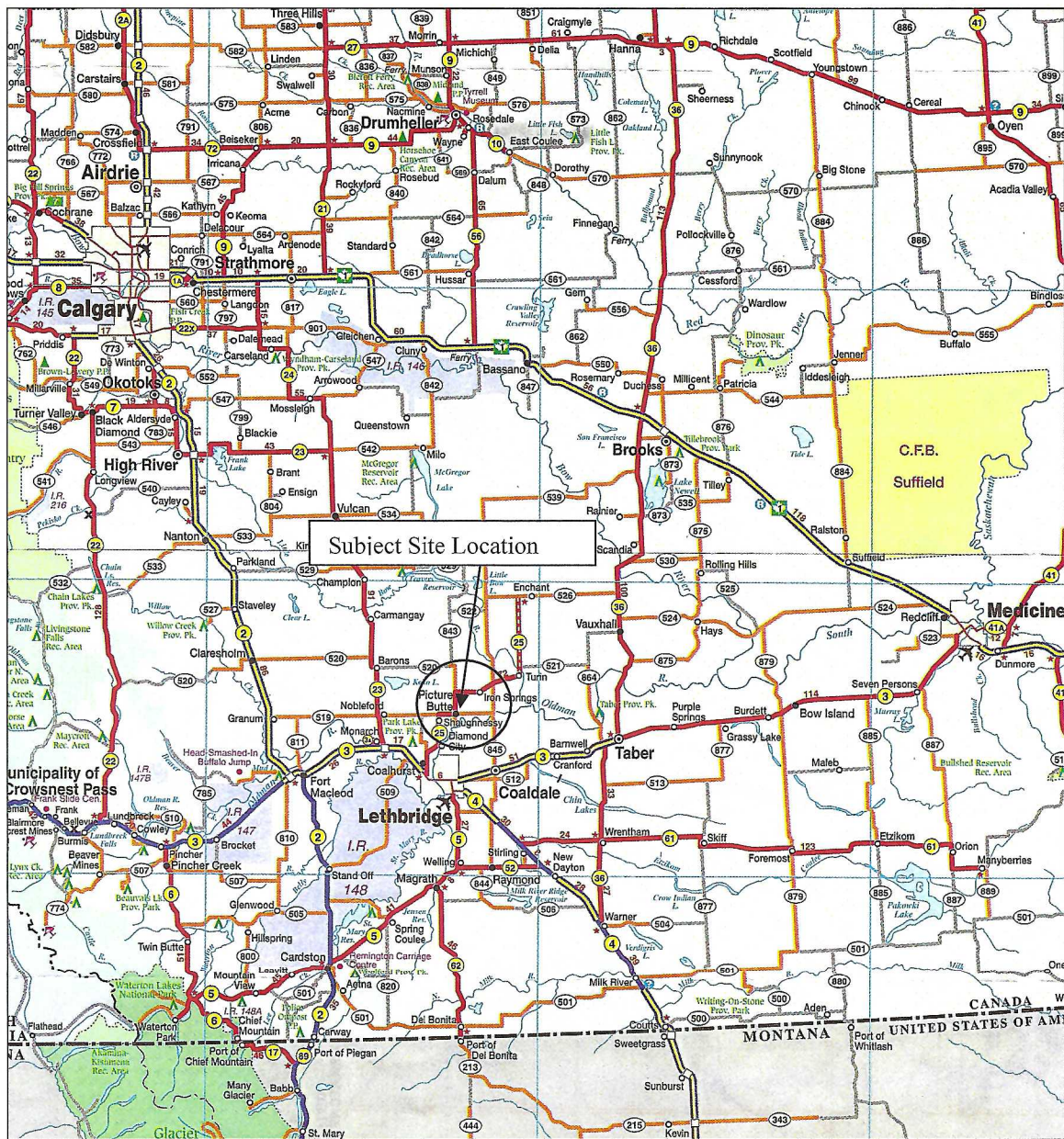
WA ENVIRONMENTAL SERVICES LTD.




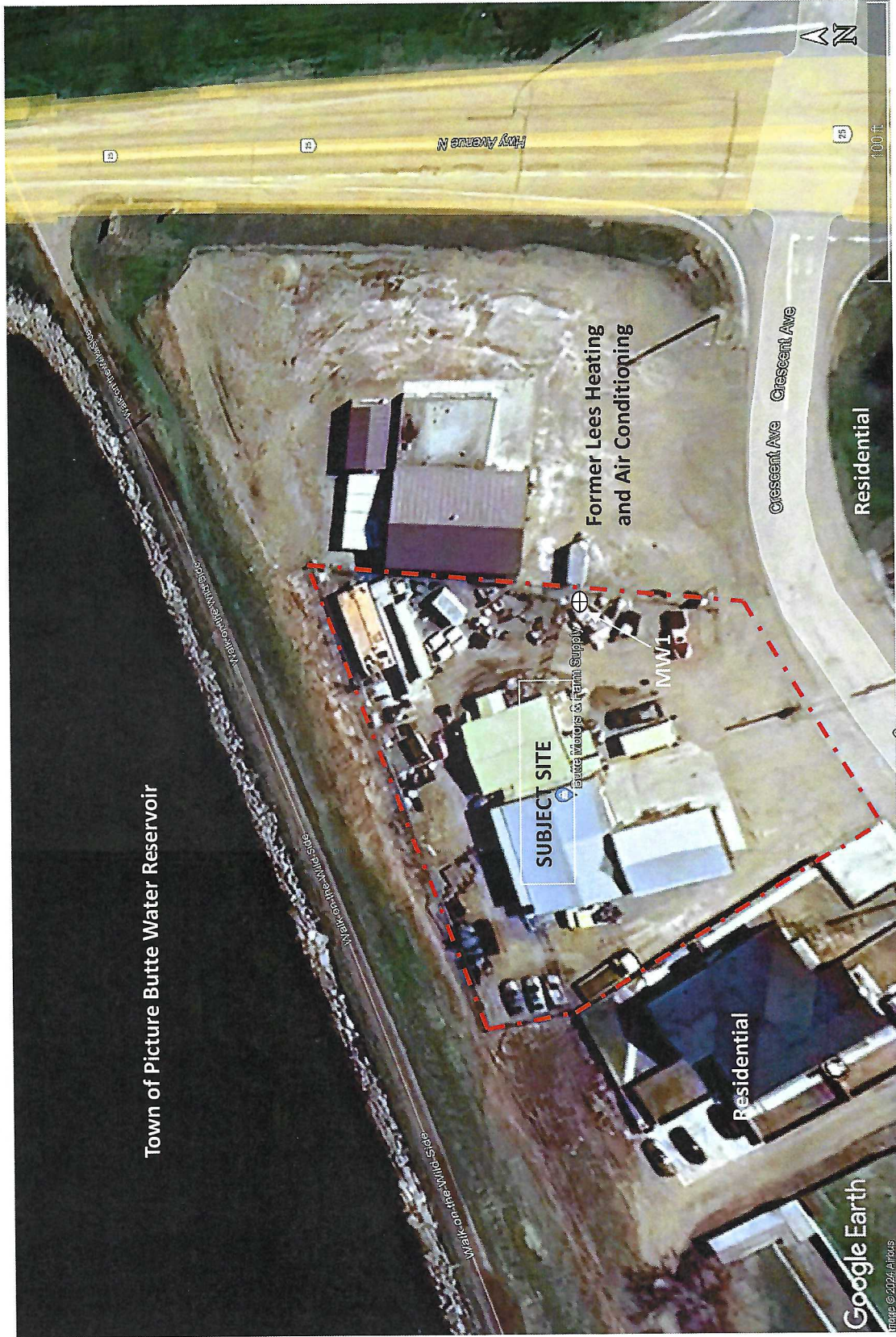
Tim Waters, C.Tech
Project Manager




Beverly Waters, C.E.S.A.
Senior Reviewer



	Date: August 28 th , 2024	Drawn by: BFW	Project: Enhanced Phase I Environmental Site Assessment
	Title: Drawing 1 Site Location Plan Lot 6, Block 8, Plan 7810085 Picture Butte, Alberta	Project No.: WA-24-081460 Client: Butte Motors & Farm Supply Ltd. 134 Crescent Avenue North Picture Butte, Alberta	



		Project: Enhanced Phase I Environmental Site Assessment		Project No: WA-24-081460	Date: August 28 th , 2024
Location: 134 Crescent Avenue Picture Butte, Alberta		Drawn By: TGW Reviewed By: BFW		Client: Butte Motors and Farm Supply Ltd.	
Drawing 2: Site Plan Showing Adjacent Land Use and Monitoring Well Location					

Symbol Legend

Common Symbols



Sand



Silty Sand



Sandy Silt



Clayey Sand



Sand and Gravel



Gravel



Silt



Clayey Silt



Clay



Silty Clay



Sandy Silty Clay



Silty Sand and Gravel



Silty Gravel



Silty Clay and Gravel



Topsoil



Peat



Limestone



Shale

Project No: WA-24-081460

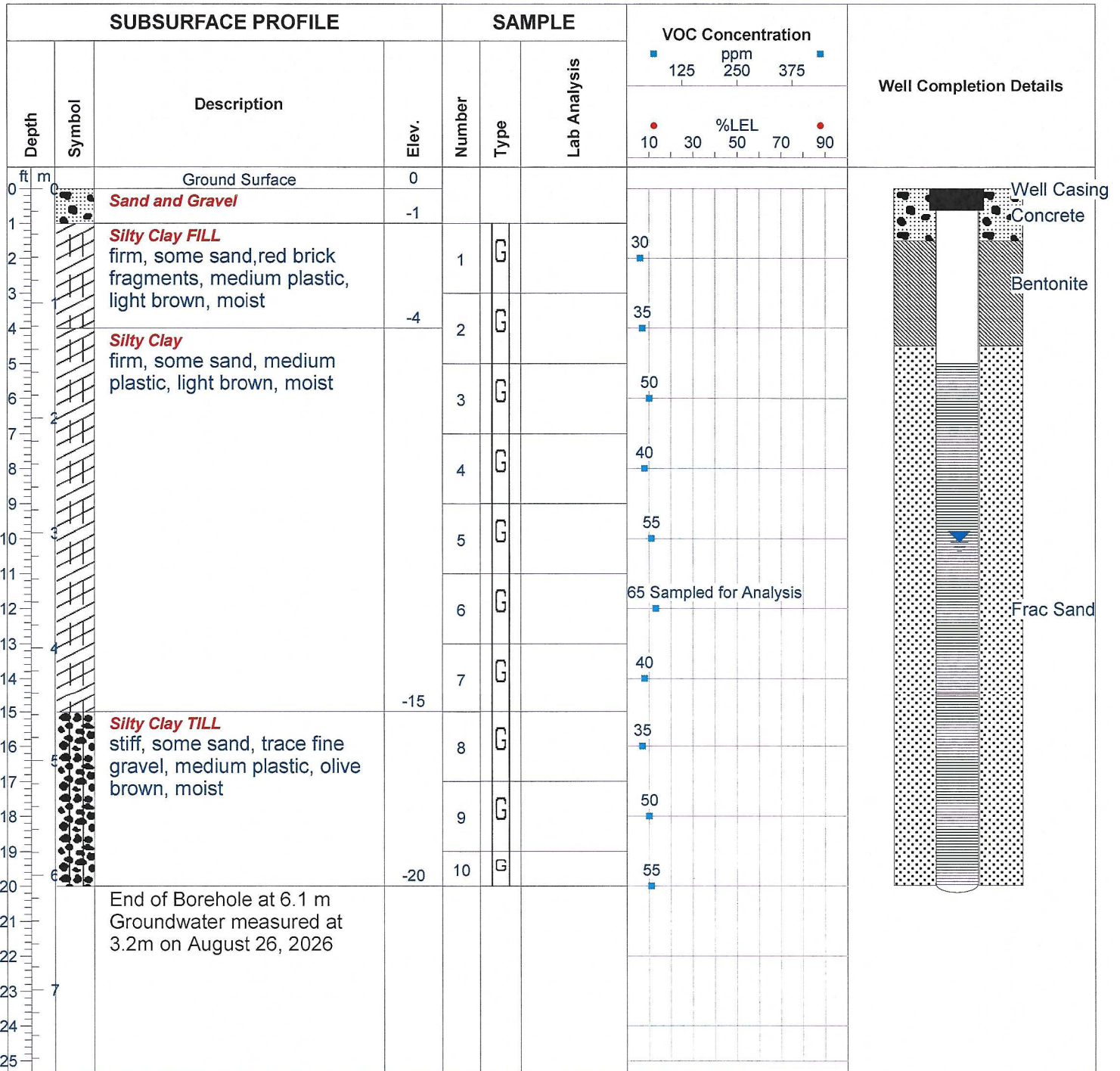
Project: Phase Enhanced I ESA

Client: Butte Motors & Farm Supply Ltd.

Location: 134 Crescent Avenue, Picture Butte, Alberta

Log of Borehole: MW1

Technologist: Tim Waters



Drill Method: Solid Stem

Drill Date: August 26, 2024

Hole Size: 150 mm



WA Environmental Services Ltd.
221 Riverpark Blvd West
Lethbridge, Alberta

Datum: 0.00

Checked by: BFW

Sheet: 1 of 1

ANALYTICAL REPORT

Client: WA Environmental Services Ltd.
 221 Riverpark Blvd. West
 Lethbridge, AB T1K 0P6

Attention: Tim Waters

KaizenLAB JOB #:	340144
DATE RECEIVED:	30-Aug-2024
DATE REPORTED:	06-Sep-2024
PROJECT ID:	Butte Motors & Farm Supply Ltd. Enhanced Phase I ESA
LOCATION:	134 Crescent Avenue Picture Butte, Alberta

KaizenLAB Sample #: 340144_001 **Sample ID:** MW1

Date Sampled: 28-Aug-2024 13:30 **Matrix:** Soil **Depth:** 3.7m

Parameter Description	Units	Result	Detection Limit
CCME Petroleum Hydrocarbons in soil: BTEX/F1-F4 (C6-C50)			
BTEX in Soil			
Benzene	mg/kg	<0.005	0.005
Toluene	mg/kg	0.013	0.010
Ethylbenzene	mg/kg	<0.010	0.010
Total Xylenes	mg/kg	<0.030	0.030
Volatile Hydrocarbons in soil			
F1 (C6-C10)	mg/kg	<5	5
Extractable Hydrocarbons in Soil			
Chromatogram descends to baseline at C50		Yes	
F2 (C10-C16)	mg/kg	<10	10
F3 (C16-C34)	mg/kg	<10	10
F4 (C34-C50)	mg/kg	<10	10
Moisture Content	%	17.1	0.1
Grain Size (0.075 mm sieve)			
Grain Size in Soil			
Grain size >0.075 mm	%	31.0	0.5
Grain size <0.075 mm	%	69.0	0.5
Texture (Fine/Coarse)		Fine	
Lead	mg/kg	7.2	1.0

KaizenLAB Sample #: 340144_002 **Sample ID:** MW1
Date Sampled: 28-Aug-2024 14:00 **Matrix:** Water

Parameter Description	Units	Result	Detection Limit
CCME Petroleum Hydrocarbons in water: BTEX/F1-F2			
BTEX in Water			
Benzene	mg/L	<0.001	0.001
Toluene	mg/L	0.0007	0.0005
Ethylbenzene	mg/L	<0.001	0.001
Total Xylenes	mg/L	<0.003	0.003
F1	mg/L	<0.05	0.05
F2	mg/L	<0.10	0.10
Dissolved Lead	mg/L	<0.00014	0.00014 *


* The detection limit has been adjusted due to sample matrix type and/or insufficient sample volume.

If both F4 and F4G have been reported, use the higher of the two results for interpretation of the CCME Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 approach. The F4G result shall not be added to the F4 result. The quality control criteria stipulated in sections 10.1, 10.5, 11.1 and 11.5 of the CCME Canada-Wide Standard for Petroleum Hydrocarbons in Soil has been met for related data listed in this report.

Test Methodologies

BTEX in Soil: Modified from EPA 8260D, EPA 5030C/EPA 5021A, and Canada-wide Method for Petroleum Hydrocarbons in Soil, CCME 2001
 BTEX in Water: Modified from EPA 8260D, EPA 5030C/EPA 5021A
 Dissolved Metals in Water by ICP-MS: Modified from SM 3030 B and SM 3125 B
 Extractable Hydrocarbons in Water: Modified from EPA 8015D and EPA 3520C
 Grain Size (Sieve Analysis) in Soil: Modified from Soil Sampling & Methods of Analysis, M.R. Carter, 2008
 Metals in Soil by ICP-MS: Modified from EPA 3050B and SM 3125 B
 Moisture Content in Soil: Modified from Canada-wide Method for Petroleum Hydrocarbons in Soil, CCME 2001
 Semi-Volatile Hydrocarbons in Soil: Canada-wide Method for Petroleum Hydrocarbons in Soil, CCME 2001
 Volatile Hydrocarbons in Soil: Canada-wide Method for Petroleum Hydrocarbons in Soil, CCME 2001
 Volatile Hydrocarbons in Water: Modified from EPA 8015D, EPA 5030C/EPA 5021A

Final Review by:



Christina Daguio
 Client Services Administrator

Note: The results in this report relate only to the items tested and as received. Information is available for any items in 7.8.2.1 of ISO/IEC 17025:2017 that cannot be put on a test report. The report shall not be reproduced except in full without written approval of KaizenLAB. The validity of results may be affected if the information is provided by the customer.

Test methodologies are accredited in accordance with ISO/IEC 17025 via CALA, unless otherwise specified in the description of the methods .

*This analyte is not accredited, even though analyzed by an accredited methodology.

QUALITY CONTROL REPORT

Client: WA Environmental Services Ltd.
Attention: Tim Waters

KaizenLAB JOB #:	340144
PROJECT:	Butte Motors & Farm Supply Ltd
LOCATION:	134 Crescent Avenue Picture Butte, Alberta
DATE REPORTED:	06-Sep-2024

		Method Blank	Calibration Verification Standard		Laboratory Control Sample		Duplicate or Matrix Spike Duplicate	
			%Recovery		%Recovery		Rel. % Diff.	
Test: Dissolved Metals in Water by ICP-MS								
QC Batch #: BW_M_DISS_240830_01								
Date: 30-Aug-2024								
Lead	<0.00007 mg/L		101	Pass	101	Pass	N/A-NC	-
Test: Extractable Hydrocarbons in Water								
QC Batch #: BW_F2F4_240906_01								
Date: 06-Sep-2024								
F2	<0.10 mg/L		94	Pass	101	Pass	N/A-NC	-
Test: Volatile Hydrocarbons in Water								
QC Batch #: BW_F1_240906_01								
Date: 06-Sep-2024								
F1	<0.05 mg/L		104	Pass	104	Pass	N/A-NC	-
Test: BTEX in Water								
QC Batch #: BW_BTEX_240906_01								
Date: 06-Sep-2024								
Benzene	<0.001 mg/L		101	Pass	101	Pass	N/A-NC	-
Ethylbenzene	<0.001 mg/L		99	Pass	99	Pass	18	Pass
m,p-Xylenes	<0.002 mg/L		101	Pass	101	Pass	5	Pass
o-Xylene	<0.001 mg/L		99	Pass	99	Pass	2	Pass
Toluene	<0.0005 mg/L		98	Pass	98	Pass	10	Pass
Test: Metals in Soil by ICP-MS								
QC Batch #: BS_METALMS_240904_01								
Date: 04-Sep-2024								
Lead	<1.0 mg/kg		101	Pass	81	Pass	3	Pass

N/A-NC: Not Applicable-Not Calculated: Result does not apply to this test or the difference between duplicate and its parent sample is not significant to perform a calculation (results are too close to the detection limit)

		Method Blank	Calibration Verification Standard		Laboratory Control Sample		Duplicate or Matrix Spike Duplicate	
			%Recovery		%Recovery		Rel. % Diff.	
Test: QC Batch #: Date:		Grain Size in Soil BS_GRAIN_240903_01 03-Sep-2024						
Percent Passed		N/A	N/A-NC	-	100	Pass	N/A-NC	-
Percent Retained		N/A	N/A-NC	-	95	Pass	N/A-NC	-
Test: QC Batch #: Date:		Extractable Hydrocarbons in Soil BS_F2F4_240905_02 05-Sep-2024						
F2 (C10-C16)		<10 mg/kg	101	Pass	103	Pass	N/A-NC	-
F3 (C16-C34)		<10 mg/kg	107	Pass	103	Pass	3	Pass
F4 (C34-C50)		<10 mg/kg	110	Pass	119	Pass	N/A-NC	-
Test: QC Batch #: Date:		Volatile Hydrocarbons in Soil BS_F1_240905_02 05-Sep-2024						
F1 (C6-C10)		<5 mg/kg	105	Pass	102	Pass	N/A-NC	-
Test: QC Batch #: Date:		BTEX in Soil BS_BTEX_240905_02 05-Sep-2024						
Benzene		<0.005 mg/kg	106	Pass	75	Pass	N/A-NC	-
Ethylbenzene		<0.010 mg/kg	87	Pass	72	Pass	N/A-NC	-
m,p-Xylenes		<0.020 mg/kg	88	Pass	73	Pass	N/A-NC	-
o-Xylene		<0.010 mg/kg	91	Pass	70	Pass	N/A-NC	-
Toluene		<0.010 mg/kg	99	Pass	73	Pass	N/A-NC	-

Final Review by:



Christina Daguio
 Client Services Administrator

Note: The results in this report relate only to the items tested and as received. Information is available for any items in 7.8.2.1 of ISO/IEC 17025:2017 that cannot be put on a test report. The report shall not be reproduced except in full without written approval of KaizenLAB. The validity of results may be affected if the information is provided by the customer.

Test methodologies are accredited in accordance with ISO/IEC 17025 via CALA, unless otherwise specified in the description of the methods.

*This analyte is not accredited, even though analyzed by an accredited methodology.

N/A-NC: Not Applicable-Not Calculated: Result does not apply to this test or the difference between duplicate and its parent sample is not significant to perform a calculation (results are too close to the detection limit)

APPENDIX B

ASSESSOR QUALIFICATIONS

INSURANCE CERTIFICATES

Name: Timothy G. Waters, C.Tech

Position: Senior Project Manager

Education: General Certificate of Education, Advanced Level
(Geography/Geomorphology), University of London, England.

Relevant Experience:

- Lead assessor on 150 Phase I Environmental Site Assessments of residential, commercial, industrial and institutional properties throughout Alberta and B.C.
- Transport Canada, Lethbridge Airport Fire Training Area. Responsible for Phase III drilling program, sample collection and gathering field data.
- Transport Canada, Medicine Hat and Empress Non Directional Beacon Sites. Responsible for Phase II drilling program and subsequent field monitoring and sampling
- Transport Canada, Pincher Creek, Alberta: Responsible for data collection at three facilities at the Pincher Creek Airport and subsequent sampling of groundwater.
- Federal Business Development Bank, Blairmore, Alberta. Responsible for the safe removal of USTs.
- Alberta Transportation and Utilities, Kipp and Burmis, Alberta. Responsible for the safe removal of USTs.

APPENDIX C

RESOURCE INFORMATION

**REGULATORY CONTACTS, PERSONS INTERVIEWED, AND
HISTORICAL SOURCES**

SOURCE	INFORMATION/CONTACT/PHONE NUMBER
Alberta Environment and Protected Areas	Environmental Permits/Approvals Mr. Dennis Eriksen, Regulatory Approvals Centre (403) 427-6311
Aerial Photographs	1950, 1974, 1981, 1991, 2003, 2010, 2018, 2022, 2024
Fire Insurance Maps	Not available for this site
Historical City Directories	Not available for this site
Previous Environmental Reports	None
Other Sources	Ms. Iris Djurfors, Environmental Law Centre, (403) 424-5099 Mr. Gerry Letendre, SCC, (780) 413-0099 Town of Picture Butte Planning Dept. (403) 732-4555 Town of Picture Butte, Volunteer Fire Dept, (403) 732-4100 Schwartz Reliance Registry (Land Titles) (403) 320-1010 Mr. Gus Buytels, Owner, Butte Motors & Farm Supply, (403) 732-4406

APPENDIX D
REGULATIONS

Federal

Legislation

Canada Water Act

- Guidelines for Canadian Drinking Water Quality - 6th edition
- Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments

Canadian Environmental Protection Act

- Chlorobiphenyls Regulations (SOR/91-152)
- Federal Aboveground Storage Tank Technical Guidelines
- Federal Underground Storage Tank Technical Guidelines
- Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum
- Federal Lands Regulations
- Storage of PCB Material Regulations (SOR/92-507)

Fisheries Act

Transportation of Dangerous Goods Act/Regulations

Hazardous Products Act

Policies, Guidelines and Codes

Canadian Council of Ministers of the Environment (CCME)

- Environmental Codes of Practice for Underground Storage Tanks Containing Petroleum Products and Allied Petroleum Products, March 1993
- Environmental Code of Practice for Aboveground Storage Tanks Containing Petroleum Products, 1993

Government of Canada Asbestos Abatement Guidelines, 1991-01-04

Code of Good Practice for Handling Solid Wastes at Federal Establishments (Environment Canada)

Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments (EPS-1-EC-76-1)

Provincial

Alberta Fire Code (2022)

Environmental Protection and Enhancement Act (1993)

Ozone-Depleting Substances and Halocarbons Regulation (2000)

Occupational Health and Safety Act (1993)

Transportation of Dangerous Goods Control Act (1986)

Municipal

Town of Picture Butte Unsightly/Untidy Premises By-law

Town of Picture Butte Refuse By-law

Town of Picture Butte Sewer Service By-law

Town of Picture Butte Noise Control By-law