



PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

**FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH**

PREPARED FOR:

**OGDEN CITY BUSINESS DEVELOPMENT
2549 WASHINGTON BLVD., SUITE 761
OGDEN, UTAH 84401**

ATTENTION: BRANDON COOPER

PROJECT NO. 1210175

MARCH 19, 2021

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EXECUTIVE SUMMARY

1. We have performed a Phase 1 Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-13 of the property described in the Property Location and Legal Description section of this report. Exceptions to, or deletions from, this practice are described in the Data Gaps/Deviations section of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property with the following exception:

A dry cleaner was located on the subject property at 856 East 25th Street from the 1960s to the 1980s. Dry cleaners commonly used chlorinated solvents that can impact the subsurface soils and groundwater if they are released to the environment. Evidence of dry-cleaning solvents have been detected in the soil, soil vapor and groundwater on the subject property, at concentrations exceeding the residential VISL for soil gas and MCL for the groundwater. Additional work to help delineate the extent of the groundwater contamination is ongoing. The former dry-cleaning business and associated subsurface contamination on the property is a recognized environmental condition and a potential vapor encroachment condition.

2. Based on historical aerial photographs, Polk city directories, Sanborn Fire Insurance maps, tax appraisal cards and interviews, a house at 856 East 25th Street was built on the subject property by 1906 and was converted into the East Side Nursing Home by the mid 1950s. The house/nursing home was removed by 1961 and replaced with the existing laundry facility at 856 East 25th Street. The building was occupied by Norge Cleaning Village/Meyer's Norge Village from the 1960s to the late 1980s. The north wing of the building was added in the late 1960s/early 1970s. In the late 1980s, the business name changed to Forsey's Norge self serve laundry and then Forsey's Laundry and Cleaning Village, 4-C's Wash Basin and Four Seasons Laundromat. We understand that dry cleaning has not been performed on site since about 1987.
3. The subject property is occupied by a one-story, 4,100-square-foot, masonry-block commercial building with a flat composite roof at 856 East 25th Street. The building was occupied by Forsey (4-C) Laundry and Cleaners, a retail laundry business. Interior finishes generally consist of painted drywall and painted masonry block. Floor coverings consist of vinyl tile over concrete and exposed concrete, except the north storage room, which is carpeted. The room on the north end of the building is being used to store commercial washer and dryer parts, ducting and miscellaneous items. Various cleaning and lubricating chemicals and containers reportedly containing used oil are located on a shelving unit on the east side of the room. The ceiling in the northeast portion of the room has some water damage. A maintenance area is located along the east wall of the building, behind the east bank of washing machines. Floor and roof drains located in the maintenance area are reportedly connected to the municipal sewer system. An office/drive-thru service area is located on the south end of the building. The center portion of the building contains the main washing/drying room. Washing and drying machines are located along the east, north and west sides of the room with an island of machines in the center portion. A mechanical room containing a gas-fired boiler and furnace are in the northwest portion of the main washing room. The historical dry-cleaning equipment was stored in this room. Floor drains in the mechanical room and behind the west bank of laundry machines are

reportedly connected to the municipal sewer system. Two restrooms are located in the west-center portion of the building.

An asphalt-paved parking lot extend south, west and northwest of the building. No storm drain inlets were observed in the parking areas. The building is connected to municipal water, sewer and natural gas utilities, presumably from 25th Street to the south.

4. Due to the age of the building (1961), it may have been constructed with asbestos-containing building materials, lead-based paints, mercury-containing light switches or fluorescent light ballasts with PCBs. Vegetation on the property is limited to lawn landscaping on the south property edge.
5. During our site visit, no evidence of significantly stained soils or stressed vegetation was observed. No evidence of hazardous materials, above-ground or underground storage tanks, unidentified vessels, odors or pools of liquid were observed on site. Monitoring wells previously installed by AGECE are located in the parking areas. A 55-gallon drum of purge water from the monitoring wells is temporarily stored on the north side of the building. Injection wells, gas and oil extraction wells, irrigation wells, and water-withdrawal wells were not observed on site. Overhead power lines extend across the north and south sides of the property. A pole-mounted electrical transformer is near the northwest corner of the property. The transformer did not appear to be leaking and should not contain poly-chlorinated biphenyls (PCBs). A trash dumpster is north of the building.
6. Government agency inquiry indicates there are no NPL or RCRA CORRACTS sites within 1 mile of the property. There are no delisted NPL, RCRA Non-CORRACTS TSD, SEMS/CERCLIS, landfills, VCP or Brownfield sites within ½ mile of the property. There is one SEMS-Archive/CERCLIS-NFRAP site within ½ mile of the property at Hoffmans Modern Dry Cleaning at 2475 Monroe Blvd., approximately 500 feet to the west and down gradient.

There are 11 sites listed on the LUST list within ½ mile of the property being investigated including two sites adjacent to the subject property. Our review of the list finds two UST sites adjacent to the subject property. The registered tanks adjacent to the property have been removed.

There is one RCRA Generator on the subject property and one generator adjacent to the property. Meyers Cleaning Village at 856 25th Street on the subject property was a small quantity generator prior to the dry-cleaning operation moving off site by 1987. The current Forsey laundry does not perform dry cleaning on site. The Rite Aid at 851 24th Street to the north and not up gradient was a conditionally exempt small quantity generator of hazardous waste including discarded or expired consumer products and pharmaceuticals.

There are no NRC sites listed on or adjacent to the subject property. There is one DERR Incident site adjacent to the property being investigated at Rite Aid at 851 24th Street. In May 2008 a complaint was made from a patron of Rite-Aid about burning of the throat and strong odors. Subsequent air sampling by the Weber-Morgan Health Department indicated that ammonia was present inside and out of the building. There are no institutional controls or engineering controls on the subject property.

7. Tetrachloroethylene (PCE) and trichloroethylene (TCE) have been identified in the soil, groundwater and soil vapor on the subject property during subsurface environmental investigations by AGECE in 2020 and 2021. Soil samples obtained during the investigations have detected concentrations of 2-Butanone also known as methyl ethyl ketone (MEK), PCE and TCE above the laboratory method detection limits. The detected concentrations of MEK, TCE and PCE were below the respective residential RSL values. The only VOCs detected above the residential VISL in the soil gas were 1,3-butadiene in sample PRT-2, chloroform in VP-2, naphthalene in VP-1, PCE in PRT-1, VP-1 and VP-2 and trichloroethene (TCE) in VP-1 and VP-2. The concentrations of PCE were significantly higher in the two subslab samples than the exterior PRT samples.

PCE was detected above the laboratory method detection limits in the groundwater samples from MW-2, MW-3, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-17. The analytical test results indicate that the groundwater samples from 12 of the 20 wells contain concentrations of PCE above the November 2020 EPA Maximum Contaminant Level (MCL). The only other compound detected above the laboratory method detection limits in the groundwater has been TCE in MW-3, MW-10, MW-12, MW-15 and MW-17, which were above the TCE MCL of 0.005 mg/L. The plumes of PCE and TCE appear to extend off site at least 200 feet to the west. The detected subsurface contamination associated with the dry cleaner is a recognized environmental condition and a potential vapor encroachment condition.

8. The nearby SEMS-Archive, LUST, RCRA Generator and UST facilities are unlikely to have impacted the subject property due to the distances, groundwater gradients and remedial activities performed at these sites. Aside from the dry cleaner on the property, a reconnaissance and data base search of properties in the vicinity of the subject property finds no evidence of facilities or environmental conditions that have adversely impacted the subject property or present a potential vapor encroachment condition.

1.0 INTRODUCTION AND SCOPE

Applied Geotechnical Engineering Consultants, Inc. (AGEC) was retained by Ogden City Business Development to conduct a site specific Phase 1 Environmental Site Assessment for one parcel containing 0.38 acres of property at 856 East 25th Street in Ogden, Utah. The site location is shown on Figures 1 to 22. The study was conducted in general accordance with AGEC's proposal dated March 4, 2021.

The purpose of a Phase 1 Environmental Site Assessment (ESA) is to address the potential environmental liabilities on a specific parcel of commercial real estate, taking into account commonly known and reasonably ascertainable information with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and petroleum products. The Phase 1 ESA is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability ("landowner liability protections," or "LLPs"): that is, the practice that constitutes All Appropriate Inquiry (AAI) into the previous ownership and uses of the property consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35)(B).

Inquiries must be performed in a manner consistent with the final rule, published at 40 Code of Federal Regulations (CFR) Part 312 (effective November 1, 2006). AAI requirements may be met using the ASTM E1527-13 or ASTM E2247-08 standards. This Phase 1 ESA, as performed by AGEC, is in general conformance with the 2013 American Society for Testing and Materials (ASTM) standard for environmental assessments (E 1527-13) and the EPA's All Appropriate Inquiry (AAI) rule found at 40 CFR 312.

A review of the site was conducted to identify *recognized environmental conditions* (REC) on the property due to present or previous activities or land uses. ASTM E 1527-13 defines recognized environmental conditions as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include *de minimis conditions* that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not considered to be recognized environmental conditions.

A historical recognized environmental condition (HREC) is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). *A controlled recognized environmental condition (CREC)* is a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

The Phase 1 ESA practice does not address whether requirements in addition to all appropriate inquiries have been met in order to qualify for the LLPs (such as the continuing obligation not to impede the integrity and effectiveness of activity and use limitations (AULs), or the duty to take reasonable steps to prevent releases, or the duty to comply with legally required release reporting obligations).

The study includes a site reconnaissance of the subject and adjoining properties to identify recognized environmental conditions in connection with the property including a reasonable observation of the property and structures, the perimeter of the property and the interior common areas of the structures when accessible. A historical review of the site is performed dating back to the first obvious developed use or back to 1940, whichever is earlier (where practical) via a combination of reasonably ascertainable records and sources such as aerial photographs, USGS maps, fire insurance maps, historical city directories and county tax and recorder records when available. A review of local, state and federal government records is performed including the following lists: Federal NPL, Delisted NPL, SEMS/CERCLIS, SEMS-Archive/CERCLIS-NFRAP, RCRA CORRACTS, RCRA non-CORRACTS TSD, RCRA Generator, institutional control/engineering control registries and NRC/ERNS; State hazardous waste sites, NPL equivalent, CERCLIS equivalent, Brownfield, VCP, spill incidents, landfill/solid waste disposal, leaking storage tank (LUST) and registered storage tank (UST) and institutional control/engineering control registries. Interviews are conducted with the key site manager who may be past or present owners, occupants, neighbors or persons familiar with the site history. Interviews with state and/or local government officials such as fire marshals and environmental personnel are conducted.

This assessment does not address other issues (Non-Scope Considerations, not all-inclusive) including the presence of endangered species, biological agents, asbestos-containing building materials, lead-based paint, mold, radon and lead in the drinking water. Liability/risk evaluations, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, regulatory compliance, health and safety, ecological resources, industrial hygiene, cultural and historic resources, wetland studies or remediation techniques are not within the scope of this report unless specifically stated and agreed upon in AGEC's proposal.

A Business Environmental Risk (BER) as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, and is not an issue required to be investigated under this ASTM E1537-13 practice and may not be included in this report. A BER may include one or more of the non-scope issues mentioned above (Non-Scope Considerations). Evaluation of non-scope items is not required nor relevant for compliance with the AAI Rule or E1527-13.

This report has been prepared to summarize the data obtained during the study and to present our conclusions. Results of the environmental site assessment are summarized and findings and conclusions relating to the apparent environmental conditions at the site are discussed.

1.1 User Reliance

This report has been prepared for the use of the client, Ogden City Business Development, who can rely on the information contained in this report in assessing environmental concerns associated with the subject property within the limitations of the scope of the report and AGEC's proposal dated March 4, 2021.

1.2 Previous Environmental Site Assessments on the Property

AGEC completed a Phase 1 ESA on the subject property and surrounding properties to the east, north and west (Proposed Gramercy Street Apartments). Findings of the study were reported to Sundance Bay under AGEC Project No. 1170955, dated February 5, 2018. This assessment revealed no evidence of recognized environmental conditions in connection with the property other than that dry cleaners were historically located on the subject property at 856 East 25th Street and 2440 Monroe Blvd. from the 1960s to the 1980s/1990s. Dry cleaners commonly used chlorinated solvents that can impact the subsurface soils and groundwater if they are released to the environment. The historical dry-cleaning businesses on the subject property is a recognized environmental condition.

To help determine if the historical dry cleaner has impacted the property, AGECE conducted a limited subsurface sampling investigation by obtaining soil and groundwater samples and performing a soil vapor investigation with locations inside and outside the existing building. This sampling event was not intended to delineate the extent of the contamination, if present, in the soil vapor, soil or groundwater.

Two exterior borings (GP-1 and GP-2) were advanced near the west and north side of the northwest end of the building, presumably where the historical dry-cleaning equipment was located (Figure 1). Two soil vapor sampling points (PRT-1 and PRT-2) were sampled adjacent to the borings west of the building. Two indoor subslab soil vapor samples were obtained in the northwest room, presumably near the historical dry-cleaning equipment.

The four soil samples did not contain concentrations of the analyzed contaminants above the laboratory reported detection limits with the exception of 2-Butanone also known as methyl ethyl ketone (MEK) and tetrachloroethylene (PCE). The contaminant concentrations were compared to the residential and commercial November 2019 EPA Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. RSLs are not necessarily cleanup standards. The RSL's role in site "screening" is to help identify areas, contaminants, and conditions that may require further attention at a particular site. The detected concentrations of MEK and PCE were below the respective residential RSL values.

The only contaminant detected in the two groundwater samples above the laboratory method detection limits was PCE (Table 2 in Appendix F). The concentrations of PCE were 0.0422 mg/L (GP-1) and 0.00661 mg/L (GP-2). The EPA Maximum Contaminant Level (MCL) for PCE is 0.005 mg/L, so both concentrations exceeded the MCL.

The only VOCs detected above the residential VISL in the soil gas were 1,3-butadiene in sample PRT-2, chloroform in VP-2, naphthalene in VP-1, PCE in PRT-1, VP-1 and VP-2 and trichloroethene (TCE) in VP-1 and VP-2.

The concentrations of PCE were significantly higher in the two subslab samples than the exterior PRT samples. The degradation process of PCE produces daughter products as it works toward non-regulated, non-toxic compounds. The primary daughter products of PCE include TCE, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, and vinyl chloride.

According to the EPA, motor vehicle exhaust is a constant source of 1,3-butadiene and it is usually found in ambient air at low levels in urban and suburban areas. Potential sources of chloroform include chlorine-treated drinking water. Chlorinated drinking water can leak from buried water supply or sanitary sewer lines. A floor drain was within several feet of VP-2 and is likely the source of the chloroform. Naphthalene is found in cigarette smoke, car exhaust and diesel fuel.

Based on the limited initial sampling performed at the site, it appeared the PCE contamination is a result of a historical release near the former dry-cleaning equipment. The sources of 1,3-butadiene, chloroform and naphthalene in the soil vapor samples are unknown. As they each were only detected in one of four samples, these compounds did not appear to be widespread contaminants on the property.

Findings of the study were reported to Ogden City Business Development under AGEC Project No. 1200034, dated January 29, 2020 (Appendix F).

To help determine the soil and groundwater conditions in the vicinity of the former dry cleaners, AGEC completed four sampling investigations on site and to the west (down gradient) with five groundwater monitoring wells installed during each sampling event. Findings of the studies were reported to Ogden City Business Development under AGEC Project No. 1200988, dated January 8, 2021, AGEC Project No. 1210017, dated January 28, 2021, AGEC Project No. 1210086, dated February 22, 2021 and AGEC Project No. 1210149, dated March 17, 2021.

AGEC installed five groundwater monitoring wells on site (MW-1 to MW-5) on December 22, 2020 in the vicinity of the previously detected groundwater contamination in borings GP-1 and GP-2 with wells east of the building (up gradient) and northwest, west and southwest of GP-1. AGEC installed four additional groundwater monitoring wells on site (MW-6 to MW-9), and one additional groundwater monitoring well off site (MW-10), down gradient of the highest concentrations of PCE/TCE previously detected in the groundwater in MW-3. The five additional groundwater monitoring wells (MW-6 to MW-10) were installed on January 20, 2021. To help continue the delineation the PCE/TCE plume at the site, one additional groundwater monitoring well was installed on site (MW-11), and four additional groundwater monitoring wells were installed off site (MW-12 to MW-15), down gradient of the concentrations of PCE/TCE previously detected in the groundwater in

MW-10. The five additional groundwater monitoring wells (MW-11 to MW-15) were installed on February 8, 2021. Five more wells (MW-16 to MW-20) were installed off site to the west, down gradient of MW-12. The five additional groundwater monitoring wells (MW-16 to MW-20) were installed on March 4, 2021.

Soil Results

PCE was detected above the laboratory method detection limits in the soil samples obtained from MW-2, MW-3, MW-4, MW-5, MW-7, MW-10, MW-12, MW-14, MW-15 and MW-17. The analytical test results (Table 1 in Appendix F) indicate that the concentrations of PCE were below the November 2020 EPA Residential or Industrial Screening Levels (SLs). TCE was detected above the laboratory method detection limits in the soil samples obtained from MW-12. No other compounds were detected above the laboratory detection limits in the twenty borings.

Groundwater Results

PCE was detected above the laboratory method detection limits in the groundwater samples from MW-2, MW-3, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-17. The analytical test results (Table 2 in Appendix F) indicate that the groundwater samples from 12 of the 20 wells contain concentrations of PCE above the November 2020 EPA Maximum Contaminant Level (MCL). The only other compound detected above the laboratory method detection limits was TCE in MW-3, MW-10, MW-12, MW-15 and MW-17 which were above the TCE MCL of 0.005 mg/L.

Summary

Based on the soil gas, soil and groundwater samples obtained in the vicinity of the Forsey Cleaners & Laundry facility, a historical release of dry-cleaning solvent occurred. Concentrations of PCE are present in the groundwater above the MCL in 12 of the 20 monitoring wells installed at the site. Concentrations of TCE are present in the groundwater above the MCL in five of the 20 monitoring wells installed at the site. VOCs detected above the residential VISL in the soil gas were 1,3-butadiene in sample PRT-2, chloroform in VP-2, naphthalene in VP-1, PCE in PRT-1, VP-1 and VP-2 and TCE in VP-1 and VP-2. Soil contamination above the EPA SLs has not been encountered during the previous four sampling events.

As the PCE groundwater contamination is above the MCL in MW-17 and MW-17A the extent of the PCE groundwater plume was not delineated with this sampling investigation, and has been shown to impact the neighboring properties to the west of the former dry cleaner. Based on the sampling to date, the PCE and TCE plumes likely extend below the north parking lots for the houses at 824 and 832 East 25th Street, west of MW-17. Figures and summary tables of the analytical sampling results to date are included in Appendix F.

1.3 Related Geotechnical Investigations

AGEC prepared a geotechnical investigation on the subject property and surrounding properties to the east, north and west (Proposed Gramercy Street Apartments). The report was prepared for Sundance Bay, under AGEC Project No. 1170953, dated January 10, 2018. Environmental sampling was not performed as part of the geotechnical investigation.

2.0 USER PROVIDED INFORMATION

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

- A. Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).
- B. Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).
- C. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).
- D. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).
- E. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).
- F. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

A questionnaire was provided to the user of this ESA, Ogden City Business Development, seeking responses to these items (Appendix B). AGECEC did not receive a completed user questionnaire.

3.0 SUBJECT PROPERTY DESCRIPTION

3.1 Location and Legal Description

The subject property is located in the southeast quarter of Section 28, Township 6 North, Range 1 West, Salt Lake Base and Meridian at 856 East 25th Street in Ogden, Utah. See Figures 21 and 22.

According to records obtained from the Weber County Recorder's Office, the subject property is located on one parcel (Figure 22). The legal description for the subject property, based on records obtained from the Weber County Recorder's office, is as follows:

Parcel No. 01-059-0012

PART OF LOT 2, BLOCK 8, PLAT B, OGDEN CITY SURVEY, WEBER COUNTY, UTAH: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 2, RUNNING THENCE NORTH 10 RODS; THENCE EAST 6 RODS; THENCE SOUTH 10 RODS; THENCE WEST TO THE PLACE OF BEGINNING.

3.2 Property Tax and Recorder Records

A review of the Weber County Tax Assessor records indicates that the subject property is located on one parcel (Figure 22). Parcel No. 01-059-0012 contains 0.38 acres at 856 East 25th Street and is owned by 4-C Properties LC.

3.3 Site Conditions, Uses and Characteristics

At the time of our field reconnaissance on March 10, 2021, the subject property was occupied by a one-story, 4,100-square-foot, masonry-block commercial building with a flat composite roof (Photographs 1 to 6) at 856 East 25th Street. The building was occupied by Forsey (4-C) Laundry and Cleaners, a retail laundry business. Interior finishes generally consist of painted drywall and painted masonry block. Floor coverings consist of vinyl tile over concrete and exposed concrete, except the north storage room, which is carpeted. The room on the north end of the building is being used to store commercial washer and dryer parts, ducting and miscellaneous items (Photographs 7 to 10). Various cleaning and

lubricating chemicals and containers reportedly containing used oil are located on a shelving unit on the east side of the room (Photographs 11 to 13). The ceiling in the northeast portion of the room has some water damage (Photograph 14). A maintenance area is located along the east wall of the building, behind the east bank of washing machines (Photographs 15 to 18). Floor and roof drains located in the maintenance area are reportedly connected to the municipal sewer system (Photographs 19 and 20). An office/drive-thru service area is located on the south end of the building (Photographs 21 and 22). The center portion of the building contains the main washing/drying room (Photographs 23 to 27). Washing and drying machines are located along the east, north and west sides of the room with an island of machines in the center portion. A mechanical room containing a gas-fired boiler and furnace are in the northwest portion of the main washing room (Photographs 28 to 30). The historical dry-cleaning equipment was stored in this room. Floor drains in the mechanical room and behind the west bank of laundry machines are reportedly connected to the municipal sewer system (Photographs 31 to 34). Two restrooms are located in the west-center portion of the building (Photographs 35 and 36).

An asphalt-paved parking lot extend south, west and northwest of the building (Photographs 37 to 42). No storm drain inlets were observed in the parking areas. The building is connected to municipal water, sewer and natural gas utilities, presumably from 25th Street to the south.

Due to the age of the building (1961), it may have been constructed with asbestos-containing building materials, lead-based paints, mercury-containing light switches or fluorescent light ballasts with PCBs. Vegetation on the property is limited to lawn landscaping on the south property edge.

During our site visit, no evidence of significantly stained soils or stressed vegetation was observed. No evidence of hazardous materials, above-ground or underground storage tanks, unidentified vessels, odors or pools of liquid were observed on site. A 55-gallon drum of purge water from the monitoring wells is temporarily stored on the north side of the building. Monitoring wells previously installed by AGECE are located in the parking areas. Injection wells, gas and oil extraction wells, irrigation wells, and water-withdrawal wells were not observed on site. Overhead power lines extend across the north and south sides of the property (Photographs 2 and 43). A pole-mounted electrical transformer is

near the northwest corner of the property (Photograph 44). The transformer did not appear to be leaking and should not contain poly-chlorinated biphenyls (PCBs). A trash dumpster is north of the building (Photographs 45 and 46).

The property is relatively flat with a gentle slope down to the west. The U.S. Geological Survey quadrangle map and the topography shown on Figure 9 indicate the elevation for the site is approximately 4,400 feet above mean sea level. Photographs of the site were taken in various locations and are included in Appendix A.

3.4 Adjacent Property Conditions and Uses

South of the property is 25th Street, a wide, two-lane asphalt-paved road with concrete curbs, gutters and sidewalks (Photographs 47 and 48). South of the road are houses at 879 and 873 East 25th Street, Rich Gallegos Law Offices at 863 East 25th Street and Cheveux Salon at 855 East 25th Street (Photograph 49 to 51). To the southwest is Gramercy Avenue.

To the west is a two-story, wood-framed apartment building with a full depth basement at 846 East 25th Street (Photographs 52 to 54). The 1,976-square-foot building has ten one-bedroom apartment units. North of the building is an asphalt-paved parking lot with a storm drain and a 2,262-square-foot masonry-block garage for seven cars (Photographs 55). The west end of the garage has been used as a shop in the past.

East of the laundry and to the north are vacant undeveloped commercial lots that have been cleared of buildings in the past 5 years (Photograph 56).

3.5 Physiographic Site Conditions

3.5.1 Geologic Conditions

The Geologic Map of the Ogden 7.5' Quadrangle, Weber and Davis Counties, Utah, compiled by Adolph Yonkee and Mike Lowe in 2004 was reviewed. The subject property is mapped as Qd₃ - Quaternary deltaic deposits, Bonneville regressive consisting of foreset beds of rhythmically interlayered, gently inclined, fine to medium sand and silt, and topset beds of clast-supported, moderately to well-sorted, pebble and cobble gravel and gravelly sand; gravels contain rounded to subrounded clasts; deposited when Lake Bonneville was at and regressing from Provo shoreline.

The subject property is located in the Weber Delta district in the northern Wasatch Front on the eastern edge of the Basin and Range physiographic province. The Weber Delta is bounded by the Wasatch Mountains to the east and the Great Salt Lake to the north and west.

Ogden was covered by Lake Bonneville in the Pleistocene. This lake reached a maximum water elevation of approximately 5,200 feet above mean sea level. Sediments deposited in Lake Bonneville range from sand and gravel to silt and clay. The silt and clay generally represent sediments deposited during deep water conditions away from canyon mouths and the mountain front. The lake sediments are overlain, in part, by alluvial deposits. The sand and gravel deposited in Lake Bonneville generally represent near shore sediments and deltaic deposits near canyon mouths.

3.5.2 Hydrogeological Setting

During environmental and geotechnical investigations in the vicinity of the property, subsurface water was measured at approximately 7 to 9 feet below the ground surface with a gradient to the west.

A search of the Utah Division of Water Rights database was conducted to determine the location of water rights diversions within $\frac{1}{4}$ mile of the center of the property. There are two water rights points of diversion within $\frac{1}{4}$ mile of the center of the property. The Utah Division of Water Rights records indicate that the water rights are for domestic and irrigation purposes. There are no water rights listed on the subject property. A list of water rights points of diversion is included as Appendix C.

3.5.3 Surface Water

Surface water including pits, ponds and lagoons were not observed on the subject property.

3.5.4 Flood Hazard Potential

The on-line Federal Emergency Management Agency (FEMA) flood insurance rate map for the surrounding area (FEMA Map Panel 49057C0427E, effective on December 16, 2005) was reviewed. The subject property is not located within a mapped 100 or 500-year flood hazard area. The subject property is mapped as Zone X, an area determined to be outside the 0.2% annual chance floodplain.

3.5.5 Wetlands Map Review

The National Wetlands Inventory (NWI) maps produced by the U.S. Fish & Wildlife Service (FWS) are microfilmed by the United States Geological Survey (USGS). Wetland maps are prepared primarily by stereoscopic analysis of high altitude aerial photographs. Wetland areas are noted on the photographs based on interpretation by the FWS of vegetation, visible hydrology, and geography.

The online Wetlands Interactive Mapper, as provided by the FWS was reviewed for depicted information of wetland areas on the subject site. This map did not indicate the presence of wetlands on the subject site. AGEC personnel did not observe apparent evidence of wetlands during the subject site and vicinity reconnaissance.

3.5.6 Soil Survey Characterization

The United States Department of Agriculture Soil Survey of the Davis-Weber Area indicates that the subject property is located within an unmapped developed portion of Ogden. During the geotechnical investigation, up to approximately 3 ½ feet of fill was encountered in the borings. The natural soil encountered below the pavement materials and fill consists primarily of lean clay and clayey sand. Silty sand was encountered in most borings between depths of approximately 5 and 15 feet. Lean clay was encountered below the silty sand and generally extends the full depth investigated.

4.0 HISTORICAL REVIEW

A historical review of the property and surrounding properties was conducted by reviewing county tax assessor records, historical topographic maps from 1955, 1969, 1975, 1986, 1992, 1998 and 2011, Sanborn fire insurance maps from 1906, 1950, 1956 and 1963, local street directories (1925 to 2017), historical aerial photographs, previous environmental assessments and performing interviews.

4.1 Past Uses of the Property

Based on historical aerial photographs, Polk city directories, Sanborn Fire Insurance maps (Appendix D), tax appraisal cards (Appendix E) and interviews, a house at 856 East 25th Street was built on the subject property by 1906 and was converted into the East Side Nursing Home by the mid 1950s. The house/nursing home was removed by 1961 and

replaced with the existing laundry facility at 856 East 25th Street. The building was occupied by Norge Cleaning Village/Meyer's Norge Village from the 1960s to the late 1980s. The north wing of the building was added in the late 1960s/early 1970s. In the late 1980s, the business name changed to Forsey's Norge self serve laundry and then Forsey's Laundry and Cleaning Village, 4-C's Wash Basin and Four Seasons Laundromat. We understand that dry cleaning has not been performed on site since about 1987.

4.2 Past Uses of the Adjoining Properties

In 1907, a sawmill was built to the northeast between 24th and 25th on Quincy Avenue and the Wheelwright Lumber was eventually moved from their previous location on Washington Boulevard to Quincy Avenue. The 1925 directory lists Wheelwright Construction Company at 2449 Quincy Avenue and Wheelwright Lumber Company at 2551 Quincy Avenue. The 1906 Sanborn map shows a wood-framed "kindling wood cutting" and "wood sawing" building at 2471 Quincy Avenue and several dwellings on the west center of the block. The Wheelwright Planing Mill is listed in the Polk directories at 2455 Quincy Avenue by 1939. 2445 Quincy Avenue is listed in 1941 as Wheelwright Construction Company and by Malan-Wheelwright Investment Company in 1944 and 1946 and a resident in 1951 and then not listed again. From 1954 to the early 1970s, Wheelwright Planing Mills and Lumber Company or Wheelwright Lumber is listed at 2451-2459 Quincy Avenue. In 1975, Tiger Lumber Sales is listed at 2451 Quincy Avenue while Wheelwright Lumber Company is listed at 2459 Quincy Avenue. Wheelwright Lumber vacated the building in the mid 2000s. When AGECE visited the property in 2015, the remaining Wheelwright Lumber building was a large vacant warehouse/office building in the east center of the property.

The 1950, 1956 and 1963 Sanborn maps indicate the lumber buildings include a planing mill with a concrete floor, a cold storage shed and numerous lumber sheds. Paints were stored in the northeast corner of the main warehouse. The masonry block building was built in 1977. Most of the western sheds were built by the 1950s. A 2005 Phase 1 Assessment on the Wheelwright Lumber property indicated that the buildings for Wheelwright Lumber included a masonry block office, sales and warehouse building with a partial basement and a wood-framed yard office. Out buildings on the west center included a masonry block door shop building, a paint shop and storage sheds. A lime/cement storage area, a wood-staining shop with stains on the concrete floor and a paint shop with overspray on the walls were observed at that time. Most of the western

buildings were removed around 2011. The remaining lumber yard buildings were removed in 2016.

Duplexes were built to the east at 868/870 and 872/874 East 25th Street by the 1920s, replacing older houses at 870 and 874 East 25th Street. The building at 868 East 25th Street was occupied by Ruby's Holiday Gift Shop/Ruby's Yard and Gift House in the mid 1960s. The duplexes were removed in 1974 when an office at 868 East 25th Street was built. The office was occupied by an anesthesiologist, Coldwell Diversified Financial Services, Check Rite, Collection Management Agency, DMT Painting, Associated Financial Systems, Warner Law Firm and Utah Legal Recovery Services until the building was removed in 2016. A brick house on the southeast corner of the block at 886 25th Street was built by 1906. The address of the building was later changed to 2471 and 2475 Quincy Avenue. The south end of the building is indicated as a store in the 1950 and 1963 Sanborn maps. The city directories indicate the business was a grocery (Al's Corner Grocery and Watkins Food Market) in the 1930s and 1940s and then Weldon's Barber Shop from the late 1950s to the mid 1970s when the house and shop were removed.

Houses and a restaurant to the north of the subject property at 837, 853, 859 and 869 East 24th Street were removed by 1954 when a Safeway store was built at 847 East 24th Street. The Safeway store was removed and replaced with a shopping center at 851 24th Street in 1964. The building was occupied by a Safeway grocery and Skaggs/Osco and then a Payless drug store. The Safeway section of the building was occupied with a Farmer's Jack grocery store by 1987 and then an IGA Super Store by 1990. The grocery store vacated the west end of the shopping center in 1994 and this portion of the building remained vacant until the building was removed in 2019. Rite Aid occupied the east end of the building in the late 1990s.

The adjacent property to the west at 846 East 25th Street was occupied by a one-story, wood-framed house by 1906. The house was removed by the early 1950s and replaced with the existing apartment building. The Weber County Assessor indicates the apartments were built in 1950. The garage north of the apartment building was constructed by the late 1950s. Polk city directories from 1979 and 1980 indicate the rear of the property (the west end of the garage) was occupied by Winfree's Furniture Strip Shop.

On the south side of 25th Street, a store was built to the west-southwest at 801 East 25th Street by 1906. Houses and duplexes were built east of the store at 811/813, 819/821, 823, 825, 835, 837, 853 and 863 East along the south side of 25th Street by 1906. The houses at 873 and 879 East 24th Street were built in 1918 and 1915, respectively. The store at 801 East 25th Street was replaced with a residence at 803 East 25th Street by 1921. The house was converted to a store at 803 East 24th Street by 1938. The store was occupied by AM Food Stores until the mid 1950s, S & H Green Stamps from late 1950s to early 1960s, General Electric Care-Free Laundry by 1964 to the late 1960s, Salvation Army Thrift Store from early 1970s to early 1990s, Ogden Rescue Thrift store in the mid 1990s and El Rodeo in the early 2000s. The duplexes at 811 to 821 East 25th Street were converted to apartments by the 1930s and were removed in the late 1980s. The houses at 823 and 825 East 25th Street were removed in the late 1970s and replaced with the building at 825 East 25th Street. The building has been occupied by Intermountain Printing, Document Systems Corp, Webco, Ventanas Restaurant, Dolphin Restaurant, Los Portales de Guanajuato restaurant and El Angel restaurant. The houses at 835 and 837 were removed in the late 1980s and early 1990s, respectively, for the restaurant parking lot. The house at 855 East 25th Street was replaced with a Phillips 66 gas station in 1960. The gas station closed by the mid 1970s and the building was occupied by Mountain West Ambulance in the late 1970s, Weber Emission Tech Center in the early 1990s, Weber County Health Department in 2000 and salons in the early 2000s. The house at 863 East 25th Street has been occupied by law offices since the early 1970s. The house at 873 East 25th Street was built in 1918 and the house at 879 East 25th Street was built in 1915.

The property south of the southeast corner of the block at 2501 Quincy Avenue was occupied by a gas station (Continental Oil from 1925 to early 1930s, LeRoy Johnson gas and oil from early 1930s to late 1930s, Johnson's Conoco from late 1930s to late 1960s, Quincy Conoco in the early 1970s and H&S Service from mid 1970s to 1990s) from at least 1925 to 1992 when the registered underground tanks were removed. The gas station building was rebuilt in 1957. From 1992 to 2017 auto repair shops occupied the property with Cocoltzi Muffler Service occupying the property from 2004 to 2017. The building was removed by 2018.

4.3 Aerial Photograph Review

Aerial photographs taken of the property and surrounding areas in 1937, 1946, 1952, 1958, 1962, 1965, 1971, 1975, 1978, 1980, 1981, 1985, 1987, 1990, 1993, 1997,

2000, 2003, 2006, 2009, 2012, 2014, 2016, 2018, 2019 and 2020, were reviewed for the study.

A brief description of conditions and changes observed on and adjacent to the site, based on our review of photographs is given below.

September 16, 1937 - Photograph No. 2-22 (Figure 1) - A house is present on the property at 856 East 25th Street. Houses and trees are to the west. The Wheelwright lumber buildings are to the northeast. Several lumber buildings, garages and trees are in the middle of the block. Houses are south of 25th Street. Individual details of the buildings are difficult to discern due to the relatively low resolution of the photograph.

August 10, 1946 - Photograph No. 2B-179 (Figure 2) - The property conditions and surrounding conditions appear to be similar to those in 1937.

August 30, 1952 - Photograph No. 2K-78 (Figure 3) - It appears the adjacent house to the west has been removed and replaced with the existing apartment building. Lumber storage buildings have been built adjacent to the north.

May 26, 1958 - Photograph No. 10V-173 (Figure 4) - The garage has been built to the west. The Safeway store has been built on the north center of the block. The gas station to the southeast at 2501 Quincy Avenue has been rebuilt.

April 13, 1962 - Photograph No. 4-60 (Figure 5) - The dry cleaner building has been built on the subject property, replacing the house. The gas station to the south has been built at 855 East 25th Street.

May 29, 1965 - Photograph No. 3FF-71 (Figure 6) - The Safeway store and the stores and houses on the northwest end of the block have been removed and replaced with a shopping center and parking lots.

October 10, 1971 - Photograph No. 1MM-169 (Figure 7) - The dry cleaner building has been expanded to the north.

April 21, 1975 - Photograph No. 3-27 - The two duplexes to the east have been removed and replaced with an office building.

August 24, 1978 - Photograph No. 178-44 (Figure 8) - The main masonry block Wheelwright Lumber building has been built on the east side of the block.

April 13, 1980 - Photograph No. 07-275 - Several houses on Quincy Avenue have been removed for more lumber storage.

August 4, 1981 - Photograph No. 107-22 - The property conditions and surrounding conditions appear to be similar to those in 1980.

1985 - Photograph No. 26-6N-1W (Figure 9) - The southwest end of the shopping center building to the north has been expanded. The gas station to the south at 855 East 25th Street has been removed for the salon building.

July 24, 1987 - Photograph No. 305-12 (Figure 10) - The property conditions and surrounding conditions appear to be similar to those in 1985.

May 6, 1990 - Photograph No. 6-6 - The property conditions and surrounding conditions appear to be similar to those in 1987.

August 14, 1993 - Photograph 5903-261 (Figure 11) - The property conditions and surrounding conditions appear to be similar to those in 1990.

October 4, 1997 - Photograph 10103-137 (Figure 12) - The property conditions and surrounding conditions appear to be similar to those in 1993.

September 1, 2000 - Photograph D-8 - The property conditions and surrounding conditions appear to be similar to those in 1997.

September 21, 2003 - Photograph No. 12TVL185630 (Figure 13) - The property conditions and surrounding conditions appear to be similar to those in 2000.

September 23, 2006 - Photograph No. 12TVL160600 (Figure 14) - The lumber buildings on the east side of the block appear to be vacant and the lumber has been removed from the storage yards and the southeast end of the block.

April 22, 2009 - Photograph No. 12TVL180620 (Figure 15) - The property conditions and surrounding conditions appear to be similar to those in 2006.

April 7, 2012 - Photograph No. 12TVL180620 (Figure 16) - The lumber sheds to the north and east have been removed.

October 8, 2014 (Figure 17) - The property conditions and surrounding conditions appear to be similar to those in 2012.

August 28, 2016 (Figure 18) - The remaining Wheelwright lumber buildings to the east have been removed.

May 4, 2018 - The office to the east has been removed. The Cocoltzi Muffler building at 2501 Quincy Avenue has been removed.

August 7, 2019 (Figure 19) - The property conditions and surrounding conditions appear to be similar to those in 2018.

April 10, 2020 - Most of the shopping center to the north has been removed.

September 11, 2020 (Figure 20) - The remaining portion of the shopping center to the north has been removed.

5.0 ENVIRONMENTAL RECORDS REVIEW

The environmental records review is performed by obtaining and reviewing the most recent versions of the publically available databases provided by the US EPA, the Utah Department of Environmental Quality and other state or local agencies. The databases are reviewed to help indicate the presence of recognized environmental conditions in connection with the subject property. Most of the databases are currently available on the internet. The lists are limited to information in the databases at the time the lists were compiled and may not necessarily be practically reviewable or accurate. We have made no independent investigation as to the accuracy or completeness of the information derived from these databases. We have assumed that the information provided by these databases is accurate and complete.

5.1 Federal NPL Site List

The National Priorities List (NPL) of August 31, 2020, was reviewed for sites listed within 1 mile of the property. The NPL is an information and management tool of the Superfund site cleanup process. The NPL sites are those considered by EPA to have the highest priority for cleanup pursuant to the EPA's Hazard Ranking System and have been targeted for long term remediation under the Superfund program. The NPL serves primarily informational purposes, identifying for the States and the public those sites or other releases that appear to warrant remedial actions.

Our review of the list finds no NPL sites located within 1 mile of the subject property being investigated.

5.2 Federal Delisted NPL Site List

The National Priorities List (NPL) of August 31, 2020, was reviewed for NPL sites that have been delisted within ½ mile of the property. Sites are deleted from the NPL list under the following conditions: Section 300.425(e) of the NCP provides that sites may be deleted from the NPL where no further response is appropriate. In making a determination to delete a site from the NPL, EPA shall consider, in consultation with the State, whether any of the following criteria have been met: responsible parties or other persons have implemented all appropriate response actions required; all appropriate Fund-financed (Hazardous Substance Superfund Response Trust Fund) response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or the remedial investigation has shown that the release poses no significant threat to public

health or the environment and, therefore, the taking of remedial measures is not appropriate. Even if a site is deleted from the NPL, where hazardous substances, pollutants, or contaminants remain at the deleted site above levels that allow for unlimited use and unrestricted exposure, EPA policy requires that a subsequent review of the site be conducted at least every 5 years after the initiation of the remedial action at the deleted site to ensure that the action remains protective of public health and the environment. If new information becomes available which indicates a need for further action, EPA may initiate or order remedial actions.

Our review of the list finds no delisted NPL sites within ½ mile of the property.

5.3 Federal SEMS/CERCLIS Site List

The EPA Comprehensive Environmental Response, Compensation and Liability Act Information System (CERCLIS) has been retired by the EPA and replaced with the Superfund Enterprise Management System (SEMS). SEMS includes the previous CERCLIS information and has added additional data fields. The SEMS listing of March 15, 2021, was examined for sites located within ½ mile of the subject property. This list reports facilities with potential to cause human health or safety problems or significant ecological or environmental damage.

Our review of the list finds no SEMS/CERCLIS sites located within ½ mile of the property being investigated.

5.4 Federal SEMS-Archive/CERCLIS NFRAP Site List

The EPA CERCLIS No Further Remedial Action Planned (NFRAP) is now known as the SEMS-Archive. The SEMS-Archive site listing of March 15, 2021, was examined for sites located within ½ mile of the subject property. The Archive designation indicates the site has no further interest under the Federal Superfund Program based on available information. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. The Archive designation is removed and the site is returned to the CERCLIS inventory if more substantive assessment and/or any cleanup work is necessary under the Federal Superfund program.

Our review of the list finds one SEMS-Archive/CERCLIS-NFRAP site located within ½ mile of the subject property at Hoffmans Modern Dry Cleaning at 2475 Monroe Blvd./790 East 25th Street, approximately 500 feet to the west and down gradient. A historical dry-cleaning operation, Hoffman’s Modern Dry Cleaning, was present at this location from at least 1958 to 1987 within a residential neighborhood. The property is adjacent to a multi-tenant apartment building. The site was discovered on the basis of its operational history by the Utah Department of Environmental Quality (UDEQ). No releases of hazardous substances have been reported or confirmed at the site. The surface water, air, and soil pathways did not appear to be a concern based on the limited information gathered to date. Groundwater would be expected to be the most viable exposure pathway, but there were no down gradient municipal wells and the closest up gradient municipal well, which is now inactive, has historically shown no signs of contamination. Because contamination with volatile organics is possible given the site history, on-site soil sampling and/or shallow groundwater sampling could help determine potential vapor intrusion concerns on or near the site. At the time of this decision (October 2016), vapor intrusion was not an HRS eligible pathway and there appeared to be no firm basis for conducting an additional investigation. The site was added to the NRFAP list in October 2016.

5.5 Federal RCRA CORRACTS Facility List

The EPA RCRA CORRACTS List of January 30, 2021, was reviewed for facilities within 1 mile of the site. Facilities are listed if they are hazardous waste handlers who have been notified by the EPA to undertake corrective action under RCRA.

Our review of the list finds no RCRA CORRACTS sites listed within 1 mile of the property.

5.6 Federal RCRA NON-CORRACTS TSD Facility List

The EPA RCRA NON-CORRACTS TSD List of January 30, 2021, was reviewed for facilities within ½ mile of the site. Facilities are listed if they treat, store or dispose of hazardous waste as defined and regulated by RCRA. This list does not infer that the facility has released any hazardous substance to the environment.

Our review of the list finds no RCRA non-CORRACTS TSD facilities within ½ mile of the subject property.

5.7 Federal RCRA Generators List

The EPA RCRA Generator List dated January 30, 2021 and the Utah Division of Waste Management and Radiation Control (DWMRC) RCRA Info Master list of March 1, 2021, were reviewed for facilities on or adjacent to the subject property. Facilities are listed if they generate, transport or store hazardous materials as defined and regulated by RCRA. The list does not infer that the facility has released any hazardous substance to the environment.

Our review of the list finds one RCRA generators listed on the subject property and one facility adjacent to the north.

- A. Meyers Cleaning Village - 856 25th Street, subject property. The building was occupied by Norge Cleaning Village/Meyer's Norge Village from the 1960s to the late 1980s. In the late 1980s, the business name changed to Forsey's Norge self serve laundry and then Forsey's Laundry and Cleaning Village, 4-C's Wash Basin and Four Seasons Laundromat. We understand that dry cleaning has not been performed on site since about 1987 (Appendix F). The property is listed on the RCRA Generator list for Meyers Cleaning Village at 856 25th Street. The facility was a small quantity generator of hazardous waste.

- B. Rite Aid - 851 24th Street, adjacent to the north and not up gradient. The facility was a conditionally exempt small quantity generator (Appendix G) of hazardous waste including discarded or expired consumer products and pharmaceuticals. The facility was inspected by the Utah DWMRC in October 2015 and was in compliance with the hazardous waste storage. Contingency plans and associate training records were subsequently submitted by Rite Aid as they were missing during the inspection.

5.8 Federal Institutional Control/Engineering Control Registry

The EPA federal institutional control(IC) registry for March 2021 was reviewed. The federal database of ICs at construction complete (CC) sites listed on the National Priorities List is known informally as the Institutional Controls Tracking System (ICTS). ICs such as deed restrictions, zoning and local ordinances are tools used to ensure the protection of human populations and the environment at many contaminated sites. ICs are meant to supplement engineering controls and ICs will rarely be the sole remedy at a site. There is no federal

engineering control (EC) registry. Engineering controls include items such as soil caps, fences to help restrict access to contaminated properties. Sites with institutional control or engineering controls would typically be included on the SEMS/CERCLIS, VCP, LUST or Brownfield lists.

Our review of the registries finds no federal institutional controls or engineering controls on the subject property.

5.9 Federal NRC List

The US Coast Guard National Response Center (NRC) list dated March 15, 2021, was reviewed for sites located on or adjacent to the subject property. The list was formerly maintained by the EPA as the Emergency Response Notification System (ERNS) and was redesigned in 2000 with the data now residing at the NRC. The primary function of the National Response Center is to serve as the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. In addition to gathering and distributing spill data for Federal On-Scene Coordinators and serving as the communications and operations center for the National Response Team, the NRC maintains agreements with a variety of federal entities to make additional notifications regarding incidents meeting established trigger criteria.

Our review of the list finds no NRC sites listed on or adjacent to the subject property being investigated.

5.10 DERR Incident Notification Database

The Utah DERR Incident Notification Database list dated March 15, 2021, was reviewed for sites within $\frac{1}{8}$ mile of the subject property. This list is a compilation of phone calls to the Utah DERR concerning potentially hazardous materials that may have been accidentally or negligently released, including spills, leaks, illegal dumping, fish kills and fires.

Our review of the list finds one DERR Incident site listed adjacent to the subject property at Rite Aid at 851 24th Street to the north and not up gradient. In May 2008, a complaint was made from a patron of Rite-Aid about burning of the throat and strong odors. Subsequent air sampling by the Weber-Morgan Health Department indicated that ammonia was present inside and outside of the building (Appendix H). No further information about the source of the ammonia was described.

5.11 State and Tribal Equivalent NPL List

Utah does not have a state-equivalent NPL list and relies on the EPA list.

5.12 State and Tribal Equivalent CERCLIS List

Utah does not have a state-equivalent CERCLIS list and relies on the EPA list.

5.13 State and Tribal Landfill and/or Solid Waste Disposal Site List

The open and closed Utah State Landfill and Solid Waste Disposal Site lists of 2019, were reviewed for landfills or disposal sites within ½ mile of the subject property.

Our review of the list finds no landfills within ½ mile of the subject property.

5.14 Utah Department of Environmental Quality Leaking Underground Storage Tank (LUST) Sites

The Utah Department of Environmental Quality Leaking Underground Storage Tank (LUST) list dated March 15, 2021, was reviewed for sites within ½ mile of the subject property. The list identifies only those facilities that have been reported to the DERR as potential leaking underground storage tank sites. The list is limited to information in the data base at the time the list was printed.

Our review of the list finds 11 sites listed on the LUST list within ½ mile of the property being investigated including two sites adjacent to the subject property.

- A. AdSCO Services - 855 25th Street - approximately 100 feet to south-southwest and not up gradient. Two tanks (10,000-gallon gasoline and 1,000 gallon waste oil) were removed from this facility in August 1991. Groundwater contamination was detected at that time. In August 1994, the groundwater was resampled and no contaminants were detected above the laboratory method detection limits. The groundwater was approximately 7 feet below the ground surface. After reviewing the reports documenting the sampling efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200147, release HGV) for this facility was closed in April 1995. No registered underground tanks remain at this facility. Copies of the LUST files are included in Appendix I.

- B. Wheelwright Lumber - 2459 Quincy Avenue - approximately 100 feet to the east and likely up gradient. A 9,000-gallon gasoline tank was removed from this facility

in August 1991 from the south side of the main building. Groundwater contamination was detected at that time and approximately 35 cubic yards of impacted soil were reportedly excavated, aerated on site and placed back in the excavation. Groundwater sampling performed west and down gradient of the tank in 1992 did not detect significant contamination. An adjacent 4,000-gallon gasoline tank was removed in September 1995 and groundwater contamination was also detected at that time. Soil and groundwater sampling performed west and down gradient of the tanks in the fall of 1995 did not detect contamination above the laboratory detection limits. The depth to groundwater was approximately 7 feet with an assumed gradient to the west. After reviewing the reports documenting the sampling and remedial efforts, the DERR recommended that no further action would be required and the two LUST files (DERR facility 1200443, releases HBM and JDV) for this facility were closed in March 1998. No registered underground tanks remain at this facility. Copies of the LUST files are included in Appendix J.

- C. H & S Services - 2501 Quincy Avenue- approximately 150 feet to the southeast and not up gradient. Four tanks (three 4,000-gallon gasoline and one 500-gallon waste oil) were removed from this facility in September 1992. Groundwater contamination detected during the tank removal activities included TPH-gasoline and benzene with the TPH-gasoline slightly above the Utah Risk Based Corrective Action (RBCA) Tier 1 screening levels. The groundwater was approximately 11 feet below the ground surface.

Soil contamination detected during the tank removal activities was limited to TPH-gasoline (16.0 mg/kg) in one sample near the southwest dispenser island and oil and grease (48 and 100 mg/kg) from the two samples below the waste oil tank. The soil contaminants were all below the respective Utah ISL.

After reviewing the reports documenting the sampling efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200074, release HUV) for this facility was closed in September 1999. No registered underground tanks remain at this facility.

AGEC performed subsurface investigations on the property in June and October 2017. Based on the soil samples obtained from the 12 borings, TPH-DRO,

TPH-GRO, oil and grease, ethylbenzene and/or total xylenes were detected above the ISL in samples from five borings with only total xylenes slightly above the RBCA Tier 1 screening levels. Groundwater contamination was limited to one boring with TPH-DRO and oil and grease concentrations above the RBCA Tier 1 screening levels and TPH-GRO above the ISL. Based on the sampling locations, it appears releases to the subsurface soils have occurred near the west side of the previous dispenser islands and near the underground tank basins. The removal of the petroleum-impacted soils was performed in November and December 2018. During the excavation work some remaining capped product piping below the dispenser islands was encountered and removed for recycling. No underground tanks were encountered. A total of 1,173 tons of petroleum-impacted soils were removed for disposal at ET Technologies facility. The impacted soils did not extend off site or below the adjacent streets and sidewalks. The groundwater was encountered approximately 8½ to 9 feet below the ground surface. During the excavation work, an estimated 20,000 gallons of water was pumped from the excavations and subsequently processed in a Baker tank and charcoal filter assembly prior to being discharged to the local sewer system. Subsequent groundwater monitoring at the site has indicated that the contaminant levels have been below the ISL. The LUST file remains open but is expected to be closed with no further action required in 2021. No registered underground tanks remain at this facility.

- D. Chevron/7-Eleven - 883 24th Street - approximately 450 feet to the north-northeast and not up gradient. In August 1988, a subsurface investigation documented the presence of TPH in the soil and groundwater. Groundwater monitoring wells sampled in 1994 indicated that the groundwater contamination had decreased below the Utah Initial Screening Levels (ISL). The groundwater was approximately 7½ feet below the ground surface with a gradient to the west-northwest. After reviewing the reports documenting the sampling and remedial efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200038, release FDR) for this facility was closed in April 1995. No registered underground tanks remain at this facility.
- E. 7-Eleven - 803 24th Street - approximately 500 feet to the northwest and not up gradient. A release of petroleum hydrocarbon contaminants was discovered in August 1998 during underground product piping upgrade activities. An air

sparge/soil vapor extraction system was subsequently installed and operated between March and December 2004. The groundwater was approximately 6 to 7 feet below the ground surface with a gradient to the west-northwest. After reviewing the reports documenting the sampling and remedial efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200230, release KPM) for this facility was closed in August 2006.

A second LUST file (release MSD) was opened at this facility when three registered underground tanks were removed in September 2010. Approximately 24 tons of impacted soil was subsequently removed. After reviewing the reports documenting the sampling and remedial efforts, the DERR recommended that no further action would be required and the second LUST file for this facility was closed in July 2013. No registered underground tanks remain at this facility.

- F. Minut Lube - 806 26th Street - approximately 750 feet to the southwest and not up gradient. Four 3,000-gallon oil tanks were removed from this facility in October 1989. Oil and grease was detected in the tank closure soil samples. A groundwater monitoring well was installed and sampled in May 1990. No contaminants were detected above the laboratory method detection limits. The groundwater was approximately 6½ feet below the ground surface. After reviewing the reports documenting the sampling efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200134, release FMD) for this facility was closed in December 1995. No registered underground tanks remain at this facility.
- G. Valley Meat Market/Stimson's Market - 2605 South Monroe Blvd. - approximately 1,100 feet to the southwest and not up gradient. There have been at least three releases from the tank system at this facility. The first two releases occurred first in 1979 and second in the spring of 1982. These were reported and investigated when the former tank system was removed in October 1989. A subsurface investigation was conducted between November 1990 and March 1991 when 15 borings were advanced and completed as monitoring wells. The sampling results at that time indicated the soil contamination was below the Utah RBCA Tier 1 screening levels. Groundwater was impacted above the Tier 1 screening levels. A bio-sparge system was installed in 1992 and operated until 1995. A third release

was detected during the monitoring of the remedial progress of the other two releases in June 1995 when the contaminant levels increased. The groundwater was approximately 9 to 11 feet below the ground surface with a gradient to the west-northwest. At the time the third release was detected, Stimson's had the tanks emptied and lined to abate the current release and to help prevent future releases. After reviewing the reports documenting the sampling and remedial efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200227, releases FBI and JKJ) for this facility were closed in April 1997.

A third LUST file (release MJU) was opened in June 2008. The four remaining tanks on site were removed in January 2009. In 2009, 3,143 tons of petroleum impacted soil were excavated and removed and approximately 20,000 gallons of impacted groundwater was removed, treated and discharged. A subsurface investigation in February 2016 identified four localized areas where the soil contamination was above the Utah ISL. Approximately 371 tons of impacted soil was removed from the site in September 2016. Weber State University has since re-developed the site with construction of a new Community Education Center and associated parking and landscaped areas. Groundwater monitoring at the site has indicated that a small benzene plume remains on site above the Utah ISL. This LUST file remains open and under investigation. No registered underground tanks remain at this facility.

- H. Red Duck II - 809 28th Street, approximately 2,400 feet to the south and not up gradient. The former Red Duck II site is currently a Fast Stop drive-through convenience store without gasoline/diesel filling services. Prior to 1998, the site was used as a gasoline and diesel filling station. In 2001, a 10,000-gallon gasoline UST, an 8,000-gallon gasoline UST, a 2,000-gallon gasoline UST, a 500-gallon diesel UST, and three dispenser islands were removed from the Red Duck II site. Comments on the UST removal inspection form state that the 500-gallon diesel UST "was punctured during excavation" but the site was "cleaned up." These tanks are recorded as having been installed in 1968 and 1975 and used until 1998. Soil and groundwater analytical results for samples collected during the 2001 tank removal were lost so UST closure soil/groundwater re-sampling was conducted in July 2011. BTEXN, TPH-DRO and TPH-GRO were detected at concentrations below

the ISL in the soil samples. The groundwater contained TPH-GRO concentrations exceeding the ISL and a benzene concentration exceeding the RBCA Tier 1 screening level. Based on these findings a LUST file was opened in August 2011. The groundwater at the site is 8 to 10 feet below the ground surface with a gradient to the west-northwest. Additional sampling in May 2012 detected soil and groundwater contamination above the Utah RBCA Tier 1 screening levels. No further action has been reported to the DERR and the LUST file (DERR facility 1200062, release MUZ) remains open. No registered underground tanks remain at this facility.

- I. Flying J - 2490 Harrison Boulevard - approximately 2,500 feet to the east and potentially up gradient. Five tanks were removed from this facility in August 1994. Approximately 750 tons of impacted soil was subsequently removed. Groundwater monitoring wells sampled in November 1999 did not detect contamination above the Utah RBCA Tier 1 screening levels. The groundwater was between 9 and 12 feet below the ground surface with a gradient to the west. After reviewing the reports documenting the sampling and remedial efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200056, release IJV) for this facility was closed in February 2000. No registered underground tanks remain at this facility.
- J. Imagine Jefferson/Former Ogden School District Shop - 2444 Adams Avenue - approximately 2,600 feet to the west and not up gradient. Two tanks were removed from this facility in April 2016 when they were encountered during the construction of a sidewalk. Soil contamination detected at that time was below the Utah ISL. Based on a review of the sampling results, the DERR recommended no further corrective action be taken at this time and the LUST file (DERR facility 1200639, release NKD) at this facility was closed in May 2016. There are no registered tanks remaining at this facility.
- K. Kwick Stop - 506 26th Street - approximately 2,600 feet to the southwest and not up gradient. Five tanks were removed from this facility in December 2005. Soil contamination was detected at that time. With the exception of a small volume, the impacted soils were not contaminated above the Utah RBCA Tier 1 screening levels. Groundwater was not encountered during the tank removal activities or subsequent

subsurface investigations. After reviewing the reports documenting the sampling efforts, the DERR recommended that no further action would be required and the LUST file (DERR facility 1200281, release MAU) was closed in September 2006. No registered underground tanks remain at this facility.

5.15 Utah Department of Environmental Quality Underground Storage Tank (UST) Sites

The DERR UST list of March 15, 2021, was reviewed for sites on or adjacent to the subject property. This is a list of registered USTs in the State of Utah. The list is limited to information in the database at the time the list was printed.

Our review of the list finds two UST adjacent to the subject property.

- A. Adscos Services - 855 25th Street - adjacent to south and not up gradient. Two tanks (10,000-gallon gasoline and 1,000-gallon waste oil) were removed from this facility in August 1991. The tanks were installed in the early 1960s. No registered underground tanks remain at this facility (Appendix I).
- B. Wheelwright Lumber - 2459 Quincy Avenue- adjacent to east-northeast of subject property. A 9,000-gallon gasoline tank was removed in August 1991 and a 4,000-gallon gasoline tank was removed in September 1995 from the south side of the main building. The tanks were installed around 1978-1979. No registered underground tanks remain at this facility (Appendix J).

5.16 State and Tribal Institutional Control/Engineering Control Registry

The March 2021 list of facilities maintained by the Utah Department of Environmental Quality of sites with institutional control or engineering controls was reviewed for facilities on the subject property.

Our review of the list finds no institutional controls, engineering controls or environmental covenants on the subject property.

5.17 State and Tribal Voluntary Cleanup Sites

The Utah DERR Voluntary Cleanup Program (VCP) list of November 18, 2020, was reviewed for facilities within ½ mile of the subject property.

Our review of the list finds no sites on the VCP list within ½ mile of the subject property.

5.18 State and Tribal Brownfield Sites

The Utah DERR Brownfield list and EPA Cleanups in my Community website of March 15, 2021, were reviewed for sites within ½ mile of the subject property.

Our review of the list finds no Brownfield sites listed within ½ mile of the subject property.

5.19 Rocky Mountain Power

Rocky Mountain Power (formerly Utah Power and Light) was contacted in regards to transformers in the area. They indicate that all high hazard transformers (> 500 ppm of PCBs) in the State of Utah have been replaced with PCB “free” transformers with less than one ppm PCBs.

6.0 INTERVIEWS

Interviews were conducted with key site managers, past property owners and occupants in order to obtain information indicating recognized environmental conditions in connection with the property.

Priscilla Blackburn, a site manager with Forsey’s Cleaners, was interviewed on site. She indicated that she has worked for Forsey’s for about 6 years and has managed the subject property for about 7 months. She indicated that dry cleaning has not been performed on the site for about 40 years. She was not aware of underground tanks, hazardous materials or environmental concerns on the property.

Dan Forsey, the property owner, was interviewed by telephone. He indicated that his family has owned the subject property for 34 years. The property was previously owned by Jim Patterson who operated a dry-cleaning business at the site for approximately 2 to 3 years after buying the business from Mr. Meyer who operated Meyer’s Dry Cleaning at the site. An old dry-cleaning machine was present in the building when Mr. Forsey purchased the property. The machine was subsequently disassembled and removed. No dry cleaning chemicals were present in the machine or on the property at that time. Mr. Forsey indicated he removed some asphalt paving to provide for construction of the existing concrete pavement leading to the north (secondary) entrance to the building. The soil beneath the removed asphalt was reportedly stained, possibly indicating a release of dry-cleaning chemical. Mr. Forsey indicated there are no underground or above-ground

storage tanks on the property. No fires, floods, spills or mold have been observed. He was not aware of environmental conditions on the property other than the possibility of a previous release of dry-cleaning chemicals by previous property owners.

Lynsey Mahoskey with the Ogden City Fire Department researched the fire department records and did not find records of hazardous material calls, spills or fires on the subject property.

7.0 DATA GAPS/DEVIATIONS

Data gaps are the lack of or inability to obtain information required by ASTM E-1527-13 despite good faith efforts by AGEC's environmental professional to gather such information. Data gaps and deviations encountered during the preparation of this report were limited to an uncompleted user questionnaire.

8.0 FINDINGS

Based on historical aerial photographs, Polk city directories, Sanborn Fire Insurance maps, tax appraisal cards and interviews, a house at 856 East 25th Street was built on the subject property by 1906 and was converted into the East Side Nursing Home by the mid 1950s. The house/nursing home was removed by 1961 and replaced with the existing laundry facility at 856 East 25th Street. The building was occupied by Norge Cleaning Village/Meyer's Norge Village from the 1960s to the late 1980s. The north wing of the building was added in the late 1960s/early 1970s. In the late 1980s, the business name changed to Forsey's Norge self serve laundry and then Forsey's Laundry and Cleaning Village, 4-C's Wash Basin and Four Seasons Laundromat. We understand that dry cleaning has not been performed on site since about 1987.

The subject property is occupied by a one-story, 4,100-square-foot, masonry-block commercial building with a flat composite roof at 856 East 25th Street. The building was occupied by Forsey (4-C) Laundry and Cleaners, a retail laundry business. Interior finishes generally consist of painted drywall and painted masonry block. Floor coverings consist of vinyl tile over concrete and exposed concrete, except the north storage room, which is carpeted. The room on the north end of the building is being used to store commercial washer and dryer parts, ducting and miscellaneous items. Various cleaning and lubricating chemicals and containers reportedly

containing used oil are located on a shelving unit on the east side of the room. The ceiling in the northeast portion of the room has some water damage. A maintenance area is located along the east wall of the building, behind the east bank of washing machines. Floor and roof drains located in the maintenance area are reportedly connected to the municipal sewer system. An office/drive-thru service area is located on the south end of the building. The center portion of the building contains the main washing/drying room. Washing and drying machines are located along the east, north and west sides of the room with an island of machines in the center portion. A mechanical room containing a gas-fired boiler and furnace are in the northwest portion of the main washing room. The historical dry-cleaning equipment was stored in this room. Floor drains in the mechanical room and behind the west bank of laundry machines are reportedly connected to the municipal sewer system. Two restrooms are located in the west-center portion of the building.

An asphalt-paved parking lot extend south, west and northwest of the building. No storm drain inlets were observed in the parking areas. The building is connected to municipal water, sewer and natural gas utilities, presumably from 25th Street to the south.

Due to the age of the building (1961), it may have been constructed with asbestos-containing building materials, lead-based paints, mercury-containing light switches or fluorescent light ballasts with PCBs. Vegetation on the property is limited to lawn landscaping on the south property edge.

During our site visit, no evidence of significantly stained soils or stressed vegetation was observed. No evidence of hazardous materials, above-ground or underground storage tanks, unidentified vessels, odors or pools of liquid were observed on site. Monitoring wells previously installed by AGECE are located in the parking areas. A 55-gallon drum of purge water from the monitoring wells is temporarily stored on the north side of the building. Injection wells, gas and oil extraction wells, irrigation wells, and water-withdrawal wells were not observed on site. Overhead power lines extend across the north and south sides of the property. A pole-mounted electrical transformer is near the northwest corner of the property. The transformer did not appear to be leaking and should not contain poly-chlorinated biphenyls (PCBs). A trash dumpster is north of the building

Government agency inquiry indicates there are no NPL or RCRA CORRACTS sites within 1 mile of the property. There are no delisted NPL, RCRA Non-CORRACTS TSD, SEMS/CERCLIS, landfills, VCP or Brownfield sites within ½ mile of the property. There is one SEMS-Archive/CERCLIS-

NFRAP site within ½ mile of the property at Hoffmans Modern Dry Cleaning at 2475 Monroe Blvd., approximately 500 feet to the west and down gradient.

There are 11 sites listed on the LUST list within ½ mile of the property being investigated including two sites adjacent to the subject property. Our review of the list finds two UST sites adjacent to the subject property. The registered tanks adjacent to the property have been removed.

There is one RCRA Generator on the subject property and one generator adjacent to the property. Meyers Cleaning Village at 856 25th Street on the subject property was a small quantity generator prior to the dry-cleaning operation moving off site by 1987. The current Forsey laundry does not perform dry cleaning on site. The Rite Aid at 851 24th Street to the north and not up gradient was a conditionally exempt small quantity generator of hazardous waste including discarded or expired consumer products and pharmaceuticals.

There are no NRC sites listed on or adjacent to the subject property. There is one DERR Incident site adjacent to the property being investigated at Rite Aid at 851 24th Street. In May 2008 a complaint was made from a patron of Rite-Aid about burning of the throat and strong odors. Subsequent air sampling by the Weber-Morgan Health Department indicated that ammonia was present inside and out of the building. There are no institutional controls or engineering controls on the subject property.

9.0 OPINION

Tetrachloroethylene (PCE) and trichloroethylene (TCE) have been identified in the soil, groundwater and soil vapor on the subject property during environmental investigations by AGECE in 2020 and 2021. Soil samples obtained during the investigations have detected concentrations of 2-Butanone also known as methyl ethyl ketone (MEK) PCE and TCE. The detected concentrations of MEK, TCE and PCE were below the respective residential RSL values. The only VOCs detected above the residential VISL in the soil gas were 1,3-butadiene in sample PRT-2, chloroform in VP-2, naphthalene in VP-1, PCE in PRT-1, VP-1 and VP-2 and trichloroethene (TCE) in VP-1 and VP-2. The concentrations of PCE were significantly higher in the two subslab samples than the exterior PRT samples.

PCE was detected above the laboratory method detection limits in the groundwater samples from MW-2, MW-3, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-17. The analytical test results indicate that the groundwater samples from 12 of the 20 wells contain concentrations of PCE above the November 2020 EPA Maximum Contaminant Level (MCL). The only other compound detected above the laboratory method detection limits was TCE in MW-3, MW-10, MW-12, MW-15 and MW-17 which were above the TCE MCL of 0.005 mg/L. The plumes of PCE and TCE extend off site at least 200 feet to the west. The detected subsurface contamination associated with the dry cleaner is a recognized environmental condition and a potential vapor encroachment condition.

The nearby SEMS-Archive, LUST and UST facilities are unlikely to have impacted the subject property due to the distances, groundwater gradients and remedial activities performed at these sites. Aside from the dry cleaner on the property, a reconnaissance and data base search of properties in the vicinity of the subject property finds no evidence of facilities or environmental conditions that have adversely impacted the subject property or present a potential vapor encroachment condition.

10.0 CONCLUSIONS

We have performed a Phase 1 Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-13 of the property described in the Property Location and Legal Description section of this report. Exceptions to, or deletions from, this practice are described in the Data Gaps/Deviations section of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property with the following exception:

A dry cleaner was located on the subject property at 856 East 25th Street from the 1960s to the 1980s. Dry cleaners commonly used chlorinated solvents that can impact the subsurface soils and groundwater if they are released to the environment. Evidence of dry-cleaning solvents have been detected in the soil, soil vapor and groundwater on the subject property, at concentrations exceeding the residential VISL for soil gas and MCL for the groundwater. Additional work to help delineate the extent of the groundwater contamination is ongoing. The former dry-cleaning business and associated subsurface contamination on the property is a recognized environmental condition and a potential vapor encroachment condition.

11.0 LIMITATIONS

This Phase 1 Environmental Site Assessment has been prepared in general conformance with the scope and limitations of ASTM E 1527-13 and generally accepted practices in this area for the use of the client. The conclusions of the report are based on the information obtained from site visits, previous site assessments, a review of government records, aerial photographs and interviews as described in the report. Except as described in this report, we have made no independent investigation as to the accuracy or completeness of the information derived from these sources. We have assumed that the information provided by these sources is accurate and complete.

The findings and conclusions presented in this report are intended only for the purpose, site specific location and client as indicated. AAI's must be conducted or updated within one year prior to property acquisition. Specific activities required by the final AAI rule that must be performed or updated within 180 days before acquisition of the property include an onsite visual inspection, review of government records, interviews with previous and current site owners, and searches for environmental cleanup liens. No sampling or chemical analysis of structural materials, soil, water or air was performed unless specifically stated. An evaluation of the subsurface soil and groundwater conditions was not performed and therefore is not a definitive study of the potential for contamination on the subject property.

Applied Geotechnical Engineering Consultants, Inc. does not represent that the site contains no hazardous materials or other latent conditions beyond that observed during the site assessment. Changes in the environmental conditions on this property may occur with the passage of time due to natural processes or human activities on or adjacent to this property. In addition, changes in applicable or appropriate standards and regulations may occur, whether the result of legislation, from the broadening of knowledge, or from other reasons. Therefore, the findings and conclusions in this report may be partially or completely invalid due to changes outside of our control. Our findings and conclusions are not presented as scientific certainties, but rather as professional opinions based on the limited data obtained by the assessment.

Applied Geotechnical Engineering Consultants, Inc. has no present or contemplated future ownership interest or financial interest in the real estate that is the subject of this Phase 1 Environmental Site Assessment report; and Applied Geotechnical Engineering Consultants, Inc. has no personal interest with respect to the subject matter of the Phase 1 Environmental Site

Assessment report or the parties involved and Applied Geotechnical Engineering Consultants, Inc. has no relationship with the property or the owners thereof which would prevent an independent analysis of the environmental or other conditions of the property.

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.



Prepared by Thomas R. Atkinson, REPA

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in general conformance with the standards and practices set forth in 40 CFR Part 312.



Reviewed by Douglas R. Hawkes, P.E., P.G.

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

THOMAS R. ATKINSON
Manager / Environmental Professional Services

AGEC
Applied GeoTech

PROJECT RESPONSIBILITY: Project Manager, Environmental Services

As the AGECE Environmental Services Manager, Mr. Atkinson will be responsible for environmental site assessments and environmental sampling in support of AGECE investigations. He will be responsible to complete assigned projects on time and within budget.

EDUCATION: B.S. Geography, Minor, Geology, Northern Arizona University, 1987.
 OSHA Hazardous Waste Training Program - 40 hours, 1989-current.
 ASTM Environmental Site Assessment Course, 1996.
 Utah Groundwater and Soil Sampler (GS-1083), 1997-current.
 Utah Certified UST Consultant (CC-0231), 2010-current.
 NREP Registered Environmental Property Assessor, 2000-current.
 State of Nevada Certified Environmental Manager (EM-1711), 2000-current.

PROFESSIONAL EXPERIENCE:

ENVIRONMENTAL PROFESSIONAL - Applied Geotechnical Engineering Consultants, Inc.
 Sandy, Utah, 1994 to Present

Completed over 1,900 Phase I and Phase II Environmental Site Assessments for apartment complexes, commercial strip malls, office complexes, industrial and manufacturing facilities, communication towers, and an entire downtown block of Salt Lake City. Prepared Utah Voluntary Cleanup Program sampling/analysis plans and conducted investigations of soil contamination for projects in Salt Lake and Summit Counties. Performed numerous subsurface soil and groundwater sampling investigations for gas stations, schools, subdivisions, commercial buildings and utility projects.

SPECIAL PROJECTS MANAGER - Applied Geotechnical Engineering Consultants, Inc.
 Sandy, Utah, 1995 to Present

Managed construction quality control personnel for large earthwork construction projects by interviewing, training and supervising technicians, writing and reviewing daily construction reports and writing final construction reports. Major projects supervised included the Micron facility in Lehi, Utah; Juniper Tailing Expansion at the Santa Fe - Twin Creeks Mine; and Landfill Cell 7 and Pond Closure 3 at the Safety-Kleen Grassy Mountain Facility.

DOUGLAS R. HAWKES, P.E., P.G.

Senior Engineering Geologist/Geotechnical Engineer
 Manager, Engineering Services Group (Sandy)



PROJECT RESPONSIBILITY: Project/Review Engineer

As Engineering Services Manager, Mr. Hawkes, P.E., P.G. is responsible for most of the engineers in the Sandy office of AGEC geotechnical/geological engineering consultation projects. In his capacity as Project/Review Engineer, he is responsible for geotechnical/geologic engineering aspects of assigned projects.

EDUCATION: Bachelor of Science in Engineering Geology.
 Brigham Young University, April 1981

PROFESSIONAL REGISTRATION: Professional Engineer, Utah
 Professional Geologist, Wyoming
 Professional Geologist, Utah

PROFESSIONAL EXPERIENCE:

ENGINEERING GEOLOGIST/GEOTECHNICAL ENGINEER - Applied Geotechnical Engineering Consultants, Inc. Sandy, Utah - 1991 to present.

Supervise the field exploration, laboratory testing, field observation and testing, engineering analysis and report preparation of geologic and geotechnical investigations. Performs the review of environmental site assessments. Projects include the evaluation of earthquake related hazards, landslide and slope stability, debris flow, rockfall and other geologic hazards in areas of proposed development. Geotechnical studies have been completed for commercial, retail and residential buildings, roads, highways, utilities, bridges, dams and other development projects.

ENGINEERING GEOLOGIST - Chen-Northern, Inc., Salt Lake City, Utah - 1981 to 1991

Supervised the field exploration, laboratory testing, field engineering and report preparation for the engineering geology section. Supervised drilling operations at the Salt Lake City office. Projects included an investigation for tunnel and large rock cuts through Provo Canyon, evaluation of rock cuts for various highway projects, geologic hazard studies for a major pipeline and residential and commercial developments, landslide studies, slope stability and earth embankment studies.

PROFESSIONAL SOCIETIES:

Association of Engineering Geologists

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FIGURES



From USDA Aerial Photograph 2-22
September 16, 1937



Approximate Scale
1 inch = 200 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1937 Aerial Photograph of Site

Figure 1



From USDA Aerial Photograph 2B-179
August 10, 1946



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1946 Aerial Photograph of Site

Figure 2



From USDA Aerial Photograph 2K-78
August 30, 1952



Approximate Scale
1 inch = 100 feet

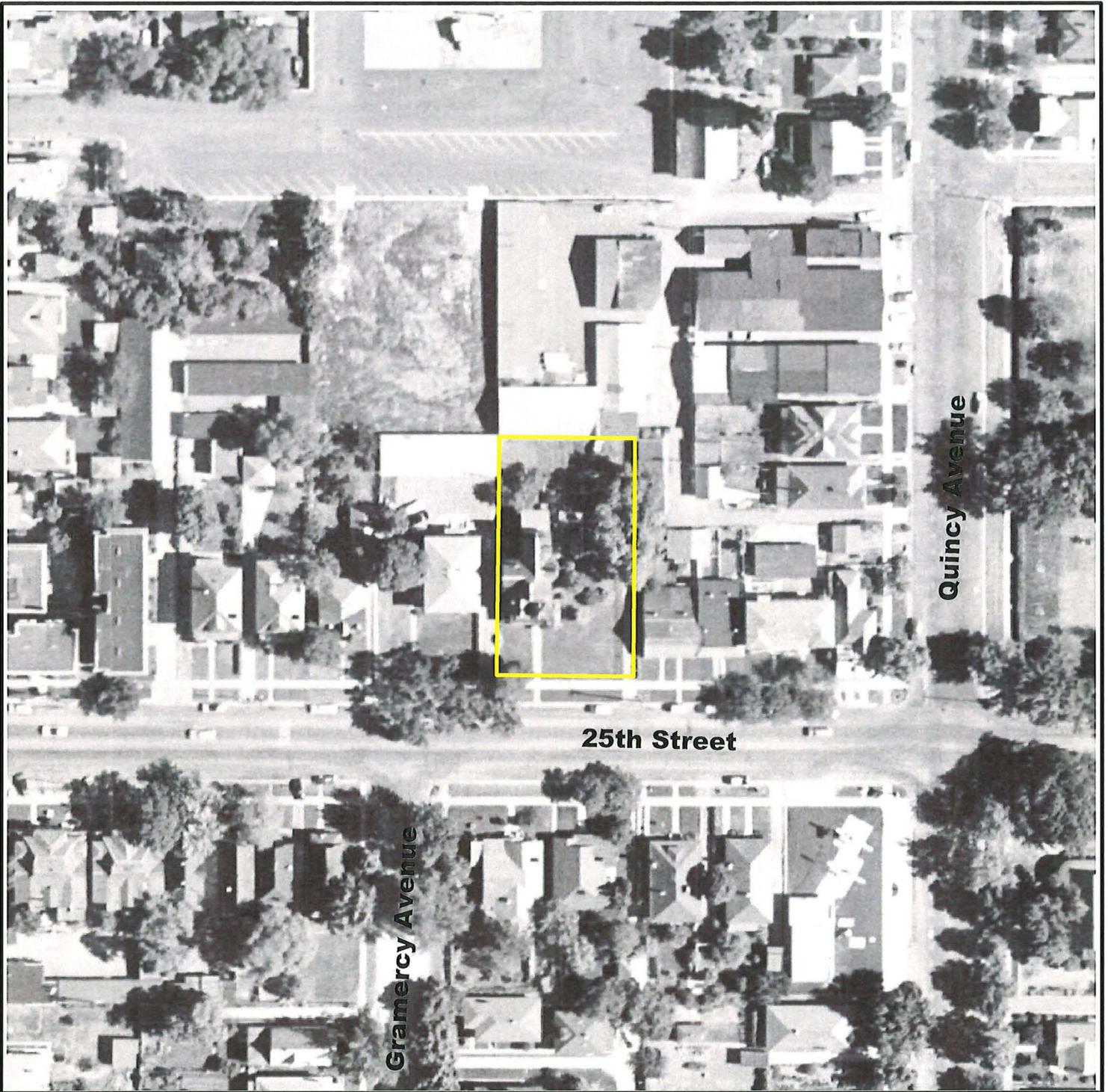
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1952 Aerial Photograph of Site

Figure 3



From USDA Aerial Photograph 10V-173
May 26, 1958



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1958 Aerial Photograph of Site

Figure 4



From USGS Aerial Photograph 4-60
April 13, 1962



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1962 Aerial Photograph of Site

Figure 5



From USDA Aerial Photograph 3FF-71
May 29, 1965



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1965 Aerial Photograph of Site

Figure 6



From USDA Aerial Photograph 1MM-169
October 10, 1971



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1971 Aerial Photograph of Site

Figure 7



From USDA Aerial Photograph 178-44
August 24, 1978



Approximate Scale
1 inch = 200 feet

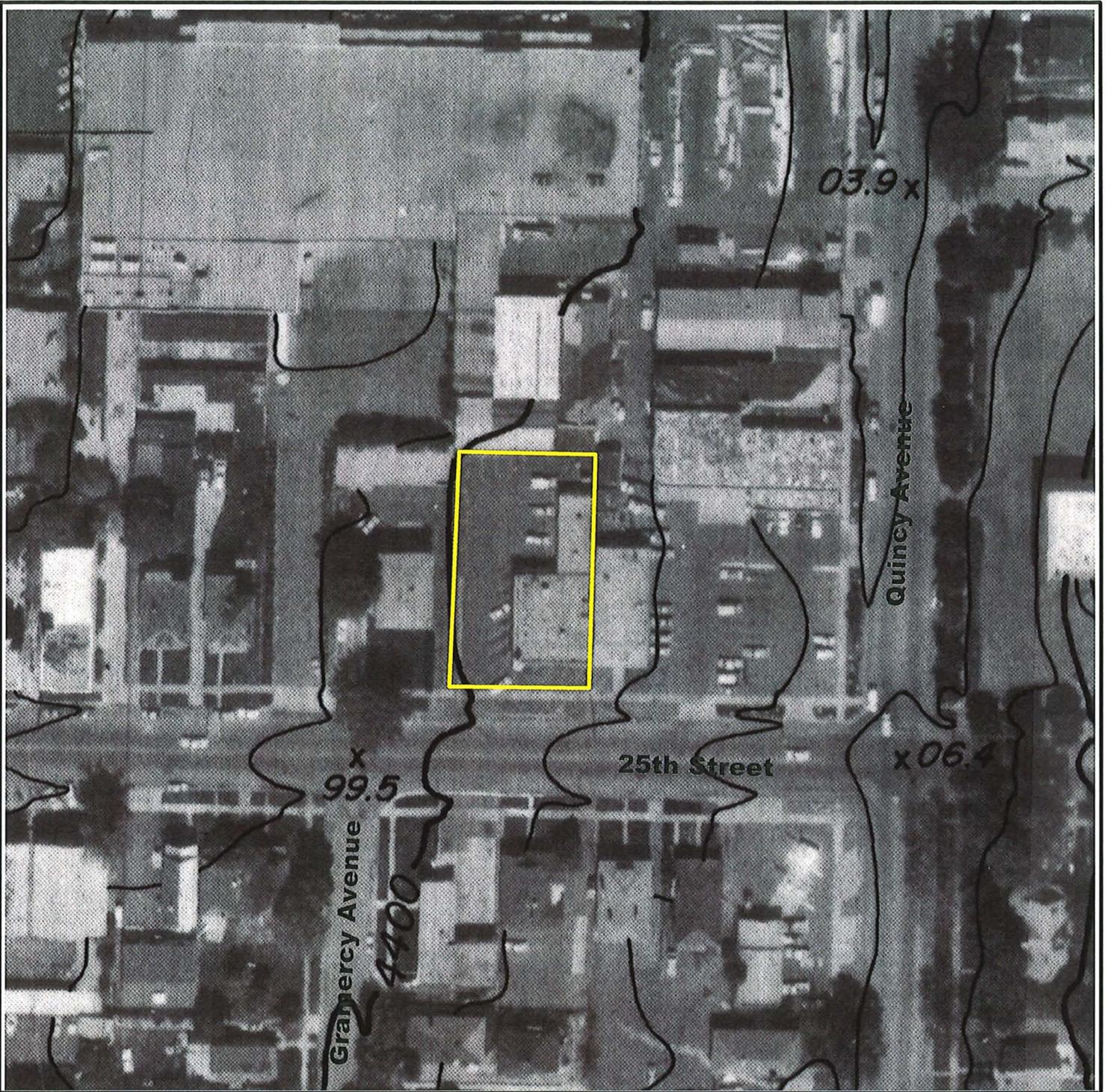
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1978 Aerial Photograph of Site

Figure 8



From Weber County Aerial Photograph 28-6N-1W
1985

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH



Approximate Scale
1 inch = 100 feet

1210175



1985 Aerial Photograph of Site

Figure 9



From USGS NAPP CIR Aerial Photograph 305-13
July 24, 1987



Approximate Scale
1 inch = 200 feet

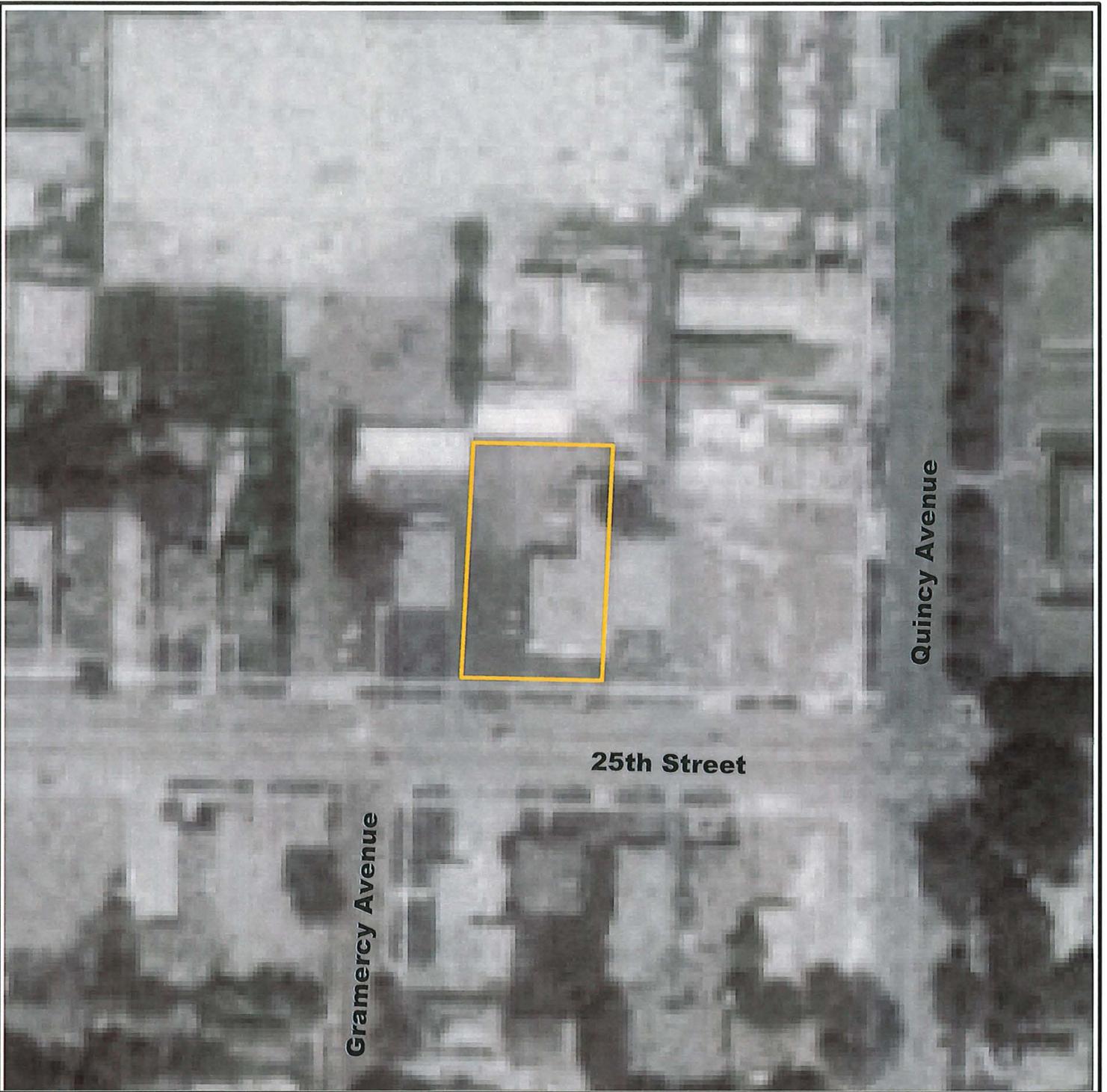
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1987 Aerial Photograph of Site

Figure 10



From USGS NAPP Aerial Photograph 5903-261
August 14, 1993



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1993 Aerial Photograph of Site

Figure 11



From USGS NAPP Aerial Photograph 10103-137
October 4, 1997



Approximate Scale
1 inch = 100 feet

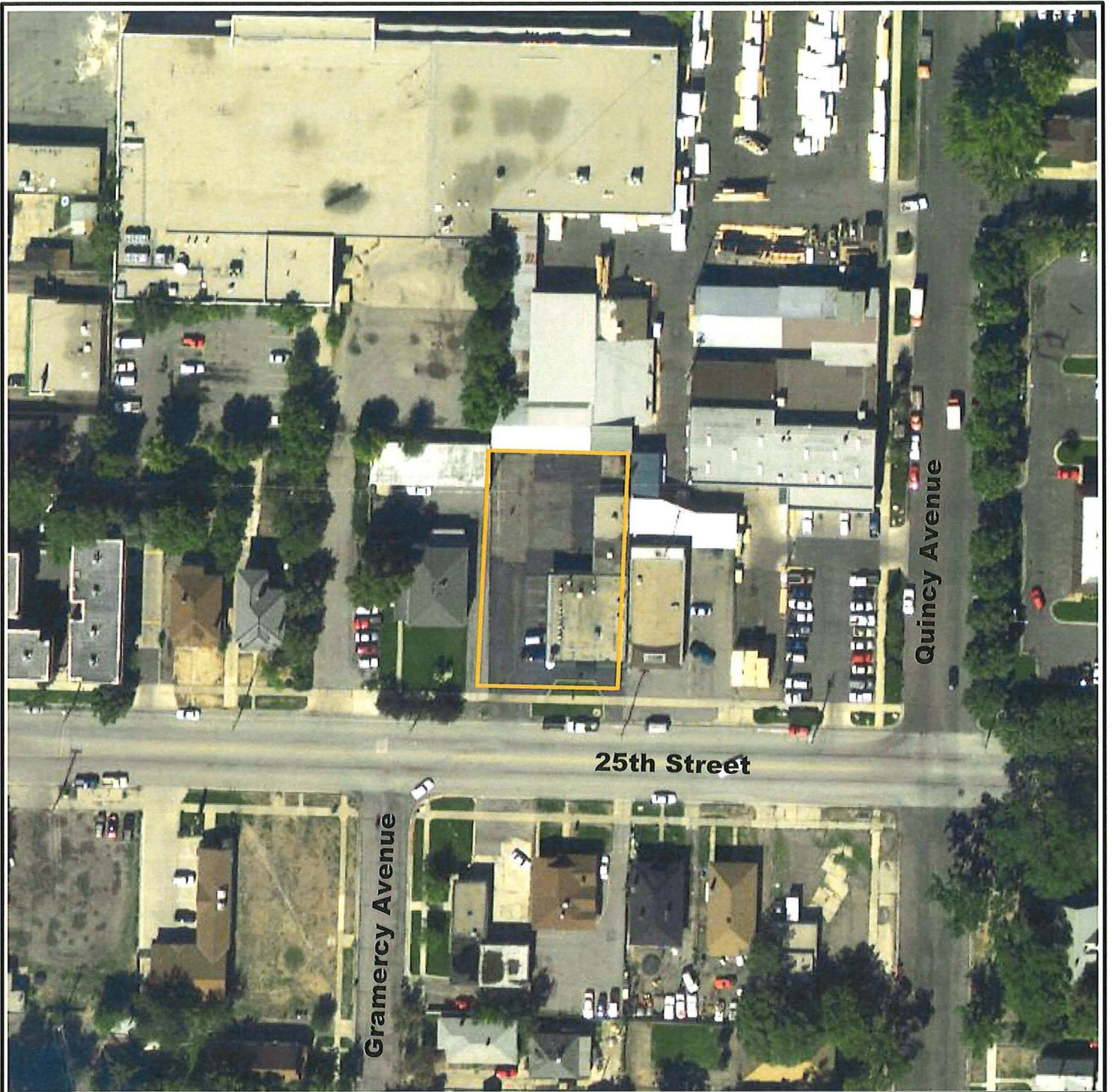
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



1997 Aerial Photograph of Site

Figure 12



From AGRC Aerial Photograph 12TVL185630
September 21, 2003

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH



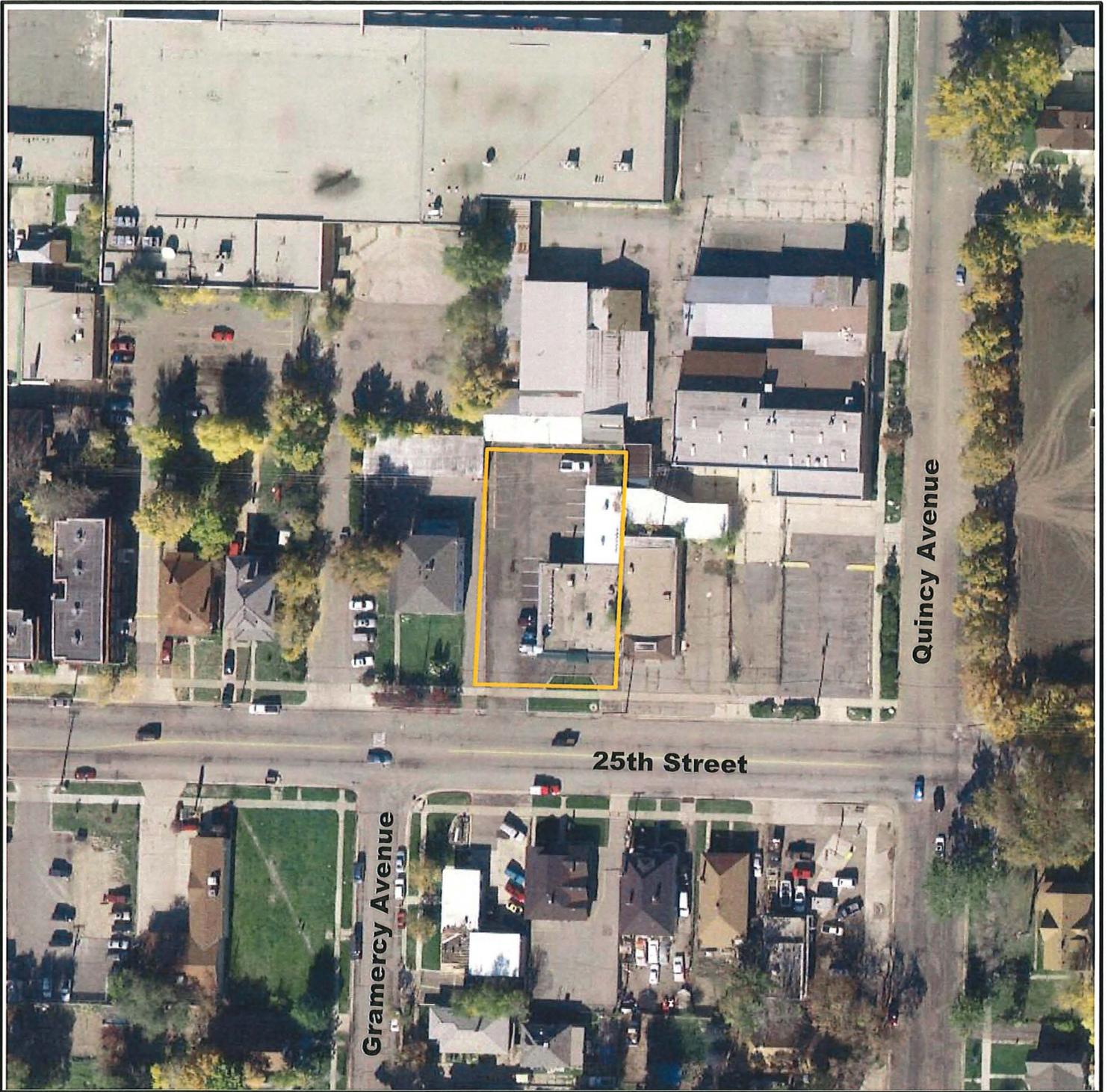
Approximate Scale
1 inch = 100 feet

1210175



2003 Aerial Photograph of Site

Figure 13



From AGRC Aerial Photograph 12TVL160600
September 23, 2006



Approximate Scale
1 inch = 100 feet

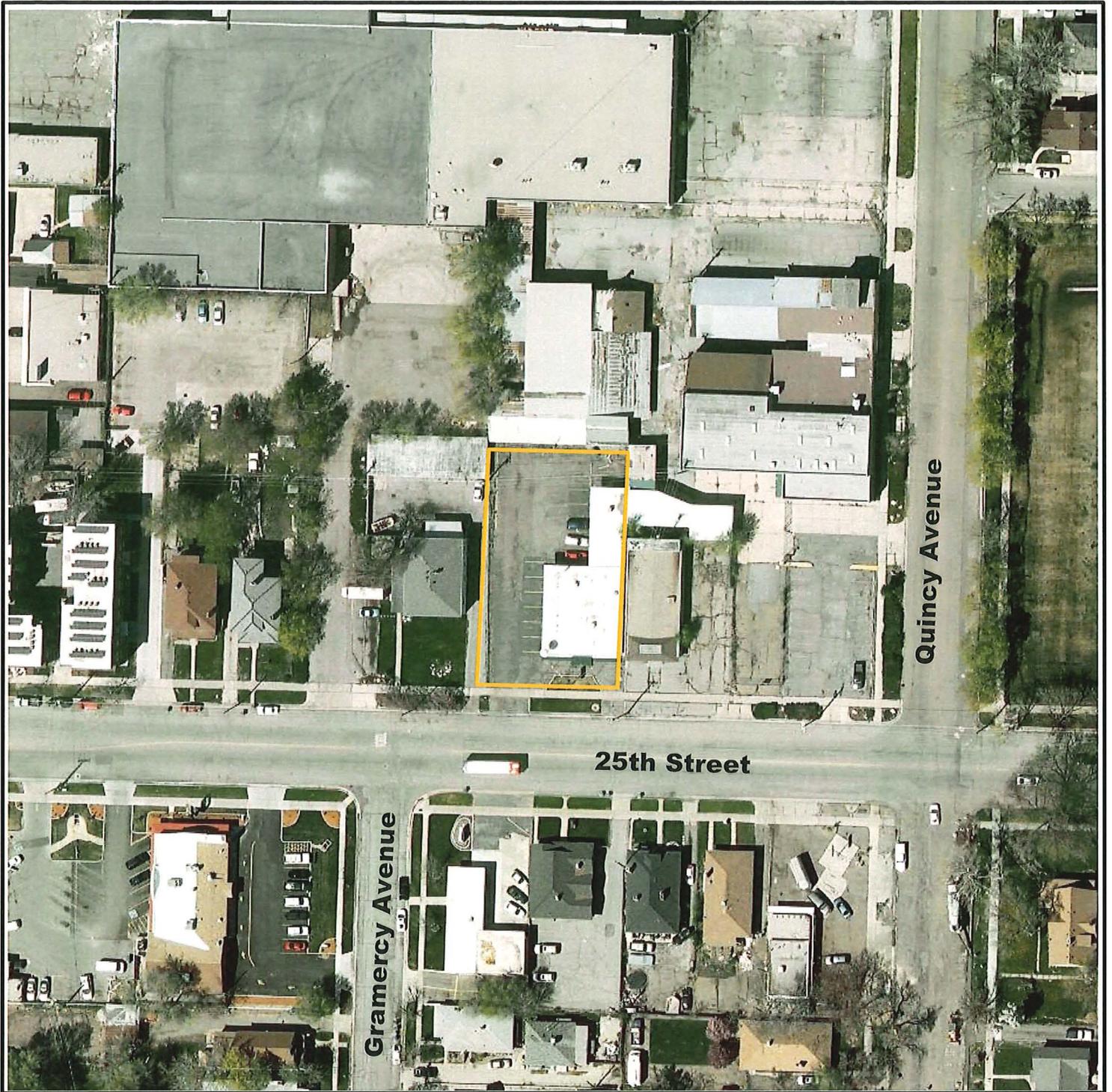
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



2006 Aerial Photograph of Site

Figure 14



From AGRC Aerial Photograph 12TVL180620
April 22, 2009

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH



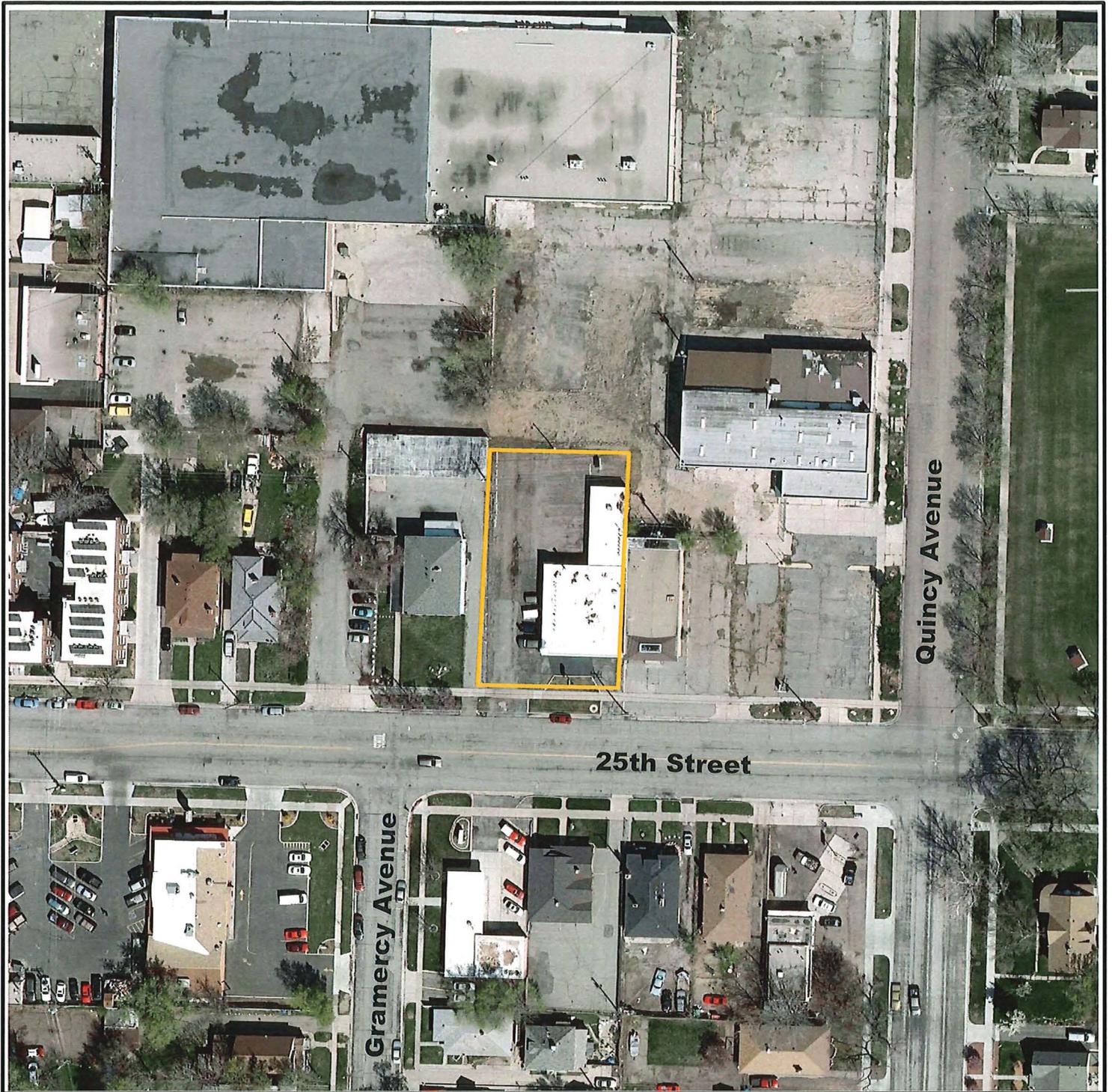
Approximate Scale
1 inch = 100 feet

1210175



2009 Aerial Photograph of Site

Figure 15



From AGRC Aerial Photograph 12TVL180620
April 7, 2012



Approximate Scale
1 inch = 100 feet

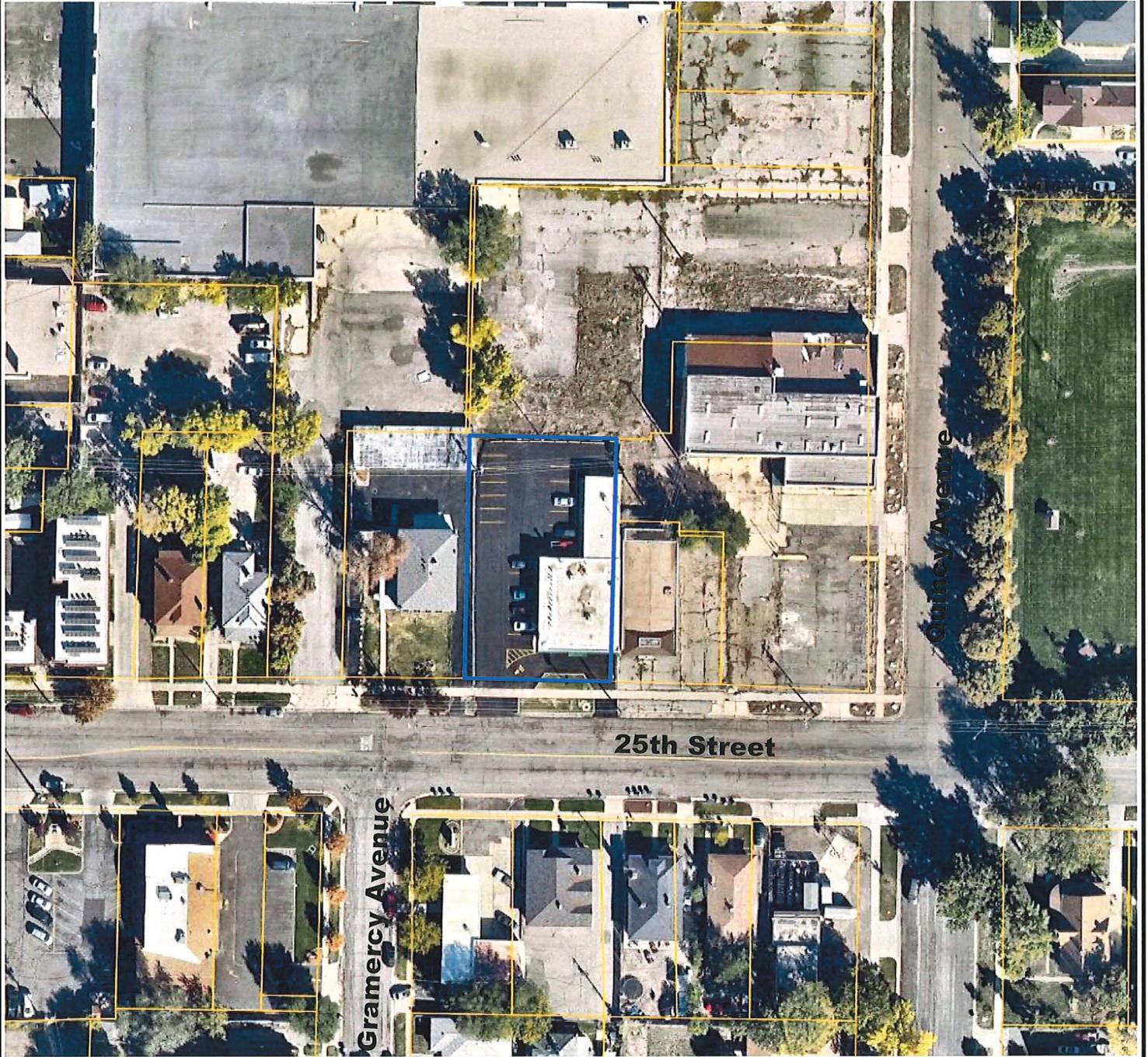
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



2012 Aerial Photograph of Site

Figure 16



From NearMap Aerial Photograph
October 8, 2014



Approximate Scale
1 inch = 100 feet

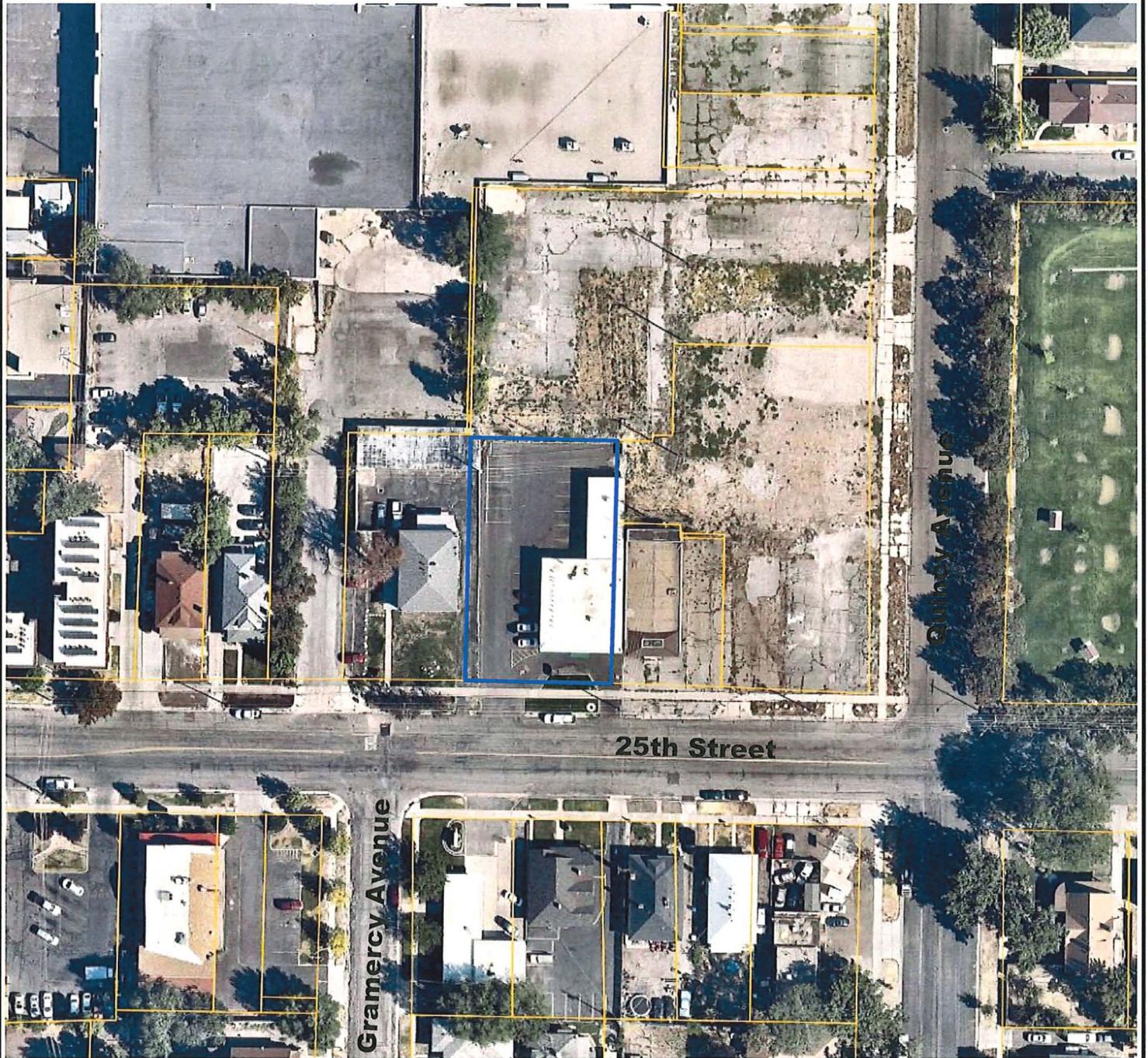
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



2014 Aerial Photograph of Site

Figure 17



From NearMap Aerial Photograph
August 28, 2016



Approximate Scale
1 inch = 100 feet

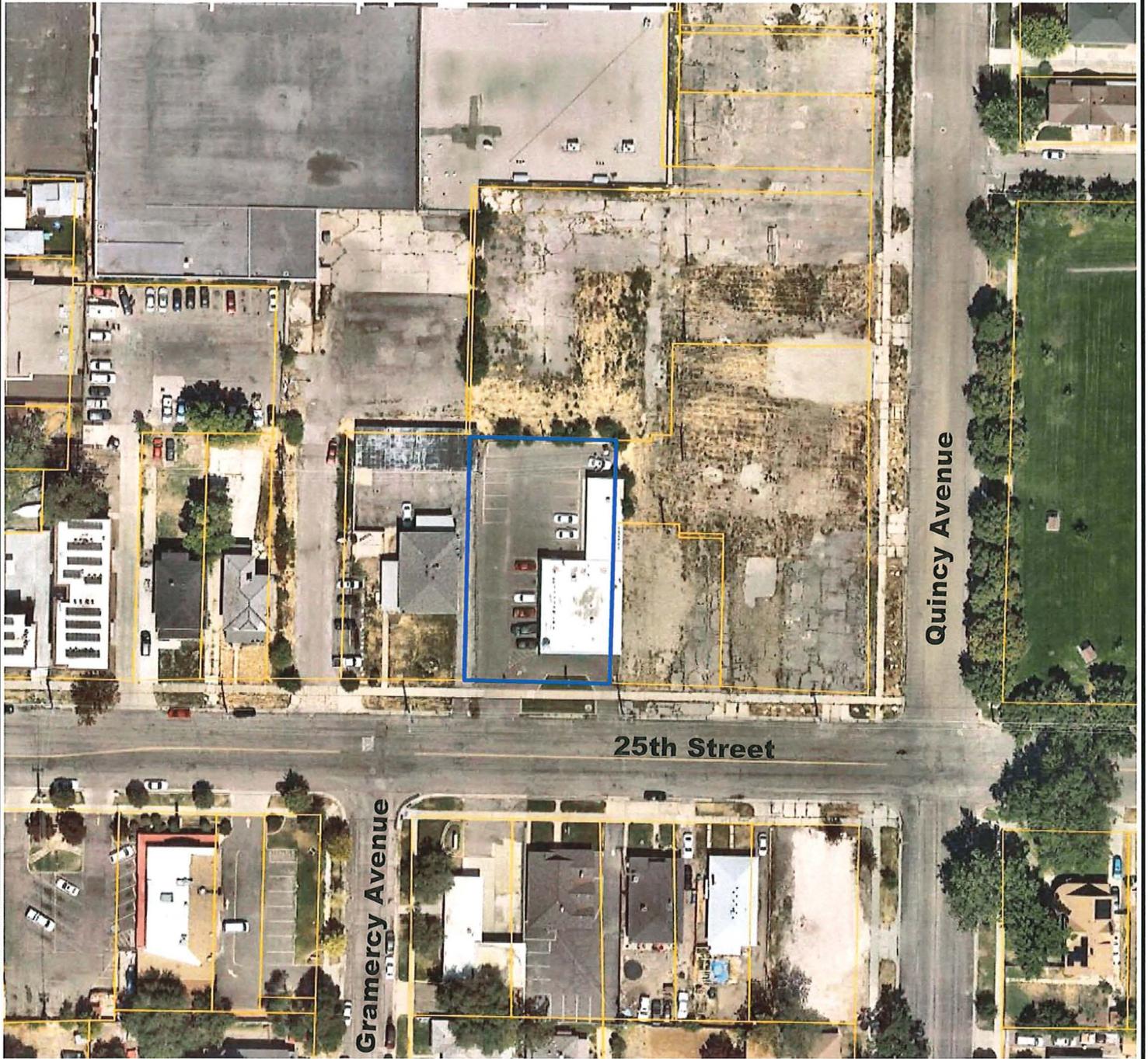
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



2016 Aerial Photograph of Site

Figure 18



From NearMap Aerial Photograph
August 7, 2019



Approximate Scale
1 inch = 100 feet

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



2019 Aerial Photograph of Site

Figure 19



From NearMap Aerial Photograph
September 11, 2020



Approximate Scale
1 inch = 100 feet

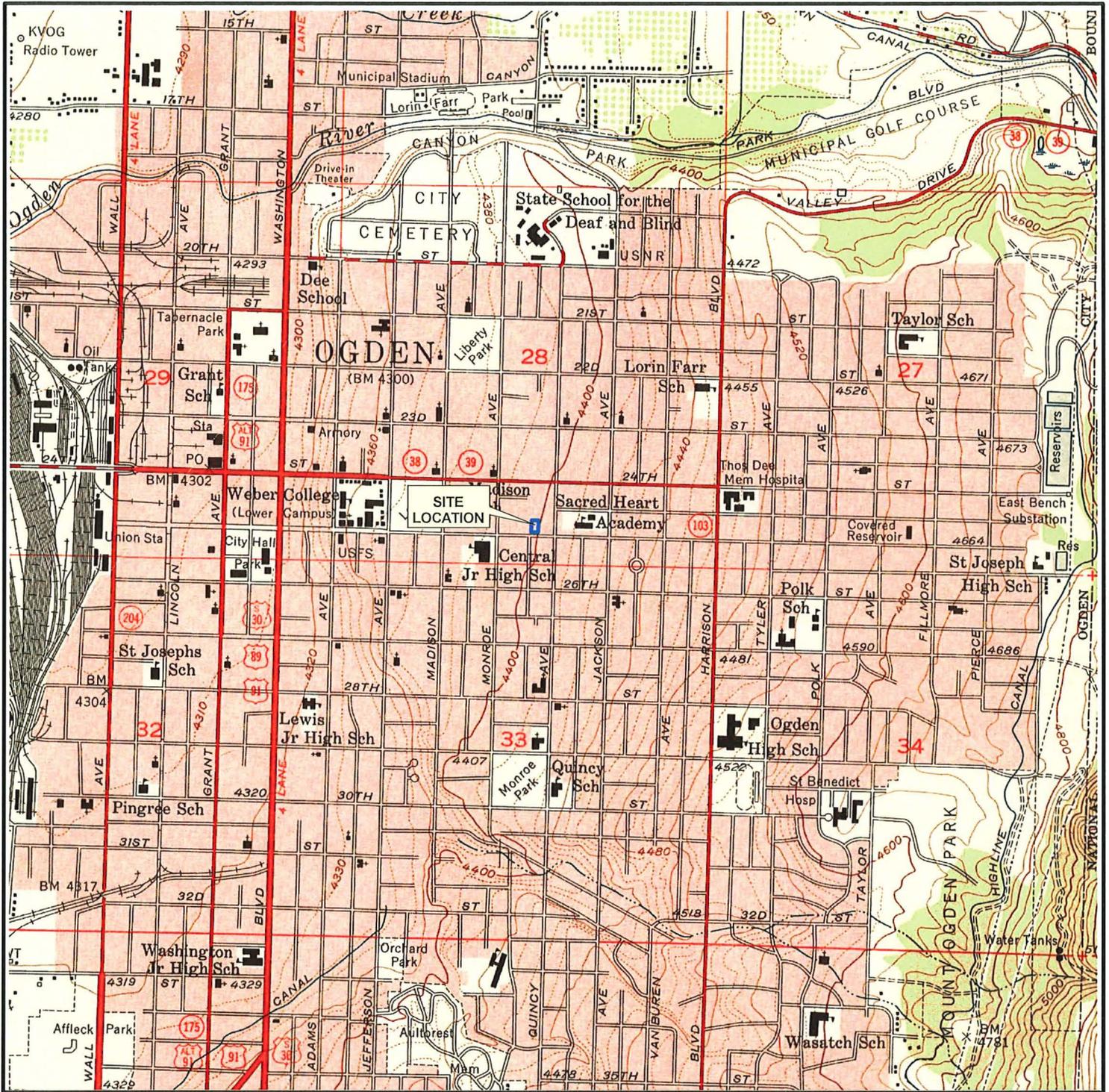
FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH

1210175



2020 Aerial Photograph of Site

Figure 20



Section 28, T6N, R1W

From USGS Ogden Quadrangle (1955)

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH



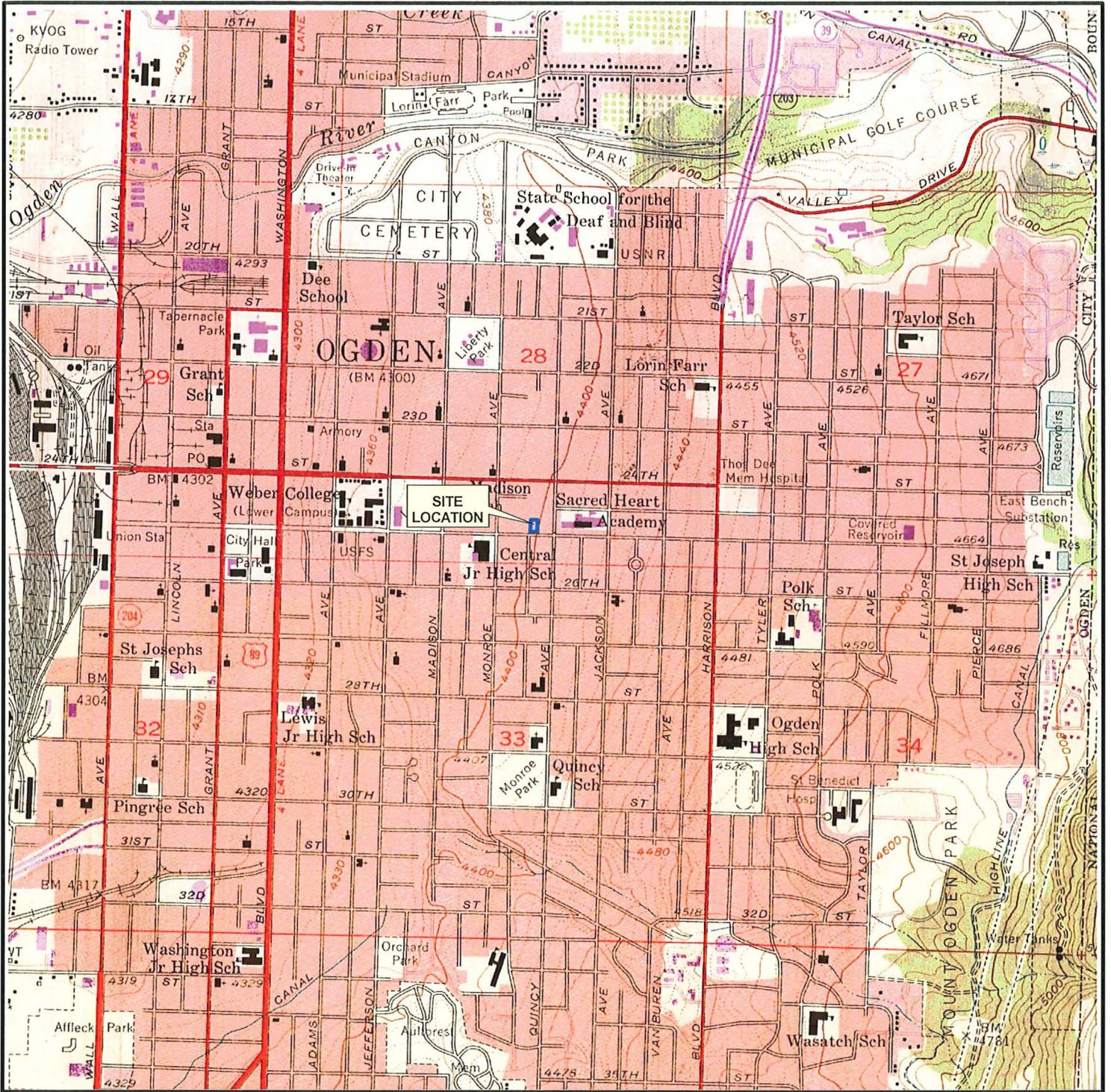
Approximate Scale
 1 inch = 2,000 feet

1210175



1955 Aerial Photograph of Site

Figure 21A



Section 28, T6N, R1W

From USGS Ogden Quadrangle (1975)

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH



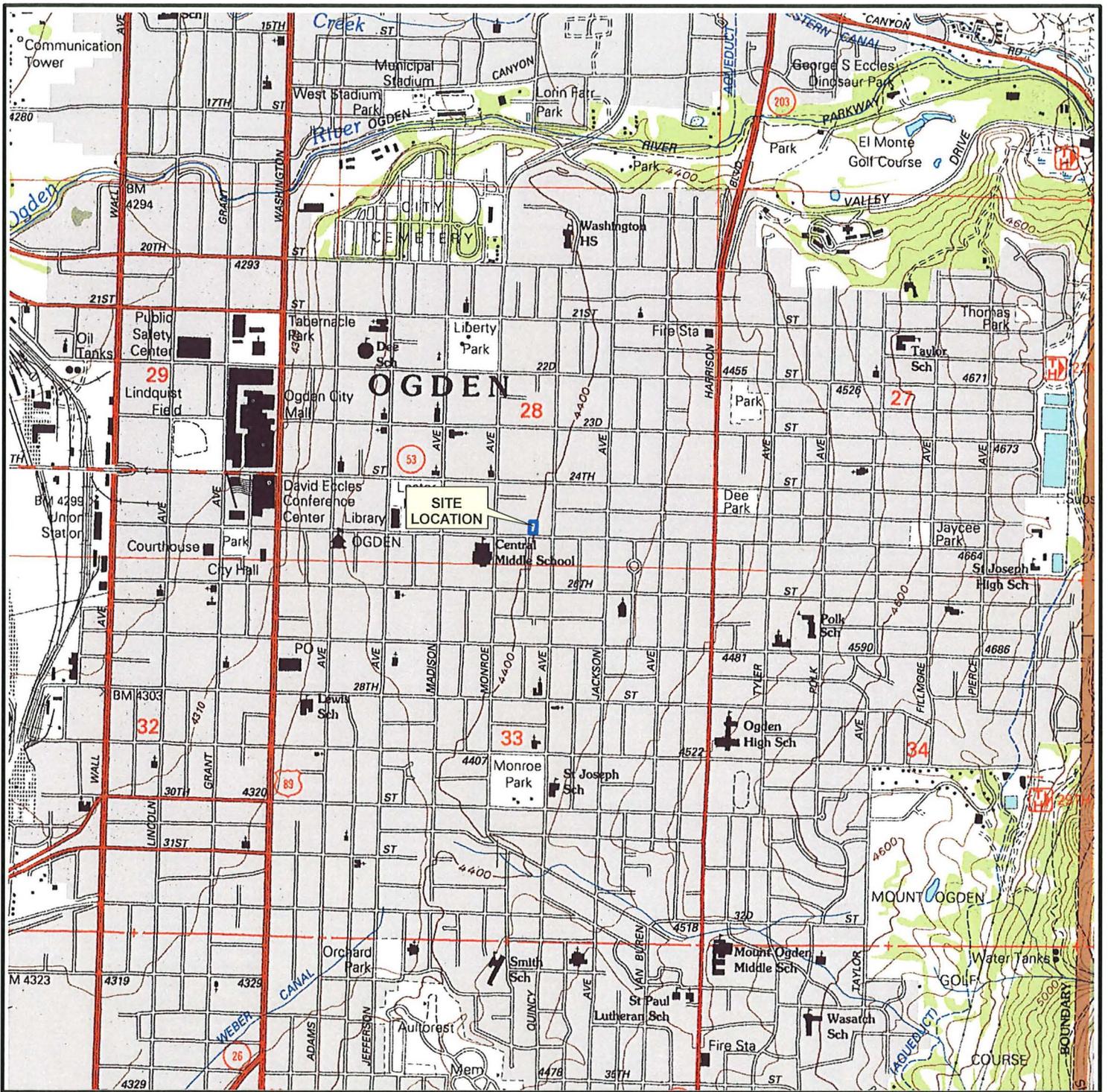
Approximate Scale
 1 inch = 2,000 feet

1210175



1975 Aerial Photograph of Site

Figure 21B



Section 28, T6N, R1W

From USGS Ogden Quadrangle (1998)

FORSEY CLEANERS & LAUNDRY
856 EAST 25TH STREET
OGDEN, UTAH



Approximate Scale
 1 inch = 2,000 feet

1210175



1998 Aerial Photograph of Site

Figure 21C

ArcGIS Web Map



3/7/2021, 12:29:52 PM

- City Boundaries
- Street Labels
- Parcel Address
- Parcel Master

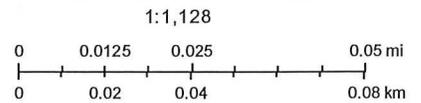


Figure 22

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Esri, HERE, Garmin, (c) OpenStreetMap contributors

BLOCK 8 PLAT B

TAXING UNIT: 237

IN OGDEN CITY
SCALE: 1" = 50'

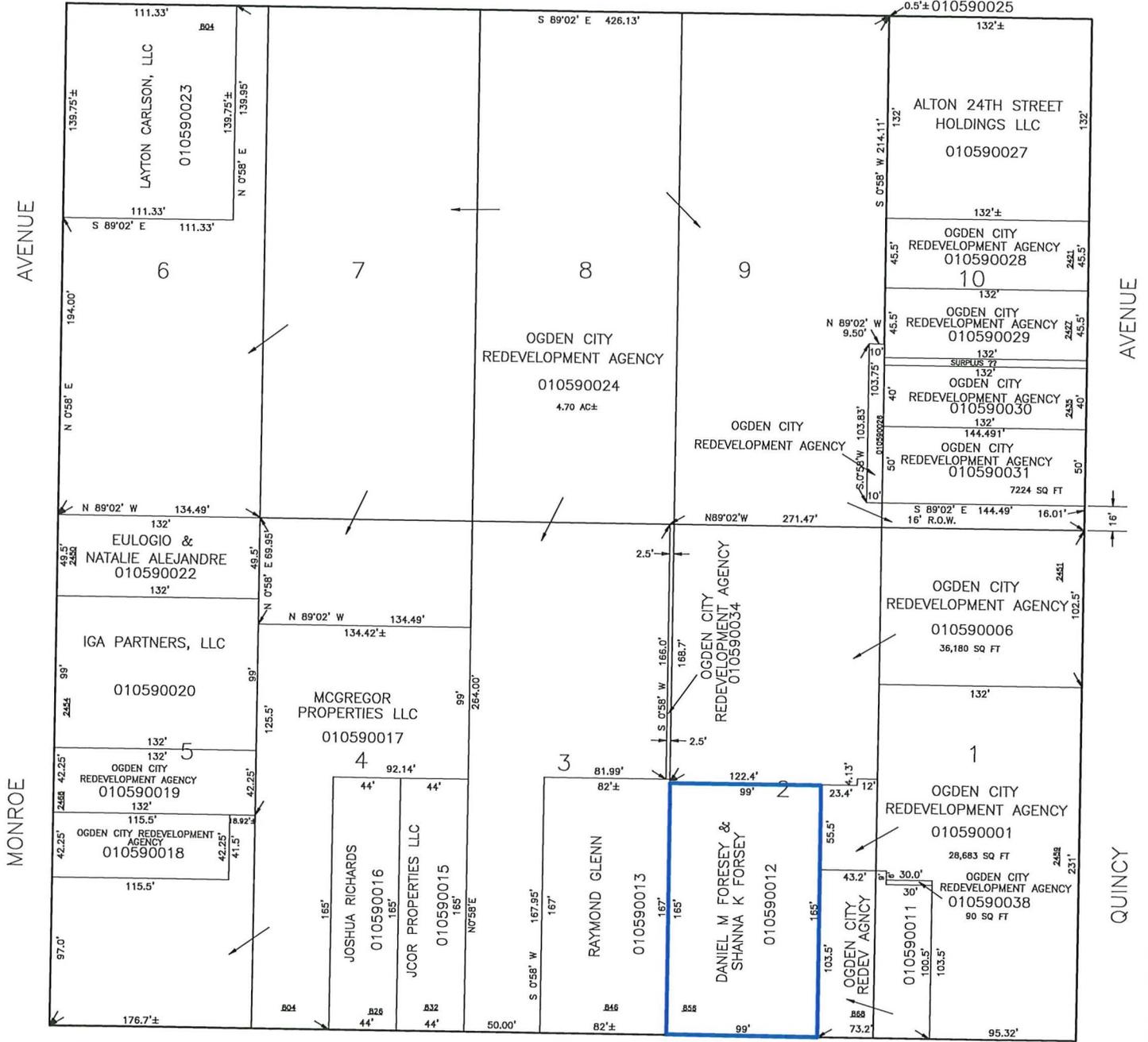
SEE PAGE 60

PREFIX: 01-059

24TH

STREET COUNTY OF WEBER
0.5±010590025

SEE PAGE 58



25TH

STREET

SEE PAGE 56

1

FOR TAX PURPOSES ONLY

NOTE: OGDEN CITY ENG. DEPT. DATA SHOWS LOTS AS BEING 134.42' X 333.75'

R.B. 11-64

SEE BOOK 2 PAGE 29

Figure 23

APPENDIX A
PHOTOGRAPHS OF SITE

3/10/2020 11:06:13 AM

Photo 1 - Southwest side of building.JPG



3/10/2020 11:07:19 AM

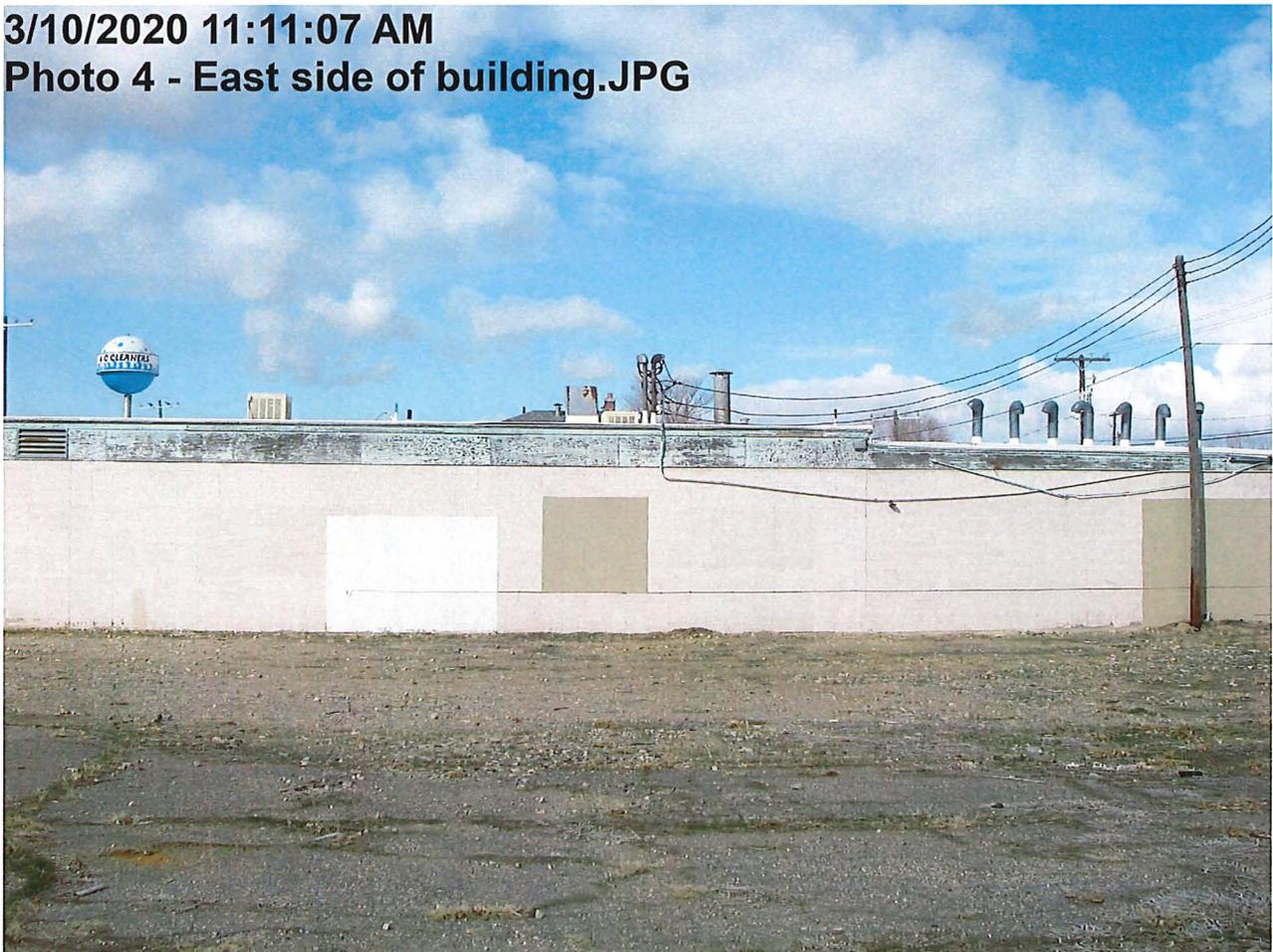
Photo 2 - South side of building.JPG



3/10/2020 11:11:42 AM
Photo 3 - Northeast side of building.JPG



3/10/2020 11:11:07 AM
Photo 4 - East side of building.JPG



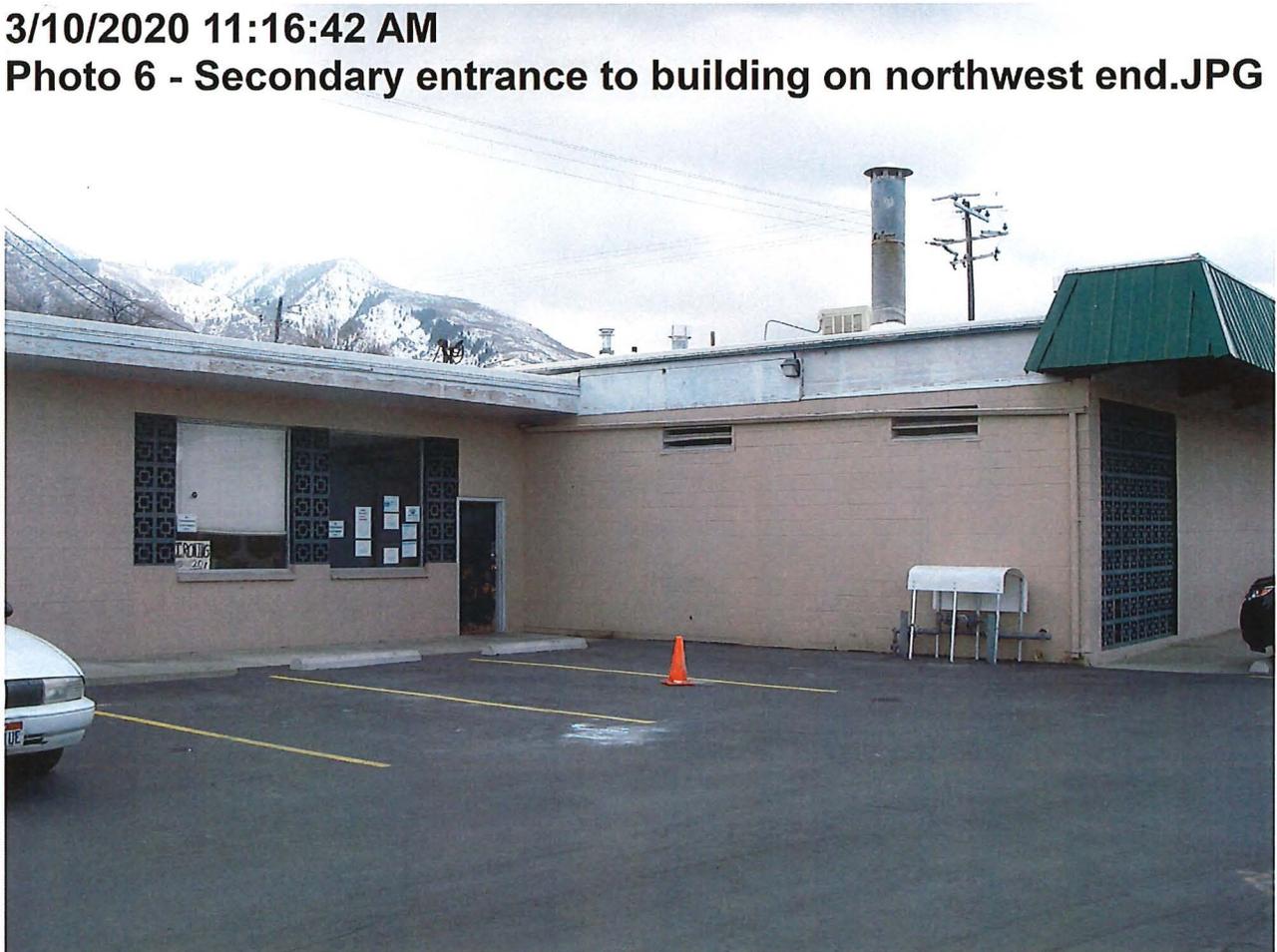
3/10/2020 11:13:59 AM

Photo 5 - Northwest side of building.JPG



3/10/2020 11:16:42 AM

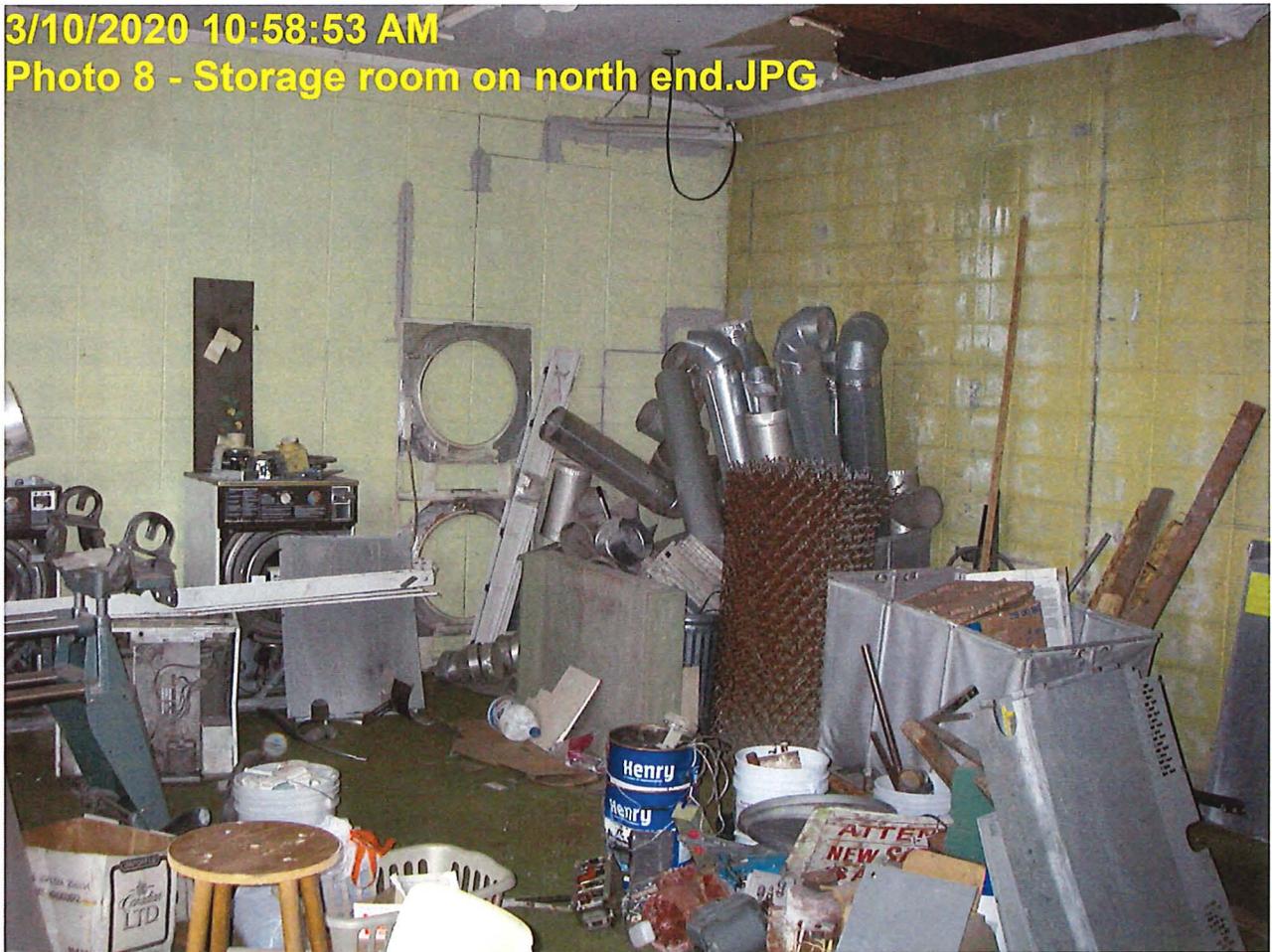
Photo 6 - Secondary entrance to building on northwest end.JPG



3/10/2020 10:58:39 AM
Photo 7 - Storage room on north end.JPG



3/10/2020 10:58:53 AM
Photo 8 - Storage room on north end.JPG



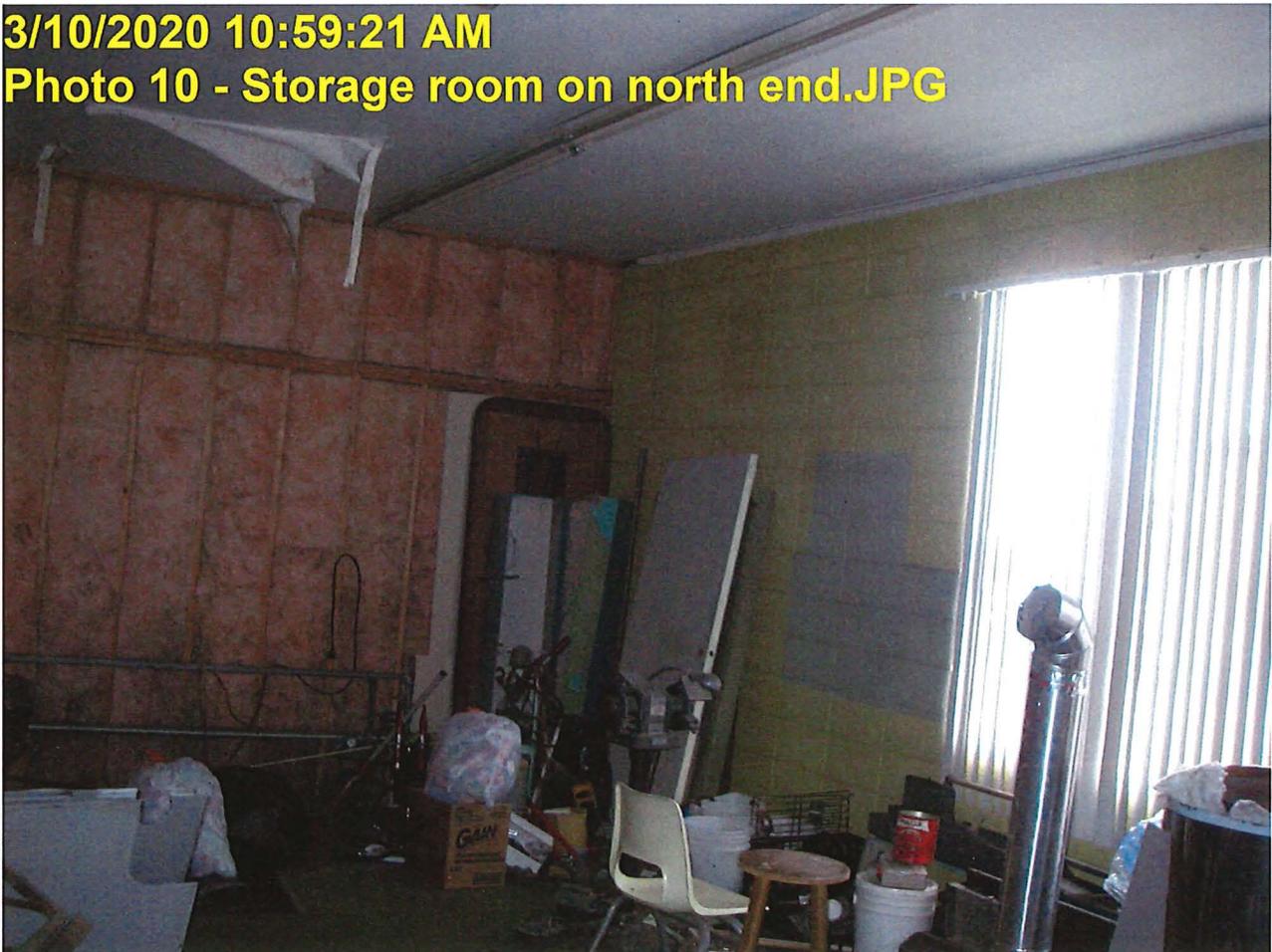
3/10/2020 10:59:10 AM

Photo 9 - Storage room on north end.JPG



3/10/2020 10:59:21 AM

Photo 10 - Storage room on north end.JPG



3/10/2020 10:59:38 AM

Photo 11 - Chemical storage in storage room.JPG



3/10/2020 10:59:47 AM

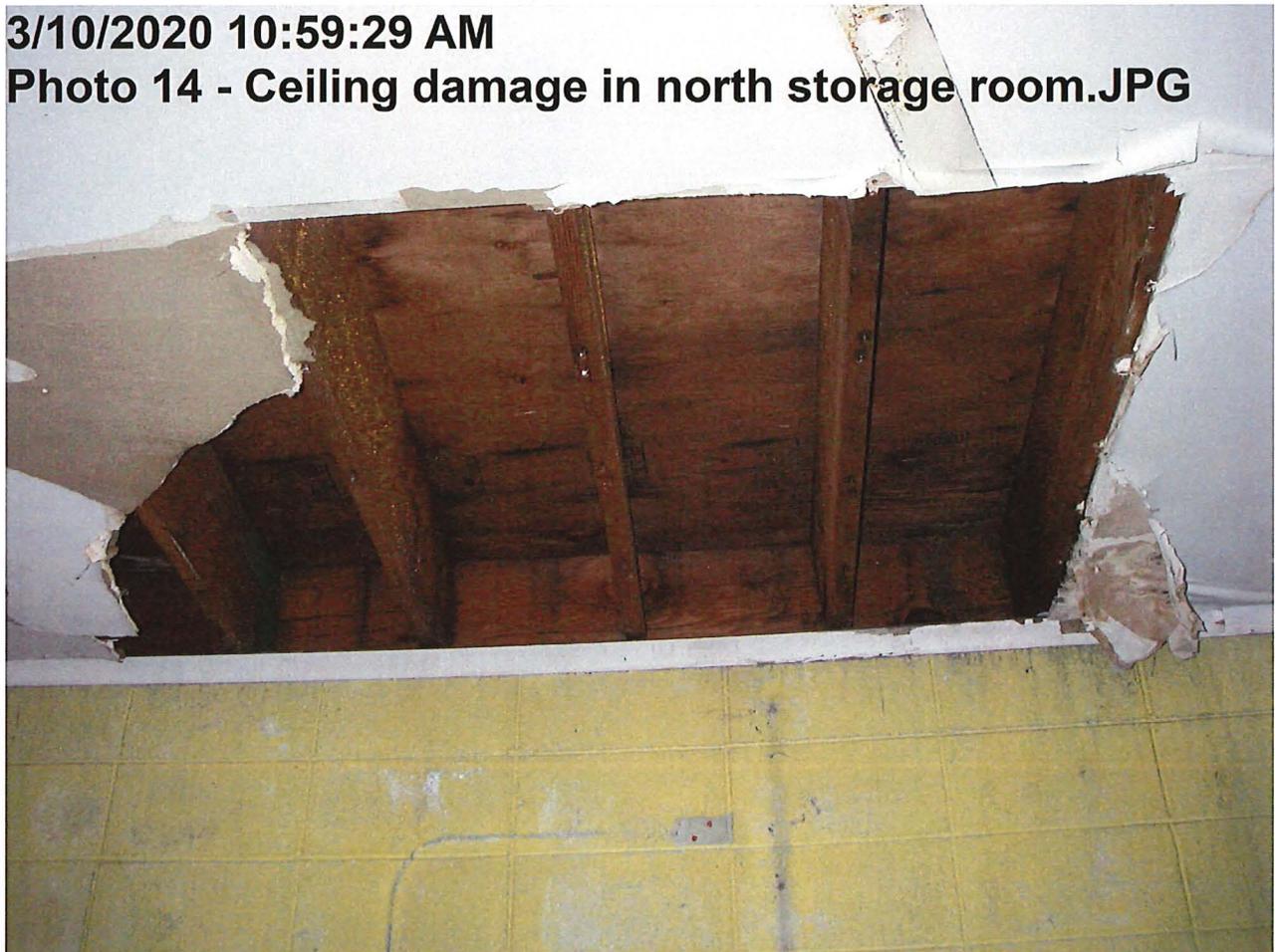
Photo 12 - Used oil storage.JPG



3/10/2020 11:00:16 AM
Photo 13 - Used oil storage.JPG

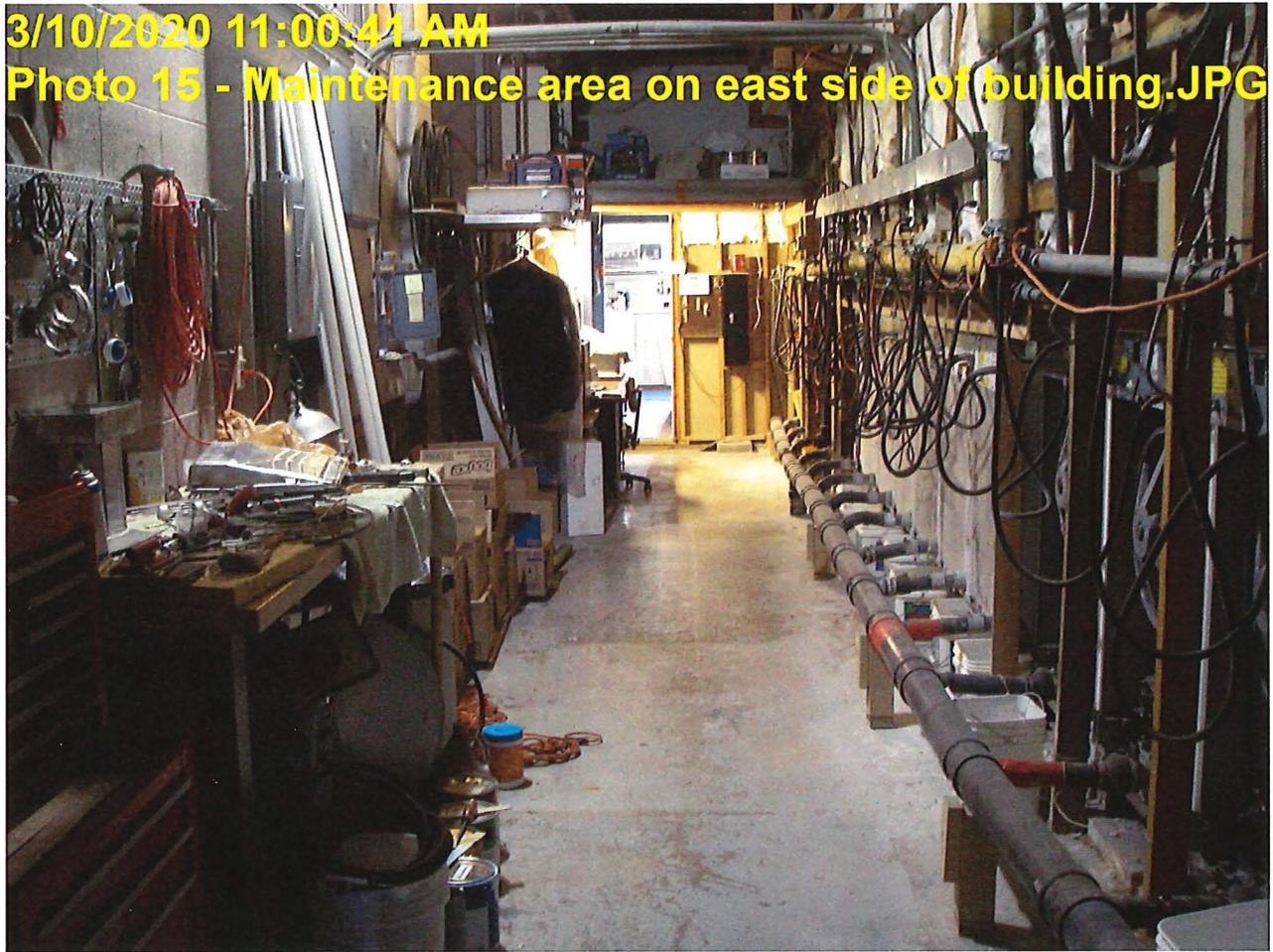


3/10/2020 10:59:29 AM
Photo 14 - Ceiling damage in north storage room.JPG



3/10/2020 11:00:41 AM

Photo 15 - Maintenance area on east side of building.JPG



3/10/2020 11:00:50 AM

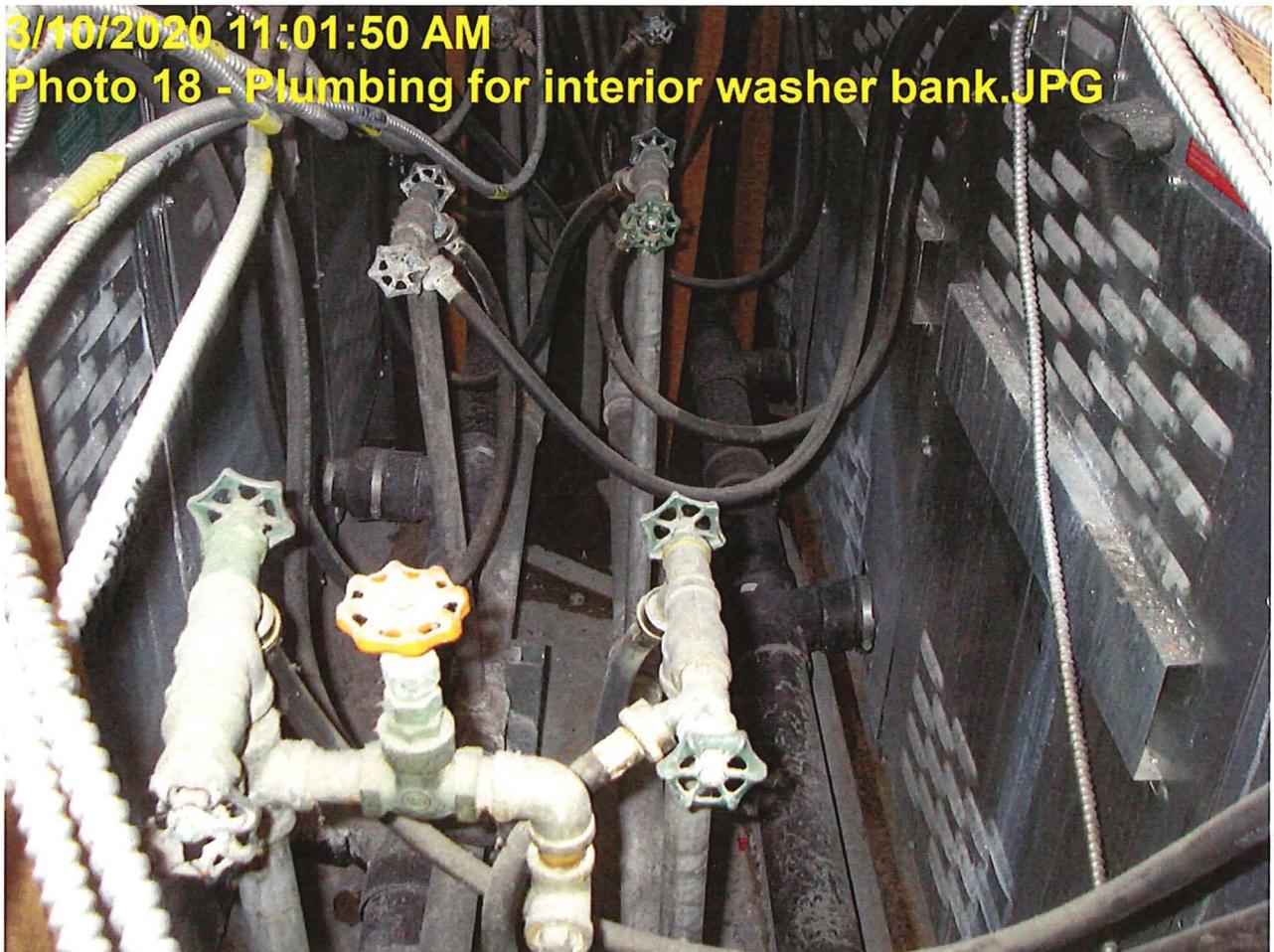
Photo 16 - Maintenance area on east side.JPG



3/10/2020 11:01:01 AM
Photo 17 - Electrical boxes on east side.JPG

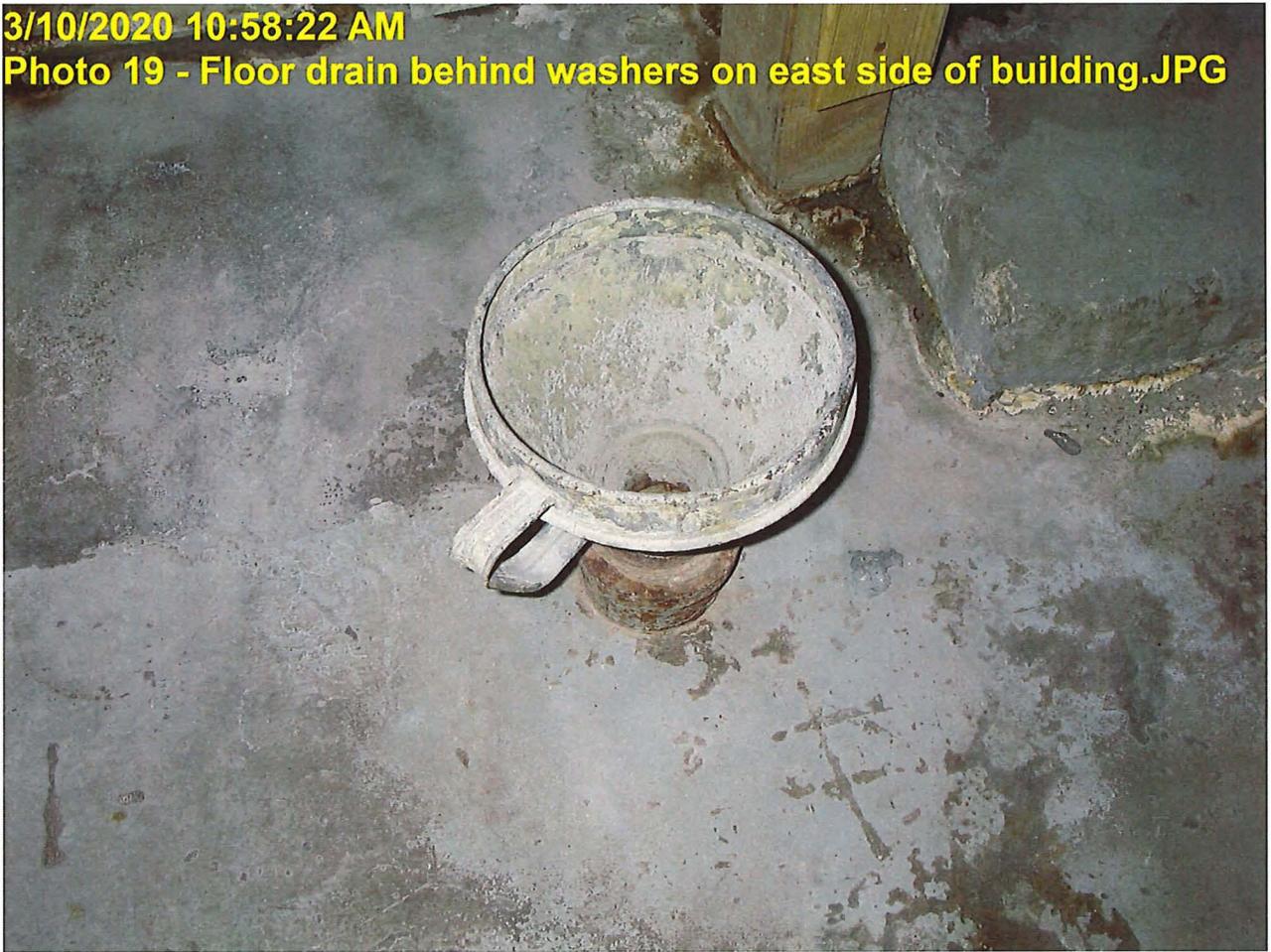


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Photo 18 - Plumbing for interior washer bank.JPG



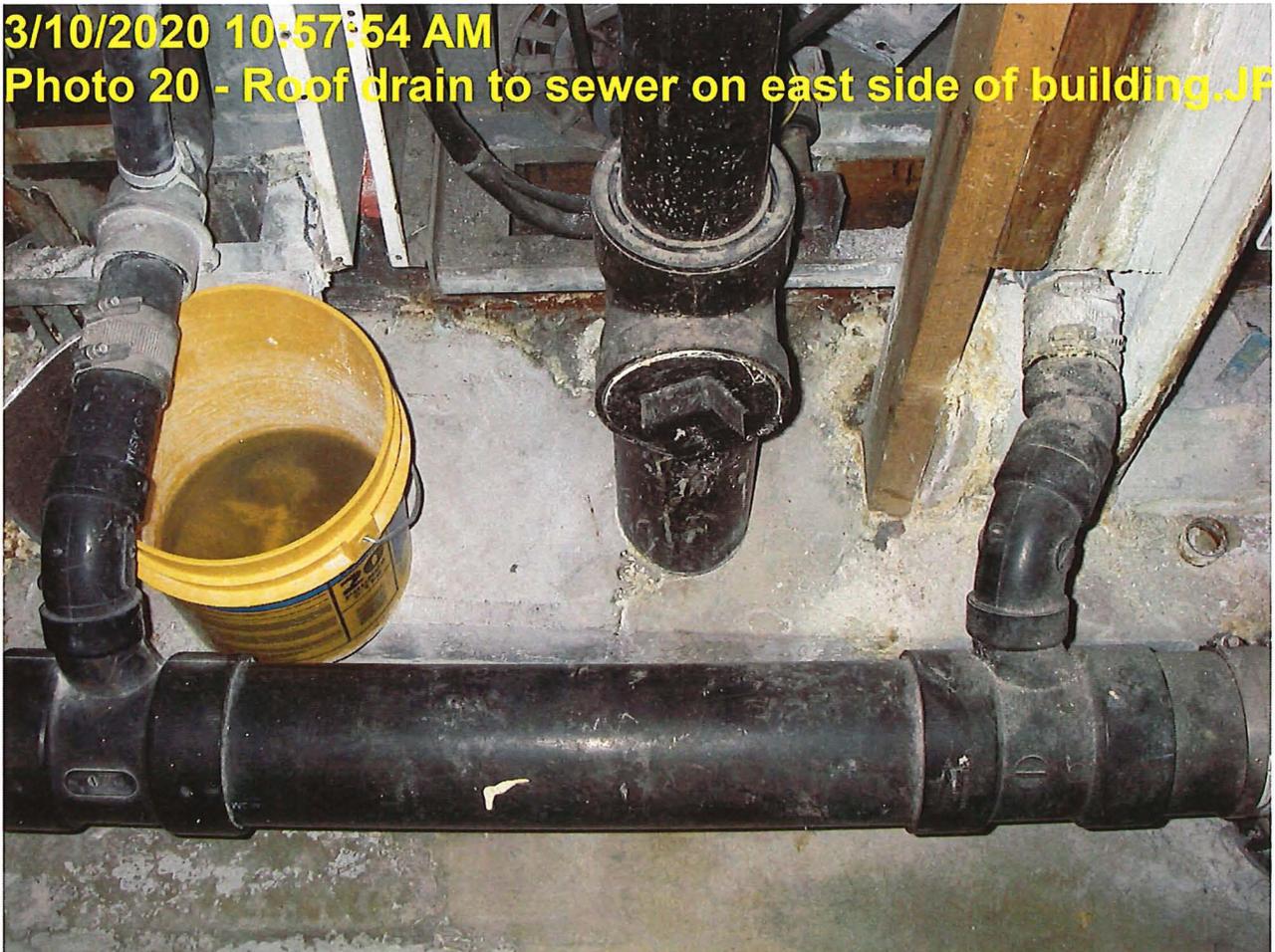
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Photo 19 - Floor drain behind washers on east side of building.JPG



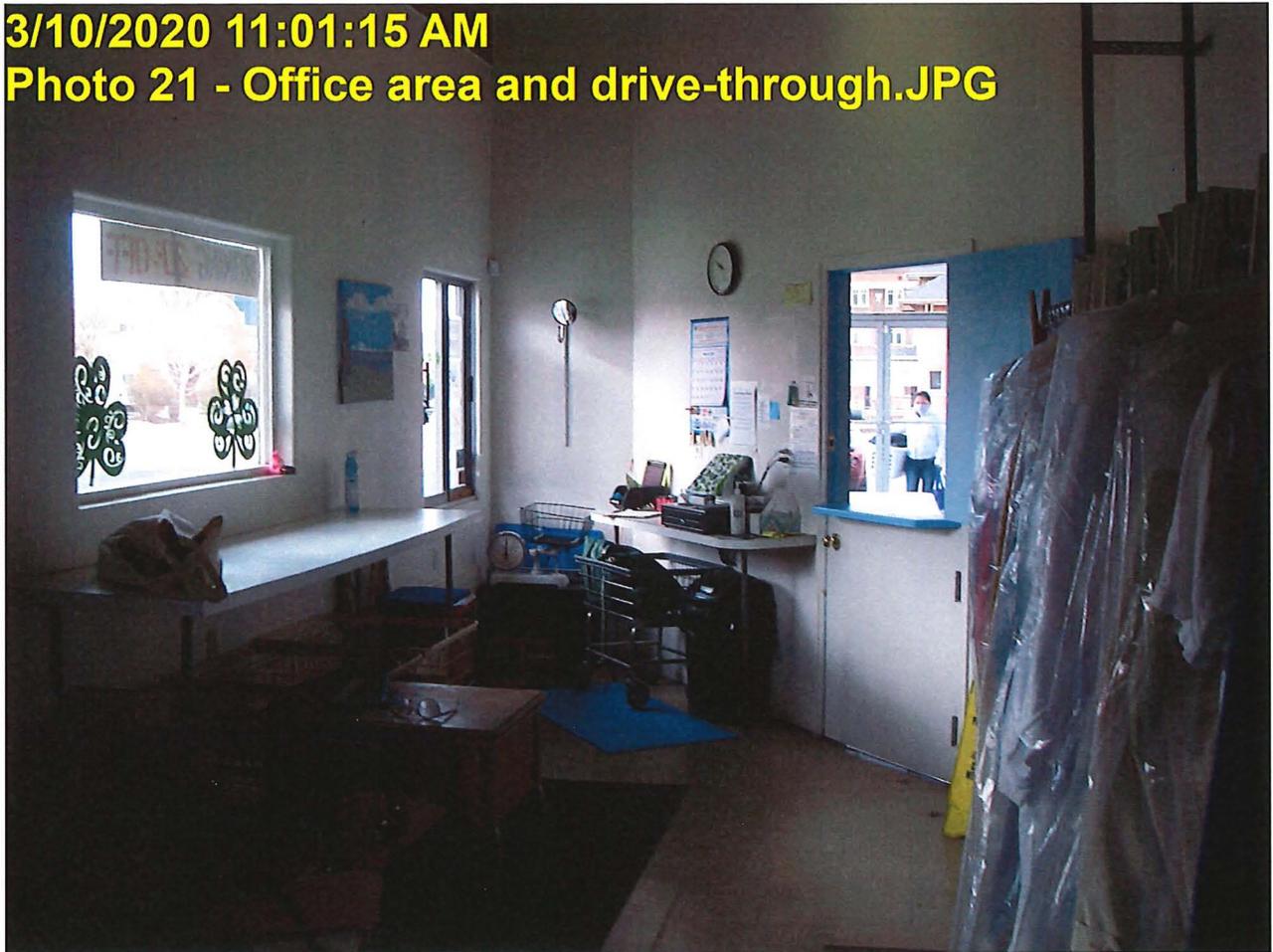
3/10/2020 10:57:54 AM

Photo 20 - Roof drain to sewer on east side of building.JPG



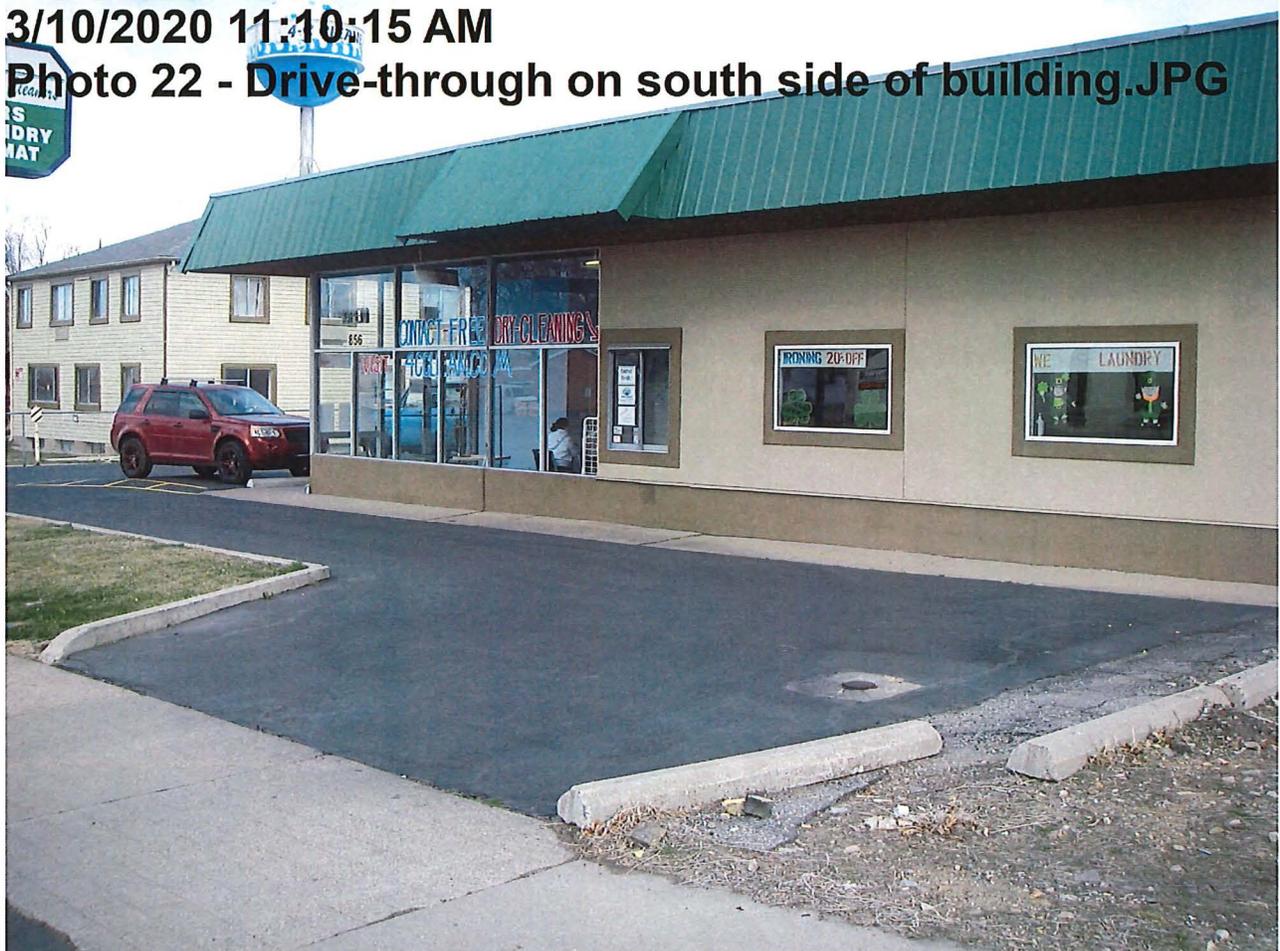
3/10/2020 11:01:15 AM

Photo 21 - Office area and drive-through.JPG



3/10/2020 11:10:15 AM

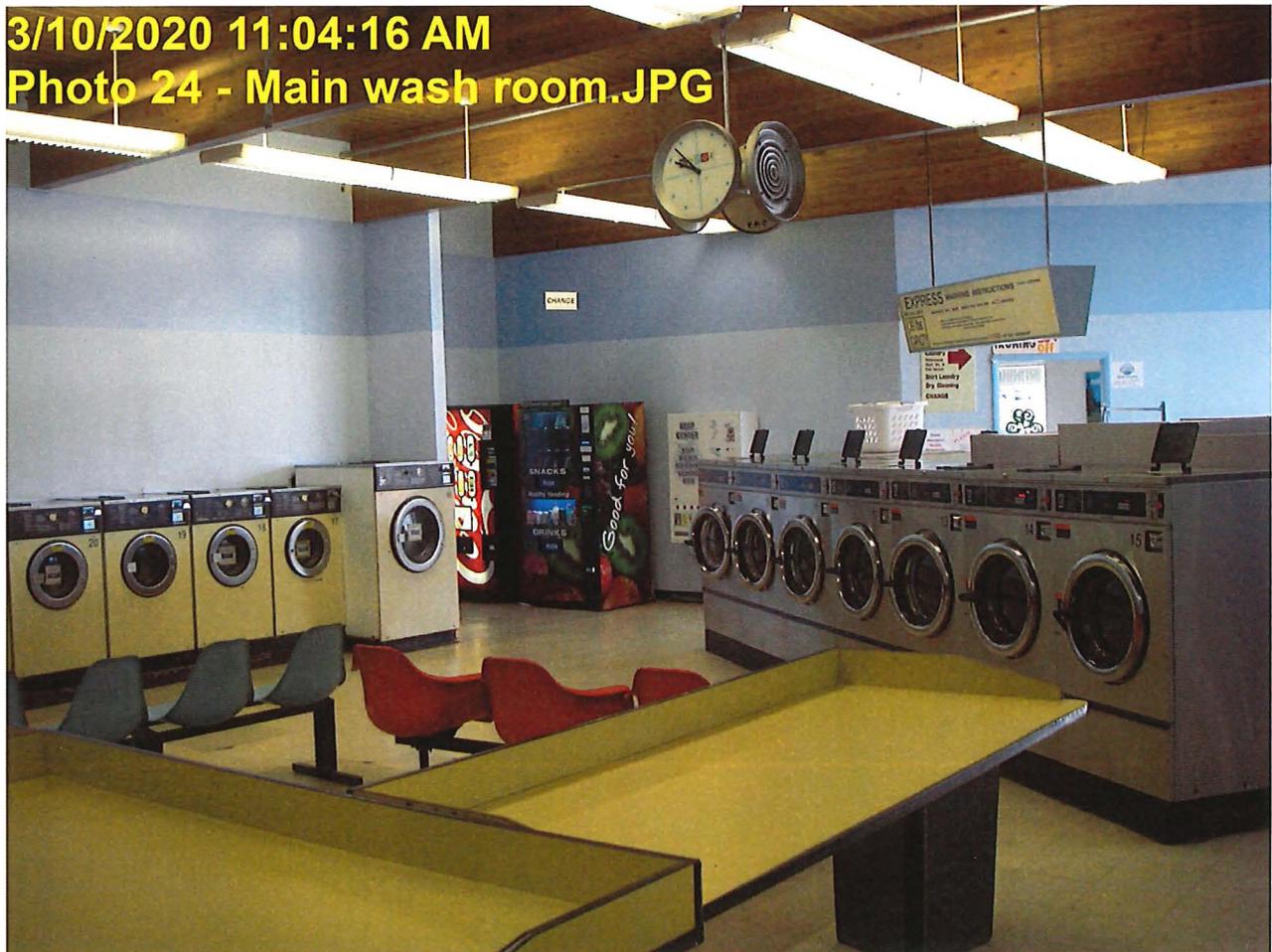
Photo 22 - Drive-through on south side of building.JPG



3/10/2020 11:05:30 AM
Photo 23 - Main wash room.JPG



3/10/2020 11:04:16 AM
Photo 24 - Main wash room.JPG



3/10/2020 11:04:38 AM
Photo 25 - Main wash room.JPG



3/10/2020 11:04:56 AM
Photo 26 - North wash area.JPG



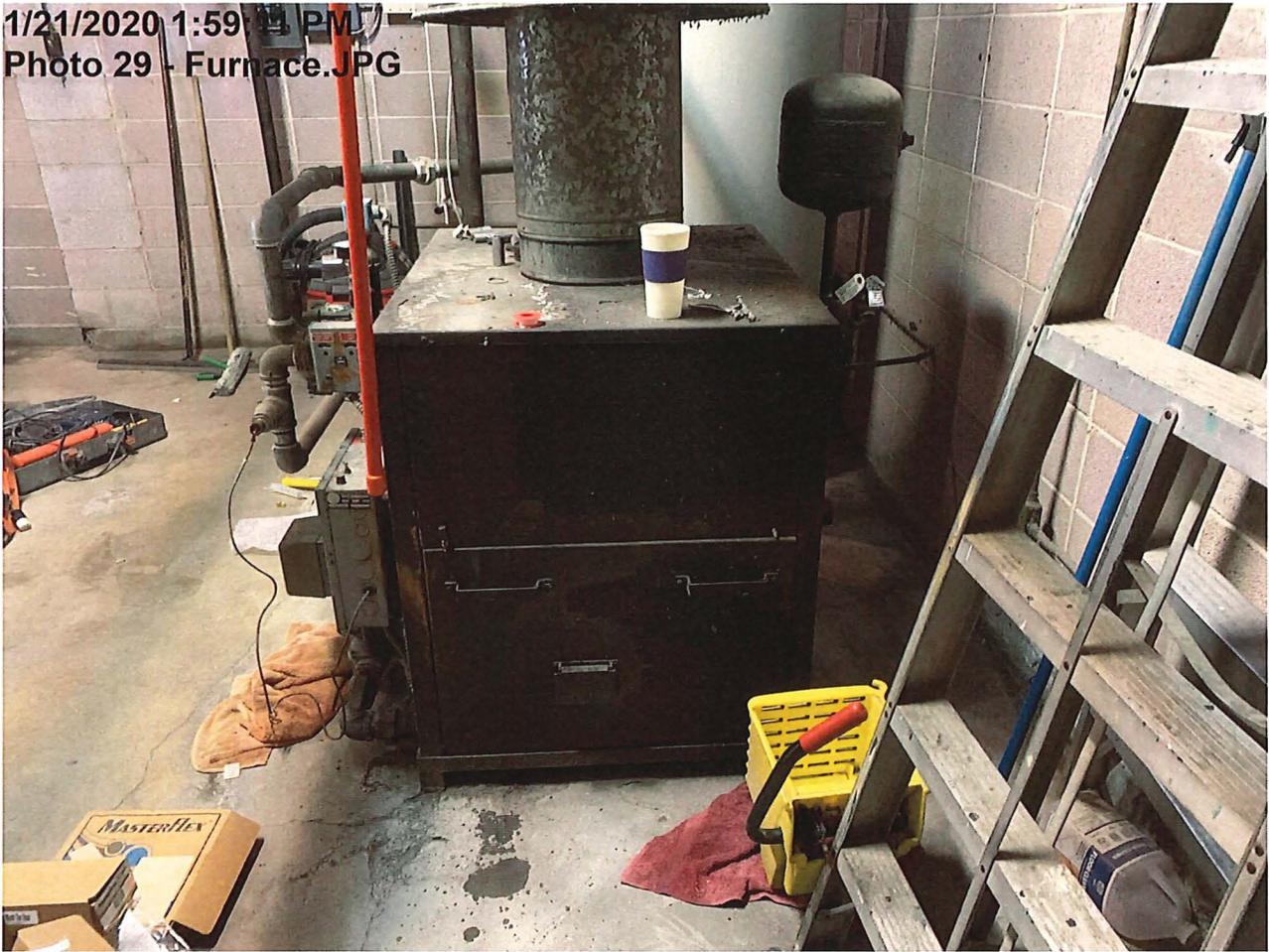
3/10/2020 11:05:46 AM
Photo 27 - Main wash room.JPG



1/21/2020 1:59:00 PM
Photo 28 - Furnace and water heater.JPG



1/21/2020 1:59:11 PM
Photo 29 - Furnace.JPG

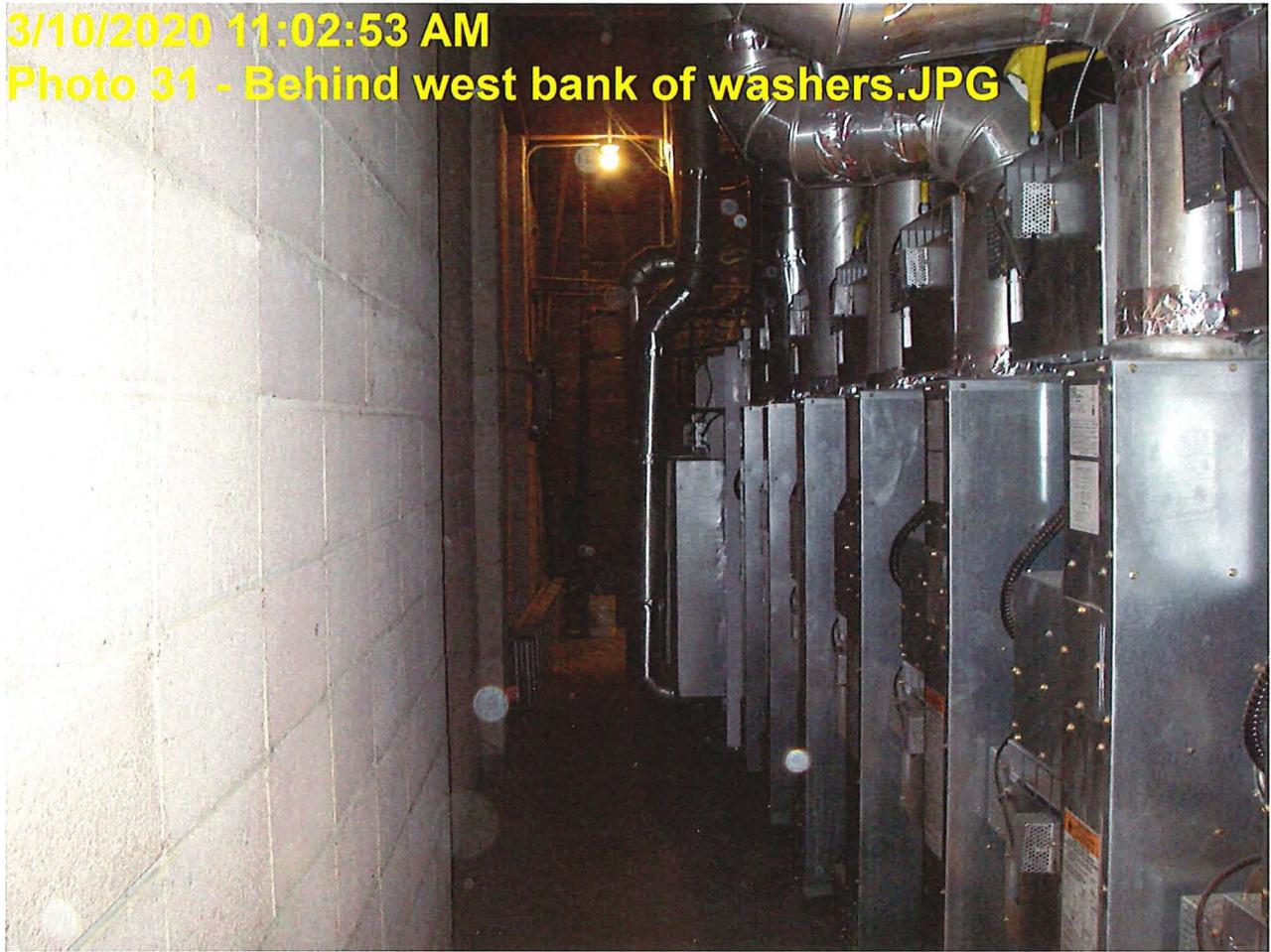


3/10/2020 11:03:03 AM
Photo 30 - Boiler and furnace.JPG



3/10/2020 11:02:53 AM

Photo 31 - Behind west bank of washers.JPG



3/10/2020 11:02:47 AM

Photo 32 - Floor drain on west side of building.JPG



3/10/2020 11:03:12 AM

Photo 33 - Oil bucket by boiler.JPG



3/10/2020 11:03:22 AM

Photo 34 - Floor drain in boiler room.JPG



3/10/2020 11:04:50 AM
Photo 35 - Women's restroom.JPG

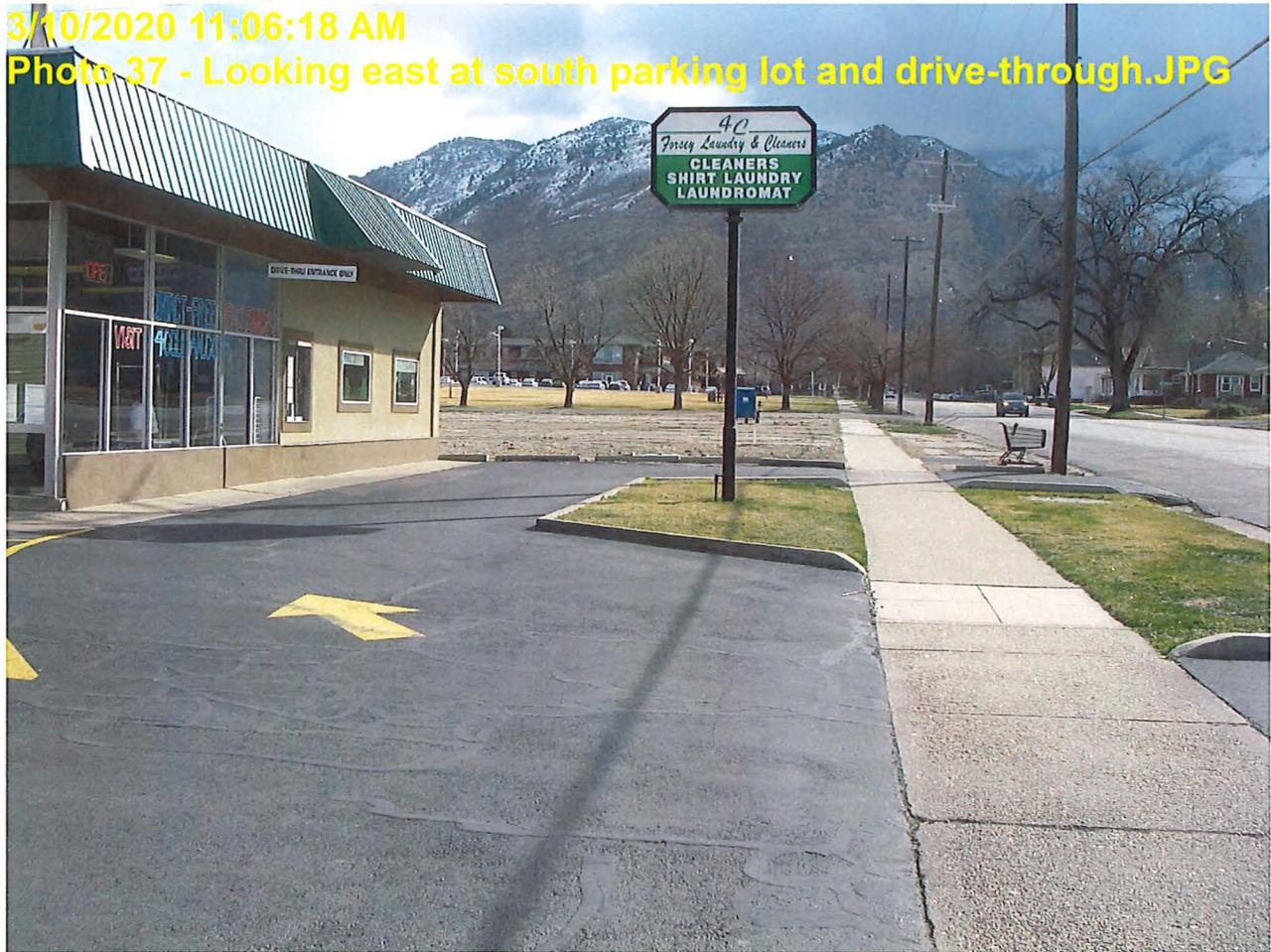


3/10/2020 11:05:02 AM
Photo 36 - Men's restroom.JPG



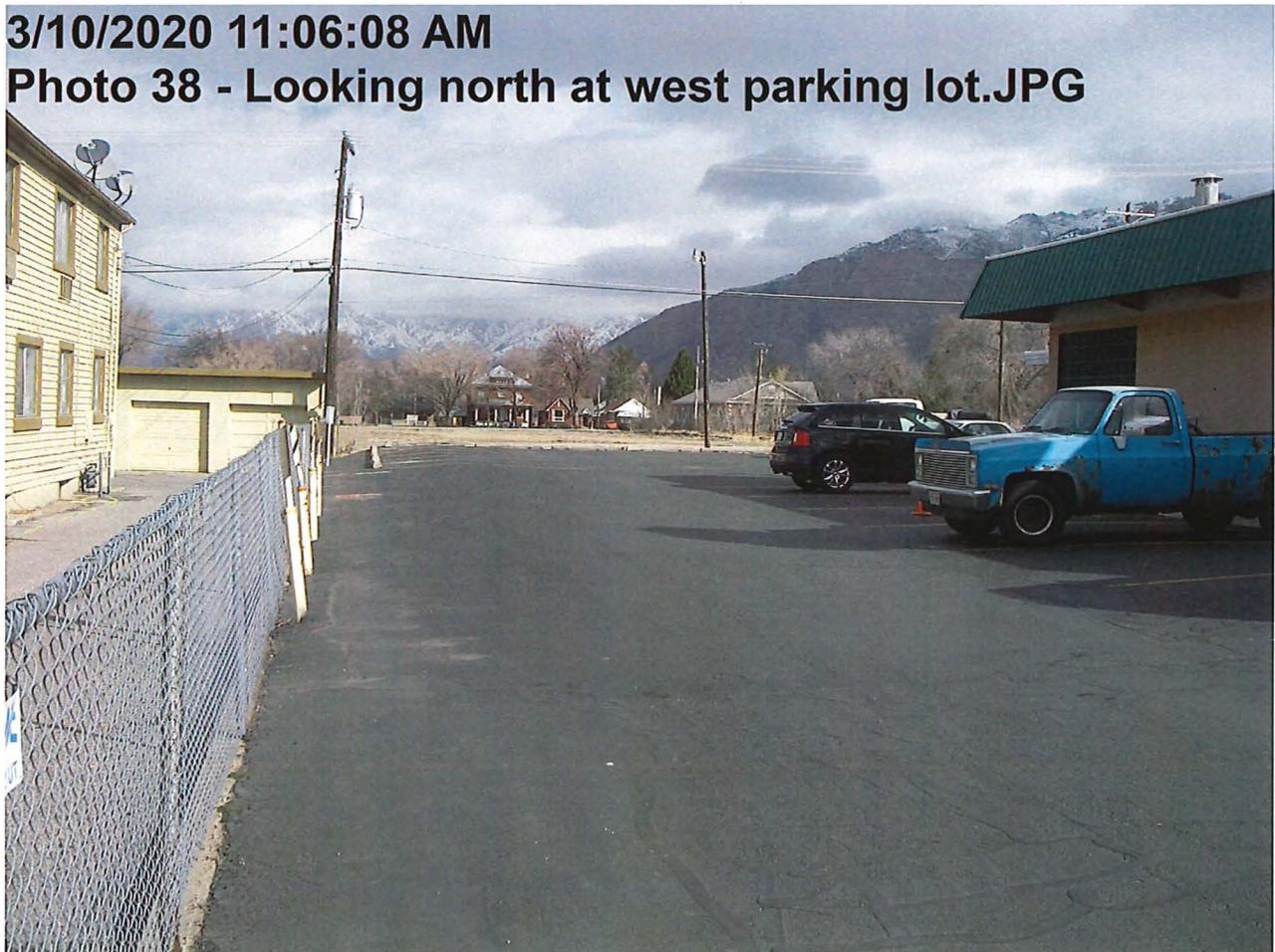
3/10/2020 11:06:18 AM

Photo 37 - Looking east at south parking lot and drive-through.JPG



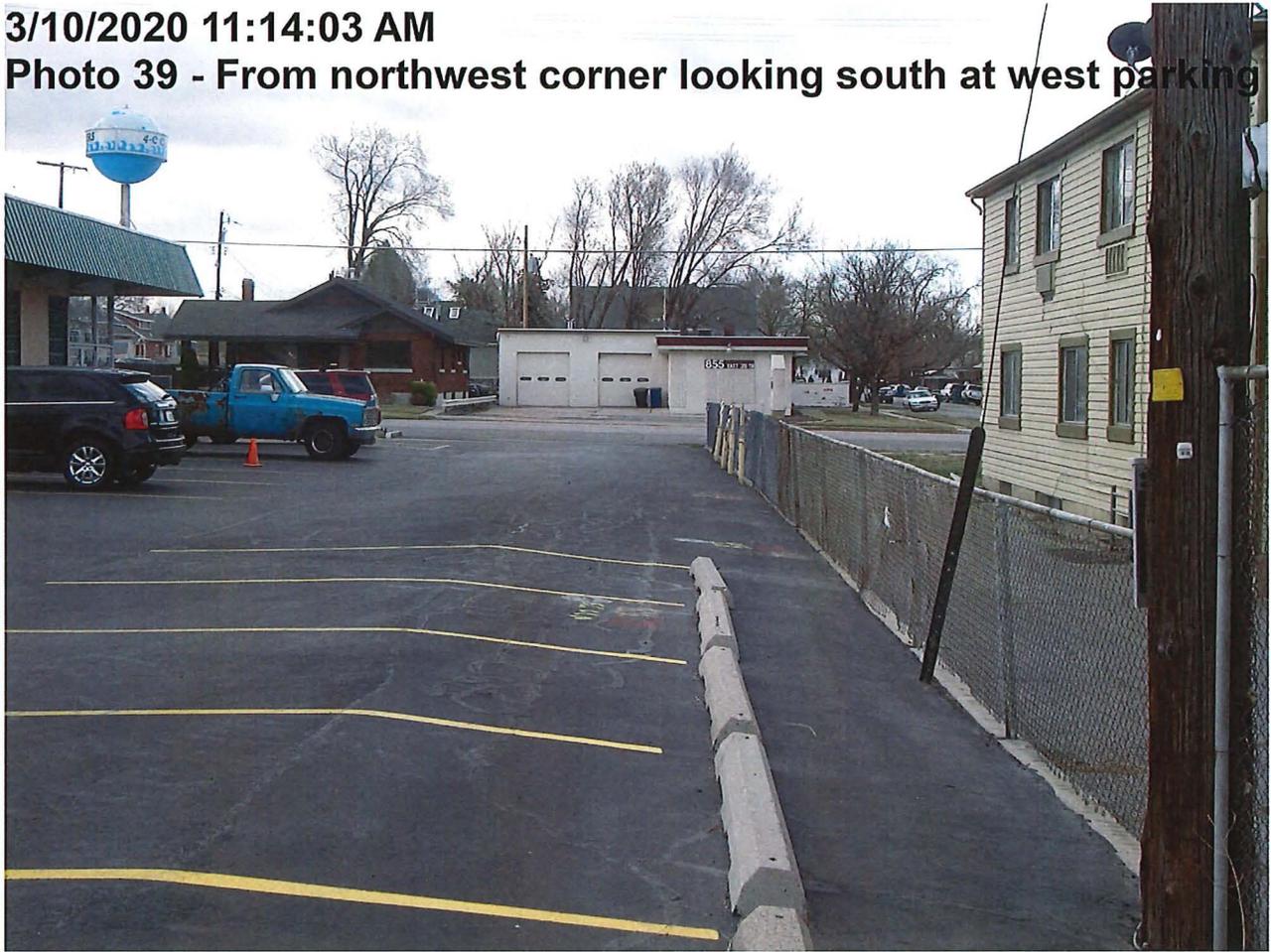
3/10/2020 11:06:08 AM

Photo 38 - Looking north at west parking lot.JPG



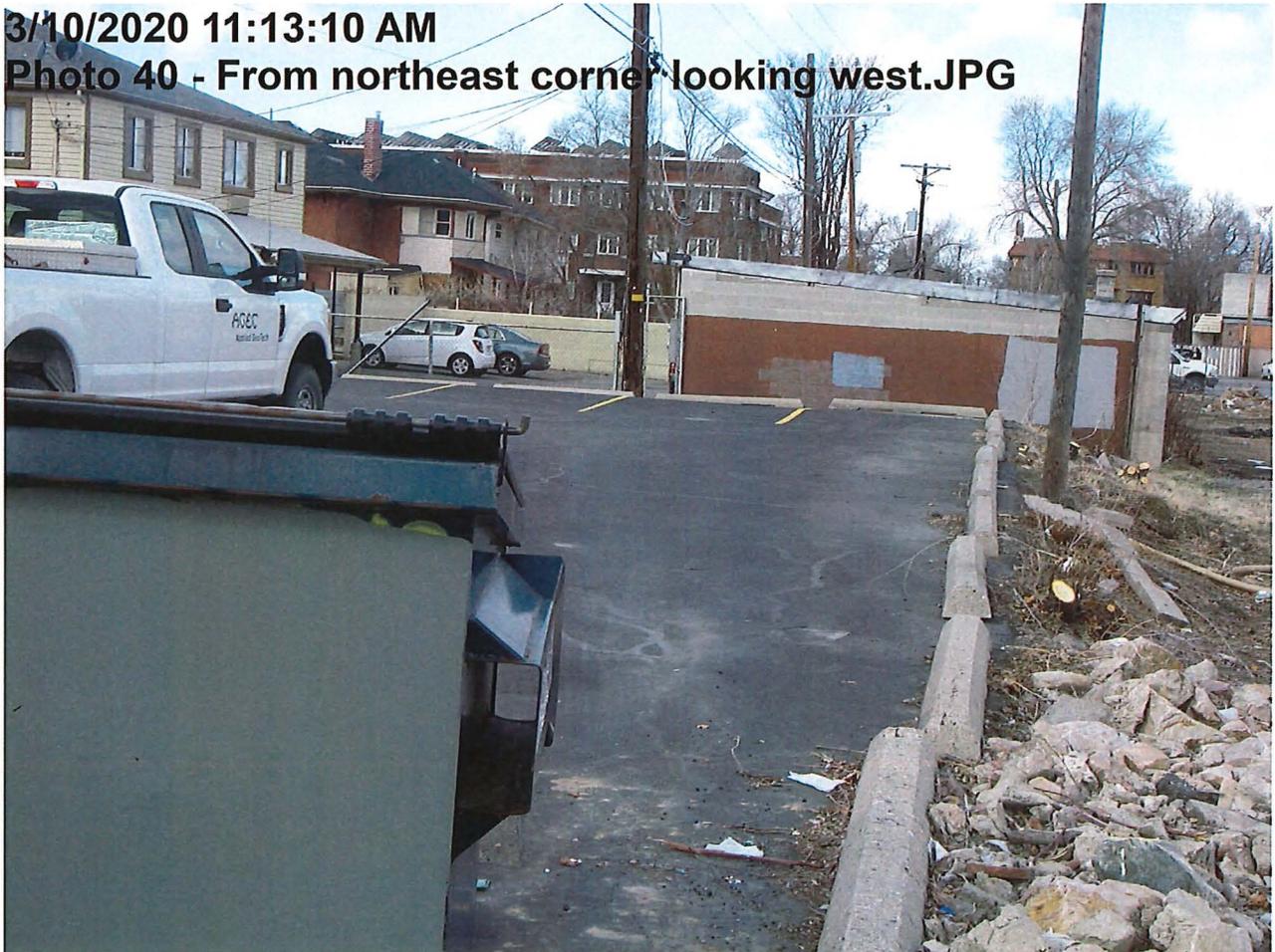
3/10/2020 11:14:03 AM

Photo 39 - From northwest corner looking south at west parking



3/10/2020 11:13:10 AM

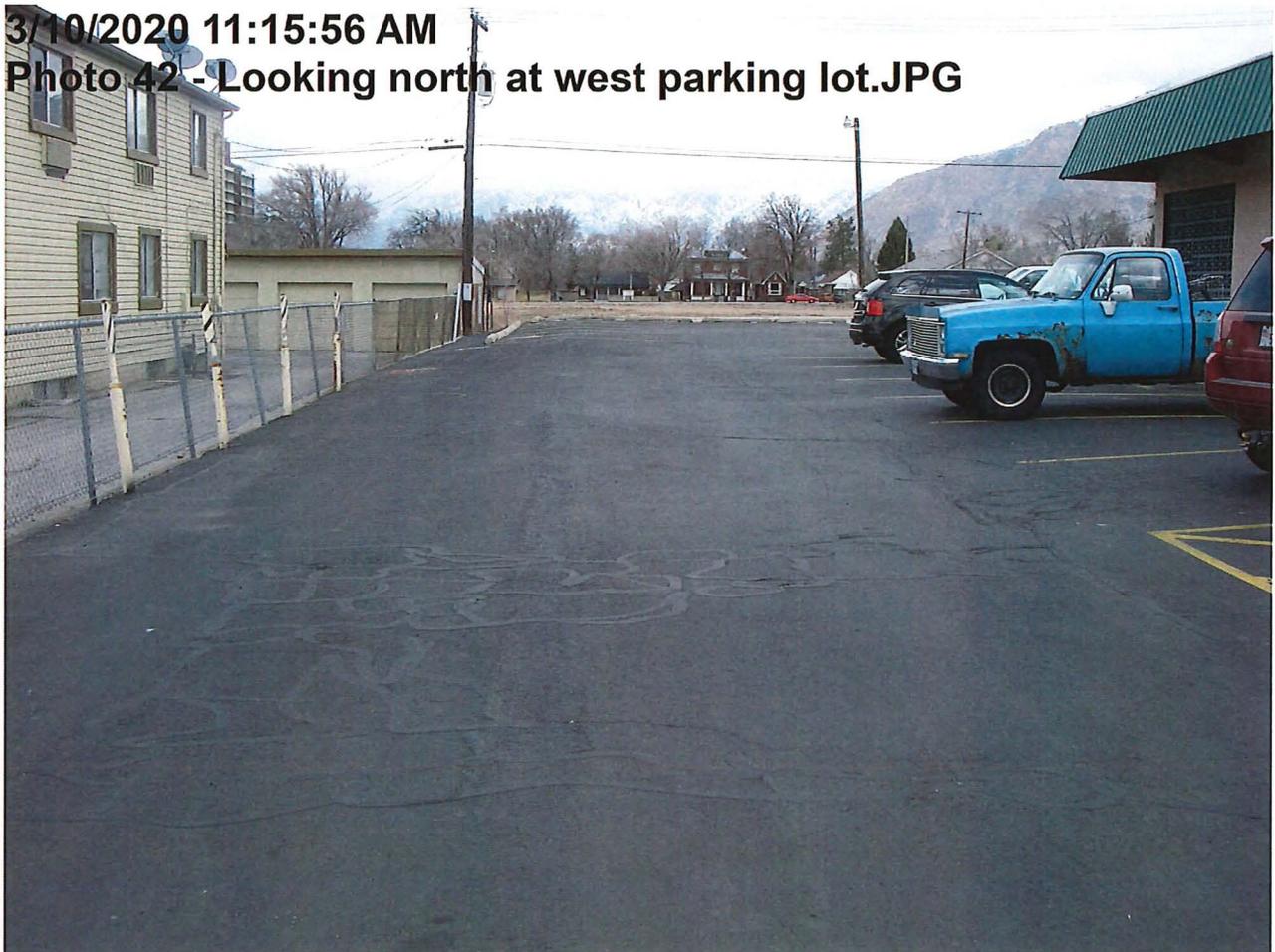
Photo 40 - From northeast corner looking west.JPG



3/10/2020 11:14:57 AM
Photo 41 - Looking south at parking lot.JPG

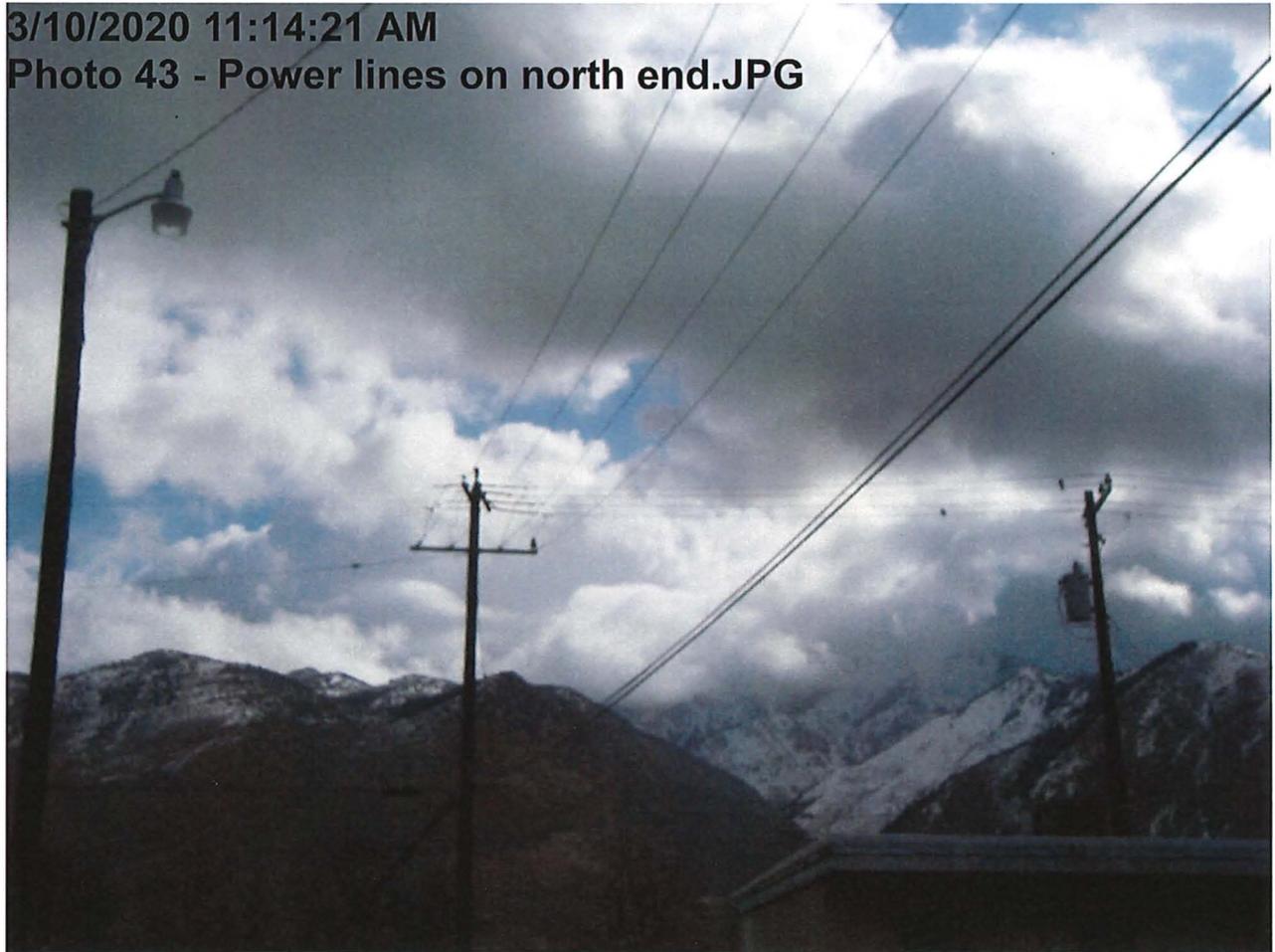


3/10/2020 11:15:56 AM
Photo 42 - Looking north at west parking lot.JPG



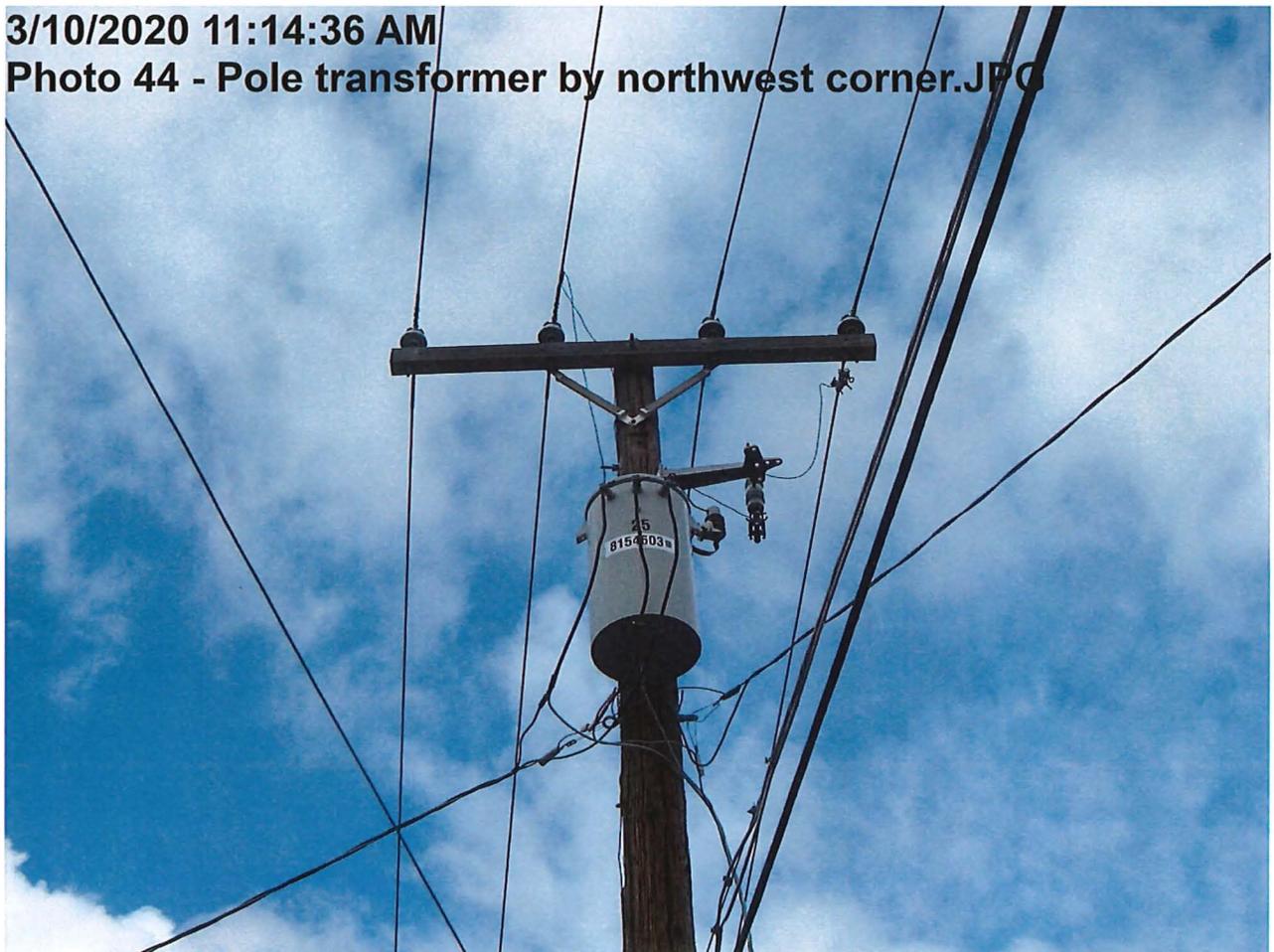
3/10/2020 11:14:21 AM

Photo 43 - Power lines on north end.JPG



3/10/2020 11:14:36 AM

Photo 44 - Pole transformer by northwest corner.JPG



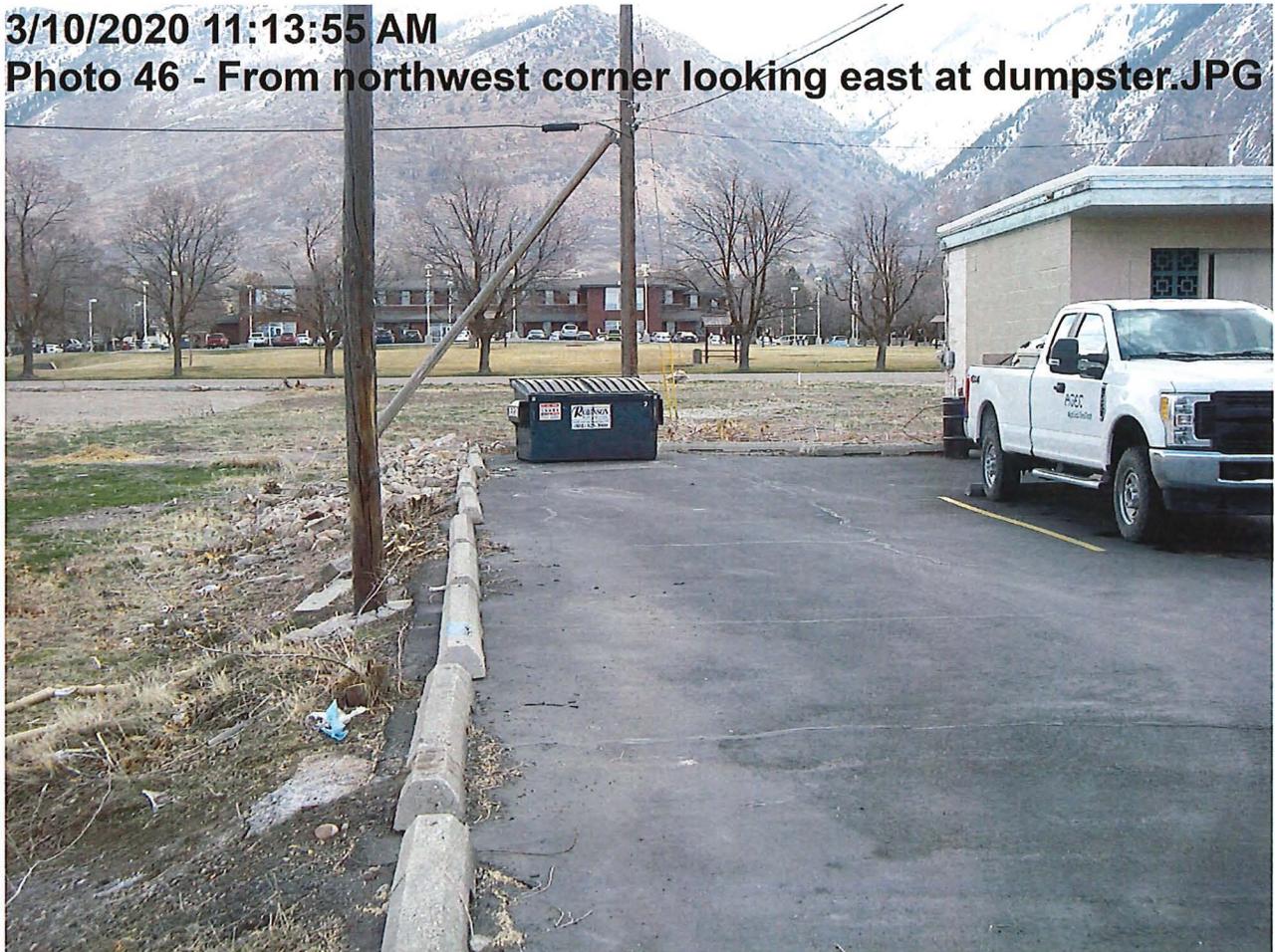
3/10/2020 11:13:27 AM

Photo 45 - Dumpster by northeast end.JPG

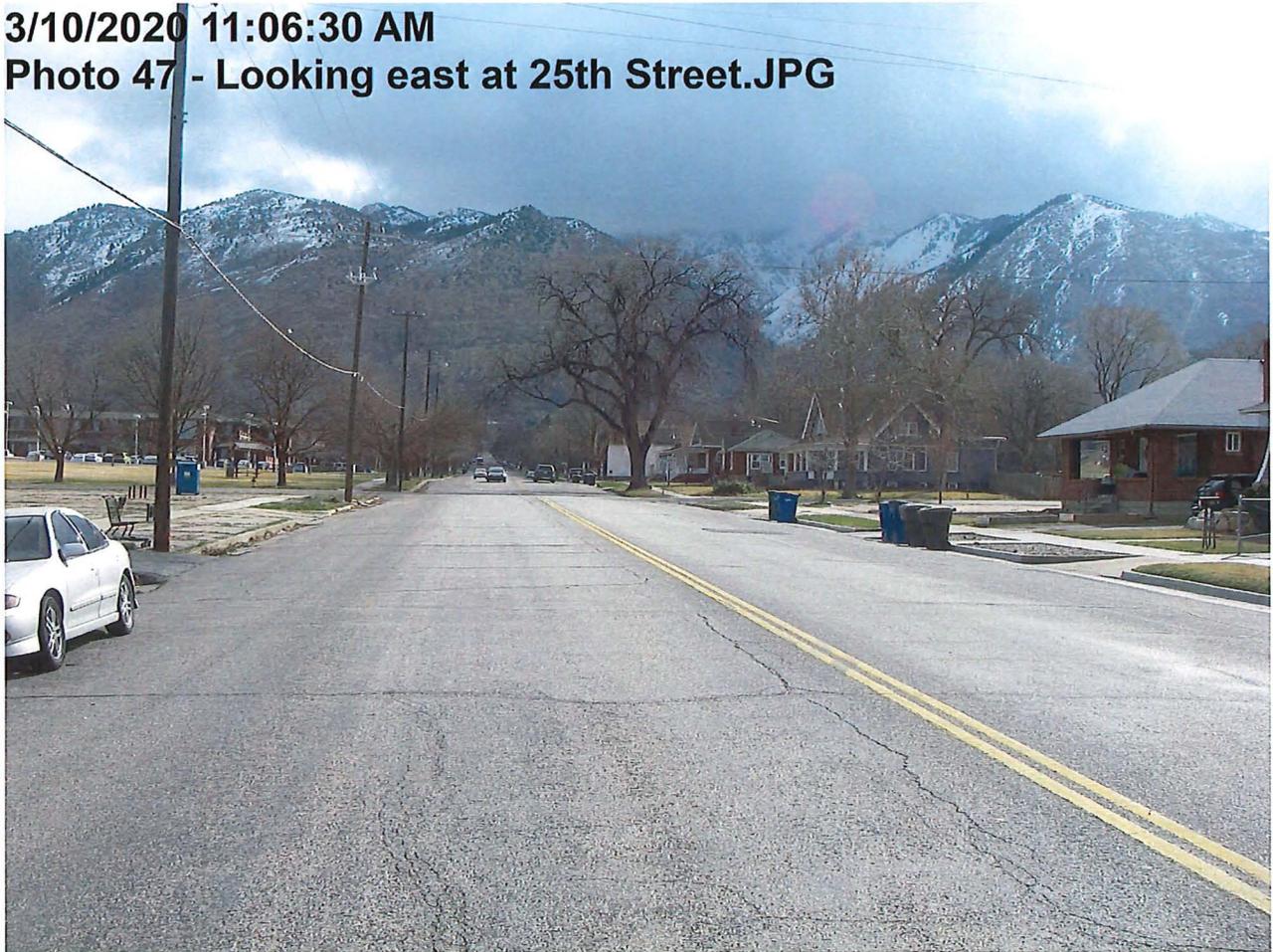


3/10/2020 11:13:55 AM

Photo 46 - From northwest corner looking east at dumpster.JPG



3/10/2020 11:06:30 AM
Photo 47 - Looking east at 25th Street.JPG

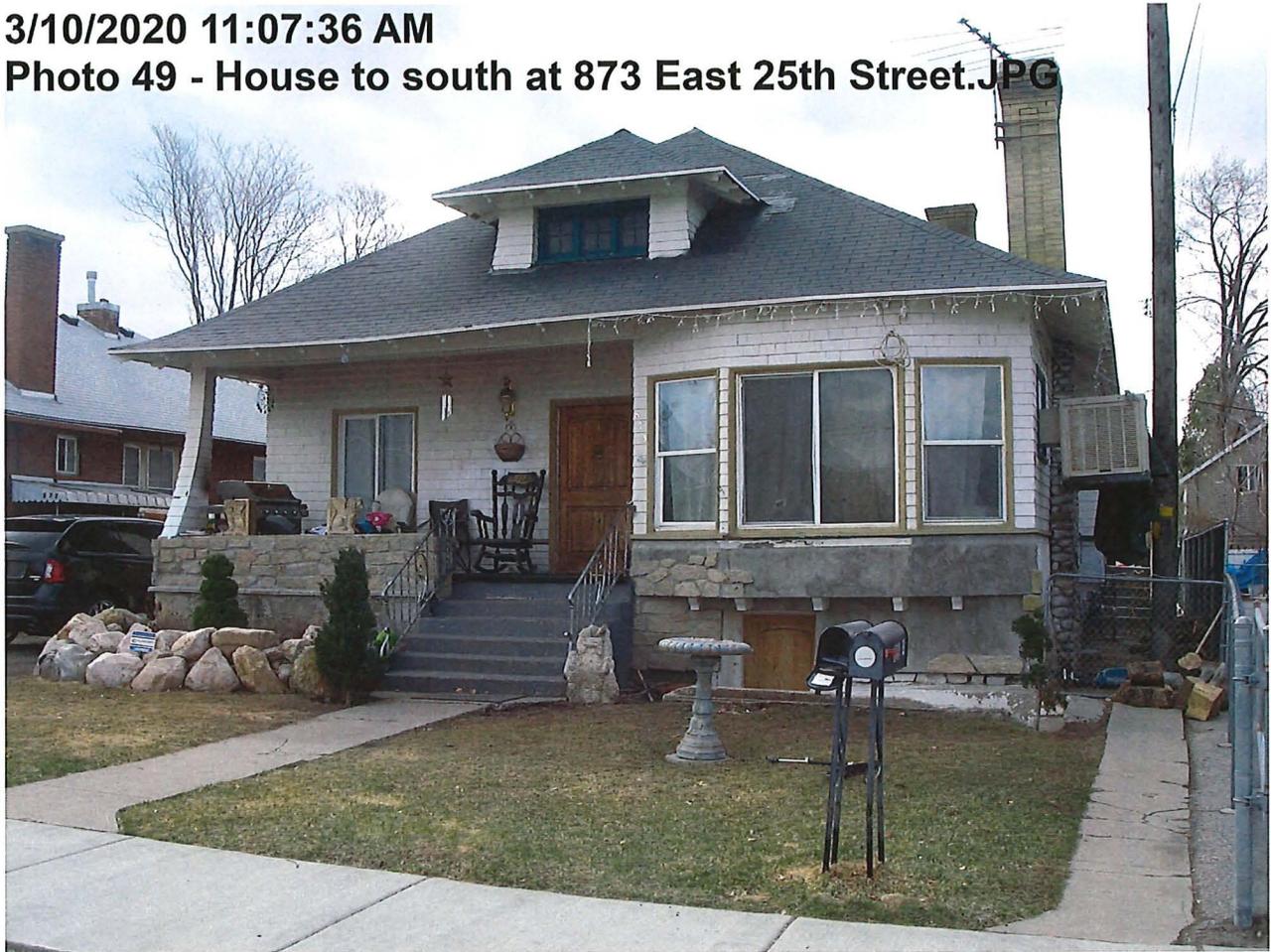


3/10/2020 11:10:02 AM
Photo 48 - Looking west at 25th Street.JPG



3/10/2020 11:07:36 AM

Photo 49 - House to south at 873 East 25th Street.JPG



3/10/2020 11:07:11 AM

Photo 50 - Law office to south.JPG



3/10/2020 11:06:37 AM

Photo 51 - Cheveux Salon to south.JPG



3/10/2020 11:06:54 AM

Photo 52 - Apartments to west.JPG



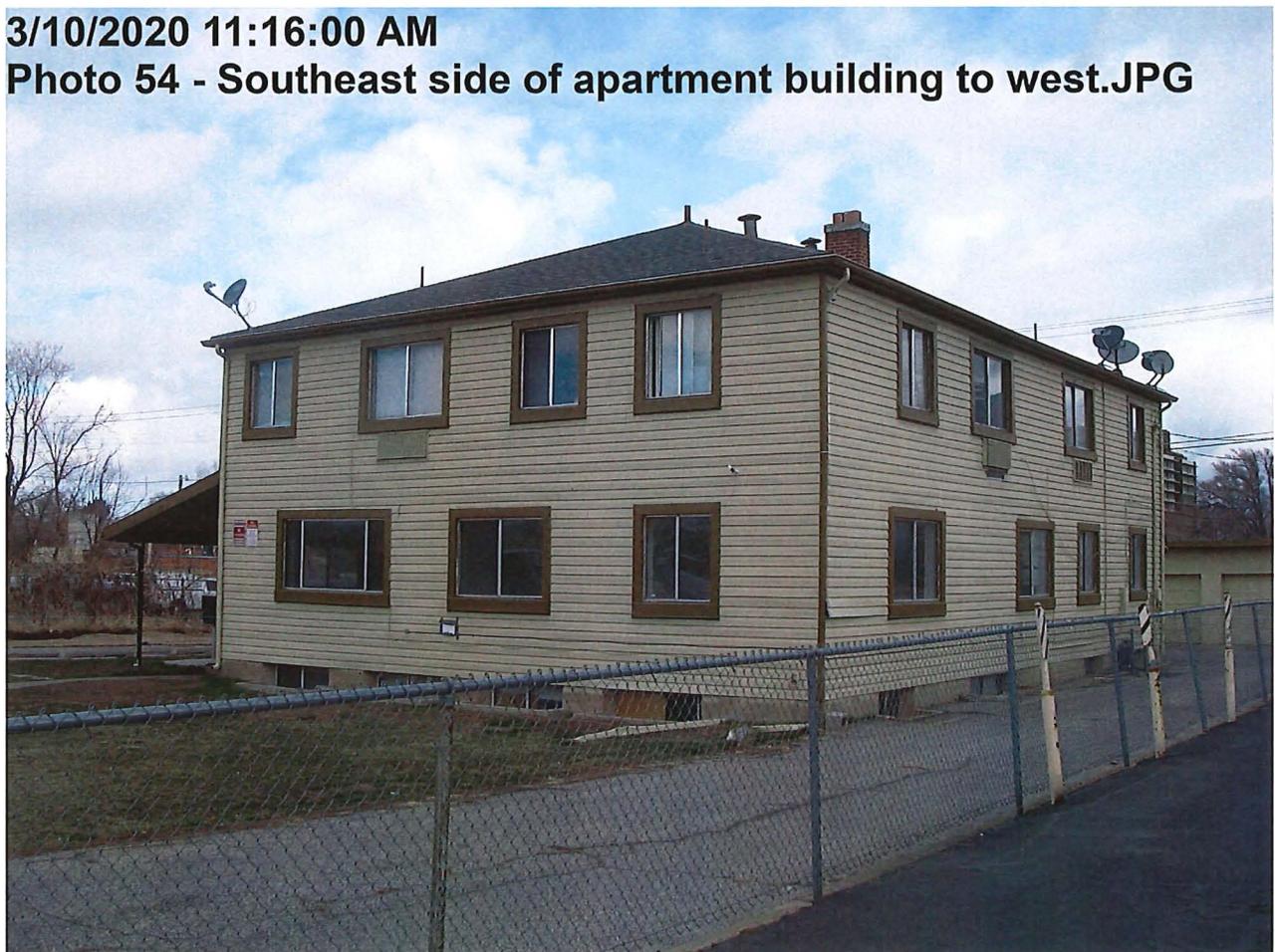
3/10/2020 11:15:03 AM

Photo 53 - Northeast side of apartments to west.JPG



3/10/2020 11:16:00 AM

Photo 54 - Southeast side of apartment building to west.JPG



3/10/2020 11:15:19 AM
Photo 55 - Garage to west.JPG



3/10/2020 11:10:35 AM
Photo 56 - Vacant lot to east.JPG



APPENDIX B
USER QUESTIONNAIRE

AGEC Phase 1 ESA User Questionnaire

Site: Forsey Cleaners & Laundry parcel at 856 East 25th Street in Ogden, Utah

The most recent revision of the ASTM Standard Practice for Environmental Site Assessments (ASTM E 1527-13) has expanded the user's responsibilities in the preparation of the Phase I ESA report. By responding to the following questions, the user will help identify the possibility of recognized environmental conditions in connection with the subject property. **Please respond to the questions to the best of your knowledge and return this questionnaire to AGECEC so that we may include the information in the report.**

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

- 1. Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).** Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state or local laws? NO YES - explain
- 2. Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).** Are you aware of any activity and land use restrictions, such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state or local law? NO YES - explain
- 3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).** 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. NO YES - explain
- 4. Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).** Does the purchase price being paid for this property reasonably reflect the fair market value of the property? YES NO
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?
- 5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).** Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional (AGECEC) to identify conditions indicative of releases or threatened releases? NO YES - explain

For example:

- A. Do you know the past uses of the property?
 - B. Do you know of specific chemicals that are present or once present at the property?
 - C. Do you know of spills or other chemical releases that have taken place at the property?
 - D. Do you know of any environmental cleanups that have taken place at the property?
6. **The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).** 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? NO YES - explain

Completed by: _____

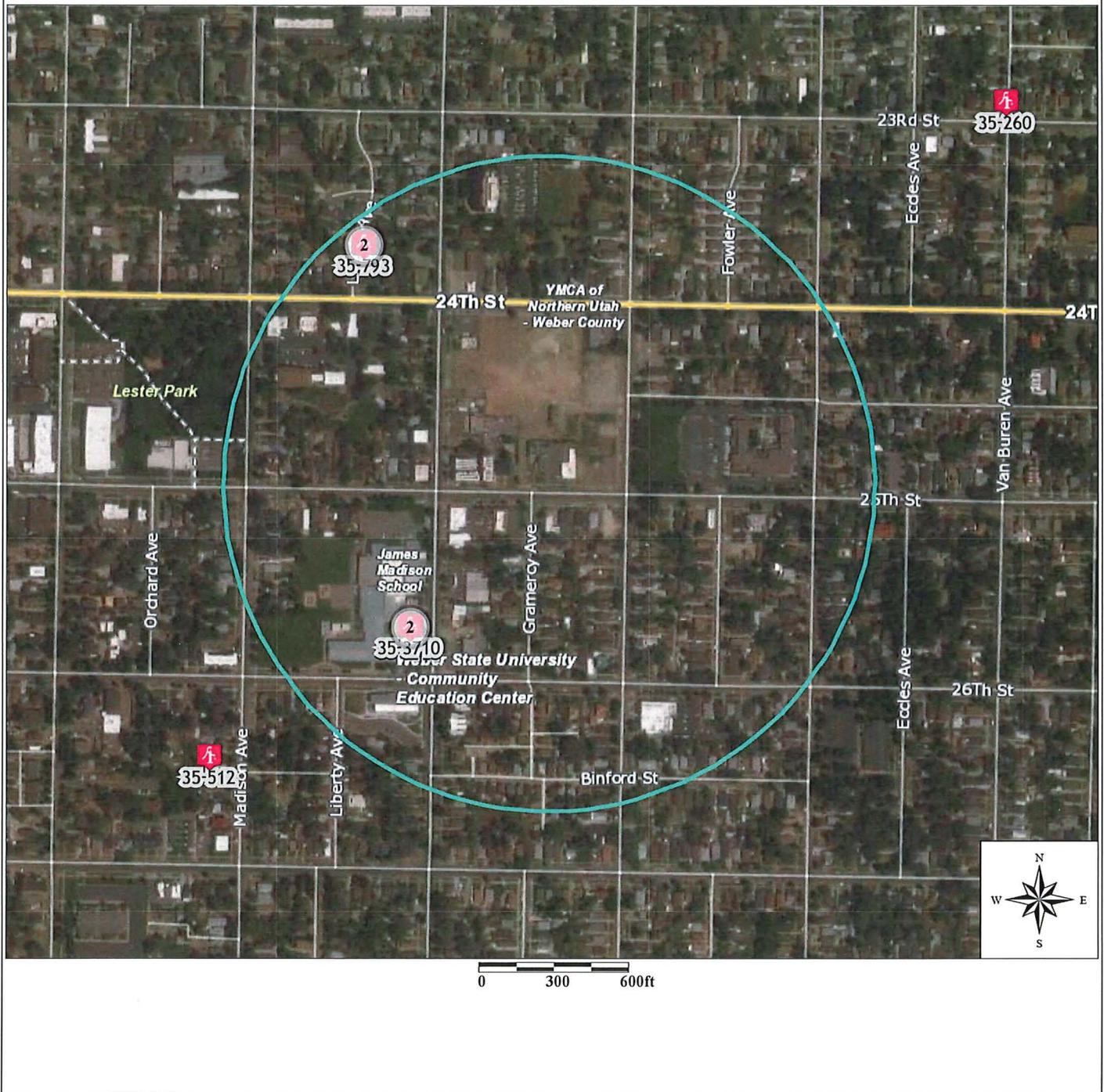
Printed name: _____

Date: _____

Please complete and return to Tom Atkinson at AGEC by fax (801) 566-6493, email (atkinson@agecinc.com) or mail.

APPENDIX C
WATER RIGHTS POINTS OF DIVERSION

Water Rights Map



Services

Agencies

Search Utah.gov



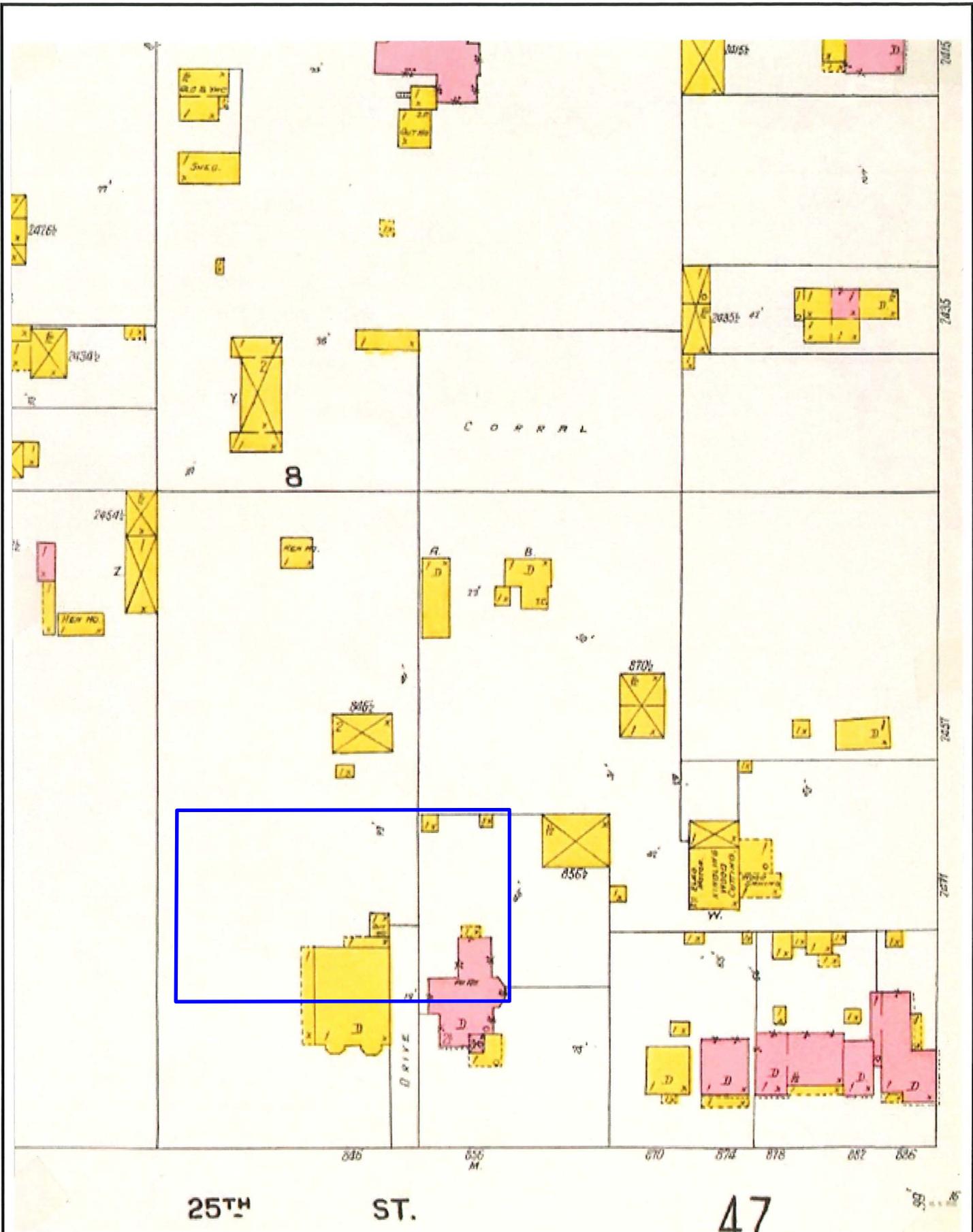
Search Radius: 1320 ft.

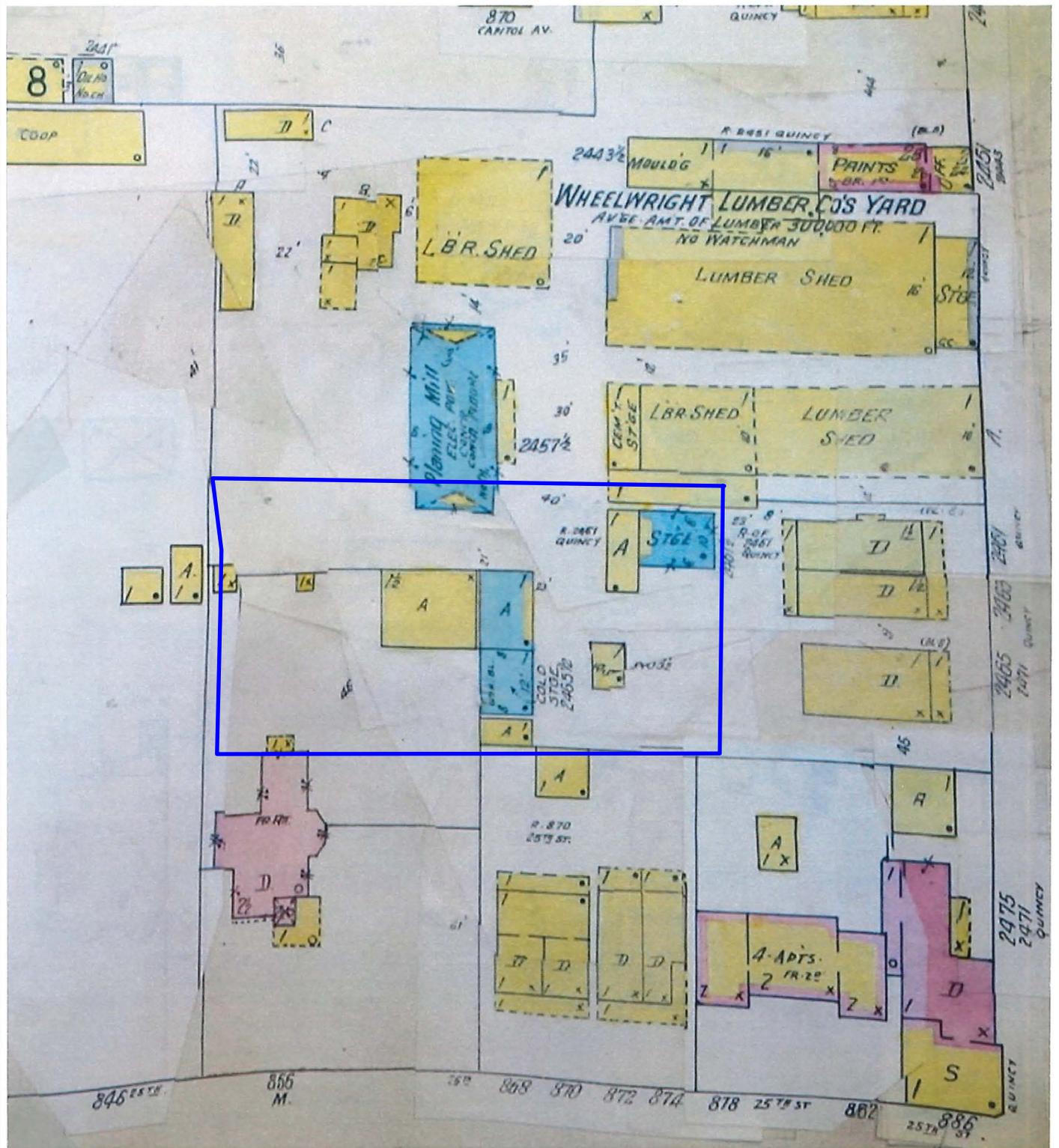
From the SE corner North 500 West 2600 section 28 township 6N range 1W SLbm

WR Number	Diversion Type	Well Log	Location	Status	Priority	Uses	CFS	ACFT	Address	Owner Name
35-793	Underground		S1292 E1978 W4 28 6N 1W SL	P	19550527	D	0.015	0.000	748 24TH STREET	C. E. TILLOTSON
35-3710	Underground		S140 W475 N4 33 6N 1W SL	P	1933	I	0.011	0.000	UT	LYDIA BURROWS

Utah Division of Water Rights | 1594 West North Temple Suite 220, P.O. Box 146300, Salt Lake City, Utah 84114-6300 | 801-538-7240
[Natural Resources](#) | [Contact](#) | [Disclaimer](#) | [Privacy Policy](#) | [Accessibility Policy](#)

APPENDIX D
SANBORN FIRE INSURANCE MAPS





APPENDIX E
TAX ASSESSOR RECORDS



Weber County Parcel Search

2380 Washington Blvd Ogden, Utah

[Weber County Home](#) - [Parcel Search](#) - [Interactive Maps](#)

[Print this page](#)

Current Taxes	Ownership Info	Tax History	Property Characteristics	Delinquent Taxes
-------------------------------	--------------------------------	-----------------------------	--	----------------------------------

Today's Date: 03/07/2021

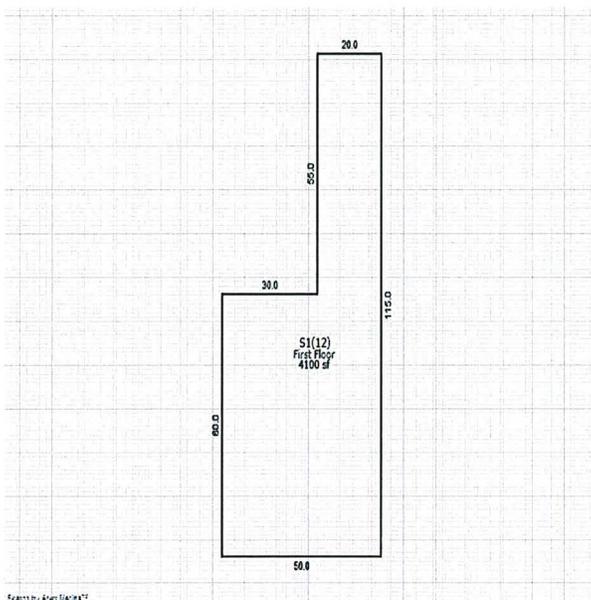
[<--Back to Search](#)

Parcel #: 010590012

Building Characteristics

Property Type:	Commercial
Built As Desc.:	Laundromat
Stories:	1
Above Grade Square Feet:	4,100
Basement Square Feet:	0
Total Square Feet:	4,100
Basement Percent Complete:	No Basement
Building Class:	C
Percent Complete:	100%
Year Built:	1961
Lot Size:	0.38 Acres

Building Sketches - Click on Image to enlarge



MAPS

[View in Geo-Gizmo](#)

01-059 [View PDF](#)

Updated: January 15 2021

APPENDIX F
MEYER CLEANING VILLAGE RCRA GENERATOR FILE
& AGECE SAMPLING REPORTS



Norman H. Bangertter
Governor

Suzanne Dandoy, M.D., M.P.H.
Executive Director

November 4, 1986
538-6170

Meyers Cleaning Village
PO Box 9609
Ogden, Utah 84401

Dear Ms. Moreno:

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown above.

Your EPA Identification Number is UTD076254960.

The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Biennial Reports that generators of hazardous waste must file with the State of Utah and other hazardous waste management reports and documents required under The Utah Solid and Hazardous Waste Act and the Utah Solid and Hazardous Waste Management Regulations (UHWMR).

If you have any questions please contact Lisa Jones at 538-6170.

Sincerely,

Dale D. Parker, Ph.D.
Executive Secretary
Utah Solid and Hazardous Wastes
Committee

cc: Jon Minkoff, U.S. Environmental Protection Agency,
Region VIII

BEFORE COPYING FORM, ATTACH SITE IDENTIFICATION LABEL OR ENTER:

SITE NAME MEYER CLEANING VILLAGE

EPA ID NO. UTD076254960



U.S. ENVIRONMENTAL PROTECTION AGENCY

1987 Hazardous Waste Generation and Shipment Report

IDENTIFICATION AND CERTIFICATION

WHO MUST COMPLETE THIS FORM? Form IC must be completed by every site that received this package.

INSTRUCTIONS: Please read the detailed instructions beginning on page 8 of the 1987 Hazardous Waste Generation and Shipment Report Instructions booklet before completing this form.

Complete Sections I through IV and Sections VI through IX immediately. Complete Section V, certification, after you have finished the full report package.

SEC. I. Site name and physical location which may differ from the mailing address. Complete items A through G. Mark for items A, B, C, D, F, and G if same as label; if different, enter corrections. If label is absent, enter information.

A. Site/company name
Same as label MEYER CLEANING
or —

B. EPA ID No.
Same as label UTD076254960
or —

C. Address number and street name of physical location - If not known, enter industrial park, building name or other physical location description
Same as label 856 - 25th ST
or —

D. City, town, village, etc.
Same as label OGDEN
or —

E. County
WEBER

F. State
Same as label UT
or —

G. Zip Code
Same as label 84401
or —

SEC. II. Mailing address of site. Mark for A, B, C, and D if same as label; if different, enter corrections.

A. Number and street name of mailing address
Same as label P.O. Box 9606
or —

B. City, town, village, etc.
Same as label OGDEN
or —

C. State
Same as label UT
or —

D. Zip Code
Same as label 84409
or —

SEC. III. Name, title, and telephone number of the person who should be contacted if questions arise regarding this report.

A. Please print: Last name First name M.I. B. Title C. Telephone

PATTERSON JAMES E PRESIDENT 801 607 - 2700

Extension

SEC. IV. Enter the Standard Industrial Classification (SIC) Code that describes the principal products, group of products, produced or distributed, or the services rendered at the site's physical location. Enter more than one SIC Code only if no one industry description includes the combined activities of the site. SIC codes are listed beginning on page 1 of the 1987 Hazardous Waste Generation, Shipment and Management Report Codebook.

A. 7216 B. C. D. E. F.

SEC. V. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. Please print: Last name First name M.I. B. Title

PATTERSON JAMES E PRESIDENT

B. Signature [Signature] Date of signature 04 22 88
Mo. Day Yr.



January 29, 2020

Ogden City Business Development
2549 Washington Blvd., Suite 420
Ogden, UT 84401

Attention: Nelson Riches

Subject: Subsurface Environmental Sampling Investigation
Forsey Cleaners & Laundry
856 25th Street
Ogden, Utah
AGEC Project No. 1200034

Gentlemen:

Applied Geotechnical Engineering Consultants, Inc., (AGEC) was requested to conduct a limited subsurface environmental investigation in the vicinity of Forsey Cleaners & Laundry at 856 25th Street in Ogden, Utah.

The subject property is occupied by Forsey (4-C) Laundry and Cleaners, a one-story, 4,100-square-foot, masonry-block commercial building at 856 East 25th Street. The south end of the building is a self-serve, coin-operated laundry facility. Offices and storage are on the north end of the building. No dry cleaning is currently performed in the building. An asphalt-paved parking lot is west of the building.

SITE HISTORY

A house was built by 1906 at 856 East 25th Street and was converted into the East Side Nursing Home by the mid 1950s. The house/nursing home was removed by 1961 and replaced with the existing laundry facility at 856 East 25th Street. The building was occupied by Norge Cleaning Village/Meyer's Norge Village from the 1960s to the late 1980s. In the late 1980s, the business name changed to Forsey's Norge self serve laundry and then Forsey's Laundry and Cleaning Village, 4-C's Wash Basin and Four Seasons Laundromat. We understand that dry cleaning has not been performed on site since about 1987.

The property is listed on the RCRA Generator list for Meyers Cleaning Village at 856 25th Street. The facility was a small quantity generator of hazardous waste. The dry-cleaning facility was closed in early 1987 when the dry cleaning began to be performed at another facility. The business was sold in January 1988. The Forsey laundry does not perform dry cleaning on site.

SAMPLING INVESTIGATION

To help determine if the historical dry cleaner has impacted the property, AGECE conducted a limited subsurface sampling investigation by obtaining soil, groundwater samples and performing a soil vapor investigation with locations inside and outside the existing building. This sampling event was not intended to delineate the extent of the contamination, if present, in the soil vapor, soil or groundwater.

Older dry cleaners typically used and stored significant quantities of chlorinated solvents including tetrachloroethylene (PCE or perc) that can impact the subsurface soils and groundwater due to historical spills and releases of the solvent. The former dry cleaner is a recognized environmental condition.

During environmental and geotechnical investigations in the vicinity of the property, subsurface water was measured at approximately 7 to 9 feet below the ground surface with a gradient to the west.

AGECE conducted the limited sampling investigation with two exterior borings (GP-1 and GP-2) near the west and north side of the northwest end of the building, presumably where the historical dry-cleaning equipment was located (Figure 1). Two soil vapor sampling points (PRT-1 and PRT-2) were sampled adjacent to the borings west of the building. Two indoor subslab soil vapor samples were obtained in the northwest room, presumably near the historical dry-cleaning equipment.

AGECE personnel arranged for a Utah-licensed drilling subcontractor (Earthprobe Environmental Field Services) to perform the exterior sampling using a track-mounted Geoprobe rig on January 20, 2020. The exterior borings (GP-1 and GP-2) were advanced at 10 feet to encounter the groundwater. The groundwater was measured approximately 7 to 7½ feet below the asphalt pavement in the borings. Soil and groundwater environmental samples were obtained from each of the two environmental borings. The soil and groundwater samples were obtained with the use of a Geoprobe driving a 2-inch diameter dual-tube sampling rod. The soil was logged and continuously sampled to the bottom of the borings. Both borings encountered fill to approximately 3 feet below the pavement followed by lean clay with sand extending to the bottom of the borings. The soil was field screened with the use of a photo ionization detector (PID) to help identify soils that have been impacted by volatile organic compounds. Elevated PID readings were not measured in the four soil samples obtained for screening (Table 1). Soil samples were obtained from each boring near the ground surface (0-2 feet) and near the groundwater interface (7 feet). The soil samples were placed in new glass jars provided by the analytical laboratory with no head space while wearing new disposable gloves.

The groundwater samples were obtained from each boring with the use of a decontaminated steel screen set in the bottom of the boring. The water samples were obtained with a disposable hose and a peristaltic pump. The groundwater samples were transferred directly to 40 ml glass vials equipped with Teflon septa, preserved with 2 percent hydrochloric acid as provided by the analytical laboratory. The soil and groundwater samples will be obtained in general accordance with the sampling protocol as set by Utah State and the Environmental

Protection Agency. The sample jars and vials were labeled with the location, depth, date and time, immediately stored in a cooler with ice and transported with chain of custody forms to a Utah-certified analytical laboratory. The soil and groundwater samples were submitted to the laboratory for analysis of total volatile organic compounds (VOCs). Chain of Custody forms supplied by the analytical laboratory were used.

Soil vapor samples were also obtained from two exterior borings adjacent to borings GP-1 and GP-2 with a Post-Run Tubing (PRT) system (PRT-1 and PRT-2). The direct-push method was used to drive a disposable point to a depth of approximately 5 feet below grade. The sampling depth of 5 feet was used as soil vapor samples collected at less than 5 feet below the ground surface may be subject to barometric pressure effects and may be prone to breakthrough of ambient air through the soil column. Once the appropriate depth was reached, the probe rod was retracted approximately 4 to 6 inches to push out the expendable point and expose the point to the subsurface soil vapor. Teflon tubing was attached to the PRT and an adapter with an O-ring with a threaded connection engaged the adapter with ¼-inch diameter tubing. A syringe was then used to purge the tubing of dead air. A T-valve on the sampling train was then be turned to allow the soil vapor sample to be collected with a certified clean 1-liter Summa canister. The soil vapor was collected via the Summa's flow regulator (pre-calibrated to flow at 200 milliliters per minute) for 5 minutes. The initial and final vacuum readings were recorded for each canister. After the soil, groundwater and soil gas samples were obtained, the outdoor borings were filled with granular bentonite clay and the asphalt pavement was patched.

The two subslab soil vapor samples were obtained on January 21, 2020 by used a hammer drill with a 0.625-inch concrete drill bit to drill holes through the concrete slab. A Vapor Pin, constructed with a single piece of metal, was installed with a silicon sleeve, forming an air tight seal between the Vapor Pin and the side of the borehole. A short section of new tubing was attached to the top of the Vapor Pin and purged with a syringe before being connected with a sampling train to a certified clean 1-liter Summa canister. The valve on the Summa canister was opened and the soil vapor collected via a flow regulator (pre-calibrated to flow at 200 milliliters per minute). The soil vapor samples (VP-1 and VP-2) were drawn and the initial and final vacuum readings were recorded. After the 5 minute sampling period was complete and the canister closed, the Vapor Pin assembly was removed from the floor and the concrete floor was patched.

The SUMMA canister samples were shipped and submitted under chain of custody protocols to Pace Analytical National, a Utah-certified laboratory for analysis of volatile compounds by method TO-15. The analytical results were compared with the EPA risk-based Commercial and Residential Vapor Intrusion Screening Level (VISL) Calculator. The VISL Calculator is a technical resource, developed by the EPA that: (1) identifies chemicals considered to be typically vapor-forming under environmental conditions and known to pose a potential cancer risk or noncancer hazard through the inhalation pathway; (2) provides generally recommended screening-level concentrations for groundwater, near-source soil gas (exterior to buildings), sub-slab soil gas, and indoor air; and (3) facilitates calculation of site-specific screening levels and/or candidate risk-based cleanup levels based on user-defined target risk levels, exposure scenarios, and semi-site-specific or site-specific attenuation factors. An exceedance of a VISL does not necessarily identify a definitive, site-specific, indoor air quality issue or concern but

may indicate that additional investigation and monitoring of site-specific conditions may be warranted.

ANALYTICAL RESULTS

The four soil samples did not contain concentrations of the analyzed contaminants above the laboratory reported detection limits with the exception of 2-Butanone also known as methyl ethyl ketone (MEK) and tetrachloroethylene (PCE). The contaminant concentrations were compared to the residential and commercial November 2019 EPA Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. RSLs are not necessarily cleanup standards. The RSL's role in site "screening" is to help identify areas, contaminants, and conditions that may require further attention at a particular site. The detected concentrations of MEK and PCE were below the respective residential RSL values as indicated on Table 1.

The only contaminant detected in the two groundwater samples above the laboratory method detection limits was PCE (Table 2). The concentrations of PCE were 0.0422 mg/L (GP-1) and 0.00661 mg/L (GP-2). The EPA Maximum Contaminant Level (MCL) for PCE is 0.005 mg/L so both concentrations exceeded the MCL.

Compounds detected above the laboratory method detection limits in the two exterior samples and two subslab samples included acetone, benzene, 1,3-butadiene, carbon disulfide, carbon tetrachloride, chloroform, chloromethane, cumene (isopropylbenzene), cyclohexane, 1,1-dichloroethene, cis 1,2-dichloroethene, 1,4-dioxane, ethanol, 4-ethyltoluene, ethylbenzene, trichlorofluoromethane, dichlorofluoromethane, N-heptane, N-hexane, isopropanol (2-propanol), 2-butanone (MEK), methylene chloride, naphthalene, propylene (propene), styrene, PCE, toluene, trichloroethylene (TCE), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m & p-xylene and o-xylene.

The soil gas analytical results were compared with the November 2019 US EPA risk-based residential and commercial VISL calculator and are summarized on Table 3 in Appendix A. The only VOCs detected above the residential VISL were 1,3-butadiene in sample PRT-2, chloroform in VP-2, naphthalene in VP-1, PCE in PRT-1, VP-1 and VP-2 and TCE in VP-1 and VP-2.

The concentrations of PCE were significantly higher in the two subslab samples than the exterior PRT samples. The degradation process of PCE produces daughter products as it works toward non-regulated, non-toxic compounds. The primary daughter products of PCE include TCE, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, and vinyl chloride.

According to the EPA, motor vehicle exhaust is a constant source of 1,3-butadiene and it is usually found in ambient air at low levels in urban and suburban areas.

Potential sources of chloroform include chlorine-treated drinking water. Chlorinated drinking water can leak from buried water supply or sanitary sewer lines. A floor drain was within several feet of VP-2 and is likely the source of the chloroform.

Naphthalene is found in cigarette smoke, car exhaust and diesel fuel.

CONCLUSIONS

Significant contaminant concentrations were not detected in the four soil samples. PCE was detected in the groundwater in both sampling locations at concentrations above the MCL.

Compounds detected above the residential VISL in the two exterior and two subsurface soil vapor samples included 1,3-butadiene, chloroform, naphthalene, PCE and TCE. The concentrations of PCE were significantly higher in the two subsurface samples than the exterior PRT samples. TCE was only detected in the two subsurface samples. Based on the limited sampling performed to date, it appears the PCE contamination is a result of an historical release near the former dry-cleaning equipment.

The sources of 1,3-butadiene, chloroform and naphthalene in the soil vapor samples are unknown. As they each were only detected in one of four samples, these compounds do not appear to be widespread contaminants on the property.

LIMITATIONS

This environmental sampling report has been prepared in accordance with generally accepted environmental practices in this area for the use of the client. The conclusions of the report are based on the information obtained from the soil, groundwater and soil vapor samples obtained at the locations indicated in the report and the data obtained from laboratory testing.

Applied Geotechnical Engineering Consultants, Inc. does not represent that the air, soil and groundwater on the property contains no hazardous materials or other latent conditions beyond the compounds and locations tested.

If you have any questions, or if we can be of further service, please call.

Sincerely,

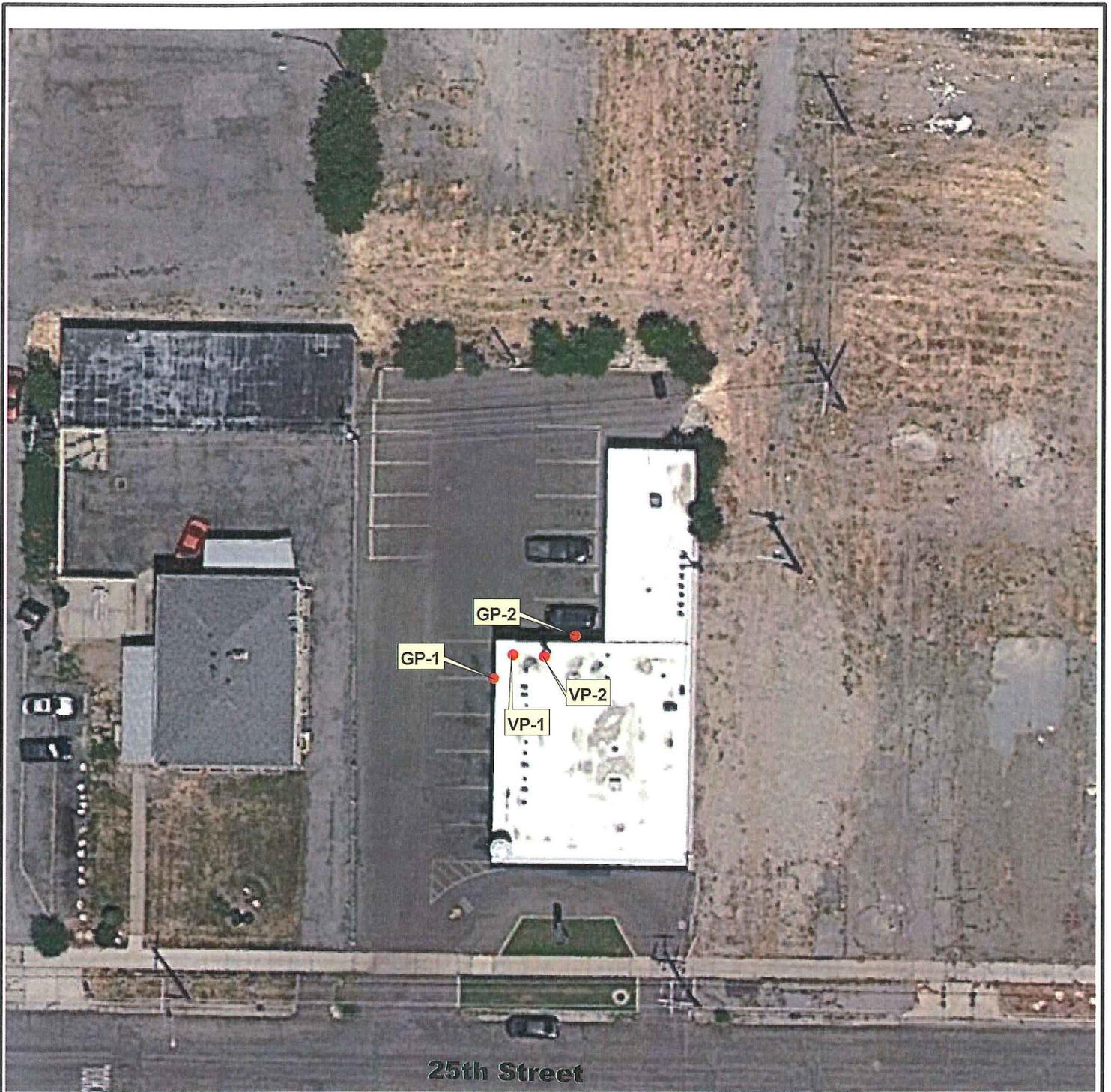
APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.



Thomas R. Atkinson

Reviewed DRH, P.E., P.G.
Attachments

SITE FIGURE



From Google Earth Aerial Photograph
July 18, 2019



Approximate Scale
1 inch = 40 feet

FORSEY CLEANERS & LAUNDRY
856 25TH STREET
OGDEN, UTAH

1200034



Sample Locations

Figure 1

APPENDIX A

ANALYTICAL RESULTS TABLES

Soil and Groundwater Analytical Results
Forsey's Laundry

Table 1 - Soil Results

Sample	Depth (feet)	Date	PID (ppm)	MEK (mg/kg)	PCE (mg/kg)
GP-1	0 to 2	1/20/2020	0.4	0.0306	0.0104
GP-1	7	1/20/2020	5.4	0.031	0.0108
GP-2	0 to 2	1/20/2020	0	0.0275	0.0135
GP-2	7	1/20/2020	1.1	0.0324	ND
November 2019 EPA Residential SL				27,000	24
November 2019 EPA Industrial SL				190,000	100

Table 2 - Groundwater Results

Sample	Depth (feet)	Date	PCE (mg/L)
GP-1	0 to 2	1/20/2020	0.0422
GP-2	7	1/20/2020	0.00661
November 2019 Tapwater SL			0.011
November 2019 EPA MCL			0.005

ND = Non Detect

Table 3 - Soil Gas Analytical Results
Forsey's Laundry

Chemical	CAS Number	Toxicity Basis	PRT-1 ($\mu\text{g}/\text{m}^3$)	PRT-2 ($\mu\text{g}/\text{m}^3$)	VP-1 ($\mu\text{g}/\text{m}^3$)	VP-2 ($\mu\text{g}/\text{m}^3$)	Residential Target Sub-Slab and Near-source Soil Gas Concentration (TCR = 1E-06 or THQ = 0.1)	Commercial Target Sub-Slab and Near-source Soil Gas Concentration (TCR = 1E-06 or THQ = 0.1)
							$C_{\text{sg, Target}}$ ($\mu\text{g}/\text{m}^3$)	$C_{\text{sg, Target}}$ ($\mu\text{g}/\text{m}^3$)
Acetone	67-64-1	NC	122	31.1	81.7	96.7	107,000	451,000
Benzene	71-43-2	CA	3.05	7.19	1.09	1.59	12	52.4
Butadiene, 1,3-	106-99-0	CA	ND	26.8	ND	ND	3.12	13.6
Carbon Disulfide	75-15-0	NC	ND	7.66	ND	ND	2,430	10,200
Carbon Tetrachloride	56-23-5	CA	2.03	ND	ND	ND	15.6	68.1
Chloroform	67-66-3	CA	ND	ND	ND	17	4.07	17.8
Chloromethane	74-87-3	NC	1.31	0.498	0.764	ND	313	1,310
Cyclohexane	110-82-7	NC	ND	ND	ND	0.813	20,900	87,600
Dichloroethene, 1,1-	75-35-4	NC	ND	ND	2.37	ND	695	2,920
Dichloroethene, cis 1,2-	156-59-2		ND	ND	19.6	9.67	NA	NA
Dioxane, 1,4-	123-91-1	CA	ND	ND	ND	6.56	18.7	81.8
Ethanol	64-17-5		50.5	7.52	30.4	27.5	NA	NA
Ethylbenzene	100-41-4	CA	1.08	1.21	1.68	ND	37.4	164
Ethyltoluene, 4-	622-96-8		ND	ND	2.91	ND	NA	NA
Trichlorofluoromethane	75-69-4		1.25	ND	2.24	1.31	NA	NA
Dichlorodifluoromethane	75-71-8	NC	ND	1.94	2.94	2.32	NA	NA
Heptane	142-82-5	NC	1.43	1.43	0.83	2.42	1,390	5,840
Hexane, N-	110-54-3	NC	2.92	4.05	1.23	6.49	2,430	10,200
Isopropylbenzene	98-82-8		ND	ND	2.18	ND	1,390	5,840
Methylene Chloride	75-09-2	CA	2.57	0.847	ND	1.24	2,090	8,760
2-Butanone (MEK)	78-93-3	NC	7.93	11.2	12.3	5.07	17,400	73,000
Naphthalene	91-20-3	CA	ND	ND	5.97	ND	2.75	12
2-Propanol (Isopropanol)	67-63-0	NC	5.92	ND	7.67	15	695	2,920
Propene (Propylene)	115-07-1	NC	ND	164	3.99	ND	10,400	43,800
Styrene	100-42-5	NC	ND	1.66	ND	ND	3,480	14,600
Tetrachloroethylene	127-18-4	CA	25.4	468	37,100	74,000	139	584
Toluene	108-88-3	NC	7.84	6.93	3.06	2.5	17,400	73,000
Trichloroethylene	79-01-6	NC	ND	ND	399	427	6.95	29.2
Trimethylbenzene, 1,2,4-	95-63-6	NC	2.05	1.03	4.49	ND	209	876
Trimethylpentane, 2,2,4-	540-84-1		5.05	ND	ND	ND	NA	NA
Xylene, M & P-	1330-20-7	NC	4.94	2.63	4.22	ND	348	1,460
Xylene, o-	95-47-6	NC	1.78	1.09	1.22	ND	348	1,460

NA = Not Available - No EPA Target

ND = Non Detect

APPENDIX B

PACE ANALYTICAL REPORTS

January 22, 2020

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Applied GeoTech

Sample Delivery Group: L1181249
Samples Received: 01/21/2020
Project Number: 1200034
Description: Forsey's

Report To: Thomas Atkinson
600 West Sandy Parkway
Sandy, UT 84070

Entire Report Reviewed By:

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	2 Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	3 Ss
GP1 @ 0-2' L1181249-01	5	
GP1 @ 7' L1181249-02	7	4 Cn
GP2 @ 0-2' L1181249-03	9	5 Sr
GP2 @ 7' L1181249-04	11	
GP-1 L1181249-05	13	6 Qc
GP-2 L1181249-06	15	
Qc: Quality Control Summary	17	7 Gl
Total Solids by Method 2540 G-2011	17	8 Al
Volatile Organic Compounds (GC/MS) by Method 8260B	18	
Gl: Glossary of Terms	28	9 Sc
Al: Accreditations & Locations	29	
Sc: Sample Chain of Custody	30	

SAMPLE SUMMARY



				Collected by	Collected date/time	Received date/time
GP1 @ 0-2' L1181249-01 Solid				Thomas Atkins	01/20/20 09:30	01/21/20 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1414684	1	01/21/20 17:09	01/21/20 17:17	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1414651	1	01/21/20 10:58	01/22/20 02:48	JHH	Mt. Juliet, TN

- 1
Cp
- 2
Tc
- 3
Ss
- 4
Cn
- 5
Sr
- 6
Qc
- 7
Gl
- 8
Al
- 9
Sc

				Collected by	Collected date/time	Received date/time
GP1 @ 7' L1181249-02 Solid				Thomas Atkins	01/20/20 09:40	01/21/20 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1414684	1	01/21/20 17:09	01/21/20 17:17	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1414651	1	01/21/20 10:58	01/22/20 03:07	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
GP2 @ 0-2' L1181249-03 Solid				Thomas Atkins	01/20/20 10:30	01/21/20 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1414684	1	01/21/20 17:09	01/21/20 17:17	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1414651	1	01/21/20 10:58	01/22/20 03:26	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
GP2 @ 7' L1181249-04 Solid				Thomas Atkins	01/20/20 10:40	01/21/20 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1414684	1	01/21/20 17:09	01/21/20 17:17	KBC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1414651	1	01/21/20 10:58	01/22/20 03:45	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
GP-1 L1181249-05 GW				Thomas Atkins	01/20/20 09:50	01/21/20 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1414558	1	01/21/20 15:36	01/21/20 15:36	ADM	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
GP-2 L1181249-06 GW				Thomas Atkins	01/20/20 10:50	01/21/20 08:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1414558	1	01/21/20 15:56	01/21/20 15:56	ADM	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.2		1	01/21/2020 17:17	WG1414684

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	<u>J3</u>	0.0271	1	01/22/2020 02:48	WG1414651
Acrylonitrile	ND		0.0136	1	01/22/2020 02:48	WG1414651
Benzene	ND		0.00108	1	01/22/2020 02:48	WG1414651
Bromobenzene	ND		0.0136	1	01/22/2020 02:48	WG1414651
Bromodichloromethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
Bromoform	ND		0.0271	1	01/22/2020 02:48	WG1414651
Bromomethane	ND		0.0136	1	01/22/2020 02:48	WG1414651
1,3-Butadiene	ND		0.0271	1	01/22/2020 02:48	WG1414651
n-Butylbenzene	ND		0.0136	1	01/22/2020 02:48	WG1414651
sec-Butylbenzene	ND		0.0136	1	01/22/2020 02:48	WG1414651
tert-Butylbenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
Carbon tetrachloride	ND		0.00542	1	01/22/2020 02:48	WG1414651
Chlorobenzene	ND		0.00271	1	01/22/2020 02:48	WG1414651
Chlorodibromomethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
Chloroethane	ND		0.00542	1	01/22/2020 02:48	WG1414651
Chloroform	ND		0.00271	1	01/22/2020 02:48	WG1414651
Chloromethane	ND		0.0136	1	01/22/2020 02:48	WG1414651
2-Chlorotoluene	ND		0.00271	1	01/22/2020 02:48	WG1414651
4-Chlorotoluene	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,2-Dibromo-3-Chloropropane	ND		0.0271	1	01/22/2020 02:48	WG1414651
1,2-Dibromoethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
Dibromomethane	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,2-Dichlorobenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,3-Dichlorobenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,4-Dichlorobenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
Dichlorodifluoromethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,1-Dichloroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,2-Dichloroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,1-Dichloroethene	ND		0.00271	1	01/22/2020 02:48	WG1414651
cis-1,2-Dichloroethene	ND		0.00271	1	01/22/2020 02:48	WG1414651
trans-1,2-Dichloroethene	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,2-Dichloropropane	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,1-Dichloropropene	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,3-Dichloropropane	ND		0.00542	1	01/22/2020 02:48	WG1414651
cis-1,3-Dichloropropene	ND		0.00271	1	01/22/2020 02:48	WG1414651
trans-1,3-Dichloropropene	ND		0.00542	1	01/22/2020 02:48	WG1414651
2,2-Dichloropropane	ND		0.00271	1	01/22/2020 02:48	WG1414651
Di-isopropyl ether	ND		0.00108	1	01/22/2020 02:48	WG1414651
Ethylbenzene	ND		0.00271	1	01/22/2020 02:48	WG1414651
Hexachloro-1,3-butadiene	ND		0.0271	1	01/22/2020 02:48	WG1414651
Isopropylbenzene	ND		0.00271	1	01/22/2020 02:48	WG1414651
p-Isopropyltoluene	ND		0.00542	1	01/22/2020 02:48	WG1414651
2-Butanone (MEK)	0.0306	<u>B</u>	0.0271	1	01/22/2020 02:48	WG1414651
Methylene Chloride	ND		0.0271	1	01/22/2020 02:48	WG1414651
4-Methyl-2-pentanone (MIBK)	ND		0.0271	1	01/22/2020 02:48	WG1414651
Methyl tert-butyl ether	ND		0.00108	1	01/22/2020 02:48	WG1414651
Naphthalene	ND		0.0136	1	01/22/2020 02:48	WG1414651
n-Propylbenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
Styrene	ND		0.0136	1	01/22/2020 02:48	WG1414651
1,1,1,2-Tetrachloroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,1,2-Trichlorotrifluoroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
Tetrachloroethene	0.0104		0.00271	1	01/22/2020 02:48	WG1414651
Toluene	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,2,3-Trichlorobenzene	ND		0.0136	1	01/22/2020 02:48	WG1414651
1,2,4-Trichlorobenzene	ND		0.0136	1	01/22/2020 02:48	WG1414651
1,1,1-Trichloroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,1,2-Trichloroethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
Trichloroethene	ND		0.00108	1	01/22/2020 02:48	WG1414651
Trichlorofluoromethane	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,2,3-Trichloropropane	ND		0.0136	1	01/22/2020 02:48	WG1414651
1,2,4-Trimethylbenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
1,2,3-Trimethylbenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
Vinyl chloride	ND		0.00271	1	01/22/2020 02:48	WG1414651
1,3,5-Trimethylbenzene	ND		0.00542	1	01/22/2020 02:48	WG1414651
Xylenes, Total	ND		0.00705	1	01/22/2020 02:48	WG1414651
(S) Toluene-d8	106		75.0-131		01/22/2020 02:48	WG1414651
(S) 4-Bromofluorobenzene	92.3		67.0-138		01/22/2020 02:48	WG1414651
(S) 1,2-Dichloroethane-d4	94.8		70.0-130		01/22/2020 02:48	WG1414651

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.2		1	01/21/2020 17:17	WG1414684

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	<u>J3</u>	0.0293	1	01/22/2020 03:07	WG1414651
Acrylonitrile	ND		0.0147	1	01/22/2020 03:07	WG1414651
Benzene	ND		0.00117	1	01/22/2020 03:07	WG1414651
Bromobenzene	ND		0.0147	1	01/22/2020 03:07	WG1414651
Bromodichloromethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
Bromoform	ND		0.0293	1	01/22/2020 03:07	WG1414651
Bromomethane	ND		0.0147	1	01/22/2020 03:07	WG1414651
1,3-Butadiene	ND		0.0293	1	01/22/2020 03:07	WG1414651
n-Butylbenzene	ND		0.0147	1	01/22/2020 03:07	WG1414651
sec-Butylbenzene	ND		0.0147	1	01/22/2020 03:07	WG1414651
tert-Butylbenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
Carbon tetrachloride	ND		0.00587	1	01/22/2020 03:07	WG1414651
Chlorobenzene	ND		0.00293	1	01/22/2020 03:07	WG1414651
Chlorodibromomethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
Chloroethane	ND		0.00587	1	01/22/2020 03:07	WG1414651
Chloroform	ND		0.00293	1	01/22/2020 03:07	WG1414651
Chloromethane	ND		0.0147	1	01/22/2020 03:07	WG1414651
2-Chlorotoluene	ND		0.00293	1	01/22/2020 03:07	WG1414651
4-Chlorotoluene	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,2-Dibromo-3-Chloropropane	ND		0.0293	1	01/22/2020 03:07	WG1414651
1,2-Dibromoethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
Dibromomethane	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,2-Dichlorobenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,3-Dichlorobenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,4-Dichlorobenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
Dichlorodifluoromethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,1-Dichloroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,2-Dichloroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,1-Dichloroethene	ND		0.00293	1	01/22/2020 03:07	WG1414651
cis-1,2-Dichloroethene	ND		0.00293	1	01/22/2020 03:07	WG1414651
trans-1,2-Dichloroethene	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,2-Dichloropropane	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,1-Dichloropropene	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,3-Dichloropropane	ND		0.00587	1	01/22/2020 03:07	WG1414651
cis-1,3-Dichloropropene	ND		0.00293	1	01/22/2020 03:07	WG1414651
trans-1,3-Dichloropropene	ND		0.00587	1	01/22/2020 03:07	WG1414651
2,2-Dichloropropane	ND		0.00293	1	01/22/2020 03:07	WG1414651
Di-isopropyl ether	ND		0.00117	1	01/22/2020 03:07	WG1414651
Ethylbenzene	ND		0.00293	1	01/22/2020 03:07	WG1414651
Hexachloro-1,3-butadiene	ND		0.0293	1	01/22/2020 03:07	WG1414651
Isopropylbenzene	ND		0.00293	1	01/22/2020 03:07	WG1414651
p-Isopropyltoluene	ND		0.00587	1	01/22/2020 03:07	WG1414651
2-Butanone (MEK)	0.0310	<u>B</u>	0.0293	1	01/22/2020 03:07	WG1414651
Methylene Chloride	ND		0.0293	1	01/22/2020 03:07	WG1414651
4-Methyl-2-pentanone (MIBK)	ND		0.0293	1	01/22/2020 03:07	WG1414651
Methyl tert-butyl ether	ND		0.00117	1	01/22/2020 03:07	WG1414651
Naphthalene	ND		0.0147	1	01/22/2020 03:07	WG1414651
n-Propylbenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
Styrene	ND		0.0147	1	01/22/2020 03:07	WG1414651
1,1,1,2-Tetrachloroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/20/20 09:40

L1181249

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,1,2-Trichlorotrifluoroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
Tetrachloroethene	0.0108		0.00293	1	01/22/2020 03:07	WG1414651
Toluene	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,2,3-Trichlorobenzene	ND		0.0147	1	01/22/2020 03:07	WG1414651
1,2,4-Trichlorobenzene	ND		0.0147	1	01/22/2020 03:07	WG1414651
1,1,1-Trichloroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,1,2-Trichloroethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
Trichloroethene	ND		0.00117	1	01/22/2020 03:07	WG1414651
Trichlorofluoromethane	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,2,3-Trichloropropane	ND		0.0147	1	01/22/2020 03:07	WG1414651
1,2,4-Trimethylbenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
1,2,3-Trimethylbenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
Vinyl chloride	ND		0.00293	1	01/22/2020 03:07	WG1414651
1,3,5-Trimethylbenzene	ND		0.00587	1	01/22/2020 03:07	WG1414651
Xylenes, Total	ND		0.00763	1	01/22/2020 03:07	WG1414651
(S) Toluene-d8	107		75.0-131		01/22/2020 03:07	WG1414651
(S) 4-Bromofluorobenzene	92.7		67.0-138		01/22/2020 03:07	WG1414651
(S) 1,2-Dichloroethane-d4	101		70.0-130		01/22/2020 03:07	WG1414651

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.8		1	01/21/2020 17:17	WG1414684

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND	J3	0.0275	1	01/22/2020 03:26	WG1414651
Acrylonitrile	ND		0.0138	1	01/22/2020 03:26	WG1414651
Benzene	ND		0.00110	1	01/22/2020 03:26	WG1414651
Bromobenzene	ND		0.0138	1	01/22/2020 03:26	WG1414651
Bromodichloromethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
Bromoform	ND		0.0275	1	01/22/2020 03:26	WG1414651
Bromomethane	ND		0.0138	1	01/22/2020 03:26	WG1414651
1,3-Butadiene	ND		0.0275	1	01/22/2020 03:26	WG1414651
n-Butylbenzene	ND		0.0138	1	01/22/2020 03:26	WG1414651
sec-Butylbenzene	ND		0.0138	1	01/22/2020 03:26	WG1414651
tert-Butylbenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
Carbon tetrachloride	ND		0.00551	1	01/22/2020 03:26	WG1414651
Chlorobenzene	ND		0.00275	1	01/22/2020 03:26	WG1414651
Chlorodibromomethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
Chloroethane	ND		0.00551	1	01/22/2020 03:26	WG1414651
Chloroform	ND		0.00275	1	01/22/2020 03:26	WG1414651
Chloromethane	ND		0.0138	1	01/22/2020 03:26	WG1414651
2-Chlorotoluene	ND		0.00275	1	01/22/2020 03:26	WG1414651
4-Chlorotoluene	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,2-Dibromo-3-Chloropropane	ND		0.0275	1	01/22/2020 03:26	WG1414651
1,2-Dibromoethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
Dibromomethane	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,2-Dichlorobenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,3-Dichlorobenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,4-Dichlorobenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
Dichlorodifluoromethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,1-Dichloroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,2-Dichloroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,1-Dichloroethene	ND		0.00275	1	01/22/2020 03:26	WG1414651
cis-1,2-Dichloroethene	ND		0.00275	1	01/22/2020 03:26	WG1414651
trans-1,2-Dichloroethene	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,2-Dichloropropane	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,1-Dichloropropene	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,3-Dichloropropane	ND		0.00551	1	01/22/2020 03:26	WG1414651
cis-1,3-Dichloropropene	ND		0.00275	1	01/22/2020 03:26	WG1414651
trans-1,3-Dichloropropene	ND		0.00551	1	01/22/2020 03:26	WG1414651
2,2-Dichloropropane	ND		0.00275	1	01/22/2020 03:26	WG1414651
Di-isopropyl ether	ND		0.00110	1	01/22/2020 03:26	WG1414651
Ethylbenzene	ND		0.00275	1	01/22/2020 03:26	WG1414651
Hexachloro-1,3-butadiene	ND		0.0275	1	01/22/2020 03:26	WG1414651
Isopropylbenzene	ND		0.00275	1	01/22/2020 03:26	WG1414651
p-Isopropyltoluene	ND		0.00551	1	01/22/2020 03:26	WG1414651
2-Butanone (MEK)	0.0275		0.0275	1	01/22/2020 03:26	WG1414651
Methylene Chloride	ND		0.0275	1	01/22/2020 03:26	WG1414651
4-Methyl-2-pentanone (MIBK)	ND		0.0275	1	01/22/2020 03:26	WG1414651
Methyl tert-butyl ether	ND		0.00110	1	01/22/2020 03:26	WG1414651
Naphthalene	ND		0.0138	1	01/22/2020 03:26	WG1414651
n-Propylbenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
Styrene	ND		0.0138	1	01/22/2020 03:26	WG1414651
1,1,1,2-Tetrachloroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,1,2-Trichlorotrifluoroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
Tetrachloroethene	0.0135		0.00275	1	01/22/2020 03:26	WG1414651
Toluene	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,2,3-Trichlorobenzene	ND		0.0138	1	01/22/2020 03:26	WG1414651
1,2,4-Trichlorobenzene	ND		0.0138	1	01/22/2020 03:26	WG1414651
1,1,1-Trichloroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,1,2-Trichloroethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
Trichloroethene	ND		0.00110	1	01/22/2020 03:26	WG1414651
Trichlorofluoromethane	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,2,3-Trichloropropane	ND		0.0138	1	01/22/2020 03:26	WG1414651
1,2,4-Trimethylbenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
1,2,3-Trimethylbenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
Vinyl chloride	ND		0.00275	1	01/22/2020 03:26	WG1414651
1,3,5-Trimethylbenzene	ND		0.00551	1	01/22/2020 03:26	WG1414651
Xylenes, Total	ND		0.00716	1	01/22/2020 03:26	WG1414651
(S) Toluene-d8	104		75.0-131		01/22/2020 03:26	WG1414651
(S) 4-Bromofluorobenzene	91.3		67.0-138		01/22/2020 03:26	WG1414651
(S) 1,2-Dichloroethane-d4	97.1		70.0-130		01/22/2020 03:26	WG1414651

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.3		1	01/21/2020 17:17	WG1414684

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0300	1	01/22/2020 03:45	WG1414651
Acrylonitrile	ND		0.0150	1	01/22/2020 03:45	WG1414651
Benzene	ND		0.00120	1	01/22/2020 03:45	WG1414651
Bromobenzene	ND		0.0150	1	01/22/2020 03:45	WG1414651
Bromodichloromethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
Bromoform	ND		0.0300	1	01/22/2020 03:45	WG1414651
Bromomethane	ND		0.0150	1	01/22/2020 03:45	WG1414651
1,3-Butadiene	ND		0.0300	1	01/22/2020 03:45	WG1414651
n-Butylbenzene	ND		0.0150	1	01/22/2020 03:45	WG1414651
sec-Butylbenzene	ND		0.0150	1	01/22/2020 03:45	WG1414651
tert-Butylbenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
Carbon tetrachloride	ND	J3 J6	0.00600	1	01/22/2020 03:45	WG1414651
Chlorobenzene	ND		0.00300	1	01/22/2020 03:45	WG1414651
Chlorodibromomethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
Chloroethane	ND	J3	0.00600	1	01/22/2020 03:45	WG1414651
Chloroform	ND		0.00300	1	01/22/2020 03:45	WG1414651
Chloromethane	ND		0.0150	1	01/22/2020 03:45	WG1414651
2-Chlorotoluene	ND		0.00300	1	01/22/2020 03:45	WG1414651
4-Chlorotoluene	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,2-Dibromo-3-Chloropropane	ND		0.0300	1	01/22/2020 03:45	WG1414651
1,2-Dibromoethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
Dibromomethane	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,2-Dichlorobenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,3-Dichlorobenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,4-Dichlorobenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
Dichlorodifluoromethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,1-Dichloroethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,2-Dichloroethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,1-Dichloroethene	ND		0.00300	1	01/22/2020 03:45	WG1414651
cis-1,2-Dichloroethene	ND		0.00300	1	01/22/2020 03:45	WG1414651
trans-1,2-Dichloroethene	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,2-Dichloropropane	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,1-Dichloropropene	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,3-Dichloropropane	ND		0.00600	1	01/22/2020 03:45	WG1414651
cis-1,3-Dichloropropene	ND		0.00300	1	01/22/2020 03:45	WG1414651
trans-1,3-Dichloropropene	ND		0.00600	1	01/22/2020 03:45	WG1414651
2,2-Dichloropropane	ND		0.00300	1	01/22/2020 03:45	WG1414651
Di-isopropyl ether	ND		0.00120	1	01/22/2020 03:45	WG1414651
Ethylbenzene	ND		0.00300	1	01/22/2020 03:45	WG1414651
Hexachloro-1,3-butadiene	ND		0.0300	1	01/22/2020 03:45	WG1414651
Isopropylbenzene	ND		0.00300	1	01/22/2020 03:45	WG1414651
p-Isopropyltoluene	ND		0.00600	1	01/22/2020 03:45	WG1414651
2-Butanone (MEK)	0.0324	B	0.0300	1	01/22/2020 03:45	WG1414651
Methylene Chloride	ND		0.0300	1	01/22/2020 03:45	WG1414651
4-Methyl-2-pentanone (MIBK)	ND		0.0300	1	01/22/2020 03:45	WG1414651
Methyl tert-butyl ether	ND		0.00120	1	01/22/2020 03:45	WG1414651
Naphthalene	ND		0.0150	1	01/22/2020 03:45	WG1414651
n-Propylbenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
Styrene	ND		0.0150	1	01/22/2020 03:45	WG1414651
1,1,1,2-Tetrachloroethane	ND		0.00300	1	01/22/2020 03:45	WG1414651

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,1,2-Trichlorotrifluoroethane	ND	J3	0.00300	1	01/22/2020 03:45	WG1414651
Tetrachloroethene	ND		0.00300	1	01/22/2020 03:45	WG1414651
Toluene	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,2,3-Trichlorobenzene	ND		0.0150	1	01/22/2020 03:45	WG1414651
1,2,4-Trichlorobenzene	ND		0.0150	1	01/22/2020 03:45	WG1414651
1,1,1-Trichloroethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,1,2-Trichloroethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
Trichloroethene	ND		0.00120	1	01/22/2020 03:45	WG1414651
Trichlorofluoromethane	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,2,3-Trichloropropane	ND		0.0150	1	01/22/2020 03:45	WG1414651
1,2,4-Trimethylbenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
1,2,3-Trimethylbenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
Vinyl chloride	ND		0.00300	1	01/22/2020 03:45	WG1414651
1,3,5-Trimethylbenzene	ND		0.00600	1	01/22/2020 03:45	WG1414651
Xylenes, Total	ND		0.00780	1	01/22/2020 03:45	WG1414651
(S) Toluene-d8	105		75.0-131		01/22/2020 03:45	WG1414651
(S) 4-Bromofluorobenzene	89.3		67.0-138		01/22/2020 03:45	WG1414651
(S) 1,2-Dichloroethane-d4	95.6		70.0-130		01/22/2020 03:45	WG1414651

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/20/20 09:50

L1181249

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/21/2020 15:36	WG1414558
Acrolein	ND		0.0500	1	01/21/2020 15:36	WG1414558
Acrylonitrile	ND		0.0100	1	01/21/2020 15:36	WG1414558
Benzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Bromobenzene	ND	J4	0.00100	1	01/21/2020 15:36	WG1414558
Bromodichloromethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
Bromoform	ND		0.00100	1	01/21/2020 15:36	WG1414558
Bromomethane	ND		0.00500	1	01/21/2020 15:36	WG1414558
1,3-Butadiene	ND		0.00200	1	01/21/2020 15:36	WG1414558
n-Butylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
sec-Butylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
tert-Butylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Carbon tetrachloride	ND		0.00100	1	01/21/2020 15:36	WG1414558
Chlorobenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Chlorodibromomethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
Chloroethane	ND		0.00500	1	01/21/2020 15:36	WG1414558
Chloroform	ND		0.00500	1	01/21/2020 15:36	WG1414558
Chloromethane	ND		0.00250	1	01/21/2020 15:36	WG1414558
2-Chlorotoluene	ND		0.00100	1	01/21/2020 15:36	WG1414558
4-Chlorotoluene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/21/2020 15:36	WG1414558
1,2-Dibromoethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
Dibromomethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,2-Dichlorobenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,3-Dichlorobenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,4-Dichlorobenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Dichlorodifluoromethane	ND		0.00500	1	01/21/2020 15:36	WG1414558
1,1-Dichloroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,2-Dichloroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1-Dichloroethene	ND		0.00100	1	01/21/2020 15:36	WG1414558
cis-1,2-Dichloroethene	ND		0.00100	1	01/21/2020 15:36	WG1414558
trans-1,2-Dichloroethene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,2-Dichloropropane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1-Dichloropropene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,3-Dichloropropane	ND		0.00100	1	01/21/2020 15:36	WG1414558
cis-1,3-Dichloropropene	ND		0.00100	1	01/21/2020 15:36	WG1414558
trans-1,3-Dichloropropene	ND		0.00100	1	01/21/2020 15:36	WG1414558
2,2-Dichloropropane	ND		0.00100	1	01/21/2020 15:36	WG1414558
Di-isopropyl ether	ND		0.00100	1	01/21/2020 15:36	WG1414558
Ethylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Hexachloro-1,3-butadiene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Isopropylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
p-Isopropyltoluene	ND		0.00100	1	01/21/2020 15:36	WG1414558
2-Butanone (MEK)	ND		0.0100	1	01/21/2020 15:36	WG1414558
Methylene Chloride	ND		0.00500	1	01/21/2020 15:36	WG1414558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/21/2020 15:36	WG1414558
Methyl tert-butyl ether	ND		0.00100	1	01/21/2020 15:36	WG1414558
Naphthalene	ND		0.00500	1	01/21/2020 15:36	WG1414558
n-Propylbenzene	ND	J4	0.00100	1	01/21/2020 15:36	WG1414558
Styrene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
Tetrachloroethene	0.0422		0.00100	1	01/21/2020 15:36	WG1414558
Toluene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,2,3-Trichlorobenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/20/20 09:50

L1181249

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1,1-Trichloroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,1,2-Trichloroethane	ND		0.00100	1	01/21/2020 15:36	WG1414558
Trichloroethene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Trichlorofluoromethane	ND		0.00500	1	01/21/2020 15:36	WG1414558
1,2,3-Trichloropropane	ND		0.00250	1	01/21/2020 15:36	WG1414558
1,2,4-Trimethylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,2,3-Trimethylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
1,3,5-Trimethylbenzene	ND		0.00100	1	01/21/2020 15:36	WG1414558
Vinyl chloride	ND		0.00100	1	01/21/2020 15:36	WG1414558
Xylenes, Total	ND		0.00300	1	01/21/2020 15:36	WG1414558
(S) Toluene-d8	97.0		80.0-120		01/21/2020 15:36	WG1414558
(S) 4-Bromofluorobenzene	92.1		77.0-126		01/21/2020 15:36	WG1414558
(S) 1,2-Dichloroethane-d4	104		70.0-130		01/21/2020 15:36	WG1414558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	01/21/2020 15:56	WG1414558
Acrolein	ND		0.0500	1	01/21/2020 15:56	WG1414558
Acrylonitrile	ND		0.0100	1	01/21/2020 15:56	WG1414558
Benzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Bromobenzene	ND	J4	0.00100	1	01/21/2020 15:56	WG1414558
Bromodichloromethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
Bromoform	ND		0.00100	1	01/21/2020 15:56	WG1414558
Bromomethane	ND		0.00500	1	01/21/2020 15:56	WG1414558
1,3-Butadiene	ND		0.00200	1	01/21/2020 15:56	WG1414558
n-Butylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
sec-Butylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
tert-Butylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Carbon tetrachloride	ND		0.00100	1	01/21/2020 15:56	WG1414558
Chlorobenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Chlorodibromomethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
Chloroethane	ND		0.00500	1	01/21/2020 15:56	WG1414558
Chloroform	ND		0.00500	1	01/21/2020 15:56	WG1414558
Chloromethane	ND		0.00250	1	01/21/2020 15:56	WG1414558
2-Chlorotoluene	ND		0.00100	1	01/21/2020 15:56	WG1414558
4-Chlorotoluene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	01/21/2020 15:56	WG1414558
1,2-Dibromoethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
Dibromomethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,2-Dichlorobenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,3-Dichlorobenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,4-Dichlorobenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Dichlorodifluoromethane	ND		0.00500	1	01/21/2020 15:56	WG1414558
1,1-Dichloroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,2-Dichloroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1-Dichloroethene	ND		0.00100	1	01/21/2020 15:56	WG1414558
cis-1,2-Dichloroethene	ND		0.00100	1	01/21/2020 15:56	WG1414558
trans-1,2-Dichloroethene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,2-Dichloropropane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1-Dichloropropene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,3-Dichloropropane	ND		0.00100	1	01/21/2020 15:56	WG1414558
cis-1,3-Dichloropropene	ND		0.00100	1	01/21/2020 15:56	WG1414558
trans-1,3-Dichloropropene	ND		0.00100	1	01/21/2020 15:56	WG1414558
2,2-Dichloropropane	ND		0.00100	1	01/21/2020 15:56	WG1414558
Di-isopropyl ether	ND		0.00100	1	01/21/2020 15:56	WG1414558
Ethylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Hexachloro-1,3-butadiene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Isopropylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
p-Isopropyltoluene	ND		0.00100	1	01/21/2020 15:56	WG1414558
2-Butanone (MEK)	ND		0.0100	1	01/21/2020 15:56	WG1414558
Methylene Chloride	ND		0.00500	1	01/21/2020 15:56	WG1414558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	01/21/2020 15:56	WG1414558
Methyl tert-butyl ether	ND		0.00100	1	01/21/2020 15:56	WG1414558
Naphthalene	ND		0.00500	1	01/21/2020 15:56	WG1414558
n-Propylbenzene	ND	J4	0.00100	1	01/21/2020 15:56	WG1414558
Styrene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
Tetrachloroethene	0.00661		0.00100	1	01/21/2020 15:56	WG1414558
Toluene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,2,3-Trichlorobenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1,1-Trichloroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,1,2-Trichloroethane	ND		0.00100	1	01/21/2020 15:56	WG1414558
Trichloroethene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Trichlorofluoromethane	ND		0.00500	1	01/21/2020 15:56	WG1414558
1,2,3-Trichloropropane	ND		0.00250	1	01/21/2020 15:56	WG1414558
1,2,4-Trimethylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,2,3-Trimethylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
1,3,5-Trimethylbenzene	ND		0.00100	1	01/21/2020 15:56	WG1414558
Vinyl chloride	ND		0.00100	1	01/21/2020 15:56	WG1414558
Xylenes, Total	ND		0.00300	1	01/21/2020 15:56	WG1414558
(S) Toluene-d8	95.8		80.0-120		01/21/2020 15:56	WG1414558
(S) 4-Bromofluorobenzene	93.4		77.0-126		01/21/2020 15:56	WG1414558
(S) 1,2-Dichloroethane-d4	105		70.0-130		01/21/2020 15:56	WG1414558

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3492868-1 01/21/20 17:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000			

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1180739-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1180739-01 01/21/20 17:17 • (DUP) R3492868-3 01/21/20 17:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	85.9	87.1	1	1.34		10

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3492868-2 01/21/20 17:17

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	



Method Blank (MB)

(MB) R3492655-2 01/21/20 11:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromobenzene	U		0.000352	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
1,3-Butadiene	U		0.000330	0.00200
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3492655-2 01/21/20 11:49

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hexachloro-1,3-butadiene	U		0.000256	0.00100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000412	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
1,2,3-Trimethylbenzene	U		0.000321	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	97.0			80.0-120
(S) 4-Bromofluorobenzene	88.2			77.0-126
(S) 1,2-Dichloroethane-d4	101			70.0-130

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3492655-1 01/21/20 11:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.0250	0.0282	113	19.0-160	
Acrolein	0.0250	0.0232	92.8	10.0-160	
Acrylonitrile	0.0250	0.0240	96.0	55.0-149	



Laboratory Control Sample (LCS)

(LCS) R3492655-1 01/21/20 11:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00548	110	70.0-123	
Bromobenzene	0.00500	0.00628	126	73.0-121	J4
Bromodichloromethane	0.00500	0.00521	104	75.0-120	
Bromoform	0.00500	0.00405	81.0	68.0-132	
Bromomethane	0.00500	0.00431	86.2	10.0-160	
1,3-Butadiene	0.00500	0.00492	98.4	45.0-147	
n-Butylbenzene	0.00500	0.00523	105	73.0-125	
sec-Butylbenzene	0.00500	0.00545	109	75.0-125	
tert-Butylbenzene	0.00500	0.00572	114	76.0-124	
Carbon tetrachloride	0.00500	0.00532	106	68.0-126	
Chlorobenzene	0.00500	0.00485	97.0	80.0-121	
Chlorodibromomethane	0.00500	0.00465	93.0	77.0-125	
Chloroethane	0.00500	0.00445	89.0	47.0-150	
Chloroform	0.00500	0.00535	107	73.0-120	
Chloromethane	0.00500	0.00597	119	41.0-142	
2-Chlorotoluene	0.00500	0.00569	114	76.0-123	
4-Chlorotoluene	0.00500	0.00560	112	75.0-122	
1,2-Dibromo-3-Chloropropane	0.00500	0.00393	78.6	58.0-134	
1,2-Dibromoethane	0.00500	0.00469	93.8	80.0-122	
Dibromomethane	0.00500	0.00486	97.2	80.0-120	
1,2-Dichlorobenzene	0.00500	0.00492	98.4	79.0-121	
1,3-Dichlorobenzene	0.00500	0.00528	106	79.0-120	
1,4-Dichlorobenzene	0.00500	0.00521	104	79.0-120	
Dichlorodifluoromethane	0.00500	0.00536	107	51.0-149	
1,1-Dichloroethane	0.00500	0.00543	109	70.0-126	
1,2-Dichloroethane	0.00500	0.00553	111	70.0-128	
1,1-Dichloroethene	0.00500	0.00474	94.8	71.0-124	
cis-1,2-Dichloroethene	0.00500	0.00463	92.6	73.0-120	
trans-1,2-Dichloroethene	0.00500	0.00473	94.6	73.0-120	
1,2-Dichloropropane	0.00500	0.00551	110	77.0-125	
1,1-Dichloropropene	0.00500	0.00549	110	74.0-126	
1,3-Dichloropropane	0.00500	0.00552	110	80.0-120	
cis-1,3-Dichloropropene	0.00500	0.00546	109	80.0-123	
trans-1,3-Dichloropropene	0.00500	0.00536	107	78.0-124	
2,2-Dichloropropane	0.00500	0.00537	107	58.0-130	
Di-isopropyl ether	0.00500	0.00525	105	58.0-138	
Ethylbenzene	0.00500	0.00478	95.6	79.0-123	
Hexachloro-1,3-butadiene	0.00500	0.00412	82.4	54.0-138	
Isopropylbenzene	0.00500	0.00494	98.8	76.0-127	
p-Isopropyltoluene	0.00500	0.00535	107	76.0-125	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS)

(LCS) R3492655-1 01/21/20 11:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Butanone (MEK)	0.0250	0.0274	110	44.0-160	
Methylene Chloride	0.00500	0.00507	101	67.0-120	
4-Methyl-2-pentanone (MIBK)	0.0250	0.0239	95.6	68.0-142	
Methyl tert-butyl ether	0.00500	0.00535	107	68.0-125	
Naphthalene	0.00500	0.00351	70.2	54.0-135	
n-Propylbenzene	0.00500	0.00710	142	77.0-124	J4
Styrene	0.00500	0.00479	95.8	73.0-130	
1,1,1,2-Tetrachloroethane	0.00500	0.00435	87.0	75.0-125	
1,1,2,2-Tetrachloroethane	0.00500	0.00524	105	65.0-130	
Tetrachloroethene	0.00500	0.00566	113	72.0-132	
Toluene	0.00500	0.00504	101	79.0-120	
1,1,2-Trichlorotrifluoroethane	0.00500	0.00435	87.0	69.0-132	
1,2,3-Trichlorobenzene	0.00500	0.00305	61.0	50.0-138	
1,2,4-Trichlorobenzene	0.00500	0.00403	80.6	57.0-137	
1,1,1-Trichloroethane	0.00500	0.00525	105	73.0-124	
1,1,2-Trichloroethane	0.00500	0.00504	101	80.0-120	
Trichloroethene	0.00500	0.00475	95.0	78.0-124	
Trichlorofluoromethane	0.00500	0.00451	90.2	59.0-147	
1,2,3-Trichloropropane	0.00500	0.00495	99.0	73.0-130	
1,2,3-Trimethylbenzene	0.00500	0.00519	104	77.0-120	
1,2,4-Trimethylbenzene	0.00500	0.00540	108	76.0-121	
1,3,5-Trimethylbenzene	0.00500	0.00522	104	76.0-122	
Vinyl chloride	0.00500	0.00539	108	67.0-131	
Xylenes, Total	0.0150	0.0143	95.3	79.0-123	
(S) Toluene-d8			98.3	80.0-120	
(S) 4-Bromofluorobenzene			93.7	77.0-126	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3492829-3 01/21/20 21:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
1,3-Butadiene	U		0.00843	0.0250
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	0.000725	U	0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3492829-3 01/21/20 21:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0351		0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	105			75.0-131
(S) 4-Bromofluorobenzene	90.7			67.0-138
(S) 1,2-Dichloroethane-d4	96.5			70.0-130

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3492829-1 01/21/20 20:09 • (LCSD) R3492829-2 01/21/20 20:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.625	0.596	0.383	95.4	61.3	10.0-160		J3	43.5	31
Acrylonitrile	0.625	0.565	0.655	90.4	105	45.0-153			14.8	22
Benzene	0.125	0.111	0.121	88.8	96.8	70.0-123			8.62	20
Bromobenzene	0.125	0.130	0.142	104	114	73.0-121			8.82	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3492829-1 01/21/20 20:09 • (LCSD) R3492829-2 01/21/20 20:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	0.125	0.120	0.131	96.0	105	73.0-121			8.76	20
Bromoform	0.125	0.126	0.133	101	106	64.0-132			5.41	20
Bromomethane	0.125	0.146	0.161	117	129	56.0-147			9.77	20
1,3-Butadiene	0.125	0.132	0.147	106	118	32.0-150			10.8	20
n-Butylbenzene	0.125	0.141	0.152	113	122	68.0-135			7.51	20
sec-Butylbenzene	0.125	0.135	0.149	108	119	74.0-130			9.86	20
tert-Butylbenzene	0.125	0.135	0.150	108	120	75.0-127			10.5	20
Carbon tetrachloride	0.125	0.138	0.159	110	127	66.0-128			14.1	20
Chlorobenzene	0.125	0.140	0.156	112	125	76.0-128			10.8	20
Chlorodibromomethane	0.125	0.122	0.134	97.6	107	74.0-127			9.38	20
Chloroethane	0.125	0.125	0.140	100	112	61.0-134			11.3	20
Chloroform	0.125	0.0957	0.109	76.6	87.2	72.0-123			13.0	20
Chloromethane	0.125	0.136	0.145	109	116	51.0-138			6.41	20
2-Chlorotoluene	0.125	0.133	0.151	106	121	75.0-124			12.7	20
4-Chlorotoluene	0.125	0.141	0.153	113	122	75.0-124			8.16	20
1,2-Dibromo-3-Chloropropane	0.125	0.117	0.114	93.6	91.2	59.0-130			2.60	20
1,2-Dibromoethane	0.125	0.117	0.128	93.6	102	74.0-128			8.98	20
Dibromomethane	0.125	0.113	0.129	90.4	103	75.0-122			13.2	20
1,2-Dichlorobenzene	0.125	0.117	0.129	93.6	103	76.0-124			9.76	20
1,3-Dichlorobenzene	0.125	0.145	0.154	116	123	76.0-125			6.02	20
1,4-Dichlorobenzene	0.125	0.131	0.138	105	110	77.0-121			5.20	20
Dichlorodifluoromethane	0.125	0.143	0.160	114	128	43.0-156			11.2	20
1,1-Dichloroethane	0.125	0.115	0.127	92.0	102	70.0-127			9.92	20
1,2-Dichloroethane	0.125	0.122	0.135	97.6	108	65.0-131			10.1	20
1,1-Dichloroethene	0.125	0.126	0.144	101	115	65.0-131			13.3	20
cis-1,2-Dichloroethene	0.125	0.100	0.119	80.0	95.2	73.0-125			17.4	20
trans-1,2-Dichloroethene	0.125	0.108	0.123	86.4	98.4	71.0-125			13.0	20
1,2-Dichloropropane	0.125	0.130	0.142	104	114	74.0-125			8.82	20
1,1-Dichloropropene	0.125	0.110	0.123	88.0	98.4	73.0-125			11.2	20
1,3-Dichloropropane	0.125	0.123	0.136	98.4	109	80.0-125			10.0	20
cis-1,3-Dichloropropene	0.125	0.121	0.134	96.8	107	76.0-127			10.2	20
trans-1,3-Dichloropropene	0.125	0.126	0.142	101	114	73.0-127			11.9	20
2,2-Dichloropropane	0.125	0.110	0.123	88.0	98.4	59.0-135			11.2	20
Di-isopropyl ether	0.125	0.102	0.112	81.6	89.6	60.0-136			9.35	20
Ethylbenzene	0.125	0.125	0.141	100	113	74.0-126			12.0	20
Hexachloro-1,3-butadiene	0.125	0.111	0.125	88.8	100	57.0-150			11.9	20
Isopropylbenzene	0.125	0.115	0.129	92.0	103	72.0-127			11.5	20
p-Isopropyltoluene	0.125	0.134	0.149	107	119	72.0-133			10.6	20
2-Butanone (MEK)	0.625	0.560	0.599	89.6	95.8	30.0-160			6.73	24
Methylene Chloride	0.125	0.116	0.134	92.8	107	68.0-123			14.4	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3492829-1 01/21/20 20:09 • (LCSD) R3492829-2 01/21/20 20:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.625	0.632	0.694	101	111	56.0-143			9.35	20
Methyl tert-butyl ether	0.125	0.0918	0.102	73.4	81.6	66.0-132			10.5	20
Naphthalene	0.125	0.104	0.110	83.2	88.0	59.0-130			5.61	20
n-Propylbenzene	0.125	0.134	0.144	107	115	74.0-126			7.19	20
Styrene	0.125	0.123	0.138	98.4	110	72.0-127			11.5	20
1,1,1,2-Tetrachloroethane	0.125	0.103	0.113	82.4	90.4	74.0-129			9.26	20
1,1,2,2-Tetrachloroethane	0.125	0.105	0.113	84.0	90.4	68.0-128			7.34	20
Tetrachloroethene	0.125	0.122	0.137	97.6	110	70.0-136			11.6	20
Toluene	0.125	0.124	0.139	99.2	111	75.0-121			11.4	20
1,1,2-Trichlorotrifluoroethane	0.125	0.121	0.138	96.8	110	61.0-139			13.1	20
1,2,3-Trichlorobenzene	0.125	0.101	0.104	80.8	83.2	59.0-139			2.93	20
1,2,4-Trichlorobenzene	0.125	0.120	0.131	96.0	105	62.0-137			8.76	20
1,1,1-Trichloroethane	0.125	0.109	0.130	87.2	104	69.0-126			17.6	20
1,1,2-Trichloroethane	0.125	0.105	0.117	84.0	93.6	78.0-123			10.8	20
Trichloroethene	0.125	0.127	0.146	102	117	76.0-126			13.9	20
Trichlorofluoromethane	0.125	0.124	0.140	99.2	112	61.0-142			12.1	20
1,2,3-Trichloropropane	0.125	0.133	0.143	106	114	67.0-129			7.25	20
1,2,3-Trimethylbenzene	0.125	0.101	0.109	80.8	87.2	74.0-124			7.62	20
1,2,4-Trimethylbenzene	0.125	0.125	0.136	100	109	70.0-126			8.43	20
1,3,5-Trimethylbenzene	0.125	0.126	0.136	101	109	73.0-127			7.63	20
Vinyl chloride	0.125	0.125	0.142	100	114	63.0-134			12.7	20
Xylenes, Total	0.375	0.352	0.383	93.9	102	72.0-127			8.44	20
(S) Toluene-d8				103	106	75.0-131				
(S) 4-Bromofluorobenzene				93.9	93.4	67.0-138				
(S) 1,2-Dichloroethane-d4				101	101	70.0-130				

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

L1181249-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1181249-04 01/22/20 03:45 • (MS) R3492829-4 01/22/20 04:04 • (MSD) R3492829-5 01/22/20 04:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.750	ND	0.631	0.543	84.2	72.5	1	10.0-160			14.9	40
Acrylonitrile	0.750	ND	0.729	0.687	97.3	91.7	1	10.0-160			5.93	40
Benzene	0.150	ND	0.113	0.137	75.2	91.2	1	10.0-149			19.2	37
Bromobenzene	0.150	ND	0.156	0.173	104	115	1	10.0-156			10.2	38
Bromodichloromethane	0.150	ND	0.130	0.143	86.4	95.2	1	10.0-143			9.69	37
Bromoform	0.150	ND	0.138	0.148	92.0	98.4	1	10.0-146			6.72	36
Bromomethane	0.150	ND	0.0607	0.0798	40.5	53.2	1	10.0-149			27.2	38
1,3-Butadiene	0.150	ND	0.0843	0.112	56.2	74.4	1	10.0-137			27.8	36



L1181249-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1181249-04 01/22/20 03:45 • (MS) R3492829-4 01/22/20 04:04 • (MSD) R3492829-5 01/22/20 04:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Butylbenzene	0.150	ND	0.143	0.176	95.2	118	1	10.0-160			21.1	40
sec-Butylbenzene	0.150	ND	0.136	0.170	90.4	114	1	10.0-159			22.7	39
tert-Butylbenzene	0.150	ND	0.138	0.174	92.0	116	1	10.0-156			23.1	39
Carbon tetrachloride	0.150	ND	0.110	0.00140	73.4	0.936	1	10.0-145		J3 J6	195	37
Chlorobenzene	0.150	ND	0.156	0.180	104	120	1	10.0-152			14.3	39
Chlorodibromomethane	0.150	ND	0.138	0.151	92.0	101	1	10.0-146			9.13	37
Chloroethane	0.150	ND	0.0284	0.0428	19.0	28.6	1	10.0-146		J3	40.4	40
Chloroform	0.150	ND	0.0938	0.112	62.6	74.7	1	10.0-146			17.7	37
Chloromethane	0.150	ND	0.0833	0.107	55.5	71.4	1	10.0-159			25.1	37
2-Chlorotoluene	0.150	ND	0.150	0.172	100	114	1	10.0-159			13.4	38
4-Chlorotoluene	0.150	ND	0.160	0.185	106	123	1	10.0-155			14.6	39
1,2-Dibromo-3-Chloropropane	0.150	ND	0.117	0.126	78.1	84.0	1	10.0-151			7.31	39
1,2-Dibromoethane	0.150	ND	0.139	0.146	92.8	97.6	1	10.0-148			5.04	34
Dibromomethane	0.150	ND	0.138	0.137	92.0	91.2	1	10.0-147			0.873	35
1,2-Dichlorobenzene	0.150	ND	0.136	0.145	90.4	96.8	1	10.0-155			6.84	37
1,3-Dichlorobenzene	0.150	ND	0.163	0.186	109	124	1	10.0-153			13.1	38
1,4-Dichlorobenzene	0.150	ND	0.146	0.167	97.6	111	1	10.0-151			13.0	38
Dichlorodifluoromethane	0.150	ND	0.0572	0.0752	38.2	50.2	1	10.0-160			27.2	35
1,1-Dichloroethane	0.150	ND	0.108	0.128	72.2	85.6	1	10.0-147			17.0	37
1,2-Dichloroethane	0.150	ND	0.142	0.146	94.4	97.6	1	10.0-148			3.33	35
1,1-Dichloroethene	0.150	ND	0.101	0.137	67.6	91.2	1	10.0-155			29.7	37
cis-1,2-Dichloroethene	0.150	ND	0.0992	0.119	66.2	79.4	1	10.0-149			18.2	37
trans-1,2-Dichloroethene	0.150	ND	0.0903	0.115	60.2	76.7	1	10.0-150			24.1	37
1,2-Dichloropropane	0.150	ND	0.142	0.164	94.4	110	1	10.0-148			14.9	37
1,1-Dichloropropene	0.150	ND	0.103	0.136	68.7	90.4	1	10.0-153			27.2	35
1,3-Dichloropropane	0.150	ND	0.150	0.161	100	107	1	10.0-154			6.95	35
cis-1,3-Dichloropropene	0.150	ND	0.138	0.152	92.0	102	1	10.0-151			9.92	37
trans-1,3-Dichloropropene	0.150	ND	0.151	0.169	101	113	1	10.0-148			11.2	37
2,2-Dichloropropane	0.150	ND	0.0621	0.0782	41.4	52.2	1	10.0-138			22.9	36
Di-isopropyl ether	0.150	ND	0.100	0.106	66.7	71.0	1	10.0-147			6.16	36
Ethylbenzene	0.150	ND	0.127	0.158	84.8	106	1	10.0-160			21.8	38
Hexachloro-1,3-butadiene	0.150	ND	0.119	0.151	79.4	101	1	10.0-160			23.8	40
Isopropylbenzene	0.150	ND	0.108	0.138	71.8	92.0	1	10.0-155			24.7	38
p-Isopropyltoluene	0.150	ND	0.136	0.170	90.4	114	1	10.0-160			22.7	40
2-Butanone (MEK)	0.750	0.0324	0.678	0.653	86.1	82.7	1	10.0-160			3.79	40
Methylene Chloride	0.150	ND	0.128	0.145	85.6	96.8	1	10.0-141			12.3	37
4-Methyl-2-pentanone (MIBK)	0.750	ND	0.723	0.753	96.5	100	1	10.0-160			4.06	35
Methyl tert-butyl ether	0.150	ND	0.0765	0.0859	51.0	57.3	1	11.0-147			11.5	35
Naphthalene	0.150	ND	0.118	0.126	78.7	84.0	1	10.0-160			6.49	36

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1181249-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1181249-04 01/22/20 03:45 • (MS) R3492829-4 01/22/20 04:04 • (MSD) R3492829-5 01/22/20 04:24

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Propylbenzene	0.150	ND	0.137	0.167	91.2	111	1	10.0-158			19.8	38
Styrene	0.150	ND	0.136	0.157	90.4	105	1	10.0-160			14.8	40
1,1,1,2-Tetrachloroethane	0.150	ND	0.106	0.122	70.8	81.6	1	10.0-149			14.2	39
1,1,2,2-Tetrachloroethane	0.150	ND	0.110	0.0933	73.1	62.2	1	10.0-160			16.1	35
Tetrachloroethene	0.150	ND	0.124	0.163	82.4	109	1	10.0-156			27.6	39
Toluene	0.150	ND	0.138	0.163	92.0	109	1	10.0-156			16.7	38
1,1,2-Trichlorotrifluoroethane	0.150	ND	0.0913	0.134	60.9	89.6	1	10.0-160		J3	38.2	36
1,2,3-Trichlorobenzene	0.150	ND	0.118	0.124	78.6	82.4	1	10.0-160			4.77	40
1,2,4-Trichlorobenzene	0.150	ND	0.148	0.155	98.4	103	1	10.0-160			4.76	40
1,1,1-Trichloroethane	0.150	ND	0.0900	0.120	60.0	79.8	1	10.0-144			28.3	35
1,1,2-Trichloroethane	0.150	ND	0.127	0.136	84.8	90.4	1	10.0-160			6.39	35
Trichloroethene	0.150	ND	0.152	0.198	102	132	1	10.0-156			26.0	38
Trichlorofluoromethane	0.150	ND	0.0377	0.0545	25.1	36.3	1	10.0-160			36.5	40
1,2,3-Trichloropropane	0.150	ND	0.160	0.169	106	113	1	10.0-156			5.84	35
1,2,3-Trimethylbenzene	0.150	ND	0.108	0.124	72.2	82.4	1	10.0-160			13.3	36
1,2,4-Trimethylbenzene	0.150	ND	0.131	0.154	87.2	102	1	10.0-160			16.0	36
1,3,5-Trimethylbenzene	0.150	ND	0.127	0.156	84.8	104	1	10.0-160			20.3	38
Vinyl chloride	0.150	ND	0.0756	0.103	50.4	68.4	1	10.0-160			30.3	37
Xylenes, Total	0.450	ND	0.360	0.446	80.0	99.2	1	10.0-160			21.4	38
(S) Toluene-d8					106	106		75.0-131				
(S) 4-Bromofluorobenzene					90.8	92.3		67.0-138				
(S) 1,2-Dichloroethane-d4					97.2	96.9		70.0-130				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

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9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

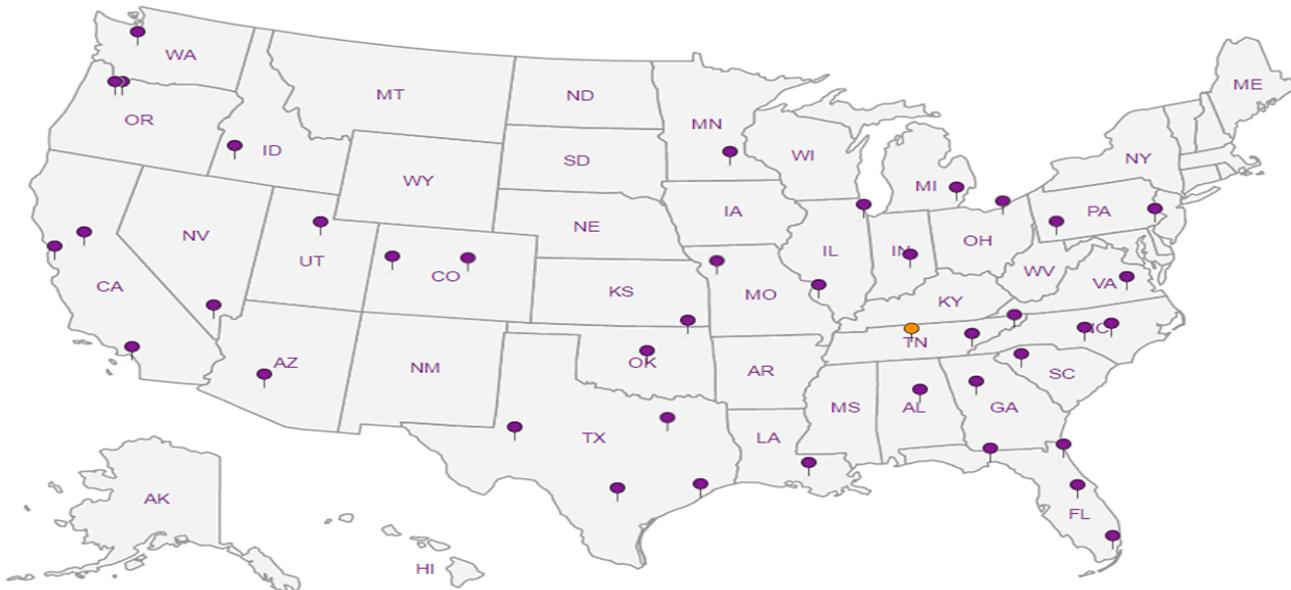
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

January 24, 2020

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Applied GeoTech

Sample Delivery Group: L1181707
Samples Received: 01/22/2020
Project Number: 1200034
Description: Forsey

Report To: Thomas Atkinson
600 West Sandy Parkway
Sandy, UT 84070

Entire Report Reviewed By:

Daphne Richards
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	2 Tc
Ss: Sample Summary	3	3 Ss
Cn: Case Narrative	4	4 Cn
Sr: Sample Results	5	5 Sr
PRT-1 L1181707-01	5	
PRT-2 L1181707-02	7	
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UP-2 L1181707-04	11	
Qc: Quality Control Summary	13	6 Qc
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Gl: Glossary of Terms	22	7 Gl
Al: Accreditations & Locations	23	8 Al
Sc: Sample Chain of Custody	24	9 Sc

SAMPLE SUMMARY

PRT-1 L1181707-01 Air

Collected by
Thomas Atkinson Collected date/time
01/20/20 10:10 Received date/time
01/22/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1415873	1	01/23/20 21:13	01/23/20 21:13	DAH	Mt. Juliet, TN

1
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Ss

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Cn

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Sr

6
Qc

7
Gl

8
Al

9
Sc

PRT-2 L1181707-02 Air

Collected by
Thomas Atkinson Collected date/time
01/20/20 10:55 Received date/time
01/22/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1415186	1	01/22/20 23:33	01/22/20 23:33	MBF	Mt. Juliet, TN

UP-1 L1181707-03 Air

Collected by
Thomas Atkinson Collected date/time
01/21/20 13:50 Received date/time
01/22/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1415186	1	01/23/20 00:20	01/23/20 00:20	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1415964	400	01/23/20 17:12	01/23/20 17:12	DAH	Mt. Juliet, TN

UP-2 L1181707-04 Air

Collected by
Thomas Atkinson Collected date/time
01/21/20 13:55 Received date/time
01/22/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1415186	1	01/23/20 01:06	01/23/20 01:06	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1415964	400	01/23/20 17:48	01/23/20 17:48	DAH	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Collected date/time: 01/20/20 10:10

L1181707

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	51.2	122		1	WG1415873
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1415873
Benzene	71-43-2	78.10	0.200	0.639	0.956	3.05		1	WG1415873
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1415873
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1415873
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1415873
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1415873
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1415873
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1415873
Carbon tetrachloride	56-23-5	154	0.200	1.26	0.323	2.03		1	WG1415873
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1415873
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1415873
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1415873
Chloromethane	74-87-3	50.50	0.200	0.413	0.636	1.31		1	WG1415873
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1415873
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1415873
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1415873
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1415873
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1415873
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1415873
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1415873
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1415873
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1415873
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1415873
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1415873
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1415873
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1415873
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1415873
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1415873
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1415873
Ethanol	64-17-5	46.10	0.630	1.19	26.8	50.5		1	WG1415873
Ethylbenzene	100-41-4	106	0.200	0.867	0.249	1.08		1	WG1415873
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1415873
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.222	1.25		1	WG1415873
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG1415873
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1415873
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1415873
Heptane	142-82-5	100	0.200	0.818	0.350	1.43		1	WG1415873
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1415873
n-Hexane	110-54-3	86.20	0.200	0.705	0.829	2.92		1	WG1415873
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1415873
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.739	2.57		1	WG1415873
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1415873
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.69	7.93		1	WG1415873
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1415873
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1415873
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1415873
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1415873
2-Propanol	67-63-0	60.10	1.25	3.07	2.41	5.92		1	WG1415873
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1415873
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1415873
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1415873
Tetrachloroethylene	127-18-4	166	0.200	1.36	3.74	25.4		1	WG1415873
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1415873
Toluene	108-88-3	92.10	0.200	0.753	2.08	7.84		1	WG1415873
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1415873

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1415873
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1415873
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1415873
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.418	2.05		1	WG1415873
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1415873
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	1.08	5.05		1	WG1415873
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1415873
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1415873
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1415873
m&p-Xylene	1330-20-7	106	0.400	1.73	1.14	4.94		1	WG1415873
o-Xylene	95-47-6	106	0.200	0.867	0.410	1.78		1	WG1415873
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.4				WG1415873

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	13.1	31.1		1	WG1415186
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1415186
Benzene	71-43-2	78.10	0.200	0.639	2.25	7.19		1	WG1415186
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1415186
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1415186
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1415186
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1415186
1,3-Butadiene	106-99-0	54.10	2.00	4.43	12.1	26.8		1	WG1415186
Carbon disulfide	75-15-0	76.10	0.200	0.622	2.46	7.66		1	WG1415186
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1415186
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1415186
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1415186
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1415186
Chloromethane	74-87-3	50.50	0.200	0.413	0.241	0.498		1	WG1415186
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1415186
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1415186
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1415186
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1415186
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1415186
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1415186
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1415186
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1415186
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1415186
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1415186
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1415186
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1415186
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1415186
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1415186
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1415186
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1415186
Ethanol	64-17-5	46.10	0.630	1.19	3.99	7.52		1	WG1415186
Ethylbenzene	100-41-4	106	0.200	0.867	0.279	1.21		1	WG1415186
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1415186
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG1415186
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.392	1.94		1	WG1415186
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1415186
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1415186
Heptane	142-82-5	100	0.200	0.818	0.350	1.43		1	WG1415186
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1415186
n-Hexane	110-54-3	86.20	0.200	0.705	1.15	4.05		1	WG1415186
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1415186
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.244	0.847		1	WG1415186
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1415186
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	3.80	11.2		1	WG1415186
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1415186
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1415186
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1415186
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1415186
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG1415186
Propene	115-07-1	42.10	0.400	0.689	95.2	164		1	WG1415186
Styrene	100-42-5	104	0.200	0.851	0.390	1.66		1	WG1415186
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1415186
Tetrachloroethylene	127-18-4	166	0.200	1.36	68.9	468		1	WG1415186
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1415186
Toluene	108-88-3	92.10	0.200	0.753	1.84	6.93		1	WG1415186
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1415186

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1415186
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1415186
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG1415186
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.209	1.03		1	WG1415186
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1415186
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1415186
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1415186
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1415186
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1415186
m&p-Xylene	1330-20-7	106	0.400	1.73	0.606	2.63		1	WG1415186
o-Xylene	95-47-6	106	0.200	0.867	0.252	1.09		1	WG1415186
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.8				WG1415186

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	34.4	81.7		1	WG1415186
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1415186
Benzene	71-43-2	78.10	0.200	0.639	0.340	1.09		1	WG1415186
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1415186
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1415186
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1415186
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1415186
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1415186
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1415186
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1415186
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1415186
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1415186
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG1415186
Chloromethane	74-87-3	50.50	0.200	0.413	0.370	0.764		1	WG1415186
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1415186
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG1415186
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1415186
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1415186
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1415186
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1415186
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1415186
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1415186
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1415186
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	0.597	2.37		1	WG1415186
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	4.94	19.6		1	WG1415186
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1415186
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1415186
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1415186
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1415186
1,4-Dioxane	123-91-1	88.10	0.200	0.721	ND	ND		1	WG1415186
Ethanol	64-17-5	46.10	0.630	1.19	16.1	30.4		1	WG1415186
Ethylbenzene	100-41-4	106	0.200	0.867	0.388	1.68		1	WG1415186
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.593	2.91		1	WG1415186
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.399	2.24		1	WG1415186
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.595	2.94		1	WG1415186
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1415186
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1415186
Heptane	142-82-5	100	0.200	0.818	0.203	0.830		1	WG1415186
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1415186
n-Hexane	110-54-3	86.20	0.200	0.705	0.349	1.23		1	WG1415186
Isopropylbenzene	98-82-8	120.20	0.200	0.983	0.443	2.18		1	WG1415186
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG1415186
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1415186
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	4.16	12.3		1	WG1415186
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1415186
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1415186
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1415186
Naphthalene	91-20-3	128	0.630	3.30	1.14	5.97		1	WG1415186
2-Propanol	67-63-0	60.10	1.25	3.07	3.12	7.67		1	WG1415186
Propene	115-07-1	42.10	0.400	0.689	2.32	3.99		1	WG1415186
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1415186
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1415186
Tetrachloroethylene	127-18-4	166	80.0	543	5460	37100		400	WG1415964
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1415186
Toluene	108-88-3	92.10	0.200	0.753	0.812	3.06		1	WG1415186
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1415186

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Collected date/time: 01/21/20 13:50

L1181707

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1415186
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1415186
Trichloroethylene	79-01-6	131	0.200	1.07	74.5	399		1	WG1415186
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.914	4.49		1	WG1415186
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1415186
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1415186
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1415186
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1415186
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1415186
m&p-Xylene	1330-20-7	106	0.400	1.73	0.974	4.22		1	WG1415186
o-Xylene	95-47-6	106	0.200	0.867	0.281	1.22		1	WG1415186
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		105				WG1415186
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		99.2				WG1415964

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	40.7	96.7		1	WG1415186
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG1415186
Benzene	71-43-2	78.10	0.200	0.639	0.497	1.59		1	WG1415186
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG1415186
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG1415186
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG1415186
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG1415186
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG1415186
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG1415186
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG1415186
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG1415186
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG1415186
Chloroform	67-66-3	119	0.200	0.973	3.50	17.0		1	WG1415186
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG1415186
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG1415186
Cyclohexane	110-82-7	84.20	0.200	0.689	0.236	0.813		1	WG1415186
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG1415186
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG1415186
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG1415186
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG1415186
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG1415186
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG1415186
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG1415186
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1415186
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	2.44	9.67		1	WG1415186
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1415186
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG1415186
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG1415186
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG1415186
1,4-Dioxane	123-91-1	88.10	0.200	0.721	1.82	6.56		1	WG1415186
Ethanol	64-17-5	46.10	0.630	1.19	14.6	27.5		1	WG1415186
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG1415186
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG1415186
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.233	1.31		1	WG1415186
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.470	2.32		1	WG1415186
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG1415186
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG1415186
Heptane	142-82-5	100	0.200	0.818	0.592	2.42		1	WG1415186
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG1415186
n-Hexane	110-54-3	86.20	0.200	0.705	1.84	6.49		1	WG1415186
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG1415186
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.356	1.24		1	WG1415186
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG1415186
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	1.72	5.07		1	WG1415186
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG1415186
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG1415186
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG1415186
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG1415186
2-Propanol	67-63-0	60.10	1.25	3.07	6.10	15.0		1	WG1415186
Propene	115-07-1	42.10	0.400	0.689	ND	ND		1	WG1415186
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG1415186
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG1415186
Tetrachloroethylene	127-18-4	166	80.0	543	10900	74000		400	WG1415964
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG1415186
Toluene	108-88-3	92.10	0.200	0.753	0.664	2.50		1	WG1415186
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG1415186

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG1415186
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG1415186
Trichloroethylene	79-01-6	131	0.200	1.07	79.7	427		1	WG1415186
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG1415186
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG1415186
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG1415186
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1415186
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG1415186
Vinyl acetate	108-05-4	86.10	0.200	0.704	ND	ND		1	WG1415186
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG1415186
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG1415186
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		104				WG1415186
(S) 1,4-Bromofluorobenzene	460-00-4	175	60.0-140		100				WG1415964

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3492958-3 01/22/20 10:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3492958-3 01/22/20 10:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	81.6			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3492958-1 01/22/20 09:03 • (LCSD) R3492958-2 01/22/20 09:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.68	3.75	98.1	100	55.0-148			1.88	25
Propene	3.75	3.56	3.66	94.9	97.6	64.0-144			2.77	25
Dichlorodifluoromethane	3.75	3.64	3.74	97.1	99.7	64.0-139			2.71	25
1,2-Dichlorotetrafluoroethane	3.75	3.68	3.74	98.1	99.7	70.0-130			1.62	25
Chloromethane	3.75	3.69	3.76	98.4	100	70.0-130			1.88	25



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3492958-1 01/22/20 09:03 • (LCSD) R3492958-2 01/22/20 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.67	3.75	97.9	100	70.0-130			2.16	25
1,3-Butadiene	3.75	3.49	3.60	93.1	96.0	70.0-130			3.10	25
Bromomethane	3.75	3.75	3.78	100	101	70.0-130			0.797	25
Chloroethane	3.75	3.71	3.76	98.9	100	70.0-130			1.34	25
Trichlorofluoromethane	3.75	3.68	3.76	98.1	100	70.0-130			2.15	25
1,1,2-Trichlorotrifluoroethane	3.75	3.68	3.75	98.1	100	70.0-130			1.88	25
1,1-Dichloroethene	3.75	3.70	3.73	98.7	99.5	70.0-130			0.808	25
1,1-Dichloroethane	3.75	3.66	3.76	97.6	100	70.0-130			2.70	25
Acetone	3.75	4.22	4.32	113	115	70.0-130			2.34	25
2-Propanol	3.75	3.68	3.78	98.1	101	70.0-139			2.68	25
Carbon disulfide	3.75	3.66	3.72	97.6	99.2	70.0-130			1.63	25
Methylene Chloride	3.75	3.57	3.66	95.2	97.6	70.0-130			2.49	25
MTBE	3.75	3.66	3.74	97.6	99.7	70.0-130			2.16	25
trans-1,2-Dichloroethene	3.75	3.64	3.76	97.1	100	70.0-130			3.24	25
n-Hexane	3.75	3.71	3.74	98.9	99.7	70.0-130			0.805	25
Vinyl acetate	3.75	3.97	4.05	106	108	70.0-130			2.00	25
Methyl Ethyl Ketone	3.75	4.06	4.09	108	109	70.0-130			0.736	25
cis-1,2-Dichloroethene	3.75	3.76	3.81	100	102	70.0-130			1.32	25
Chloroform	3.75	3.66	3.71	97.6	98.9	70.0-130			1.36	25
Cyclohexane	3.75	3.72	3.73	99.2	99.5	70.0-130			0.268	25
1,1,1-Trichloroethane	3.75	3.65	3.73	97.3	99.5	70.0-130			2.17	25
Carbon tetrachloride	3.75	3.68	3.75	98.1	100	70.0-130			1.88	25
Benzene	3.75	3.71	3.78	98.9	101	70.0-130			1.87	25
1,2-Dichloroethane	3.75	3.66	3.74	97.6	99.7	70.0-130			2.16	25
Heptane	3.75	4.23	4.30	113	115	70.0-130			1.64	25
Trichloroethylene	3.75	3.63	3.70	96.8	98.7	70.0-130			1.91	25
1,2-Dichloropropane	3.75	3.67	3.75	97.9	100	70.0-130			2.16	25
1,4-Dioxane	3.75	4.02	4.05	107	108	70.0-140			0.743	25
Bromodichloromethane	3.75	3.69	3.72	98.4	99.2	70.0-130			0.810	25
cis-1,3-Dichloropropene	3.75	3.79	3.82	101	102	70.0-130			0.788	25
4-Methyl-2-pentanone (MIBK)	3.75	4.06	4.12	108	110	70.0-139			1.47	25
Toluene	3.75	3.73	3.81	99.5	102	70.0-130			2.12	25
trans-1,3-Dichloropropene	3.75	3.92	3.99	105	106	70.0-130			1.77	25
1,1,2-Trichloroethane	3.75	3.73	3.79	99.5	101	70.0-130			1.60	25
Tetrachloroethylene	3.75	3.75	3.82	100	102	70.0-130			1.85	25
Methyl Butyl Ketone	3.75	4.04	4.11	108	110	70.0-149			1.72	25
Dibromochloromethane	3.75	3.77	3.84	101	102	70.0-130			1.84	25
1,2-Dibromoethane	3.75	3.90	3.96	104	106	70.0-130			1.53	25
Chlorobenzene	3.75	3.81	3.90	102	104	70.0-130			2.33	25
Ethylbenzene	3.75	3.74	3.81	99.7	102	70.0-130			1.85	25

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3492958-1 01/22/20 09:03 • (LCSD) R3492958-2 01/22/20 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	7.38	7.49	98.4	99.9	70.0-130			1.48	25
o-Xylene	3.75	3.69	3.75	98.4	100	70.0-130			1.61	25
Styrene	3.75	4.08	4.13	109	110	70.0-130			1.22	25
Bromoform	3.75	3.85	3.90	103	104	70.0-130			1.29	25
1,1,2,2-Tetrachloroethane	3.75	3.83	3.89	102	104	70.0-130			1.55	25
4-Ethyltoluene	3.75	4.05	4.05	108	108	70.0-130			0.000	25
1,3,5-Trimethylbenzene	3.75	3.76	3.83	100	102	70.0-130			1.84	25
1,2,4-Trimethylbenzene	3.75	3.93	4.00	105	107	70.0-130			1.77	25
1,3-Dichlorobenzene	3.75	4.41	4.41	118	118	70.0-130			0.000	25
1,4-Dichlorobenzene	3.75	4.70	4.77	125	127	70.0-130			1.48	25
Benzyl Chloride	3.75	3.88	3.91	103	104	70.0-152			0.770	25
1,2-Dichlorobenzene	3.75	4.34	4.41	116	118	70.0-130			1.60	25
1,2,4-Trichlorobenzene	3.75	5.51	5.56	147	148	70.0-160			0.903	25
Hexachloro-1,3-butadiene	3.75	3.96	3.97	106	106	70.0-151			0.252	25
Naphthalene	3.75	3.97	4.00	106	107	70.0-159			0.753	25
Allyl Chloride	3.75	3.68	3.75	98.1	100	70.0-130			1.88	25
2-Chlorotoluene	3.75	3.83	3.88	102	103	70.0-130			1.30	25
Methyl Methacrylate	3.75	3.83	3.88	102	103	70.0-130			1.30	25
Tetrahydrofuran	3.75	3.72	3.78	99.2	101	70.0-137			1.60	25
2,2,4-Trimethylpentane	3.75	3.72	3.77	99.2	101	70.0-130			1.34	25
Vinyl Bromide	3.75	3.66	3.70	97.6	98.7	70.0-130			1.09	25
Isopropylbenzene	3.75	3.80	3.81	101	102	70.0-130			0.263	25
<i>(S) 1,4-Bromofluorobenzene</i>				102	102	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3493512-3 01/23/20 10:34

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	0.0747	U	0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3493512-3 01/23/20 10:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	99.1			60.0-140

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493512-1 01/23/20 09:10 • (LCSD) R3493512-2 01/23/20 09:53

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Ethanol	3.75	3.27	4.02	87.2	107	55.0-148			20.6	25
Propene	3.75	4.12	3.58	110	95.5	64.0-144			14.0	25
Dichlorodifluoromethane	3.75	4.20	3.65	112	97.3	64.0-139			14.0	25
1,2-Dichlorotetrafluoroethane	3.75	4.09	3.72	109	99.2	70.0-130			9.48	25
Chloromethane	3.75	4.03	3.65	107	97.3	70.0-130			9.90	25



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493512-1 01/23/20 09:10 • (LCSD) R3493512-2 01/23/20 09:53

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	4.01	3.68	107	98.1	70.0-130			8.58	25
1,3-Butadiene	3.75	3.93	3.50	105	93.3	70.0-130			11.6	25
Bromomethane	3.75	3.51	3.69	93.6	98.4	70.0-130			5.00	25
Chloroethane	3.75	3.28	3.80	87.5	101	70.0-130			14.7	25
Trichlorofluoromethane	3.75	3.62	3.81	96.5	102	70.0-130			5.11	25
1,1,2-Trichlorotrifluoroethane	3.75	3.97	3.87	106	103	70.0-130			2.55	25
1,1-Dichloroethene	3.75	3.89	3.71	104	98.9	70.0-130			4.74	25
1,1-Dichloroethane	3.75	3.92	3.90	105	104	70.0-130			0.512	25
Acetone	3.75	4.25	4.14	113	110	70.0-130			2.62	25
2-Propanol	3.75	4.20	4.03	112	107	70.0-139			4.13	25
Carbon disulfide	3.75	3.74	3.46	99.7	92.3	70.0-130			7.78	25
Methylene Chloride	3.75	3.97	3.84	106	102	70.0-130			3.33	25
MTBE	3.75	3.67	3.61	97.9	96.3	70.0-130			1.65	25
trans-1,2-Dichloroethene	3.75	4.00	3.78	107	101	70.0-130			5.66	25
n-Hexane	3.75	4.02	3.81	107	102	70.0-130			5.36	25
Vinyl acetate	3.75	2.87	2.92	76.5	77.9	70.0-130			1.73	25
Methyl Ethyl Ketone	3.75	3.70	3.76	98.7	100	70.0-130			1.61	25
cis-1,2-Dichloroethene	3.75	3.48	3.51	92.8	93.6	70.0-130			0.858	25
Chloroform	3.75	3.85	3.92	103	105	70.0-130			1.80	25
Cyclohexane	3.75	3.94	3.80	105	101	70.0-130			3.62	25
1,1,1-Trichloroethane	3.75	3.91	3.85	104	103	70.0-130			1.55	25
Carbon tetrachloride	3.75	3.96	3.91	106	104	70.0-130			1.27	25
Benzene	3.75	3.95	3.80	105	101	70.0-130			3.87	25
1,2-Dichloroethane	3.75	4.07	3.91	109	104	70.0-130			4.01	25
Heptane	3.75	2.92	3.01	77.9	80.3	70.0-130			3.04	25
Trichloroethylene	3.75	3.94	3.96	105	106	70.0-130			0.506	25
1,2-Dichloropropane	3.75	3.92	3.90	105	104	70.0-130			0.512	25
1,4-Dioxane	3.75	4.00	3.53	107	94.1	70.0-140			12.5	25
Bromodichloromethane	3.75	3.93	3.92	105	105	70.0-130			0.255	25
cis-1,3-Dichloropropene	3.75	3.86	3.83	103	102	70.0-130			0.780	25
4-Methyl-2-pentanone (MIBK)	3.75	4.29	3.66	114	97.6	70.0-139			15.8	25
Toluene	3.75	3.98	3.91	106	104	70.0-130			1.77	25
trans-1,3-Dichloropropene	3.75	3.98	3.85	106	103	70.0-130			3.32	25
1,1,2-Trichloroethane	3.75	3.95	3.82	105	102	70.0-130			3.35	25
Tetrachloroethylene	3.75	3.99	3.90	106	104	70.0-130			2.28	25
Methyl Butyl Ketone	3.75	4.41	3.55	118	94.7	70.0-149			21.6	25
Dibromochloromethane	3.75	4.07	3.87	109	103	70.0-130			5.04	25
1,2-Dibromoethane	3.75	4.06	3.83	108	102	70.0-130			5.83	25
Chlorobenzene	3.75	4.10	3.87	109	103	70.0-130			5.77	25
Ethylbenzene	3.75	3.97	3.87	106	103	70.0-130			2.55	25

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493512-1 01/23/20 09:10 • (LCSD) R3493512-2 01/23/20 09:53

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
m&p-Xylene	7.50	8.03	7.74	107	103	70.0-130			3.68	25
o-Xylene	3.75	3.99	3.81	106	102	70.0-130			4.62	25
Styrene	3.75	4.13	3.85	110	103	70.0-130			7.02	25
Bromoform	3.75	3.96	3.88	106	103	70.0-130			2.04	25
1,1,2,2-Tetrachloroethane	3.75	4.13	3.75	110	100	70.0-130			9.64	25
4-Ethyltoluene	3.75	4.18	3.78	111	101	70.0-130			10.1	25
1,3,5-Trimethylbenzene	3.75	4.22	3.75	113	100	70.0-130			11.8	25
1,2,4-Trimethylbenzene	3.75	4.18	3.75	111	100	70.0-130			10.8	25
1,3-Dichlorobenzene	3.75	4.13	3.75	110	100	70.0-130			9.64	25
1,4-Dichlorobenzene	3.75	4.26	3.81	114	102	70.0-130			11.2	25
Benzyl Chloride	3.75	4.28	3.74	114	99.7	70.0-152			13.5	25
1,2-Dichlorobenzene	3.75	4.17	3.68	111	98.1	70.0-130			12.5	25
1,2,4-Trichlorobenzene	3.75	4.35	3.68	116	98.1	70.0-160			16.7	25
Hexachloro-1,3-butadiene	3.75	4.39	3.72	117	99.2	70.0-151			16.5	25
Naphthalene	3.75	4.30	3.65	115	97.3	70.0-159			16.4	25
Allyl Chloride	3.75	3.80	3.86	101	103	70.0-130			1.57	25
2-Chlorotoluene	3.75	4.16	3.82	111	102	70.0-130			8.52	25
Methyl Methacrylate	3.75	3.65	3.47	97.3	92.5	70.0-130			5.06	25
Tetrahydrofuran	3.75	3.73	3.63	99.5	96.8	70.0-137			2.72	25
2,2,4-Trimethylpentane	3.75	3.95	3.90	105	104	70.0-130			1.27	25
Vinyl Bromide	3.75	3.38	3.79	90.1	101	70.0-130			11.4	25
Isopropylbenzene	3.75	4.11	3.79	110	101	70.0-130			8.10	25
<i>(S) 1,4-Bromofluorobenzene</i>				99.8	93.3	60.0-140				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3493495-1 01/23/20 10:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppbv		ppbv	ppbv
Tetrachloroethylene	U		0.0497	0.200
<i>(S) 1,4-Bromofluorobenzene</i>	94.9			60.0-140

1 Cp

2 Tc

3 Ss

4 Cn

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3493495-2 01/23/20 10:54 • (LCSD) R3493495-3 01/23/20 11:33

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppbv	ppbv	ppbv	%	%	%			%	%
Tetrachloroethylene	3.75	4.69	4.71	125	126	70.0-130			0.426	25
<i>(S) 1,4-Bromofluorobenzene</i>				104	97.0	60.0-140				

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
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Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

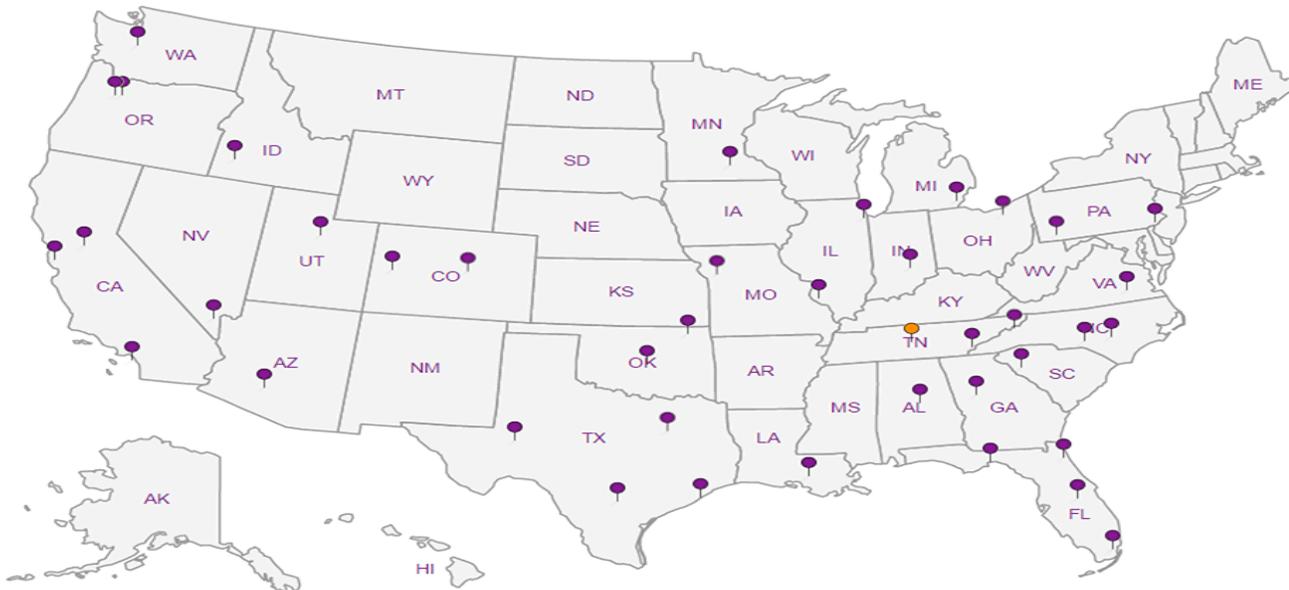
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Company Name/Address: AGBC 600 West Sandy Parkway Sandy, UT 84070		Billing Information: →		Analysis		Chain of Custody Page ___ of ___			
Report to: Tom Atkinson		Email To: Atkinson @ agecinc.com		5105 7015		 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
Project Description: Forsy		City/State Collected: Ogden UT							
Phone: 801-566-6399 Fax: 801-566-6443		Client Project # 1200034				L# 11181707 F175			
Collected by (print): Thomas Atkinson		Site/Facility ID #				Lab Project #		Acctnum:	
Collected by (signature): [Signature]		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day200% <input type="checkbox"/> Next Day100% <input type="checkbox"/> Two Day50% <input checked="" type="checkbox"/> Three Day25%				Date Results Needed: 1/24/20 Canister Pressure/Vacuum		Template: Prelogin: TSR: PB:	
P.O. #		Date Results Needed: 1/24/20		Canister Pressure/Vacuum		Shipped Via:			
Sample ID	Sample Description	Can #	Date	Time	Initial	Final	Rem./Contaminant	Sample # (lab only)	
PRT-1	PRT#1	7609	1/20/20	1010	27	3	/	- 01	
PRT-2	PRT#2	5813	1/20/20	1055	27	7	/	- 02	
VP-1	Vapor Pin - West	6598	1/21/20	150	27	5	/	- 03	
VP-2	Vapor Pin - East	8542	1/21/20	155	24	1	/	- 04	

Remarks:						Hold #	
Relinquished by: (Signature)	Date: 1/21/20	Time: 255	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: (lab use only) OK		
Relinquished by: (Signature)	Date: 1/21/2020	Time: 1700	Received by: (Signature)	Temp: °C Amb 4	Bottles Received: 4		
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1/22/20	Time: 0915	COC Seal Intact: ___ Y ___ N ___ NA	
						pH Checked: NCF:	

APPENDIX C
SITE PHOTOGRAPHS

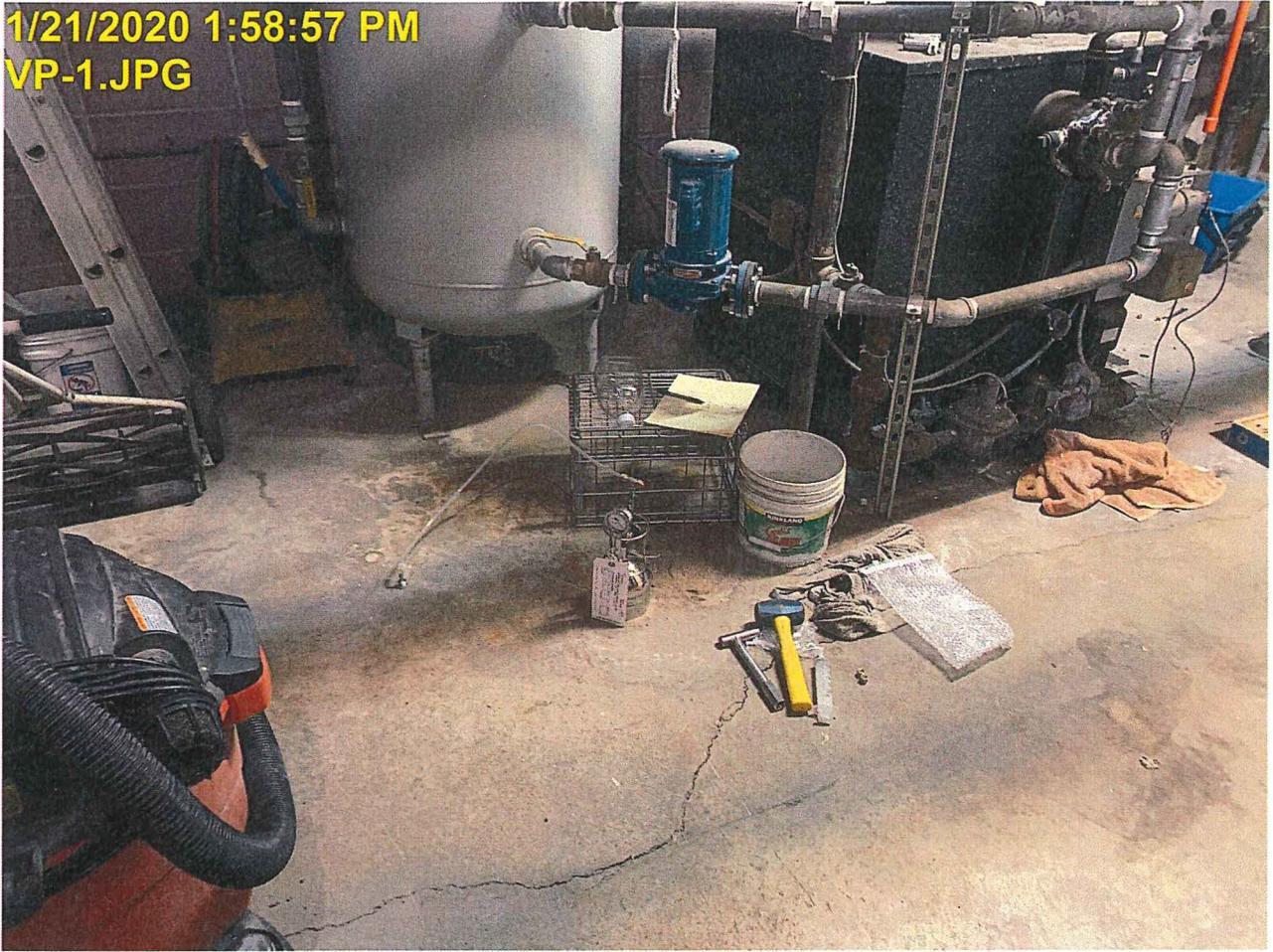
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1/20/2020 10:30:33 AM
GP-2.JPG



1/21/2020 1:58:57 PM
VP-1.JPG



1/21/2020 1:59:06 PM
VP-2.JPG





From NearMap Aerial Photograph
September 11, 2020

FORSEY CLEANERS & LAUNDRY
856 25TH STREET
OGDEN, UTAH



Approximate Scale
1 inch = 45 feet

1210149



Monitoring Wells and Sample Locations

Figure 1



From NearMap Aerial Photograph
September 11, 2020

FORSEY CLEANERS & LAUNDRY
856 25TH STREET
OGDEN, UTAH



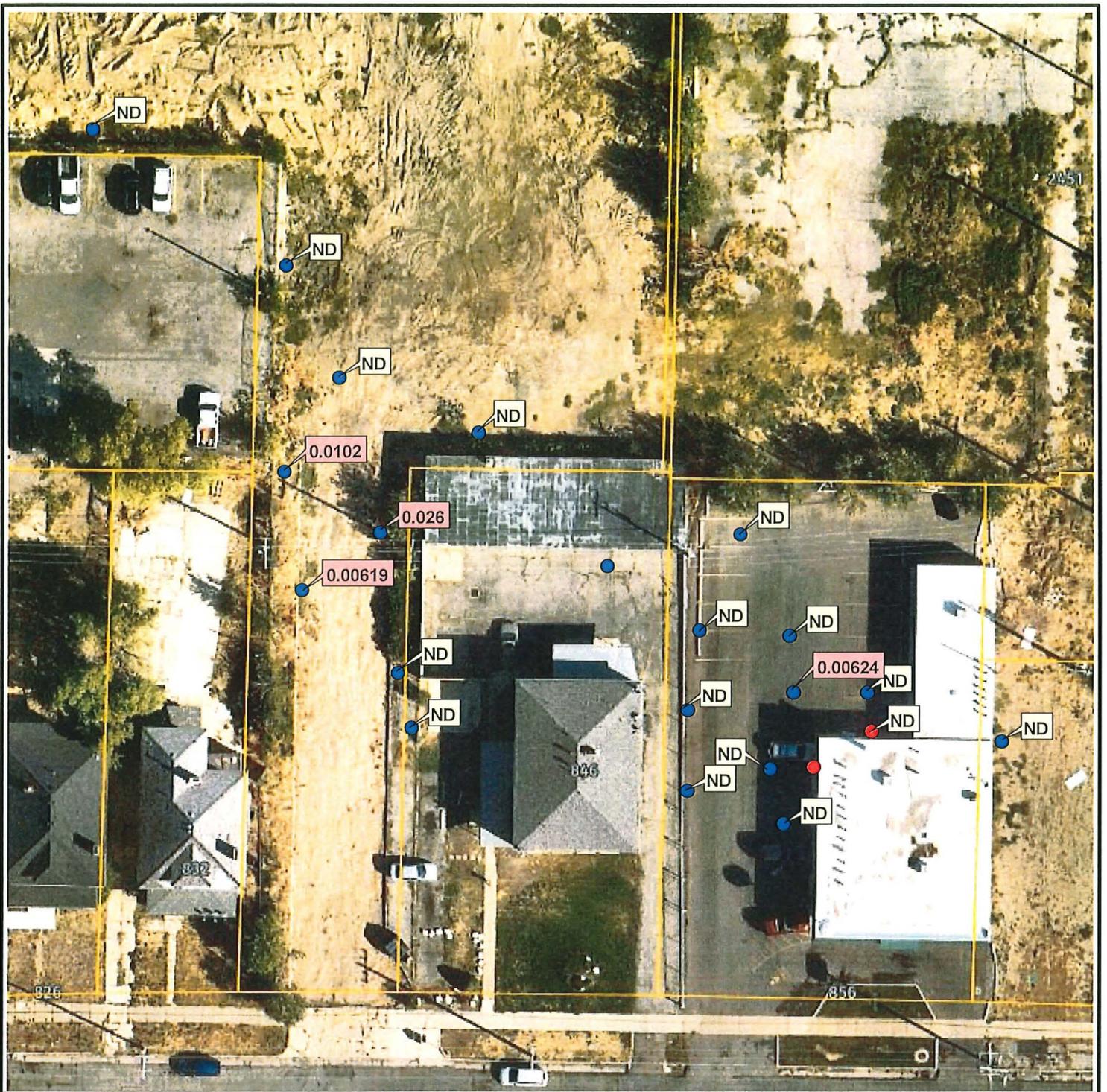
Approximate Scale
1 inch = 45 feet

1210149



Groundwater Elevations (3-10-2021)

Figure 2



From NearMap Aerial Photograph
September 11, 2020

 TCE (mg/L)



Approximate Scale
1 inch = 45 feet

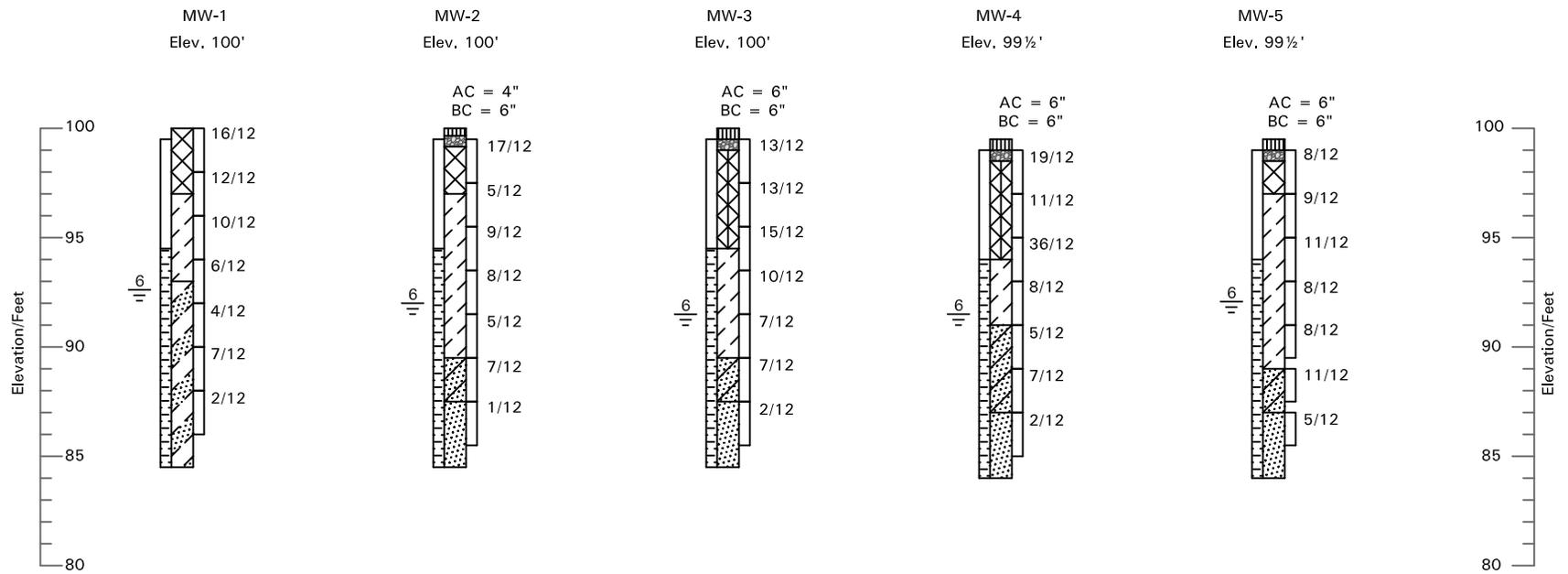
FORSEY CLEANERS & LAUNDRY
856 25TH STREET
OGDEN, UTAH

1210149



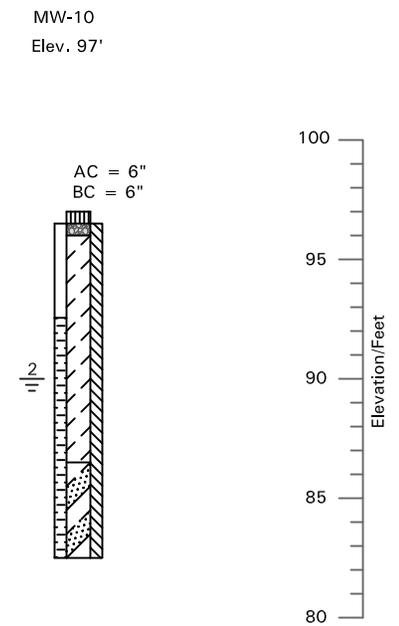
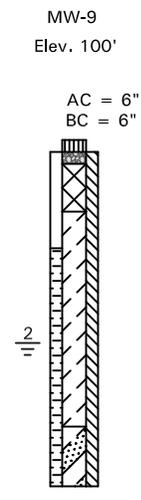
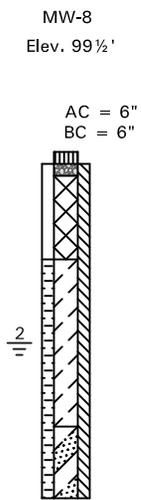
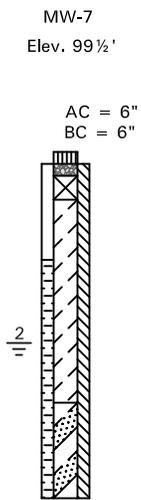
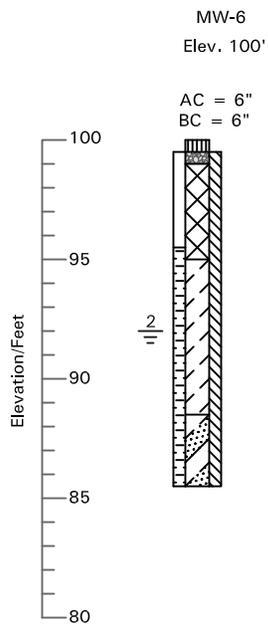
TCE GW Concentrations (12/2020, 01/2021, 02, 2021 & 03/2021)

Figure 4



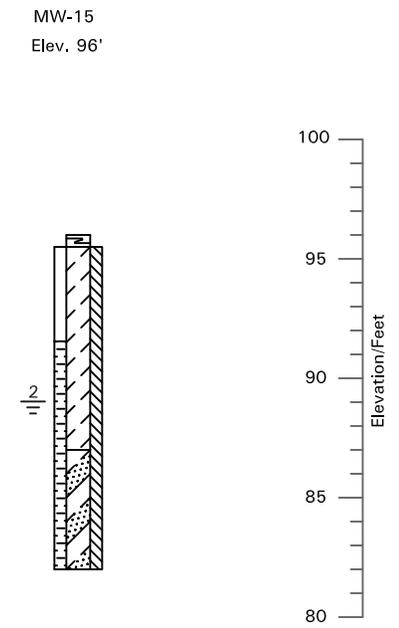
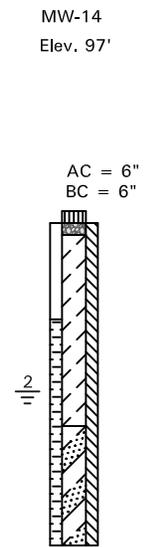
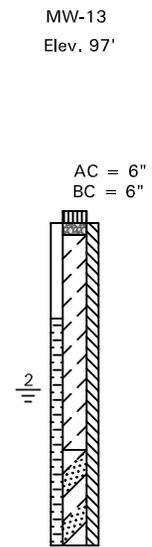
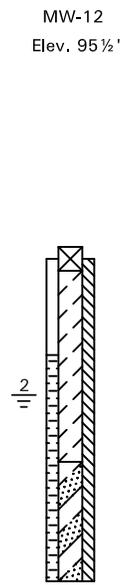
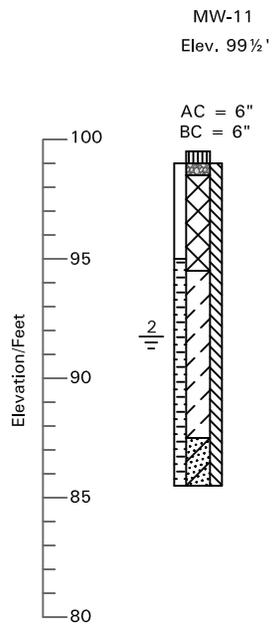
Approximate Vertical Scale 1" = 8'

See Figure 9 for Legend and Notes



Approximate Vertical Scale 1" = 8'

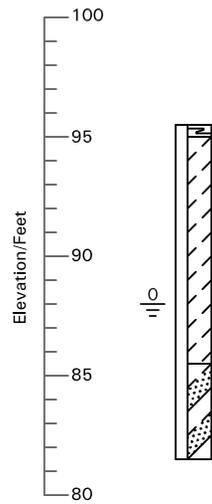
See Figure 9 for Legend and Notes



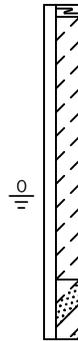
Approximate Vertical Scale 1" = 8'

See Figure 9 for Legend and Notes

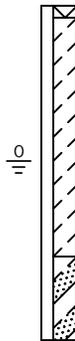
WW-16
Elev. 95 1/2'



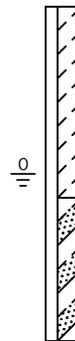
WW-17
Elev. 95 1/2'



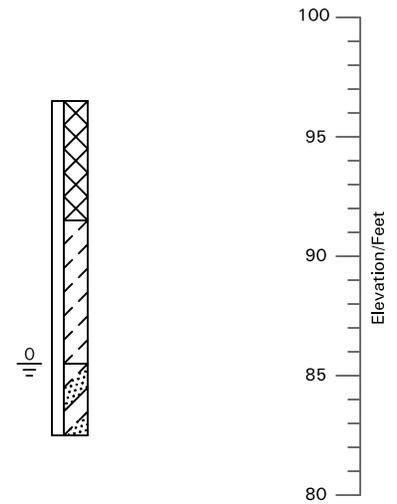
WW-18
Elev. 94 1/2'



WW-19
Elev. 94'



WW-20
Elev. 96 1/2'



Approximate Vertical Scale 1" = 8'

See Figure 9 for Legend and Notes

LEGEND:

-  Asphaltic Concrete; dense, dry, black, poor to good condition.
-  Base Course; silty gravel with sand, moist, brown, angular aggregates.
-  Fill; lean clay to sandy lean clay to silty gravel with sand, moist, dark brown to brown to dark gray, petroleum hydrocarbon odor in MW-1 and MW-2.
-  Lean Clay (CL); sandy, stiff to medium stiff, moist, dark brown to brown, slight petroleum hydrocarbon odor in MW-2.
-  Silty Sand (SM); loose to medium dense, moist, light brown.
-  Poorly-graded Sand (SP); slightly gravelly, medium dense, wet, brown.
-  Poorly-graded Sand with Silty Sand (SP/SM); medium dense, moist, brown to gray.
-  Poorly-graded Gravel with Sand (GP); loose to very dense, moist to wet, brown to gray, petroleum hydrocarbon odor in MW-2.
-  Poorly-graded Gravel with Silt and Sand (GP-GM); medium dense, moist to wet, grayish brown.
-  10/12 California Drive sample taken. The symbol 10/12 indicates that 10 blows from a 140-pound automatic hammer falling 30 inches were required to drive the sampler 12 inches.
-  Indicates continuous soil sample taken. The samples were obtained with disposable acetate liners.
-  Indicates slotted 1 ½-inch PVC pipe installed in the boring to the depth shown.
-  Indicates solid 1 ½-inch PVC pipe installed in the boring to the depth shown.
-  Indicates the depth to free water and number of days after drilling the measurement was taken.

NOTES:

1. Borings MW-1 to MW-5 were drilled on December 3, 2020 using direct push equipment. Borings MW-6 to MW-10 were drilled on January 20, 2021. Borings MW-11 to MW-15 were drilled on February 8, 2021. Borings MW-16 to MW-20 were drilled on March 4, 2021.
2. Locations of the borings were measured approximately by pacing from features shown on the site plan provided.
3. Elevations of the borings were measured by automatic/hand level and refer to the benchmark shown on Figure 2.
4. The boring locations and elevations should be considered accurate only to the degree implied by the method used.
5. The lines between materials shown on the boring logs represent the approximate boundaries between material types and the transitions may be gradual.
6. The water level readings shown on the logs were made at the time and under the conditions indicated. Fluctuations in the water level will occur with time.

Soil and Groundwater Analytical Results
Forsey's Laundry

Table 1 - Soil Results

Sample	Depth (feet)	Date	PID (ppm)	MEK* (mg/kg)	PCE** (mg/kg)	TCE*** (mg/kg)
GP-1	0 to 2	1/20/2020	0.4	0.0306	0.0104	ND
GP-1	7	1/20/2020	5.4	0.031	0.0108	ND
GP-2	0 to 2	1/20/2020	0	0.0275	0.0135	ND
GP-2	7	1/20/2020	1.1	0.0324	ND	ND
MW-1	6 to 8	12/22/2020	0	ND	ND	ND
MW-2	6 ½ to 8 ½	12/22/2020	0.1	ND	0.00279	ND
MW-3	6 ½ to 8 ½	12/22/2020	0.1	ND	0.018	ND
MW-4	6 ½ to 8 ½	12/22/2020	0.2	ND	0.00385	ND
MW-5	6 ½ to 8 ½	12/22/2020	0.1	ND	0.00336	ND
MW-6	6 to 7	1/20/2021	0.4	ND	ND	ND
MW-6	10 to 11	1/20/2021	0.5	ND	ND	ND
MW-7	6 ½ to 8 ½	1/20/2021	0.6	ND	0.0221	ND
MW-8	6 ½ to 8 ½	1/20/2021	0.3	ND	ND	ND
MW-9	6 ½ to 8 ½	1/20/2021	0.3	ND	ND	ND
MW-10	6 ½ to 8 ½	1/20/2021	0.2	ND	0.0138	ND
MW-11	7 to 8	2/8/2021	0.2	ND	ND	ND
MW-12	9 to 10	2/8/2021	0.2	ND	0.239	0.0028
MW-13	8 to 9	2/8/2021	0.1	ND	ND	ND
MW-14	7 to 8	2/8/2021	0.2	ND	0.0318	ND
MW-15	6 to 7	2/8/2021	0.2	ND	0.103	ND
MW-16	6 to 7	3/4/2021	0.5	ND	ND	ND
MW-17	6 ½ to 7 ½	3/4/2021	0.3	ND	0.0202	ND
MW-18	5 to 6	3/4/2021	0.2	ND	ND	ND
MW-19	6 to 7	3/4/2021	0.4	ND	ND	ND
MW-20	8 to 9	3/4/2021	0.2	ND	ND	ND
MW-20	10 to 11	3/4/2021	0.3	ND	ND	ND
November 2020 EPA Residential SL				27,000	24	0.94
November 2020 EPA Industrial SL				190,000	100	6

ND = Non Detect

NA = Not Applicable

* MEK identified as 2-Butadone in lab results

** PCE identified as tetrachloroethene in lab results

*** TCE identified as trichloroethene in lab results

Table 2 - Groundwater Results

Sample	Depth (feet)	Date	PCE* (mg/L)	TCE** (mg/L)
GP-1	7	1/20/2020	0.0422	ND
GP-2	7	1/20/2020	0.00661	ND
MW-1	7.5	12/28/2020	ND	ND
MW-1-Dup	7.5	12/28/2020	ND	ND
MW-2	8.2	12/28/2020	0.0584	ND
MW-3	8.2	12/28/2020	0.739	0.00624
MW-4	8.1	12/28/2020	0.00585	ND
MW-5	7.8	12/28/2020	ND	ND
Trip Blank	NA	12/28/2020	ND	ND
MW-6	8.3	1/20/2021	0.0224	ND
MW-6-Dup	8.3	1/20/2021	0.0213	ND
MW-7	8.2	1/20/2021	0.204	ND
MW-8	8.4	1/20/2021	0.0372	ND
MW-9	8.7	1/20/2021	ND	ND
MW-10	6.4	1/20/2021	0.226	0.0127
Trip Blank	NA	1/20/2021	ND	ND
MW-11	7.8	2/10/2021	0.00729	ND
MW-12	6.2	2/10/2021	0.833	0.026
MW-12-Dup	6.2	2/10/2021	0.771	0.0258
MW-13	7.5	2/10/2021	0.002	ND
MW-14	7.5	2/10/2021	0.0326	ND
MW-15	7	2/10/2021	0.135	0.00619
Trip Blank	NA	2/10/2021	ND	ND
MW-16	5.7	3/10/2021	ND	ND
MW-17	6.8	3/10/2021	0.388	0.0102
MW-17-Dup	6.8	3/10/2021	0.417	0.0114
MW-18	5.6	3/10/2021	ND	ND
MW-19	5.6	3/10/2021	ND	ND
MW-20	8.9	3/10/2021	ND	ND
Trip Blank	NA	3/10/2021	ND	ND
November 2020 EPA MCL			0.005	0.005

ND = Non Detect

NA = Not Applicable

Above MCL

* PCE identified as tetrachloroethene in lab results

** TCE identified as trichloroethene in lab results

Table 3 - Soil Gas Analytical Results
Forsey's Laundry

Chemical	CAS Number	Toxicity Basis	PRT-1 ($\mu\text{g}/\text{m}^3$)	PRT-2 ($\mu\text{g}/\text{m}^3$)	VP-1 ($\mu\text{g}/\text{m}^3$)	VP-2 ($\mu\text{g}/\text{m}^3$)	Residential Target Sub-Slab and Near-source Soil Gas Concentration (TCR = 1E-06 or THQ = 0.1)	Commercial Target Sub-Slab and Near-source Soil Gas Concentration (TCR = 1E-06 or THQ = 0.1)
							$C_{\text{sg, Target}}$ ($\mu\text{g}/\text{m}^3$)	$C_{\text{sg, Target}}$ ($\mu\text{g}/\text{m}^3$)
Acetone	67-64-1	NC	122	31.1	81.7	96.7	107,000	451,000
Benzene	71-43-2	CA	3.05	7.19	1.09	1.59	12	52.4
Butadiene, 1,3-	106-99-0	CA	ND	26.8	ND	ND	3.12	13.6
Carbon Disulfide	75-15-0	NC	ND	7.66	ND	ND	2,430	10,200
Carbon Tetrachloride	56-23-5	CA	2.03	ND	ND	ND	15.6	68.1
Chloroform	67-66-3	CA	ND	ND	ND	17	4.07	17.8
Chloromethane	74-87-3	NC	1.31	0.498	0.764	ND	313	1,310
Cyclohexane	110-82-7	NC	ND	ND	ND	0.813	20,900	87,600
Dichloroethene, 1,1-	75-35-4	NC	ND	ND	2.37	ND	695	2,920
Dichloroethene, cis 1,2-	156-59-2		ND	ND	19.6	9.67	NA	NA
Dioxane, 1,4-	123-91-1	CA	ND	ND	ND	6.56	18.7	81.8
Ethanol	64-17-5		50.5	7.52	30.4	27.5	NA	NA
Ethylbenzene	100-41-4	CA	1.08	1.21	1.68	ND	37.4	164
Ethyltoluene, 4-	622-96-8		ND	ND	2.91	ND	NA	NA
Trichlorofluoromethane	75-69-4		1.25	ND	2.24	1.31	NA	NA
Dichlorodifluoromethane	75-71-8	NC	ND	1.94	2.94	2.32	NA	NA
Heptane	142-82-5	NC	1.43	1.43	0.83	2.42	1,390	5,840
Hexane, N-	110-54-3	NC	2.92	4.05	1.23	6.49	2,430	10,200
Isopropylbenzene	98-82-8		ND	ND	2.18	ND	1,390	5,840
Methylene Chloride	75-09-2	CA	2.57	0.847	ND	1.24	2,090	8,760
2-Butanone (MEK)	78-93-3	NC	7.93	11.2	12.3	5.07	17,400	73,000
Naphthalene	91-20-3	CA	ND	ND	5.97	ND	2.75	12
2-Propanol (Isopropanol)	67-63-0	NC	5.92	ND	7.67	15	695	2,920
Propene (Propylene)	115-07-1	NC	ND	164	3.99	ND	10,400	43,800
Styrene	100-42-5	NC	ND	1.66	ND	ND	3,480	14,600
Tetrachloroethylene	127-18-4	CA	25.4	468	37,100	74,000	139	584
Toluene	108-88-3	NC	7.84	6.93	3.06	2.5	17,400	73,000
Trichloroethylene	79-01-6	NC	ND	ND	399	427	6.95	29.2
Trimethylbenzene, 1,2,4-	95-63-6	NC	2.05	1.03	4.49	ND	209	876
Trimethylpentane, 2,2,4-	540-84-1		5.05	ND	ND	ND	NA	NA
Xylene, M & P-	1330-20-7	NC	4.94	2.63	4.22	ND	348	1,460
Xylene, o-	95-47-6	NC	1.78	1.09	1.22	ND	348	1,460

NA = Not Available - No EPA Target

ND = Non Detect

Table 4 - Monitoring Well Construction Data
Forsey Cleaners

Monitor Well ID	Drilling Method	Total Depth (BTOC)	Date Installed	Diameter/Well Material	Top of Casing Elevation (RSB)	Screened Interval (ft)	Sand Pack (ft)	Depth to Water BTOC (ft)	GW Elevation RSB (ft)
MW-1	Direct Push	15 feet	12/22/2020	1 ½- inch/PVC	99.61	5 to 15	3 to 15	7.16	92.45
MW-2	Direct Push	15 feet	12/22/2020	1 ½- inch/PVC	99.74	5 to 15	3 to 15	7.88	91.86
MW-3	Direct Push	15 feet	12/22/2020	1 ½- inch/PVC	99.42	5 to 15	3 to 15	7.93	91.49
MW-4	Direct Push	15 feet	12/22/2020	1 ½- inch/PVC	99.25	5 to 15	3 to 15	7.78	91.47
MW-5	Direct Push	15 feet	12/22/2020	1 ½- inch/PVC	99.14	5 to 15	3 to 15	7.53	91.61
MW-6	Direct Push	15 feet	1/20/2021	1 ½- inch/PVC	99.44	5 to 15	3 to 15	8.02	91.42
MW-7	Direct Push	15 feet	1/20/2021	1 ½- inch/PVC	98.96	5 to 15	3 to 15	7.86	91.10
MW-8	Direct Push	15 feet	1/20/2021	1 ½- inch/PVC	99.18	5 to 15	3 to 15	8.13	91.05
MW-9	Direct Push	15 feet	1/20/2021	1 ½- inch/PVC	99.78	5 to 15	3 to 15	8.36	91.42
MW-10	Direct Push	15 feet	1/20/2021	1 ½- inch/PVC	96.52	5 to 15	3 to 15	6.04	90.48
MW-11	Direct Push	14 feet	2/8/2021	1 ½- inch/PVC	98.97	4 to 14	3 to 14	7.70	91.27
MW-12	Direct Push	14 feet	2/8/2021	1 ½- inch/PVC	95.11	4 to 14	3 to 14	6.00	89.11
MW-13	Direct Push	14 feet	2/8/2021	1 ½- inch/PVC	96.77	4 to 14	3 to 14	7.44	89.33
MW-14	Direct Push	14 feet	2/8/2021	1 ½- inch/PVC	96.74	4 to 14	3 to 14	7.50	89.24
MW-15	Direct Push	14 feet	2/8/2021	1 ½- inch/PVC	95.66	4 to 14	3 to 14	9.92	85.74
MW-16	Direct Push	14 feet	3/4/2021	1 ½- inch/PVC	95.34	4 to 14	3 to 14	5.75	89.59
MW-17	Direct Push	14 feet	3/4/2021	1 ½- inch/PVC	95.44	4 to 14	3 to 14	6.85	88.59
MW-18	Direct Push	14 feet	3/4/2021	1 ½- inch/PVC	94.48	4 to 14	3 to 14	5.64	88.84
MW-19	Direct Push	14 feet	3/4/2021	1 ½- inch/PVC	94.22	4 to 14	3 to 14	5.61	88.61
MW-20	Direct Push	14 feet	3/4/2021	1 ½- inch/PVC	96.58	4 to 14	3 to 14	8.91	87.67

Depth to water measured in all 20 wells on 03/10/2021

BTOC = Below Top of Casing

RSB = Relative to Site Benchmark

APPENDIX G
RITE AID RCRA GENERATOR FILE

OK DS

RECEIVED

<p>SEND COMPLETED FORM TO: The Appropriate State or Regional Office.</p>	<p align="center">United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM</p> <p align="right">NOV 15 2011 EPA DIVISION OF SOLID & HAZARDOUS WASTE 2011.02518</p>		
<p>1. Reason for Submittal</p> <p>MARK ALL BOX(ES) THAT APPLY</p>	<p>Reason for Submittal:</p> <p>To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location) <input checked="" type="checkbox"/> X</p> <p>To provide a Subsequent Notification (to update site identification information for this location) <input type="checkbox"/></p> <p>As a component of a First RCRA Hazardous Waste Part A Permit Application <input type="checkbox"/></p> <p>As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____) <input type="checkbox"/></p> <p>As a component of the Hazardous Waste Report (If marked, see sub-bullet below) <input type="checkbox"/></p> <p>Site was a TSD facility and/or generator of $\geq 1,000$ kg of hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations) <input type="checkbox"/></p>		
<p>2. Site EPA ID Number</p>	<p>EPA ID Number <u>UTR101010111430</u></p>		
<p>3. Site Name</p>	<p>Name: Rite Aid # 6146</p>		
<p>4. Site Location Information</p>	<p>Street Address: 851 24Th Street</p> <p>City, Town, or Village: Ogden County:</p> <p>State: UT Country: U.S.A. Zip Code: 84401</p>		
<p>5. Site Land Type</p>	<p>Private <input checked="" type="checkbox"/> X County District Federal Tribal Municipal State Other</p>		
<p>6. NAICS Code(s) for the Site (at least 5-digit codes)</p>	<p>A. <u>44110</u> C. _____</p> <p>B. _____ D. _____</p>		
<p>7. Site Mailing Address</p>	<p>Street or P.O. Box: 30 Hunter Lane</p> <p>City, Town, or Village: Camp Hill</p> <p>State: PA Country: U.S.A. Zip Code: 17011</p>		
<p>8. Site Contact Person</p>	<p>First Name: Stephanie MI: A Last: Caiati</p> <p>Title: Senior Manager, Environmental Health and Safety</p> <p>Street or P.O. Box: 30 Hunter Lane</p> <p>City, Town or Village: Camp Hill</p> <p>State: PA Country: U.S.A. Zip Code: 17011</p> <p>Email: Sscaiati@Riteaid.com</p> <p>Phone: (717)730-8225 Ext.: Fax: (717)975-3761</p>		
<p>9. Legal Owner and Operator of the Site</p>	<p>A. Name of Site's Legal Owner: Rite Aid Corporation Date Became Owner: <u>5/7/1997</u></p> <p>Owner Type: <input checked="" type="checkbox"/> X Private County District Federal Tribal Municipal State Other</p> <p>Street or P.O. Box: 30 Hunter Lane</p> <p>City, Town, or Village: Camp Hill Phone: (717)761-2633</p> <p>State: PA Country: U.S.A. Zip Code: 17011</p> <p>B. Name of Site's Operator: Rite Aid Corporation Date Became Operator: <u>5/7/1997</u></p> <p>Operator Type: <input checked="" type="checkbox"/> X Private County District Federal Tribal Municipal State Other</p>		

10. Type of Regulated Waste Activity (at your site)
 Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-7.

- | | |
|--|---|
| <p>Y X N</p> <p>1. Generator of Hazardous Waste
 If "Yes", mark only one of the following – a, b, or c.</p> <p>a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs./mo.) or more of hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs./mo) of acute hazardous waste; or in any calendar month, or accumulates at any time, more than 100 kg/mo (220 lbs./mo) of acute hazardous spill cleanup material.</p> <p>b. SQG: 100 to 1,000 kg/mo (220 – 2,200 lbs./mo) of non-acute hazardous waste.</p> <p>c. CESQG: X Less than 100 kg/mo (220 lbs./mo) of non-acute hazardous waste.</p> <p>If "Yes" above, indicate other generator activities.</p> <p>d. Short-Term Generator (generate from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.</p> <p>e. United States Importer of Hazardous Waste</p> <p>f. Mixed Waste (hazardous and radioactive) Generator</p> | <p>Y N X</p> <p>2. Transporter of Hazardous Waste
 If "Yes", mark all that apply.</p> <p>a. Transporter</p> <p>b. Transfer Facility (at your site)</p> <p>Y N X</p> <p>3. Treater, Storer, or Disposer of Hazardous Waste Note: A hazardous waste permit is required for these activities.</p> <p>Y N X</p> <p>4. Recycler of Hazardous Waste</p> <p>Y N X</p> <p>5. Exempt Boiler and/or Industrial Furnace
 If "Yes", mark all that apply.</p> <p>a. Small Quantity On-site Burner Exemption</p> <p>b. Smelting, Melting, and Refining Furnace Exemption</p> <p>Y N X</p> <p>6. Underground Injection Control</p> <p>Y N X</p> <p>7. Receives Hazardous Waste from Off-site</p> |
|--|---|

B. Universal Waste Activities; Complete all parts 1-2.

- Y N X
1. **Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes", mark all that apply.**
- a. Batteries
- b. Pesticides
- c. Mercury containing equipment
- d. Lamps
- e. Other (specify) _____
- f. Other (specify) _____
- g. Other (specify) _____
- Y N X
2. **Destination Facility for Universal Waste**
 Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.

- Y N X
1. **Used Oil Transporter**
 If "Yes", mark all that apply.
- a. Transporter
- b. Transfer Facility (at your site)
- Y N X
2. **Used Oil Processor and/or Re-refiner**
 If "Yes", mark all that apply.
- a. Processor
- b. Re-refiner
- Y N X
3. **Off-Specification Used Oil Burner**
- Y N X
4. **Used Oil Fuel Marketer**
 If "Yes", mark all that apply.
- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications

D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

TM You must check with your State to determine if you are eligible to manage laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories
See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:
 - a. College or University
 - b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university
 - c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university
2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Waste

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001						
D002						
D007						
D010						
D009						
D024						
P001						
P075						

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.



LQG
COMPLIANCE EVALUATION INSPECTION

OSHW-2015-011419

Date of Inspection:	October 26, 2015
Facility:	Rite Aid Store #06146
Facility Address:	851 24 th Street, Ogden Utah 84401
County:	Weber
EPA ID #	UTR000011430
Latitude / Longitude:	41.221816-111.958042
Generator Status:	LQG
Arrival / Departure Time:	1:40 p.m. to 2:45 p.m.
Weather Conditions:	Sunny, about 70°F
Report Prepared By:	Alex Pashley
Names of Inspectors:	Alex Pashley, DWMRC
LHD Notifications / Date:	Weber /Morgan by phone message on 10-26-2015
Facility Notification / Date:	Unannounced
Applicable Rules:	R315: R315-5, R315-13, R315-16 and R315-9 of the Utah Administrative Code

FACILITY DESCRIPTION AND WASTE MANAGEMENT OPERATIONS

Rite Aid Corporation is one of the nation's leading drugstore chains. They have approximately 4,600 stores in 31 states and the District of Columbia. Rite Aid Store #6146 is a retail store and pharmacy located in Ogden, Utah.

CREDENTIALS, PURPOSE AND SCOPE:



LQG COMPLIANCE ASSISTANCE VISIT

The inspector met with, and presented credentials to, Nick Nicholls, the assistant store manager. Mr. Don Higley is the store manager, but was not present during the inspection. The purpose of the inspection was to evaluate Rite Aid's hazardous waste management practices for compliance with R315 of the Utah Administrative Code (the Rules). The scope of the inspection included a tour of the hazardous waste collection areas and a review of the required records and plans. The Weber/Morgan Health Department was notified of the inspection but did not participate.

MANAGEMENT ACTIVITIES:

Rite Aid management at the corporate level (in conjunction with Stericycle) has put together a hazardous waste management program, which is the same for all of their stores nationwide.

Waste streams generated by Rite Aid are discarded or expired consumer products and pharmaceuticals that Rite Aid corporate has decided to manage as hazardous wastes. The wastes are accumulated in five-gallon storage bins (see photos). They are located in the product receiving and storage room behind the main store. At the time of the inspection, there were six bins that were either full of, or were accumulating wastes. One of the six bins contained a spill kit. There were also six boxes of waste, over the counter medicines, waiting for disposal pickup. The boxes were properly labeled and dated. Also, there was another large container (garbage can style) with a locking lid, and is chained to the floor, that is used to accumulate DEA controlled pharmaceuticals. All of the accumulation containers were closed, labeled, and dated appropriately. Also, each item being disposed of is placed into a labeled plastic bag, prior to being placed into the bins. A bin for the collection of waste pharmaceuticals was located in the pharmacy. It was empty. Stericycle has been contracted to pick up their waste and ships it to 21st Century in Nevada. Pick-ups are scheduled so that accumulation times are less than 90 days.

Records related to the management of hazardous waste were reviewed. Four manifests randomly picked from the past last two years, were reviewed. They were in good order. Land Disposal Notification forms were with all of the manifests.

Inspections of the hazardous waste accumulation areas were being conducted on at least a weekly basis, however, inspections were not being documented.

The Contingency Plan and Emergency Procedures (CPEP) plan was reviewed. It was developed by Ride Aid Corporate and is basically the same for their stores nationwide. Upon reviewing and asking questions about the plan, it was apparent that the assistant store manager and the person who manages the wastes (did not get his name), had not been trained on it. The CPEP contains a section, where the individual stores are required to write in the names and phone numbers of emergency coordinators and emergency responders. It was blank. Both Mr. Nicholls and the waste manager indicated that they had not reviewed it. However, it is maintained in the same binder as the hazardous waste



LQG COMPLIANCE ASSISTANCE VISIT

manifests, which were in good order. It is required, under the LQG rules, that they receive training within the first six months of hire and annually thereafter specific to the CPEP. It appeared that they had, had some trainings specific to the waste containerization and management. Mr. Nicholls did not know if the CPEP had been sent to the local emergency responders.

Spent fluorescent lamps are managed as universal wastes.

Based on the amount of hazardous waste generated at Rite Aid, they would normally be a SQG or maybe even a CESQG, however because Rite Aid occasionally disposes of off-spec or returned Nicorette gum, an acutely hazardous waste, they are notified as a LQG. Review of the hazardous waste manifest, revealed that Nicorette gum has been disposed of, a few times over the last year.

COMPLIANCE STATUS:

R315-5 **Hazardous Waste Generator Requirements**

5-1.11 Determination of Whether a Waste is a Hazardous Waste OK

5-1.12 EPA Identification Numbers UTR000011430

5-2.20 Manifest OK

5-3.30-3.33 Packaging, Labeling, Marking, and Placarding OK

5.3.34 Accumulation Time OK

Container Management OK

Tank Management N/A

Preparedness and Prevention Contingency and Emergency Procedures plan was missing emergency coordinators and outside responder's names and phone numbers. Also, Mr. Nicholls did not know if the CPEP had been sent to the local emergency responders, i.e., police, fire and hospital.

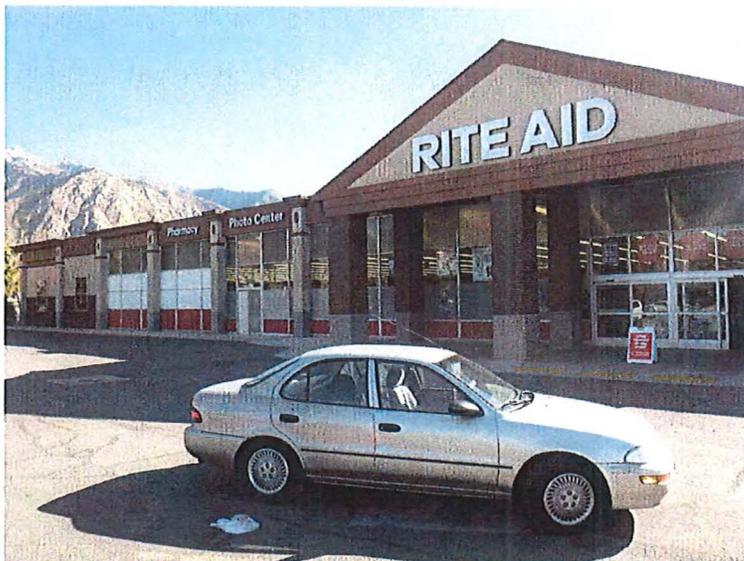
5-4.40 Recordkeeping OK

5-4.41 Biennial Reporting?

5-4.42 Exception Reporting N/A



LQG COMPLIANCE ASSISTANCE VISIT



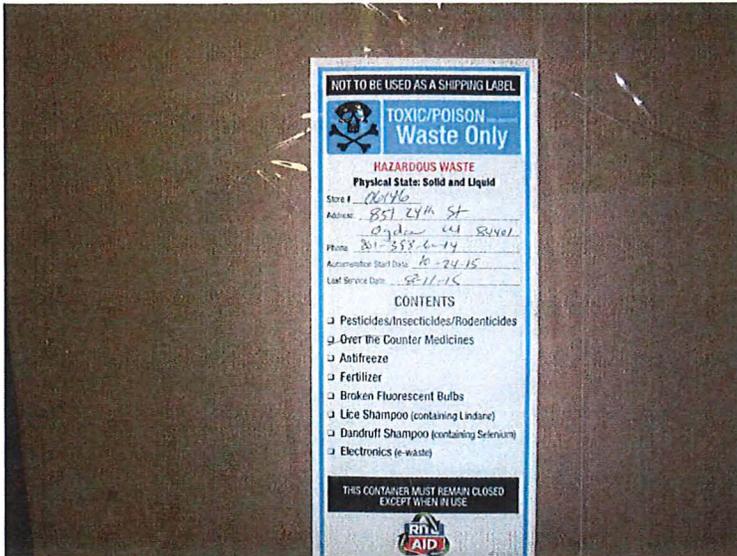
Rite Aid Ogden



Over the counter medicines containerized for disposal.



LQG COMPLIANCE ASSISTANCE VISIT



Over the counter waste medicines, label.



Hazardous waste containers for various listed and characteristic wastes.

Site: Rite A.I.D

EPA #: UTR00001143

Date: 10-26-15

**Hazardous Waste Inspection
Manifest Checklist**

Requirements	Manifests Reviewed			
Manifest Number (box 4)	#006366016	#006365834	#005857790	#005907915
Generator EPA ID# R315-5-2 (box 1)	ok	ok	ok	ok
Generator information: Mailing Address (box 5) Phone Number				
Transporter #1 information: Company Name (box 6) EPA ID# (box 6)				
Transporter #2 information: Company Name (box 7) EPA ID# (box 7)				
Designated Facility information: Name and Address (box 8) EPA ID# (box 8) Phone Number (box 8)				
Waste Shipping requirements: DOT Description (Including proper name, Hazard class, and ID #) (box 9b) (box 9a "X" if hazardous materials) Containers: No & Type (box 10) Total Quantity (box 11) Unit - Wt/Vol (box 12) Waste Codes (box 13)				
Special Handling Instructions (box 14)				
Manifest Certifications: Generator's Signature (box 15) International Shipments (box 16) Transporter's Signature (box 17) Discrepancy Indication (box 18) Hazardous Waste Report Management Method Codes (box 19)				
Facility Signature (box 20)				
Final Observations and Comments:	<p>1 Ph nicotine</p> <p style="text-align: right;">Warfarin Nicotine Cadmium</p>			
<p>Common container codes: DM - metal drum\barrel; DF - fiberbarrel; TT - cargo tank; TC - tank car; DT - dump truck; CM - metal box\carton (includes roll-offs) Common Units of Measure: G - gallons; P - pounds; T - tons; Y - cubic yards)</p>				

**Hazardous Waste Inspection
Preparedness and Prevention Measures**

Nick Nicholls / assistant manager / Don Hislop

INSPECTION ITEM	CITATION	COMMENTS
Is the facility maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents?	R315-7-10.2 265.31 R315-5-3.34 262.34(a)(4)	manager letter
<p>The facility must be equipped with items (1)-(4), identified below, unless it can be shown that hazardous waste managed at the site would not require the particular kind of equipment specified.</p> <p>1. Does the facility have an internal communications or alarm system capable of providing immediate emergency instruction to its personnel?</p> <p>2. Does the facility have a device capable of summoning external emergency assistance to the facility (phone or two-way radio)?</p> <p>3. Does the facility have portable extinguishers, fire control equipment (including special extinguishing equipment necessary for their facility), spill control equipment, and decontamination equipment?</p> <p>4. Does the facility have water at adequate volume and pressure to supply water hoses, or foam producing equipment, or automatic sprinklers, or water spray systems?</p>	<p>R315-7-10.3 265.32</p> <p>R315-7-10.3(a) 265.32(a)</p> <p>R315-7-10.3(b) 265.32(b)</p> <p>R315-7-10.3(c) 265.32(c)</p> <p>R315-7-10.3(d) 265.32(d)</p>	<p>OK</p> <p>OK</p> <p>OK</p> <p>yes</p> <p>yes</p>
Are facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment tested and maintained to assure its proper operation in time of an emergency?	R315-7-10.4 265.33	yes
Do facility personnel have immediate access to an internal alarm or emergency communication device, either directly through visual or voice contact, while managing hazardous waste?	R315-7-10.5(a) 265.34(a)	yes
Is there ever just one employee on the premises while the facility is operating? If yes, does that person have immediate access to device capable of summoning external emergency assistance?	R315-7-10.5(b) 265.34(b)	

Site: _____

EPA #: _____

Date: _____

Hazardous Waste Inspection Preparedness and Prevention Measures

INSPECTION ITEM	CITATION	COMMENTS
Is aisle space maintained to allow the unobstructed movement of emergency personnel or equipment (unless aisle space is not needed for any of these purposes)?	R315-7-10.6 265.35	OK
<p>The facility must arrange the following types of agreements or arrangements with local organizations (as appropriate):</p> <p>1. Has the facility made or attempted to make arrangements to familiarize local police, fire departments, and emergency response teams with the layout of the facility, character of the hazardous waste(s) managed, locations where facility personnel normally work, location of facility entrances and possible evacuation routes?</p> <p>2. Has the facility designated primary emergency authority to a specific police or fire department, when more than one police or fire department might respond in the event of an emergency?</p> <p>3. Have agreements with State emergency response teams, emergency responses contractors, and equipment suppliers been made?</p> <p>4. Have arrangements been made to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility?</p>	<p>R315-7-10.7(a) 265.37(a)</p> <p>R315-7-10.7(a)(1) 265.37(a)(1)</p> <p>R315-7-10.7(a)(2) 265.37(a)(2)</p> <p>R315-7-10.7(a)(3) 265.37(a)(3)</p> <p>R315-7-10.7(a)(4) 265.37(a)(4)</p>	<p>?</p> <p>?</p> <p>Store manager on duty</p> <p>T</p> <p>?</p>
If any State or local authorities have declined to enter into such arrangements, has the facility documented the refusal in the operating record?	R315-7-10.7(b) 265.37(b)	no

Site: Rite Aid Ogden

EPA #: VTR0001143

Date: 10-26-2015

**Hazardous Waste Inspection
Contingency Plan and Emergency Procedures Checklist**

INSPECTION ITEM	CITATION	COMMENTS
<p><u>General Requirements:</u> Have copies been distributed to all local police and fire departments, hospitals, and State and local emergency response teams that may be called upon for assistance?</p>	<p>R315-5-3.34 262.34(a)(4) R315-7-11.4(a) 265.53(a) R315-7-11.4(c) 265.53(b)</p>	
<p><u>Content of the Contingency Plan:</u></p> <p>1. Does the contingency plan describe the actions facility personnel will take to minimize the hazard to human health or the environment when responding to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste?</p> <p>2. Does the contingency plan describe arrangements agreed to by local police and fire departments, hospitals, contractors, and State and local emergency response teams?</p> <p>3. Does the contingency plan list the names, addresses, and phone numbers (office and home) of primary and all other persons qualified to act as emergency coordinator?</p> <p>4. Does the contingency plan include a list of all emergency equipment at the facility? The list must be kept up-to-date, and include the location and a physical description of each item on the list, and a brief outline of the equipment's capability.</p> <p>5. Does the contingency plan include an evacuation plan for the facility? This plan must include a description of signal(s) to be used to begin an evacuation, evacuation routes, and alternate evacuation routes.</p>	<p>R315-7-11.3(a) 265.52(a)</p> <p>R315-7-11.3(c) 265.52(c)</p> <p>R315-7-11.3(d) 265.52(d)</p> <p>R315-7-11.3(e) 265.52(e)</p> <p>R315-7-11.3(f) 265.52(f)</p>	<p align="center">OK</p>
<p>Does the facility have a least one employee on-site or on-call at all time who is qualified to act as the emergency coordinator?</p>	<p>R315-7-11.6 265.55</p>	
<p>Does the contingency plan include procedures for activation of the internal alarm by the emergency coordinator?</p> <p>Does the contingency plan include provision for notifying the appropriate State and/or local response agencies?</p>	<p>R315-7-11.7(a)(1) 265.56(a)(1)</p> <p>R315-7-11.7(a)(2) 265.56(a)(2)</p>	

Site: _____

EPA #: _____

Date: _____

**Hazardous Waste Inspection
Contingency Plan and Emergency Procedures Checklist**

INSPECTION ITEM	CITATION	COMMENTS
Does the contingency plan outline the procedure(s) that the emergency coordinator will follow to immediately identify the character, source, amount, and extent of released material?	R315-7-11.7(b) 265.56(b)	OK
Does the contingency plan include procedures for the emergency coordinator to follow in order to assess possible hazards to human health or the environment?	R315-7-11.7(c) 265.56(c)	
If it is determined that the incident could threaten human health or the environment, outside the facility, the emergency coordinator must notify the appropriate local, State and Federal agencies. Does the contingency plan include provision for notifying the appropriate agencies? Do the notification measures include information to be reported (name and telephone # of reporter, name and address of facility, name and quantity of material(s) involved, extent of injuries, and possibility of exposure outside the facility), and identify the National Response Center and the State as parties to be notified?	R315-7-11.7(d)(1) and (d)(2) 265.56(d)(1) and (d)(2)	
Does the plan include procedure to prevent the spread of the incident to other hazardous waste at the facility?	R315-7-11.7(e) 265.56(e)	OK
Are measures included to monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, when it is necessary to shut-down operations as a response to an incident?	R315-7-11.7(f) 265.56(f)	
Does the contingency plan provide procedures to follow to manage the hazardous waste generated as a result of an incident?	R315-7-11.7(g) 265.56(g)	
Following implementation of the contingency plan, are provisions included to ensure that in the affected area(s): 1. No waste that may be incompatible with the released material is treated, stored, or disposed of until the cleanup is complete. 2. That all equipment listed in the contingency plan is cleaned and fit for use prior to resuming activities at the facility.	R315-7-11.7(h) 265.56(h) R315-7-11.7(h)(1) 265.56(h)(1) R315-7-11.7(h)(2) 265.56(h)(2)	

Site: RITARD

EPA #: UTR 0000/1470

Date: 10-26-2015

**Hazardous Waste Inspection
Contingency Plan and Emergency Procedures Checklist**

INSPECTION ITEM	CITATION	COMMENTS
Does the contingency plan include provisions for notifying the appropriate federal, State and local authorities that the facility is in compliance with 40 CFR 265.56(h) prior to resuming operations in the affected area?	R315-7-11.7(i) 265.56(i)	
<p>The contingency plan must include provision for recording the incident requiring implementation of the contingency plan and specifying information that will be recorded and reported. The requirements are as follows:</p> <p>1. Will a written report on the incident be provided to the Utah State Department of Environmental Quality within 15 days?</p> <p>2. The following information needs to be recorded and reported:</p> <p>a) The name, address, and telephone # of the owner/operator;</p> <p>b) The name address, and telephone # of the facility;</p> <p>c) Date, time, and type of incident;</p> <p>d) Name and quantity of material(s) involved;</p> <p>e) Extent of injury, if any;</p> <p>f) An assessment of the actual or potential hazard to human health or the environment; and</p> <p>g) An estimate of the quantity and disposition of recovered material(s) that resulted from the incident.</p>	<p>R315-7-11.7(j) 265.56(j)</p> <p>R315-7-11.7(j) 265.56(j)</p> <p>R315-7-11.7(j)(1) thru (j)(7) 265.56(j)(1) thru (j)(7)</p>	

Site: RAA AEO

EPA #: UTR000011430

Date: 10 26 15

**Hazardous Waste Inspection
Personnel Training Checklist**

INSPECTION ITEM	CITATION	COMMENTS
Facility personnel must successfully complete classroom instruction or on-the-job training which teaches them to perform their jobs, such that the facility is operated in compliance with the applicable hazardous waste management requirements.	R315-5-3.34 262.34(a)(4) R315-7-9.7(a)(1) 265.16(a)(1)	Not every one has been trained.
Is the program directed by a person trained in hazardous waste management procedures?	R315-7-9.7(a)(2) 265.16(a)(2)	81
Does the training teach facility personnel hazardous waste management and contingency plan implementation procedures?	R315-7-9.7(a)(2) 265.16(a)(2)	
Does the training program include, at a minimum, the following, where applicable: 1. Procedures for using, inspecting, repairing, and replacing facility emergency equipment; 2. Key parameters for automatic waste cut-off systems; 3. Communications or alarm systems; 4. Response to fires or explosions; 5. Response to groundwater contamination incidents; 6. Shutdown of operations; and 7. Evacuation of personnel procedures.	R315-7-9.7(a)(3) 265.16(a)(3) R315-7-9.7(a)(3)(i) 265.16(a)(3)(i) R315-7-9.7(a)(3)(ii) 265.16(a)(3)(ii) R315-7-9.7(a)(3)(iii) 265.16(a)(3)(iii) R315-7-9.7(a)(3)(iv) 265.16(a)(3)(iv) R315-7-9.7(a)(3)(v) 265.16(a)(3)(v) R315-7-9.7(a)(3)(vi) 265.16(a)(3)(vi)	
Have facility personnel successfully completed the personnel training program within six months of the date of their employment or assignment to the facility?	R315-7-9.7(b) 265.16(b)	
Do the facility personnel receive an annual review of their initial training?	R315-7-9.7(c) 265.16(c)	

Site: _____

EPA #: _____

Date: _____

**Hazardous Waste Inspection
Personnel Training Checklist**

INSPECTION ITEM	CITATION	COMMENTS
<p>The owner/operator of the facility must maintain the following documents at the facility:</p> <p>1. The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;</p> <p>2. A written job description for each position listed under #1;</p> <p>3. A written description of the type and amount of both introductory and continuing training that will be given to the employees listed in #1, and;</p> <p>4. Records that document that employees have the training or job experience required by paragraphs 265.16 (a), (b), and (c).</p>	<p>R315-7-9.7(d) 265.16 (d)</p> <p>R315-7-9.7(d)(1) 265.16 (d)(1)</p> <p>R315-7-9.7(d)(2) 265.16 (d)(2)</p> <p>R315-7-9.7(d)(3) 265.16 (d)(3)</p> <p>R315-7-9.7(d)(3) 265.16 (d)(3)</p>	
<p>Are training records maintained at the facility for current employees and for at least three years for employees that have left the company?</p>	<p>R315-7-9.7(e) 265.16(e)</p>	



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
Scott T. Anderson
Director

November 3, 2015

Don Higley, Store Manager
Rite Aid Store # 06146
851 24th Street
Ogden, UT 84401

RE: Compliance Evaluation Inspection
UTR000011430

Dear Mr. Higley:

On October 26, 2015, a representative from the Division of Waste Management and Radiation Control conducted a compliance evaluation inspection at your facility to determine compliance with the Utah Solid and Hazardous Waste Rules.

In accordance with R315-5-3.34 of the Utah Administrative Code, large quantity generators of hazardous waste are required to distribute to the local police and fire departments, hospitals and any other emergency response teams, updated copies of Rite Aid's Contingency Plan and Emergency Procedures (CPEP). During the inspection, you were unable to confirm that this had been performed. You also indicated that it was possible that Rite Aid's corporate office may have sent them out.

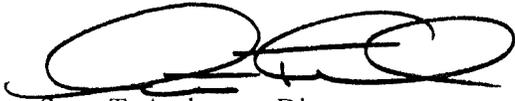
In accordance with R315-7-9.7(a)(2) of the Utah Administrative Code, large quantity generators of hazardous waste are required to provide training to appropriate personal in regards to the implementation procedures of the CPEP. During the inspection, there was no documentation indicating that training of the CPEP had been provided. Also, the names and phone numbers were not included in the CPEP for the Rite Aid store emergency coordinators and for and local emergency responders.

Please provide documentation by November 30, 2015 that the notifications and required training have been completed.

(Over)

If you have any questions, please call Alex Pashley at (801) 536-0231.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott T. Anderson". The signature is stylized with large loops and a horizontal line across the middle.

Scott T. Anderson, Director
Division of Waste Management and Radiation Control

STA/AP/kl

c: Brian Bennion, Health Officer, Weber-Morgan Health Department
Louis Cooper, LEHS, MPA, Environmental Health Director, Weber-Morgan Health Department



With us, it's personal.

UTR000011430
Div of Waste Management
and Radiation Control

DEC 14 2015
DSHW-2015-012627

MAILING ADDRESS
P.O. Box 3165
Harrisburg, PA 17105

GENERAL OFFICE
30 Hunter Lane
Camp Hill, PA 17011

717.761.2633

November 27, 2015

Department of Environmental Quality
Division of Waste Management and Radiation Control
P.O. Box 144880
Salt Lake City, UT 84114-4880

ATTN: Scott T. Anderson, Director

Sent via Certified Mail and Facsimile to: 801-536-0222

RE: Rite Aid Store 6146
851 24th Street
Ogden, UT 84401

Dear Mr. Anderson:

In response to the Inspection report dated October 26, 2015, for Store 6146 in Ogden, please see the outline below indicating actions taken and documents provided:

- Contingency plans have been sent certified to local emergency responders (Exhibit A); and
- Associate training records for 2015 (Exhibit B).

Please do not hesitate to contact me should you require additional information.

Kind Regards,
Rite Aid Corporation

Deanna Bomgardner
Manager, Projects and Compliance

Exhibit A

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
1. Article Addressed to: Emergency Response Coordinator Ogden Fire Department 2186 Lincoln Avenue Ogden, UT 84401	B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
	3. Service Type <input checked="" type="checkbox"/> Certified Mail* <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery
2. Article (Trans) <u>91 7199 9991 7035 5784 8827</u>	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
PS Form 3811, July 2013 Domestic Return Receipt	

Not delivered, re-sent.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
1. Article Addressed to: Emergency Response Coordinator McKay-Dee Hospital 4403 Harrison Blvd Ogden, UT 84401	B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
	3. Service Type <input checked="" type="checkbox"/> Certified Mail* <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery
2. Article (Trans) <u>91 7199 9991 7035 5784 8841</u>	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
PS Form 3811, July 2013 Domestic Return Receipt	

Delivered.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature X <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
1. Article Addressed to: Emergency Response Coordinator Ogden Police Department 2186 Lincoln Avenue Ogden, UT 84401	B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
	3. Service Type <input checked="" type="checkbox"/> Certified Mail* <input type="checkbox"/> Priority Mail Express™ <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> Collect on Delivery
2. Article (Trans) <u>91 7199 9991 7035 5784 8834</u>	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
PS Form 3811, July 2013 Domestic Return Receipt	

Not delivered, re-sent.



With us, it's personal.

November 10, 2015

MAILING ADDRESS
P.O. Box 3165
Harrisburg, PA 17105

GENERAL OFFICE
30 Hunter Lane
Camp Hill, PA 17011

717.761.2633

Emergency Response Coordinator
McKay – Dee Hospital
4403 Harrison Blvd
Ogden, UT 84401

RE: Rite Aid Store #6146
851 24th Street
Ogden, UT 84401

SUBJECT: Emergency Contingency Plan

As a "large quantity generator" of hazardous waste, we are required to provide a copy of our Emergency Contingency Plan to local emergency response teams to help ensure proper response in the event of an emergency.

This information is to be used by your department to better plan for an emergency response at this facility.

While we only generate small amounts of hazardous waste, under applicable environmental regulations, we have been classified as a Large Quantity Generator (LQG) of hazardous waste because we sometimes generate more than 2.2 pounds of acutely hazardous waste during a calendar month. These materials consist of expired, damaged and returned smoking cessation products (nicotine gums, patches, etc.) along with their associated packaging.

If you have questions or comments regarding this letter or the Emergency Contingency Plan, please call our Store Manager at (801) 393-6044 or contact our Corporate Environmental Health & Safety Department at (717) 975-8643.

Sincerely,

A handwritten signature in black ink, appearing to read "David W. Crozier".

David W. Crozier
Manager, Environmental Health and Safety

Encl. Emergency Contingency Plan



Date: November 16, 2015

6146 - Hospital

Kyle Alexander:

The following is in response to your November 16, 2015 request for delivery information on your Certified Mail™ item number 9171999991703557848841. The delivery record shows that this item was delivered on November 16, 2015 at 10:20 am in OGDEN, UT 84403. The scanned image of the recipient information is provided below.

Signature of Recipient :

A handwritten signature in black ink, appearing to be "C. K. W." with a stylized flourish at the end.

Address of Recipient :

A handwritten address in black ink, appearing to be "544 1 3".

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service



With us, it's personal.

November 10, 2015

MAILING ADDRESS
P.O. Box 3165
Harrisburg, PA 17105

GENERAL OFFICE
30 Hunter Lane
Camp Hill, PA 17011

717.761.2633

Emergency Response Coordinator
Ogden Police Department
2186 Lincoln Avenue
Ogden, UT 84401

RE: Rite Aid Store #6146
851 24th Street
Ogden, UT 84401

SUBJECT: Emergency Contingency Plan

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Sincerely,

A handwritten signature in black ink, appearing to read "David W. Crozier".

David W. Crozier
Manager, Environmental Health and Safety

Encl. Emergency Contingency Plan



With us, it's personal.

November 23, 2015

MAILING ADDRESS
P.O. Box 3165
Harrisburg, PA 17105

GENERAL OFFICE
30 Hunter Lane
Camp Hill, PA 17011

717.761.2633

Emergency Response Coordinator
Ogden Police Department
2186 Lincoln Avenue
Ogden, UT 84401

RE: Rite Aid Store # 06146
851 24th Street
Ogden, UT 84401

SUBJECT: Emergency Contingency Plan

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Sincerely,

A handwritten signature in black ink, appearing to read "D. Crozier".

David W. Crozier
Manager, Environmental Health and Safety

Encl. Emergency Contingency Plan



UPS Shipping Form (Required shipping information)

Sender's Contact Information:

Date: 11/23/2015

Name: Kyle Alexander Extension: 2441 Please return the tracking receipt: -Yes -No

Required information for various locations: (choose one of the following 3 mailing options)

Mailing to a Store: (only the Store Number and Attention Name is required)

Store Number: _____ Attention Name: _____

Mailing to a Regional Office or Warehouse: (only the Zip Code and Attention Name is required)

Zip Code: _____ Attention Name: _____

Mailing to all other locations: Recipient's Information

Is delivery address Residential -Yes -No

Attention: Emergency Response Coordinator

Company: Ogden Police Department

Address 1: 2186 Lincoln Avenue

Address 2: _____

City: Ogden State: UT

Zip: 84401 Phone: _____

(*Required to process overseas and Canada)

882A6A NOV 23, 2015 ACT WT 0.2 LBS
SVC 20A BL WT 1.0 LBS
TRACKING# 1Z882A6A0248804821
REF 1:00569
REF 2:

HANDLING CHARGE 0.00			
SINGLE - PIECE NR RATE			
DV 0.00	CHRG:	COD 0.00	SVC 5.82 USD
DC 0.00		DGD 0.00	RS 0.00
AH 0.00		PR 0.00	SD 0.00
TOT NR CHG 5.82			SP 0.00
			NR+HANDLING 5.82

*****Required Information for ALL packages*****

Cost Center: 9569 Total Packages: 1

Express Package Service:

- Ground (5 business days)
- UPS 3 Day Select (1-3 business days)
- 2nd Day Air (2 business days) - *Mgr Signature Required: *Paul C. King*
- Next Day Air Saver (Next day by 3:00 PM) - **VP Signature Required: _____
- Next Day Air (Next day by 10:30 AM) - **VP Signature Required: _____

Special Handling: (if applicable)

Saturday Delivery

Residential Delivery Signature: -No Signature -Direct Signature -Indirect Signature

Payment information: (if applicable)

-Sender (billed to Rite Aid Acct #) -Recipient -Third Party

UPS Account #: _____ Insured amount (if applicable): \$ _____

Before 4:00 PM - To be processed by the mailroom - Must have completed form & package in the Mailroom by 4:00 PM
After 4:00 PM - Must have completed UPS Shipping Label on package in the Lobby ready to ship by 7:00 PM



Proof of Delivery

11/27/2015 7:59 AM ET

Dear Customer,

This notice serves as proof of delivery for the shipment listed below

Tracking Number:	1Z882A5A0246804821
Service:	UPS 2nd Day Air®
Weight:	20 lb
Shipped/Billed On:	11/23/2015
Delivered On:	11/25/2015 1 14 P M
Delivered To:	OGDEN, UT, US
Signed By:	NELSON
Left At:	Front Desk

Thank you for giving us this opportunity to serve you.

Sincerely,

UPS

Tracking results provided by UPS. 11/27/2015 7 59 A M ET

[Print This Page](#)

[Close Window](#)



With us, it's personal.

November 10, 2015

MAILING ADDRESS
P.O. Box 3165
Harrisburg, PA 17105

GENERAL OFFICE
30 Hunter Lane
Camp Hill, PA 17011

717.761.2633

Emergency Response Coordinator
Ogden Fire Department
2186 Lincoln Avenue
Ogden, UT 84401

RE: Rite Aid Store #6146
851 24th Street
Ogden, UT 84401

SUBJECT: Emergency Contingency Plan

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Sincerely,

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David W. Crozier
Manager, Environmental Health and Safety

Encl. Emergency Contingency Plan



With us. it's personal.

MAILING ADDRESS
P.O. Box 3165
Harrisburg, PA 17105

GENERAL OFFICE
30 Hunter Lane
Camp Hill, PA 17011

717.761.2633

November 23, 2015

Emergency Response Coordinator
Ogden Fire Department
2186 Lincoln Avenue
Ogden, UT 84401

RE: Rite Aid Store # 06146
851 24th Street
Ogden, UT 84401

SUBJECT: Emergency Contingency Plan

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David W. Crozier
Manager, Environmental Health and Safety

Encl. Emergency Contingency Plan



UPS Shipping Form (Required shipping information)

Sender's Contact Information:

Date: 11/23/2015

Name: Kyle Alexander

Extension: 2441

Please return the tracking receipt: -Yes -No

Required information for various locations: (choose one of the following 3 mailing options)

Mailing to a Store: (only the Store Number and Attention Name is required)

Store Number: _____

Attention Name: _____

Mailing to a Regional Office or Warehouse: (only the Zip Code and Attention Name is required)

Zip Code: _____

Attention Name: _____

Mailing to all other locations: Recipient's Information

Is delivery address Residential -Yes -No

Attention: Emergency Response Coordinator

Company: Ogden Fire Department

Address 1: 2186 Lincoln Avenue

Address 2: _____

City: Ogden

State: UT

Zip: 84401

Phone: _____

(*Required to process overseas and Canada)

NOV 23, 2015 ACT WT 0.2 LBS
 BL WT 1.0 LBS
 882A6A
 SVC 2DA
 TRACKING# 1Z882A6A0248228030
 REF 1:09588
 REF 2:

HANDLING CHARGE 0.00		SVC 6.82 USD
SINGLE - PIECE NR RATE CHRG:		RS 0.00
DV 0.00	COD 0.00	SD 0.00
DC 0.00	DGD 0.00	SP 0.00
AH 0.00	PR 0.00	NR + HANDLING 6.82
TOT NR CHG 6.82		

*****Required Information for ALL packages*****

Cost Center: 9569

Total Packages: 1

Express Package Service:

Ground (5 business days)

UPS 3 Day Select (1-3 business days)

2nd Day Air (2 business days) - *Mgr Signature Required: *[Signature]*

Next Day Air Saver (Next day by 3:00 PM) - **VP Signature Required: _____

Next Day Air (Next day by 10 30 AM) - **VP Signature Required: _____

Special Handling: (if applicable)

Saturday Delivery

Residential Delivery Signature:

-No Signature

-Direct Signature

-Indirect Signature

Payment information: (if applicable)

-Sender (billed to Rite Aid Acct #)

-Recipient

-Third Party

UPS Account #: _____

Insured amount (if applicable): \$ _____

Before 4:00 PM - To be processed by the mailroom - Must have completed form & package in the Mailroom by 4:00 PM
 After 4:00 PM - Must have completed UPS Shipping Label on package in the Lobby ready to ship by 7:00 PM



Proof of Delivery

[Close Window](#)

Dear Customer,

This notice serves as proof of delivery for the shipment listed below

Tracking Number:	1Z882A5A0248228030
Service:	UPS 2nd Day Air®
Weight:	20 lb
Shipped/Billed On:	11/23/2015
Delivered On:	11/25/2015 1 14 P M
Delivered To:	OGDEN, UT US
Signed By:	NELSON
Left At:	Front Desk

Thank you for giving us this opportunity to serve you

Sincerely,

UPS

Tracking results provided by UPS 11/26/2015 7 21 P M ET

[Print this Page](#)

[Close Window](#)

2015 Training Records - Store 6146

First Name	Last Name	Store	Department	Job Code	Course Name	Status	Date of Completion
Evelyn	Blackwell	6146	Front End	Cashier	Retail HazMat	Completed	10/16/15
Kathryn	Doxey	6146	Front End	Cashier	Retail HazMat	Completed	10/21/15
Rick	Haase	6146	Front End	Shift Supervisor	Retail HazMat	Completed	11/03/15
Adam	Henrie	6146	Pharmacy	Pharmacy Tech	Retail HazMat	Completed	10/17/15
Donald	Higley	6146	Front End	Store Manager	Retail HazMat	Completed	10/10/15
Stephanie	Ligori	6146	Front End	Shift Supervisor	Retail HazMat	Completed	10/22/15
Frederick	Nicholls	6146	Front End	Shift Supervisor	Retail HazMat	Completed	10/17/15
Julene	Pentecost	6146	Pharmacy	Pharmacy Tech	Retail HazMat	Completed	10/19/15
Dee	Pierce	6146	Pharmacy	Pharmacist	Retail HazMat	Completed	10/11/15
Robert	Pump	6146	Pharmacy	Pharmacy Manager	Retail HazMat	Completed	10/18/15
James	Ricketts	6146	Front End	Store Helper	Retail HazMat	Completed	10/16/15
Sharlena	Schacht	6146	Pharmacy	Pharmacy Tech	Retail HazMat	Completed	10/16/15
Geraldine	Whitlock	6146	Front End	Cashier	Retail HazMat	Completed	10/13/15
Danial	Williams	6146	Front End	Shift Supervisor	Retail HazMat	Completed	10/30/15

Exhibit B



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
Scott T. Anderson
Director

January 20, 2016

RITE AID STORES
SEE ATTACHED FACILITY LIST

RE: 2015 Hazardous Waste Biennial Report

To whom it may concern:

According to our records, your facility was listed as a Large Quantity Generator (LQG) of hazardous waste, a hazardous waste Treatment, Storage, and Disposal (TSD) facility, or both, for some or all of 2015. All LQGs and TSDs are required to submit a biennial report each even numbered year for their generator or facility activities during the previous year. Your biennial report, covering calendar year 2015, must be submitted to this office by March 1, 2016.

For electronic submittals, the Division is once again using the BRState software from Florida which can be found at: "http://www.dep.state.fl.us/waste/categories/hazardous/pages/brs_data.htm."

Forms and instructions can be found at:
"<http://www.epa.gov/epawaste/inforesources/data/biennialreport/index.htm>"

All applicable information on the Site Identification (SI) Form, GM Form and WR Form must be completed. The OI Form is not required by the State of Utah. Please note that, if the report is compiled using the Florida software, the signed SI Form must be submitted as a hard copy along with a CD containing all other data.

If your facility was not a LQG or TSD during any part of 2015 and you wish to update your generator status, please submit an updated SI Form.

If you have any questions, please call Carlee Christoffersen at (801) 536-0233.

Sincerely,

Scott T. Anderson, Director
Division of Waste Management and Radiation Control

STA/CC/kl

EPA ID Number	Store #	Address	City
UTR000011759	RITE AID #6123	535 SOUTH MAIN STREET	BOUNTIFUL
UTR000011767	RITE AID #6125	860 NORTH FAIRFIELD ROAD	LAYTON
UTR000011775	RITE AID #6126	774 SOUTH STATE STREET	OREM
UTR000011791	RITE AID #6128	5673 SOUTH 1900 WEST	ROY
UTR000011809	RITE AID #6129	8645 SOUTH HIGHLAND DRIVE	SANDY
UTR000011817	RITE AID #6131	72 SOUTH MAIN STREET	SALT LAKE CITY
UTR000011825	RITE AID #6132	220 SOUTH 700 EAST	SALT LAKE CITY
UTR000011833	RITE AID #6133	635 EAST 3300 SOUTH	SALT LAKE CITY
UTR000011841	RITE AID #6135	2266 EAST 3300 SOUTH	SALT LAKE CITY
UTR000011858	RITE AID #6136	2332 EAST 2100 SOUTH	SALT LAKE CITY
UTR000011866	RITE AID #6137	150 NORTH 900 WEST	SALT LAKE CITY
UTR000011957	RITE AID #6138	5540 SOUTH 900 EAST	SALT LAKE CITY
UTR000011874	RITE AID #6139	4714 HOLLADAY BLVD	HOLLADAY
UTR000011882	RITE AID #6140	1837 WEST 4700 SOUTH	TAYLORSVILLE
UTR000011890	RITE AID #6143	2378 EAST 7000 SOUTH	SALT LAKE CITY
UTR000011430	RITE AID #6146	851 24TH STREET	OGDEN
UTR000011908	RITE AID #6147	142 NORTH HARRISVILLE ROAD	OGDEN
UTR000011916	RITE AID #6148	1324 NORTH STATE STREET	PROVO
UTR000011924	RITE AID #6149	615 EAST SAINT GEORGE BLVD	ST. GEORGE
UTR000011932	RITE AID #6304	1550 NORTH STATE STREET	OREM
UTR000011940	RITE AID #6311	819 NORTH MAIN STREET	PAYSON

OK cc

FEB - 5 2016

OMB# 2050-0024; Expires 01/31/2017

<p>SEND COMPLETED FORM TO: The Appropriate State or Regional Office.</p>	<p>United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM DSHW-2016-008267</p>		
<p>1. Reason for Submittal</p> <p>MARK ALL BOX(ES) THAT APPLY</p>	<p>Reason for Submittal:</p> <p><input type="checkbox"/> To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)</p> <p><input type="checkbox"/> To provide a Subsequent Notification (to update site identification information for this location)</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application</p> <p><input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____)</p> <p><input checked="" type="checkbox"/> As a component of the Hazardous Waste Report (If marked, see sub-bullet below)</p> <p><input checked="" type="checkbox"/> Site was a TSD facility and/or generator of >1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)</p>		
<p>2. Site EPA ID Number</p>	<p>EPA ID Number <input type="text" value="U"/> <input type="text" value="T"/> <input type="text" value="R"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="4"/> <input type="text" value="3"/> <input type="text" value="0"/></p>		
<p>3. Site Name</p>	<p>Name: Rite Aid # 6146</p>		
<p>4. Site Location Information</p>	<p>Street Address: 851 24th ST</p>		<p>County: Weber</p>
<p>City, Town, or Village: Ogden</p>		<p>State: UT</p>	<p>Country: USA</p>
<p>Zip Code: 84401</p>			
<p>5. Site Land Type</p>	<p><input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		
<p>6. NAICS Code(s) for the Site (at least 5-digit codes)</p>	<p>A. <input type="text" value="4"/> <input type="text" value="4"/> <input type="text" value="6"/> <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="0"/></p>	<p>C. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
<p>B. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>		<p>D. <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
<p>7. Site Mailing Address</p>	<p>Street or P.O. Box: 30 Hunter Lane</p>		
<p>City, Town, or Village: Camp Hill</p>		<p>State: PA</p>	<p>Country: USA</p>
<p>Zip Code: 17011</p>			
<p>8. Site Contact Person</p>	<p>First Name: David MI: W Last: Crozier</p>		<p>Title: Manager, Environmental Health & Safety</p>
<p>Street or P.O. Box: 30 Hunter Lane</p>		<p>City, Town or Village: Camp Hill</p>	
<p>State: PA</p>		<p>Country: USA</p>	
<p>Zip Code: 17011</p>		<p>Email: EHS@riteaid.com</p>	
<p>Phone: 717-975-8643</p>		<p>Ext.: Fax: (717) 972-3989</p>	
<p>9. Legal Owner and Operator of the Site</p>	<p>A. Name of Site's Legal Owner: Bailey Ogden Borris, LLC</p>		<p>Date Became Owner: 10/10/1965</p>
<p>Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		<p>Street or P.O. Box: P.O. Box 7096</p>	
<p>City, Town, or Village: Santa Monica</p>		<p>Phone: (310)260-6488</p>	
<p>State: CA</p>		<p>Country: USA</p>	
<p>Zip Code: 90406</p>		<p>B. Name of Site's Operator: Thrifty Payless, Inc.</p>	
<p>Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		<p>Date Became Operator: 05/07/1997</p>	

10. Type of Regulated Waste Activity (at your site)
 Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-10.

- Y N **1. Generator of Hazardous Waste**
 If "Yes," mark only one of the following - a, b, or c.
- a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs/mo.) or more of hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs/mo) of acute hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 100 kg/mo (220 lbs/mo) of acute hazardous spill cleanup material.
- b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs/mo) of non-acute hazardous waste.
- c. CESQG: Less than 100 kg/mo (220 lbs/mo) of non-acute hazardous waste.
- If "Yes" above, indicate other generator activities in 2-10.

- Y N **2. Short-Term Generator** (generate from a short-term or one-time event and not from on-going processes). If "Yes," provide an explanation in the Comments section.
- Y N **3. United States Importer of Hazardous Waste**
- Y N **4. Mixed Waste (hazardous and radioactive) Generator**

- Y N **5. Transporter of Hazardous Waste**
 If "Yes," mark all that apply.
- a. Transporter
- b. Transfer Facility (at your site)
- Y N **6. Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste Part B permit is required for these activities.
- Y N **7. Recycler of Hazardous Waste**
- Y N **8. Exempt Boiler and/or Industrial Furnace**
 If "Yes," mark all that apply.
- a. Small Quantity On-site Burner Exemption
- b. Smelting, Melting, and Refining Furnace Exemption
- Y N **9. Underground Injection Control**
- Y N **10. Receives Hazardous Waste from Off-site**

B. Universal Waste Activities; Complete all parts 1-2.

- Y N **1. Large Quantity Handler of Universal Waste** (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes," mark all that apply.
- a. Batteries
- b. Pesticides
- c. Mercury containing equipment
- d. Lamps
- e. Other (specify) _____
- f. Other (specify) _____
- g. Other (specify) _____
- Y N **2. Destination Facility for Universal Waste**
 Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.

- Y N **1. Used Oil Transporter**
 If "Yes," mark all that apply.
- a. Transporter
- b. Transfer Facility (at your site)
- Y N **2. Used Oil Processor and/or Re-refiner**
 If "Yes," mark all that apply.
- a. Processor
- b. Re-refiner
- Y N **3. Off-Specification Used Oil Burner**
- Y N **4. Used Oil Fuel Marketer**
 If "Yes," mark all that apply.
- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications

D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

❖ You can ONLY Opt into Subpart K if:

- you are at least one of the following: a college or university; a teaching hospital that is owned by or has a formal affiliation agreement with a college or university; or a non-profit research institute that is owned by or has a formal affiliation agreement with a college or university; AND
- you have checked with your State to determine if 40 CFR Part 262 Subpart K is effective in your state

Y N 1. Opting into or currently operating under 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories
See the item-by-item instructions for definitions of types of eligible academic entities. Mark all that apply:

- a. College or University
- b. Teaching Hospital that is owned by or has a formal written affiliation agreement with a college or university
- c. Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Y N 2. Withdrawing from 40 CFR Part 262 Subpart K for the management of hazardous wastes in laboratories

11. Description of Hazardous Waste

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001						
D002						
D007						
D010						
D011						
P001						
P075						

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-Regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

12. Notification of Hazardous Secondary Material (HSM) Activity

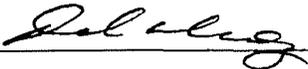
Y N Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes," you must fill out the Addendum to the Site Identification Form: Notification for Managing Hazardous Secondary Material.

13. Comments

Component of reporting.

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and Imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	David W. Crozier	2/5/2016
	Manager, EH&S	

DEC 19 2017

OMB# 2050-0024; Expires 01/31/2017

OK-CC

<p>SEND COMPLETED FORM TO: The Appropriate State or Regional Office.</p>	<p>United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM DSHW-2017-011265</p>		
<p>1. Reason for Submittal</p> <p>MARK ALL BOX(ES) THAT APPLY</p>	<p>Reason for Submittal:</p> <p><input type="checkbox"/> To provide an Initial Notification (first time submitting site identification information / to obtain an EPA ID number for this location)</p> <p><input checked="" type="checkbox"/> To provide a Subsequent Notification (to update site identification information for this location)</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application</p> <p><input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____)</p> <p><input type="checkbox"/> As a component of the Hazardous Waste Report (If marked, see sub-bullet below)</p> <p><input type="checkbox"/> Site was a TSD facility and/or generator of >1,000 kg of hazardous waste, >1 kg of acute hazardous waste, or >100 kg of acute hazardous waste spill cleanup in one or more months of the report year (or State equivalent LQG regulations)</p>		
<p>2. Site EPA ID Number</p>	<p>EPA ID Number <u>U</u><u>T</u><u>R</u><u> </u><u>0</u><u>0</u><u>0</u><u> </u><u>0</u><u>1</u><u>1</u><u> </u><u>4</u><u>3</u><u>0</u></p>		
<p>3. Site Name</p>	<p>Name: DBA Rite Aid #06146</p>		
<p>4. Site Location Information</p>	<p>Street Address: 851 24th Street</p>		<p>County: Weber <input checked="" type="checkbox"/></p>
<p>City, Town, or Village: Ogden</p>		<p>State: UT</p>	
<p>Country: USA</p>		<p>Zip Code: 84401</p>	
<p>5. Site Land Type</p>	<p><input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		
<p>6. NAICS Code(s) for the Site (at least 5-digit codes)</p>	<p>A. <u>4</u><u>4</u><u>6</u><u> </u><u>1</u><u>1</u><u>0</u></p>	<p>C. _____</p>	
<p>B. _____</p>		<p>D. _____</p>	
<p>7. Site Mailing Address</p>	<p>Street or P.O. Box: 300 Wilmot Road MS #3301</p>		
<p>City, Town, or Village: Deerfield</p>		<p>State: IL</p>	
<p>Country: USA</p>		<p>Zip Code: 60015</p>	
<p>8. Site Contact Person</p>	<p>First Name: Kimberly</p>		<p>MI: Last: Dascoli</p>
<p>Title: Director, Retail Compliance</p>			
<p>Street or P.O. Box: 200 Wilmot Road</p>			
<p>City, Town or Village: Deerfield</p>			
<p>State: IL</p>		<p>Country: USA</p>	
<p>Zip Code: 60015</p>			
<p>Email: kim.dascoli@walgreens.com</p>		<p>Phone: 847-315-2812</p>	
<p>Ext.:</p>		<p>Fax: (717) 972-3989</p>	
<p>9. Legal Owner and Operator of the Site</p>	<p>A. Name of Site's Legal Owner: Ogden City Redevelopment Agency</p>		<p>Date Became Owner: 1-1-15</p>
<p>Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>			
<p>Street or P.O. Box: 2549 Washington Blvd., Suite 420</p>			
<p>City, Town, or Village: Ogden</p>		<p>Phone: 801-629-8410</p>	
<p>State: UT</p>		<p>Country: USA</p>	
<p>Zip Code: 84401</p>			
<p>B. Name of Site's Operator: Walgreen Co.</p>		<p>Date Became Operator: 12/19/2017</p>	
<p>Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>			

10. Type of Regulated Waste Activity (at your site)
 Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities; Complete all parts 1-10.

- Y N **1. Generator of Hazardous Waste**
 If "Yes," mark only one of the following – a, b, or c.
- a. LQG: Generates, in any calendar month, 1,000 kg/mo (2,200 lbs/mo.) or more of hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lbs/mo) of acute hazardous waste; or Generates, in any calendar month, or accumulates at any time, more than 100 kg/mo (220 lbs/mo) of acute hazardous spill cleanup material.
- b. SQG 100 to 1,000 kg/mo (220 – 2,200 lbs/mo) of non-acute hazardous waste.
- c. CESQG: Less than 100 kg/mo (220 lbs/mo) of non-acute hazardous waste
- If "Yes" above, indicate other generator activities in 2-10.

- Y N **2. Short-Term Generator** (generate from a short-term or one-time event and not from on-going processes). If "Yes," provide an explanation in the Comments section

- Y N **3. United States Importer of Hazardous Waste**

- Y N **4. Mixed Waste (hazardous and radioactive) Generator**

- Y N **5. Transporter of Hazardous Waste**
 If "Yes," mark all that apply.
- a. Transporter
- b. Transfer Facility (at your site)

- Y N **6. Treater, Storer, or Disposer of Hazardous Waste** Note: A hazardous waste Part B permit is required for these activities.

- Y N **7. Recycler of Hazardous Waste**

- Y N **8. Exempt Boiler and/or Industrial Furnace**
 If "Yes," mark all that apply.
- a. Small Quantity On-site Burner Exemption
- b. Smelting, Melting, and Refining Furnace Exemption

- Y N **9. Underground Injection Control**

- Y N **10. Receives Hazardous Waste from Off-site**

B. Universal Waste Activities; Complete all parts 1-2.

- Y N **1. Large Quantity Handler of Universal Waste** (you accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste managed at your site. If "Yes," mark all that apply.

- a Batteries
- b. Pesticides
- c Mercury containing equipment
- d Lamps
- e Other (specify) _____
- f. Other (specify) _____
- g. Other (specify) _____

- Y N **2. Destination Facility for Universal Waste**
 Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities; Complete all parts 1-4.

- Y N **1. Used Oil Transporter**
 If "Yes," mark all that apply.
- a. Transporter
- b Transfer Facility (at your site)

- Y N **2. Used Oil Processor and/or Re-refiner**
 If "Yes," mark all that apply.
- a Processor
- b Re-refiner

- Y N **3. Off-Specification Used Oil Burner**

- Y N **4. Used Oil Fuel Marketer**
 If "Yes," mark all that apply.
- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications

D. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K

❖ You can ONLY Opt into Subpart K if:

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Y N Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 261.2(a)(2)(ii), 40 CFR 261.4(a)(23), (24), or (25)?

If "Yes," you must fill out the Addendum to the Site Identification Form. Notification for Managing Hazardous Secondary Material.

13. Comments

The following changes are being requested to this location, as the result of an asset

purchase from Thrifty Payless, Inc. by Walgreen Co , effective 12/19/2017

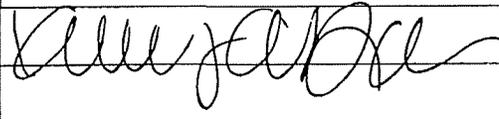
Site name DBA added (#3)

Site Mailing Address Changed (#7)

Site Contact Changed (#8)

Name of Site's Legal Operator Changed (#9B)

14. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all owner(s) and operator(s) must sign (see 40 CFR 270.10(b) and 270.11).

Signature of legal owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	Kimberly Dascoli	12/19/2017
	Director, Retail Compliance	

APPENDIX H
DERR INCIDENT REPORT



Utah Department of Environmental Quality
 Division of Environmental Response and Remediation
 195 North 1950 West Salt Lake City, Utah 84116
 Bus. Hours: 801-536-4100
 Report Spills 24/7/365: 801-536-4123

Report Number 6924

ENVIRONMENTAL INCIDENT REPORT - ENVIRONMENTAL ABATEMENT, INC.(?) (NULL RP SUBSTITUTED)

Report Taken By:	LHD (Correspondence)		
Date / Time Reported:	5/5/2008 11:30		

REPORTING PARTY DATES AND TIMES

Reporting Party:	Bill Reysn	Title:	EHS
Company:	Weber-Morgan Health	Phone:	(801) 399-7160
Date & Time Discovered:	5/5/2008 0:0		

RESPONSIBLE PARTY

Name:	Environmental Abatement, Inc.(?)	Phone:	8015899238
Address:			

INCIDENT LOCATION

Incident Address:	24th and Monroe		
Nearest Town:	OGDEN	County:	WEBER
Highway:		Mile Marker:	
UTM:	(E) (N)	Land Ownership:	

INCIDENT SUMMARY

Phone call from anonymous person, female patron of Rite-Aid on 24th and Monroe. Burning of throat. Strong odors. VOC's 1.4 - 2.0 mg/cm³ (at loading dock inside). Ammonia at 1.0 mg/cm³ inside building. Measured 10.0 ammonia, outdoors by asphalt unit. WMHD made recommendations to minimize while all possibilities are explored. Building not evacuated.

CHEMICAL(S) REPORTED

	AMMONIA
	VOCs

IMPACTED MEDIA	Media	Media Other	Land Use	Waterway Name	Near Water	Distance	NRC Rpt. #
----------------	-------	-------------	----------	---------------	------------	----------	------------

NOTIFICATIONS MADE	Agency	Contact	Date	Time	By	Active?
--------------------	--------	---------	------	------	----	---------

ACTIONS TAKEN	Date	Agency	Action	Action Details
---------------	------	--------	--------	----------------

Incident notification reports are prepared by DEQ staff using information provided by the reporting party. The information is considered preliminary and is subject to revision. The reported incident and associated details may or may not be valid

APPENDIX I
WHEELWRIGHT LUMBER LUST FILES



STATE OF UTAH

FILE COPY

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENVIRONMENTAL RESPONSE AND REMEDIATION

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Kent P. Gray
Director

168 North 1950 West
P.O. Box 144840
Salt Lake City, Utah 84114-4840
(801) 536-4100
(801) 359-8853 Fax
(801) 536-4414 T.D.D.
www.deq.state.ut.us Web

ERRL-0322-98

March 13, 1998

Mr. Hal Wheelwright
Wheelwright Lumber Company
2459 Quincy Avenue
Ogden, Utah 84401

SCANNED

DERR-1998-004805

RE: Release Site EJDV & EHBM, Wheelwright Lumber Company
Located at 2459 Quincy Avenue, Ogden, Utah
Facility Identification No.1200443
LUST Site Closure

Dear Mr. Wheelwright:

The case file for this facility has been reviewed by your state project manager, who has recommended that no further corrective action be taken at this time. This no further action applies only to the specific LUST release EJDV & EHBM. This recommendation is based upon the information contained in the file supplied by you or your consultant.

The information you have submitted indicates that any detectable petroleum contamination at the site is not a threat to human health or the environment as characterized using state underground storage tank rules. In the future, if other evidence indicates a spread of contamination from the Facility which may cause such a threat, further corrective action may be required.

If you have any questions regarding this matter, please contact your state project manager, Mark Crim at (801) 536-4247.

Sincerely,

Kent P. Gray, Executive Secretary (UST)
Utah Solid and Hazardous Waste Control Board

KPG/MEC/js

cc: J. Brett Lazar, M.D., M.P.H., Director, Weber/Morgan District Health Department
Ted Thatcher, TR Tech, Inc.

CLOSE-OUT CHECKLIST

March 18, 1997
(date revised)

This checklist is a guideline for identifying and assessing exposure pathways and receptors of petroleum contamination from LUST sites. This checklist is intended to expedite the LUST case file close-out process by providing supporting documentation that remaining contamination is not expected to adversely impact those receptors, RCLs, MCLs, or Tier I Screening Levels (ASTM, 1994) have been exceeded and site-specific data have subsequently been collected (Tier 2 or 3 Evaluation). The remaining contamination at this site does not appear to present current or future risks to human and environmental health, and site-specific cleanup levels have been set using ASTM, 1994 or other methods.

The spaces provided in this checklist are checked if the condition for the particular exposure criterion applies to supporting and documenting low or no risk. Attach a site map showing analytical results. This recommendation for case file close-out is in accordance with all sections of 40 CFR Subparts E and F, and Utah Administrative Code R311-200.

Project Manager (print) Mark Crum Date 2-17-98 Facility ID 1200443 LUST ID EHBW EJOV
 Facility Name and Address Wheelwright Lumber 2459 Quincy Ave Ogden UT
 Closeout Peer Group Review and Concurrence (date) _____
 Section Manager Concurrence (signature, date) _____
 Branch Manager Concurrence (signature, date) _____

EHBW
EJOV

1.0 ABATEMENT

A. PRODUCT INFORMATION			B. ENVIRONMENTAL and OTHER IMPACTS		C. SOURCE ABATEMENT	
PRODUCT RELEASED	AMOUNT IF KNOWN	RELEASE RATE IF KNOWN	<input type="checkbox"/> Soil	<input checked="" type="checkbox"/> Groundwater	Leaks Repaired	Source Removed
<input checked="" type="checkbox"/> Gasoline	<u>UNK</u>	<u>UNK</u>	<input type="checkbox"/> Vapors	<input type="checkbox"/> Free product	Tank _____	<input checked="" type="checkbox"/>
<input type="checkbox"/> Diesel	_____	_____	<input type="checkbox"/> Surface water	<input type="checkbox"/> Homes, businesses, utilities, other structures.	Piping _____	<input checked="" type="checkbox"/>
<input type="checkbox"/> Jet Fuel	_____	_____	<input type="checkbox"/> Pipe permeation	<input type="checkbox"/> Wells (municipal, domestic, irrigation, stock, other)	Dispenser _____	<input checked="" type="checkbox"/>
<input type="checkbox"/> Waste oil	_____	_____			Free Product (amount) _____	<u>N/A</u>
<input type="checkbox"/> New Oil	_____	_____			Contaminated soil (amount) _____	<u>N/A</u>
<input type="checkbox"/> Unknown	_____	_____			Vapors _____	<u>---</u>
<input type="checkbox"/> Other: _____	_____	_____			Successful Emergency Measures Taken:	
_____	_____	_____			<input checked="" type="checkbox"/> Vapor evacuation	
_____	_____	_____			<input checked="" type="checkbox"/> Utility line replacement or flushing (sewer, water, other)	
					<input checked="" type="checkbox"/> Alternative drinking water supplied	
					<input checked="" type="checkbox"/> Residents/workers relocated	
					Other, explain: _____	

2.0 SITE CHARACTERIZATION

A. ENVIRONMENTAL SENSITIVITY	B. EXPOSURE PATHWAYS AND RECEPTORS																																												
Specify level of environmental sensitivity and point score (See Table 1 worksheet attached): <input checked="" type="checkbox"/> Level I >65 <input type="checkbox"/> Level II 40-65 <input type="checkbox"/> Level III <40 <input type="checkbox"/> Not applicable Other method, describe below: _____ _____ _____ _____ Current Land Use: Residential _____ Commercial <input checked="" type="checkbox"/> Industrial _____ Agricultural _____	Buildings, utility lines, wells, and surface water have been evaluated and determined to be not-at-risk exposure pathways or receptors. Risk-Based Cleanup Levels (RBCLs) have been re-calculated and are expected to be protective of the exposure pathways and receptors identified below:																																												
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">Not Likely</td> <td style="text-align: center;">B/T/E/X/N RBCLs</td> <td style="text-align: center;">B/T/E/X/N Observed</td> </tr> <tr> <td>Soil:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Indoor air inhalation</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Leaching to GW</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Ingestion</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Skin contact</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td></td> <td style="text-align: center;">Not Likely</td> <td style="text-align: center;">B/T/E/X/N RBCLs</td> <td style="text-align: center;">B/T/E/X/N Observed</td> </tr> <tr> <td>Groundwater:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Indoor air inhalation</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Ingestion</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Skin contact</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> </table>		Not Likely	B/T/E/X/N RBCLs	B/T/E/X/N Observed	Soil:				Indoor air inhalation	<input checked="" type="checkbox"/>	_____	_____	Leaching to GW	<input checked="" type="checkbox"/>	_____	_____	Ingestion	<input checked="" type="checkbox"/>	_____	_____	Skin contact	<input checked="" type="checkbox"/>	_____	_____		Not Likely	B/T/E/X/N RBCLs	B/T/E/X/N Observed	Groundwater:				Indoor air inhalation	<input checked="" type="checkbox"/>	_____	_____	Ingestion	<input checked="" type="checkbox"/>	_____	_____	Skin contact	<input checked="" type="checkbox"/>	_____	_____
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3.0 SUBSURFACE INVESTIGATION

<p>A. EXTENT AND DEGREE OF CONTAMINATION</p> <p><input type="checkbox"/> Extent and degree of contamination are sufficiently defined. <input checked="" type="checkbox"/> Extent and degree of contamination are projected or inferred.</p> <p>Model Used (results and summary attached): _____: Vadose _____ Groundwater _____ <input type="checkbox"/> Attenuation on-site. <input type="checkbox"/> Attenuation to safe levels off-site. <input type="checkbox"/> Attenuation to safe levels prior to reaching utilities/well/bldgs/surface water.</p>	<p>B. SAMPLE COLLECTION</p> <p>Confirmation samples taken after source removal or corrective action: <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Vapors <input type="checkbox"/> Surface Water</p> <p><input type="checkbox"/> Confirmation samples not necessary. <input checked="" type="checkbox"/> Asymptotic concentrations observed.</p>
<p>C. REMAINING CONTAMINATION (provide if not separately attached)</p>	
<p><u>Dissolved Phase</u>: Plume Dimensions (L X W): <u>60' x 20' Approx.</u> Concentrations at source (TPH/B/T/E/X/N mg/L): <u>11 TPH / .301 N</u> Concentrations at leading edge (TPH/B/T/E/X/N mg/L): <u>All - Non-Detect. SENTRY well - 2 Events</u></p>	<p><u>Adsorbed Phase</u>: Dimensions: (L X W X Thickness; yd³): <u>N/A</u> Concentrations at source (TPH/B/T/E/X/N mg/kg): _____ Concentrations at leading edge (TPH/B/T/E/X/N mg/kg): <u>A</u></p>

3 yrs apart.

4.0 CLEANUP: SUPPORTING INFORMATION FOR LOW RISK

<p><input checked="" type="checkbox"/> Sources of contamination are removed. <input checked="" type="checkbox"/> <u>5</u> yd³ contaminated soil remain in place. <input checked="" type="checkbox"/> <u>10'</u> separates contaminated soil from GW. <input type="checkbox"/> <u>10'</u> separates contamination from bldgs/utilities. <input type="checkbox"/> Buildings or utilities do not overlie contamination. <input checked="" type="checkbox"/> Current exposure pathways and receptors appear minimal, limited or non-existent including buildings, utilities, wells, surface water; ingestion, inhalation, leaching. <input type="checkbox"/> Contaminated soil near or in contact with groundwater is not leaching concentrations that will impact receptors.</p> <p>Weathered product evidence: <input type="checkbox"/> Only TPH remains in place. <input checked="" type="checkbox"/> Small periodic overfills and spills. <input type="checkbox"/> Old releases.</p>	<p>Infiltration of recharge water not likely to leach unsafe concentrations based on: <input checked="" type="checkbox"/> Recharge is very low. <input type="checkbox"/> Recharge water not actually/likely to reach adsorbed contamination.</p> <p>Natural attenuation and transport and fate mechanisms are reducing contaminant concentrations and risk of exposure: <input type="checkbox"/> Adsorption/Desorption <input type="checkbox"/> Biodegradation <input type="checkbox"/> Advection/Dispersion <input type="checkbox"/> Volatilization <input type="checkbox"/> Chemical mobility <input type="checkbox"/> Physical mobility</p> <p><input checked="" type="checkbox"/> Hydrocarbons of highest toxicity (BTEXN) are not present in groundwater or known to exist. <input type="checkbox"/> Hydrocarbons of highest toxicity (BTEXN) are not present in soil or known to exist. <input type="checkbox"/> Other toxic compounds analyzed are not present or known to exist.</p>	<p><input type="checkbox"/> Further cleanup does not appear to be achievable based on: <input type="checkbox"/> Technological feasibility <input type="checkbox"/> Cost-Effectiveness (excessive cost/benefit)</p> <p>Current land use restrictions not likely based on: <input type="checkbox"/> No receptors are present. <input checked="" type="checkbox"/> Receptors not likely to be exposed to unsafe concentrations. <input type="checkbox"/> Other: _____</p> <p>Future land use restrictions not likely based on: <input checked="" type="checkbox"/> Historical land use well-established and not likely to change or become more sensitive. <input type="checkbox"/> Remaining contamination not likely to impact future bldgs or utilities. <input type="checkbox"/> Other: _____</p>
--	--	--

ADDITIONAL COMMENTS: This lumber yard facility had two USTs removed on two separate occasions, 1992 & 1995. For each closure event, soil contamination was never detected but groundwater (GW) did show levels of benzene as high as .734 ppm (1992), TPH as high as 40.7 ppm (1992) and naphthalene up to .301 ppm in the 1995 sampling event. Although the USTs were removed separately, they were located in the same area of the site. A groundwater sampling point was put in-place down gradient of the UST area, about 25' and was sampled two times, once after each of the UST removals in 1992 & 1995. Each of those GW sampling events showed non-detect for BTEXN/TPH concerns. The GW contamination reflected in the two UST closure events may have been attributed to the UST removal process itself. No soil contamination is apparent, on-site receptors are not threatened and a down gradient sentry well has not been impacted. Closure is recommended.

It is recommended that the release case file for the above-referenced facility be closed out based on the information provided by the facility owner/operator, which is described in this checklist. This recommendation is based on the condition that if future evidence indicates contamination at or emanating from this site, additional investigation and/or remediation may be required.

Project Manager (signature)

Manchu

Date

2-17-98

Table 1
Environmental Sensitivity Evaluation Ranking Criteria and Point Score

Site-Specific Factors (* Identify and explain the extenuating circumstances here)	Ranking Score	Enter Site Data	Unknown (specify DERR research)	Final Ranking Score
Distance from Contamination to Groundwater (feet) >100 100 to 75 75 to 50 50 to 25 25 to 10 <10, or recharge area	0 4 8 12 16 20	N121		16
Native Soil Type: Low permeability (PT, OH, GH, MH, OL, CL, ML) Mod. permeability (SC and SM) High permeability (GM, GP, GW, GC, SW, SP, SM)	0 10 20			20
Annual Precipitation (inches) 10 10 to 20 >20	0 5 10	215		5
Distance to Nearest Municipal Production Well (feet) >5280 1320 to 5280 500 to 1320 <500	0 8 10 15	1300		10
Distance to Other Wells (feet) >1320 300 to 1320 <300	0 5 10	1250' 1100		5
Distance to Surface Water (feet) >1000 300 to 100 <300	0 2 5	>1000'		0
Potentially Affected Populations within 3-mile Radius <100 100 to 3000 >3000	0 10 20	>3K		20
Presence of Onsite or Adjacent Utility Conduits Not Present Unknown Present	0 14 15	Present		15
Final Score (>65=Level I, 40-65=Level II, <40=Level IU)				91

level I

RESULTS

TABLE I
 ANALYTICAL TEST RESULTS

UST # 1
 Closure 1992
 Confirmatory
 Sample
 UST # 2
 Closure 1995
 Confirmatory H₂O
 TR. Tail
 1995

Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/l ppm	Benzene mg/l ppb	Toluene mg/l ppb	Ethyl Benzene mg/l	Total Xylene mg/l	Naphthalene mg/l
11/23/92	BSS#1-7	Water	—	2.1	40.7	0.734	1.580	0.361	2.330	0.172
11/23/92	BSS#1	Water	—	2.1	2.5	<2	<2	<2	69.1	<2
11/23/95	BSS#2	Water	—	2.1	<5	<2	<2	<2	<5	<21.6
9/15/95	MSS#1	Water	—	2.1	<5	<2	9.8	5.1	41.4	0.058
9/15/95	MSS#2	Water	—	2.1	11	<20	391	150	1570	0.301
11/03/95	MSS#1	Water	—	2.1	<5	<2	<2	<2	<5	<2
Utah RBCA Tier I Drinking Water					10.0	0.300 0.005	7.000 1.000	4.0 0.7	73.0 10.0	0.100 0.020

TABLE II
 SOIL ANALYTICAL DATA ng/kg (ppm)

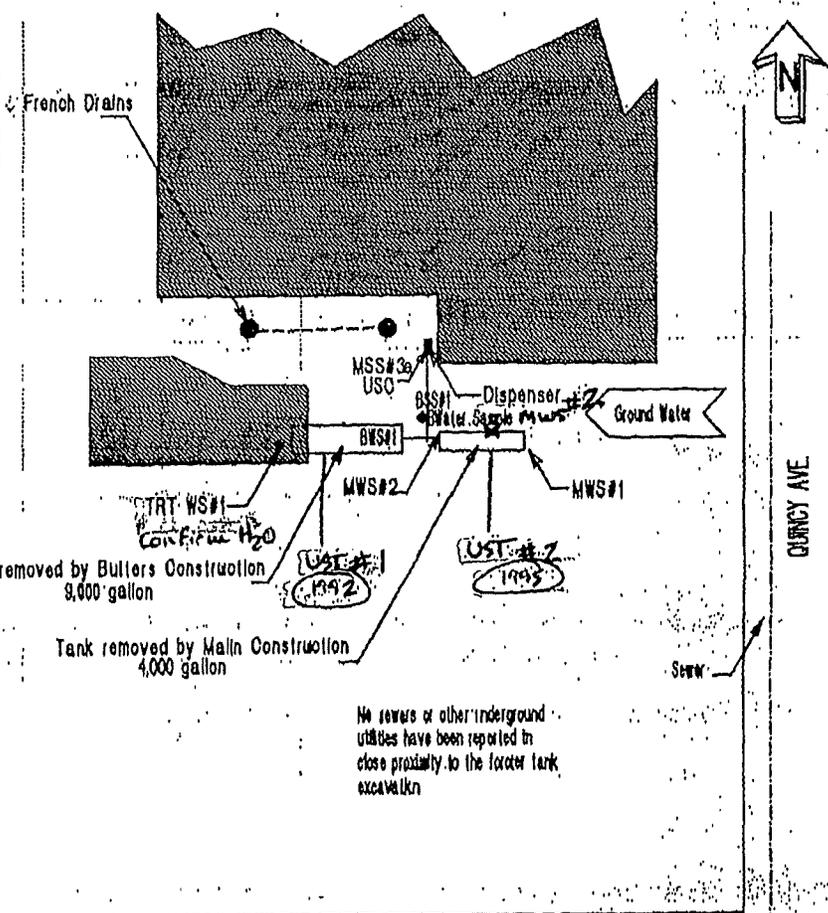
UST Closure
 1995
 All soils
 Below
 Detection

Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/l ppm	Benzene mg/l ppb	Toluene mg/l ppb	Ethyl Benzene mg/l	Total Xylene mg/l	Naphthalene mg/l
08/28/91	BSS#1-D	Soil	SN	1.0	<10.0	<.005	<.005	<.005	<.015	<.005
9/15/95	MSS#3-1	Soil	SN	1.0	<10.0	—	—	—	—	—
10/04/95	MSS#1	Soil	SP	2.1	<10.0	<.005	<.005	<.005	<.015	<.005
10/04/95	MSS#2	Soil	SP	2.1	<10.0	<.005	<.005	<.005	<.015	<.005
10/06/95	MSS#3-a	Soil	SN	1.0	<10.0	<.005	<.005	<.005	<.015	<.005
Utah RBCA Tier I					1500.0	0.900	61.000	23.0	235.0	10.000

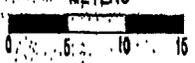
CONCLUSIONS AND RECOMMENDATIONS

No contamination appears to be left on this site. Soils were excavated to non-detect levels under the supervision of the County Health Department and the limited contamination in the water has attenuated naturally to non-detect levels.

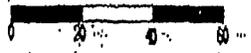
SAMPLE TABLE		
Sample	Description	Depth (meters)
BSS-1	8/28/91 Dispenser (soil)	1
BWS-1	8/28/91 Water by excavation (water)	2.1
BWATEH	10/1/91 Water east sump (water)	2.1
MWS#1	8/18/95 East end 4,000 gallon tank (water)	2.1
MWS#2	8/18/95 West end 4,000 gallon tank (water)	2.1
MSS#1	10/4/95 Northwest side 7 feet (soil)	2.2
MSS#2	10/4/95 Northeast side 7 feet (soil)	2.2
MSS#3A	10/9/95 Under fire dispenser (soil)	1
TRTWS#1	11/3/95 West sump (water)	2.1



APPROXIMATE SCALE
 METERS



FEET



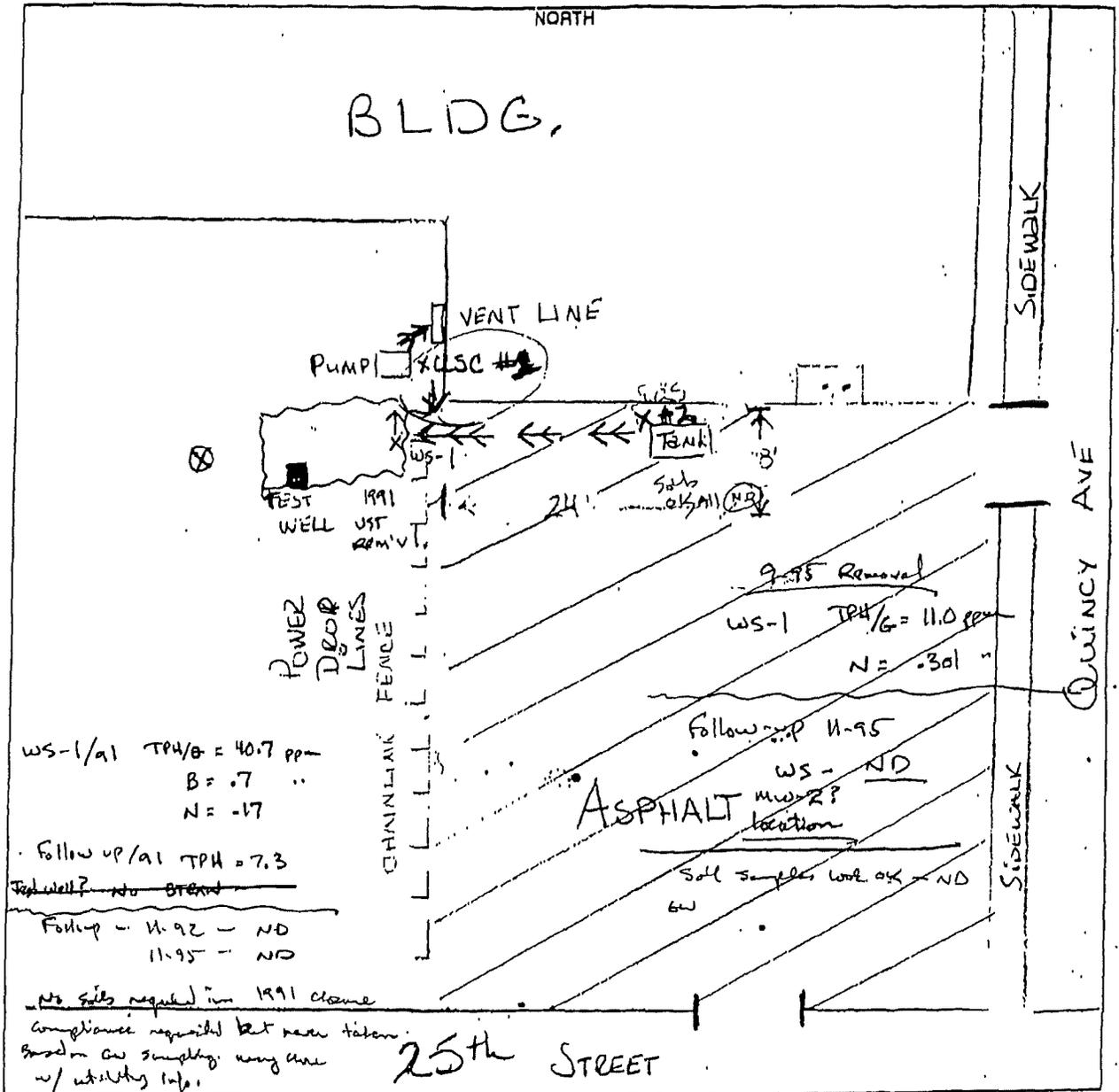
SAMPLERS
 Butlers (B) GSO465
 Mallin (M) GSO134
 TRTeds (TRT) GSO365

**SITE PLAN
 WHEELRIGHT LUMBER
 2459 QUINCY AVENUE
 OGDEN, UTAH**

FACILITY SITE PLAT (CLOSURE NOTICE)

The site plat must show locations of all buildings, streets, property boundaries, tanks, piping, dispenser islands, and underground utilities. The site plat must be drawn to an appropriate identified scale. It must show actual sampling locations, substances stored in tanks, and other relevant information. Tank and sample identification numbers must be consistent with the information given on p. 1 and 4 of the closure notice.

Facility ID # 1200443 Drawn By R. Ned Malan Date 9,14,95



- X = Sample locations (SS-#, WS-#, USC-#)
- ⊗ = Monitoring Wells (MW-#)
- = Soil boring (B-#)
- = Water Wells (domestic, livestock, etc.)

PM Notes: Shelly Quick allowed the well emplacement (per bl'd) which was not professionally / properly installed. Content of GW contains water & is differently defined. Need site check letter & utility / property line info.

LUST RELEASE/SPILL REPORT

Release Site No. 1229JDU
Fac ID No. 12DD443
Project Manager SMQ
Potential PST-Fund Site? yes

Date Received 10-5-95
Date Assigned 10-6-95
Date Confirmed _____

Received by Rose Johnson Time 9am

Name of Reporting Party _____ Company Weber Co H.D Phone: _____
Name of PRP (current o/o) _____ Phone: _____
Name of Release Location Whitaker's Lumber Phone: _____
Release site street address _____ City: _____

Type of Release: ___ (piping: suction/pressurized) tank (corrosion/fittings) ___ spill/overflow ___ pump island
Release Date(s) _____ Suspected or Confirmed? Estimated Amount _____

Method of Determination: ___ failed TTT (volumetric/other) w/ leak rate of ___ gal/hr; ___ Leak Detector Alarm
___ Inventory loss (___ gal); ___ failed LTT (volumetric/other) w/ leak rate of ___ gal/hr
___ Field Instrumentation (Model/Type _____) w/ maximum readings of ___ units
 Permanent Closure (in-place/removal) w/ ___ soil staining; ___ odors; ___ sheen on ILO; ___ Analytical
___ Analytical Results: Soil (mg/Kg) B ND, T ---, E ---, X ---, N ---, TPH ND, O&G ---, TRH ---
___ Analytical Results: Water (ug/L) B 20, T 391, E 150, X 150, N 301, TPH ?, O&G ---, Solvents
Substance Released: ___ Gas (UL/Reg) ___ Diesel ___ Waste Oil ___ New Oil ___ Other (specify) _____
Native Soil Type _____; Local GW flow direction _____; Regional GW flow direction _____

RELEASE IMPACTS

FUMES: ___ Home ___ Business ___ Utilities ___ Outdoors ___ Soils ___ Water ___ Other (specify) _____
DAMAGE: ___ Groundwater (~ ___ ft BLS) ___ Surface Water* ___ Drinking Water* ___ Utilities* ___ Soils
___ Land Surface* ___ Biota/Wildlife* ___ Free Product* ___ 3rd party impacts*

*EMERGENCY ABATEMENT ACTIONS TAKEN/NEEDED: _____

2nd water ND, 9.8, 5.1, 41.4, 5

NON-EMERGENCY ACTIONS TAKEN/PLANNED: The excavation is in front of their building & they want to close the hole. Dispenser was not analyzed for BTEXN. Water exceeds Tier 1 for Naphthalene. LHD saw hole looked "pretty good"

to see how what they had to
STAFF RECOMMENDATIONS: 1) sample dispenser again & analyze for BTEXN; 2) sample w/end of excavation & analyze for TPH, BTEXN in soil; 3) when they can close the hole since it's hindering their business & may be a safety problem.

Agencies Notified: LHD ___ Fire Dept ___ EPA ___ Other
Agencies On-Site: LHD ___ Fire Dept ___ EPA ___ Other
State Risk Manager notified of 3rd party impacts (direct/potential) on: 1/1/ by: _____

UNDERGROUND STORAGE TANK CLOSURE NOTICE (Revised 03/01/93)

ENVIRONMENTAL PROTECTION AGENCY

Facility ID # 1200443

OCT 30 1995

State Use Only	
Date Processed	<u>11-9-95</u> by <u>GAM</u>
Date Mailed to LHD	
Samples In LUST File #	<u>1229 SDV SMO</u>
Samples to LUST Review	

BY _____

Closure Notice prepared at the request of the owner/operator (identified below) by R. Ned Malan
 of (company name) Malan Const Phone # (801) 782-5707
 Address 1055 E 1700 N City Ogden State UT Zip 84404

FACILITY INFORMATION

Tank Owner WHEELWRIGHT LUMBER Phone # (801) 627-0850
 dba (Individual doing business as) sole proprietorship partnership corporation
 Address 2459 Quincy City Ogden State UT Zip 84401
 Facility Name WHEELWRIGHT LUMBER
 Address 2459 Quincy City Ogden State UT Zip 84401
 Contact person Hal Wheelwright Phone # (801) 627-0850
 Number of regulated tanks at the facility before closure: 1
 Number of regulated tanks at the facility after closure: 0

TYPE OF CLOSURE Permanent Temporary Change-in-Service
Permanent or Change-in-Service Fuel was emptied Sludge was removed Tank was cleaned.
 Tank was: Purged Inerted. Method Used: Dry Ice 15# per 1,000 gal
 Location of Closure Records R. Ned Malan 1055 E 1700 N Ogden, UT 84404

For In-place closure: tanks filled with _____
 Substance to be stored for Change-in-Service _____

Temporary Fuel was emptied. Corrosion protection is operating. Release detection equipment is operating
 Residue depth remaining in tank _____ inches, or _____ % by weight of total capacity of UST.
 3 months: Vent lines open Cap/Secure: lines pumps manways
 12 months: Permanently closed New/Upgraded Extension request

TANKS CLOSED

Tank #	<u>1</u>	_____	_____	_____	_____	_____	_____
Age of tank	<u>17 yrs</u>	_____	_____	_____	_____	_____	_____
Capacity	<u>4,000g</u>	_____	_____	_____	_____	_____	_____
Subs. stored*	<u>npld gas</u>	_____	_____	_____	_____	_____	_____
Date last used	<u>8-94</u>	_____	_____	_____	_____	_____	_____
Date closed	<u>9-15-95</u>	_____	_____	_____	_____	_____	_____
Rmvd/In place	<u>rmvd</u>	_____	_____	_____	_____	_____	_____

* Indicate the specific substance stored in each tank closed (regular, unleaded, diesel, waste oil, etc.)

TANK REMOVER Name R. Ned Malan Cert. # TR 0092 Exp. date 10-95
Company Malan Const Phone # (801) 782-5707
Address 1055 E 1700 N City Ogden State UT Zip 84404

SOIL/GROUNDWATER SAMPLER Name R. Ned Malan Cert. # GS 0135 Exp. date 7-96
Company Malan Const Phone # (801) 782-5707
Address 1055 E 1700 N City Ogden State UT Zip 84404

DISPOSAL SITES USED:

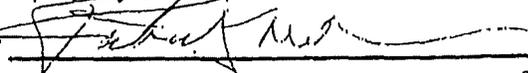
Tank: Atlas Steel Date 9.15.95 Number 1
Product from Tank: NAT'L TANK MONITORING Date 9.15.95 Amount 70 gal
Contaminated water from tank cleaning: NAT'L TANK MON Date 9.15.95 Amount 1200 gal
Sludge: _____ Date _____ Amount _____
Contaminated Water: _____ Date _____ Amount _____
Contaminated Soil: _____ Date _____ Amount _____
Is any contaminated soil which was overexcavated still on site? Yes No Not applicable

SITE ASSESSMENT

Complete the Facility Site Plat (Closure Notice) and Sample Information Table (Closure Notice) on pages 3 and 4 to show the locations, depths, and other information on all soil/groundwater samples taken for closure. The samples must be consistently identified by sample ID # on the site plat, table, and lab analysis report.

- Completed Facility Site Plat (Closure Notice) is attached.
 - Completed Sample Information Table (Closure Notice) is attached.
 - Certified lab analytical environmental sample results are attached.
 - Unified Soil Classification (USC) sample results are attached.
 - Chain of Custody form is attached.
- Samples were properly: Collected Labeled Packaged Transported
 Samples were in sight of the person in custody at all times or in a secured locked place.

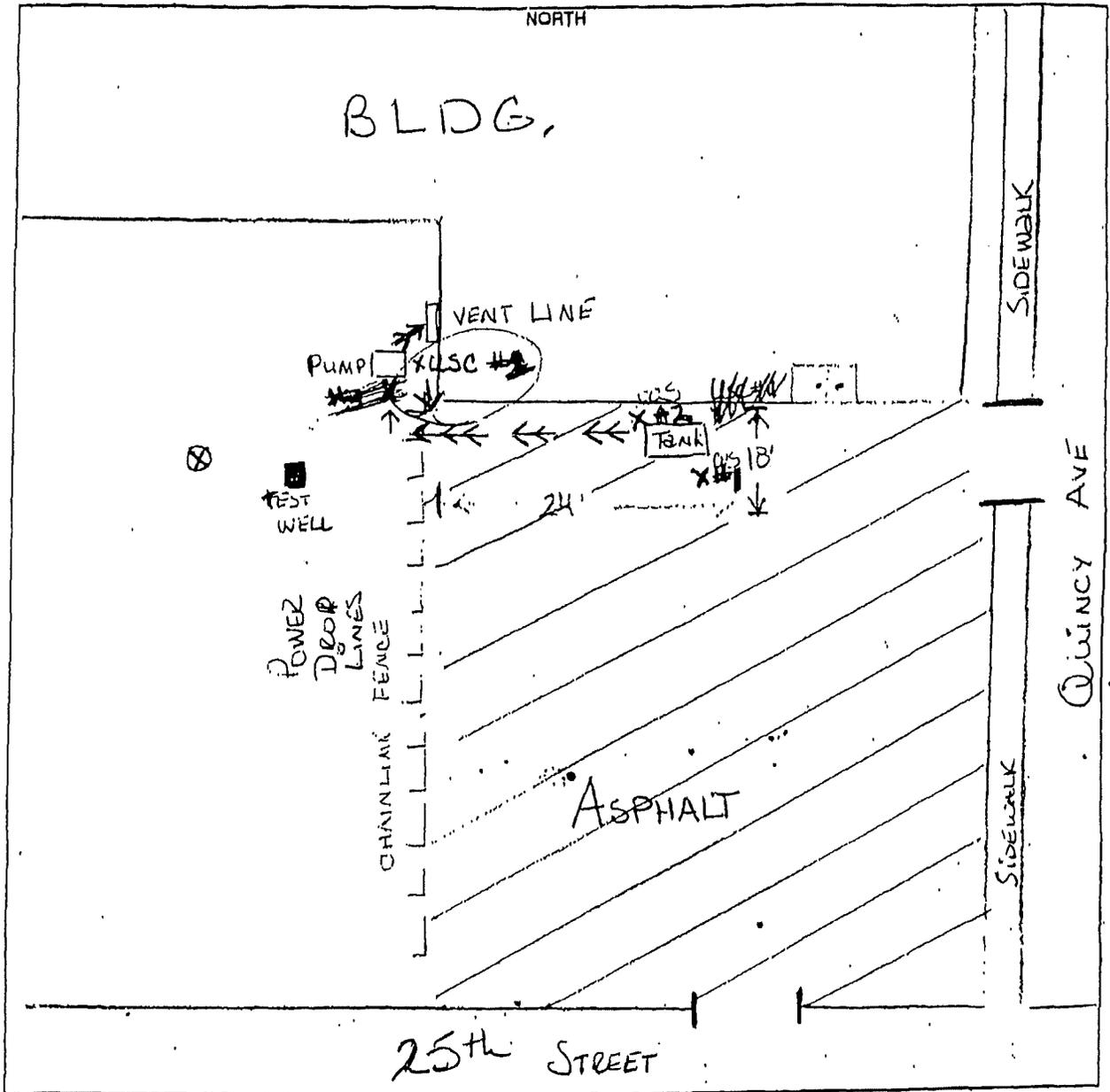
I certify under penalty of law that the closure site assessment at this facility was conducted in accordance with R311-202 (parts 280.52 and 280.72) and R311-205 U.A.C., and that any additional samples required by R311-202 parts 280.52 and 280.72 and R311-205-2(a)(1) were properly collected.

Signature of Certified Groundwater/Soil Sampler 
Full name of Certified Sampler R. NED MALAN Date 9.15.95

FACILITY SITE PLAT (CLOSURE NOTICE)

The site plat must show locations of all buildings, streets, property boundaries, tanks, piping, dispenser islands, and underground utilities. The site plat must be drawn to an appropriate identified scale. It must show actual sampling locations, substances stored in tanks, and other relevant information. Tank and sample identification numbers must be consistent with the information given on p. 1 and 4 of the closure notice.

Facility ID # 1200443 Drawn By R. Ned Malan Date 9.14.95



- X = Sample locations (SS-#, WS-#, USC-#)
- ⊗ = Monitoring Wells (MW-#)
- = Soil boring (B-#)
- = Water Wells (domestic, livestock, etc.)

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
09-15-95-20	WS #2	11.0 mg/L Gasoline < 0.5 mg/L Diesel 11.0 mg/L TPH
<u>Date Analyzed:</u> 23 SEPT 1995		

BTEX SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER) USING PURGE & TRAP METHOD 5030 METHOD DETECTION LIMITS: 5 ppb SOIL, 3 ppb WATER PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
09-15-95-20	WS #2	< 20 µg/L Benzene 391 µg/L Toluene 150 µg/L Ethylbenzene 1,570 µg/L Xylenes, Total 301 µg/L Naphthalene
<u>Date Analyzed:</u> 22 SEPT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
PS

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH Testing - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
09-15-95-21	SS#3 - 1	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH
Date Analyzed: 23 SEPT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
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D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
09-15-95-19	WS #1	< 0.5 mg/L Gasoline < 0.5 mg/L Diesel < 0.5 mg/L TPH
Date Analyzed: 23 SEPT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
09-15-95-19	WS #1	< 2 µg/L Benzene 9.8 µg/L Toluene 5.1 µg/L Ethylbenzene 41.4 µg/L Xylenes, Total 5.0 µg/L Naphthalene
Date Analyzed: 22 SEPT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen

D. M. Thorsen



Utility Testing Laboratory

CHAIN OF CUSTODY

875 South Chestnut Street Salt Lake City, Utah 84104 Phone: 801-973-8305 FAX: 801-973-8333

TOTHL P.02

Project Number: FAC ID #1200443		Project Name: WHEELWRIGHT LMB		Analysis					Report To (print): R. NED MALAN			
C.O. Number:		Sampler's Signature:		8015 mod	epa 602	USC				No. of cont.	Matrix	REMARKS
Date Sampled	Sample Time	Sample Identification										
9.15.95		WS #1 (2 each)		✓	✓					1		
9.15.95		WS #2 (2 each)		✓	✓					1		
9.15.95		WS #3								1		
9.15.95		SS #3 - 1		✓						1		
9.15.95		USC #1				✓				1		
9.15.95		USC #1								1		
9.15.95		USC #2				✓				1		
Relinquished (signature): <i>Kurt M. Steh</i>		Date/Time: 9.15.95 2:30 PM	Received (signature): <i>R. Ned Malan</i>		SEND RESULTS TO (Company Name) MALAN CONST					CONDITION OF SAMPLES		
Relinquished (signature): <i>R. Ned Malan</i>		Date/Time: 9-15-95 4:00	Received (signature): <i>J. Farnsworth</i>		To the attention of: R. NED MALAN					Samples Chilled: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Relinquished (signature):		Date/Time:	Received (signature):		Address: 1055 E 1700 N Ogden, UT 84404					Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Relinquished (signature):		Date/Time:	Received (signature):		Phone:					Samples Preserved: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
REMARKS:					Fax:					Remarks:		

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: Uniform Soil Classification
ASTM Method D2488-90 - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

Following are the test results on your subject samples;

Test No.
09-15-95-22

Customer I.D.
USC#1

Color of Sample:
BROWN

Dry Strength:
LOW

Toughness:
N/A

Reaction with 1:1 HCl:
STRONG

Plasticity:
NON-PLASTIC

Classification:
(SM)

Description of Sample:
SILTY SAND WITH GRAVEL

Composition of Sample by Sieve Analysis:

COARSE GRAVEL	< 76.0 mm - 10%
FINE GRAVEL	< 19.0 mm - 10%
COARSE SAND	< 4.0 mm - 20%
MEDIUM SAND	< 2.0 mm - 15%
FINE SAND	< 0.425mm - 30%
FINES	< 0.075mm - 15%

* ND INDICATES NOT DETECTED

UTILITY TESTING LABORATORY

D. M. Thorsen
15

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: Uniform Soil Classification
ASTM Method D2488-90 - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

Following are the test results on your subject samples;

Test No.
09-15-95-23

Color of Sample:
BROWN

Toughness:
N/A

Plasticity:
NON-PLASTIC

Description of Sample:
POORLY GRADED SAND WITH GRAVEL

Composition of Sample by Sieve Analysis:
COARSE GRAVEL < 76.0 mm - ND
FINE GRAVEL < 19.0 mm - 20%
COARSE SAND < 4.0 mm - 15%
MEDIUM SAND < 2.0 mm - 40%
FINE SAND < 0.425mm - 25%
FINES < 0.075mm - ND

* ND INDICATES NOT DETECTED

UTILITY TESTING LABORATORY

D. M. Thorsen

D. M. Thorsen

Customer I.D.
USC#2

Dry Strength:
LOW

Reaction with 1:1 HCl:
STRONG

Classification:
(SP)

RICHARD MALAN
1055 E 1700 N.
No. Ogden, UT 84404
782-5707

WHEELWRIGHT LUMBER
2459 Quincy
Ogden, UT 84401

RE: UST CLOSURE - ADDITIONAL SAMPLES

Per conversations with Holger Sass, Weber County Health; and Shelly Quick, Dept of Derr, additional samples were required to close said tank hole to recover for parking purposes. Samples and results required to be on file:

Oct 4th and Oct 5th, 1995:

(3) Soil Samples:

SS #1
SS #2
SS #3A

Samples delivered to Utility Testing on respective dates:
Samples Fees, Lab costs, transportation fees, phone expenses



Utility Testing Laboratory

CHAIN OF CUSTODY

875 South Chestnut Street Salt Lake City, Utah 84104 Phone: 801-973-8305 FAX: 801-973-8333

TATSU P 02

Project Number: FOC TO# 1200443		Project Name: Wheelwright Lumber		Analysis				Report To (print): R. Ned Malan		
C.O. Number:		Sampler's Signature: <i>R. Ned Malan</i>		SO15	MAD	EPA	SO20	BTEXD	No. of cont.	Matrix

Date Sampled	Sample Time	Sample Identification	SO15	MAD	EPA	SO20	BTEXD	No. of cont.	Matrix	REMARKS
10-4-95	4:59	SS #1	✓	✓	✓			1		7' depth NW side
10-4-95	5:01	SS #2	✓	✓	✓			1		7' depth NE side

Relinquished (signature): <i>R. Ned Malan</i>	Date/Time: 10-4-95	Received (signature): <i>Shari Malan</i>	SEND RESULTS TO (Company Name): Malan Const.	CONDITION OF SAMPLES Samples Chilled: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Samples Preserved: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Remarks:
Relinquished (signature): <i>Shari Malan</i>	Date/Time: 10-5-95	Received (signature): <i>Paul Solomon</i>	To the attention of: R. Ned Malan	
Relinquished (signature):	Date/Time:	Received (signature):	Address: 1055E 1700 RD Ogden, Utah 84404	
Relinquished (signature):	Date/Time:	Received (signature):	Phone: 782-5707	

COMMENTS:

Fax:

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

October 17, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright Lumber #1200443

Sample Collected: 04 Oct 1995

Sample Received: 05 Oct 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
10-05-95-02	SS#1 7' DEPTH NW SIDE	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH
Date Analyzed: 10 OCT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
10-05-95-02	SS#1 7' DEPTH NW SIDE	< 5 ug/Kg Benzene < 5 ug/Kg Toluene < 5 ug/Kg Ethylbenzene < 15 ug/Kg Xylenes, Total < 5 ug/Kg Naphthalene
Date Analyzed: 13 OCT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
PS

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

October 17, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright Lumber #1200443

Sample Collected: 04 Oct 1995

Sample Received: 05 Oct 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	SOIL SAMPLE	<u>Test Results mg/Kg, mg/L (ppm)</u>
10-05-95-03	SS#2 7' DEPTH NE SIDE	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH
Date Analyzed: 10 OCT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	SOIL SAMPLE	<u>Test Results µg/Kg, µg/L (ppb)</u>
10-05-95-03	SS#2	< 5 µg/Kg Benzene < 5 µg/Kg Toluene < 5 µg/Kg Ethylbenzene < 15 µg/Kg Xylenes, Total < 5 µg/Kg Naphthalene
Date Analyzed: 13 OCT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
PS

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

October 19, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright Lumber #1200443

Sample Collected: 06 Oct 1995

Sample Received: 09 Oct 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
10-09-95-06	S/S #3-A	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH
Date Analyzed: 11 OCT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
10-09-95-06	S/S #3-A	< 5 µg/Kg Benzene < 5 µg/Kg Toluene < 5 µg/Kg Ethylbenzene < 15 µg/Kg Xylenes, Total < 5 µg/Kg Naphthalene
Date Analyzed: 14 OCT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen

D. M. Thorsen

Telephone Documentation

Contact: Hal Wheelwright

Date/Time: 7-3-96

Representing: Wheelwright Lumber Phone # 627-0850

Facility I.D. 1700443 I.U.S.T. I.D. EHBW/EJDN

Discussion Summary: I introduced myself as the new P. in
to this site and indicated that some issues were
still hanging, regarding my closure review.

DEPR needs site map w/ utilities located, property
boundary and the location of a "m-u-2" Sampled by
TR Tech.

Mr. Wheelwright thought the site was closed. TR Tech
promised him that a state letter was forthcoming. I said
that the DEPR received TR Tech info, dated 11-95 but
that no state letter was yet issued.

Also m-u's were not properly sampled (Sample allowed them) I have
per Hal w. to accept!

I said I would revisit the possibility of closure w/
the new information, and get back w/ him.
New concrete has been laid - m-u's don't exist now.

Signed: WJL

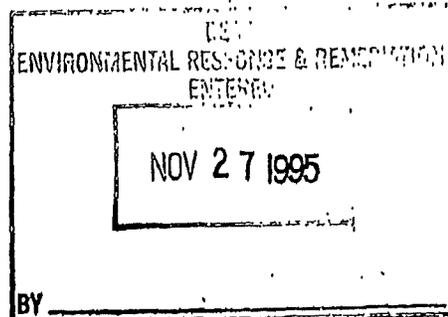
Additional: urgent: agree w/ my
direction to pursue subsurface
info. define degree of extent.
Provide utility info. obtain soil
& water samples. Suggest on-site
meeting - send site check.

7-3-96 WJL

SCANNED

DEIR - 1995 - 008943

**ABATEMENT AND INITIAL SITE CHARACTERIZATION
SITE SENSITIVITY, SUB-SURFACE INVESTIGATION
AND
RISK BASED CORRECTIVE ACTION**



Prepared For
Hal Wheelwright
Wheelwright Lumber Co.
2459 Quincy Ave.
Ogden, Utah

by
TRTech, Inc.
P.O. Box 7

Farrington, Utah 84025

(801) 451-9714 FAX (801) 451-9715 e-mail angfanger@aol.com

Job 145

November 21, 1995

ABSTRACT

The Wheelwright Lumber Co. LUST site (facility 1200443), located at 2459 Quincy Avenue in Ogden, Utah, meets the criteria for a Tier I Risk Based Corrective Action closure. The site involves two separate tank removals on adjacent tanks. The first tank was removed in 1982 by Butters Construction. There was limited water contamination and two sumps were installed. The second removal in 1995 was conducted by Malin Construction. A limited amount of contaminated soils were removed and minor water contamination was noted.

The closure samples met RBCA standards for soils and the waters were so close that it was probable that the air-sunlight exposure during the tank removal would have reduced the levels to RBCA closure standards. At closure TPH were 1 ppm too high and naphthalene was 0.201 ppm too high. The down gradient sump was still in place so we determined to take a confirmation sample at this point to determine if the exposure to air and sunlight during the tank removal was sufficient to bring the levels to below RBCA standards.

The site was checked for surface indications of underground utility conduits within 15.5 meters (50 feet) of the excavation. No sensitive receptors were noted within the estimated zone of influence. ?

The confirmation sample from the sump was non-detect in all categories so the site appears to be ready for closure.

Site map to scale
loc. of utilities + depth
loc. of Down grad W.S.
Dist to building ~~base-~~

SITE DESCRIPTION

Wheelwright Lumber Co. has been on the corner of 25th South and Quincy Avenue since 1908. The facility took on its current configuration in 1978. The facility consists of three structures; a masonry office, sales and warehouse building (with a partial basement); a yard office made of wood and a masonry door shop. The surface topography slopes down gently westward, toward Washington Blvd.

The property is bounded on the east by Quincy Avenue; east across Quincy is The Ogden Clinic and residences; to the south across 25th Street is an auto repair shop (LUST site); to the west are commercial offices currently occupied by a collection service and to the north are the IGA grocery store and Pay Less Drugs.

Surface observations suggest that no utility conduits bisect the excavation and none appear to be near enough to be affected by the release.

TABLE I
 ANALYTICAL TEST RESULTS

Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/1 ppm	Benzene pg/1 ppb	Toluene µg/1 ppb	Ethyl Benzene pg/1	Total Xylene µg/1	Naphthalene pg/1
11/23/92	Pit-1-1	Water	—	2.1	2.5	<2	<2	<2	69.1	<2
11/23/95	Pit-1-2	Water	—	2.1	<.5	<2	<2	<2	<6	<21.6
9/15/95	Pit-2-1	Water	—	2.1	<.5	<2	9.8	5.1	41.4	5.0
9/15/95	Pit-2-2	Water	—	2.1	11	<20	391	150	1570	301
11/03/95	MW-2	Water	—	2.1	<5	<2	<2	<2	<5	<2

JF
 Chroma

CONTAMINATION REMAINING ON SITE

No contamination appears to be left on this site. Soils were excavated to non-detect levels under the supervision of the County Health Department and the limited contamination in the water has attenuated naturally to non-detect levels.

QUALITY CONTROL

Closure samples were taken by a certified sampler following approved DERR proto-

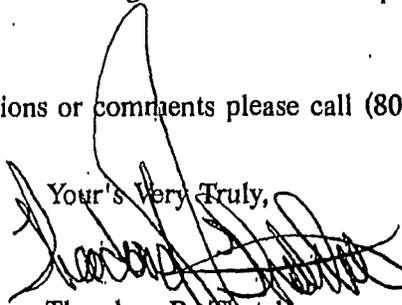
cols. Samples were sent to a certified testing laboratory for analysis.

The samples were tested according to protocols in effect in the summer of 1995.

CONCLUSIONS AND RECOMMENDATIONS

According to our understanding of the Risk Based standards this property should meet closure criteria without any further action or testing so we do not anticipate any further action at this site.

As always if you have any questions or comments please call (801) 451-9714 or FAX (801) 451-9715.

Your's Very Truly,

Theodore R. Thatcher
Geochemist

TRT/trt

REFERENCES

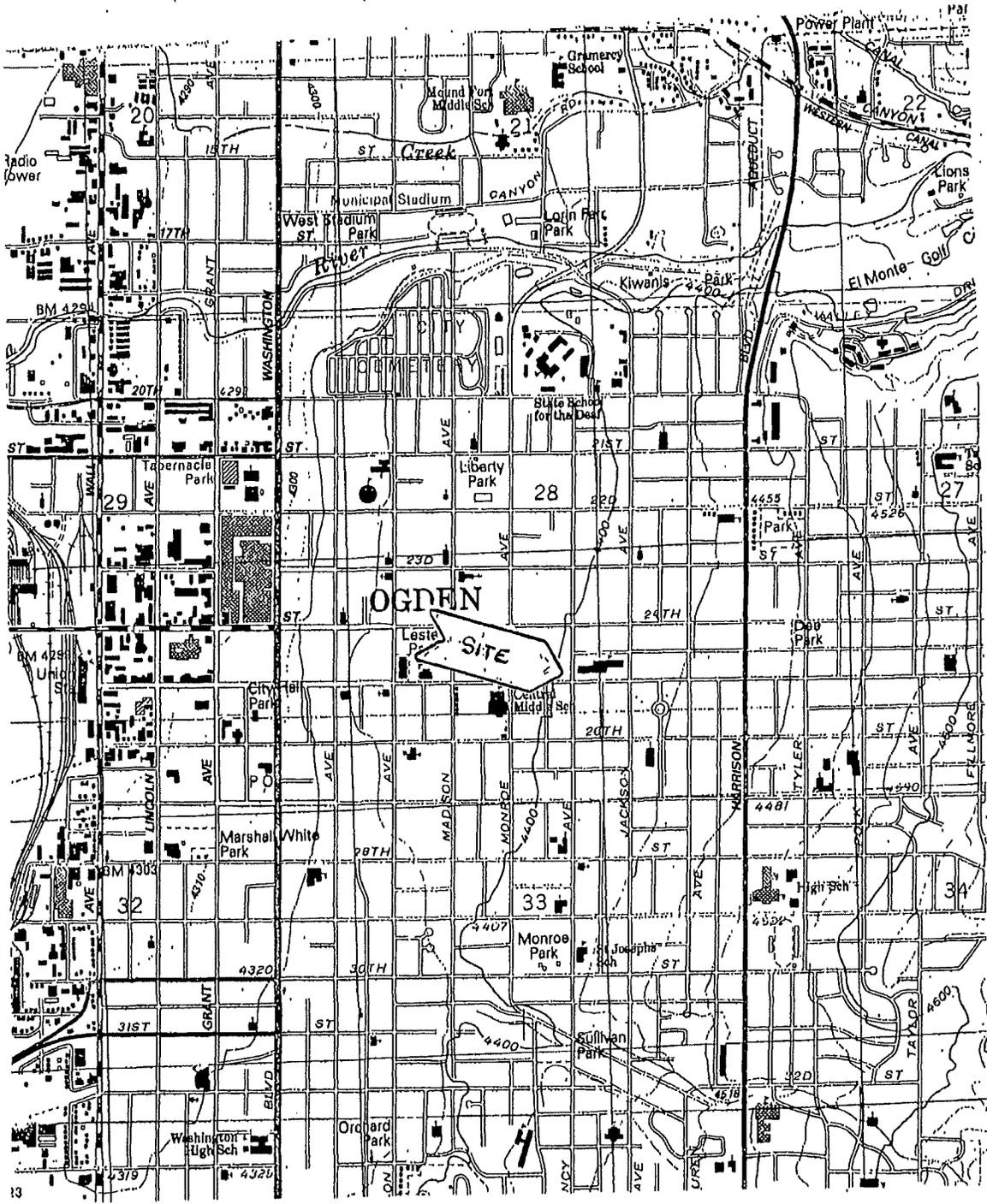
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APPENDIX A

Vicinity Map

Site Map

Map 110 Shallow Ground Water and Related Hazards in Utah



VICINITY MAP
 WHEELWRIGHT LUMBER CO.
 2459 QUINCY AVENUE
 OGDEN, UTAH
 Scale 1:24,000

APPENDIX B

Certificates of Analysis

Chain of Custody

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

November 15, 1995

TRTech, Inc.
P.O. Box 7
Farmington, UT 84025

Attention: Mr. Theodore Thatcher

Subject: TPH/BTEX Testing - Proj. - Whelfwright #145
Sample Collected: 03 Nov 1995
Sample Received: 03 Nov 1995
Comments: None

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
11-03-95-07	WS#1	< 0.5 mg/L Gasoline < 0.5 mg/L Diesel < 0.5 mg/L TPH
Date Analyzed:		
06 NOV 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
11-03-95-07	WS#1	< 2 ug/L Benzene < 2 ug/L Toluene < 2 ug/L Ethylbenzene < 6 ug/L Xylenes, Total < 2 ug/L Naphthalene
Date Analyzed:		
09 NOV 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen

D. M. Thorsen



Utility Testing Laboratory

CHAIN OF CUSTODY

875 South Chestnut Street Salt Lake City, Utah 84104 Phone: 801-973-8305 FAX: 801-973-8333

Project Number: 145		Project Name: Wheelwright		Analysis						Report To (print): Ted Thatcher			
P.O. Number:		Sampler's Signature: Hunter Chabot		TPH	BTEXN						No. of cont.	Matrix	REMARKS
Date Sampled	Sample Time	Sample Identification											
11-3-95	11:30 AM	WS #1											
Relinquished (signature): Hunter Chabot	Date/Time: 11-3-95 2:25	Received (signature): N. Fairman		SEND RESULTS TO (Company Name) TRTech						CONDITION OF SAMPLES			
Relinquished (signature):	Date/Time:	Received (signature):		To the attention of: Ted Thatcher						Samples Chilled: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Relinquished (signature):	Date/Time:	Received (signature):		Address: P.O. Box 7						Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Relinquished (signature):	Date/Time:	Received (signature):		Farmington Ut 84035						Samples Preserved: <input type="checkbox"/> Yes <input type="checkbox"/> No			
COMMENTS:				Phone: (801) 451-9714						Remarks:			
				Fax: (801) 451-9715									

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
09-15-95-19	WS #1	< 0.5 mg/L Gasoline < 0.5 mg/L Diesel < 0.5 mg/L TPH
Date Analyzed: 23 SEPT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
09-15-95-19	WS #1	< 2 ug/L Benzene 9.8 ug/L Toluene 5.1 ug/L Ethylbenzene 41.4 ug/L Xylenes, Total 5.0 ug/L Naphthalene
Date Analyzed: 22 SEPT 1995		

UTILITY TESTING LABORATORY

D.M. Thorsen

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
09-15-95-20	WS #2	11.0 mg/L Gasoline < 0.5 mg/L Diesel 11.0 mg/L TPH
Date Analyzed: 23 SEPT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
09-15-95-20	WS #2	< 20 µg/L Benzene 391 µg/L Toluene 150 µg/L Ethylbenzene 1,570 µg/L Xylenes, Total 301 µg/L Naphthalene
Date Analyzed: 22 SEPT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
PS

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
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PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH Testing - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

Test No.
09-15-95-21

SOIL SAMPLE
SS#3 - 1

Test Results mg/Kg, mg/L (ppm)

< 10 mg/Kg Gasoline
< 10 mg/Kg Diesel
< 10 mg/Kg TPH

Date Analyzed:
23 SEPT 1995

UTILITY TESTING LABORATORY



D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: Uniform Soil Classification
ASTM Method D2488-90 - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

Following are the test results on your subject samples:

Test No.
09-15-95-22

Customer I.D.
USC#1

Color of Sample:

BROWN

Toughness:

N/A

Plasticity:

NON-PLASTIC

Description of Sample:

SILTY SAND WITH GRAVEL

Dry Strength:

LOW

Reaction with 1:1 HCl:

STRONG

Classification:

(SM)

Composition of Sample by Sieve Analysis:

COARSE GRAVEL	< 76.0 mm - 10%
FINE GRAVEL	< 19.0 mm - 10%
COARSE SAND	< 4.0 mm - 20%
MEDIUM SAND	< 2.0 mm - 15%
FINE SAND	< 0.425 mm - 30%
FINES	< 0.075 mm - 15%

* ND INDICATES NOT DETECTED

UTILITY TESTING LABORATORY

D. M. Thorsen
ps

D. M. Thorsen

UTILITY TESTING LABORATORY

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PHONE: (801) 973-8305
FAX: (801) 973-8333

September 29, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: Uniform Soil Classification
ASTM Method D2488-90 - Proj. - Wheelwright LMB #1200443

Sample Collected: 15 Sept 1995

Sample Received: 15 Sept 1995

Following are the test results on your subject samples;

Test No.
09-15-95-23

Color of Sample:
BROWN

Toughness:
N/A

Plasticity:
NON-PLASTIC

Description of Sample:
POORLY GRADED SAND WITH GRAVEL

Composition of Sample by Sieve Analysis:
COARSE GRAVEL < 76.0 mm - ND
FINE GRAVEL < 19.0 mm - 20%
COARSE SAND < 4.0 mm - 15%
MEDIUM SAND < 2.0 mm - 40%
FINE SAND < 0.425mm - 25%
FINES < 0.075mm - ND

* ND INDICATES NOT DETECTED

UTILITY TESTING LABORATORY



D. M. Thorsen

Customer I.D.
USC#2

Dry Strength:
LOW

Reaction with 1:1 HCl:
STRONG

Classification:
(SP)

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

October 17, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright Lumber #1200443

Sample Collected: 04 Oct 1995

Sample Received: 05 Oct 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER.

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results mg/Kg, mg/L (opm)</u>
10-05-95-02	SS#1 7' DEPTH NW SIDE	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH
Date Analyzed: 10 OCT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results µg/Kg, µg/L (oph)</u>
10-05-95-02	SS#1 7' DEPTH NW SIDE	< 5 µg/Kg Benzene < 5 µg/Kg Toluene < 5 µg/Kg Ethylbenzene < 15 µg/Kg Xylenes, Total < 5 µg/Kg Naphthalene
Date Analyzed: 13 OCT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
ps

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

October 17, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright Lumber #1200443

Sample Collected: 04 Oct 1995

Sample Received: 05 Oct 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
10-05-95-03	SS#2 7' DEPTH NE SIDE	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH
Date Analyzed: 10 OCT 1995		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
10-05-95-03	SS#2	< 5 ug/Kg Benzene < 5 ug/Kg Toluene < 5 ug/Kg Ethylbenzene < 15 ug/Kg Xylenes, Total < 5 ug/Kg Naphthalene
Date Analyzed: 13 OCT 1995		

UTILITY TESTING LABORATORY

D. M. Thorsen
15
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UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

October 19, 1995

Malan Construction
1055 East 1700 North
Ogden, UT 84404

Attention: Mr. R. Ned Malan

Subject: TPH/BTEX Testing - Proj. - Wheelwright Lumber #1200443

Sample Collected: 06 Oct 1995

Sample Received: 09 Oct 1995

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
10-09-95-06	S/S #3-A	< 10 mg/Kg Gasoline < 10 mg/Kg Diesel < 10 mg/Kg TPH

Date Analyzed:
11 OCT 1995

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>SOIL SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
10-09-95-06	S/S #3-A	< 5 µg/Kg Benzene < 5 µg/Kg Toluene < 5 µg/Kg Ethylbenzene < 15 µg/Kg Xylenes, Total < 5 µg/Kg Naphthalene

Date Analyzed:
14 OCT 1995

UTILITY TESTING LABORATORY

D. M. Thorsen

D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH. 84125
PHONE: (801) 973-8305

December 9, 1992

C.E. Butters Construction
760 North Harrisville Road
Ogden, UT 84404

Attention: Mr. Ray A. Carling

Subject: TPH/BTEX Testing - Wheelwright Lumber

Sample Collected: 23 November 92

Sample Received: 23 November 92

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
11-23-92-12	#1	< 0.5 mg/L Gasoline < 0.5 mg/L Diesel < 0.5 mg/L TPH

Date Analyzed:
03 DECEMBER 92

BTEX
SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
11-23-92-12	#1	< 2 µg/L Benzene < 2 µg/L Toluene < 2 µg/L Ethylbenzene < 6 µg/L Xylenes, Total < 2 µg/L Naphthalene

Date Analyzed:
07 DECEMBER 92

UTILITY TESTING LABORATORY

D.M. Thorsen
D. M. Thorsen

ORIGINAL

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305

December 9, 1992

C.E. Butters Construction
760 North Harrisville Road
Ogden, UT 84404

Attention: Mr. Ray A. Carling

Subject: TPH/BTEX Testing - Wheelwright Lumber

Sample Collected: 23 November 92

Sample Received: 23 November 92

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
11-23-92-13	#2	2.5 mg/L Gasoline < 0.5 mg/L Diesel 2.5 mg/L TPH

Date Analyzed:
03 DECEMBER 92

BTEX
SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
11-23-92-13	#2	< 2 ug/L Benzene < 2 ug/L Toluene < 2 ug/L Ethylbenzene 69.1 ug/L Xylenes, Total < 2 ug/L Naphthalene

Date Analyzed:
07 DECEMBER 92

UTILITY TESTING LABORATORY

D M Thorsen
D. M. Thorsen

ORIGINAL

**SUB-SURFACE INVESTIGATION
AND
RISK BASED CORRECTIVE ACTION
WHEELRIGHT LUMBER, FACILITY 1200443
2459 QUINCY AVENUE
OGDEN, UTAH**

SCANNED

DERR -1997-005849

Prepared For
Hal Wheelwright
Wheelwright Lumber Co.
2459 Quincy Ave.
Ogden, Utah

by

TiRTech, Inc.
P.O. Box 7

Farmington, Utah, 84025

(801) 451-9714. FAX (801) 451-9715. e-mail anfanger@JUNO.com

Job 145.

June 3, 1997.

DEQ / DERR RECEIVED
JUN - 5 1997
<input type="checkbox"/> HAND DELIVERED

ABSTRACT

The Wheelwright Lumber Co. LUST site (facility 1200443), located at 2459 Quincy Avenue in Ogden, Utah, meets the criteria for a Tier I Risk Based Corrective Action closure. The site involves two separate tank removals on adjacent tanks. The first tank was removed in 1982 by Butters Construction. There was limited water contamination and two sumps were installed. The second removal in 1995 was conducted by Malin Construction. A limited amount of contaminated soils were removed and minor water contamination was noted.

The closure samples met RBCA standards for soils and the waters were so close that it was probable that the air-sunlight exposure during the tank removal would have reduced the levels to RBCA closure standards. At closure TPH were 1 ppm too high and naphthalene was 0.201 ppm too high. The down gradient sump was still in place so we determined to take a confirmation sample at this point to determine if the exposure to air and sunlight during the tank removal and the rapid movement of ground water through coarse sub-surface soils was sufficient to bring the levels to below RBCA standards.

The site was checked for surface indications of underground utility conduits within 15.5 meters (50 feet) of the excavation. No sensitive receptors, other than structures, were noted within the estimated zone of influence. The confirmation sample from the sump was non-detect in all categories so the site appears to be ready for closure.

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APPENDIX A: UDNR Map 110, Water Rights Points of Diversion

APPENDIX B: Certificates of Analysis, Chain-of-Custody

INTRODUCTION

Wheelright Lumber had two underground storage tanks (9,000 gallons and 4,000 gallons) with a single dispenser. The 9,000 gallon tank was removed circa 1991 by C.E. Butters Construction Company. No soil contamination was discovered but there was a modicum of water contamination, probably the result of surface spills and over filling. C.E. Butters installed two 10 cm PVC sumps, one near each end of the excavation. No further action was reported.

In 1995 Malin Construction removed the remaining 4,000 gallon tank and dispenser. Modest soil contamination was noted and some soils were over excavated under the direction of the Weber-Morgan County Environmental Health Department. Very low levels of contamination were noted in the ground water. TRTech, Inc. was called in to perform a closure sampling on the down gradient sump and prepare an Abatement and Site Check Report.

SITE DESCRIPTION

Wheelwright Lumber Co., (Facility 1200443, LUST I.D. EHBM & EJDV), Global Satellite (GPS) position 41°13'18" north, 111°57'19" west, has been on the corner of 25th South and Quincy Avenue since 1908. The facility took on its current configuration in 1978. The facility consists of three structures; a masonry office, sales and warehouse building (with a partial basement); a yard office made of wood and a masonry door shop. The surface topography slopes down gently westward, toward Washington Blvd.

The property is bounded on the east by Quincy Avenue; east across Quincy is The Ogden Clinic and residences; to the south across 25th Street is an auto repair shop (LUST site); to the west are commercial offices currently occupied by a collection service and to the north are the IGA Grocery Store and Pay Less Drugs. Surface observations suggest that no utility conduits bisect the excava-

tion and none appear to be near enough to be affected by the release.

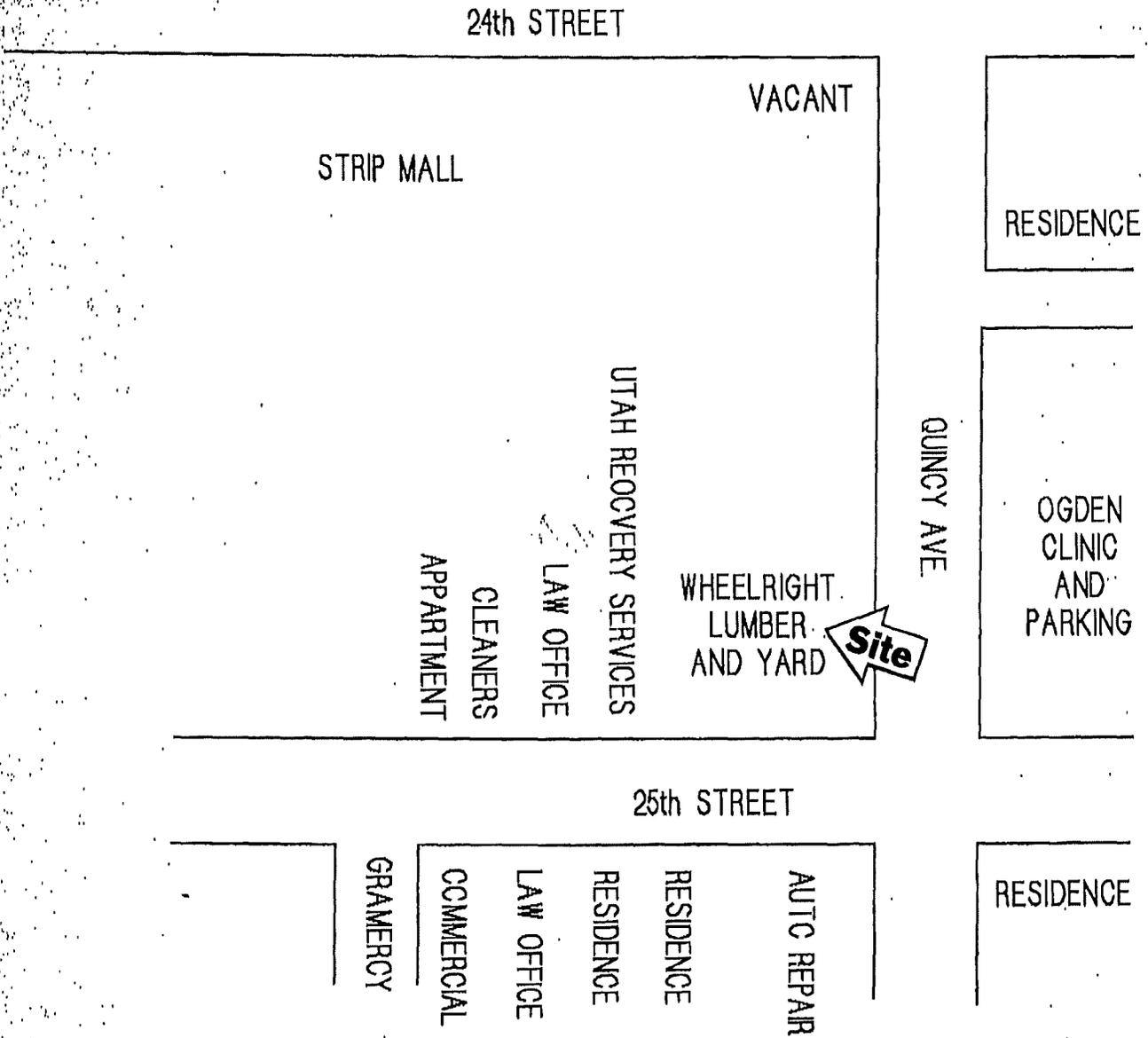
The neighborhood is located in the urbanized grass sagebrush ecosystem of the Salt Lake Valley, a deep, sediment-filled structural basin flanked by two uplifted range blocks; the Wasatch Range to the east, and the Oquirrh Mountains to the west. The surficial geology has been mapped as post Bonneville Lake Cycle lacustrine, marsh and alluvial deposits (Holocene to uppermost Pleistocene) consisting of silt, clay and minor sand (Personius and Scott, 1992). These alluvial deposits postdate the regressive phase of the Bonneville Lake Cycle and are underlain by laminated Lake Bonneville gravel, sand, silt and clay sediments. The site is in an area that has been listed as having a moderate earthquake liquefaction potential.

The subsurface hydrology consists of two aquifers: a shallow unconfined aquifer and a deeper, confined aquifer. According to UDNR Map 110, the depth to the unconfined aquifer varies somewhat based on climatic cycles and seasonal fluctuations but is expected to be on the order of 10 meters, actual measurements at the site of less than 3 meters suggest a localized perched water table not noted in UDNR Map 110. The deeper, confined aquifer, known as the principal aquifer, generally meets the standards for public drinking water supply. The regional direction of ground water flow is generally to the west toward the Great Salt Lake. The National Oceanic and Atmospheric Administration reports that the average yearly rainfall for the area is about 19 inches.

Subsurface Investigation
Wheelwright Lumber Co., Facility 1200443

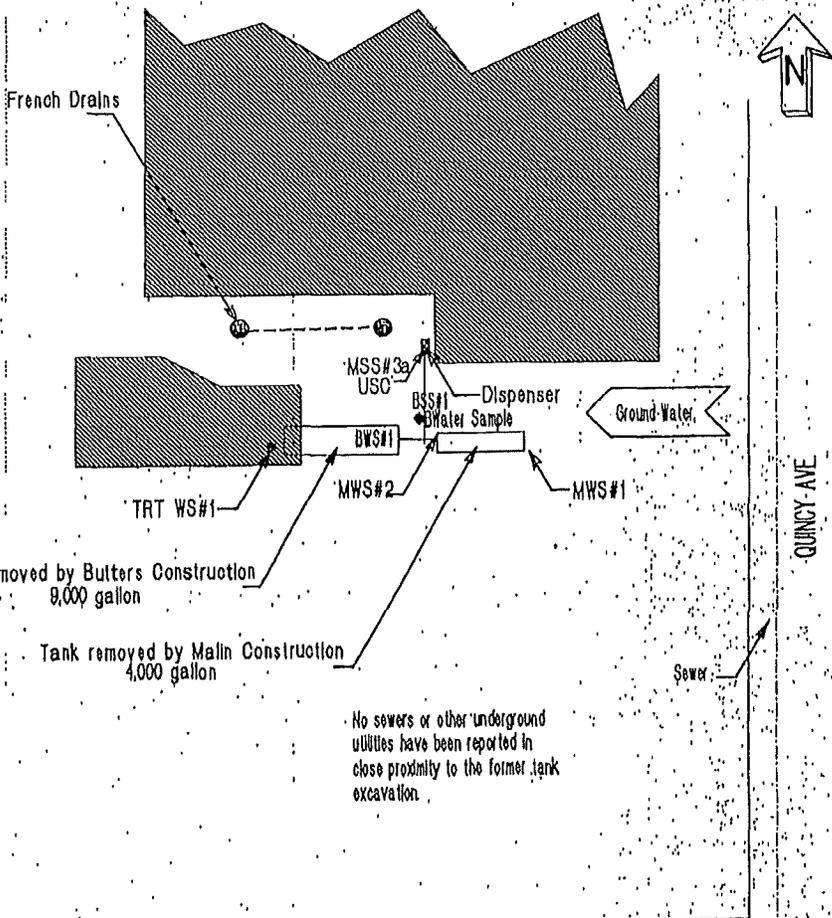


VICINITY MAP
WHEELWRIGHT LUMBER, FACILITY No. 1200443
2459 EAST QUINCY AVENUE
OGDEN, UTAH
Scale 1:24,000

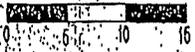


NEIGHBORHOOD MAP
2459 QUINCY AVENUE
OGDEN, UTAH

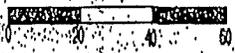
SAMPLE TABLE		
Sample	Description	Depth (meters)
BSS-1	8/29/91 Dispenser (soil)	1
BWS-1	8/23/91 Water in excavation (water)	2.1
BWATER	10/1/91 Water east sump (water)	2.1
MWS#1	9/15/95 East end 4,000 gallon tank (water)	2.1
MWS#2	9/9/95 West end 4,000 gallon tank (water)	2.1
MSS#1	10/4/95 Northwest side @ 7 feet (soil)	2.2
MSS#2	10/4/95 Northeast side @ 7 feet (soil)	2.2
MSS#3A	10/8/95 Under the dispenser (soil)	1
TRTWS#1	11/3/95 West sump (water)	2.1



APPROXIMATE SCALE
 METERS



FEET



SAMPLERS

- Butlers (B) GS0495
- Malin (M) GS0131
- TRTech (TRT) GS0065

25th STREET

**SITE PLAN
 WHEELRIGHT LUMBER
 2459 QUINCY AVENUE
 OGDEN, UTAH**

ENVIRONMENTAL SENSITIVITY LEVEL/REGULATORY CRITERIA

The levels of contamination at the site by this time should be non-detect in all categories eliminating any need for environmental sensitivity calculations. The site should meet Drinking Water Standards:

Recommended Water Quality (DRINKING) Criteria

Constituents (ppm)	µg/l, ppb	mg/l, ppm
Total Hydrocarbons	----	-----
Benzene	5.0	0.005
Toluene	1000.0	1.000
Ethylbenzene	700.0	0.700
Xylenes (total)	10000.0	10.000
Naphthalene	20.0	0.020
Benzo(a)pyrene	20.0	0.200
Lead	50.0	0.050
Oil and Grease	N/A	10±5

NATURE OF RELEASE AND ABATEMENT MEASURES

No significant soil contamination was noted during the first tank removal. A small amount of contaminated soils were removed during the second tank removal. The combination of coarse (high porosity) soils, a perched aquifer and high ground water recharge rates would tend to flush any contamination away from the site in a down gradient direction. Because the releases were very minor this flushing action removed all traces of contamination from the site. The recharge rate was so high that we were unable to draw the sump down more than 50 mm using a purge pump delivering over 15 liters per minute. The shallow aquifer in the Salt Lake Valley will normally yield between 0.25 and 7 liters per minute.

METHODOLOGY

Closure Samples, There were two separate closures at this site the first, conducted by C. E. Butters Construction took place circa November of 1992. A 9,000 gallon gasoline tank was removed and two 10 cm PVC sumps were installed. Samples from this event are prefixed with a "B" (e.g. BSS#1). The sampling is reported to have followed DERR sampling protocols in effect at the time.

The remaining 4,000 gallon gasoline tank and dispenser were removed by Malin Construction circa October 1995. Samples from this event are prefixed with a "M" (e.g. MSS#1). The sampling from this tank removal was reported to have followed DERR sampling protocols in effect at the time.

Closure Confirmation Sample, TRTech sampled the water in the down gradient sump installed by C. E. Butters Construction. The water level in the sump was measured, the sump was pumped for 5 minutes at a rate of 17 liters per minute (85 liters) and the sample was taken from the pump discharge. Prior to sampling the Homelite pump had been purged with 20-25 liters of soapy water (Alconox solution) and rinsed with three rinses of 20 liters each (culinary water). There was no significant draw down in the 10 cm (4") sump during the purge pumping. This suggests a very high transmissivity in the shallow aquifer. The water from the pump discharge was crystal clear, odor free and there was no sheen. It should be noted that the yard drains into a French Drain (gravel percolation sump) about 3 meters north of the sample sump. French drains require soils of high porosity and transmissivity. The sampling was conducted by a certified sampler following DERR Protocols as established in the Consultants Manual published by the DERR.

RESULTS

TABLE I
 ANALYTICAL TEST RESULTS

Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/1 ppm	Benzene mg/1 ppb	Toluene mg/1 ppb	Ethyl Benzene mg/1	Total Xylene mg/1	Naphthalene mg/1
11/23/92	BWS#1-7	Water	—	2.1	40.7	0.734	1.580	0.361	2.330	0.172
11/23/92	BWS#1	Water	—	2.1	2.5	<2	<2	<2	69.1	<2
11/23/95	BWS#2	Water	—	2.1	<.5	<2	<2	<2	<6	<21.6
9/15/95	MWS#1	Water	—	2.1	<.5	<2	9.8	5.1	41.4	5.0
9/15/95	MWS#2	Water	—	2.1	11	<20	391	150	1570	301
11/03/95	TRTWS#1	Water	—	2.1	<5	<2	<2	<2	<5	<2
Utah RBCA Tier I Drinking Water					10.0	0.300	7.000	4.0	73.0	0.100
					—	0.005	1.000	0.7	10.0	0.020

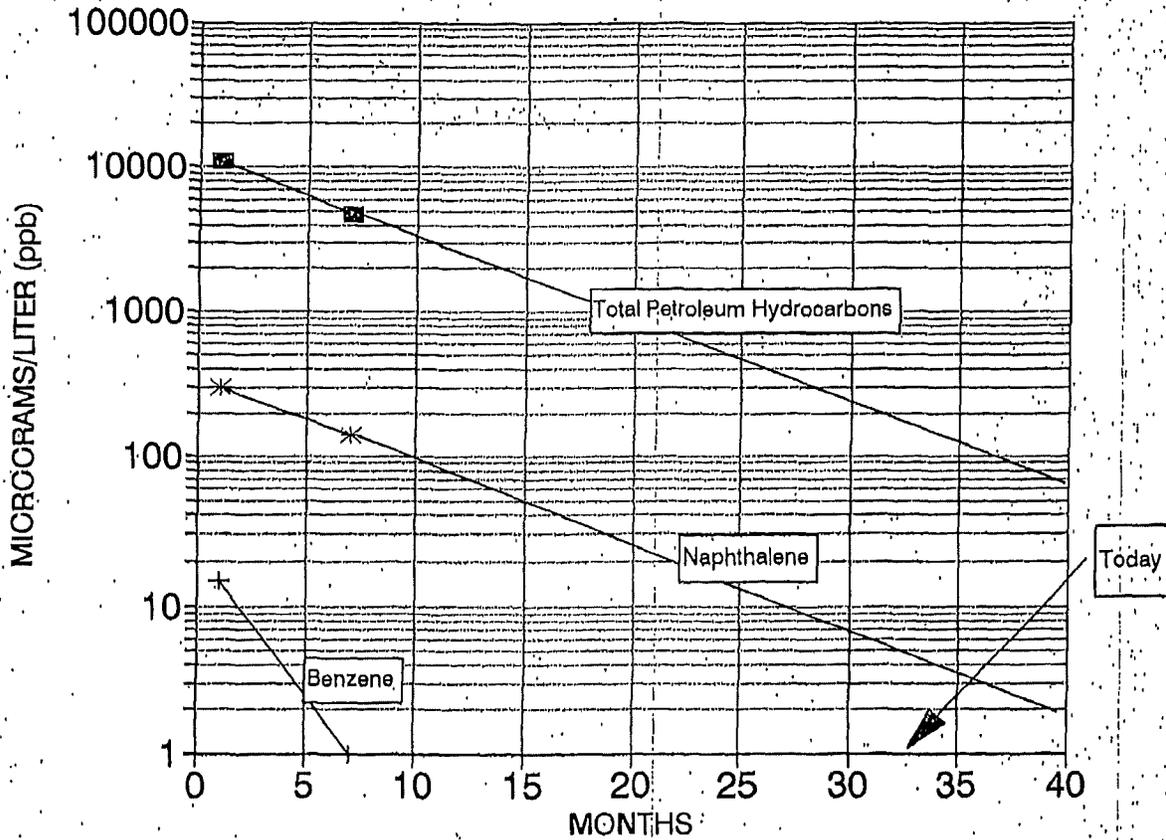
TABLE II
 SOIL ANALYTICAL DATA mg/kg (ppm)

Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/1 ppm	Benzene mg/1 ppb	Toluene mg/1 ppb	Ethyl Benzene mg/1	Total Xylene mg/1	Naphthalene mg/1
08/28/91	BSS#1-D	Soil	SM	1.0	<10.0	<.005	<.005	<.005	<.015	<.005
9/15/95	MSS#3-1	Soil	SM	1.0	<10.0	—	—	—	—	—
10/04/95	MSS#1	Soil	SP	2.1	<10.0	<.005	<.005	<.005	<.015	<.005
10/04/95	MSS#2	Soil	SP	2.1	<10.0	<.005	<.005	<.005	<.015	<.005
10/06/95	MSS#3-a	Soil	SM	1.0	<10.0	<.005	<.005	<.005	<.015	<.005
Utah RBCA Tier I					1500.0	0.900	61.000	23.0	235.0	10.000

CONCLUSIONS AND RECOMMENDATIONS

No contamination appears to be left on this site. Soils were excavated to non-detect levels under the supervision of the County Health Department and the limited contamination in the water has attenuated naturally to non-detect levels.

NATURAL ATTENUATION (half-life) WHEELRIGHT LUMBER, OGDEN

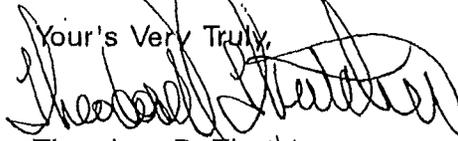


Estimated time to Drinking Water MCLs by Natural Attenuation
 Based on the assumption that $t_{1/2}$ is a semi-logarithmic function

Component	Depth to HOH	Soil Type	Half-life	Estimated value on 6/2/97
TPH	< 2 meters	SP / SM	100 - 200 days	< 0.5 ppm
Benzene	< 2 meters	SC / SM	30 - 180 days	< 0.002 ppa
Naphthalene	< 2 meters	SC / SM	180 - 300 days	< 0.020 ppm

According to our understanding of the Risk Based standards this property should meet closure criteria adjusted for proximity to structures without any further action or testing. As always if you have any questions or comments please call (801) 451-9714 or FAX (801) 451-9715.

Your's Very Truly,



Theodore R. Thatcher
Geochemist

TRT/trt

REFERENCES

- Atlas, R. M., (Ed.), 1984, Petroleum Microbiology, New York: Macmillan.
- Fiero, B., 1986, Geology of the Great Basin, Reno: University of Nevada Press.
- Stecher, R. G. (Ed.), Finkel, M. J., Siegmund, O. H. and Szafranski, B. M., 1960, The Merck Index, Rahway, N. J.: Merck & Co.
- Corbitt, R. A., 1990, Standard Handbook of Environmental Engineering, New York: Mc Graw-Hill Publishing Co.
- Brooks, B. T., 1950, Second Edition, The Chemistry of the Non-benzoid Hydrocarbons, New York: Reinhold Publishing
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- Clark, D.W., Appel, C.L., Lambert, R.M., and Puryear, R.L., 1990, Ground-water Resources and Simulated Effects of Withdrawals in the East Shore area of Great Salt Lake, Utah, Utah Department of Natural Resources Technical Publication 93, 150p.



State of Utah

FILE COPY

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENVIRONMENTAL RESPONSE AND REMEDIATION

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Kent P. Gray
Director

168 North 1950 West
P.O. Box 144840
Salt Lake City, Utah 84114-4840
(801) 536-4100
(801) 359-8853 Fax
(801) 536-4414 T.D.D.
www.deq.state.ut.us Web

ERRL-0322-98

March 13, 1998

Mr. Hal Wheelwright
Wheelwright Lumber Company
2459 Quincy Avenue
Ogden, Utah 84401

SCANNED

DERR - 1998 - 004804

RE: Release Site EJDV & EHBM, Wheelwright Lumber Company
Located at 2459 Quincy Avenue, Ogden, Utah
Facility Identification No. 1200443
LUST Site Closure

Dear Mr. Wheelwright:

The case file for this facility has been reviewed by your state project manager, who has recommended that no further corrective action be taken at this time. This no further action applies only to the specific LUST release EJDV & EHBM. This recommendation is based upon the information contained in the file supplied by you or your consultant.

The information you have submitted indicates that any detectable petroleum contamination at the site is not a threat to human health or the environment as characterized using state underground storage tank rules. In the future, if other evidence indicates a spread of contamination from the Facility which may cause such a threat, further corrective action may be required.

If you have any questions regarding this matter, please contact your state project manager, Mark Crim at (801) 536-4247.

Sincerely,

Kent P. Gray, Executive Secretary (UST)
Utah Solid and Hazardous Waste Control Board

KPG/MEC/js

cc: J. Brett Lazar, M.D., M.P.H., Director, Weber/Morgan District Health Department
Ted Thatcher, TR Tech, Inc.

SCANNED

12-29-91 LUST RELEASE/SPILL REPORT
SITE No. Assigned 12-29-HBM
ID No. 1260443
Inspector Assignee Shelly

DERR 1991-010075
Date Received 8-29-91
Date Assigned _____
Date Confirmed _____

Received by R. O'Neil Time _____

Party Reporting NAME Ernie Butters Phone: _____

PRP NAME _____ Phone: _____

Location NAME Wheelwright Lumber Phone: 41 Wheelwright

STREET Quincy CITY: Ogden

~~1260~~ 2459

Type of Release: _____ Piping; _____ Tank; Overfill; Spill; _____ Unknown

Release Date(s) (approx. or discovered) 8-29-91

Substance: Gas; _____ Diesel; _____ Other, Specify _____

Estimated Amount: _____ Method of Determination Visual

Impacts

Fumes: _____ Home _____ Business _____ Utility _____ Outdoor Soils _____ Water

Product: _____ Groundwater _____ Surface Water _____ Land Surface _____ Utility

Damage: _____ Health _____ Evacuation _____ Biotic _____ Drinking Water _____ Property

Describe _____

Actions Taken: _____

Tanks & lines look good

1 tank passed tank & line

AGENCIES NOTIFIED: HEALTH DIST; _____ FIRE; _____ EPA; OTHER _____

Staff Recommendations _____

CLOSURE NOTICE

5Q 1229HBM

Facility ID # 1200643

TANK OWNER Name Wheelwright Lumber Phone 627-0850

Address 2459 Quincy Ave

City Ogden State Utah Zip 84401

TANK OPERATOR/LOCATION Name, Title Hal Wheelwright

Business Name Wheelwright Lumber

proprietorship, corporation, partnership. Phone 627-0850

Address 2459 Quincy Ave

City Ogden County Weber Zip 84401

TANK HANDLER/REMOVER Name Ernie Butters Cert. # TH0053

Address 760 N. Harrisville Rd., Ogden 84404 Phone 782-2088

SOIL/GROUNDWATER SAMPLER Name Ray A. Carling Cert. # 680485

Address 1287 E. 2500 N., N. Ogden, UT 84404 Phone 782-7167

TYPE OF CLOSURE Permanent Temporary Change-In-Service

Permanent or Change-in-Service Sampler: #1 Austin F. Legler

Date Closed 8-23-91 Removed In-place

Fuel was emptied, Clean Dry Sludge was removed, Tank was cleaned.

Tank was: Purged, Inerted. Method Used: Dry Ice

Location of Closure Records 760 N. Harrisville Rd.

Substance to be stored for Change-In-Service _____

Temporary

Date of Closure _____ Fuel was emptied.

Residue depth remaining in tank _____ or, % by weight of total capacity of UST: _____

Corrosion protection equipment is operating. Release detection equipment is operating.

3 months: Vent lines open Cap/Secure: lines pumps manways

12 months: Permanently closed New/Upgraded Extension

TANKS CLOSED

Tank # 1 _____

Age of tank 1979 _____

Capacity 9000 _____

Subs. stored* Regular _____

Date last used 1988 _____

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

NOV 12 1991

DIV. OF ENVIRONMENTAL RESPONSE AND REMEDIATION

*Indicate the specific substance stored in each tank closed (regular, unleaded, diesel, waste oil, etc.)

DISPOSAL SITES USED:

Tank: Atlas Steel Date 8-23-91 Number 1
Product from Tank: None Date _____ Amount _____
Sludge: None Date _____ Amount _____
Contaminated Soils: Affected on site Date _____ Amount _____
Contaminated Water: None Date _____ Amount _____

SITE ASSESSMENT (A copy of the lab analysis report must be attached to this notice)

Groundwater samples: TPH: 8015 modified; Oil & Grease: [] 413.1 [] 418.1
Other: _____, BETX: [] 8020
Results: _____

Soil samples: TPH: [] 8015 modified; Oil & Grease: [] 413.1 [] 418.1
Other: _____, BETX: 8020
Results: Test Results attached.

Certified Laboratory: Utility Testing Laboratory
Address: 875 South Chestnut St.

CHAIN OF CUSTODY FORM (A copy of the form must be attached to this notice)

Samples were properly. Collected Labeled Packaged Transported
 Samples were in sight of the person in custody at all times or in a secured locked place.

I certify under penalty of law that I am familiar with the information on this form and that it is true, accurate and complete and further, that the procedures described herein were followed during tank closure.

Signature of UST Owner/Operator Hal W. Wheelwright
Full name of Owner/Operator Hal W. Wheelwright Date 11-7-91

Wheelwright Lumber
2459 Quincy Ave.
Ogden, Utah 84401
7 November 1991

State of Utah
Project Manager, DERR

Re: Closure Notice
Facility ID # 1200443

On August 23, 1991 the 9000 gallon tank was excavated and removed from our site at the above address. The tank was found to be clean and dry after it was opened up, as it hadn't been used since 1988. After it had been inerted with dry ice it was delivered to Atlas Steel Inc. for disposal.

Boil samples were taken at the dispenser location by Sitex Environmental Inc. was found clean, but the groundwater sample results indicated some contamination at 40.7 ppm TPH. The DERR was notified of the situation. At that time some over excavating was done and the soil was left to aireate for over a month.

It was established at that time that no more money could be spent on the site so another groundwater sample was taken by Ray A. Carling and sent to the lab. which showed considerable improvement to 7.3 ppm TPH.

We installed two test wells, one on each end of the excavation, for future testing and filled in the hole with the existing material and added clean fill to finish.

Future testing will be done until the site is clean.

Prepared by Ray A. Carling
C. E. Bitters Construction
for Hal Wheelwright
Wheelwright Lumber,





**SITEX
Environmental, Inc.**

Hillside Business Center, Suite 212
2469 East 7000 South
Salt Lake City, UT 84121
(801) 943-1222
FAX (801) 943-1288

September 17, 1991

Mr. Ernie Butters
Butters Construction
760 North Harrisville Road
Harrisville, Utah 84044

Subject: Soil and Groundwater Sampling at Wheelwright Lumber.

Dear Mr. Butters:

Please find enclosed the original copies of lab results for the soil samples taken at the Wheelwright Lumber job along with our invoice for these services. All sample numbers correspond to the sample numbers shown on the attached figure. It looks like the soil sample from under the pump is clean, however, the water sample from the tank excavation is fairly heavily contaminated.

If you have any questions concerning this matter, please do not hesitate to call.

Sincerely,

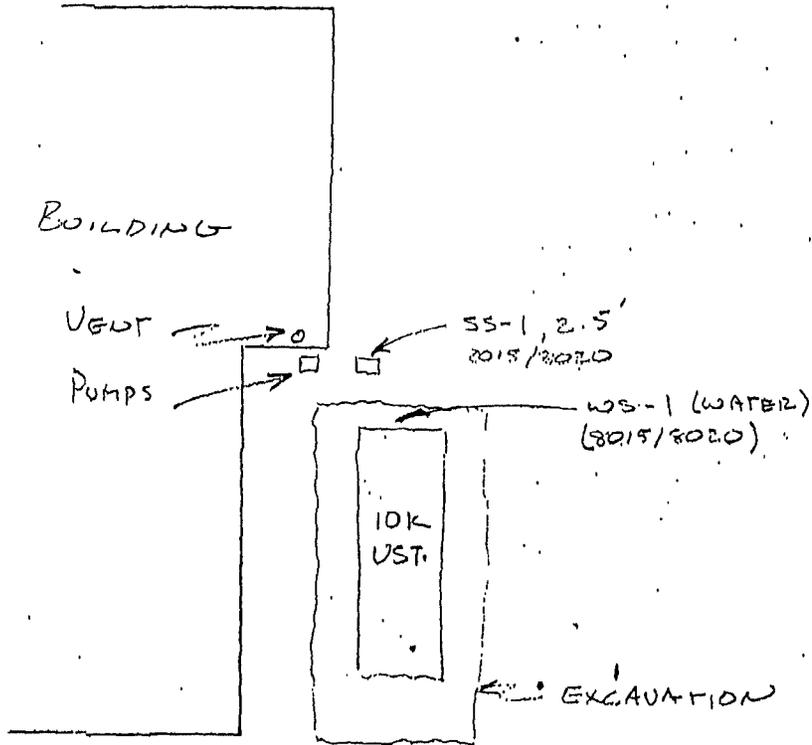
SITEX Environmental, Inc.



Austin F. Legler EIT
Civil Engineer

Enclosures

E QUINCY AVE.



SITE MAP
CH

WHEEL WRIGHT LUMBER 2459 QUINCY AVE OGDEN UTAH		
SCALE: LA	APPROVED BY:	DRAWN BY: AFL
DATE: 9/17/91		REVISED:
		DRAWING NUMBER:

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 2S005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305

August 28, 1991

Sitex Environmental Inc.
Suite 212
2463 East 7000 South
Salt Lake City, UT 84121

Attention: Mr. Austin Legler

Subject: TPH/BTEX Testing - Sutters Wheelwright Lumber

Sample Collected: 23 August 91

Sample Received: 23 August 91

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>SOIL SAMPLE SS-1</u>	<u>Test Results</u>
8-23-S1-11	DISPENSER	< 10 ppm Gasoline < 10 ppm Diesel < 10 ppm TPH
Date Analyzed: 23 AUGUST 91		

BTEX
SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>SOIL SAMPLE SS-1</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
8-23-S1-11	DISPENSER	< 5 ug/Kg Benzene < 5 ug/Kg Toluene < 5 ug/Kg Ethylbenzene < 15 ug/Kg Xylenes, Total < 5 ug/Kg Naphthalene
Date Analyzed: 28 AUGUST 91		

UTILITY TESTING LABORATORY

D M Thorsen
D. M. Thorsen

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
 P. O. BOX 25005
 SALT LAKE CITY, UTAH 84125
 PHONE: (801) 973-8305

August 28, 1991

Sitex Environmental Inc.
 Suite 212
 2469 East 7000 South
 Salt Lake City, UT 84121

Attention: Mr. Austin Legler

Subject: TPH/BTEX Testing - Butters Wheelwright Lumber

Sample Collected: 23 August 91

Sample Received: 23 August 91

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
 (MODIFIED CALIFORNIA METHOD 8015)
 METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results</u>
8-23-91-10	W8-1 EXCAVATION	40.7 ppm Gasoline < 0.5 ppm Diesel 40.7 ppm TPH
Date Analyzed:		
23 AUGUST 91		

BTEX
 SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
 USING PURGE & TRAP METHOD 5030
 METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
 PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results $\mu\text{g}/\text{Kg}$, $\mu\text{g}/\text{L}$ (oob)</u>
8-23-91-10		734 $\mu\text{g}/\text{L}$ Benzene 1,580 $\mu\text{g}/\text{L}$ Toluene 361 $\mu\text{g}/\text{L}$ Ethylbenzene 2,330 $\mu\text{g}/\text{L}$ Xylenes, Total 172 $\mu\text{g}/\text{L}$ Naphthalene
Date Analyzed:		
26 AUGUST 91		

UTILITY TESTING LABORATORY

W M Thorsen
 O. M. Thorsen

Utility Testing Laboratory

875 South Chestnut Street
Salt Lake City, Utah 84104

Chain of Custody Form

Company Name <i>C.F. Butters Crest</i>	<i>5015</i>	Report To <i>Naught. Corning</i>
Purchase Order		<i>1987 E. 2500 N. N. Ogden, Ut. 84414</i>
Sample Identification		Phone No. <i>782-7167 - 782-2088</i>
<i>Wheelwright Lumber 10-1-91</i>	<i>2</i>	Remarks <i>water sample</i>

Immediate Attention
 Rush
 Standard

<i>Naught. Corning</i> Relinquished by: (signature)	<i>10-1-91</i> Date	<i>3:00 PM</i> Time	<i>J. F. ...</i> Received by: (signature)
			Witnessed By: (signature)
			Received by: (signature)
			Witnessed By: (signature)
			Received by: (signature)
			Witnessed By: (signature)

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305

October 16, 1991

Ray A. Carling
1287 East 2500 North
North Ogden, UT 84414

Attention: Mr. Ray Carling

Subject: Total Petroleum Hydrocarbon Testing - C.E.
Butters, Wheelwright Lumber

Sample Collected: 01 October 91

Sample Received: 01 October 91

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results</u>
10-01-91-09	WHEELWRIGHT LUMBER	7.3 ppm Gasoline < 0.5 ppm Diesel 7.3 ppm TPH

Date Analyzed:
02 OCTOBER 91

UTILITY TESTING LABORATORY


D. M. Thorsen

ORIGINAL

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305

December 9, 1992

C.E. Butters Construction
760 North Harrisville Road
Ogden, UT 84404

Attention: Mr. Ray A. Carling

Subject: TPH/BTEX Testing - Wheelwright Lumber

Sample Collected: 23 November 92

Sample Received: 23 November 92

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)
METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
11-23-92-12	#1	< 0.5 mg/L Gasoline < 0.5 mg/L Diesel < 0.5 mg/L TPH

Date Analyzed:
03 DECEMBER 92

BTEX
SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
11-23-92-12	#1	< 2 ug/L Benzene < 2 pg/L Toluene < 2 ug/L Ethylbenzene < 6 ug/L Xylenes, Total < 2 pg/L Naphthalene

Date Analyzed:
07 DECEMBER 92

UTILITY TESTING LABORATORY

D M Thorsen
D. M. Thorsen

ORIGINAL

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305

December 9, 1992

C.E. Butters Construction
760 North Harrisville Road
Ogden, UT 84404

Attention: Mr. Ray A. Carling

Subject: TPH/BTEX Testing - Wheelwright Lumber

Sample Collected: 23 November 92

Sample Received: 23 November 92

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL
(MODIFIED CALIFORNIA METHOD 8015)

METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
11-23-92-13	#2	2.5 mg/L Gasoline < 0.5 mg/L Diesel 2.5 mg/L TPH

Date Analyzed:
03 DECEMBER 92

BTEX
SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results ug/Kg, ug/L (ppb)</u>
11-23-92-13	#2	< 2 ug/L Benzene < 2 ug/L Toluene < 2 ug/L Ethylbenzene 69.1 ug/L Xylenes, Total < 2 ug/L Naphthalene

Date Analyzed:
07 DECEMBER 92

UTILITY TESTING LABORATORY

D M Thorsen
D. M. Thorsen

ORIGINAL

Utility Testing Laboratory

875 South Chestnut Street
Salt Lake City, Utah 84104

Wheelerwright Lumber
2459 Quincey Ave
Ogden, Utah 84401

Chain of Custody Form

Company Name C.E. Butters Const. 760 N. Harrisville Rd Ogden, Utah 84404	APDH 8015 MCD ERH 603	Report To C.E. Butters Const. 760 N. Harrisville Rd Ogden, Utah 84404 Ray A. Carling
Purchase Order		Phone No 782-2088 or 782-7167
Sample Identification 11-23-92		Remarks
Sample # 1, sea. water	X X	
Sample # 2, sea. water	X X	

Immediate Attention

Rush

Standard

Ray A. Carling
Relinquished by: (signature)

11-23-92 9:15
Date Time

J. Farnsworth
Received by: (signature)

Witnessed By: (signature)

(signature)

Date

Time

Received by: (signature)

Witnessed By: (signature)

Relinquished by: (signature)

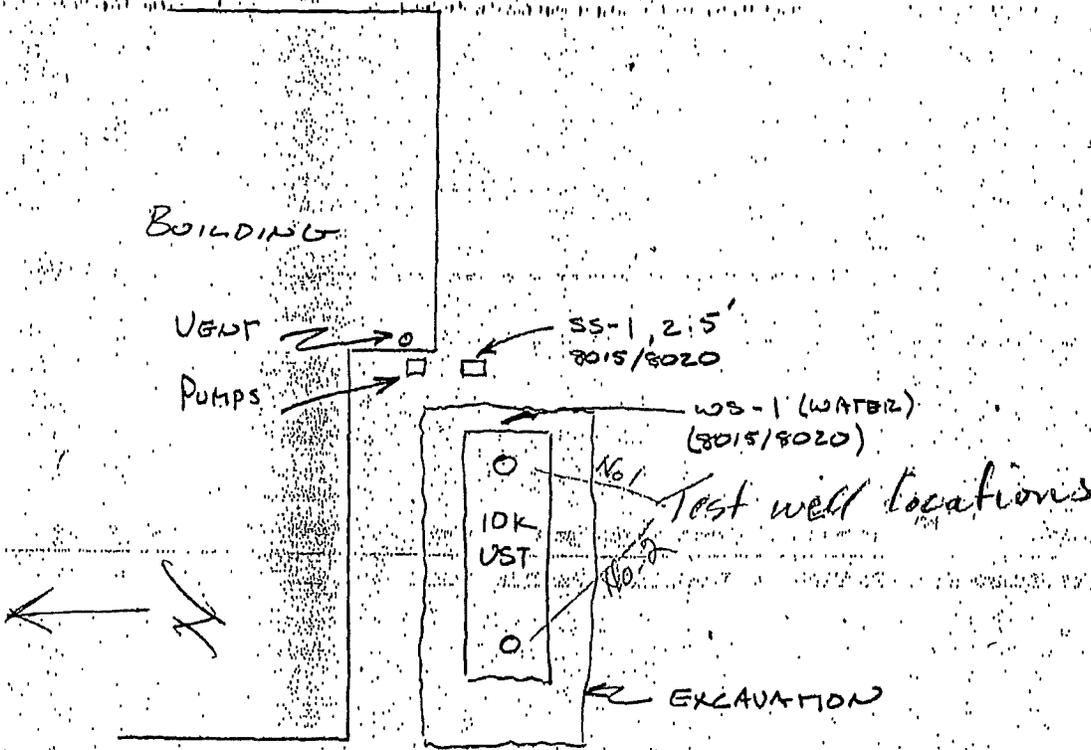
Date

Time

Received by:

Witnessed By: (signature)

E QUINCY AVE.



SITE MAP

WHEEL WRIGHT LUMBER
2459 QUINCY AVE.
OGDEN UTAH

SCALE: 1/4"
DATE: 9/17/91

APPROVED BY:
DRAWN BY: AFL

REVISED:

DRAWING NUMBER

Wheelwright Lumber
2459 Quincy Ave
Ogden, Utah 84401
15 April 1993

State Of Utah
Shelly Quick
Project Manager, DERR

SCANNED

DERR-1993-010426

Re: Status Report
Facility ID # 1200443

Dear ~~Shelly Quick~~

I talked to you on the phone on 14 Jan 1993 about the test results at Wheelwright Lumber, which are included. Hal Wheelwright says he still hasn't money to do more testing and asked if he can wait till spring of 94 to do soil samples around the perimeter at water level and additional water samples as you requested. Last time a year made a lot of difference in his test results.

Also you asked how much soil was removed and then put back in the excavation. We estimate there was about 35 yards, with the addition of about 55 yards of new dirt to fill the excavation.

Thank you for your help and consideration.

Ray A. Carling

Prepared by Ray A. Carling
C. E. Butters Construction
for Hal Wheelwright
Wheelwright Lumber

UTAH DEPARTMENT OF
ENVIRONMENTAL QUALITY

APR 16 1993 Ra

DIV. OF ENVIRONMENTAL
RESPONSE AND REMEDIATION

CLOSE-OUT CHECKLIST

March 18, 1997
(date revised)

This checklist is a guideline for identifying and assessing exposure pathways and receptors of petroleum contamination from LUST sites. This checklist is intended to expedite the LUST case file close-out process by providing supporting documentation that remaining contamination is not expected to adversely impact those receptors. RCLs, MCLs, or Tier 1 Screening Levels (ASTM, 1994) have been exceeded and site-specific data have subsequently been collected (Tier 2 or 3 Evaluation). The remaining contamination at this site does not appear to present current or future risks to human and environmental health, and site-specific cleanup levels have been set using ASTM, 1994 or other methods.

The spaces provided in this checklist are checked if the condition for the particular exposure criterion applies to supporting and documenting low or no risk. Attach a site map showing analytical results. This recommendation for case file close-out is in accordance with all sections of 40 CFR Subparts E and F, and Utah Administrative Code R306-200.

Project Manager (print) Mark Crum Date 2-17-98 Facility ID 1200443 LUST ID EHBW
 Facility Name and Address Wheatland Lumber 2459 Quincy Ave Ogden UT EJOW
 Closure Peer Group Review and Concurrence (date) _____
 Section Manager Concurrence (signature, date) _____
 Branch Manager Concurrence (signature, date) _____

1.0 ABATEMENT																																										
A. PRODUCT INFORMATION	B. ENVIRONMENTAL and OTHER IMPACTS	C. SOURCE ABATEMENT																																								
<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">PRODUCT RELEASED</th> <th style="width: 33%;">AMOUNT IF KNOWN</th> <th style="width: 33%;">RELEASE RATE IF KNOWN</th> </tr> <tr> <td><input checked="" type="checkbox"/> Gasoline</td> <td><u>UNK</u></td> <td><u>UNK</u></td> </tr> <tr> <td><input type="checkbox"/> Diesel</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Jet Fuel</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Waste oil</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> New Oil</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Other: _____</td> <td>_____</td> <td>_____</td> </tr> </table>	PRODUCT RELEASED	AMOUNT IF KNOWN	RELEASE RATE IF KNOWN	<input checked="" type="checkbox"/> Gasoline	<u>UNK</u>	<u>UNK</u>	<input type="checkbox"/> Diesel	_____	_____	<input type="checkbox"/> Jet Fuel	_____	_____	<input type="checkbox"/> Waste oil	_____	_____	<input type="checkbox"/> New Oil	_____	_____	<input type="checkbox"/> Unknown	_____	_____	<input type="checkbox"/> Other: _____	_____	_____	<ul style="list-style-type: none"> <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Vapors <input type="checkbox"/> Free product <input type="checkbox"/> Surface water <input type="checkbox"/> Homes, businesses, utilities, other structures <input type="checkbox"/> Pipe penetration <input type="checkbox"/> Wells (municipal, domestic, irrigation, stock, other) 	<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 33%;">Leaks</th> <th style="width: 33%;">Source</th> </tr> <tr> <td>Repaired</td> <td>Removed</td> </tr> <tr> <td><input type="checkbox"/> Tank</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Piping</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Dispenser</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Free Product (amount)</td> <td><u>N/A</u></td> </tr> <tr> <td>Contaminated soil (amount)</td> <td><u>N/A</u></td> </tr> <tr> <td>Vapors</td> <td><input checked="" type="checkbox"/></td> </tr> </table> <p>Successful Emergency Measures Taken:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Vapor evacuation <input checked="" type="checkbox"/> Utility line replacement or flushing (sewer, water, other) <input type="checkbox"/> Alternative drinking water supplied <input type="checkbox"/> Residents/workers relocated <input type="checkbox"/> Other, explain: _____ 	Leaks	Source	Repaired	Removed	<input type="checkbox"/> Tank	<input checked="" type="checkbox"/>	<input type="checkbox"/> Piping	<input checked="" type="checkbox"/>	<input type="checkbox"/> Dispenser	<input checked="" type="checkbox"/>	Free Product (amount)	<u>N/A</u>	Contaminated soil (amount)	<u>N/A</u>	Vapors	<input checked="" type="checkbox"/>
PRODUCT RELEASED	AMOUNT IF KNOWN	RELEASE RATE IF KNOWN																																								
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2.0 SITE CHARACTERIZATION																																									
A. ENVIRONMENTAL SENSITIVITY	B. EXPOSURE PATHWAYS AND RECEPTORS																																								
<p>Specify level of environmental sensitivity and point score (See Table / worksheet attached):</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Level I >65 (91) <input type="checkbox"/> Level II 40-65 <input type="checkbox"/> Level III <40 <input type="checkbox"/> Not applicable Other method, describe below: _____ <p>Current Land Use:</p> <p>Residential <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/></p>	<p>Buildings, utility lines, wells, and surface water have been evaluated and determined to be not-at-risk exposure pathways or receptors. Risk-Based Cleanup Levels (RBCLs) have been re-calculated and are expected to be protective of the exposure pathways and receptors identified below:</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"></td> <td style="width: 10%; text-align: center;">Not Likely</td> <td style="width: 10%; text-align: center;">B/T/E/X/N RBCLs</td> <td style="width: 10%; text-align: center;">B/T/E/X/N Observed</td> </tr> <tr> <td>Soil:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Indoor air Inhalation</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Leaching to GW</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Ingestion</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Skin contact</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Groundwater:</td> <td style="text-align: center;">Not Likely</td> <td style="text-align: center;">B/T/E/X/N RBCLs</td> <td style="text-align: center;">B/T/E/X/N Observed</td> </tr> <tr> <td>Indoor air Inhalation</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Ingestion</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> <tr> <td>Skin contact</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> <td></td> </tr> </table>		Not Likely	B/T/E/X/N RBCLs	B/T/E/X/N Observed	Soil:				Indoor air Inhalation	<input checked="" type="checkbox"/>			Leaching to GW	<input checked="" type="checkbox"/>			Ingestion	<input checked="" type="checkbox"/>			Skin contact	<input checked="" type="checkbox"/>			Groundwater:	Not Likely	B/T/E/X/N RBCLs	B/T/E/X/N Observed	Indoor air Inhalation	<input checked="" type="checkbox"/>			Ingestion	<input checked="" type="checkbox"/>			Skin contact	<input checked="" type="checkbox"/>		
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Skin contact	<input checked="" type="checkbox"/>																																								

3.0 SUBSURFACE INVESTIGATION

<p style="text-align: center;">A. EXTENT AND DEGREE OF CONTAMINATION</p> <p><input type="checkbox"/> Extent and degree of contamination are sufficiently defined. <input checked="" type="checkbox"/> Extent and degree of contamination are projected or inferred.</p> <p>Model Used (results and summary attached): _____; Vadose <input type="checkbox"/> Groundwater <input type="checkbox"/> <input type="checkbox"/> Attenuation on-site. <input type="checkbox"/> Attenuation to safe levels off-site. <input type="checkbox"/> Attenuation to safe levels prior to reaching utilities/well/bldgs/surface water.</p>	<p style="text-align: center;">B. SAMPLE COLLECTION</p> <p>Confirmation samples taken after source removal or corrective action: <input type="checkbox"/> Soil <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Vapors <input type="checkbox"/> Surface Water</p> <p><input type="checkbox"/> Confirmation samples not necessary. <input checked="" type="checkbox"/> Asymptotic concentrations observed.</p>
<p>C. REMAINING CONTAMINATION (provide if not separately attached)</p>	
<p>Dissolved Phase: Plume Dimensions (L X W): <u>60' x 20' Approx.</u> Concentrations at source (TPH/B/T/E/X/N mg/L): <u>11 TPH / 301 N</u> Concentrations at leading edge (TPH/B/T/E/X/N mg/L): <u>All - Non-Detect.</u> <u>Sentry well - 2 Events</u> <u>3 yrs apart</u></p>	<p>Adsorbed Phase: Dimensions: (L X W X Thickness; yd³) <u>N/A</u> Concentrations at source (TPH/B/T/E/X/N mg/kg): _____ Concentrations at leading edge (TPH/B/T/E/X/N mg/kg): <u>A</u></p>

4.0 CLEANUP: SUPPORTING INFORMATION FOR LOW RISK

<p><input checked="" type="checkbox"/> Sources of contamination are removed. <input checked="" type="checkbox"/> < 5 yd³ contaminated soil remain in place. <input checked="" type="checkbox"/> > 10' separates contaminated soil from GW. <input checked="" type="checkbox"/> > 10' separates contamination from bldgs/utilities. <input type="checkbox"/> Buildings or utilities do not overlie contamination. <input checked="" type="checkbox"/> Current exposure pathways and receptors appear minimal, limited or non-existent including buildings, utilities, wells, surface water; ingestion, inhalation, leaching. <input type="checkbox"/> Contaminated soil near or in contact with groundwater is not leaching concentrations that will impact receptors.</p> <p>Weathered product evidence: <input type="checkbox"/> Only TPH remains in place. <input checked="" type="checkbox"/> Small periodic overfills and spills. <input type="checkbox"/> Old releases.</p>	<p>Infiltration of recharge water not likely to leach unsafe concentrations based on: <input checked="" type="checkbox"/> Recharge is very low. <input type="checkbox"/> Recharge water not acmally/likely to reach adsorbed contamination.</p> <p>Natural attenuation and transport and fate mechanisms are reducing contaminant concentrations and risk of exposure: <input type="checkbox"/> Adsorption/Desorption <input type="checkbox"/> Biodegradation <input type="checkbox"/> Advection/Dispersion <input type="checkbox"/> Volatilization <input type="checkbox"/> Chemical mobility <input type="checkbox"/> Physical mobility</p> <p><input checked="" type="checkbox"/> Hydrocarbons of highest toxicity (BTEXN) are not present in groundwater or known to exist. <input type="checkbox"/> Hydrocarbons of highest toxicity (BTEXN) are not present in soil or known to exist. <input type="checkbox"/> Other toxic compounds analyzed are not present or known to exist.</p>	<p><input type="checkbox"/> Further cleanup does not appear to be achievable based on: <input type="checkbox"/> Technological feasibility <input type="checkbox"/> Cost-Effectiveness (excessive cost/benefit)</p> <p>Current land use restrictions not likely based on: <input type="checkbox"/> No receptors are present. <input checked="" type="checkbox"/> Receptors not likely to be exposed to unsafe concentrations. <input type="checkbox"/> Other: _____</p> <p>Future land use restrictions not likely based on: <input checked="" type="checkbox"/> Historical land use well-established and not likely to change or become more sensitive. <input type="checkbox"/> Remaining contamination not likely to impact future bldgs or utilities. <input type="checkbox"/> Other: _____</p>
---	--	--

ADDITIONAL COMMENTS: This lumber yard facility had two USTs removed on two separate occasions, 1992 & 1995. For each closure event, soil contamination was never detected but groundwater (GW) did show levels of benzene as high as .734 ppm (1992), TPH as high as 40.7 (1992) and naphthalene up to .301 ppm in the 1995 sampling event. Although the USTs were removed separately, they were located in the same area of the site. A ground water sampling point was put in place down gradient of the UST area, about 25' and was sampled two times, once after each of the UST removals in 1992 & 1995. Each of those GW sampling events showed non-detect for BTEXN/TPH concerns. The GW contamination reflected in the two UST closure events may have been attributed to the UST removal process itself. No soil contamination is apparent, on-site receptors are not threatened and a down gradient sentry well has not been impacted. Closure is recommended.

It is recommended that the release case file for the above-referenced facility be closed out based on the information provided by the facility owner/operator, which is described in this checklist. This recommendation is based on the condition that if future evidence indicates contamination at or emanating from this site, additional investigation and/or remediation may be required.

2-17-98
 Date

Project Manager (signature)

**Table 1
Environmental Sensitivity Evaluation Ranking Criteria and Point Score**

Site-Specific Factors (* Identify and explain the extenuating circumstances here)	Ranking Score	Enter Site Data	Unknown (specify DERR research)	Final Ranking Score
Distance from Contamination to Groundwater (feet) >100 100 to 75 75 to 50 50 to 25 25 to 10 <10, or recharge area	0 4 8 12 16 20	~12'		16
Native Soil Type: Low permeability (PT, OH, CH, MH, OL, CL, ML) Mod. permeability (SC and SM) High permeability (GM, GP, GW, GC, SW, SP, SM)	0 10 20			20
Annual Precipitation (inches) 10 10 to 20 >20	0 5 10	215		5
Distance to Nearest Municipal Production Well (feet) >5280 1320 to 5280 500 to 1320 <500	0 8 10 15	1300		10
Distance to Other Wells (feet) >1320 300 to 1320 <300	0 5 10	1250' 1100'		5
Distance to Surface Water (feet) >1000 300 to 100 <300	0 2 5	>1000'		0
Potentially Affected Populations within 3-mile Radius <100 100 to 3000 >3000	0 10 20	>3K		20
Presence of Onsite or Adjacent Utility Conduits Not Present Unknown Present	0 14 15	Present		15
Final Score (>65=Level I, 40-65=Level II, <40=Level III)				91

level I

RESULTS

TABLE I
 ANALYTICAL TEST RESULTS

UST # 1
 Closure 1992

Confirm
 - Super Samp.

UST # 2
 Closure 1995

Confirm #2 U
 T & Tech.
 1995

Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/l ppm	Benzene mg/l ppb	Toluene mg/l ppb	Ethyl Benzene mg/l	Total Xylene mg/l	Naphthalene mg/l
11/23/92	BSS#1-7	Water	—	2.1	40.7	0.734	1.580	0.361	2.330	0.172
11/23/92	BUS#1	Water	—	2.1	2.5	<2	<2	<2	69.1	<2
11/23/95	BSS#2	Water	—	2.1	<.5	<2	<2	<2	<6	<21.6
9/15/95	HSS#1	Water	—	2.1	<.5	<2	9.8	5.1	41.4	.005
9/15/95	HSS#2	Water	—	2.1	11	<20	391	150	1570	.301
11/03/95	TRINS#1	Water	—	2.1	<5	<2	<2	<2	<5	<2
Utah RBCA Tier I Drinking Water					10.0	0.300	7.000	4.0	73.0	0.100
					—	0.005	1.000	0.7	10.0	0.020

TABLE II
 SOIL ANALYTICAL DATA ng/kg (ppm)

UST Closure
 1995.
 All soils
 Below
 Detection

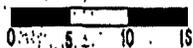
Date of Sample	Sample Location	Sample Medium	USC	Sample Depth meters	TPH mg/l ppm	Benzene mg/l ppb	Toluene mg/l ppb	Ethyl Benzene mg/l	Total Xylene mg/l	Naphthalene mg/l
08/28/91	BSS#1-D	Soil	SN	1.0	<10.0	<.005	<.005	<.005	<.015	<.005
9/15/95	NSS#3-1	Soil	SN	1.0	<10.0	—	—	—	—	—
10/04/95	HSS#1	Soil	SP	2.1	<10.0	<.005	<.005	<.005	<.015	<.005
10/04/95	NSS#2	Soil	SP	2.1	<10.0	<.005	<.005	<.005	<.015	<.005
10/06/95	NSS#3-a	Soil	SN	1.0	<10.0	<.005	<.005	<.005	<.015	<.005
Utah RBCA Tier I					1500.0	0.900	61.000	23.0	235.0	10.000

CONCLUSIONS AND RECOMMENDATIONS

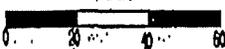
No contamination appears to be left on this site. Soils were excavated to non-detect levels under the supervision of the County Health Department and the limited contamination in the water has attenuated naturally to non-detect levels.

SAMPLE TABLE		
Sample	Description	Depth (meters)
BSS-1	8/28/81 Dispenser (soil)	1
BWS-1	8/22/91 Water h excavation (water)	2.1
BWATER	10/1/91 Water east sump (water)	2.1
MWS#1	9/16/95 East end 4000 gallon tank (water)	2.1
MWS#2	9/16/95 West end 4000 gallon tank (water)	2.1
MSS#1	10/4/95 Northwest side @ 7 feet (soil)	2.2
MSS#2	10/4/95 Northeast side @ 7 feet (soil)	2.2
MSS#3A	10/6/95 Under the dispenser (soil)	1
TRTW#1	11/3/95 West sump (water)	2.1

APPROXIMATE SCALE
 METERS

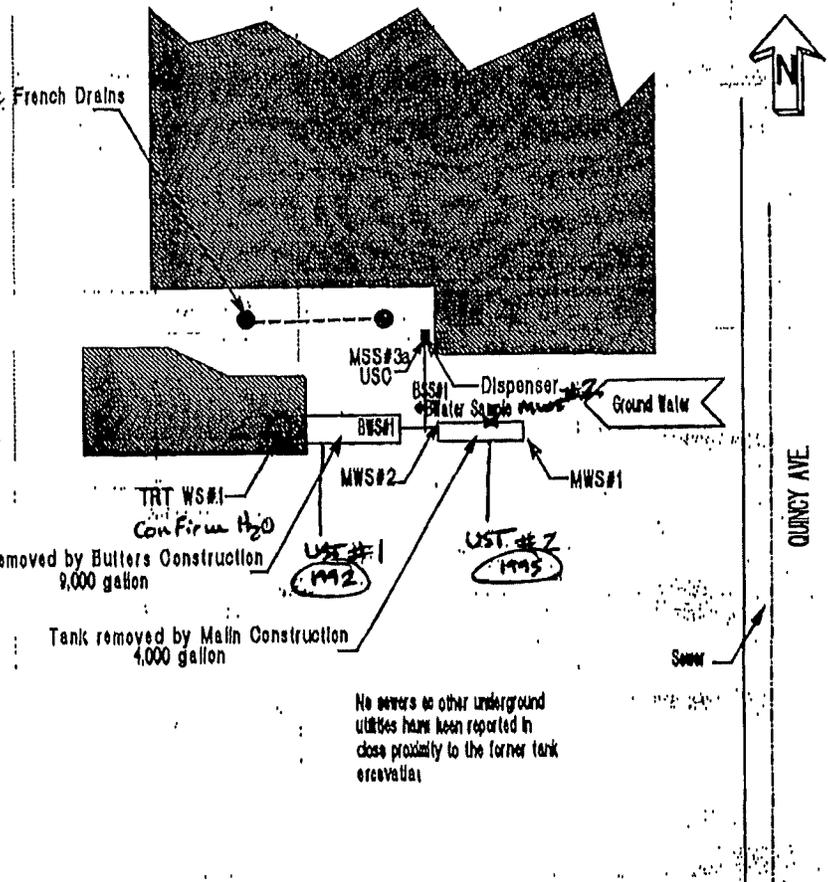


FEET



SAMPLES

Butlers (B) 68095
 Malin (M) 68031
 IRTech (TRT) 68023



26th STREET

QUINCY AVE

SITE PLAN
 WHEELRIGHT LUMBER
 2459 QUINCY AVENUE
 OGDEN, UTAH

APPENDIX J
ADSCO LUST FILE



State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENVIRONMENTAL RESPONSE AND REMEDIATION

Michael O. Leavitt
Governor
Dianne R. Nielson, Ph.D.
Executive Director
Kent P. Gray
Director

168 North 1950 West
P.O. Box 144840
Salt Lake City, Utah 84114-4840
(801) 536-4100 Voice
(801) 359-8853 Fax
(801) 536-4414 T.D.D.

FILE COPY

ERRL-0307-95

April 10, 1995

Mr. Alan Gould
AdSCO Services, Inc.
2527 Gramercy Avenue
Ogden, Utah 84401

Re: Release Site EHG, AdSCO Protective Services, 855 25th Street, Ogden, Utah
Facility Identification No. 1200147

Dear Mr. Gould:

The Utah Division of Environmental Response and Remediation (DERR) has reviewed the case file for the facility identified above. Your state project manager has recommended that no further action be taken at this time, based upon review of the information contained in the file. The DERR staff has not made an independent investigation of the site but has relied on the information supplied by you or your consultant.

The information indicates that the petroleum release at the facility no longer poses a threat to human health or the environment at this time. In the future, if other evidence indicates a spread of contamination from the Facility which may cause a threat to human health or the environment, the DERR may require further action.

Sincerely,

Kent P. Gray, Executive Secretary (UST)
Utah Solid and Hazardous Waste Control Board

KPG/SBQ/jf

cc: Craig Heninger, M.S., Acting Director, Weber/Morgan District Health Department

SCANNED



DERR 1995-000804

UST Site Close-out Checklist

The recommendation for case file close-out is in accordance with all sections of 40 CFR Subparts E and F, and Utah Administrative Code R311-200.

Project Manager Shelley Pugh Date 12-13-94 Facility ID 200147 LUST ID HGV
 Facility Name and Address Adco Services, Inc 2527 Gomer Ave Ogden UT
 Peer Group Review and Concurrence _____
 Section Manager Concurrence (signature) _____
 Branch Manager Concurrence (signature) _____
 Executive Secretary (signature) [Signature] 4-11-95

Check the applicable spaces provided and describe in the Summary.

1.0 RELEASE CHARACTERIZATION 40 CFR Subpart E																										
A. SOURCE OF CONTAMINATION	B. PRODUCT		C. TYPE OF RELEASE																							
<input checked="" type="checkbox"/> UST System <input type="checkbox"/> Contaminated Soil <input type="checkbox"/> Free Product <input type="checkbox"/> Impact is from offsite <input type="checkbox"/> Other	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">PRODUCT RELEASED</th> <th style="width: 33%;">AMOUNT IF KNOWN</th> <th style="width: 34%;">RELEASE RATE IF KNOWN</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Gasoline</td> <td style="text-align: center;"><u>na</u></td> <td style="text-align: center;"><u>na</u></td> </tr> <tr> <td><input type="checkbox"/> Diesel</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input checked="" type="checkbox"/> Waste oil</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> New Oil</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Jet Fuel</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td>_____</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table>	PRODUCT RELEASED	AMOUNT IF KNOWN	RELEASE RATE IF KNOWN	<input checked="" type="checkbox"/> Gasoline	<u>na</u>	<u>na</u>	<input type="checkbox"/> Diesel	_____	_____	<input checked="" type="checkbox"/> Waste oil	_____	_____	<input type="checkbox"/> New Oil	_____	_____	<input type="checkbox"/> Jet Fuel	_____	_____	<input type="checkbox"/> Other	_____	_____	<input type="checkbox"/> Unknown	_____	_____	Describe how the source of contamination was discovered: <input checked="" type="checkbox"/> UST system closure <input type="checkbox"/> Spill/Overflow <input type="checkbox"/> Precision test failure (TTT, LTT) <input type="checkbox"/> Other <input type="checkbox"/> Property Assessment <input type="checkbox"/> Site Assessment <input checked="" type="checkbox"/> Tank(s); indicate size, date installed, date last used, which one(s) leaked. <input type="checkbox"/> Piping (suction, pressure) <input type="checkbox"/> Pump/Dispenser <input type="checkbox"/> Unknown <input type="checkbox"/> Other
PRODUCT RELEASED	AMOUNT IF KNOWN	RELEASE RATE IF KNOWN																								
<input checked="" type="checkbox"/> Gasoline	<u>na</u>	<u>na</u>																								
<input type="checkbox"/> Diesel	_____	_____																								
<input checked="" type="checkbox"/> Waste oil	_____	_____																								
<input type="checkbox"/> New Oil	_____	_____																								
<input type="checkbox"/> Jet Fuel	_____	_____																								
<input type="checkbox"/> Other	_____	_____																								
<input type="checkbox"/> Unknown	_____	_____																								
D. INVESTIGATIVE METHODS	E. ANALYTICAL METHODS		F. ENVIRONMENTAL IMPACTS																							
<input checked="" type="checkbox"/> Excavation <input type="checkbox"/> Soil samples <input checked="" type="checkbox"/> Water samples <input type="checkbox"/> Test Pits <input type="checkbox"/> Soil samples <input type="checkbox"/> Water samples <input checked="" type="checkbox"/> Soil Borings <input type="checkbox"/> Soil samples <input checked="" type="checkbox"/> Water samples <input type="checkbox"/> GW Monitor Wells <input type="checkbox"/> Geoprobe, Hydropunch, CPT <input type="checkbox"/> Soil samples <input type="checkbox"/> Water samples <input type="checkbox"/> Soil Vapor Survey <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Chemical analysis (fixed or mobile lab) Field Screening Methods: <input type="checkbox"/> PID/Hnu <input type="checkbox"/> PID/OVM <input type="checkbox"/> FID/OVA <input type="checkbox"/> Other <input type="checkbox"/> Olfactory/Visual <input type="checkbox"/> Immunoassay <input checked="" type="checkbox"/> 8015 modified (TPH) for gas/diesel) <input type="checkbox"/> 413.1 (oil & grease) <input type="checkbox"/> 418.1 (TRPH) <input checked="" type="checkbox"/> 602/8020 aromatic volatiles <input type="checkbox"/> 624/8240 volatiles <input type="checkbox"/> 625/8270 semi volatiles <input type="checkbox"/> 7421 lead <input type="checkbox"/> 610/8100 or 8310 PAHs <input type="checkbox"/> 608 or 617/8080 PCBs <input type="checkbox"/> Other method(s)		<input type="checkbox"/> Soil <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Vapors <input type="checkbox"/> Free product <input type="checkbox"/> Surface water <input type="checkbox"/> Homes, businesses, utilities, other structures, <input type="checkbox"/> Pipe permeation <input type="checkbox"/> Wells (municipal, domestic, irrigation, stock, other)																							

2.0 SITE CHARACTERIZATION
40 CFR Subpart F

<p>A. ENVIRONMENTAL SENSITIVITY</p> <p>Specify level of environmental sensitivity and point score:</p> <p><input checked="" type="checkbox"/> Level I >65</p> <p><input type="checkbox"/> Level II 40-65</p> <p><input type="checkbox"/> Level III <40</p> <p><input type="checkbox"/> Not applicable</p> <p><input type="checkbox"/> Other method, describe</p>	<p>B. SITE MAP</p> <p><input checked="" type="checkbox"/> Site Map is attached, appropriately scaled and oriented map, maximum size 11 X 17 inches, showing the following on-site features at a minimum:</p> <ul style="list-style-type: none"> • Structures, buildings, homes, businesses • Utilities • UST systems • Locations of samples collected, wells, borings, excavations, test pits, etc. • Extent of contamination before contamination before corrective action • Extent of contamination before contamination after corrective action • Other relevant features 	<p>C. PRESENT ANALYTICAL DATA</p> <p><input type="checkbox"/> Tabulated analytical data attached showing initial and final concentrations (Tables A and B for soil and groundwater may be used).</p> <p><input checked="" type="checkbox"/> Analytical data presented on site map.</p> <p><input type="checkbox"/> Concentrations before corrective action</p> <p><input checked="" type="checkbox"/> Concentrations after corrective action</p>
---	--	---

3.0 ABATEMENT and CORRECTIVE ACTION
40 CFR Subpart F

<p>A. TECHNOLOGY</p> <ul style="list-style-type: none"> • Corrective action technology used to remove/treat the source and contaminated media and/or product described in Summary. • Amount and type of medium treated and/or removed described in Summary. • Disposal location of contaminated media described in Summary. 	<p>B. OTHER MEASURES TAKEN</p> <p><input type="checkbox"/> Describe emergency abatement measures</p> <p><input type="checkbox"/> Vapor evacuation</p> <p><input type="checkbox"/> Utility line replacement</p> <p><input type="checkbox"/> Alternative drinking water supplied</p> <p><input type="checkbox"/> Residents or workers relocated</p> <p><input type="checkbox"/> Other</p> <p style="text-align: center;"><i>NA</i></p>	<p>C. MAGNITUDE OF CONTAMINATION</p> <p>Confirmation samples taken:</p> <p><input type="checkbox"/> Soil</p> <p><input checked="" type="checkbox"/> Groundwater</p> <p><input type="checkbox"/> Vapors</p> <p><input type="checkbox"/> Surface Water</p> <p><input type="checkbox"/> Explanation if none taken</p> <p><input type="checkbox"/> Extent and degree of contamination were sufficiently defined.</p> <p><input type="checkbox"/> Extent and degree of contamination were projected or inferred.</p>
---	---	--

4.0 CLEANUP LEVELS FOR SOIL AND GROUNDWATER (or other media as necessary)
UAC R311-211, 40 CFR Subpart F

<p>CASE 1</p> <p><input checked="" type="checkbox"/> Risk-based decision for case file close-out. Cleanup to established cleanup levels was not achieved, however extenuating circumstances exist which justify a low risk of remaining contamination on human and environmental health. Current and potential impacts to human and environmental health appear low and further environmental degradation is not expected. Rationale for the extenuating circumstances is provided by a discussion in the Summary of the applicable elements listed below.</p>		
<p><input checked="" type="checkbox"/> Volume of contaminated media</p> <p><input checked="" type="checkbox"/> Age of release (weathered product)</p> <p><input type="checkbox"/> In situ degradation is observed</p> <p><input checked="" type="checkbox"/> Attenuation is observed due to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adsorption/desorption <input checked="" type="checkbox"/> Biological degradation <i>probable</i> <input checked="" type="checkbox"/> Dilution <input type="checkbox"/> Evidence for all of the above <p><input checked="" type="checkbox"/> Fluctuating groundwater levels has assisted in reducing contaminant concentrations <i>probable</i></p>	<p><input checked="" type="checkbox"/> Contaminated soil in contact with groundwater is not leaching unsafe concentrations</p> <p><input type="checkbox"/> Transport and fate of contaminant(s) are estimated to represent a low risk based on:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Chemical mobility <input type="checkbox"/> Physical mobility <input type="checkbox"/> Persistence <input type="checkbox"/> Degradability <input type="checkbox"/> Computer modeling results (attached) <input type="checkbox"/> Toxicity 	<p><input type="checkbox"/> Source of contamination is removed</p> <p><input type="checkbox"/> Further cleanup does not appear to be achievable based on:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Technological feasibility <input type="checkbox"/> Cost-Effectiveness <p><input checked="" type="checkbox"/> Current exposure pathways appear to be minimal, limited or non-existent</p> <p><input checked="" type="checkbox"/> Current land use is not likely to be restrictive</p> <p><input checked="" type="checkbox"/> Future land use is not likely to be restrictive</p>
<p align="center">CASE 2</p> <p><input type="checkbox"/> Cleanup to below established cleanup levels was achieved, but detectable concentrations remain in place. Reference the document and date on which cleanup levels were established.</p>	<p align="center">CASE 3</p> <p><input type="checkbox"/> Cleanup to background levels or below detection levels was achieved.</p>	

SUMMARY

Provide a type- or hand-written detailed summary of the site history, source of contamination, and abatement and remedial measures that were used to clean up the contamination. Provide rationale why conditions remaining at the site will not adversely impact water quality, environmental health, or other beneficial uses.

Project Manager Shelly Quick Date 4-3-95 Facility ID 1200147 LUST ID H6V
Facility Name and Address Adco Services 2527 Grammery Qden
Peer Group Review and Concurrence _____
Management Approval _____

The source of contamination has been removed. The highest levels of contaminants were expected to be encountered at the source area, however biodegradation and dispersion have ~~caused~~ natural attenuation to occur. Even though no samples were collected downgradient of the source area, it is expected that if the source area measures non-detect for BTEX+TPH that there is no significant health or environmental risk associated with this site.

Shelly Quick
Project Manger (signature)

4-3-95
Date

It is recommended that the release case file for the above-referenced facility be closed out based on the information provided by the facility owner/operator, which is described in this checklist. This recommendation is based on the condition that if future evidence indicates contamination at or emanating from this site, additional investigation and/or remediation may be required.

Site Summary for Adco Protective Services
Facility I.D. 1200147
Lust I.D. EHG V

On August 5 1991, a 10,000 gallon gasoline and a 1000 gallon waste oil tank was permanently closed. Two soil samples were collected in the waste oil excavation and the results were well below recommended cleanup levels for a level one site sensitivity.

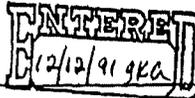
Two groundwater samples were collected in the gasoline excavation since groundwater was encountered in the excavation. 35 ppm TPH was analyzed in the sample, BTEX was not analyzed.

No work was conducted until August 1994. The responsible party hired a consultant to bore two holes near the excavation and analyze the groundwater. One boring was placed in the excavation and water was sampled. TPH & all BTEX constituents were below detectable levels. Several attempts were made to advance another boring, however, it was unsuccessful. Even though soil samples were not collected, the soil type is very permeable (gravelly sand) and the floor of the tank excavation was in or very near the groundwater table. It is expected that spill and overfill would have migrated directly to groundwater and has dispersed, diluted and degraded after each episode. There have never been reports of vapors in the home or businesses on or near the site. There have been no preferential pathways identified at the site that would allow contamination left in place at the site to migrate to a receptor. There does not appear to be any present or future threat to human health or the environment based on all information submitted to the DERR by the responsible party and his consultant.

I recommend that no further action be required at this site.

Duplicate

CLOSURE NOTICE



Facility ID # 1200147
Phone 782-1499

TANK OWNER Name AL GOULD
Address 855 E. 25TH ST.
City OGDEN State UT Zip 84401

TANK OPERATOR/LOCATION Name, Title ADSCO AL GOULD
Business Name ADSCO PROTECTIVE SERVICE
[] proprietorship, [X] corporation, [] partnership. Phone _____
Address 855 E. 25TH ST.
City OGDEN County WEBER Zip 84401

TANK HANDLER Name R. NED MALAN Cert. # TR0092
Address 648 N. ECCLES, OG. UT 84404 Phone 782-5707

SOIL/GROUNDWATER SAMPLER Name R. NED MALAN Cert. # 650134
Address 648 N. ECCLES, OG. UT 84404 Phone 782-5707

TYPE OF CLOSURE [X] Permanent [] Temporary [] Change-In-Service
Permanent or Change-in-Service
Date Closed 8/5/91 [X] Removed [] In-place
[X] Fuel was emptied. [] Sludge was removed. [] Tank was cleaned.
Tank was: [] Purged, [X] Inerted. Method Used: DRY ICE
Location of Closure Records R. NED MALAN
Substance to be stored for Change-In-Service N/A

Temporary
Date of Closure N/A [] Fuel was emptied.
Residue depth remaining in tank _____ or, % by weight of total capacity of UST: _____
[] Corrosion protection equipment is operating. [] Release detection equipment is operating.
3 months: [] Vent lines open Cap/Secure: [] lines [] pumps [] manways
12 months: [] Permanently closed [] New/Upgraded [] Extension

TANKS CLOSED		UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY	
Tank #	<u>1</u> <u>2</u>	DEC 02 1991 <u>zps</u>	
Age of tank	<u>30YRS</u> <u>30YRS</u>	DIV. OF ENVIRONMENTAL RESPONSE AND REMEDIATION	
Capacity	<u>1000</u> <u>1000</u>		
Subs. stored*	<u>GAS</u> <u>WASTE OIL</u>		
Date last used	_____		

*Indicate the specific substance stored in each tank closed (regular, unleaded, diesel, waste oil, etc.)

DISPOSAL SITES USED:

Tank: ATLAS STEEL Date 8/5/91 Number _____
 Product from Tank: REG. GAS Date _____ Amount _____
 Sludge: NONE Date _____ Amount _____
 Contaminated Soils: NONE Date _____ Amount _____
 Contaminated Water: NONE Date _____ Amount _____

SITE ASSESSMENT (A copy of the lab analysis report must be attached to this notice)

Groundwater samples: TPH: 8015 modified; Oil & Grease: [] 413.1 [] 418.1
 Other: _____, BETX: [] 8020

Results: _____

Soil samples: TPH: [] 8015 modified; Oil & Grease: 413.1 [] 418.1
 Other: _____, BETX: [] 8020

Results: _____

Certified Laboratory: UTILITY TESTING LABORATORY
 Address: 875 S. CHESTNUT ST., S.L.C., UT 84104

CHAIN OF CUSTODY FORM (A copy of the form must be attached to this notice)

Samples were properly: Collected Labeled [] Packaged Transported
 Samples were in sight of the person in custody at all times or in a secured locked place.

I certify under penalty of law that I am familiar with the information on this form and that it is true, accurate and complete and further, that the procedures described herein were followed during tank closure.

Signature of UST Owner/Operator Alan Dee Gould
 Full name of Owner/Operator Alan Dee Gould Date 8-2-91



September 6, 1994

**ENVIRONMENTAL
CONTRACTORS**
INCORPORATED

UTAH DEPARTMENT OF
ENVIRONMENTAL QUALITY

SEP 19 1994

Ms. Shelly Quick
Department of Environmental Response and Remediation
168 North 1950 West
Salt Lake City, Utah 84116

DIV. OF ENVIRONMENTAL
RESPONSE AND REMEDIATION

Subject: Groundwater Sampling/Petition for Site Closure Report
Release Site #1229 EHG
Facility I.D. #1200147
855 East 25th Street
Ogden, Utah

Dear Ms. Quick,

Environmental Contractors, Inc. has been retained by Mr. Alan Gould to sample groundwater within the former excavation at the subject property (or "site") located at 855 East 25th Street in Ogden, Utah. This action had been coordinated with Ms. Shelly Quick, DERR project manager. It was agreed that a hand auger would be used to collect groundwater samples from opposite ends of the excavation and samples would be analyzed for TPH and the aromatic hydrocarbons (BTEXN).

SITE HISTORY

UST Closure Notice data indicate one 10,000 gallon gasoline tank was removed from a single excavation on August 5, 1991. A petroleum hydrocarbon release was subsequently to the DERR (formerly the "Bureau of Environmental Response and Remediation"). Chemical analytical data listed Total Petroleum Hydrocarbon (TPH) concentrations of 35 ppm and 30 ppm in water sampled from the excavation.

Note: Because water was encounter in the excavation, no soil samples were collected and BTEXN was not analyzed in the water samples following established UST closure protocol at the time of closure.

GROUNDWATER SAMPLING

On August 23, 1994, the site was visited for the purpose of sampling groundwater. An initial boring, located at the south central end of the former excavation (Figure 1), was completed below groundwater using a hand auger equipped with a three-inch diameter bit. Groundwater was encountered at approximately 7 feet and the boring was extended to 8.5 feet. Well materials including a 5-foot section of PVC slotted (0.01) well screen were inserted into the boring to serve as a make-shift well. Groundwater was allowed to stabilize within the "well" for approximately one hour before sampling.

210 W. 200 N. Suite 205
PROVO, UTAH 84601
TEL: 801-373-2727
SLC: 801-561-8279
FAX: 801-374-9414

A second boring was attempted near the north-central end of the former excavation. Cobbles were encountered in the boring approximately 3 feet below grade rendering the hand auger useless. Four other attempts were made to complete a boring (moving progressively toward the center of the excavation) with the same results (Figure 1). Apparently, the excavation was backfilled with coarse material and the completion of the initial boring to groundwater was fortuitous.

QA/QC - CHEMICAL ANALYTICAL RESULTS

Groundwater sampled from the initial "well" was containerized in 40 ml glass "VOC" vials allowing no headspace. The sample was immediately placed in cold storage and transported under chain-of-custody to Utility Testing Laboratory, an E.P.A. and State-certified laboratory, for analysis of total petroleum hydrocarbons (TPH, EPA method #8015 modified), and aromatic hydrocarbons: benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEXN, EPA method 602/SW-846 #8020). The chemical analytical report and chain of custody are attached in Appendix A.

Chemical analyses list TPH and BTEXN concentrations below instrumental detection limits.

CONCLUSIONS AND RECOMMENDATIONS

Our assessment of the present groundwater condition in the vicinity of the former excavation is limited to one groundwater sample from the south-central end of the excavation. Course backfill materials in the excavation frustrated our efforts to collect a second water sample near the north-central end of the excavation. Although a second sample would have been desirable, a single sample may be sufficient to evaluate petroleum hydrocarbons within a relatively small sample target area (the former excavation). Considering the fact that no petroleum hydrocarbons were detected in the water sample at the former source of release, we recommend no further action be required at this site.

LIMITATIONS

Our services consist of professional opinions and recommendations made in accordance with generally accepted environmental engineering principles and practices at the time of execution. This warranty is in lieu of all other warranties either expressed or implied.

Respectfully submitted,
Environmental Contractors, Inc.



Lyle V. Phillips, Ph.D.
Project Geologist

Appendix A

CHEMICAL ANALYTICAL REPORT

UTILITY TESTING LABORATORY

875 SO. CHESTNUT ST.
P. O. BOX 25005
SALT LAKE CITY, UTAH 84125
PHONE: (801) 973-8305
FAX: (801) 973-8333

August 30, 1994

Environmental Contractors
210 West 200 North
Provo, UT 84601

Attention: Mr. Lyle Phillips

Subject: TPH/BTEX Testing - Proj. - ADSCO

Sample Collected: 23 Aug 1994

Sample Received: 23 Aug 1994

TOTAL PETROLEUM HYDROCARBONS (TPH) - GASOLINE & DIESEL (MODIFIED CALIFORNIA METHOD 8015) METHOD DETECTION LIMITS: 10 ppm SOIL, .5 ppm WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results mg/Kg, mg/L (ppm)</u>
08-23-94-11	SOUTH CENTRAL EXCAVATION	< 0.5 mg/L Gasoline < 0.5 mg/L Diesel < 0.5 mg/L TPH
Date Analyzed: 27 AUG 1994		

BTEX

SW-846 METHOD 8020 (SOIL), METHOD 602 (WATER)
USING PURGE & TRAP METHOD 5030
METHOD DETECTION LIMITS: 5 ppb SOIL, .3 ppb WATER
PRACTICAL QUANTITATIVE LIMIT: 5 ppb SOIL, 2 ppb WATER

<u>Test No.</u>	<u>WATER SAMPLE</u>	<u>Test Results µg/Kg, µg/L (ppb)</u>
08-23-94-11	SOUTH CENTRAL EXCAVATION	< 2 µg/L Benzene < 2 µg/L Toluene < 2 µg/L Ethylbenzene < 6 µg/L Xylenes, Total < 2 µg/L Naphthalene
Date Analyzed: 29 AUG 1994		

UTILITY TESTING LABORATORY


D. M. Thorsen



ENVIRONMENTAL
CONTRACTORS
INCORPORATED

PROJECT NAME: <u>ADSC0</u>				SAMPLER: <u>Jule Phillips</u>		
SAMPLE NUMBER	SAMPLE LOCATION	DATE	TIME	SAMPLE/TYPE	# OF CONT	ANALYSIS REQUESTED
<u>TW-5</u>	<u>South-central excavation</u>	<u>8/23/94</u>	<u>10:09 am</u>	<u>H₂O</u>	<u>2-40ml</u>	<u>BTEXN TPH</u>
Relinquished by (signature) <u>Jule Phillips</u>		Received by (signature) <u>Just Boevers</u>			Date/Time <u>August 23, '94 1:30pm</u>	
Relinquished by (signature)		Received by (signature)			Date/Time	
Relinquished by (signature)		Received by (signature)			Date/Time	
Shipped by (sign)	Date/Time	Received for Laboratory by:			Date/Time	
Method of Shipment:						



25th Street

grass

sidewalk

asphalt

UST excavation area

house/law office

building

cement

garage

legend



soil boring completed to groundwater



unsuccessful borings



ECI

Environmental Contractors, Inc

Date
9/8/94

Scale
1"=15'

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Figure 1
Site Map