Phase I
Environmental Site Assessment
225 S. 2nd Street
Grand Junction, Colorado

Avant Project Number: 9047-1
July 30, 2015

Avant
ENVIRONMENTAL SERVICES INC.

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Grand Junction, Colorado

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Submitted by:

Avant Environmental Services Inc.
120 Mesa Grande Drive
Grand Junction, Colorado 81507-1551
(970) 260-8468

Prepared for:

John Shaver, City Attorney
City of Grand Junction
250 N. 5th Street
Grand Junction CO 81501

Author: _____

Edward M. Baltzer, CPG, CHMM
Project Manager

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in Section 212.10 of 40 CFR part 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 conformance with the standards and practices set forth in 40 CFR Part 312.

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ACRONYMS AND ABBREVIATIONS

AST	Above-ground Storage Tank
ASTM	American Society for Testing and Materials
Avant	Avant Environmental Services Inc.
BTEX	benzene, toluene, ethylbenzene, and xylenes
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
DDA	Grand Junction Downtown Development Authority
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
LUST	Leaking Underground Storage Tank
MINES	Mines Master Index File
MSHA	Mine Safety and Health Administration
NFRAP	No Further Remedial Action Planned
NPL	National Priority List
NRCS	Natural Resource Conservation Service (formerly Soil Conservation Service)
NTIS	National Technical Information Service
OPS	Colorado Department of Labor and Employment, Oil and Public Safety
PCBs	Polychlorinated Biphenyls
RCRA	Resource Conservation and Recovery Act
RCRIS	RCRA Inventory System
ROD	Records of Decision
Site	225 S. 2nd Street, Grand Junction, Colorado
SPL	State Equivalent Priorities List
SQGs	Small Quantity Generators
TSD	Treatment, Storage, and Disposal
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VCUP	Colorado Voluntary Clean-Up

EXECUTIVE SUMMARY

This ESA was conducted by Avant Environmental Services Inc. (Avant) on behalf of the City of Grand Junction as due diligence pursuant to an option agreement on the subject property. Avant has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 of 225 S. 2nd Street, Grand Junction, Colorado (the Site). Any exceptions to, or deletions from, this practice are described in the section where they occur in this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- The Site has historically been used as a pawn shop, for equipment rental, and for equipment and vehicle repair and maintenance. It currently has a large amount of pawned and used items for sale and is an active business. A thorough inspection of all floors and walls could not be conducted owing to cover by the stored materials.
- A sand trap that leads to interior floor drains exists at the Site. This system may have historically been used to convey regulated wastes off of the Site, and may have resulted in contamination of the soil and/or groundwater near the sand trap.
- Various building materials in the structure may contain asbestos (e.g. ceiling tile, texture, flooring). An asbestos inspection is required prior to any activities that could result in damage or disposal of these potentially asbestos containing materials.
- Some items on the premises may not be discarded into the trash. These include florescent lamps, liquids, aerosol cans, and electronics. These are considered either “hazardous” or “universal” wastes and must be discarded or recycled in a manner consistent with regulations.
- An oil stain is present in the graveled yard; this was reported to be a hydraulic fluid leak by the Operator. It does not appear to be extensive, but should be excavated and properly disposed or otherwise remediated.

Based on the findings of this Phase I Environmental Site Assessment (ESA), Avant recommends removing and properly disposing of all wastes, inspection and removal of contents from the sand trap, and removal of the oil-stained soil. An asbestos inspection of the structure should be conducted prior to any activities that would affect potentially asbestos-containing materials, such as remodeling or demolition. A re-inspection of the premises is recommended once all stored material is removed.

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1 INTRODUCTION

This report presents the findings of a Phase I Environmental Site Assessment (ESA) conducted on 225 S. 2nd Street, Mesa County parcel number 2945-143-25-004 (the "Site", see Figure 1). This ESA was prepared by Avant Environmental Services Inc. (Avant) on behalf of the City of Grand Junction (the ESA "User").

1.1 Purpose

This ESA was performed in anticipation of a purchase option of the real property by the User. The objective of this assessment is to provide information regarding the environmental condition of the Site.

1.2 Scope of Service

This ESA consisted of a review of available local, county, state, and federal documents; examination of historical aerial photographs, topographic maps, city directories, and fire insurance maps; interviews; and a visual inspection of the Site. This ESA was conducted in accordance with American Society of Testing and Materials (ASTM) Standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM, 2013).

1.3 Previous Reports

The Site had uranium mill tailings removed and a removal report was generated. A copy of this report is included in Appendix B.

1.4 Assumptions, Limitations, and Exceptions

In preparing the conclusions to this ESA, Avant assumed that information provided by others is reliable and makes no warranty to its accuracy. No significant limitations or deviations from the ASTM standard were encountered. Minor deviations from the ASTM standard are described in the sections where they occur. The contacts made for conducting this ESA are listed in Appendix A. No sampling of soil, water, building materials, or other material was conducted.

No interviews with prior owners or operators were conducted.

2 SITE DESCRIPTION

2.1 Site Location and Legal Description

The Site is located at 225 S. 2nd Street, at the southwest edge of the downtown core of Grand Junction, Colorado. The Site consists of approximately 0.85 acres of developed land situated in the southwest quarter of the southwest quarter of Section 14, Township 1 south, Range 1 west of the Ute Principal Meridian. Its legal description is Lots 13 to 24 Inclusive, block 122 Grand Junction - Except Beg SW Corner Lot 24 E 24.9 feet then N 35 deg 49 min W 42.5 feet to W Line of Lot 24, then S 34.4 ft to beginning. It is listed as being owned by Mesa Pawn & Loan, Inc. A copy of the assessor's records is included in Appendix B.

2.2 Site and Vicinity General Characteristics

The Site is located in a business and commercial area with various retail businesses, commercial operations, residences, and a convention center in the vicinity.

2.3 Current Property Use and Description

The Site is currently developed with a masonry building with a 5,000 square-foot retail area, a 600 square-foot unfinished basement, and 8800 square feet of unfinished wood-framed storage areas constructed in 1948 that has been used for retail and commercial uses. The Site is zoned B-2, Downtown Business. The surrounding area is primarily zoned B-2.

2.4 Physical Setting

2.4.1 Topography

The Site lies within the USGS Grand Junction, Colorado topographic quadrangle at an elevation of approximately 4,580 feet above mean sea level. The topography in the vicinity of the Site is flat and slopes generally to the southwest.

2.4.1 Regional and Site Geology

The Site is located within the Grand Valley geomorphic province. The Grand Valley is located north of the Uncompahgre Plateau and south of the Piceance Basin (Tweto, 1979). The Uncompahgre Plateau is an uplift of primarily Mesozoic sedimentary bedrock forming an anticline that plunges northward into the Grand Valley. The Piceance Basin is composed of relatively flat-lying Tertiary Uintah, Green River, and Wasatch Formations. These formations contain sandstones, siltstones, and shales including oil-bearing shales. Bedrock within the Grand Valley is the Cretaceous Mancos Shale that grades into the cliff-forming Cretaceous Mount Garfield Formation and Sego Sandstone. These formations grade into the Cretaceous Hunter Canyon Formation north of the Grand Valley (Cashion, 1973). The Mancos Shale overlies the Burro Canyon formation, composed of sandstone and conglomerate.

2.4.2 Soils

Soil at the Site is listed as Sagers-Urban land complex, 0 to 2 percent slopes. The Sagers-Urban soil is a deep, well-drained, low-salinity silty-clay loam soil. (U.S. NRCS, 2006).

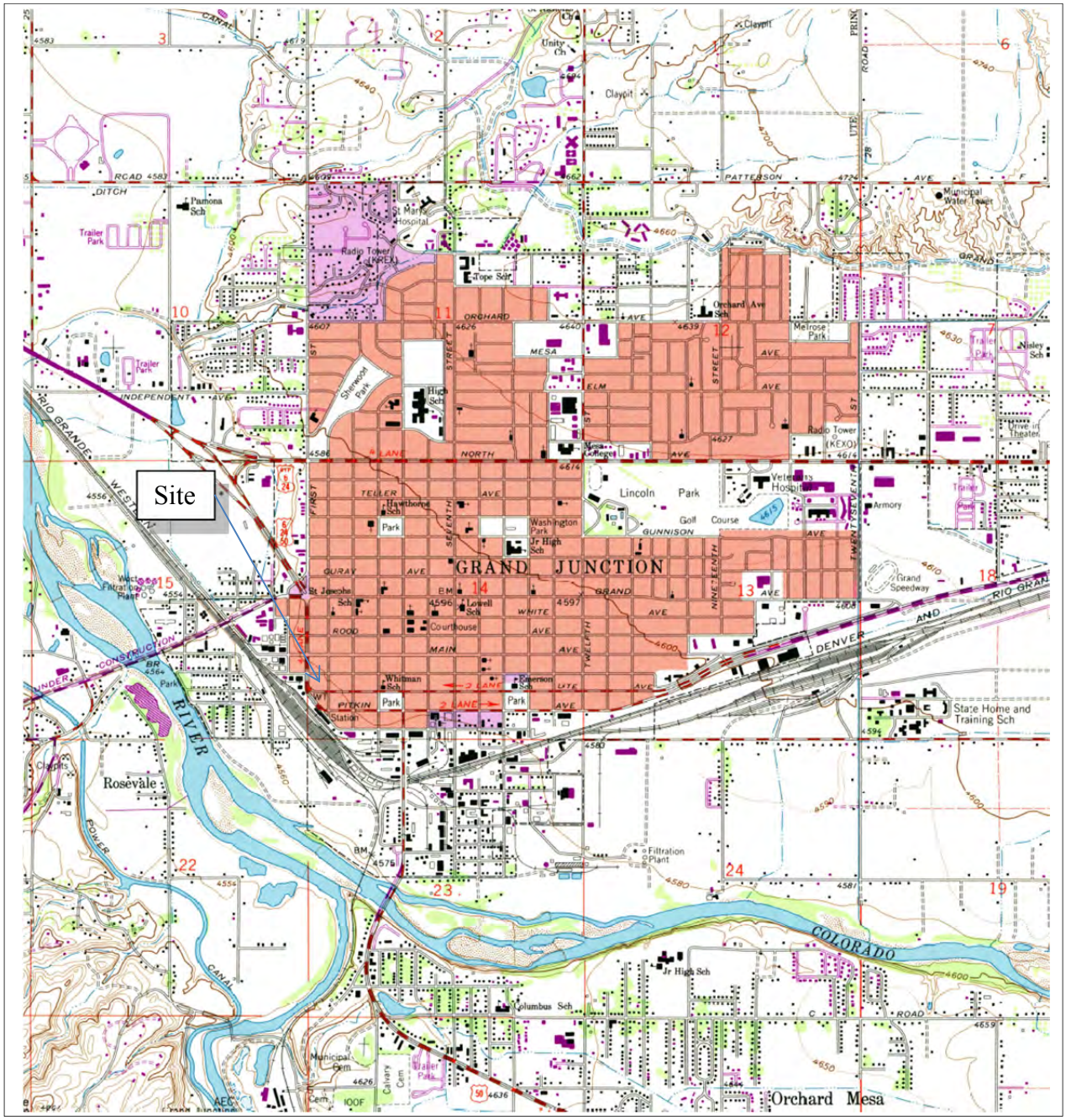

Figure 1. Site Location Map

Base map from:
USGS Grand Junction, Colorado
7.5 minute topographic map, 1962,
Photorevised 1973

2.4.3 Hydrology

Surface water flow in the area of the Site is directed by storm drainage systems to the south and west into the Colorado River approximately ½ mile southwest of the Site. The Colorado River is a perennial drainage that ultimately flows into the Pacific Ocean.

Groundwater in the vicinity flows perpendicularly to surface contours, or towards the southwest at a depth of about 10 to 20 feet below grade. The actual groundwater depth and flow direction at the Site is likely to vary depending on the season and other factors.

3 USER PROVIDED INFORMATION

The user (Mr. John Shaver of the City of Grand Junction) stated that the purpose of this ESA was to determine the environmental condition of the Site as part of due diligence pursuant to an option agreement for the Site.

4 HISTORICAL RECORDS REVIEW

4.1 Aerial Photograph Review

Aerial photos from 1937 to 2014 were reviewed to determine use and development of the Site. Copies of selected images are included in Appendix B.

The 1937 aerial photo shows the Site to be vacant. Surrounding land use appears residential and business, although the image quality is poor.

The 1954 aerial photo shows the Site with the current structure. Residences appear to the east and north, warehouses appear to the west, and businesses to the south and northeast.

The 1966 aerial photo shows the Site developed with the current structure. Numerous vehicles are parked on the vacant part of the lot. A motel appears to the immediate north. Other surrounding land use appears similar to 1954, but with generally more development noted.

The 1977 and 1986 aerial photos show the Site to remain largely unchanged. A large structure (Two Rivers Convention Center) appears at the southwest corner of 2nd and Main streets. Surrounding land use appears largely unchanged from earlier images.

The 1994 through 2001 photos show the Site similar to its appearance today. A parking lot exists across most of the half-block north of the Site. The block to the east appears more open, with several structures removed. The block to the southeast appears to be a bank drive-through. The block to the northeast had a structure removed from the north center of the block and a small structure on the southeast corner of 2nd and Main that may be a filling station that was removed by 1997. In 2001 a large structure appears on the north half of the 200 block of Main Street.

The 2003 and later aerial photos show the Site and surrounding land similar to today. Colorado Avenue terminates at a round-about northeast of the Site, and additional parking and landscaping appear on the two blocks to the north. An additional large structure appears immediately east of the

Two Rivers Convention Center by 2003. In 2007, a small house-like structure located one block east appears fire-damaged, and in 2008 it has been removed.

In summary, the aerial photograph review shows that the Site was vacant from 1937 until about 1954 when the current structure was built. Surrounding land use shows various changes but appears largely business and commercial.

4.2 United States Geological Survey (USGS) Topographic Maps

USGS topographic maps were reviewed. The Site is located within the Grand Junction, Colorado quadrangle. The Grand Junction quadrangle was originally printed in 1962 and was photorevised in 1973. The map shows the Site as being located in the City of Grand Junction. A large structure appears south of the Site. Figure 1 uses this USGS map for a base.

4.3 City Directories

Polk City Directories were reviewed at approximately five-year intervals from 1928 through 2015. The following information was found.

South 2th Street – The Site (225 S. 2nd Street) was listed as Mesa Pawn in the 2005 through 2014 directories. It was listed as All American Rental in 1995 and U-Rent-It in 1989. It was vacant in 1984 and was listed as World of Sleep in 1979. In 1974 and 1969 it was listed as Hanson Equipment. From 1949 through 1964 the Site was listed as Hallam Boggs Trucks and Implements. Prior to 1949 the Site address was not listed.

Other addresses on South 2nd Street nearby included 220 listed as Raso Liquors from 1935 until 1959; it was listed as the Flamingo Lounge in 1964 and 1969. 205 was listed as the LaSalle Hotel in 1941. In 2014, 216 S. 2nd was listed as an insurance agent. 317 S. 2nd was listed as the St. Charles Hotel from 1928 until 1964; it was listed as Sand Dollar Rooms from 1974 through 1989. 105 was listed as the La Court Hotel from 1928 through 1969. Simmons Lock and Key was listed at 322 from 1969 until the present, and 330 was listed as various radiator shops from 1949 until 1995. Other nearby addresses included automobile sales, furniture sales, and lodging.

Ute Avenue – Various retail and residential listings appear in the 100 through 300 blocks of Ute Avenue. 101 was listed as the Black Diamond coal yard in 1941, 202 was listed as Raso Liquor from 1964 through 1974 and Burgess Liquor in 1979 and 1985; and Computers Plus was listed at 248 Ute in 2005. All listings in the 100 – 300 blocks were residential or vacant from 1928 until 1979 other than those described above.

In summary, the Site has been listed as a pawn shop from at least 2005 until present, an equipment rental yard in 1989 and 1995, was a furniture retail outlet in 1979, and was a truck and equipment yard from 1949 until 1974. Surrounding listings were mostly residences and small retail uses.

4.4 Sanborn Fire Insurance Rate Maps

The Sanborn Company prepared maps for fire insurance companies during the latter part of the nineteenth and early twentieth centuries. These maps often indicate locations of USTs, ASTs, building construction, and business names.

Sanborn Insurance maps from 1890 through 1947 were reviewed. The 1890 map shows Lot 13 to have a restaurant, lot 17 as a tenement, and lot 20 as a dwelling. Surrounding land use shows various dwellings, and offices, and the St. Charles Hotel to the southeast. The 1893 and 1899 maps shows the same, but with lots 13 and 17 to be vacant, and the Revere Hotel present to the southeast in 1899. The 1904 map shows the site to be the same, except lot 17 now contains a duplex, and the nearby hotel is now the Lincoln Hotel. Surrounding land use is dwellings. In 1907, the Site is entirely vacant and surrounding land use remains largely unchanged. The 1912, 1919, 1926, and 1947 maps show the Site remaining vacant, and various businesses along Colorado Avenue, various dwellings nearby, and various structures across 1st Street.

In summary, the Sanborn Fire Insurance maps show the Site to have been lightly used until about 1904, and vacant until at least 1947. Surrounding land use is light business and dwellings (residential) use.

5 ENVIRONMENTAL RECORDS REVIEW

A search of environmental records held by pertinent agencies was conducted. The search focused on records pertaining to facilities within one mile of the Site that are regulated by government agencies or that have reported releases of regulated materials. A listing of all environmental records searched appears in the environmental records Radius Report for the Site (GeoSearch, 2015).

5.1 Federal Records

5.1.1 CERCLA Sites and Superfund Sites (NPL)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides a system for prioritizing existing areas of known contamination for remediation. The U.S. Environmental Protection Agency (EPA) ranks the CERCLA Information System (CERCLIS) sites according to risk based on the Hazard Ranking Score. Higher risk sites are placed on the National Priority List (NPL) and these sites are then considered Superfund sites. The CERCLIS lists no existing or pending NPL sites within one mile, one active CERCLA site within ½ mile of the Site and no archived CERCLA facilities adjacent to the Site. The active facility is Grand Cleaners at 545 Grand Avenue. Grand Cleaners shows a discovery on 9/4/12 and lists it as a former dry cleaners and an EPA-funded investigation. Grand Cleaners is located about ½ mile northeast of (upgradient from) the Site.

5.1.2 RCRA/Hazardous Waste Notifiers

The Resource Conservation and Recovery Act (RCRA) Notifiers List is an inventory of hazardous waste transporters; treatment, storage, and disposal (TSD) facilities; and large, small, and very small quantity generators. Large-quantity generators (LQGs) generate more than 1,000 kilograms (2,205

pounds) of hazardous waste per month. Small quantity generators (SQGs) generate between 100 and 1,000 kilograms per month; and conditionally-exempt small quantity generators (CESQGs) generate less than 100 kilograms (220 pounds) per month. There are two facilities within one mile of the site with corrective actions; they are Randall Industries at 745 Struthers Avenue, about 0.9 miles south of the Site, and Holiday Cleaners at 1251 N. 3rd Street, about 0.9 miles north of the Site. Randall Industries was inspected and found non-compliant in 2009, and the corrective action was terminated in November 2014 as remedial activities were complete. Holiday Cleaners was first listed in 1992, had a violation in 2006, and has been undergoing remediation since 2007. There are no TSD facilities within ½ mile, and no other generators or inactive sites at or adjacent to the Site. There are seven inactive sites and/or non-generators located within about ½ mile of the Site. None of these facilities are likely to have impacted the Site owing to their distance from the Site, their closed condition, and/or location downgradient from the Site.

5.1.3 **Emergency Response Notification System (ERNS)**

Spill reports received by the EPA regarding hazardous substance incidents are maintained in an on-line database called ERNS. When a reportable quantity of a hazardous substance is released, the National Response Center (NRC) must be notified within 24 hours and these reports are also included in ERNS. One spill was listed in 1997 at the corner of 2nd and Ute Avenue. This event was a fuel transport truck involved in an accident with a passenger vehicle. No community impact was noted, and no indication of fuel spills or other contamination was indicated in the event record. Some of the ERNS sites are non-locatable due to insufficient data provided to the EPA.

5.1.4 **Other Environmental Records**

Twenty additional EPA sources were reviewed for the Site and adjacent properties. These include the National Pollution Discharge Elimination System (NPDES), air pollution emission permit holders (AIRS/AFS program), clandestine drug lab locations, the Integrated Compliance Information System (ICIS), and the Toxic Release Inventory (TRI), a list of entities that emit more than threshold levels of certain toxic chemicals into the air.

There are no facilities at or adjacent to the Site that appear on these sources. A complete listing of reviewed databases is included in the environmental records report provided by GeoSearch (2015).

5.2 State and Local Agency Records

5.2.1 **Colorado Department of Public Health and Environment**

Uranium mill tailings were produced in Grand Junction from the 1950's until the 1970's. These tailings were given away for use as fill material during that time. The Uranium Mill Tailings Remedial Act (UMTRA) mandated that the U.S. Department of Energy (DOE) remediate these tailings. The Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division, who maintains the records for UMTRA and the earlier Grand Junction Remedial Action Program (GJRAP), was contacted for a radiation report for the Site. The Site was reportedly surveyed in 1971 when tailings were identified. The Site was certified as meeting the EPA standards for uranium mill tailings in 1990. A copy of the mill tailings report is included in Appendix B.

5.2.2 **Environmental Covenants**

The CDPHE uses environmental covenants to approve requests by any party to restrict the future use of a property using an enforceable agreement called an environmental real covenant. These covenants, which are recorded with the deed and stay associated with the land in perpetuity, provide a mechanism to ensure that institutional controls that are part of environmental remediation projects are properly implemented and that engineered structures are protected and maintained, so that implemented remedies continue to be protective of human health and the environment for as long as any residual contamination remains a risk.

The list of environmental covenants was searched. No covenants exist within one mile of the Site.

5.2.3 **Voluntary Cleanup Sites**

The State of Colorado has a voluntary cleanup program whereby property owners can clean up unregulated sites with environmental contamination to standards that are agreed upon by the State CDPHE. A review of the VCUP list of sites revealed four facilities within ½ mile of the Site. These include:

Facility	Address	Status	Proximity
Lewco	711 S. 6th	Approved 11/19/00	½ mile southeast
Dry Cleaner	321 Rood	Approved 9/19/09	¼ mile northeast

None of these locations are likely to have impacted the Site.

5.2.4 **Landfill/Solid Waste Activities**

CDPHE records were searched for active and historic landfill locations within Mesa County. None are listed within ½ mile of the Site.

5.2.5 **Above and Underground Storage Tanks (AST/USTs)**

Lists compiled by the State of Colorado Oil and Public Safety Division (OPS) were searched for registered above-ground and underground storage tank facilities within ¼ mile of the Site. There are 17 UST and AST facilities, including active and closed facilities, within this distance. The nearest active facility is Scotty's Lube at 357 Pitkin Avenue, ¼ mile south of the Site. There are no registered UST or ASTs at or adjacent to the Site.

5.2.6 **Leaking ASTs/USTs**

Lists compiled by the OPS were searched for leaking underground and aboveground storage tanks (USTs/ASTs) located within one-half mile of the Site. There are 38 listed leaking storage tank sites within ½ mile of the Site. Open sites are undergoing active remediation; while closed sites have reportedly been cleaned up. The nearest leaking UST/AST facilities in the vicinity of the Site include:

Facility	Address	Status	Proximity
Keebler	245 S. 1st Street	Release closed 1991	0.1 mile west
City Market	105 W. Colorado	Release closed 1991	0.1 mile west
Plump and Luscious	201 Main	Release closed 1991	0.1 mile north
Auto Dealership/United Bank	235 Main	Release closed 1992	0.12 mile northeast
Feed Lot Restaurant	118 Main St.	Release closed 1991	0.13 mile north
UPRR yard	2nd & South Ave.	Release closed 2000	0.15 mile south
Stop n Save	213 N. 1st St.	2001 release under remediation	0.2 mile north
Gregory Freeman property	112 N. 3rd St.	Release closed 1992	0.2 mile north
Robert Weiss	321 Rood Ave.	Release closed 2006	0.23 mile north
Steve Reimer tire	315 N. 3rd Street	Release closed 1991	0.24 mile north

Files held by the OPS for these facilities were not reviewed owing to their closed status, their distance from the Site, and/or their cross-gradient or down-gradient position from the Site.

5.2.7 Leaking UST Trust Fund Sites

Sites that are complex and/or have no known responsible party can be managed directly by the OPS. These are called Leaking UST Trust Fund sites. The nearest Trust Fund sites are Downtown Conoco at 702 Main, the 7th and Main site, the 4th and Rood site, and the 7th and Rood site. All of these sites have had free petroleum product found in various monitoring wells at various locations, all show groundwater flow to be towards the southwest, and several have not determined the extent of contamination. These sites are not likely to be upgradient from the Site and are unlikely to have impacted the Site.

5.2.8 Grand Junction Fire Prevention Bureau

Avant contacted Grand Junction Fire Marshall Chuck Mathis to determine if hazardous materials incidents, spills, or fires had occurred on or near the Site. Marshall Mathis reported the department has no record of hazardous materials incidents or spills for the Site.

6 SITE INSPECTION AND INTERVIEWS

6.1 Subject Site

Avant personnel inspected the Site on July 30, 2015. The Site is located in a commercial and business area at South Avenue and 5th Street in Grand Junction, Colorado.

6.1.1 General Observations

The site is developed with a brick, concrete, and steel- and wood-framed structure. Electric and gas are provided by Xcel Energy, and water and sewer by the City of Grand Junction. The topography is flat. The property occupies the south half of the city block and has a concrete paved area and fenced gravel parking and storage areas south and west of the structure and street parking to the east of the structure.

6.1.2 Structure Interior

The interior is divided into a retail area, storage areas, a basement with a vault, several garage bays, and several open carport bays. The interior walls are finished with drywall or are brick, and most have painted and textured surfaces. The ceilings throughout the interior are mostly drop ceiling tiles. The retail area is the east approximately half of the main level. It contains all items for retail sale including firearms, videos, tools, equipment, and electronics. It overlies a basement used to store firearms and other pawned items, and includes a vault on one end. The west half of the structure is a mostly open area with garage and man doors accessing it. It contained a wide variety of pawned items and a large recreational vehicle. Floor drains in the storage area lead to a sump or sand trap on the west side of the building. The sand trap is connected to the city storm sewer system. A "paint bay" is present on the west end of the main structure; it is only accessed from an exterior garage door and currently stores a car and other items. Some materials in the structure, including oils, automotive fluids, electronic equipment, fluorescent tubes, and asbestos-containing building materials, are regulated wastes once they are discarded.

6.1.3 Exterior

The building sits on the north property line and including the exterior storage building, extends along the entire north property line from east to west. South of the main building is an open concrete paved area extending to the sidewalk. The west half of the property south of the open storage bays is a fenced, gravel storage yard. A wide variety of items are stored in the open storage building including boats, ATVs, furniture, electronics, tools, and other items. A sump or sand trap is present just west of the main building; it connects floor drains in the building to the city storm sewer system.

6.1.4 Surrounding Properties

To the north of the Site is a parking area for the Two Rivers Convention Center; to the east are 2nd Street and an open lot. To the south is Ute Avenue, and south of Ute is an auto dealership. To the west are 1st Street and several office or business buildings.

6.2 Interviews

6.2.1 Site Owner

The owner of the Site as recorded by the Mesa County Assessor is Mesa Pawn & Loan, Inc. Mr. Dick Nottingham, representing the owner, was contacted and questioned about the environmental condition of the Site. He indicated that the property has been under his control for over 20 years, that it has been used as a pawn store the entire time, and that there is no chemical or petroleum storage at the Site. He stated that there are no environmental reports, permits, or government actions regarding the property, and that there are no environmental liens or deed restrictions on the property.

6.2.2 Site Operator

The operator is also the owner (Mr. Dick Nottingham). His interview is stated above.

6.2.3 **Intended User of the Phase I ESA**

Mr. John Shaver, attorney for the City of Grand Junction and representing the User of the ESA, stated that the purpose of the ESA was due diligence pursuant to an option agreement. He stated that he is unaware of previous environmental reports or environmental liens associated with the property, and that the sales price has not been reduced for any reason, including environmental issues.

7 CONCLUSIONS

This ESA of 225 S. 2nd Street, Grand Junction, Colorado was conducted by Avant Environmental Services, Inc. (Avant) on behalf of the City of Grand Junction. Avant has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E-1527 of the property. Any exceptions to, or deletions from, this practice are described in the section where they occur in this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- The Site has historically been used as a pawn shop, for equipment rental, and for vehicle repair and maintenance. It currently has a large amount of pawned and used items for sale and is an active business. A thorough inspection of all floors and walls could not be conducted owing to cover by the stored materials.
- A sand trap that leads to interior floor drains exists at the Site. This system may have historically been used to convey regulated wastes off of the Site, and may have resulted in contamination of the soil and/or groundwater near the sand trap.
- Various building materials in the structure may contain asbestos (e.g. ceiling tile, texture, flooring). An asbestos inspection is required prior to any activities that could result in damage or disposal of these potentially asbestos containing materials.
- Some items on the premises cannot be discarded into the trash. These include florescent lamps, liquids, aerosol cans, and electronics. These are considered either “hazardous” or “universal” wastes and must be discarded or recycled in a manner consistent with regulations.
- An oil stain is present in the graveled yard; this was reported by the Operator to be a hydraulic fluid leak. It does not appear to be extensive, but should be excavated and properly disposed or otherwise remediated.

Based on the findings of this Phase I Environmental Site Assessment (ESA), Avant recommends removing and properly disposing of all wastes, inspection and removal of contents from the sand trap, and removal of the oil-stained soil. An asbestos inspection of the structure should be conducted prior to any activities that would affect potentially asbestos-containing materials, such as remodeling or demolition. A re-inspection of the premises is recommended once all stored material is removed.

8 DEVIATIONS AND LIMITATIONS

8.1 Data Gaps

The ASTM 2005 ESA Standard requires identifying significant data gaps that affect the Environmental Professional's ability to identify recognized environmental conditions. There are no data gaps that are significant to the findings of this report.

8.2 Limitations

Avant conducted this Phase I ESA in accordance with the guidelines set forth by ASTM. The qualifications of the personnel preparing this assessment are included in Appendix D. The sources of information obtained to perform this assessment include documents, oral statements, and other information from parties outside of Avant's control. Avant cannot guarantee the accuracy of the information.

Avant's conclusions for this Phase I ESA are based on information provided by third parties (including government records) and general site conditions determined by a visual inspection. Prior to the 1970s, environmental records were not required, and as such, activities at that time may have adversely impacted the area without being documented by government agencies. In addition, current record-keeping requirements may not be adhered to by all facilities.

This assessment was limited and it did **not** include:

- Collection, testing, or chemical analysis of any samples of soil, groundwater, surface water, wastewater, building materials, or other material which was or could have been on site.
- Interviews, except as specifically noted in this report, with past owners, tenants, employees, or neighboring landowners regarding past site use, waste generation and disposal practices (including disposal at remote sites), or manufacturing processes which may have contributed to environmental contamination at the Site.
- Evaluation of the potential risks associated with identified concerns from records searches with incomplete addresses location listings, or sites where no records were available for review.

If additional information concerning site environmental conditions becomes available, the conclusions presented in this report will not be considered valid unless this information is reviewed and the conclusions and recommendations of this report are modified and approved in writing by Avant. It is possible that additional reports or investigations could alter the conclusions of this assessment. This report was prepared for the use of our client(s) and authorized agents only.

9 REFERENCES

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Whitney, J. W. 1981. *Surficial Geologic Map of the Grand Junction 1^0 X 2^0 Quadrangle, Colorado and Utah.* U.S. Geological Survey Map I-1289.

APPENDIX A

PERSONS CONTACTED FOR THIS ESA

CONTACTED PERSONS AND ENTITIES

The following individuals and entities have been contacted for this Phase I ESA:

Fire Marshall Chuck Mathis
Grand Junction Fire District
330 South 6th Street
Grand Junction, CO 81501
(970) 244-1400

Colorado Department of Public Health and Environment
Solid and Hazardous Waste Division
Denver, Colorado
(303) 331-4802

Mesa County Public Library
Main Branch
530 Grand Avenue
Grand Junction, Colorado
(970) 243-4442

City of Grand Junction
Community Development
250 N. 5th Street
Grand Junction, Colorado 81501

University of Colorado Library
Accessed via the Internet at:
http://libcudl.colorado.edu/sanborn

US Geological Survey
Maps on demand
Accessed via the Internet at:
http://www.usgs.gov

Colorado Department of Public Health and Environment (CDPHE)
Radiation and Hazardous Waste Division
222 S. 6th Street
Grand Junction, Colorado 81501
(970) 248-7164

Colorado Dept. of Labor and Employment
Oil Inspection Section
Tower 3, Suite 610
1515 Arapahoe Street
Denver, CO 80202
(303) 318-8500
www.oil.cdle.state.co.us

Mr. John Shaver
City Attorney
City of Grand Junction
250 N. 5th Street
Grand Junction CO 81501
(970) 244-1508

Mr. Dick Nottingham
Mesa Pawn & Loan
225 S. 2nd Street
Grand Junction CO 81501
(970) 242-7645

Mr. John Gormley
Attorney
(970) 243-1003

APPENDIX B

ESA DOCUMENTATION
AERIAL PHOTOGRAPHS

Mesa County Assessors Office

P.O. Box 20000
544 Rood Avenue
Grand Junction, CO 81502

Report Date: 7/16/2015

Property Information

Parcel Num.:	**2945-143-25-004**
Account Num.:	**R064110**
Location:	**225 S 2ND ST GRAND JUNCTION, CO 81501**
Mailing Add.:	**225 S 2ND ST GRAND JUNCTION, CO 81501-7826**
Owner	**MESA PAWN & LOAN INC**
Joint Owner:	
Neighborhood:	**AREA 10 MERCHAND (221210.00CM)**
Assoc. Parcel:	
Title Status:	
Property Use:	**Commercial**
Legal Sum.:	**LOTS 13 TO 24 INC BLK 122 GRAND JUNCTION EXC BEG SW COR LOT 24 E 24.9FT N 35DEG49MIN W 42.5FT TO W LI LOT 24 S 34.4FT TO BEG**

Air Photography Date: 2012 & 2015

Tax Information

Year	Prop. Code	Imp. (Actual)	Land (Actual)	Total (Actual)	Imp. (Assd.)	Land (Assd.)	Total (Assd.)	TAC Code	Mill Levey	Water Assessment	Tax
2015	2112, 2212	$370,960	$210,250	$581,210	$107,580	$60,970	$168,550	10107		$0.00	***$11,470.16**
2014	2112, 2212	$433,310	$163,130	$596,440	$125,660	$47,310	$172,970	10107	0.0681	$0.00	$11,770.96
2013	2112, 2212	$325,000	$652,500	$977,500	$94,250	$189,230	$283,480	10107	0.0681	$0.00	$19,307.24

***Current Estimated Tax is Using Previous Year's Mill Levy (Mill Levy Determined in December of Current Year)**

Taxing Authority Detail

Year	Agency Abbrev.	Agency Name	TAC Code	Mill Levy	Total (Assessed)	Tax Per Agency
2014	GRJCT	CITY OF GRAND JUNCTION	10107	8.0000	$172,970	$1383.76
2014	COLRW	COLORADO RIVER WATER	10107	0.2530	$172,970	$43.76
2014	MCCCB	COUNTY - DEVELOP DISABLED	10107	0.2910	$172,970	$50.33
2014	MCGF	COUNTY GENERAL FUND	10107	9.3790	$172,970	$1622.29

2014	MCRBS	COUNTY ROAD & BRIDGE-1/2 LEVY	10107	0.2215	$172,970	$38.31
2014	MCTV	COUNTY TRANSLATOR TV FUND	10107	0.0170	$172,970	$2.94
2014	DDA	DOWNTOWN DEVELOPMENT AUTHORITY	10107	5.0000	$172,970	$864.85
2014	GRMCD	GRAND RIVER MOSQUITO CTRL	10107	1.5130	$172,970	$261.7
2014	GVDD	GRAND VALLEY DRAINAGE DIST	10107	1.4830	$172,970	$256.51
2014	LIBR	LIBRARY DISTRICT	10107	3.0170	$172,970	$521.85
2014	GJRB	MESA CNTY ROAD & BRIDGE-GRAND JCT	10107	0.2215	$172,970	$38.31
2014	SD51O06	SCHOOL DIST# 51 2006 OVERID	10107	2.5250	$172,970	$436.75
2014	SD51B	SCHOOL DIST# 51 BOND	10107	6.9900	$172,970	$1209.06
2014	SD51	SCHOOL DIST# 51 GENERAL	10107	24.3470	$172,970	$4211.3
2014	SD51O	SCHOOL DIST# 51 OVERRIDE	10107	2.7100	$172,970	$468.75
2014	MCSS	SOCIAL SERVICES	10107	2.0840	$172,970	$360.47
			Totals:	68.0520		*$11,770.95

Land Description

Property Use Code	Property Use Type	Sq. Ft.
2112	MERCHANDISING - LAND	36250

Acreage is approximate and should not be used in lieu of Legal Documents

Acres (Unofficial): **0.85** Lat/Lon: **39.06568629, -108.57023560**

Building Photos

Photos not available

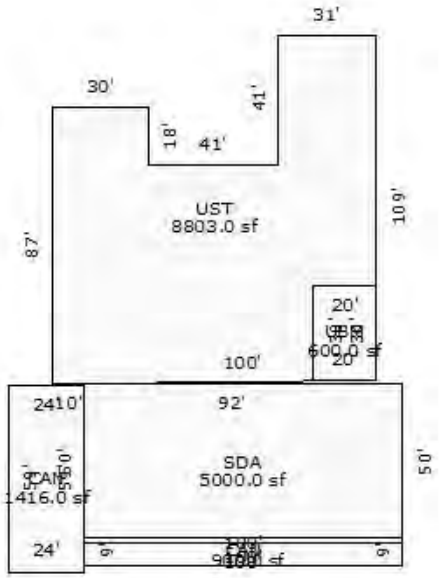
Sales and Conveyance Information

If Book/Page is Entered, No Recep. Num. is Available

Date	Price	Reception Number	Doc. Type
06/12/1995	$235,000.00	1720189	Warranty Deed
03/04/1988	$0.00	1479634	Warranty Deed JT

Check the associated reception number for Grantee and Grantor information via recorded document.

Building Description



Building #:	**R064110COM1.1431710222729**	Stories:	**1**
Units:	**1**	Quality:	**AVERAGE QUALITY**
Heated Sq. Ft.:	**5000**	Frame:	**MASONRY**
Building Use:	**(2212)MERCHANDISING**	Exterior Wall:	**CONCRETE BLOCK**
Model Desc.:	**Commercial**	Interior Wall:	**DRYWALL**
Style:	**COMMERCIAL INDUSTRIAL**	Roof Struct.:	**FLAT**
Actual Year Built:	**1948**	Roof Cover:	**BUILT UP T & G**
Effective Year Built:	**1990**	Air Cond:	**ROOF TOP AIR**
Architectural Desc.:	**LG SHOP/OFFICE**	Heat Fuel:	**GAS**
Rooms:		Heat Type:	**FORCED AIR HEAT**
Bedrooms:		Comm. Wall Ht.:	**16**
Bathrooms:	**Commercial-No Bath**	Comm. Fixtures:	**7**

Sub Areas:	**Canopy(CAN) = 2316 sq.ft.** **Store Display Area(SDA) = 5000 sq.ft.** **Unfinished Basement(UBM) = 600 sq.ft.** **Unfinished Storage(UST) = 8803 sq.ft.**

Misc. Building Information

Year Built	Miscellaneous Desc.
1948	ASPH,COM 0-499 SF
1948	FENCE 0-399 LF
1948	3 SIDED UTILITY BLDG
1948	GATES

The miscellaneous items above are not tied to a specific building

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Hazardous Materials and Waste Management Division
222 S. 6th St., Rm 232, Grand Junction CO 81501
(970)-248-7164

Date: 7/21/2015

Mill Tailings Report for

Address: 00225 S 2ND ST Location No.: 06107
2945-143-25-004
#Error

Requested By: BALTZER ED
AVANT ENVIRONMENTAL

ORIGINAL SURVEY/SCREENING INFORMATION

3/1/1971 Date of survey (or screening form date)
Occupant: HANSON EQUIP INC
Owner: HANSON LV
Tailings Use: Tailings are Indicated Greater Than 10 Feet Away From the Structure

Comment: T CITY WALK

Uranium Mill Tailings Remedial Action Program (UMTRAP)

12/9/1985 Date Included in the Program
2/5/1987 Date of Final Prereconstruction Survey
10/15/1990 Date DOE Certified This Property Meets EPA Standards

*****This is a Summary Sheet*****
This document may not reflect all of the information that is available. Any explanation, interpretation, or to fully understand the work that was performed on this property, and whether any uranium mill tailings remain contact CDPHE at (970) 248-7164.

06107

RECEIVED

OCT 30 1990

Colo. Dept. of Health
Grand Jct. Office

PROPERTY COMPLETION REPORT

FOR

GRAND JUNCTION
VICINITY PROPERTY REMEDIAL ACTION

FOR

DOE ID NO.: GJ-06107-CS
ADDRESS: 225 SOUTH 2ND STREET
GRAND JUNCTION, COLORADO 81501

MAY 1989

Prepared for
Uranium Mill Tailings Remedial Action Project Office
Albuquerque Operations Office
Department of Energy

by

UNC Geotech
P.O. Box 14000
Grand Junction, Colorado 81502-5504

[signature] /FOR
Michael E. Madson
UMTRA Program Manager

UNC Geotech has been granted authorization to perform remedial action under the Uranium Mill Tailings Radiation Control Act of 1978, Public Law 95-604. Remedial action was done in accordance with the Environmental Protection Agency (EPA) Standards for Cleanup of Lands and Buildings Contaminated with Residual Radioactive Material from Inactive Uranium Processing Sites, 40 CFR 192.12, 192.20-23.

GJ-06107-CS:PCR-128

TABLE OF CONTENTS

1.0 SUMMARY

1.1 Basis for Remedial Action

In 1950, the Climax Uranium Company built a uranium/vanadium recovery mill in Grand Junction, Colorado, near the Colorado River. The mill operated for 19 years, processing over 2.2 million tons of ore. Some 250,000 tons of mill tailings were used for construction-related activities in the Grand Junction area.

In November 1978, Congress enacted the "Uranium Mill Tailings Radiation Control Act of 1978" (Public Law 95-604). This act authorized the U.S. Department of Energy (DOE) to enter into cooperative agreements with the states and Indian tribes affected by uranium mill tailings in order to conduct an assessment and remedial action program.

A cooperative agreement (DE-FC04-81AL16257) was signed with the Colorado Department of Health (CDH), effective October 19, 1981, which authorized the DOE to initiate remedial action activities within the State of Colorado.

1.2 Criteria for Remedial Action

Public Law 95-604 required that the U.S. Environmental Protection Agency (EPA) promulgate general standards to be applied to cleanup work conducted under the auspices of the Uranium Mill Tailings Remedial Action (UMTRA) Project. In March 1983, the EPA published "Standards for Remedial Action at Inactive Uranium Processing Sites" (40 CFR Part 192). These standards established guidelines for the control of tailings piles and the cleanup of buildings and open lands.

This property was evaluated on the basis of the EPA standards by the DOE Inclusion Survey Contractor. The DOE reviewed these evaluation results and determined that the property contained residual radioactive material which exceeded the EPA standards. Thus, in accord with Section 102(e)(2) of Public Law 95-604, this property was included in the UMTRA Project by the DOE. The Remedial Action Contractor was authorized by the DOE to perform remedial action as required to bring the property into conformance with the EPA standards.

1.3 Summary of Remedial Action

DOE ID No.:	GJ-06107-CS
Mesa County Tax Parcel No.:	294514325004, confirmed May 1989
Legal Description:	Lots 13 to 24 inclusive, Block 122, except beginning SW Corner Lot 24, east 24.9 feet, north 35 degrees 49 minutes west 42.5 feet to west line of Lot 24, south 34.4 feet to beginning, City of Grand Junction, County of Mesa, State of Colorado
Property Address:	225 South 2nd Street Grand Junction, Colorado 81501
Property Owners:	Allen R. and Nancy Ann Johnsen, and Maynard and Maxine Inez 225 South 2nd Street Grand Junction, Colorado 81501
Property Category:	Commercial Structure (CS)
Inclusion Survey Contractor:	Oak Ridge National Laboratory
Inclusion Notification Date:	December 9, 1985
Remedial Action Contractor:	UNC Geotech
Radiological & Engineering Assessment (REA):	June 12, 1986
Construction Subcontractor:	Mays Concrete Inc. P.O. Box 4124 Grand Junction, Colorado
Pre-Construction Conference Record:	January 5, 1987
Notice of Final Completion Inspection:	February 20, 1987
Volume of Material Removed:	Exterior: 114 cu. yd. Interior: 0 cu. yd.
Area Cleaned Up:	284 m^2
Property Completion Report Submitted:	May 1989

2.0 OPERATIONS SUMMARY

2.1 Abstract of Remedial Action Plan

The remedial action plan involved removal of exterior contamination (Appendix Figure 2.1). Once excavation was complete, the affected areas were resurveyed for possible remaining contamination and, upon attaining satisfactory results, were backfilled with uncontaminated material. The property was restored to a condition comparable to that which existed prior to remedial action activities.

2.2 Previously Unidentified Contamination

The original radiological assessment identified 97 cu. yd. of tailings, from 6 inches to 12 inches deep, within the property. The remedial action process included the removal of 114 cu. yd. of residual radioactive material, ranging from 5 inches to 22 inches deep (Appendix Figure 2.1).

The difference between the original assessment and the actual material removed is shown in Appendix Figure 2.1.

2.3 Unanticipated Items During Remedial Action

None.

2.4 Application of Supplemental Standards

Supplemental standards were not applicable to the tailings removal activities performed on the property.

3.0 VERIFICATION SUMMARY

3.1 Radiological Survey Data

All survey data were acquired according to approved procedures.

3.1.1 Pre-Remedial Action Survey

A radiological survey was conducted by UNC Geotech during March 1986, as described in the final Radiological and Engineering Assessment, dated June 1986. Appendix Figure 2.1 shows the extent of contamination determined during the pre-remedial assessment and identifies the areas recommended to undergo remedial action.

3.1.2 Post-Excavation Survey

A ground-level gamma scan with a scintillometer was performed after the removal of contamination and prior to backfilling. Following the gamma scan, soil samples representative of the 6-inch-thick soil layer at the bottom of the excavation were collected. The samples were blended to form composite samples representing an average over the verification areas (Appendix Figure 2.1).

Exterior Findings: Surface exposure-rate values determined during the gamma scan ranged from 15 μR/h to 29 μR/h (Appendix Figure 2.1). The results of analyses for Ra-226 in four composite soil samples taken from the excavated areas ranged from 1.7 pCi/g to 5.2 pCi/g (Appendix Table 3.1).

3.1.3 Radon Decay-Product Concentration (RDC) Measurement

Based on the DOE-approved abbreviated-measurement method, the RDC was determined to be below the EPA standard (Appendix Table 3.2). Appendix Figure 2.1 shows the measurement location in the basement (the lowest habitable level of the structure).

3.2 Recommendation For Certification

Residual radioactive materials have been removed from this property to the extent required by the EPA standards (40 CFR 192.12, 192.20-23). (See Certification Data Summary below.)

Therefore, the property located at 225 South 2nd Street, in Grand Junction, Colorado, is recommended for certification as required by the UMTRA Project guidelines, and the appropriate record should be documented.

Certification Data Summary

Applicability	Standards	Survey Results
Habitable Structures		
Exposure Rate:	Shall not exceed 20 μR/h above background.*	Range for the basement was 14 μR/h to 16 μR/h (Appendix Figure 2.1).
Radon Decay-Product Concentration:	Annual average shall not exceed 0.02 WL, to the extent practicable, and in no case shall exceed 0.03 WL.	Average 0.0063 WL, based on the DOE-approved abbreviated-measurement method (Appendix Table 3.2).
Land		
Radium-226 Concentration in Surface Soil:	Shall not exceed 5 pCi/g above background** in the 15-cm surface layer, averaged over 100 m^2.	< 5 pCi/g above background.***
Radium-226 Concentration in Subsurface Soils:	Shall not exceed 15 pCi/g above background** in any 15-cm-thick soil layer more than 15 cm below the surface, averaged over 100 m^2.	The soil sample results ranged from 1.7 pCi/g to 5.2 pCi/g (Appendix Table 3.1).

*The background exposure rate is approximately 15 μR/h.
**The background radium-226 concentration is approximately 2.0 pCi/g.
***A part of sample V-1 is from the 15 cm surface layer.

4.0 APPENDIX

Appendix Tables:

Table 3.1 Post-Excavation Sample/Measurement Results

Table 3.2 Radon Decay-Product Concentration (RDC) Measurement Results

Appendix Figure:

Figure 2.1 Exterior Extent of Contamination - RADIOLOGICAL AS-BUILT

Appendix Table 3.1

Post-Excavation Sample/Measurement Results

DOE ID No.: GJ-06107-CS

Address: 225 South 2nd Street, Grand Junction, Colorado

The analytical uncertainties in the table are reported at the 95-percent confidence interval.

Area	Exposure-Rate Range (μR/h)	Soil Sample Ticket No.	Ra-226 (pCi/g)	Potassium (pCi/g)	Thorium (pCi/g)
V-1	15 - 23	MBP 940	4.1 $\pm$ 0.7	18.8 $\pm$ 8.3	1.2 $\pm$ 0.4
V-2	17 - 23	MBP 941	5.2 $\pm$ 0.8	20.2 $\pm$ 8.6	1.0 $\pm$ 0.4
V-3	17 - 29	MNA 351	3.0 $\pm$ 0.6	18.4 $\pm$ 8.9	1.2 $\pm$ 0.5
V-4	17 - 25	MNA 352	1.7 $\pm$ 0.4	15.2 $\pm$ 8.8	0.9 $\pm$ 0.4

See Appendix Figure 2.1 for the verification areas.

Appendix Table 3.2

Radon Decay-Product Concentration (RDC) Measurement Results

DOE ID No.: GJ-06107-CS

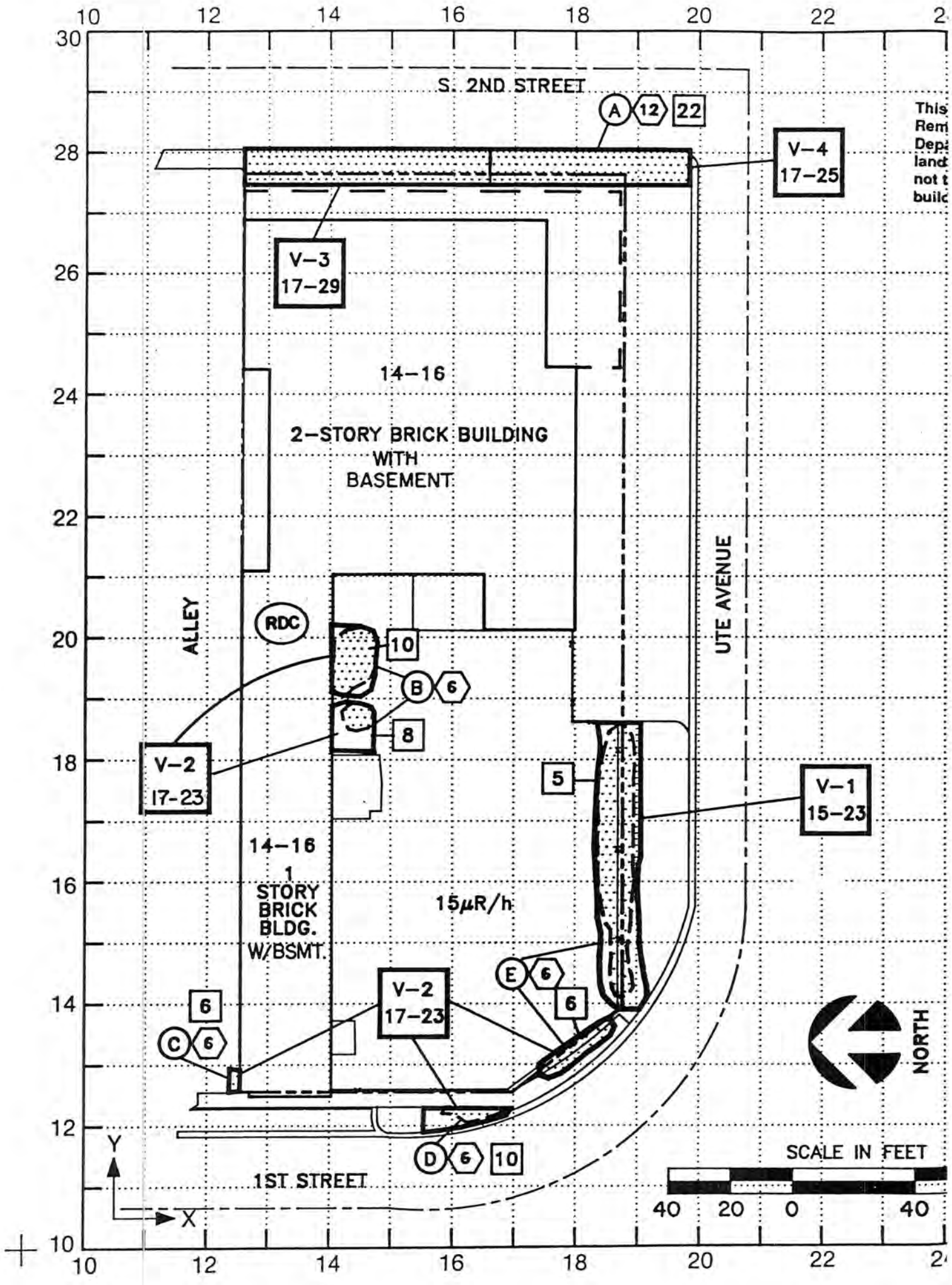
Address: 225 South 2nd Street, Grand Junction, Colorado

Instrument Type: Terradex Track Etch^{R} Detector

Detector Number	Start Date	End Date	Tracks Per mm^2	Radon Concentration (pCi/l)	Average Working Level (WL)
514160	04-21-88	02-24-89	9.7	1.29	0.0065
514128	04-21-88	02-24-89	8.1	1.07	0.0054
514074	04-21-88	02-24-89	10.5	1.40	0.0070
				Average:	0.0063

See Appendix Figure 2.1 for the measurement location.

BGS:11/02/88
GJ-06107-CS:PCR-128
REV041288


10
12
14
16
18
20
22
30
28
26
24
22
20
18
16
14
12
10
S. 2ND STREET
A
12
22
V–4
17–25
V–3
17–29
14–16
2–STORY BRICK BUILDING
WITH
BASEMENT
ALLEY
UTE AVENUE
RDC
10
B
6
8
V–2
17-23
5
V–1
15–23
14–16
1
STORY
BRICK
BLDG.
W/BSMT.
15μR/h
E
6
6
6
C
6
V–2
17–23
D
6
10
1ST STREET
NORTH
SCALE IN FEET
40
20
0
40
Y
X

drawing, prepared for the Uranium Mill Tailings
edial Action Project, is for the sole use of the U.S.
ırtment of Energy and its contractors. It is not a
survey plat or an improvement survey plat and is
o be relied upon for the establishment of fence,
ling, or other future improvement lines.

LEGEND

ALL DEPTHS IN INCHES
ALL EXPOSURE-RATES IN μ R/h

(A) ASSESSED AREA IDENTIFIER

⟨6⟩ AVERAGE DEPTH OF ASSESSED CONTAMINATION

AREA OF ASSESSED CONTAMINANTS

12–15 POST REMEDIAL ACTION EXPOSURE-RATE RANGE

BOUNDARY OF EXCAVATION

[12] AVERAGE EXCAVATED DEPTH FOR THE DEPOSIT OF CONTAMINATION

V-1
16–17 VERIFICATION SOIL SAMPLE AREA IDENTIFIER AND EXCAVATION EXPOSURE-RATE RANGE

(RDC) POST REMEDIAL ACTION RADON DAUGHTER CONCENTRATION MEASUREMENT LOCATION

RADIOLOGICAL AS-BUILT

FIGURE 2.1

EXTERIOR EXTENT OF CONTAMINATION

NO.	DATE	REVISIONS	BY	CK.	A.E.	APP.	NO.	DATE	REVISIONS	BY	CK.	A.E.	APP.

RESIDENCE—NO. OF OCCUPANTS

NON-RESIDENCE—MAN-HRS./WK.

INSTRUMENT NO. | SURVEYOR

SURVEY DATE | TIME

VERIFICATION | DATE

U.S. DEPARTMENT OF ENERGY
GRAND JUNCTION PROJECTS OFFICE, COLORADO

DESIGNED: MM DATE
DRAWN: AGJ 11/88
CHECKED:
PROJ. ENG.: JEL 12/88
SUBMITTED: APPROVAL DATE APPROVAL DOE DATE

225 S. 2ND STREET
GRAND JUNCTION, COLORADO

UNC Geotech

DOE ID NO. GJ-06107-CS
DWG. NO. 3-B06107-G4 SHT. 1 OF 1

80

DOE ID NO.: GJ-06107-CS

Property Address: 225 South 2nd Street

VICINITY PROPERTY CERTIFICATION SUMMARY AND RECOMMENDATION

SUMMARY EVALUATION

	UNC Geotech			U.S. Department of Energy (DOE)		
	YES	NO	NOT TAKEN	YES	NO	NOT TAKEN
Ra-226 is < 5 pCi/g above background in top 15 cm layer of soil averaged over 100 m^2. In-situ [X] Lab [X]**	[X]*	[ ]	[ ]	[✓]	[ ]	[ ]
Ra-226 is < 15 pCi/g above background in any 15 cm layer of soil more than 15 cm below the surface averaged over 100 m^2. In-situ [ ] Lab [X]	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
Interior gamma is < 20 μR/h above background in any occupied or habitable structure.	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
The radon decay-product concentration in any occupied or habitable structure is < 0.02 working levels or at most 0.03 working levels.	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
Supplemental standards were applied in accordance with EPA standard 40 CFR 192.21.	[ ]	[X]	[ ]	[ ]	[✓]	[ ]

COMMENTS: *The excavations were backfilled with materials which were measured at the source showing that the Ra-226 concentrations are in the range of normal background. Other surface areas were verified on the basis of gamma exposure rates which do not exceed 30-percent above normal background.

** PART OF ONE SAMPLE WAS FROM THE 15 CM SURFACE LAYER.

DOE ID NO.: GJ-06107-CS

UNC GEOTECH RECOMMENDATION

Based on the UNC evaluation, I recommend this property for:

[X] Certification by the Department of Energy.

[ ] Certification by the Department of Energy with the concurrence of the Nuclear Regulatory Commission because supplemental standards were applied per 40 CFR 192.21.

/FOR

Michael E. Madson
UMTRA Program Manager
UNC Geotech

May 8, 1989
Date

DOE UMTRA EVALUATION

[✓] Should be certified by the Department of Energy.

[ ] Should be certified by the Department of Energy with the concurrence of the Nuclear Regulatory Commission because supplemental standards were applied per 40 CFR 192.21.

Michael K. Tucker
Michael K. Tucker
UMTRA Certification Official
Department of Energy

October 11, 1990
Date

DOE ID Number: GJ06107-CS

VICINITY PROPERTY CERTIFICATION SUMMARY AND DECISION

1.0 SUMMARY EVALUATION

The data presented in the property portfolio indicate:

		IVC (ORNL)			U.S. Dept. of Energy		
		Yes	No	N/A	Yes	No	N/A
1.	The Ra-226 concentration in the top 15cm of soil averages < 5 pCi/g above background over 100 m^2.	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
2.	The Ra-226 concentration in any 15 cm layer of soil below the top 15cm surface layer averages <5 pCi/g above background over 100 m^2.	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
3.	The indoor gamma readings are <20 μR/hr above background in every habitable room.	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
4.	The radon daughter concentration in any habitable room is < 0.02 working levels, or at most 0.03 WL's.	[X]	[ ]	[ ]	[✓]	[ ]	[ ]
5.	Supplemental standards were applied in accordance with EPA standards 192.21.*	[ ]	[X]	[ ]	[ ]	[✓]	[ ]

COMMENTS: _____

DOE ID Number: GJ06107-CS

2.0 ORNL's RECOMMENDATION

Based on ORNL's evaluation of the [X] Completion Report [] Completion Report and field survey data, I recommend this property for:

[X] Certification

[] Additional measurements and/or additional information in the Completion Report as described below

[] Certification pending resolution of the deficiencies described below

[] Additional remedial action

Judith A. Person for

C. A. Little, Ph.D.
Independent Verification Contractor

Date: 4/27/90

2.1 ORNL's DESCRIPTION OF FINDINGS AND EVALUATION

This summary describes the findings of the IVC after review of the Completion Report, information in the property portfolio, and analysis of other available data.

Confirmatory analysis of sample splits from the RAC was performed. The splits were taken from the samples tabulated in the completion report. They are as follows:

UNC Ticket #	RAC Ra^{226} Content	IVC Ra^{226} Content
MBP940	4.1 pCi/g	4.1 pCi/g
MBP941	5.2 pCi/g	5.2 pCi/g
MNA351	3.0 pCi/g	2.8 pCi/g
MNA352	1.7 pCi/g	1.5 pCi/g

A review of the completion report and folio for location GJ06107-CS found the property to be in compliance with EPA regulations for ^{226}Ra concentrations in surface/subsurface soil layers. Analysis of the split samples from UNC by ORNL found close agreement of the ^{226}Ra concentrations with the analysis results from the RAC.

The indoor gamma exposure rate range and annual radon daughter concentration are both in compliance with EPA standards.

Based on these findings, it is recommended that location GJ06107-CS be certified by the DOE.

DOE ID Number: GJ06107-CS

3.0 DOE/UMTRA EVALUATION

DOE Decision: [✓] Certify

[ ] Requires additional measurements prior to certification

[ ] Requires additional remedial action

Comments: _____

_____

_____

_____

Michael K Tucker Date: 10-11-90

U.S. Department of Energy
Certification Official

*Certification concurred on by NRC on _____
(date)

OAK RIDGE NATIONAL LABORATORY
OPERATED BY MARTIN MARIETTA ENERGY SYSTEMS, INC.

GRAND JUNCTION OFFICE
P. O. BOX 2567
GRAND JUNCTION, COLORADO 81502

SEP - 7 1990

Mr. Michael K. Tucker, Manager
U. S. Department of Energy
Grand Junction Area Office
P. O. Box 2567
Grand Junction, Colorado 81502

Dear Mr. Tucker,

Radiation levels at the property identified below do not exceed the U. S. Environmental Protection Agency (EPA) standards as specified in 40 CFR 192.

This evaluation is based on a review of the Remedial Action Contractor's completion report.

This recommendation is based upon the Independent Verification Contractor's assessment of the ^{226}Ra concentration in the soil, indoor radon daughter concentration, and indoor gamma exposure rate at this property.

Therefore, this property is recommended for certification by the U. S. Department of Energy.

Sincerely,

C. A. Little, Ph. D.
Independent Verification Contractor

Location Number: GJ06107-CS
Location Address: 225 South 2nd Street AKA 150 Ute Ave.
Grand Junction, CO 81501
Property Owner: Allen R. and Nancy Ann Johnsen
Owner Address: 225 South 2nd Street
Grand Junction, CO 81501

Department of Energy
Grand Junction Projects Office
Post Office Box 2567
Grand Junction, Colorado 81502-2567

October 15, 1990

Location No.: GJ-06107+

Address: 225 S. Second Street
Grand Junction, CO

Maynard and Maxine Inez
225 South Second Street
Grand Junction, CO 81501

Dear Mr. and Mrs. Inez:

Under the Uranium Mill Tailings Radiation Control Act of 1978, Public Law 95-604, the Department of Energy (DOE) in cooperation with the Colorado Department of Health, has completed remedial action at the property address listed above. Review of the available data indicates that your property has been cleared of residual radioactive contamination to the extent required by the Environmental Protection Agency (EPA) standards (40 CFR 192). Therefore, the DOE certifies that your property is in compliance with the EPA standards.

The current status of your property will be recorded by the State on the appropriate property records, per requirements of Public Law 95-604. Records of UMTRA vicinity properties are archived with the State and the United States Department of Energy.

Should you have any questions regarding the project or your property, please call me at 303-248-6001 or G. A. Franz, III, Supervisory Health Physicist, Colorado Department of Health, at 303-248-7164. Your cooperation in the successful accomplishment of this work has been greatly appreciated.

Sincerely,

Michael K. Tucker

Michael K. Tucker
Certification Official

cc: G.A. Franz, III - CDH
M. Madson - UNC

Department of Energy
Grand Junction Projects Office
Post Office Box 2567
Grand Junction, Colorado 81502-2567

October 15, 1990

Location No.: GJ-06107+

Address: 225 S. Second Street
Grand Junction, CO

Allen R. and Nancy A. Johnsen
225 South Second Street
Grand Junction, CO 81501

Dear Mr. and Mrs. Johnsen:

Under the Uranium Mill Tailings Radiation Control Act of 1978, Public Law 95-604, the Department of Energy (DOE) in cooperation with the Colorado Department of Health, has completed remedial action at the property address listed above. Review of the available data indicates that your property has been cleared of residual radioactive contamination to the extent required by the Environmental Protection Agency (EPA) standards (40 CFR 192). Therefore, the DOE certifies that your property is in compliance with the EPA standards.

The current status of your property will be recorded by the State on the appropriate property records, per requirements of Public Law 95-604. Records of UMTRA vicinity properties are archived with the State and the United States Department of Energy.

Should you have any questions regarding the project or your property, please call me at 303-248-6001 or G. A. Franz, III, Supervisory Health Physicist, Colorado Department of Health, at 303-248-7164. Your cooperation in the successful accomplishment of this work has been greatly appreciated.

Sincerely,

Michael K. Tucker

Michael K. Tucker
Certification Official

cc: G.A. Franz, III - CDH
M. Madson - UNC

1954 Aerial Photo

0 0.0075 0.015 0.03 mi

0 0.00750.015 0.03 km

Print Date: July 16, 2015

Mesa County, Colorado
GIS/IT Department
gis.mesacounty.us

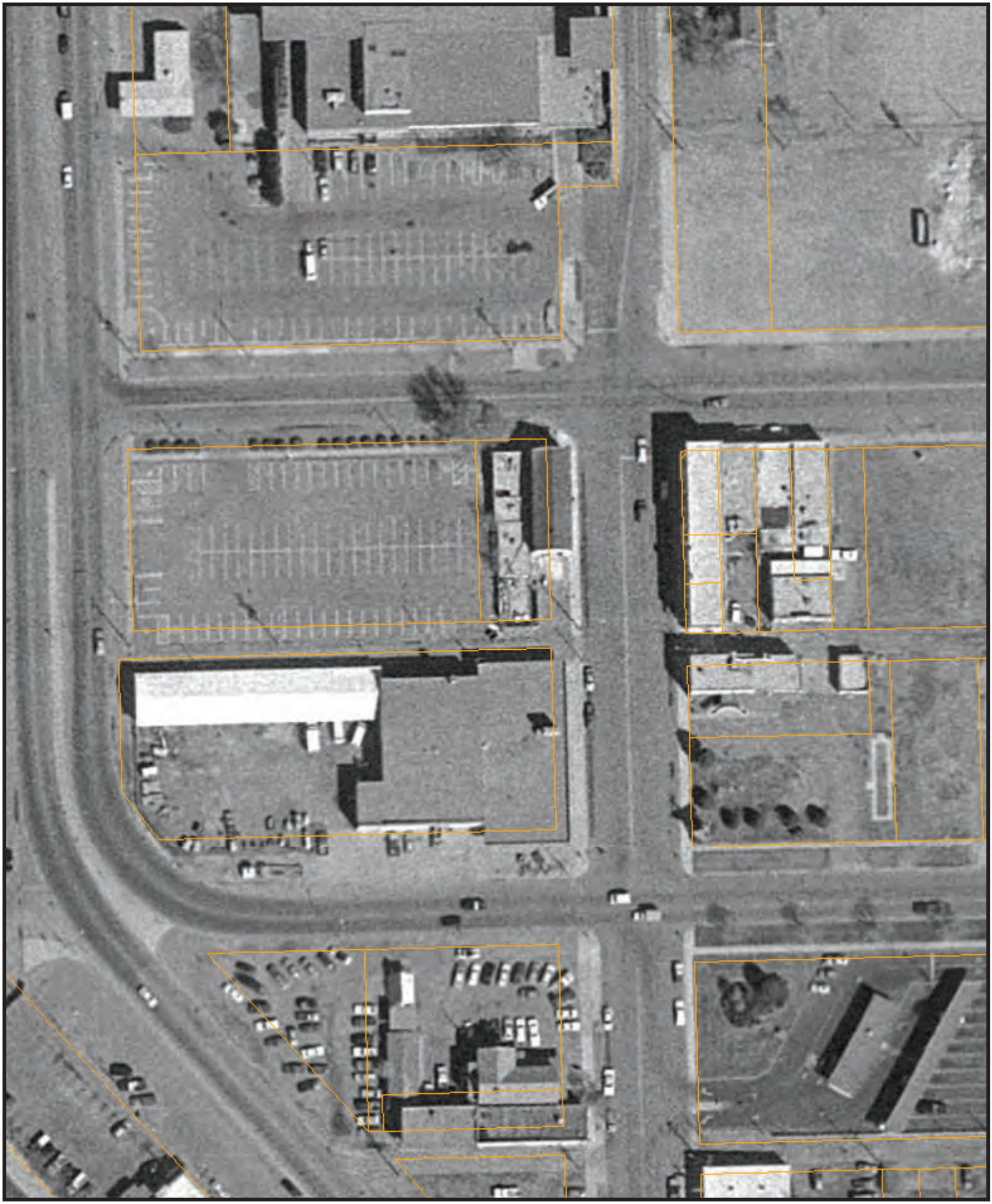
1966 Aerial Photo

0 0.0075 0.015 0.03 mi

0 0.00750.015 0.03 km

Print Date: July 16, 2015

Mesa County, Colorado
GIS/IT Department
gis.mesacounty.us



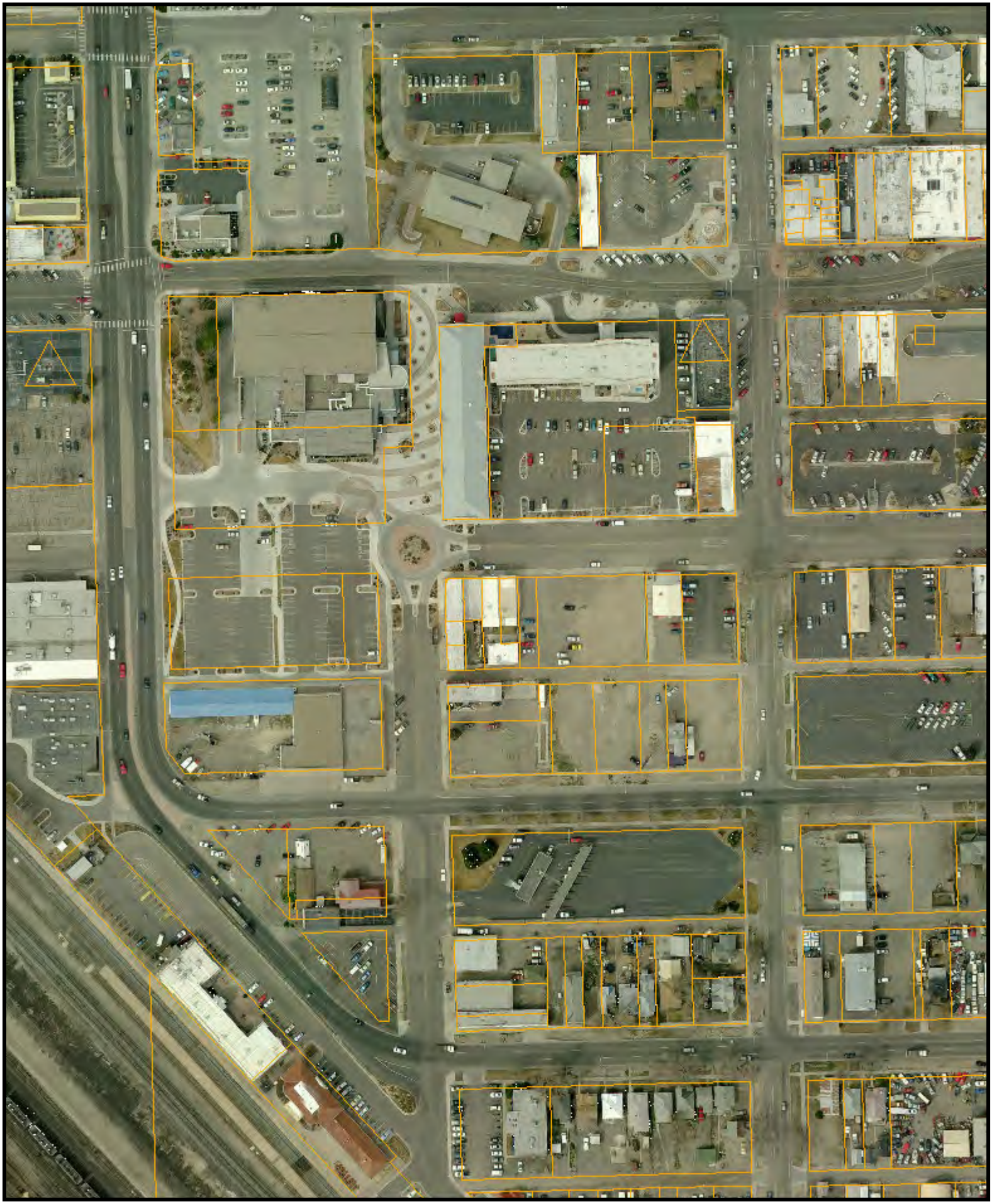
1994 Aerial Photo

Print Date: July 16, 2015

0 0.0075 0.015 0.03 mi

0 0.00750.015 0.03 km

Mesa County, Colorado
GIS/IT Department
gis.mesacounty.us



2006 Aerial Photo

Print Date: July 16, 2015

0 0.015 0.03 0.06 mi

0 0.0175 0.035 0.07 km

Mesa County, Colorado
GIS/IT Department
gis.mesacounty.us

APPENDIX C

SITE PHOTOGRAPHS

South side of business

Interior storage area

Retail area

Paint booth

Sump or sand trap

Outside covered storage


Oil stained soil in yard


Basement access

APPENDIX D

ENVIRONMENTAL PROFESSIONAL QUALIFICATIONS

EDWARD M. BALTZER, CPG, CHMM

Manager, Regulatory Specialist, and Environmental Scientist

KEY EXPERTISE

- ✓ Phase I Environmental Site Assessments
- ✓ Permitting and Regulatory Support
- ✓ Environmental Site Characterization
- ✓ Soil, Groundwater, and Asbestos Investigations and Remediation
- ✓ Industrial Hygiene and Worker Health and Safety
- ✓ Hazardous Waste Handling and Disposal
- ✓ Voluntary Cleanup Plans

EDUCATION AND CERTIFICATIONS

M.A., Geology and Environmental Sciences, State University of New York, 1989
B.A., Environmental Engineering, University of Colorado, 1981
Certified Hazardous Material Manager (CHMM) #11357
Registered Professional Environmental Scientist #5078, Colorado Oil Inspection Section
Wyoming Registered Professional Geologist PG-3325
Certified Professional Geologist (AIPG) CPG 8861
Asbestos Inspector, EPA and Colorado #8738
Asbestos Project Designer, EPA and Colorado #8738
OSHA 40-hour Hazardous Waste Operations Worker and 8-hour Supervisor training

EXPERIENCE SUMMARY

Mr. Baltzer has 35 years of professional experience including 25 as an environmental consultant and 10 as a soil geologist and Quaternary tectonics specialist. He has performed environmental and geologic investigations on hundreds of sites, has prepared written reports for most of these, and has delivered oral presentations on several dozen topics. He is responsible for evaluating the presence and/or extent of contamination at sites. He provides regulatory, technical, and managerial assistance on Phase I ESAs, asbestos, voluntary cleanup, hazardous waste, TSCA, ecological, and other types of environmental projects.

PROFESSIONAL AFFILIATIONS

EPA/NGWA Advisory Council member for the Remediation of Abandoned Mine Lands Conference
AIPG Annual Convention Planning Committee and Chief Editor, 2009 National Convention
Mesa County Indoor Air Task Force member, 2007 to present
Former Chair and Vice Chair, Mesa County (Colorado) Local Emergency Planning Committee (LEPC)
American Institute for Professional Geologists (AIPG) Associate Editor
Member, Mesa State College Environmental Restoration Education Advisory Committee
Part time professor of Environmental Restoration at Mesa State College, 2005 to present
Mesa County Household Hazardous Waste Task Force member, 1994-1996
Former Town Councilman and Volunteer Firefighter

PUBLICATIONS, PRESENTATIONS, AND AWARDS

Service to Geology Award, December, 2009 from the American Institute of Professional Geologists
Recognition by USFS chief for vital role in "the best example of a land exchange in the nation", 2005
Guest lecturer, Mesa State College Environmental Restoration Program, 1993-present.
Colorado Produced Water Rules – Western COGA environmental summit, 2010
Preservation of Water Quality near a Surface Mine, Northwestern Colorado. 2007 GSA convention.
Neotectonics of the Lemhi Fault, Geological Society of America, Northwest Section Meeting, 1989.
Use of Remote Sensing to Define Fault Traces, Central Utah. American Society of Remote Sensing, 1982.
Co-author of numerous geologic reports, U.S. Bureau of Reclamation, 1981-1985

September 16, 2016

Mr. John Shaver, City Attorney
City of Grand Junction
250 N. 5th Street
Grand Junction CO 81501

RE: Asbestos and Soil Inspections
225 S. 2nd Street, Grand Junction CO
Avant Project No. 9047-2

Dear Mr. Shaver:

Avant Environmental Services, Inc. (Avant) performed asbestos and soil inspections of the above-referenced property. It is improved with a cinder block, masonry, and wood-framed single-story structure built in several stages. It was inspected on August 31, 2016 by Edward Baltzer, a Certified Hazardous Materials Manager and an asbestos inspector certified by the EPA and the Colorado Department of Public Health and Environment's Air Pollution Control Division (APCD).

Asbestos Inspection – Asbestos inspection work conformed to the APCD Regulation 8 governing asbestos inspections of non-schools. Bulk samples of suspect building materials were obtained and placed into individual containers, labeled, recorded on inspection forms and on a chain-of-custody form, and shipped to Reservoirs Environmental Laboratories in Denver, Colorado for polarized-light microscopic analysis using calibrated visual area estimating. Reservoirs Environmental is certified by NAVLAP for asbestos analysis. Avant obtained 22 samples of suspect asbestos-containing building materials that contained a total of 41 separately analyzed layers from the structure. Samples included drywall, flooring, texture, plaster, and ceiling tiles. All materials were found to be in good condition.

Observed non-asbestos materials included wood, plywood, steel, glass, fiberglass insulation, cinderblock, brick, ceramic tile, concrete, wiring, and pipes. Potentially asbestos-containing building materials that were observed and sampled during the inspection, their approximate extent, and asbestos content are listed below. The laboratory analytical data sheets and the chain-of-custody form are attached to this letter.

Drywall and Texture (HA1-1 through -5) – Five samples of drywall and orange peel texture were obtained from the north wall of the main retail area and the back room walls. None of the samples contained asbestos; as such the interior drywall and orange peel texture is not a regulated asbestos-containing building material under Colorado asbestos regulations.

Drywall and Texture (HA2-1 through -3) – Three samples of drywall and light spatter pattern texture were obtained from the southwest corner of the main retail area. None of the samples contained asbestos; as such this wall system is not regulated.

Plaster (HA3-1 through-3) – Three samples of plaster were obtained from the bathrooms and office of the main retail area. The plaster is a concrete product with a sand-like texture. None of the samples contained asbestos; as such the plaster is not regulated.

Skim Coat (HA4-1 through -3) – Three samples of a skim coating on the foundation wall in the basement gun room were obtained. The finish is white and covers the poured concrete walls of the gun room. None of the samples contained asbestos; as such the material is not regulated

Flooring (M1 and 2) – Two samples of red and white 12-inch floor tiles and mastic were obtained from the main retail area. Neither sample was found to contain no asbestos; as such the tile and mastic are not regulated.

Ceiling tiles (M3 through -8) – Six samples of ceiling tiles were obtained from throughout the structure. The tiles are 2 feet by 4 feet standard drop-grid tiles, with several predominant patterns noted. At least one sample of each observed pattern was obtained for analysis. No asbestos was found in any of the ceiling tile samples. As such, the ceiling tile is not regulated.

Roofing – The roof is composed of metal and asphalt or tar. The asphalt/tar was not sampled so as to preserve the roof's integrity. If the tar contains asbestos, it may be left in the structure during demolition as it is not friable. Samples of roofing can be obtained prior to demolition if requested. At this time, the roofing material is assumed to be asbestos-containing and non-friable.

Soil Inspection – Avant also inspected the oil spill in the yard and the exterior oil/water separator and sand trap located on an abandoned sewer line exiting the structure. Individual samples of the most stained soil from the oil stain and the lowest sediment in the sand trap were placed into Zip-Loc bags, allowed to warm, and the head space in the bags was sampled using a photo-ionizing detector equipped with a 10.6 electron volt lamp. Both samples measured less than 1 part per million, indicating no presence of volatile organic compounds. Laboratory samples were obtained as described below and shipped under chain-of-custody control via overnight courier to ESC Analytical Laboratory of Nashville, Tennessee. Methods and findings are discussed below.

Oil Spill –The oil spill in the yard was reported by the owner to have originated from a slow leak of hydraulic oil from a backhoe. He estimated only a few quarts had leaked. It appears as a dark area in the gravel and soil about 8 feet in diameter. Test holes excavated in the stain revealed broken asphalt at about 2 inches below grade at all points tested. This suggests that soil stained with oil is only a few inches thick, although it may thicken in some areas beneath cracks in the asphalt. A sample from the center (most stained area) was obtained and placed into laboratory-provided containers, labeled, and placed on ice. The sample was analyzed for the 8 Resource Conservation and Recovery Act (RCRA) metals, volatile organic compounds using EPA Method 8260, diesel-range organics, and oil and grease. Results are summarized in the table below, and laboratory analytical reports are attached.

Sand Trap – This is a sub-grade concrete installation that receives drainage from floor drains in the structure and roof runoff which is conveyed into the sewer system. It is about 6 feet by 3.5 feet and about 3 feet deep and formed of 4-inch thick concrete apparently poured in place. Inspection of the

sand trap revealed some minor cracking on the sides, and as it was holding water at the time of inspection likely does not have any cracks on the bottom. It has several inches of dirt-like sediment in the bottom when it was inspected. Some of this material may have originated when vehicle maintenance was occurring, and as such, was sampled by obtaining a composite sample of especially the lowest sediment in the trap. This material was placed into laboratory-provided containers, labeled, and placed on ice. The sample was analyzed for the 8 RCRA metals and for volatile organic compounds using EPA Method 8260. Results are summarized in the table below, and laboratory analytical reports are attached.

Analyte (mg/kg)	Oil Spill	Sand Trap	TCLP MCL	MCL
Oil & Grease	**58,100**	Not analyzed		**500***
Total Petroleum Hydrocarbons	**9,810**	Not analyzed		**500***
Mercury	<0.0200	0.147	4	11
Arsenic	**7.66**	**6.84**	100	**0.68**
Barium	200	148	2000	1,500
Cadmium	0.751	2.98	20	71
Chromium	12.3	19.4	100	120,000(Cr III)
Lead	79.7	**150**	**100**	400
Selenium	<2.00	<2.00	20	390
Silver	<1.00	<1.00	100	390
EPA Method 8260 (VOCs)		No detections		
Acetone	0.111	<0.05	not regulated	6,100
2-Butanone (MEK)	0.033	<0.01	200	27,000

Note: TCLP MCL – listed level multiplied by 20. MCL from EPA *Regional Screening Level Summary Table*, residential soil level, hazard quotient of 1.0. Exceedances shown in **bold**. * Hydrocarbon MCL from Colorado Oil and Public Safety Division (OPS) Risk Based Screening Level for total petroleum hydrocarbons. See text for details.

Results – Arsenic, oil and grease, and total petroleum hydrocarbons exceed their respective maximum contaminant levels. Arsenic exceeds the residential soil standard; however, arsenic is a naturally-occurring element found in the Grand Junction area at levels similar to those reported here. Oil and grease and total petroleum hydrocarbons have a screening level of 500 mg/kg above which the OPS requires testing of semi-volatile organic hydrocarbons by EPA Method 8270. This may also be required by a disposal facility. Lead exceeded the toxicity characteristic leaching procedure (TCLP) standard of 5, which was multiplied by 20 in the table above. This was done as the TCLP procedure dilutes a sample with 20X its weight in a mild acid, which leaches out contaminants, and the contaminant level is measured in the leachate. If all contaminant in the sample were leached into the leachate, the sample would theoretically exceed the TCLP maximum contaminant level (MCL). These lead levels are in the range of or somewhat higher than levels found in background.

The waste material in the sand trap does not require special handling. The oil stained soil from the oil spill has results consistent with the leak reported by the owner. This soil can be managed in one of several ways. These include stockpiling it in a manner where it can be aerated and hydrated for a summer season, which will likely result in biodegradation of the hydrocarbons. Alternatively, the soil

can be disposed at the Mesa County landfill upon application for and approval of special waste disposal. Additional analyses may be required prior to its disposal. Similarly if the sand trap waste is to be disposed at the landfill, special waste disposal procedures must be followed.

Conclusions and Recommendations – No asbestos was found in any sample in the structure. As such, the building may be demolished without asbestos abatement. A Colorado-state demolition permit application can be completed upon request. Soil stained by oil in the yard should be managed by in-situ treatment or off-site landfill disposal. The sand trap does not contain regulated waste, and therefore can be treated in an ordinary manner during use or demolition. The integrity of the sand trap indicates that it may have leaked into the surrounding soil. Avant recommends having an environmental scientist present during the removal of the sand trap to determine if regulated compounds are present in the soil surrounding the sand trap.

Please contact me at (970) 260-8468 with any questions. Thank you for selecting Avant for your project.

Sincerely,
Avant Environmental Services, Inc.

Edward M. Baltzer, CPG 8861, CHMM
Principal Consultant

Attachments: Sampling Forms
Chain-of-Custody Forms
Analytical Results
Inspector Certifications
Photographs

Avant
ENVIRONMENTAL SERVICES INC.

Asbestos Inspection Form
Building: 225 S. 2nd Street
Grand Junction, CO

Inspector Name: Ed Baltzer (# 8738)
Project #: 9047-2 Date: August 31, 2016
Homogenous Area # HA1
Amount of Material: ~600 ft²

Description of Material: Orange peel texture - North wall NW area

Type of Suspect Material: ✓ Surfacing, _____ TSI, _____ Miscellaneous

Sample #	Location
HA1-1	west end pillar
-2	north wall center
-3	east wall left of display
-4	BACK ROOM north wall - TAPE, mud, texture only
-5	" " South wall

CONDITION	Sig. Damage	Damaged	Good
Deterioration			✓
Water Damage			✓
Physical Damage			✓

Note: Sig. Damage = >10% scattered or >25% local damage. Damage = <10% scattered or <25% local damage.

POTENTIAL FOR DISTURBANCE Highest ~~Lowest~~

Comments: _____

PHYSICAL CLASSIFICATION

_____ Damaged or significantly damaged thermal system insulation (TSI)
_____ Damaged friable surfacing ACBM
_____ Significantly damaged friable surfacing ACBM
_____ Damaged or significantly damaged friable miscellaneous ACBM
✓ ACBM with potential for damage
_____ ACBM with potential for significant damage
_____ Any remaining friable ACBM or friable suspected ACBM

Comments: _____

Avant
ENVIRONMENTAL SERVICES INC.

Asbestos Inspection Form
Building: 225 S. 2nd Street
Grand Junction, CO

Inspector Name: Ed Baltzer (# 8738)
Project #: 9047-2 Date: August 31, 2016
Homogenous Area # HA2
Amount of Material: 500 ft²

Description of Material: Light spatter texture Southwest corner

Type of Suspect Material: ✓ Surfacing, _____ TSI, _____ Miscellaneous

Sample #	Location
HA2-1	south wall east end
-2	SW corner
-3	by door

CONDITION	Sig. Damage	Damaged	Good
Deterioration			✓
Water Damage			✓
Physical Damage			✓

Note: Sig. Damage = >10% scattered or >25% local damage. Damage = <10% scattered or <25% local damage.

POTENTIAL FOR DISTURBANCE Highest (Lowest)

Comments: _____

PHYSICAL CLASSIFICATION

- _____ Damaged or significantly damaged thermal system insulation (TSI)
- _____ Damaged friable surfacing ACBM
- _____ Significantly damaged friable surfacing ACBM
- _____ Damaged or significantly damaged friable miscellaneous ACBM
- ✓ ACBM with potential for damage
- _____ ACBM with potential for significant damage
- _____ Any remaining friable ACBM or friable suspected ACBM

Comments: _____

Avant
ENVIRONMENTAL SERVICES INC.

Asbestos Inspection Form
Building: 225 S. 2nd Street
Grand Junction, CO

Inspector Name: Ed Baltzer (# 8738)
Project #: 9047-2 Date: August 31, 2016
Homogenous Area # HA 3
Amount of Material: ~500 ft²

Description of Material: Plaster on original brick and on framing

Type of Suspect Material: ✓ Surfacing, _____ TSI, _____ Miscellaneous

Sample #	Location
HA3-1	left of bathroom in corner - w/ caulk
-2	in unused bath by sink
-3	by desk inside office

CONDITION	Sig. Damage	Damaged	Good
Deterioration			✓
Water Damage			✓
Physical Damage			✓

Note: Sig. Damage = >10% scattered or >25% local damage. Damage = <10% scattered or <25% local damage.

POTENTIAL FOR DISTURBANCE Highest (Lowest)

Comments: _____

PHYSICAL CLASSIFICATION

- _____ Damaged or significantly damaged thermal system insulation (TSI)
- _____ Damaged friable surfacing ACBM
- _____ Significantly damaged friable surfacing ACBM
- _____ Damaged or significantly damaged friable miscellaneous ACBM
- ✓ ACBM with potential for damage
- _____ ACBM with potential for significant damage
- _____ Any remaining friable ACBM or friable suspected ACBM

Comments: Sand-like texture

Avant
ENVIRONMENTAL SERVICES INC.

Asbestos Inspection Form
Building: 225 S. 2nd Street
Grand Junction, CO

Inspector Name: Ed Baltzer (# 8738)
Project #: 9047-2 Date: August 31, 2016
Homogenous Area # HA 4
Amount of Material: 400 ft²

Description of Material: Skim coat on foundation wall

Type of Suspect Material: ✓ Surfacing, _____ TSI, _____ Miscellaneous

Sample #	Location
HA4-1	EAST Gym room wall
HA4-2	North " " "
-3	West " " "

CONDITION	Sig. Damage	Damaged	Good
Deterioration			✓
Water Damage			✓
Physical Damage			✓

Note: Sig. Damage = >10% scattered or >25% local damage. Damage = <10% scattered or <25% local damage.

POTENTIAL FOR DISTURBANCE Highest (Lowest)

Comments: _____

PHYSICAL CLASSIFICATION

_____ Damaged or significantly damaged thermal system insulation (TSI)
_____ Damaged friable surfacing ACBM
_____ Significantly damaged friable surfacing ACBM
_____ Damaged or significantly damaged friable miscellaneous ACBM
✓ ACBM with potential for damage
_____ ACBM with potential for significant damage
_____ Any remaining friable ACBM or friable suspected ACBM

Comments: _____

Avant
ENVIRONMENTAL SERVICES INC.

Asbestos Inspection Form
Building: 225 S. 2nd Street
Grand Junction, CO

Inspector Name: Ed Baltzer (# 8738)
Project #: 9047-2 Date: August 31, 2016
Homogenous Area # M/SC
Amount of Material: _____ ft²

Description of Material: Miscellaneous

Type of Suspect Material: _____Surfacing, _____TSI, ✓ Miscellaneous

Sample #	Location	
M-1	White 12" tile } ~1200 SF	
M2	Red 12" tile }	
M3	5"-dot ceiling tile main area ~3000 SF	
M4	12" ceiling tile - PAINTED deep texture - original(?)	Total ~1500
M5	" " " lateral fissure low texture replacement	
M6	" " " deep texture replacement - dark appearance	
M7	Horizontal 2x4 SE corner storage } 3000	
M8	Random 2x4 " " " }	

CONDITION

	Sig. Damage	Damaged	Good
Deterioration			✓
Water Damage			✓
Physical Damage			✓

Note: Sig. Damage = >10% scattered or >25% local damage. Damage = <10% scattered or <25% local damage.

POTENTIAL FOR DISTURBANCE Highest Lowest

Comments: _____

PHYSICAL CLASSIFICATION

_____ Damaged or significantly damaged thermal system insulation (TSI)
_____ Damaged friable surfacing ACBM
_____ Significantly damaged friable surfacing ACBM
_____ Damaged or significantly damaged friable miscellaneous ACBM
✓ ACBM with potential for damage
_____ ACBM with potential for significant damage
_____ Any remaining friable ACBM or friable suspected ACBM

Comments: _____

REI LAB **Reservoirs Environmental, Inc.**

September 15, 2016

Subcontract Number: **NA**
Laboratory Report: **RES 359990-1**
Project # / P.O. # **9047-2**
Project Description: **Mesa Pawn**

Avant Environmental Inc.
120 Mesa Grande Dr.
Grand Junction CO 81507

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 359990-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

Emily A. Casey
Emily Casey for

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 359990-1**
Client: **Avant Environmental Inc.**
Client Project Number / P.O.: **9047-2**
Client Project Description: **Mesa Pawn**
Date Samples Received: **September 02, 2016**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **3-5 Day**
Date Samples Analyzed: **September 15, 2016**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
M1	EM 1702313	A	Yellow mastic	TR		**ND**	0	100
		B	Red floor tile	100		**ND**	0	100
M2	EM 1702314	A	Yellow mastic	TR		**ND**	0	100
		B	White floor tile	100		**ND**	0	100
M3	EM 1702315	A	Tan/white ceiling tile w/ gray paint	100		**ND**	65	35
M4	EM 1702316	A	Tan/white ceiling tile w/ white/brown paint	100		**ND**	70	30
M5	EM 1702317	A	Tan/white ceiling tile w/ white/brown paint	100		**ND**	70	30
M6	EM 1702318	A	Tan/white ceiling tile	100		**ND**	75	25
M7	EM 1702319	A	Tan/white ceiling tile	100		**ND**	65	35
M8	EM 1702320	A	Tan/white ceiling tile	100		**ND**	65	35
HA1-1	EM 1702321	A	White texture w/ white/beige paint	100		**ND**	0	100
HA1-2	EM 1702322	A	White texture w/ white paint	40		**ND**	0	100
		B	White/brown drywall	60		**ND**	30	70

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 359990-1**
Client: **Avant Environmental Inc.**
Client Project Number / P.O.: **9047-2**
Client Project Description: **Mesa Pawn**
Date Samples Received: **September 02, 2016**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **3-5 Day**
Date Samples Analyzed: **September 15, 2016**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
HA1-3	EM 1702323	A	White texture w/ white paint	20		**ND**	0	100
		B	White/brown drywall	80		**ND**	35	65
HA1-4	EM 1702324	A	White joint compound	4		**ND**	0	100
		B	Brown/white drywall	8		**ND**	85	15
		C	White texture w/ white paint	20		**ND**	0	100
		D	White texture w/ white paint	33		**ND**	0	100
		E	White tape	35		**ND**	99	1
HA1-5	EM 1702325	A	White texture w/ white paint	20		**ND**	0	100
		B	White texture w/ white paint	25		**ND**	0	100
		C	White/brown drywall	55		**ND**	45	55
HA2-1	EM 1702326	A	White paint w/ white compound	4		**ND**	0	100
		B	White texture w/ white paint	8		**ND**	0	100
		C	White/brown drywall	88		**ND**	40	60

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 359990-1**
Client: **Avant Environmental Inc.**
Client Project Number / P.O.: **9047-2**
Client Project Description: **Mesa Pawn**
Date Samples Received: **September 02, 2016**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **3-5 Day**
Date Samples Analyzed: **September 15, 2016**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
HA2-2	EM 1702327	A	White paint w/ white texture	4		**ND**	TR	100
		B	White/brown drywall	96		**ND**	45	55
HA2-3	EM 1702328	A	White texture w/ white paint	5		**ND**	0	100
		B	White/brown drywall	95		**ND**	15	85
HA3-1	EM 1702329	A	White caulk w/ white/multi-colored paint	20		**ND**	0	100
		B	Beige granular plaster	80		**ND**	TR	100
HA3-2	EM 1702330	A	Beige granular plaster w/ white/multi-colored paint	100		**ND**	TR	100
HA3-3	EM 1702331	A	White texture w/ white paint	45		**ND**	0	100
		B	Beige granular plaster w/ cream/multi-colored paint	55		**ND**	TR	100
HA4-1	EM 1702332	A	Gray granular cementitious material	2		**ND**	0	100
		B	White texture w/ white paint	98		**ND**	0	100
HA4-2	EM 1702333	A	Off white/gray paint w/ white compound	4		**ND**	0	100
		B	Gray granular cementitious material	96		**ND**	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 359990-1**
Client: **Avant Environmental Inc.**
Client Project Number / P.O.: **9047-2**
Client Project Description: **Mesa Pawn**
Date Samples Received: **September 02, 2016**
Method: **EPA 600/R-93/116 - Short Report, Bulk**
Turnaround: **3-5 Day**
Date Samples Analyzed: **September 15, 2016**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	LAYER	Physical Description	Sub Part (%)	Asbestos Content: Mineral	Asbestos Content: Visual Estimate (%)	Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
HA4-3	EM 1702334	A	Gray granular cementitious material	45		**ND**	0	100
		B	White compound w/ white paint	55		**ND**	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Brett S. Colbert
Analyst / Data QA

Due Date: 9-8-9-D
Due Time: 1110a

REI LAB Reservoirs Environmental, Inc.

5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RESI-ENV

RES 359990

After Hours Cell Phone: 720-339-9228

SUBMITTED BY:	INVOICE TO: (IF DIFFERENT)	CONTACT INFORMATION:
Company: Avant Environmental Services, Inc.	Company:	Contact: Edward Baltzer
Address: 2500 Broadway Unit B-235	Address:	Phone:
Grand Junction CO 81507		Fax:
		Cell/pager: 970 260-8468
Project Number and/or P.O. #: 9047-2		Final Data Deliverable Email Address: ebaltzer@avantenvironmental.com
Project Description/Location: Mesa Pawn		

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm

PLM / PCM / TEM ____ RUSH (Same Day) ___ PRIORITY (Next Day) ✓ STANDARD (3-5 Day)
(Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust** ___ RUSH ___ 24 hr. ___3-5 Day
RCRA 8 / Metals & Welding Fume Scan / TCLP** __RUSH (3 Day)__5 Day __10 Day
Organics ___ 24 hr. ___ 3 day ___5 Day

Prior notification is required for RUSH turnarounds.

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm

E.coli and/or Coliforms* ___ 24-48 Hour Other: _____
Pathogens* ___ 24-48 Hour
Microbial Growth* ___ 5-10 Day
Legionella ___ 10 Day
Mold ___ RUSH ___24 Hr ___48 Hr ___3 Day ___5 Day

TAT dependent on speed of microbial growth.

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions:

REQUESTED ANALYSIS

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Point Count, Long report, Qualitative	TEM - AHERA, Level II, 7402, ISO, +/- (Air, Bulk or Dust), Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan, pH	ORGANICS - METH, TSS	MICROBIOLOGY: Pathogens: Aerobic Plate Count, Salmonella, E.coli O157:H7, Listeria, S.aureus, Campilobacter: +/- or Quantification	MICROBIOLOGY: E.coli and/or Coliforms: +/- or Quantification	MICROBIOLOGY: Microbial Growth: Aerobic Plate Count ID, Bacteria or Y & M: +/- or Quantification	MICROBIOLOGY: Legionella: +/- or Quantification	MICROBIOLOGY: Other: Bioburden, LAL or Environmental	MICROBIOLOGY: Mold: Spore Trap or Bulk: +/-, Identification, Quantification	SAMPLER'S INITIALS OR OTHER NOTES:	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1 M1	X														B	1	8/31/16		170213
2 M2	X														B	1	8/31/16		4
3 M3	X														B	1	8/31/16		5
4 M4	X														B	1	8/31/16		6
5 M5	X														B	1	8/31/16		7
6 M6	X														B	1	8/31/16		8
7 M7	X														B	1	8/31/16		9
8 M8	X														B	1	8/31/16		10
9 HA1-1	X														B	1	8/31/16		11
10 HA1-2	X														B	1	8/31/16		12

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

Number of samples received: 22 (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: Edward M Baltzer Date/Time: 8/31/16

Laboratory Use Only
Received By: Date/Time: 9216 1110

Carrier: Hand / FedEx / UPS / USPS / Drop Box / Courier

Sample Condition: Temp. (F°) ____ On Ice Yes / No Sealed Yes / No Intact Yes / No

Data Entry QA:	Contact	Phone	Email	Fax	Date	Time	Initials	Contact	Phone	Email	Fax	Date	Time	Initials
	Contact	Phone	Email	Fax	Date	Time	Initials	Contact	Phone	Email	Fax	Date	Time	Initials

REI LAB **Reservoirs Environmental, Inc.**
5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RESI-ENV

RES Job # 35990 Page 2 of 2

Submitted by: **Avant Environmental Services, Inc.**

REQUESTED ANALYSIS

PLM - Short report, Long report, Point Count
TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps
PCM - 7400A, 7400B, OSHA
DUST - Total, Respirable
METALS - Analyte(s) _____ RCRA 8, TCLP, Welding Fume, Metals Scan
ORGANICS - METH
MICROBIOLOGY
Pathogens: Aerobic Plate Count, Salmonella, E.coli O157:H7, Listeria, S aureus, Camphilobacter: +/- or Quantification
E.coli and/or Coliforms: +/- or Quantificatino
Microbial Growth: Aerobic Plate Count ID, Bacteria or Y & M: +/- or Quantification
Legionella: +/- or Quantification
Other: Bioburden, LAL or Environmental
Mold: Spore Trap or Bulk: +/- or Quantification
SAMPLER'S INITIALS OR OTHER NOTES:

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

	Client sample ID number (Sample ID's must be unique)	PLM	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
11	HA1-3	X		B	1	8 31 16		702393
12	HA1-4	X		B	1	8 31 16		4
13	HA1-5	X		B	1	8 31 16		5
14	HA2-1	X		B	1	8 31 16		6
15	HA2-2	X		B	1	8 31 16		7
16	HA2-3	X		B	1	8 31 16		8
17	HA3-1	X		B	1	8 31 16		9
18	HA3-2	X		B	1	8 31 16		10
19	HA3-3	X		B	1	8 31 16		11
20	HA4-1	X		B	1	8 31 16		12
21	HA4-2	X		B	1	8 31 16		13
22	HA4-3	X		B	1	8 31 16		14
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
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Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Edward M. Baltzer

Certification No.: 8738

has met the requirements of 25-7-507, C.R.S. and Air Quality Control Commission Regulation No. 8, Part B, and is hereby certified by the state of Colorado in the following discipline:

Building Inspector*

Issued: **April 08, 2016**

Expires: **April 17, 2017**

**** This certificate is valid only with the possession of a current Division-approved training course certification in the discipline specified above.***

Authorized APCD Representative

SEAL

ACCLAIM ENVIRONMENTAL
SERVICES INC

14367 Lakeview Lane, Broomfield, Colorado 80023
Tel: 303.424.4647
Fax: 303.432.8669

CERTIFIES THAT

EDWARD BALTZER

Has successfully completed

The **EPA-Approved AHERA Annual Refresher Course** for **INSPECTOR**. This course is EPA-approved under Section 206 of the Toxic Substances Control Act (TSCA) and meets the requirements of Colorado Regulation No. 8.

Course Date:	04/06/16
Exam Date:	N/A
Certificate No.:	AE16-019-BI-R-01
Expiration Date:	04/06/17

K. Jay Gale, President

ANALYTICAL REPORT

September 13, 2016

Avant Environmental - GJ, CO

Sample Delivery Group:	L857087
Samples Received:	09/01/2016
Project Number:	9047-2
Description:	Mesa Power

Report To: Ed Baltzer
120 Mesa Grande Drive
Grand Junction, CO 81507

Entire Report Reviewed By:

Shane Gambill
Technical Service Representative

TABLE OF CONTENTS

LEAK L857087-01 Solid

Collected by: Edward Baltzer
Collected date/time: 08/31/16 10:03
Received date/time: 09/01/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG904528	1	09/01/16 18:32	09/02/16 11:29	NJB
Metals (ICP) by Method 6010B	WG904908	1	09/07/16 15:26	09/08/16 01:37	LTB
Semi-Volatile Organic Compounds (GC) by Method 8015	WG906242	100	09/08/16 14:03	09/08/16 23:52	JM
Volatile Organic Compounds (GC/MS) by Method 8260B	WG905607	1	09/08/16 18:36	09/10/16 09:15	BMB
Wet Chemistry by Method 9071B	WG905442	1	09/07/16 08:59	09/07/16 15:37	SHG

SAND TRAP L857087-02 Solid

Collected by: Edward Baltzer
Collected date/time: 08/31/16 11:15
Received date/time: 09/01/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7471A	WG904528	1	09/01/16 18:32	09/02/16 12:15	NJB
Metals (ICP) by Method 6010B	WG904908	1	09/07/16 15:26	09/08/16 02:52	LTB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG905607	1	09/08/16 18:36	09/10/16 09:36	BMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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.

Shane Gambill
Technical Service Representative

Wet Chemistry by Method 9071B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	58100		100	1	09/07/2016 15:37	WG905442

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	09/02/2016 11:29	WG904528

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.66		2.00	1	09/08/2016 01:37	WG904908
Barium	201		0.500	1	09/08/2016 01:37	WG904908
Cadmium	0.751		0.500	1	09/08/2016 01:37	WG904908
Chromium	12.3		1.00	1	09/08/2016 01:37	WG904908
Lead	79.7		0.500	1	09/08/2016 01:37	WG904908
Selenium	ND		2.00	1	09/08/2016 01:37	WG904908
Silver	ND		1.00	1	09/08/2016 01:37	WG904908

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.111		0.0500	1	09/10/2016 09:15	WG905607
Acrylonitrile	ND		0.0100	1	09/10/2016 09:15	WG905607
Benzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Bromobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Bromodichloromethane	ND		0.00100	1	09/10/2016 09:15	WG905607
Bromoform	ND		0.00100	1	09/10/2016 09:15	WG905607
Bromomethane	ND		0.00500	1	09/10/2016 09:15	WG905607
n-Butylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
sec-Butylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
tert-Butylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Carbon tetrachloride	ND		0.00100	1	09/10/2016 09:15	WG905607
Chlorobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Chlorodibromomethane	ND		0.00100	1	09/10/2016 09:15	WG905607
Chloroethane	ND		0.00500	1	09/10/2016 09:15	WG905607
2-Chloroethyl vinyl ether	ND		0.0500	1	09/10/2016 09:15	WG905607
Chloroform	ND		0.00500	1	09/10/2016 09:15	WG905607
Chloromethane	ND		0.00250	1	09/10/2016 09:15	WG905607
2-Chlorotoluene	ND		0.00100	1	09/10/2016 09:15	WG905607
4-Chlorotoluene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	09/10/2016 09:15	WG905607
1,2-Dibromoethane	ND		0.00100	1	09/10/2016 09:15	WG905607
Dibromomethane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,2-Dichlorobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,3-Dichlorobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,4-Dichlorobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Dichlorodifluoromethane	ND		0.00500	1	09/10/2016 09:15	WG905607
1,1-Dichloroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,2-Dichloroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1-Dichloroethene	ND		0.00100	1	09/10/2016 09:15	WG905607
cis-1,2-Dichloroethene	ND		0.00100	1	09/10/2016 09:15	WG905607
trans-1,2-Dichloroethene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,2-Dichloropropane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1-Dichloropropene	ND		0.00100	1	09/10/2016 09:15	WG905607

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichloropropane	ND		0.00100	1	09/10/2016 09:15	WG905607
cis-1,3-Dichloropropene	ND		0.00100	1	09/10/2016 09:15	WG905607
trans-1,3-Dichloropropene	ND		0.00100	1	09/10/2016 09:15	WG905607
2,2-Dichloropropane	ND		0.00100	1	09/10/2016 09:15	WG905607
Di-isopropyl ether	ND		0.00100	1	09/10/2016 09:15	WG905607
Ethylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Hexachloro-1,3-butadiene	ND		0.00100	1	09/10/2016 09:15	WG905607
Isopropylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
p-Isopropyltoluene	ND		0.00100	1	09/10/2016 09:15	WG905607
2-Butanone (MEK)	0.0330		0.0100	1	09/10/2016 09:15	WG905607
Methylene Chloride	ND		0.00500	1	09/10/2016 09:15	WG905607
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	09/10/2016 09:15	WG905607
Methyl tert-butyl ether	ND		0.00100	1	09/10/2016 09:15	WG905607
Naphthalene	ND		0.00500	1	09/10/2016 09:15	WG905607
n-Propylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Styrene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1,1,2-Tetrachloroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1,2,2-Tetrachloroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
Tetrachloroethene	ND		0.00100	1	09/10/2016 09:15	WG905607
Toluene	ND		0.00500	1	09/10/2016 09:15	WG905607
1,2,3-Trichlorobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,2,4-Trichlorobenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1,1-Trichloroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
1,1,2-Trichloroethane	ND		0.00100	1	09/10/2016 09:15	WG905607
Trichloroethene	ND		0.00100	1	09/10/2016 09:15	WG905607
Trichlorofluoromethane	ND		0.00500	1	09/10/2016 09:15	WG905607
1,2,3-Trichloropropane	ND		0.00250	1	09/10/2016 09:15	WG905607
1,2,4-Trimethylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,2,3-Trimethylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
1,3,5-Trimethylbenzene	ND		0.00100	1	09/10/2016 09:15	WG905607
Vinyl chloride	ND		0.00100	1	09/10/2016 09:15	WG905607
Xylenes, Total	ND		0.00300	1	09/10/2016 09:15	WG905607
(S) Toluene-d8	*90.6*		*88.7-115*		*09/10/2016 09:15*	WG905607
(S) Dibromofluoromethane	*133*	J1	*76.3-123*		*09/10/2016 09:15*	WG905607
(S) 4-Bromofluorobenzene	*62.7*	J2	*69.7-129*		*09/10/2016 09:15*	WG905607

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	9810		400	100	09/08/2016 23:52	WG906242
(S) o-Terphenyl	*24.9*	J7	*50.0-150*		*09/08/2016 23:52*	WG906242

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.147		0.0200	1	09/02/2016 12:15	WG904528

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.84		2.00	1	09/08/2016 02:52	WG904908
Barium	148		0.500	1	09/08/2016 02:52	WG904908
Cadmium	2.98		0.500	1	09/08/2016 02:52	WG904908
Chromium	19.4		1.00	1	09/08/2016 02:52	WG904908
Lead	150		0.500	1	09/08/2016 02:52	WG904908
Selenium	ND		2.00	1	09/08/2016 02:52	WG904908
Silver	ND		1.00	1	09/08/2016 02:52	WG904908

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	09/10/2016 09:36	WG905607
Acrylonitrile	ND		0.0100	1	09/10/2016 09:36	WG905607
Benzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Bromobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Bromodichloromethane	ND		0.00100	1	09/10/2016 09:36	WG905607
Bromoform	ND		0.00100	1	09/10/2016 09:36	WG905607
Bromomethane	ND		0.00500	1	09/10/2016 09:36	WG905607
n-Butylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
sec-Butylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
tert-Butylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Carbon tetrachloride	ND		0.00100	1	09/10/2016 09:36	WG905607
Chlorobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Chlorodibromomethane	ND		0.00100	1	09/10/2016 09:36	WG905607
Chloroethane	ND		0.00500	1	09/10/2016 09:36	WG905607
2-Chloroethyl vinyl ether	ND		0.0500	1	09/10/2016 09:36	WG905607
Chloroform	ND		0.00500	1	09/10/2016 09:36	WG905607
Chloromethane	ND		0.00250	1	09/10/2016 09:36	WG905607
2-Chlorotoluene	ND		0.00100	1	09/10/2016 09:36	WG905607
4-Chlorotoluene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	09/10/2016 09:36	WG905607
1,2-Dibromoethane	ND		0.00100	1	09/10/2016 09:36	WG905607
Dibromomethane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,2-Dichlorobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,3-Dichlorobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,4-Dichlorobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Dichlorodifluoromethane	ND		0.00500	1	09/10/2016 09:36	WG905607
1,1-Dichloroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,2-Dichloroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1-Dichloroethene	ND		0.00100	1	09/10/2016 09:36	WG905607
cis-1,2-Dichloroethene	ND		0.00100	1	09/10/2016 09:36	WG905607
trans-1,2-Dichloroethene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,2-Dichloropropane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1-Dichloropropene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,3-Dichloropropane	ND		0.00100	1	09/10/2016 09:36	WG905607
cis-1,3-Dichloropropene	ND		0.00100	1	09/10/2016 09:36	WG905607
trans-1,3-Dichloropropene	ND		0.00100	1	09/10/2016 09:36	WG905607
2,2-Dichloropropane	ND		0.00100	1	09/10/2016 09:36	WG905607
Di-isopropyl ether	ND		0.00100	1	09/10/2016 09:36	WG905607
Ethylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607

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/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexachloro-1,3-butadiene	ND		0.00100	1	09/10/2016 09:36	WG905607
Isopropylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
p-Isopropyltoluene	ND		0.00100	1	09/10/2016 09:36	WG905607
2-Butanone (MEK)	ND		0.0100	1	09/10/2016 09:36	WG905607
Methylene Chloride	ND		0.00500	1	09/10/2016 09:36	WG905607
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	09/10/2016 09:36	WG905607
Methyl tert-butyl ether	ND		0.00100	1	09/10/2016 09:36	WG905607
Naphthalene	ND		0.00500	1	09/10/2016 09:36	WG905607
n-Propylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Styrene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1,1,2-Tetrachloroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1,2,2-Tetrachloroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
Tetrachloroethene	ND		0.00100	1	09/10/2016 09:36	WG905607
Toluene	ND		0.00500	1	09/10/2016 09:36	WG905607
1,2,3-Trichlorobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,2,4-Trichlorobenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1,1-Trichloroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
1,1,2-Trichloroethane	ND		0.00100	1	09/10/2016 09:36	WG905607
Trichloroethene	ND		0.00100	1	09/10/2016 09:36	WG905607
Trichlorofluoromethane	ND		0.00500	1	09/10/2016 09:36	WG905607
1,2,3-Trichloropropane	ND		0.00250	1	09/10/2016 09:36	WG905607
1,2,4-Trimethylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,2,3-Trimethylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
1,3,5-Trimethylbenzene	ND		0.00100	1	09/10/2016 09:36	WG905607
Vinyl chloride	ND		0.00100	1	09/10/2016 09:36	WG905607
Xylenes, Total	ND		0.00300	1	09/10/2016 09:36	WG905607
(S) Toluene-d8	*103*		*88.7-115*		*09/10/2016 09:36*	WG905607
(S) Dibromofluoromethane	*115*		*76.3-123*		*09/10/2016 09:36*	WG905607
(S) 4-Bromofluorobenzene	*78.1*		*69.7-129*		*09/10/2016 09:36*	WG905607

Method Blank (MB)

(MB) R3161940-1 09/07/16 15:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Oil & Grease (Hexane Extr)	U		33.0	100

L857075-03 Original Sample (OS) • Duplicate (DUP)

(OS) L857075-03 09/07/16 15:37 • (DUP) R3161940-6 09/07/16 15:37

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Oil & Grease (Hexane Extr)	100	120	1	18.2		20

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

(LCS) R3161940-2 09/07/16 15:34 • (LCSD) R3161940-3 09/07/16 15:34

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 %
Oil & Grease (Hexane Extr)	4000	3960	4050	99.0	101	80.0-120			2.25	20

L857067-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857067-09 09/07/16 15:36 • (MS) R3161940-4 09/07/16 15:36 • (MSD) R3161940-5 09/07/16 15:36

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Oil & Grease (Hexane Extr)	4000	430	4050	4180	90.5	93.8	1	80.0-120			3.16	20

Method Blank (MB)

(MB) R3161155-1 09/02/16 11:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

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

(LCS) R3161155-2 09/02/16 11:24 • (LCSD) R3161155-3 09/02/16 11:26

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 %
Mercury	0.300	0.280	0.276	93	92	80-120			1	20

L857087-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857087-01 09/02/16 11:29 • (MS) R3161155-4 09/02/16 11:37 • (MSD) R3161155-5 09/02/16 11:39

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	ND	0.265	0.287	83	91	1	75-125			8	20

Method Blank (MB)

(MB) R3162027-1 09/08/16 01:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

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

(LCS) R3162027-2 09/08/16 01:32 • (LCSD) R3162027-3 09/08/16 01:34

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 %
Arsenic	100	99.3	98.8	99	99	80-120			0	20
Barium	100	103	103	103	103	80-120			0	20
Cadmium	100	101	100	101	100	80-120			0	20
Chromium	100	102	102	102	102	80-120			0	20
Lead	100	102	102	102	102	80-120			0	20
Selenium	100	98.9	98.7	99	99	80-120			0	20
Silver	100	100	100	100	100	80-120			0	20

L857087-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857087-01 09/08/16 01:37 • (MS) R3162027-6 09/08/16 01:45 • (MSD) R3162027-7 09/08/16 01:48

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	7.66	105	101	97	94	1	75-125			4	20
Barium	100	201	310	299	109	98	1	75-125			4	20
Cadmium	100	0.751	100	96.0	99	95	1	75-125			4	20
Chromium	100	12.3	103	99.6	91	87	1	75-125			4	20
Lead	100	79.7	185	176	105	97	1	75-125			5	20
Selenium	100	ND	98.8	94.7	99	95	1	75-125			4	20
Silver	100	ND	101	96.9	101	97	1	75-125			4	20

Method Blank (MB)

(MB) R3162908-3 09/10/16 02:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
2-Chloroethyl vinyl ether	U		0.00234	0.0500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100

Method Blank (MB)

(MB) R3162908-3 09/10/16 02:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	0.00166	J	0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*107*			*88.7-115*
(S) Dibromofluoromethane	*108*			*76.3-123*
(S) 4-Bromofluorobenzene	*99.2*			*69.7-129*

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

(LCS) R3162908-1 09/10/16 01:59 • (LCSD) R3162908-2 09/10/16 02:19

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	0.125	0.116	0.127	93.1	101	25.3-178			8.59	22.9
Acrylonitrile	0.125	0.135	0.138	108	111	57.8-143			2.76	20
Benzene	0.0250	0.0249	0.0249	99.4	99.6	72.6-120			0.190	20
Bromobenzene	0.0250	0.0238	0.0244	95.2	97.8	80.3-115			2.67	20

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

(LCS) R3162908-1 09/10/16 01:59 • (LCSD) R3162908-2 09/10/16 02:19

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	0.0250	0.0246	0.0247	98.4	98.7	75.3-119			0.330	20
Bromoform	0.0250	0.0233	0.0237	93.3	94.6	69.1-135			1.39	20
Bromomethane	0.0250	0.0211	0.0181	84.3	72.6	23.0-191			14.9	20
n-Butylbenzene	0.0250	0.0259	0.0265	104	106	74.2-134			2.03	20
sec-Butylbenzene	0.0250	0.0244	0.0249	97.6	99.5	77.8-129			1.94	20
tert-Butylbenzene	0.0250	0.0238	0.0251	95.1	101	77.2-129			5.57	20
Carbon tetrachloride	0.0250	0.0240	0.0241	96.1	96.2	69.4-129			0.0600	20
Chlorobenzene	0.0250	0.0246	0.0247	98.2	98.8	78.9-122			0.590	20
Chlorodibromomethane	0.0250	0.0251	0.0257	100	103	76.4-126			2.42	20
Chloroethane	0.0250	0.0218	0.0190	87.1	76.2	47.2-147			13.4	20
2-Chloroethyl vinyl ether	0.125	0.125	0.129	99.6	103	16.7-162			3.51	23.7
Chloroform	0.0250	0.0246	0.0244	98.6	97.4	73.3-122			1.14	20
Chloromethane	0.0250	0.0282	0.0261	113	104	53.1-135			7.82	20
2-Chlorotoluene	0.0250	0.0251	0.0256	100	102	74.6-127			2.17	20
4-Chlorotoluene	0.0250	0.0247	0.0250	98.7	100	79.5-123			1.32	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0253	0.0277	101	111	64.9-131			9.06	20
1,2-Dibromoethane	0.0250	0.0256	0.0255	103	102	78.7-123			0.330	20
Dibromomethane	0.0250	0.0250	0.0251	100	100	78.5-117			0.0900	20
1,2-Dichlorobenzene	0.0250	0.0246	0.0263	98.4	105	83.6-119			6.77	20
1,3-Dichlorobenzene	0.0250	0.0238	0.0248	95.1	99.2	75.9-129			4.26	20
1,4-Dichlorobenzene	0.0250	0.0235	0.0243	94.1	97.2	81.0-115			3.27	20
Dichlorodifluoromethane	0.0250	0.0274	0.0261	110	104	50.9-139			4.97	20
1,1-Dichloroethane	0.0250	0.0260	0.0260	104	104	71.7-125			0.0700	20
1,2-Dichloroethane	0.0250	0.0248	0.0249	99.2	99.4	67.2-121			0.190	20
1,1-Dichloroethene	0.0250	0.0231	0.0231	92.5	92.2	60.6-133			0.240	20
cis-1,2-Dichloroethene	0.0250	0.0248	0.0250	99.4	100	76.1-121			0.700	20
trans-1,2-Dichloroethene	0.0250	0.0247	0.0245	98.9	97.8	70.7-124			1.07	20
1,2-Dichloropropane	0.0250	0.0253	0.0258	101	103	76.9-123			2.07	20
1,1-Dichloropropene	0.0250	0.0265	0.0263	106	105	71.2-126			0.840	20
1,3-Dichloropropane	0.0250	0.0261	0.0268	105	107	80.3-114			2.64	20
cis-1,3-Dichloropropene	0.0250	0.0261	0.0261	105	105	77.3-123			0.0700	20
trans-1,3-Dichloropropene	0.0250	0.0234	0.0238	93.5	95.2	73.0-127			1.71	20
2,2-Dichloropropane	0.0250	0.0232	0.0220	92.7	88.0	61.9-132			5.13	20
Di-isopropyl ether	0.0250	0.0237	0.0240	95.0	95.8	67.2-131			0.870	20
Ethylbenzene	0.0250	0.0237	0.0240	94.7	95.8	78.6-124			1.13	20
Hexachloro-1,3-butadiene	0.0250	0.0250	0.0249	100	99.8	69.2-136			0.410	20
Isopropylbenzene	0.0250	0.0236	0.0238	94.3	95.1	79.4-126			0.810	20
p-Isopropyltoluene	0.0250	0.0250	0.0255	100	102	75.4-132			1.90	20
2-Butanone (MEK)	0.125	0.129	0.134	103	108	44.5-154			4.44	21.3
Methylene Chloride	0.0250	0.0245	0.0240	98.2	96.2	68.2-119			2.06	20

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

(LCS) R3162908-1 09/10/16 01:59 • (LCSD) R3162908-2 09/10/16 02:19

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)	0.125	0.123	0.126	98.2	101	61.1-138			2.34	20
Methyl tert-butyl ether	0.0250	0.0233	0.0238	93.3	95.1	70.2-122			1.92	20
Naphthalene	0.0250	0.0276	0.0300	110	120	69.9-132			8.19	20
n-Propylbenzene	0.0250	0.0251	0.0271	100	108	80.2-124			7.72	20
Styrene	0.0250	0.0243	0.0251	97.3	100	79.4-124			3.15	20
1,1,1,2-Tetrachloroethane	0.0250	0.0238	0.0249	95.2	99.6	76.7-127			4.55	20
1,1,2,2-Tetrachloroethane	0.0250	0.0252	0.0261	101	104	78.8-124			3.50	20
Tetrachloroethene	0.0250	0.0232	0.0228	92.9	91.1	71.1-133			2.02	20
Toluene	0.0250	0.0239	0.0240	95.8	96.1	76.7-116			0.370	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0277	0.0269	111	108	62.6-138			2.82	20
1,2,3-Trichlorobenzene	0.0250	0.0289	0.0298	116	119	72.5-137			2.93	20
1,2,4-Trichlorobenzene	0.0250	0.0279	0.0284	112	113	74.0-137			1.69	20
1,1,1-Trichloroethane	0.0250	0.0245	0.0241	97.9	96.6	69.9-127			1.33	20
1,1,2-Trichloroethane	0.0250	0.0253	0.0256	101	103	81.9-119			1.22	20
Trichloroethene	0.0250	0.0235	0.0240	94.2	96.2	77.2-122			2.09	20
Trichlorofluoromethane	0.0250	0.0236	0.0220	94.5	88.0	51.5-151			7.11	20
1,2,3-Trichloropropane	0.0250	0.0254	0.0257	102	103	74.0-124			1.10	20
1,2,3-Trimethylbenzene	0.0250	0.0245	0.0253	97.8	101	79.4-118			3.38	20
1,2,4-Trimethylbenzene	0.0250	0.0245	0.0249	98.0	99.6	77.1-124			1.63	20
1,3,5-Trimethylbenzene	0.0250	0.0243	0.0245	97.1	98.0	79.0-125			0.920	20
Vinyl chloride	0.0250	0.0239	0.0224	95.7	89.5	58.4-134			6.66	20
Xylenes, Total	0.0750	0.0705	0.0718	94.0	95.7	78.1-123			1.73	20
(S) Toluene-d8				*105*	*105*	*88.7-115*				
(S) Dibromofluoromethane				*106*	*105*	*76.3-123*				
(S) 4-Bromofluorobenzene				*99.1*	*101*	*69.7-129*				

L857104-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857104-01 09/10/16 05:14 • (MS) R3162908-4 09/10/16 04:14 • (MSD) R3162908-5 09/10/16 04:34

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	0.159	ND	0.123	0.0986	37.8	22.4	1	10.0-130			22.1	31.5
Acrylonitrile	0.159	ND	0.198	0.169	125	107	1	39.3-152			15.7	27.2
Benzene	0.0317	ND	0.0305	0.0276	96.1	87.0	1	47.8-131			9.88	22.8
Bromobenzene	0.0317	ND	0.0268	0.0219	84.4	69.1	1	40.0-130			20.0	27.4
Bromodichloromethane	0.0317	ND	0.0317	0.0297	100	93.6	1	50.6-128			6.73	22.8
Bromoform	0.0317	ND	0.0301	0.0256	95.1	80.9	1	43.3-139			16.1	25.9
Bromomethane	0.0317	ND	0.0227	0.0181	71.6	57.2	1	5.00-189			22.3	26.7
n-Butylbenzene	0.0317	ND	0.0292	0.0297	92.0	93.8	1	23.6-146			1.92	39.2

L857104-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857104-01 09/10/16 05:14 • (MS) R3162908-4 09/10/16 04:14 • (MSD) R3162908-5 09/10/16 04:34

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 %
sec-Butylbenzene	0.0317	ND	0.0263	0.0216	83.0	68.2	1	31.0-142			19.6	34.7
tert-Butylbenzene	0.0317	ND	0.0261	0.0219	82.4	69.2	1	36.9-142			17.4	31.7
Carbon tetrachloride	0.0317	ND	0.0296	0.0263	93.4	82.8	1	46.0-140			12.0	27.2
Chlorobenzene	0.0317	ND	0.0282	0.0235	89.0	74.1	1	44.1-134			18.2	25.7
Chlorodibromomethane	0.0317	ND	0.0318	0.0337	100	106	1	49.7-134			5.99	24
Chloroethane	0.0317	ND	0.0232	0.0205	73.2	64.5	1	5.00-164			12.6	28.4
2-Chloroethyl vinyl ether	0.159	ND	ND	ND	0.000	0.000	1	5.00-159	J6	J6	0.000	40
Chloroform	0.0317	ND	0.0310	0.0267	97.7	84.2	1	51.2-133			14.8	22.8
Chloromethane	0.0317	ND	0.0364	0.0274	115	86.4	1	31.4-141		J3	28.2	24.6
2-Chlorotoluene	0.0317	ND	0.0275	0.0229	86.8	72.2	1	36.1-137			18.4	28.9
4-Chlorotoluene	0.0317	ND	0.0266	0.0220	84.0	69.4	1	35.4-137			19.1	29.8
1,2-Dibromo-3-Chloropropane	0.0317	ND	0.0422	0.0413	133	130	1	40.4-138			2.23	30.8
1,2-Dibromoethane	0.0317	ND	0.0337	0.0354	106	112	1	50.2-133			5.14	23.6
Dibromomethane	0.0317	ND	0.0329	0.0320	104	101	1	52.4-128			2.57	23
1,2-Dichlorobenzene	0.0317	ND	0.0299	0.0299	94.3	94.3	1	34.6-139			0.0200	29.9
1,3-Dichlorobenzene	0.0317	ND	0.0245	0.0204	77.3	64.5	1	28.4-142			18.1	31.2
1,4-Dichlorobenzene	0.0317	ND	0.0278	0.0284	87.7	89.5	1	35.0-133			2.06	31.1
Dichlorodifluoromethane	0.0317	ND	0.0364	0.0276	115	87.1	1	31.2-144			27.3	30.2
1,1-Dichloroethane	0.0317	ND	0.0326	0.0268	103	84.4	1	49.1-136			19.7	22.9
1,2-Dichloroethane	0.0317	ND	0.0324	0.0254	102	80.0	1	47.1-129		J3	24.2	22.7
1,1-Dichloroethene	0.0317	ND	0.0290	0.0203	91.5	64.1	1	36.1-142		J3	35.2	25.6
cis-1,2-Dichloroethene	0.0317	ND	0.0312	0.0287	98.5	90.4	1	50.6-133			8.56	23
trans-1,2-Dichloroethene	0.0317	ND	0.0291	0.0271	91.7	85.4	1	43.8-135			7.13	24.8
1,2-Dichloropropane	0.0317	ND	0.0328	0.0312	104	98.5	1	50.3-134			5.02	22.7
1,1-Dichloropropene	0.0317	ND	0.0315	0.0278	99.5	87.6	1	43.0-137			12.7	26.4
1,3-Dichloropropane	0.0317	ND	0.0342	0.0352	108	111	1	51.4-127			2.87	23.1
cis-1,3-Dichloropropene	0.0317	ND	0.0324	0.0324	102	102	1	48.4-134			0.120	23.6
trans-1,3-Dichloropropene	0.0317	ND	0.0303	0.0294	95.5	92.8	1	46.6-135			2.85	25.3
2,2-Dichloropropane	0.0317	ND	0.0307	0.0225	96.8	70.9	1	45.2-141		J3	30.9	26.6
Di-isopropyl ether	0.0317	ND	0.0307	0.0245	96.7	77.3	1	46.7-140			22.3	23.5
Ethylbenzene	0.0317	ND	0.0271	0.0226	85.5	71.3	1	44.8-135			18.2	26.9
Hexachloro-1,3-butadiene	0.0317	ND	0.0243	0.0256	76.6	80.8	1	10.0-149			5.36	40
Isopropylbenzene	0.0317	ND	0.0266	0.0221	84.0	69.8	1	41.9-139			18.5	29.3
p-Isopropyltoluene	0.0317	ND	0.0265	0.0221	83.7	69.8	1	27.3-146			18.2	35.1
2-Butanone (MEK)	0.159	ND	0.169	0.139	107	87.8	1	23.9-170			19.2	28.3
Methylene Chloride	0.0317	ND	0.0301	0.0266	94.9	83.8	1	46.7-125			12.5	22.2
4-Methyl-2-pentanone (MIBK)	0.159	ND	0.198	0.187	125	118	1	42.4-146			5.56	26.7
Methyl tert-butyl ether	0.0317	ND	0.0325	0.0277	103	87.4	1	50.4-131			16.0	24.8
Naphthalene	0.0317	ND	0.0278	0.0283	87.8	89.2	1	18.4-145			1.66	34

L857104-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857104-01 09/10/16 05:14 • (MS) R3162908-4 09/10/16 04:14 • (MSD) R3162908-5 09/10/16 04:34

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	0.0317	ND	0.0274	0.0227	86.3	71.5	1	35.2-139			18.8	31.9
Styrene	0.0317	ND	0.0265	0.0216	83.7	68.1	1	39.7-137			20.6	28.2
1,1,1,2-Tetrachloroethane	0.0317	ND	0.0289	0.0241	91.0	76.1	1	48.8-136			17.9	25.5
1,1,2,2-Tetrachloroethane	0.0317	ND	0.0344	0.0289	109	91.1	1	45.7-140			17.5	26.4
Tetrachloroethene	0.0317	ND	0.0253	0.0292	79.8	92.2	1	37.7-140			14.4	29.2
Toluene	0.0317	ND	0.0288	0.0294	90.7	92.9	1	47.8-127			2.37	24.3
1,1,2-Trichlorotrifluoroethane	0.0317	ND	0.0337	0.0239	106	75.4	1	35.7-146		J3	34.2	28.8
1,2,3-Trichlorobenzene	0.0317	ND	0.0266	0.0261	83.9	82.3	1	10.0-150			1.92	38.5
1,2,4-Trichlorobenzene	0.0317	ND	0.0264	0.0263	83.3	82.9	1	10.0-153			0.560	39.3
1,1,1-Trichloroethane	0.0317	ND	0.0303	0.0265	95.5	83.5	1	49.0-138			13.4	25.3
1,1,2-Trichloroethane	0.0317	ND	0.0326	0.0346	103	109	1	52.3-132			5.99	23.4
Trichloroethene	0.0317	ND	0.0285	0.0299	90.0	94.4	1	48.0-132			4.84	24.8
Trichlorofluoromethane	0.0317	ND	0.0267	0.0226	84.2	71.4	1	12.8-169			16.4	29.7
1,2,3-Trichloropropane	0.0317	ND	0.0353	0.0296	111	93.2	1	44.4-138			17.8	26.3
1,2,3-Trimethylbenzene	0.0317	ND	0.0307	0.0312	96.8	98.3	1	41.0-133			1.48	27.6
1,2,4-Trimethylbenzene	0.0317	ND	0.0266	0.0221	83.9	69.7	1	32.9-139			18.4	30.6
1,3,5-Trimethylbenzene	0.0317	ND	0.0266	0.0221	83.8	69.6	1	37.1-138			18.6	30.6
Vinyl chloride	0.0317	ND	0.0291	0.0227	91.6	71.7	1	32.0-146			24.4	26.3
Xylenes, Total	0.0951	ND	0.0795	0.0664	83.6	69.8	1	42.7-135			17.9	26.6
(S) Toluene-d8					*104*	*104*		*88.7-115*				
(S) Dibromofluoromethane					*110*	*96.8*		*76.3-123*				
(S) 4-Bromofluorobenzene					*94.5*	*76.2*		*69.7-129*				

Method Blank (MB)

(MB) R3162361-1 09/08/16 21:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	*59.2*			*50.0-150*

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

(LCS) R3162361-2 09/08/16 21:27 • (LCSD) R3162361-3 09/08/16 21:38

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 %
TPH (GC/FID) High Fraction	60.0	40.7	35.5	67.8	59.2	50.0-150			13.5	20
(S) o-Terphenyl				*69.6*	*61.8*	*50.0-150*				

L857069-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L857069-06 09/08/16 22:45 • (MS) R3162361-4 09/08/16 22:56 • (MSD) R3162361-5 09/08/16 23:08

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) High Fraction	60.0	ND	33.2	31.6	55.4	52.6	1	50.0-150			5.11	20
(S) o-Terphenyl					*56.6*	*57.5*		*50.0-150*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.
(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.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ESC Lab Sciences 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.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

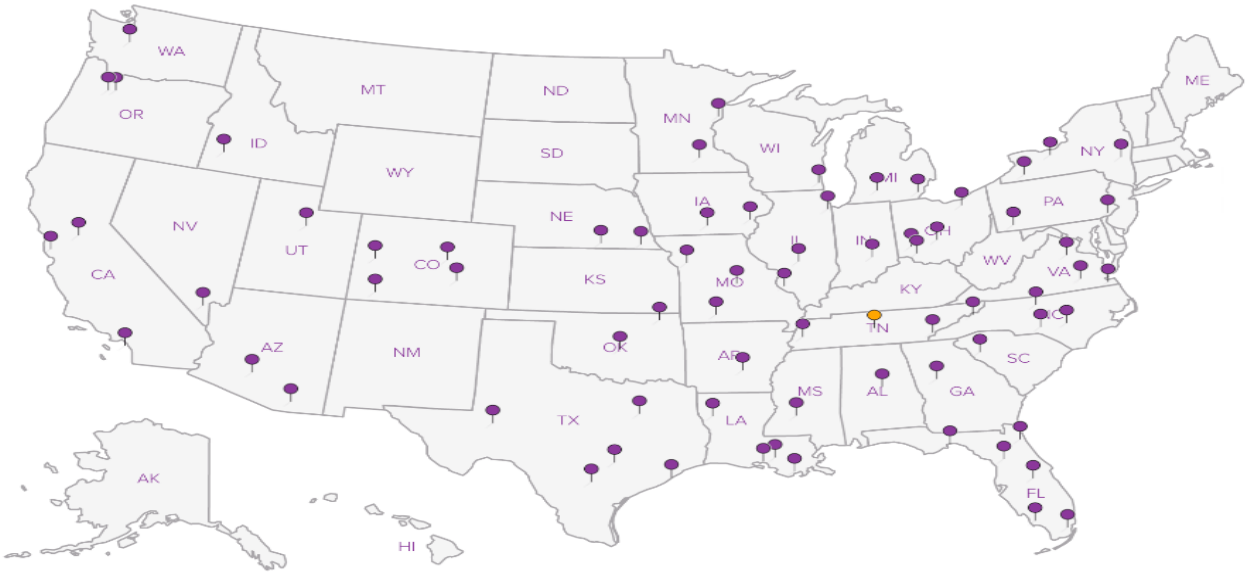
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

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

Our Locations

ESC Lab Sciences 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. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address:

Avant Environmental Services - GJ, CO

2500 Broadway B-235

~~120 Mesa Grande Drive~~

Grand Junction,CO 81507

Billing Information:

Ed Baltzer
120 Mesa Grande Drive

Grand Junction,CO 81507

ebaltzer@avantenvironmental.com

Report to: Edward Baltzer

Email to: ebaltzer@avantenvironmental.com

Project Description: Mesa Rowe

City/State Collected: Grand Jct CO

Phone: (970) 260-8468

FAX:

Client Project #: 9047-2

ESC Key:

Collected by: (print) Edward Baltzer

Site/Facility ID#:

P.O.#: 9047-2

Collected by (signature): Edward M Baltzer

Immediately Packed on Ice N ___ (Y)

Rush? (Lab MUST Be Notified)

___ Same Day..... 200%
___ Next Day..... 100%
___ Two Day..... 50%
___ Three Day..... 25%

Date Results Needed:

Email? __No ✓Yes

FAX? ✓No __Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	8 RCRA metal, total	DRO + ~~GRO~~ oil + Grease	8260 VOCs	Remarks/Contaminant	Sample # (lab only)
LEAK	Comp	SS	1-3"	~~8/30~~ 8/31/16	1003	3	✓	✓	✓		-01
Sand trap	Comp	SS	2-4"	8/31/16	1115	2	✓		✓		-02

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other ___

Remarks:

pH ___ Temp ___

Flow ___ Other ___

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122

Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

A162

CoCode AVAENVGC (lab use only)

Template/Prelogin

Shipped Via: L857087

L827110293 0

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Edward M Baltzer	8/31/16	1430	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	8/31/16	1700	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ___

Temp: 2.9 Bottles Received: 5

Date: 9.1.16 Time: 0900

Condition: 0139 OK (lab use only)

CoC Seals Intact ___ Y ___ N ✓ NA

pH Checked: NCF:

ESC LAB SCIENCES

YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: AVAENVGCO SDG# L857087

Cooler Received/Opened On: 9/1/16 By: Nikkki Farmer

bbuTemperature Upon Receipt: 2.9 °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			✓
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?			✓
Were all applicable sample containers checked for preservation?			✓
(Any samples not in accepted pH range noted on COC .)			
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	

Oil stain in yard. It is about 8 feet in diameter and is underlain by broken asphalt at a depth of about 2 inches. Analytical results are consistent with a hydraulic fluid leak.

Sand trap and oil/water separator. Sump pump reportedly used by owner to remove accumulated stormwater as needed. Note water and sediment in bottom and minor cracking in top right corner and around outlet pipe.

September 10, 2020

Jim Stavast
City of Grand Junction Facilities
333 West Ave
Grand Junction CO 81501

RE: Oil/Water Separator Removal Soil Sampling
225 S. 2nd Street, Grand Junction CO
Avant Project No. 9047-3

Dear Jim:

Avant Environmental Services, Inc. (Avant) observed the removal of an oil/water separator at the above-referenced property. The building was being demolished and the separator was removed under observation by Avant in order to determine if its historic use had impacted soil in the vicinity. On September 4, 2020 Avant met personnel from CW Construction and observed the removal of a buried concrete oil/water separator using a track-mounted excavator. The separator was an intact block of concrete that contained a minor amount of water that had entered it during a recent rainstorm. Soil in the vicinity had an odor of petroleum or solvents and a seam of dark staining was visible adjacent to the separator extending to the south and west. The operator removed this stained soil and stockpiled it on the project site. Avant used a photo-ionizing detector (PID) equipped with a 10.6 electron-volt lamp to measure volatile organic compounds in ambient air, air adjacent to the stained soil, and in headspace of soil. The PID measured 11 to 15 parts per million (ppm) volatile organic compounds (VOCs) in air adjacent to the soil. Head space was measured by placing stained soil into a Ziploc bag, sealing the bag, warming the soil, and measuring the air within the bag. These results ranged from 380 to 4,000 ppm. All visibly-impacted soil was removed from the area around the separator, resulting in an excavation that was about 12 feet by 15 feet and about 4.5 feet deep (see photo).

Avant obtained a soil sample from six inches deep beneath the center of the excavation and another from the most visibly-stained soil within the stockpile. Samples were placed into laboratory-provided glass jars with Teflon septa, labeled, placed on ice, recorded on a chain of custody form, and shipped via overnight courier to Pace Analytical Laboratories of Mt. Juliet, Tennessee. Samples were analyzed for VOCs using EPA Method 8260. Results show no detections of any regulated VOC. As such, the soil may remain on site.

Photos showing oil/water separator (top left), stained soil stockpile (above) and final excavation (left)

Please contact me with any questions at (970) 260-8468. Thank you for selecting Avant for your project.

Sincerely,

Edward M. Baltzer, PG
Principal Consultant

Attachments:
Chain-of-Custody Form
Analytical Results

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 10, 2020

Avant Environmental - GJ, CO

Sample Delivery Group:	L1258980
Samples Received:	09/05/2020
Project Number:	9047-2
Description:	mesa Pawn oil/water seperator

Report To:

Ed Baltzer
2500 Broadway
Unit B 235
Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

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SPOIL PILE L1258980-01 Solid

Collected by: Edward Baltzer
Collected date/time: 09/04/20 15:10
Received date/time: 09/05/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1539065	1	09/06/20 11:10	09/06/20 14:38	JHH	Mt. Juliet, TN

BASE OF PIT L1258980-02 Solid

Collected by: Edward Baltzer
Collected date/time: 09/04/20 15:10
Received date/time: 09/05/20 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1539065	1	09/06/20 11:10	09/06/20 14:18	JHH	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.

Chris Ward

Chris Ward
Project Manager

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	09/06/2020 14:38	WG1539065
Acrylonitrile	ND		0.0125	1	09/06/2020 14:38	WG1539065
Benzene	ND		0.00100	1	09/06/2020 14:38	WG1539065
Bromobenzene	ND		0.0125	1	09/06/2020 14:38	WG1539065
Bromodichloromethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
Bromoform	ND		0.0250	1	09/06/2020 14:38	WG1539065
Bromomethane	ND		0.0125	1	09/06/2020 14:38	WG1539065
n-Butylbenzene	ND		0.0125	1	09/06/2020 14:38	WG1539065
sec-Butylbenzene	ND		0.0125	1	09/06/2020 14:38	WG1539065
tert-Butylbenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
Carbon tetrachloride	ND		0.00500	1	09/06/2020 14:38	WG1539065
Chlorobenzene	ND		0.00250	1	09/06/2020 14:38	WG1539065
Chlorodibromomethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
Chloroethane	ND		0.00500	1	09/06/2020 14:38	WG1539065
Chloroform	ND		0.00250	1	09/06/2020 14:38	WG1539065
Chloromethane	ND		0.0125	1	09/06/2020 14:38	WG1539065
2-Chlorotoluene	ND		0.00250	1	09/06/2020 14:38	WG1539065
4-Chlorotoluene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/06/2020 14:38	WG1539065
1,2-Dibromoethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
Dibromomethane	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,2-Dichlorobenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,3-Dichlorobenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,4-Dichlorobenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
Dichlorodifluoromethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,1-Dichloroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,2-Dichloroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,1-Dichloroethene	ND		0.00250	1	09/06/2020 14:38	WG1539065
cis-1,2-Dichloroethene	ND		0.00250	1	09/06/2020 14:38	WG1539065
trans-1,2-Dichloroethene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,2-Dichloropropane	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,1-Dichloropropene	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,3-Dichloropropane	ND		0.00500	1	09/06/2020 14:38	WG1539065
cis-1,3-Dichloropropene	ND		0.00250	1	09/06/2020 14:38	WG1539065
trans-1,3-Dichloropropene	ND		0.00500	1	09/06/2020 14:38	WG1539065
2,2-Dichloropropane	ND		0.00250	1	09/06/2020 14:38	WG1539065
Di-isopropyl ether	ND		0.00100	1	09/06/2020 14:38	WG1539065
Ethylbenzene	ND		0.00250	1	09/06/2020 14:38	WG1539065
Hexachloro-1,3-butadiene	ND		0.0250	1	09/06/2020 14:38	WG1539065
Isopropylbenzene	ND		0.00250	1	09/06/2020 14:38	WG1539065
p-Isopropyltoluene	ND		0.00500	1	09/06/2020 14:38	WG1539065
2-Butanone (MEK)	ND		0.100	1	09/06/2020 14:38	WG1539065
Methylene Chloride	ND		0.0250	1	09/06/2020 14:38	WG1539065
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/06/2020 14:38	WG1539065
Methyl tert-butyl ether	ND		0.00100	1	09/06/2020 14:38	WG1539065
Naphthalene	ND		0.0125	1	09/06/2020 14:38	WG1539065
n-Propylbenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
Styrene	ND		0.0125	1	09/06/2020 14:38	WG1539065
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
Tetrachloroethene	ND		0.00250	1	09/06/2020 14:38	WG1539065
Toluene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,2,3-Trichlorobenzene	ND		0.0125	1	09/06/2020 14:38	WG1539065
1,2,4-Trichlorobenzene	ND		0.0125	1	09/06/2020 14:38	WG1539065
1,1,1-Trichloroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
Trichloroethene	ND		0.00100	1	09/06/2020 14:38	WG1539065
Trichlorofluoromethane	ND		0.00250	1	09/06/2020 14:38	WG1539065
1,2,3-Trichloropropane	ND		0.0125	1	09/06/2020 14:38	WG1539065
1,2,4-Trimethylbenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,2,3-Trimethylbenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
1,3,5-Trimethylbenzene	ND		0.00500	1	09/06/2020 14:38	WG1539065
Vinyl chloride	ND		0.00250	1	09/06/2020 14:38	WG1539065
Xylenes, Total	ND		0.00650	1	09/06/2020 14:38	WG1539065
(S) Toluene-d8	*94.9*		*75.0-131*		*09/06/2020 14:38*	WG1539065
(S) 4-Bromofluorobenzene	*107*		*67.0-138*		*09/06/2020 14:38*	WG1539065
(S) 1,2-Dichloroethane-d4	*95.3*		*70.0-130*		*09/06/2020 14:38*	WG1539065

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0500	1	09/06/2020 14:18	WG1539065
Acrylonitrile	ND		0.0125	1	09/06/2020 14:18	WG1539065
Benzene	ND		0.00100	1	09/06/2020 14:18	WG1539065
Bromobenzene	ND		0.0125	1	09/06/2020 14:18	WG1539065
Bromodichloromethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
Bromoform	ND		0.0250	1	09/06/2020 14:18	WG1539065
Bromomethane	ND		0.0125	1	09/06/2020 14:18	WG1539065
n-Butylbenzene	ND		0.0125	1	09/06/2020 14:18	WG1539065
sec-Butylbenzene	ND		0.0125	1	09/06/2020 14:18	WG1539065
tert-Butylbenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
Carbon tetrachloride	ND		0.00500	1	09/06/2020 14:18	WG1539065
Chlorobenzene	ND		0.00250	1	09/06/2020 14:18	WG1539065
Chlorodibromomethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
Chloroethane	ND		0.00500	1	09/06/2020 14:18	WG1539065
Chloroform	ND		0.00250	1	09/06/2020 14:18	WG1539065
Chloromethane	ND		0.0125	1	09/06/2020 14:18	WG1539065
2-Chlorotoluene	ND		0.00250	1	09/06/2020 14:18	WG1539065
4-Chlorotoluene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,2-Dibromo-3-Chloropropane	ND		0.0250	1	09/06/2020 14:18	WG1539065
1,2-Dibromoethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
Dibromomethane	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,2-Dichlorobenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,3-Dichlorobenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,4-Dichlorobenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
Dichlorodifluoromethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,1-Dichloroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,2-Dichloroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,1-Dichloroethene	ND		0.00250	1	09/06/2020 14:18	WG1539065
cis-1,2-Dichloroethene	ND		0.00250	1	09/06/2020 14:18	WG1539065
trans-1,2-Dichloroethene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,2-Dichloropropane	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,1-Dichloropropene	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,3-Dichloropropane	ND		0.00500	1	09/06/2020 14:18	WG1539065
cis-1,3-Dichloropropene	ND		0.00250	1	09/06/2020 14:18	WG1539065
trans-1,3-Dichloropropene	ND		0.00500	1	09/06/2020 14:18	WG1539065
2,2-Dichloropropane	ND		0.00250	1	09/06/2020 14:18	WG1539065
Di-isopropyl ether	ND		0.00100	1	09/06/2020 14:18	WG1539065
Ethylbenzene	ND		0.00250	1	09/06/2020 14:18	WG1539065
Hexachloro-1,3-butadiene	ND		0.0250	1	09/06/2020 14:18	WG1539065
Isopropylbenzene	ND		0.00250	1	09/06/2020 14:18	WG1539065
p-Isopropyltoluene	ND		0.00500	1	09/06/2020 14:18	WG1539065
2-Butanone (MEK)	ND		0.100	1	09/06/2020 14:18	WG1539065
Methylene Chloride	ND		0.0250	1	09/06/2020 14:18	WG1539065
4-Methyl-2-pentanone (MIBK)	ND		0.0250	1	09/06/2020 14:18	WG1539065
Methyl tert-butyl ether	ND		0.00100	1	09/06/2020 14:18	WG1539065
Naphthalene	ND		0.0125	1	09/06/2020 14:18	WG1539065
n-Propylbenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
Styrene	ND		0.0125	1	09/06/2020 14:18	WG1539065
1,1,1,2-Tetrachloroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,1,2,2-Tetrachloroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,1,2-Trichlorotrifluoroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
Tetrachloroethene	ND		0.00250	1	09/06/2020 14:18	WG1539065
Toluene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,2,3-Trichlorobenzene	ND		0.0125	1	09/06/2020 14:18	WG1539065
1,2,4-Trichlorobenzene	ND		0.0125	1	09/06/2020 14:18	WG1539065
1,1,1-Trichloroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
Trichloroethene	ND		0.00100	1	09/06/2020 14:18	WG1539065
Trichlorofluoromethane	ND		0.00250	1	09/06/2020 14:18	WG1539065
1,2,3-Trichloropropane	ND		0.0125	1	09/06/2020 14:18	WG1539065
1,2,4-Trimethylbenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,2,3-Trimethylbenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
1,3,5-Trimethylbenzene	ND		0.00500	1	09/06/2020 14:18	WG1539065
Vinyl chloride	ND		0.00250	1	09/06/2020 14:18	WG1539065
Xylenes, Total	ND		0.00650	1	09/06/2020 14:18	WG1539065
(S) Toluene-d8	*95.8*		*75.0-131*		*09/06/2020 14:18*	WG1539065
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*09/06/2020 14:18*	WG1539065
(S) 1,2-Dichloroethane-d4	*94.7*		*70.0-130*		*09/06/2020 14:18*	WG1539065

Method Blank (MB)

(MB) R3568743-2 09/06/20 12:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0365	0.0500
Acrylonitrile	U		0.00361	0.0125
Benzene	U		0.000467	0.00100
Bromobenzene	U		0.000900	0.0125
Bromodichloromethane	U		0.000725	0.00250
Bromoform	U		0.00117	0.0250
Bromomethane	U		0.00197	0.0125
n-Butylbenzene	U		0.00525	0.0125
sec-Butylbenzene	U		0.00288	0.0125
tert-Butylbenzene	U		0.00195	0.00500
Carbon tetrachloride	U		0.000898	0.00500
Chlorobenzene	U		0.000210	0.00250
Chlorodibromomethane	U		0.000612	0.00250
Chloroethane	U		0.00170	0.00500
Chloroform	U		0.00103	0.00250
Chloromethane	U		0.00435	0.0125
2-Chlorotoluene	U		0.000865	0.00250
4-Chlorotoluene	U		0.000450	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00390	0.0250
1,2-Dibromoethane	U		0.000648	0.00250
Dibromomethane	U		0.000750	0.00500
1,2-Dichlorobenzene	U		0.000425	0.00500
1,3-Dichlorobenzene	U		0.000600	0.00500
1,4-Dichlorobenzene	U		0.000700	0.00500
Dichlorodifluoromethane	U		0.00161	0.00250
1,1-Dichloroethane	U		0.000491	0.00250
1,2-Dichloroethane	U		0.000649	0.00250
1,1-Dichloroethene	U		0.000606	0.00250
cis-1,2-Dichloroethene	U		0.000734	0.00250
trans-1,2-Dichloroethene	U		0.00104	0.00500
1,2-Dichloropropane	U		0.00142	0.00500
1,1-Dichloropropene	U		0.000809	0.00250
1,3-Dichloropropane	U		0.000501	0.00500
cis-1,3-Dichloropropene	U		0.000757	0.00250
trans-1,3-Dichloropropene	U		0.00114	0.00500
2,2-Dichloropropane	U		0.00138	0.00250
Di-isopropyl ether	U		0.000410	0.00100
Ethylbenzene	U		0.000737	0.00250
Hexachloro-1,3-butadiene	U		0.00600	0.0250
Isopropylbenzene	U		0.000425	0.00250

Method Blank (MB)

(MB) R3568743-2 09/06/20 12:03

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00255	0.00500
2-Butanone (MEK)	U		0.0635	0.100
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.00228	0.0250
Methyl tert-butyl ether	U		0.000350	0.00100
Naphthalene	U		0.00488	0.0125
n-Propylbenzene	U		0.000950	0.00500
Styrene	U		0.000229	0.0125
1,1,1,2-Tetrachloroethane	U		0.000948	0.00250
1,1,2,2-Tetrachloroethane	U		0.000695	0.00250
Tetrachloroethene	U		0.000896	0.00250
Toluene	U		0.00130	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000754	0.00250
1,2,3-Trichlorobenzene	U		0.00733	0.0125
1,2,4-Trichlorobenzene	U		0.00440	0.0125
1,1,1-Trichloroethane	U		0.000923	0.00250
1,1,2-Trichloroethane	U		0.000597	0.00250
Trichloroethene	U		0.000584	0.00100
Trichlorofluoromethane	U		0.000827	0.00250
1,2,3-Trichloropropane	U		0.00162	0.0125
1,2,3-Trimethylbenzene	U		0.00158	0.00500
1,2,4-Trimethylbenzene	0.00266	J	0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
Vinyl chloride	U		0.00116	0.00250
Xylenes, Total	U		0.000880	0.00650
(S) Toluene-d8	*96.5*			*75.0-131*
(S) 4-Bromofluorobenzene	*108*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3568743-1 09/06/20 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.490	78.4	10.0-160	
Acrylonitrile	0.625	0.616	98.6	45.0-153	
Benzene	0.125	0.135	108	70.0-123	
Bromobenzene	0.125	0.101	80.8	73.0-121	
Bromodichloromethane	0.125	0.141	113	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3568743-1 09/06/20 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.111	88.8	64.0-132	
Bromomethane	0.125	0.144	115	56.0-147	
n-Butylbenzene	0.125	0.0996	79.7	68.0-135	
sec-Butylbenzene	0.125	0.102	81.6	74.0-130	
tert-Butylbenzene	0.125	0.105	84.0	75.0-127	
Carbon tetrachloride	0.125	0.153	122	66.0-128	
Chlorobenzene	0.125	0.123	98.4	76.0-128	
Chlorodibromomethane	0.125	0.114	91.2	74.0-127	
Chloroethane	0.125	0.136	109	61.0-134	
Chloroform	0.125	0.146	117	72.0-123	
Chloromethane	0.125	0.130	104	51.0-138	
2-Chlorotoluene	0.125	0.106	84.8	75.0-124	
4-Chlorotoluene	0.125	0.106	84.8	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.0926	74.1	59.0-130	
1,2-Dibromoethane	0.125	0.119	95.2	74.0-128	
Dibromomethane	0.125	0.136	109	75.0-122	
1,2-Dichlorobenzene	0.125	0.112	89.6	76.0-124	
1,3-Dichlorobenzene	0.125	0.109	87.2	76.0-125	
1,4-Dichlorobenzene	0.125	0.110	88.0	77.0-121	
Dichlorodifluoromethane	0.125	0.157	126	43.0-156	
1,1-Dichloroethane	0.125	0.135	108	70.0-127	
1,2-Dichloroethane	0.125	0.136	109	65.0-131	
1,1-Dichloroethene	0.125	0.154	123	65.0-131	
cis-1,2-Dichloroethene	0.125	0.144	115	73.0-125	
trans-1,2-Dichloroethene	0.125	0.147	118	71.0-125	
1,2-Dichloropropane	0.125	0.129	103	74.0-125	
1,1-Dichloropropene	0.125	0.142	114	73.0-125	
1,3-Dichloropropane	0.125	0.117	93.6	80.0-125	
cis-1,3-Dichloropropene	0.125	0.137	110	76.0-127	
trans-1,3-Dichloropropene	0.125	0.117	93.6	73.0-127	
2,2-Dichloropropane	0.125	0.141	113	59.0-135	
Di-isopropyl ether	0.125	0.134	107	60.0-136	
Ethylbenzene	0.125	0.120	96.0	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.104	83.2	57.0-150	
Isopropylbenzene	0.125	0.115	92.0	72.0-127	
p-Isopropyltoluene	0.125	0.106	84.8	72.0-133	
2-Butanone (MEK)	0.625	0.574	91.8	30.0-160	
Methylene Chloride	0.125	0.136	109	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.535	85.6	56.0-143	
Methyl tert-butyl ether	0.125	0.132	106	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3568743-1 09/06/20 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.0956	76.5	59.0-130	
n-Propylbenzene	0.125	0.107	85.6	74.0-126	
Styrene	0.125	0.116	92.8	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.119	95.2	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.0954	76.3	68.0-128	
Tetrachloroethene	0.125	0.126	101	70.0-136	
Toluene	0.125	0.120	96.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.145	116	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.0998	79.8	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.106	84.8	62.0-137	
1,1,1-Trichloroethane	0.125	0.150	120	69.0-126	
1,1,2-Trichloroethane	0.125	0.114	91.2	78.0-123	
Trichloroethene	0.125	0.158	126	76.0-126	
Trichlorofluoromethane	0.125	0.153	122	61.0-142	
1,2,3-Trichloropropane	0.125	0.119	95.2	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.102	81.6	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.109	87.2	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.106	84.8	73.0-127	
Vinyl chloride	0.125	0.128	102	63.0-134	
Xylenes, Total	0.375	0.361	96.3	72.0-127	
(S) Toluene-d8			*96.2*	*75.0-131*	
(S) 4-Bromofluorobenzene			*106*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.7*	*70.0-130*	

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.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

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	LAO00356
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

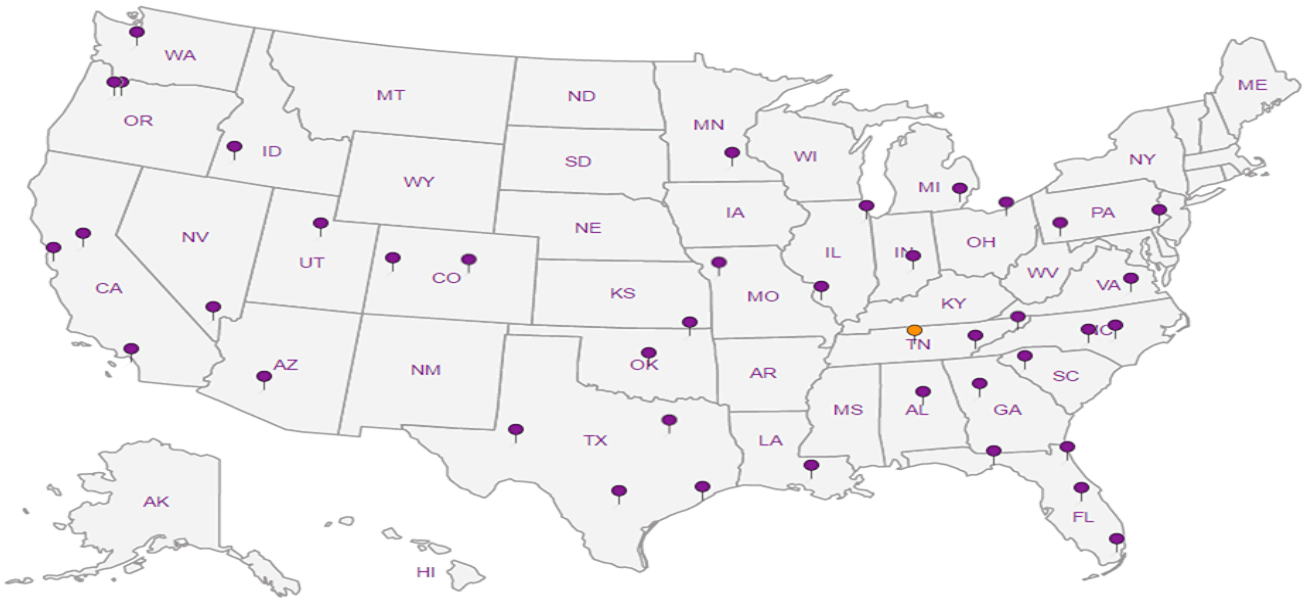
Third Party Federal Accreditations

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.



Avant Environmental Services, Inc.
2500 Broadway Unit B-235
Grand Junction CO 81507

Billing Information: **Same**

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: **Edward Baltzer**

Email To: **ebaltzer@avantenvironmental.com**

Project Description: **Mesa Pawn oil/water separator**

City/State Collected: **Grand Junction CO**

Phone: **970 260-8468**
Fax:

Client Project # **9047-2**

Lab Project #

L # 125-8980

Table # F135

Collected by (print): **Edward Baltzer**

Site/Facility ID #

P.O. # **9047-1**

Collected by (signature):

Immediately Packed on Ice N ___ Y ___ X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
X Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Acctnum:
Template:
Prelogin:
TSR:
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOA 8260	HOLD FOR TCLP	Remarks	Sample # (lab only)
Spoil Pile	Grab	SS	0-12"	9/04/2020	1510	3	✓			-01
Base of pit	Grab	SS	0-6"	9/04/2020	1500	3	✓			02

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 1676 2750 4222

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: ✓Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
	9/4/2020	1545			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C .7+3=1.0	Bottles Received: 5
	9/4/2020	1700			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9/5/20	Time: 915
					Hold: / Condition: NCF / OK

June 15, 2020

Jim Stavast
City of Grand Junction Facilities
333 West Ave
Grand Junction CO 81501

RE: Oil-Stained Soil Sampling
225 S. 2nd Street, Grand Junction CO
Avant Project No. 3301-10

Dear Jim:

Avant Environmental Services, Inc. (Avant) sampled an oil-stained soil area at Mesa Pawn located at the above-referenced address. The stained soil was initially sampled on August 31, 2016 and found to have 58,100 milligrams per kilogram (mg/kg) oil and grease, and 9,800 mg/kg total petroleum hydrocarbons. These exceed the state screening level of 500 mg/kg. The oil-stained soil was sampled again on May 28, 2020. The stain was no longer evident. The sample contained 3,310 mg/kg oil and grease. The soil was analyzed for polynuclear aromatic hydrocarbons (PAH) using EPA Method 8270, with the laboratory results attached to this letter. All PAH results were below the applicable EPA Soil Regional Screening Levels for each detected compound. Previous results showed metals and volatile organic compounds to be below regulatory standards as reported in our September 16, 2016 letter to you.

The area of the previously-reported oil stain has apparently self-remediated through biodegradation. No special handling of this soil is required.

Please contact me with any questions at (970) 260-8468. Thank you for selecting Avant for your project.

Sincerely,

Edward M. Baltzer, PG
Principal Consultant

Attachments:
Chain-of-Custody Form
Analytical Results

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

June 05, 2020

Avant Environmental - GJ, CO

Sample Delivery Group:	L1223396
Samples Received:	05/29/2020
Project Number:	9047-2
Description:	Mesa Pawn old oil spill

Report To: Ed Baltzer
2500 Broadway
Unit B 235
Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
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.

TABLE OF CONTENTS

MESA PAWN OLD OIL SPILL L1223396-01 Solid

Collected by	Collected date/time	Received date/time
Edward Baltzer	05/28/20 13:30	05/29/20 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9071B	WG1486626	1	06/03/20 17:46	06/03/20 23:15	MBP	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1486851	5	06/04/20 09:35	06/05/20 01:02	AAT	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.

Chris Ward

Chris Ward
Project Manager

Wet Chemistry by Method 9071B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Oil & Grease (Hexane Extr)	3310		100	1	06/03/2020 23:15	WG1486626

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0300	5	06/05/2020 01:02	WG1486851
Acenaphthene	ND		0.0300	5	06/05/2020 01:02	WG1486851
Acenaphthylene	ND		0.0300	5	06/05/2020 01:02	WG1486851
Benzo(a)anthracene	0.0434		0.0300	5	06/05/2020 01:02	WG1486851
Benzo(a)pyrene	0.0527		0.0300	5	06/05/2020 01:02	WG1486851
Benzo(b)fluoranthene	0.105		0.0300	5	06/05/2020 01:02	WG1486851
Benzo(g,h,i)perylene	0.0902		0.0300	5	06/05/2020 01:02	WG1486851
Benzo(k)fluoranthene	ND		0.0300	5	06/05/2020 01:02	WG1486851
Chrysene	0.0554		0.0300	5	06/05/2020 01:02	WG1486851
Dibenz(a,h)anthracene	ND		0.0300	5	06/05/2020 01:02	WG1486851
Fluoranthene	0.101		0.0300	5	06/05/2020 01:02	WG1486851
Fluorene	ND		0.0300	5	06/05/2020 01:02	WG1486851
Indeno(1,2,3-cd)pyrene	0.0498		0.0300	5	06/05/2020 01:02	WG1486851
Naphthalene	ND		0.100	5	06/05/2020 01:02	WG1486851
Phenanthrene	0.0480		0.0300	5	06/05/2020 01:02	WG1486851
Pyrene	0.0952		0.0300	5	06/05/2020 01:02	WG1486851
1-Methylnaphthalene	ND		0.100	5	06/05/2020 01:02	WG1486851
2-Methylnaphthalene	ND		0.100	5	06/05/2020 01:02	WG1486851
2-Chloronaphthalene	ND		0.100	5	06/05/2020 01:02	WG1486851
(S) p-Terphenyl-d14	*82.6*		*23.0-120*		*06/05/2020 01:02*	WG1486851
(S) Nitrobenzene-d5	*79.7*		*14.0-149*		*06/05/2020 01:02*	WG1486851
(S) 2-Fluorobiphenyl	*73.9*		*34.0-125*		*06/05/2020 01:02*	WG1486851

Method Blank (MB)

(MB) R3534772-1 06/03/20 23:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Oil & Grease (Hexane Extr)	U		33.0	100

Original Sample (OS) • Duplicate (DUP)

(OS) • (DUP) R3534772-4 06/03/20 23:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
		mg/kg		%		%
Oil & Grease (Hexane Extr)		ND	1	0.000		20

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

(LCS) R3534772-2 06/03/20 23:15 • (LCSD) R3534772-3 06/03/20 23:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Oil & Grease (Hexane Extr)	4000	3550	3990	88.6	99.8	80.0-120			11.8	20

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3534772-5 06/03/20 23:15 • (MSD) R3534772-6 06/03/20 23:15

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg		mg/kg	mg/kg	%	%		%			%	%
Oil & Grease (Hexane Extr)	4000		2550	1720	61.3	40.4	1	80.0-120	J6	J3 J6	39.2	20

Method Blank (MB)

(MB) R3535222-2 06/04/20 17:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00230	0.00600
Acenaphthene	U		0.00209	0.00600
Acenaphthylene	U		0.00216	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(g,h,i)perylene	U		0.00177	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
Naphthalene	U		0.00408	0.0200
Phenanthrene	U		0.00231	0.00600
Pyrene	U		0.00200	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
2-Chloronaphthalene	U		0.00466	0.0200
(S) Nitrobenzene-d5	*91.8*			*14.0-149*
(S) 2-Fluorobiphenyl	*87.3*			*34.0-125*
(S) p-Terphenyl-d14	*96.8*			*23.0-120*

Laboratory Control Sample (LCS)

(LCS) R3535222-1 06/04/20 17:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Anthracene	0.0800	0.0726	90.8	50.0-126	
Acenaphthene	0.0800	0.0720	90.0	50.0-120	
Acenaphthylene	0.0800	0.0757	94.6	50.0-120	
Benzo(a)anthracene	0.0800	0.0721	90.1	45.0-120	
Benzo(a)pyrene	0.0800	0.0647	80.9	42.0-120	
Benzo(b)fluoranthene	0.0800	0.0733	91.6	42.0-121	
Benzo(g,h,i)perylene	0.0800	0.0736	92.0	45.0-125	
Benzo(k)fluoranthene	0.0800	0.0705	88.1	49.0-125	
Chrysene	0.0800	0.0732	91.5	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0750	93.8	47.0-125	
Fluoranthene	0.0800	0.0728	91.0	49.0-129	

Laboratory Control Sample (LCS)

(LCS) R3535222-1 06/04/20 17:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Fluorene	0.0800	0.0733	91.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0745	93.1	46.0-125	
Naphthalene	0.0800	0.0728	91.0	50.0-120	
Phenanthrene	0.0800	0.0725	90.6	47.0-120	
Pyrene	0.0800	0.0705	88.1	43.0-123	
1-Methylnaphthalene	0.0800	0.0729	91.1	51.0-121	
2-Methylnaphthalene	0.0800	0.0696	87.0	50.0-120	
2-Chloronaphthalene	0.0800	0.0713	89.1	50.0-120	
(S) Nitrobenzene-d5			*97.8*	*14.0-149*	
(S) 2-Fluorobiphenyl			*90.3*	*34.0-125*	
(S) p-Terphenyl-d14			*95.0*	*23.0-120*	

L1223383-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1223383-20 06/04/20 21:13 • (MS) R3535222-3 06/04/20 21:34 • (MSD) R3535222-4 06/04/20 21:54

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0800	ND	0.0520	0.0537	65.0	67.1	1	10.0-145			3.22	30
Acenaphthene	0.0800	ND	0.0512	0.0524	64.0	65.5	1	14.0-127			2.32	27
Acenaphthylene	0.0800	ND	0.0552	0.0560	69.0	70.0	1	21.0-124			1.44	25
Benzo(a)anthracene	0.0800	ND	0.0524	0.0542	65.5	67.8	1	10.0-139			3.38	30
Benzo(a)pyrene	0.0800	ND	0.0505	0.0534	63.1	66.8	1	10.0-141			5.58	31
Benzo(b)fluoranthene	0.0800	ND	0.0508	0.0525	63.5	65.6	1	10.0-140			3.29	36
Benzo(g,h,i)perylene	0.0800	ND	0.0495	0.0518	61.9	64.8	1	10.0-140			4.54	33
Benzo(k)fluoranthene	0.0800	ND	0.0483	0.0526	60.4	65.8	1	10.0-137			8.52	31
Chrysene	0.0800	ND	0.0496	0.0524	62.0	65.5	1	10.0-145			5.49	30
Dibenz(a,h)anthracene	0.0800	ND	0.0503	0.0522	62.9	65.3	1	10.0-132			3.71	31
Fluoranthene	0.0800	ND	0.0518	0.0541	64.8	67.6	1	10.0-153			4.34	33
Fluorene	0.0800	ND	0.0516	0.0537	64.5	67.1	1	11.0-130			3.99	29
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0504	0.0522	63.0	65.3	1	10.0-137			3.51	32
Naphthalene	0.0800	ND	0.0555	0.0550	69.4	68.8	1	10.0-135			0.905	27
Phenanthrene	0.0800	ND	0.0509	0.0530	63.6	66.3	1	10.0-144			4.04	31
Pyrene	0.0800	ND	0.0499	0.0523	62.4	65.4	1	10.0-148			4.70	35
1-Methylnaphthalene	0.0800	ND	0.0541	0.0542	67.6	67.8	1	10.0-142			0.185	28
2-Methylnaphthalene	0.0800	ND	0.0513	0.0521	64.1	65.1	1	10.0-137			1.55	28
2-Chloronaphthalene	0.0800	ND	0.0517	0.0509	64.6	63.6	1	29.0-120			1.56	24
(S) Nitrobenzene-d5					*75.9*	*73.7*		*14.0-149*				
(S) 2-Fluorobiphenyl					*67.7*	*67.6*		*34.0-125*				
(S) p-Terphenyl-d14					*68.2*	*69.8*		*23.0-120*				

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.
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.

Qualifier Description

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
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	LAO00356
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

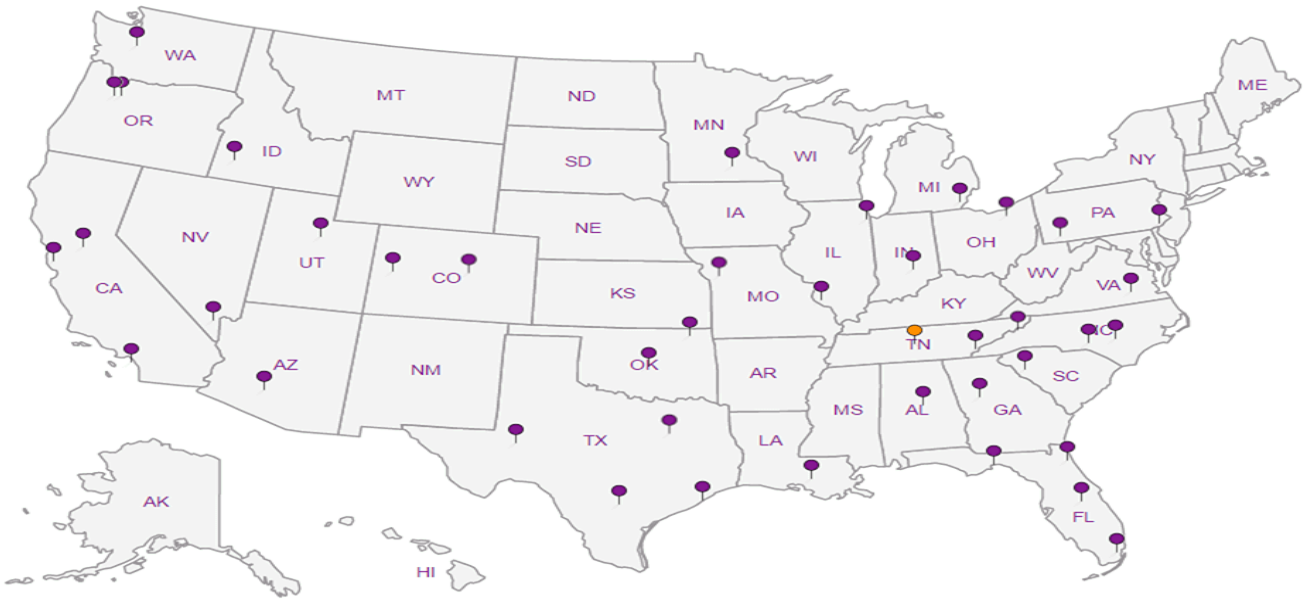
Third Party Federal Accreditations

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.



Avant Environmental Services, Inc.
2500 Broadway Unit B-235
Grand Junction CO 81507

Billing Information:
Same

Report to: **Edward Baltzer**

Email To: **ebaltzer@avantenvironmental.com**

Project Description: **Mesa Pawn old oil spill**

City/State Collected: **Grand Jct CO**

Phone: **970 260-8468**
Fax:

Client Project # **9047-2**

Lab Project #

Collected by (print): **Edward Baltzer**

Site/Facility ID #

P.O. # **9047-2**

Collected by (signature): Edward M Baltzer

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Quote #

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Oil and Grease, PAH 8270	Remarks	Sample # (lab only)
Mesa Pawn old oil spill	Grab	SS	0-2"	5/28/2020	13:30	2	X		-01

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # 1223396

Table E114

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 1676 2750 7519

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

RAD SCREEN: <0.5 mR/hr

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	If preservation required by Login: Date/Time
Edward Baltzer	5/28/2020	1500			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.4 °C Bottles Received: 9+3=12 2	
	5/29/2020	1700			
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 05 28 20 Time: 0900	Hold: / Condition: NCF / OK