CTL | THOMPSON INCORPORATED

ENVIRONMENTAL IMPACT REPORT
MINTURN NORTH PUD
TAYLOR STREET AND MINTURN ROAD
MINTURN, COLORADO

Prepared for:

RESORT CONCEPTS
225 Main Street, Suite C-101
Edwards, Colorado 81632

Attention: Mr. Rick Hermes

Project No. SU01922.001-240-R1

December 8, 2022

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EXECUTIVE SUMMARY

This report presents the results of the Environmental Impact Report that was performed by CTL/Thompson (CTL) for Resort Concepts for the Subject Property known as Minturn North PUD. The Property is located north of Taylor Street and Minturn Road in the Town of Minturn, Colorado and is proposed for a total of 39 residential units.

Based on our findings we believe that significant environmental impacts associated with the development of the site are expected to be fully avoided or mitigated.

This executive summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

1.0 INTRODUCTION AND SITE DESCRIPTION

CTL Thompson (CTL) has been contracted by Resort Concepts to perform an Environmental Impact Report (EIR) for the Subject Property known as Minturn North PUD, located between Minturn Road and Taylor Street, in Minturn, Eagle County, Colorado.

The Subject Property, located between Taylor Street and Minturn Avenue, is primarily vacant aside from six mobile homes. The Property is generally triangular shaped and is approximately 14 acres in size. The Property was historically used for railyard storage and is vegetated by invasive grass species such as crested wheatgrass (*Agropyron cristatum*) and quackgrass (*Elymus repens*). Game Creek Trail, a popular year-round hiking and mountain biking trail, is present at the northwest corner of the Property, to the south of Game Creek. A residential development borders the Property along Taylor Street to the east, and the Union Pacific Railroad and Eagle River border the Property along Minturn Road to the west. The surrounding area is a popular recreation area year-round, with hiking, mountain biking, and ski trails nearby. 4th Street and 4th Avenue cross the Subject Property in the central portion, adjacent to the mobile homes.

2.0 PROJECT AND PURPOSE

The purpose of the project is to create a low-impact residential development within the Town of Minturn. The proposed development will include 39 residential lots and related infrastructure. Development includes 6 units which will be deed-restricted for Town of Minturn permanent residents. The lots include an internal roadway (Game Creek Lane). Development will not disturb Taylor Street.

3.0 IMPACT ANALYSIS

3.1 Hydrologic Conditions

Minturn, Colorado is located in the Upper Colorado River Basin and is a part of the Eagle River Watershed. The Subject Property is located just east and up-gradient of the

Eagle River. Ground water and surface drainage is flowing towards Eagle River. To the north of the Property is Game Creek, which flows into the Eagle River. The soil is predominantly Forsey cobbly loam. According to USDA's Web Soil Survey, Forsey cobbly loam outflow is considered somewhat limited. Development of the Subject Property should not impact the Eagle River as long as care is taken to preserve Game Creek.

3.2 Atmospheric Conditions

The Town of Minturn regulates air quality standards for smoke emissions, particulate matter, dust and fumes. Without the impacts of forest fires in the surrounding area, Minturn maintains a standard of "good" air quality, with an Air Quality Index (AQI) usually ranging from 0-50 AQI. The development of the Property will have minimal long term and short-term impacts for particulate matter, dust and fumes.

Construction activities have the potential to generate a substantial amount of air pollution for the short term. We estimate the construction phase of the project will have the highest temporary impacts to air quality. We expect that construction emissions will be generated from common construction activities and could potentially include increases from the following activities:

- Exhaust emissions of particulate matter (PM) and oxides of nitrogen (NOX) from fuel combustion for mobile heavy-duty diesel and gasoline-powered equipment, portable auxiliary equipment, material delivery trucks, and worker commute trips;
- Fugitive PM dust from soil disturbance and demolition activity;
- Evaporative emissions of reactive organic gases (ROG or VOC) from paving activity and the application of architectural coatings.
- Exhaust emissions of greenhouse gases (GHG) such as carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O).

According to the Town of Minturn air quality standards, dust shall not be projected beyond any boundary line of the property. Additionally, fumes shall not be emitted from the boundary line of construction to an obnoxious or dangerous degree. Subject Property infrastructure construction will require the contractor to utilize a wash area for equipment and will also require a dust mitigation plan with use of a water-spray truck when necessary.

A dust control plan will be implemented that will control site dust and protect nearby residences.

Long term air quality impacts of the development may slightly increase due to the increase of traffic emissions from private vehicles. A Traffic Impact Report has yet to be completed for this development. The increase in traffic emissions is expected to increase the amount of air particulates and exhaust emissions; however, this increase is not expected to negatively impact overall air quality standards significantly. We do not expect that the increase in traffic will violate the Town of Minturn's air quality standards.

3.3 Geologic Conditions

CTL conducted a Soils and Foundation Investigation for the Property (Project No. SU01922.000-120-R1, report dated August 26, 2020). We conducted this investigation to evaluate subsurface conditions at the site and provide geotechnical engineering recommendations for the proposed development.

The ground surface across the Subject Property generally slopes down to the west and southwest. Slope amounts are variable and generally decrease from east to west. The slopes range from 5 to 15 percent south of Game Creek. According to the Minturn Quadrangle Geologic Map, most of the property is mapped as fan deposits.

Subsurface conditions observed in our exploratory borings and pits generally consisted of about 6 to 12 inches of "topsoil" overlying sand and gravel deposits. Existing man-placed fill was encountered in the upper 2 to 7 feet of several of the borings and pits. The maximum depth explored was 30 feet. Groundwater was not encountered in any of the borings/pits at the time of drilling/excavation, or in the borings when checked several days after drilling.

CTL completed a Limited Phase II Environmental Site Assessment for the Subject Property with letter dated September 25, 2020. A previous soil screen assessment completed by Jacobs, indicated an exceedance of benzo(a)pyrene, a Polynuclear Aromatic Hydrocarbon (PAH), in a soil boring (SB08) located adjacent to the northwest of

the corner of Taylor Street and 4th Street, in the central portion of the Property. We advanced a total of nine (9) shallow borings, in a 3 x 3 grid around the assumed location of the soil boring. Benzo(a)pyrene is typically a remnant of coal ash, soot, or other byproducts of combustion. It is unknown if the source is from historic rail use, drainage from pollutants on nearby roadways, or other sources. In any event, we delineated the extent of the PAH impact, so that this finite area can be removed by a contractor and taken to a landfill that accepts special / industrial / non-hazardous waste. Our laboratory data can be provided to the landfill in order to facilitate the creation of a waste profile. After and assuming proper disposal of this finite yardage, we consider the PAH issue resolved, and the environmental condition of the Subject Property improved.

3.4 Biotic Conditions

CTL conducted a Biological Assessment and Cultural Record Review for a larger property which included the Subject Property (Report No. SU01922.000-240-R1, report September 17, 2020). Our assessment evaluated the Subject Property for the presence of jurisdictional wetlands and Waters of the U.S., the presence of State and Federally threatened or endangered species, the presence of critical habitat for endangered or threatened species, migratory birds, and the presence of registered archeological and/or historic sites on the Subject Property.

The Property currently exists in a naturally vegetated state. Common species observed at the Property mostly consisted of invasive prairie grasses such as crested wheatgrass (*Agropyron cristatum*), quackgrass (*Elymus repens*) and smooth brome (*Bromus inermus*). Other herbaceous species observed on the site included invasive weeds and some native plants such as musk thistle (*Carduus nutans*), silver wormwood (*Artemisia ludoviciana*) tansy (*Tanacetum vulgare*) and scentless chamomile (*Tripleurospermum inodorum*). Game Creek is present to the north of the Property. The EPA's Region 8 Ecoregion Map classifies the Property as sedimentary subalpine forests and northwestern forested mountains.

Our evaluation identified potential wetlands and Waters of the U.S. located to the north of the Property in the form of Game Creek. Game Creek is located approximately

30 feet to the north of the Property and flows west into Eagle River. Eagle River is a tributary to the Colorado River. We consulted a Wetland Delineation Report prepared by Birch Ecology, dated September 2020. Birch Ecology identified one Palustrine, Forested and Scrub-Shrub Wetland along Game Creek, approximately 0.36 acres in size. Birch Ecology also corroborated our opinion that Game Creek and the associated wetlands would be considered jurisdictional by the U.S. Army Corps of Engineers. We also determined that impacts and discharge to Game Creek could potentially impact four federally endangered fish species which include the bonytail chub (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), humpback chub (*Gila cypha*), and the razorback sucker (*Xyrauchen texanus*). We do not believe that development will impact Game Creek or the associated wetlands. A map of Game Creek wetlands can be found in **Figure 2.**

By regulation, the owner or contractor will need to develop and implement a Stormwater Management Plan (SWMP) to control sediment leaving the Property. A stormwater management plan will be utilized in order to avoid impacts to Game Creek.

Our assessment identified potential habitat for ground-nesting and tree-nesting migratory birds which are protected under the Migratory Bird Treaty Act. Several species of migratory bird were observed on the Property which included a red-tailed hawk (*Buteo jamacicensis*), black-billed magpies (*Pica hudsonia*) and American robins (*Turdus migratorius*). We recommended vegetation be removed outside of the breeding season (March to August) or a migratory bird nest survey be performed prior to development.

According to data obtained by History Colorado, Office of Archaeology and Historic Preservation, the Subject Property contains one record for a historic unpaved road named Stage Road on the western border of the Subject Property. This road dates back to the 1880s but is officially not eligible for inclusion on the National Registrar. We do not believe development will impact eligible historic sites.

According to previous conversations with CPW, the Property occurs within a quarter mile of a golden eagle nest. However, more recent data indicates that this nest has been confirmed to be abandoned by CPW. The surrounding area is a residential area

of Minturn with on-going residential construction along Taylor Street, as well as being a popular recreation area year-round. We do not believe that the development will create increased human impact on this golden eagle nest.

The project occurs within CPW-mapped Bear-Human Conflict Area and in the state's only mountain lion (Puma concolor) Special Management Area (SMA). Black bears are considered a problem in Minturn. The development will adhere to "best management practices" in order to reduce potential predator encounters. The development will recommend no composting, no fruit-bearing trees or shrubs, no feeding pets outside, and use of bear proof trash containers. The development commits to develop a Wildlife Mitigation Plan.

Elk herds in the area have experienced a severe decline in the last ten years. Approximately 2.50 acres in the northeastern portion of the Property occur within the elk severe winter range. This is approximately 0.07% of the elk winter range in Colorado. Due to the developed nature of the adjoining properties within the elk severe winter range, we believe it is unlikely that development will impact elk populations. The recreational trails in the surrounding area are open year-round, and not subject to regulation by the development.

Based on the biological and cultural studies conducted on the Subject Property and due to the actions the developers plan on taking in order to minimize impacts, we do not believe development of the Property will have significant impacts on critical habitats, state or federally listed species, Waters of the U.S., or other critical biological and cultural features on the Property.

3.5 Noise and Odors

The Town of Minturn requires that noise levels do not exceed 60 dBA (decibels) between the hours of 7:00 a.m. to 7:00 p.m. and 55 dBA from 7:00 p.m. to 7:00 a.m. Properties adjacent to the project area are transportation corridors and residential properties. During our Subject Property visit on August 21, 2020, we used a decimeter to estimate current noise levels. During mid-day we estimated noise levels on the Property

to be below 50 dBA during daytime hours. CDOT estimates the average maximum noise level of construction equipment to be around 80 dBA at 50 feet. We predict that noise at 50 feet from the project boundary may exceed 60 dBA from 7:00 a.m. to 7:00 p.m. but should not exceed 55 dBA from 7:00 p.m. to 7:00 a.m. Additionally, we expect that some odors emanating from operating machinery may increase during construction hours. We do not expect these odors will exceed permissible amounts or create an unreasonable nuisance to the surrounding area. We do not expect these impacts to have a significant impact on wildlife as critical habitat for wildlife was not identified on or nearby the Subject Property. Noise and odors related to construction are temporary impacts and will only be short term.

Long-term impacts are expected to be minimal, as we do not expect the completed project to exceed the maximum permissible noise levels for the Town of Minturn. We do not expect the completed project to exceed permissible odor regulations for the Town of Minturn.

3.6 Visual Conditions

The Subject Property and surrounding area overlook a view to the west of Grouse Mountain and the Holy Cross Wilderness Area within White River National Forest. Grouse Mountain and associated hiking trails are present in this area. To the north is more Forest Service land which overlooks a steep ridge. Directly east are single-family residential homes and more Forest Service land which look up to steep mountains and Cougar Ridge. To the south are residential homes and downtown Minturn.

The main visual impacts due to the development of the Property are to the residences to the east. Building plans for the proposed residences have not been developed yet; however, buildings will not exceed maximum height standards for the town of Minturn. Although the proposed project may somewhat obscure the view for existing residences, the general topography of the neighborhood slants to the west, putting the existing residences to the east at a higher vantage point. The proposed development may cause some concern from nearby neighbors; however, the project is properly in line with the designated zoning of the area. We contacted Mr. Scott Fleming, GIS Analysist with

Eagle County, for information regarding protected viewsheds or view corridors. According to the information provided by Eagle County, there are not restricted, protected, or designated view corridors within the area of the Subject Property.

Development of the Subject Property may also impact the view to the east from Highway 24. We see this impact as less of a concern as the area is already developed as residential. Overall, the project is in line with the established zoning of the area and does not obscure the view of designated viewing corridors.

3.7 Zoning and Land Use

The Property was historically vacant until the 1950s and 1960s when structures and equipment were present, likely storage for the railroad. Mobile homes are visible beginning in the 1970s until present. According to the Town of Minturn, the Property is visually prominent from the north entry way into the town and is predominantly devoted to railroad use. The area is bisected by the railroad right-of-way, which will remain as a transportation corridor. The town's community plan identified this area as an area for extension of the Old Town commercial core, mixed-use and residential development. High impact industrial use is discouraged. Enhancement of the Eagle River corridor is a community priority. The Property is currently zoned Planned Unit Development Holding zone (PUD Holding Zone) by the Town of Minturn. The Town of Minturn provides the purpose of this area is to "provide for continued residential use and redevelopment that preserve the small-town residential character and scale of the neighborhood." Development incorporate appropriate residential and low-impact land uses along Taylor Avenue to minimize impacts to the existing neighborhood.

3.8 Traffic Impacts

A Traffic Impact Report was completed by CivTrans on October 3, 2022. This report indicated that the development will generate 424 average daily trips, with peak hours of 32 trips (AM) and 41 trips (PM). The estimated peak hour trips for the site are less than the CDOT trip generation threshold of 100 peak hour trips. So no additional traffic analysis should be required.

The report indicated that all of the study area intersections operate at level of service C or better for all conditions analyzed. Therefore, the study area intersections are anticipated to operate at acceptable levels.

A southbound left turn late is currently required for the intersection of US Highway 24 and County Road, based on existing traffic volumes.

The development is not planned to improve or disturb Taylor Street Roadway.

The CivTrans Trip Generation Letter is presented in **Attachment C**.

3.9 Fiscal Impacts

A Town of Minturn Financial Impact and Estimated Tax Revenue Report, dated September 19, 2022, indicated that the most significant fiscal impacts to the Town of Minturn were identified as the incremental General Fund revenue and expenditure impacts, and Water Enterprise Fund. These impacts are summarized below:

- The report expects incremental costs of an average $600 per residence, and revenue over expenditures of approximately $1.2 million during years 2023 – 2030. Incremental General Fund revenues are forecast to exceed incremental expenditures by approximately $3.9 million annually at stabilization (2030).

- Incremental Water Enterprise Fund revenues are forecast to generate approximately $2.67 million during years 2023 – 2030. The resulting sustaining and ongoing Water Use Revenue in 2030 is estimated at approximately $1.47 million.

The Minturn North Economic Impact Study is presented in **Attachment D**.

3.10 Population Impacts

The Town of Minturn is currently at a population of 1,027 and has remained relatively constant over the last twenty years. The median age was around 40 years and

estimated median household income around $75,754. The town of Minturn is surrounded by The White River National Forest, and thus the population is concentrated along the US 24 and Eagle River corridor. The town maintains about an 80% year-round occupancy level. In recent years, home prices have increased as have the number of short-term rentals.

The Property, located east of the railroad, is currently vacant land with several mobile homes. There is potential for displacement of the residents of these mobile homes.

According to the Minturn Housing Action Plan, development of this area would promote affordable year-round residency, and an extension of the Old Town commercial core.

3.11 Regulatory Agencies

Below is a list of regulatory or review agencies and the specific regulations to which the proposed development will be subject:

Agency Name	Regulations
Town of Minturn	Reviewing agency.
Eagle River Water & Sanitation District	Within sanitation district jurisdiction.
Colorado Department of Public Health and Environment	Stormwater management during construction.
Occupational Safety and Health Administration (OSHA)	Worker Health and Safety

4.0 GENERAL SUMMARY

Game Creek, present approximately 30 feet to the North of the Property, contains wetlands and is a tributary to Eagle River and the Colorado River. Development is not expected to impact Game Creek.

Atmospheric conditions are expected to be somewhat impacted in the short term and long term. We expect temporary, short-term impacts will be the highest, due to

construction and development. In the long-term, we expect that air quality will be slightly impacted due to the increase in traffic to the area. Air particulates and exhaust emissions may increase. However, we expect that these increases will only minimally impact overall air quality in the area.

The Property generally slopes down to the west and southwest. Subsurface conditions generally consisted of about 6 to 12 inches of “topsoil” overlying sand and gravel deposits. Existing man-placed fill was encountered in the upper 2 to 7 feet of several of the borings and pits. Groundwater was not encountered in any of the borings/pits at the time of drilling/excavation, or in the borings when checked several days after drilling.

According to a Limited Phase II ESA completed on the Subject Property, soils in the northwest corner of 4th Street and Taylor Street contain PAHs below their EPA RSLs and are suitable for disposal in a solid waste landfill.

Short-term impacts to noise and odor levels in the area are expected to be highest due to construction. We do not expect that noise and odor levels will exceed Town ordinances from 7 p.m. to 7 a.m. We do not expect that long-term impacts of the development will exceed noise and odor ordinances.

Development of the Subject Property may somewhat obscure the views of Grouse Mountain for the existing residences to the east of the Property. Views of the completed development from Highway 24 will not be impacted significantly as the area is already residential. There are no designated or restricted scenic corridors or viewsheds in the area of the project.

The project does not conflict with the designated land use and zoning requirements of the area.

The Traffic Impact Report indicated that the development will generate 424 average daily trips, with peak hourly trips well under the 100-trip threshold of CDOT. No additional traffic analysis should be required. All of the study area intersections operate at

level of service C or better for all conditions analyzed. Therefore, the study area intersections are anticipated to operate at acceptable levels. The development is not planned to improve or disturb Taylor Street Roadway.

The Town of Minturn Financial Impact and Estimated Tax Revenue Report, dated September 19, 2022, indicated that the most significant fiscal impacts to the Town of Minturn were identified as the incremental General Fund revenue and expenditure impacts, and Water Enterprise Fund. The revenue over expenditures is expected to result in approximately $1.2 million during years 2023 – 2030. Incremental General Fund revenues are forecast to exceed incremental expenditures by approximately $3.9 million annually at stabilization (2030). Incremental Water Enterprise Fund revenues are forecast to generate approximately $2.67 million during years 2023 – 2030. The resulting sustaining and ongoing Water Use Revenue in 2030 is estimated at approximately $1.47 million.

The Subject Property in its current condition mostly consists of vacant land occupied by several mobile homes. The development of the Site will displace the current residents of the mobile homes; however, the development of the Property will overall create more affordable housing in the area.

5.0 MITIGATION STRATEGIES

In order to avoid impacts to hydrology, wetlands, Waters of the U.S. and potential impacts to endangered fish species, development will remain outside of Game Creek. A Storm Water Management Plan (SWMP) or Storm Water Pollution Prevention Plan (SWPPP) will be implemented at the Property to prevent sediment and other pollutants entering Game Creek during construction.

Subject Property construction will require the contractor to utilize a wash area for equipment and will also require a dust mitigation plan with use of a water-spray truck when necessary. A dust control plan will be implemented that will control site dust and protect nearby residences. The increase in traffic emissions is expected to increase the amount

of air particulates and exhaust emissions; however, this increase is not expected to negatively impact overall air quality standards significantly. We do not expect that the increase in traffic will violate the Town of Minturn's air quality standards.

The finite area of PAH impacted soil near the northwest corner of 4th Street and Taylor Street may be removed by a contractor and taken to a landfill that accepts special /industrial/non-hazardous waste. Our laboratory data can be provided to the landfill in order to facilitate the creation of a waste profile. After and assuming proper disposal PAH-impacted soil, we consider the PAH issue resolved, and the environmental condition of the Subject Property improved.

Approximately 2.5 acres of Property development occurs within the Severe Winter Elk Range. However, due to the residential and recreational nature of the area, the development is not anticipated to increase the impact to local elk populations.

Black bears and mountain lions are a concern in the Town of Minturn. In order to reduce human-predator interaction, the development will utilize "best management practices."

The Property generally provides habitat for migratory birds. In order to avoid impacts to migratory birds, vegetation will be removed outside of the breeding season, or a migratory bird survey will be conducted prior to the removal of vegetation.

Construction of the development is expected to temporarily increase noise, emissions, and odors in the surrounding area. Construction activities will remain within the hours of 7 a.m. to 7 p.m. to not exceed nigh-time noise ordinances. Construction vehicles may also contribute to increased particulate matter, dust, and fumes. Dust will not be projected beyond any boundary line of the property. Additionally, fumes will not be emitted from the boundary line of construction to an obnoxious or dangerous degree. During development, the construction yard will be located at the northern end of the Site. Site infrastructure construction will require the contractor to utilize a wash area for equipment and will also require a dust mitigation plan with use of a water-spray truck when necessary. A full dust control plan will be developed with the contractor after one is selected. These

emissions are not expected to exceed the Town of Minturn's air quality standards. The completed project is not expected to contribute significant impacts to air quality.

The development is not expected to significantly impact traffic. A southbound left turn late is currently required for the intersection of US Highway 24 and County Road, based on existing traffic volumes.

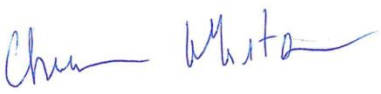
6.0 LIMITATIONS

This document was prepared to provide the required information for the Town of Minturn's required for an Environmental Inventory Report (EIR). We believe we have performed this EIR with a level of skill and care ordinarily used by environmental professionals practicing in this area at this time.

This document was prepared by CTL | Thompson, Inc. on behalf of Resort Concepts. Should additional information or evaluation be required, please contact us.

Sincerely,

CTL | THOMPSON, INC.



Christine Whitacre
Environmental Scientist

Reviewed by:

Matthew L. Wardlow, P.E.
Environmental Department Manager, Denver Office

Via e-mail: rickh@resortconceptsco.com

REFRENCES

Colorado Division of Wildlife, Wildlife Species Profiles, http://wildlife.state.co.us/WildlifeSpecies/Profiles/.

Rocky Mountain Flora, William A. Weber, Copyright 1976.

Scats and Tracks of the Rocky Mountains, James C. Halfpenny, Ph.D, Copyright 2001.

The Guide to Colorado Birds, Mary Taylor, Copyright 1998.

U.S. Army Corps of Engineers Wetlands Delineation Manual, Produced by the Corps of Engineers, 1987 Edition.

U.S. Army Corps of Engineers, 33 CFR Part 328 – Definition of "Waters of the United States", www.usace.army.mil/inet/functions/cw/cecwo/reg/33cfr328.htm.

U.S. Fish and Wildlife Service, National Wetlands Inventory, http://nmviewogc.cr.usgs.gov/viewer.htm.

U.S. Fish and Wildlife Service, Mountain and Prairie Region, Endangered Species Program website, www.mountain-prairie.fws.gov/endspp.

Eagle River Watershed Plan, Eagle County & The Eagle River Watershed Council, dated May 15, 2013.

Minturn Housing Action Plan 2019 DRAFT, Town of Minturn, dated May 28, 2019.

Minturn North Economic Study, Dated September 19, 2022

Minturn North PUD – Trip Generator Letter, CivTrans, dated October 3, 2022.

Statistics, Minturn, CO, Town of Minturn Website, accessed via web, August 2020, https://www.minturn.org/town-history/pages/statistics.

Minturn, CO Charter and Municipal Code, Town of Minturn, accessed via web, August 2020, https://library.municode.com/co/minturn/codes/charter_and_municipal_code?nodeId=MIMUCO.

A Resolution Readopting the Minturn Community Plan as the Master Plan for the Town, Town of Minturn, Series 1998

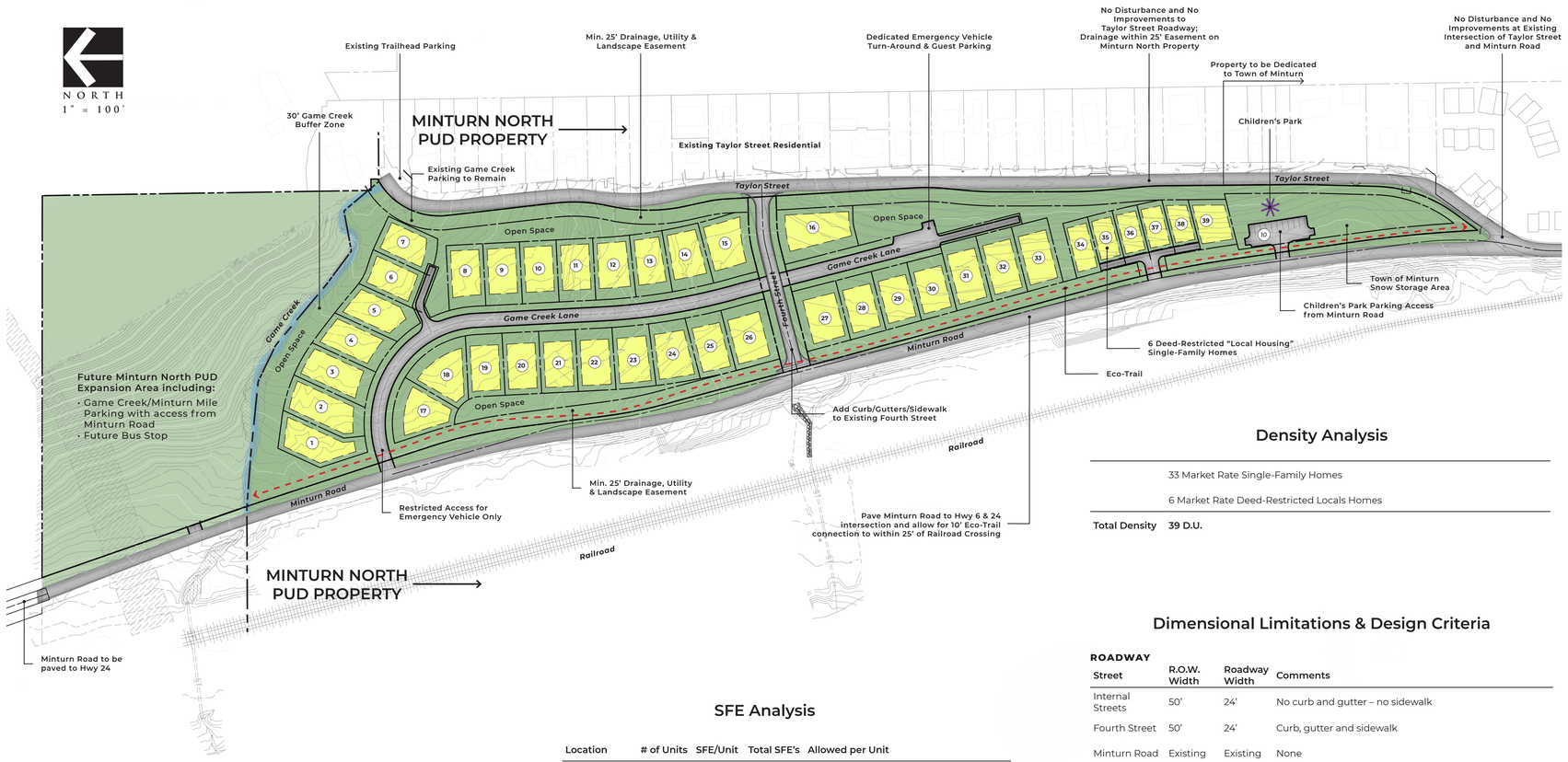
Town of Minturn Zoning Map, Town of Minturn, accessed via web, August 2020, https://www.minturn.org/sites/g/files/vyhlif3486/f/imce/town_of_minturn_zoning_map.jpg.

Soils and Foundation Investigation, Minturn Railroad PUD, CTL/Thompson, Project No. SU01922.000-120-R1, dated August 26, 2020

Wetland Delineation Report, Birch Ecology, LLC, Report No. Unknown, dated September 2020.

Analysis of Potential Incremental Town of Minturn Revenues Generated, and General Fund Expenditures Incurred as a result of the development of the North Minturn PUD, Stan Bernstein and Associates, Report No. Unknown, dated September 14, 2020.

MINTURN NORTH PUD – PRELIMINARY PLAN REVISIONS



Density Analysis

	33 Market Rate Single-Family Homes
	6 Market Rate Deed-Restricted Locals Homes
Total Density	**39 D.U.**

Dimensional Limitations & Design Criteria

ROADWAY

Street	R.O.W. Width	Roadway Width	Comments
Internal Streets	50'	24'	No curb and gutter – no sidewalk
Fourth Street	50'	24'	Curb, gutter and sidewalk
Minturn Road	Existing	Existing	None
Taylor Street	Existing	Existing	No improvements required – drainage within minimum 25' Drainage, Utility & Landscape easement

BUILDING

Lot #	Front Setback	Rear Setback	Side Setback	Max. Roof Height
1–33	20' from R.O.W.	10' from R.O.W.	7.5' from R.O.W.	Per T.O.M. code
34–39	20' from R.O.W.	10' from R.O.W.	5' from Property Line	Per T.O.M. code

SFE Analysis

Location	# of Units	SFE/Unit	Total SFE's	Allowed per Unit
Lots 1–33	33	2	66	Max. 6,000sf + 4,000sf irrigation
Lots 34–39	6	1	6	Max. 3,000sf + 2,000sf irrigation
Common Area	N/A	N/A	4	Max. 10,000sf irrigation
Total SFE's			**76**	

Note: Homes which are less than 3,000sf shall require 1 SFE in accordance with Minturn Town Ordinance. This determination shall be made upon each building permit application. In the event excess SFE's become available resulting from homes less than 3,000sf, remaining SFE's may be utilized within the future Minturn North PUD expansion area.

Local Housing Conceptual Floor Plan – 1,840sf

Planning Response to Stakeholder Comments

TOPIC	PLAN REVISIONS/PUBLIC BENEFITS
Density	• Revised plan provides for a 80% reduction in density from 193 to 39 units. The Revised Minturn North PUD only includes the property South of Game Creek. • 39 single family homes (6 are Deed Restricted Town of Minturn "Locals Housing" Single-Family Homes) • Property North of Game Creek is not included in the Minturn North PUD. However, it is labeled as Future PUD Expansion Area which will be subject to future T.O.M. review and approval. • Minturn North lot sizes are consistent with existing Taylor Street lots and the 2009 T.O.M. Master Community Plan • Revised plan allows for low vehicular, pedestrian and visual impact from existing Taylor Street residences and maintains the Fourth Street access to Minturn Road for Taylor Street residents.
Water	• Revised plan utilizes the 76 currently available SFE's (70 provided by T.O.M. + 6 existing SFE's on the property) • 2 SFE's are allocated to Lots 1-33 and 1 SFE is allocated to Lots 34-39. *Note: Homes which are less than 3,000sf shall require 1 SFE in accordance with Minturn Town Ordinance. This determination shall be made upon each building permit application. In the event excess SFE's become available resulting from homes less than 3,000sf, remaining SFE's may be utilized within the future Minturn North PUD expansion area.*
Taylor Street	• Access to Taylor Street has been reduced to existing Fourth Street location. • A minimum 25' drainage, utility and landscape easement has been located along the western boundary of Taylor Street on Minturn North property to reduce visual impacts on Taylor Street residents. • Revised plan reduces hardscape and infrastructure thereby increasing landscaping and open space around homes.
Natural Resources Protection	• Revised plan maintains a 30'+ buffer along Game Creek
Local Housing	• 6 Units of the revised Minturn North PUD shall be deed restricted for T.O.M. permanent residents. • 33 single family homes shall be offered to the general public. A perpetual deed restriction shall stipulate that Non-Minturn permanent resident Buyers shall pay a 1% transfer fee to the T.O.M. Community Fund.
Open Space	• The revised Minturn North PUD will meet or exceed the minimum 25% required open space within each phase. • A public Children's Park has been relocated to the South end of the property – more accessible to the majority of Town residents. This revision also increases vehicular and pedestrian visibility at the intersection thereby providing for safer connectivity. The property shall be dedicated to T.O.M. • Space for T.O.M. snow storage has been added to the South end of the property. The property shall be dedicated to T.O.M.
Infrastructure and Public Improvements	• The revised Minturn North PUD purposefully creates a low impact infrastructure plan which substantially simplifies and reduces the need for on-site and off-site public improvements. This reduction is critical to the viability of the revised plan. • The revised Minturn North PUD design intent is to create a low impact neighborhood rather than an urban footprint. • The revised Minturn North PUD does not include an overlapping metropolitan district. • With the exception of Fourth Street, internal roadway maintenance will be managed and paid for by the to-be-formed property owners association. • The park and associated improvements shall be dedicated to the T.O.M. • Revised plan requires minimal Town Code variances.
Sustainability	• Residential fixtures including toilets, shower heads, faucets, irrigation controllers shall be certified by the EPA's Water Sense program or have an equivalent rating. • Irrigation devices such as spray sprinkler bodies shall be rated for efficiency and low flow. • All water using appliances such as dishwashers, ice machines and washing machines shall be Energy Star certified. • All exterior lighting fixtures will be dark sky compliant. Non dark sky compliant lighting may be used at specific locations for the purpose of safety if approved by the T.O.M. design review board.
Architectural Character	• The architectural style of Minturn North will allow for diversity of forms, massing and colors to create an eclectic timeless style grounded in the rich heritage of the area and in harmony with the Town. • Neutral tones will create the broad canvas that binds the neighborhood with splashes of color on accent elements such as windows, doors, shutter's and additive forms allowing for an eclectic individuality. • Appropriate landscaping material will be used to weave the architecture and streetscape into a cohesive neighborhood, respectful of existing homes. • A Design Review Board will be established by the Property Owners Association to enforce Design Guidelines.

Local Home Inspiration

Single-Family Home Inspiration

Public Park Inspiration

Single-Family Home Inspiration

Single-Family Home Inspiration

Single-Family Home Inspiration

U.S. Fish and Wildlife Service
National Wetlands Inventory

Figure 2 - Site Wetlands

October 12, 2022

Wetlands

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

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

ATTACHMENT A
SITE PHOTOGRAPHS

Overall Site Photos

Description: General Property view
Direction: North

Description: General Property view
Direction: North

Description: On-site mobile homes
Direction: Southwest

Description: General Property view
Direction: South

SITE PHOTOGRAPHS

ATTACHMENT B

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

CTL | THOMPSON INCORPORATED

September 23, 2020
Revised September 25, 2020

Minturn Crossing, LLC
245 Pine Street
Minturn, Colorado 81645

Attention: Gregory Sparhawk

Subject: Limited Phase II Environmental Site Assessment
Minturn Railroad PUD
19 Acres Between N. Taylor Street and Minturn Road
Minturn, Colorado
Project No. SU01922.000-205-L1

This letter was prepared by CTL | Thompson, Inc. (CTL) for **Minturn Crossing, LLC,** and presents the results of the Limited Phase II Environmental Site Assessment (ESA) for the Proposed Minturn Railroad PUD in Minturn, Colorado**.**

Introduction

Minturn Crossing, LLC requested that the subsurface conditions be evaluated at the Site. This included soil sampling in nine locations on the Site. This letter includes our methods for gathering data of the shallow subsurface conditions at the site and evaluation of the analytical data.

Per our Contract Modification #2 dated August 10, 2020, we advanced a total of nine (9) shallow borings, in a 3 x 3 grid around the assumed the location of SB08 from the December 2018 soil screening assessment performed by others. Our borings were spaced between 30 and 50 feet apart. The previous SB08 location had an elevated concentration of Benzo(a)pyrene, a Polynuclear Aromatic Hydrocarbon (PAH) that is typically a remnant of coal ash, soot, or other byproducts of combustion. It is unknown if the source is from historic rail use, drainage from pollutants on nearby roadways, or other sources. Our borings were to at least 12 inches using a shovel, decontaminated between borings.

Site Description

The sites consist of approximately 19 acres between N. Taylor Street and Minturn Road in Minturn, Colorado. The Eagle County Assessor website lists the size of this parcel as approximately 19 acres. Figure 1 (Topographic Map) presents the location of the Site and Figure 2 (Site Plan) presents the approximate locations of the soil samples, as well as a summary of significant results.

Field Investigation

Following utility clearances, CTL visited the site on September 10, 2020 and collected shallow soil samples with a shovel. Soil samples were collected to an approximate depth of 12 inches at six locations, and to approximately 24 inches at three locations.

Environmental protocol was used by CTL during digging and sampling of the soil. Disposable nitrile gloves were used by CTL to obtain subsurface soils. Sampling equipment was decontaminated with an Alconox® wash, followed by rinse, and deionization rinse between sample locations.

The portions of the samples from the shovel borings that were composited (metals) were collected by combining the boring spoils in a plastic bucket. The spoils were then mixed and quartered.

The soil samples were analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) and one location was additionally analyzed for Volatile Organic Compounds (VOCs) via EPA Method 8260, and Resource Conservation and Recovery Act (RCRA) 8 Metals via EPA Methods 6010C/7471A, as well as pH and Flashpoint. The VOC sample was not composited but was a discrete ("grab") samples to minimize volatilization. These additional analyses were performed simply to provide to a landfill for approval in the event of excavation and disposal, rather than out of concern for these contaminants at the Site. All samples were placed in laboratory provided glassware and transported on ice to Origins Laboratory in Denver, Colorado.

Laboratory Results and Discussion

Table I and II presents a summary of the soil sample results. A complete copy of the laboratory results is presented in Attachment A.

Table I
Summary of Soil Sampling Results

	ANALYTE	HB1	HB2	HB3	HB4	HB5	HB6	HB7	HB8	HB9	EPA RSL
PAHs	1-Methylnapthalene	0.0123	0.0136	0.0126	0.0233	0.0180	0.0159	0.00750	0.0442	0.0249	18
	2-Methylnapthalene	0.0163	0.0165	0.0158	0.0275	0.0222	0.0195	0.00822	0.0530	0.0283	240
	Acenaphthene	ND	ND	ND	ND	ND	0.00217	ND	ND	ND	36,000
	Acenaphthylene	ND	0.00179	ND	0.00625	ND	0.00253	ND	0.00405	0.00297	NSF
	Anthracene	ND	0.00287	ND	0.0100	ND	0.00579	ND	0.00589	0.00446	180,000
	Benzo(a)anthracene	ND	0.0125	0.0205	0.0675	0.00970	0.0355	0.00750	0.0210	0.0178	1.1
	Benzo(a)pyrene	0.0102	0.0168	0.0379	0.0709	0.0125	0.0423	0.0104	0.0291	0.0268	0.11
	Benzo(b)fluoranthene	0.0184	0.0398	0.0838	0.123	0.0250	0.0593	0.0411	0.119	0.111	1.1
	Benzo(ghi)perylene	0.0102	0.0204	0.0427	0.0438	0.0180	0.0260	0.0204	0.0508	0.0494	NSF
	Benzo(k)fluoranthene	ND	0.0108	0.0221	0.0409	0.00693	0.0199	0.0100	0.0287	0.0260	11
	Chrysene	0.0123	0.0208	0.0300	0.0763	0.0166	0.0398	0.0168	0.0512	0.0461	110
	Dibenzo(a,h)anthracene	ND	0.00538	0.0111	0.0138	ND	0.00724	0.00500	0.0121	0.0155	0.10
	Fluoranthene	0.0163	0.0212	0.0379	0.110	0.0152	0.0445	0.0129	0.0427	0.0357	2,400

ANALYTE		HB1	HB2	HB3	HB4	HB5	HB6	HB7	HB8	HB9	EPA RSL
	Fluorene	ND	ND	ND	ND	ND	0.00217	ND	0.00184	ND	2,400
	Indeno(1,2,3-cd)pyrene	0.0123	0.0294	0.0474	0.0655	0.0194	0.0351	0.0347	0.0876	0.0844	1.1
	Napthalene	0.0102	0.0115	0.0111	0.0250	0.0139	0.0119	0.00857	0.0387	0.0249	2.0
	Phenanthrene	0.0123	0.0176	0.0190	0.0434	0.0152	0.0268	0.0132	0.0449	0.0353	NSF
	Pyrene	0.0204	0.0229	0.0506	0.111	0.0194	0.0554	0.0111	0.0342	0.0305	1,800

ND = None Detected
NA = Not Analyzed
NSF = No Standard Found
EPA RSL = United States Environmental Protection Agency Regional Screening Level (Residential) Summary Table (TR=1E-06, HQ=1.0) May 20202
TCLP = Toxicity Characteristic Leaching Procedure
BOLD = Exceeds RSL
Note: All concentrations in milligrams per kilogram (mg/kg) unless otherwise noted

Table II
Summary of Soil Sampling Results for Landfill (If Disposal Needed)

ANALYTE		HB5	EPA RSL
VOCs		ND	Varies
pH		7.49	NA
Flash Point		>200	NA
TCLP Lead		ND	5
RCRA 8 Metals	Arsenic	**1.80**	0.68
	Barium	129	15,000
	Cadmium	ND	71
	Chromium	17.1	120,000
	Lead	19.0	400
	Selenium	ND	390
	Silver	ND	390
	Mercury	0.00968	11

ND = None Detected
NA = Not Analyzed
NSF = No Standard Found
EPA RSL = United States Environmental Protection Agency Regional Screening Level (Residential) Summary Table (TR=1E-06, HQ=1.0) May 2020
TCLP = Toxicity Characteristic Leaching Procedure
BOLD = Exceeds RSL
Note: All concentrations in milligrams per kilogram (mg/kg) unless otherwise noted

VOCs were not detected in the sample collected.

PAHs were not detected in concentrations above the EPA Regional Screening Levels (RSLs) for residential soil, or else there was no clear standard.

Seven of the eight RCRA Metals were not detected in concentrations above the EPA RSLs for residential soil.

Arsenic was detected in concentrations which exceed the EPA RSL for residential soil; however, it should be noted that arsenic is naturally occurring in some

geologic environments in Colorado. The Colorado Department of Public Health and Environment (CDPHE) released a soil guidance document in June 2011 (reviewed/revised July 2014) related to evaluating arsenic concentrations in soil, specifically regarding screening data collected from sites where historical use does not indicate the potential for arsenic contamination. More than 2,700 soil samples were collected from 44 counties in Colorado and were separated into three different land use categories. The average concentration of the land use categories was 11 mg/kg and the average concentration for the urban mixed-use category was 19 mg/kg. According to the CDPHE document, if arsenic concentrations are lower than 11 mg/kg, and releases of arsenic could not have occurred at the site, than the division would require no further action to address arsenic in soil. Four of the samples collected also slightly exceeded the CDPHE guidance document level of 11 mg/kg. Based on the laboratory results, as well as the CDPHE guidance document, we do not believe that arsenic concentrations in the soils represent a concern.

Conclusions and Recommendations

Based on the results of the limited sampling and evaluation at the sites, the following can be concluded.

- PAHs were not detected in the shallow soils in concentrations which exceed EPA RSLs.

- Arsenic was detected in the soil sample above the EPA RSL for residential soil, but not in exceedance of the Colorado standard of 11 mg/kg. Other RCRA metals were not identified in concentrations that exceeded the EPA RSLs for residential soil where a clear standard is provided.

- Based on the laboratory results, as well as our field observations, the soils in question appear suitable for disposal in a Subtitle D landfill, such as the Denver Arapahoe Disposal Site (DADS). The laboratory data can be provided to the landfill in order to facilitate the creation of a waste profile.

We recommend excavation and disposal of the immediate area of SB8 (our HB5 one foot deeper) from the 2018 sampling effort. We did not find elevated PAH concentrations, likely because we deliberately went deeper in the central location of SB08, in an effort to bracket the contaminated area and provide an estimated yardage and pathway for closure. Disposal of this area, assuming SB08 and our HB5 are centrally located, would be the most definitive solution. The estimated yardage could be the central sample (the former SB08 or our deeper HB5), which is approximately two feet deep and 40’ x 40’ in area, or about 118 yards. We can assist with developing an approved waste profile with a local landfill, if requested.

LIMITATIONS

This letter was prepared for the use of the Minturn Crossing, LLC in evaluating the soils which will be disturbed during planned improvements of the Proposed Minturn Railroad PUD. Our sampling and analytical plan was designed using previously obtained environmental background information and our judgment for the performance of a limited subsurface evaluation. The accuracy and reliability of environmental studies are a reflection of the number and type of samples taken and extent of the analyses conducted by CTL. This investigation does not result in any guarantee that the site is free and clear of hazardous materials other than those that may be indicated by CTL in this letter.

If you have any questions or need additional information or assistance with future evaluation of the site, please feel free to call.

Sincerely,

CTL | THOMPSON, INC.

John P Castellano
Environmental Scientist
jcastellano@ctlthompson.com

Reviewed by:

Matthew L. Wardlow, P.E.
Environmental Department Manager

JPC:MLW/nn

Attachments: Figure 1 – Topographic Area Map
Figure 2 – Approximate Sample Locations and Laboratory Results Summary
Attachment A – Soil Sample Laboratory Data

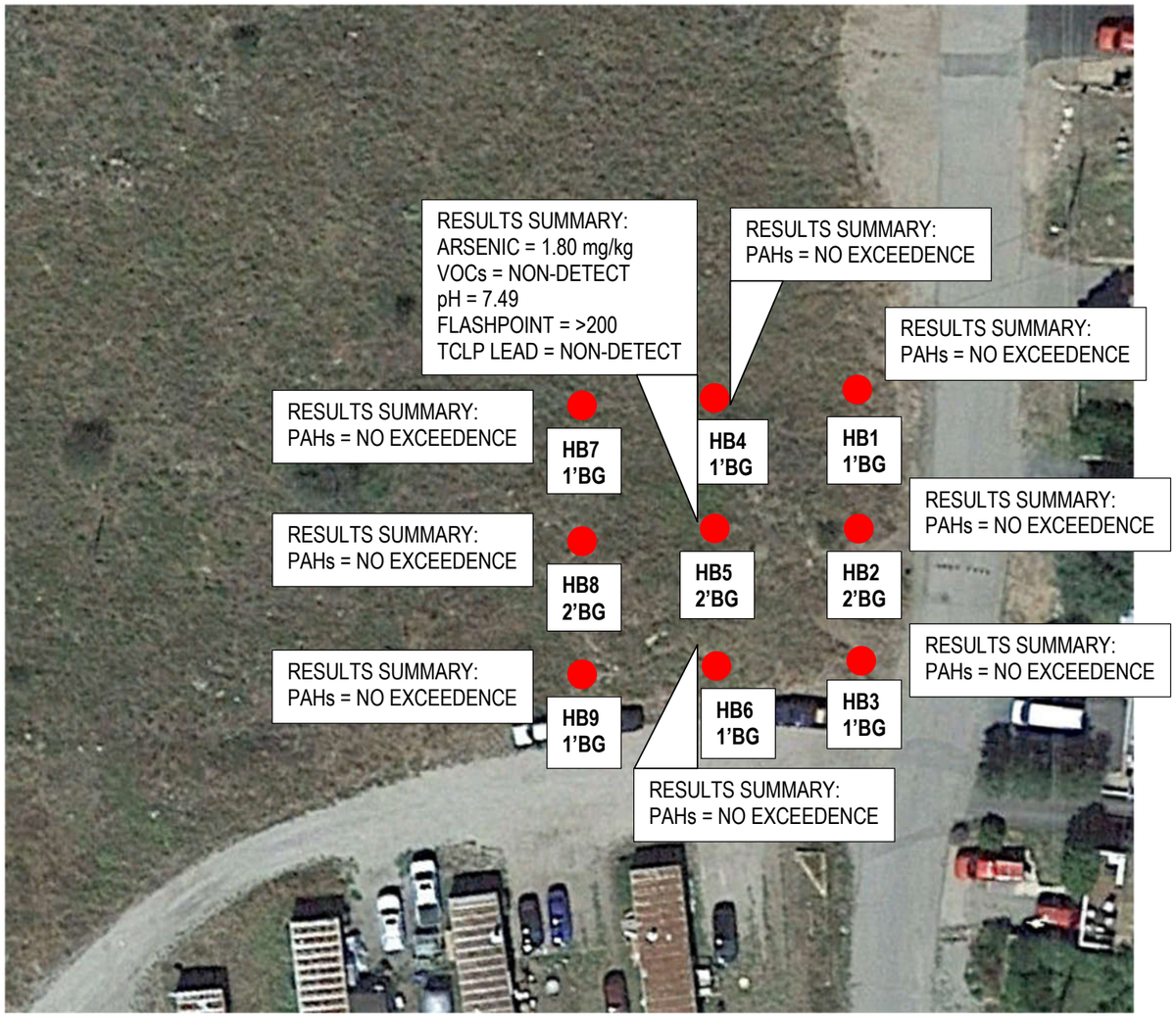
Via e-mail: gregs@gpsdesigns.com

S 26
T 5 S
R 81 W

Source:
Google Maps
Minturn, Colorado
Online - 2020

1" ~ 100'

Topographic Map
Figure 1



LEGEND:

HB1 Approximate location of Sample

HB5 is presumed to be in the vicinity of SB8 from 2018 Site Assessment

PROPOSED MINTURN RAILROAD PUD
LIMITED PHASE II ESA
SU01922.000-205-L1

FIGURE 2
APPROXIMATE SAMPLE LOCATIONS
AND LABORATORY RESULTS SUMMARY

ATTACHMENT A
SOIL SAMPLE LABORATORY DATA

ORIGINS LABORATORY, INC

September 17, 2020

CTL Thompson, Inc.

John Castellano

1971 West 12th Avenue

Denver CO 80204

Project Name - Minturn P11 **Project Number - SU01922.000-205**

Attached are your analytical results for Minturn P11 received by Origins Laboratory, Inc. September 10, 2020. This project is associated with Origins project number Y009128-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

THE NELAC INSTITUTE

ORIGINS LABORATORY, INC

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HB1	Y009128-01	Soil	September 10, 2020 9:00	09/10/2020 15:00
HB2	Y009128-02	Soil	September 10, 2020 9:40	09/10/2020 15:00
HB3	Y009128-03	Soil	September 10, 2020 10:20	09/10/2020 15:00
HB4	Y009128-04	Soil	September 10, 2020 10:40	09/10/2020 15:00
HB5	Y009128-05	Soil	September 10, 2020 11:00	09/10/2020 15:00
HB6	Y009128-06	Soil	September 10, 2020 11:25	09/10/2020 15:00
HB7	Y009128-07	Soil	September 10, 2020 11:45	09/10/2020 15:00
HB8	Y009128-08	Soil	September 10, 2020 12:15	09/10/2020 15:00
HB9	Y009128-09	Soil	September 10, 2020 13:00	09/10/2020 15:00

Origins Laboratory, Inc.

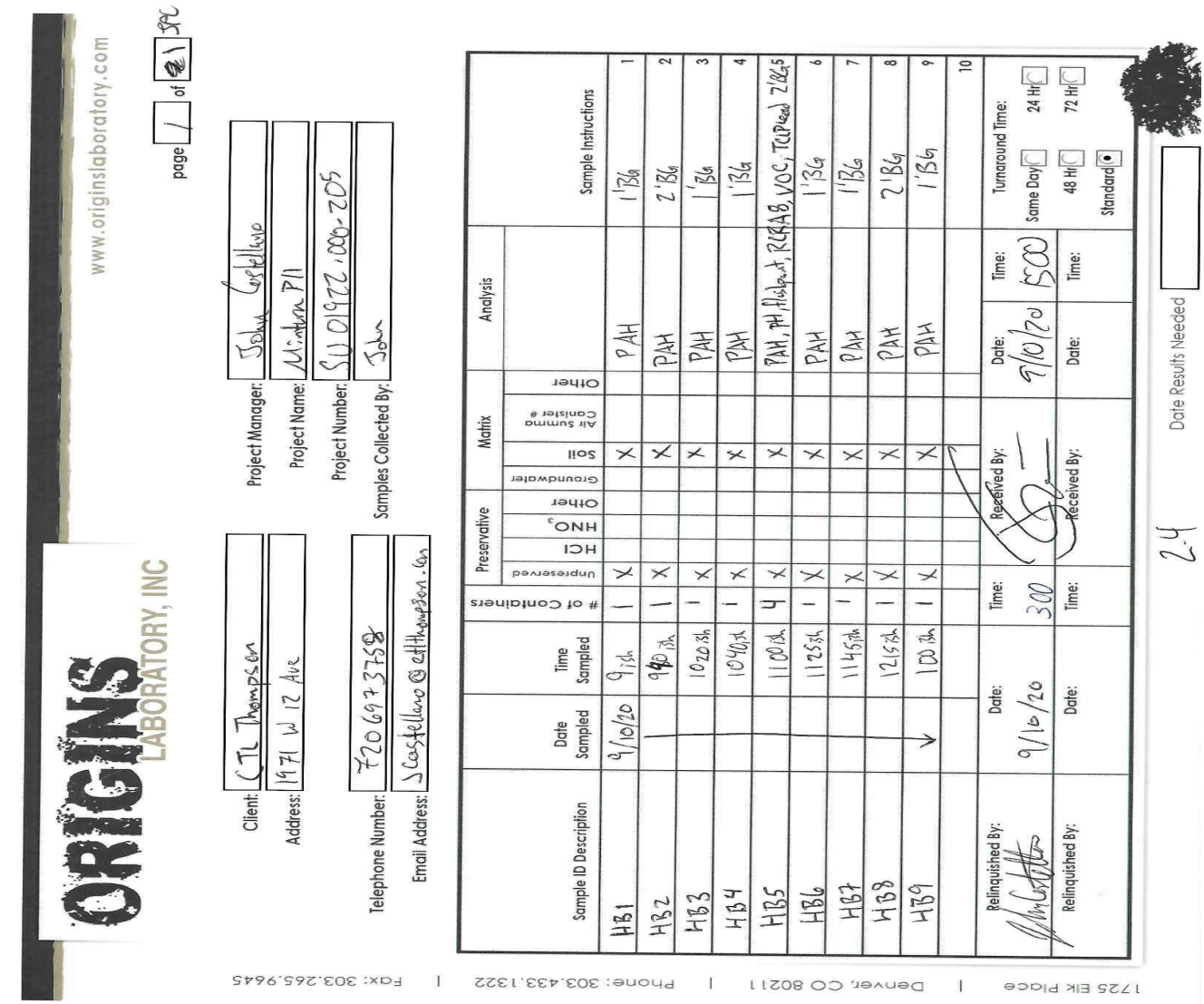
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jordan A. Merrill For Noelle Doyle Mathis, President

ORIGINS LABORATORY, INC

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11



Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: Y009128
Client: CTL Thompson
Client Project ID: Minturn P11

Checklist Completed by: JG
Shipped Via: HD
Date/time completed: 9 / 10 / 2020
Airbill #: N/A (UPS, FedEx, Hand Delivered, Pick-up, etc.)

Matrix(s) Received: (Check all that apply): X Soil/Solid ____Water ____Other:____

Cooler Number/Temperature: 1 / 2.4 °C ____/____ °C ____/____ °C ____/____ °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?	✓			
Is there ice present (document if blue ice is used)	✓			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Were all samples received intact[1]?	✓			
Was adequate sample volume provided[1]?	✓			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?		✓		
Is a chain-of-custody (COC) present and filled out completely[1]?	✓			
Does the COC agree with the number and type of sample bottles received[1]?	✓			
Do the sample IDs on the bottle labels match the COC[1]?	✓			
Is the COC properly relinquished by the client with date and time recorded[1]?	✓			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation and was it checked [1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*			✓	
Additional Comments (if any):				

[1]If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

JM
Reviewed by (Project Manager)

9-11-20
Date/Time Reviewed

Origins Laboratory, Inc.

Jordan A. Merrill For Noelle Doyle Mathis, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB1
9/10/2020 9:00:00AM

GEL Laboratories, LLC
Y009128-01 (Soil)

PAH by EPA 8270D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
1-Methylnaphthalene	**0.0123**	0.0204	mg/kg dry	5	2039675	JMB3	09/14/2020	09/15/2020	J
2-Methylnaphthalene	**0.0163**	0.0204	"	"	"	JMB3	"	"	J
Acenaphthene	ND	0.0204	"	"	"	JMB3	"	"	U
Acenaphthylene	ND	0.0204	"	"	"	JMB3	"	"	U
Anthracene	ND	0.0204	"	"	"	JMB3	"	"	U
Benzo(a)anthracene	ND	0.0204	"	"	"	JMB3	"	"	U
Benzo(a)pyrene	**0.0102**	0.0204	"	"	"	JMB3	"	"	J
Benzo(b)fluoranthene	**0.0184**	0.0204	"	"	"	JMB3	"	"	J
Benzo(ghi)perylene	**0.0102**	0.0204	"	"	"	JMB3	"	"	J
Benzo(k)fluoranthene	ND	0.0204	"	"	"	JMB3	"	"	U
Chrysene	**0.0123**	0.0204	"	"	"	JMB3	"	"	J
Dibenzo(a,h)anthracene	ND	0.0204	"	"	"	JMB3	"	"	U
Fluoranthene	**0.0163**	0.0204	"	"	"	JMB3	"	"	J
Fluorene	ND	0.0204	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0123**	0.0204	"	"	"	JMB3	"	"	J
Naphthalene	**0.0102**	0.0204	"	"	"	JMB3	"	"	J
Phenanthrene	**0.0123**	0.0204	"	"	"	JMB3	"	"	J
Pyrene	**0.0204**	0.0204	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*83 %*		*25-121*		"	"	"		

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB2
9/10/2020 9:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes

GEL Laboratories, LLC

Y009128-02 (Soil)

PAH by EPA 8270D

1-Methylnaphthalene	**0.0136**	0.00359	mg/kg dry	1	2039675	JMB3	09/14/2020	09/14/2020	
2-Methylnaphthalene	**0.0165**	0.00359	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.00359	"	"	"	JMB3	"	"	U
Acenaphthylene	**0.00179**	0.00359	"	"	"	JMB3	"	"	J
Anthracene	**0.00287**	0.00359	"	"	"	JMB3	"	"	J
Benzo(a)anthracene	**0.0125**	0.00359	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0168**	0.00359	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.0398**	0.00359	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0204**	0.00359	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0108**	0.00359	"	"	"	JMB3	"	"	
Chrysene	**0.0208**	0.00359	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.00538**	0.00359	"	"	"	JMB3	"	"	
Fluoranthene	**0.0212**	0.00359	"	"	"	JMB3	"	"	
Fluorene	ND	0.00359	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0294**	0.00359	"	"	"	JMB3	"	"	
Naphthalene	**0.0115**	0.00359	"	"	"	JMB3	"	"	
Phenanthrene	**0.0176**	0.00359	"	"	"	JMB3	"	"	
Pyrene	**0.0229**	0.00359	"	"	"	JMB3	"	"	

Surrogate: 5-alpha-Androstane	*73 %*	*25-121*	*"*	*"*	*"*	

Origins Laboratory, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB3
9/10/2020 10:20:00AM

GEL Laboratories, LLC
Y009128-03 (Soil)

PAH by EPA 8270D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
1-Methylnaphthalene	**0.0126**	0.0158	mg/kg dry	4	2039675	JMB3	09/14/2020	09/15/2020	J
2-Methylnaphthalene	**0.0158**	0.0158	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.0158	"	"	"	JMB3	"	"	U
Acenaphthylene	ND	0.0158	"	"	"	JMB3	"	"	U
Anthracene	ND	0.0158	"	"	"	JMB3	"	"	U
Benzo(a)anthracene	**0.0205**	0.0158	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0379**	0.0158	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.0838**	0.0158	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0427**	0.0158	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0221**	0.0158	"	"	"	JMB3	"	"	
Chrysene	**0.0300**	0.0158	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.0111**	0.0158	"	"	"	JMB3	"	"	J
Fluoranthene	**0.0379**	0.0158	"	"	"	JMB3	"	"	
Fluorene	ND	0.0158	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0474**	0.0158	"	"	"	JMB3	"	"	
Naphthalene	**0.0111**	0.0158	"	"	"	JMB3	"	"	J
Phenanthrene	**0.0190**	0.0158	"	"	"	JMB3	"	"	
Pyrene	**0.0506**	0.0158	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*83 %*	*25-121*			"	"	"		

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB4
9/10/2020 10:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes

GEL Laboratories, LLC
Y009128-04 (Soil)

PAH by EPA 8270D

1-Methylnaphthalene	**0.0233**	0.00417	mg/kg dry	1	2039675	JMB3	09/14/2020	09/15/2020	
2-Methylnaphthalene	**0.0275**	0.00417	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.00417	"	"	"	JMB3	"	"	U
Acenaphthylene	**0.00625**	0.00417	"	"	"	JMB3	"	"	
Anthracene	**0.0100**	0.00417	"	"	"	JMB3	"	"	
Benzo(a)anthracene	**0.0675**	0.00417	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0709**	0.00417	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.123**	0.00417	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0438**	0.00417	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0409**	0.00417	"	"	"	JMB3	"	"	
Chrysene	**0.0763**	0.00417	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.0138**	0.00417	"	"	"	JMB3	"	"	
Fluoranthene	**0.110**	0.00417	"	"	"	JMB3	"	"	
Fluorene	ND	0.00417	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0655**	0.00417	"	"	"	JMB3	"	"	
Naphthalene	**0.0250**	0.00417	"	"	"	JMB3	"	"	
Phenanthrene	**0.0434**	0.00417	"	"	"	JMB3	"	"	
Pyrene	**0.111**	0.00417	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*72 %*		*25-121*		"	"	"		

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB5
9/10/2020 11:00:00AM

GEL Laboratories, LLC
Y009128-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
Flash Point by EPA 1020A									
Setaflash-200	>200	75.0	Fahrenheit	1	2037954	VH1	09/10/2020	09/14/2020	
PAH by EPA 8270D									
1-Methylnaphthalene	**0.0180**	0.0139	mg/kg dry	4	2039675	JMB3	09/14/2020	09/15/2020	
2-Methylnaphthalene	**0.0222**	0.0139	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.0139	"	"	"	JMB3	"	"	U
Acenaphthylene	ND	0.0139	"	"	"	JMB3	"	"	U
Anthracene	ND	0.0139	"	"	"	JMB3	"	"	U
Benzo(a)anthracene	**0.00970**	0.0139	"	"	"	JMB3	"	"	J
Benzo(a)pyrene	**0.0125**	0.0139	"	"	"	JMB3	"	"	J
Benzo(b)fluoranthene	**0.0250**	0.0139	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0180**	0.0139	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.00693**	0.0139	"	"	"	JMB3	"	"	J
Chrysene	**0.0166**	0.0139	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	ND	0.0139	"	"	"	JMB3	"	"	U
Fluoranthene	**0.0152**	0.0139	"	"	"	JMB3	"	"	
Fluorene	ND	0.0139	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0194**	0.0139	"	"	"	JMB3	"	"	
Naphthalene	**0.0139**	0.0139	"	"	"	JMB3	"	"	
Phenanthrene	**0.0152**	0.0139	"	"	"	JMB3	"	"	
Pyrene	**0.0194**	0.0139	"	"	"	JMB3	"	"	

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CTL Thompson, Inc.
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Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB5
9/10/2020 11:00:00AM

GEL Laboratories, LLC
Y009128-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
PAH by EPA 8270D									
Surrogate: 5-alpha-Androstane	*69 %*	*25-121*			*2039675*		*09/14/2020*	*09/15/2020*	
pH in Soil by EPA 9045D									
pH	**7.49**		pH Units	1	B0I1108	KDK	09/11/2020	09/11/2020	
RCRA 8 Metals by EPA 6010C									
Arsenic	**1.80**	3.09	mg/kg dry	1	2039783	JWJ	09/14/2020	09/14/2020	J
Barium	**129**	0.515	"	"	"	JWJ	"	"	
Cadmium	ND	0.515	"	"	"	JWJ	"	"	U
Chromium	**17.1**	1.03	"	"	"	JWJ	"	"	
Lead	**19.0**	2.06	"	"	"	JWJ	"	"	
Selenium	ND	3.09	"	"	"	JWJ	"	"	U
Silver	ND	0.515	"	"	"	JWJ	"	"	U
RCRA 8 Metals by EPA 7471									
Mercury	**0.00968**	0.0236	mg/kg dry	1	2040105	MTM1	"	09/15/2020	J
TCLP Metals by EPA 1311/6010C									
Lead	ND	0.200	mg/L	1	2040504	JWJ	09/15/2020	09/15/2020	U

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Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB5
9/10/2020 11:00:00AM

GEL Laboratories, LLC
Y009128-05 (Soil)

VOC by EPA 8260D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.00200	mg/kg	1	B0I1414	KDK	09/14/2020	09/15/2020	Ua
1,1,1-Trichloroethane	ND	0.00200	"	"	"	KDK	"	"	Ua
1,1,2,2-Tetrachloroethane	ND	0.00200	"	"	"	KDK	"	"	Ua
1,1,2-Trichloroethane	ND	0.00200	"	"	"	KDK	"	"	Ua
1,1-Dichloroethane	ND	0.00200	"	"	"	KDK	"	"	Ua
1,1-Dichloroethene	ND	0.00200	"	"	"	KDK	"	"	Ua
1,1-Dichloropropene	ND	0.00200	"	"	"	KDK	"	"	Ua
1,2,3-Trichlorobenzene	ND	0.00500	"	"	"	KDK	"	"	Ua
1,2,3-Trichloropropane	ND	0.00500	"	"	"	KDK	"	"	Ua
1,2,4-Trichlorobenzene	ND	0.00500	"	"	"	KDK	"	"	Ua
1,2,4-Trimethylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
1,2-Dibromo-3-chloropropane	ND	0.00500	"	"	"	KDK	"	"	Ua
1,2-Dibromoethane (EDB)	ND	0.00200	"	"	"	KDK	"	"	Ua
1,2-Dichlorobenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
1,2-Dichloroethane	ND	0.00200	"	"	"	KDK	"	"	Ua
1,2-Dichloropropane	ND	0.00200	"	"	"	KDK	"	"	Ua
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
1,3-Dichlorobenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
1,3-Dichloropropane	ND	0.00200	"	"	"	KDK	"	"	Ua

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CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB5
9/10/2020 11:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes

Origins Laboratory, Inc.
Y009128-05 (Soil)

VOC by EPA 8260D

1,4-Dichlorobenzene	ND	0.00200	mg/kg	1	B0I1414	KDK	09/14/2020	09/15/2020	Ua
2,2-Dichloropropane	ND	0.00200	"	"	"	KDK	"	"	Ua
2-Butanone	ND	0.0100	"	"	"	KDK	"	"	Ua
2-Chlorotoluene	ND	0.00200	"	"	"	KDK	"	"	Ua
2-Hexanone	ND	0.0100	"	"	"	KDK	"	"	Ua
4-Chlorotoluene	ND	0.00200	"	"	"	KDK	"	"	Ua
4-Isopropyltoluene	ND	0.00200	"	"	"	KDK	"	"	Ua
4-Methyl-2-pentanone	ND	0.0100	"	"	"	KDK	"	"	Ua
Acetone	ND	0.0200	"	"	"	KDK	"	"	Ua
Benzene	ND	0.00200	"	"	"	KDK	"	"	Ua
Bromobenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
Bromochloromethane	ND	0.00200	"	"	"	KDK	"	"	Ua
Bromodichloromethane	ND	0.00200	"	"	"	KDK	"	"	Ua
Bromoform	ND	0.00200	"	"	"	KDK	"	"	Ua
Bromomethane	ND	0.00200	"	"	"	KDK	"	"	Ua
Carbon disulfide	ND	0.00500	"	"	"	KDK	"	"	Ua
Carbon tetrachloride	ND	0.00200	"	"	"	KDK	"	"	Ua
Chlorobenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
Chloroethane	ND	0.00500	"	"	"	KDK	"	"	Ua

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Project Number: SU01922.000-205
Project: Minturn P11

HB5
9/10/2020 11:00:00AM

Origins Laboratory, Inc.
Y009128-05 (Soil)

VOC by EPA 8260D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
Chloroform	ND	0.00200	mg/kg	1	B0I1414	KDK	09/14/2020	09/15/2020	Ua
Chloromethane	ND	0.00200	"	"	"	KDK	"	"	Ua
cis-1,2-Dichloroethene	ND	0.00200	"	"	"	KDK	"	"	Ua
cis-1,3-Dichloropropene	ND	0.00200	"	"	"	KDK	"	"	Ua
Dibromochloromethane	ND	0.00200	"	"	"	KDK	"	"	Ua
Dibromomethane	ND	0.00200	"	"	"	KDK	"	"	Ua
Ethylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
Hexachlorobutadiene	ND	0.00500	"	"	"	KDK	"	"	Ua
Iodomethane	ND	0.0150	"	"	"	KDK	"	"	Ua
Isopropylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
m,p-Xylene	ND	0.00400	"	"	"	KDK	"	"	Ua
Methyl tert-Butyl Ether	ND	0.00200	"	"	"	KDK	"	"	Ua
Methylene Chloride	ND	0.0200	"	"	"	KDK	"	"	Ua
Naphthalene	ND	0.0100	"	"	"	KDK	"	"	Ua
n-Butylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
n-Propylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
o-Xylene	ND	0.00200	"	"	"	KDK	"	"	Ua
sec-Butylbenzene	ND	0.00200	"	"	"	KDK	"	"	Ua
Styrene	ND	0.00200	"	"	"	KDK	"	"	Ua

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Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB5
9/10/2020 11:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes

Origins Laboratory, Inc.

Y009128-05 (Soil)

VOC by EPA 8260D

tert-Butylbenzene	ND	0.00200	mg/kg	1	B0I1414	KDK	09/14/2020	09/15/2020	Ua
Tetrachloroethene	ND	0.00200	"	"	"	KDK	"	"	Ua
Toluene	ND	0.00200	"	"	"	KDK	"	"	Ua
trans-1,2-Dichloroethene	ND	0.00200	"	"	"	KDK	"	"	Ua
trans-1,3-Dichloropropene	ND	0.00200	"	"	"	KDK	"	"	Ua
Trichloroethene	ND	0.00200	"	"	"	KDK	"	"	Ua
Trichlorofluoromethane	ND	0.00300	"	"	"	KDK	"	"	Ua
Vinyl chloride	ND	0.00200	"	"	"	KDK	"	"	Ua

Surrogate: 1,2-Dichloroethane-d4	*93.7 %*	*70-130*	*"*	*"*	*"*
Surrogate: Toluene-d8	*105 %*	*70-130*	*"*	*"*	*"*
Surrogate: 4-Bromofluorobenzene	*102 %*	*70-130*	*"*	*"*	*"*

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1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB6
9/10/2020 11:25:00AM

GEL Laboratories, LLC
Y009128-06 (Soil)

PAH by EPA 8270D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
1-Methylnaphthalene	**0.0159**	0.00362	mg/kg dry	1	2039675	JMB3	09/14/2020	09/15/2020	
2-Methylnaphthalene	**0.0195**	0.00362	"	"	"	JMB3	"	"	
Acenaphthene	**0.00217**	0.00362	"	"	"	JMB3	"	"	J
Acenaphthylene	**0.00253**	0.00362	"	"	"	JMB3	"	"	J
Anthracene	**0.00579**	0.00362	"	"	"	JMB3	"	"	
Benzo(a)anthracene	**0.0355**	0.00362	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0423**	0.00362	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.0593**	0.00362	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0260**	0.00362	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0199**	0.00362	"	"	"	JMB3	"	"	
Chrysene	**0.0398**	0.00362	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.00724**	0.00362	"	"	"	JMB3	"	"	
Fluoranthene	**0.0445**	0.00362	"	"	"	JMB3	"	"	
Fluorene	**0.00217**	0.00362	"	"	"	JMB3	"	"	J
Indeno(1,2,3-cd)pyrene	**0.0351**	0.00362	"	"	"	JMB3	"	"	
Naphthalene	**0.0119**	0.00362	"	"	"	JMB3	"	"	
Phenanthrene	**0.0268**	0.00362	"	"	"	JMB3	"	"	
Pyrene	**0.0554**	0.00362	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*68 %*	*25-121*			"		"	"	

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB7
9/10/2020 11:45:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes

GEL Laboratories, LLC
Y009128-07 (Soil)

PAH by EPA 8270D

1-Methylnaphthalene	**0.00750**	0.00357	mg/kg dry	1	2039675	JMB3	09/14/2020	09/15/2020	
2-Methylnaphthalene	**0.00822**	0.00357	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.00357	"	"	"	JMB3	"	"	U
Acenaphthylene	ND	0.00357	"	"	"	JMB3	"	"	U
Anthracene	ND	0.00357	"	"	"	JMB3	"	"	U
Benzo(a)anthracene	**0.00750**	0.00357	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0104**	0.00357	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.0411**	0.00357	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0204**	0.00357	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0100**	0.00357	"	"	"	JMB3	"	"	
Chrysene	**0.0168**	0.00357	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.00500**	0.00357	"	"	"	JMB3	"	"	
Fluoranthene	**0.0129**	0.00357	"	"	"	JMB3	"	"	
Fluorene	ND	0.00357	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0347**	0.00357	"	"	"	JMB3	"	"	
Naphthalene	**0.00857**	0.00357	"	"	"	JMB3	"	"	
Phenanthrene	**0.0132**	0.00357	"	"	"	JMB3	"	"	
Pyrene	**0.0111**	0.00357	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*60 %*	*25-121*			"		"	"	

Origins Laboratory, Inc.

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1971 West 12th Avenue
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John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB8
9/10/2020 12:15:00PM

GEL Laboratories, LLC
Y009128-08 (Soil)

PAH by EPA 8270D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
1-Methylnaphthalene	**0.0442**	0.00368	mg/kg dry	1	2039675	JMB3	09/14/2020	09/15/2020	
2-Methylnaphthalene	**0.0530**	0.00368	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.00368	"	"	"	JMB3	"	"	U
Acenaphthylene	**0.00405**	0.00368	"	"	"	JMB3	"	"	
Anthracene	**0.00589**	0.00368	"	"	"	JMB3	"	"	
Benzo(a)anthracene	**0.0210**	0.00368	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0291**	0.00368	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.119**	0.00368	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0508**	0.00368	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0287**	0.00368	"	"	"	JMB3	"	"	
Chrysene	**0.0512**	0.00368	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.0121**	0.00368	"	"	"	JMB3	"	"	
Fluoranthene	**0.0427**	0.00368	"	"	"	JMB3	"	"	
Fluorene	**0.00184**	0.00368	"	"	"	JMB3	"	"	J
Indeno(1,2,3-cd)pyrene	**0.0876**	0.00368	"	"	"	JMB3	"	"	
Naphthalene	**0.0387**	0.00368	"	"	"	JMB3	"	"	
Phenanthrene	**0.0449**	0.00368	"	"	"	JMB3	"	"	
Pyrene	**0.0342**	0.00368	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*64 %*	*25-121*			"	"	"		

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

HB9
9/10/2020 1:00:00PM

GEL Laboratories, LLC
Y009128-09 (Soil)

PAH by EPA 8270D

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
1-Methylnaphthalene	**0.0249**	0.00372	mg/kg dry	1	2039675	JMB3	09/14/2020	09/15/2020	
2-Methylnaphthalene	**0.0283**	0.00372	"	"	"	JMB3	"	"	
Acenaphthene	ND	0.00372	"	"	"	JMB3	"	"	U
Acenaphthylene	**0.00297**	0.00372	"	"	"	JMB3	"	"	J
Anthracene	**0.00446**	0.00372	"	"	"	JMB3	"	"	
Benzo(a)anthracene	**0.0178**	0.00372	"	"	"	JMB3	"	"	
Benzo(a)pyrene	**0.0268**	0.00372	"	"	"	JMB3	"	"	
Benzo(b)fluoranthene	**0.111**	0.00372	"	"	"	JMB3	"	"	
Benzo(ghi)perylene	**0.0494**	0.00372	"	"	"	JMB3	"	"	
Benzo(k)fluoranthene	**0.0260**	0.00372	"	"	"	JMB3	"	"	
Chrysene	**0.0461**	0.00372	"	"	"	JMB3	"	"	
Dibenzo(a,h)anthracene	**0.0115**	0.00372	"	"	"	JMB3	"	"	
Fluoranthene	**0.0357**	0.00372	"	"	"	JMB3	"	"	
Fluorene	ND	0.00372	"	"	"	JMB3	"	"	U
Indeno(1,2,3-cd)pyrene	**0.0844**	0.00372	"	"	"	JMB3	"	"	
Naphthalene	**0.0249**	0.00372	"	"	"	JMB3	"	"	
Phenanthrene	**0.0353**	0.00372	"	"	"	JMB3	"	"	
Pyrene	**0.0305**	0.00372	"	"	"	JMB3	"	"	
Surrogate: 5-alpha-Androstane	*63 %*	*25-121*			"	"	"		

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Project Number: SU01922.000-205
Project: Minturn P11

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Blank (B0I1414-BLK1)				Prepared: 09/14/2020 Analyzed: 09/15/2020						
1,1,1,2-Tetrachloroethane	ND	0.00200	mg/kg							Ua
1,1,1-Trichloroethane	ND	0.00200	"							Ua
1,1,2,2-Tetrachloroethane	ND	0.00200	"							Ua
1,1,2-Trichloroethane	ND	0.00200	"							Ua
1,1-Dichloroethane	ND	0.00200	"							Ua
1,1-Dichloroethene	ND	0.00200	"							Ua
1,1-Dichloropropene	ND	0.00200	"							Ua
1,2,3-Trichlorobenzene	ND	0.00500	"							Ua
1,2,3-Trichloropropane	ND	0.00500	"							Ua
1,2,4-Trichlorobenzene	ND	0.00500	"							Ua
1,2,4-Trimethylbenzene	ND	0.00200	"							Ua
1,2-Dibromo-3-chloropropane	ND	0.00500	"							Ua
1,2-Dibromoethane (EDB)	ND	0.00200	"							Ua
1,2-Dichlorobenzene	ND	0.00200	"							Ua
1,2-Dichloroethane	ND	0.00200	"							Ua
1,2-Dichloropropane	ND	0.00200	"							Ua
1,3,5-Trimethylbenzene	ND	0.00200	"							Ua
1,3-Dichlorobenzene	ND	0.00200	"							Ua
1,3-Dichloropropane	ND	0.00200	"							Ua
1,4-Dichlorobenzene	ND	0.00200	"							Ua
2,2-Dichloropropane	ND	0.00200	"							Ua
2-Butanone	ND	0.0100	"							Ua
2-Chlorotoluene	ND	0.00200	"							Ua
2-Hexanone	ND	0.0100	"							Ua
4-Chlorotoluene	ND	0.00200	"							Ua
4-Isopropyltoluene	ND	0.00200	"							Ua

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Blank (B0I1414-BLK1)				Prepared: 09/14/2020 Analyzed: 09/15/2020						
4-Methyl-2-pentanone	ND	0.0100	mg/kg							Ua
Acetone	ND	0.0200	"							Ua
Benzene	ND	0.00200	"							Ua
Bromobenzene	ND	0.00200	"							Ua
Bromochloromethane	ND	0.00200	"							Ua
Bromodichloromethane	ND	0.00200	"							Ua
Bromoform	ND	0.00200	"							Ua
Bromomethane	ND	0.00200	"							Ua
Carbon disulfide	ND	0.00500	"							Ua
Carbon tetrachloride	ND	0.00200	"							Ua
Chlorobenzene	ND	0.00200	"							Ua
Chloroethane	ND	0.00500	"							Ua
Chloroform	ND	0.00200	"							Ua
Chloromethane	ND	0.00200	"							Ua
cis-1,2-Dichloroethene	ND	0.00200	"							Ua
cis-1,3-Dichloropropene	ND	0.00200	"							Ua
Dibromochloromethane	ND	0.00200	"							Ua
Dibromomethane	ND	0.00200	"							Ua
Ethylbenzene	ND	0.00200	"							Ua
Hexachlorobutadiene	ND	0.00500	"							Ua
Iodomethane	ND	0.0150	"							Ua
Isopropylbenzene	ND	0.00200	"							Ua
m,p-Xylene	ND	0.00400	"							Ua
Methyl tert-Butyl Ether	ND	0.00200	"							Ua
Methylene Chloride	ND	0.0200	"							Ua
Naphthalene	ND	0.0100	"							Ua

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Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Blank (B0I1414-BLK1)					Prepared: 09/14/2020 Analyzed: 09/15/2020					
n-Butylbenzene	ND	0.00200	mg/kg							Ua
n-Propylbenzene	ND	0.00200	"							Ua
o-Xylene	ND	0.00200	"							Ua
sec-Butylbenzene	ND	0.00200	"							Ua
Styrene	ND	0.00200	"							Ua
tert-Butylbenzene	ND	0.00200	"							Ua
Tetrachloroethene	ND	0.00200	"							Ua
Toluene	ND	0.00200	"							Ua
trans-1,2-Dichloroethene	ND	0.00200	"							Ua
trans-1,3-Dichloropropene	ND	0.00200	"							Ua
Trichloroethene	ND	0.00200	"							Ua
Trichlorofluoromethane	ND	0.00300	"							Ua
Vinyl chloride	ND	0.00200	"							Ua
Surrogate: 1,2-Dichloroethane-d4	*0.11*		"	*0.125*		*90.3*	*70-130*			
Surrogate: Toluene-d8	*0.13*		"	*0.125*		*104*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.12*		"	*0.125*		*99.9*	*70-130*			

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Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
LCS (B0I1414-BS1)					Prepared: 09/14/2020 Analyzed: 09/15/2020					
1,1,1,2-Tetrachloroethane	0.0535	0.00200	mg/kg	0.0500		107	70-130			
1,1,1-Trichloroethane	0.0474	0.00200	"	0.0500		94.8	70-130			
1,1,2,2-Tetrachloroethane	0.0552	0.00200	"	0.0500		110	70-130			
1,1,2-Trichloroethane	0.0523	0.00200	"	0.0500		105	70-130			
1,1-Dichloroethane	0.0505	0.00200	"	0.0500		101	70-130			
1,1-Dichloroethene	0.0499	0.00200	"	0.0500		99.8	70-130			
1,1-Dichloropropene	0.0503	0.00200	"	0.0500		101	70-130			
1,2,3-Trichlorobenzene	0.0474	0.00500	"	0.0500		94.8	70-130			
1,2,3-Trichloropropane	0.0508	0.00500	"	0.0500		102	70-130			
1,2,4-Trichlorobenzene	0.0482	0.00500	"	0.0500		96.5	70-130			
1,2,4-Trimethylbenzene	0.0530	0.00200	"	0.0500		106	70-130			
1,2-Dibromo-3-chloropropane	0.0412	0.00500	"	0.0500		82.4	70-130			
1,2-Dibromoethane (EDB)	0.0510	0.00200	"	0.0500		102	70-130			
1,2-Dichlorobenzene	0.0501	0.00200	"	0.0500		100	70-130			
1,2-Dichloroethane	0.0424	0.00200	"	0.0500		84.7	70-130			
1,2-Dichloropropane	0.0529	0.00200	"	0.0500		106	70-130			
1,3,5-Trimethylbenzene	0.0529	0.00200	"	0.0500		106	70-130			
1,3-Dichlorobenzene	0.0515	0.00200	"	0.0500		103	70-130			
1,3-Dichloropropane	0.0519	0.00200	"	0.0500		104	70-130			
1,4-Dichlorobenzene	0.0496	0.00200	"	0.0500		99.3	70-130			
2,2-Dichloropropane	0.0464	0.00200	"	0.0500		92.8	70-130			
2-Butanone	0.266	0.0100	"	0.250		106	70-130			
2-Chlorotoluene	0.0522	0.00200	"	0.0500		104	70-130			
2-Hexanone	0.277	0.0100	"	0.250		111	70-130			
4-Chlorotoluene	0.0534	0.00200	"	0.0500		107	70-130			
4-Isopropyltoluene	0.0542	0.00200	"	0.0500		108	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
LCS (B0I1414-BS1)					Prepared: 09/14/2020 Analyzed: 09/15/2020					
4-Methyl-2-pentanone	0.282	0.0100	mg/kg	0.250		113	70-130			
Acetone	0.237	0.0200	"	0.250		94.7	70-130			
Benzene	0.0515	0.00200	"	0.0500		103	70-130			
Bromobenzene	0.0523	0.00200	"	0.0500		105	70-130			
Bromochloromethane	0.0488	0.00200	"	0.0500		97.6	70-130			
Bromodichloromethane	0.0493	0.00200	"	0.0500		98.6	70-130			
Bromoform	0.0524	0.00200	"	0.0500		105	70-130			
Bromomethane	0.0510	0.00200	"	0.0500		102	70-130			
Carbon disulfide	0.0562	0.00500	"	0.0500		112	70-130			
Carbon tetrachloride	0.0476	0.00200	"	0.0500		95.2	70-130			
Chlorobenzene	0.0508	0.00200	"	0.0500		102	70-130			
Chloroethane	0.0584	0.00500	"	0.0500		117	70-130			
Chloroform	0.0484	0.00200	"	0.0500		96.8	70-130			
Chloromethane	0.0453	0.00200	"	0.0500		90.7	70-130			
cis-1,2-Dichloroethene	0.0500	0.00200	"	0.0500		100	70-130			
cis-1,3-Dichloropropene	0.0544	0.00200	"	0.0500		109	70-130			
Dibromochloromethane	0.0521	0.00200	"	0.0500		104	70-130			
Dibromomethane	0.0462	0.00200	"	0.0500		92.4	70-130			
Ethylbenzene	0.0550	0.00200	"	0.0500		110	70-130			
Hexachlorobutadiene	0.0474	0.00500	"	0.0500		94.8	70-130			
Iodomethane	0.0542	0.0150	"	0.0500		108	70-130			
Isopropylbenzene	0.0545	0.00200	"	0.0500		109	70-130			
m,p-Xylene	0.112	0.00400	"	0.100		112	70-130			
Methyl tert-Butyl Ether	0.0448	0.00200	"	0.0500		89.5	70-130			
Methylene Chloride	0.0491	0.0200	"	0.0500		98.2	70-130			
Naphthalene	0.0513	0.0100	"	0.0500		103	70-130			

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Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
LCS (B0I1414-BS1)					Prepared: 09/14/2020 Analyzed: 09/15/2020					
n-Butylbenzene	0.0554	0.00200	mg/kg	0.0500		111	70-130			
n-Propylbenzene	0.0553	0.00200	"	0.0500		111	70-130			
o-Xylene	0.0545	0.00200	"	0.0500		109	70-130			
sec-Butylbenzene	0.0560	0.00200	"	0.0500		112	70-130			
Styrene	0.0544	0.00200	"	0.0500		109	70-130			
tert-Butylbenzene	0.0537	0.00200	"	0.0500		107	70-130			
Tetrachloroethene	0.0498	0.00200	"	0.0500		99.5	70-130			
Toluene	0.0531	0.00200	"	0.0500		106	70-130			
trans-1,2-Dichloroethene	0.0509	0.00200	"	0.0500		102	70-130			
trans-1,3-Dichloropropene	0.0523	0.00200	"	0.0500		105	70-130			
Trichloroethene	0.0494	0.00200	"	0.0500		98.8	70-130			
Trichlorofluoromethane	0.0449	0.00300	"	0.0500		89.8	70-130			
Vinyl chloride	0.0465	0.00200	"	0.0500		93.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.11*		"	*0.125*		*87.2*	*70-130*			
Surrogate: Toluene-d8	*0.13*		"	*0.125*		*103*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.13*		"	*0.125*		*101*	*70-130*			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Matrix Spike (B0I1414-MS1)		**Source: Y009139-01**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
1,1,1,2-Tetrachloroethane	0.0479	0.00200	mg/kg	0.0500	ND	95.7	70-130			
1,1,1-Trichloroethane	0.0415	0.00200	"	0.0500	ND	83.1	70-130			
1,1,2,2-Tetrachloroethane	0.0495	0.00200	"	0.0500	ND	99.0	70-130			
1,1,2-Trichloroethane	0.0471	0.00200	"	0.0500	ND	94.3	70-130			
1,1-Dichloroethane	0.0458	0.00200	"	0.0500	ND	91.7	70-130			
1,1-Dichloroethene	0.0426	0.00200	"	0.0500	ND	85.2	70-130			
1,1-Dichloropropene	0.0413	0.00200	"	0.0500	ND	82.6	70-130			
1,2,3-Trichlorobenzene	0.0279	0.00500	"	0.0500	ND	55.8	70-130			QM-07
1,2,3-Trichloropropane	0.0453	0.00500	"	0.0500	ND	90.5	70-130			
1,2,4-Trichlorobenzene	0.0279	0.00500	"	0.0500	ND	55.8	70-130			QM-07
1,2,4-Trimethylbenzene	0.0405	0.00200	"	0.0500	ND	80.9	70-130			
1,2-Dibromo-3-chloropropane	0.0357	0.00500	"	0.0500	ND	71.3	70-130			
1,2-Dibromoethane (EDB)	0.0444	0.00200	"	0.0500	ND	88.9	70-130			
1,2-Dichlorobenzene	0.0359	0.00200	"	0.0500	ND	71.8	70-130			
1,2-Dichloroethane	0.0395	0.00200	"	0.0500	ND	79.0	70-130			
1,2-Dichloropropane	0.0479	0.00200	"	0.0500	ND	95.9	70-130			
1,3,5-Trimethylbenzene	0.0410	0.00200	"	0.0500	ND	82.0	70-130			
1,3-Dichlorobenzene	0.0356	0.00200	"	0.0500	ND	71.2	70-130			
1,3-Dichloropropane	0.0463	0.00200	"	0.0500	ND	92.5	70-130			
1,4-Dichlorobenzene	0.0349	0.00200	"	0.0500	ND	69.8	70-130			QM-07
2,2-Dichloropropane	0.0402	0.00200	"	0.0500	ND	80.4	70-130			
2-Butanone	0.253	0.0100	"	0.250	ND	101	70-130			
2-Chlorotoluene	0.0380	0.00200	"	0.0500	ND	76.1	70-130			
2-Hexanone	0.249	0.0100	"	0.250	ND	99.6	70-130			
4-Chlorotoluene	0.0404	0.00200	"	0.0500	ND	80.8	70-130			
4-Isopropyltoluene	0.0391	0.00200	"	0.0500	ND	78.2	70-130			

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Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Matrix Spike (B0I1414-MS1)		**Source: Y009139-01**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
4-Methyl-2-pentanone	0.262	0.0100	mg/kg	0.250	ND	105	70-130			
Acetone	0.228	0.0200	"	0.250	ND	91.4	70-130			
Benzene	0.0449	0.00200	"	0.0500	ND	89.7	70-130			
Bromobenzene	0.0404	0.00200	"	0.0500	ND	80.9	70-130			
Bromochloromethane	0.0442	0.00200	"	0.0500	ND	88.4	70-130			
Bromodichloromethane	0.0446	0.00200	"	0.0500	ND	89.2	70-130			
Bromoform	0.0461	0.00200	"	0.0500	ND	92.2	70-130			
Bromomethane	0.0480	0.00200	"	0.0500	ND	95.9	70-130			
Carbon disulfide	0.0424	0.00500	"	0.0500	ND	84.7	70-130			
Carbon tetrachloride	0.0402	0.00200	"	0.0500	ND	80.4	70-130			
Chlorobenzene	0.0397	0.00200	"	0.0500	ND	79.4	70-130			
Chloroethane	0.0575	0.00500	"	0.0500	ND	115	70-130			
Chloroform	0.0440	0.00200	"	0.0500	ND	88.0	70-130			
Chloromethane	0.0455	0.00200	"	0.0500	ND	91.0	70-130			
cis-1,2-Dichloroethene	0.0434	0.00200	"	0.0500	ND	86.7	70-130			
cis-1,3-Dichloropropene	0.0459	0.00200	"	0.0500	ND	91.9	70-130			
Dibromochloromethane	0.0459	0.00200	"	0.0500	ND	91.9	70-130			
Dibromomethane	0.0418	0.00200	"	0.0500	ND	83.6	70-130			
Ethylbenzene	0.0447	0.00200	"	0.0500	ND	89.5	70-130			
Hexachlorobutadiene	0.0266	0.00500	"	0.0500	ND	53.2	70-130			QM-07
Iodomethane	0.0455	0.0150	"	0.0500	ND	91.0	70-130			
Isopropylbenzene	0.0431	0.00200	"	0.0500	ND	86.2	70-130			
m,p-Xylene	0.0894	0.00400	"	0.100	ND	89.4	70-130			
Methyl tert-Butyl Ether	0.0435	0.00200	"	0.0500	ND	86.9	70-130			
Methylene Chloride	0.0473	0.0200	"	0.0500	ND	94.6	70-130			
Naphthalene	0.0333	0.0100	"	0.0500	ND	66.7	70-130			QM-07

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Matrix Spike (B0I1414-MS1)		**Source: Y009139-01**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
n-Butylbenzene	0.0367	0.00200	mg/kg	0.0500	ND	73.4	70-130			
n-Propylbenzene	0.0412	0.00200	"	0.0500	ND	82.4	70-130			
o-Xylene	0.0452	0.00200	"	0.0500	ND	90.3	70-130			
sec-Butylbenzene	0.0404	0.00200	"	0.0500	ND	80.8	70-130			
Styrene	0.0420	0.00200	"	0.0500	ND	84.0	70-130			
tert-Butylbenzene	0.0411	0.00200	"	0.0500	ND	82.3	70-130			
Tetrachloroethene	0.0388	0.00200	"	0.0500	ND	77.5	70-130			
Toluene	0.0437	0.00200	"	0.0500	ND	87.5	70-130			
trans-1,2-Dichloroethene	0.0418	0.00200	"	0.0500	ND	83.6	70-130			
trans-1,3-Dichloropropene	0.0434	0.00200	"	0.0500	ND	86.9	70-130			
Trichloroethene	0.0408	0.00200	"	0.0500	ND	81.6	70-130			
Trichlorofluoromethane	0.0440	0.00300	"	0.0500	ND	88.1	70-130			
Vinyl chloride	0.0450	0.00200	"	0.0500	ND	90.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.11*		"	*0.125*		*89.9*	*70-130*			
Surrogate: Toluene-d8	*0.13*		"	*0.125*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.13*		"	*0.125*		*102*	*70-130*			

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Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Matrix Spike Dup (B0I1414-MSD1)		**Source: Y009139-01**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
1,1,1,2-Tetrachloroethane	0.0477	0.00200	mg/kg	0.0500	ND	95.4	70-130	0.335	20	
1,1,1-Trichloroethane	0.0418	0.00200	"	0.0500	ND	83.7	70-130	0.720	20	
1,1,2,2-Tetrachloroethane	0.0501	0.00200	"	0.0500	ND	100	70-130	1.16	20	
1,1,2-Trichloroethane	0.0477	0.00200	"	0.0500	ND	95.4	70-130	1.18	20	
1,1-Dichloroethane	0.0463	0.00200	"	0.0500	ND	92.7	70-130	1.08	20	
1,1-Dichloroethene	0.0428	0.00200	"	0.0500	ND	85.6	70-130	0.421	20	
1,1-Dichloropropene	0.0417	0.00200	"	0.0500	ND	83.5	70-130	1.06	20	
1,2,3-Trichlorobenzene	0.0278	0.00500	"	0.0500	ND	55.6	70-130	0.287	20	QM-07
1,2,3-Trichloropropane	0.0458	0.00500	"	0.0500	ND	91.6	70-130	1.19	20	
1,2,4-Trichlorobenzene	0.0280	0.00500	"	0.0500	ND	55.9	70-130	0.287	20	QM-07
1,2,4-Trimethylbenzene	0.0398	0.00200	"	0.0500	ND	79.6	70-130	1.64	20	
1,2-Dibromo-3-chloropropane	0.0361	0.00500	"	0.0500	ND	72.3	70-130	1.34	20	
1,2-Dibromoethane (EDB)	0.0451	0.00200	"	0.0500	ND	90.2	70-130	1.52	20	
1,2-Dichlorobenzene	0.0359	0.00200	"	0.0500	ND	71.8	70-130	0.0557	20	
1,2-Dichloroethane	0.0395	0.00200	"	0.0500	ND	79.0	70-130	0.0506	20	
1,2-Dichloropropane	0.0482	0.00200	"	0.0500	ND	96.4	70-130	0.541	20	
1,3,5-Trimethylbenzene	0.0404	0.00200	"	0.0500	ND	80.7	70-130	1.57	20	
1,3-Dichlorobenzene	0.0355	0.00200	"	0.0500	ND	71.1	70-130	0.169	20	
1,3-Dichloropropane	0.0467	0.00200	"	0.0500	ND	93.5	70-130	1.03	20	
1,4-Dichlorobenzene	0.0343	0.00200	"	0.0500	ND	68.6	70-130	1.68	20	QM-07
2,2-Dichloropropane	0.0408	0.00200	"	0.0500	ND	81.6	70-130	1.38	20	
2-Butanone	0.261	0.0100	"	0.250	ND	104	70-130	3.16	20	
2-Chlorotoluene	0.0380	0.00200	"	0.0500	ND	76.0	70-130	0.158	20	
2-Hexanone	0.255	0.0100	"	0.250	ND	102	70-130	2.25	20	
4-Chlorotoluene	0.0401	0.00200	"	0.0500	ND	80.1	70-130	0.895	20	
4-Isopropyltoluene	0.0385	0.00200	"	0.0500	ND	77.1	70-130	1.39	20	

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Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Matrix Spike Dup (B0I1414-MSD1)		**Source: Y009139-01**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
4-Methyl-2-pentanone	0.268	0.0100	mg/kg	0.250	ND	107	70-130	2.30	20	
Acetone	0.234	0.0200	"	0.250	ND	93.7	70-130	2.53	20	
Benzene	0.0453	0.00200	"	0.0500	ND	90.6	70-130	1.02	20	
Bromobenzene	0.0404	0.00200	"	0.0500	ND	80.8	70-130	0.0990	20	
Bromochloromethane	0.0455	0.00200	"	0.0500	ND	90.9	70-130	2.86	20	
Bromodichloromethane	0.0452	0.00200	"	0.0500	ND	90.4	70-130	1.34	20	
Bromoform	0.0455	0.00200	"	0.0500	ND	91.0	70-130	1.40	20	
Bromomethane	0.0459	0.00200	"	0.0500	ND	91.9	70-130	4.30	20	
Carbon disulfide	0.0426	0.00500	"	0.0500	ND	85.2	70-130	0.565	20	
Carbon tetrachloride	0.0406	0.00200	"	0.0500	ND	81.2	70-130	1.09	20	
Chlorobenzene	0.0400	0.00200	"	0.0500	ND	79.9	70-130	0.653	20	
Chloroethane	0.0524	0.00500	"	0.0500	ND	105	70-130	9.17	20	
Chloroform	0.0445	0.00200	"	0.0500	ND	89.1	70-130	1.22	20	
Chloromethane	0.0431	0.00200	"	0.0500	ND	86.3	70-130	5.37	20	
cis-1,2-Dichloroethene	0.0437	0.00200	"	0.0500	ND	87.5	70-130	0.873	20	
cis-1,3-Dichloropropene	0.0461	0.00200	"	0.0500	ND	92.1	70-130	0.261	20	
Dibromochloromethane	0.0467	0.00200	"	0.0500	ND	93.3	70-130	1.56	20	
Dibromomethane	0.0424	0.00200	"	0.0500	ND	84.8	70-130	1.52	20	
Ethylbenzene	0.0442	0.00200	"	0.0500	ND	88.5	70-130	1.12	20	
Hexachlorobutadiene	0.0256	0.00500	"	0.0500	ND	51.3	70-130	3.68	20	QM-07
Iodomethane	0.0462	0.0150	"	0.0500	ND	92.5	70-130	1.66	20	
Isopropylbenzene	0.0426	0.00200	"	0.0500	ND	85.2	70-130	1.17	20	
m,p-Xylene	0.0887	0.00400	"	0.100	ND	88.7	70-130	0.719	20	
Methyl tert-Butyl Ether	0.0446	0.00200	"	0.0500	ND	89.2	70-130	2.54	20	
Methylene Chloride	0.0490	0.0200	"	0.0500	ND	98.0	70-130	3.49	20	
Naphthalene	0.0334	0.0100	"	0.0500	ND	66.8	70-130	0.240	20	QM-07

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John Castellano
Project Number: SU01922.000-205
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Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1414 - EPA 5030 (soil)										
Matrix Spike Dup (B0I1414-MSD1)		**Source: Y009139-01**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
n-Butylbenzene	0.0367	0.00200	mg/kg	0.0500	ND	73.3	70-130	0.109	20	
n-Propylbenzene	0.0409	0.00200	"	0.0500	ND	81.8	70-130	0.682	20	
o-Xylene	0.0444	0.00200	"	0.0500	ND	88.8	70-130	1.65	20	
sec-Butylbenzene	0.0399	0.00200	"	0.0500	ND	79.8	70-130	1.29	20	
Styrene	0.0419	0.00200	"	0.0500	ND	83.9	70-130	0.191	20	
tert-Butylbenzene	0.0408	0.00200	"	0.0500	ND	81.6	70-130	0.879	20	
Tetrachloroethene	0.0387	0.00200	"	0.0500	ND	77.4	70-130	0.103	20	
Toluene	0.0441	0.00200	"	0.0500	ND	88.2	70-130	0.820	20	
trans-1,2-Dichloroethene	0.0422	0.00200	"	0.0500	ND	84.3	70-130	0.858	20	
trans-1,3-Dichloropropene	0.0436	0.00200	"	0.0500	ND	87.3	70-130	0.459	20	
Trichloroethene	0.0409	0.00200	"	0.0500	ND	81.7	70-130	0.147	20	
Trichlorofluoromethane	0.0420	0.00300	"	0.0500	ND	84.0	70-130	4.69	20	
Vinyl chloride	0.0425	0.00200	"	0.0500	ND	84.9	70-130	5.90	20	
Surrogate: 1,2-Dichloroethane-d4	*0.11*		"	*0.125*		*90.5*	*70-130*			
Surrogate: Toluene-d8	*0.13*		"	*0.125*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.13*		"	*0.125*		*102*	*70-130*			

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Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Classical Chemistry Parameters - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0I1108 - NO PREP										
Duplicate (B0I1108-DUP1)		**Source: Y009128-05**		Prepared: 09/11/2020 Analyzed: 09/11/2020						
pH	7.49		pH Units		7.49			0.00	25	

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Flash Point by EPA 1020A - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2037954 -										
LCS (1204637519-BKS)					Prepared: Analyzed: 09/14/2020					
Setaflash-200	82.0	75.0	Fahrenheit	81.0		101	97-103			
DUP (1204637521 D)		**Source: 519644001**			Prepared: Analyzed: 09/14/2020					
Setaflash-200	>200	75.0	Fahrenheit		>200		0-9	0	9	

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PAH by EPA 8270D - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2039675 - SW846 3541										
BLANK (1204641214-BLK)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Benzo(k)fluoranthene	ND	0.00329	mg/kg				-			U
Pyrene	ND	0.00329	"				-			U
Phenanthrene	ND	0.00329	"				-			U
Naphthalene	ND	0.00329	"				-			U
Indeno(1,2,3-cd)pyrene	ND	0.00329	"				-			U
Fluorene	ND	0.00329	"				-			U
Fluoranthene	ND	0.00329	"				-			U
Chrysene	ND	0.00329	"				-			U
Benzo(ghi)perylene	ND	0.00329	"				-			U
Benzo(b)fluoranthene	ND	0.00329	"				-			U
Benzo(a)anthracene	ND	0.00329	"				-			U
Anthracene	ND	0.00329	"				-			U
Acenaphthylene	ND	0.00329	"				-			U
Acenaphthene	ND	0.00329	"				-			U
2-Methylnaphthalene	ND	0.00329	"				-			U
1-Methylnaphthalene	ND	0.00329	"				-			U
Benzo(a)pyrene	ND	0.00329	"				-			U
Dibenzo(a,h)anthracene	ND	0.00329	"				-			U
Surrogate: 5-alpha-Androstane	*0.143*		"	*0.165*		*87*	*25-121*			
LCS (1204641215-BKS)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Naphthalene	0.251	0.00327	mg/kg	0.327		77	52-106			
Benzo(ghi)perylene	0.267	0.00327	"	0.327		82	35-121			
Pyrene	0.304	0.00327	"	0.327		93	42-114			
Chrysene	0.272	0.00327	"	0.327		83	53-108			
Dibenzo(a,h)anthracene	0.293	0.00327	"	0.327		90	40-137			
Fluoranthene	0.254	0.00327	"	0.327		78	43-116			

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PAH by EPA 8270D - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2039675 - SW846 3541										
LCS (1204641215-BKS)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Fluorene	0.263	0.00327	mg/kg	0.327		81	42-113			
Indeno(1,2,3-cd)pyrene	0.321	0.00327	"	0.327		98	40-132			
Phenanthrene	0.260	0.00327	"	0.327		79	53-106			
Benzo(b)fluoranthene	0.334	0.00327	"	0.327		102	42-119			
Benzo(k)fluoranthene	0.302	0.00327	"	0.327		93	39-119			
Benzo(a)pyrene	0.318	0.00327	"	0.327		97	42-123			
1-Methylnaphthalene	0.245	0.00327	"	0.327		75	50-109			
2-Methylnaphthalene	0.251	0.00327	"	0.327		77	50-109			
Acenaphthene	0.259	0.00327	"	0.327		79	48-107			
Acenaphthylene	0.274	0.00327	"	0.327		84	42-114			
Anthracene	0.264	0.00327	"	0.327		81	49-113			
Benzo(a)anthracene	0.263	0.00327	"	0.327		81	51-118			
Surrogate: 5-alpha-Androstane	*0.141*		"	*0.164*		*86*	*25-121*			
LCSD (1204641216-BKSD)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Phenanthrene	0.247	0.00333	mg/kg	0.333		74	53-106	5	30	
Benzo(ghi)perylene	0.254	0.00333	"	0.333		76	35-121	5	30	
Naphthalene	0.235	0.00333	"	0.333		71	52-106	6	30	
Indeno(1,2,3-cd)pyrene	0.310	0.00333	"	0.333		93	40-132	4	30	
Fluorene	0.252	0.00333	"	0.333		76	42-113	4	30	
Fluoranthene	0.247	0.00333	"	0.333		74	43-116	3	30	
Dibenzo(a,h)anthracene	0.280	0.00333	"	0.333		84	40-137	5	30	
Chrysene	0.258	0.00333	"	0.333		78	53-108	5	30	
Benzo(k)fluoranthene	0.286	0.00333	"	0.333		86	39-119	6	30	
Pyrene	0.279	0.00333	"	0.333		84	42-114	9	30	
Benzo(a)pyrene	0.297	0.00333	"	0.333		89	42-123	7	30	
Benzo(a)anthracene	0.246	0.00333	"	0.333		74	51-118	7	30	

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PAH by EPA 8270D - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2039675 - SW846 3541										
LCSD (1204641216-BKSD)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Anthracene	0.250	0.00333	mg/kg	0.333		75	49-113	5	30	
Acenaphthylene	0.262	0.00333	"	0.333		79	42-114	4	30	
Acenaphthene	0.247	0.00333	"	0.333		74	48-107	5	30	
2-Methylnaphthalene	0.237	0.00333	"	0.333		71	50-109	6	30	
1-Methylnaphthalene	0.232	0.00333	"	0.333		70	50-109	5	30	
Benzo(b)fluoranthene	0.307	0.00333	"	0.333		92	42-119	8	30	
Surrogate: 5-alpha-Androstane	*0.134*		"	*0.166*		*81*	*25-121*			
MS (1204641217 S)		**Source: 521186001**			Prepared: 09/14/2020 Analyzed: 09/14/2020					
Pyrene	0.694	0.0193	mg/kg dry	0.387	0.595	26	19-139			
Benzo(k)fluoranthene	0.387	0.0193	"	0.387	0.301	22	26-130			
Chrysene	0.512	0.0193	"	0.387	0.612	0	31-119			
Dibenzo(a,h)anthracene	0.340	0.0193	"	0.387	0.132	54	16-139			
Fluoranthene	0.472	0.0193	"	0.387	0.389	21	21-122			
Fluorene	0.271	0.0193	"	0.387	0.0175	65	26-123			
Indeno(1,2,3-cd)pyrene	0.543	0.0193	"	0.387	0.570	0	14-132			
1-Methylnaphthalene	0.259	0.0193	"	0.387	0.00972	64	30-129			
Phenanthrene	0.336	0.0193	"	0.387	0.233	27	27-124			
Benzo(a)pyrene	0.617	0.0193	"	0.387	0.791	0	24-129			
Naphthalene	0.276	0.0193	"	0.387	0.0194	66	29-122			
Benzo(a)anthracene	0.487	0.0193	"	0.387	0.494	0	31-124			
Anthracene	0.284	0.0193	"	0.387	0.0622	57	29-127			
Acenaphthylene	0.305	0.0193	"	0.387	0.0117	76	27-122			
Acenaphthene	0.278	0.0193	"	0.387	0.0175	67	29-118			
2-Methylnaphthalene	0.265	0.0193	"	0.387	0.0117	65	23-124			
Benzo(b)fluoranthene	0.678	0.0193	"	0.387	0.896	0	22-130			
Benzo(ghi)perylene	0.437	0.0193	"	0.387	0.474	0	16-124			

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

PAH by EPA 8270D - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2039675 - SW846 3541										
MS (1204641217 S)		**Source: 521186001**			Prepared: 09/14/2020 Analyzed: 09/14/2020					
Surrogate: 5-alpha-Androstane	*0.114*		*mg/kg dry*	*0.193*	*0.122*	*59*	*25-121*			
MSD (1204641218 SD)		**Source: 521186001**			Prepared: 09/14/2020 Analyzed: 09/14/2020					
Naphthalene	0.267	0.0194	mg/kg dry	0.387	0.0194	64	29-122	3	30	
Benzo(k)fluoranthene	0.467	0.0194	"	0.387	0.301	43	26-130	19	30	
Chrysene	0.643	0.0194	"	0.387	0.612	8	31-119	23	30	
Dibenzo(a,h)anthracene	0.364	0.0194	"	0.387	0.132	60	16-139	7	30	
Pyrene	0.856	0.0194	"	0.387	0.595	67	19-139	21	30	
Fluoranthene	0.600	0.0194	"	0.387	0.389	55	21-122	24	30	
Phenanthrene	0.352	0.0194	"	0.387	0.233	31	27-124	5	30	
Fluorene	0.258	0.0194	"	0.387	0.0175	62	26-123	5	30	
Benzo(ghi)perylene	0.552	0.0194	"	0.387	0.474	20	16-124	23	30	
Indeno(1,2,3-cd)pyrene	0.688	0.0194	"	0.387	0.570	30	14-132	23	30	
Benzo(b)fluoranthene	0.864	0.0194	"	0.387	0.896	0	22-130	24	30	
Benzo(a)pyrene	0.794	0.0194	"	0.387	0.791	1	24-129	25	30	
Benzo(a)anthracene	0.598	0.0194	"	0.387	0.494	27	31-124	21	30	
Anthracene	0.285	0.0194	"	0.387	0.0622	57	29-127	0	30	
Acenaphthene	0.265	0.0194	"	0.387	0.0175	64	29-118	5	30	
2-Methylnaphthalene	0.254	0.0194	"	0.387	0.0117	62	23-124	4	30	
1-Methylnaphthalene	0.248	0.0194	"	0.387	0.00972	61	30-129	4	30	
Acenaphthylene	0.292	0.0194	"	0.387	0.0117	72	27-122	4	30	
Surrogate: 5-alpha-Androstane	*0.114*		*"*	*0.194*	*0.122*	*59*	*25-121*			

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

RCRA 8 Metals by EPA 6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2039783 - SW846 3050B										
BLANK (1204641421-BLK)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Silver	ND	0.450	mg/kg				-			U
Selenium	0.920	2.70	"				-			J
Lead	0.537	1.80	"				-			J
Chromium	ND	0.899	"				-			U
Cadmium	ND	0.450	"				-			U
Barium	ND	0.450	"				-			U
Arsenic	ND	2.70	"				-			U
LCS (1204641422-BKS)					Prepared: 09/14/2020 Analyzed: 09/14/2020					
Chromium	43.5	0.912	mg/kg	45.6		95.3	80-120			
Selenium	43.5	2.74	"	45.6		95.4	80-120			
Lead	45.3	1.82	"	45.6		99.4	80-120			
Silver	8.89	0.456	"	9.12		97.5	80-120			
Barium	44.4	0.456	"	45.6		97.4	80-120			
Arsenic	43.8	2.74	"	45.6		95.9	80-120			
Cadmium	43.5	0.456	"	45.6		95.4	80-120			
DUP (1204641423 D)		**Source: 521192016**			Prepared: 09/14/2020 Analyzed: 09/14/2020					
Barium	235	0.565	mg/kg dry		186		0-20	23.5	20	
Cadmium	2.97	0.565	"		1.06		0-20	95.1	20	
Chromium	5.95	1.13	"		12.4		0-20	70.5	20	
Lead	1270	2.26	"		134		0-20	162	20	
Selenium	ND	3.39	"		<0.565		0-20	130	20	U
Silver	0.724	0.565	"		0.324		0-20	76.3	20	
Arsenic	8.11	3.39	"		5.18		0-20	44	20	
MS (1204641424 S)		**Source: 521192016**			Prepared: 09/14/2020 Analyzed: 09/14/2020					

Origins Laboratory, Inc.

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CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

RCRA 8 Metals by EPA 6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2039783 - SW846 3050B										
MS (1204641424 S)		**Source: 521192016**			Prepared: 09/14/2020 Analyzed: 09/14/2020					
Barium	592	0.573	mg/kg dry	57.3	186	708	75-125			
Silver	12.9	0.573	"	11.5	0.324	109	75-125			
Selenium	51.6	3.44	"	57.3	<0.573	89.9	75-125			
Lead	292	2.29	"	57.3	134	277	75-125			
Cadmium	53.8	0.573	"	57.3	1.06	92	75-125			
Arsenic	62.5	3.44	"	57.3	5.18	100	75-125			
Chromium	63.1	1.15	"	57.3	12.4	88.5	75-125			
PS (1204642842 S)		**Source: 521192016**			Prepared: 09/14/2020 Analyzed: 09/14/2020					
Barium	2.81	0.00578	mg/kg dry	0.500		156	75-125			
Lead	2.89	0.0231	"	0.500		262	75-125			

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

RCRA 8 Metals by EPA 7471 - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040105 - SW846 7471A Prep										
BLANK (1204642279-BLK)					Prepared: 09/14/2020 Analyzed: 09/15/2020					
Mercury	ND	0.0201	mg/kg				-			U
LCS (1204642280-BKS)					Prepared: 09/14/2020 Analyzed: 09/15/2020					
Mercury	0.220	0.0217	mg/kg	0.217		102	80-120			
DUP (1204642281 D)		**Source: 519532005**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
Mercury	ND	0.0286	mg/kg dry		<0.00959		0-20	61.2	20	U
MS (1204642282 S)		**Source: 519532005**			Prepared: 09/14/2020 Analyzed: 09/15/2020					
Mercury	0.257	0.0253	mg/kg dry	0.253	<0.00849	101	80-120			

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

TCLP Metals by EPA 1311/6010C - Quality Control
GEL Laboratories, LLC

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040504 - SW846 3010A										
MS (1204640992 S)		**Source: Y009128-05**			Prepared: 09/15/2020 Analyzed: 09/15/2020					
Lead	4.63	0.200	mg/L	5.00	<0.0330	92.7	75-125			
TB (1204640993-BLK)					Prepared: 09/15/2020 Analyzed: 09/15/2020					
Lead	ND	0.200	mg/L				-			U
BLANK (1204643223-BLK)					Prepared: 09/15/2020 Analyzed: 09/15/2020					
Lead	ND	0.200	mg/L				-			U
LCS (1204643224-BKS)					Prepared: 09/15/2020 Analyzed: 09/15/2020					
Lead	4.75	0.200	mg/L	5.00		94.9	80-120			
DUP (1204643225 D)		**Source: Y009128-05**			Prepared: 09/15/2020 Analyzed: 09/15/2020					
Lead	ND	0.200	mg/L		<0.0330		0-20	171	20	U

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

CTL Thompson, Inc.
1971 West 12th Avenue
Denver CO 80204

John Castellano
Project Number: SU01922.000-205
Project: Minturn P11

Notes and Definitions

Ua	Sample is Non-Detect.
U	Result not detected above the detection limit
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
J	Greater than the detection limit but less than the reporting limit
>200	>200
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.

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Jordan A. Merrill For Noelle Doyle Mathis, President

ATTACHMENT C
CIVTRANS TRIP GENERATION LETTER

Civ Trans
ENGINEERING INC.

October 3, 2022

Michelle Meteer
Town Manager
Town of Minturn
301 Boulder Street, #309
Minturn, CO 81645

Re: **Minturn North PUD – Trip Generation Letter**
Minturn, Colorado

Dear Michelle:

INTRODUCTION

The Minturn North PUD project has modified its site plan to reduce the number of residential dwelling units and address neighbor comments and concerns. A traffic study was completed for the previous site plan, which proposed up to 193 dwelling units in a mix of single-family and multi-family residential buildings. The current proposal is for 39 single-family dwelling units. Local and regional access to the development is unchanged from the previous plan, which will utilize Minturn Road / County Road north and south of the site to access US 24. This traffic letter has been completed to update the trip generation estimates for the development and provide supplemental information for amendments to the previously completed access permits at US 24 & County Road and US 24 & Main Street.

This document includes a description of the proposed project, trip generation characteristics and trip distribution.

PROJECT DESCRIPTION

Minturn Crossing, LLC is proposing a residential development within the Town of Minturn, Colorado. The site is currently vacant aside from six mobile homes, which will be removed as a part of the project. It is located between Taylor Street and Minturn Avenue in the vicinity of Game Creek and will accommodate 39 single family residential lots, a 30' Game Creek buffer zone, a children's park and snow storage area for the Town of Minturn. Six of the single-family homes will be deed-restricted for local housing. Property north of Game Creek is not included in the Minturn North PUD. The residential lots will primarily be accessed from an internal roadway that connects to Fourth Street. Fourth Street provides a connection to Taylor Street and Minturn Road. No access to Taylor Street is planned. Therefore, no improvements to Taylor Street are proposed as a part of this project.

The site is bordered on the south and east by existing residences, a non-operating Union Pacific Railroad line to the west and vacant land to the north. The primary population and

business of Minturn lies to the south. Eagle River runs north-south through the area, which forms a natural barrier between the site and US 24, the primary regional highway for the Town.

Regional access to the area is accommodated primarily by US 24 and I-70. I-70 is an interstate freeway located approximately 2 miles to the north and is accessed from US 24. There are two points of access to US 24 from the proposed development, Main Street (south of the site) and County Road (north of site).

A vicinity map is included as **Exhibit 1** and the current site plan is included as **Exhibit 2** at the end of this document. An aerial of the immediate vicinity is included as **Exhibit 3**.

TRIP GENERATION

The proposed project will include up to 39 single-family residential dwelling units. The *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) was used to determine the number of trips generated by the proposed land use. The purpose of the Trip Generation Manual (TGM) is to compile and quantify empirical trip generation rates for specific land uses within the US, UK and Canada. Generally, the Trip Generation Manual is the industry standard accepted reference for estimating trip generation. The proposed single-family housing falls within the TGM land use category 210, "Single-Family Detached Housing." The trip generation estimate for the site based on this land use category is shown in the table below.

Table 1 - Project Trip Generation (unadjusted)

Land Use	ITE Code	Size	Units	Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Single-Family Detached Housing	210	39	DU	424	8	24	32	26	15	41

DU = Dwelling Units

As shown in the table above, the project is anticipated to generate 32 AM peak hour trips, 41 PM peak hour trips and 424 average daily trips. It should be noted that the site historically has operated with several mobile homes. The net change in trips for this site due to the historic uses is likely slightly less than what is shown in the table above.

Trip Types

Nearly all developments are made up of the following six trip types: new (destination) trips, pass-by trips, diverted trips, shared (internal) trips, multi-modal (non-vehicular) trips, and transit-oriented trips. To better understand the trip types available for land access and how they relate to this project, a description of each specific type follows.

New (Destination) Trips – These types of trips occur to access a specific land use such as a new retail development or a new residential subdivision. These types of trips will travel to and from the new site and a single other destination such as home or work. This is the only trip type that will result in a net increase in the total amount of traffic within the study area. The reason primarily is that these trips represent planned trips to a specific destination that never took trips to that part of the city prior to the development being constructed and occupied. This project will develop new trips.

Pass-by Trips – These trips represent vehicles which currently use adjacent roadways providing primary access to new land uses or projects. These trips, however, have an ultimate destination other than the project in question. They should be viewed as drop-in customers who stop in on their way home from work. A good example is a quick stop at the grocery store to pick up an ingredient for dinner on the way home from work or at a latte stand to grab a coffee on the way to work. This can make this trip pre-determined, but the stop is still on the way by. Another example would be on payday, where an individual generally drives by their bank every day without stopping, except on payday. On that day, this driver would drive into the bank, perform the prerequisite banking and then continue home. In this example, the trip started from work with a destination of home, however on the way, the driver stopped at the grocery store/latte stand and/or bank directly adjacent to their path. Pass-by trips are most always associated with commercial/retail types of developments. Therefore, no pass-by trips are anticipated for this project.

Diverted (Linked) Trips - Diverted trips are like pass-by trips, but diverted trips occur from roadways that do not provide direct access to the site. Instead, one or more streets must be utilized to get to and from the site. For this project, diverted trips could occur from Interstate 70, US 24 or any other street that does not provide direct access for the site. Due to the type of use, diverted trips were not accounted for within this analysis.

Shared (Internal) Trips - Internal trips are the portion of trips generated by a mixed-use development that both begin and end within the development. When estimating trip generation for a development with several uses, each use will generate its own trips. If those trips occur between two of the onsite uses without using the external roadway system, it is considered a shared or internal trip. This trip type reduces the number of new trips generated on the public road system and is most commonly used for commercial or mix-use developments. Determining these trip types is more difficult to quantify and without specific guidance are usually determined by engineering judgment on a project-by-project basis. For this project, the residences are the only use on site and no shared trips will occur.

Multi-Modal (Non-Vehicular) Trips - These are non-vehicular trips to and from the site, mostly comprised of pedestrian and bicycle trips. Generally, they are local trips from the surrounding neighborhood or adjacent businesses. If a development is in an area with a high amount of bicycle and pedestrian activity, such as a downtown setting or college campus, a reduction of vehicular trips would be anticipated. During traffic counts and field observations, very little bicycles or pedestrians were seen in the vicinity of the site. Around downtown Minturn there was significant pedestrian activity. The proximity of the site would allow for residents to walk between the downtown area and their home. Therefore, a small amount of pedestrian and bicycle activity for the site is anticipated, but no reduction of vehicular trips was applied. It should be noted that a portion of the Eco-trail will be incorporated into the site frontage along Minturn Road.

Transit Trip – Minturn and the Vail Valley are served by ECO Transit with a public bus connection from downtown Minturn. Although transit is available and would likely see some use from this development, no transit reduction was applied.

TRIP DISTRIBUTION

The traffic associated with the project is expected to be made up of commuter trips

primarily during the peak hours with most of the trips oriented towards the Eagle-Vail Valley and the I-70 corridor. The directional distribution for how site-generated trips would access the development were based on existing traffic counts. A significant portion of the Minturn Road / County Road is currently unpaved. It is unknown when paving will occur on the portion of County Road north of the site, which provides a connection to US 24. If this roadway becomes paved in the future, a higher percentage of site generated trips are anticipated to use this roadway north of the site.

County Road paved

- US Highway 24 via County Road north of the site – 65%
- US Highway 24 via Main Street north of the site – 15%
- Main Street (US 24) south of the site – 20%

County Road unpaved

- US Highway 24 via County Road north of the site – 50%
- US Highway 24 via Main Street north of the site – 30%
- Main Street (US 24) south of the site – 20%

AUXILIARY LANE EVALUATION

In the previous traffic impact study, the need for auxiliary turn lanes were evaluated using the CDOT State Highway Access Code (SHAC) for the intersections of US 24 & Main Street and US 24 & County Road based on traffic counts collected in February 2020. US 24 is designated as R-A (rural arterial) at the County Road intersection and NR-B (non-rural arterial) at the Main Street intersection. The need for a turn lane is based on roadway classification, design or posted speed, and design hour turning volume.

At US 24 & County Road, the threshold for requiring a left turn lane is 10 vehicles per hour, which is exceeded during the PM peak hour in the current conditions without the proposed project. At US 24 & Main Street, the threshold for requiring a left turn lane is 25 vehicles per hour, which is also exceeded during the PM peak hour in the current conditions. Any additional trips to these left turn movements would add to the need for a left turn lane and the proposed project is anticipated to add trips to these movements. Therefore, per the SHAC, left turn lanes should be installed at these intersections. Right turn volume is not anticipated to exceed the threshold for requiring a right turn deceleration lane at either intersection with the proposed project trips.

As discussed in the previous traffic impact study for this site, installing a left turn lane at US 24 & Main Street would require enormous effort due to the location of existing structures along both sides of US 24 around the intersection. Therefore, a variance was requested to not build this left turn lane and is continued to be requested with the new proposed site plan.

CONCLUSIONS/RECOMMENDATIONS

It is anticipated that this project will generate 32 AM peak hour trips, 41 PM peak hour trips and 424 daily trips. The site historically has operated with six mobile home residences.

Therefore, the net change in trips to the surrounding transportation system may be slightly less than the values shown above. CDOT has a trip generation threshold of 100 peak hour trips by developments for requiring a traffic impact study. The estimated trips for the site are less than this threshold and are likely even less of a net impact when considering the historic use. Therefore, no additional traffic analysis should be required.

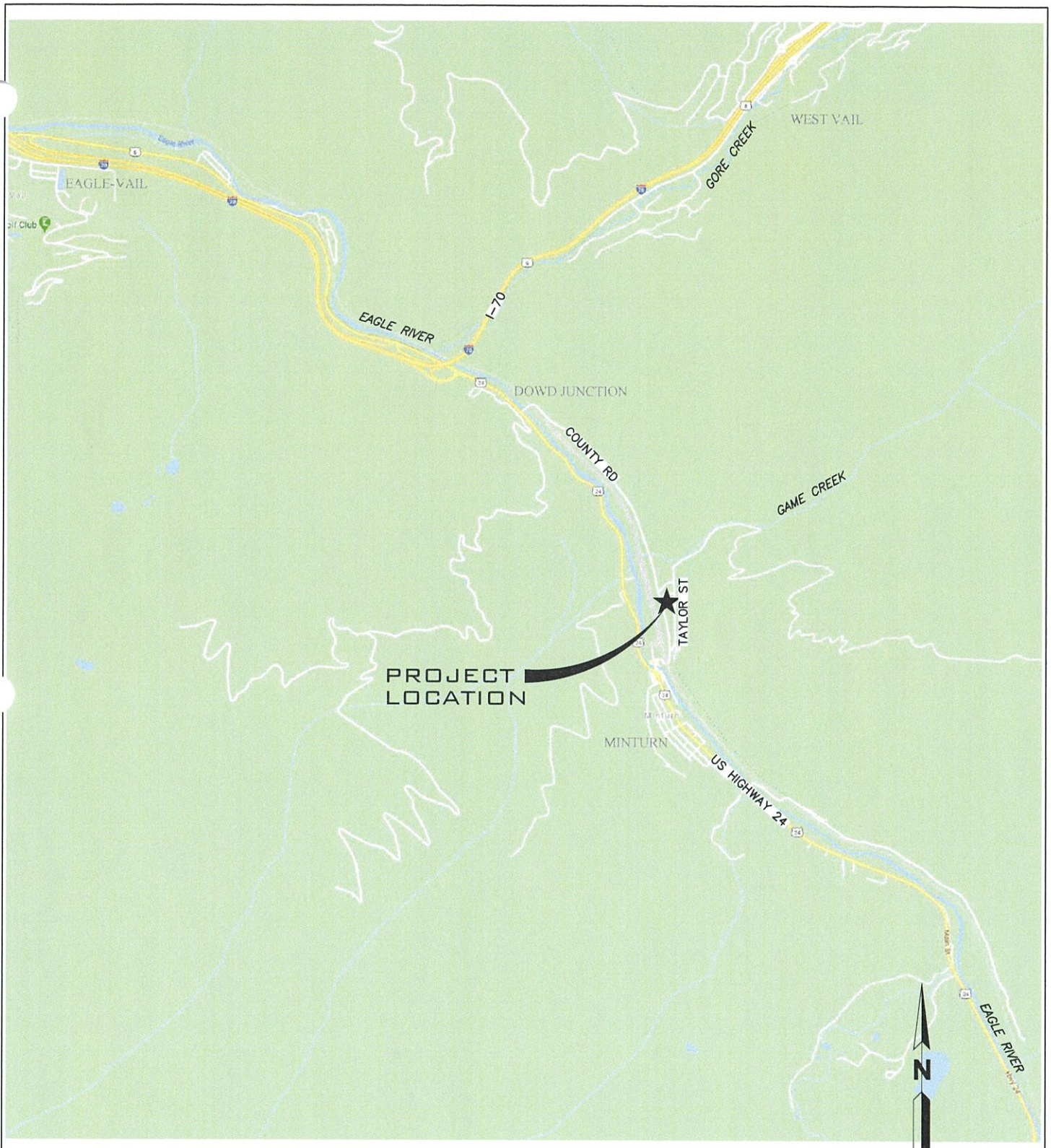
A previous traffic impact study was completed for the site in 2021 and the previous site plan included significantly more development and associated trips. This traffic study analyzed several intersections and found all of the study area intersections to operate at level of service (LOS) C or better for all conditions analyzed. The reduced number of residential dwelling units associated with the current plan is anticipated to generate significantly fewer trips. Therefore, the previous study area intersections are anticipated to operate at acceptable levels with the revised site plan.

An auxiliary lane evaluation was conducted utilizing CDOT access code criteria. A southbound left turn lane is currently required for the intersection of US Highway 24 & County Road based on existing traffic volumes. The proposed project is anticipated to add trips to this left turn movement.

Should you have any questions regarding this document or the information contained herein, please do not hesitate to contact me on my cell at 509-991-2803 or via email at craig@civtrans.com.

Sincerely,

Craig A. MacPhee, PE, PTOE



NOT TO SCALE
OCTOBER 3, 2022

EXHIBIT 1

VICINITY MAP

CivTrans ENGINEERING INC.

N

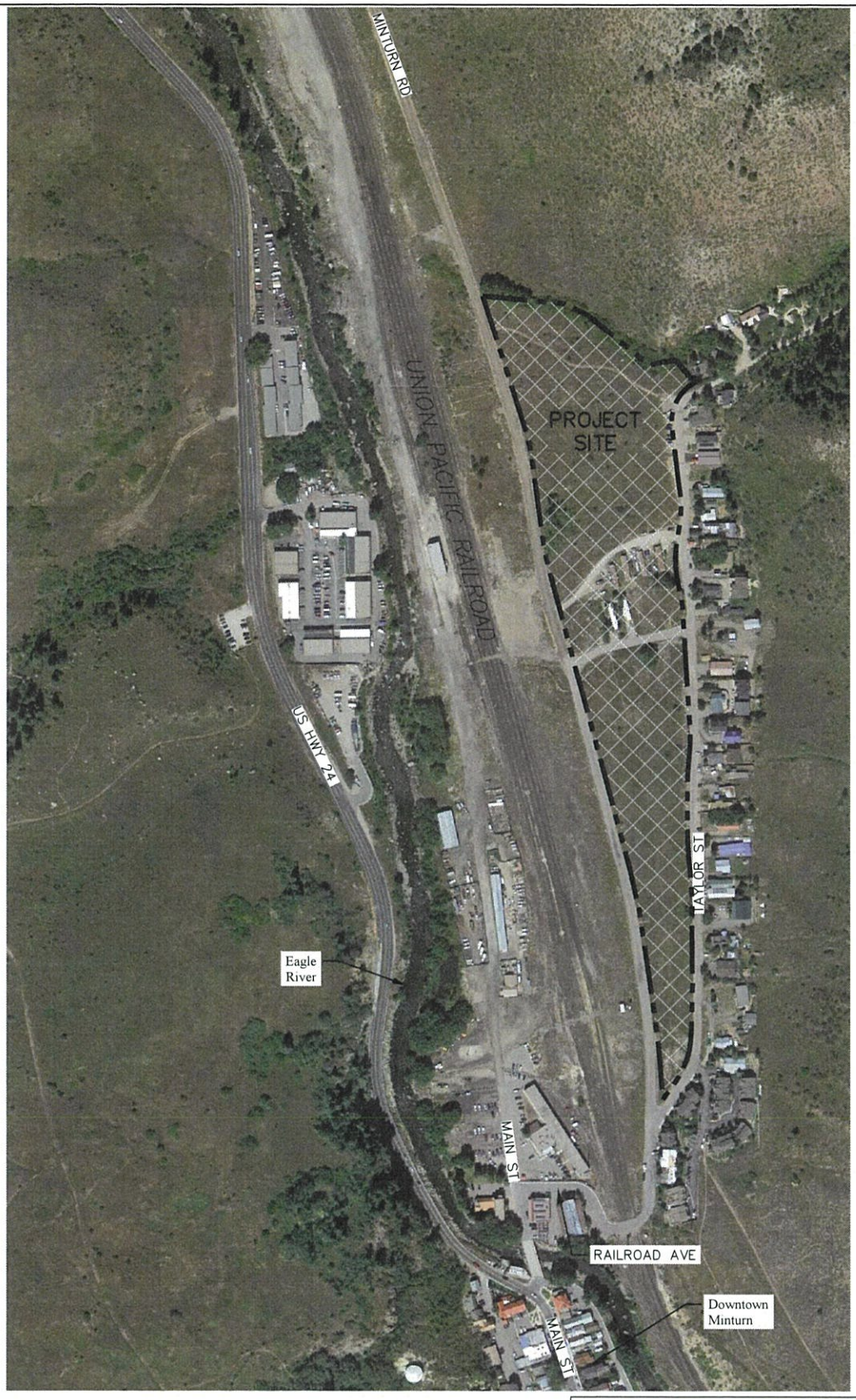
NOT TO SCALE

OCTOBER 3, 2022

EXHIBIT 2

CURRENT SITE PLAN

Civtrans ENGINEERING INC.



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NOT TO SCALE

OCTOBER 3, 2022

EXHIBIT 3

EXISTING AERIAL

CivTrans ENGINEERING INC.

ATTACHMENT D

MINTURN NORTH ECONOMIC IMPACT STUDY

APPENDIX Q

Town of Minturn Financial Impact and
Estimated Tax Revenue Report

MINTURN NORTH **September 19, 2022**

ECONOMIC IMPACT STUDY

Potential Incremental Revenue & Fiscal Impacts

	Development
Number of Homes	39
Average Home and Lot Value	$ 2,500,000
Total Buildout Value	$ 97,500,000

General Fund

The General Fund includes new Property Tax @ 17.934 mill levy, Sales Tax @ 4% on incremental sales, Real Estate Transfer Tax @ 1% on new sales and resales, Building Permit Fees and intergovernmental revenues; minus incremental costs at an average of $600 per residence, see Exhibit I for the period of 2023-2030 which shows excess Revenue over Expenditures of:	$ 1,241,371
The resulting sustaining General Fund Revenue over Expenditures beginning in 2030 @ $195,026 per year generates long-term capitalized value with 5% cap rate estimated as:	$ 3,900,527
Construction Use Tax @ 4% of Materials, see Exhibit II:	$ 1,170,000

Water Enterprise (see Exhibit III)

With Prepaid Water Tap Fee Reveune of $392,280 and Water Enterprise SIF Revenue of $904,670 and Cash in lieu Revenue of $888,622 and Water User Fee Revenue for the period 2023-2030 of $478,136 for a total of:	$ 2,663,708
The resulting sustaining and ongoing Water User Revenue in 2030 of $73,350 per year generates long-term capitalized value with 5% cap rate estimated as:	$ 1,467,008
TOTAL ECONOMIC IMPACT	$ 10,442,615

Note:

(1) Additionally, 1% Real Estate Transfer on initial sales and resales will generate $236,500 over years 2023-2030 for the Community Fund with a sustaining value of $4M at 5% cap rate (assuming 50% of sales are to non resident buyers), see Schedule 5.

(2) Internal road maintenance is funded by the Property Owners Association.

(3) Property donation to the Town of approx. 1 acre on the South end for Childrens Park, Open Space and Parking.

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN **September 16, 2022**
GENERAL FUND
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

EXHIBIT I - PROJECTED GENERAL FUND REVENUES AND EXPENDITURES
Assume Minturn currently has 540 households

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
GENERAL FUND - REVENUES:									
TAXES:									
General Property @ 17.934 Mills (See Schedule 1)	0	0	0	49,991	117,961	125,022	125,022	125,022	543,019
Town Sales Tax @ 4% (See Schedule 2)	0	0	3,875	13,175	15,113	15,113	15,113	15,113	77,501
Lodging Tax @ 1.5%	0	0	0	0	0	0	0	0	0
Real Estate Transfer Taxes @ 1.0% (See Schedule 5)	137,000	86,000	0	50,000	50,000	50,000	50,000	50,000	473,000
Franchise Fees @ $119.63 per Household	0	1,196	4,067	4,666	4,666	4,666	4,666	4,666	28,592
Total Taxes	137,000	87,196	7,942	117,832	187,739	194,801	194,801	194,801	1,122,111
LICENSES AND PERMITS:									
Building Permits @ .006 x Cost of Construction	237,120	118,560	0	0	0	0	0	0	355,680
Total Licenses and Permits	237,120	118,560	0	0	0	0	0	0	355,680
INTERGOVERNMENTAL REVENUE:									
Highway Users Tax @ $74.07 per household	0	741	2,518	2,889	2,889	2,889	2,889	2,889	17,703
Specific Ownership @ 5.0% of Property Taxes	0	0	0	2,500	5,898	6,251	6,251	6,251	27,151
Cigarette Tax @ $4.44 per household	0	44	151	173	173	173	173	173	1,061
Road & Bridge Fund @ .6795 mills (50% of County R&B Fund)	0	0	0	1,894	4,469	4,737	4,737	4,737	20,574
Highway 24 Maintenance @ $50.00 per household	0	500	1,700	1,950	1,950	1,950	1,950	1,950	11,950
County Sales Tax @ 4.3% of 4% Town sales taxes	0	0	167	567	650	650	650	650	3,333
Total Intergovernmental Revenue	0	1,285	4,536	9,972	16,029	16,650	16,650	16,650	81,772
CHARGES FOR SERVICES:									
Inspections and Reimbursable @ $1,000 per unit(construction related)	10,000	24,000	5,000	0	0	0	0	0	39,000
Total Charges For Services	10,000	24,000	5,000	0	0	0	0	0	39,000
FINES AND FORFEITURES:									
Fines and Forfeitures @ $31.48 per household	0	315	1,070	1,228	1,228	1,228	1,228	1,228	7,524
Total Fines and Forfeitures	0	315	1,070	1,228	1,228	1,228	1,228	1,228	7,524
MISCELLANEOUS REVENUE:									
Interest & Other @ $147.50 per household	0	1,471	5,000	5,735	5,735	5,735	5,735	5,735	35,145
Total Miscellaneous Revenue	0	1,471	5,000	5,735	5,735	5,735	5,735	5,735	35,145
TOTAL GENERAL FUND REVENUES	384,120	232,827	23,548	134,766	210,731	218,413	218,413	218,413	1,641,232
GENERAL FUND - EXPENDITURES:									
GENERAL GOVERNMENT @ 10% variable = $102.7 per household	0	1,027	3,492	4,005	4,005	4,005	4,005	4,005	24,545
PLANNING AND ZONING (65% of Inspection Fees + Reimbursements)	160,628	92,664	3,250	0	0	0	0	0	256,542
PUBLIC WORKS - STREETS @ 10% variable = $55.6 per household	0	551	1,872	2,147	2,147	2,147	2,147	2,147	13,159
COURT/POLICE @ 50% variable = $428 per household	0	4,280	14,552	16,692	16,692	16,692	16,692	16,692	102,292
EVENTS @ 10% variable = $13.9 per household	0	139	473	542	542	542	542	542	3,322
TOTAL GENERAL FUND - EXPENDITURES	160,628	98,661	23,638	23,387	23,387	23,387	23,387	23,387	399,861
EXCESS ANNUAL REVENUES OVER EXPEND. - GENERAL FUND	223,492	134,166	(90)	111,380	187,344	195,026	195,026	195,026	1,241,371
CUMULATIVE EXCESS REVENUES OVER EXPEND. - GENERAL FUND	223,492	357,658	357,568	468,948	656,292	851,318	1,046,345	1,241,371	1,241,371

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
CAPITAL FUND & COMMUNITY FUND
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

September 16, 2022

EXHIBIT II - PROJECTED CAPITAL FUND REVENUES

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
CAPITAL IMPROVEMENT FUND REVENUES:									
4% USE TAX (SCHEDULE 2)	0	300,000	720,000	150,000	0	0	0	0	1,170,000
TOTAL REVENUES	0	300,000	720,000	150,000	0	0	0	0	1,170,000
EXPENDITURES:									
NONE	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL EXPENDITURES	0	0	0	0	0	0	0	0	0
EXCESS REVENUES OVER EXPENDITURES	0	300,000	720,000	150,000	0	0	0	0	1,170,000

EXHIBIT II - PROJECTED COMMUNITY FUND REVENUES

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
COMMUNITY FUND REVENUES:									
1% RETT ON 50% OF SALES TO NON RESIDENT BUYERS (see bottom of Sched. 5)	68,500	43,000	0	25,000	25,000	25,000	25,000	25,000	236,500
TOTAL REVENUES	68,500	43,000	0	25,000	25,000	25,000	25,000	25,000	236,500
EXPENDITURES:									
NONE	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL EXPENDITURES	0	0	0	0	0	0	0	0	0
EXCESS REVENUES OVER EXPENDITURES	68,500	43,000	0	25,000	25,000	25,000	25,000	25,000	236,500

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
WATER ENTERPRISE FUND
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

September 16, 2022

EXHIBIT III - PROJECTED WATER ENTERPRISE FUND REVENUES

WATER ENTERPRISE FUND	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
Water Tap Fee Revenue (See Schedule 3)	392,280	0	0	0	0	0	0	0	392,280
Water SIF Fee Revenue (See Schedule 3)	226,050	558,720	119,900	0	0	0	0	0	904,670
Water Cash in Lieu Fee Revenue (See Schedule 3)	888,622	0	0	0	0	0	0	0	888,622
Water User Fee Revenue (See Schedule 3)	15,290	53,550	63,297	65,169	67,119	69,147	71,214	73,350	478,136
TOTAL WATER FUND REVENUES	1,522,242	612,270	183,197	65,169	67,119	69,147	71,214	73,350	2,663,708
TOTAL WATER FUND REVENUES - CUMULATIVE	1,522,242	2,134,512	2,317,709	2,382,878	2,449,997	2,519,144	2,590,358	2,663,708	2,663,708

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED FIRE IMPACT FEE REVENUES
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

September 16, 2022

EXHIBIT IV - FIRE IMPACT FEE REVENUES

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
FIRE IMPACT FEE REVENUES (SCH. 4)	16,710	40,104	8,355	0	0	0	0	o	65,169
FIRE IMPACT FEE REVENUES - CUMULATIVE	16,710	56,814	65,169	65,169	65,169	65,169	65,169	#VALUE!	#VALUE!

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED PROPERTY TAX REVENUES GENERATED FOR VARIOUS OVERLAPPING
TOWN OF MINTURN GOVERNMENTAL ENTITIES
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

September 16, 2022

EXHIBIT V - PROJECTED PROPERTY TAX REVENUES GENERATED FOR OVERLAPPING TAXING ENTITIES

	ASSUMED MILL LEVY	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
PROJECTED ASSESSED VALUATION - MINTURN NORTH PUD		0	0	0	2,787,500	6,577,500	6,971,250	6,971,250	6,971,250	6,971,250
OVERLAPPING ENTITIES (MINTURN IN TOWN MILL LEVY):										
EAGLE COUNTY	8.499	0	0	0	23,691	55,902	59,249	59,249	59,249	59,249
COLORADO MOUNTAIN COLLEGE	4.013	0	0	0	11,186	26,396	27,976	27,976	27,976	27,976
SCHOOL DISTRICT RE-50J	24.649	0	0	0	68,709	162,129	171,834	171,834	171,834	171,834
TOWN OF MINTURN	17.934	0	0	0	49,991	117,961	125,022	125,022	125,022	125,022
MINTURN CEMETERY	0.450	0	0	0	1,254	2,960	3,137	3,137	3,137	3,137
EAGLE RIVER FIRE PROTECTION DISTRICT	9.703	0	0	0	27,047	63,821	67,642	67,642	67,642	67,642
EAGLE RIVER WATER AND SANITATION DISTRICT	0.759	0	0	0	2,116	4,992	5,291	5,291	5,291	5,291
COLORADO RIVER WATER CONSERVATION DISTRICT	0.501	0	0	0	1,397	3,295	3,493	3,493	3,493	3,493
EAGLE VALLEY LIBRARY DISTRICT	2.763	0	0	0	7,702	18,174	19,262	19,262	19,262	19,262
EAGLE COUNTY HEALTH SERVICE (AMBULANCE)	2.774	0	0	0	7,733	18,246	19,338	19,338	19,338	19,338
TOTAL - ALL OVERLAPPING ENTITIES	72.808	0	0	0	200,825	473,876	502,244	502,244	502,244	502,244

Source: Eagle County Abstract of Levies 2021

SCHEDULE 1

September 16, 2022

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED ASSESSED VALUATION - BUILDOUT & LOT SALES
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

BUILDOUT - INCLUDES UNIT LOT VALUES AS SHOWN BELOW:											
Description of Unit	Planned Number of Units	Average Value/Unit	Average Square Feet	Total Gross Unit Volume	2023	2024	2025	2026	2027	2028	2029	2030	2031
Single Family Homes	39	2,500,000	4,000	97,500,000	0	10	24	5	0	0	0	0	0
Total Project	39	2,500,000		97,500,000	0	10	24	5	0	0	0	0	0
Total Value - Entire Project				97,500,000	0	10	34	39	39	39	39	39	39
Estimated Actual Value of Residential													
Single Family Homes					0	25,000,000	60,000,000	12,500,000	0	0	0	0	0
Total Incremental Estimate Actual Value of Residential					0	25,000,000	60,000,000	12,500,000	0	0	0	0	0
Total Cumulative Estimate Actual Value of Residential					0	25,000,000	85,000,000	97,500,000	97,500,000	97,500,000	97,500,000	97,500,000	97,500,000
Estimate Assessed Value (Cumulative)													
Estimated Assessed Value of Vacant Land @ 29%					0	1,000,000	500,000	0	0	0	0	0	0
Estimated Assessed Value of Residential Product @ 7.15%					0	1,787,500	6,077,500	6,971,250	6,971,250	6,971,250	6,971,250	6,971,250	6,971,250
Total Estimated Assessed Value of Vacant Land, Comm. & Resid.					0	2,787,500	6,577,500	6,971,250	6,971,250	6,971,250	6,971,250	6,971,250	6,971,250
TOWN OF MINTURN Mill Levy	**17.934**				0	49,991	117,961	125,022	125,022	125,022	125,022	125,022	125,022
Year Assessed Valuation Certified					2022	2023	2024	2025	2026	2027	2028	2029	2032
Year Taxes Received					2023	2024	2025	2026	2027	2028	2029	2030	2033

SCHEDULE 2 **September 16, 2022**

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED TOWN OF MINTURN 4.0% SALES AND USE TAXES
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
Projected Cumulative Households Completed (Occupied 1 year after completion)	0	0	10	34	39	39	39	39	39
Projected Households:									
Assumed Average Number of Residents per Household	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Assumed Number of Residents	0	0	30	102	117	117	117	117	117
Allocation of Types of Households:									
Assumed Percentage of Households Occupied for Full Year	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Assumed Percentage of Households Occupied for Half Year	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Assumed Percentage of Households Occupied for Three Months	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Assumed Number of Households Occupied for Full Year	0	0	5	17	20	20	20	20	20
Assumed Number of Households Occupied for Half Year	0	0	3	9	10	10	10	10	10
Assumed Percentage of Households Occupied for Three Months	0	0	2	7	8	8	8	8	8
Assumed Total Number of Households	0	0	10	32	37	37	37	37	37
Assumed Total Number of Full Year Equiv. Households	0	0	8	28	33	33	33	33	33
Projected Town of Minturn Taxable Sales Generated From Groceries/Residential Utilities/Other (liquor, sundries, hardware and materials, clothing, gifts, restaurants, etc.) per household:									
Assumed Annual Taxable Sales for Households Occupied for Full Year (1)	14,352	14,352	14,352	14,352	14,352	14,352	14,352	14,352	14,352
Assumed Annual Taxable Sales for Households Occupied for Half Year	7,176	7,176	7,176	7,176	7,176	7,176	7,176	7,176	7,176
Assumed Annual Taxable Sales for Households Occupied for Three Months	3,588	3,588	3,588	3,588	3,588	3,588	3,588	3,588	3,588
Projected Annual Taxable Sales Generated From Groceries/Residential Utilities/Other (liquor, sundries, hardware and materials, clothing, gifts, etc.):									
Projected Annual Taxable Sales for Households Occupied for Full Year	0	0	71,760	243,984	279,864	279,864	279,864	279,864	279,864
Projected Annual Taxable Sales for Households Occupied for Half Year	0	0	17,940	60,996	69,966	69,966	69,966	69,966	69,966
Assumed Annual Taxable Sales for Households Occupied for Three Months	0	0	7,176	24,398	27,986	27,986	27,986	27,986	27,986
Projected Annual Sales from All Households - (Groceries/Utilities/Other)	0	0	96,876	329,378	377,816	377,816	377,816	377,816	377,816
Projected 4.0% Town of Minturn Sales Tax Revenues from Groceries/Utilities/Other:									
Projected 4.0% Sales Tax Revenues for Households Occupied for Full Year	0	0	2,870	9,759	11,195	11,195	11,195	11,195	11,195
Projected 4.0% Sales Tax Revenues for Households Occupied for Half Year	0	0	718	2,440	2,799	2,799	2,799	2,799	2,799
Projected 4.0% Sales Tax Revenues Households Occupied for Three Months	0	0	287	976	1,119	1,119	1,119	1,119	1,119
Projected 4.0% Sales Tax Revenues from Groc./Util./Other - All Residents	0	0	3,875	13,175	15,113	15,113	15,113	15,113	15,113
Projected 4.0% Sales Tax Revenues from North Minturn PUD to General Fund	**0**	**0**	**3,875**	**13,175**	**15,113**	**15,113**	**15,113**	**15,113**	**15,113**
Projected 4% Town of Minturn Use Tax Revenues from Construction Materials:									
Projected Bldg. Permit Value @ $2.5M minus lot $600k = 1.9M x 80% = $1.5M Avg. Bldg. Permit	15,000,000	36,000,000	7,500,000	0	0	0	0	0	58,500,000
Assumed Cost of Construction Materials @ 50% of Bldg. Permit Value, 1 yr. lag	0	7,500,000	18,000,000	3,750,000	0	0	0	0	29,250,000
Projected 4% Use Tax Construction Materials - Residential	**0**	**300,000**	**720,000**	**150,000**	**0**	**0**	**0**	**0**	**1,170,000**

Note 1: The $14,352 per household expenditure was estimated as follows: $15,500,00 budgeted year 2019 taxable sales divided by 540 current Town of Minturn households = $28,704 per household divided by two = $14,352 sales taxable expend

SCHEDULE 3

September 16, 2022

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED WATER TAP FEE AND USER FEE REVENUES
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

		2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
Total Projec. Number of Incremental New Taps (subject to tap fee, SIF, cash in lieu fee)	24	4.00	24.00	5.00	0.00	0.00	0.00	0.00	0.00	33.00
Total Projec. Number of Existing Taps (subject to SIF only)		6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
Cumulative Total		10.00	34.00	39.00	39.00	39.00	39.00	39.00	39.00	
Projected Water Tap Fee, SIF Fee, and Cash in Lieu Fee Revenues:										
Assumed Tap Fee per 0-3,000 SF (3,001+ pays 2nd tap) per Town of Minturn (paid at permit; 3% increase		5,604	5,772	5,946	6,124	6,308	6,497	6,692	6,893	
Assumed SIF Fee - Tier 1 (0 - 1,500 SF) per Town of Minturn (paid at permit; 3% increases)		4.60	4.74	4.88	5.03	5.18	5.34	5.50	6	
Assumed SIF Fee - Tier 2 (1,501 - 3,000 SF) per Town of Minturn (paid at permit; 3% increases)		5.81	5.98	6.16	6.35	6.54	6.73	6.94	7	
Assumed SIF Fee - Tier 3 (3,001+SF) per Town of Minturn (paid at permit; 3% increases)		6.99	7.20	7.42	7.64	7.87	8.11	8.35	9	
Assumed Cash in Lieu Fee per Town of Minturn (paid upfront; 3% increases)		12,151	12,515	12,891	13,278	13,676	14,086	14,509	14,944	
Projected Tap Fee Revenues		**48,604**	**300,360**	**64,455**	**0**	**0**	**0**	**0**	**0**	**413,419**
Prepaid Tap Fee Revenue (paid upfront)		**392,280**								
Projected SIF Fee Revenues										
SIF TIER 1		69,000	170,640	36,600	0	0	0	0	0	276,240
SIF TIER 2		87,150	215,280	46,200	0	0	0	0	0	348,630
SIF TIER 3		69,900	172,800	37,100	0	0	0	0	0	279,800
Projected SIF Fee Revenues		**226,050**	**558,720**	**119,900**	**0**	**0**	**0**	**0**	**0**	**904,670**
Projected Cash in Lieu Fee Revenues (assumed 70 SFEs paid upfront)		**888,622**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**888,622**
Projected Water User Fee Revenues:										
Assumed Average Annual Rate per dwelling unit ($90.41 base +6.83x4 (assume 4,000 gallons per month)		1,529	1,575	1,623	1,671	1,721	1,773	1,826	1,881	
Total Projected Water User Fee Revenues		**15,290**	**53,550**	**63,297**	**65,169**	**67,119**	**69,147**	**71,214**	**73,350**	**478,136**

SCHEDULE 4

September 16, 2022

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED FIRE IMPACT FEES
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
Projected Fire Impact Fee Revenues (paid at permit):									
Assumed Average Rate per .75 inch water meter - Residential	1,671.00	1,671.00	1,671.00	1,671.00	1,671.00	1,671.00	1,671.00	1,671.00	
Projected Fire Impact Fee Revenues	16,710	40,104	8,355	0	0	0	0	o	65,169

SCHEDULE 5

September 16, 2022

MINTURN NORTH PUD - DIRECT FISCAL IMPACTS TO TOWN OF MINTURN
PROJECTED REAL ESTATE TRANSFER ASSESSMENT (RETT)
FOR THE YEARS ENDING DECEMBER 31, 2023 THROUGH 2030
2022$ (NO INFLATION)

	2023	2024	2025	2026	2027	2028	2029	2030	TOTALS
INITIAL SALES									
INCREMENTAL INITIAL LAND SALES	13,700,000	8,600,000	0	0	0	0	0	0	22,300,000
1% RETT ON INITIAL LAND SALES	**137,000**	**86,000**	**0**	**0**	**0**	**0**	**0**	**0**	**223,000**
RESALES	0	0	0	2	2	2	2	2	
AVERAGE VALUE EACH HOME	0	0	0	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	
TOTAL RESALE REVENUE	0	0	0	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	
1% RETT ON RESALES	**0**	**0**	**0**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**250,000**
TOTAL ANNUAL 1.0% RETT TO TOWN OF MINTURN GENERAL FUND	**137,000**	**86,000**	**0**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	**473,000**
TOTAL ANNUAL 1.0% RETT TO TOWN OF MINTURN COMMUNITY FUND	**68,500**	**43,000**	**0**	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**	**236,500**
(Assuming 50% are Non-resident Buyers									

ATTACHMENT E

RESUMES

Resume

Chrissy Whitacre

Environmental Technician

Office Location

Denver, Colorado

Years of Experience

1 Year

Education

B.S. Environmental Science
DePaul University
2010

Ms. Whitacre joined CTL | Thompson in 2018 as an Engineering Field Technician for the Soils Department. Her past background includes plant identification and habitat remediation. Her current responsibilities include Phase I Environmental Site Assessments and Biological Evaluations.

Project Experience

CTL/Thompson
Field technician managing soil inspections on construction sites, pier observation, pre-construction meetings, and field one-points to determine soil compaction curves; various projects, Colorado Front Range

Wetland Delineation, Gallegos Property, Mead, CO

Phase I ESA, Stapleton Northfield, Denver, CO

Phase I ESA, Legacy Ridge, Elizabeth, CO

Phase I ESA, 6985 East Chenango Avenue, Denver, CO

Chicago Botanic Garden, Chicago Il
Assisted in the evaluation of plants for green roofs, and planting trials. Maintained a photographic database of plants for documentation.

Invasive Buckthorn Project, Chicago, Il
Assisted in the transformation of a habitat degraded by buckthorn into an outdoor laboratory, and the study of best methods to repair degraded habitats.

SOYFACE Research Intern, Champaign, Il
Assisted in research on crops gown under elevated carbon dioxide and ozone levels, maintenance of research facility and assistance with grant writing.

Rocky Mountain Catering, Denver, CO
Worked with a production team and families to put together weddings, and managed a staff to execute events.

Matthew L. Wardlow, P.E.

Environmental Department Manager

Office Location
Denver, Colorado

Years of Experience
20 Years

Professional Registration
Registered Professional Engineer: Colorado

Education
B.S. Engineering and Policy, Washington University, St. Louis, MO, 1993

Training & Certifications
40 Hour OSHA Training

Confined Space Training

Mold Remediation Technician

Training Principals of Forced Air Remediation

Asbestos Inspector
Air Monitoring Specialist
Designer

Professional Affiliations
American Society of Civil Engineers

American Society of Foundation Engineers

Colorado Environmental Management Society

Urban Land Institute

Mr. Wardlow has a variety of technical expertise in Phase I and II Environmental Site Assessments, CDPHE Voluntary Cleanup (VCP) applications, asbestos consultation, underground storage tank removals, site characterizations, and assessments under the National Environmental Policy Act. Mr. Wardlow reviews all environmental deliverables, making sure that the latest practices are followed. He has developed a reputation as a consistent and reliable consultant for his clients, which include the City & County of Denver, Auraria Campus and its colleges, and Boulder County. He encompasses a variety of project experience including brownfields, historical mine sites, medical facilities, and wastewater treatment plants.

Project Experience

Regency Athletic Complex at MSU Denver, Denver Colorado
2016 ACEC CO GRAND CONCEPTOR AWARD – Highest Engineering Honor
This former brownfield, located at the southern end of Auraria Campus, was the site of geotechnical and environmental issues from past industrial use. There was also the potential for settlement due to undocumented fill. Mr. Wardlow devised an idea using Deep Dynamic Compaction (DDC), which is a ground improvement technique that densifies the majority of soils and fills in-place by using a drop weight. CTL then provided on-site geotechnical and environmental inspection services, management of contaminants excavated, and also successfully entered the client into the State of Colorado Voluntary Cleanup Program. Measures were also taken to monitor air quality and vibrations from the impact. The solution was about 25% of the removal and replacement costs, and there has been no noticeable settlement.

Other Redevelopment/Voluntary Cleanup Projects:
Prepared Overall 2016 Auraria Campus Materials Management Plan
New Breckenridge Brewery – VCP – Remediation of Pesticides
Community College of Denver Confluence Building
Metro State Hotel and Hospitality Learning Center
Metro State Student Success Building
AHEC 5th Street Parking Garage – VCP – Coal Ash and Asbestos
Gold Hill Mesa - VCP - Subdivision Constructed on Mine Tailings
4th and Santa Fe – VCP Remediation of Chrome Plating Site
ConocoPhillips - Purchase/Redevelopment of 400-acre StorageTek

Other Major Projects and Clients
Denver Department of Environmental Health - 20+ P1 and P2 ESAs
CDOT - Over 30 Asbestos Surveys, Air Clearances of Buildings
Land Developers - Due Diligence Studies and SWMP Consultation
Urban Land Conservancy - P1 and P2 ESAs, IAQ Concerns
CU Boulder - Asbestos Consultant - Ketchum Hall, Hallett Hall
Homebuilders - Due Diligence, Mold and Moisture Consultation
Boulder County Risk Management - On-Call Industrial Hygienist
Boulder Valley School District - On-Call Asbestos Consultant
Regis University - P1 ESA of 7 Parcels of Campus