

## **STERLING RANCH METROPOLITAN DISTRICT NO. 1**

### **NOVEMBER, 2017 ADDENDUM TO MAY, 2015 WATER RESOURCES AND WASTEWATER REPORT**

#### **Section 1 - WATER**

The May, 2015, Sterling Ranch Metropolitan District No. 1 Water Resources and Wastewater Report for Sterling Ranch Phase One (672 single family homes) was previously submitted with the Sterling Ranch Phase One Preliminary Plan. That report, which is being resubmitted with this Addendum, contains detailed projections of water needs, a description of the on-site and off-site water rights owned by the District and system facilities. It also contains a map of the overall Sterling Ranch service area, water rights decrees, well permits and a water system master plan. The information in that report continues to be applicable. The purpose of this Addendum is to provide an update on the status of the District's physical water facilities.

A November 27, 2017, Memorandum from JDS Hydro, Consultants, Inc. is attached to this Addendum. The District drilled two deep wells in the Spring of 2017, one in the Arapaho aquifer (Well Permit No. 80131-F) and one in the Laramie Fox Hills aquifer (Well Permit No. 80132-F). The well construction and yield estimate report provided to the Colorado Division of Water Resources is included in the Memorandum as well as the water quality test results sampled during the pump tests. The estimated yields from the Arapaho well are 299 gpm and 149 gpm for the LFH well. The water quality sampling indicated no substance or chemical constituents above CDHPHE maximum contaminant levels. The District has also completed a 1,000,000 gallon water storage tank and the main delivery lines from the storage tank to the areas being initially developed and platted. The foregoing water infrastructure had previously received the necessary 1041 approvals from El Paso County.

#### **Section 2 - WASTEWATER**

As stated above, the May, 2015, Sterling Ranch Metropolitan District No. 1 Water Resources and Wastewater Report for Sterling Ranch Phase One (672 single family homes) was previously submitted with the Sterling Ranch Phase One Preliminary Plan. That report contained wastewater projections, including expected average daily wastewater loads and peaking factors. This Addendum provides an update on the status of the District's physical wastewater facilities.

Since the May, 2015, Report, the District has received Site Location approvals from the Pikes Peak Area Council of Governments and the Water Quality Control Division of the Colorado Department of Public Health and Environment (April 24, 2017) for the initial phase of its lift station and the force main connecting the lift station to Meridian Service Metropolitan District's wastewater system. The District has also received 1041 approvals from El Paso County for its wastewater facilities. Finally, the District recently received approval of the final plans and specifications for construction of its lift station and force main from the Water Quality Control Division of the Colorado Department of Public Health and Environment (see attached approval letter). The initial phase of the lift station is approved for a maximum hydraulic capacity of 0.200 million gallons (200,000 gallons) per day (MGD).

The Branding Iron at Sterling Ranch Filing No. 1 final plat contains 51 single family lots and is projected to add 8,772 gallons per day on a gravity feed basis to the lift station. The Homestead at Sterling Ranch Filing No. 1 final plat contains 72 single family lots and is projected to add 16,600 gallons per day on a gravity feed basis to the lift station.

The District has begun construction of the lift station and force main and anticipates completion of both prior to recordation of the Branding Iron at Sterling Ranch Filing No. 1 and Homestead at Sterling Ranch Filing No. 1 final plats. An alternate alignment of the offsite portion of the force main is contemplated by the District due to difficulties constructing the force main in the approved location along Woodmen Road. It is understood that a

1041 amendment will be necessary and the District has discussed this with the County 1041 Administrator who has determined this amendment can be processed administratively. In the event that construction of either the lift station or the force main is not completed prior to the recordation of the first final plat, the District will post collateral sufficient in the opinion of the Board of County Commissioners to complete construction.



## COLORADO

### Department of Public Health & Environment

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

November 8, 2017

Jim Morley, President  
Sterling Ranch Metropolitan District No. 1  
20 Boulder Crescent, Suite 200  
Colorado Springs, CO 80903

Subject: Final Plans and Specifications for Construction Approval  
Sterling Ranch Metropolitan District No. 1, Sterling Ranch Lift Station  
Associated WWTF CDPS Permit No. COX048348  
Site Location Approval No. ES.16.SA.02841  
El Paso County  
ES Project No. ES.16.CWPDR.02842

Dear Mr. Morley:

The Water Quality Control Division (Division), Engineering Section has received and reviewed the Plans and Specifications for the Sterling Ranch Metropolitan District No. 1, Sterling Ranch Lift Station project. The final plans and specifications, as reviewed, meet the requirements of the *State of Colorado Design Criteria for Domestic Wastewater Treatment Works* (Design Criteria) and are hereby approved as listed below. The approved maximum month and peak hydraulic capacities are 0.200 million gallons per day (MGD) and 350 gallons per minute (GPM), respectively.

This approval addresses the following:

- Lift Station Structure
  - 1. Sewage pump pit
    - a. One (1) below-grade concrete wet well having the dimensions of 11.5 feet by 8.0 feet and a floor elevation of approximately 32.5 feet below grade.
    - b. Operating capacity of the wet well as determined by the "lead pump on" set point (elev. 6947.50 feet) and the "pump(s) off" set point (elev. 6944.50 feet) is approximately 2,060 gallons.
  - 2. Potable water flushing water pit (not used for lift station capacity)
    - a. One (1) below-grade concrete wet well adjacent to the sewage pump pit having the dimensions of 12.5 feet by 8.0 feet and a floor elevation of approximately 32.5 feet below grade.
    - b. Operating capacity of the wet well as determined by the lead "lead pump on" set point (elev. 6962.00 feet) and the "pump(s) off" set point (elev. 6945.00 feet) is approximately 12,700 gallons.
    - c. The potable water supply pipeline is air gapped above the wet well structure.
  - 3. Peak flow storage basin
    - a. One (1) below-grade concrete equalization/emergency overflow storage basin having the dimensions of 39.5 feet by 25.5 feet and a floor elevation of approximately 26.5 feet below grade.
    - b. Equalization is provided by surcharging the sewage pump pit and peak flow storage basin to the "lag pump on" set point (elev. 6949.50 feet), which equates to a volume of 12,000 gallons.
    - c. Storage basin and sewage pump pit hydraulically connected by gated opening in the common wall.



4. Valve vault
  - a. One (1) below-grade concrete vault.
  - b. Vault contains a 4-inch diameter check valve and 4-inch diameter plug valve for each of the wastewater pumps, 6-inch diameter check valve and 6-inch diameter plug valve for each of the flushing water pumps, bypass pumping line with 4-inch camlock fitting and 4-inch plug valve, 6-inch magnetic flow meter, and the associated discharge piping, fittings, and piping support.
- Pumping Equipment
  1. Wastewater pumps: Three (3) non-clog submersible pumps equipped with 30 horsepower (hp) motors controlled by variable frequency drives (VFDs).
    - a. Each pump (2 service, 1 standby) is rated for 175 gallons per minute (gpm) at 140 feet of total dynamic head (TDH).
    - b. Pumps are operated in a lead/lag arrangement.
    - c. Wet well levels are automatically maintained by the pump control panel and an ultrasonic level transducer. Secondary level measurement is provided by three (3) float switches (pump(s) off, lead pump on, and lag pump on). An additional float switch provides a high level alarm.
    - d. Status and alarm conditions are monitored locally through the control panel and remotely through the District's telemetry system.
    - e. Associated discharge piping, valves, and fittings.
  2. Flushing water pumps: Two (2) non-clog submersible pumps equipped with 100 hp motors controlled by VFDs. Note, flushing water pumps are used for maintenance purposes only.
    - a. Each pump (1 service, 1 standby) is rated for 550 gpm at 220 feet of TDH.
    - b. Pumps are operated in a lead/lag arrangement.
    - c. Upon manual activation of the flushing water pumping system, wet well levels are automatically maintained by the pump control panel and an ultrasonic level transducer. Secondary level measurement is provided by float switches.
    - d. Status and alarm conditions are monitored locally through the control panel and remotely through the District's telemetry system.
    - e. Associated discharge piping, valves, and fittings.
- Force Main
  1. Dual force main with approximately 25,010 linear feet of 8-inch and 10-inch (future use) piping connects the lift station to an existing 12-inch sewer line located in the Meridian Service Metropolitan District (MSMD) service area.
  2. Air release manhole
    - a. Thirteen (13), 6-foot diameter below-grade precast concrete manholes.
    - b. Manhole contains a 2-inch combination air/vacuum valve, 2-inch ball valve, and tapping saddle for the 8-inch force main. Air released by the valve is discharged to the interior of the vault, and the vault is passively ventilated to atmosphere above grade.
    - c. Associated piping, fittings, and piping support provided for both force mains.
  3. Metering manhole
    - a. One (1), 4-foot diameter below-grade fiberglass manhole with integrated Parshall flume.
    - b. The metering manhole measures the wastewater discharge from the District using a 3-inch Parshall flume nested inside a 9-inch flume and an ultrasonic level transducer.
- Emergency Equipment and Structures
  1. Emergency overflow storage: By surcharging the sewage pump pit to an elevation of 6962.17 feet, the peak flow storage basin provides an emergency overflow storage volume of 93,000 gallons, which is in addition to the equalization volume. This equates to a detention time of approximately 11.2 hours at the maximum month influent flow to the lift station.

2. Standby power source: One (1), 150 kilowatt (kW) diesel generator and automatic transfer switch provides emergency operations of all system components including the wastewater pumps, flushing water pumps, and chemical and electrical building.
- Odor Control
  1. Liquid calcium nitrate addition: A calcium nitrate chemical feed system located in the separate chemical and electrical building is utilized to prevent the formation of hydrogen sulfide at the lift station site and the associated force main. Two (2) peristaltic chemical feed pumps (1 duty, 1 standby) have the ability to convey up to 5.8 gallons per hour (gph) or 140 gallons per day (gpd) of calcium nitrate. The system is capable of injecting calcium nitrate at the lift station wet well. The calcium nitrate is stored in a 40 gallon polyethylene distribution tank, and secondary containment is provided by a polyethylene basin. Calcium nitrate is transferred from the 4,400 gallon double wall polyethylene bulk storage tank to distribution tank using a transfer pump.

Conditions of Approval:

1. The drawing set provided as part of the Final Design Submittal appears to show locations where the force main alignment runs parallel to or crosses a potable water line. The force main shall be installed with appropriate separation to potable water lines as established in Section 3.2.12 (Relationship of Sewers to Potable and Reclaim Water Pipelines and Facilities) of the Design Criteria.
2. Upon completion of construction and prior to commencement of operation, a written certification must be submitted to the Division stating that the project facilities were built in accordance with the approved plans, specifications, and change orders. The certification must be signed by the applicant's registered engineer.
3. Any change orders or addenda that change facility capacity, water quality, or processes, must be submitted to this office for review and approval.
4. When construction is estimated to be within 14 days of completion, please notify this office. A representative of this Division may schedule a site visit to conduct a final construction inspection before the facility commences operations.
5. Please note that during construction and operation activities, the provisions specified in the Sections 2.2.0, 2.3.17 and 2.3.18 of the Design Criteria, must be implemented and followed. This review does not relieve the owner from compliance with all Federal, State, and local regulations and requirements prior to construction nor from responsibility for proper engineering, construction, and operation of the facility.
6. No point source discharges of water and/or contaminants from this facility to the waters of the state are authorized during construction unless a permit for such discharges has been issued by the Division. If you have any questions regarding permit issues or requirements, please contact the Permits Section at 303-692-3510.
7. The approval of this project is based on the above referenced conditions and upon the engineering design submitted to the Division for pumping wastewater to the Cherokee Metropolitan District Water Reclamation Facility located in El Paso County.

Documents reviewed:

- Drawing set dated April 24, 2017 titled "Sterling Ranch Lift Station and Force Main, El Paso County, Colorado." Prepared by Lamp Rynearson & Associates for the Sterling Ranch Metropolitan District No. 1.

- Report dated April 24, 2017 titled "Basis of Design Report for the Sterling Ranch Metro District No. 1 and the Sterling Ranch Lift Station and Force Mains." Prepared by Lamp Rynearson & Associates for the Sterling Ranch Metropolitan District No. 1.
- Site location approval letter dated May 15, 2017 titled "Site Location Approval No. ES.16.SA.02841." Prepared by the Division for the Sterling Ranch Metropolitan District No. 1.
- Specifications dated April 24, 2017 titled "Project Manual for Sterling Ranch Metropolitan District No. 1, Sterling Ranch Lift Station and Force Main." Prepared by Lamp Rynearson & Associates for the Sterling Ranch Metropolitan District No. 1.
- Miscellaneous correspondence.

In accordance with the current Operators Certification Board Regulations, the collection system is a Class 1 Wastewater Collection System.

The Engineering Section is interested in gaining feedback about your experience during the engineering review process. We would appreciate your time to complete a Quality-of-Service Survey regarding your experience during the engineering review process leading up to issuance of this decision letter. The Engineering Section will use your responses and comments to identify strengths, target areas for improvement, and evaluate process improvements to better serve your needs. Please take a moment to fill out our survey at the following website: <http://fs8.formsite.com/cohealth/form627710151/index.html>.

Thank you for your time and cooperation in this matter. Please contact me by telephone at 303-692-6337 or by electronic mail at [michael.emming@state.co.us](mailto:michael.emming@state.co.us) if you have any questions.

Sincerely,



Digitally signed by Michael G Emming, P.E.  
DN: cn=Michael G Emming, P.E.,  
o=Engineering Section, ou=Water Quality  
Control Division,  
email=michael.emming@state.co.us, c=US  
Date: 2017.11.08 10:25:54 -07'00"

Michael G. Emming, P.E.  
Senior Review Engineer  
Engineering Section | Water Quality Control Division  
Colorado Department of Public Health and Environment

cc: Bradley Simons, Lamp Rynearson & Associates  
Aaron Doussett, El Paso County Public Health  
Amy Zimmerman, WQCD ES Engineering Review Unit Manager  
David Kurz, WQCD ES Lead Wastewater Engineer (satellite collection system)  
Site Application File | Discharge Permit File (COX048348)

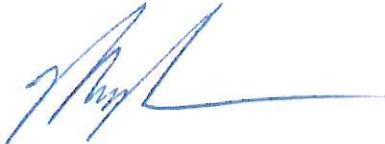
## Memorandum

---

**To:** P.J. Anderson  
**From:** Mario DiPasquale, P.E.  
**Date:** November 27, 2017  
**Subject:** Sterling Ranch - Denver Basin LFH-1(80132-F) and A-1(80131-F) Well

---

As per your request JDS-Hydro Consultants, Inc. has attached the well construction and yield estimate report (GWS-31) provided to the Colorado Division of Water Resources as well as the water quality test results sampled during the pump tests.



Mario DiPasquale, P.E.  
JDS-Hydro Consultants, Inc.

# **Well Construction Report**

## **A-1 (80131-F)**





WELL#  
Permit

A-1

80131-F

VV

VV

Surface

Cement  
6' - 40'

Surface Borehole Diam.- 30"  
Surface Casing OD- 18"  
Surface Casing Depth- 40'

Neat cement  
6' - 1515'

Borehole Diam.- 14.75"

BLANK CASING OD- 10.75

Blank casing from- +2' - 1738'

NOTE: NOT DRAWN TO SCALE

Approx. SWL 1256'

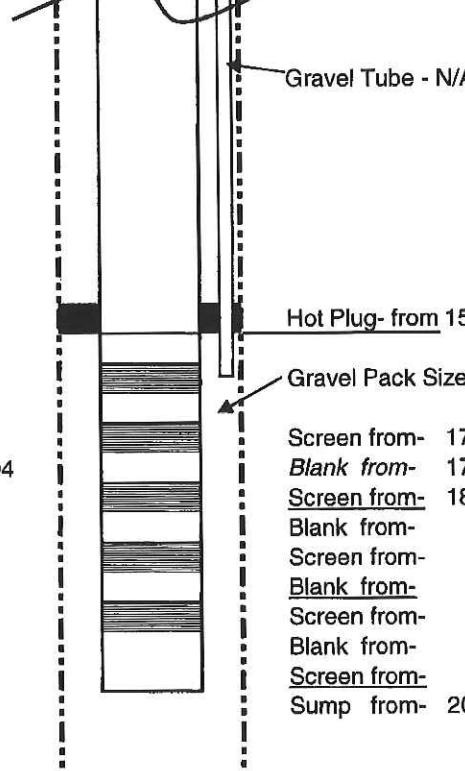
Gravel Pack Top 1600'  
Top of Screen 1738'

Screen Type- SSWW  
Screen slot size- 0.04

Bottom of Screen 2020'

Total Depth of Well 2050'

Total Drilled Depth 2080'



RECEIVED

JUN 13 2017

WATER RESOURCES  
STATE ENGINEER  
COLO

**Description of Drill Cuttings for Sterling Ranch Well A-1****Well Permit No. 80131-F****Approximate Elevation: 7316 Ft****By: Mario DiPasquale, P.E.****RECEIVED**

<b>Depth (ft)</b>	<b>Description</b>	<b>JUN 13 2017</b>
0 - 40	No samples collected, 18" steel surface casing	WATER RESOURCES STATE ENGINEER COLO
40 - 160	Sand and gravel, grey and pink	
160 - 200	Light grey claystone	
200 - 210	Claystone with some sand, grey	
210 - 220	Sand, grey and pink	
230 - 280	Medium grey claystone	
280 - 300	Grey sand and gravel	
300 - 320	Light grey sandstone w/ some sand	
320 - 390	Medium grey sandstone w/ some gravel	
390 - 460	Light grey and pink sand and gravel	
460 - 470	Medium grey sandstone	
470 - 500	Light grey and pink sand and gravel	
500 - 570	Light grey claystone	
570 - 590	Medium grey sand	
590 - 640	Medium grey sand with some claystone	
640 - 650	Light grey sand w/ some claystone	
650 - 700	Medium grey claystone	
700 - 710	Light brown claystone	
710 - 720	Light brown claystone w/ interbedded dark brown claystone	
720 - 770	Light grey claystone	
770 - 870	Light grey sandstone	
870 - 880	Light grey sandstone w/ interbedded brown claystone	
880 - 890	Light grey sandstone w/ some sand	
890 - 940	Medium brown claystone	
940 - 950	Light grey sandstone	
950 - 960	Medium brown claystone	
960 - 990	Light brown claystone	
990 - 1010	Medium brown sandstone	
1010 - 1030	Medium brown sandstone w/ some interbedded clays	
1030 - 1080	Medium brown sandstone	
1080 - 1120	Medium grey claystone	
1120 - 1160	Medium brown sandstone	
1160 - 1210	Medium grey sandstone	
1210 - 1260	Medium brown claystone	
1260 - 1270	Light grey sandstone	
1270 - 1300	Medium grey sandstone	
1300 - 1370	Medium grey claystone	
1370 - 1410	Light grey claystone	
1410 - 1420	Light brown claystone	
1420 - 1480	Medium brown claystone	
1480 - 1490	Dark brown claystone	
1490 - 1500	Light grey claystone	
1500 - 1510	Light brown claystone	

Description of Drill Cuttings for Sterling Ranch Well A-1

Well Permit No. 80131-F

Approximate Elevation: 7316 Ft

By: Mario DiPasquale, P.E.

RECEIVED

Depth (ft)	Description	JUN 13 2017
1510 - 1550	Medium grey claystone	WATER RESOURCES STATE ENGINEER COLORADO
1550 - 1580	Medium brown claystone	
1580 - 1600	Medium grey claystone	
1600 - 1620	Dark brown claystone	
1620 - 1670	Medium grey claystone	
1670 - 1690	Dark brown claystone	
1690 - 1730	Medium grey claystone	
1730 - 1740	Medium grey sandstone	
1740 - 1760	Light grey sandstone	
1760 - 1770	Medium brown claystone	
1770 - 1780	Light brown claystone	
1780 - 1790	Medium brown claystone	
1790 - 1830	Medium grey claystone	
1830 - 1860	Light grey claystone	
1860 - 1870	Medium brown claystone	
1870 - 1880	Medium grey claystone	
1880 - 1890	Medium brown claystone	
1890 - 1900	Light grey sandstone	
1900 - 1920	Light grey sandstone	
1920 - 1950	Medium grey sandstone	
1950 - 1960	Light grey sandstone	
1960 - 1990	Medium grey sandstone	
1990 - 2000	Light grey sandstone	
2000 - 2010	Medium grey sandstone w/ some sand	
2010 - 2040	Light grey sandstone w/ some sand	
2040 - 2070	Medium grey claystone	
2070 - 2080	Medium brown claystone	
2080	Total Depth	
-		
-		
-		
-		
-		

# **Well Construction Report**

## **LFH-1 (80132-F)**





**Hydro**  
RESOURCES

RECEIVED  
MAY 30 2017

WATER RESOURCES  
STATE ENGINEER  
COLO

WELL#  
Permit

LFH-1  
80132-F

VVV

VVV

Surface

Cement---  
7' - 40'

Surface Borehole Diam.- 30"  
Surface Casing OD- 18"  
Surface Casing Depth- 40'

Neat cement---  
7' - 2315'

Borehole Diam.- 14.75"

BLANK CASING OD- 8.625"

Blank casing from- +2'-2345'

NOTE: NOT DRAWN TO SCALE

Approx. SWL

Gravel Pack Top 2315'  
Top of Screen 2345'

Hot Plug- from 2222'-2315'7'-743'

Screen Type- SSWW  
Screen slot size- 0.020

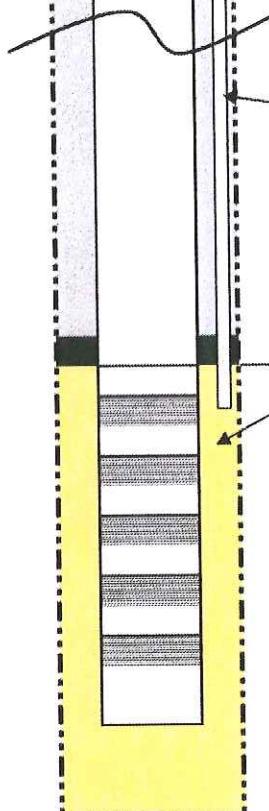
Gravel Pack Size- 10x20

Bottom of Screen 2530'

Screen from- 2345'-2365'  
Blank from- 2365'-2380'  
Screen from- 2380'-2400'  
Blank from- 2400'-2410'  
Screen from- 2410'-2440'  
Blank from- 2440'-2450'  
Screen from- 2450'-2530'  
Blank from-  
Screen from-  
Sump from- 2530'-2560'

Total Depth of Well 2560'

Total Drilled Depth 2660'



## Casing and Screen Schedule

Hydro Resources - Rocky Mountain, Inc.

Permit #	80132-F
Owner	Morley-Bentley Investments LLC
Well Name	LFH-1
Casing size/wall thickness	8.625/.322
Screen size/material/slot	8.625/SSWW/0.020

RECEIVED

MAY 30 2017

WATER RESOURCES  
STATE ENGINEER  
COLO

Material	Depth to/Bottm	Length
Blank	Above 2' - 2345'	2347'
Screen	2345'-2365'	20'
Blank	2365'-2380'	15'
Screen	2380'-2400'	20'
Blank	2400'-2410'	10'
Screen	2410'-2440'	30'
Blank	2440'-2450'	10'
Screen	2450'-2530'	80'
Blank	2530'-2560'	30'
	Total	2562

RECEIVED

MAY 30 2017

WATER RESOURCES  
STATE ENGINEER  
COLO

Description of Drill Cuttings for Sterling Ranch Well LFH-1

Well Permit No. 80132-F

Approximate Elevation: 7314 Ft

By: Mario DiPasquale, P.E.

Depth (ft)	Description
0 - 40	No samples collected, 18" steel surface casing
40 - 160	Sand and gravel, grey and pink
160 - 200	Light grey claystone
200 - 210	Claystone with some sand, grey
210 - 220	Sand, grey and pink
230 - 280	Medium grey claystone
280 - 300	Grey sand and gravel
300 - 320	Light grey sandstone w/ some sand
320 # 390	Medium grey sandstone w/ some gravel
390 - 460	Light grey and pink sand and gravel
460 - 470	Medium grey sandstone
470 - 500	Light grey and pink sand and gravel
500 - 570	Light grey claystone
570 - 590	Medium grey sand
590 - 640	Medium grey sand with some claystone
640 - 650	Light grey sand w/ some claystone
650 - 700	Medium grey claystone
700 - 710	Light brown claystone
710 - 720	Light brown claystone w/ interbedded dark brown claystone
720 - 770	Light grey claystone
770 - 870	Light grey sandstone
870 - 880	Light grey sandstone w/ interbedded brown claystone
880 - 890	Light grey sandstone w/ some sand
890 - 940	Medium brown claystone
940 - 950	Light grey sandstone
950 - 960	Medium brown claystone
960 - 990	Light brown claystone
990 - 1010	Medium brown sandstone
1010 - 1030	Medium brown sandstone w/ some interbedded clays
1030 - 1080	Medium brown sandstone
1080 - 1120	Medium grey claystone
1120 - 1160	Medium brown sandstone
1160 - 1210	Medium grey sandstone
1210 - 1260	Medium brown claystone
1260 - 1270	Light grey sandstone
1270 - 1300	Medium grey sandstone
1300 - 1370	Medium grey claystone
1370 - 1410	Light grey claystone
1410 - 1420	Light brown claystone
1420 - 1480	Medium brown claystone
1480 - 1490	Dark brown claystone
1490 - 1500	Light grey claystone
1500 - 1510	Light brown claystone

RECEIVED  
 MAY 30 2017  
 WATER RESOURCES  
 STATE ENGINEER  
 COLO

**Description of Drill Cuttings for Sterling Ranch Well LFH-1**

**Well Permit No. 80132-F**

**Approximate Elevation: 7314 Ft**

**By: Mario DiPasquale, P.E.**

<b>Depth (ft)</b>	<b>Description</b>
1510 - 1550	Medium grey claystone
1550 - 1580	Medium brown claystone
1580 - 1600	Medium grey claystone
1600 - 1620	Dark brown claystone
1620 - 1670	Medium grey claystone
1670 - 1690	Dark brown claystone
1690 - 1730	Medium grey claystone
1730 - 1740	Medium grey sandstone
1740 - 1760	Light grey sandstone
1760 - 1770	Medium brown claystone
1770 - 1780	Light brown claystone
1780 - 1790	Medium brown claystone
1790 - 1830	Medium grey claystone
1830 - 1860	Light grey claystone
1860 - 1870	Medium brown claystone
1870 - 1880	Medium grey claystone
1880 - 1890	Medium brown claystone
1890 - 1900	Light grey claystone
1900 - 1920	Light grey sandstone
1920 - 1950	Medium grey sandstone
1950 - 1960	Light grey sandstone
1960 - 1990	Medium grey sandstone
1990 - 2000	Light grey sandstone
2000 - 2010	Medium grey sandstone w/ some sand
2010 - 2040	Light grey sandstone w/ some sand
2040 - 2070	Medium grey sandstone
2070 - 2170	Medium brown claystone
2170 - 2300	Medium grey claystone
2300 - 2350	Dark brown claystone
2350 - 2370	Light grey sandstone
2370 - 2380	Dark brown claystone
2380 - 2400	Light grey sandstone
2400 - 2410	Medium brown claystone
2410 - 2520	Light grey sandstone
2520 - 2560	Medium grey claystone
2560 - 2600	Medium grey sandstone
2600 - 2660	Medium grey claystone
2660	Total Depth
-	
-	
-	
-	
-	

# **Water Quality Results**

## **A-1 (80131-F)**



Colorado Department  
of Public Health  
and Environment

Inorganic Chemicals Certified Laboratory Report Form  
WQCD - Drinking Water CAS  
4300 Cherry Creek Drive South, Denver, CO 80246-1530  
Fax: (303) 758-1398; cdph.drinkingswater@state.co.us

Revised 6/13/2014

IOC

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)						
PWSID#: CO0121724		Laboratory ID: CO 0015	Certified Laboratory Information					
System Name: Sterling Ranch MD		Laboratory Name: Colorado Analytical Laboratory						
Contact Person: Mark Volle	Phone #: 719-227-0072	Contact Person: Customer Service	Phone: 303-659-2313					
Comments:	Do Samples Need to be Composited BY THE LAB?	Comments:	<input type="checkbox"/>					
Section III (Supplied or Completed by Public Water System)								
Sample Date: 3/23/17	Collector: Stephanie Schwei	Facility ID (On Schedule): New Well	Sample Pt ID (On Schedule): New Well					
Section IV Inorganic Chemicals (Completed by Certified Laboratory)								
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)
3/24/17	3/24/17	1703240N7-01	Fluoride	7681-49-4	EPA 300.0	4	0.09	1.22

NT: Not Tested

Lab MRL: Laboratory Minimum Reporting Level  
BDL: Below Laboratory MRL. A less than (<) may also used.

mg/L: Milligrams per Liter  
MCL: Maximum Contaminant Level

4/2/17  
1703240N7-01  
1/1  
N

## Drinking Water Chain of Custody

Page 1 of 2



Report To Information		State Form / Project Information	
Company Name:	<u>JDS-HydroConsultants</u>	PWSID:	<u>CO 0121724</u>
Contact Name:	<u>Mark Vollie</u>	System Name:	<u>STREAMS RANCH MD</u>
Address:	<u>2452. Pikes Peak Ave</u>	Address:	<u>20 Boulders Crescent</u>
City	<u>CO</u>	City	<u>CO</u>
State/Zip	<u>80913</u>	State/Zip	<u>80903</u>
Phone:	<u>(719) 227-0072</u>	Phone:	<u>(719) 384-0200</u>
Email:	<u>mvollie@jshydro.com</u>	Email:	<u>jmorley3840@aol.com</u>
Sampler Name:	<u>Sophanie Schwenke</u>	PO No.:	

Bill To Information (if different from report to)		State Form / Project Information	
Company Name:	<u>SR WATER</u>	PWSID:	<u>CO 0121724</u>
Contact Name:	<u>JIM MORLEY</u>	System Name:	<u>STREAMS RANCH MD</u>
Address:	<u>20 Boulders Crescent</u>	Address:	<u>20 Boulders Crescent</u>
City	<u>CO</u>	City	<u>CO</u>
State/Zip	<u>80903</u>	State/Zip	<u>80903</u>
Phone:	<u>(719) 384-0200</u>	Phone:	<u>(719) 384-0200</u>
Email:	<u>jmorley3840@aol.com</u>	Email:	<u>jmorley3840@aol.com</u>
Sampler Name:	<u>Sophanie Schwenke</u>	PO No.:	

PHASE I, II, V Drinking Water Analyses (check analysis)				Subcontract Analyses			
CAL Task No.	Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/BCP
170324007	3-23	7:55	#1	-	X	X	515.4 Herbicides
	7:57	7:57	#2	-	X	X	524.2 VOCs
	8:11	#3	8:05	2	X	X	525.2 SOCs-Pesticides
	8:11	#4		1	X	X	548.1 Endothell
	7:52	#5		1	X	X	549.2 Diquat
	7:53	#6		1	X	X	552.2 HAA5
	7:58	#7		1	X	X	524.2 THMs
	7:59	#8		1	X	X	54.1 Glyphosate
	8:03	#9		1	X	X	54.1 Endothell
	8:03	#10		1	X	X	54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
							311. Carbamates
							347.1 Glyphosate
							525.2 SOCs-Pesticides
							548.1 Endothell
							549.2 Diquat
							552.2 HAA5
							524.2 THMs
							54.1 Glyphosate
							54.1 Endothell
							54.1 Copper
					</		



Drinking Water Chain of Custody

Page 2 of 2

Report To Information		Bill To Information (if different from report to)		State Form / Project Information	
Company Name:	<u>DDS-Hydro Consultants</u>	Company Name:	<u>SR Water</u>	FWSID:	<u>60 01 21734</u>
Contact Name:	<u>Mark Volle</u>	Contact Name:	<u>Tim Morley</u>	System Name:	<u>Ser line Ranch MD</u>
Address:	<u>545 E. Pikes Peak Ave</u>	Address:	<u>20 Boulder Cresent</u>	Address:	<u>20 Boulder Cresent</u>
City CS	<u>Colorado Springs</u>	City CS	<u>Boulder</u>	City CS	<u>Boulder</u>
State CO	<u>80903</u>	State CO	<u>80103</u>	State CO	<u>80303</u>
Zip:	<u>80903</u>	Zip:	<u>80103</u>	Zip:	<u>80303</u>
Phone:	<u>719-227-0072</u>	Phone:	<u>(720) 505-4500</u>	Fax:	<u>(720) 505-4500</u>
Email:	<u>mvolle@idashydro.com</u>	Email:	<u>tim.morley@bouldercounty.org</u>	Compliance Sample:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sampler Name:	<u>Sophie Silverman PRO No:</u>				
<input type="checkbox"/> Send Forms to State: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					

卷之三

## Instructions:

Delivered Via: \_\_\_\_\_ Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Retired/Extinguished By:	C/S Charge <input type="checkbox"/>	Temp.	$^{\circ}\text{C}$ / $^{\circ}\text{F}$
	Date/Time:		Received By:

Sample Pres. Yes  No   
Date/Time: \_\_\_\_\_



Colorado Department  
of Public Health  
and Environment

**Inorganic Chemicals Certified Laboratory Report Form**  
**WQCD - Drinking Water CAS**  
**Submit Online at <http://www.wqcdcompliance.com/login>**

**LOC**

Revised 4/13/2015

<b>Section I (Supplied or Completed by Public Water System)</b> <b>Public Water System Information</b>				<b>Section II (Supplied or Completed by Certified Laboratory)</b> <b>Certified Laboratory Information</b>			
PWSID#: CO0121724				Laboratory ID: CO 0015			
System Name: Sterling Ranch MD	Phone #:	Contact Person: Customer Service	Phone: 303-659-2313	Laboratory Name: Colorado Analytical Laboratory			
Contact Person: Mark Volle		Comments:					
Comments:	Do Samples Need to be Composed BY THE LAB?		<input type="checkbox"/>				
<b>Section III (Supplied or Completed by Public Water System)</b> <b>Sample Pt ID (On Schedule): New Well</b>							
<b>Section IV Inorganic Chemicals (Completed by Certified Laboratory)</b> <b>Sample Date: 3/23/17</b> <b>Collector: Stephanie Schwei</b> <b>Facility ID (On Schedule): New Well</b> <b>Sample Pt ID (On Schedule): New Well</b>							
Lab Receipt Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)
3/24/17	170324007-01A	Antimony	7740-36-0	EPA 200.8	0.006	0.001	BDL
3/24/17	170324007-01A	Arsenic	7740-38-2	EPA 200.8	0.01	0.001	0.002
3/24/17	170324007-01A	Barium	7740-39-3	EPA 200.8	2	0.001	0.003
3/29/17	170324007-01A	Beryllium	7440-41-7	EPA 200.8	0.004	0.001	BDL
3/29/17	170324007-01A	Cadmium	7440-43-9	EPA 200.8	0.005	0.001	BDL
3/29/17	170324007-01A	Chromium	7440-47-3	EPA 200.8	0.1	0.001	BDL
3/29/17	170324007-01A	Mercury	7439-97-6	EPA 200.8	0.002	0.0001	BDL
3/29/17	170324007-01A	Nickel	7440-02-0	EPA 200.8	N/A	0.001	0.001
3/29/17	170324007-01A	Selenium	7782-49-2	EPA 200.8	0.05	0.001	BDL
3/29/17	170324007-01A	Sodium	7440-23-5	EPA 200.7	N/A	0.1	52.8
3/30/17	170324007-01A	Thallium	7440-28-0	EPA 200.8	0.002	0.001	BDL
3/24/17	170324007-01A						

NT: Not Tested

Lab MRL: Laboratory Minimum Reporting Level

BDL: Below Laboratory MRL. A less than (<) may also used.

mg/L: Milligrams per Liter

MCL: Maximum Contaminant Level

4/2/17  
 170324007-01A  
 N



Drinking Water Chain of Custody

page 1 of 2

Report To Information		BHI To Information (if different from report to)		State Form / Project Information	
Company Name:	<u>IDS-Hydro Consultants</u>	Company Name:	<u>JK WATER</u>	PWSID:	<u>CO 0121724</u>
Contact Name:	<u>Mark Wolfe</u>	Contact Name:	<u>JIM MORLEY</u>	System Name:	<u>STRAIGHTS RANCH MD</u>
Address:	<u>545 E. Miles Peck Avenue</u>	Address:	<u>20 Boulder Crescent</u>	Address:	<u>20 Boulder Crescent</u>
City	<u>CO</u>	City	<u>Calgary</u>	City	<u>CO 80903</u>
State/Zip	<u>80903</u>	State/Zip	<u>CO 80201</u>	State/Zip	<u>CO 80903</u>
Suite	<u>3-5</u>	Suite	<u>300</u>	County:	<u>El Paso</u>
Phone:	<u>719-237-0079x:</u>	Phone:	<u>719-237-0079x:</u>	Fax:	<u></u>
Email:	<u>M.Wolfe@jkwolfe.com</u>	Email:	<u>jmorley3870@aol.com</u>	Compliance Samples:	<u>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></u>
Sampler Name:	<u>Sophanie Schenke</u>	PO No.:	<u></u>	Send Forms to State:	<u>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></u>

卷之三

CAL Task No.  
170324007

Page 2 of 3



Drinking Water Chain of Custody

page 2 of 2

Report To Information		Bill To Information (if different from report to)		State Form / Project Information	
Company Name:	<u>JDS-Hydro Consultants</u>	Company Name:	<u>SE Water</u>	PWSID:	<u>00 01 21734</u>
Contact Name:	<u>Merk Volle</u>	Contact Name:	<u>Tim Marley</u>	System Name:	<u>Silver Ranch MD</u>
Address:	<u>545 E. Pikes Peak Ave</u>	Address:	<u>205 BoulderCresent</u>	Address:	<u>205 BoulderCresent</u>
City	<u>CS</u>	City	<u>CS</u>	City	<u>CS</u>
State/Zip	<u>CO 80910-3</u>	State/Zip	<u>CO 80910-3</u>	State/Zip	<u>CO 80910-3</u>
Phone:	<u>719-327-0072</u>	Phone:	<u>719-327-0072</u>	Phone:	<u>El Paso</u>
Email:	<u>mvolle@jdshydro.com</u>	Email:	<u>jmarley3870@cox.net</u>	Compliance Samples:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sampler Name:	<u>Sophie Schwenke</u>	PO No.:		Send Forms to State:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

CAI Tag

Page 3 of 3

PHASE I, II, V Drinking Water Analyses (check analysis)				Subcontract Analyses			
Date	Time	Client Sample ID / EP Code	No. of Contaminants	Date	Time	Sample Pres. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Headspace Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
3/23	8:01	#11	1				
	8:02	#12					
	8:03	#13					
	8:04	#14					
	8:05	#15					
	8:06	#16 (1,4 Dioxane)	3				
	8:07	#17					
	8:08	#18					
	8:09	#19					
	8:10	#20					
	8:11						
	8:12						
	8:13						
	8:14						
	8:15						
	8:16						
	8:17						
	8:18						
	8:19						
	8:20						
	8:21						
	8:22						
	8:23						
	8:24						
	8:25						
	8:26						
	8:27						
	8:28						
	8:29						
	8:30						
	8:31						
	8:32						
	8:33						
	8:34						
	8:35						
	8:36						
	8:37						
	8:38						
	8:39						
	8:40						
	8:41						
	8:42						
	8:43						
	8:44						
	8:45						
	8:46						
	8:47						
	8:48						
	8:49						
	8:50						
	8:51						
	8:52						
	8:53						
	8:54						
	8:55						
	8:56						
	8:57						
	8:58						
	8:59						
	8:60						
	8:61						
	8:62						
	8:63						
	8:64						
	8:65						
	8:66						
	8:67						
	8:68						
	8:69						
	8:70						
	8:71						
	8:72						
	8:73						
	8:74						
	8:75						
	8:76						
	8:77						
	8:78						
	8:79						
	8:80						
	8:81						
	8:82						
	8:83						
	8:84						
	8:85						
	8:86						
	8:87						
	8:88						
	8:89						
	8:90						
	8:91						
	8:92						
	8:93						
	8:94						
	8:95						
	8:96						
	8:97						
	8:98						
	8:99						
	8:100						
	8:101						
	8:102						
	8:103						
	8:104						
	8:105						
	8:106						
	8:107						
	8:108						
	8:109						
	8:110						
	8:111						
	8:112						
	8:113						
	8:114						
	8:115						
	8:116						
	8:117						
	8:118						
	8:119						
	8:120						
	8:121						
	8:122						
	8:123						
	8:124						
	8:125						
	8:126						
	8:127						
	8:128						
	8:129						
	8:130						
	8:131						
	8:132						
	8:133						
	8:134						
	8:135						
	8:136						
	8:137						
	8:138						
	8:139						
	8:140						
	8:141						
	8:142						
	8:143						
	8:144						
	8:145						
	8:146						
	8:147						
	8:148						
	8:149						
	8:150						
	8:151						
	8:152						
	8:153						
	8:154						
	8:155						
	8:156						
	8:157						
	8:158						
	8:159						
	8:160						
	8:161						
	8:162						
	8:163						
	8:164						
	8:165						
	8:166						
	8:167						
	8:168						
	8:169						
	8:170						
	8:171						
	8:172						
	8:173						
	8:174						
	8:175						
	8:176						
	8:177						
	8:178						
	8:179						
	8:180						
	8:181						
	8:182						
	8:183						
	8:184						
	8:185						
	8:186						
	8:187						
	8:188						
	8:189						
	8:190						
	8:191						
	8:192						
	8:193						
	8:194						
	8:195						
	8:196						
	8:197						
	8:198						
	8:199						
	8:200						
	8:201						
	8:202						
	8:203						
	8:204						
	8:205						
	8:206						
	8:207						
	8:208						
	8:209						
	8:210						
	8:211						
	8:212						
	8:213						
	8:214						
	8:215						
	8:216						
	8:217						
	8:218						
	8:219						
	8:220						
	8:221						
	8:222						
	8:223						
	8:224						
	8:225						
	8:226						
	8:227						
	8:228						
	8:229						
	8:230						
	8:231						
	8:232						
	8:233						
	8:234						
	8:235						
	8:236						
	8:237						
	8:238						
	8:239						
	8:240						
	8:241						
	8:242						
	8:243						
	8:244						
	8:245						
	8:246						
	8:247						
	8:248						
	8:249						
	8:250						
	8:251						
	8:252						
	8:253						
	8:254						
	8:255						
	8:256						
	8:257						
	8:258						
	8:259						
	8:260						
	8:261						
	8:262						
	8:263						
	8:264						
	8:265						
	8:266						
	8:267						
	8:268						
	8:269						
	8:270						
	8:271						
	8:272						
	8:273						
	8:274						
	8:275						
	8:276						
	8:277						
	8:278						
	8:279						
	8:280						
	8:281						
	8:282						
	8:283						



## Analytical Results

TASK NO: 170324007

Report To: Mark Volle  
Company: JDS Hydro Consultants  
545 E. Pikes Peak Ave  
Suite 300  
Colorado Springs CO 80903

Bill To: Jim Morley  
Company: SR Water  
20 Boulder Crescent St.  
Colorado Springs CO 80903

Task No.: 170324007  
Client PO:  
Client Project: Sterling Ranch MD CO0121724

Date Received: 3/24/17  
Date Reported: 4/21/17  
Matrix: Water - Drinking

Customer Sample ID: Sterling Ranch MD  
Sample Date/Time: 3/23/17 8:03 AM  
Lab Number: 170324007-01

Test	Result	Method	ML	Date Analyzed	Analyzed By
Bicarbonate	99.7 mg/L as CaCO <sub>3</sub>	SM 2320-B	0.1	3/28/17	VDB
Calcium as CaCO <sub>3</sub>	2.6 mg/L	SM 3111-B	0.1	3/30/17	MBN
Carbonate	< 0.1 mg/L as CaCO <sub>3</sub>	SM 2320-B	0.1	3/28/17	VDB
Langelier Index	-1.23 units	SM 2330-B		3/31/17	LJG
pH	8.16 units	SM 4500-H-B	0.01	3/24/17	MBN
Temperature	20 °C	SM 4500-H-B	1	3/24/17	MBN
Total Alkalinity	99.7 mg/L as CaCO <sub>3</sub>	SM 2320-B	0.1	3/28/17	VDB
Total Dissolved Solids	143 mg/L	SM 2540-C	5	3/29/17	ISG

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL  
mg/L = Milligrams Per Liter or PPM  
ug/L = Micrograms Per Liter or PPB  
mpn/100 ml = Most Probable Number Index/ 100 ml  
Date Analyzed = Date Test Completed

DATA APPROVED FOR RELEASE BY

## Drinking Water Chain of Custody

Page 1 of 2



Report To Information		State Form / Project Information	
Company Name: <u>DS-Hydro Consultants</u>	Company Name: <u>SR WATER</u>	PWSID: Co 0121724	Brighton Lab
Contact Name: <u>Mark Yelle</u>	Contact Name: <u>JSEM MOORE</u>	System Name: <u>STREAMING RANCH MD</u>	240 South Main Street Brighton, CO 80601
Address: <u>545 S. Pikes Peak Ave</u>	Address: <u>20 Boulders Crescent</u>	Address: <u>20 Boulder Crescent</u>	Lakewood Lab
City: <u>CO</u>	City: <u>CO</u>	City: <u>CO</u>	12860 W. Cedar Dr. Suite 100A Lakewood CO 80228
Suite: <u>300</u>	Suite: <u>20</u>	Suite: <u>20</u>	
Phone: <u>(719) 227-0079</u>	Phone: <u>(719) 227-0079</u>	Phone: <u>(719) 227-0079</u>	Phone: <u>303-659-2313</u> Fax: <u>303-659-2315</u>
Email: <u>m.yelle@hydrocs.com</u>	Email: <u>jmoore@srwater.com</u>	Email: <u>jmoore@srwater.com</u>	<a href="http://www.coloradolab.com">www.coloradolab.com</a>
Sampler Name: <u>Stephanie Schwenke</u>	PO No.: <u></u>	Send Form to State: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

## PHASE I, II, V Drinking Water Analyses (check analysis)

CAL Task No.  ARF	Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L)	Total Coliform P/A Samples Only	504.1 EDR/DBC	505 Pesticides	524.2 VOCs	548.1 Endothial	549.2 Diquat	552.2 HAA5s	524.2 THMs	Lead/Copper	Nitrate	Fluoride	Inorganics	Alk/Large mde	TOC, DOC (Circle)	UVVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Ra	Radon	Uranium
	3-23	7:55	#1	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		7:57	#2	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		7:58	#3	8:05	2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		8:11	#4	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		7:52	#5	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		7:53	#6	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		7:58	#7	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		7:59	#8	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		8:03	#10	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Instructions: No Hg SO4 preservative was included with the bottle shipment. Please preserve the shipment as soon as you receive the shipment.

Reinquished By:	Date/Time:	Received By:	Delivered Via: Fed Ex	C/S Charge	Temp. °C/Ice	Sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<i>[Signature]</i>	3-23 11:30am	<i>[Signature]</i>	Delivered Date/Time:	Date/Time:	3-3	Headspace Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Reinquished By:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Temp. °C/Ice	Sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<i>[Signature]</i>	3/24/17 10:00	<i>[Signature]</i>	<i>[Signature]</i>	3/24/17 10:00	3-3	Headspace Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

## Drinking Water Chain of Custody

Page 2 of 2



LABORATORIES, INC.

Report To Information		Bill To Information (if different from report to)		State Form / Project Information	
Company Name:	<u>JDS-Hydro Consultants</u>	Company Name:	<u>Sr Water</u>	PWSID:	<u>CD 0121734</u>
Contact Name:	<u>Mark Voller</u>	Contact Name:	<u>Tim Morey</u>	System Name:	<u>Silver Ranch MD</u>
Address:	<u>545 E. Pikes Peak Ave</u>	Address:	<u>200 Boulder Crest</u>	Address:	<u>200 Silver Ranch MD</u>
City	<u>CS</u>	City	<u>Boulder</u>	City	<u>CS</u>
State/Zip	<u>CO 80013</u>	State/Zip	<u>CO 80103</u>	State/Zip	<u>CO 80090-3</u>
Phone:	<u>719-327-0073</u>	Phone:	<u></u>	Fax:	<u>E1 Posco</u>
Email:	<u>Mvoller@jshydro.com</u>	Email:	<u>jmorey@srwater.com</u>	Compliance Samples: Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/>
Sampler Name:	<u>Stephene Schueren</u>	Sampler ID No.:	<u></u>	Send Forms to State:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

PHASE I, II, & V Drinking Water Analyses (check analysis)					
Subcontractor Analyses					
CYS Info:	Calcd	UV/VIS	TOC, DOC (Circle)	Afk/Lang-Index	SUVA, UV 234 (Circle)
Lead/Copper	Nitrite	Nitrate	Fluoride	Inorganic	Gross Alpha/Beta
524.2 THMs	549.2 Diquat	548.1 Endothall	547 Glyphosate	AKP/Lang-Index	Radium
552.2 HAA5s	549.2 Diquat	548.1 Endothall	547 Glyphosate	UV/Visible	Radiium 228
531.1 Carbamates	525.2 SOCs-Pest	548.1 Endothall	547 Glyphosate	UV/Visible	Radiium 226
505 Pests/PCBs	515.4 Herbicides	547 Glyphosate	547 Glyphosate	UV/Visible	Uranium
504.1 EDB/BCP	524.2 THMs	549.2 Diquat	547 Glyphosate	UV/Visible	
Total Coliform/P/A	524.2 THMs	549.2 Diquat	547 Glyphosate	UV/Visible	
Residual Chlorine (mg/L)	525.2 SOCs-Pest	548.1 Endothall	547 Glyphosate	UV/Visible	
No. of Samples Only	515.4 Herbicides	547 Glyphosate	547 Glyphosate	UV/Visible	
PA Samples Only	505 Pests/PCBs	547 Glyphosate	547 Glyphosate	UV/Visible	
(mg/L)	504.1 EDB/BCP	547 Glyphosate	547 Glyphosate	UV/Visible	
Instructions:	Instructions:	Instructions:	Instructions:	Instructions:	Instructions:
Delinquented By:	Date/Time:	Received By:	Date/Time:	Temp:	oC/Ice
Relinquished By:	Date/Time:	Delivered Via:	Date/Time:	Received By:	Sample Pres. Yes <input type="checkbox"/> No <input type="checkbox"/> Headspace Yes <input type="checkbox"/> No <input type="checkbox"/>
Initials	3-22-11	Initials	Initials	Initials	Date/Time:



Nitrate and Nitrite as Nitrogen Certified Laboratory Report Form  
WQCD - Drinking Water CAS  
Submit Online at <http://www.wqcdcompliance.com/login>

Revised 4/13/2015  
**NOX**

Section I (Supplied or Completed by Public Water System)				Section II (Supplied or Completed by Certified Laboratory)			
Public Water System Information				Certified Laboratory Information			
PWSID#:	CO0121724	Laboratory ID:	CO 0015	System Name:	Sterling Ranch MD	Laboratory Name:	Colorado Analytical Laboratory
Contact Person:	Mark Volle	Phone #:	719-227-0072	Contact Person:	Customer Service	Phone:	303-659-2313
Comments:		Comments:		Comments:		Comments:	
Section III (Supplied or Completed by Public Water System)				Section IV (Supplied or Completed by Certified Laboratory)			
Sample Date	Collector	Facility ID On Schedule	Sample Pt ID On Schedule	Confirmation?	Lab Receipt Date	Lab Analysis Date	Laboratory Sample ID #
3/23/17	Stephanie Schwank	New Well		<input type="checkbox"/>	3/24/17	3/24/17	170324007-01
3/23/17	Stephanie Schwank	New Well		<input type="checkbox"/>	3/24/17	3/24/17	170324007-01

NT: Not Tested  
Lab MRL: Laboratory Minimum Reporting Level  
BDL: Below Laboratory MRL. A less than (<) may also be used.

mg/L: Milligrams per Liter  
MCL: Maximum Contaminant Level

4/21/17  
170324007-01  
111  
N



Drinking Water Chain of Custody

page lot 2

Report To Information		State Form / Project Information	
Company Name: <u>JDS-Hydro Consultants</u>	Company Name: <u>SR WATER</u>	PWSID: CO 01217-24	System Name:
Contact Name: <u>Mark Mollo</u>	Contact Name: <u>JEM MORLEY</u>	Address: <u>Strawlings Ranch MD</u>	Address: <u>20 Boulders Crescent</u>
Address: <u>515 E. Pikes Peak Ave</u>	Address: <u>20 Boulders Crescent</u>	City: <u>COLORADO SPRINGS</u>	City: <u>COLO SPRINGS</u>
City: <u>CO</u>	City: <u>COLO SPRINGS</u>	City: <u>COLO SPRINGS</u>	City: <u>COLO SPRINGS</u>
Phone: <u>(719) 267-0074</u>	Phone: <u>(719) 267-0074</u>	Fax: <u></u>	Fax: <u></u>
Email: <u>m.mollo@jdshydro.com</u>	Email: <u>jmorley387@aol.com</u>	Compliance Samples: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Send Forms to State: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sampler Name: <u>Sediment Sampler PO#:</u>			

Page 2 of 3

# Drinking Water Chain of Custody

Page 2 of 2



## Report To Information

Company Name: JDS-Hydro Consultants

Contact Name: Mark Volle

Bill To Information (If different from report to)

Company Name: SR Water

Contact Name: Jim Morrissey

Brighton Lab  
240 South Main Street  
Brighton, CO 80601

Lakewood Lab  
12860 W. Cedar Dr, Suite 100A  
Lakewood CO 80228

Lakewood Lab  
12860 W. Cedar Dr, Suite 100A  
Lakewood CO 80228

Phone: 303-659-2313  
Fax: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)

State Form / Project Information	
PW/SID:	00 01 21734
System Name:	<u>Ses Am Park MD</u>
Address:	<u>20 Boulder Crest</u>
City	<u>CS</u>
State/Zip	<u>CO 80103</u>
City	<u>CS</u>
State/Zip	<u>CO 80103</u>
Phone:	<u>719-327-0072</u>
Fax:	<u></u>
Email:	<u>Mvolle@jdsphere.com</u>
Sampler Name:	<u>Sophrene Schuerenker</u>
Project No.:	<u>#64</u>
Compliance Samples: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Send Forms to State: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

CAL Task No.  
170324007

ARF

Page 3 of 3

No. of Contaminants	Residual Chlorine (mg/L)	Total Coliform P/A	So4.1 EDR/DBCP	505 Pesticides/PCBs	515.4 Herbicides	547 Glyphosate	548.1 Endothiazil	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	ALK/Lang. Index	SVA, DOC (Circle)	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium	Subcontract Analyses				
																							Subcontract Analyses				
1																									X		
2																									X		
3																									X		
4																									X		
5																									X		
6																									X		
7																									X		
8																									X		
9																									X		
10																									X		
11																									X		
12																									X		
13																									X		
14																									X		
15																									X		
16																									X		
17																									X		
18																									X		
19																									X		
20																									X		
21																									X		
22																									X		
23																									X		
24																									X		
25																									X		
26																									X		
27																									X		
28																									X		
29																									X		
30																									X		
31																									X		
32																									X		
33																									X		
34																									X		
35																									X		
36																									X		
37																									X		
38																									X		
39																									X		
40																									X		
41																									X		
42																									X		
43																									X		
44																									X		
45																									X		
46																									X		
47																									X		
48																									X		
49																									X		
50																									X		
51																									X		
52																									X		
53																									X		
54																									X		
55																									X		
56																									X		
57																									X		
58																									X		
59																									X		
60																									X		
61																									X		
62																									X		
63																									X		
64																									X		
65																									X		
66																									X		
67																									X		
68																									X		
69																									X		
70																									X		
71																									X		
72																									X		
73																									X		
74																											



Colorado Department  
of Public Health  
and Environment

**Organic Chemicals Certified Laboratory Report Form**  
**WQCD - Drinking Water CAS**  
**Submit Online at <http://www.wqedcompliance.com/login>**

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)	
Public Water System Information		Certified Laboratory Information	
PWSID#: CO0121724		Laboratory ID: CO 00063	
System Name: Sterling Ranch MD		Laboratory Name: Colorado Analytical Laboratory	
Contact Person: Mark Vole	Phone #: 719-227-0072	Contact Person: Customer Service	Phone: 303-659-2313
Comments:	Do Samples Need to be Composed BY THE LAB?	Comments:	<input type="checkbox"/>

Section III (Supplied or Completed by Public Water System)		Section IV (Supplied or Completed by Certified Laboratory)	
Public Water System Information		Certified Laboratory Information	
PWSID#: CO0121724	Sample Date: 3/23/17	Collector: Stephanie Schwenk	Facility ID (On Schedule): New Well
Section VI Synthetic Organic Chemicals (Supplied or Completed by Certified Laboratory)		Sample Pt ID (On Schedule): New Well	
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name
3/24/17	4/3/17	170324007-01E	Dibromochloropropane
3/24/17	3/29/17	170324007-01G	2,4-D
3/24/17	3/29/17	170324007-01G	2,4,5-TP
3/24/17	3/31/17	170324007-01I	Atracitor
3/24/17	3/31/17	170324007-01J	Aldicarb
3/24/17	3/31/17	170324007-01J	Aldicarb sulfone
3/24/17	3/31/17	170324007-01J	Aldicarb sulfoxide
3/24/17	3/31/17	170324007-01J	Atrazine
3/24/17	3/31/17	170324007-01J	Benz(a)pyrene
3/24/17	3/31/17	170324007-01J	Carbofuran
3/24/17	3/30/17	170324007-01F	Chlordane
3/24/17	3/29/17	170324007-01G	Dalapon
3/24/17	3/31/17	170324007-01J	Di(2-ethylhexyl)adipate
3/24/17	3/31/17	170324007-01J	Di(2-ethylhexyl)phthalate
3/24/17	3/29/17	170324007-01G	Diosob
3/24/17	3/29/17	170324007-01L	Diquat
3/24/17	3/29/17	170324007-01K	Endothall
3/24/17	3/30/17	170324007-01F	Endrin
3/24/17	4/3/17	170324007-01E	Ethylene dibromide
3/24/17	3/31/17	170324007-01J	Heptachlor
3/24/17	3/30/17	170324007-01F	Heptachlor epoxide

Section V (Supplied or Completed by Public Water System)		Section VI (Supplied or Completed by Certified Laboratory)	
Lab Receipt Date	Lab Sample ID	CAS No	Analytical Method
3/24/17	4/3/17	96-12-8	EPA 504.1
3/24/17	3/29/17	94-75-7	EPA 515.4
3/24/17	3/29/17	93-72-1	EPA 515.4
3/24/17	3/31/17	15972-60-8	EPA 525.2
3/24/17	3/31/17	116-06-3	EPA 531.1
3/24/17	3/31/17	1646-58-4	EPA 531.1
3/24/17	3/31/17	1646-87-3	EPA 531.1
3/24/17	3/31/17	1912-24-9	EPA 525.2
3/24/17	3/31/17	50-32-8	EPA 525.2
3/24/17	3/31/17	1563-66-2	EPA 531.1
3/24/17	3/30/17	57-74-9	EPA 505
3/24/17	3/29/17	75-99-0	EPA 515.4
3/24/17	3/31/17	103-23-1	EPA 525.2
3/24/17	3/31/17	117-81-7	EPA 525.2
3/24/17	3/29/17	85-85-7	EPA 515.4
3/24/17	3/29/17	85-00-7	EPA 549.2
3/24/17	3/29/17	145-73-3	EPA 548.1
3/24/17	3/30/17	72-20-8	EPA 505
3/24/17	4/3/17	106-93-4	EPA 504.1
3/24/17	3/31/17	76-44-8	EPA 525.2
3/24/17	3/30/17	1024-57-3	EPA 505

NT: Not Tested ug/L. MCL: Maximum Contaminant Level. BDL: Below Laboratory MRL. A less than sign (<) may also be used.

Revised 4/13/2015  
170324007-01 N 1/2  
4/21/17

PWSID#: CO0121724		Section V (Supplied or Completed by Public Water System)					
Sample Date:	3/23/17	Collector:	Stephanie Schwenk	Facility ID (On Schedule):	New Well	Sample Pt ID (On Schedule):	New Well
Section VI Synthetic Organic Chemicals (Supplied or Completed by Certified Laboratory)							
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analytic Name	CAS No	Analytical Method	MCL (ug/L)	Lab MRL (ug/L)
3/24/17	3/30/17	170324007-01F	Hexachlorobenzene	118-74-1	EPA 505	1	0.1
3/24/17	3/30/17	170324007-01F	Hexachlorocyclopentadiene	71-47-4	EPA 505	50	0.1
3/24/17	3/30/17	170324007-01F	Indane	58-89-9	EPA 505	0.2	0.02
3/24/17	3/30/17	170324007-01F	Methoxychlor	72-43-5	EPA 505	40	0.1
3/24/17	3/31/17	170324007-01J	Oxamy	23135-22-0	EPA 5311	200	1
3/24/17	3/29/17	170324007-01G	Pentachlorophenol	87-96-5	EPA 5154	1	0.04
3/24/17	3/29/17	170324007-01G	Pictoran	1918-02-1	EPA 5154	500	0.1
3/24/17	3/30/17	170324007-01F	Polychlorinated biphenyl's	1336-36-3	EPA 505	0.5	0.1
3/24/17	3/31/17	170324007-01I	Simazine	122-34-9	EPA 525-2	4	0.07
3/24/17	3/30/17	170324007-01F	Toxaphene	8001-35-2	EPA 505	3	1
					BDL		

NT: Not Tested ug/L: Micrograms per Liter MCL: Maximum Containment Level BDL: Below Laboratory MRL A less than sign (<) may also be used.

170324007-01 N 2/2 4/17



Drinking Water Chain of Custody

page lot 2

Report To Information		Bill To Information (if different from report to)		State Form / Project Information	
Company Name:	<u>JDS-Hydro Consultants</u>	Company Name:	<u>SR WATER</u>	FWSID:	<u>CO 0121724</u>
Contact Name:	<u>Mark Volle</u>	Contact Name:	<u>JEM MORLEY</u>	System Name:	<u>STRANING RANCH MD</u>
Address:	<u>545 E. Pikes Peak Ave</u>	Address:	<u>20 Boulders Crescent</u>	Address:	<u>20 BOUNDER CRESCEANT</u>
City	<u>CS</u>	City	<u>COLORADO SPRINGS</u>	City	<u>COLORADO SPRINGS</u>
State/Zip:	<u>80903</u>	State/Zip:	<u>80903</u>	State/Zip:	<u>80903</u>
Phone:	<u>719-227-0072</u>	Phone:	<u>719-227-0072</u>	Phone:	<u>719-227-0072</u>
Email:	<u>M.volle@jds-hydro.com</u>	Email:	<u>jmorley.387@comcast.net</u>	Compliance Samples:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sampler Name:	<u>Sophrene Schenck</u>	PO No.:		Send Forms to State:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>

Page 3 of 4



Drinking Water Chain of Custody

Page 2 of 2

Report To Information		Bill To Information (If different from report to)		State Form / Project Information	
Company Name:	<u>DDS-Hydric Consultants</u>	Company Name:	<u>SK Water</u>	PWSID:	<u>000121734</u>
Contact Name:	<u>Mark Mville</u>	Contact Name:	<u>Jim Morley</u>	System Name:	<u>Silver Branch MD</u>
Address:	<u>245 E. Pikes Peak Ave</u>	Address:	<u>200 Boulder Crescent</u>	Address:	<u>200 Boulder Crescent</u>
City CS	<u>Colorado Springs</u>	City CS	<u>Boulder CO</u>	City CS	<u>Boulder CO</u>
State CO	<u>80903</u>	State CO	<u>80103</u>	State CO	<u>80303</u>
Phone:	<u>719-527-0072</u>	Phone:	<u>719-527-0072</u>	Phone:	<u>719-527-0072</u>
Email:	<u>mville@jdmhydro.com</u>	Email:	<u>jmorley3870@aol.com</u>	Email:	<u>jmorley3870@aol.com</u>
Sample Name:	<u>Sophene Schuerkamp</u>	Sample Name:	<u>Sophene Schuerkamp</u>	Sample Name:	<u>Sophene Schuerkamp</u>
				Compliance Sampled: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
				Send Forms to State: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	



Colorado Department  
of Public Health  
and Environment

### Radionuclides Certified Laboratory Report Form

Revision 6/13/2014

**RAD**

WQCD – Drinking Water CAS  
4300 Cherry Creek Drive South; Denver, CO 80246-1530  
Fax: (303) 758-1398; cdph.drinkingswater@state.co.us

Section I (Supplied or Completed by Public Water System)				Section II (Supplied or Completed by Certified Laboratory)			
PWS ID: C000121724				Laboratory ID: CO 00008		Certified Laboratory Information	
System Name: Sterling Ranch MD		Contact Person:		Laboratory Name: Hazen Research, Inc.		Phone #: 303-279-4501	
Comments:		Phone #:		Contact Person: Jessica Axen			
		Do Samples Need to be Composted BY THE LAB?		Comments:			
Section III (Supplied or Completed by Public Water System)							
Sample Date: 03/23/2017		Collector:		Facility ID (On Schedule):		Sample Pt ID (On Schedule):	
Section IV Radionuclides (Supplied or Completed by Certified Laboratory)							
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name (Code)	CAS No.	Analytical Method	MCL	Lab MRL
03/24/2017	04/18/2017	C27017-001	Gross Alpha Including Uranium (4002)	12587-46-1	SM 7110 B	N/A	1.5
			Combined Uranium (4006)	7440-61-1	D2907-97	30 $\mu\text{g/L}$	
03/24/2017	04/07/2017	C27017-001	Radium -226 (4020)	13982-63-3	SM 7500-Ra B	N/A	0.1
03/24/2017	03/30/2017	C27017-001	Radium -228 (4030)	15262-20-1	EPA Ra-05	N/A	0.2( $\pm$ 0.6)
03/24/2017	04/18/2017	C27017-001	Gross Beta (4100)	12587-47-2	SM 7110 B	50 pCi/L *	2.1
			Total Dissolved Solids (1930)		EPA 160.3	N/A	
*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern.							
Section V Calculated Values							
N/A		Gross Alpha Excluding Uranium (4000)		Calculated Value	15 pCi/L	N/A	
		Combined Radium {-226 & -228} (4010)		Calculated Value	5 pCi/L	N/A	

NT: Not Tested

Lab MRL: Laboratory Minimum Reporting Level

BDL: Below Laboratory MRL. A less than sign (<) may also be used

$\mu\text{g/L}$ : Micrograms per Liter

pCi/L: Picocuries per Liter

MCL: Maximum Contaminant Level

## Drinking Water Chain of Custody

State Form / Project Information

Report To Information  
Company Name: Colorado Analytical Labs

BU To Information (if different from report to)  
Company Name: Same

Contact Name: Stuart Nielsen

Contact Name: \_\_\_\_\_

Address:  
P.O. Box 507

Address:  
20 Boulder Crescent  
City: Colo Spgs State: CO Zip: 80903

Cty: Brighton State: CO Zip: 80601

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: 303-659-2313 Fax: 303-659-2315

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: stuartnielsen@coloradolab.com

Email: \_\_\_\_\_

Sampler Name:

PO No.: \_\_\_\_\_  
Send Forms to State: Yes  No

### PHASE I, II, V Drinking Water Analyses (check analysis)

CAL Task No.

170324007

Subcontract Analyses

ARF

Date Time Client Sample ID / EP Code

No. of Containers

		Residual Chlorine (mg/L) P/A Samples Only
		Total Coliform P/A
		504.1 EDB/DBCP
		505 Pests/PCBs
		515.4 Herbicides
		524.2 VOCs
		525.2 SOCs-Pest
		531.1 Carbamates
		547 Glyphosate
		548.1 Endothall
		549.2 Diquat
		524.2 TTHMs
		552.2 HAA5s
		Lead/Copper
		Nitrate
		Nitrite
		Fluoride
		Inorganics
		Alk./Lang. Index
		TOC, DOC (Circle)
		SUVA, UV 254 (Circle)
		Gross Alpha /Beta
		Radium 226
		Radium 228
		Radon
		Uranium

Date Time Relinquished By:

Received By:

Delivered Via:

Date/Time:

Temp. °C/°F

C/S Charge

Headspace Yes  No

Sample Pres. Yes  No

Seals Present Yes  No

Instructions: Gross Alpha, without Radon & Uranium. \*\* Combined Radium -226 & -228.  
Please print results on Colorado State form but do not submit to CDPHE. Thank you.

  
**Colorado Analytical**  
Laboratories, Inc.

PWSID: CO0121724

System Name: Sterling Ranch MD

Brighton Lab  
240 South Main Street  
Brighton, CO 80601

Lakewood Lab  
12860 W. Cedar Dr, Suite 101  
Lakewood CO 80228

Phone: 303-659-2313  
Fax: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)

Relinquished By: <i>J. McNeil</i>	Date/Time: 3/24/17 11:50	Received By:	Date/Time:	Delivered Via: <i>HD</i>	C/S Charge <input type="checkbox"/>	Date/Time:	Temp. °C/°F	Headspace Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Sample Pres. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Seals Present Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Reinquished By: <i>J. McNeil</i>	Date/Time: 3/24/17 11:52	Received By:	Date/Time:	Delivered Via: <i>HD</i>	C/S Charge <input type="checkbox"/>	Date/Time:	Temp. °C/°F	Headspace Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Sample Pres. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Seals Present Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>



## Analytical Results

TASK NO: 170324007

Report To: Mark Volle  
Company: JDS Hydro Consultants  
545 E. Pikes Peak Ave  
Suite 300  
Colorado Springs CO 80903

Bill To: Jim Morley  
Company: SR Water  
20 Boulder Crescent St.  
Colorado Springs CO 80903

Task No.: 170324007  
Client PO:  
Client Project: Sterling Ranch MD CO0121724

Date Received: 3/24/17  
Date Reported: 4/21/17  
Matrix: Water - Drinking

Customer Sample ID: Sterling Ranch MD  
Sample Date/Time: 3/23/17 8:03 AM  
Lab Number: 170324007-01

Facility ID: New Well  
Sample Point ID: New Well

Test	Result	Method	ML	Date Analyzed	Analyzed By
Chloride	1.3 mg/L	EPA 300.0	0.1 mg/L	3/24/17	LJG
Cyanide-Free	< 0.005 mg/L	EPA 335.4	0.005 mg/L	3/28/17	VDB
E-Coli	< 1 mpn/100ml	Colbert	1 mpn/100ml	3/25/17	VDB
Sulfate	10.7 mg/L	EPA 300.0	0.1 mg/L	3/24/17	LJG
Total Coliform	68 mpn/100ml	Colbert	1 mpn/100ml	3/25/17	VDB
Total Organic Carbon	< 0.5 mg/L	SM 5310-C	0.5 mg/L	3/28/17	ISG
Turbidity	1.08 NTU	SM 2130-B	0.01 NTU	3/24/17	MBN
<i>Total</i>					
Aluminum	0.032 mg/L	EPA 200.8	0.001 mg/L	3/29/17	TCD
Calcium	1.0 mg/L	EPA 200.7	0.1 mg/L	3/29/17	MBN
Copper	< 0.0008 mg/L	EPA 200.8	0.0008 mg/L	3/29/17	TCD
Iron	0.180 mg/L	EPA 200.7	0.005 mg/L	3/30/17	MBN
Lead	0.0002 mg/L	EPA 200.8	0.0001 mg/L	3/29/17	TCD
Magnesium	0.06 mg/L	EPA 200.7	0.02 mg/L	3/29/17	MBN
Manganese	0.0071 mg/L	EPA 200.8	0.0008 mg/L	3/29/17	TCD
Potassium	1.0 mg/L	EPA 200.7	0.1 mg/L	3/29/17	MBN
Silver	< 0.0001 mg/L	EPA 200.8	0.0001 mg/L	3/29/17	TCD
Strontium	0.009 mg/L	EPA 200.8	0.005 mg/L	3/29/17	TCD
Total Hardness	2.7 mg/L as CaCO <sub>3</sub>	SM 2340-B	0.1 mg/L as CaCO <sub>3</sub>	3/30/17	MBN
Uranium	< 0.0002 mg/L	EPA 200.8	0.0002 mg/L	3/29/17	TCD
Zinc	0.002 mg/L	EPA 200.8	0.001 mg/L	3/29/17	TCD

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL  
mg/L = Milligrams Per Liter or PPM  
ug/L = Micrograms Per Liter or PPB  
mpn/100 mls = Most Probable Number Index/ 100 mls  
Date Analyzed = Date Test Completed

DATA APPROVED FOR RELEASE BY

240 South Main Street / Brighton, CO 80601-0507 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507 / Fax: 303-659-2315



## Analytical Results

**TASK NO: 170324007**

**Report To:** Mark Volle

**Company:** JDS Hydro Consultants  
545 E. Pikes Peak Ave  
Suite 300  
Colorado Springs CO 80903

**Bill To:** Jim Morley

**Company:** SR Water  
20 Boulder Crescent St.  
Colorado Springs CO 80903

**Task No.:** 170324007

**Client PO:**

**Client Project:** Sterling Ranch MD CO0121724

**Date Received:** 3/24/17

**Date Reported:** 4/21/17

**Matrix:** Water - Drinking

**Customer Sample ID:** Sterling Ranch MD  
**Sample Date/Time:** 3/23/17 8:03 AM  
**Lab Number:** 170324007-01

**Facility ID:** New Well  
**Sample Point ID:** New Well

<b>Test</b>	<b>Result</b>	<b>Method</b>	<b>ML</b>	<b>Date Analyzed</b>	<b>Analyzed By</b>
<i>Total</i>					
Zinc	0.002 mg/L	EPA 200.8	0.001 mg/L	3/29/17	TCD

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

A handwritten signature in black ink that reads "Steve Riebau".

DATA APPROVED FOR RELEASE BY

**240 South Main Street / Brighton, CO 80601-0507 / 303-659-2313**  
**Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507 / Fax: 303-659-2315**



Drinking Water Chain of Custody

page 1 of 2

Report To Information		State Form / Project Information			
Company Name:	<u>JDS-HydroConsultants</u>	Company Name:	<u>SR WATER</u>	PWSID:	<u>CO 0121724</u>
Contact Name:	<u>Mark Valle</u>	Contact Name:	<u>JIM MOALEY</u>	System Name:	<u>STRALEYS RANCH HD</u>
Address:	<u>545 E. Pikes Peak Ave</u>	Address:	<u>26 Boulders Crescent</u>	Address:	<u>20 Boulder Crestcourt</u>
City	<u>CO</u>	City	<u>CO</u>	City	<u>CO</u>
Zip	<u>80903</u>	Zip	<u>80903</u>	Zip	<u>80903</u>
Phone:	<u>719-267-0678</u>	Phone:	<u>303-495-1200</u>	Phone:	<u>303-495-1200</u>
Email:	<u>mvalle@jdshydro.com</u>	Email:	<u>jimaley3840@aol.com</u>	Email:	<u>stevene.schwerke@no</u>
Sampler Name:	<u>Stephane Schwerke</u>	Sampler Name:	<u>No</u>	Compliance Sample:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> Send Forms to Sampler: Yes <input type="checkbox"/> No	

Supplier Name: Technic Diesel U No.: 11111111111111111111

Page 3 of 4





Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.051  
Gillette, WY 866.686.7175 • Helena, MT 877.472.071

## ANALYTICAL SUMMARY REPORT

April 06, 2017

Colorado Analytical Laboratories Inc

PO Drawer 507  
Brighton, CO 80601

Work Order: C17030850      Quote ID: C4542 - 624, 625, 1,4-Dioxane

Project Name: 170324007 Sterling Ranch MD

Energy Laboratories, Inc. Casper WY received the following 1 sample for Colorado Analytical Laboratories Inc on 3/28/2017 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C17030850-001	170324007 Sterling Ranch MD	03/23/17 8:03	03/28/17	Groundwater	Azeotropic Distillation Separatory Funnel Liquid-Liquid Ext. Semi-Volatile Organic Compounds 624-Purgeable Organics Volatile Compounds by Azeotropic Distillation

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

  
Randy Horton, Project Manager

Digitally signed by  
Randy Horton  
Date: 2017.04.06 16:31:29 -06:00



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

**CLIENT:** Colorado Analytical Laboratories Inc  
**Project:** 170324007 Sterling Ranch MD  
**Work Order:** C17030850

**Report Date:** 04/06/17

## CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

**LABORATORY ANALYTICAL REPORT**

Prepared by Casper, WY Branch

**Client:** Colorado Analytical Laboratories Inc  
**Project:** 170324007 Sterling Ranch MD  
**Lab ID:** C17030850-001  
**Client Sample ID:** 170324007 Sterling Ranch MD

**Report Date:** 04/06/17  
**Collection Date:** 03/23/17 08:03  
**DateReceived:** 03/28/17  
**Matrix:** Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>VOCS BY AZEOTROPIC DISTILLATION</b>							
1,4-Dioxane	ND	ug/L		1.0	Sv8260M		04/06/17 09:34 / ell-b
- Analysis by direct aqueous injection of the sample distillate. A deuterated version of 1,4-Dioxane was added to the sample prior to distillation and used to quantitate the 1,4-Dioxane and account for any variations in the analysis or distillation.							
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Acetone	ND	ug/L		20	E624		03/31/17 16:09 / ell-b
Acetonitrile	ND	ug/L		20	E624		03/31/17 16:09 / ell-b
Acrolein	ND	ug/L		20	E624		03/31/17 16:09 / ell-b
Acrylonitrile	ND	ug/L		20	E624		03/31/17 16:09 / ell-b
Benzene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Bromobenzene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Bromo(chloromethane)	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Bromodichloromethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Bromoform	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Bromomethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Carbon disulfide	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Carbon tetrachloride	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Chlorobenzene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Chlorodibromomethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Chloroethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
2-Chloroethyl vinyl ether	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Chloroform	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Chloromethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
2-Chlorotoluene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
4-Chlorotoluene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
1,2-Dibromoethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Dibromomethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
1,2-Dichlorobenzene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
1,3-Dichlorobenzene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
1,4-Dichlorobenzene	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
Dichlorodifluoromethane	ND	ug/L		1.0	E624		03/31/17 16:09 / ell-b
1,1-Dichloroethane	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
1,2-Dichloroethane	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
1,1-Dichloroethene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
cis-1,2-Dichloroethene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
trans-1,2-Dichloroethene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
1,2-Dichloropropane	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
1,3-Dichloropropane	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
2,2-Dichloropropane	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
1,1-Dichloropropene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
cis-1,3-Dichloropropene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
trans-1,3-Dichloropropene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b
Ethylbenzene	ND	ug/L		1.0	E624		03/31/17 16:08 / ell-b

**Report Definitions:** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

**MCL** - Maximum contaminant level.  
**ND** - Not detected at the reporting limit.

**LABORATORY ANALYTICAL REPORT**

Prepared by Casper, WY Branch

**Client:** Colorado Analytical Laboratories Inc  
**Project:** 170324007 Sterling Ranch MD  
**Lab ID:** C17030850-001  
**Client Sample ID:** 170324007 Sterling Ranch MD

**Report Date:** 04/06/17  
**Collection Date:** 03/23/17 08:03  
**DateReceived:** 03/28/17  
**Matrix:** Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/QCL	Method	Analysis Date / By
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Methyl tert-butyl ether (MTBE)	ND	ug/L		2.0	E624		03/31/17 16:09 / eli-b
Methyl ethyl ketone	ND	ug/L		20	E624		03/31/17 16:09 / eli-b
Methyl Isobutyl ketone	ND	ug/L		10	E624		03/31/17 16:09 / eli-b
Methylene chloride	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Naphthalene	ND	ug/L		0.50	E624		03/31/17 16:09 / eli-b
Styrene	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Tetrachloroethene	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Toluene	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Trichloroethene	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
1,1,1-Trichloroethane	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
1,1,2-Trichloroethane	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Trichlorofluoromethane	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
1,2,3-Trichloropropane	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Vinyl Acetate	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Vinyl chloride	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
m,p-Xylenes	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
c-Xylene	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Xylenes, Total	ND	ug/L		1.0	E624		03/31/17 16:09 / eli-b
Surr: 1,2-Dichloroethane-d4	105	%REC		71-139	E624		03/31/17 16:09 / eli-b
Surr: p-Bromofluorobenzene	102	%REC		80-127	E624		03/31/17 16:09 / eli-b
Surr: Toluene-d8	92.0	%REC		80-123	E624		03/31/17 16:09 / eli-b
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
Acenaphthene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Acenaphthylene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Anthracene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Azobenzene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Benzidine	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Benzo(a)anthracene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Benzo(a)pyrene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Benzo(b)fluoranthene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Benzo(g,h,i)perylene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Benzo(k)fluoranthene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
4-Bromophenyl phenyl ether	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
Butylbenzylphthalate	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
4-Chloro-3-methylphenol	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
bis(-2-chloroethoxy)Methane	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
bis(-2-chloroethyl)Ether	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
bis(2-chloroisopropyl)Ether	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
2-Chloronaphthalene	ND	ug/L		10	E625		03/30/17 17:14 / eli-b
2-Chlorophenol	ND	ug/L		10	E625		03/30/17 17:14 / eli-b

**Report Definitions:** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

**LABORATORY ANALYTICAL REPORT**

Prepared by Casper, WY Branch

**Client:** Colorado Analytical Laboratories Inc  
**Project:** 170324007 Sterling Ranch MD  
**Lab ID:** C17030850-001  
**Client Sample ID:** 170324007 Sterling Ranch MD

**Report Date:** 04/06/17  
**Collection Date:** 03/23/17 08:03  
**DateReceived:** 03/28/17  
**Matrix:** Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
4-Chlorophenyl phenyl ether	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Chrysene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Diethyl phthalate	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Di-n-butyl phthalate	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
1,2-Dichlorobenzene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
1,3-Dichlorobenzene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
1,4-Dichlorobenzene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
3,3'-Dichlorobenzidine	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
2,4-Dichlorophenol	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Dimethyl phthalate	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Di-n-octyl phthalate	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Dibenzo(a,h)anthracene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
2,4-Dimethylphenol	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
4,6-Dinitro-2-methylphenol	ND	ug/L		50	E625		03/30/17 17:14 / ell-b
2,4-Dinitrophenol	ND	ug/L		50	E625		03/30/17 17:14 / ell-b
2,4-Dinitrotoluene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
2,6-Dinitrotoluene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
bis(2-ethylhexyl)Phthalate	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Fluoranthene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Fluorene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Hexachlorobenzene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Hexachlorobutadiene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Hexachlorocyclopentadiene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Hexachloroethane	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Indeno(1,2,3-cd)pyrene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Isophorone	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
n-Nitrosodimethylamine	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
n-Nitroso-di-n-propylamine	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
n-Nitrosodiphenylamine	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
2-Nitrophenol	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
4-Nitrophenol	ND	ug/L		50	E625		03/30/17 17:14 / ell-b
Naphthalene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Nitrobenzene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Pentachlorophenol	ND	ug/L		50	E625		03/30/17 17:14 / ell-b
Phenanthrene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Phenol	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Pyrene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
1,2,4-Trichlorobenzene	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
2,4,6-Trichlorophenol	ND	ug/L		10	E625		03/30/17 17:14 / ell-b
Surr: 2-Fluorobiphenyl	61.0	%REC		28-107	E625		03/30/17 17:14 / ell-b
Surr: 2-Fluorophenol	39.0	%REC		20-56	E625		03/30/17 17:14 / ell-b
Surr: Nitrobenzene-d5	63.0	%REC		32-94	E625		03/30/17 17:14 / ell-b
Surr: Phenol-d5	27.0	%REC		19-45	E625		03/30/17 17:14 / ell-b

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.  
 ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

## LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc  
Project: 170324007 Sterling Ranch MD  
Lab ID: C17030850-001  
Client Sample ID: 170324007 Sterling Ranch MD

Report Date: 04/06/17  
Collection Date: 03/23/17 08:03  
DateReceived: 03/28/17  
Matrix: Groundwater

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
Surr: Terphenyl-d14	70.0	%REC		32-122		E625	03/30/17 17:14 / eli-b
Surr: 2,4,6-Tribromophenol	68.0	%REC		21-130		E625	03/30/17 17:14 / eli-b

Report Definitions:  
RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E624									Analytical Run: R277281
<b>Lab ID:</b> ccv033117									03/31/17 08:45
<b>Continuing Calibration Verification Standard</b>									
Acetone	58.0	ug/L	20	116	70	130			
Acetonitrile	56.4	ug/L	20	113	70	130			
Acrolein	56.4	ug/L	20	113	70	130			
Acrylonitrile	49.6	ug/L	20	99	70	130			
Benzene	5.08	ug/L	0.50	102	70	130			
Bromobenzene	5.04	ug/L	0.50	101	70	130			
Bromochloromethane	5.36	ug/L	0.50	107	70	130			
Bromodichloromethane	4.92	ug/L	0.50	98	70	130			
Bromoform	5.04	ug/L	0.50	101	70	130			
Bromomethane	4.28	ug/L	0.50	86	70	130			
Carbon disulfide	5.32	ug/L	0.50	106	70	130			
Carbon tetrachloride	5.80	ug/L	0.50	116	70	130			
Chlorobenzene	4.56	ug/L	0.50	91	70	130			
Chlorodibromomethane	5.04	ug/L	0.50	101	70	130			
Chloroethane	4.80	ug/L	0.50	96	70	130			
2-Chloroethyl vinyl ether	2.90	ug/L	1.0	58	70	130	S		
Chloroform	5.60	ug/L	0.50	112	70	130			
Chloromethane	3.82	ug/L	0.50	76	70	130			
2-Chlorotoluene	5.00	ug/L	0.50	100	70	130			
4-Chlorotoluene	5.44	ug/L	0.50	109	70	130			
1,2-Dibromoethane	4.68	ug/L	0.50	94	70	130			
Dibromomethane	4.96	ug/L	0.50	99	70	130			
1,2-Dichlorobenzene	5.04	ug/L	0.50	101	70	130			
1,3-Dichlorobenzene	5.16	ug/L	0.50	103	70	130			
1,4-Dichlorobenzene	5.00	ug/L	0.50	100	70	130			
Dichlorodifluoromethane	5.20	ug/L	0.50	104	70	130			
1,1-Dichloroethane	4.96	ug/L	0.50	99	70	130			
1,2-Dichloroethane	6.24	ug/L	0.50	125	70	130			
1,1-Dichloroethene	5.12	ug/L	0.50	102	70	130			
cis-1,2-Dichloroethene	4.76	ug/L	0.50	95	70	130			
trans-1,2-Dichloroethene	5.00	ug/L	0.50	100	70	130			
1,2-Dichloropropane	4.88	ug/L	0.50	98	70	130			
1,3-Dichloropropane	4.88	ug/L	0.50	98	70	130			
2,2-Dichloropropane	5.72	ug/L	0.50	114	70	130			
1,1-Dichloropropene	5.44	ug/L	0.50	108	70	130			
cis-1,3-Dichloropropene	4.80	ug/L	0.50	96	70	130			
trans-1,3-Dichloropropene	4.84	ug/L	0.50	97	70	130			
Ethylbenzene	4.88	ug/L	0.50	98	70	130			
Methyl tert-butyl ether (MTBE)	5.20	ug/L	0.50	104	70	130			
Methyl ethyl ketone	54.0	ug/L	20	108	70	130			
Methyl isobutyl ketone	50.4	ug/L	20	101	70	130			
Methylene chloride	5.88	ug/L	0.50	118	70	130			
Naphthalene	5.08	ug/L	0.50	102	70	130			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E624</b>									Analytical Run: R277281
<b>Lab ID: ccv033117</b>									03/31/17 08:45
		Continuing Calibration Verification Standard							
Styrene	4.52	ug/L	0.50	90	70	130			
Tetrachloroethene	4.68	ug/L	0.50	94	70	130			
1,1,1,2-Tetrachloroethane	4.72	ug/L	0.50	94	70	130			
1,1,2,2-Tetrachloroethane	4.96	ug/L	0.50	99	70	130			
Toluene	4.76	ug/L	0.50	95	70	130			
Trichloroethene	4.92	ug/L	0.50	98	70	130			
1,1,1-Trichloroethane	5.72	ug/L	0.50	114	70	130			
1,1,2-Trichloroethane	4.72	ug/L	0.50	94	70	130			
Trichlorofluoromethane	4.88	ug/L	0.50	98	70	130			
1,2,3-Trichloropropane	5.24	ug/L	0.50	105	70	130			
Vinyl Acetate	5.32	ug/L	1.0	106	70	130			
Vinyl chloride	4.60	ug/L	0.50	92	70	130			
m+p-Xylenes	9.32	ug/L	0.50	93	70	130			
o-Xylene	4.52	ug/L	0.50	90	70	130			
Xylenes, Total	13.8	ug/L	0.50	92	70	130			
Surr: 1,2-Dichloroethane-d4			0.50	107	71	139			
Surr: p-Bromofluorobenzene			0.50	102	80	127			
Surr: Toluene-d8			0.50	91	80	123			
<b>Method: E624</b>									Batch: R277281
<b>Lab ID: lcs033117</b>									03/31/17 09:18
		Laboratory Control Sample			Run: 5971A.I_170331A				
Acetone	56.0	ug/L	20	112	55	144			
Acetonitrile	56.8	ug/L	20	114	54	142			
Acrolein	42.4	ug/L	20	85	16	233			
Acrylonitrile	48.4	ug/L	20	97	76	127			
Benzene	4.92	ug/L	0.50	98	73	122			
Bromobenzene	4.86	ug/L	0.50	99	74	129			
Bromochloromethane	5.16	ug/L	0.50	103	66	120			
Bromodichloromethane	5.16	ug/L	0.50	103	74	128			
Bromoform	5.12	ug/L	0.50	102	66	126			
Bromomethane	4.76	ug/L	0.50	95	51	123			
Carbon disulfide	5.36	ug/L	0.50	107	46	145			
Carbon tetrachloride	5.72	ug/L	0.50	114	75	125			
Chlorobenzene	4.64	ug/L	0.50	93	80	123			
Chlorodibromomethane	5.32	ug/L	0.50	106	74	125			
Chloroethane	4.48	ug/L	0.50	90	59	142			
2-Chloroethyl vinyl ether	2.62	ug/L	1.0	52	36	144			
Chloroform	5.52	ug/L	0.50	110	68	124			
Chloromethane	3.77	ug/L	0.50	75	53	146			
2-Chlorotoluene	5.08	ug/L	0.50	102	75	131			
4-Chlorotoluene	5.36	ug/L	0.50	107	74	129			
1,2-Dibromoethane	4.64	ug/L	0.50	93	76	124			
Dibromomethane	5.16	ug/L	0.50	103	77	125			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E624</b>								Batch: R277281	
<b>Lab ID: lcs033117</b>								Run: 5971A.I_170331A	
Laboratory Control Sample								03/31/17 09:19	
1,2-Dichlorobenzene	4.96	ug/L	0.50	99	74	124			
1,3-Dichlorobenzene	5.12	ug/L	0.50	102	77	122			
1,4-Dichlorobenzene	4.96	ug/L	0.50	99	76	126			
Dichlorodifluoromethane	5.60	ug/L	0.50	112	56	146			
1,1-Dichloroethane	4.72	ug/L	0.50	94	74	133			
1,2-Dichloroethane	5.76	ug/L	0.50	115	75	129			
1,1-Dichloroethene	5.16	ug/L	0.50	103	74	132			
cis-1,2-Dichloroethene	4.88	ug/L	0.50	98	81	122			
trans-1,2-Dichloroethene	5.12	ug/L	0.50	102	79	143			
1,2-Dichloropropane	4.60	ug/L	0.50	92	75	126			
1,3-Dichloropropane	4.68	ug/L	0.50	94	71	136			
2,2-Dichloropropane	5.68	ug/L	0.50	114	68	142			
1,1-Dichloropropene	5.00	ug/L	0.50	100	70	131			
cis-1,3-Dichloropropene	4.40	ug/L	0.50	88	74	135			
trans-1,3-Dichloropropene	4.84	ug/L	0.50	97	76	149			
Ethylbenzene	4.96	ug/L	0.50	99	72	130			
Methyl tert-butyl ether (MTBE)	5.12	ug/L	0.50	102	72	120			
Methyl ethyl ketone	52.0	ug/L	20	104	45	130			
Methyl isobutyl ketone	50.8	ug/L	20	102	58	135			
Methylene chloride	6.08	ug/L	0.50	122	66	142			
Naphthalene	5.60	ug/L	0.50	112	69	124			
Styrene	4.56	ug/L	0.50	91	80	124			
Tetrachloroethene	4.72	ug/L	0.50	94	72	131			
1,1,1,2-Tetrachloroethane	4.64	ug/L	0.50	93	78	124			
1,1,2,2-Tetrachloroethane	4.76	ug/L	0.50	95	68	137			
Toluene	4.76	ug/L	0.50	95	72	135			
Trichloroethene	4.80	ug/L	0.50	96	85	126			
1,1,1-Trichloroethane	5.40	ug/L	0.50	108	63	120			
1,1,2-Trichloroethane	4.48	ug/L	0.50	90	78	124			
Trichlorofluoromethane	4.52	ug/L	0.50	90	72	120			
1,2,3-Trichloropropane	4.68	ug/L	0.50	94	64	138			
Vinyl Acetate	4.76	ug/L	1.0	95	31	124			
Vinyl chloride	4.76	ug/L	0.50	95	58	140			
m+p-Xylenes	9.08	ug/L	0.50	91	67	139			
o-Xylene	4.48	ug/L	0.50	90	74	135			
Xylenes, Total	13.6	ug/L	0.50	90	70	137			
Surr: 1,2-Dichloroethane-d4			0.50	109	71	139			
Surr: p-Bromofluorobenzene			0.50	102	80	127			
Surr: Toluene-d8			0.50	92	80	123			
<b>Lab ID: blk033117</b>								Run: 5971A.I_170331A	
Acetone	ND	ug/L		20				03/31/17 10:18	
Acetonitrile	ND	ug/L		20					

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624									Batch: R277281
Lab ID: blk033117	Method Blank						Run: 5971A.I_170331A		03/31/17 10:18
Acrolein	ND	ug/L	20						
Acrylonitrile	ND	ug/L	20						
Benzene	ND	ug/L	0.50						
Bromobenzene	ND	ug/L	0.50						
Bromoform	ND	ug/L	0.50						
Bromomethane	ND	ug/L	0.50						
Carbon disulfide	ND	ug/L	0.50						
Carbon tetrachloride	ND	ug/L	0.50						
Chlorobenzene	ND	ug/L	0.50						
Chlorodibromomethane	ND	ug/L	0.50						
Chloroethane	ND	ug/L	0.50						
2-Chloroethyl vinyl ether	ND	ug/L	1.0						
Chloroform	ND	ug/L	0.50						
Chloromethane	ND	ug/L	0.50						
2-Chlorotoluene	ND	ug/L	0.50						
4-Chlorotoluene	ND	ug/L	0.50						
1,2-Dibromoethane	ND	ug/L	0.50						
Dibromomethane	ND	ug/L	0.50						
1,2-Dichlorobenzene	ND	ug/L	0.50						
1,3-Dichlorobenzene	ND	ug/L	0.50						
1,4-Dichlorobenzene	ND	ug/L	0.50						
Dichlorodifluoromethane	ND	ug/L	0.50						
1,1-Dichloroethane	ND	ug/L	0.50						
1,2-Dichloroethane	ND	ug/L	0.50						
1,1-Dichloroethene	ND	ug/L	0.50						
cis-1,2-Dichloroethene	ND	ug/L	0.50						
trans-1,2-Dichloroethene	ND	ug/L	0.50						
1,2-Dichloropropane	ND	ug/L	0.50						
1,3-Dichloropropane	ND	ug/L	0.50						
2,2-Dichloropropane	ND	ug/L	0.50						
1,1-Dichloropropene	ND	ug/L	0.50						
cis-1,3-Dichloropropene	ND	ug/L	0.50						
trans-1,3-Dichloropropene	ND	ug/L	0.50						
Ethylbenzene	ND	ug/L	0.50						
Methyl tert-butyl ether (MTBE)	ND	ug/L	0.50						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	0.50						
Naphthalene	ND	ug/L	0.50						
Styrene	ND	ug/L	0.50						
Tetrachloroethene	ND	ug/L	0.50						

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E824</b>									Batch: R277281
<b>Lab ID: blk033117</b>									Run: 5971A.I_170331A 03/31/17 10:18
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50						
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50						
Toluene	ND	ug/L	0.50						
Trichloroethene	ND	ug/L	0.50						
1,1,1-Trichloroethane	ND	ug/L	0.50						
1,1,2-Trichloroethane	ND	ug/L	0.50						
Trichlorofluoromethane	ND	ug/L	0.50						
1,2,3-Trichloropropane	ND	ug/L	0.50						
Vinyl Acetate	ND	ug/L	1.0						
Vinyl chloride	ND	ug/L	0.50						
m+p-Xylenes	ND	ug/L	0.50						
o-Xylene	ND	ug/L	0.50						
Xylenes, Total	ND	ug/L	0.50						
Sur: 1,2-Dichloroethane-d4			0.50	105	71	138			
Sur: p-Bromofluorobenzene			0.50	104	80	127			
Sur: Toluene-d8			0.50	92	80	123			
<b>Lab ID: b17031875-001dms</b>									Run: 5971A.I_170331A 03/31/17 14:12
Acetone	378	ug/L	100	109	55	144			
Acetonitrile	274	ug/L	100	110	54	142			
Benzene	24.6	ug/L	2.5	98	73	122			
Bromobenzene	24.8	ug/L	2.5	99	74	128			
Bromoform	25.2	ug/L	2.5	101	66	120			
Bromodichloromethane	26.2	ug/L	2.5	105	74	128			
Bromomethane	27.0	ug/L	2.5	108	66	128			
Carbon disulfide	18.8	ug/L	2.5	75	51	123			
Carbon tetrachloride	26.4	ug/L	2.5	106	46	145			
Chlorobenzene	28.2	ug/L	2.5	113	75	125			
Chlorodibromomethane	22.8	ug/L	2.5	91	60	123			
Chloroethane	26.8	ug/L	2.5	107	74	125			
Chloroform	20.2	ug/L	2.5	81	59	142			
Chloromethane	33.2	ug/L	2.5	110	68	124			
2-Chlorotoluene	18.6	ug/L	2.5	74	53	146			
4-Chlorotoluene	24.8	ug/L	2.5	99	75	131			
1,2-Dibromoethane	25.8	ug/L	2.5	103	74	129			
Dibromomethane	24.0	ug/L	2.5	96	76	124			
1,2-Dichlorobenzene	26.2	ug/L	2.5	105	77	125			
1,3-Dichlorobenzene	24.6	ug/L	2.5	98	74	124			
1,4-Dichlorobenzene	24.6	ug/L	2.5	98	77	122			
Dichlorodifluoromethane	27.0	ug/L	2.5	108	56	146			
1,1-Dichloroethane	24.2	ug/L	2.5	97	74	133			
1,2-Dichloroethane	29.2	ug/L	2.5	117	75	129			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E624</b>								Batch: R277281	
<b>Lab ID: b17031875-001dms</b>								Run: 5971A.I_170331A	
1,1-Dichloroethene	26.6	ug/L	2.5	106	74	132			03/31/17 14:12
cis-1,2-Dichloroethene	24.4	ug/L	2.5	98	81	122			
trans-1,2-Dichloroethene	25.8	ug/L	2.5	103	79	143			
1,2-Dichloropropane	23.0	ug/L	2.5	92	75	126			
1,3-Dichloropropane	22.4	ug/L	2.5	90	71	136			
2,2-Dichloropropane	28.0	ug/L	2.5	112	68	142			
1,1-Dichloropropene	25.2	ug/L	2.5	101	70	131			
cis-1,3-Dichloropropene	22.2	ug/L	2.5	89	74	135			
trans-1,3-Dichloropropene	24.6	ug/L	2.5	98	76	149			
Ethybenzene	23.6	ug/L	2.5	94	72	130			
Methyl tert-butyl ether (MTBE)	25.6	ug/L	2.5	102	72	120			
Methyl ethyl ketone	268	ug/L	100	107	45	130			
Methyl isobutyl ketone	258	ug/L	100	103	58	135			
Methylene chloride	32.2	ug/L	2.5	129	66	142			
Naphthalene	27.6	ug/L	2.5	110	69	124			
Styrene	22.4	ug/L	2.5	90	80	124			
Tetrachloroethene	22.8	ug/L	2.5	91	72	131			
1,1,1,2-Tetrachloroethane	23.0	ug/L	2.5	92	78	124			
1,1,2,2-Tetrachloroethane	26.0	ug/L	2.5	104	68	137			
Toluene	24.4	ug/L	2.5	95	72	135			
Trichloroethene	23.8	ug/L	2.5	95	85	126			
1,1,1-Trichloroethane	26.8	ug/L	2.5	107	63	120			
1,1,2-Trichloroethane	23.4	ug/L	2.5	94	78	124			
Trichlorofluoromethane	21.2	ug/L	2.5	85	72	120			
1,2,3-Trichloropropane	26.2	ug/L	2.5	105	64	138			
Vinyl Acetate	24.4	ug/L	5.0	98	31	124			
Vinyl chloride	22.6	ug/L	2.5	90	58	140			
m+p-Xylenes	44.8	ug/L	2.5	90	67	139			
o-Xylene	22.6	ug/L	2.5	90	74	135			
Xylenes, Total	67.4	ug/L	2.5	90	70	137			
Surr: 1,2-Dichloroethane-d4			2.5	110	71	139			
Surr: p-Bromofluorobenzene			2.5	102	80	127			
Surr: Toluene-d8			2.5	93	80	123			
<b>Lab ID: b17031875-001dmsd</b>								Run: 5971A.I_170331A	
Acetone	410	ug/L	100	122	55	144	8.1	20	
Acetonitrile	262	ug/L	100	105	54	142	4.5	20	
Benzene	25.0	ug/L	2.5	100	73	122	1.6	20	
Bromobenzene	25.6	ug/L	2.5	102	74	129	3.2	20	
Bromoform	25.2	ug/L	2.5	101	66	120	0.0	20	
Bromodichloromethane	27.2	ug/L	2.5	109	74	128	3.7	20	
Bromomethane	28.4	ug/L	2.5	114	66	128	5.1	20	
Acetone	20.8	ug/L	2.5	83	51	123	10	20	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E624									Batch: R277281
<b>Lab ID:</b> b17031875-001dmsd	<b>Sample Matrix Spike Duplicate</b>								03/31/17 15:11
Carbon disulfide	25.6	ug/L	2.5	102	46	145	3.1	20	
Carbon tetrachloride	28.6	ug/L	2.5	114	75	125	1.4	20	
Chlorobenzene	23.6	ug/L	2.5	94	80	123	3.4	20	
Chlorodibromomethane	28.0	ug/L	2.5	112	74	125	4.4	20	
Chloroethane	20.6	ug/L	2.5	82	59	142	2.0	20	
Chloroform	33.6	ug/L	2.5	111	68	124	1.2	20	
Chloromethane	19.3	ug/L	2.5	77	53	146	3.8	20	
2-Chlorotoluene	26.4	ug/L	2.5	106	75	131	6.2	20	
4-Chlorotoluene	27.2	ug/L	2.5	109	74	129	5.3	20	
1,2-Dibromoethane	24.0	ug/L	2.5	96	76	124	0.0	20	
Dibromomethane	26.8	ug/L	2.5	107	77	125	2.3	20	
1,2-Dichlorobenzene	25.8	ug/L	2.5	103	74	124	4.8	20	
1,3-Dichlorobenzene	26.0	ug/L	2.5	104	77	122	5.5	20	
1,4-Dichlorobenzene	25.4	ug/L	2.5	102	76	126	3.2	20	
Dichlorodifluoromethane	25.8	ug/L	2.5	103	56	146	4.5	20	
1,1-Dichloroethane	24.8	ug/L	2.5	99	74	133	2.4	20	
1,2-Dichloroethane	29.2	ug/L	2.5	117	75	129	0.0	20	
1,1-Dichloroethene	26.8	ug/L	2.5	107	74	132	0.7	20	
cis-1,2-Dichloroethene	25.2	ug/L	2.5	101	81	122	3.2	20	
trans-1,2-Dichloroethene	26.4	ug/L	2.5	106	79	143	2.3	20	
1,2-Dichloropropane	23.6	ug/L	2.5	94	75	126	2.6	20	
1,3-Dichloropropane	23.8	ug/L	2.5	95	71	136	6.1	20	
2,2-Dichloropropane	28.6	ug/L	2.5	114	68	142	2.1	20	
1,1-Dichloropropene	25.8	ug/L	2.5	103	70	131	2.4	20	
cis-1,3-Dichloropropene	23.2	ug/L	2.5	93	74	135	4.4	20	
trans-1,3-Dichloropropene	25.4	ug/L	2.5	102	76	149	3.2	20	
Ethylbenzene	25.0	ug/L	2.5	100	72	130	5.8	20	
Methyl tert-butyl ether (MTBE)	26.6	ug/L	2.5	106	72	120	3.8	20	
Methyl ethyl ketone	292	ug/L	100	117	45	130	8.6	20	
Methyl isobutyl ketone	286	ug/L	100	114	58	135	10	20	
Methylene chloride	31.4	ug/L	2.5	126	66	142	2.5	20	
Naphthalene	27.8	ug/L	2.5	111	69	124	0.7	20	
Styrene	22.8	ug/L	2.5	91	80	124	1.8	20	
Tetrachloroethene	23.8	ug/L	2.5	95	72	131	4.3	20	
1,1,1,2-Tetrachloroethane	23.2	ug/L	2.5	93	78	124	0.9	20	
1,1,2,2-Tetrachloroethane	27.4	ug/L	2.5	110	68	137	5.2	20	
Toluene	24.4	ug/L	2.5	95	72	135	0.0	20	
Trichloroethene	25.0	ug/L	2.5	100	85	126	4.9	20	
1,1,1-Trichloroethane	27.4	ug/L	2.5	110	63	120	2.2	20	
1,1,2-Trichloroethane	24.8	ug/L	2.5	99	78	124	5.8	20	
Trichlorofluoromethane	22.4	ug/L	2.5	90	72	120	5.5	20	
1,2,3-Trichloropropane	26.8	ug/L	2.5	107	64	138	2.3	20	
Vinyl Acetate	24.4	ug/L	5.0	98	31	124	0.0	20	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
Gillette, WY 866.686.7176 • Helena, MT 877.472.0711

## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Project: 170324007 Sterling Ranch MD

Report Date: 04/06/17

Work Order: C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624	Batch: R277281								
Lab ID: b17031876-001dmsd	Sample Matrix Spike Duplicate				Run: 5971A.I_170331A				03/31/17 15:11
Vinyl chloride	22.8	ug/L	2.5	91	58	140	0.9	20	
m+p-Xylenes	46.0	ug/L	2.5	92	67	139	2.6	20	
o-Xylene	23.4	ug/L	2.5	94	74	135	3.5	20	
Xylenes, Total	69.4	ug/L	2.5	93	70	137			
Surr: 1,2-Dichloroethane-d4			2.5	112	71	138			
Surr: p-Bromofluorobenzene			2.5	105	80	127			
Surr: Toluene-d8			2.5	93	80	123			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E625									Batch: 107942
Lab ID: MB-107942	Method Blank						Run: SV5973N2.I_170330B		03/30/17 16:12
Acenaphthene	ND	ug/L	10						
Acenaphthylene	ND	ug/L	10						
Anthracene	ND	ug/L	10						
Azobenzene	ND	ug/L	10						
Benzidine	ND	ug/L	10						
Benzo(a)anthracene	ND	ug/L	10						
Benzo(a)pyrene	ND	ug/L	10						
Benzo(b)fluoranthene	ND	ug/L	10						
Benzo(g,h,i)perylene	ND	ug/L	10						
Benzo(k)fluoranthene	ND	ug/L	10						
4-Bromophenyl phenyl ether	ND	ug/L	10						
Butylbenzylphthalate	ND	ug/L	10						
4-Chloro-3-methylphenol	ND	ug/L	10						
bis(-2-chloroethoxy)Methane	ND	ug/L	10						
bis(-2-chloroethyl)Ether	ND	ug/L	10						
bis(2-chloroisopropyl)Ether	ND	ug/L	10						
2-Chloronaphthalene	ND	ug/L	10						
2-Chlorophenol	ND	ug/L	10						
4-Chlorophenyl phenyl ether	ND	ug/L	10						
Chrysene	ND	ug/L	10						
Diethyl phthalate	ND	ug/L	10						
Di-n-butyl phthalate	ND	ug/L	10						
1,2-Dichlorobenzene	ND	ug/L	10						
1,3-Dichlorobenzene	ND	ug/L	10						
1,4-Dichlorobenzene	ND	ug/L	10						
3,3'-Dichlorobenzidine	ND	ug/L	10						
2,4-Dichlorophenol	ND	ug/L	10						
Dimethyl phthalate	ND	ug/L	10						
Di-n-octyl phthalate	ND	ug/L	10						
Dibenzo(a,h)anthracene	ND	ug/L	10						
2,4-Dimethylphenol	ND	ug/L	10						
4,6-Dinitro-2-methylphenol	ND	ug/L	50						
2,4-Dinitrophenol	ND	ug/L	50						
2,4-Dinitrotoluene	ND	ug/L	10						
2,6-Dinitrotoluene	ND	ug/L	10						
bis(2-ethylhexyl)Phthalate	ND	ug/L	10						
Fluoranthene	ND	ug/L	10						
Fluorene	ND	ug/L	10						
Hexachlorobenzene	ND	ug/L	10						
Hexachlorobutadiene	ND	ug/L	10						
Hexachlorocyclopentadiene	ND	ug/L	10						
Hexachloroethane	ND	ug/L	10						
Indeno(1,2,3-cd)pyrene	ND	ug/L	10						

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E826									
<b>Lab ID:</b> MB-107942	Method Blank								
Isophorone	ND	ug/L	10						
n-Nitrosodimethylamine	ND	ug/L	10						
n-Nitroso-di-n-propylamine	ND	ug/L	10						
n-Nitrosodiphenylamine	ND	ug/L	10						
2-Nitrophenol	ND	ug/L	10						
4-Nitrophenol	ND	ug/L	50						
Naphthalene	ND	ug/L	10						
Nitrobenzene	ND	ug/L	10						
Pentachlorophenol	ND	ug/L	50						
Phenanthrene	ND	ug/L	10						
Phenol	ND	ug/L	10						
Pyrene	ND	ug/L	10						
1,2,4-Trichlorobenzene	ND	ug/L	10						
2,4,6-Trichlorophenol	ND	ug/L	10						
Surr: 2-Fluorobiphenyl			10	57	28	107			
Surr: 2-Fluorophenol			10	42	20	56			
Surr: Nitrobenzene-d5			10	62	32	94			
Surr: Phenol-d5			10	30	19	45			
Surr: Terphenyl-d14			10	80	32	122			
Surr: 2,4,6-Tribromophenol			10	68	21	130			
<b>Lab ID:</b> LCS-107942	Laboratory Control Sample								
Acenaphthene	89.1	ug/L	10	89	58	99			
Acenaphthylene	84.2	ug/L	10	84	57	96			
Anthracene	75.6	ug/L	10	76	60	107			
Azobenzene	78.0	ug/L	10	78	56	100			
Benzidine	53.1	ug/L	10	53	10	100			
Benzo(a)anthracene	86.4	ug/L	10	86	62	114			
Benzo(a)pyrene	84.7	ug/L	10	85	62	108			
Benzo(b)fluoranthene	89.8	ug/L	10	90	48	127			
Benzo(g,h,i)perylene	87.2	ug/L	10	87	62	121			
Benzo(k)fluoranthene	84.0	ug/L	10	84	55	111			
4-Bromophenyl phenyl ether	87.1	ug/L	10	87	58	105			
Butylbenzylphthalate	90.8	ug/L	10	91	60	113			
4-Chloro-3-methylphenol	74.6	ug/L	10	75	53	92			
bis(-2-chloroethoxy)Methane	69.9	ug/L	10	70	50	92			
bis(-2-chloroethyl)Ether	72.1	ug/L	10	72	44	82			
bis(2-chloroisopropyl)Ether	63.2	ug/L	10	63	56	87			
2-Chloronaphthalene	84.9	ug/L	10	85	56	95			
2-Chlorophenol	67.2	ug/L	10	67	47	76			
4-Chlorophenyl phenyl ether	83.0	ug/L	10	83	58	99			
Chrysene	87.0	ug/L	10	87	63	106			
Diethyl phthalate	84.6	ug/L	10	85	58	103			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E625							<b>Batch:</b> 107942		
<b>Lab ID:</b> LCS-107942	<b>Laboratory Control Sample</b> Run: SV5973N2.I_170330B								03/30/17 16:43
Di-n-butyl phthalate	87.1	ug/L	10	87	61	110			
1,2-Dichlorobenzene	69.3	ug/L	10	69	43	81			
1,3-Dichlorobenzene	64.0	ug/L	10	64	41	79			
1,4-Dichlorobenzene	64.5	ug/L	10	64	42	79			
3,3'-Dichlorobenzidine	64.8	ug/L	10	65	51	93			
2,4-Dichlorophenol	70.6	ug/L	10	71	49	90			
Dimethyl phthalate	82.5	ug/L	10	82	58	104			
Di-n-octyl phthalate	93.4	ug/L	10	93	56	110			
Dibenzo(a,h)anthracene	87.8	ug/L	10	88	61	111			
2,4-Dimethylphenol	66.2	ug/L	10	66	45	89			
4,6-Dinitro-2-methylphenol	66.1	ug/L	50	66	37	105			
2,4-Dinitrophenol	54.1	ug/L	50	54	27	81			
2,4-Dinitrotoluene	86.2	ug/L	10	86	63	110			
2,6-Dinitrotoluene	77.2	ug/L	10	77	60	107			
bis(2-ethylhexyl)Phthalate	86.0	ug/L	10	86	56	108			
Fluoranthene	84.2	ug/L	10	84	63	110			
Fluorene	89.3	ug/L	10	89	60	99			
Hexachlorobenzene	82.7	ug/L	10	83	57	103			
Hexachlorobutadiene	71.7	ug/L	10	72	39	83			
Hexachlorocyclopentadiene	81.0	ug/L	10	81	39	91			
Hexachloroethane	65.0	ug/L	10	65	37	75			
Indeno(1,2,3-cd)pyrene	83.2	ug/L	10	83	59	109			
Isophorone	69.8	ug/L	10	70	42	102			
n-Nitrosodimethylamine	36.8	ug/L	10	37	20	45			
n-Nitroso-di-n-propylamine	76.6	ug/L	10	77	48	98			
n-Nitrosodiphenylamine	91.5	ug/L	10	92	61	108			
2-Nitrophenol	72.3	ug/L	10	72	51	96			
4-Nitrophenol	27.4	ug/L	50	27	15	36			
Naphthalene	68.1	ug/L	10	68	48	96			
Nitrobenzene	77.9	ug/L	10	78	51	91			
Pentachlorophenol	72.4	ug/L	50	72	53	109			
Phenanthrene	82.0	ug/L	10	82	58	104			
Phenol	40.6	ug/L	10	41	27	45			
Pyrene	85.0	ug/L	10	85	64	108			
1,2,4-Trichlorobenzene	71.2	ug/L	10	71	49	85			
2,4,6-Trichlorophenol	73.9	ug/L	10	74	47	99			
Surr: 2-Fluorobiphenyl			10	69	28	107			
Surr: 2-Fluorophenol			10	42	20	56			
Surr: Nitrobenzene-d5			10	72	32	94			
Surr: Phenol-d5			10	36	19	45			
Surr: Terphenyl-d14			10	80	32	122			
Surr: 2,4,6-Tribromophenol			10	70	21	130			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E626									Batch: 107942
Lab ID: C17030850-001CMS	Sample Matrix Spike				Run: SV5973N2.L_170330B				03/30/17 17:45
Acenaphthene	86.7	ug/L	10	87	58	99			
Acenaphthylene	75.5	ug/L	10	76	57	96			
Anthracene	81.6	ug/L	10	82	60	107			
Azobenzene	84.6	ug/L	10	85	56	100			
Benzidine	122	ug/L	20	122	10	100			S
Benzo(a)anthracene	83.4	ug/L	10	83	62	114			
Benzo(a)pyrene	78.4	ug/L	10	78	62	108			
Benzo(b)fluoranthene	79.9	ug/L	10	80	48	127			
Benzo(g,h,i)perylene	83.2	ug/L	10	83	62	121			
Benzo(k)fluoranthene	84.5	ug/L	10	84	55	111			
4-Bromophenyl phenyl ether	79.5	ug/L	10	79	58	105			
Butylbenzylphthalate	89.2	ug/L	10	89	60	113			
4-Chloro-3-methylphenol	78.3	ug/L	10	78	53	92			
bis(-2-chloroethoxy)Methane	77.9	ug/L	10	78	50	92			
bis(-2-chloroethyl)Ether	71.5	ug/L	10	71	44	82			
bis(2-chloroisopropyl)Ether	58.4	ug/L	10	58	56	87			
2-Chloronaphthalene	77.8	ug/L	10	78	56	95			
2-Chlorophenol	63.7	ug/L	10	64	47	78			
4-Chlorophenyl phenyl ether	81.0	ug/L	10	81	58	99			
Chrysene	85.9	ug/L	10	86	63	106			
Diethyl phthalate	84.0	ug/L	10	84	58	103			
Di-n-butyl phthalate	87.0	ug/L	10	87	61	110			
1,2-Dichlorobenzene	67.3	ug/L	10	67	43	81			
1,3-Dichlorobenzene	66.0	ug/L	10	66	41	79			
1,4-Dichlorobenzene	66.7	ug/L	10	67	42	79			
3,3'-Dichlorobenzidine	131	ug/L	10	131	51	93			S
2,4-Dichlorophenol	70.0	ug/L	10	70	49	90			
Dimethyl phthalate	79.3	ug/L	10	79	58	104			
Di-n-octyl phthalate	81.8	ug/L	10	82	56	110			
Dibenzo(a,h)anthracene	80.1	ug/L	10	80	61	111			
2,4-Dimethylphenol	70.7	ug/L	10	71	45	87			
4,6-Dinitro-2-methylphenol	53.1	ug/L	50	53	37	105			
2,4-Dinitrophenol	43.0	ug/L	50	43	27	81			
2,4-Dinitrotoluene	85.6	ug/L	10	86	63	110			
2,6-Dinitrotoluene	81.5	ug/L	10	81	60	107			
bis(2-ethylhexyl)Phthalate	77.5	ug/L	10	77	56	108			
Fluoranthene	84.0	ug/L	10	84	63	110			
Fluorene	80.0	ug/L	10	80	60	99			
Hexachlorobenzene	78.2	ug/L	10	78	57	103			
Hexachlorobutadiene	69.1	ug/L	10	69	39	83			
Hexachlorocyclopentadiene	69.0	ug/L	10	69	39	91			
Hexachloroethane	62.6	ug/L	10	63	37	75			
Indeno(1,2,3-cd)pyrene	76.3	ug/L	10	76	59	109			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 04/06/17

Project: 170324007 Sterling Ranch MD

Work Order: C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E625									Batch: 107942
Lab ID: C17030850-001CMS	Sample Matrix Spike Run: SV5973N2.I_170330B								03/30/17 17:45
Isophorone	71.4	ug/L	10	71	42	102			
n-Nitrosodiethylamine	26.1	ug/L	10	26	20	45			
n-Nitroso-di-n-propylamine	76.1	ug/L	10	76	49	98			
n-Nitrosodiphenylamine	105	ug/L	10	105	61	108			
2-Nitrophenol	73.5	ug/L	10	74	51	96			
4-Nitrophenol	25.8	ug/L	50	26	15	38			
Naphthalene	75.6	ug/L	10	76	48	96			
Nitrobenzene	75.6	ug/L	10	76	51	91			
Pentachlorophenol	60.3	ug/L	50	60	53	109			
Phenanthrene	83.8	ug/L	10	84	58	104			
Phenol	38.7	ug/L	10	39	27	45			
Pyrene	87.0	ug/L	10	87	64	108			
1,2,4-Trichlorobenzene	74.7	ug/L	10	75	49	85			
2,4,6-Trichlorophenol	68.8	ug/L	10	69	47	99			
Surr: 2-Fluorobiphenyl			10	51	28	107			
Surr: 2-Fluorophenol			10	41	20	56			
Surr: Nitrobenzene-d5			10	64	32	94			
Surr: Phenol-d5			10	33	19	45			
Surr: Terphenyl-d14			10	73	32	122			
Surr: 2,4,6-Tribromophenol			10	67	21	130			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 04/06/17

**Project:** 170324007 Sterling Ranch MD

**Work Order:** C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E625									
<b>Lab ID:</b> 30-Mar-17_CCV_11	Continuing Calibration Verification Standard								
									03/30/17 15:40
Acenaphthene	75.3	ug/L	10	100	80	120			
Acenaphthylene	79.7	ug/L	10	106	80	120			
Anthracene	75.2	ug/L	10	100	80	120			
Azobenzene	75.1	ug/L	10	100	80	120			
Benzidine	70.6	ug/L	10	94	80	120			
Benzo(a)anthracene	76.3	ug/L	10	102	80	120			
Benzo(a)pyrene	81.9	ug/L	10	109	80	120			
Benzo(b)fluoranthene	78.3	ug/L	10	104	80	120			
Benzo(g,h,i)perylene	78.0	ug/L	10	104	80	120			
Benzo(k)fluoranthene	81.6	ug/L	10	109	80	120			
4-Bromophenyl phenyl ether	81.6	ug/L	10	109	80	120			
Butylbenzylphthalate	78.0	ug/L	10	104	80	120			
4-Chloro-3-methyphenol	76.0	ug/L	10	101	80	120			
bis(-2-chloroethoxy)Methane	70.4	ug/L	10	94	80	120			
bis(-2-chloroethyl)Ether	77.2	ug/L	10	103	80	120			
bis(2-chloroisopropyl)Ether	76.7	ug/L	10	102	80	120			
2-Chloronaphthalene	79.8	ug/L	10	106	80	120			
2-Chlorophenol	72.7	ug/L	10	97	80	120			
4-Chlorophenyl phenyl ether	72.7	ug/L	10	97	80	120			
Chrysene	74.9	ug/L	10	100	80	120			
Diethyl phthalate	76.8	ug/L	10	102	80	120			
Di-n-butyl phthalate	76.9	ug/L	10	102	80	120			
1,2-Dichlorobenzene	76.8	ug/L	10	102	80	120			
1,3-Dichlorobenzene	72.1	ug/L	10	96	80	120			
1,4-Dichlorobenzene	74.8	ug/L	10	100	80	120			
3,3'-Dichlorobenzidine	76.2	ug/L	10	102	80	120			
2,4-Dichlorophenol	73.5	ug/L	10	98	80	120			
Dimethyl phthalate	77.0	ug/L	10	103	80	120			
Di-n-octyl phthalate	81.2	ug/L	10	108	80	120			
Dibenzo(a,h)anthracene	76.2	ug/L	10	102	80	120			
2,4-Dimethylphenol	70.3	ug/L	10	94	80	120			
4,6-Dinitro-2-methylphenol	77.4	ug/L	50	103	80	120			
2,4-Dinitrophenol	80.2	ug/L	50	107	80	120			
2,4-Dinitrotoluene	79.8	ug/L	10	106	80	120			
2,6-Dinitrotoluene	80.8	ug/L	10	108	80	120			
bis(2-ethylhexyl)Phthalate	77.3	ug/L	10	103	80	120			
Fluoranthene	76.8	ug/L	10	102	80	120			
Fluorene	82.8	ug/L	10	110	80	120			
Hexachlorobenzene	74.2	ug/L	10	99	80	120			
Hexachlorobutadiene	73.0	ug/L	10	97	80	120			
Hexachlorocyclopentadiene	79.2	ug/L	10	106	80	120			
Hexachloroethane	74.4	ug/L	10	99	80	120			
Indeno(1,2,3-cd)pyrene	73.3	ug/L	10	98	80	120			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
Gillette, WY 888.688.7175 • Helena, MT 877.472.0711

## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 04/06/17

Project: 170324007 Sterling Ranch MD

Work Order: C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E626	Analytical Run: R277253								
Lab ID: 30-Mar-17_CCV_11	Continuing Calibration Verification Standard								03/30/17 15:40
Isophorone	71.5	ug/L	10	95	80	120			
n-Nitrosodimethylamine	79.5	ug/L	10	106	80	120			
n-Nitroso-di-n-propylamine	76.0	ug/L	10	101	80	120			
n-Nitrosodiphenylamine	77.5	ug/L	10	103	80	120			
2-Nitrophenol	74.6	ug/L	10	99	80	120			
4-Nitrophenol	72.4	ug/L	50	97	80	120			
Naphthalene	68.4	ug/L	10	91	80	120			
Nitrobenzene	77.1	ug/L	10	103	80	120			
Pentachlorophenol	71.7	ug/L	50	96	80	120			
Phenanthrene	70.9	ug/L	10	95	80	120			
Phenol	79.0	ug/L	10	105	80	120			
Pyrene	79.0	ug/L	10	105	80	120			
1,2,4-Trichlorobenzene	73.1	ug/L	10	98	80	120			
2,4,6-Trichlorophenol	71.0	ug/L	10	95	80	120			
Surr: 2-Fluorobiphenyl			10	108	80	120			
Surr: 2-Fluorophenol			10	105	80	120			
Surr: Nitrobenzene-d5			10	101	80	120			
Surr: Phenol-d5			10	102	80	120			
Surr: Terphenyl-d14			10	104	80	120			
Surr: 2,4,6-Tribromophenol			10	105	80	120			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 868.235.0515  
Gillette, WY 866.666.7175 • Helena, MT 877.472.0711

## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 04/06/17

Project: 170324007 Sterling Ranch MD

Work Order: C17030850

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260M	Analytical Run: 108173								
Lab ID: CCV-108173	Continuing Calibration Verification Standard								
1,4-Dioxane	95.7	ug/L	1.0	96	80	120			04/06/17 08:29
Method: SW8260M	Batch: 108173								
Lab ID: LCS-108173	Run: VOA5973A.I_170406A								
1,4-Dioxane	87.5	ug/L	1.0	88	70	130			04/06/17 08:51
Lab ID: MB-108173	Run: VOA5973A.I_170406A								
1,4-Dioxane	ND	ug/L	1.0						04/06/17 09:12
Lab ID: C17030850-001AMS	Run: VOA5973A.I_170406A								
1,4-Dioxane	194	ug/L	2.0	97	70	130			04/06/17 09:55
Lab ID: C17030850-001AMSD	Run: VOA5973A.I_170406A								
1,4-Dioxane	206	ug/L	2.0	103	70	130	6.0	20	04/06/17 10:17

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## Work Order Receipt Checklist

Colorado Analytical Laboratories Inc

C17030850

Login completed by: Corinne Wagner

Date Received: 3/28/2017

Reviewed by: Kasey Vidick

Received by: ckw

Reviewed Date: 3/29/2017

Carrier name: Ground

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	6.6°C On Ice - From Field		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

### Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as -dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

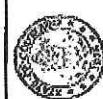
### Contact and Corrective Action Comments:

None



# **Water Quality Results**

## **LFH-1 (80132-F)**



Colorado Department  
of Public Health  
and Environment

## Inorganic Chemicals Certified Laboratory Report Form

WQCD - Drinking Water CAS

4300 Cherry Creek Drive South, Denver, CO 80246-1530  
Fax: (303) 758-1398; cdph.drinkingswater@state.co.us

**IOC**

Revised 6/13/2014

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)						
PWSID#: CO-0121724	Public Water System Information	Laboratory ID: CO 0015	Certified Laboratory Information					
System Name: LFH-1		Laboratory Name: Colorado Analytical Laboratory						
Contact Person: Mark Volle	Phone #: 719-227-0072	Contact Person: Customer Service	Phone: 303-659-2313					
Comments:	Do Samples Need to be Composted BY THE LAB? <input type="checkbox"/>	Comments:						
Section III (Supplied or Completed by Public Water System)								
Sample Date: 2/16/17	Collector: Stephanie Schwe	Facility ID (On Schedule):	Sample Pt II) (On Schedule):					
Section IV Inorganic Chemicals (Completed by Certified Laboratory)								
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analytic Name	CAS No	Analytical Method	MCL, (mg/L)	Lab MRL (mg/L)	Result (mg/L)
2/17/17	2/17/17	170217005-01	Fluoride	7681-49-4	EPA 300.0	4	0.09	1.07

NT: Not Tested

Lab M.R.L.: Laboratory Minimum Reporting Level  
B.D.L.: Below Laboratory M.R.L.. A less than (<) may also used.

mg/L: Milligrams per Liter  
MCL: Maximum Contaminant Level

3/6/17  
170217005-01  
1/1

# Drinking Water Chain of Custody



LABORATORIES, INC.

Report Information  
Company Name: DS-Hydro  
Contact Name: Mark Volle

Address: 545 E. Pikes Peak Ave  
Suite 300  
City CS State CO zip 80903

Phone: 719-227-0524  
Fax:

Email: mvolle@jishydro.com  
Sampler Name: Stephanie Schwerdt PO No:

Bill To Information (if different from report to)

Company Name: SP Water  
Contact Name: Tim Merley

Address: 20 Boulder Crescent St  
NE 1/4 NW 1/4 S27  
T12S R26SW 64+44  
City Co State CO zip 80903

Phone: 303-659-2313  
Fax: 303-659-2315

Email: jmerley@spwater.org  
Sampler Name: Stephanie Schwerdt PO No:

State Form / Project Information

PWSID: Co-D121704  
System Name: LFT-1

Address: NE 1/4 NW 1/4 S27  
T12S R26SW 64+44  
City Co State CO zip 80903

Phone: 303-659-2313  
Fax: 303-659-2315

Email: jmerley@spwater.org  
Sampler Name: Stephanie Schwerdt PO No:

Brighton Lab  
240 South Main Street  
Brighton, CO 80601

Lakewood Lab  
12860 W. Cedar Dr, Suite 100A  
Lakewood CO 80228

Phone: 303-659-2313  
Fax: 303-659-2315

www.coloradolab.com

CAL Task No.  
170217005

### PHASE I, II, V Drinking Water Analyses (check analysis)

Subcontract Analyses

ARF		Client Sample ID / EP Code	No. of Containers		Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A		504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC DOC (Circle)	SUVA, UV 254 (Circle)	metals
Date	Time																										
7/21	#1			3	X																						
7/24	#2			2	X																						
7/30	#3			1	X																						
8/3	#4			1																							
8/10	#5			1																							
8/15	#6			1																							
8/22	#7			1																							
8/26	#8			1																							
8/31	#9			1																							
9/5	#10			1																							

Instructions:

CS Info: fedex K Temp. J °C/Ice Y Sample Pres. Yes ✓ Headspace Yes No No

Reinquished By: SGM Date/Time: 7/14/17 12:45 PM Received By: SGM Date/Time: 7/14/17 0800

Delivered Via: Temp. J Temp. I °C/Ice Y Sample Pres. Yes ✓ Headspace Yes No No

Reinquished By: SGM Date/Time: 7/14/17 12:45 PM Received By: SGM Date/Time: 7/14/17 0800

# Drinking Water Chain of Custody



LABORATORIES, INC.

## Report To Information

Company Name: JD'S HYDRO

Contact Name: MARK VOLLE

Address: 545 E. BOXES PEAK AVE

SUITE 300

City/Co/Zip: COLO SPRINGS CO ZIP 80903

Phone: 719-227-0072 Fax:

Email: [mvalle@jdshydro.com](mailto:mvalle@jdshydro.com)

Sampler Name: STEPH SCHWENKE

PONo:

CAL Task No.

170217005

ARF

## BILL TO Information (if different from report to)

Company Name: SR WATER

Contact Name: JIM MORLEY

Address: 20 BENDER CRESCENT ST

T 125 R 65W C 11 PH

City/Co/Zip: COLO SPRINGS CO ZIP 80903

Phone:

Fax:

County: EL PASO

Compliance Samples: Yes  No

Send Forms to State: Yes  No

## PHASE I, II, V Drinking Water Analyses (check analysis)

Subcontract Analyses

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	525.2 SOC's-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAAs	Lead/Copper	Nitrate	Nitrite	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	1,4-Dioxane	Gross Alpha/Beta	Radium 226	Radium 228	Radon-Gamide	Uranium
2/16	5:31	#11	3																									
2/16	4:50	412	3																									
2/16	4:43	#13	2																									
2/16	3:40	#15	1																									
2/16	3:44	#16	1						X																			
2/16	4:15	#17	1																									
2/16	4:18	#18	1																									
2/16	4:19	#19	3						X																			

Page 3 of 3

Instructions:

(34+) SO4 Blank

VQA

Index

CS Info:

Seals Present Yes  No

Headspace Yes  No

Temp  $20^{\circ}\text{C}/\text{sec}$

Sample Pres. Yes  No

Date/Tim:

Received By:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge

Temp  $20^{\circ}\text{C}/\text{sec}$

Received By:

Date/Tim:

Relinquished By:

Date/Tim:

Received By:

Date/Tim:

Delivered Via:

C/S Charge



Colorado Department  
of Public Health  
and Environment

Inorganic Chemicals Certified Laboratory Report Form  
WQCD - Drinking Water CAS  
Submit Online at <http://www.wqcdcompliance.com/login>

IOC  
4/13/2015

Revised 4/13/2015

100

Submit Online at <http://www.wqcdcompliance.com/login>

Section I (Supplied or Completed by Public Water System) Public Water System Information				Section II (Supplied or Completed by Certified Laboratory) Certified Laboratory Information			
System Name: LFH-1				Laboratory ID: CO 0015			
Contact Person: Mark Voller	Phone #:			Contact Person: Customer Service	Phone: 303-659-2313		
Comments:				Comments:			
				<input type="checkbox"/>			
Sample Date: 2/16/17 Collector: Stephanie Schwie Facility ID (On Schedule):				Section III (Supplied or Completed by Public Water System) Sample Pt ID (On Schedule):			
Section IV Inorganic Chemicals (Completed by Certified Laboratory)				Section V Inorganic Chemicals (Completed by Certified Laboratory)			
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)
2/17/17	2/22/17	170217005-01A	Antimony	7740-36-0	EPA 200.8	0.006	0.001
2/17/17	2/22/17	170217005-01A	Arsenic	7440-38-2	EPA 200.8	0.01	0.001
2/17/17	2/22/17	170217005-01A	Barium	7440-39-3	EPA 200.8	2	0.001
2/17/17	2/22/17	170217005-01A	Beryllium	7440-41-7	EPA 200.8	0.004	0.001
2/17/17	2/22/17	170217005-01A	Cadmium	7440-43-9	EPA 200.8	0.005	0.001
2/17/17	2/22/17	170217005-01A	Chromium	7440-47-3	EPA 200.8	0.1	0.001
2/17/17	2/22/17	170217005-01A	Mercury	7439-97-6	EPA 200.8	0.002	0.0001
2/17/17	2/22/17	170217005-01A	Nickel	7440-02-0	EPA 200.8	N/A	0.001
2/17/17	2/22/17	170217005-01A	Selenium	7782-49-2	EPA 200.8	0.05	0.001
2/17/17	2/24/17	170217005-01A	Sodium	7440-23-5	EPA 200.7	N/A	0.1
2/17/17	2/22/17	170217005-01A	Thallium	7440-28-0	EPA 200.8	0.002	0.001

NT: Not Tested  
Lab MRL: Laboratory Minimum Reporting Level  
BDL: Below Laboratory MRL. A less than ( $<$ ) may also be used.

mg/L: Milligrams per Liter

3/6/17  
1170217005-01A



# Drinking Water Chain of Custody



## Report To Information

Company Name: SDS HYDRO

Contact Name: MARK VOLLE

Address: 545 E. BOLES PEAK AVE

SUITE 300

City/Co SP/S State/Co Zip 80903

Phone: 719-227-0074 Fax:

Email: [mvolle@sdshydro.com](mailto:mvolle@sdshydro.com)

Sampler Name: STEPH SCHWENKE

PO No.:

CAL Task No.

170217005

ARF

## BILL TO Information (if different from report to)

Company Name: SR WATER

Contact Name: JIM MORLEY

Address:

20 BONDER CRESCENT ST

T 125 R 65W 6<sup>th</sup> PH

CITY/CO SP/S STATE/CO ZIP 80003

Phone:

Fax:

County: El Paso

Phone: 303-659-2315

FAX: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)

## State Form / Project Information

PWSID: CO-0121724

System Name:  
LFW - 1

Address:  
NEW NW 527

Lakewood Lab

12860 W. Cedar Dr, Suite 100A

Lakewood CO 80228

Phone: 303-659-2315

FAX: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)

## LABORATORIES, INC.

## BILL TO Information (if different from report to)

Company Name: SDS HYDRO

Contact Name: MARK VOLLE

Address: 545 E. BOLES PEAK AVE

SUITE 300

City/Co SP/S State/Co Zip 80903

Phone: 719-227-0074 Fax:

Email: [mvolle@sdshydro.com](mailto:mvolle@sdshydro.com)

Sampler Name: STEPH SCHWENKE

PO No.:

CAL Task No.

170217005

ARF

## PHASE I, II, V Drinking Water Analyses (check analysis)

## Subcontract Analyses

Total Chlorine  
(mg/L)  
P/A Samples Only

504.1 EDB/DBCP

505 Pests/PCBs

515.4 Herbicides

525.2 SOCs-Pest

531.1 Carbamates

547 Glyphosate

548.1 Endothall

549.2 Diquat

524.2 TTHMs

552.2 HAAs

Lead/Copper

Nitrate

Nitrite

Drinking Water Tests

Inorganics

Alk./Lang. Index

TOC, DOC (Circle)

SUVA, UV 254 (Circle)

1,4 Dioxane

Gross Alpha/Beta

Radium 226

Radium 228

Radon-Gamma

Uranium

Seals Present Yes  No

Headspace Yes  No

Temp.  $2^{\circ}\text{C}/\text{ice}$   Sample Pres. Yes  No

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date/Time:

Reinquished By:

Date/Time:

Received By:

Date/Time:

Delivered Via:

Relinquished By:

Date/Time:

Received By:

Date



Hazen Research, Inc.  
4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 275-1528

Lab Control ID: B16917  
Received: Feb 17, 2017  
Reported: Mar 20, 2017  
Purchase Order No.  
None Received

Customer ID: 20040H  
Account ID: Z01034  
Project #: 009-616

## ANALYTICAL REPORT

Stuart Nielson  
Colorado Analytical Laboratories, Inc.

Lab Sample ID		B16917-001 170217005-01 - Lfh-1 - PWSID: CO0121724 - LFH-1 sampled on 02/16/17 @ 0906 by Stephanie Schwenke						
Parameter	Units	Code	Result	Precision*	Detection	Method	Analysis Date / Time	Analyst
				+/-	Limit			
Gross Alpha	pCi/L	T	0.0	0.0	1.5	SM 7110 B	3/2/17 @ 0840	LD
Gross Beta	pCi/L	T	0.0	2.1	2.2	SM 7110 B	3/2/17 @ 0840	LD
Radium-226	pCi/L	T	0.0	0.2	0.1	SM 7500-Ra B	3/3/17 @ 0825	LD
Radium-228	pCi/L	T	0.0	0.8	0.8	EPA Ra-05	3/14/17 @ 1257	JR
Radon	pCi/L	T	345	25	13.9	SM 7500-Rn B	2/17/17 @ 1500	AN

Certification ID's: CO/EPA CO00008; CT PH-0152; KS E-10265; NJ CO008; NYSELAP (NELAC Certified) 11417; RI LAO00284; WI 998376610, TX T104704256-15-6

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Total Residual  
(PD) = Potentially Dissolved < = Less Than



## Radionuclides Certified Laboratory Report Form

Revision 6/13/2014

**RAD**

WQCD – Drinking Water CAS  
 4300 Cherry Creek Drive South; Denver, CO 80246-1530  
 Fax: (303) 758-1398; cdph.drinkingswater@state.co.us

Section I (Supplied or Completed by Public Water System)		Section II (Supplied or Completed by Certified Laboratory)						
Public Water System Information		Certified Laboratory Information						
PWS ID: CO0121724		Laboratory ID: CO 00008						
System Name: Lift-1	Phone #:	Laboratory Name: Hazen Research, Inc.						
Contact Person:	Do Samples Need to be Composed BY THE LAB?	Contact Person: Jessica Axen	Phone #: 303-279-4501					
Comments:		Comments:						
Section III (Supplied or Completed by Public Water System)								
Sample Date: 02/16/2017	Collector: Stephanie Schwenke Facility ID (On Schedule):	Sample Pt ID (On Schedule):						
Section IV Radiotracers (Supplied or Completed by Certified Laboratory)								
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name (Code)	CAS No.	Analytical Method	MCL	Lab MRL	Result
02/17/2017	02/02/2017	B16917-001	Gross Alpha Including Uranium (4002)	12587-46-1	SM 7110 B	N/A	1.5	0.0( $\pm$ 0.0)
			Combined Uranium (4006)	7440-61-1	D2907-97	30 ug/L		
			Radium -226 (4020)	13992-63-3	SM 7500-Ra B	N/A	0.1	0.0( $\pm$ 0.2)
			Radium -228 (4030)	15262-20-1	EPA Ra-05	N/A	0.8	0.0( $\pm$ 0.8)
			Gross Beta (4100)	12587-47-2	SM 7110 B	50 pCi/L*	2.2	0.0( $\pm$ 2.1)
			Total Dissolved Solids (1930)		EPA 160.3	N/A		
*The MCL for Gross Beta Particle Activity is 4 mrem/year. Since there is no simple conversion between mrem/year and pCi/L EPA considers 50 pCi/L to be the level of concern.								
Section V Calculated Values								
		Gross Alpha Excluding Uranium (4000)	Calculated Value	15 pCi/L	N/A			
		Combined Radium { -226 & -228 } (4010)	Calculated Value	5 pCi/L	N/A			

NT: Not Tested

Lab MRL: Laboratory Minimum Reporting Level

BDL: Below Laboratory MRL. A less than sign (&lt;) may also be used

ug/L: Micrograms per Liter

pCi/L: Picocuries per Liter

MCL: Maximum Contaminant Level

# Drinking Water Chain of Custody

FED EX

## Report To Information

Company Name: Colorado Analytical

Contact Name: Stuart Nelson

Address:

240 S. Main St.

Address:  
\_\_\_\_\_

City: Brighton

State: CO Zip: 80601

Phone: 303-659-2313

Fax: 303-659-2315

Email: stuartnelson@coloradolab.com

Sampler Name: Stephanie Schwerdt

PONO:

## BILL TO Information (if different from report to)

Company Name: Same As Report To

Contact Name: \_\_\_\_\_

Address:  
\_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Send Forms to State: Yes  No

## State Form / Project Information

PWSID: C00121724

System Name: Lfh-1

System Address:  
Ne 14 Avw 1/4 S27

T125 R65w G# Pm  
City: Colorado Springs State: CO Zip: 80908



Colorado Analytical  
Laboratories, Inc.

Brighton Lab  
240 South Main Street  
Brighton, CO 80601

Lakewood Lab  
12860 W. Cedar Dr, Suite 101  
Lakewood CO 80228

Phone: 303-659-2313

Fax: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)

## Task Number

## PHASE I, II, V Drinking Water Analyses (check analysis)

## Subcontract Analyses

Date Time Client Sample ID / EP Code

No. of Containers  
Residual Chlorine (mg/L)  
P/A Samples Only

Total Coliform P/A

504.1 EDB/DBCP

505 Pests/PCBs

515.4 Herbicides

524.2 VOCs

525.2 SOCs-Pest

531.1 Carbamates

547 Glyphosate

548.1 Endothall

549.2 Diquat

524.2 TTHMs

552.2 HAA5s

Lead/Copper

Nitrate

Nitrite

Fluoride

Inorganics

Alk./Lang. Index

TOC, DOC (Circle)

SUVA, UV 254 (Circle)

Gross Alpha/Beta

Radium 226

Radium 228

Radon

Uranium

Instructions: Please print on state forms but do not submit to CDPPB. Thanks!

C/S Info:

To: Hager

Seals Present Yes  No  Headspace Yes  No

Temp. °C/Ice Sample Pres. Yes  No

1.8

Retrqnished By:

2/17/16

Date/Time:

Received By:

Date/Time:

Delivered Via:

FedEx SD

Relinquished By:

Date/Time:

Received By:

Date/Time:

02/17/2017



## Analytical Results

TASK NO: 170217005

Report To: Mark Volle

Company: JDS Hydro Consultants  
545 E. Pikes Peak Ave  
Suite 300  
Colorado Springs CO 80903

Bill To: Jim Morley

Company: SR Water  
20 Boulder Crescent St.  
Colorado Springs CO 80903

Task No.: 170217005  
Client PO:  
Client Project: LFH-1 CO-0121724

Date Received: 2/17/17  
Date Reported: 3/6/17  
Matrix: Water - Drinking

Customer Sample ID LFH-1

Sample Date/Time: 2/16/17

Lab Number: 170217005-01

Test	Result	Method	ML	Date Analyzed	Analyzed By
Bicarbonate	159.5 mg/L as CaCO <sub>3</sub>	SM 2320-B	0.1	2/20/17	VDB
Calcium as CaCO <sub>3</sub>	6.3 mg/L	SM 3111-B	0.1	2/24/17	MBN
Carbonate	4.0 mg/L as CaCO <sub>3</sub>	SM 2320-B	0.1	2/20/17	VDB
Langelier Index	-0.43 units	SM 2330-B		2/24/17	SAN
pH	8.44 units	SM 4500-H-B	0.01	2/17/17	MBN
Temperature	20 °C	SM 4500-H-B	1	2/17/17	MBN
Total Alkalinity	159.5 mg/L as CaCO <sub>3</sub>	SM 2320-B	0.1	2/20/17	VDB
Total Dissolved Solids	488 mg/L	SM 2540-C	5	2/23/17	ISG

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 ml = Most Probable Number Index/ 100 ml

Date Analyzed = Date Test Completed

DATA APPROVED FOR RELEASE BY

# Drinking Water Chain of Custody



LABORATORIES, INC.

## Report Information:

Company Name: JDS-Hydro  
 Contact Name: Mark Vale  
 Address: 545 E. Pikes Peak Ave  
Suite 300  
 City: CS State: CO Zip: 80903

Phone: 719-227-0510 Fax:   
 Email: Mvalle@jds-hydro.com  
 Sampler Name: Stephanie Schuett PON#:

## BMT Information (if different from report info)

Company Name: SP Water  
 Contact Name: Tom Morley  
 Address: 20 Boulder CresenSt  
T12S R26SW 6th Ave  
 City: ColoSprings State: CO Zip: 80903  
 County: El Paso  
 Compliance Samples: Yes  No   
 Send Forms to State: Yes  No

## State Form / Project Information

PWSID: 60-0131704  
 System Name: LFT-1  
 Address: NE 1/4 NW 1/4 S27  
12860 W. Cedar Dr., Suite 100A  
 Lakewood Lab  
 Lakewood CO 80228  
 Phone: 303-659-2313  
 Fax: 303-659-2315  
[www.coloradolab.com](http://www.coloradolab.com)

CAL Task No.  
170217005

## PHASE I, II, V Drinking Water Analyses (check analysis)

### Subcontract Analyses

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index	TOC/DOC (Circle)	SUVA, UV 254 (Circle)	Metals	Gross Alpha/Beta	Radium 226	Radium 228	Radon	Uranium
7/13/17	#1	X			X																									
7/14	#2	X					X																							
7/30	#3	X						X																						
8/34	#4	X							X																					
8/35	#5	X								X																				
8/36	#6	X								X																				
8/37	#7	X								X																				
8/38	#8	X								X																				
8/39	#9	X								X																				
8/40	#10	X								X																				

Instructions:

Relinquished By: <u>Stephanie Schuett</u>	Date/Time: <u>10:45 AM</u>	Received By: <u>John Schuett</u>	Date/Time: <u>10/11/17 0800</u>	Delivered Via: <u>fedex</u>	CS Charge: <u>Temp. ✓ °C/Ice ✓</u>	Sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Seals Present Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Headspace Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	----------------------------	----------------------------------	---------------------------------	-----------------------------	------------------------------------	--	---	---

# Drinking Water Chain of Custody


**Report To Information**

Company Name: JDS HYDRO

Contact Name: MARK VOLLE

Address: 545 E. BOXES PEAK AVE

SUITE 300

CITY/CO SP65 State/CO zip 80903

Phone: 719-227-0072 Fax:

Email: mvolle@jdshydro.com Email: jmvolle433870@aol.com

Sampler Name: STEPH SCHWENKE

P.O.#:

CAL Task No.  
170217005

ARF

Bill To Information (if different from report to)			State Form / Project Information	
Company Name: <u>SR WATER</u>			PWSID: <u>CO-0121724</u>	
Contact Name: <u>JIM MORLEY</u>			System Name: <u>LFH-1</u>	
Address: <u>20 BENDER CRESCENT ST</u>			Address: <u>125 RIVER LN #27</u>	
<u>NEW JERSEY NJ 07452</u>			City/Co/Zip: <u>STATE CO ZIP 07008</u>	
Phone: <u>719-227-0072</u> Fax:			Phone: <u>303-659-2315</u>	
Email: <u>jmorley@jdshydro.com</u> Email: <u>jmvolle433870@aol.com</u>			Fax: <u>303-659-2315</u>	
Sampler Name: <u>STEPH SCHWENKE</u>			Compliance Samples: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
P.O.#:			Send Forms to State: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

### PHASE I, II, V Drinking Water Analyses (check analysis)

#### Subcontract Analyses

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	525.2 SOC's-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	532.2 HAA5s	Lead/Copper	Nitrate	Nitrite	DINING Elderly Water <sup>1000</sup>	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	1,4 Dioxane	Gross Alpha/Beta	Radium 226	Radium 228	Radon-Cyanide	Uranium
2/16	8:37	#11	3																										
	9:50	#12	3																										
	9:51	#13	2																										
	9:43	#14	1																										
	10:34	#15	1																										
	8:44	#16	1						X																				
	10:16	#17	1																										
	8:43	#18	1																										
	9:19	#19	3						X																				

Instructions:

34+ SO4/Blank

SO4

CS Info:

Sediment

Delivered via:

Temp.

CS Charge

Temp. 30 °C/Ice

Seals Present Yes  No

Headspace Yes  No

Date/Time:

Received By:

Date/Time:

Instructions:  
34+ SO4/Blank



Colorado Department  
of Public Health  
and Environment

Nitrate and Nitrite as Nitrogen Certified Laboratory Report Form  
WQCD - Drinking Water CAS  
Submit Online at <http://www.wqcdcompliance.com/login>

Revised 4/13/2015

**NOX**

Section I (Supplied or Completed by Public Water System)

Public Water System Information

PWSID#: CO-0121724

System Name: LFH-1

Contact Person: Mark Volle

Phone #: 719-227-0072

Comments:

Section II (Supplied or Completed by Certified Laboratory)

Certified Laboratory Information

Laboratory ID: CO 0015

Laboratory Name: Colorado Analytical Laboratory

Contact Person: Customer Service

Phone: 303-659-2313

Comments:

Section III (Supplied or Completed by Public Water System)

Sample Date	Collector	Facility ID On Schedule	Sample Pt ID On Schedule	Confirmation?	Lab Receipt Date	Lab Analysis Date	Laboratory Sample ID #	Analytic	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)
2/16/17	Lephantine Schwerk			<input type="checkbox"/>	2/17/17	2/17/17	17027005-01	Nitrate Nitrogen	EPA 300.0	10	0.1	BDL
2/16/17	Lephantine Schwerk			<input type="checkbox"/>	2/17/17	2/17/17	17027005-01	Nitrite Nitrogen	EPA 300.0	1	0.1	BDL

Section IV (Supplied or Completed by Certified Laboratory)

Laboratory ID	Sample ID #	Analytic	Analytical Method	MCL (mg/L)	Lab MRL (mg/L)	Result (mg/L)

NT: Not Tested  
Lab MRI: Laboratory Minimum Reporting Level  
BDL: Below Laboratory MRI.. A less than (<) may also used.

mg/L: Milligrams per Liter  
MCL: Maximum Contaminant Level

36/17  
17027005-01  
1/1

Drinking Water Chain of Custody



**LABORATORIES, INC.**

Report Info Information		State Form / Project Information	
Bill To Information (if different from report to)			
Company Name:	<u>IDS-Hydro</u>	Company Name:	<u>SR Water</u>
Contact Name:	<u>Mark Volle</u>	Contact Name:	<u>J.m. Morley</u>
Address:	<u>545 E. Rivers Peak Ave</u>	Address:	<u>20 Boulderr Crescent</u>
City	<u>Cs</u>	City	<u>ColoSprings</u>
Zip	<u>80903</u>	Zip	<u>80903</u>
Phone:	<u>719-227-0572</u>	Phone:	<u>(719) 590-6277</u>
Email:	<u>mvolle@jshydro.com</u>	Email:	<u>jmorley@srwater.com</u>
Sampler Name:	<u>Sophanie Schwenke</u>	PO No.:	<u>Send Forms to State: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></u>
<i>Sample Request Form</i>		<i>www.coloradolab.com</i>	

CAL Task No.  
170217005

## Instructions:

Relinquished By:	Date/Time:	Received By:	Date/Time:	Temp. °C	°C Acc	Sample Pres. Yes	No
Delivered Via:	CSC Charged:						
<i>John Doherty</i>	10/24/17 10:45AM	<i>M. J. M. 3rd year</i>	10/24/17 10:45AM	6800			
Relinquished By:	Date/Time:	Received By:	Date/Time:				

# Drinking Water Chain of Custody



LABORATORIES, INC.

## Report To Information

Company Name: JDS HYDRO

Contact Name: MARK VOLLE

Address: 545 E. POKES PEAK AVE  
SUITE 300

City/State/Zip: COLO SPRINGS CO ZIP 80903

Phone: 719-277-0072 Fax:

Email: mark.muelle@jdshydro.com

Sampler Name: STEPH SCHWENKE

PO No.:

CAL Task No.

170217005

## Bill To Information (if different from report to)

Company Name: SR WATER

Contact Name: STEVE MORLEY

Address: 20 BONDER CRESCENT ST  
NE 4 NW 1/4 S 27

City/State/Zip: COLO SPRINGS CO ZIP 80908

Phone: 719-590-4450 Fax:

Email: smorley@srwater.com

Compliance Samples: Yes  No

Send Forms to State: Yes  No

Please return

results or state forms

## State Form / Project Information

PWSID: CO-0121724

System Name:  
LFW-1

Address: NE 4 NW 1/4 S 27  
T 12S R 65W 6<sup>th</sup> PM

Lakewood Lab  
12860 W. Cedar Dr, Suite 100A

Phone: 303-659-2313  
Fax: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)

## Brighton Lab

240 South Main Street  
Brighton, CO 80601

## Project Information

Project Name: ARF

Page 1 of 3

## PHASE I, II, V Drinking Water Analyses (check analysis)

### Subcontract Analyses

Date	Time	Client Sample ID / EP Code	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	525.2 SOC's-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Inorganics	Alk./Lang. Index	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	1,4 Dioxane	Gross Alpha/Beta	Radium 226	Radium 228	Radon/Gamma	Uranium
2/16	9:31	#11	3																									
	9:30	#12	3																									
	9:31	#13	3																									
	9:43	#14	1																									
	9:40	#15	1																									
	8:44	#16	1																									
	8:45	#17	1																									
	8:43	#18	1																									
	8:49	#19	3																									

## Instructions:

34 + 504 Blank

CS Info:

sedex

Seals Present Yes  No

Headspace Yes  No

Page 3 of 3

Relinquished By:

JM

Date/Time: 2/17/17 12:56PM

Received By: Metzger

Date/Time: 2/17/17 0800

Delivered Via:

CS Charge

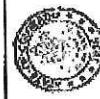
Temp. 3 °C/ice

Sample Pres. Yes  No

Date/Time:

Received By: JM

Date/Time:



Colorado Department  
of Public Health  
and Environment

**Organic Chemicals Certified Laboratory Report Form**  
**WQCD - Drinking Water CAS**  
**Submit Online at <http://www.wqcdcompliance.com/login>**

**VOC/SOC**

Revised 4/13/2015

<b>Section I (Supplied or Completed by Public Water System)</b>			<b>Section II (Supplied or Completed by Certified Laboratory)</b>		
<b>Public Water System Information</b>			<b>Certified Laboratory Information</b>		
PWSID#: CO-0121724	System Name: LFH-1	Phone #: 719-227-0072	Laboratory ID: CO 00063		
Contact Person: Mark Volle	Comments:	Do Samples Need to be Composited BY THE LAB?			
<input type="checkbox"/>					

<b>Section V (Supplied or Completed by Public Water System)</b>					
<b>Sample Pt ID (On Schedule):</b>			<b>Sample Pt ID (On Schedule):</b>		
<b>Section VI Synthetic Organic Chemicals (Supplied or Completed by Certified Laboratory)</b>					
Lab Receipt Date	Lab Sample ID	Analyte Name	CAS No.	Analytical Method	MCL (ug/L)
2/24/17	170217005-01F	Dibromochloropropane	96-12-8	EPA 504.1	0.2
2/17/17	170217005-01G	2,4-D	94-75-7	EPA 515.4	70
3/1/17	170217005-01G	2,4,5-TP	93-72-1	EPA 515.4	50
2/17/17	170217005-01H	Aalachlor	15972-60-8	EPA 525.2	2
2/23/17	170217005-01H	Aldicarb	116-06-3	EPA 531.1	N/A
3/2/17	170217005-01H	Aldicarb sulfone	1646-88-4	EPA 531.1	N/A
2/17/17	170217005-01H	Aldicarb sulfoxide	1646-87-3	EPA 531.1	N/A
3/2/17	170217005-01H	Atrazine	1912-24-9	EPA 525.2	3
2/17/17	170217005-01H	Benz(a)pyrene	50-32-8	EPA 525.2	0.2
2/23/17	170217005-01H	Carbofuran	1563-66-2	EPA 531.1	40
2/17/17	170217005-01H	Chlordane	57-74-9	EPA 505	2
2/24/17	170217005-01F	Dalapon	75-99-0	EPA 515.4	200
3/1/17	170217005-01G	Di(2-ethylhexyl)adipate	103-23-1	EPA 525.2	400
2/23/17	170217005-01H	Di(2-ethylhexyl)phthalate	117-81-7	EPA 525.2	6
2/17/17	170217005-01H	Dinosob	85-85-7	EPA 515.4	7
3/1/17	170217005-01G	Diquat	85-00-7	EPA 549.2	20
2/23/17	170217005-01K	Fenthion	145-73-3	EPA 548.1	100
2/17/17	170217005-01J	Fenitrothion	72-20-8	EPA 505	2
2/24/17	170217005-01F	Ethylene difluoride	106-93-4	EPA 504.1	0.05
2/24/17	170217005-01E	Heptachlor	76-44-8	EPA 525.2	0.4
2/23/17	170217005-01H	Heptachlor epoxide	1024-57-3	EPA 505	0.2
2/17/17	170217005-01F				0.02

NT: Not Tested ug/L: Micrograms per Liter MCL: Maximum Contaminant Level BDL: Below Laboratory MRL A less than sign (<) may also be used.

170217005-01 11/2  
36/17

Section V (Supplied or Completed by Public Water System)						
Sample Pt I (On Schedule):			Sample Pt II (On Schedule):			
Section VI Synthetic Organic Chemicals (Supplied or Completed by Certified Laboratory)				Analytical Method		
Lab Receipt Date	Lab Analysis Date	Lab Sample ID	Analyte Name	CAS No.	MCL (ug/L)	Lab MRL (ug/L)
2/17/17	2/24/17	170217005-01F	Hexachlorobenzene	118-74-1	EPA 505	1
2/17/17	2/24/17	170217005-01F	Hexachlorocyclopentadiene	77-47-4	EPA 505	50
2/17/17	2/24/17	170217005-01F	Indane	58-89-9	EPA 505	0.2
2/17/17	2/24/17	170217005-01F	Methoxychlor	72-43-5	EPA 505	40
2/17/17	3/2/17	170217005-01I	Oxamyl	23135-22-0	EPA 531.1	200
2/17/17	3/1/17	170217005-01G	Pentachlorophenol	87-86-5	EPA 515.4	1
2/17/17	3/1/17	170217005-01G	Picloram	1918-02-1	EPA 515.4	500
2/17/17	2/24/17	170217005-01F	Polychlorinated Biphenyl's	1336-36-3	EPA 505	0.5
2/17/17	2/23/17	170217005-01H	Simazine	122-34-9	EPA 525.2	4
2/17/17	2/24/17	170217005-01F	Toxaphene	8601-35-2	EPA 505	3

NT: Not Tested up/L. Micrograms per Liter MCL: Maximum Contaminant Level BDL Below Laboratory MRL & less than sign (<) may also be used.

# Drinking Water Chain of Custody



Report Info:

Bill To Information (if different from report info)

Company Name: JDS-Hydro

Contact Name: Marc Volpe

Address: 5452. River Peak Ave

Suite 300

City CS State CO Zip 80903

Phone: 720-227-0512

Fax:

Email: MarcVolpe@jds-hydro.com

Sampler Name: Stephanie Schuerke P.O. No:

State, Form / Project Information

PWSID: 10-0101724

System Name: LFT-1

Address: NE 1/4 NW 1/4 527

City ColoSprings State CO Zip 80908

Phone: 303-659-2315

Fax:

County: El Paso

Compliance Sample: Yes  No

Sample Type: Drinking Water

Sample ID: DR-101724

URL: www.coloradolab.com

Send Forms to State: Yes  No

CAL Task No.  
170217005

## PHASE I, II, V Drinking Water Analyses (check analysis)

### Subcontract Analyses

ARF

Date	Time	Client Sample ID / EP Code	No. of Containers
<u>7/13/11</u>	<u>11:31</u>	<u>#1</u>	<u>3</u>
<u>7/14</u>	<u>12</u>		
<u>7/15/11</u>	<u>#3</u>	<u>3</u>	
<u>7/19/11</u>	<u>#4</u>	<u>3</u>	
<u>7/20/11</u>	<u>#5</u>	<u>1</u>	
<u>7/21/11</u>	<u>#6</u>	<u>1</u>	
<u>7/22/11</u>	<u>#7</u>	<u>1</u>	
<u>7/23/11</u>	<u>#8</u>	<u>1</u>	
<u>7/24/11</u>	<u>#9</u>	<u>1</u>	
<u>7/25/11</u>	<u>#10</u>	<u>1</u>	

Residual Chlorine  
(mg/L)  
P/A Samples Only

Total Coliform P/A  
504.1 EDB/DBCP  
505 Pests/PCBs  
515.4 Herbicides  
524.2 VOCs  
525.2 SOCs-Pest  
531.1 Carbamates  
547 Glyphosate  
548.1 Endothall  
549.2 Diquat  
524.2 TTHMs  
552.2 HAA5s  
Lead/Copper  
Nitrate  
Nitrite  
Fluoride  
Inorganics  
Alk./Lang. Index  
TOC/DOC (Circle)  
SUVA, UV 254 (Circle)

Metals  
Gross Alpha/Beta  
Radium 226  
Radium 228  
Radon  
Uranium

		C/S Info:		Seals Present Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Headspace Yes <input type="checkbox"/> No <input type="checkbox"/>	
Delivered Via:	<u>fedex</u>	Date/Time:	<u>7/11/11 6:00</u>	Temp. °C/ice	<u>4</u>	sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Relinquished By:		Date/Time:		Received By:		Date/Time:	
Relinquished By:	<u>D. J. M.</u>	Date/Time:	<u>7/14/11 12:00</u>	Received By:		Date/Time:	
Received By:	<u>M. M.</u>	Date/Time:	<u>7/17/11 6:00</u>	Delivered Via:		Temp. °C/ice:	

Instructions:

# Drinking Water Chain of Custody



State Form / Project Information

**Report To Information**

Company Name: JDS HYDRO  
 Contact Name: MARY VOLLE  
 Address: 545 E. PIKES PEAK AVE  
SUITE 300  
City/Co 8065 State/Co zip 80903

**Bill To Information (if different from report to)**

Company Name: SR water  
 Contact Name: JEM MORLEY  
 Address: 20 BONDER CRESCENT ST  
T 125 R 65W C 77 PM  
NE 1/4 NW 1/4 S 27  
City/Co 805 State/Co zip 80803

PWSID: CO-0121724  
 System Name: LFA-1

**Address:** 12860 W. Cedar Dr, Suite 100A  
Brighton Lab  
Lakewood Lab  
Phone: 303-659-2313  
Fax: 303-659-2315  
www.coloradolab.com

**Address:** 240 South Main Street  
Brighton, CO 80601

**Phone:** 719-227-0072  
**Fax:**   
**Email:** mmarley@jdshydro.com jmorley@3870@aol.com  
**Sampler Name:** STEPH SCHWENKE  
**PONO:**

**Send Forms to State:** Yes  No   
*Please return results on state forms*

CAL Task No.  
170217005

## PHASE I, II, V Drinking Water Analyses (check analysis)

Subtract Analyses

Date	Time	Client Sample ID / EP Code	No. of Containers
7/16	5:37	#11	3
7/16	4:50	412	3
7/16	4:13	413	2
7/16	4:14	414	1
7/16	3:40	415	1
7/16	4:16		X
7/16	4:17		X
7/16	4:18		X
7/16	4:19	419	3

Drinking Water	
Inorganics	
Alk./Lang. Index	
TOC, DOC (Circle)	
SUVA, UV 254 (Circle)	
1,4 Dioxane	X
Gross Alpha/Beta	X
Radium 226	X
Radium 228	X
Radon-Gamma	X
Uranium	

CS Info:	Scals Present	Yes	No	Headspace	Yes	No
<i>Handwritten CS Info:</i>						

Instructions:

34 + 504 Blank

Relinquished By:  
J. Marley

Date/Time: 7/16/17 12:57PM Received By: M. Marley

Date/Time: 7/17/17 0800

Delivered via:

Relinquished By:

Date/Time:

Temp. 70 °C/Ice

Received By:

Date/Time:

Sample Pres. Yes  No

Date/Time:

## Analytical Results

**TASK NO: 170217005**

**Report To:** Mark Volle  
**Company:** JDS Hydro Consultants  
 545 E. Pikes Peak Ave  
 Suite 300  
 Colorado Springs CO 80903

**Bill To:** Jim Morley  
**Company:** SR Water  
 20 Boulder Crescent St.  
 Colorado Springs CO 80903

**Task No.:** 170217005  
**Client PO:**  
**Client Project:** LFH-1 CO-0121724

**Date Received:** 2/17/17  
**Date Reported:** 3/6/17  
**Matrix:** Water - Drinking

**Customer Sample ID** LFH-1

**Sample Date/Time:** 2/16/17

**Lab Number:** 170217005-01

Test	Result	Method	ML	Date Analyzed	Analyzed By
Chloride	5.8 mg/L	EPA 300.0	0.1 mg/L	2/17/17	LJG
Cyanide-Free	< 0.005 mg/L	EPA 335.4	0.005 mg/L	2/24/17	VDB
E-Coli	< 1 mpn/100ml	Colilert	1 mpn/100ml	2/18/17	VDB
Sulfate	142.1 mg/L	EPA 300.0	0.1 mg/L	2/17/17	LJG
Total Coliform	93 mpn/100ml	Colilert	1 mpn/100ml	2/18/17	VDB
Total Organic Carbon	0.8 mg/L	SM 5310-C	0.5 mg/L	2/23/17	ISG
Turbidity	2.49 NTU	SM 2130-B	0.01 NTU	2/17/17	MBN
<i>Total</i>					
Aluminum	0.063 mg/L	EPA 200.8	0.001 mg/L	2/22/17	TCD
Calcium	2.5 mg/L	EPA 200.7	0.1 mg/L	2/22/17	MBN
Copper	0.0026 mg/L	EPA 200.8	0.0008 mg/L	2/22/17	TCD
Iron	0.802 mg/L	EPA 200.7	0.005 mg/L	2/24/17	MBN
Lead	0.0005 mg/L	EPA 200.8	0.0001 mg/L	2/22/17	TCD
Magnesium	0.39 mg/L	EPA 200.7	0.02 mg/L	2/22/17	MBN
Manganese	0.0258 mg/L	EPA 200.8	0.0008 mg/L	2/22/17	TCD
Potassium	1.6 mg/L	EPA 200.7	0.1 mg/L	2/22/17	MBN
Silver	< 0.0001 mg/L	EPA 200.8	0.0001 mg/L	2/22/17	TCD
Strontium	0.037 mg/L	EPA 200.8	0.005 mg/L	2/22/17	TCD
Total Hardness	7.7 mg/L as CaCO <sub>3</sub>	SM 2340-B	0.1 mg/L as CaCO <sub>3</sub>	2/24/17	MBN
Uranium	< 0.0002 mg/L	EPA 200.8	0.0002 mg/L	2/22/17	TCD
Zinc	0.004 mg/L	EPA 200.8	0.001 mg/L	2/22/17	TCD

**Abbreviations/ References:**

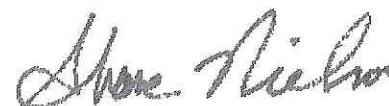
ML = Minimum Level = LRL = RL

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 ml = Most Probable Number Index/ 100 ml

Date Analyzed = Date Test Completed



DATA APPROVED FOR RELEASE BY



## Analytical Results

TASK NO: 170217005

Report To: Mark Volle

Company: JDS Hydro Consultants  
545 E. Pikes Peak Ave  
Suite 300  
Colorado Springs CO 80903

Bill To: Jim Morley

Company: SR Water  
20 Boulder Crescent St.  
Colorado Springs CO 80903

Task No.: 170217005

Client PO:

Client Project: LFH-1 CO-0121724

Date Received: 2/17/17

Date Reported: 3/6/17

Matrix: Water - Drinking

Customer Sample ID: LFH-1

Sample Date/Time: 2/16/17

Lab Number: 170217005-01

Test	Result	Method	ML	Date Analyzed	Analyzed By
Total Zinc	0.005 mg/L	EPA 200.8	0.001 mg/L	2/22/17	TCD

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed

A handwritten signature in black ink that reads "Steve Nielson". The signature is written in a cursive style with a long horizontal line extending to the right.

DATA APPROVED FOR RELEASE BY

240 South Main Street / Brighton, CO 80601-0507 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507 / Fax: 303-659-2315

# Drinking Water Chain of Custody



LABORATORIES, INC.

## Report Information

Company Name: DS-Hydro

Contact Name: Mark Volke

Address: 545 E. Pikes Peak Ave

Suite 300

CS StateCO zip 80903

Phone: 719-527-0223

Email: Mvolke@jishydro.com

Sampler Name: Stephanie Schuerkens

PO No.:

## BH To Information (if different from report ID)

Company Name: SP Water

Contact Name: Tim Marley

Address: 20 Boulder Crescent St

NE 1/4 NW 1/4 S27

T1S R26SW 16th PH

City CO zip 80903

Phone:

Fax:

County: E1 Peso

Compliance Samples: Yes  No

Seal Forms to State: Yes  No

or e-mail: jmarley@spwater.com

## State Form / Project Information

PWSID: CO\_0121724

System Name: LFT-1

Address: NE 1/4 NW 1/4 S27

T1S R26SW 16th PH

City CO zip 80903

Phone: 303-659-2313

FAX: 303-659-2315

[www.coloradolab.com](http://www.coloradolab.com)



## Brighton Lab

240 South Main Street

Brighton, CO 80601

Lakewood Lab

12860 W. Cedar Dr, Suite 100A

Lakewood CO 80228

CAL Task No. <u>170217005</u>		PHASE I, II, V Drinking Water Analyses (check analysis)	
<b>ARF</b>			
Date	Time	Client Sample ID / EP Code	No. of Containers
7/13	#1		X
7/14	#2		X
7/30	#3		X
8/5/04	#4		X
8/5/04	#5		X
8/6/04	#6		X
8/22	#7		X
8/26	#8		X
9/15/04	#9		X
8/5/04	#10		X

C/S Info:

fedex

Subcontract Analyses

Seals Present Yes  No

Headspace Yes  No

Delivered Via:	C/S Charged:	Temp. °C/lce	Sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<u>Reinquished By: <i>Deb Hinkley</i></u>	<u>Date/Time: 12:45 PM 7/17/04</u>	<u>Received By: <i>WV</i></u>	<u>Date/Time: 2:11 PM 8/20/04</u>

Instructions:

# Drinking Water Chain of Custody



## Report To Information

Company Name: JDS HYDRO

Contact Name: MARY VOLLE

Address: 545 E. RIDGE PEAK AVE.

SUITE 300

CITY/STATE ZIP 80903

Phone: 719-227-0072 Fax:

Email: mvolle@jdshydro.com

Sampler Name: STEPH SCHWENKE

CAL Task No.

170217005

## Bill To Information (if different from report to)

Company Name: SR WATER

Contact Name: TERI MORLEY

Address: 20 BOULDER CRESCENT ST

NE 14 NO 44 S 27

T 125 R 65W 6<sup>th</sup> PM

CITY/STATE ZIP 80903

Phone:

Fax:

County: EL PASO

Compliance Samples: Yes  No

www.coloradolab.com

## State Form / Project Information

PWSID: CO-0121724

System Name:  
LFA-1

Address: NE 14 NO 44 S 27

T 125 R 65W 6<sup>th</sup> PM

CITY/STATE ZIP 80903

DRINKING WATER TESTS

INORGANICS

ALK./LANG. INDEX

TOC, DOC (Circle)

SUVA, UV 254 (Circle)

1,4 DIOXANE

GROSS ALPHA/BETA

RADIUM 226

RADIUM 228

RADON-CYANIDE

URANIUM

SEALS PRESENT YES  NO

HEADSPACE YES  NO

CS Info:



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

## ANALYTICAL SUMMARY REPORT

March 02, 2017

Colorado Analytical Laboratories Inc

PO Drawer 507  
Brighton, CO 80601

Work Order: C17020566      Quote ID: C4542 - 624, 625, 1,4-Dioxane

Project Name: 170217005 LFH-1 CO-0121724

Energy Laboratories, Inc. Casper WY received the following 1 sample for Colorado Analytical Laboratories Inc on 2/21/2017 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C17020566-001	170217005-01 LFH-1	02/16/17 0:00	02/21/17	Drinking Water	Azeotropic Distillation Separatory Funnel Liquid-Liquid Ext. Semi-Volatile Organic Compounds 624-Purgeable Organics Volatile Compounds by Azeotropic Distillation

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

Randy Horton, Project Manager

Digitally signed by  
Randy Horton  
Date: 2017.03.02 10:49:28 -07:00



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515

College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

**CLIENT:** Colorado Analytical Laboratories Inc  
**Project:** 170217005 LFH-1 CO-0121724  
**Work Order:** C17020566

**Report Date:** 03/02/17

## CASE NARRATIVE

Tests associated with analyst identified as ELI-B were subcontracted to Energy Laboratories, 1120 S. 27th St., Billings, MT, EPA Number MT00005.

**LABORATORY ANALYTICAL REPORT**

Prepared by Casper, WY Branch

**Client:** Colorado Analytical Laboratories Inc  
**Project:** 170217005 LFH-1 CO-0121724  
**Lab ID:** C17020566-001  
**Client Sample ID:** 170217005-01 LFH-1

**Report Date:** 03/02/17  
**Collection Date:** 02/16/17  
**DateReceived:** 02/21/17  
**Matrix:** Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>VOCS BY AZEOTROPIC DISTILLATION</b>							
1,4-Dioxane	ND	ug/L		1.0		SW8260M	02/27/17 11:16 / ell-b
- Analysis by direct aqueous injection of the sample distillate. A deuterated version of 1,4-Dioxane was added to the sample prior to distillation and used to quantitate the 1,4-Dioxane and account for any variations in the analysis or distillation.							
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Acetone	ND	ug/L		20		E624	02/24/17 19:19 / ell-b
Acetonitrile	ND	ug/L		20		E624	02/24/17 19:19 / ell-b
Acrolein	ND	ug/L		20		E624	02/24/17 19:19 / ell-b
Acrylonitrile	ND	ug/L		20		E624	02/24/17 19:19 / ell-b
Benzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Bromobenzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Bromochloromethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Bromodichloromethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Bromoform	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Bromomethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Carbon disulfide	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Carbon tetrachloride	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Chlorobenzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Chlorodibromomethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Chloroethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
2-Chloroethyl vinyl ether	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Chloroform	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Chloromethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
2-Chlorotoluene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
4-Chlorotoluene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,2-Dibromoethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Dibromomethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,2-Dichlorobenzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,3-Dichlorobenzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,4-Dichlorobenzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Dichlorodifluoromethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,1-Dichloroethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,2-Dichloroethane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,1-Dichloroethene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
cis-1,2-Dichloroethene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
trans-1,2-Dichloroethene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,2-Dichloropropane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,3-Dichloropropane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
2,2-Dichloropropane	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
1,1-Dichloropropene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
cis-1,3-Dichloropropene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
trans-1,3-Dichloropropene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b
Ethylbenzene	ND	ug/L		1.0		E624	02/24/17 19:19 / ell-b

**Report Definitions:** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

**MCL** - Maximum contaminant level.  
**ND** - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

**Client:** Colorado Analytical Laboratories Inc  
**Project:** 170217005 LFH-1 CO-0121724  
**Lab ID:** C17020566-001  
**Client Sample ID:** 170217005-01 LFH-1

**Report Date:** 03/02/17  
**Collection Date:** 02/16/17  
**DateReceived:** 02/21/17  
**Matrix:** Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/QCL	Method	Analysis Date / By
<b>VOLATILE ORGANIC COMPOUNDS</b>							
Methyl tert-butyl ether (MTBE)	ND	ug/L		2.0	E624		02/24/17 19:19 / eli-b
Methyl ethyl ketone	ND	ug/L		20	E624		02/24/17 19:19 / eli-b
Methyl isobutyl ketone	ND	ug/L		10	E624		02/24/17 19:19 / eli-b
Methylene chloride	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Naphthalene	ND	ug/L		0.50	E624		02/24/17 19:19 / eli-b
Styrene	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Tetrachloroethene	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
1,1,1,2-Tetrachloroethane	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
1,1,2,2-Tetrachloroethane	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Toluene	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Trichloroethene	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
1,1,1-Trichloroethane	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
1,1,2-Trichloroethane	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Trichlorofluoromethane	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
1,2,3-Trichloropropane	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Vinyl Acetate	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Vinyl chloride	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
m+p-Xylenes	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
α-Xylene	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Xylenes, Total	ND	ug/L		1.0	E624		02/24/17 19:19 / eli-b
Surr: 1,2-Dichloroethane-d4	76.0	%REC		71-139	E624		02/24/17 19:19 / eli-b
Surr: p-Bromofluorobenzene	92.0	%REC		80-127	E624		02/24/17 19:19 / eli-b
Surr: Toluene-d8	94.0	%REC		80-123	E624		02/24/17 19:19 / eli-b
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
Acenaphthene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Acenaphthylene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Anthracene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Azobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Benzidine	ND	ug/L		10	E625		02/28/17 13:13 / eli-b
Benzo(a)anthracene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Benzo(a)pyrene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Benzo(b)fluoranthene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Benzo(g,h,i)perylene	ND	ug/L		10	E626		02/27/17 19:27 / eli-b
Benzo(k)fluoranthene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
4-Bromophenyl phenyl ether	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Butylbenzylphthalate	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
4-Chloro-3-methylphenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
bis(-2-chloroethoxy)Methane	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
bis(-2-chloroethyl)Ether	ND	ug/L		10	E626		02/27/17 19:27 / eli-b
bis(2-chloroisopropyl)Ether	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
2-Chloronaphthalene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
2-Chlorophenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b

**Report Definitions:** RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

**Client:** Colorado Analytical Laboratories Inc  
**Project:** 170217005 LFH-1 CO-0121724  
**Lab ID:** C17020566-001  
**Client Sample ID:** 170217005-01 LFH-1

**Report Date:** 03/02/17  
**Collection Date:** 02/16/17  
**DateReceived:** 02/21/17  
**Matrix:** Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
4-Chlorophenyl phenyl ether	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Chrysene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Diethyl phthalate	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Di-n-butyl phthalate	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
1,2-Dichlorobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
1,3-Dichlorobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
1,4-Dichlorobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
3,3'-Dichlorobenzidine	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
2,4-Dichlorophenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Dimethyl phthalate	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Di-n-octyl phthalate	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Dibenzo(a,h)anthracene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
2,4-Dimethylphenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
4,6-Dinitro-2-methylphenol	ND	ug/L		50	E625		02/27/17 19:27 / eli-b
2,4-Dinitrophenol	ND	ug/L		50	E625		02/27/17 19:27 / eli-b
2,4-Dinitrotoluene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
bis(2-ethylhexyl)Phthalate	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Fluoranthene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Fluorene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Hexachlorobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Hexachlorobutadiene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Hexachlorocyclopentadiene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Hexachloroethane	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Indeno(1,2,3-cd)pyrene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Isophorone	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
n-Nitrosodimethylamine	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
n-Nitroso-dl-n-propylamine	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
n-Nitrosodiphenylamine	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
2-Nitrophenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
4-Nitrophenol	ND	ug/L		50	E625		02/27/17 19:27 / eli-b
Naphthalene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Nitrobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Pentachlorophenol	ND	ug/L		50	E625		02/27/17 19:27 / eli-b
Phenanthrene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Phenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Pyrene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
1,2,4-Trichlorobenzene	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
2,4,6-Trichlorophenol	ND	ug/L		10	E625		02/27/17 19:27 / eli-b
Surr: 2-Fluorobiphenyl	59.0	%REC		28-107	E625		02/27/17 19:27 / eli-b
Surr: 2-Fluorophenol	34.0	%REC		20-56	E625		02/27/17 19:27 / eli-b
Surr: Nitrobenzene-d5	63.0	%REC		32-94	E625		02/27/17 19:27 / eli-b
Surr: Phenol-d5	33.0	%REC		19-45	E625		02/27/17 19:27 / eli-b

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energyisb.com

Billings, MT 800.735.4489 • Casper, WY 800.235.0515  
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

## LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Colorado Analytical Laboratories Inc  
Project: 170217005 LFH-1 CO-0121724  
Lab ID: C17020566-001  
Client Sample ID: 170217005-01 LFH-1

Report Date: 03/02/17  
Collection Date: 02/16/17  
DateReceived: 02/21/17  
Matrix: Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
----------	--------	-------	------------	----	-------------	--------	--------------------

### SEMI-VOLATILE ORGANIC COMPOUNDS

Surr: Terphenyl-d14	69.0	%REC		32-122	E625	02/27/17 19:27 / eli-b
Surr: 2,4,6-Tribromophenol	60.0	%REC		21-130	E625	02/27/17 19:27 / eli-b

- The sample was received past the extraction prep hold time. The prep hold time was exceeded by 4.31 days.

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624									Analytical Run: R275391
Lab ID: ccv022417	Continuing Calibration Verification Standard								02/24/17 09:51
Acetone	40.8	ug/L	20	82	70	130			
Acetonitrile	60.0	ug/L	20	120	70	130			
Acrolein	59.2	ug/L	20	118	70	130			
Acrylonitrile	46.4	ug/L	20	93	70	130			
Benzene	4.80	ug/L	0.50	96	70	130			
Bromobenzene	4.56	ug/L	0.50	91	70	130			
Bromoform	4.64	ug/L	0.50	93	70	130			
Bromochloromethane	4.08	ug/L	0.50	82	70	130			
Bromodichloromethane	4.08	ug/L	0.50	82	70	130			
Bromoform	4.08	ug/L	0.50	82	70	130			
Bromomethane	5.56	ug/L	0.50	111	70	130			
Carbon disulfide	4.80	ug/L	0.50	96	70	130			
Carbon tetrachloride	3.70	ug/L	0.50	74	70	130			
Chlorobenzene	4.80	ug/L	0.50	96	70	130			
Chlorodibromomethane	4.32	ug/L	0.50	86	70	130			
Chloroethane	4.88	ug/L	0.50	98	70	130			
2-Chloroethyl vinyl ether	3.07	ug/L	1.0	61	70	130			S
Chloroform	4.36	ug/L	0.50	87	70	130			
Chloromethane	4.60	ug/L	0.50	92	70	130			
2-Chlorotoluene	4.84	ug/L	0.50	97	70	130			
4-Chlorotoluene	4.80	ug/L	0.50	96	70	130			
1,2-Dibromoethane	4.40	ug/L	0.50	88	70	130			
Dibromomethane	4.60	ug/L	0.50	92	70	130			
1,2-Dichlorobenzene	4.72	ug/L	0.50	94	70	130			
1,3-Dichlorobenzene	4.84	ug/L	0.50	97	70	130			
1,4-Dichlorobenzene	4.76	ug/L	0.50	95	70	130			
Dichlorodifluoromethane	3.87	ug/L	0.50	77	70	130			
1,1-Dichloroethane	4.40	ug/L	0.50	88	70	130			
1,2-Dichloroethane	3.78	ug/L	0.50	76	70	130			
1,1-Dichloroethene	4.20	ug/L	0.50	84	70	130			
cis-1,2-Dichloroethene	4.72	ug/L	0.50	94	70	130			
trans-1,2-Dichloroethene	4.64	ug/L	0.50	93	70	130			
1,2-Dichloropropane	5.20	ug/L	0.50	104	70	130			
1,3-Dichloropropane	4.64	ug/L	0.50	93	70	130			
2,2-Dichloropropane	3.92	ug/L	0.50	78	70	130			
1,1-Dichloropropene	4.40	ug/L	0.50	88	70	130			
cis-1,3-Dichloropropene	4.56	ug/L	0.50	91	70	130			
trans-1,3-Dichloropropene	4.04	ug/L	0.50	81	70	130			
Ethylbenzene	4.84	ug/L	0.50	97	70	130			
Methyl tert-butyl ether (MTBE)	3.68	ug/L	0.50	74	70	130			
Methyl ethyl ketone	42.8	ug/L	20	86	70	130			
Methyl Isobutyl ketone	45.6	ug/L	20	91	70	130			
Methylene chloride	5.44	ug/L	0.50	109	70	130			
Naphthalene	4.88	ug/L	0.50	98	70	130			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E624								Analytical Run: R275391	
<b>Lab ID:</b> ccv022417								02/24/17 09:51	
Styrene	4.76	ug/L	0.50	95	70	130			
Tetrachloroethene	4.60	ug/L	0.50	92	70	130			
1,1,1,2-Tetrachloroethane	4.24	ug/L	0.50	85	70	130			
1,1,2,2-Tetrachloroethane	4.96	ug/L	0.50	99	70	130			
Toluene	4.96	ug/L	0.50	99	70	130			
Trichloroethene	4.80	ug/L	0.50	96	70	130			
1,1,1-Trichloroethane	3.75	ug/L	0.50	75	70	130			
1,1,2-Trichloroethane	4.76	ug/L	0.50	95	70	130			
Trichlorofluoromethane	3.34	ug/L	0.50	67	70	130			S
1,2,3-Trichloropropane	4.20	ug/L	0.50	84	70	130			
Vinyl Acetate	4.56	ug/L	1.0	91	70	130			
Vinyl chloride	4.84	ug/L	0.50	97	70	130			
m+p-Xylenes	9.76	ug/L	0.50	98	70	130			
o-Xylene	4.76	ug/L	0.50	95	70	130			
Xylenes, Total	14.5	ug/L	0.50	97	70	130			
Surr: 1,2-Dichloroethane-d4			0.50	74	71	139			
Surr: p-Bromofluorobenzene			0.50	88	80	127			
Surr: Toluene-d8			0.50	92	80	123			
<b>Method:</b> E624								Batch: R275391	
<b>Lab ID:</b> lcs022417								02/24/17 10:31	
Acetone	41.6	ug/L	20	83	55	144			
Acetonitrile	60.4	ug/L	20	121	54	142			
Acrolein	49.6	ug/L	20	99	16	233			
Acrylonitrile	46.0	ug/L	20	92	76	127			
Benzene	4.96	ug/L	0.50	99	73	122			
Bromobenzene	4.76	ug/L	0.50	95	74	129			
Bromoform	4.64	ug/L	0.50	93	68	120			
Bromodichloromethane	4.44	ug/L	0.50	89	74	128			
Bromoform	4.36	ug/L	0.50	87	66	128			
Bromomethane	5.76	ug/L	0.50	115	51	123			
Carbon disulfide	4.92	ug/L	0.50	98	46	145			
Carbon tetrachloride	3.80	ug/L	0.50	76	75	125			
Chlorobenzene	4.92	ug/L	0.50	98	80	123			
Chlorodibromomethane	4.64	ug/L	0.50	93	74	125			
Chloroethane	5.04	ug/L	0.50	101	59	142			
2-Chloroethyl vinyl ether	2.74	ug/L	1.0	55	36	144			
Chloroform	4.40	ug/L	0.50	88	68	124			
Chloromethane	4.64	ug/L	0.50	93	53	146			
2-Chlorotoluene	5.04	ug/L	0.50	101	75	131			
4-Chlorotoluene	4.68	ug/L	0.50	94	74	129			
1,2-Dibromoethane	4.40	ug/L	0.50	88	76	124			
Dibromomethane	4.76	ug/L	0.50	95	77	125			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624									Batch: R275391
Lab ID: lcs022417	Laboratory Control Sample				Run: 5971A.I_170224A				02/24/17 10:31
1,2-Dichlorobenzene	4.80	ug/L	0.50	96	74	124			
1,3-Dichlorobenzene	5.00	ug/L	0.50	100	77	122			
1,4-Dichlorobenzene	4.80	ug/L	0.50	96	76	126			
Dichlorodifluoromethane	4.36	ug/L	0.50	87	56	146			
1,1-Dichloroethane	4.56	ug/L	0.50	91	74	133			
1,2-Dichloroethane	3.76	ug/L	0.50	75	75	129			
1,1-Dichloroethene	4.28	ug/L	0.50	86	74	132			
cis-1,2-Dichloroethene	4.76	ug/L	0.50	95	81	122			
trans-1,2-Dichloroethene	5.08	ug/L	0.50	102	79	143			
1,2-Dichloropropane	5.20	ug/L	0.50	104	75	126			
1,3-Dichloropropane	4.32	ug/L	0.50	86	71	136			
2,2-Dichloropropane	4.00	ug/L	0.50	80	68	142			
1,1-Dichloropropene	4.18	ug/L	0.50	83	70	131			
cis-1,3-Dichloropropene	4.12	ug/L	0.50	82	74	135			
trans-1,3-Dichloropropene	3.96	ug/L	0.50	79	76	149			
Ethylbenzene	4.92	ug/L	0.50	98	72	130			
Methyl tert-butyl ether (MTBE)	3.71	ug/L	0.50	74	72	120			
Methyl ethyl ketone	45.2	ug/L	20	90	45	130			
Methyl Isobutyl ketone	49.2	ug/L	20	98	58	135			
Methylene chloride	5.64	ug/L	0.50	113	66	142			
Naphthalene	5.44	ug/L	0.50	109	68	124			
Styrene	4.84	ug/L	0.50	97	80	124			
Tetrachloroethene	4.68	ug/L	0.50	94	72	131			
1,1,1,2-Tetrachloroethane	4.16	ug/L	0.50	83	78	124			
1,1,2,2-Tetrachloroethane	4.72	ug/L	0.50	94	68	137			
Toluene	5.16	ug/L	0.50	103	72	135			
Trichloroethene	4.80	ug/L	0.50	96	65	126			
1,1,1-Trichloroethane	3.73	ug/L	0.50	75	63	120			
1,1,2-Trichloroethane	4.68	ug/L	0.50	94	78	124			
Trichlorofluoromethane	3.30	ug/L	0.50	66	72	120			S
1,2,3-Trichloropropane	4.04	ug/L	0.50	81	64	138			
Vinyl Acetate	4.08	ug/L	1.0	82	31	124			
Vinyl chloride	5.12	ug/L	0.50	102	58	140			
m+p-Xylenes	9.84	ug/L	0.50	98	67	139			
o-Xylene	4.84	ug/L	0.50	97	74	135			
Xylenes, Total	14.7	ug/L	0.50	98	70	137			
Surr: 1,2-Dichloroethane-d4			0.50	72	71	139			
Surr: p-Bromofluorobenzene			0.60	87	80	127			
Surr: Toluene-d8			0.50	92	80	123			
Lab ID: blk022417	Method Blank				Run: 5971A.I_170224A				02/24/17 11:30
Acetone	ND	ug/L	20						
Acetonitrile	ND	ug/L	20						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 03/02/17

Project: 170217005 LFH-1 CO-0121724

Work Order: C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624									Batch: R276391
Lab ID: blk022417	Method Blank						Run: 5971A.I_170224A		02/24/17 11:30
Acrolein	ND	ug/L	20						
Acrylonitrile	ND	ug/L	3.0						
Benzene	ND	ug/L	0.50						
Bromobenzene	ND	ug/L	0.50						
Bromoform	ND	ug/L	0.50						
Bromomethane	ND	ug/L	0.50						
Carbon disulfide	ND	ug/L	0.50						
Carbon tetrachloride	ND	ug/L	0.50						
Chlorobenzene	ND	ug/L	0.50						
Chlorodibromomethane	ND	ug/L	0.50						
Chloroethane	ND	ug/L	0.50						
2-Chloroethyl vinyl ether	ND	ug/L	1.0						
Chloroform	ND	ug/L	0.50						
Chloromethane	ND	ug/L	0.50						
2-Chlorotoluene	ND	ug/L	0.50						
4-Chirotoluene	ND	ug/L	0.50						
1,2-Dibromoethane	ND	ug/L	0.50						
Dibromomethane	ND	ug/L	0.50						
1,2-Dichlorobenzene	ND	ug/L	0.50						
1,3-Dichlorobenzene	ND	ug/L	0.50						
1,4-Dichlorobenzene	ND	ug/L	0.50						
Dichlorodifluoromethane	ND	ug/L	0.50						
1,1-Dichloroethane	ND	ug/L	0.50						
1,2-Dichloroethane	ND	ug/L	0.50						
1,1-Dichloroethene	ND	ug/L	0.50						
cis-1,2-Dichloroethene	ND	ug/L	0.50						
trans-1,2-Dichloroethene	ND	ug/L	0.50						
1,2-Dichloropropane	ND	ug/L	0.50						
1,3-Dichloropropane	ND	ug/L	0.50						
2,2-Dichloropropane	ND	ug/L	0.50						
1,1-Dichloropropene	ND	ug/L	0.50						
cis-1,3-Dichloropropene	ND	ug/L	0.30						
trans-1,3-Dichloropropene	ND	ug/L	0.30						
Ethylbenzene	ND	ug/L	0.50						
Methyl tert-butyl ether (MTBE)	ND	ug/L	0.50						
Methyl ethyl ketone	ND	ug/L	20						
Methyl isobutyl ketone	ND	ug/L	20						
Methylene chloride	ND	ug/L	0.50						
Naphthalene	ND	ug/L	0.50						
Styrene	ND	ug/L	0.50						
Tetrachloroethene	ND	ug/L	0.50						

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E624									Batch: R275391
<b>Lab ID:</b> blk022417	Method Blank								
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50						
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50						
Toluene	ND	ug/L	0.50						
Trichloroethene	ND	ug/L	0.50						
1,1,1-Trichloroethane	ND	ug/L	0.50						
1,1,2-Trichloroethane	ND	ug/L	0.50						
Trichlorofluoromethane	ND	ug/L	0.50						
1,2,3-Trichloropropane	ND	ug/L	0.50						
Vinyl Acetate	ND	ug/L	1.0						
Vinyl chloride	ND	ug/L	0.40						
m+p-Xylenes	ND	ug/L	0.50						
o-Xylene	ND	ug/L	0.50						
Xylenes, Total	ND	ug/L	0.50						
Surr: 1,2-Dichloroethane-d4			0.50	74	71	139			
Surr: p-Bromofluorobenzene			0.50	90	80	127			
Surr: Toluene-d8			0.50	94	80	123			
<b>Lab ID:</b> b17021110-001bms	Sample Matrix Spike								
Acrolein	ND	ug/L	20	0	16	233			S 1
Acrylonitrile	48.8	ug/L	20	98	76	127			
2-Chloroethyl vinyl ether	3.44	ug/L	1.0	69	36	144			
Surr: 1,2-Dichloroethane-d4			0.50	80	71	139			
Surr: p-Bromofluorobenzene			0.50	95	80	127			
Surr: Toluene-d8			0.50	100	80	123			
- 1 = This is a known very reactive compound. The recovery of this compound was normal in the Laboratory Control Sample (LCS). The compound appears to have reacted with the sample matrix.									
<b>Lab ID:</b> b17021110-001bmsd	Sample Matrix Spike Duplicate								
Acrolein	ND	ug/L	20	0	16	233			20 S 1
Acrylonitrile	48.8	ug/L	20	98	76	127	0.0		20
2-Chloroethyl vinyl ether	3.66	ug/L	1.0	73	36	144	6.1		20
Surr: 1,2-Dichloroethane-d4			0.50	81	71	139			
Surr: p-Bromofluorobenzene			0.50	96	80	127			
Surr: Toluene-d8			0.50	99	80	123			
- 1 = This is a known very reactive compound. The recovery of this compound was normal in the Laboratory Control Sample (LCS). The compound appears to have reacted with the sample matrix.									
<b>Lab ID:</b> b17021110-001bms	Sample Matrix Spike								
Acetone	40.4	ug/L	20	81	55	144			
Acetonitrile	66.0	ug/L	20	132	54	142			
Benzene	4.60	ug/L	0.50	92	73	122			
Bromobenzene	4.60	ug/L	0.50	92	74	129			
Bromoform	4.56	ug/L	0.50	91	66	120			
Bromochloromethane	4.36	ug/L	0.50	87	74	128			
Bromodichloromethane	4.40	ug/L	0.50	88	66	128			
Bromomethane	5.88	ug/L	0.50	118	51	123			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624									Batch: R275391
Lab ID: b17021110-001bms	Sample Matrix Spike				Run: 5971A.I_170224A				02/24/17 18:21
Carbon disulfide	5.12	ug/L	0.50	102	46	145			
Carbon tetrachloride	3.59	ug/L	0.50	72	75	125			S
Chlorobenzene	4.52	ug/L	0.50	90	80	123			
Chlorodibromomethane	4.52	ug/L	0.50	90	74	125			
Chloroethane	5.40	ug/L	0.50	108	59	142			
Chloroform	4.68	ug/L	0.50	82	68	124			
Chloromethane	4.64	ug/L	0.50	93	53	146			
2-Chlorotoluene	4.88	ug/L	0.50	98	75	131			
4-Chlorotoluene	4.68	ug/L	0.50	94	74	128			
1,2-Dibromoethane	4.16	ug/L	0.50	83	76	124			
Dibromomethane	4.64	ug/L	0.50	93	77	125			
1,2-Dichlorobenzene	4.64	ug/L	0.50	93	74	124			
1,3-Dichlorobenzene	4.88	ug/L	0.50	98	77	122			
1,4-Dichlorobenzene	4.76	ug/L	0.50	91	76	126			
Dichlorodifluoromethane	4.32	ug/L	0.50	86	56	146			
1,1-Dichloroethane	4.24	ug/L	0.50	85	74	133			
1,2-Dichloroethane	3.48	ug/L	0.50	70	75	129			S
1,1-Dichloroethene	4.12	ug/L	0.50	82	74	132			
cis-1,2-Dichloroethene	4.48	ug/L	0.50	90	81	122			
trans-1,2-Dichloroethene	4.64	ug/L	0.50	93	79	143			
1,2-Dichloropropane	4.92	ug/L	0.50	98	75	126			
1,3-Dichloropropane	4.24	ug/L	0.50	85	71	136			
2,2-Dichloropropane	3.60	ug/L	0.50	72	68	142			
1,1-Dichloropropene	4.04	ug/L	0.50	81	70	131			
cis-1,3-Dichloropropene	4.08	ug/L	0.50	82	74	135			
trans-1,3-Dichloropropene	3.97	ug/L	0.50	79	76	149			
Ethylbenzene	4.64	ug/L	0.50	93	72	130			
Methyl tert-butyl ether (MTBE)	3.63	ug/L	0.50	73	72	120			
Methyl ethyl ketone	44.4	ug/L	20	89	45	130			
Methyl isobutyl ketone	51.2	ug/L	20	102	58	135			
Methylene chloride	5.44	ug/L	0.50	109	66	142			
Naphthalene	4.84	ug/L	0.50	97	69	124			
Styrene	4.56	ug/L	0.50	91	80	124			
Tetrachloroethene	4.44	ug/L	0.50	89	72	131			
1,1,1,2-Tetrachloroethane	3.95	ug/L	0.50	79	78	124			
1,1,2,2-Tetrachloroethane	4.86	ug/L	0.50	98	68	137			
Toluene	4.86	ug/L	0.50	98	72	135			
Trichloroethene	4.56	ug/L	0.50	91	85	126			
1,1,1-Trichloroethane	3.51	ug/L	0.50	70	63	120			
1,1,2-Trichloroethane	4.52	ug/L	0.50	90	78	124			
Trichlorofluoromethane	3.29	ug/L	0.50	66	72	120			S
1,2,3-Trichloropropane	3.90	ug/L	0.50	78	64	138			
Vinyl Acetate	4.00	ug/L	1.0	80	31	124			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E624									
Lab ID: b17021110-001bms	Sample Matrix Spike								
Vinyl chloride	5.12	ug/L	0.50	102	58	140			
m+p-Xylenes	9.32	ug/L	0.50	93	67	139			
o-Xylene	4.44	ug/L	0.50	89	74	135			
Xylenes, Total	13.8	ug/L	0.50	92	70	137			
Surr: 1,2-Dichloroethane-d4			0.50	80	71	138			
Surr: p-Bromofluorobenzene			0.50	94	80	127			
Surr: Toluene-d8			0.50	101	80	123			
Lab ID: b17021110-001bmsd	Sample Matrix Spike Duplicate								
Acetone	44.0	ug/L	20	88	55	144	8.5	20	
Acetonitrile	65.6	ug/L	20	131	54	142	0.6	20	
Benzene	5.04	ug/L	0.50	101	73	122	9.1	20	
Bromobenzene	4.96	ug/L	0.50	99	74	129	7.5	20	
Bromoform	4.80	ug/L	0.50	96	66	120	5.1	20	
Bromochloromethane	4.80	ug/L	0.50	96	66	128	5.4	20	
Bromodichloromethane	4.60	ug/L	0.50	92	74	128			
Bromoform	4.80	ug/L	0.50	96	66	128	8.7	20	
Bromomethane	6.00	ug/L	0.50	120	51	123	2.0	20	
Carbon disulfide	5.20	ug/L	0.50	104	46	145	1.6	20	
Carbon tetrachloride	3.97	ug/L	0.50	79	75	125	10	20	
Chlorobenzene	4.88	ug/L	0.50	98	80	123	7.7	20	
Chlorodibromomethane	4.76	ug/L	0.50	95	74	125	5.2	20	
Chloroethane	5.32	ug/L	0.50	106	59	142	1.5	20	
Chloroform	4.96	ug/L	0.50	87	68	124	5.8	20	
Chloromethane	4.88	ug/L	0.50	98	53	146	5.0	20	
2-Chlorotoluene	5.20	ug/L	0.50	104	75	131	6.3	20	
4-Chlorotoluene	5.04	ug/L	0.50	101	74	129	7.4	20	
1,2-Dibromoethane	4.52	ug/L	0.50	90	76	124	8.3	20	
Dibromomethane	4.88	ug/L	0.50	98	77	125	5.0	20	
1,2-Dichlorobenzene	5.04	ug/L	0.50	101	74	124	8.3	20	
1,3-Dichlorobenzene	5.20	ug/L	0.50	104	77	122	6.3	20	
1,4-Dichlorobenzene	5.12	ug/L	0.50	98	76	126	7.3	20	
Dichlorodifluoromethane	4.36	ug/L	0.50	87	56	146	0.9	20	
1,1-Dichloroethane	4.66	ug/L	0.50	94	74	133	9.9	20	
1,2-Dichloroethane	3.76	ug/L	0.50	75	75	129	7.8	20	
1,1-Dichloroethene	4.44	ug/L	0.50	89	74	132	7.5	20	
cis-1,2-Dichloroethene	4.88	ug/L	0.50	98	81	122	8.5	20	
trans-1,2-Dichloroethene	5.12	ug/L	0.50	102	79	143	9.8	20	
1,2-Dichloropropane	5.24	ug/L	0.50	105	75	126	6.3	20	
1,3-Dichloropropane	4.64	ug/L	0.50	93	71	136	9.0	20	
2,2-Dichloropropane	3.96	ug/L	0.50	79	68	142	9.6	20	
1,1-Dichloreopropene	4.44	ug/L	0.50	89	70	131	9.4	20	
cis-1,3-Dichloropropene	4.40	ug/L	0.50	88	74	135	7.5	20	
trans-1,3-Dichloropropene	4.24	ug/L	0.50	85	76	149	6.6	20	

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E624									Batch: R275391
<b>Lab ID:</b> b17021110-001bmsd	Sample Matrix Spike Duplicate				Run: 5971A.I_170224A				02/24/17 18:50
Ethylbenzene	5.00	ug/L	0.50	100	72	130	7.5	20	
Methyl tert-butyl ether (MTBE)	3.83	ug/L	0.50	77	72	120	5.5	20	
Methyl ethyl ketone	46.0	ug/L	20	92	45	130	3.5	20	
Methyl Isobutyl ketone	61.2	ug/L	20	102	58	135	0.0	20	
Methylene chloride	5.72	ug/L	0.50	114	66	142	5.0	20	
Naphthalene	5.56	ug/L	0.50	111	69	124	14	20	
Styrene	4.84	ug/L	0.50	97	80	124	6.0	20	
Tetrachloroethene	4.72	ug/L	0.50	94	72	131	6.1	20	
1,1,1,2-Tetrachloroethane	4.20	ug/L	0.50	84	78	124	6.1	20	
1,1,2,2-Tetrachloroethane	5.20	ug/L	0.50	104	68	137	6.3	20	
Toluene	5.12	ug/L	0.50	102	72	135	4.8	20	
Trichloroethene	4.80	ug/L	0.50	96	85	126	5.1	20	
1,1,1-Trichloroethane	3.94	ug/L	0.50	79	63	120	12	20	
1,1,2-Trichloroethane	4.76	ug/L	0.50	95	78	124	5.2	20	
Trichlorofluoromethane	3.36	ug/L	0.50	67	72	120	2.3	20	S
1,2,3-Trichloropropane	4.20	ug/L	0.50	84	64	138	7.4	20	
Vinyl Acetate	4.20	ug/L	1.0	84	31	124	4.9	20	
Vinyl chloride	5.08	ug/L	0.50	102	58	140	0.8	20	
m+p-Xylenes	9.92	ug/L	0.50	99	67	139	6.2	20	
o-Xylene	4.80	ug/L	0.50	96	74	135	7.8	20	
Xylenes, Total	14.7	ug/L	0.50	98	70	137			
Surr: 1,2-Dichlorethane-d4			0.50	81	71	139			
Surr: p-Bromofluorobenzene			0.50	94	80	127			
Surr: Toluene-d8			0.50	100	60	123			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E626									Batch: 107004
Lab ID: MB-107004	Method Blank						Run: SV5973N2.I_170227B		02/27/17 18:24
Acenaphthene	ND	ug/L	10						
Acenaphthylene	ND	ug/L	10						
Anthracene	ND	ug/L	10						
Azobenzene	ND	ug/L	10						
Benzo(a)anthracene	ND	ug/L	10						
Benzo(a)pyrene	ND	ug/L	10						
Benzo(b)fluoranthene	ND	ug/L	10						
Benzo(g,h,i)perylene	ND	ug/L	10						
Benzo(k)fluoranthene	ND	ug/L	10						
4-Bromophenyl phenyl ether	ND	ug/L	10						
Butylbenzylphthalate	ND	ug/L	10						
4-Chloro-3-methylphenol	ND	ug/L	10						
bis(-2-chloroethoxy)Methane	ND	ug/L	10						
bis(-2-chloroethyl)Ether	ND	ug/L	10						
bis(2-chloroisopropyl)Ether	ND	ug/L	10						
2-Chloronaphthalene	ND	ug/L	10						
2-Chlorophenol	ND	ug/L	10						
4-Chlorophenyl phenyl ether	ND	ug/L	10						
Chrysene	ND	ug/L	10						
Diethyl phthalate	ND	ug/L	10						
Di-n-butyl phthalate	ND	ug/L	10						
1,2-Dichlorobenzene	ND	ug/L	10						
1,3-Dichlorobenzene	ND	ug/L	10						
1,4-Dichlorobenzene	ND	ug/L	10						
3,3'-Dichlorobenzidine	ND	ug/L	10						
2,4-Dichlorophenol	ND	ug/L	10						
Dimethyl phthalate	ND	ug/L	10						
Di-n-octyl phthalate	ND	ug/L	10						
Dibenzo(a,h)anthracene	ND	ug/L	10						
2,4-Dimethylphenol	ND	ug/L	10						
4,6-Dinitro-2-methylphenol	ND	ug/L	50						
2,4-Dinitrophenol	ND	ug/L	50						
2,4-Dinitrotoluene	ND	ug/L	10						
2,6-Dinitrotoluene	ND	ug/L	10						
bis(2-ethylhexyl)Phthalate	ND	ug/L	10						
Fluoranthene	ND	ug/L	10						
Fluorene	ND	ug/L	10						
Hexachlorobenzene	ND	ug/L	10						
Hexachlorobutadiene	ND	ug/L	10						
Hexachlorocyclopentadiene	ND	ug/L	10						
Hexachloroethane	ND	ug/L	10						
Indeno(1,2,3-ed)pyrene	ND	ug/L	10						
Isophorone	ND	ug/L	10						

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
College Station, TX 888.890.2218 • Gillette, WY 866.888.7175 • Helena, MT 877.472.0711

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E625									Batch: 107004
<b>Lab ID:</b> MB-107004	Method Blank				Run: SV5973N2.I_170227B				02/27/17 18:24
n-Nitrosodimethylamine	ND	ug/L	10						
n-Nitroso-di-n-propylamine	ND	ug/L	10						
n-Nitrosodiphenylamine	ND	ug/L	10						
2-Nitrophenol	ND	ug/L	10						
4-Nitrophenol	ND	ug/L	50						
Naphthalene	ND	ug/L	10						
Nitrobenzene	ND	ug/L	10						
Pentachlorophenol	ND	ug/L	50						
Phenanthrene	ND	ug/L	10						
Phenol	ND	ug/L	10						
Pyrene	ND	ug/L	10						
1,2,4-Trichlorobenzene	ND	ug/L	10						
2,4,6-Trichlorophenol	ND	ug/L	10						
Surr: 2-Fluorobiphenyl			10	55	28	107			
Surr: 2-Fluorophenol			10	36	20	56			
Surr: Nitrobenzene-d5			10	58	32	94			
Surr: Phenol-d5			10	35	19	45			
Surr: Terphenyl-d14			10	77	32	122			
Surr: 2,4,6-Tribromophenol			10	58	21	130			
<b>Lab ID:</b> LCS-107004	Laboratory Control Sample			Run: SV5973N2.I_170227B			02/27/17 18:55		
Acenaphthene	61.2	ug/L	10	81	58	99			
Acenaphthylene	76.5	ug/L	10	77	57	96			
Anthracene	79.5	ug/L	10	80	60	107			
Azobenzene	79.3	ug/L	10	79	56	100			
Benzo(a)anthracene	84.1	ug/L	10	84	62	114			
Benzo(a)pyrene	80.1	ug/L	10	80	62	108			
Benzo(b)fluoranthene	88.6	ug/L	10	89	48	127			
Benzo(g,h,i)perylene	81.6	ug/L	10	82	62	121			
Benzo(k)fluoranthene	79.2	ug/L	10	79	55	111			
4-Bromophenyl phenyl ether	63.0	ug/L	10	83	58	105			
Butylbenzylphthalate	91.6	ug/L	10	92	60	113			
4-Chloro-3-methylphenol	65.7	ug/L	10	66	53	92			
bis(-2-chloroethoxy)Methane	73.9	ug/L	10	74	50	92			
bis(-2-chloroethyl)Ether	63.4	ug/L	10	63	44	82			
bis(2-chloroisopropyl)Ether	61.2	ug/L	10	61	56	87			
2-Chloronaphthalene	74.9	ug/L	10	75	56	95			
2-Chlorophenol	60.1	ug/L	10	60	47	76			
4-Chlorophenyl phenyl ether	75.8	ug/L	10	76	58	99			
Chrysene	81.9	ug/L	10	82	63	106			
Diethyl phthalate	78.6	ug/L	10	79	58	103			
Di-n-butyl phthalate	87.6	ug/L	10	88	61	110			
1,2-Dichlorobenzene	61.5	ug/L	10	62	43	81			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E626									Batch: 107004
Lab ID: LCS-107004	Laboratory Control Sample					Run: SV5973N2.I_170227B	02/27/17 18:55		
1,3-Dichlorobenzene	60.2	ug/L	10	60	41	79			
1,4-Dichlorobenzene	61.4	ug/L	10	61	42	79			
3,3'-Dichlorobenzidine	68.6	ug/L	10	69	51	93			
2,4-Dichlorophenol	64.7	ug/L	10	65	49	90			
Dimethyl phthalate	76.4	ug/L	10	76	58	104			
Di-n-octyl phthalate	88.3	ug/L	10	88	56	110			
Dibenz(a,h)anthracene	80.4	ug/L	10	80	61	111			
2,4-Dimethylphenol	61.8	ug/L	10	62	45	89			
4,6-Dinitro-2-methylphenol	48.2	ug/L	50	48	37	105			
2,4-Dinitrophenol	38.7	ug/L	50	40	27	81			
2,4-Dinitrotoluene	87.7	ug/L	10	88	63	110			
2,6-Dinitrotoluene	75.5	ug/L	10	76	60	107			
bis(2-ethylhexyl)Phthalate	88.6	ug/L	10	89	56	108			
Fluoranthene	83.8	ug/L	10	84	63	110			
Fluorene	77.4	ug/L	10	77	60	99			
Hexachlorobenzene	78.2	ug/L	10	78	57	103			
Hexachlorobutadiene	67.5	ug/L	10	67	39	83			
Hexachlorocyclopentadiene	68.4	ug/L	10	68	39	91			
Hexachloroethane	59.6	ug/L	10	60	37	75			
Indeno(1,2,3-cd)pyrene	82.0	ug/L	10	82	59	109			
Isophorone	67.1	ug/L	10	67	42	102			
n-Nitrosodimethylamine	36.9	ug/L	10	37	20	45			
n-Nitroso-di-n-propylamine	71.5	ug/L	10	71	49	98			
n-Nitrosodiphenylamine	90.0	ug/L	10	90	61	108			
2-Nitrophenol	68.0	ug/L	10	68	51	96			
4-Nitrophenol	18.3	ug/L	50	18	15	36			
Naphthalene	71.6	ug/L	10	72	48	96			
Nitrobenzene	65.0	ug/L	10	65	51	81			
Pentachlorophenol	70.8	ug/L	50	71	53	109			
Phenanthrene	80.5	ug/L	10	81	58	104			
Phenol	35.4	ug/L	10	35	27	45			
Pyrene	89.3	ug/L	10	89	64	108			
1,2,4-Trichlorobenzene	67.3	ug/L	10	67	49	85			
2,4,6-Trichlorophenol	64.9	ug/L	10	65	47	99			
Surr: 2-Fluorobiphenyl			10	63	28	107			
Surr: 2-Fluorophenol			10	35	20	56			
Surr: Nitrobenzene-d5			10	68	32	94			
Surr: Phenol-d5			10	42	19	45			
Surr: Terphenyl-d14			10	87	32	122			
Surr: 2,4,6-Tribromophenol			10	70	21	130			
Lab ID: B17021688-001CMS	Sample Matrix Spike		Run: SV5973N2.I_170227B					02/27/17 20:29	
Acenaphthene	86.4	ug/L	10	86	58	99			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QAQC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 03/02/17

Project: 170217005 LFH-1 CO-0121724

Work Order: C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E625									Batch: 107004
Lab ID: B17021688-001CMS	Sample Matrix Spike				Run: SV5973N2.I_170227B				02/27/17 20:29
Acenaphthylene	83.0	ug/L	10	83	57	96			
Anthracene	86.4	ug/L	10	86	60	107			
Azobenzene	84.3	ug/L	10	84	56	100			
Benzo(a)anthracene	90.3	ug/L	10	90	62	114			
Benzo(a)pyrene	80.9	ug/L	10	81	62	108			
Benzo(b)fluoranthene	80.4	ug/L	10	80	48	127			
Benzo(g,h,i)perylene	80.5	ug/L	10	81	62	121			
Benzo(k)fluoranthene	83.5	ug/L	10	83	55	111			
4-Bromophenyl phenyl ether	80.4	ug/L	10	80	58	105			
Butylbenzylphthalate	99.7	ug/L	10	100	60	113			
4-Chloro-3-methylphenol	77.0	ug/L	10	77	53	92			
bis(-2-chloroethoxy)Methane	77.3	ug/L	10	77	50	92			
bis(-2-chloroethyl)Ether	66.7	ug/L	10	67	44	82			
bis(2-chloroisopropyl)Ether	66.6	ug/L	10	67	56	87			
2-Chloronaphthalene	79.8	ug/L	10	80	56	95			
2-Chlorophenol	64.1	ug/L	10	64	47	76			
4-Chlorophenyl phenyl ether	84.5	ug/L	10	85	58	99			
Chrysene	85.9	ug/L	10	86	63	106			
Diethyl phthalate	85.4	ug/L	10	85	58	103			
Di-n-butyl phthalate	96.0	ug/L	10	96	61	110			
1,2-Dichlorobenzene	66.1	ug/L	10	66	43	81			
1,3-Dichlorobenzene	61.9	ug/L	10	62	41	79			
1,4-Dichlorobenzene	61.6	ug/L	10	62	42	79			
3,3'-Dichlorobenzidine	69.1	ug/L	10	69	51	93			
2,4-Dichlorophenol	68.4	ug/L	10	68	49	90			
Dimethyl phthalate	81.4	ug/L	10	81	58	104			
Di-n-octyl phthalate	90.6	ug/L	10	91	56	110			
Dibenzo(a,h)anthracene	80.0	ug/L	10	80	61	111			
2,4-Dimethylphenol	69.2	ug/L	10	69	45	87			
4,6-Dinitro-2-methylphenol	58.9	ug/L	50	59	37	105			
2,4-Dinitrophenol	54.8	ug/L	50	55	27	81			
2,4-Dinitrotoluene	82.5	ug/L	10	83	63	110			
2,6-Dinitrotoluene	80.8	ug/L	10	81	60	107			
bis(2-ethylhexyl)Phthalate	92.0	ug/L	10	92	56	108			
Fluoranthene	88.0	ug/L	10	88	63	110			
Fluorene	80.1	ug/L	10	80	60	99			
Hexachlorobenzene	82.5	ug/L	10	83	57	103			
Hexachlorobutadiene	69.0	ug/L	10	69	39	83			
Hexachlorocyclopentadiene	68.1	ug/L	10	68	39	91			
Hexachloroethane	65.6	ug/L	10	66	37	75			
Indeno(1,2,3-cd)pyrene	82.3	ug/L	10	82	59	109			
Isophorone	71.3	ug/L	10	71	42	102			
n-Nitrosodimethylamine	41.5	ug/L	10	41	20	45			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E625									Batch: 107004
<b>Lab ID:</b> B17021688-001CMS	Sample Matrix Spike								Run: SV5973N2.L_170227B 02/27/17 20:29
n-Nitroso-di-n-propylamine	76.9	ug/L	10	77	49	98			
n-Nitrosodiphenylamine	93.7	ug/L	10	94	61	108			
2-Nitrophenol	69.9	ug/L	10	70	51	96			
4-Nitrophenol	24.6	ug/L	50	25	15	36			
Naphthalene	76.0	ug/L	10	76	48	96			
Nitrobenzene	72.5	ug/L	10	73	51	91			
Pentachlorophenol	89.2	ug/L	50	88	53	109			
Phenanthrene	85.1	ug/L	10	85	58	104			
Phenol	36.7	ug/L	10	37	27	45			
Pyrene	89.8	ug/L	10	90	64	108			
1,2,4-Trichlorobenzene	70.9	ug/L	10	71	49	85			
2,4,6-Trichlorophenol	67.7	ug/L	10	68	47	89			
Surr: 2-Fluorobiphenyl			10	62	28	107			
Surr: 2-Fluorophenol			10	39	20	56			
Surr: Nitrobenzene-d5			10	72	32	94			
Surr: Phenol-d5			10	35	19	45			
Surr: Terphenyl-d14			10	87	32	122			
Surr: 2,4,6-Tribromophenol			10	75	21	130			
<b>Lab ID:</b> B17021688-003CMS	Sample Matrix Spike								Run: SV5973N2.L_170227B 02/27/17 21:31
Acenaphthene	89.8	ug/L	10	90	58	99			
Acenaphthylene	82.2	ug/L	10	82	57	96			
Anthracene	73.2	ug/L	10	73	60	107			
Azobenzene	80.2	ug/L	10	80	56	100			
Benzo(a)anthracene	85.1	ug/L	10	85	62	114			
Benzo(a)pyrene	77.0	ug/L	10	77	62	108			
Benzo(b)fluoranthene	73.3	ug/L	10	73	48	127			
Benzo(g,h,i)perylene	78.5	ug/L	10	79	62	121			
Benzo(k)fluoranthene	83.1	ug/L	10	83	55	111			
4-Bromophenyl phenyl ether	78.1	ug/L	10	78	58	105			
Butylbenzylphthalate	92.9	ug/L	10	93	60	113			
4-Chloro-3-methylphenol	69.5	ug/L	10	69	53	92			
bis(-2-chloroethoxy)Methane	69.6	ug/L	10	70	50	92			
bis(-2-chloroethyl)Ether	58.4	ug/L	10	58	44	82			
bis(2-chloroisopropyl)Ether	57.7	ug/L	10	58	56	87			
2-Chloronaphthalene	77.7	ug/L	10	78	56	95			
2-Chlorophenol	56.6	ug/L	10	57	47	76			
4-Chlorophenyl phenyl ether	82.9	ug/L	10	83	58	99			
Chrysene	82.0	ug/L	10	82	63	106			
Diethyl phthalate	80.2	ug/L	10	80	58	103			
Di-n-butyl phthalate	86.9	ug/L	10	87	61	110			
1,2-Dichlorobenzene	61.5	ug/L	10	62	43	81			
1,3-Dichlorobenzene	59.3	ug/L	10	59	41	79			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 03/02/17

Project: 170217005 LFH-1 CO-0121724

Work Order: C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E626									Batch: 107004
Lab ID: B17021688-003CMS	Sample Matrix Spike				Run: SV5973N2.I_170227B				02/27/17 21:31
1,4-Dichlorobenzene	57.9	ug/L	10	58	42	79			
3,3'-Dichlorobenzidine	52.9	ug/L	10	53	51	93			
2,4-Dichlorophenol	61.5	ug/L	10	62	49	90			
Dimethyl phthalate	74.3	ug/L	10	74	58	104			
Di-n-octyl phthalate	82.5	ug/L	10	83	56	110			
Dibenzo(a,h)anthracene	75.9	ug/L	10	76	61	111			
2,4-Dimethylphenol	60.0	ug/L	10	60	45	87			
4,6-Dinitro-2-methylphenol	41.6	ug/L	50	42	37	105			
2,4-Dinitrophenol	30.1	ug/L	50	30	27	81			
2,4-Dinitrotoluene	88.9	ug/L	10	87	63	110			
2,6-Dinitrotoluene	75.9	ug/L	10	76	60	107			
bis(2-ethylhexyl)Phthalate	81.5	ug/L	10	82	56	108			
Fluoranthene	82.0	ug/L	10	82	63	110			
Fluorene	81.9	ug/L	10	82	60	99			
Hexachlorobenzene	75.8	ug/L	10	76	57	103			
Hexachlorobutadiene	69.3	ug/L	10	69	39	83			
Hexachlorocyclopentadiene	69.5	ug/L	10	70	39	91			
Hexachloroethane	57.7	ug/L	10	58	37	75			
Indeno(1,2,3-cd)pyrene	73.4	ug/L	10	73	59	109			
Isophorone	68.4	ug/L	10	68	42	102			
n-Nitrosodimethylamine	27.8	ug/L	10	28	20	45			
n-Nitroso-di-n-propylamine	68.7	ug/L	10	69	49	98			
n-Nitrosodiphenylamine	84.0	ug/L	10	84	61	108			
2-Nitrophenol	61.8	ug/L	10	82	51	96			
4-Nitrophenol	27.7	ug/L	50	28	15	36			
Naphthalene	72.4	ug/L	10	72	48	96			
Nitrobenzene	69.7	ug/L	10	70	51	91			
Pentachlorophenol	66.8	ug/L	50	67	53	109			
Phenanthrene	79.7	ug/L	10	80	58	104			
Phenol	33.9	ug/L	10	34	27	45			
Pyrene	81.2	ug/L	10	81	64	108			
1,2,4-Trichlorobenzene	71.3	ug/L	10	71	49	85			
2,4,6-Trichlorophenol	63.8	ug/L	10	64	47	99			
Surr: 2-Fluorobiphenyl			10	45	28	107			
Surr: 2-Fluorophenol			10	37	20	56			
Surr: Nitrobenzene-d5			10	62	32	94			
Surr: Phenol-d5			10	31	19	45			
Surr: Terphenyl-d14			10	64	32	122			
Surr: 2,4,6-Tribromophenol			10	55	21	130			
Lab ID: MB-107004	Method Blank				Run: SV5973N2.I_170228A				02/28/17 12:11
Benzidine	ND	ug/L	10						

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
College Station, TX 888.690.2218 • Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 03/02/17

Project: 170217005 LFH-1 CO-0121724

Work Order: C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E825									Batch: 107004
Lab ID: LCS-107004	Laboratory Control Sample				Run: SV5973N2.I_170228A				02/28/17 12:42
Benzidine	63.4	ug/L	10	63	10	100			
Lab ID: B17021688-001CMS	Sample Matrix Spike				Run: SV5973N2.I_170228A				02/28/17 14:16
Benzidine	25.8	ug/L	20	26	10	100			
Lab ID: B17021688-003CMS	Sample Matrix Spike				Run: SV5973N2.I_170228A				02/28/17 15:18
Benzidine	28.5	ug/L	20	28	10	100			

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual			
<b>Method:</b> E625					Analytical Run: R275528							
<b>Lab ID:</b> 27-Feb-17_CCV_2		Continuing Calibration Verification Standard								02/27/17 15:18		
Acenaphthene	75.7	ug/L	10	101	80	120						
Acenaphthylene	75.2	ug/L	10	100	80	120						
Anthracene	78.7	ug/L	10	105	80	120						
Azobenzene	79.8	ug/L	10	108	80	120						
Benzo(a)anthracene	78.0	ug/L	10	104	80	120						
Benzo(a)pyrene	78.0	ug/L	10	104	80	120						
Benzo(b)fluoranthene	78.6	ug/L	10	105	80	120						
Benzo(g,h,i)perylene	75.3	ug/L	10	100	80	120						
Benzo(k)fluoranthene	73.2	ug/L	10	98	80	120						
4-Bromophenyl phenyl ether	74.4	ug/L	10	99	80	120						
Butylbenzylphthalate	84.4	ug/L	10	113	80	120						
4-Chloro-3-methylphenol	77.2	ug/L	10	103	80	120						
bis(-2-chloroethoxy)Methane	79.4	ug/L	10	106	80	120						
bis(-2-chloroethyl)Ether	80.8	ug/L	10	108	80	120						
bis(2-chloroisopropyl)Ether	77.8	ug/L	10	104	80	120						
2-Choronaphthalene	70.3	ug/L	10	94	80	120						
2-Chlorophenol	80.3	ug/L	10	107	80	120						
4-Chlorophenyl phenyl ether	72.9	ug/L	10	97	80	120						
Chrysene	75.0	ug/L	10	100	80	120						
Diethyl phthalate	75.7	ug/L	10	101	80	120						
Di-n-butyl phthalate	81.6	ug/L	10	109	80	120						
1,2-Dichlorobenzene	72.7	ug/L	10	97	80	120						
1,3-Dichlorobenzene	77.8	ug/L	10	104	80	120						
1,4-Dichlorobenzene	74.9	ug/L	10	100	80	120						
3,3'-Dichlorobenzidine	75.8	ug/L	10	101	80	120						
2,4-Dichlorophenol	74.8	ug/L	10	100	80	120						
Dimethyl phthalate	75.3	ug/L	10	100	80	120						
Di-n-octyl phthalate	83.5	ug/L	10	111	80	120						
Dibenzo(a,h)anthracene	74.8	ug/L	10	100	80	120						
2,4-Dimethylphenol	73.0	ug/L	10	97	80	120						
4,6-Dinitro-2-methylphenol	71.3	ug/L	50	95	80	120						
2,4-Dinitrophenol	69.4	ug/L	50	93	80	120						
2,4-Dinitrotoluene	79.4	ug/L	10	106	80	120						
2,6-Dinitrotoluene	78.1	ug/L	10	104	80	120						
bis(2-ethylhexyl)Phthalate	84.4	ug/L	10	112	80	120						
Fluoranthene	76.0	ug/L	10	101	80	120						
Fluorene	77.8	ug/L	10	104	80	120						
Hexachlorobenzene	73.8	ug/L	10	98	80	120						
Hexachlorobutadiene	71.9	ug/L	10	96	80	120						
Hexachlorocyclopentadiene	73.1	ug/L	10	97	80	120						
Hexachloroethane	77.6	ug/L	10	103	80	120						
Indeno(1,2,3-cd)pyrene	75.6	ug/L	10	101	80	120						
Isophorone	78.1	ug/L	10	104	80	120						

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Colorado Analytical Laboratories Inc

Report Date: 03/02/17

Project: 170217005 LFH-1 CO-0121724

Work Order: C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E625	Analytical Run: R275528								
Lab ID: 27-Feb-17_CCV_2	Continuing Calibration Verification Standard								02/27/17 15:18
n-Nitrosodimethylamine	75.3	ug/L	10	100	80	120			
n-Nitroso-di-n-propylamine	77.8	ug/L	10	104	80	120			
n-Nitrosodiphenylamine	78.9	ug/L	10	105	80	120			
2-Nitrophenol	75.8	ug/L	10	101	80	120			
4-Nitrophenol	69.6	ug/L	50	93	80	120			
Naphthalene	79.8	ug/L	10	106	80	120			
Nitrobenzene	76.8	ug/L	10	102	80	120			
Pentachlorophenol	73.3	ug/L	50	98	80	120			
Phenanthrene	74.0	ug/L	10	99	80	120			
Phenol	79.2	ug/L	10	106	80	120			
Pyrene	75.2	ug/L	10	100	80	120			
1,2,4-Trichlorobenzene	72.8	ug/L	10	97	80	120			
2,4,6-Trichlorophenol	73.6	ug/L	10	98	80	120			
Sur: 2-Fluorobiphenyl			10	100	80	120			
Sur: 2-Fluorophenol			10	113	80	120			
Sur: Nitrobenzene-d5			10	105	80	120			
Sur: Phenol-d5			10	121	80	120			S
Sur: Terphenyl-d14			10	101	80	120			
Sur: 2,4,6-Tribromophenol			10	102	80	120			
Method: E625	Analytical Run: R275577								
Lab ID: 28-Feb-17_CCV_2	Continuing Calibration Verification Standard								02/28/17 11:39
Benzidine	89.5	ug/L	10	119	80	120			

**Qualifiers:**

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



Trust our People. Trust our Data.  
www.energylab.com

Billings, MT 800.735.4489 • Casper, WY 888.235.0515  
College Station TX 800.690.2218 • Gillette, WY 888.686.7175 • Helena, MT 877.472.0711

## QA/QC Summary Report

Prepared by Billings, MT Branch

**Client:** Colorado Analytical Laboratories Inc

**Report Date:** 03/02/17

**Project:** 170217005 LFH-1 CO-0121724

**Work Order:** C17020566

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260M	Analytical Run: 107003								
Lab ID: CCV-107003	Continuing Calibration Verification Standard								02/27/17 08:30
1,4-Dioxane	105	ug/L	1.0	105	80	120			
Method: SW8260M	Batch: 107003								
Lab ID: LCS-107003	Laboratory Control Sample						Run: VOA5973A.I_170227A		02/27/17 09:22
1,4-Dioxane	106	ug/L	1.0	106	70	130			
Lab ID: MB-107003	Method Blank						Run: VOA5973A.I_170227A		02/27/17 09:44
1,4-Dioxane	ND	ug/L	1.0						
Lab ID: C17020566-001BMS	Sample Matrix Spike						Run: VOA5973A.I_170227A		02/27/17 11:37
1,4-Dioxane	200	ug/L	2.0	100	70	130			
Lab ID: C17020566-001BMSD	Sample Matrix Spike Duplicate						Run: VOA5973A.I_170227A		02/27/17 11:58
1,4-Dioxane	206	ug/L	2.0	103	70	130	3.0	20	

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



## Work Order Receipt Checklist

Colorado Analytical Laboratories Inc

C17020566

Login completed by: Dorian Quis

Date Received: 2/21/2017

Reviewed by: Kasey Vidick

Received by: dcq

Reviewed Date: 2/21/2017

Carrier name: Ground

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	6.8°C Blue Ice		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

### Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as -dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

### Contact and Corrective Action Comments:

None

## Chain of Custody Form

Report To Information		Bill To Information (If different from report to)		Project Name
Company Name: Colorado Analytical		Company Name: Same As Report To		170217005
Contact Name: Stuart Nelson		Contact Name: _____		Lfh-1 Co-0121724
Address: 240 S. Main St.		Address:		Task Number (Lab Use Only)
City: Brighton	State: CO Zip: 80601	City: _____	State: _____ Zip: _____	
Phone: 3036592313	Fax: 3036592315	Phone: _____	Fax: _____	Disposal Date(Lab Use Only)
Email: stuart.nelson@coloradolab.com		Email: _____		
Sample Collector: Stephanie Schwenke	P.O. No.: _____			

C.170217005-1		C.170217005-2		C.170217005-3	
No. of Contaminants	Grab or Composite or (Check One Only)	624 VOC Long List	625 SOCs	14 Dioxane	Brighton Lab 240 South Main Street Brighton, CO 80601 Lakewood Lab 12860 W. Cedar Dr, Suite 100A Lakewood CO 80228
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Phone: 303-659-2313 Fax: 303-659-2315 <a href="http://www.coloradolab.com">www.coloradolab.com</a>
Waste Water	<input type="checkbox"/>	Soil	<input type="checkbox"/>	Plant Tissue	<input type="checkbox"/>
Ground Water	<input type="checkbox"/>	Sludge	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Surface Water	<input type="checkbox"/>	Compost	<input type="checkbox"/>	Drinking Water	
2/16/17 170217005-01 Lfh-1					
C/S Info:		CS Charge	Date/Time:	Temp L.s. & o.Che	Sample Pres. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
3.2 Relinquished By: <i>S. Adams</i>		Received By: <i>1000</i>	Date/Time: <i>2/20/17</i>	Deliver Via: <i>UPS</i>	Received By: <i>Levi Dicus</i>
Instructions: Send via UPS to Energy Labs					