



# ANALYTICAL SUMMARY REPORT

October 12, 2020

Skyline Ranch Improvement Service Dist  
PO Box 3601  
Jackson, WY 83001

Work Order: C20100053  
Project Name: WY5600217

Energy Laboratories, Inc. Casper WY received the following 1 sample for Skyline Ranch Improvement Service Dist on 9/16/2020 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C20100053-001	3155 Teal	09/15/20 11:30	09/16/20	Drinking Water	Asbestos in Water

The analyses presented in this report were performed by 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. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager .

Report Approved By:



**LABORATORY ANALYTICAL REPORT**

Prepared by Casper, WY Branch

**Client:** Skyline Ranch Improvement Service Dist

**Lab ID:** C20100053-001

**Client Sample ID:** 3155 Teal

**Report Date:** 10/12/20

**PWS #:** WY5600217 **Name:** SKYLINE RANCH I&S DISTRICT

**Collection Date:** 09/15/20 11:30

**Facility ID:** DIST

**Date Received:** 09/16/20

**SamplingPoint/Location:** DIST / 3155 Teal

**Matrix:** Drinking Water

**Project ID:** WY5600217

**Federal ID#:** WY00002

**Collector's Name:** Not Provided

**Contact Phone #:**

**Compliance Sample:** YES

**Sample Type:** RT

FRDS Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
<b>NON-METALS</b>							
Actinolite	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS
Amosite	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS
Anthophyllite	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS
Chrysotile	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS
Crocidolite	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS
1094 Total Asbestos	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS
Tremolite	<AS	MFL		0.200		E100.2	09/16/20 12:00 / ALS

\*\*\* Analysis performed by ALS Cincinnati

**Report** RL - Analyte Reporting Limit

MCL - Maximum Contaminant Level

**Definitions:** QCL - Quality Control Limit

ND - Not detected at the Reporting Limit (RL)



Contact: Alyson Degnan  
Company: Energy Laboratories  
Address: P.O. Box 3258, 2393 Salt Creek Highway 82601  
Casper, WY 82602-3258

Project / Location: Skyline Ranch ISD

PO Number: NA

ALS Work Order: 20090484

**NARRATIVE:** Analysis performed on FEI Tecnai G2 Spirit Twin TEM equipped with EDAX Octane T Plus Silicon Drift Detector System, and Z2 Analyzer. Fiber morphology, SAED, and EDXA used to determine species. All sample collection is performed outside ALS and is the sole responsibility of client. If sample collection deviates from any method requirement interpretation of the results via the method cannot be made.

**NOTICE:** *Drinking waters for EPA compliance must be received and filtered within 48 hours of sampling. ALS Cincinnati cannot submit results to any state EPA unless all of the sampling and reference information required by the state is included on the specific state drinking water form which must accompany the sample upon receipt by ALS Cincinnati. Failure to include the state form in shipment or to provide the necessary information may result in additional fees associated with amending the original data package. ALS Cincinnati cannot be held responsible for late or inaccurate state EPA reporting as a result of sample collection, submission, or information errors or omissions.*

**METHOD CODE:** "EPA 100.2" refers only to drinking (potable) waters for EPA compliance filtered on 0.22µm pore sized MCE filters. "EPA 100.1" refers only to potable waters for EPA compliance filtered on 0.1µm pore sized polycarbonate filters. "ENV 005" refers to all non-potable waters regardless of origin, use, or method requested. All excess water samples are disposed after adequate filtration. Filtered samples are disposed after 60 days. TEM grids archived 3 years. Results apply only to portions analyzed.

**SUMMARY:** An AS of <0.2 MFL is desired for drinking (potable) waters, and an AS of <7 MFL is generally acceptable for non-potable waters. Whenever possible, a sufficient volume is analyzed to yield the desired AS based on the detection of one confirmed asbestos fiber in the total area analyzed. However, samples containing excessive suspended solids may require filtration of volumes too low to achieve the desired AS. All water samples are analyzed at >10,000x magnification for asbestos fibers >10µm long. A minimum of 4 and maximum of 10 grid openings are analyzed regardless of the AS reached or the asbestos concentration detected.

*NA=Not Applicable, AS=Analytical Sensitivity, MFL=Millions of Fibers per Liter, MRL=Method Reporting Limit*

**ALS Cincinnati accredited by NY ELAP for Asbestos in Water by EPA 100.2**

*OH State Lab No.: 4077, OH Analyst Nos.: 2268 (P. Hizar), 3431 (A. Sohn)*

*PA State Lab No.: 68-01320, PA Certification No.: 003*

*WA State Lab No.: 211*

*NY State Lab No.: 11371*

CAS Nos.: 1332-21-4	Asbestos (All Forms)
12001-29-5	Chrysotile Asbestos
12001-73-5	Amosite Asbestos
12001-28-4	Crocidolite Asbestos
77536-66-4	Actinolite Asbestos
77536-68-6	Tremolite Asbestos
77536-68-5	Anthophyllite Asbestos

**IDENTIFICATION**

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Client Sample ID: WY5600217  
ALS Sample ID: 20090484-01  
Method: EPA 100.2  
MRL: <0.2MFL  
Collection Date: 9/15/2020  
Collection Time: 11:30  
Filtration Date: 9/16/2020  
Filtration Time: 12:00

**ANALYSIS**

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Analyst: Pamela Hizar  
Analysis Date: 9/21/2020  
Analysis Time: 12:20  
Volume Analyzed (L): 0.15  
Openings Analyzed: 4  
Avg. Opening Area (mm<sup>2</sup>): 0.0101  
AS (MFL): 0.18

**ASBESTOS COUNT**

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Chrysotile: 0  
Amosite: 0  
Crocidolite: 0  
Actinolite: 0  
Tremolite: 0  
Anthophyllite: 0  
Total Asbestos: 0

**ASBESTOS CONCENTRATION (MFL)**

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Chrysotile: <AS  
Amosite: <AS  
Crocidolite: <AS  
Actinolite: <AS  
Tremolite: <AS  
Anthophyllite: <AS  
**Total Asbestos: <AS**

**NOTES**

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Results were not reported directly to EPA as information required to do so was incomplete and/or the samples are not drinking water for EPA compliance.



# Work Order Receipt Checklist

Skyline Ranch Improvement Service Dist      C20100053

Login completed by: Tracy L. Baughman

Date Received: 9/16/2020

Reviewed by: Misty Stephens

Received by: ALS

Reviewed Date: 10/6/2020

Carrier name: NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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 type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>
Container/Temp Blank temperature:	16.2°C On Ice		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

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## 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.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

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## Contact and Corrective Action Comments:

None

