



ANALYTICAL SUMMARY REPORT

OST-003

August 06, 2015

Defenders of the Black Hills
PO Box 2003
Rapid City, SD 57709

Work Order: G15070702

Project Name: PSMSD & CCHPSD

Energy Laboratories Inc. Gillette WY received the following 2 samples for Defenders of the Black Hills on 7/31/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
G15070702-001	PSMSD	07/29/15 17:02	07/31/15	Drinking Water	Uranium, Isotopic, Total
G15070702-002	CCHPSD	07/29/15 15:40	07/31/15	Drinking Water	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 400 W. Boxelder Rd., Gillette, WY 82718, unless otherwise noted.

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

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

Report Approved By:


Project Manager

Digitally signed by
Tracey Archer
Date: 2015.08.06 12:59:00 -06:00



CLIENT: Defenders of the Black Hills
Project: PSMSD & CCHPSD
Work Order: G15070702

Report Date: 08/06/15

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, 2393 Salt Creek Hwy., Casper, WY, EPA Number WY00002 and WY00937.



LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Defenders of the Black Hills
Project: PSMSD & CCHPSD
Lab ID: G15070702-001
Client Sample ID: PSMSD

Report Date: 08/06/15
Collection Date: 07/29/15 17:02
Date Received: 07/31/15
Matrix: Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Uranium 234	15.2	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 234 precision (±)	3.0	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 234 MDC	0.08	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 235	0.7	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 235 precision (±)	0.3	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 235 MDC	0.1	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 238	8.1	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 238 precision (±)	1.6	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 238 MDC	0.08	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

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



LABORATORY ANALYTICAL REPORT

Prepared by Gillette, WY Branch

Client: Defenders of the Black Hills
Project: PSMSD & CCHPSD
Lab ID: G15070702-002
Client Sample ID: CCHPSD

Report Date: 08/06/15
Collection Date: 07/29/15 15:40
Date Received: 07/31/15
Matrix: Drinking Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Uranium 234	8.7	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 234 precision (±)	1.7	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 234 MDC	0.09	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 235	0.2	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 235 precision (±)	0.2	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 235 MDC	0.1	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 238	3.7	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 238 precision (±)	0.7	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca
Uranium 238 MDC	0.09	pCi/L				A7500-U C	08/05/15 11:18 / eli-ca

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

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



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Defenders of the Black Hills
Project: PSMDS & CCHPSD

Report Date: 08/06/15
Work Order: G15070702

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A7500-U C									Batch: RA-U-ISO-0725
Lab ID: LCS-RA-U-ISO-0725 Uranium 238	Laboratory Control Sample 11.2	pCi/L		94	80	120			08/05/15 11:18
Lab ID: G15070702-002AMS Uranium 238	Sample Matrix Spike 29.4	pCi/L		106	80	120			08/05/15 11:18
Lab ID: G15070702-002AMSD Uranium 238	Sample Matrix Spike Duplicate 24.8	pCi/L		87	80	120	17	20	08/05/15 11:18
Lab ID: MB-RA-U-ISO-0725 Uranium 234	Method Blank 0.4	pCi/L							08/05/15 11:18
Uranium 234 precision (±)	0.2	pCi/L							
Uranium 234 MDC	0.2	pCi/L							
Uranium 235	0.2	pCi/L							U
Uranium 235 precision (±)	0.1	pCi/L							
Uranium 235 MDC	0.2	pCi/L							
Uranium 238	0.1	pCi/L							U
Uranium 238 precision (±)	0.1	pCi/L							
Uranium 238 MDC	0.2	pCi/L							

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration



Work Order Receipt Checklist

Defenders of the Black Hills

G15070702

Login completed by: Tracey Archer

Date Received: 7/31/2015

Reviewed by: BL2000\kscottruff

Received by: kls

Reviewed Date: 8/3/2015

Carrier name: UPS

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on all shipping container(s)/cooler(s)? Yes No Not Present
- Custody seals intact on all sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time?
(Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.) Yes No
- Temp Blank received in all shipping container(s)/cooler(s)? Yes No Not Applicable
- Container/Temp Blank temperature: 23.4°C No Ice
- Water - VOA vials have zero headspace? Yes No No VOA vials submitted
- Water - pH acceptable upon receipt? Yes No Not Applicable

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

