



Twin Enviro Services
DAVID KEATING
20650 COUNTY RD 205
Steamboat Springs CO 80477

REPORT OF ANALYSIS
For: (64012) Twin Enviro Services
TWIN ENVIRO

Analysis	Level Found		Reporting			Analyst- Date	Verified- Date	
	As Received	Dry Weight	Units	Limit	Method			
Sample ID: COMPOST TESTING	Lab Number: 70526407		Date Sampled: 2024-09-17 1421					
Salmonella	< 1.20	< 1.20	MPN/4g	1.20	TMECC 7.02 (mod)		ojb0-2024/09/21	snl7-2024/09/23
Fecal coliforms	2.4	3.2	MPN/g	0.2	EPA 1681		sdw8-2024/09/19	snl7-2024/09/19
Percent solids	74.8		%	0.01	SM 2540 G-(2015) *		Ppj2-2024/09/20	mgn8-2024/09/24

MPN = most probable number

For questions please contact:

Kerri Stanek
Account Manager
kstanek@midwestlabs.com (402)590-2982

24-331-4151

REPORT DATE
Nov 26, 2024

RECEIVED DATE
Nov 22, 2024

SEND TO
64012



Twin Enviro Services
DAVID KEATING
20650 COUNTY RD 205
Steamboat Springs CO 80477

REPORT OF ANALYSIS
For: (64012) Twin Enviro Services
TWIN ENVIRO FECAL + SALM

Analysis	Level Found		Reporting			Analyst- Date	Verified- Date
	As Received	Dry Weight	Units	Limit	Method		
Sample ID: COMPOST	Lab Number: 70557094	Date Sampled: 2024-11-21 0945					
Fecal coliforms	< 0.2	< 0.2	MPN/g	0.2	EPA 1681	Uml8-2024/11/23	snl7-2024/11/25
Salmonella	< 1.20	< 1.20	MPN/4g	1.20	TMECC 7.02 (mod)	sdw8-2024/11/25	snl7-2024/11/25
Percent solids	70.8		%	0.01	SM 2540 G-(2015) *	jsp9-2024/11/26	mgn8-2024/11/26

MPN = most probable number

For questions please contact:

Kerri Stanek
Account Manager
kstanek@midwestlabs.com (402)590-2982

December 26, 2024

Report to:

Rebecca Lindeman
Jardon Engineering & Inspections
PO Box 772143
Steamboat, CO 80477

Bill to:

Accounts Payable
Twin Landfill Corporation
P.O. Box 774362
Steamboat Springs, CO 80477

cc: Dave Keating

Project ID:

ACZ Project ID: L92018

Rebecca Lindeman:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 12, 2024. This project has been assigned to ACZ's project number, L92018. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L92018. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 25, 2025. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Madeleine Murray has reviewed
and approved this report.



Twin Landfill Corporation

Project ID:

Sample ID: COMPOST

ACZ Sample ID: **L92018-01**

Date Sampled: 12/12/24 13:05

Date Received: 12/12/24

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, total (3050)	EPA 6010D	109	5.74	B		mg/Kg	4.36	21.8	12/23/24 22:00	msp
Barium, total (3050)	EPA 6010D	109	252			mg/Kg	0.981	3.82	12/23/24 22:00	msp
Cadmium, total (3050)	EPA 6010D	109	1.08	B	*	mg/Kg	0.872	2.73	12/23/24 22:00	msp
Chromium, total (3050)	EPA 6010D	109	16.8		*	mg/Kg	2.18	5.45	12/23/24 22:00	msp
Lead, total (3050)	EPA 6010D	109	22.0			mg/Kg	3.27	16.4	12/23/24 22:00	msp
Selenium, total (3050)	EPA 6010D	109	<5.45	U		mg/Kg	5.45	27.3	12/23/24 22:00	msp
Silver, total (3050)	EPA 6010D	109	4.89		*	mg/Kg	1.09	2.73	12/23/24 22:00	msp

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	62.4		*	%	0.1	0.5	12/20/24 8:00	grw

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								12/17/24 7:40	jsa
Digestion - Hot Plate	EPA 3050B								12/20/24 10:40	bat2
Sieve-2000 um (2.0mm)	ASA No.9 15-4.2.2								12/18/24 7:25	jsa

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

Twin Landfill Corporation

ACZ Project ID: **L92018**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L92018-01	WG603508	Cadmium, total (3050)	EPA 6010D	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Chromium, total (3050)	EPA 6010D	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Silver, total (3050)	EPA 6010D	ZG	The ICP or ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.

Twin Landfill Corporation

ACZ Project ID: **L92018**

Soil Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Solids, Percent

D2216-80

Twin Landfill Corporation

ACZ Project ID: L92018

Date Received: 12/12/2024 17:11

Received By:

Date Printed: 12/16/2024

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	☐	☐	☒
2) Is the Chain of Custody form or other directive shipping papers present?	☒	☐	☐
3) Does this project require special handling procedures such as CLP protocol?	☐	☒	☐
4) Are any samples NRC licensable material?	☐	☐	☒
5) If samples are received past hold time, proceed with requested short hold time analyses?	☒	☐	☐
6) Is the Chain of Custody form complete and accurate?	☒	☐	☐
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	☐	☒	☐

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	☒	☐	☐
9) Are all labels on containers and are they intact and legible?	☒	☐	☐
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	☒	☐	☐
11) For preserved bottle types, was the pH checked and within limits? ¹	☐	☐	☒
12) Is there sufficient sample volume to perform all requested work?	☒	☐	☐
13) Is the custody seal intact on all containers?	☐	☐	☒
14) Are samples that require zero headspace acceptable?	☐	☐	☒
15) Are all sample containers appropriate for analytical requirements?	☒	☐	☐
16) Is there an Hg-1631 trip blank present?	☐	☐	☒
17) Is there a VOA trip blank present?	☐	☐	☒
18) Were all samples received within hold time?	☒	☐	☐

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----	-----
7697	4.8	NA	15	N/A

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Twin Landfill Corporation

ACZ Project ID: L92018

Date Received: 12/12/2024 17:11

Received By:

Date Printed: 12/16/2024

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

