

Technical Report for

Olsson Associates - Denver

Indian Tree 8/13/13

Accutest Job Number: D49279

Sampling Date: 08/13/13

Report to:

**Olsson Associates
4690 Table Mountain Drive Suite 200
Golden, CO 80403
bbaugh@olssonassociates.com**

ATTN: Ben Baugh

Total number of pages in report: 14



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.



Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

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Sample Summary

Olsson Associates - Denver

Job No: D49279

Indian Tree 8/13/13

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
D49279-1	08/13/13	13:40 BB	08/13/13	SO	Soil	INDIAN TREE

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Olsson Associates - Denver

Job No D49279

Site: Indian Tree 8/13/13

Report Date 8/20/2013 4:01:36 PM

On 08/13/2013, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.9 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D49279 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Wet Chemistry By Method SM2540B-2011 M

Matrix SO

Batch ID: GN21465

- The data for SM2540B-2011 M meets quality control requirements.

Wet Chemistry By Method SW846 9071B

Matrix SO

Batch ID: GP10719

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D49279-1MS, D49279-1MSD were used as the QC samples for the HEM Oil and Grease analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D49279
Account: Olsson Associates - Denver
Project: Indian Tree 8/13/13
Collected: 08/13/13



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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D49279-1 **INDIAN TREE**

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: INDIAN TREE	Date Sampled: 08/13/13
Lab Sample ID: D49279-1	Date Received: 08/13/13
Matrix: SO - Soil	Percent Solids: 91.5
Project: Indian Tree 8/13/13	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 270	270	mg/kg	1	08/20/13	SWT	SW846 9071B
Solids, Percent	91.5		%	1	08/14/13	SWT	SM2540B-2011 M

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.accutest.com

FED-EX Tracking #
Bottle Order Control #
Accutest Quote #
Accutest Job # D49279

Client / Reporting Information
Project Information
Requested Analysis (see TEST CODE sheet)
Matrix Codes
Company Name: Olsson Associates
Project Name: Indian Tree 8/13/13
Street Address: 4690 Table Mountain Drive, Suite 200
City: Golden, CO 80403
Project Contact: Ben Baugh
Phone #: 303-374-3158
Project Manager: Kevin Taylor
Collection Table with columns: Field ID / Point of Collection, MEQ/VIDI Vial #, Date, Time, Sampled by, Matrix, # of bottles, etc.

Turnaround Time (Business days)
Data Deliverable Information
Comments / Special Instructions
[] Std. 10 Business Days
[X] 7 Day (per contract)
[] 5 Day RUSH
[] 3 Day Emergency
[] 2 Day Emergency
[] 1 Day Emergency
Approved By (Accutest PM): / Date:
Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "BN" = Results/QC/Narrative (+/- drums/bags/etc.)
**filter and preserve plastic bottle for Major Cations (EPA 200.7) in lab
**48 hour rush on Methane
report to: bbaugh@olsson

Sample Custody must be documented below each time samples change possession, including courier delivery.
1. Requisitioned by: [Signature] Date Time: 8/13/13 15:20
2. Received By: JACOB PATER Date Time: 8/13/13 15:20
3. Requisitioned by: [Signature] Date Time:
4. Received By: Date Time:
5. Requisitioned by: Date Time:
5. Received By: Date Time:
Custody Seal # HD X Intact Not Intact
Preserved where applicable
On Ice
Cooler Temp. 5.9

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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D49279

Client: OLSSON ASSOC.

Immediate Client Services Action Required: No

Date / Time Received: 8/13/2013 3:20:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: INDIAN TREE 8/13/13

Airbill #'s: HD

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smp'l Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	Infrared gun	
3. Cooler media:	Ice (bag)	

<u>Quality Control Preservation</u>	<u>Y or N</u>		<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

<u>Sample Integrity - Instructions</u>	<u>Y or N</u>		<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D49279
Account: COCSCOG - Olsson Associates - Denver
Project: Indian Tree 8/13/13

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
HEM Oil and Grease	GP10719/GN21558	250	0.00	mg/kg	800	830	103.8	70-130%

Associated Samples:
Batch GP10719: D49279-1
(*) Outside of QC limits

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D49279
Account: COCSCOG - Olsson Associates - Denver
Project: Indian Tree 8/13/13

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
HEM Oil and Grease	GP10719/GN21558	D49279-1	mg/kg	251	874	1100	97.1	65-130%

Associated Samples:

Batch GP10719: D49279-1

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

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MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D49279
Account: COCSCOG - Olsson Associates - Denver
Project: Indian Tree 8/13/13

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
HEM Oil and Grease	GP10719/GN21558	D49279-1	mg/kg	251	874	1180	7.0	30%

Associated Samples:

Batch GP10719: D49279-1

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

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