



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

December 26, 2018

Jason Herman  
NMED-GWQB  
PO BOX 5469  
Rm S4051  
Santa Fe, NM 87502  
TEL: (505) 827-2909  
FAX

RE: S and R Septic

OrderNo.: 1812981

Dear Jason Herman:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/17/2018 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** NMED-GWQB **Client Sample ID:** SW Organics 1841 Cell#2  
**Project:** S and R Septic **Collection Date:** 12/17/2018 2:15:00 PM  
**Lab ID:** 1812981-001 **Matrix:** SOIL **Received Date:** 12/17/2018 3:50:00 PM

| Analyses   | Result | PQL      | Qual | Units | DF | Date Analyzed          | Batch               |
|--|--------|----------|------|-------|----|------------------------|---------------------|
| <b>OIL AND GREASE, T/R</b>                       |        |          |      |       |    |                        | Analyst: <b>CLP</b> |
| Oil & Grease, Total Recoverable                  | 400    | 20       |      | mg/Kg | 1  | 12/19/2018             | 42192               |
| <b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                        | Analyst: <b>Irm</b> |
| Diesel Range Organics (DRO)                      | 92     | 9.7      |      | mg/Kg | 1  | 12/21/2018 2:10:26 PM  | 42209               |
| Motor Oil Range Organics (MRO)                   | 270    | 49       |      | mg/Kg | 1  | 12/21/2018 2:10:26 PM  | 42209               |
| Surr: DNOP                                       | 95.9   | 50.6-138 |      | %Rec  | 1  | 12/21/2018 2:10:26 PM  | 42209               |
| <b>EPA METHOD 8015D: GASOLINE RANGE</b>          |        |          |      |       |    |                        | Analyst: <b>NSB</b> |
| Gasoline Range Organics (GRO)                    | ND     | 4.9      |      | mg/Kg | 1  | 12/19/2018 12:28:19 PM | 42178               |
| Surr: BFB  | 98.6   | 73.8-119 |      | %Rec  | 1  | 12/19/2018 12:28:19 PM | 42178               |

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

|                    |   |   |
|--------------------|---|---|
| <b>Qualifiers:</b> | * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
|                    | D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
|                    | H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
|                    | ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
|                    | PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
|                    | S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1812981

26-Dec-18

**Client:** NMED-GWQB

**Project:** S and R Septic

|                                 |            |                |            |             |                     |          |           |      |          |      |
|---------------------------------|------------|----------------|------------|-------------|---------------------|----------|-----------|------|----------|------|
| Sample ID                       | MB-42192   | SampType:      | MBLK       | TestCode:   | OIL and GREASE, T/R |          |           |      |          |      |
| Client ID:                      | PBS        | Batch ID:      | 42192      | RunNo:      | 56458               |          |           |      |          |      |
| Prep Date:                      | 12/18/2018 | Analysis Date: | 12/19/2018 | SeqNo:      | 1888046             | Units:   | mg/Kg     |      |          |      |
| Analyte                         | Result     | PQL            | SPK value  | SPK Ref Val | %REC                | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Oil & Grease, Total Recoverable | ND         | 20             |            |             |                     |          |           |      |          |      |

|                                 |            |                |            |             |                     |          |           |      |          |      |
|---------------------------------|------------|----------------|------------|-------------|---------------------|----------|-----------|------|----------|------|
| Sample ID                       | LCS-42192  | SampType:      | LCS        | TestCode:   | OIL and GREASE, T/R |          |           |      |          |      |
| Client ID:                      | LCSS       | Batch ID:      | 42192      | RunNo:      | 56458               |          |           |      |          |      |
| Prep Date:                      | 12/18/2018 | Analysis Date: | 12/19/2018 | SeqNo:      | 1888047             | Units:   | mg/Kg     |      |          |      |
| Analyte                         | Result     | PQL            | SPK value  | SPK Ref Val | %REC                | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Oil & Grease, Total Recoverable | 100        | 20             | 100.0      | 0           | 102                 | 84.7     | 129       |      |          |      |

|                                 |            |                |            |             |                     |          |           |      |          |      |
|---------------------------------|------------|----------------|------------|-------------|---------------------|----------|-----------|------|----------|------|
| Sample ID                       | LCSD-42192 | SampType:      | LCSD       | TestCode:   | OIL and GREASE, T/R |          |           |      |          |      |
| Client ID:                      | LCSS02     | Batch ID:      | 42192      | RunNo:      | 56458               |          |           |      |          |      |
| Prep Date:                      | 12/18/2018 | Analysis Date: | 12/19/2018 | SeqNo:      | 1888048             | Units:   | mg/Kg     |      |          |      |
| Analyte                         | Result     | PQL            | SPK value  | SPK Ref Val | %REC                | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Oil & Grease, Total Recoverable | 100        | 20             | 100.0      | 0           | 101                 | 84.7     | 129       | 1.13 | 20       |      |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1812981

26-Dec-18

**Client:** NMED-GWQB

**Project:** S and R Septic

| Sample ID: <b>MB-42209</b>     | SampType: <b>MBLK</b>            | TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b> |                     |             |      |          |           |      |          |      |
|--------------------------------|----------------------------------|--|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: <b>PBS</b>          | Batch ID: <b>42209</b>           | RunNo: <b>56431</b>  |                     |             |      |          |           |      |          |      |
| Prep Date: <b>12/19/2018</b>   | Analysis Date: <b>12/20/2018</b> | SeqNo: <b>1890230</b>                                      | Units: <b>mg/Kg</b> |             |      |          |           |      |          |      |
| Analyte                        | Result                           | PQL  | SPK value           | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO)    | ND                               | 10   |                     |             |      |          |           |      |          |      |
| Motor Oil Range Organics (MRO) | ND                               | 50   |                     |             |      |          |           |      |          |      |
| Surr: DNOP                     | 12                               |  | 10.00               |             | 118  | 50.6     | 138       |      |          |      |

| Sample ID: <b>LCS-42209</b>  | SampType: <b>LCS</b>             | TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b> |                     |             |      |          |           |      |          |      |
|------------------------------|----------------------------------|--|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: <b>LCSS</b>       | Batch ID: <b>42209</b>           | RunNo: <b>56431</b>  |                     |             |      |          |           |      |          |      |
| Prep Date: <b>12/19/2018</b> | Analysis Date: <b>12/20/2018</b> | SeqNo: <b>1890231</b>                                      | Units: <b>mg/Kg</b> |             |      |          |           |      |          |      |
| Analyte                      | Result                           | PQL  | SPK value           | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO)  | 60                               | 10   | 50.00               | 0           | 119  | 70       | 130       |      |          |      |
| Surr: DNOP                   | 5.4                              |  | 5.000               |             | 109  | 50.6     | 138       |      |          |      |

| Sample ID: <b>LCS-42209</b>  | SampType: <b>LCS</b>             | TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b> |                     |             |      |          |           |      |          |      |
|------------------------------|----------------------------------|--|---------------------|-------------|------|----------|-----------|------|----------|------|
| Client ID: <b>LCSS</b>       | Batch ID: <b>42209</b>           | RunNo: <b>56431</b>  |                     |             |      |          |           |      |          |      |
| Prep Date: <b>12/19/2018</b> | Analysis Date: <b>12/21/2018</b> | SeqNo: <b>1890696</b>                                      | Units: <b>mg/Kg</b> |             |      |          |           |      |          |      |
| Analyte                      | Result                           | PQL  | SPK value           | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO)  | 58                               | 10   | 50.00               | 0           | 116  | 70       | 130       |      |          |      |
| Surr: DNOP                   | 5.9                              |  | 5.000               |             | 118  | 50.6     | 138       |      |          |      |

**Qualifiers:**

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- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1812981

26-Dec-18

Client: NMED-GWQB

Project: S and R Septic

|                               |            |                |            |             |                                  |          |           |      |          |      |
|-------------------------------|------------|----------------|------------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID                     | MB-42178   | SampType:      | MBLK       | TestCode:   | EPA Method 8015D: Gasoline Range |          |           |      |          |      |
| Client ID:                    | PBS        | Batch ID:      | 42178      | RunNo:      | 56473                            |          |           |      |          |      |
| Prep Date:                    | 12/18/2018 | Analysis Date: | 12/19/2018 | SeqNo:      | 1888352                          | Units:   | mg/Kg     |      |          |      |
| Analyte                       | Result     | PQL            | SPK value  | SPK Ref Val | %REC                             | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | ND         | 5.0            |            |             |                                  |          |           |      |          |      |
| Surr: BFB                     | 950        |                | 1000       |             | 94.7                             | 73.8     | 119       |      |          |      |

|                               |            |                |            |             |                                  |          |           |      |          |      |
|-------------------------------|------------|----------------|------------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID                     | LCS-42178  | SampType:      | LCS        | TestCode:   | EPA Method 8015D: Gasoline Range |          |           |      |          |      |
| Client ID:                    | LCSS       | Batch ID:      | 42178      | RunNo:      | 56473                            |          |           |      |          |      |
| Prep Date:                    | 12/18/2018 | Analysis Date: | 12/19/2018 | SeqNo:      | 1888353                          | Units:   | mg/Kg     |      |          |      |
| Analyte                       | Result     | PQL            | SPK value  | SPK Ref Val | %REC                             | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24         | 5.0            | 25.00      | 0           | 97.8                             | 80.1     | 123       |      |          |      |
| Surr: BFB                     | 1000       |                | 1000       |             | 101                              | 73.8     | 119       |      |          |      |

|            |            |                |            |             |                                  |          |           |      |          |      |
|------------|------------|----------------|------------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID  | MB-42210   | SampType:      | MBLK       | TestCode:   | EPA Method 8015D: Gasoline Range |          |           |      |          |      |
| Client ID: | PBS        | Batch ID:      | 42210      | RunNo:      | 56489                            |          |           |      |          |      |
| Prep Date: | 12/19/2018 | Analysis Date: | 12/20/2018 | SeqNo:      | 1889749                          | Units:   | %Rec      |      |          |      |
| Analyte    | Result     | PQL            | SPK value  | SPK Ref Val | %REC                             | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: BFB  | 880        |                | 1000       |             | 87.8                             | 73.8     | 119       |      |          |      |

|            |            |                |            |             |                                  |          |           |      |          |      |
|------------|------------|----------------|------------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID  | LCS-42210  | SampType:      | LCS        | TestCode:   | EPA Method 8015D: Gasoline Range |          |           |      |          |      |
| Client ID: | LCSS       | Batch ID:      | 42210      | RunNo:      | 56489                            |          |           |      |          |      |
| Prep Date: | 12/19/2018 | Analysis Date: | 12/20/2018 | SeqNo:      | 1889750                          | Units:   | %Rec      |      |          |      |
| Analyte    | Result     | PQL            | SPK value  | SPK Ref Val | %REC                             | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: BFB  | 1000       |                | 1000       |             | 104                              | 73.8     | 119       |      |          |      |

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



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# Sample Log-In Check List

Client Name: NMED Santa Fe

Work Order Number: 1812981

RcptNo: 1

Received By: Victoria Zellar

12/17/2018 3:50:00 PM

*Victoria Zellar*

Completed By: Isaiah Ortiz

12/18/2018 7:44:06 AM

*I-Ortiz*

Reviewed By:

*JAS 12/18/18*  
*LB: DAD 12/18/18*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? Client

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes  No

13. Is it clear what analyses were requested? Yes  No

14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: *DAD 12/18/18*

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

|                      |       |       |   |
|----------------------|-------|-------|---|
| Person Notified:     | _____ | Date: | _____   |
| By Whom:             | _____ | Via:  | <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           | _____ |       |   |
| Client Instructions: | _____ |       |   |

16. Additional remarks:

**Cooler Information**

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 17.2    | Good      | Not Present |         |           |           |

# Chain-of-Custody Record

Client: NMED GWDQB

Mailing Address: 1190 St. Francis Dr  
Santa Fe NM 87502

Phone #: 505 827 2713

email or Fax#: Jason.Herman@State.NM.US

QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  
 NELAC  Other

Sampler: Same  
 On Ice:  Yes  No

# of Coolers: 428 v2 N/A CF = FOA  
 Cooler Temp (including CF): 17.2°C

Container Type and #  
1817981  
-001

Sample Name  
Soil from SW Organics 1841  
Cell #2

Date Time Matrix  
12/17 14:15 Soil

HEAL No.  
1817981  
-001

Received by: Victoria Buller Date: 12/17/18 15:50  
 Relinquished by: Jason Herman

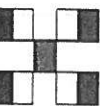
Received by: Jason Herman Date: 12/17/18 15:50  
 Relinquished by:

Turn-Around Time:  
 Standard  Rush

Project Name:  
St R Septic

Project #:  
DP-465

Project Manager:  
Jason Herman



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**  
 www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

| Analysis Request   |                                     |
|--|-------------------------------------|
| BTEX / MTBE / TMB's (8021)   | <input checked="" type="checkbox"/> |
| TPH:8015D(GRO / DRO / MRO)   | <input checked="" type="checkbox"/> |
| 8081 Pesticides/8082 PCB's   |                                     |
| EDB (Method 504.1)   |                                     |
| PAHs by 8310 or 8270SIMS   |                                     |
| RCRA 8 Metals  |                                     |
| Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> |                                     |
| 8260 (VOA)   |                                     |
| 8270 (Semi-VOA)  |                                     |
| Total Coliform (Present/Absent)  | <input checked="" type="checkbox"/> |
| Oil + Grease Total Reson   | <u>413</u>                          |

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.