

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2215147527 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Garrett Green Title: Environmental Coordinator

Signature:  Date: 12/07/2022

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

### OCD Only

Received by: Jocelyn Harimon Date: 12/07/2022

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Robert Hamlet Date: 3/13/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural  
Resources Department

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2214342255 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Release Notification

### Responsible Party

|                                                                            |                                |
|----------------------------------------------------------------------------|--------------------------------|
| Responsible Party XTO Energy                                               | OGRID 5380                     |
| Contact Name Garrett Green                                                 | Contact Telephone 575-200-0729 |
| Contact email garrett.green@exxonmobil.com                                 | Incident # (assigned by OCD)   |
| Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220 |                                |

### Location of Release Source

Latitude 32.10939 Longitude -103.88361  
(NAD 83 in decimal degrees to 5 decimal places)

|                                    |                           |
|------------------------------------|---------------------------|
| Site Name PLU 21 Brushy Draw 126H  | Site Type Production Well |
| Date Release Discovered 05/11/2022 | API# (if applicable)      |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| O           | 21      | 25S      | 30E   | Eddy   |

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Janey Paschal)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

|                                                                              |                                                                                          |                                                          |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Crude Oil                                           | Volume Released (bbls)                                                                   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Produced Water                                      | Volume Released (bbls)                                                                   | Volume Recovered (bbls)                                  |
|                                                                              | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate                                          | Volume Released (bbls)                                                                   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Natural Gas                                         | Volume Released (Mcf)                                                                    | Volume Recovered (Mcf)                                   |
| <input checked="" type="checkbox"/> Other (describe)<br>Produced water w/ FR | Volume/Weight Released (provide units)<br>10.00                                          | Volume/Weight Recovered (provide units)<br>4.00          |

Cause of Release During frac operations sand washout caused a flange to release fluids both into containment and onto pad. All free fluids were recovered. A third-party contractor has been retained for remediation purposes.

|                |                |
|----------------|----------------|
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|                                                                                                                                       |                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release?<br>N/A |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?<br>N/A                   |                                                                                             |

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> The source of the release has been stopped.<br><input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.<br><input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.<br><input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.                                                                                                                                                                                                                                                                                               |                                |
| If all the actions described above have <u>not</u> been undertaken, explain why:<br>NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.                                                                                                                                                                                                                                                                                                                                                                                      |                                |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. |                                |
| Printed Name: <u>Garrett Green</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Title: <u>SSHE Coordinator</u> |
| Signature: <u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Date: <u>05/23/2022</u>        |
| email: <u>garrett.green@exxonmobil.com</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Telephone: <u>575-200-0729</u> |
| <b><u>OCD Only</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |
| Received by: <u>Jocelyn Harimon</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date: <u>05/23/2022</u>        |

|                                          |                                |         |
|------------------------------------------|--------------------------------|---------|
| <b>Location:</b>                         | <b>PLU 21 Brushy Draw 126H</b> |         |
| <b>Spill Date:</b>                       | <b>5/11/2022</b>               |         |
| <b>Area 1</b>                            |                                |         |
| Approximate Area =                       | 11.23                          | cu.ft.  |
| VOLUME OF LEAK                           |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 2.00                           | bbls    |
| <b>Area 2</b>                            |                                |         |
| Approximate Area =                       | 6733.00                        | sq. ft. |
| Average Saturation (or depth) of spill = | 2.00                           | inches  |
| Average Porosity Factor =                |                                |         |
| 0.03                                     |                                |         |
| VOLUME OF LEAK                           |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 8.00                           | bbls    |
| <b>TOTAL VOLUME OF LEAK</b>              |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 10.00                          | bbls    |
| <b>TOTAL VOLUME RECOVERED</b>            |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 4.00                           | bbls    |



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 109385

CONDITIONS

|                                                                             |                                                           |
|-----------------------------------------------------------------------------|-----------------------------------------------------------|
| Operator:<br>XTO ENERGY, INC<br>6401 Holiday Hill Road<br>Midland, TX 79707 | OGRID:<br>5380                                            |
|                                                                             | Action Number:<br>109385                                  |
|                                                                             | Action Type:<br>[C-141] Release Corrective Action (C-141) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| jharimon   | None      | 5/23/2022      |

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2214342255 |
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| Facility ID    |                |
| Application ID |                |

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

|                                                                                                                                                                                                 |                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| What is the shallowest depth to groundwater beneath the area affected by the release?                                                                                                           | <u>&gt;100</u> (ft bgs)                                             |
| Did this release impact groundwater or surface water?                                                                                                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?                                                              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?                                                    | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?                                                                                                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland?                                                                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine?                                                                                                                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology?                                                                                                        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain?                                                                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?                                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

|                |                |
|----------------|----------------|
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green Title: Environmental Coordinator

Signature:  Date: 12/07/2022

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2214342255 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Garrett Green Title: Environmental Coordinator

Signature:  Date: 12/07/2022

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

### OCD Only

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

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| Application ID |                |

## Release Notification

### Responsible Party

|                                                                            |                                |
|----------------------------------------------------------------------------|--------------------------------|
| Responsible Party XTO Energy                                               | OGRID 5380                     |
| Contact Name Garrett Green                                                 | Contact Telephone 575-200-0729 |
| Contact email garrett.green@exxonmobil.com                                 | Incident # (assigned by OCD)   |
| Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220 |                                |

### Location of Release Source

Latitude 32.10941 Longitude -103.88323  
(NAD 83 in decimal degrees to 5 decimal places)

|                                    |                           |
|------------------------------------|---------------------------|
| Site Name PLU 21 Brushy Draw 905H  | Site Type Production Well |
| Date Release Discovered 05/19/2022 | API# (if applicable)      |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| O           | 21      | 25S      | 30E   | Eddy   |

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Janey Paschal)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

|                                                                             |                                                                                          |                                                          |
|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Crude Oil                                          | Volume Released (bbls)                                                                   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Produced Water                                     | Volume Released (bbls)                                                                   | Volume Recovered (bbls)                                  |
|                                                                             | Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate                                         | Volume Released (bbls)                                                                   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Natural Gas                                        | Volume Released (Mcf)                                                                    | Volume Recovered (Mcf)                                   |
| <input checked="" type="checkbox"/> Other (describe)<br>Produced Water w/FR | Volume/Weight Released (provide units)<br>7.00 BBLS                                      | Volume/Weight Recovered (provide units)<br>4.00 BBLS     |

Cause of Release During frac operations, the blender tub was overfilled, causing fluids to release into containment and onto pad. All free fluids were recovered. A third-party contractor has been retained for remediation purposes.

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2215147527 |
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| Application ID |                |

|                                                                                                                                       |                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release?<br>N/A |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?<br>N/A                   |                                                                                             |

## Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> The source of the release has been stopped.<br><input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.<br><input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.<br><input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.                                                                                                                                                                                                                                                                                               |                                |
| If all the actions described above have <u>not</u> been undertaken, explain why:<br>NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.                                                                                                                                                                                                                                                                                                                                                                                      |                                |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. |                                |
| Printed Name: <u>Garrett Green</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Title: <u>SSHE Coordinator</u> |
| Signature: <u></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Date: <u>05/31/2022</u>        |
| email: <u>garrett.green@exxonmobil.com</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Telephone: <u>575-200-0729</u> |
| <b><u>OCD Only</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |
| Received by: <u>Jocelyn Harimon</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date: <u>05/31/2022</u>        |

|                                          |                                |         |
|------------------------------------------|--------------------------------|---------|
| <b>Location:</b>                         | <b>PLU 21 Brushy Draw 905H</b> |         |
| <b>Spill Date:</b>                       | <b>5/19/2022</b>               |         |
| <b>Area 1</b>                            |                                |         |
| Approximate Area =                       | 22.46                          | cu.ft.  |
| VOLUME OF LEAK                           |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 4.00                           | bbls    |
| <b>Area 2</b>                            |                                |         |
| Approximate Area =                       | 5398.00                        | sq. ft. |
| Average Saturation (or depth) of spill = | 1.25                           | inches  |
| Average Porosity Factor =                |                                |         |
| 0.03                                     |                                |         |
| VOLUME OF LEAK                           |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 3.00                           | bbls    |
| <b>TOTAL VOLUME OF LEAK</b>              |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 7.00                           | bbls    |
| <b>TOTAL VOLUME RECOVERED</b>            |                                |         |
| Total Crude Oil =                        | 0.00                           | bbls    |
| Total Produced Water =                   | 4.00                           | bbls    |

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 112119

CONDITIONS

|                                                                                 |                                                               |
|---------------------------------------------------------------------------------|---------------------------------------------------------------|
| Operator:<br><br>XTO ENERGY, INC<br>6401 Holiday Hill Road<br>Midland, TX 79707 | OGRID:<br><br>5380                                            |
|                                                                                 | Action Number:<br><br>112119                                  |
|                                                                                 | Action Type:<br><br>[C-141] Release Corrective Action (C-141) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| jharimon   | None      | 5/31/2022      |



|                |                |
|----------------|----------------|
| Incident ID    | NAPP2215147527 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

|                                                                                                                                                                                                 |                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| What is the shallowest depth to groundwater beneath the area affected by the release?                                                                                                           | <u>&gt;100</u> (ft bgs)                                             |
| Did this release impact groundwater or surface water?                                                                                                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?                                                              | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?                                                    | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?                                                                                                | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland?                                                                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine?                                                                                                                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology?                                                                                                        | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain?                                                                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?                                                                                            | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Page 4

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2215147527 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green Title: Environmental CoordinatorSignature:  Date: 12/07/2022email: garrett.green@exxonmobil.com Telephone: 575-200-0729**OCD Only**Received by: Jocelyn Harimon Date: 12/07/2022

|                |                |
|----------------|----------------|
| Incident ID    | NAPP2215147527 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Garrett Green Title: Environmental Coordinator

Signature:  Date: 12/07/2022

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

### OCD Only

Received by: Jocelyn Harimon Date: 12/07/2022

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_



December 7, 2022

**New Mexico Oil Conservation Division**

New Mexico Energy, Minerals, and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Closure Request  
Poker Lake Unit (PLU) 21 Brushy Draw 126H / 905H  
Incident Numbers NAPP2214342255 and NAPP2215147527  
Eddy County, New Mexico**

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document site assessment and soil sampling activities performed at the PLU 21 Brushy Draw 126H and PLU 21 Brushy Draw 905H (located on the same well pad and collectively referred to as the Site). The purpose of the site assessment, and soil sampling activities was to assess for the presence or absence of impacts to soil following a two release events of produced water with friction reducer (FR) at the Site. Based on field observations, field screening activities, and laboratory analytical results from the soil sampling events, XTO is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Numbers NAPP2214342255 and NAPP2215147527.

**SITE DESCRIPTION AND RELEASE SUMMARY**

The Site is located in Unit O, Section 21, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.10939°N, 103.88361°W) and is associated with oil and gas exploration and production operations on Private Land.

NAPP2214342255

On May 11, 2022, during hydraulic fracturing (frac) operations sand washout caused a flange to fail resulting in the release of approximately 10 barrels (bbls) of produced water with FR onto the surface of the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids; approximately 4 bbls of liquids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on May 23, 2022. The release was assigned Incident Number NAPP2214342255.

NAPP2215147527

On May 19, 2022, during frac operations, the blender tub was overfilled resulting in the release of approximately 7 bbls of produced water with FR onto the surface of the well pad. A vacuum truck was dispatched to the Site to recover free-standing fluids and approximately 4 bbls were recovered. XTO reported the release to the NMOCD on a Form C-141 on May 31, 2022. The release was assigned Incident Number NAPP2215147527.

XTO Energy, Inc  
Closure Request  
PLU 21 Brushy Draw 126H / 905H



## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United State Geological Survey (USGS) well 320629103533002, located approximately ½ mile southwest of the Site. The groundwater well has a reported depth to groundwater of 265 feet bgs and a total depth of 280 feet bgs. Ground surface elevation at the groundwater well location is 3,219 feet above mean sea level (amsl), which is approximately 31 feet lower in elevation than the Site. There are no hydrological features near the Site that would indicate shallow groundwater. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 1,427 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

## SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

Frac operations continued onsite prohibiting XTO from conducting Site assessment immediately following notification of the release. XTO submitted an extension request for both release events on August 9, 2022, due to frac operations. The NMOCD approved the extension request on August 9, 2022, extending the due date to November 7, 2022.

Between September 27, 2022 and November 7, 2022, Ensolum personnel visited the Site to evaluate the release extents based on information provided on the Form C-141s and information from XTO regarding the location of the former containment. Upon completion of frac operations, a temporary containment was removed and Ensolum personnel were able to access the Site. A total of 9 soil samples (SS01 through SS07) were collected within and around the release extent from a depth of 0.5 feet bgs to assess the lateral extent of the impacted soil. Three soil samples (SS01 through SS03) were collected within the release extent (associated with Incident Number NAPP2215147527) and two soil samples (SS01 through SS02) collected within the release extent (associated with incident number

XTO Energy, Inc  
Closure Request  
PLU 21 Brushy Draw 126H / 905H



NAPP2214342255). Additionally, lateral delineation samples (SS04 through SS07) were collected outside the release extents. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips, respectively. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Potholes PH01 through PH04 were advanced via backhoe to a depth of 2 feet bgs within the release extents to assess the vertical extent of the releases. The potholes were advanced at the locations of previously collected delineation samples SS01, SS02, and SS03 (associated with Incident Number NAPP2215147527) and at SS01 (associated with incident number NAPP2214342255). Delineation soil samples were collected from each pothole at depths of 1 foot and 2 feet bgs. Soil from the delineation potholes was field screened for VOCs and chloride, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations are depicted on Figure 2.

Laboratory analytical results for all delineation soil samples indicated concentrations of all COCs were compliant with the Site Closure Criteria. In addition, the lateral delineation samples (SS04 through SS07) were compliant with the most stringent Table I Closure Criteria and successfully defined the lateral extent of the release. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included in Appendix D.

## CLOSURE REQUEST

Site assessment and delineation activities were conducted at the Site to address two separate, but commingled releases of produced water with FR. Laboratory analytical results for the delineation soil samples indicated all COC concentrations were compliant with the Site Closure Criteria. The lateral extent of the release was delineated to the reclamation requirement at SS04, SS05, SS06, and SS07 to ensure the release did not flow off pad. Based on the soil sample laboratory analytical results, no further remediation was required.

Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Numbers NAPP2214342255 and NAPP2215147527.

XTO Energy, Inc  
Closure Request  
PLU 21 Brushy Draw 126H / 905H



If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or [kjennings@ensolum.com](mailto:kjennings@ensolum.com).

Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink that reads "Eric Carroll".

Eric Carroll  
Project Geologist

A handwritten signature in black ink that reads "Ashley L. Ager".

Ashley L. Ager, M.S., P.G.  
Program Director

cc: Garrett Green, XTO  
Shelby Pennington, XTO  
Janey Paschal

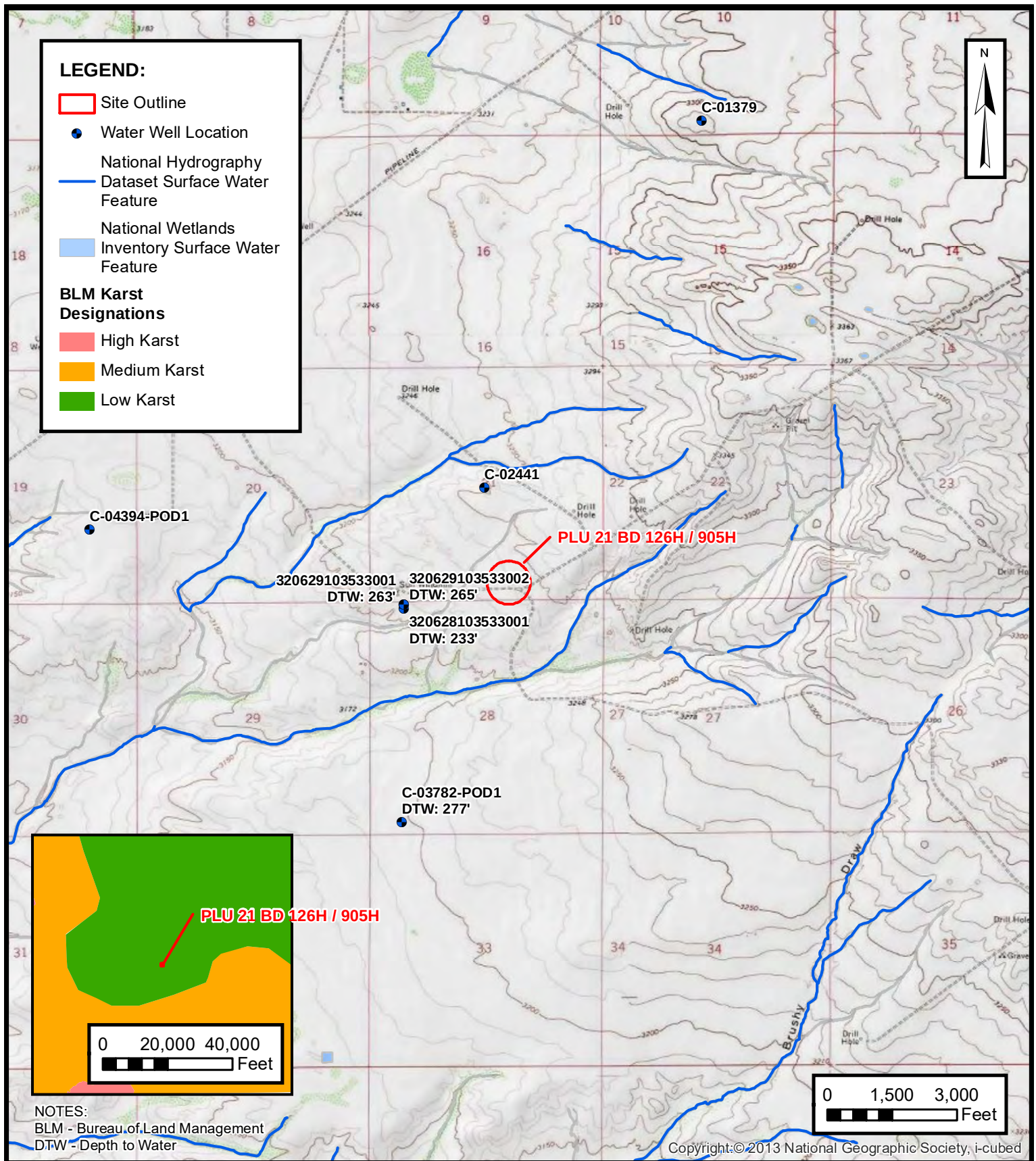
Appendices:

|            |                                                                |
|------------|----------------------------------------------------------------|
| Figure 1   | Site Receptor Map                                              |
| Figure 2   | Delineation Soil Sample Locations                              |
| Table 1    | Soil Sample Analytical Results                                 |
| Appendix A | Referenced Well Records                                        |
| Appendix B | Lithologic Soil Sampling Logs                                  |
| Appendix C | Photographic Log                                               |
| Appendix D | Laboratory Analytical Reports & Chain-of-Custody Documentation |
| Appendix E | NMOCD Notifications                                            |
| Appendix F | SDS for Friction Reducer                                       |



FIGURES



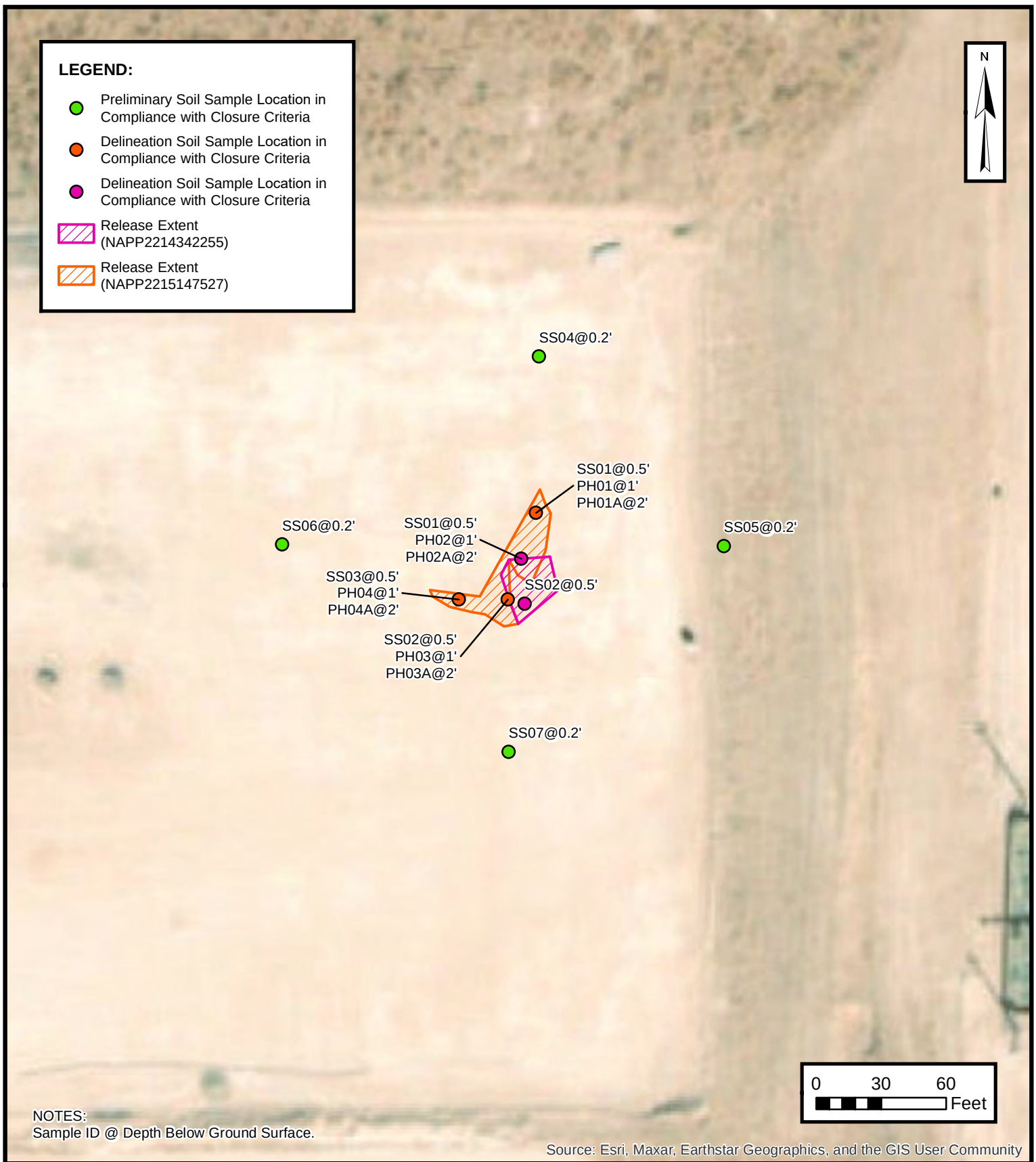
**SITE RECEPTOR MAP**

XTO ENERGY, INC.  
 PLU 21 BD 126H / 905H  
 NAPP2215147527 & NAPP2214342255  
 Unit O, Sec 21, T25S, R30E  
 Eddy County, New Mexico

**FIGURE****1**

**ENSOLUM**  
 Environmental, Engineering and  
 Hydrogeologic Consultants





### DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC.  
 PLU 21 BD 126H / 905H  
 NAPP2215147527 & NAPP2214342255  
 Unit O, Sec 21, T25S, R30E  
 Eddy County, New Mexico

FIGURE

2



TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**PLU 21 Brushy Draw 126H / 905H**  
**XTO Energy, Inc.**  
**Eddy County, New Mexico**

| Sample I.D.                                    | Sample Date | Sample Depth (feet bgs) | Benzene (mg/kg) | Total BTEX (mg/kg) | TPH GRO (mg/kg) | TPH DRO (mg/kg) | TPH ORO (mg/kg) | GRO+DRO (mg/kg) | Total TPH (mg/kg) | Chloride (mg/kg) |
|------------------------------------------------|-------------|-------------------------|-----------------|--------------------|-----------------|-----------------|-----------------|-----------------|-------------------|------------------|
| NMOCD Table 1 Closure Criteria (NMAC 19.15.29) |             |                         | 10              | 50                 | NE              | NE              | NE              | 1,000           | 2,500             | 20,000           |
| Preliminary Soil Samples (NAPP2215147527)      |             |                         |                 |                    |                 |                 |                 |                 |                   |                  |
| SS01                                           | 09/27/2022  | 0.5                     | <0.00198        | <0.00396           | <49.9           | <49.9           | <49.9           | <49.9           | <49.9             | 5,390            |
| SS02                                           | 09/27/2022  | 0.5                     | <0.00199        | <0.00398           | <49.9           | <49.9           | <49.9           | <49.9           | <49.9             | 18,100           |
| SS03                                           | 09/27/2022  | 0.5                     | <0.00202        | <0.00403           | <50.0           | 4960            | <50.0           | <49.9           | <49.9             | 1,060            |
| Preliminary Soil Samples (NAPP2214342255)      |             |                         |                 |                    |                 |                 |                 |                 |                   |                  |
| SS01                                           | 09/27/2022  | 0.5                     | <0.00199        | <0.00398           | <49.9           | 70.7            | <49.9           | 70.7            | 70.7              | 3,770            |
| SS02                                           | 09/27/2022  | 0.5                     | <0.00201        | <0.00402           | <49.9           | 137             | <49.9           | 137             | 137               | 330              |
| Delineation Soil Samples                       |             |                         |                 |                    |                 |                 |                 |                 |                   |                  |
| PH01                                           | 10/05/2022  | 1                       | <0.00200        | <0.00401           | <50.0           | <50.0           | <50.0           | <50.0           | <50.0             | 3,500            |
| PH01A                                          | 10/05/2022  | 2                       | <0.00201        | <0.00402           | <49.9           | <49.9           | <49.9           | <49.9           | <49.9             | 1,110            |
| PH02                                           | 10/05/2022  | 1                       | <0.00200        | <0.00399           | <50.0           | <50.0           | <50.0           | <50.0           | <50.0             | 2,070            |
| PH02A                                          | 10/05/2022  | 2                       | <0.00199        | <0.00398           | <50.0           | <50.0           | <50.0           | <50.0           | <50.0             | 1,470            |
| PH03                                           | 10/05/2022  | 1                       | <0.00199        | <0.00398           | <50.0           | <50.0           | <50.0           | <50.0           | <50.0             | 4,340            |
| PH03A                                          | 10/05/2022  | 2                       | <0.00199        | <0.00398           | <50.0           | <50.0           | <50.0           | <50.0           | <50.0             | 7,200            |
| PH04                                           | 10/05/2022  | 1                       | <0.00199        | <0.00398           | <49.8           | <49.8           | <49.8           | <49.8           | <49.8             | 8,250            |
| PH04A                                          | 10/05/2022  | 2                       | <0.00199        | <0.00398           | <49.9           | <49.9           | <49.9           | <49.9           | <49.9             | 8,390            |
| SS04                                           | 11/07/2022  | 0.2                     | <0.00199        | <0.00398           | <49.9           | <49.9           | <49.9           | <49.9           | <49.9             | 14.0             |
| SS05                                           | 11/07/2022  | 0.2                     | <0.00200        | <0.00401           | <49.8           | <49.8           | <49.8           | <49.8           | <49.8             | 301              |
| SS06                                           | 11/07/2022  | 0.2                     | <0.00198        | <0.00396           | 55.1            | <50.0           | 14.4            | 55.1            | 69.5              | 195              |
| SS07                                           | 11/07/2022  | 0.2                     | <0.00199        | <0.00398           | <50.0           | <50.0           | <50.0           | <50.0           | <50.0             | 35.8             |

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code



## APPENDIX A

### Referenced Well Records

---



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

## National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

### Search Results -- 1 sites found

site\_no list =

- 320629103533002

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

### USGS 320629103533002 25S.30E.21.33342 A

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°06'29", Longitude 103°53'30" NAD27

Land-surface elevation 3,209 feet above NAVD88

The depth of the well is 280 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

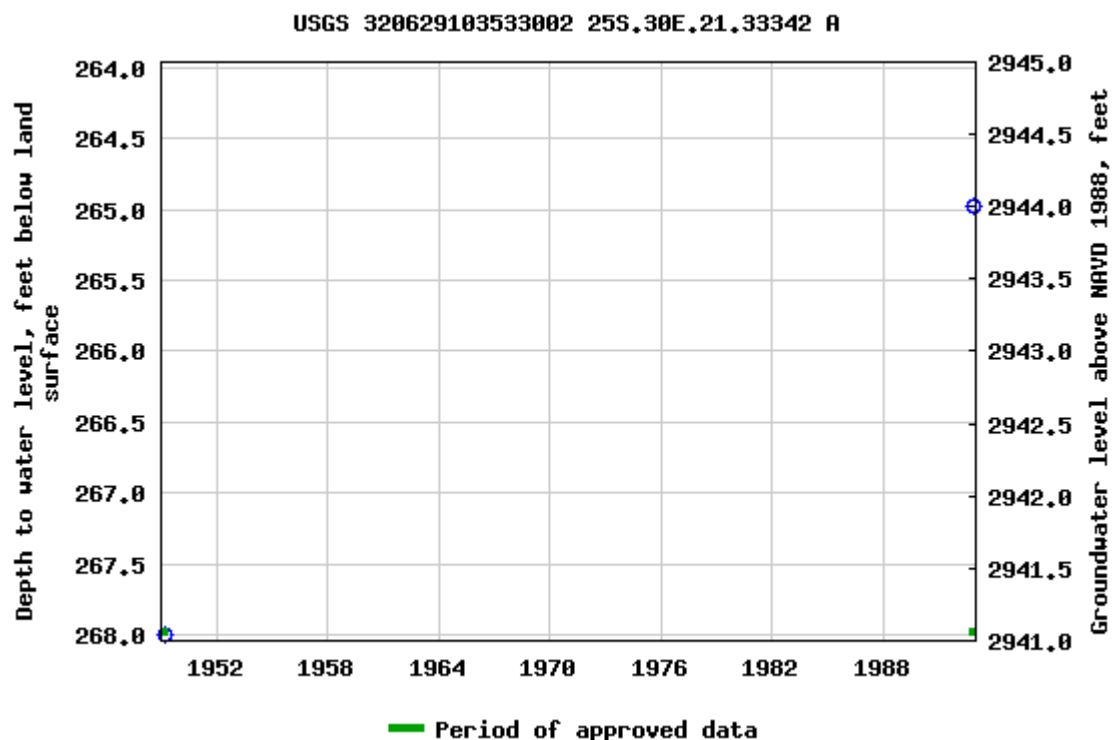
#### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2022-07-05 17:04:41 EDT

0.7 0.64 nadww01



## APPENDIX B

### Lithologic Soil Sampling Logs

---



|                                                                                                                                              |                |             |          |           |                       |                |                  | Sample Name: PH01               |  | Date: 10/5/22   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|----------|-----------|-----------------------|----------------|------------------|---------------------------------|--|-----------------|--|
|                                                                                                                                                                                                                               |                |             |          |           |                       |                |                  | Site Name: PLU 21 BD 126H/905H  |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                |                  | Incident Number: NAPP2214342255 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                |                  | Job Number: 03E1558070          |  |                 |  |
| <b>LITHOLOGIC / SOIL SAMPLING LOG</b>                                                                                                                                                                                         |                |             |          |           |                       |                |                  | Logged By: Kase Parker          |  | Method: Backhoe |  |
| Coordinates: 32.10939, -103.88361                                                                                                                                                                                             |                |             |          |           |                       |                |                  | Hole Diameter: ~3'              |  | Total Depth: 2  |  |
| Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. |                |             |          |           |                       |                |                  |                                 |  |                 |  |
| Moisture Content                                                                                                                                                                                                              | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithologic Descriptions         |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 0              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               | 3,847          | 0           | N        | PH01      | 1'                    | 1              | GM               | Well graded stilty caliche      |  |                 |  |
|                                                                                                                                                                                                                               | 929            | 0           | N        | PH01A     | 2'                    | 2              | GM               | Well graded stilty caliche      |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 3              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 4              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 5              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 6              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 7              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 8              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 9              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 10             |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 11             |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 12             |                  |                                 |  |                 |  |

|                                                                                                                                              |                |             |          |           |                       |                | Sample Name: PH02               |                            | Date: 10/5/22   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|----------|-----------|-----------------------|----------------|---------------------------------|----------------------------|-----------------|--|
|                                                                                                                                                                                                                               |                |             |          |           |                       |                | Site Name: PLU 21 BD 126H/905H  |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                | Incident Number: NAPP2214342255 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                | Job Number: 03E1558070          |                            |                 |  |
| <b>LITHOLOGIC / SOIL SAMPLING LOG</b>                                                                                                                                                                                         |                |             |          |           |                       |                | Logged By: Kase Parker          |                            | Method: Backhoe |  |
| Coordinates: 32.10939, -103.88361                                                                                                                                                                                             |                |             |          |           |                       |                | Hole Diameter: ~3'              |                            | Total Depth: 2  |  |
| Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. |                |             |          |           |                       |                |                                 |                            |                 |  |
| Moisture Content                                                                                                                                                                                                              | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol                | Lithologic Descriptions    |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 0              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               | 2,296          | 0           | N        | PH02      | 1'                    | 1              | GM                              | Well graded stilty caliche |                 |  |
|                                                                                                                                                                                                                               | 1,288          | 0           | N        | PH02A     | 2'                    | 2              | GM                              | Well graded stilty caliche |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 3              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 4              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 5              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 6              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 7              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 8              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 9              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 10             |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 11             |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 12             |                                 |                            |                 |  |

|                                                                                                                                              |                |             |          |           |                       |                |                  | Sample Name: PH03               |  | Date: 10/5/22   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|----------|-----------|-----------------------|----------------|------------------|---------------------------------|--|-----------------|--|
|                                                                                                                                                                                                                               |                |             |          |           |                       |                |                  | Site Name: PLU 21 BD 126H/905H  |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                |                  | Incident Number: NAPP2214342255 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                |                  | Job Number: 03E1558070          |  |                 |  |
| <b>LITHOLOGIC / SOIL SAMPLING LOG</b>                                                                                                                                                                                         |                |             |          |           |                       |                |                  | Logged By: Kase Parker          |  | Method: Backhoe |  |
| Coordinates: 32.10939, -103.88361                                                                                                                                                                                             |                |             |          |           |                       |                |                  | Hole Diameter: ~3'              |  | Total Depth: 2  |  |
| Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. |                |             |          |           |                       |                |                  |                                 |  |                 |  |
| Moisture Content                                                                                                                                                                                                              | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol | Lithologic Descriptions         |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 0              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               | 6,249          | 0           | N        | PH03      | 1'                    | 1              | GM               | Well graded stilty caliche      |  |                 |  |
|                                                                                                                                                                                                                               | 8,596          | 0           | N        | PH03A     | 2'                    | 2              | GM               | Well graded stilty caliche      |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 3              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 4              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 5              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 6              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 7              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 8              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 9              |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 10             |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 11             |                  |                                 |  |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 12             |                  |                                 |  |                 |  |

|                                                                                                                                              |                |             |          |           |                       |                | Sample Name: PH04               |                            | Date: 10/5/22   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|----------|-----------|-----------------------|----------------|---------------------------------|----------------------------|-----------------|--|
|                                                                                                                                                                                                                               |                |             |          |           |                       |                | Site Name: PLU 21 BD 126H/905H  |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                | Incident Number: NAPP2214342255 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       |                | Job Number: 03E1558070          |                            |                 |  |
| <b>LITHOLOGIC / SOIL SAMPLING LOG</b>                                                                                                                                                                                         |                |             |          |           |                       |                | Logged By: Kase Parker          |                            | Method: Backhoe |  |
| Coordinates: 32.10939, -103.88361                                                                                                                                                                                             |                |             |          |           |                       |                | Hole Diameter: ~3'              |                            | Total Depth: 2  |  |
| Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. |                |             |          |           |                       |                |                                 |                            |                 |  |
| Moisture Content                                                                                                                                                                                                              | Chloride (ppm) | Vapor (ppm) | Staining | Sample ID | Sample Depth (ft bgs) | Depth (ft bgs) | USCS/Rock Symbol                | Lithologic Descriptions    |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 0              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               | 8,596          | 0           | N        | PH04      | 1'                    | 1              | GM                              | Well graded stilty caliche |                 |  |
|                                                                                                                                                                                                                               | 10,046         | 0           | N        | PH04A     | 2'                    | 2              | GM                              | Well graded stilty caliche |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 3              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 4              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 5              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 6              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 7              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 8              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 9              |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 10             |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 11             |                                 |                            |                 |  |
|                                                                                                                                                                                                                               |                |             |          |           |                       | 12             |                                 |                            |                 |  |



## APPENDIX C

### Photographic Log

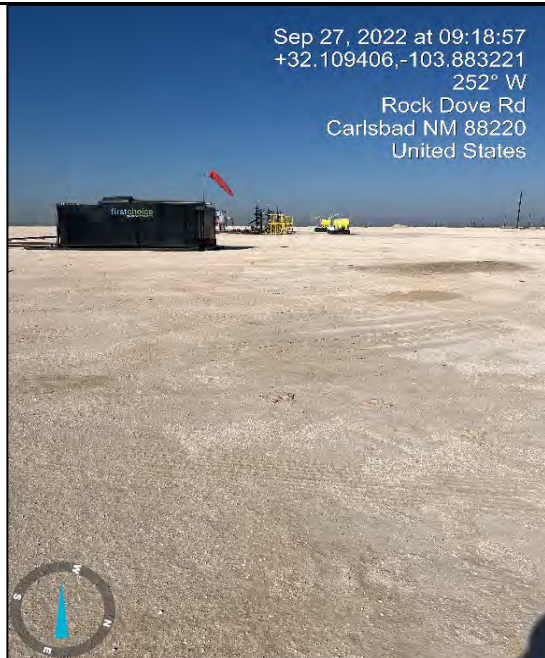
---

**Photographic Log**

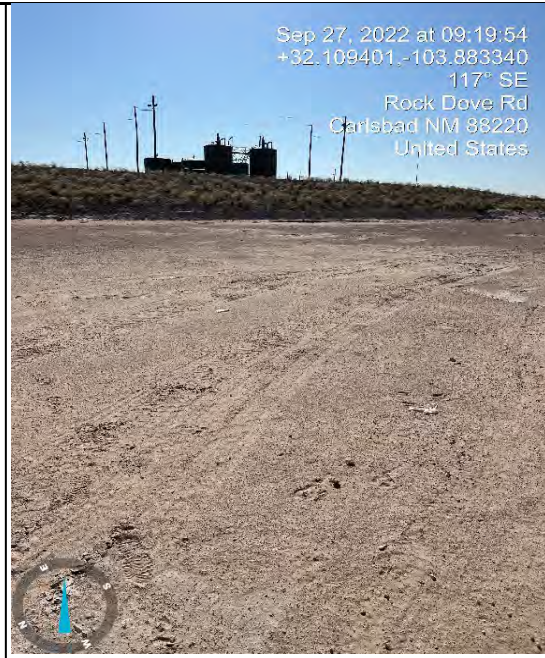
XTO Energy, Inc.

PLU 21 Brushy Draw 126H / 905H

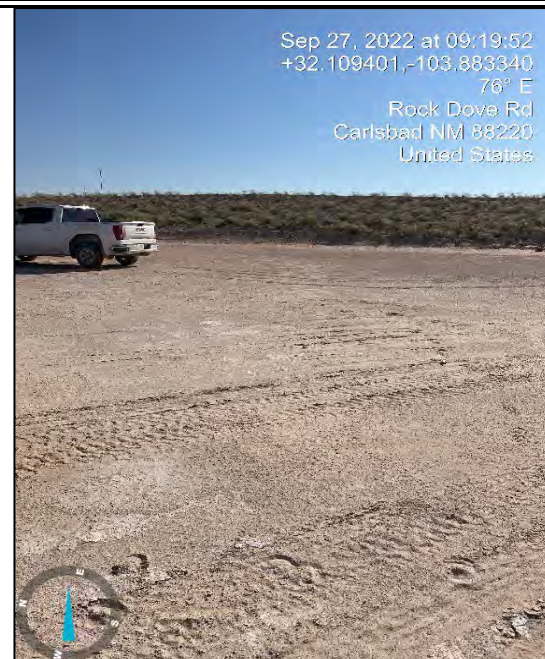
Eddy County, New Mexico



Photograph: 1 Date: 9/27/2022  
Description: View of release areas.  
View: West



Photograph: 2 Date: 9/27/2022  
Description: View of release areas.  
View: West



Photograph: 3 Date: 9/27/2022  
Description: View of release areas.  
View: East



Photograph: 4 Date: 10/05/2022  
Description: View during delineation activities  
View: Southeast



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation

---





Environment Testing  
America

## ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3074-1

Laboratory Sample Delivery Group: 03E1558070

Client Project/Site: PLU 21 BD 126H

For:

Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Kalei Jennings

Authorized for release by:

10/8/2022 8:40:04 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Client: Ensolum  
Project/Site: PLU 21 BD 126H

Laboratory Job ID: 890-3074-1  
SDG: 03E1558070

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| F2        | MS/MSD RPD exceeds control limits                        |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| □              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

**Job ID: 890-3074-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-3074-1****Receipt**

The samples were received on 9/27/2022 2:51 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36296 and analytical batch 880-36323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3068-A-1-H). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35711 and analytical batch 880-35736 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35680 and analytical batch 880-35721 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

Client Sample ID: SS01

Lab Sample ID: 890-3074-1

Date Collected: 09/27/22 09:50

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0 - 3

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00198 | U         | 0.00198 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:14 | 1       |
| Toluene             | <0.00198 | U         | 0.00198 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:14 | 1       |
| Ethylbenzene        | <0.00198 | U         | 0.00198 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:14 | 1       |
| m-Xylene & p-Xylene | <0.00396 | U         | 0.00396 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:14 | 1       |
| o-Xylene            | <0.00198 | U         | 0.00198 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:14 | 1       |
| Xylenes, Total      | <0.00396 | U         | 0.00396 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:14 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 115       |           | 70 - 130 | 10/06/22 16:44 | 10/07/22 23:14 | 1       |
| 1,4-Difluorobenzene (Surr)  | 75        |           | 70 - 130 | 10/06/22 16:44 | 10/07/22 23:14 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00396 | U         | 0.00396 | mg/Kg |   |          | 10/08/22 09:02 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.9  | U         | 49.9 | mg/Kg |   |          | 10/03/22 11:24 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9  | U         | 49.9 | mg/Kg |   | 09/29/22 13:24 | 10/01/22 02:19 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.9  | U         | 49.9 | mg/Kg |   | 09/29/22 13:24 | 10/01/22 02:19 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9  | U         | 49.9 | mg/Kg |   | 09/29/22 13:24 | 10/01/22 02:19 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 111       |           | 70 - 130 | 09/29/22 13:24 | 10/01/22 02:19 | 1       |
| o-Terphenyl    | 112       |           | 70 - 130 | 09/29/22 13:24 | 10/01/22 02:19 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 5390   |           | 49.8 | mg/Kg |   |          | 09/29/22 22:46 | 10      |

Client Sample ID: SS02

Lab Sample ID: 890-3074-2

Date Collected: 09/27/22 09:55

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0 - 3

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:34 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:34 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:34 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:34 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:34 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:34 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 127       |           | 70 - 130 | 10/06/22 16:44 | 10/07/22 23:34 | 1       |

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

Client Sample ID: SS02

Lab Sample ID: 890-3074-2

Date Collected: 09/27/22 09:55

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0 - 3

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate                  | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,4-Difluorobenzene (Surr) | 101       |           | 70 - 130 | 10/06/22 16:44 | 10/07/22 23:34 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/08/22 09:02 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.9  | U         | 49.9 | mg/Kg |   |          | 10/03/22 11:24 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9     | U         | 49.9     | mg/Kg |   | 09/29/22 13:24 | 10/01/22 02:41 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.9     | U         | 49.9     | mg/Kg |   | 09/29/22 13:24 | 10/01/22 02:41 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9     | U         | 49.9     | mg/Kg |   | 09/29/22 13:24 | 10/01/22 02:41 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 123       |           | 70 - 130 |       |   | 09/29/22 13:24 | 10/01/22 02:41 | 1       |
| o-Terphenyl                          | 121       |           | 70 - 130 |       |   | 09/29/22 13:24 | 10/01/22 02:41 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL  | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|-----|-------|---|----------|----------------|---------|
| Chloride | 18100  |           | 250 | mg/Kg |   |          | 09/29/22 22:51 | 50      |

Client Sample ID: SS03

Lab Sample ID: 890-3074-3

Date Collected: 09/27/22 10:00

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0 - 3

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00202 | U         | 0.00202 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:55 | 1       |
| Toluene             | <0.00202 | U         | 0.00202 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:55 | 1       |
| Ethylbenzene        | <0.00202 | U         | 0.00202 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:55 | 1       |
| m-Xylene & p-Xylene | <0.00403 | U         | 0.00403 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:55 | 1       |
| o-Xylene            | <0.00202 | U         | 0.00202 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:55 | 1       |
| Xylenes, Total      | <0.00403 | U         | 0.00403 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 23:55 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 98        |           | 70 - 130 | 10/06/22 16:44 | 10/07/22 23:55 | 1       |
| 1,4-Difluorobenzene (Surr)  | 103       |           | 70 - 130 | 10/06/22 16:44 | 10/07/22 23:55 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00403 | U         | 0.00403 | mg/Kg |   |          | 10/08/22 09:02 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 10/03/22 11:24 | 1       |

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

Client Sample ID: SS03

Lab Sample ID: 890-3074-3

Date Collected: 09/27/22 10:00

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0 - 3

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U         | 50.0     | mg/Kg |   | 09/29/22 13:24 | 10/01/22 03:02 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0     | U         | 50.0     | mg/Kg |   | 09/29/22 13:24 | 10/01/22 03:02 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0     | U         | 50.0     | mg/Kg |   | 09/29/22 13:24 | 10/01/22 03:02 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 113       |           | 70 - 130 |       |   | 09/29/22 13:24 | 10/01/22 03:02 | 1       |
| o-Terphenyl                          | 105       |           | 70 - 130 |       |   | 09/29/22 13:24 | 10/01/22 03:02 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1060   |           | 4.97 | mg/Kg |   |          | 09/29/22 22:55 | 1       |

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 890-3068-A-1-F MS                 | Matrix Spike           | 92                                             | 76                |
| 890-3068-A-1-G MSD                | Matrix Spike Duplicate | 105                                            | 96                |
| 890-3074-1                        | SS01                   | 115                                            | 75                |
| 890-3074-2                        | SS02                   | 127                                            | 101               |
| 890-3074-3                        | SS03                   | 98                                             | 103               |
| LCS 880-36296/1-A                 | Lab Control Sample     | 94                                             | 97                |
| LCSD 880-36296/2-A                | Lab Control Sample Dup | 95                                             | 95                |
| MB 880-36284/5-A                  | Method Blank           | 98                                             | 82                |
| MB 880-36296/5-A                  | Method Blank           | 102                                            | 83                |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3074-1              | SS01                   | 111                                            | 112               |
| 890-3074-2              | SS02                   | 123                                            | 121               |
| 890-3074-3              | SS03                   | 113                                            | 105               |
| 890-3080-A-21-C MS      | Matrix Spike           | 106                                            | 89                |
| 890-3080-A-21-D MSD     | Matrix Spike Duplicate | 96                                             | 80                |
| LCS 880-35711/2-A       | Lab Control Sample     | 118                                            | 103               |
| LCSD 880-35711/3-A      | Lab Control Sample Dup | 109                                            | 110               |
| MB 880-35711/1-A        | Method Blank           | 119                                            | 109               |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |



## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36284/5-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36284

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 98           |              | 70 - 130 | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| 1,4-Difluorobenzene (Surr)  | 82           |              | 70 - 130 | 10/06/22 15:09 | 10/07/22 10:37 | 1       |

Lab Sample ID: MB 880-36296/5-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 102          |              | 70 - 130 | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| 1,4-Difluorobenzene (Surr)  | 83           |              | 70 - 130 | 10/06/22 16:44 | 10/07/22 21:29 | 1       |

Lab Sample ID: LCS 880-36296/1-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.1000     |               | mg/Kg |   | 100  | 70 - 130    |
| Toluene             | 0.100       | 0.1030     |               | mg/Kg |   | 103  | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.09760    |               | mg/Kg |   | 98   | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.2073     |               | mg/Kg |   | 104  | 70 - 130    |
| o-Xylene            | 0.100       | 0.1060     |               | mg/Kg |   | 106  | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 94            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 97            |               | 70 - 130 |

Lab Sample ID: LCSD 880-36296/2-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36296

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene | 0.100       | 0.1015      |                | mg/Kg |   | 101  | 70 - 130    | 1   | 35        |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-36296/2-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Toluene             | 0.100       | 0.1107      |                | mg/Kg |   | 111  | 70 - 130    | 7   | 35        |
| Ethylbenzene        | 0.100       | 0.1022      |                | mg/Kg |   | 102  | 70 - 130    | 5   | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.2208      |                | mg/Kg |   | 110  | 70 - 130    | 6   | 35        |
| o-Xylene            | 0.100       | 0.1109      |                | mg/Kg |   | 111  | 70 - 130    | 5   | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 95             |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 95             |                | 70 - 130 |

Lab Sample ID: 890-3068-A-1-F MS

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene             | <0.00200      | U F1 F2          | 0.100       | 0.02395   | F1           | mg/Kg |   | 24   | 70 - 130    |
| Toluene             | <0.00200      | U F1 F2          | 0.100       | 0.03824   | F1           | mg/Kg |   | 37   | 70 - 130    |
| Ethylbenzene        | <0.00200      | U F1             | 0.100       | 0.03719   | F1           | mg/Kg |   | 37   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00399      | U F1 F2          | 0.201       | 0.06673   | F1           | mg/Kg |   | 33   | 70 - 130    |
| o-Xylene            | <0.00200      | U F1 F2          | 0.100       | 0.03598   | F1           | mg/Kg |   | 36   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 92           |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 76           |              | 70 - 130 |

Lab Sample ID: 890-3068-A-1-G MSD

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00200      | U F1 F2          | 0.0990      | 0.06384    | F1 F2         | mg/Kg |   | 64   | 70 - 130    | 91  | 35        |
| Toluene             | <0.00200      | U F1 F2          | 0.0990      | 0.06418    | F1 F2         | mg/Kg |   | 64   | 70 - 130    | 51  | 35        |
| Ethylbenzene        | <0.00200      | U F1             | 0.0990      | 0.05261    | F1            | mg/Kg |   | 53   | 70 - 130    | 34  | 35        |
| m-Xylene & p-Xylene | <0.00399      | U F1 F2          | 0.198       | 0.1138     | F1 F2         | mg/Kg |   | 57   | 70 - 130    | 52  | 35        |
| o-Xylene            | <0.00200      | U F1 F2          | 0.0990      | 0.05730    | F1 F2         | mg/Kg |   | 58   | 70 - 130    | 46  | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 105           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 96            |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35711/1-A

Matrix: Solid

Analysis Batch: 35736

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35711

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 09/29/22 13:24 | 09/30/22 19:10 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-35711/1-A

Matrix: Solid

Analysis Batch: 35736

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35711

| Analyte                              | MB<br>Result    | MB<br>Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------------|-----------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0           | U               | 50.0     | mg/Kg |   | 09/29/22 13:24 | 09/30/22 19:10 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0           | U               | 50.0     | mg/Kg |   | 09/29/22 13:24 | 09/30/22 19:10 | 1       |
| Surrogate                            | MB<br>%Recovery | MB<br>Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 119             |                 | 70 - 130 |       |   | 09/29/22 13:24 | 09/30/22 19:10 | 1       |
| o-Terphenyl                          | 109             |                 | 70 - 130 |       |   | 09/29/22 13:24 | 09/30/22 19:10 | 1       |

Lab Sample ID: LCS 880-35711/2-A

Matrix: Solid

Analysis Batch: 35736

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35711

| Analyte                              | Spike<br>Added   | LCS<br>Result    | LCS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|--------------------------------------|------------------|------------------|------------------|-------|---|------|----------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000             | 825.2            |                  | mg/Kg |   | 83   | 70 - 130       |
| Diesel Range Organics (Over C10-C28) | 1000             | 990.0            |                  | mg/Kg |   | 99   | 70 - 130       |
| Surrogate                            | LCS<br>%Recovery | LCS<br>Qualifier | Limits           |       |   |      |                |
| 1-Chlorooctane                       | 118              |                  | 70 - 130         |       |   |      |                |
| o-Terphenyl                          | 103              |                  | 70 - 130         |       |   |      |                |

Lab Sample ID: LCSD 880-35711/3-A

Matrix: Solid

Analysis Batch: 35736

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35711

| Analyte                              | Spike<br>Added    | LCSD<br>Result    | LCSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|--------------------------------------|-------------------|-------------------|-------------------|-------|---|------|----------------|-----|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000              | 929.3             |                   | mg/Kg |   | 93   | 70 - 130       | 12  | 20           |
| Diesel Range Organics (Over C10-C28) | 1000              | 1053              |                   | mg/Kg |   | 105  | 70 - 130       | 6   | 20           |
| Surrogate                            | LCSD<br>%Recovery | LCSD<br>Qualifier | Limits            |       |   |      |                |     |              |
| 1-Chlorooctane                       | 109               |                   | 70 - 130          |       |   |      |                |     |              |
| o-Terphenyl                          | 110               |                   | 70 - 130          |       |   |      |                |     |              |

Lab Sample ID: 890-3080-A-21-C MS

Matrix: Solid

Analysis Batch: 35736

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35711

| Analyte                              | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|--------------------------------------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0            | U F1                | 998            | 661.8        | F1              | mg/Kg |   | 66   | 70 - 130       |
| Diesel Range Organics (Over C10-C28) | <50.0            | U                   | 998            | 955.8        |                 | mg/Kg |   | 93   | 70 - 130       |
| Surrogate                            | MS<br>%Recovery  | MS<br>Qualifier     | Limits         |              |                 |       |   |      |                |
| 1-Chlorooctane                       | 106              |                     | 70 - 130       |              |                 |       |   |      |                |
| o-Terphenyl                          | 89               |                     | 70 - 130       |              |                 |       |   |      |                |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3080-A-21-D MSD

Matrix: Solid

Analysis Batch: 35736

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35711

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U F1             | 999         | 693.2      | F1            | mg/Kg |   | 69   | 70 - 130    | 5   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 999         | 867.0      |               | mg/Kg |   | 84   | 70 - 130    | 10  | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 96            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 80            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35680/1-A

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 09/29/22 21:43 | 1       |

Lab Sample ID: LCS 880-35680/2-A

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 247.4      |               | mg/Kg |   | 99   | 90 - 110    |

Lab Sample ID: LCSD 880-35680/3-A

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 248.0       |                | mg/Kg |   | 99   | 90 - 110    | 0   | 20        |

Lab Sample ID: 890-3068-A-1-B MS

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 531           | F1               | 252         | 753.4     | F1           | mg/Kg |   | 88   | 90 - 110    |

Lab Sample ID: 890-3068-A-1-C MSD

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 531           | F1               | 252         | 756.9      |               | mg/Kg |   | 90   | 90 - 110    | 0   | 20        |

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## GC VOA

## Prep Batch: 36284

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-36284/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 36296

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3074-1         | SS01                   | Total/NA  | Solid  | 5035   |            |
| 890-3074-2         | SS02                   | Total/NA  | Solid  | 5035   |            |
| 890-3074-3         | SS03                   | Total/NA  | Solid  | 5035   |            |
| MB 880-36296/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-36296/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-36296/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3068-A-1-F MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3068-A-1-G MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 36323

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3074-1         | SS01                   | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3074-2         | SS02                   | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3074-3         | SS03                   | Total/NA  | Solid  | 8021B  | 36296      |
| MB 880-36284/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36284      |
| MB 880-36296/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36296      |
| LCS 880-36296/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 36296      |
| LCSD 880-36296/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3068-A-1-F MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3068-A-1-G MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 36296      |

## Analysis Batch: 36429

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3074-1    | SS01             | Total/NA  | Solid  | Total BTEX |            |
| 890-3074-2    | SS02             | Total/NA  | Solid  | Total BTEX |            |
| 890-3074-3    | SS03             | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 35711

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|---------------------|------------------------|-----------|--------|-------------|------------|
| 890-3074-1          | SS01                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3074-2          | SS02                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3074-3          | SS03                   | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-35711/1-A    | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-35711/2-A   | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-35711/3-A  | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3080-A-21-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3080-A-21-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 35736

| Lab Sample ID     | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|-------------------|--------------------|-----------|--------|----------|------------|
| 890-3074-1        | SS01               | Total/NA  | Solid  | 8015B NM | 35711      |
| 890-3074-2        | SS02               | Total/NA  | Solid  | 8015B NM | 35711      |
| 890-3074-3        | SS03               | Total/NA  | Solid  | 8015B NM | 35711      |
| MB 880-35711/1-A  | Method Blank       | Total/NA  | Solid  | 8015B NM | 35711      |
| LCS 880-35711/2-A | Lab Control Sample | Total/NA  | Solid  | 8015B NM | 35711      |

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

## GC Semi VOA (Continued)

## Analysis Batch: 35736 (Continued)

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| LCSD 880-35711/3-A  | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 35711      |
| 890-3080-A-21-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 35711      |
| 890-3080-A-21-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 35711      |

## Analysis Batch: 35965

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3074-1    | SS01             | Total/NA  | Solid  | 8015 NM |            |
| 890-3074-2    | SS02             | Total/NA  | Solid  | 8015 NM |            |
| 890-3074-3    | SS03             | Total/NA  | Solid  | 8015 NM |            |

## HPLC/IC

## Leach Batch: 35680

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3074-1         | SS01                   | Soluble   | Solid  | DI Leach |            |
| 890-3074-2         | SS02                   | Soluble   | Solid  | DI Leach |            |
| 890-3074-3         | SS03                   | Soluble   | Solid  | DI Leach |            |
| MB 880-35680/1-A   | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-35680/2-A  | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-35680/3-A | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3068-A-1-B MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3068-A-1-C MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 35721

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3074-1         | SS01                   | Soluble   | Solid  | 300.0  | 35680      |
| 890-3074-2         | SS02                   | Soluble   | Solid  | 300.0  | 35680      |
| 890-3074-3         | SS03                   | Soluble   | Solid  | 300.0  | 35680      |
| MB 880-35680/1-A   | Method Blank           | Soluble   | Solid  | 300.0  | 35680      |
| LCS 880-35680/2-A  | Lab Control Sample     | Soluble   | Solid  | 300.0  | 35680      |
| LCSD 880-35680/3-A | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 35680      |
| 890-3068-A-1-B MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 35680      |
| 890-3068-A-1-C MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 35680      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

Client Sample ID: SS01

Lab Sample ID: 890-3074-1

Date Collected: 09/27/22 09:50

Matrix: Solid

Date Received: 09/27/22 14:51

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.05 g         | 5 mL         | 36296        | 10/06/22 16:44       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36323        | 10/07/22 23:14       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36429        | 10/08/22 09:02       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 35965        | 10/03/22 11:24       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.02 g        | 10 mL        | 35711        | 09/29/22 13:24       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 35736        | 10/01/22 02:19       | AJ      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.02 g         | 50 mL        | 35680        | 09/29/22 12:00       | SMC     | EET MID |
| Soluble   | Analysis   | 300.0        |     | 10         |                |              | 35721        | 09/29/22 22:46       | CH      | EET MID |

Client Sample ID: SS02

Lab Sample ID: 890-3074-2

Date Collected: 09/27/22 09:55

Matrix: Solid

Date Received: 09/27/22 14:51

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.03 g         | 5 mL         | 36296        | 10/06/22 16:44       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36323        | 10/07/22 23:34       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36429        | 10/08/22 09:02       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 35965        | 10/03/22 11:24       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.03 g        | 10 mL        | 35711        | 09/29/22 13:24       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 35736        | 10/01/22 02:41       | AJ      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5 g            | 50 mL        | 35680        | 09/29/22 12:00       | SMC     | EET MID |
| Soluble   | Analysis   | 300.0        |     | 50         |                |              | 35721        | 09/29/22 22:51       | CH      | EET MID |

Client Sample ID: SS03

Lab Sample ID: 890-3074-3

Date Collected: 09/27/22 10:00

Matrix: Solid

Date Received: 09/27/22 14:51

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 4.96 g         | 5 mL         | 36296        | 10/06/22 16:44       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36323        | 10/07/22 23:55       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36429        | 10/08/22 09:02       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 35965        | 10/03/22 11:24       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.01 g        | 10 mL        | 35711        | 09/29/22 13:24       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 35736        | 10/01/22 03:02       | AJ      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.03 g         | 50 mL        | 35680        | 09/29/22 12:00       | SMC     | EET MID |
| Soluble   | Analysis   | 300.0        |     | 1          |                |              | 35721        | 09/29/22 22:55       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas     | NELAP   | T104704400-22-24      | 06-30-23        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte    |
|-----------------|-------------|--------|------------|
| 8015 NM         |             | Solid  | Total TPH  |
| Total BTEX      |             | Solid  | Total BTEX |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

## Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H

Job ID: 890-3074-1  
SDG: 03E1558070

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3074-1    | SS01             | Solid  | 09/27/22 09:50 | 09/27/22 14:51 | 0 - 3 |
| 890-3074-2    | SS02             | Solid  | 09/27/22 09:55 | 09/27/22 14:51 | 0 - 3 |
| 890-3074-3    | SS03             | Solid  | 09/27/22 10:00 | 09/27/22 14:51 | 0 - 3 |

1

2

3

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14



Environment Testing  
Xenco

## Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

Work Order Comments

Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Reporting: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: ☐ EDD ☐ ADAPT ☐ Other: \_\_\_\_\_

Project Manager: **Kalei Jennings** Bill to: (if different) **Garrett Green**

Company Name: **Enselum** Company Name: **XTO Energy**

Address: **3122 Nat'l Parks Hwy** Address: **3104 E Greene St**

City, State ZIP: **Carlsbad, NM 88226** City, State ZIP: **Carlsbad, NM 88220**

Phone: **505-683-2503** Email: **kjennings@enselum.com**

| Project Name: <b>PLUABD 1264</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      | Tom Round                                                    |                               | Pres. Code |  | ANALYSIS REQUEST |  | Preservative Codes |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------|-------------------------------|------------|--|------------------|--|--------------------|--|
| P Project Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 03E1558070           | <input checked="" type="checkbox"/> Routine                  | <input type="checkbox"/> Rush |            |  |                  |  |                    |  |
| Project Location:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 32.10739, -103.88361 | Due Date:                                                    |                               |            |  |                  |  |                    |  |
| Sampler's Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Meredith Roberts     | TAT starts the day received by the lab, if received by 430pm |                               |            |  |                  |  |                    |  |
| PO #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      |                                                              |                               |            |  |                  |  |                    |  |
| <b>SAMPLE RECEIPT</b><br>Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Thermometer ID: <b>1110057</b><br>Samples Received Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Correction Factor: <b>-0.2</b><br>Cooler Custody Seals: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Temperature Reading: <b>5.2</b><br>Sample Custody Seals: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temperature: <b>5.0</b><br>Total Containers: <b>5.0</b> |                      |                                                              |                               |            |  |                  |  |                    |  |
| <b>Chain of Custody</b><br>890-3074 Chain of Custody<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                                                              |                               |            |  |                  |  |                    |  |
| None: NO DI Water: H <sub>2</sub> O<br>Cool: Cool MeOH: Me<br>HCL: HC HNO <sub>3</sub> : HN<br>H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na<br>H <sub>3</sub> PO <sub>4</sub> : HP<br>NaHSO <sub>4</sub> : NABIS<br>Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub><br>Zn Acetate+NaOH: Zn<br>NaOH+Ascorbic Acid: SAPC                                                                                                                                                                                                               |                      |                                                              |                               |            |  |                  |  |                    |  |
| Sample Comments<br><b>Incident #:</b><br><b>NAPP2214342255</b><br><b>Cost Center:</b><br><b>1666431001</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                      |                                                              |                               |            |  |                  |  |                    |  |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|------------------------------|--------------------------|-----------|------------------------------|--------------------------|-----------|
| <b>1</b>                     | <b>9.27.22 14:51</b>     |           |                              |                          |           |
| <b>2</b>                     |                          |           |                              |                          |           |
| <b>3</b>                     |                          |           |                              |                          |           |
| <b>4</b>                     |                          |           |                              |                          |           |
| <b>5</b>                     |                          |           |                              |                          |           |

Revised Date: 08/25/2020 Rev. 2020.2

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3074-1

SDG Number: 03E1558070

Login Number: 3074

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | True   |         |
| Sample custody seals, if present, are intact.                                    | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3074-1

SDG Number: 03E1558070

Login Number: 3074

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/29/22 11:12 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3078-1

Laboratory Sample Delivery Group: 03E1558065

Client Project/Site: PLU 21 BD 905H

For:

Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Kalei Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/8/2022 8:41:25 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

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results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Laboratory Job ID: 890-3078-1  
SDG: 03E1558065

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| F2        | MS/MSD RPD exceeds control limits                        |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| S1-       | Surrogate recovery exceeds control limits, low biased.   |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| ▫              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |



## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

**Job ID: 890-3078-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-3078-1****Receipt**

The samples were received on 9/27/2022 2:51 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36296 and analytical batch 880-36323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3068-A-1-H). Evidence of matrix interferences is not obvious.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (890-3075-A-1-B), (890-3075-A-1-C MS) and (890-3075-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35805 and analytical batch 880-35863 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

Client Sample ID: SS01

Lab Sample ID: 890-3078-1

Date Collected: 09/27/22 12:35

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0' - 3'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:02 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:02 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:02 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:02 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:02 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:02 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 123       |           | 70 - 130 | 10/06/22 16:44 | 10/08/22 03:02 | 1       |
| 1,4-Difluorobenzene (Surr)  | 103       |           | 70 - 130 | 10/06/22 16:44 | 10/08/22 03:02 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/08/22 09:02 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | 70.7   |           | 49.9 | mg/Kg |   |          | 10/03/22 11:31 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9  | U         | 49.9 | mg/Kg |   | 09/30/22 11:17 | 10/01/22 14:23 | 1       |
| Diesel Range Organics (Over C10-C28) | 70.7   |           | 49.9 | mg/Kg |   | 09/30/22 11:17 | 10/01/22 14:23 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9  | U         | 49.9 | mg/Kg |   | 09/30/22 11:17 | 10/01/22 14:23 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 88        |           | 70 - 130 | 09/30/22 11:17 | 10/01/22 14:23 | 1       |
| o-Terphenyl    | 78        |           | 70 - 130 | 09/30/22 11:17 | 10/01/22 14:23 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 3770   |           | 49.8 | mg/Kg |   |          | 09/29/22 23:44 | 10      |

Client Sample ID: SS02

Lab Sample ID: 890-3078-2

Date Collected: 09/27/22 12:40

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0' - 3'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:23 | 1       |
| Toluene             | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:23 | 1       |
| Ethylbenzene        | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:23 | 1       |
| m-Xylene & p-Xylene | <0.00402 | U         | 0.00402 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:23 | 1       |
| o-Xylene            | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:23 | 1       |
| Xylenes, Total      | <0.00402 | U         | 0.00402 | mg/Kg |   | 10/06/22 16:44 | 10/08/22 03:23 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 119       |           | 70 - 130 | 10/06/22 16:44 | 10/08/22 03:23 | 1       |

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

Client Sample ID: SS02

Lab Sample ID: 890-3078-2

Date Collected: 09/27/22 12:40

Matrix: Solid

Date Received: 09/27/22 14:51

Sample Depth: 0' - 3'

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate                  | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,4-Difluorobenzene (Surr) | 100       |           | 70 - 130 | 10/06/22 16:44 | 10/08/22 03:23 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00402 | U         | 0.00402 | mg/Kg |   |          | 10/08/22 09:02 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | 137    |           | 49.9 | mg/Kg |   |          | 10/03/22 11:31 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9     | U         | 49.9     | mg/Kg |   | 09/30/22 11:17 | 10/01/22 14:44 | 1       |
| Diesel Range Organics (Over C10-C28) | 137       |           | 49.9     | mg/Kg |   | 09/30/22 11:17 | 10/01/22 14:44 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9     | U         | 49.9     | mg/Kg |   | 09/30/22 11:17 | 10/01/22 14:44 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 97        |           | 70 - 130 |       |   | 09/30/22 11:17 | 10/01/22 14:44 | 1       |
| o-Terphenyl                          | 85        |           | 70 - 130 |       |   | 09/30/22 11:17 | 10/01/22 14:44 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 330    |           | 5.05 | mg/Kg |   |          | 09/29/22 23:49 | 1       |

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 890-3068-A-1-F MS                 | Matrix Spike           | 92                                             | 76                |
| 890-3068-A-1-G MSD                | Matrix Spike Duplicate | 105                                            | 96                |
| 890-3078-1                        | SS01                   | 123                                            | 103               |
| 890-3078-2                        | SS02                   | 119                                            | 100               |
| LCS 880-36296/1-A                 | Lab Control Sample     | 94                                             | 97                |
| LCSD 880-36296/2-A                | Lab Control Sample Dup | 95                                             | 95                |
| MB 880-36284/5-A                  | Method Blank           | 98                                             | 82                |
| MB 880-36296/5-A                  | Method Blank           | 102                                            | 83                |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3075-A-1-C MS       | Matrix Spike           | 69 S1-                                         | 62 S1-            |
| 890-3075-A-1-D MSD      | Matrix Spike Duplicate | 68 S1-                                         | 62 S1-            |
| 890-3078-1              | SS01                   | 88                                             | 78                |
| 890-3078-2              | SS02                   | 97                                             | 85                |
| LCS 880-35805/2-A       | Lab Control Sample     | 95                                             | 91                |
| LCSD 880-35805/3-A      | Lab Control Sample Dup | 109                                            | 103               |
| MB 880-35805/1-A        | Method Blank           | 109                                            | 99                |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36284/5-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36284

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 15:09 | 10/07/22 10:37 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 98           |              | 70 - 130 | 10/06/22 15:09 | 10/07/22 10:37 | 1       |
| 1,4-Difluorobenzene (Surr)  | 82           |              | 70 - 130 | 10/06/22 15:09 | 10/07/22 10:37 | 1       |

Lab Sample ID: MB 880-36296/5-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/06/22 16:44 | 10/07/22 21:29 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 102          |              | 70 - 130 | 10/06/22 16:44 | 10/07/22 21:29 | 1       |
| 1,4-Difluorobenzene (Surr)  | 83           |              | 70 - 130 | 10/06/22 16:44 | 10/07/22 21:29 | 1       |

Lab Sample ID: LCS 880-36296/1-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.1000     |               | mg/Kg |   | 100  | 70 - 130    |
| Toluene             | 0.100       | 0.1030     |               | mg/Kg |   | 103  | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.09760    |               | mg/Kg |   | 98   | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.2073     |               | mg/Kg |   | 104  | 70 - 130    |
| o-Xylene            | 0.100       | 0.1060     |               | mg/Kg |   | 106  | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 94            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 97            |               | 70 - 130 |

Lab Sample ID: LCSD 880-36296/2-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36296

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene | 0.100       | 0.1015      |                | mg/Kg |   | 101  | 70 - 130    | 1   | 35        |

Eurofins Carlsbad

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-36296/2-A

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Toluene             | 0.100       | 0.1107      |                | mg/Kg |   | 111  | 70 - 130    | 7   | 35        |
| Ethylbenzene        | 0.100       | 0.1022      |                | mg/Kg |   | 102  | 70 - 130    | 5   | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.2208      |                | mg/Kg |   | 110  | 70 - 130    | 6   | 35        |
| o-Xylene            | 0.100       | 0.1109      |                | mg/Kg |   | 111  | 70 - 130    | 5   | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 95             |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 95             |                | 70 - 130 |

Lab Sample ID: 890-3068-A-1-F MS

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene             | <0.00200      | U F1 F2          | 0.100       | 0.02395   | F1           | mg/Kg |   | 24   | 70 - 130    |
| Toluene             | <0.00200      | U F1 F2          | 0.100       | 0.03824   | F1           | mg/Kg |   | 37   | 70 - 130    |
| Ethylbenzene        | <0.00200      | U F1             | 0.100       | 0.03719   | F1           | mg/Kg |   | 37   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00399      | U F1 F2          | 0.201       | 0.06673   | F1           | mg/Kg |   | 33   | 70 - 130    |
| o-Xylene            | <0.00200      | U F1 F2          | 0.100       | 0.03598   | F1           | mg/Kg |   | 36   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 92           |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 76           |              | 70 - 130 |

Lab Sample ID: 890-3068-A-1-G MSD

Matrix: Solid

Analysis Batch: 36323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36296

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00200      | U F1 F2          | 0.0990      | 0.06384    | F1 F2         | mg/Kg |   | 64   | 70 - 130    | 91  | 35        |
| Toluene             | <0.00200      | U F1 F2          | 0.0990      | 0.06418    | F1 F2         | mg/Kg |   | 64   | 70 - 130    | 51  | 35        |
| Ethylbenzene        | <0.00200      | U F1             | 0.0990      | 0.05261    | F1            | mg/Kg |   | 53   | 70 - 130    | 34  | 35        |
| m-Xylene & p-Xylene | <0.00399      | U F1 F2          | 0.198       | 0.1138     | F1 F2         | mg/Kg |   | 57   | 70 - 130    | 52  | 35        |
| o-Xylene            | <0.00200      | U F1 F2          | 0.0990      | 0.05730    | F1 F2         | mg/Kg |   | 58   | 70 - 130    | 46  | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 105           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 96            |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-35805/1-A

Matrix: Solid

Analysis Batch: 35863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35805

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 09/30/22 11:17 | 10/01/22 11:52 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-35805/1-A

Matrix: Solid

Analysis Batch: 35863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35805

| Analyte                              | MB<br>Result    | MB<br>Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------------|-----------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0           | U               | 50.0     | mg/Kg |   | 09/30/22 11:17 | 10/01/22 11:52 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0           | U               | 50.0     | mg/Kg |   | 09/30/22 11:17 | 10/01/22 11:52 | 1       |
| Surrogate                            | MB<br>%Recovery | MB<br>Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 109             |                 | 70 - 130 |       |   | 09/30/22 11:17 | 10/01/22 11:52 | 1       |
| o-Terphenyl                          | 99              |                 | 70 - 130 |       |   | 09/30/22 11:17 | 10/01/22 11:52 | 1       |

Lab Sample ID: LCS 880-35805/2-A

Matrix: Solid

Analysis Batch: 35863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35805

| Analyte                              | Spike<br>Added   | LCS<br>Result    | LCS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|--------------------------------------|------------------|------------------|------------------|-------|---|------|----------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000             | 812.7            |                  | mg/Kg |   | 81   | 70 - 130       |
| Diesel Range Organics (Over C10-C28) | 1000             | 888.2            |                  | mg/Kg |   | 89   | 70 - 130       |
| Surrogate                            | LCS<br>%Recovery | LCS<br>Qualifier | Limits           |       |   |      |                |
| 1-Chlorooctane                       | 95               |                  | 70 - 130         |       |   |      |                |
| o-Terphenyl                          | 91               |                  | 70 - 130         |       |   |      |                |

Lab Sample ID: LCSD 880-35805/3-A

Matrix: Solid

Analysis Batch: 35863

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35805

| Analyte                              | Spike<br>Added    | LCSD<br>Result    | LCSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|--------------------------------------|-------------------|-------------------|-------------------|-------|---|------|----------------|-----|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000              | 956.4             |                   | mg/Kg |   | 96   | 70 - 130       | 16  | 20           |
| Diesel Range Organics (Over C10-C28) | 1000              | 991.8             |                   | mg/Kg |   | 99   | 70 - 130       | 11  | 20           |
| Surrogate                            | LCSD<br>%Recovery | LCSD<br>Qualifier | Limits            |       |   |      |                |     |              |
| 1-Chlorooctane                       | 109               |                   | 70 - 130          |       |   |      |                |     |              |
| o-Terphenyl                          | 103               |                   | 70 - 130          |       |   |      |                |     |              |

Lab Sample ID: 890-3075-A-1-C MS

Matrix: Solid

Analysis Batch: 35863

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35805

| Analyte                              | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|--------------------------------------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0            | U F1                | 998            | 603.9        | F1              | mg/Kg |   | 61   | 70 - 130       |
| Diesel Range Organics (Over C10-C28) | 188              | F1                  | 998            | 466.6        | F1              | mg/Kg |   | 28   | 70 - 130       |
| Surrogate                            | MS<br>%Recovery  | MS<br>Qualifier     | Limits         |              |                 |       |   |      |                |
| 1-Chlorooctane                       | 69               | S1-                 | 70 - 130       |              |                 |       |   |      |                |
| o-Terphenyl                          | 62               | S1-                 | 70 - 130       |              |                 |       |   |      |                |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3075-A-1-D MSD

Matrix: Solid

Analysis Batch: 35863

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35805

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U F1             | 999         | 573.3      | F1            | mg/Kg |   | 57   | 70 - 130    | 5   | 20        |
| Diesel Range Organics (Over C10-C28) | 188           | F1               | 999         | 464.2      | F1            | mg/Kg |   | 28   | 70 - 130    | 1   | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 68            | S1-              | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 62            | S1-              | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35680/1-A

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 09/29/22 21:43 | 1       |

Lab Sample ID: LCS 880-35680/2-A

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 247.4      |               | mg/Kg |   | 99   | 90 - 110    |

Lab Sample ID: LCSD 880-35680/3-A

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 248.0       |                | mg/Kg |   | 99   | 90 - 110    | 0   | 20        |

Lab Sample ID: 890-3076-A-1-B MS

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 56.2          |                  | 248         | 304.2     |              | mg/Kg |   | 100  | 90 - 110    |

Lab Sample ID: 890-3076-A-1-C MSD

Matrix: Solid

Analysis Batch: 35721

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 56.2          |                  | 248         | 303.8      |               | mg/Kg |   | 100  | 90 - 110    | 0   | 20        |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## GC VOA

## Prep Batch: 36284

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-36284/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 36296

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3078-1         | SS01                   | Total/NA  | Solid  | 5035   |            |
| 890-3078-2         | SS02                   | Total/NA  | Solid  | 5035   |            |
| MB 880-36296/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-36296/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-36296/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3068-A-1-F MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3068-A-1-G MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 36323

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3078-1         | SS01                   | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3078-2         | SS02                   | Total/NA  | Solid  | 8021B  | 36296      |
| MB 880-36284/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36284      |
| MB 880-36296/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36296      |
| LCS 880-36296/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 36296      |
| LCSD 880-36296/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3068-A-1-F MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 36296      |
| 890-3068-A-1-G MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 36296      |

## Analysis Batch: 36433

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3078-1    | SS01             | Total/NA  | Solid  | Total BTEX |            |
| 890-3078-2    | SS02             | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 35805

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3078-1         | SS01                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3078-2         | SS02                   | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-35805/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-35805/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-35805/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3075-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3075-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 35863

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3078-1         | SS01                   | Total/NA  | Solid  | 8015B NM | 35805      |
| 890-3078-2         | SS02                   | Total/NA  | Solid  | 8015B NM | 35805      |
| MB 880-35805/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 35805      |
| LCS 880-35805/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 35805      |
| LCSD 880-35805/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 35805      |
| 890-3075-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 35805      |
| 890-3075-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 35805      |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

## GC Semi VOA

## Analysis Batch: 35969

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3078-1    | SS01             | Total/NA  | Solid  | 8015 NM |            |
| 890-3078-2    | SS02             | Total/NA  | Solid  | 8015 NM |            |

## HPLC/IC

## Leach Batch: 35680

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3078-1         | SS01                   | Soluble   | Solid  | DI Leach |            |
| 890-3078-2         | SS02                   | Soluble   | Solid  | DI Leach |            |
| MB 880-35680/1-A   | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-35680/2-A  | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-35680/3-A | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3076-A-1-B MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3076-A-1-C MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 35721

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3078-1         | SS01                   | Soluble   | Solid  | 300.0  | 35680      |
| 890-3078-2         | SS02                   | Soluble   | Solid  | 300.0  | 35680      |
| MB 880-35680/1-A   | Method Blank           | Soluble   | Solid  | 300.0  | 35680      |
| LCS 880-35680/2-A  | Lab Control Sample     | Soluble   | Solid  | 300.0  | 35680      |
| LCSD 880-35680/3-A | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 35680      |
| 890-3076-A-1-B MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 35680      |
| 890-3076-A-1-C MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 35680      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

Client Sample ID: SS01

Lab Sample ID: 890-3078-1

Date Collected: 09/27/22 12:35

Matrix: Solid

Date Received: 09/27/22 14:51

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.03 g         | 5 mL         | 36296        | 10/06/22 16:44       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36323        | 10/08/22 03:02       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36433        | 10/08/22 09:02       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 35969        | 10/03/22 11:31       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.03 g        | 10 mL        | 35805        | 09/30/22 11:17       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 35863        | 10/01/22 14:23       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.02 g         | 50 mL        | 35680        | 09/29/22 12:00       | SMC     | EET MID |
| Soluble   | Analysis   | 300.0        |     | 10         |                |              | 35721        | 09/29/22 23:44       | CH      | EET MID |

Client Sample ID: SS02

Lab Sample ID: 890-3078-2

Date Collected: 09/27/22 12:40

Matrix: Solid

Date Received: 09/27/22 14:51

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 4.97 g         | 5 mL         | 36296        | 10/06/22 16:44       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36323        | 10/08/22 03:23       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36433        | 10/08/22 09:02       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 35969        | 10/03/22 11:31       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.02 g        | 10 mL        | 35805        | 09/30/22 11:17       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 35863        | 10/01/22 14:44       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 4.95 g         | 50 mL        | 35680        | 09/29/22 12:00       | SMC     | EET MID |
| Soluble   | Analysis   | 300.0        |     | 1          |                |              | 35721        | 09/29/22 23:49       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas     | NELAP   | T104704400-22-24      | 06-30-23        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte    |
|-----------------|-------------|--------|------------|
| 8015 NM         |             | Solid  | Total TPH  |
| Total BTEX      |             | Solid  | Total BTEX |

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 905H

Job ID: 890-3078-1  
SDG: 03E1558065

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth   |
|---------------|------------------|--------|----------------|----------------|---------|
| 890-3078-1    | SS01             | Solid  | 09/27/22 12:35 | 09/27/22 14:51 | 0' - 3' |
| 890-3078-2    | SS02             | Solid  | 09/27/22 12:40 | 09/27/22 14:51 | 0' - 3' |

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## Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
 El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

**Environment Testing**  
**Xenco**



**Work Order No:**

Page 1 of 1  
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| Work Order Comments |  |          |                          |           |                          |             |                          |      |                          |           |                          |
|---------------------|--|----------|--------------------------|-----------|--------------------------|-------------|--------------------------|------|--------------------------|-----------|--------------------------|
| Program:            |  | UST/PST  | <input type="checkbox"/> | PRP       | <input type="checkbox"/> | Brownfields | <input type="checkbox"/> | RRC  | <input type="checkbox"/> | Superfund | <input type="checkbox"/> |
| State of Project:   |  |          |                          |           |                          |             |                          |      |                          |           |                          |
| Reporting:          |  | Level II | <input type="checkbox"/> | Level III | <input type="checkbox"/> | PST/UST     | <input type="checkbox"/> | TRRP | <input type="checkbox"/> | Level IV  | <input type="checkbox"/> |
| Deliverables:       |  | EDD      | <input type="checkbox"/> | ADAPT     | <input type="checkbox"/> | Other:      |                          |      |                          |           |                          |

|                  |                      |                         |                        |
|------------------|----------------------|-------------------------|------------------------|
| Project Manager: | Kalei Jennings       | Bill To: (if different) | Carrett Green          |
| Company Name:    | Ensolium, LLC        | Company Name:           | XTO Energy             |
| Address:         | 3122 Nat'l Parks Hwy | Address:                | 3104 E Greene St       |
| City, State ZIP: | Carlsbad, NM 88220   | City, State ZIP:        | Carlsbad, NM 88220     |
| Phone:           | 817-683-2503         | Email:                  | Kjennings@ensolium.com |

[illegible][illegible]

**Notice:** Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for losses or expenses incurred by the client if such losses are due to circumstances beyond the control of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for losses or expenses incurred by the client if such losses are due to circumstances beyond the control of service.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time                | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|------------------------------|--------------------------|--------------------------|------------------------------|--------------------------|-----------|
| <i>[Signature]</i>           | <i>[Signature]</i>       | 9/27/00 145 <sup>3</sup> |                              |                          |           |
|                              |                          | 4                        |                              |                          |           |
|                              |                          | 6                        |                              |                          |           |

Revised Date 08/25/2020 Rev 2020 2

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3078-1

SDG Number: 03E1558065

Login Number: 3078

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | True   |         |
| Sample custody seals, if present, are intact.                                    | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3078-1

SDG Number: 03E1558065

Login Number: 3078

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/29/22 11:12 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3153-1

Laboratory Sample Delivery Group: 03E1558070

Client Project/Site: PLU 21 BD 126H/905H

**For:**

Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Kalei Jennings

Authorized for release by:

10/13/2022 10:49:56 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Laboratory Job ID: 890-3153-1  
SDG: 03E1558070

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| F2        | MS/MSD RPD exceeds control limits                        |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| □              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

Job ID: 890-3153-1

Laboratory: Eurofins Carlsbad

| Narrative |                             |
|-----------|-----------------------------|
|           | Job Narrative<br>890-3153-1 |

Receipt

The samples were received on 10/5/2022 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH04 (890-3153-1) and PH04A (890-3153-2).

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method 8015MOD\_NM: The method blank for preparation batch 880-36322 and analytical batch 880-36315 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

Client Sample ID: PH04

Lab Sample ID: 890-3153-1

Date Collected: 10/05/22 09:30

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 1'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 03:51 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 03:51 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 03:51 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 03:51 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 03:51 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 03:51 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 109       |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 03:51 | 1       |
| 1,4-Difluorobenzene (Surr)  | 82        |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 03:51 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/13/22 11:29 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.8  | U         | 49.8 | mg/Kg |   |          | 10/10/22 12:14 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8  | U         | 49.8 | mg/Kg |   | 10/07/22 07:42 | 10/07/22 14:25 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.8  | U         | 49.8 | mg/Kg |   | 10/07/22 07:42 | 10/07/22 14:25 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.8  | U         | 49.8 | mg/Kg |   | 10/07/22 07:42 | 10/07/22 14:25 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 96        |           | 70 - 130 | 10/07/22 07:42 | 10/07/22 14:25 | 1       |
| o-Terphenyl    | 108       |           | 70 - 130 | 10/07/22 07:42 | 10/07/22 14:25 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 8250   |           | 99.2 | mg/Kg |   |          | 10/10/22 23:13 | 20      |

Client Sample ID: PH04A

Lab Sample ID: 890-3153-2

Date Collected: 10/05/22 09:35

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:11 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:11 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:11 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:11 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:11 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:11 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 111       |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 04:11 | 1       |

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

Client Sample ID: PH04A

Lab Sample ID: 890-3153-2

Date Collected: 10/05/22 09:35

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate                  | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,4-Difluorobenzene (Surr) | 77        |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 04:11 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/13/22 11:29 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.9  | U         | 49.9 | mg/Kg |   |          | 10/10/22 12:14 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9     | U         | 49.9     | mg/Kg |   | 10/07/22 07:42 | 10/07/22 14:46 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.9     | U         | 49.9     | mg/Kg |   | 10/07/22 07:42 | 10/07/22 14:46 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9     | U         | 49.9     | mg/Kg |   | 10/07/22 07:42 | 10/07/22 14:46 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 86        |           | 70 - 130 |       |   | 10/07/22 07:42 | 10/07/22 14:46 | 1       |
| o-Terphenyl                          | 98        |           | 70 - 130 |       |   | 10/07/22 07:42 | 10/07/22 14:46 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 8390   |           | 50.4 | mg/Kg |   |          | 10/10/22 23:31 | 10      |

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 890-3144-A-1-D MS                 | Matrix Spike           | 117                                            | 97                |
| 890-3144-A-1-E MSD                | Matrix Spike Duplicate | 85                                             | 95                |
| 890-3153-1                        | PH04                   | 109                                            | 82                |
| 890-3153-2                        | PH04A                  | 111                                            | 77                |
| LCS 880-36591/1-A                 | Lab Control Sample     | 96                                             | 104               |
| LCSD 880-36591/2-A                | Lab Control Sample Dup | 96                                             | 100               |
| MB 880-36589/5-A                  | Method Blank           | 90                                             | 94                |
| MB 880-36591/5-A                  | Method Blank           | 88                                             | 94                |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3153-1              | PH04                   | 96                                             | 108               |
| 890-3153-2              | PH04A                  | 86                                             | 98                |
| 890-3171-A-1-C MS       | Matrix Spike           | 79                                             | 78                |
| 890-3171-A-1-D MSD      | Matrix Spike Duplicate | 80                                             | 79                |
| LCS 880-36322/2-A       | Lab Control Sample     | 97                                             | 110               |
| LCSD 880-36322/3-A      | Lab Control Sample Dup | 98                                             | 110               |
| MB 880-36322/1-A        | Method Blank           | 85                                             | 97                |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |



## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36589/5-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36589

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90           |              | 70 - 130 | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| 1,4-Difluorobenzene (Surr)  | 94           |              | 70 - 130 | 10/10/22 13:30 | 10/12/22 11:31 | 1       |

Lab Sample ID: MB 880-36591/5-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88           |              | 70 - 130 | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| 1,4-Difluorobenzene (Surr)  | 94           |              | 70 - 130 | 10/10/22 13:52 | 10/12/22 23:04 | 1       |

Lab Sample ID: LCS 880-36591/1-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.1109     |               | mg/Kg |   | 111  | 70 - 130    |
| Toluene             | 0.100       | 0.09785    |               | mg/Kg |   | 98   | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.09422    |               | mg/Kg |   | 94   | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.1941     |               | mg/Kg |   | 97   | 70 - 130    |
| o-Xylene            | 0.100       | 0.1122     |               | mg/Kg |   | 112  | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 96            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 104           |               | 70 - 130 |

Lab Sample ID: LCSD 880-36591/2-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36591

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene | 0.100       | 0.09337     |                | mg/Kg |   | 93   | 70 - 130    | 17  | 35        |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-36591/2-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Toluene             | 0.100       | 0.08557     |                | mg/Kg |   | 86   | 70 - 130    | 13  | 35        |
| Ethylbenzene        | 0.100       | 0.08075     |                | mg/Kg |   | 81   | 70 - 130    | 15  | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.1627      |                | mg/Kg |   | 81   | 70 - 130    | 18  | 35        |
| o-Xylene            | 0.100       | 0.09260     |                | mg/Kg |   | 93   | 70 - 130    | 19  | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 96             |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 100            |                | 70 - 130 |

Lab Sample ID: 890-3144-A-1-D MS

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene             | <0.00201      | U F1 F2          | 0.100       | 0.07974   |              | mg/Kg |   | 79   | 70 - 130    |
| Toluene             | <0.00201      | U F1             | 0.100       | 0.08047   |              | mg/Kg |   | 80   | 70 - 130    |
| Ethylbenzene        | <0.00201      | U F1             | 0.100       | 0.08454   |              | mg/Kg |   | 84   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U F1             | 0.201       | 0.1817    |              | mg/Kg |   | 91   | 70 - 130    |
| o-Xylene            | <0.00201      | U F1             | 0.100       | 0.1046    |              | mg/Kg |   | 104  | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 117          |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 97           |              | 70 - 130 |

Lab Sample ID: 890-3144-A-1-E MSD

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00201      | U F1 F2          | 0.0990      | <0.00198   | U F1 F2       | mg/Kg |   | 0.4  | 70 - 130    | 198 | 35        |
| Toluene             | <0.00201      | U F1             | 0.0990      | <0.00198   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |
| Ethylbenzene        | <0.00201      | U F1             | 0.0990      | <0.00198   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |
| m-Xylene & p-Xylene | <0.00402      | U F1             | 0.198       | <0.00396   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |
| o-Xylene            | <0.00201      | U F1             | 0.0990      | <0.00198   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 85            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 95            |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-36322/1-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36322

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 07:42 | 10/07/22 09:54 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-36322/1-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36322

| Analyte                              | MB<br>Result    | MB<br>Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------------|-----------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0           | U               | 50.0     | mg/Kg |   | 10/07/22 07:42 | 10/07/22 09:54 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0           | U               | 50.0     | mg/Kg |   | 10/07/22 07:42 | 10/07/22 09:54 | 1       |
| Surrogate                            | MB<br>%Recovery | MB<br>Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 85              |                 | 70 - 130 |       |   | 10/07/22 07:42 | 10/07/22 09:54 | 1       |
| o-Terphenyl                          | 97              |                 | 70 - 130 |       |   | 10/07/22 07:42 | 10/07/22 09:54 | 1       |

Lab Sample ID: LCS 880-36322/2-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36322

| Analyte                              | Spike<br>Added   | LCS<br>Result    | LCS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|--------------------------------------|------------------|------------------|------------------|-------|---|------|----------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000             | 920.4            |                  | mg/Kg |   | 92   | 70 - 130       |
| Diesel Range Organics (Over C10-C28) | 1000             | 985.5            |                  | mg/Kg |   | 99   | 70 - 130       |
| Surrogate                            | LCS<br>%Recovery | LCS<br>Qualifier | Limits           |       |   |      |                |
| 1-Chlorooctane                       | 97               |                  | 70 - 130         |       |   |      |                |
| o-Terphenyl                          | 110              |                  | 70 - 130         |       |   |      |                |

Lab Sample ID: LCSD 880-36322/3-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36322

| Analyte                              | Spike<br>Added    | LCSD<br>Result    | LCSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|--------------------------------------|-------------------|-------------------|-------------------|-------|---|------|----------------|-----|--------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000              | 992.9             |                   | mg/Kg |   | 99   | 70 - 130       | 8   | 20           |
| Diesel Range Organics (Over C10-C28) | 1000              | 982.2             |                   | mg/Kg |   | 98   | 70 - 130       | 0   | 20           |
| Surrogate                            | LCSD<br>%Recovery | LCSD<br>Qualifier | Limits            |       |   |      |                |     |              |
| 1-Chlorooctane                       | 98                |                   | 70 - 130          |       |   |      |                |     |              |
| o-Terphenyl                          | 110               |                   | 70 - 130          |       |   |      |                |     |              |

Lab Sample ID: 890-3171-A-1-C MS

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36322

| Analyte                              | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|--------------------------------------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0            | U                   | 998            | 787.0        |                 | mg/Kg |   | 77   | 70 - 130       |
| Diesel Range Organics (Over C10-C28) | 115              |                     | 998            | 877.5        |                 | mg/Kg |   | 76   | 70 - 130       |
| Surrogate                            | MS<br>%Recovery  | MS<br>Qualifier     | Limits         |              |                 |       |   |      |                |
| 1-Chlorooctane                       | 79               |                     | 70 - 130       |              |                 |       |   |      |                |
| o-Terphenyl                          | 78               |                     | 70 - 130       |              |                 |       |   |      |                |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3171-A-1-D MSD

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36322

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U                | 999         | 776.9      |               | mg/Kg |   | 76   | 70 - 130    | 1   | 20        |
| Diesel Range Organics (Over C10-C28) | 115           |                  | 999         | 976.6      |               | mg/Kg |   | 86   | 70 - 130    | 11  | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 80            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 79            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36392/1-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 10/10/22 21:11 | 1       |

Lab Sample ID: LCS 880-36392/2-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 243.6      |               | mg/Kg |   | 97   | 90 - 110    |

Lab Sample ID: LCSD 880-36392/3-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 258.4       |                | mg/Kg |   | 103  | 90 - 110    | 6   | 20        |

Lab Sample ID: 890-3151-A-31-C MS

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 185           |                  | 250         | 458.5     |              | mg/Kg |   | 110  | 90 - 110    |

Lab Sample ID: 890-3151-A-31-D MSD

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 185           |                  | 250         | 432.4      |               | mg/Kg |   | 99   | 90 - 110    | 6   | 20        |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## GC VOA

## Prep Batch: 36589

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-36589/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 36591

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3153-1         | PH04                   | Total/NA  | Solid  | 5035   |            |
| 890-3153-2         | PH04A                  | Total/NA  | Solid  | 5035   |            |
| MB 880-36591/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-36591/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-36591/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3144-A-1-D MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3144-A-1-E MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 36716

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3153-1         | PH04                   | Total/NA  | Solid  | 8021B  | 36591      |
| 890-3153-2         | PH04A                  | Total/NA  | Solid  | 8021B  | 36591      |
| MB 880-36589/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36589      |
| MB 880-36591/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36591      |
| LCS 880-36591/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 36591      |
| LCSD 880-36591/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 36591      |
| 890-3144-A-1-D MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 36591      |
| 890-3144-A-1-E MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 36591      |

## Analysis Batch: 36862

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3153-1    | PH04             | Total/NA  | Solid  | Total BTEX |            |
| 890-3153-2    | PH04A            | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Analysis Batch: 36315

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3153-1         | PH04                   | Total/NA  | Solid  | 8015B NM | 36322      |
| 890-3153-2         | PH04A                  | Total/NA  | Solid  | 8015B NM | 36322      |
| MB 880-36322/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 36322      |
| LCS 880-36322/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 36322      |
| LCSD 880-36322/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 36322      |
| 890-3171-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 36322      |
| 890-3171-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 36322      |

## Prep Batch: 36322

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3153-1         | PH04                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3153-2         | PH04A                  | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-36322/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-36322/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-36322/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3171-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3171-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

## GC Semi VOA

## Analysis Batch: 36581

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3153-1    | PH04             | Total/NA  | Solid  | 8015 NM |            |
| 890-3153-2    | PH04A            | Total/NA  | Solid  | 8015 NM |            |

## HPLC/IC

## Leach Batch: 36392

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 890-3153-1          | PH04                   | Soluble   | Solid  | DI Leach |            |
| 890-3153-2          | PH04A                  | Soluble   | Solid  | DI Leach |            |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-31-C MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-31-D MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 36601

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3153-1          | PH04                   | Soluble   | Solid  | 300.0  | 36392      |
| 890-3153-2          | PH04A                  | Soluble   | Solid  | 300.0  | 36392      |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | 300.0  | 36392      |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | 300.0  | 36392      |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-31-C MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-31-D MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 36392      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

Client Sample ID: PH04

Lab Sample ID: 890-3153-1

Date Collected: 10/05/22 09:30

Matrix: Solid

Date Received: 10/05/22 15:25

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.03 g         | 5 mL         | 36591        | 10/10/22 13:52       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36716        | 10/13/22 03:51       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36862        | 10/13/22 11:29       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36581        | 10/10/22 12:14       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.05 g        | 10 mL        | 36322        | 10/07/22 07:42       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36315        | 10/07/22 14:25       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.04 g         | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 20         |                |              | 36601        | 10/10/22 23:13       | CH      | EET MID |

Client Sample ID: PH04A

Lab Sample ID: 890-3153-2

Date Collected: 10/05/22 09:35

Matrix: Solid

Date Received: 10/05/22 15:25

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.03 g         | 5 mL         | 36591        | 10/10/22 13:52       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36716        | 10/13/22 04:11       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36862        | 10/13/22 11:29       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36581        | 10/10/22 12:14       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.03 g        | 10 mL        | 36322        | 10/07/22 07:42       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36315        | 10/07/22 14:46       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 4.96 g         | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 10         |                |              | 36601        | 10/10/22 23:31       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas     | NELAP   | T104704400-22-24      | 06-30-23        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte    |
|-----------------|-------------|--------|------------|
| 8015 NM         |             | Solid  | Total TPH  |
| Total BTEX      |             | Solid  | Total BTEX |

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## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3153-1  
SDG: 03E1558070

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3153-1    | PH04             | Solid  | 10/05/22 09:30 | 10/05/22 15:25 | 1'    |
| 890-3153-2    | PH04A            | Solid  | 10/05/22 09:35 | 10/05/22 15:25 | 2'    |

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Environment Testing  
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

|                  |                         |                         |                             |
|------------------|-------------------------|-------------------------|-----------------------------|
| Project Manager: | Katie Jennings          | Bill to: (if different) | Garret Green                |
| Company Name:    | Ensolium                | Company Name:           | XTO Energy                  |
| Address:         | 3122 National Parks Hwy | Address:                | 3104 E. Green St.           |
| City, State ZIP: | Carlsbad, NM 88220      | City, State ZIP:        | Carlsbad, NM 88220          |
| Phone:           | 303-887-2946            | Email:                  | Garret.Green@ExxonMobil.com |

|                                                                                                                                                                                  |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>      |                                                                                        |
| State of Project:                                                                                                                                                                |                                                                                        |
| Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> | Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____ |

|                           |                                                                     |                                                               |                                                                           |            |                                                                     |
|---------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------|------------|---------------------------------------------------------------------|
| Project Name:             | PLU 21 BD 126H/905H                                                 | Turn Around                                                   | <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush | Pres. Code |                                                                     |
| Project Number:           | 03E1558070                                                          |                                                               |                                                                           |            |                                                                     |
| Project Location:         | 32.10939, -103.88361                                                | Due Date:                                                     |                                                                           |            |                                                                     |
| Sampler's Name:           | Kase Parker                                                         | TAT starts the day received by the lab, if received by 4:30pm |                                                                           |            |                                                                     |
| PO #:                     |                                                                     |                                                               |                                                                           |            |                                                                     |
| SAMPLE RECEIPT            |                                                                     | Temp Blank:                                                   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No       | Wet Ice:   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Samples Received In tact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Thermometer ID:                                               |                                                                           |            |                                                                     |
| Cooler Custody Seals:     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Correction Factor:                                            |                                                                           |            |                                                                     |
| Sample Custody Seals:     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Temperature Reading:                                          |                                                                           |            |                                                                     |
| Total Containers:         |                                                                     | Corrected Temperature:                                        |                                                                           |            |                                                                     |
| Sample Identification     | Matrix                                                              | Date Sampled                                                  | Time Sampled                                                              | Depth      | Grav/Comp                                                           |
| PH04                      | S                                                                   | 10/5/2022                                                     | 9:30                                                                      | 1'         | G                                                                   |
| PH04A                     | S                                                                   | 10/5/2022                                                     | 9:35                                                                      | 2'         | G                                                                   |
| Parameters                |                                                                     |                                                               |                                                                           |            |                                                                     |
| CHLORIDES (EPA: 300.0)    |                                                                     |                                                               |                                                                           |            |                                                                     |
| TPH (8015)                |                                                                     |                                                               |                                                                           |            |                                                                     |
| BTEX (8021)               |                                                                     |                                                               |                                                                           |            |                                                                     |
| ANALYSIS REQUEST          |                                                                     |                                                               |                                                                           |            |                                                                     |
| Preservative Codes        |                                                                     |                                                               |                                                                           |            |                                                                     |
| None: NO                  |                                                                     |                                                               |                                                                           |            |                                                                     |
| Cool: Cool                |                                                                     |                                                               |                                                                           |            |                                                                     |
| HCL: HC                   |                                                                     |                                                               |                                                                           |            |                                                                     |
| H2SO4: H2                 |                                                                     |                                                               |                                                                           |            |                                                                     |
| H3PO4: HP                 |                                                                     |                                                               |                                                                           |            |                                                                     |
| NaHSO4: NABIS             |                                                                     |                                                               |                                                                           |            |                                                                     |
| Na2S2O3: NaSO3            |                                                                     |                                                               |                                                                           |            |                                                                     |
| Zn Acetate+NaOH: Zn       |                                                                     |                                                               |                                                                           |            |                                                                     |
| NaOH+Ascorbic Acid: SABC  |                                                                     |                                                               |                                                                           |            |                                                                     |
| Sample Comments           |                                                                     |                                                               |                                                                           |            |                                                                     |
| Incident ID:              |                                                                     |                                                               |                                                                           |            |                                                                     |
| NAPP2214342255            |                                                                     |                                                               |                                                                           |            |                                                                     |
| Cost Center:              |                                                                     |                                                               |                                                                           |            |                                                                     |
| 1666431001                |                                                                     |                                                               |                                                                           |            |                                                                     |
| AFE:                      |                                                                     |                                                               |                                                                           |            |                                                                     |

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

|                              |                          |               |                              |                          |           |
|------------------------------|--------------------------|---------------|------------------------------|--------------------------|-----------|
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time     | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| <i>[Signature]</i>           | <i>[Signature]</i>       | 10/5/22 15:35 |                              |                          |           |
|                              |                          |               |                              |                          |           |
|                              |                          |               |                              |                          |           |
|                              |                          |               |                              |                          |           |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3153-1

SDG Number: 03E1558070

Login Number: 3153

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3153-1

SDG Number: 03E1558070

Login Number: 3153

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 10/07/22 11:00 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3154-1

Laboratory Sample Delivery Group: 03E1558070

Client Project/Site: PLU 21 BD 126H/905H

For:

Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Kalei Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/13/2022 10:50:00 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Laboratory Job ID: 890-3154-1  
SDG: 03E1558070

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| F2        | MS/MSD RPD exceeds control limits                        |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| *1        | LCS/LCSD RPD exceeds control limits.                     |
| S1-       | Surrogate recovery exceeds control limits, low biased.   |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| □              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |



## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

**Job ID: 890-3154-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-3154-1****Receipt**

The samples were received on 10/5/2022 3:33 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.2°C

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-3154-1) and PH02A (890-3154-2).

**GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-36387 and analytical batch 880-36315 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-36387 and analytical batch 880-36315 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

Client Sample ID: PH02

Lab Sample ID: 890-3154-1

Date Collected: 10/05/22 09:10

Matrix: Solid

Date Received: 10/05/22 15:33

Sample Depth: 1'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:32 | 1       |
| Toluene             | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:32 | 1       |
| Ethylbenzene        | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:32 | 1       |
| m-Xylene & p-Xylene | <0.00399 | U         | 0.00399 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:32 | 1       |
| o-Xylene            | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:32 | 1       |
| Xylenes, Total      | <0.00399 | U         | 0.00399 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:32 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 111       |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 04:32 | 1       |
| 1,4-Difluorobenzene (Surr)  | 78        |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 04:32 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00399 | U         | 0.00399 | mg/Kg |   |          | 10/13/22 11:29 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 10/10/22 12:14 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0  | U *1      | 50.0 | mg/Kg |   | 10/07/22 13:17 | 10/08/22 00:50 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 13:17 | 10/08/22 00:50 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 13:17 | 10/08/22 00:50 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 82        |           | 70 - 130 | 10/07/22 13:17 | 10/08/22 00:50 | 1       |
| o-Terphenyl    | 88        |           | 70 - 130 | 10/07/22 13:17 | 10/08/22 00:50 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 2070   |           | 24.9 | mg/Kg |   |          | 10/10/22 23:37 | 5       |

Client Sample ID: PH02A

Lab Sample ID: 890-3154-2

Date Collected: 10/05/22 09:15

Matrix: Solid

Date Received: 10/05/22 15:33

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:52 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:52 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:52 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:52 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:52 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/10/22 13:52 | 10/13/22 04:52 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 94        |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 04:52 | 1       |

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

Client Sample ID: PH02A

Lab Sample ID: 890-3154-2

Date Collected: 10/05/22 09:15

Matrix: Solid

Date Received: 10/05/22 15:33

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate                  | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,4-Difluorobenzene (Surr) | 91        |           | 70 - 130 | 10/10/22 13:52 | 10/13/22 04:52 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/13/22 11:29 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 10/10/22 12:14 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U *1      | 50.0     | mg/Kg |   | 10/07/22 13:17 | 10/08/22 01:12 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0     | U         | 50.0     | mg/Kg |   | 10/07/22 13:17 | 10/08/22 01:12 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0     | U         | 50.0     | mg/Kg |   | 10/07/22 13:17 | 10/08/22 01:12 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 76        |           | 70 - 130 |       |   | 10/07/22 13:17 | 10/08/22 01:12 | 1       |
| o-Terphenyl                          | 82        |           | 70 - 130 |       |   | 10/07/22 13:17 | 10/08/22 01:12 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1470   |           | 25.0 | mg/Kg |   |          | 10/10/22 23:43 | 5       |

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 890-3144-A-1-D MS                 | Matrix Spike           | 117                                            | 97                |
| 890-3144-A-1-E MSD                | Matrix Spike Duplicate | 85                                             | 95                |
| 890-3154-1                        | PH02                   | 111                                            | 78                |
| 890-3154-2                        | PH02A                  | 94                                             | 91                |
| LCS 880-36591/1-A                 | Lab Control Sample     | 96                                             | 104               |
| LCSD 880-36591/2-A                | Lab Control Sample Dup | 96                                             | 100               |
| MB 880-36589/5-A                  | Method Blank           | 90                                             | 94                |
| MB 880-36591/5-A                  | Method Blank           | 88                                             | 94                |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3148-A-1-C MS       | Matrix Spike           | 94                                             | 92                |
| 890-3148-A-1-D MSD      | Matrix Spike Duplicate | 91                                             | 92                |
| 890-3154-1              | PH02                   | 82                                             | 88                |
| 890-3154-2              | PH02A                  | 76                                             | 82                |
| LCS 880-36387/2-A       | Lab Control Sample     | 110                                            | 119               |
| LCSD 880-36387/3-A      | Lab Control Sample Dup | 95                                             | 108               |
| MB 880-36387/1-A        | Method Blank           | 7 S1-                                          | 7 S1-             |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36589/5-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36589

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:30 | 10/12/22 11:31 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90           |              | 70 - 130 | 10/10/22 13:30 | 10/12/22 11:31 | 1       |
| 1,4-Difluorobenzene (Surr)  | 94           |              | 70 - 130 | 10/10/22 13:30 | 10/12/22 11:31 | 1       |

Lab Sample ID: MB 880-36591/5-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/10/22 13:52 | 10/12/22 23:04 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 88           |              | 70 - 130 | 10/10/22 13:52 | 10/12/22 23:04 | 1       |
| 1,4-Difluorobenzene (Surr)  | 94           |              | 70 - 130 | 10/10/22 13:52 | 10/12/22 23:04 | 1       |

Lab Sample ID: LCS 880-36591/1-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.1109     |               | mg/Kg |   | 111  | 70 - 130    |
| Toluene             | 0.100       | 0.09785    |               | mg/Kg |   | 98   | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.09422    |               | mg/Kg |   | 94   | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.1941     |               | mg/Kg |   | 97   | 70 - 130    |
| o-Xylene            | 0.100       | 0.1122     |               | mg/Kg |   | 112  | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 96            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 104           |               | 70 - 130 |

Lab Sample ID: LCSD 880-36591/2-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36591

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene | 0.100       | 0.09337     |                | mg/Kg |   | 93   | 70 - 130    | 17  | 35        |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-36591/2-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Toluene             | 0.100       | 0.08557     |                | mg/Kg |   | 86   | 70 - 130    | 13  | 35        |
| Ethylbenzene        | 0.100       | 0.08075     |                | mg/Kg |   | 81   | 70 - 130    | 15  | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.1627      |                | mg/Kg |   | 81   | 70 - 130    | 18  | 35        |
| o-Xylene            | 0.100       | 0.09260     |                | mg/Kg |   | 93   | 70 - 130    | 19  | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 96             |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 100            |                | 70 - 130 |

Lab Sample ID: 890-3144-A-1-D MS

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene             | <0.00201      | U F1 F2          | 0.100       | 0.07974   |              | mg/Kg |   | 79   | 70 - 130    |
| Toluene             | <0.00201      | U F1             | 0.100       | 0.08047   |              | mg/Kg |   | 80   | 70 - 130    |
| Ethylbenzene        | <0.00201      | U F1             | 0.100       | 0.08454   |              | mg/Kg |   | 84   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U F1             | 0.201       | 0.1817    |              | mg/Kg |   | 91   | 70 - 130    |
| o-Xylene            | <0.00201      | U F1             | 0.100       | 0.1046    |              | mg/Kg |   | 104  | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 117          |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 97           |              | 70 - 130 |

Lab Sample ID: 890-3144-A-1-E MSD

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36591

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00201      | U F1 F2          | 0.0990      | <0.00198   | U F1 F2       | mg/Kg |   | 0.4  | 70 - 130    | 198 | 35        |
| Toluene             | <0.00201      | U F1             | 0.0990      | <0.00198   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |
| Ethylbenzene        | <0.00201      | U F1             | 0.0990      | <0.00198   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |
| m-Xylene & p-Xylene | <0.00402      | U F1             | 0.198       | <0.00396   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |
| o-Xylene            | <0.00201      | U F1             | 0.0990      | <0.00198   | U F1          | mg/Kg |   | 0    | 70 - 130    | NC  | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 85            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 95            |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-36387/1-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36387

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 13:17 | 10/07/22 19:44 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-36387/1-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36387

| Analyte                              | MB Result    | MB Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0        | U            | 50.0     | mg/Kg |   | 10/07/22 13:17 | 10/07/22 19:44 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0        | U            | 50.0     | mg/Kg |   | 10/07/22 13:17 | 10/07/22 19:44 | 1       |
| Surrogate                            | MB %Recovery | MB Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 7            | S1-          | 70 - 130 |       |   | 10/07/22 13:17 | 10/07/22 19:44 | 1       |
| o-Terphenyl                          | 7            | S1-          | 70 - 130 |       |   | 10/07/22 13:17 | 10/07/22 19:44 | 1       |

Lab Sample ID: LCS 880-36387/2-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36387

| Analyte                              | Spike Added   | LCS Result    | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|---------------|---------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000          | 1166          |               | mg/Kg |   | 117  | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 1000          | 1038          |               | mg/Kg |   | 104  | 70 - 130    |
| Surrogate                            | LCS %Recovery | LCS Qualifier | Limits        |       |   |      |             |
| 1-Chlorooctane                       | 110           |               | 70 - 130      |       |   |      |             |
| o-Terphenyl                          | 119           |               | 70 - 130      |       |   |      |             |

Lab Sample ID: LCSD 880-36387/3-A

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36387

| Analyte                              | Spike Added    | LCSD Result    | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000           | 913.9          | *1             | mg/Kg |   | 91   | 70 - 130    | 24  | 20        |
| Diesel Range Organics (Over C10-C28) | 1000           | 907.1          |                | mg/Kg |   | 91   | 70 - 130    | 13  | 20        |
| Surrogate                            | LCSD %Recovery | LCSD Qualifier | Limits         |       |   |      |             |     |           |
| 1-Chlorooctane                       | 95             |                | 70 - 130       |       |   |      |             |     |           |
| o-Terphenyl                          | 108            |                | 70 - 130       |       |   |      |             |     |           |

Lab Sample ID: 890-3148-A-1-C MS

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36387

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U *1             | 998         | 824.5     |              | mg/Kg |   | 80   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 118           |                  | 998         | 928.0     |              | mg/Kg |   | 81   | 70 - 130    |
| Surrogate                            | MS %Recovery  | MS Qualifier     | Limits      |           |              |       |   |      |             |
| 1-Chlorooctane                       | 94            |                  | 70 - 130    |           |              |       |   |      |             |
| o-Terphenyl                          | 92            |                  | 70 - 130    |           |              |       |   |      |             |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3148-A-1-D MSD

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36387

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U *1             | 999         | 796.9      |               | mg/Kg |   | 77   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | 118           |                  | 999         | 917.1      |               | mg/Kg |   | 80   | 70 - 130    | 1   | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 91            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 92            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36392/1-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 10/10/22 21:11 | 1       |

Lab Sample ID: LCS 880-36392/2-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 243.6      |               | mg/Kg |   | 97   | 90 - 110    |

Lab Sample ID: LCSD 880-36392/3-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 258.4       |                | mg/Kg |   | 103  | 90 - 110    | 6   | 20        |

Lab Sample ID: 890-3151-A-21-E MS

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 919           |                  | 1250        | 2234      |              | mg/Kg |   | 106  | 90 - 110    |

Lab Sample ID: 890-3151-A-21-F MSD

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 919           |                  | 1250        | 2105       |               | mg/Kg |   | 95   | 90 - 110    | 6   | 20        |

Eurofins Carlsbad



## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## GC VOA

## Prep Batch: 36589

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-36589/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 36591

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3154-1         | PH02                   | Total/NA  | Solid  | 5035   |            |
| 890-3154-2         | PH02A                  | Total/NA  | Solid  | 5035   |            |
| MB 880-36591/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-36591/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-36591/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3144-A-1-D MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3144-A-1-E MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 36716

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3154-1         | PH02                   | Total/NA  | Solid  | 8021B  | 36591      |
| 890-3154-2         | PH02A                  | Total/NA  | Solid  | 8021B  | 36591      |
| MB 880-36589/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36589      |
| MB 880-36591/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 36591      |
| LCS 880-36591/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 36591      |
| LCSD 880-36591/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 36591      |
| 890-3144-A-1-D MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 36591      |
| 890-3144-A-1-E MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 36591      |

## Analysis Batch: 36863

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3154-1    | PH02             | Total/NA  | Solid  | Total BTEX |            |
| 890-3154-2    | PH02A            | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Analysis Batch: 36315

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3154-1         | PH02                   | Total/NA  | Solid  | 8015B NM | 36387      |
| 890-3154-2         | PH02A                  | Total/NA  | Solid  | 8015B NM | 36387      |
| MB 880-36387/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 36387      |
| LCS 880-36387/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 36387      |
| LCSD 880-36387/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 36387      |
| 890-3148-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 36387      |
| 890-3148-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 36387      |

## Prep Batch: 36387

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3154-1         | PH02                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3154-2         | PH02A                  | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-36387/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-36387/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-36387/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3148-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3148-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

## GC Semi VOA

## Analysis Batch: 36585

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3154-1    | PH02             | Total/NA  | Solid  | 8015 NM |            |
| 890-3154-2    | PH02A            | Total/NA  | Solid  | 8015 NM |            |

## HPLC/IC

## Leach Batch: 36392

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 890-3154-1          | PH02                   | Soluble   | Solid  | DI Leach |            |
| 890-3154-2          | PH02A                  | Soluble   | Solid  | DI Leach |            |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-21-E MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-21-F MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 36601

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3154-1          | PH02                   | Soluble   | Solid  | 300.0  | 36392      |
| 890-3154-2          | PH02A                  | Soluble   | Solid  | 300.0  | 36392      |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | 300.0  | 36392      |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | 300.0  | 36392      |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-21-E MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-21-F MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 36392      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

Client Sample ID: PH02

Lab Sample ID: 890-3154-1

Date Collected: 10/05/22 09:10

Matrix: Solid

Date Received: 10/05/22 15:33

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.01 g         | 5 mL         | 36591        | 10/10/22 13:52       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36716        | 10/13/22 04:32       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36863        | 10/13/22 11:29       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36585        | 10/10/22 12:14       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.01 g        | 10 mL        | 36387        | 10/07/22 13:17       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36315        | 10/08/22 00:50       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.03 g         | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 5          |                |              | 36601        | 10/10/22 23:37       | CH      | EET MID |

Client Sample ID: PH02A

Lab Sample ID: 890-3154-2

Date Collected: 10/05/22 09:15

Matrix: Solid

Date Received: 10/05/22 15:33

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.02 g         | 5 mL         | 36591        | 10/10/22 13:52       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36716        | 10/13/22 04:52       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36863        | 10/13/22 11:29       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36585        | 10/10/22 12:14       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.00 g        | 10 mL        | 36387        | 10/07/22 13:17       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36315        | 10/08/22 01:12       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.01 g         | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 5          |                |              | 36601        | 10/10/22 23:43       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas     | NELAP   | T104704400-22-24      | 06-30-23        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte    |
|-----------------|-------------|--------|------------|
| 8015 NM         |             | Solid  | Total TPH  |
| Total BTEX      |             | Solid  | Total BTEX |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3154-1  
SDG: 03E1558070

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3154-1    | PH02             | Solid  | 10/05/22 09:10 | 10/05/22 15:33 | 1'    |
| 890-3154-2    | PH02A            | Solid  | 10/05/22 09:15 | 10/05/22 15:33 | 2'    |

- 1
- 2
- 3
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- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing  
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

## Chain of Custody

**Work Order No:**

Page www.xenco.com

Page

ot

|                  |                         |                         |                             |
|------------------|-------------------------|-------------------------|-----------------------------|
| Project Manager: | Katie Jennings          | Bill to: (if different) | Garret Green                |
| Company Name:    | Ensolum                 | Company Name:           | XTO Energy                  |
| Address:         | 3122 National Parks Hwy | Address:                | 3104 E. Green St.           |
| City, State ZIP: | Carlsbad, NM 88220      | City, State ZIP:        | Carlsbad, NM 88220          |
| Phone:           | 303-887-2946            | Email:                  | Garret.Green@ExxonMobil.com |

| Work Order Comments                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| <b>Program:</b> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>     |  |  |  |  |  |  |  |  |  |
| <b>State of Project:</b>                                                                                                                                                               |  |  |  |  |  |  |  |  |  |
| <b>Reporting:</b> Level I <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> |  |  |  |  |  |  |  |  |  |
| <b>Deliverables:</b> EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:                                                                                                |  |  |  |  |  |  |  |  |  |

|                          |                                                                     |                                                               |                                                                     |                        |                                                                     |  |  |  |  |  |  |  |  |                    |                                                 |                                                                   |  |
|--------------------------|---------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|------------------------|---------------------------------------------------------------------|--|--|--|--|--|--|--|--|--------------------|-------------------------------------------------|-------------------------------------------------------------------|--|
| Project Name:            | PLU 21 BD 126H/905H                                                 | Turn Around                                                   |                                                                     | ANALYSIS REQUEST       |                                                                     |  |  |  |  |  |  |  |  | Preservative Codes |                                                 |                                                                   |  |
| Project Number:          | 03E1558070                                                          | <input checked="" type="checkbox"/> Routine                   | <input type="checkbox"/> Rush                                       | Press. Code            |                                                                     |  |  |  |  |  |  |  |  |                    | None: NO                                        | DI Water: H <sub>2</sub> O                                        |  |
| Project Location:        | 32.10939, -103.88361                                                | Due Date:                                                     |                                                                     |                        |                                                                     |  |  |  |  |  |  |  |  |                    | Cool: Cool                                      | MeOH: Me                                                          |  |
| Sampler's Name:          | Kase Parker                                                         | TAT starts the day received by the lab, if received by 4:30pm |                                                                     |                        |                                                                     |  |  |  |  |  |  |  |  |                    | HCL: HC                                         | HNO <sub>3</sub> : HN                                             |  |
| PO #:                    |                                                                     |                                                               |                                                                     |                        |                                                                     |  |  |  |  |  |  |  |  |                    | H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> | NaOH: Na                                                          |  |
| <b>SAMPLE RECEIPT</b>    |                                                                     | Temp Blank:                                                   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Wet Ice:               | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  |  |  |  |  |  |  |  |                    |                                                 | H <sub>3</sub> PO <sub>4</sub> : HP                               |  |
| Samples Received Intact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Thermometer ID:                                               |                                                                     | Correction Factor:     | <del>1m-0.01</del>                                                  |  |  |  |  |  |  |  |  |                    |                                                 | NaHSO <sub>4</sub> : NABIS                                        |  |
| Cooler Custody Seals:    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Temperature Reading:                                          |                                                                     | Corrected Temperature: | 21.4                                                                |  |  |  |  |  |  |  |  |                    |                                                 | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub> |  |
| Sample Custody Seals:    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                                                               |                                                                     |                        | 21.2                                                                |  |  |  |  |  |  |  |  |                    |                                                 | Zn Acetate+NaOH: Zn                                               |  |
| Total Containers:        |                                                                     |                                                               |                                                                     |                        |                                                                     |  |  |  |  |  |  |  |  |                    |                                                 | NaOH+Ascorbic Acid: SAPC                                          |  |

[illegible][illegible]

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time      | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|------------------------------|--------------------------|----------------|------------------------------|--------------------------|-----------|
| <i>[Signature]</i>           | <i>[Signature]</i>       | 10/1/2015 2:13 |                              |                          |           |
|                              |                          |                |                              |                          |           |
|                              |                          |                |                              |                          |           |
|                              |                          |                |                              |                          |           |
|                              |                          |                |                              |                          |           |

Revised Date 06/25/2020 Rev 2020

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3154-1

SDG Number: 03E1558070

Login Number: 3154

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |



## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3154-1

SDG Number: 03E1558070

Login Number: 3154

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 10/07/22 11:00 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3155-1

Laboratory Sample Delivery Group: 03E1558070

Client Project/Site: PLU 21 BD 126H/905H

For:

Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Kalei Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/13/2022 11:08:23 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

Review your project  
results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Laboratory Job ID: 890-3155-1  
SDG: 03E1558070

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| F2        | MS/MSD RPD exceeds control limits                        |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

**Job ID: 890-3155-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-3155-1****Receipt**

The samples were received on 10/5/2022 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.2°C

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: PH03 (890-3155-1) and PH03A (890-3155-2).

**GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: The method blank for preparation batch 880-36395 and analytical batch 880-36488 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36395 and analytical batch 880-36488 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

Client Sample ID: PH03

Lab Sample ID: 890-3155-1

Date Collected: 10/05/22 09:20

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 1'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:28 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:28 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:28 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:28 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:28 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:28 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 108       |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 19:28 | 1       |
| 1,4-Difluorobenzene (Surr)  | 99        |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 19:28 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/13/22 11:47 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 10/11/22 09:32 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 12:02 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0  | U F1      | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 12:02 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 12:02 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 98        |           | 70 - 130 | 10/07/22 15:16 | 10/10/22 12:02 | 1       |
| o-Terphenyl    | 105       |           | 70 - 130 | 10/07/22 15:16 | 10/10/22 12:02 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 4340   |           | 25.0 | mg/Kg |   |          | 10/10/22 23:48 | 5       |

Client Sample ID: PH03A

Lab Sample ID: 890-3155-2

Date Collected: 10/05/22 09:25

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:49 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:49 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:49 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:49 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:49 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 19:49 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 105       |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 19:49 | 1       |

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

Client Sample ID: PH03A

Lab Sample ID: 890-3155-2

Date Collected: 10/05/22 09:25

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate                  | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,4-Difluorobenzene (Surr) | 99        |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 19:49 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 10/13/22 11:47 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 10/11/22 09:32 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U         | 50.0     | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:04 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0     | U         | 50.0     | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:04 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0     | U         | 50.0     | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:04 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 100       |           | 70 - 130 |       |   | 10/07/22 15:16 | 10/10/22 13:04 | 1       |
| o-Terphenyl                          | 106       |           | 70 - 130 |       |   | 10/07/22 15:16 | 10/10/22 13:04 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 7200   |           | 50.0 | mg/Kg |   |          | 10/10/22 23:54 | 10      |

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 880-20232-A-1-A MS                | Matrix Spike           | 99                                             | 107               |
| 880-20232-A-1-B MSD               | Matrix Spike Duplicate | 77                                             | 109               |
| 890-3155-1                        | PH03                   | 108                                            | 99                |
| 890-3155-2                        | PH03A                  | 105                                            | 99                |
| LCS 880-36699/1-A                 | Lab Control Sample     | 100                                            | 97                |
| LCSD 880-36699/2-A                | Lab Control Sample Dup | 103                                            | 104               |
| MB 880-36699/5-A                  | Method Blank           | 90                                             | 112               |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3155-1              | PH03                   | 98                                             | 105               |
| 890-3155-1 MS           | PH03                   | 82                                             | 78                |
| 890-3155-1 MSD          | PH03                   | 82                                             | 78                |
| 890-3155-2              | PH03A                  | 100                                            | 106               |
| LCS 880-36395/2-A       | Lab Control Sample     | 107                                            | 117               |
| LCSD 880-36395/3-A      | Lab Control Sample Dup | 106                                            | 113               |
| MB 880-36395/1-A        | Method Blank           | 112                                            | 121               |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |



## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36699/5-A

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | MB<br>Result | MB<br>Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|--------------|-----------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200     | U               | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| Toluene             | <0.00200     | U               | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| Ethylbenzene        | <0.00200     | U               | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| m-Xylene & p-Xylene | <0.00400     | U               | 0.00400 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| o-Xylene            | <0.00200     | U               | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| Xylenes, Total      | <0.00400     | U               | 0.00400 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |

| Surrogate                   | MB<br>%Recovery | MB<br>Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------------|-----------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90              |                 | 70 - 130 | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| 1,4-Difluorobenzene (Surr)  | 112             |                 | 70 - 130 | 10/11/22 16:29 | 10/12/22 11:29 | 1       |

Lab Sample ID: LCS 880-36699/1-A

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|---------------------|----------------|---------------|------------------|-------|---|------|----------------|
| Benzene             | 0.100          | 0.08151       |                  | mg/Kg |   | 82   | 70 - 130       |
| Toluene             | 0.100          | 0.08917       |                  | mg/Kg |   | 89   | 70 - 130       |
| Ethylbenzene        | 0.100          | 0.07884       |                  | mg/Kg |   | 79   | 70 - 130       |
| m-Xylene & p-Xylene | 0.200          | 0.1575        |                  | mg/Kg |   | 79   | 70 - 130       |
| o-Xylene            | 0.100          | 0.07833       |                  | mg/Kg |   | 78   | 70 - 130       |

| Surrogate                   | LCS<br>%Recovery | LCS<br>Qualifier | Limits   |
|-----------------------------|------------------|------------------|----------|
| 4-Bromofluorobenzene (Surr) | 100              |                  | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 97               |                  | 70 - 130 |

Lab Sample ID: LCSD 880-36699/2-A

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|---------------------|----------------|----------------|-------------------|-------|---|------|----------------|-----|--------------|
| Benzene             | 0.100          | 0.09035        |                   | mg/Kg |   | 90   | 70 - 130       | 10  | 35           |
| Toluene             | 0.100          | 0.09725        |                   | mg/Kg |   | 97   | 70 - 130       | 9   | 35           |
| Ethylbenzene        | 0.100          | 0.08683        |                   | mg/Kg |   | 87   | 70 - 130       | 10  | 35           |
| m-Xylene & p-Xylene | 0.200          | 0.1722         |                   | mg/Kg |   | 86   | 70 - 130       | 9   | 35           |
| o-Xylene            | 0.100          | 0.08568        |                   | mg/Kg |   | 86   | 70 - 130       | 9   | 35           |

| Surrogate                   | LCSD<br>%Recovery | LCSD<br>Qualifier | Limits   |
|-----------------------------|-------------------|-------------------|----------|
| 4-Bromofluorobenzene (Surr) | 103               |                   | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 104               |                   | 70 - 130 |

Lab Sample ID: 880-20232-A-1-A MS

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36699

| Analyte | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|---------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Benzene | <0.00201         | U                   | 0.100          | 0.09214      |                 | mg/Kg |   | 92   | 70 - 130       |
| Toluene | <0.00201         | U F1                | 0.100          | 0.09307      |                 | mg/Kg |   | 93   | 70 - 130       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-20232-A-1-A MS

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Ethylbenzene        | <0.00201      | U F1 F2          | 0.100       | 0.07772   |              | mg/Kg |   | 77   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U F1 F2          | 0.201       | 0.1563    |              | mg/Kg |   | 78   | 70 - 130    |
| o-Xylene            | <0.00201      | U F1 F2          | 0.100       | 0.07596   |              | mg/Kg |   | 75   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 99           |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 107          |              | 70 - 130 |

Lab Sample ID: 880-20232-A-1-B MSD

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00201      | U                | 0.0998      | 0.07929    |               | mg/Kg |   | 79   | 70 - 130    | 15  | 35        |
| Toluene             | <0.00201      | U F1             | 0.0998      | 0.06564    | F1            | mg/Kg |   | 66   | 70 - 130    | 35  | 35        |
| Ethylbenzene        | <0.00201      | U F1 F2          | 0.0998      | 0.05281    | F1 F2         | mg/Kg |   | 53   | 70 - 130    | 38  | 35        |
| m-Xylene & p-Xylene | <0.00402      | U F1 F2          | 0.200       | 0.09464    | F1 F2         | mg/Kg |   | 47   | 70 - 130    | 49  | 35        |
| o-Xylene            | <0.00201      | U F1 F2          | 0.0998      | 0.04674    | F1 F2         | mg/Kg |   | 46   | 70 - 130    | 48  | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 77            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 109           |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-36395/1-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 10:59 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 10:59 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 10:59 | 1       |

| Surrogate      | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|--------------|--------------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 112          |              | 70 - 130 | 10/07/22 15:16 | 10/10/22 10:59 | 1       |
| o-Terphenyl    | 121          |              | 70 - 130 | 10/07/22 15:16 | 10/10/22 10:59 | 1       |

Lab Sample ID: LCS 880-36395/2-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000        | 996.9      |               | mg/Kg |   | 100  | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 1000        | 946.9      |               | mg/Kg |   | 95   | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-36395/2-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36395

|                | LCS       | LCS       |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 107       |           | 70 - 130 |
| o-Terphenyl    | 117       |           | 70 - 130 |

Lab Sample ID: LCSD 880-36395/3-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000        | 1023        |                | mg/Kg |   | 102  | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | 1000        | 992.6       |                | mg/Kg |   | 99   | 70 - 130    | 5   | 20        |

|                | LCSD      | LCSD      |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 106       |           | 70 - 130 |
| o-Terphenyl    | 113       |           | 70 - 130 |

Lab Sample ID: 890-3155-1 MS

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: PH03

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U                | 998         | 983.4     |              | mg/Kg |   | 96   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | <50.0         | U F1             | 998         | 671.0     | F1           | mg/Kg |   | 66   | 70 - 130    |

|                | MS        | MS        |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 82        |           | 70 - 130 |
| o-Terphenyl    | 78        |           | 70 - 130 |

Lab Sample ID: 890-3155-1 MSD

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: PH03

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U                | 999         | 1010       |               | mg/Kg |   | 99   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U F1             | 999         | 687.0      | F1            | mg/Kg |   | 67   | 70 - 130    | 2   | 20        |

|                | MSD       | MSD       |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 82        |           | 70 - 130 |
| o-Terphenyl    | 78        |           | 70 - 130 |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36392/1-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB<br>Result | MB<br>Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------------|-----------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00        | U               | 5.00 | mg/Kg |   |          | 10/10/22 21:11 | 1       |

Lab Sample ID: LCS 880-36392/2-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|----------|----------------|---------------|------------------|-------|---|------|----------------|
| Chloride | 250            | 243.6         |                  | mg/Kg |   | 97   | 90 - 110       |

Lab Sample ID: LCSD 880-36392/3-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|----------|----------------|----------------|-------------------|-------|---|------|----------------|-----|--------------|
| Chloride | 250            | 258.4          |                   | mg/Kg |   | 103  | 90 - 110       | 6   | 20           |

Lab Sample ID: 890-3151-A-21-E MS

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Chloride | 919              |                     | 1250           | 2234         |                 | mg/Kg |   | 106  | 90 - 110       |

Lab Sample ID: 890-3151-A-21-F MSD

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|----------------|-----|--------------|
| Chloride | 919              |                     | 1250           | 2105          |                  | mg/Kg |   | 95   | 90 - 110       | 6   | 20           |

Lab Sample ID: 890-3151-A-31-C MS

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Chloride | 185              |                     | 250            | 458.5        |                 | mg/Kg |   | 110  | 90 - 110       |

Lab Sample ID: 890-3151-A-31-D MSD

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|----------------|-----|--------------|
| Chloride | 185              |                     | 250            | 432.4         |                  | mg/Kg |   | 99   | 90 - 110       | 6   | 20           |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## GC VOA

## Prep Batch: 36699

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3155-1          | PH03                   | Total/NA  | Solid  | 5035   |            |
| 890-3155-2          | PH03A                  | Total/NA  | Solid  | 5035   |            |
| MB 880-36699/5-A    | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-36699/1-A   | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-36699/2-A  | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 880-20232-A-1-A MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 880-20232-A-1-B MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 36717

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3155-1          | PH03                   | Total/NA  | Solid  | 8021B  | 36699      |
| 890-3155-2          | PH03A                  | Total/NA  | Solid  | 8021B  | 36699      |
| MB 880-36699/5-A    | Method Blank           | Total/NA  | Solid  | 8021B  | 36699      |
| LCS 880-36699/1-A   | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 36699      |
| LCSD 880-36699/2-A  | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 36699      |
| 880-20232-A-1-A MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 36699      |
| 880-20232-A-1-B MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 36699      |

## Analysis Batch: 36876

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3155-1    | PH03             | Total/NA  | Solid  | Total BTEX |            |
| 890-3155-2    | PH03A            | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 36395

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3155-1         | PH03                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3155-2         | PH03A                  | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-36395/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-36395/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-36395/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3155-1 MS      | PH03                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3155-1 MSD     | PH03                   | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 36488

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3155-1         | PH03                   | Total/NA  | Solid  | 8015B NM | 36395      |
| 890-3155-2         | PH03A                  | Total/NA  | Solid  | 8015B NM | 36395      |
| MB 880-36395/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 36395      |
| LCS 880-36395/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 36395      |
| LCSD 880-36395/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 36395      |
| 890-3155-1 MS      | PH03                   | Total/NA  | Solid  | 8015B NM | 36395      |
| 890-3155-1 MSD     | PH03                   | Total/NA  | Solid  | 8015B NM | 36395      |

## Analysis Batch: 36648

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3155-1    | PH03             | Total/NA  | Solid  | 8015 NM |            |
| 890-3155-2    | PH03A            | Total/NA  | Solid  | 8015 NM |            |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

## HPLC/IC

## Leach Batch: 36392

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 890-3155-1          | PH03                   | Soluble   | Solid  | DI Leach |            |
| 890-3155-2          | PH03A                  | Soluble   | Solid  | DI Leach |            |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-21-E MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-21-F MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-31-C MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-31-D MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 36601

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3155-1          | PH03                   | Soluble   | Solid  | 300.0  | 36392      |
| 890-3155-2          | PH03A                  | Soluble   | Solid  | 300.0  | 36392      |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | 300.0  | 36392      |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | 300.0  | 36392      |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-21-E MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-21-F MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-31-C MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-31-D MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 36392      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

Client Sample ID: PH03

Lab Sample ID: 890-3155-1

Date Collected: 10/05/22 09:20

Matrix: Solid

Date Received: 10/05/22 15:25

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.02 g         | 5 mL         | 36699        | 10/11/22 16:29       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36717        | 10/12/22 19:28       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36876        | 10/13/22 11:47       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36648        | 10/11/22 09:32       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.01 g        | 10 mL        | 36395        | 10/07/22 15:16       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36488        | 10/10/22 12:02       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5 g            | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 5          |                |              | 36601        | 10/10/22 23:48       | CH      | EET MID |

Client Sample ID: PH03A

Lab Sample ID: 890-3155-2

Date Collected: 10/05/22 09:25

Matrix: Solid

Date Received: 10/05/22 15:25

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.03 g         | 5 mL         | 36699        | 10/11/22 16:29       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36717        | 10/12/22 19:49       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36876        | 10/13/22 11:47       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36648        | 10/11/22 09:32       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.00 g        | 10 mL        | 36395        | 10/07/22 15:16       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36488        | 10/10/22 13:04       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5 g            | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 10         |                |              | 36601        | 10/10/22 23:54       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas     | NELAP   | T104704400-22-24      | 06-30-23        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte    |
|-----------------|-------------|--------|------------|
| 8015 NM         |             | Solid  | Total TPH  |
| Total BTEX      |             | Solid  | Total BTEX |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

## Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3155-1  
SDG: 03E1558070

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3155-1    | PH03             | Solid  | 10/05/22 09:20 | 10/05/22 15:25 | 1'    |
| 890-3155-2    | PH03A            | Solid  | 10/05/22 09:25 | 10/05/22 15:25 | 2'    |

- 1
- 2
- 3
- 4
- 5
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- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

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| Work Order Comments |                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program: UST/PST    | <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>   |
| State of Project:   |                                                                                                                                                              |
| Reporting: Level II | <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> |
| Deliverables: EDD   | <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:                                                                                               |

|                                                                                     |  |                                                                     |  |                                                                           |  |                     |  |
|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------|--|---------------------------------------------------------------------------|--|---------------------|--|
| Project Name:                                                                       |  | PLU 21 BD 126H/905H                                                 |  | Turn Around                                                               |  | Pres. Code          |  |
| Project Number:                                                                     |  | 03E1558070                                                          |  | <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush |  |                     |  |
| Project Location:                                                                   |  | 32, 10939, -103, 88361                                              |  | Due Date:                                                                 |  |                     |  |
| Sampler's Name:                                                                     |  | Kase Parker                                                         |  | TAT starts the day received by the lab, if received by 4:30pm             |  |                     |  |
| PO #:                                                                               |  |                                                                     |  |                                                                           |  |                     |  |
| <b>SAMPLE RECEIPT</b>                                                               |  | Temp Blank:                                                         |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No       |  | Wet Ice:            |  |
| Samples Received Intact:                                                            |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | Thermometer ID:                                                           |  | TK 111003           |  |
| Cooler Custody Seals:                                                               |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | Correction Factor:                                                        |  | -0.2                |  |
| Sample Custody Seals:                                                               |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | Temperature Reading:                                                      |  | 21.4                |  |
| Total Containers:                                                                   |  |                                                                     |  | Corrected Temperature:                                                    |  | 21.8                |  |
| <b>Parameters</b>                                                                   |  |                                                                     |  |                                                                           |  |                     |  |
| RIDES (EPA: 300.0)                                                                  |  |                                                                     |  |                                                                           |  |                     |  |
| (015)<br>(8021)                                                                     |  |                                                                     |  |                                                                           |  |                     |  |
| <b>ANALYSIS REQUEST</b>                                                             |  |                                                                     |  |                                                                           |  |                     |  |
|  |  |                                                                     |  |                                                                           |  |                     |  |
| 890-3155 Chain of Custody                                                           |  |                                                                     |  |                                                                           |  |                     |  |
| <b>Preservative Codes</b>                                                           |  |                                                                     |  |                                                                           |  |                     |  |
| None: NO                                                                            |  | DI Water: H <sub>2</sub> O                                          |  | Cool: Cool                                                                |  | MeOH: Me            |  |
| HCL: HCl                                                                            |  | HNO <sub>3</sub> : HN                                               |  | H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>                           |  | NaOH: Na            |  |
| H <sub>3</sub> PO <sub>4</sub> : HP                                                 |  | NaHSO <sub>4</sub> : NABIS                                          |  | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>         |  | Zn Acetate+NaOH: Zn |  |
| NaOH+Ascorbic Acid: SASC                                                            |  |                                                                     |  |                                                                           |  |                     |  |

[illegible]Revised Date: 08/25/2020 Rev. 2020:

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3155-1

SDG Number: 03E1558070

Login Number: 3155

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3155-1

SDG Number: 03E1558070

Login Number: 3155

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 10/07/22 11:00 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



## Environment Testing America

### ANALYTICAL REPORT

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad, NM 88220  
Tel: (575)988-3199

Laboratory Job ID: 890-3156-1

Laboratory Sample Delivery Group: 03E1558070

Client Project/Site: PLU 21 BD 126H/905H

For:

Ensolum  
705 W. Wadley  
Suite 210  
Midland, Texas 79701

Attn: Kalei Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:

10/13/2022 11:08:37 AM

Jessica Kramer, Project Manager  
(432)704-5440

[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)

#### LINKS

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results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Laboratory Job ID: 890-3156-1  
SDG: 03E1558070

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| F2        | MS/MSD RPD exceeds control limits                        |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |



## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

**Job ID: 890-3156-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-3156-1****Receipt**

The samples were received on 10/5/2022 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 21.2°C

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3156-1) and PH01A (890-3156-2).

**GC VOA**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: The method blank for preparation batch 880-36395 and analytical batch 880-36488 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36395 and analytical batch 880-36488 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

Client Sample ID: PH01

Lab Sample ID: 890-3156-1

Date Collected: 10/05/22 09:00

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 1'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:09 | 1       |
| Toluene             | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:09 | 1       |
| Ethylbenzene        | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:09 | 1       |
| m-Xylene & p-Xylene | <0.00401 | U         | 0.00401 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:09 | 1       |
| o-Xylene            | <0.00200 | U         | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:09 | 1       |
| Xylenes, Total      | <0.00401 | U         | 0.00401 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:09 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 104       |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 20:09 | 1       |
| 1,4-Difluorobenzene (Surr)  | 108       |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 20:09 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00401 | U         | 0.00401 | mg/Kg |   |          | 10/13/22 11:47 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 10/11/22 09:32 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:25 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:25 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0  | U         | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:25 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 99        |           | 70 - 130 | 10/07/22 15:16 | 10/10/22 13:25 | 1       |
| o-Terphenyl    | 104       |           | 70 - 130 | 10/07/22 15:16 | 10/10/22 13:25 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 3500   |           | 49.8 | mg/Kg |   |          | 10/11/22 00:00 | 10      |

Client Sample ID: PH01A

Lab Sample ID: 890-3156-2

Date Collected: 10/05/22 09:05

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:30 | 1       |
| Toluene             | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:30 | 1       |
| Ethylbenzene        | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:30 | 1       |
| m-Xylene & p-Xylene | <0.00402 | U         | 0.00402 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:30 | 1       |
| o-Xylene            | <0.00201 | U         | 0.00201 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:30 | 1       |
| Xylenes, Total      | <0.00402 | U         | 0.00402 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 20:30 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 103       |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 20:30 | 1       |

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

Client Sample ID: PH01A

Lab Sample ID: 890-3156-2

Date Collected: 10/05/22 09:05

Matrix: Solid

Date Received: 10/05/22 15:25

Sample Depth: 2'

## Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

| Surrogate                  | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 1,4-Difluorobenzene (Surr) | 107       |           | 70 - 130 | 10/11/22 16:29 | 10/12/22 20:30 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00402 | U         | 0.00402 | mg/Kg |   |          | 10/13/22 11:47 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.9  | U         | 49.9 | mg/Kg |   |          | 10/11/22 09:32 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result    | Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|-----------|----------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9     | U         | 49.9     | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:45 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.9     | U         | 49.9     | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:45 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9     | U         | 49.9     | mg/Kg |   | 10/07/22 15:16 | 10/10/22 13:45 | 1       |
| Surrogate                            | %Recovery | Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 105       |           | 70 - 130 |       |   | 10/07/22 15:16 | 10/10/22 13:45 | 1       |
| o-Terphenyl                          | 112       |           | 70 - 130 |       |   | 10/07/22 15:16 | 10/10/22 13:45 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 1110   |           | 49.7 | mg/Kg |   |          | 10/11/22 00:06 | 10      |

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 880-20232-A-1-A MS                | Matrix Spike           | 99                                             | 107               |
| 880-20232-A-1-B MSD               | Matrix Spike Duplicate | 77                                             | 109               |
| 890-3156-1                        | PH01                   | 104                                            | 108               |
| 890-3156-2                        | PH01A                  | 103                                            | 107               |
| LCS 880-36699/1-A                 | Lab Control Sample     | 100                                            | 97                |
| LCSD 880-36699/2-A                | Lab Control Sample Dup | 103                                            | 104               |
| MB 880-36699/5-A                  | Method Blank           | 90                                             | 112               |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3155-A-1-C MS       | Matrix Spike           | 82                                             | 78                |
| 890-3155-A-1-D MSD      | Matrix Spike Duplicate | 82                                             | 78                |
| 890-3156-1              | PH01                   | 99                                             | 104               |
| 890-3156-2              | PH01A                  | 105                                            | 112               |
| LCS 880-36395/2-A       | Lab Control Sample     | 107                                            | 117               |
| LCSD 880-36395/3-A      | Lab Control Sample Dup | 106                                            | 113               |
| MB 880-36395/1-A        | Method Blank           | 112                                            | 121               |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36699/5-A

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 10/11/22 16:29 | 10/12/22 11:29 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90           |              | 70 - 130 | 10/11/22 16:29 | 10/12/22 11:29 | 1       |
| 1,4-Difluorobenzene (Surr)  | 112          |              | 70 - 130 | 10/11/22 16:29 | 10/12/22 11:29 | 1       |

Lab Sample ID: LCS 880-36699/1-A

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.08151    |               | mg/Kg |   | 82   | 70 - 130    |
| Toluene             | 0.100       | 0.08917    |               | mg/Kg |   | 89   | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.07884    |               | mg/Kg |   | 79   | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.1575     |               | mg/Kg |   | 79   | 70 - 130    |
| o-Xylene            | 0.100       | 0.07833    |               | mg/Kg |   | 78   | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 100           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 97            |               | 70 - 130 |

Lab Sample ID: LCSD 880-36699/2-A

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene             | 0.100       | 0.09035     |                | mg/Kg |   | 90   | 70 - 130    | 10  | 35        |
| Toluene             | 0.100       | 0.09725     |                | mg/Kg |   | 97   | 70 - 130    | 9   | 35        |
| Ethylbenzene        | 0.100       | 0.08683     |                | mg/Kg |   | 87   | 70 - 130    | 10  | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.1722      |                | mg/Kg |   | 86   | 70 - 130    | 9   | 35        |
| o-Xylene            | 0.100       | 0.08568     |                | mg/Kg |   | 86   | 70 - 130    | 9   | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 103            |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 104            |                | 70 - 130 |

Lab Sample ID: 880-20232-A-1-A MS

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36699

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene | <0.00201      | U                | 0.100       | 0.09214   |              | mg/Kg |   | 92   | 70 - 130    |
| Toluene | <0.00201      | U F1             | 0.100       | 0.09307   |              | mg/Kg |   | 93   | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-20232-A-1-A MS

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Ethylbenzene        | <0.00201      | U F1 F2          | 0.100       | 0.07772   |              | mg/Kg |   | 77   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U F1 F2          | 0.201       | 0.1563    |              | mg/Kg |   | 78   | 70 - 130    |
| o-Xylene            | <0.00201      | U F1 F2          | 0.100       | 0.07596   |              | mg/Kg |   | 75   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 99           |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 107          |              | 70 - 130 |

Lab Sample ID: 880-20232-A-1-B MSD

Matrix: Solid

Analysis Batch: 36717

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36699

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00201      | U                | 0.0998      | 0.07929    |               | mg/Kg |   | 79   | 70 - 130    | 15  | 35        |
| Toluene             | <0.00201      | U F1             | 0.0998      | 0.06564    | F1            | mg/Kg |   | 66   | 70 - 130    | 35  | 35        |
| Ethylbenzene        | <0.00201      | U F1 F2          | 0.0998      | 0.05281    | F1 F2         | mg/Kg |   | 53   | 70 - 130    | 38  | 35        |
| m-Xylene & p-Xylene | <0.00402      | U F1 F2          | 0.200       | 0.09464    | F1 F2         | mg/Kg |   | 47   | 70 - 130    | 49  | 35        |
| o-Xylene            | <0.00201      | U F1 F2          | 0.0998      | 0.04674    | F1 F2         | mg/Kg |   | 46   | 70 - 130    | 48  | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 77            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 109           |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-36395/1-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 10:59 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 10:59 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0     | U            | 50.0 | mg/Kg |   | 10/07/22 15:16 | 10/10/22 10:59 | 1       |

| Surrogate      | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|--------------|--------------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 112          |              | 70 - 130 | 10/07/22 15:16 | 10/10/22 10:59 | 1       |
| o-Terphenyl    | 121          |              | 70 - 130 | 10/07/22 15:16 | 10/10/22 10:59 | 1       |

Lab Sample ID: LCS 880-36395/2-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|-------------|------------|---------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000        | 996.9      |               | mg/Kg |   | 100  | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 1000        | 946.9      |               | mg/Kg |   | 95   | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-36395/2-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36395

|                | LCS       | LCS       |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 107       |           | 70 - 130 |
| o-Terphenyl    | 117       |           | 70 - 130 |

Lab Sample ID: LCSD 880-36395/3-A

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000        | 1023        |                | mg/Kg |   | 102  | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | 1000        | 992.6       |                | mg/Kg |   | 99   | 70 - 130    | 5   | 20        |

|                | LCSD      | LCSD      |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 106       |           | 70 - 130 |
| o-Terphenyl    | 113       |           | 70 - 130 |

Lab Sample ID: 890-3155-A-1-C MS

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U                | 998         | 983.4     |              | mg/Kg |   | 96   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | <50.0         | U F1             | 998         | 671.0     | F1           | mg/Kg |   | 66   | 70 - 130    |

|                | MS        | MS        |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 82        |           | 70 - 130 |
| o-Terphenyl    | 78        |           | 70 - 130 |

Lab Sample ID: 890-3155-A-1-D MSD

Matrix: Solid

Analysis Batch: 36488

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36395

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0         | U                | 999         | 1010       |               | mg/Kg |   | 99   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U F1             | 999         | 687.0      | F1            | mg/Kg |   | 67   | 70 - 130    | 2   | 20        |

|                | MSD       | MSD       |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 82        |           | 70 - 130 |
| o-Terphenyl    | 78        |           | 70 - 130 |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36392/1-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB<br>Result | MB<br>Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------------|-----------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00        | U               | 5.00 | mg/Kg |   |          | 10/10/22 21:11 | 1       |

Lab Sample ID: LCS 880-36392/2-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike<br>Added | LCS<br>Result | LCS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|----------|----------------|---------------|------------------|-------|---|------|----------------|
| Chloride | 250            | 243.6         |                  | mg/Kg |   | 97   | 90 - 110       |

Lab Sample ID: LCSD 880-36392/3-A

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike<br>Added | LCSD<br>Result | LCSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|----------|----------------|----------------|-------------------|-------|---|------|----------------|-----|--------------|
| Chloride | 250            | 258.4          |                   | mg/Kg |   | 103  | 90 - 110       | 6   | 20           |

Lab Sample ID: 890-3151-A-31-C MS

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MS<br>Result | MS<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits |
|----------|------------------|---------------------|----------------|--------------|-----------------|-------|---|------|----------------|
| Chloride | 185              |                     | 250            | 458.5        |                 | mg/Kg |   | 110  | 90 - 110       |

Lab Sample ID: 890-3151-A-31-D MSD

Matrix: Solid

Analysis Batch: 36601

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample<br>Result | Sample<br>Qualifier | Spike<br>Added | MSD<br>Result | MSD<br>Qualifier | Unit  | D | %Rec | %Rec<br>Limits | RPD | RPD<br>Limit |
|----------|------------------|---------------------|----------------|---------------|------------------|-------|---|------|----------------|-----|--------------|
| Chloride | 185              |                     | 250            | 432.4         |                  | mg/Kg |   | 99   | 90 - 110       | 6   | 20           |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## GC VOA

## Prep Batch: 36699

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3156-1          | PH01                   | Total/NA  | Solid  | 5035   |            |
| 890-3156-2          | PH01A                  | Total/NA  | Solid  | 5035   |            |
| MB 880-36699/5-A    | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-36699/1-A   | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-36699/2-A  | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 880-20232-A-1-A MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 880-20232-A-1-B MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 36717

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3156-1          | PH01                   | Total/NA  | Solid  | 8021B  | 36699      |
| 890-3156-2          | PH01A                  | Total/NA  | Solid  | 8021B  | 36699      |
| MB 880-36699/5-A    | Method Blank           | Total/NA  | Solid  | 8021B  | 36699      |
| LCS 880-36699/1-A   | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 36699      |
| LCSD 880-36699/2-A  | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 36699      |
| 880-20232-A-1-A MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 36699      |
| 880-20232-A-1-B MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 36699      |

## Analysis Batch: 36877

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3156-1    | PH01             | Total/NA  | Solid  | Total BTEX |            |
| 890-3156-2    | PH01A            | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 36395

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3156-1         | PH01                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3156-2         | PH01A                  | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-36395/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-36395/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-36395/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3155-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3155-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 36488

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3156-1         | PH01                   | Total/NA  | Solid  | 8015B NM | 36395      |
| 890-3156-2         | PH01A                  | Total/NA  | Solid  | 8015B NM | 36395      |
| MB 880-36395/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 36395      |
| LCS 880-36395/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 36395      |
| LCSD 880-36395/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 36395      |
| 890-3155-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 36395      |
| 890-3155-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 36395      |

## Analysis Batch: 36649

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3156-1    | PH01             | Total/NA  | Solid  | 8015 NM |            |
| 890-3156-2    | PH01A            | Total/NA  | Solid  | 8015 NM |            |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

## HPLC/IC

## Leach Batch: 36392

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|---------------------|------------------------|-----------|--------|----------|------------|
| 890-3156-1          | PH01                   | Soluble   | Solid  | DI Leach |            |
| 890-3156-2          | PH01A                  | Soluble   | Solid  | DI Leach |            |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-31-C MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3151-A-31-D MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 36601

| Lab Sample ID       | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|--------|------------|
| 890-3156-1          | PH01                   | Soluble   | Solid  | 300.0  | 36392      |
| 890-3156-2          | PH01A                  | Soluble   | Solid  | 300.0  | 36392      |
| MB 880-36392/1-A    | Method Blank           | Soluble   | Solid  | 300.0  | 36392      |
| LCS 880-36392/2-A   | Lab Control Sample     | Soluble   | Solid  | 300.0  | 36392      |
| LCSD 880-36392/3-A  | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-31-C MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 36392      |
| 890-3151-A-31-D MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 36392      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

Client Sample ID: PH01

Lab Sample ID: 890-3156-1

Date Collected: 10/05/22 09:00

Matrix: Solid

Date Received: 10/05/22 15:25

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 4.99 g         | 5 mL         | 36699        | 10/11/22 16:29       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36717        | 10/12/22 20:09       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36877        | 10/13/22 11:47       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36649        | 10/11/22 09:32       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.01 g        | 10 mL        | 36395        | 10/07/22 15:16       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36488        | 10/10/22 13:25       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.02 g         | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 10         |                |              | 36601        | 10/11/22 00:00       | CH      | EET MID |

Client Sample ID: PH01A

Lab Sample ID: 890-3156-2

Date Collected: 10/05/22 09:05

Matrix: Solid

Date Received: 10/05/22 15:25

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 4.98 g         | 5 mL         | 36699        | 10/11/22 16:29       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 36717        | 10/12/22 20:30       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 36877        | 10/13/22 11:47       | AJ      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 36649        | 10/11/22 09:32       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.02 g        | 10 mL        | 36395        | 10/07/22 15:16       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 36488        | 10/10/22 13:45       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.03 g         | 50 mL        | 36392        | 10/07/22 15:09       | CH      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 10         |                |              | 36601        | 10/11/22 00:06       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Texas     | NELAP   | T104704400-22-24      | 06-30-23        |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte    |
|-----------------|-------------|--------|------------|
| 8015 NM         |             | Solid  | Total TPH  |
| Total BTEX      |             | Solid  | Total BTEX |

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

**Protocol References:**

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 126H/905H

Job ID: 890-3156-1  
SDG: 03E1558070

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3156-1    | PH01             | Solid  | 10/05/22 09:00 | 10/05/22 15:25 | 1'    |
| 890-3156-2    | PH01A            | Solid  | 10/05/22 09:05 | 10/05/22 15:25 | 2'    |

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Environment Testing  
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

## Chain of Custody

**Work Order No:**

Page 1 of 1

|                  |                         |                         |                             |
|------------------|-------------------------|-------------------------|-----------------------------|
| Project Manager: | Katie Jennings          | Bill to: (if different) | Garret Green                |
| Company Name:    | Ensolium                | Company Name:           | XTO Energy                  |
| Address:         | 3122 National Parks Hwy | Address:                | 3104 E. Green St.           |
| City, State ZIP: | Carlsbad, NM 88220      | City, State ZIP:        | Carlsbad, NM 88220          |
| Phone:           | 303-887-2946            | Email:                  | Garret.Green@ExxonMobil.com |

| Work Order Comments |                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program: UST/PST    | <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>   |
| State of Project:   |                                                                                                                                                              |
| Reporting: Level II | <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> |
| Deliverables: EDD   | <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:                                                                                               |

|                          |  |                                                                     |  |                                                                           |  |                        |  |                                                                     |  |      |  |  |  |  |  |  |  |  |  |                                                 |  |                                     |  |                                                                   |  |  |  |
|--------------------------|--|---------------------------------------------------------------------|--|---------------------------------------------------------------------------|--|------------------------|--|---------------------------------------------------------------------|--|------|--|--|--|--|--|--|--|--|--|-------------------------------------------------|--|-------------------------------------|--|-------------------------------------------------------------------|--|--|--|
| Project Name:            |  | PLU 21 BD 126H/905H                                                 |  | Turn Around                                                               |  | Pres. Code             |  | ANALYSIS REQUEST                                                    |  |      |  |  |  |  |  |  |  |  |  | Preservative Codes                              |  |                                     |  |                                                                   |  |  |  |
| Project Number:          |  | 03E1558070                                                          |  | <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush |  |                        |  |                                                                     |  |      |  |  |  |  |  |  |  |  |  | None: NO                                        |  |                                     |  |                                                                   |  |  |  |
| Project Location:        |  | 32.10939, -103.88361                                                |  | Due Date:                                                                 |  |                        |  |                                                                     |  |      |  |  |  |  |  |  |  |  |  | Cool: Cool                                      |  |                                     |  |                                                                   |  |  |  |
| Sampler's Name:          |  | Kase Parker                                                         |  | TAT starts the day received by the lab, if received by 4:30pm             |  |                        |  |                                                                     |  |      |  |  |  |  |  |  |  |  |  | HCL: HC                                         |  |                                     |  |                                                                   |  |  |  |
| PO #:                    |  |                                                                     |  |                                                                           |  |                        |  |                                                                     |  |      |  |  |  |  |  |  |  |  |  | H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> |  |                                     |  |                                                                   |  |  |  |
| SAMPLE RECEIPT           |  | Temp Blank:                                                         |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No       |  | Wet Ice:               |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  |      |  |  |  |  |  |  |  |  |  |                                                 |  | H <sub>3</sub> PO <sub>4</sub> : HP |  |                                                                   |  |  |  |
| Samples Received Intact: |  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | Thermometer ID:                                                           |  | ITM-007                |  |                                                                     |  |      |  |  |  |  |  |  |  |  |  | NaHSO <sub>4</sub> : NABIS                      |  |                                     |  |                                                                   |  |  |  |
| Cooler Custody Seals:    |  | Yes                                                                 |  | No                                                                        |  | N/A                    |  | Correction Factor:                                                  |  | -0.2 |  |  |  |  |  |  |  |  |  |                                                 |  |                                     |  | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub> |  |  |  |
| Sample Custody Seals:    |  | Yes                                                                 |  | No                                                                        |  | N/A                    |  | Temperature Reading:                                                |  | 21.4 |  |  |  |  |  |  |  |  |  |                                                 |  |                                     |  | Zn Acetate+NaOH: Zn                                               |  |  |  |
| Total Containers:        |  |                                                                     |  |                                                                           |  | Corrected Temperature: |  | 21.2                                                                |  |      |  |  |  |  |  |  |  |  |  |                                                 |  | NaOH+Ascorbic Acid: SAPC            |  |                                                                   |  |  |  |

[illegible]

|                  |                             |               |             |       |       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |     |      |                  |        |        |    |    |   |   |    |
|------------------|-----------------------------|---------------|-------------|-------|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|-----|------|------------------|--------|--------|----|----|---|---|----|
| Total            | 200.7 / 6010                | 200.8 / 6020: | 8RCRA       | 13PPM | Texas | 11 | Al | Sb | As | Ba | Be | B  | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Mo | Ni | K | Se  | Ag   | SiO <sub>2</sub> | Nb     | Sr     | Ti | Sn | U | V | Zn |
| Circle Method(s) | and Metal(s) to be analyzed |               | TC1P / SPLP | 6010: | 8RCRA | Sb | As | Ba | Be | Cd | Cr | Co | Cu | Pb | Mn | Mo | Ni | Se | Ag | Ti | U  |    |    |   | Hg: | 1631 | / 245.1          | / 7470 | / 7471 |    |    |   |   |    |

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco. The affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time    | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|------------------------------|--------------------------|--------------|------------------------------|--------------------------|-----------|
| <i>[Signature]</i>           | <i>[Signature]</i>       | 10/5/02 1522 |                              |                          |           |
|                              |                          |              |                              |                          |           |
|                              |                          |              |                              |                          |           |
|                              |                          |              |                              |                          |           |
|                              |                          |              |                              |                          |           |

Revised Date 08/25/2020 Rev 2020

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3156-1

SDG Number: 03E1558070

Login Number: 3156

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |



## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3156-1

SDG Number: 03E1558070

Login Number: 3156

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 10/07/22 11:00 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kalei Jennings  
Ensolum  
705 W. Wadley  
Suite 210  
Midland Texas 79701

Generated 11/21/2022 2:58:31 PM Revision 1

## JOB DESCRIPTION

PLU 21 BD 125H  
SDG NUMBER 03E1558068

## JOB NUMBER

890-3402-1

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Laboratory Job ID: 890-3402-1  
SDG: 03E1558068

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| *1        | LCS/LCSD RPD exceeds control limits.                     |
| S1+       | Surrogate recovery exceeds control limits, high biased.  |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

**Job ID: 890-3402-1**

**Laboratory: Eurofins Carlsbad**

### Narrative

#### Job Narrative 890-3402-1

#### REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

#### Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

#### Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-3402-1).

#### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

Client Sample ID: SS06

Lab Sample ID: 890-3402-1

Date Collected: 11/07/22 12:05

Matrix: Solid

Date Received: 11/07/22 14:17

Sample Depth: 0.2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00198 | U         | 0.00198 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:00 | 1       |
| Toluene             | <0.00198 | U         | 0.00198 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:00 | 1       |
| Ethylbenzene        | <0.00198 | U         | 0.00198 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:00 | 1       |
| m-Xylene & p-Xylene | <0.00396 | U         | 0.00396 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:00 | 1       |
| o-Xylene            | <0.00198 | U         | 0.00198 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:00 | 1       |
| Xylenes, Total      | <0.00396 | U         | 0.00396 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:00 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 109       |           | 70 - 130 | 11/09/22 13:56 | 11/10/22 13:00 | 1       |
| 1,4-Difluorobenzene (Surr)  | 107       |           | 70 - 130 | 11/09/22 13:56 | 11/10/22 13:00 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00396 | U         | 0.00396 | mg/Kg |   |          | 11/10/22 13:49 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | 69.5   |           | 50.0 | mg/Kg |   |          | 11/11/22 14:06 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1   | *1        | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 11:58 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0  | U         | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 11:58 | 1       |
| Oil Range Organics (Over C28-C36)    | 14.4   |           | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 11:58 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 109       |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 11:58 | 1       |
| o-Terphenyl    | 118       |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 11:58 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 195    |           | 4.97 | mg/Kg |   |          | 11/12/22 03:11 | 1       |

Eurofins Carlsbad

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | BFB1<br>(70-130) | DFBZ1<br>(70-130) |
|--------------------|------------------------|------------------|-------------------|
| 890-3374-A-1-C MS  | Matrix Spike           | 117              | 94                |
| 890-3374-A-1-D MSD | Matrix Spike Duplicate | 115              | 100               |
| 890-3402-1         | SS06                   | 109              | 107               |
| LCS 880-39013/1-A  | Lab Control Sample     | 119              | 99                |
| LCSD 880-39013/2-A | Lab Control Sample Dup | 112              | 96                |
| MB 880-39013/5-A   | Method Blank           | 87               | 96                |
| MB 880-39079/5-A   | Method Blank           | 83               | 100               |

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | 1CO1<br>(70-130) | OTPH1<br>(70-130) |
|--------------------|------------------------|------------------|-------------------|
| 890-3402-1         | SS06                   | 70               | 118               |
| 890-3402-1 MS      | SS06                   | 86               | 79                |
| 890-3402-1 MSD     | SS06                   | 82               | 73                |
| LCS 880-39172/2-A  | Lab Control Sample     | 94               | 97                |
| LCSD 880-39172/3-A | Lab Control Sample Dup | 107              | 109               |
| MB 880-39172/1-A   | Method Blank           | 119              | 134 S1+           |

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39013/5-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87           |              | 70 - 130 | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| 1,4-Difluorobenzene (Surr)  | 96           |              | 70 - 130 | 11/08/22 13:56 | 11/10/22 03:41 | 1       |

Lab Sample ID: LCS 880-39013/1-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.09861    |               | mg/Kg |   | 99   | 70 - 130    |
| Toluene             | 0.100       | 0.1075     |               | mg/Kg |   | 107  | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.1070     |               | mg/Kg |   | 107  | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.1883     |               | mg/Kg |   | 94   | 70 - 130    |
| o-Xylene            | 0.100       | 0.09621    |               | mg/Kg |   | 96   | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 119           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 99            |               | 70 - 130 |

Lab Sample ID: LCSD 880-39013/2-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-------|
| Benzene             | 0.100       | 0.09159     |                | mg/Kg |   | 92   | 70 - 130    | 7   | 35    |
| Toluene             | 0.100       | 0.1006      |                | mg/Kg |   | 101  | 70 - 130    | 7   | 35    |
| Ethylbenzene        | 0.100       | 0.09712     |                | mg/Kg |   | 97   | 70 - 130    | 10  | 35    |
| m-Xylene & p-Xylene | 0.200       | 0.1715      |                | mg/Kg |   | 86   | 70 - 130    | 9   | 35    |
| o-Xylene            | 0.100       | 0.08615     |                | mg/Kg |   | 86   | 70 - 130    | 11  | 35    |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 112            |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 96             |                | 70 - 130 |

Lab Sample ID: 890-3374-A-1-C MS

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39013

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene | <0.00200      | U                | 0.0996      | 0.07004   |              | mg/Kg |   | 70   | 70 - 130    |
| Toluene | <0.00200      | U                | 0.0996      | 0.08341   |              | mg/Kg |   | 84   | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3374-A-1-C MS

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Ethylbenzene        | <0.00200      | U                | 0.0996      | 0.08100   |              | mg/Kg |   | 81   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00401      | U                | 0.199       | 0.1464    |              | mg/Kg |   | 73   | 70 - 130    |
| o-Xylene            | <0.00200      | U                | 0.0996      | 0.07491   |              | mg/Kg |   | 75   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 117          |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 94           |              | 70 - 130 |

Lab Sample ID: 890-3374-A-1-D MSD

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-------|
| Benzene             | <0.00200      | U                | 0.0994      | 0.09453    |               | mg/Kg |   | 95   | 70 - 130    | 30  | 35    |
| Toluene             | <0.00200      | U                | 0.0994      | 0.1030     |               | mg/Kg |   | 104  | 70 - 130    | 21  | 35    |
| Ethylbenzene        | <0.00200      | U                | 0.0994      | 0.09726    |               | mg/Kg |   | 98   | 70 - 130    | 18  | 35    |
| m-Xylene & p-Xylene | <0.00401      | U                | 0.199       | 0.1707     |               | mg/Kg |   | 86   | 70 - 130    | 15  | 35    |
| o-Xylene            | <0.00200      | U                | 0.0994      | 0.08657    |               | mg/Kg |   | 87   | 70 - 130    | 14  | 35    |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 115           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 100           |               | 70 - 130 |

Lab Sample ID: MB 880-39079/5-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39079

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 83           |              | 70 - 130 | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| 1,4-Difluorobenzene (Surr)  | 100          |              | 70 - 130 | 11/09/22 09:54 | 11/09/22 15:45 | 1       |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result    | MB Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0        | U            | 50.0     | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0        | U            | 50.0     | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Surrogate                            | MB %Recovery | MB Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 119          |              | 70 - 130 |       |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| o-Terphenyl                          | 134          | S1+          | 70 - 130 |       |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

Lab Sample ID: LCS 880-39172/2-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added   | LCS Result    | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|---------------|---------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000          | 815.5         |               | mg/Kg |   | 82   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 1000          | 846.7         |               | mg/Kg |   | 85   | 70 - 130    |
| Surrogate                            | LCS %Recovery | LCS Qualifier | Limits        |       |   |      |             |
| 1-Chlorooctane                       | 94            |               | 70 - 130      |       |   |      |             |
| o-Terphenyl                          | 97            |               | 70 - 130      |       |   |      |             |

Lab Sample ID: LCSD 880-39172/3-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added    | LCSD Result    | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000           | 1003           | *1             | mg/Kg |   | 100  | 70 - 130    | 21  | 20        |
| Diesel Range Organics (Over C10-C28) | 1000           | 950.2          |                | mg/Kg |   | 95   | 70 - 130    | 12  | 20        |
| Surrogate                            | LCSD %Recovery | LCSD Qualifier | Limits         |       |   |      |             |     |           |
| 1-Chlorooctane                       | 107            |                | 70 - 130       |       |   |      |             |     |           |
| o-Terphenyl                          | 109            |                | 70 - 130       |       |   |      |             |     |           |

Lab Sample ID: 890-3402-1 MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: SS06

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 997         | 1007      |              | mg/Kg |   | 95   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 997         | 861.7     |              | mg/Kg |   | 84   | 70 - 130    |
| Surrogate                            | MS %Recovery  | MS Qualifier     | Limits      |           |              |       |   |      |             |
| 1-Chlorooctane                       | 86            |                  | 70 - 130    |           |              |       |   |      |             |
| o-Terphenyl                          | 79            |                  | 70 - 130    |           |              |       |   |      |             |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-1 MSD

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: SS06

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 999         | 978.6      |               | mg/Kg |   | 92   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 999         | 796.8      |               | mg/Kg |   | 77   | 70 - 130    | 8   | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 82            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 73            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 11/12/22 02:56 | 1       |

Lab Sample ID: LCS 880-39126/2-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 266.1      |               | mg/Kg |   | 106  | 90 - 110    |

Lab Sample ID: LCSD 880-39126/3-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 258.9       |                | mg/Kg |   | 104  | 90 - 110    | 3   | 20        |

Lab Sample ID: 890-3402-1 MS

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: SS06

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 195           |                  | 249         | 466.5     |              | mg/Kg |   | 109  | 90 - 110    |

Lab Sample ID: 890-3402-1 MSD

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: SS06

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 195           |                  | 249         | 456.2      |               | mg/Kg |   | 105  | 90 - 110    | 2   | 20        |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## GC VOA

## Prep Batch: 39013

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3402-1         | SS06                   | Total/NA  | Solid  | 5035   |            |
| MB 880-39013/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-39013/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-39013/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3374-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3374-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 39079

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-39079/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 39086

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3402-1         | SS06                   | Total/NA  | Solid  | 8021B  | 39013      |
| MB 880-39013/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39013      |
| MB 880-39079/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39079      |
| LCS 880-39013/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 39013      |
| LCSD 880-39013/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 39013      |
| 890-3374-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 39013      |
| 890-3374-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 39013      |

## Analysis Batch: 39248

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3402-1    | SS06             | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 39172

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3402-1         | SS06                   | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-1 MS      | SS06                   | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-1 MSD     | SS06                   | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 39269

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3402-1         | SS06                   | Total/NA  | Solid  | 8015B NM | 39172      |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 39172      |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 39172      |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-1 MS      | SS06                   | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-1 MSD     | SS06                   | Total/NA  | Solid  | 8015B NM | 39172      |

## Analysis Batch: 39337

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3402-1    | SS06             | Total/NA  | Solid  | 8015 NM |            |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

## HPLC/IC

## Leach Batch: 39126

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3402-1         | SS06                   | Soluble   | Solid  | DI Leach |            |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3402-1 MS      | SS06                   | Soluble   | Solid  | DI Leach |            |
| 890-3402-1 MSD     | SS06                   | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 39335

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3402-1         | SS06                   | Soluble   | Solid  | 300.0  | 39126      |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | 300.0  | 39126      |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | 300.0  | 39126      |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-1 MS      | SS06                   | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-1 MSD     | SS06                   | Soluble   | Solid  | 300.0  | 39126      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

Client Sample ID: SS06

Lab Sample ID: 890-3402-1

Date Collected: 11/07/22 12:05

Matrix: Solid

Date Received: 11/07/22 14:17

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.05 g         | 5 mL         | 39013        | 11/09/22 13:56       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 39086        | 11/10/22 13:00       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 39248        | 11/10/22 13:49       | SM      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 39337        | 11/11/22 14:06       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.01 g        | 10 mL        | 39172        | 11/10/22 08:48       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 39269        | 11/11/22 11:58       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.03 g         | 50 mL        | 39126        | 11/09/22 15:04       | KS      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 1          | 0 mL           | 1.0 mL       | 39335        | 11/12/22 03:11       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------|
| Texas                                                                                                                                                                                                 | NELAP       | T104704400-22-24      | 06-30-23        |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                 |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte         |
| 8015 NM                                                                                                                                                                                               |             | Solid                 | Total TPH       |
| Total BTEX                                                                                                                                                                                            |             | Solid                 | Total BTEX      |

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

### Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1  
SDG: 03E1558068

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3402-1    | SS06             | Solid  | 11/07/22 12:05 | 11/07/22 14:17 | 0.2'  |

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## Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

**Work Order No:**

www.xenco.com Page 1 of 1

|                  |                                     |                         |                                           |
|------------------|-------------------------------------|-------------------------|-------------------------------------------|
| Project Manager: | Katei Jennings                      | Bill to: (if different) | Garret Green                              |
| Company Name:    | Ensolum, LLC                        | Company Name:           | XTO Energy, Inc.                          |
| Address:         | 601 N. Marienfeld Street, Suite 400 | Address:                | 3104 E. Greene Street                     |
| City, State ZIP: | Midland, TX 79701                   | City, State ZIP:        | Carlsbad, NM 88220                        |
| Phone:           | 817-683-2503                        | Email:                  | kjennings@ensolum.com, bbejll@ensolum.com |

| Work Order Comments                                                                                                                                                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>       |  |
| State of Project: NM                                                                                                                                                             |  |
| Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> |  |
| Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____                                                                                           |  |

[illegible][illegible]

| Total 200.7 / 6010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                   | 200.8 / 6020:                                                          |                              | 8RCRA 13PPM Texas 11           |           | Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Ti Sn U V Zn |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------|--------------------------------|-----------|-----------------------------------------------------------------------------------------------|--|
| Circle Method(s) and Metal(s) to be analyzed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                   | TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U |                              | Hg: 1631 / 245.1 / 7470 / 7471 |           |                                                                                               |  |
| Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. |                                                                                   |                                                                        |                              |                                |           |                                                                                               |  |
| Relinquished by: (Signature)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Received by: (Signature)                                                          | Date/Time                                                              | Relinquished by: (Signature) | Received by: (Signature)       | Date/Time |                                                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | 11-7-2014/7                                                            |                              |                                |           |                                                                                               |  |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                   |                                                                        |                              |                                | 4         |                                                                                               |  |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                   |                                                                        |                              |                                |           |                                                                                               |  |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                   |                                                                        |                              |                                | 6         |                                                                                               |  |

Revised Date: 08/25/2020 Rev: 2020.

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3402-1

SDG Number: 03E1558068

**Login Number: 3402****List Number: 1****Creator: Stutzman, Amanda****List Source: Eurofins Carlsbad**

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3402-1

SDG Number: 03E1558068

Login Number: 3402

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |

**Eurofins Carlsbad****Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

**Authorization**

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

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11/21/2022 2:58:31 PM  
Revision 1



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kalei Jennings  
Ensolum  
705 W. Wadley  
Suite 210  
Midland Texas 79701

Generated 11/21/2022 2:59:29 PM Revision 1

## JOB DESCRIPTION

PLU 21 BD 125H  
SDG NUMBER 03E1558068

## JOB NUMBER

890-3403-1

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Laboratory Job ID: 890-3403-1  
SDG: 03E1558068

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| *1        | LCS/LCSD RPD exceeds control limits.                     |
| S1+       | Surrogate recovery exceeds control limits, high biased.  |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |



## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

**Job ID: 890-3403-1**

**Laboratory: Eurofins Carlsbad**

### Narrative

#### Job Narrative 890-3403-1

### REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

### Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

### Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-3403-1).

### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

Client Sample ID: SS05

Lab Sample ID: 890-3403-1

Date Collected: 11/07/22 12:00

Matrix: Solid

Date Received: 11/07/22 14:17

Sample Depth: 0.2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200 | U         | 0.00200 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:21 | 1       |
| Toluene             | <0.00200 | U         | 0.00200 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:21 | 1       |
| Ethylbenzene        | <0.00200 | U         | 0.00200 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:21 | 1       |
| m-Xylene & p-Xylene | <0.00401 | U         | 0.00401 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:21 | 1       |
| o-Xylene            | <0.00200 | U         | 0.00200 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:21 | 1       |
| Xylenes, Total      | <0.00401 | U         | 0.00401 | mg/Kg |   | 11/09/22 13:56 | 11/10/22 13:21 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 105       |           | 70 - 130 | 11/09/22 13:56 | 11/10/22 13:21 | 1       |
| 1,4-Difluorobenzene (Surr)  | 96        |           | 70 - 130 | 11/09/22 13:56 | 11/10/22 13:21 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00401 | U         | 0.00401 | mg/Kg |   |          | 11/10/22 14:19 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.8  | U         | 49.8 | mg/Kg |   |          | 11/14/22 09:30 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.8  | U *1      | 49.8 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:07 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.8  | U         | 49.8 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:07 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.8  | U         | 49.8 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:07 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 96        |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 15:07 | 1       |
| o-Terphenyl    | 95        |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 15:07 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 301    |           | 4.96 | mg/Kg |   |          | 11/12/22 03:25 | 1       |

Eurofins Carlsbad

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | BFB1<br>(70-130) | DFBZ1<br>(70-130) |
|--------------------|------------------------|------------------|-------------------|
| 890-3374-A-1-C MS  | Matrix Spike           | 117              | 94                |
| 890-3374-A-1-D MSD | Matrix Spike Duplicate | 115              | 100               |
| 890-3403-1         | SS05                   | 105              | 96                |
| LCS 880-39013/1-A  | Lab Control Sample     | 119              | 99                |
| LCSD 880-39013/2-A | Lab Control Sample Dup | 112              | 96                |
| MB 880-39013/5-A   | Method Blank           | 87               | 96                |
| MB 880-39079/5-A   | Method Blank           | 83               | 100               |

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | 1CO1<br>(70-130) | OTPH1<br>(70-130) |
|--------------------|------------------------|------------------|-------------------|
| 890-3402-A-1-G MS  | Matrix Spike           | 86               | 79                |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | 82               | 73                |
| 890-3403-1         | SS05                   | 96               | 95                |
| LCS 880-39172/2-A  | Lab Control Sample     | 94               | 97                |
| LCSD 880-39172/3-A | Lab Control Sample Dup | 107              | 109               |
| MB 880-39172/1-A   | Method Blank           | 119              | 134 S1+           |

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39013/5-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 13:56 | 11/10/22 03:41 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87           |              | 70 - 130 | 11/08/22 13:56 | 11/10/22 03:41 | 1       |
| 1,4-Difluorobenzene (Surr)  | 96           |              | 70 - 130 | 11/08/22 13:56 | 11/10/22 03:41 | 1       |

Lab Sample ID: LCS 880-39013/1-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.09861    |               | mg/Kg |   | 99   | 70 - 130    |
| Toluene             | 0.100       | 0.1075     |               | mg/Kg |   | 107  | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.1070     |               | mg/Kg |   | 107  | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.1883     |               | mg/Kg |   | 94   | 70 - 130    |
| o-Xylene            | 0.100       | 0.09621    |               | mg/Kg |   | 96   | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 119           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 99            |               | 70 - 130 |

Lab Sample ID: LCSD 880-39013/2-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-------|
| Benzene             | 0.100       | 0.09159     |                | mg/Kg |   | 92   | 70 - 130    | 7   | 35    |
| Toluene             | 0.100       | 0.1006      |                | mg/Kg |   | 101  | 70 - 130    | 7   | 35    |
| Ethylbenzene        | 0.100       | 0.09712     |                | mg/Kg |   | 97   | 70 - 130    | 10  | 35    |
| m-Xylene & p-Xylene | 0.200       | 0.1715      |                | mg/Kg |   | 86   | 70 - 130    | 9   | 35    |
| o-Xylene            | 0.100       | 0.08615     |                | mg/Kg |   | 86   | 70 - 130    | 11  | 35    |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 112            |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 96             |                | 70 - 130 |

Lab Sample ID: 890-3374-A-1-C MS

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39013

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene | <0.00200      | U                | 0.0996      | 0.07004   |              | mg/Kg |   | 70   | 70 - 130    |
| Toluene | <0.00200      | U                | 0.0996      | 0.08341   |              | mg/Kg |   | 84   | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3374-A-1-C MS

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Ethylbenzene        | <0.00200      | U                | 0.0996      | 0.08100   |              | mg/Kg |   | 81   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00401      | U                | 0.199       | 0.1464    |              | mg/Kg |   | 73   | 70 - 130    |
| o-Xylene            | <0.00200      | U                | 0.0996      | 0.07491   |              | mg/Kg |   | 75   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 117          |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 94           |              | 70 - 130 |

Lab Sample ID: 890-3374-A-1-D MSD

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39013

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-------|
| Benzene             | <0.00200      | U                | 0.0994      | 0.09453    |               | mg/Kg |   | 95   | 70 - 130    | 30  | 35    |
| Toluene             | <0.00200      | U                | 0.0994      | 0.1030     |               | mg/Kg |   | 104  | 70 - 130    | 21  | 35    |
| Ethylbenzene        | <0.00200      | U                | 0.0994      | 0.09726    |               | mg/Kg |   | 98   | 70 - 130    | 18  | 35    |
| m-Xylene & p-Xylene | <0.00401      | U                | 0.199       | 0.1707     |               | mg/Kg |   | 86   | 70 - 130    | 15  | 35    |
| o-Xylene            | <0.00200      | U                | 0.0994      | 0.08657    |               | mg/Kg |   | 87   | 70 - 130    | 14  | 35    |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 115           |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 100           |               | 70 - 130 |

Lab Sample ID: MB 880-39079/5-A

Matrix: Solid

Analysis Batch: 39086

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39079

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 09:54 | 11/09/22 15:45 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 83           |              | 70 - 130 | 11/09/22 09:54 | 11/09/22 15:45 | 1       |
| 1,4-Difluorobenzene (Surr)  | 100          |              | 70 - 130 | 11/09/22 09:54 | 11/09/22 15:45 | 1       |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result    | MB Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0        | U            | 50.0     | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0        | U            | 50.0     | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Surrogate                            | MB %Recovery | MB Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 119          |              | 70 - 130 |       |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| o-Terphenyl                          | 134          | S1+          | 70 - 130 |       |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

Lab Sample ID: LCS 880-39172/2-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added   | LCS Result    | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|---------------|---------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000          | 815.5         |               | mg/Kg |   | 82   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 1000          | 846.7         |               | mg/Kg |   | 85   | 70 - 130    |
| Surrogate                            | LCS %Recovery | LCS Qualifier | Limits        |       |   |      |             |
| 1-Chlorooctane                       | 94            |               | 70 - 130      |       |   |      |             |
| o-Terphenyl                          | 97            |               | 70 - 130      |       |   |      |             |

Lab Sample ID: LCSD 880-39172/3-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added    | LCSD Result    | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000           | 1003           | *1             | mg/Kg |   | 100  | 70 - 130    | 21  | 20        |
| Diesel Range Organics (Over C10-C28) | 1000           | 950.2          |                | mg/Kg |   | 95   | 70 - 130    | 12  | 20        |
| Surrogate                            | LCSD %Recovery | LCSD Qualifier | Limits         |       |   |      |             |     |           |
| 1-Chlorooctane                       | 107            |                | 70 - 130       |       |   |      |             |     |           |
| o-Terphenyl                          | 109            |                | 70 - 130       |       |   |      |             |     |           |

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 997         | 1007      |              | mg/Kg |   | 95   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 997         | 861.7     |              | mg/Kg |   | 84   | 70 - 130    |
| Surrogate                            | MS %Recovery  | MS Qualifier     | Limits      |           |              |       |   |      |             |
| 1-Chlorooctane                       | 86            |                  | 70 - 130    |           |              |       |   |      |             |
| o-Terphenyl                          | 79            |                  | 70 - 130    |           |              |       |   |      |             |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-A-1-H MSD

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 999         | 978.6      |               | mg/Kg |   | 92   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 999         | 796.8      |               | mg/Kg |   | 77   | 70 - 130    | 8   | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 82            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 73            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 11/12/22 02:56 | 1       |

Lab Sample ID: LCS 880-39126/2-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 266.1      |               | mg/Kg |   | 106  | 90 - 110    |

Lab Sample ID: LCSD 880-39126/3-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 258.9       |                | mg/Kg |   | 104  | 90 - 110    | 3   | 20        |

Lab Sample ID: 890-3402-A-1-D MS

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 195           |                  | 249         | 466.5     |              | mg/Kg |   | 109  | 90 - 110    |

Lab Sample ID: 890-3402-A-1-E MSD

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 195           |                  | 249         | 456.2      |               | mg/Kg |   | 105  | 90 - 110    | 2   | 20        |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## GC VOA

## Prep Batch: 39013

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3403-1         | SS05                   | Total/NA  | Solid  | 5035   |            |
| MB 880-39013/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-39013/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-39013/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3374-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3374-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 39079

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-39079/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 39086

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3403-1         | SS05                   | Total/NA  | Solid  | 8021B  | 39013      |
| MB 880-39013/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39013      |
| MB 880-39079/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39079      |
| LCS 880-39013/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 39013      |
| LCSD 880-39013/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 39013      |
| 890-3374-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 39013      |
| 890-3374-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 39013      |

## Analysis Batch: 39252

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3403-1    | SS05             | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 39172

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3403-1         | SS05                   | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-A-1-G MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 39269

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3403-1         | SS05                   | Total/NA  | Solid  | 8015B NM | 39172      |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 39172      |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 39172      |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-A-1-G MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 39172      |

## Analysis Batch: 39399

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3403-1    | SS05             | Total/NA  | Solid  | 8015 NM |            |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

## HPLC/IC

## Leach Batch: 39126

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3403-1         | SS05                   | Soluble   | Solid  | DI Leach |            |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3402-A-1-D MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3402-A-1-E MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 39335

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3403-1         | SS05                   | Soluble   | Solid  | 300.0  | 39126      |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | 300.0  | 39126      |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | 300.0  | 39126      |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-A-1-D MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-A-1-E MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 39126      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

Client Sample ID: SS05

Lab Sample ID: 890-3403-1

Date Collected: 11/07/22 12:00

Matrix: Solid

Date Received: 11/07/22 14:17

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 4.99 g         | 5 mL         | 39013        | 11/09/22 13:56       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 39086        | 11/10/22 13:21       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 39252        | 11/10/22 14:19       | SM      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 39399        | 11/14/22 09:30       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.04 g        | 10 mL        | 39172        | 11/10/22 08:48       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 39269        | 11/11/22 15:07       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5.04 g         | 50 mL        | 39126        | 11/09/22 15:04       | KS      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 1          | 0 mL           | 1.0 mL       | 39335        | 11/12/22 03:25       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------|
| Texas                                                                                                                                                                                                 | NELAP       | T104704400-22-24      | 06-30-23        |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                 |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte         |
| 8015 NM                                                                                                                                                                                               |             | Solid                 | Total TPH       |
| Total BTEX                                                                                                                                                                                            |             | Solid                 | Total BTEX      |

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

### Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1  
SDG: 03E1558068

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3403-1    | SS05             | Solid  | 11/07/22 12:00 | 11/07/22 14:17 | 0.2'  |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



**Environment Testing**  
**Xenco**

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

## Chain of Custody

**Work Order No.:**

www.xenco.com Page 1 of 1

|                  |                                     |                         |                                           |
|------------------|-------------------------------------|-------------------------|-------------------------------------------|
| Project Manager: | Katei Jennings                      | Bill to: (if different) | Garret Green                              |
| Company Name:    | Ensolum, LLC                        | Company Name:           | XTO Energy, Inc.                          |
| Address:         | 601 N. Marienfeld Street, Suite 400 | Address:                | 3104 E. Greene Street                     |
| City, State ZIP: | Midland, TX 79701                   | City, State ZIP:        | Carlsbad, NM 88220                        |
| Phone:           | 817-683-2503                        | Email:                  | kjennings@ensolum.com, bbejll@ensolum.com |

| Work Order Comments                                                                                                                                                             |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>      |  |
| State of Project: NM                                                                                                                                                            |  |
| Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> |  |
| Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:                                                                                                |  |

[illegible][illegible]

|       |              |               |
|-------|--------------|---------------|
| Total | 200.7 / 6010 | 200.8 / 6020: |
|-------|--------------|---------------|

**Circle Method(s) and Metal(s) to be analyzed**

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 1411

**Notice:** Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$5.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

| Relinquished by: (Signature)                                                      | Received by: (Signature)                                                           | Date/Time  | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|------------------------------|--------------------------|-----------|
|  |  | 11-17-2017 |                              |                          |           |
|                                                                                   |                                                                                    |            |                              |                          |           |
|                                                                                   |                                                                                    |            |                              |                          |           |
|                                                                                   |                                                                                    |            |                              |                          |           |
|                                                                                   |                                                                                    |            |                              |                          |           |
|                                                                                   |                                                                                    |            |                              |                          |           |

Revised Date: 08/25/2020 Rev: 2020

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3403-1

SDG Number: 03E1558068

Login Number: 3403

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3403-1

SDG Number: 03E1558068

**Login Number: 3403****List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 11/09/22 10:47 AM**

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |



**Eurofins Carlsbad****Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

**Authorization**

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

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Revision 1



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kalei Jennings  
Ensolum  
705 W. Wadley  
Suite 210  
Midland Texas 79701

Generated 11/21/2022 3:00:35 PM Revision 1

## JOB DESCRIPTION

PLU 21 BD 125H  
SDG NUMBER 03E1558068

## JOB NUMBER

890-3404-1

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Laboratory Job ID: 890-3404-1  
SDG: 03E1558068

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| F1        | MS and/or MSD recovery exceeds control limits.           |
| S1-       | Surrogate recovery exceeds control limits, low biased.   |
| S1+       | Surrogate recovery exceeds control limits, high biased.  |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| *1        | LCS/LCSD RPD exceeds control limits.                     |
| S1+       | Surrogate recovery exceeds control limits, high biased.  |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

**Job ID: 890-3404-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-3404-1**REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

**Receipt**

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

**Receipt Exceptions**

The following sample was received and analyzed from an unpreserved bulk soil jar: SS04 (890-3404-1).

**GC VOA**

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-38960/1-A) and (LCSD 880-38960/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-21141-A-21-E MS) and (880-21141-A-21-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-38960/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21141-A-21-G). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS04 (890-3404-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39022 and analytical batch 880-39343 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39138 and analytical batch 880-39343 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**GC Semi VOA**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

Job ID: 890-3404-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

Client Sample ID: SS04

Lab Sample ID: 890-3404-1

Date Collected: 11/07/22 11:55

Matrix: Solid

Date Received: 11/07/22 14:17

Sample Depth: 0.2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 22:29 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 22:29 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 22:29 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 22:29 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 22:29 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 22:29 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 238       | S1+       | 70 - 130 | 11/08/22 09:56 | 11/10/22 22:29 | 1       |
| 1,4-Difluorobenzene (Surr)  | 69        | S1-       | 70 - 130 | 11/08/22 09:56 | 11/10/22 22:29 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 11/11/22 09:54 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <49.9  | U         | 49.9 | mg/Kg |   |          | 11/14/22 09:30 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <49.9  | U *1      | 49.9 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:28 | 1       |
| Diesel Range Organics (Over C10-C28) | <49.9  | U         | 49.9 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:28 | 1       |
| Oil Range Organics (Over C28-C36)    | <49.9  | U         | 49.9 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:28 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 91        |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 15:28 | 1       |
| o-Terphenyl    | 94        |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 15:28 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 14.0   |           | 5.00 | mg/Kg |   |          | 11/12/22 03:30 | 1       |

Eurofins Carlsbad

## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID        | Client Sample ID       | BFB1<br>(70-130) | DFBZ1<br>(70-130) |
|----------------------|------------------------|------------------|-------------------|
| 880-21141-A-21-E MS  | Matrix Spike           | 227 S1+          | 87                |
| 880-21141-A-21-F MSD | Matrix Spike Duplicate | 216 S1+          | 92                |
| 890-3392-A-1-C MS    | Matrix Spike           | 95               | 111               |
| 890-3392-A-1-D MSD   | Matrix Spike Duplicate | 89               | 115               |
| 890-3404-1           | SS04                   | 238 S1+          | 69 S1-            |
| LCS 880-38960/1-A    | Lab Control Sample     | 171 S1+          | 72                |
| LCS 880-39138/1-A    | Lab Control Sample     | 93               | 112               |
| LCSD 880-38960/2-A   | Lab Control Sample Dup | 156 S1+          | 70                |
| LCSD 880-39138/2-A   | Lab Control Sample Dup | 108              | 112               |
| MB 880-38960/5-A     | Method Blank           | 140 S1+          | 74                |
| MB 880-39022/5-A     | Method Blank           | 60 S1-           | 99                |
| MB 880-39138/5-A     | Method Blank           | 59 S1-           | 99                |

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID       | 1CO1<br>(70-130) | OTPH1<br>(70-130) |
|--------------------|------------------------|------------------|-------------------|
| 890-3402-A-1-G MS  | Matrix Spike           | 86               | 79                |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | 82               | 73                |
| 890-3404-1         | SS04                   | 91               | 94                |
| LCS 880-39172/2-A  | Lab Control Sample     | 94               | 97                |
| LCSD 880-39172/3-A | Lab Control Sample Dup | 107              | 109               |
| MB 880-39172/1-A   | Method Blank           | 119              | 134 S1+           |

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad



## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38960/5-A

Matrix: Solid

Analysis Batch: 39229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38960

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 15:54 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 15:54 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 15:54 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 15:54 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 15:54 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 09:56 | 11/10/22 15:54 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 140          | S1+          | 70 - 130 | 11/08/22 09:56 | 11/10/22 15:54 | 1       |
| 1,4-Difluorobenzene (Surr)  | 74           |              | 70 - 130 | 11/08/22 09:56 | 11/10/22 15:54 | 1       |

Lab Sample ID: LCS 880-38960/1-A

Matrix: Solid

Analysis Batch: 39229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38960

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.1206     |               | mg/Kg |   | 121  | 70 - 130    |
| Toluene             | 0.100       | 0.1189     |               | mg/Kg |   | 119  | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.1271     |               | mg/Kg |   | 127  | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.2552     |               | mg/Kg |   | 128  | 70 - 130    |
| o-Xylene            | 0.100       | 0.1256     |               | mg/Kg |   | 126  | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 171           | S1+           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 72            |               | 70 - 130 |

Lab Sample ID: LCSD 880-38960/2-A

Matrix: Solid

Analysis Batch: 39229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38960

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene             | 0.100       | 0.1171      |                | mg/Kg |   | 117  | 70 - 130    | 3   | 35        |
| Toluene             | 0.100       | 0.1087      |                | mg/Kg |   | 109  | 70 - 130    | 9   | 35        |
| Ethylbenzene        | 0.100       | 0.1197      |                | mg/Kg |   | 120  | 70 - 130    | 6   | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.2402      |                | mg/Kg |   | 120  | 70 - 130    | 6   | 35        |
| o-Xylene            | 0.100       | 0.1216      |                | mg/Kg |   | 122  | 70 - 130    | 3   | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 156            | S1+            | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 70             |                | 70 - 130 |

Lab Sample ID: 880-21141-A-21-E MS

Matrix: Solid

Analysis Batch: 39229

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38960

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene | <0.00201      | U F1             | 0.100       | 0.1425    | F1           | mg/Kg |   | 142  | 70 - 130    |
| Toluene | <0.00201      | U                | 0.100       | 0.1263    |              | mg/Kg |   | 126  | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-21141-A-21-E MS

Matrix: Solid

Analysis Batch: 39229

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38960

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Ethylbenzene        | <0.00201      | U F1             | 0.100       | 0.1354    | F1           | mg/Kg |   | 135  | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U F1             | 0.200       | 0.2734    | F1           | mg/Kg |   | 136  | 70 - 130    |
| o-Xylene            | <0.00201      | U F1             | 0.100       | 0.1399    | F1           | mg/Kg |   | 140  | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 227          | S1+          | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 87           |              | 70 - 130 |

Lab Sample ID: 880-21141-A-21-F MSD

Matrix: Solid

Analysis Batch: 39229

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38960

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-------|
| Benzene             | <0.00201      | U F1             | 0.0990      | 0.1280     |               | mg/Kg |   | 129  | 70 - 130    | 11  | 35    |
| Toluene             | <0.00201      | U                | 0.0990      | 0.1220     |               | mg/Kg |   | 123  | 70 - 130    | 3   | 35    |
| Ethylbenzene        | <0.00201      | U F1             | 0.0990      | 0.1185     |               | mg/Kg |   | 120  | 70 - 130    | 13  | 35    |
| m-Xylene & p-Xylene | <0.00402      | U F1             | 0.198       | 0.2403     |               | mg/Kg |   | 121  | 70 - 130    | 13  | 35    |
| o-Xylene            | <0.00201      | U F1             | 0.0990      | 0.1268     |               | mg/Kg |   | 128  | 70 - 130    | 10  | 35    |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 216           | S1+           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 92            |               | 70 - 130 |

Lab Sample ID: MB 880-39022/5-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39022

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 60           | S1-          | 70 - 130 | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| 1,4-Difluorobenzene (Surr)  | 99           |              | 70 - 130 | 11/08/22 15:10 | 11/11/22 18:42 | 1       |

Lab Sample ID: MB 880-39138/5-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 880-39138/5-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39138

| Analyte                     | MB Result    | MB Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| o-Xylene                    | <0.00200     | U            | 0.00200  | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Xylenes, Total              | <0.00400     | U            | 0.00400  | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Surrogate                   | MB %Recovery | MB Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 59           | S1-          | 70 - 130 |       |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| 1,4-Difluorobenzene (Surr)  | 99           |              | 70 - 130 |       |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |

Lab Sample ID: LCS 880-39138/1-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39138

| Analyte                     | Spike Added   | LCS Result    | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|-----------------------------|---------------|---------------|---------------|-------|---|------|-------------|
| Benzene                     | 0.100         | 0.09491       |               | mg/Kg |   | 95   | 70 - 130    |
| Toluene                     | 0.100         | 0.09455       |               | mg/Kg |   | 95   | 70 - 130    |
| Ethylbenzene                | 0.100         | 0.08730       |               | mg/Kg |   | 87   | 70 - 130    |
| m-Xylene & p-Xylene         | 0.200         | 0.1927        |               | mg/Kg |   | 96   | 70 - 130    |
| o-Xylene                    | 0.100         | 0.09563       |               | mg/Kg |   | 96   | 70 - 130    |
| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits        |       |   |      |             |
| 4-Bromofluorobenzene (Surr) | 93            |               | 70 - 130      |       |   |      |             |
| 1,4-Difluorobenzene (Surr)  | 112           |               | 70 - 130      |       |   |      |             |

Lab Sample ID: LCSD 880-39138/2-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39138

| Analyte                     | Spike Added    | LCSD Result    | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | Limit |
|-----------------------------|----------------|----------------|----------------|-------|---|------|-------------|-----|-------|
| Benzene                     | 0.100          | 0.08952        |                | mg/Kg |   | 90   | 70 - 130    | 6   | 35    |
| Toluene                     | 0.100          | 0.09075        |                | mg/Kg |   | 91   | 70 - 130    | 4   | 35    |
| Ethylbenzene                | 0.100          | 0.08974        |                | mg/Kg |   | 90   | 70 - 130    | 3   | 35    |
| m-Xylene & p-Xylene         | 0.200          | 0.2057         |                | mg/Kg |   | 103  | 70 - 130    | 7   | 35    |
| o-Xylene                    | 0.100          | 0.1104         |                | mg/Kg |   | 110  | 70 - 130    | 14  | 35    |
| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits         |       |   |      |             |     |       |
| 4-Bromofluorobenzene (Surr) | 108            |                | 70 - 130       |       |   |      |             |     |       |
| 1,4-Difluorobenzene (Surr)  | 112            |                | 70 - 130       |       |   |      |             |     |       |

Lab Sample ID: 890-3392-A-1-C MS

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene             | <0.00201      | U                | 0.100       | 0.08927   |              | mg/Kg |   | 89   | 70 - 130    |
| Toluene             | <0.00201      | U                | 0.100       | 0.08382   |              | mg/Kg |   | 83   | 70 - 130    |
| Ethylbenzene        | <0.00201      | U                | 0.100       | 0.07488   |              | mg/Kg |   | 75   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U                | 0.201       | 0.1635    |              | mg/Kg |   | 81   | 70 - 130    |
| o-Xylene            | <0.00201      | U                | 0.100       | 0.08493   |              | mg/Kg |   | 85   | 70 - 130    |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-3392-A-1-C MS

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39138

|                             | MS        | MS        |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 95        |           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 111       |           | 70 - 130 |

Lab Sample ID: 890-3392-A-1-D MSD

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00201      | U                | 0.0990      | 0.07916    |               | mg/Kg |   | 80   | 70 - 130    | 12  | 35        |
| Toluene             | <0.00201      | U                | 0.0990      | 0.07843    |               | mg/Kg |   | 79   | 70 - 130    | 7   | 35        |
| Ethylbenzene        | <0.00201      | U                | 0.0990      | 0.07188    |               | mg/Kg |   | 73   | 70 - 130    | 4   | 35        |
| m-Xylene & p-Xylene | <0.00402      | U                | 0.198       | 0.1570     |               | mg/Kg |   | 79   | 70 - 130    | 4   | 35        |
| o-Xylene            | <0.00201      | U                | 0.0990      | 0.08045    |               | mg/Kg |   | 81   | 70 - 130    | 5   | 35        |

|                             | MSD       | MSD       |          |
|-----------------------------|-----------|-----------|----------|
| Surrogate                   | %Recovery | Qualifier | Limits   |
| 4-Bromofluorobenzene (Surr) | 89        |           | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 115       |           | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0     | U            | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0     | U            | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

|                | MB        | MB        |          |                |                |         |  |  |
|----------------|-----------|-----------|----------|----------------|----------------|---------|--|--|
| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |  |  |
| 1-Chlorooctane | 119       |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 09:30 | 1       |  |  |
| o-Terphenyl    | 134       | S1+       | 70 - 130 | 11/10/22 08:48 | 11/11/22 09:30 | 1       |  |  |

Lab Sample ID: LCS 880-39172/2-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |  |
|--------------------------------------|-------------|------------|---------------|-------|---|------|-------------|--|
| Gasoline Range Organics (GRO)-C6-C10 | 1000        | 815.5      |               | mg/Kg |   | 82   | 70 - 130    |  |
| Diesel Range Organics (Over C10-C28) | 1000        | 846.7      |               | mg/Kg |   | 85   | 70 - 130    |  |

|                | LCS       | LCS       |          |
|----------------|-----------|-----------|----------|
| Surrogate      | %Recovery | Qualifier | Limits   |
| 1-Chlorooctane | 94        |           | 70 - 130 |
| o-Terphenyl    | 97        |           | 70 - 130 |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-39172/3-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added    | LCSD Result    | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000           | 1003           | *1             | mg/Kg |   | 100  | 70 - 130    | 21  | 20        |
| Diesel Range Organics (Over C10-C28) | 1000           | 950.2          |                | mg/Kg |   | 95   | 70 - 130    | 12  | 20        |
| Surrogate                            | LCSD %Recovery | LCSD Qualifier | Limits         |       |   |      |             |     |           |
| 1-Chlorooctane                       | 107            |                | 70 - 130       |       |   |      |             |     |           |
| o-Terphenyl                          | 109            |                | 70 - 130       |       |   |      |             |     |           |

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 997         | 1007      |              | mg/Kg |   | 95   | 70 - 130    |     |           |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 997         | 861.7     |              | mg/Kg |   | 84   | 70 - 130    |     |           |
| Surrogate                            | MS %Recovery  | MS Qualifier     | Limits      |           |              |       |   |      |             |     |           |
| 1-Chlorooctane                       | 86            |                  | 70 - 130    |           |              |       |   |      |             |     |           |
| o-Terphenyl                          | 79            |                  | 70 - 130    |           |              |       |   |      |             |     |           |

Lab Sample ID: 890-3402-A-1-H MSD

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 999         | 978.6      |               | mg/Kg |   | 92   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 999         | 796.8      |               | mg/Kg |   | 77   | 70 - 130    | 8   | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 82            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 73            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 11/12/22 02:56 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-39126/2-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 266.1      |               | mg/Kg |   | 106  | 90 - 110    |

Lab Sample ID: LCSD 880-39126/3-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 258.9       |                | mg/Kg |   | 104  | 90 - 110    | 3   | 20        |

Lab Sample ID: 890-3402-A-1-D MS

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 195           |                  | 249         | 466.5     |              | mg/Kg |   | 109  | 90 - 110    |

Lab Sample ID: 890-3402-A-1-E MSD

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 195           |                  | 249         | 456.2      |               | mg/Kg |   | 105  | 90 - 110    | 2   | 20        |

## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## GC VOA

## Prep Batch: 38960

| Lab Sample ID        | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 890-3404-1           | SS04                   | Total/NA  | Solid  | 5035   |            |
| MB 880-38960/5-A     | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-38960/1-A    | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-38960/2-A   | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 880-21141-A-21-E MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 880-21141-A-21-F MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 39022

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-39022/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 39138

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| MB 880-39138/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-39138/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-39138/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3392-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3392-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 39229

| Lab Sample ID        | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|----------------------|------------------------|-----------|--------|--------|------------|
| 890-3404-1           | SS04                   | Total/NA  | Solid  | 8021B  | 38960      |
| MB 880-38960/5-A     | Method Blank           | Total/NA  | Solid  | 8021B  | 38960      |
| LCS 880-38960/1-A    | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 38960      |
| LCSD 880-38960/2-A   | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 38960      |
| 880-21141-A-21-E MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 38960      |
| 880-21141-A-21-F MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 38960      |

## Analysis Batch: 39309

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3404-1    | SS04             | Total/NA  | Solid  | Total BTEX |            |

## Analysis Batch: 39343

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| MB 880-39022/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39022      |
| MB 880-39138/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39138      |
| LCS 880-39138/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 39138      |
| LCSD 880-39138/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 39138      |
| 890-3392-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 39138      |
| 890-3392-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 39138      |

## GC Semi VOA

## Prep Batch: 39172

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3404-1         | SS04                   | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-A-1-G MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

## GC Semi VOA

## Analysis Batch: 39269

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3404-1         | SS04                   | Total/NA  | Solid  | 8015B NM | 39172      |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 39172      |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 39172      |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-A-1-G MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 39172      |

## Analysis Batch: 39400

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3404-1    | SS04             | Total/NA  | Solid  | 8015 NM |            |

## HPLC/IC

## Leach Batch: 39126

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3404-1         | SS04                   | Soluble   | Solid  | DI Leach |            |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3402-A-1-D MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3402-A-1-E MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 39335

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3404-1         | SS04                   | Soluble   | Solid  | 300.0  | 39126      |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | 300.0  | 39126      |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | 300.0  | 39126      |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-A-1-D MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-A-1-E MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 39126      |

Eurofins Carlsbad



## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

Client Sample ID: SS04

Lab Sample ID: 890-3404-1

Date Collected: 11/07/22 11:55

Matrix: Solid

Date Received: 11/07/22 14:17

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.03 g         | 5 mL         | 38960        | 11/08/22 09:56       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 39229        | 11/10/22 22:29       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 39309        | 11/11/22 09:54       | SM      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 39400        | 11/14/22 09:30       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.02 g        | 10 mL        | 39172        | 11/10/22 08:48       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 39269        | 11/11/22 15:28       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 5 g            | 50 mL        | 39126        | 11/09/22 15:04       | KS      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 1          | 0 mL           | 1.0 mL       | 39335        | 11/12/22 03:30       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------|
| Texas                                                                                                                                                                                                 | NELAP       | T104704400-22-24      | 06-30-23        |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                 |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte         |
| 8015 NM                                                                                                                                                                                               |             | Solid                 | Total TPH       |
| Total BTEX                                                                                                                                                                                            |             | Solid                 | Total BTEX      |

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

### Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1  
SDG: 03E1558068

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3404-1    | SS04             | Solid  | 11/07/22 11:55 | 11/07/22 14:17 | 0.2'  |

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Environment Testing  
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1236  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

|                  |                                      |                         |                                          |
|------------------|--------------------------------------|-------------------------|------------------------------------------|
| Project Manager: | Kalei Jennings                       | Bill to: (if different) | Garret Green                             |
| Company Name:    | Ensolum, LLC                         | Company Name:           | XTO Energy, Inc.                         |
| Address:         | 601 N. Marientfeld Street, Suite 400 | Address:                | 3104 E. Greene Street                    |
| City, State ZIP: | Midland, TX 79701                    | City, State ZIP:        | Carlsbad, NM 88220                       |
| Phone:           | 817-683-2503                         | Email:                  | kjennings@ensolum.com, bbeil@ensolum.com |

|                                                                                                                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Work Order Comments                                                                                                                                                              |  |
| Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/>       |  |
| State of Project: NM                                                                                                                                                             |  |
| Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/> |  |
| Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____                                                                                           |  |

|                          |                                                                                 |                                                                              |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  |                                                                   |                            |  |                 |  |
|--------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------|------------------|-----------|-----------|-----------|---|---|---|--|--|--|--|--|--|--|--|--|-------------------------------------------------------------------|----------------------------|--|-----------------|--|
| Project Name:            | PLU 21 BD 125H                                                                  | Turn Around                                                                  | Pres. Code             | ANALYSIS REQUEST |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | Preservative Codes                                                |                            |  |                 |  |
| Project Number:          | 03E1558068                                                                      | <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush    |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | None: NO                                                          | DI Water: H <sub>2</sub> O |  |                 |  |
| Project Location:        | 32.10974, -103.88422                                                            | Due Date:                                                                    |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | Cool: Cool                                                        | MeOH: Me                   |  |                 |  |
| Sampler's Name:          | Juliana Falcomata                                                               | TAT starts the day received by the lab, if received by 4:30pm                |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | HCL: HC                                                           | HNO <sub>3</sub> : HN      |  |                 |  |
| PO #:                    |                                                                                 |                                                                              |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>                   | NaOH: Na                   |  |                 |  |
| SAMPLE RECEIPT           | Lamp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Thermometer ID: 100007 |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | H <sub>3</sub> PO <sub>4</sub> : HP                               |                            |  |                 |  |
| Samples Received Intact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No             | Correction Factor: -0.2                                                      |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | NaHSO <sub>4</sub> : NABIS                                        |                            |  |                 |  |
| Cooler Custody Seals:    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No             | Temperature Reading: 18.0                                                    |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub> |                            |  |                 |  |
| Sample Custody Seals:    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No             | Corrected Temperature: 5.8                                                   |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | Zn Acetate+NaOH: Zn                                               |                            |  |                 |  |
| Total Containers:        |                                                                                 |                                                                              |                        |                  |           |           |           |   |   |   |  |  |  |  |  |  |  |  |  | NaOH+Ascorbic Acid: SAPC                                          |                            |  |                 |  |
| Sample Identification    | Matrix                                                                          | Date Sampled                                                                 | Time Sampled           | Depth            | Grab/Comp | # of Cont |           |   |   |   |  |  |  |  |  |  |  |  |  |                                                                   |                            |  | Sample Comments |  |
| FSD4                     | S                                                                               | 11-7-22                                                                      | 165                    | 2'               | C         | 1         | X         | X | X |   |  |  |  |  |  |  |  |  |  | Cost Center: 1666421001                                           |                            |  |                 |  |
|                          |                                                                                 |                                                                              |                        |                  |           |           | BTEX      | X | X | X |  |  |  |  |  |  |  |  |  |                                                                   | nAPP2214547737             |  |                 |  |
|                          |                                                                                 |                                                                              |                        |                  |           |           | TPH       | X |   |   |  |  |  |  |  |  |  |  |  |                                                                   |                            |  |                 |  |
|                          |                                                                                 |                                                                              |                        |                  |           |           | CHLORIDES | X |   |   |  |  |  |  |  |  |  |  |  |                                                                   |                            |  |                 |  |



890-3404 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn  
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010, 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

|                              |                          |              |                              |                          |           |
|------------------------------|--------------------------|--------------|------------------------------|--------------------------|-----------|
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time    | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|                              |                          | 11-7-22/1417 |                              |                          |           |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3404-1

SDG Number: 03E1558068

Login Number: 3404

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3404-1

SDG Number: 03E1558068

**Login Number: 3404****List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 11/09/22 10:47 AM**

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |

**Eurofins Carlsbad****Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

**Authorization**

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

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Revision 1





Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Kalei Jennings  
Ensolum  
705 W. Wadley  
Suite 210  
Midland Texas 79701

Generated 11/23/2022 9:17:53 AM Revision 1

## JOB DESCRIPTION

PLU 21 BD 125H  
SDG NUMBER 03E1558068

## JOB NUMBER

890-3405-1

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Laboratory Job ID: 890-3405-1  
SDG: 03E1558068

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## Qualifiers

## GC VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| S1-       | Surrogate recovery exceeds control limits, low biased.   |
| U         | Indicates the analyte was analyzed for but not detected. |

## GC Semi VOA

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| *1        | LCS/LCSD RPD exceeds control limits.                     |
| S1+       | Surrogate recovery exceeds control limits, high biased.  |
| U         | Indicates the analyte was analyzed for but not detected. |

## HPLC/IC

| Qualifier | Qualifier Description                                    |
|-----------|----------------------------------------------------------|
| U         | Indicates the analyte was analyzed for but not detected. |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| ¤              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CFU            | Colony Forming Unit                                                                                         |
| CNF            | Contains No Free Liquid                                                                                     |
| DER            | Duplicate Error Ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL             | Detection Limit (DoD/DOE)                                                                                   |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision Level Concentration (Radiochemistry)                                                               |
| EDL            | Estimated Detection Limit (Dioxin)                                                                          |
| LOD            | Limit of Detection (DoD/DOE)                                                                                |
| LOQ            | Limit of Quantitation (DoD/DOE)                                                                             |
| MCL            | EPA recommended "Maximum Contaminant Level"                                                                 |
| MDA            | Minimum Detectable Activity (Radiochemistry)                                                                |
| MDC            | Minimum Detectable Concentration (Radiochemistry)                                                           |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| MPN            | Most Probable Number                                                                                        |
| MQL            | Method Quantitation Limit                                                                                   |
| NC             | Not Calculated                                                                                              |
| ND             | Not Detected at the reporting limit (or MDL or EDL if shown)                                                |
| NEG            | Negative / Absent                                                                                           |
| POS            | Positive / Present                                                                                          |
| PQL            | Practical Quantitation Limit                                                                                |
| PRES           | Presumptive                                                                                                 |
| QC             | Quality Control                                                                                             |
| RER            | Relative Error Ratio (Radiochemistry)                                                                       |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |
| TNTC           | Too Numerous To Count                                                                                       |

## Case Narrative

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

**Job ID: 890-3405-1**

**Laboratory: Eurofins Carlsbad**

### Narrative

#### Job Narrative 890-3405-1

#### REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

#### Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

#### Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS07 (890-3405-1).

#### GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39022 and analytical batch 880-39343 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39138 and analytical batch 880-39343 was outside the upper control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC Semi VOA

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

## Client Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

Client Sample ID: SS07

Lab Sample ID: 890-3405-1

Date Collected: 11/07/22 12:10

Matrix: Solid

Date Received: 11/07/22 14:17

Sample Depth: 0.2'

## Method: SW846 8021B - Volatile Organic Compounds (GC)

| Analyte             | Result   | Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|----------|-----------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 17:37 | 1       |
| Toluene             | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 17:37 | 1       |
| Ethylbenzene        | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 17:37 | 1       |
| m-Xylene & p-Xylene | <0.00398 | U         | 0.00398 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 17:37 | 1       |
| o-Xylene            | <0.00199 | U         | 0.00199 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 17:37 | 1       |
| Xylenes, Total      | <0.00398 | U         | 0.00398 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 17:37 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 93        |           | 70 - 130 | 11/09/22 15:29 | 11/12/22 17:37 | 1       |
| 1,4-Difluorobenzene (Surr)  | 104       |           | 70 - 130 | 11/09/22 15:29 | 11/12/22 17:37 | 1       |

## Method: TAL SOP Total BTEX - Total BTEX Calculation

| Analyte    | Result   | Qualifier | RL      | Unit  | D | Prepared | Analyzed       | Dil Fac |
|------------|----------|-----------|---------|-------|---|----------|----------------|---------|
| Total BTEX | <0.00398 | U         | 0.00398 | mg/Kg |   |          | 11/14/22 12:31 | 1       |

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

| Analyte   | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|-----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Total TPH | <50.0  | U         | 50.0 | mg/Kg |   |          | 11/14/22 09:30 | 1       |

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

| Analyte                              | Result | Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------|-----------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0  | U *1      | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:50 | 1       |
| Diesel Range Organics (Over C10-C28) | <50.0  | U         | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:50 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0  | U         | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 15:50 | 1       |

| Surrogate      | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|----------------|-----------|-----------|----------|----------------|----------------|---------|
| 1-Chlorooctane | 93        |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 15:50 | 1       |
| o-Terphenyl    | 96        |           | 70 - 130 | 11/10/22 08:48 | 11/11/22 15:50 | 1       |

## Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

| Analyte  | Result | Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|--------|-----------|------|-------|---|----------|----------------|---------|
| Chloride | 35.8   |           | 5.03 | mg/Kg |   |          | 11/12/22 03:35 | 1       |

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## Surrogate Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

|                                   |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-----------------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID                     | Client Sample ID       | BFB1<br>(70-130)                               | DFBZ1<br>(70-130) |
| 890-3392-A-1-C MS                 | Matrix Spike           | 95                                             | 111               |
| 890-3392-A-1-D MSD                | Matrix Spike Duplicate | 89                                             | 115               |
| 890-3405-1                        | SS07                   | 93                                             | 104               |
| LCS 880-39138/1-A                 | Lab Control Sample     | 93                                             | 112               |
| LCSD 880-39138/2-A                | Lab Control Sample Dup | 108                                            | 112               |
| MB 880-39022/5-A                  | Method Blank           | 60 S1-                                         | 99                |
| MB 880-39138/5-A                  | Method Blank           | 59 S1-                                         | 99                |
| <b>Surrogate Legend</b>           |                        |                                                |                   |
| BFB = 4-Bromofluorobenzene (Surr) |                        |                                                |                   |
| DFBZ = 1,4-Difluorobenzene (Surr) |                        |                                                |                   |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

|                         |                        | Percent Surrogate Recovery (Acceptance Limits) |                   |
|-------------------------|------------------------|------------------------------------------------|-------------------|
| Lab Sample ID           | Client Sample ID       | 1CO1<br>(70-130)                               | OTPH1<br>(70-130) |
| 890-3402-A-1-G MS       | Matrix Spike           | 86                                             | 79                |
| 890-3402-A-1-H MSD      | Matrix Spike Duplicate | 82                                             | 73                |
| 890-3405-1              | SS07                   | 93                                             | 96                |
| LCS 880-39172/2-A       | Lab Control Sample     | 94                                             | 97                |
| LCSD 880-39172/3-A      | Lab Control Sample Dup | 107                                            | 109               |
| MB 880-39172/1-A        | Method Blank           | 119                                            | 134 S1+           |
| <b>Surrogate Legend</b> |                        |                                                |                   |
| 1CO = 1-Chlorooctane    |                        |                                                |                   |
| OTPH = o-Terphenyl      |                        |                                                |                   |

## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39022/5-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39022

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/08/22 15:10 | 11/11/22 18:42 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 60           | S1-          | 70 - 130 | 11/08/22 15:10 | 11/11/22 18:42 | 1       |
| 1,4-Difluorobenzene (Surr)  | 99           |              | 70 - 130 | 11/08/22 15:10 | 11/11/22 18:42 | 1       |

Lab Sample ID: MB 880-39138/5-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | MB Result | MB Qualifier | RL      | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|--------------|---------|-------|---|----------------|----------------|---------|
| Benzene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Toluene             | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Ethylbenzene        | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| m-Xylene & p-Xylene | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| o-Xylene            | <0.00200  | U            | 0.00200 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| Xylenes, Total      | <0.00400  | U            | 0.00400 | mg/Kg |   | 11/09/22 15:29 | 11/12/22 08:23 | 1       |

| Surrogate                   | MB %Recovery | MB Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|--------------|--------------|----------|----------------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 59           | S1-          | 70 - 130 | 11/09/22 15:29 | 11/12/22 08:23 | 1       |
| 1,4-Difluorobenzene (Surr)  | 99           |              | 70 - 130 | 11/09/22 15:29 | 11/12/22 08:23 | 1       |

Lab Sample ID: LCS 880-39138/1-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|-------------|------------|---------------|-------|---|------|-------------|
| Benzene             | 0.100       | 0.09491    |               | mg/Kg |   | 95   | 70 - 130    |
| Toluene             | 0.100       | 0.09455    |               | mg/Kg |   | 95   | 70 - 130    |
| Ethylbenzene        | 0.100       | 0.08730    |               | mg/Kg |   | 87   | 70 - 130    |
| m-Xylene & p-Xylene | 0.200       | 0.1927     |               | mg/Kg |   | 96   | 70 - 130    |
| o-Xylene            | 0.100       | 0.09563    |               | mg/Kg |   | 96   | 70 - 130    |

| Surrogate                   | LCS %Recovery | LCS Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 93            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 112           |               | 70 - 130 |

Lab Sample ID: LCSD 880-39138/2-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39138

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Benzene | 0.100       | 0.08952     |                | mg/Kg |   | 90   | 70 - 130    | 6   | 35        |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-39138/2-A

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Toluene             | 0.100       | 0.09075     |                | mg/Kg |   | 91   | 70 - 130    | 4   | 35        |
| Ethylbenzene        | 0.100       | 0.08974     |                | mg/Kg |   | 90   | 70 - 130    | 3   | 35        |
| m-Xylene & p-Xylene | 0.200       | 0.2057      |                | mg/Kg |   | 103  | 70 - 130    | 7   | 35        |
| o-Xylene            | 0.100       | 0.1104      |                | mg/Kg |   | 110  | 70 - 130    | 14  | 35        |

| Surrogate                   | LCSD %Recovery | LCSD Qualifier | Limits   |
|-----------------------------|----------------|----------------|----------|
| 4-Bromofluorobenzene (Surr) | 108            |                | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 112            |                | 70 - 130 |

Lab Sample ID: 890-3392-A-1-C MS

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|---------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Benzene             | <0.00201      | U                | 0.100       | 0.08927   |              | mg/Kg |   | 89   | 70 - 130    |
| Toluene             | <0.00201      | U                | 0.100       | 0.08382   |              | mg/Kg |   | 83   | 70 - 130    |
| Ethylbenzene        | <0.00201      | U                | 0.100       | 0.07488   |              | mg/Kg |   | 75   | 70 - 130    |
| m-Xylene & p-Xylene | <0.00402      | U                | 0.201       | 0.1635    |              | mg/Kg |   | 81   | 70 - 130    |
| o-Xylene            | <0.00201      | U                | 0.100       | 0.08493   |              | mg/Kg |   | 85   | 70 - 130    |

| Surrogate                   | MS %Recovery | MS Qualifier | Limits   |
|-----------------------------|--------------|--------------|----------|
| 4-Bromofluorobenzene (Surr) | 95           |              | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 111          |              | 70 - 130 |

Lab Sample ID: 890-3392-A-1-D MSD

Matrix: Solid

Analysis Batch: 39343

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39138

| Analyte             | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Benzene             | <0.00201      | U                | 0.0990      | 0.07916    |               | mg/Kg |   | 80   | 70 - 130    | 12  | 35        |
| Toluene             | <0.00201      | U                | 0.0990      | 0.07843    |               | mg/Kg |   | 79   | 70 - 130    | 7   | 35        |
| Ethylbenzene        | <0.00201      | U                | 0.0990      | 0.07188    |               | mg/Kg |   | 73   | 70 - 130    | 4   | 35        |
| m-Xylene & p-Xylene | <0.00402      | U                | 0.198       | 0.1570     |               | mg/Kg |   | 79   | 70 - 130    | 4   | 35        |
| o-Xylene            | <0.00201      | U                | 0.0990      | 0.08045    |               | mg/Kg |   | 81   | 70 - 130    | 5   | 35        |

| Surrogate                   | MSD %Recovery | MSD Qualifier | Limits   |
|-----------------------------|---------------|---------------|----------|
| 4-Bromofluorobenzene (Surr) | 89            |               | 70 - 130 |
| 1,4-Difluorobenzene (Surr)  | 115           |               | 70 - 130 |

## Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result | MB Qualifier | RL   | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|-----------|--------------|------|-------|---|----------------|----------------|---------|
| Gasoline Range Organics (GRO)-C6-C10 | <50.0     | U            | 50.0 | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-39172/1-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | MB Result    | MB Qualifier | RL       | Unit  | D | Prepared       | Analyzed       | Dil Fac |
|--------------------------------------|--------------|--------------|----------|-------|---|----------------|----------------|---------|
| Diesel Range Organics (Over C10-C28) | <50.0        | U            | 50.0     | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Oil Range Organics (Over C28-C36)    | <50.0        | U            | 50.0     | mg/Kg |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| Surrogate                            | MB %Recovery | MB Qualifier | Limits   |       |   | Prepared       | Analyzed       | Dil Fac |
| 1-Chlorooctane                       | 119          |              | 70 - 130 |       |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |
| o-Terphenyl                          | 134          | S1+          | 70 - 130 |       |   | 11/10/22 08:48 | 11/11/22 09:30 | 1       |

Lab Sample ID: LCS 880-39172/2-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added   | LCS Result    | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|---------------|---------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000          | 815.5         |               | mg/Kg |   | 82   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | 1000          | 846.7         |               | mg/Kg |   | 85   | 70 - 130    |
| Surrogate                            | LCS %Recovery | LCS Qualifier | Limits        |       |   |      |             |
| 1-Chlorooctane                       | 94            |               | 70 - 130      |       |   |      |             |
| o-Terphenyl                          | 97            |               | 70 - 130      |       |   |      |             |

Lab Sample ID: LCSD 880-39172/3-A

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Spike Added    | LCSD Result    | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|----------------|----------------|----------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 1000           | 1003           | *1             | mg/Kg |   | 100  | 70 - 130    | 21  | 20        |
| Diesel Range Organics (Over C10-C28) | 1000           | 950.2          |                | mg/Kg |   | 95   | 70 - 130    | 12  | 20        |
| Surrogate                            | LCSD %Recovery | LCSD Qualifier | Limits         |       |   |      |             |     |           |
| 1-Chlorooctane                       | 107            |                | 70 - 130       |       |   |      |             |     |           |
| o-Terphenyl                          | 109            |                | 70 - 130       |       |   |      |             |     |           |

Lab Sample ID: 890-3402-A-1-G MS

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|--------------------------------------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 997         | 1007      |              | mg/Kg |   | 95   | 70 - 130    |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 997         | 861.7     |              | mg/Kg |   | 84   | 70 - 130    |
| Surrogate                            | MS %Recovery  | MS Qualifier     | Limits      |           |              |       |   |      |             |
| 1-Chlorooctane                       | 86            |                  | 70 - 130    |           |              |       |   |      |             |
| o-Terphenyl                          | 79            |                  | 70 - 130    |           |              |       |   |      |             |

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 890-3402-A-1-H MSD

Matrix: Solid

Analysis Batch: 39269

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39172

| Analyte                              | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------------------------------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Gasoline Range Organics (GRO)-C6-C10 | 55.1          | *1               | 999         | 978.6      |               | mg/Kg |   | 92   | 70 - 130    | 3   | 20        |
| Diesel Range Organics (Over C10-C28) | <50.0         | U                | 999         | 796.8      |               | mg/Kg |   | 77   | 70 - 130    | 8   | 20        |
| Surrogate                            | MSD %Recovery | MSD Qualifier    | Limits      |            |               |       |   |      |             |     |           |
| 1-Chlorooctane                       | 82            |                  | 70 - 130    |            |               |       |   |      |             |     |           |
| o-Terphenyl                          | 73            |                  | 70 - 130    |            |               |       |   |      |             |     |           |

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39126/1-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Method Blank

Prep Type: Soluble

| Analyte  | MB Result | MB Qualifier | RL   | Unit  | D | Prepared | Analyzed       | Dil Fac |
|----------|-----------|--------------|------|-------|---|----------|----------------|---------|
| Chloride | <5.00     | U            | 5.00 | mg/Kg |   |          | 11/12/22 02:56 | 1       |

Lab Sample ID: LCS 880-39126/2-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample

Prep Type: Soluble

| Analyte  | Spike Added | LCS Result | LCS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|-------------|------------|---------------|-------|---|------|-------------|
| Chloride | 250         | 266.1      |               | mg/Kg |   | 106  | 90 - 110    |

Lab Sample ID: LCSD 880-39126/3-A

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

| Analyte  | Spike Added | LCSD Result | LCSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|-------------|-------------|----------------|-------|---|------|-------------|-----|-----------|
| Chloride | 250         | 258.9       |                | mg/Kg |   | 104  | 90 - 110    | 3   | 20        |

Lab Sample ID: 890-3402-A-1-D MS

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Matrix Spike

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit  | D | %Rec | %Rec Limits |
|----------|---------------|------------------|-------------|-----------|--------------|-------|---|------|-------------|
| Chloride | 195           |                  | 249         | 466.5     |              | mg/Kg |   | 109  | 90 - 110    |

Lab Sample ID: 890-3402-A-1-E MSD

Matrix: Solid

Analysis Batch: 39335

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

| Analyte  | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit  | D | %Rec | %Rec Limits | RPD | RPD Limit |
|----------|---------------|------------------|-------------|------------|---------------|-------|---|------|-------------|-----|-----------|
| Chloride | 195           |                  | 249         | 456.2      |               | mg/Kg |   | 105  | 90 - 110    | 2   | 20        |

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## GC VOA

## Prep Batch: 39022

| Lab Sample ID    | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|------------------|------------------|-----------|--------|--------|------------|
| MB 880-39022/5-A | Method Blank     | Total/NA  | Solid  | 5035   |            |

## Prep Batch: 39138

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3405-1         | SS07                   | Total/NA  | Solid  | 5035   |            |
| MB 880-39138/5-A   | Method Blank           | Total/NA  | Solid  | 5035   |            |
| LCS 880-39138/1-A  | Lab Control Sample     | Total/NA  | Solid  | 5035   |            |
| LCSD 880-39138/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 5035   |            |
| 890-3392-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 5035   |            |
| 890-3392-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 5035   |            |

## Analysis Batch: 39343

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3405-1         | SS07                   | Total/NA  | Solid  | 8021B  | 39138      |
| MB 880-39022/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39022      |
| MB 880-39138/5-A   | Method Blank           | Total/NA  | Solid  | 8021B  | 39138      |
| LCS 880-39138/1-A  | Lab Control Sample     | Total/NA  | Solid  | 8021B  | 39138      |
| LCSD 880-39138/2-A | Lab Control Sample Dup | Total/NA  | Solid  | 8021B  | 39138      |
| 890-3392-A-1-C MS  | Matrix Spike           | Total/NA  | Solid  | 8021B  | 39138      |
| 890-3392-A-1-D MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8021B  | 39138      |

## Analysis Batch: 39481

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method     | Prep Batch |
|---------------|------------------|-----------|--------|------------|------------|
| 890-3405-1    | SS07             | Total/NA  | Solid  | Total BTEX |            |

## GC Semi VOA

## Prep Batch: 39172

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method      | Prep Batch |
|--------------------|------------------------|-----------|--------|-------------|------------|
| 890-3405-1         | SS07                   | Total/NA  | Solid  | 8015NM Prep |            |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015NM Prep |            |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015NM Prep |            |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-A-1-G MS  | Matrix Spike           | Total/NA  | Solid  | 8015NM Prep |            |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015NM Prep |            |

## Analysis Batch: 39269

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3405-1         | SS07                   | Total/NA  | Solid  | 8015B NM | 39172      |
| MB 880-39172/1-A   | Method Blank           | Total/NA  | Solid  | 8015B NM | 39172      |
| LCS 880-39172/2-A  | Lab Control Sample     | Total/NA  | Solid  | 8015B NM | 39172      |
| LCSD 880-39172/3-A | Lab Control Sample Dup | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-A-1-G MS  | Matrix Spike           | Total/NA  | Solid  | 8015B NM | 39172      |
| 890-3402-A-1-H MSD | Matrix Spike Duplicate | Total/NA  | Solid  | 8015B NM | 39172      |

## Analysis Batch: 39401

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method  | Prep Batch |
|---------------|------------------|-----------|--------|---------|------------|
| 890-3405-1    | SS07             | Total/NA  | Solid  | 8015 NM |            |

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

## HPLC/IC

## Leach Batch: 39126

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|------------------------|-----------|--------|----------|------------|
| 890-3405-1         | SS07                   | Soluble   | Solid  | DI Leach |            |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | DI Leach |            |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | DI Leach |            |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | DI Leach |            |
| 890-3402-A-1-D MS  | Matrix Spike           | Soluble   | Solid  | DI Leach |            |
| 890-3402-A-1-E MSD | Matrix Spike Duplicate | Soluble   | Solid  | DI Leach |            |

## Analysis Batch: 39335

| Lab Sample ID      | Client Sample ID       | Prep Type | Matrix | Method | Prep Batch |
|--------------------|------------------------|-----------|--------|--------|------------|
| 890-3405-1         | SS07                   | Soluble   | Solid  | 300.0  | 39126      |
| MB 880-39126/1-A   | Method Blank           | Soluble   | Solid  | 300.0  | 39126      |
| LCS 880-39126/2-A  | Lab Control Sample     | Soluble   | Solid  | 300.0  | 39126      |
| LCSD 880-39126/3-A | Lab Control Sample Dup | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-A-1-D MS  | Matrix Spike           | Soluble   | Solid  | 300.0  | 39126      |
| 890-3402-A-1-E MSD | Matrix Spike Duplicate | Soluble   | Solid  | 300.0  | 39126      |

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

Client Sample ID: SS07

Lab Sample ID: 890-3405-1

Date Collected: 11/07/22 12:10

Matrix: Solid

Date Received: 11/07/22 14:17

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Prep       | 5035         |     |            | 5.02 g         | 5 mL         | 39138        | 11/09/22 15:29       | MNR     | EET MID |
| Total/NA  | Analysis   | 8021B        |     | 1          | 5 mL           | 5 mL         | 39343        | 11/12/22 17:37       | MNR     | EET MID |
| Total/NA  | Analysis   | Total BTEX   |     | 1          |                |              | 39481        | 11/14/22 12:31       | SM      | EET MID |
| Total/NA  | Analysis   | 8015 NM      |     | 1          |                |              | 39401        | 11/14/22 09:30       | SM      | EET MID |
| Total/NA  | Prep       | 8015NM Prep  |     |            | 10.01 g        | 10 mL        | 39172        | 11/10/22 08:48       | DM      | EET MID |
| Total/NA  | Analysis   | 8015B NM     |     | 1          | 1 uL           | 1 uL         | 39269        | 11/11/22 15:50       | SM      | EET MID |
| Soluble   | Leach      | DI Leach     |     |            | 4.97 g         | 50 mL        | 39126        | 11/09/22 15:04       | KS      | EET MID |
| Soluble   | Analysis   | 300.0        |     | 1          | 0 mL           | 1.0 mL       | 39335        | 11/12/22 03:35       | CH      | EET MID |

## Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority                                                                                                                                                                                             | Program     | Identification Number | Expiration Date |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------|
| Texas                                                                                                                                                                                                 | NELAP       | T104704400-22-24      | 06-30-23        |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. |             |                       |                 |
| Analysis Method                                                                                                                                                                                       | Prep Method | Matrix                | Analyte         |
| 8015 NM                                                                                                                                                                                               |             | Solid                 | Total TPH       |
| Total BTEX                                                                                                                                                                                            |             | Solid                 | Total BTEX      |

## Method Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

| Method      | Method Description                 | Protocol | Laboratory |
|-------------|------------------------------------|----------|------------|
| 8021B       | Volatile Organic Compounds (GC)    | SW846    | EET MID    |
| Total BTEX  | Total BTEX Calculation             | TAL SOP  | EET MID    |
| 8015 NM     | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 8015B NM    | Diesel Range Organics (DRO) (GC)   | SW846    | EET MID    |
| 300.0       | Anions, Ion Chromatography         | MCAWW    | EET MID    |
| 5035        | Closed System Purge and Trap       | SW846    | EET MID    |
| 8015NM Prep | Microextraction                    | SW846    | EET MID    |
| DI Leach    | Deionized Water Leaching Procedure | ASTM     | EET MID    |

### Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Carlsbad

Sample Summary

Client: Ensolum  
Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1  
SDG: 03E1558068

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       | Depth |
|---------------|------------------|--------|----------------|----------------|-------|
| 890-3405-1    | SS07             | Solid  | 11/07/22 12:10 | 11/07/22 14:17 | 0.2'  |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15





Environment Testing  
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

|                  |                                       |                         |                                          |
|------------------|---------------------------------------|-------------------------|------------------------------------------|
| Project Manager: | Kalei Jennings                        | Bill to: (if different) | Garret Green                             |
| Company Name:    | Ensolum, LLC                          | Company Name:           | XTO Energy, Inc.                         |
| Address:         | 601 N. Marientfield Street, Suite 400 | Address:                | 3104 E. Greene Street                    |
| City, State ZIP: | Midland, TX 79701                     | City, State ZIP:        | Carlsbad, NM 88220                       |
| Phone:           | 817-683-2503                          | Email:                  | kjennings@ensolum.com, bbeil@ensolum.com |

|                                                                                                                                                                                                     |                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> |                                             |
| State of Project: NM                                                                                                                                                                                |                                             |
| Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>                    |                                             |
| Deliverables: EDD <input type="checkbox"/>                                                                                                                                                          | Adapt <input type="checkbox"/> Other: _____ |

|                         |                      |                                                               |                                                                     |                      |                                                                     |           |     |     |           |
|-------------------------|----------------------|---------------------------------------------------------------|---------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|-----------|-----|-----|-----------|
| Project Name:           | PLU 21 BD 125H       | Turn Around                                                   |                                                                     | ANALYSIS REQUEST     | Preservative Codes                                                  |           |     |     |           |
| Project Number:         | 03E1558068           | <input checked="" type="checkbox"/> Routine                   | <input type="checkbox"/> Rush                                       |                      |                                                                     |           |     |     |           |
| Project Location:       | 32.10974, -103.88422 | Due Date:                                                     |                                                                     |                      |                                                                     |           |     |     |           |
| Sampler's Name:         | Juliana Falcomata    | TAT starts the day received by the lab, if received by 4:30pm |                                                                     |                      |                                                                     |           |     |     |           |
| PO #:                   |                      | Temp Blank:                                                   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Wet Ice:             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |           |     |     |           |
| SAMPLE RECEIPT          |                      | Samples Received Intact:                                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Thermometer ID:      | TM 11007                                                            |           |     |     |           |
| Cooler Custody Seals:   | Yes                  | No                                                            | N/A                                                                 | Correction Factor:   | -0.02                                                               |           |     |     |           |
| Sample Custody Seals:   | Yes                  | No                                                            | N/A                                                                 | Temperature Reading: | 18.0                                                                |           |     |     |           |
| Total Containers:       |                      | Corrected Temperature:                                        |                                                                     |                      | 8.8                                                                 |           |     |     |           |
| Sample Identification   | Matrix               | Date Sampled                                                  | Time Sampled                                                        | Depth                | Grab/Comp                                                           | # of Cont | BTX | TPH | CHLORIDES |
| F601                    | S                    | 11-1-22                                                       | 1210                                                                | .2'                  | C                                                                   | 1         | X   | X   | X         |
| Cost Center: 1666421001 |                      |                                                               |                                                                     |                      |                                                                     |           |     |     |           |
| NAPP2214547737          |                      |                                                               |                                                                     |                      |                                                                     |           |     |     |           |



890-3405 Chain of Custody

|                                              |               |                  |          |       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                                |    |    |                  |    |    |    |    |   |   |    |  |  |  |  |  |
|----------------------------------------------|---------------|------------------|----------|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------------------------------|----|----|------------------|----|----|----|----|---|---|----|--|--|--|--|--|
| Total 200.7 / 6010                           | 200.8 / 6020: | 8RCRA 13PPM      | Texas 11 | Al    | Sb | As | Ba | Be | B  | Cd | Ca | Cr | Co | Cu | Fe | Pb | Mg | Mn | Mo | Ni | K                              | Se | Ag | SiO <sub>2</sub> | Na | Sr | Ti | Sn | U | V | Zn |  |  |  |  |  |
| Circle Method(s) and Metal(s) to be analyzed |               | TCLP / SPLP 6010 |          | 8RCRA | Sb | As | Ba | Be | Cd | Cr | Co | Cu | Pb | Mn | Mo | Ni | Se | Ag | Ti | U  | Hg: 1631 / 245.1 / 7470 / 7471 |    |    |                  |    |    |    |    |   |   |    |  |  |  |  |  |

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

|                              |                          |              |                              |                          |           |
|------------------------------|--------------------------|--------------|------------------------------|--------------------------|-----------|
| Relinquished by: (Signature) | Received by: (Signature) | Date/Time    | Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
| <i>[Signature]</i>           | <i>[Signature]</i>       | 11-7-22 1417 |                              |                          |           |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3405-1

SDG Number: 03E1558068

Login Number: 3405

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

| Question                                                                         | Answer | Comment                             |
|----------------------------------------------------------------------------------|--------|-------------------------------------|
| The cooler's custody seal, if present, is intact.                                | True   |                                     |
| Sample custody seals, if present, are intact.                                    | True   |                                     |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |                                     |
| Samples were received on ice.                                                    | True   |                                     |
| Cooler Temperature is acceptable.                                                | True   |                                     |
| Cooler Temperature is recorded.                                                  | True   |                                     |
| COC is present.                                                                  | True   |                                     |
| COC is filled out in ink and legible.                                            | True   |                                     |
| COC is filled out with all pertinent information.                                | True   |                                     |
| Is the Field Sampler's name present on COC?                                      | True   |                                     |
| There are no discrepancies between the containers received and the COC.          | True   |                                     |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                     |
| Sample containers have legible labels.                                           | True   |                                     |
| Containers are not broken or leaking.                                            | True   |                                     |
| Sample collection date/times are provided.                                       | True   |                                     |
| Appropriate sample containers are used.                                          | N/A    | Refer to Job Narrative for details. |
| Sample bottles are completely filled.                                            | True   |                                     |
| Sample Preservation Verified.                                                    | N/A    |                                     |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                     |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |                                     |

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3405-1

SDG Number: 03E1558068

**Login Number: 3405****List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 11/09/22 10:47 AM**

| Question                                                                         | Answer | Comment |
|----------------------------------------------------------------------------------|--------|---------|
| The cooler's custody seal, if present, is intact.                                | N/A    |         |
| Sample custody seals, if present, are intact.                                    | N/A    |         |
| The cooler or samples do not appear to have been compromised or tampered with.   | True   |         |
| Samples were received on ice.                                                    | True   |         |
| Cooler Temperature is acceptable.                                                | True   |         |
| Cooler Temperature is recorded.                                                  | True   |         |
| COC is present.                                                                  | True   |         |
| COC is filled out in ink and legible.                                            | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| Is the Field Sampler's name present on COC?                                      | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.                                           | True   |         |
| Containers are not broken or leaking.                                            | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| Appropriate sample containers are used.                                          | True   |         |
| Sample bottles are completely filled.                                            | True   |         |
| Sample Preservation Verified.                                                    | N/A    |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | N/A    |         |

**Eurofins Carlsbad****Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

**Authorization**

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

Generated  
11/23/2022 9:17:53 AM  
Revision 1



## APPENDIX E

### NMOCD Notifications

---

**From:** [Tacoma Morrissey](#)  
**To:** [garrett.green@exxonmobil.com](mailto:garrett.green@exxonmobil.com); [Collins, Melanie](#)  
**Cc:** [DelawareSpills@exxonmobil.com](mailto:DelawareSpills@exxonmobil.com); [Ashley Ager](#); [Ben Belill](#); [Kalei Jennings](#); [Stuart Hyde](#)  
**Subject:** RE: XTO - Sampling Notification (Week of 10/17/22 - 10/21/22)  
**Date:** Sunday, October 16, 2022 10:30:26 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

---

Hi Garrett,

Please see the below email for NMOCD sampling notification for the week of Oct 17, 2022, if you would like to provide an update.

All,

XTO plans to complete final sampling activities at the following sites the week of Oct 17, 2022.

Monday

- BEU 29W Vader 100H / nAPP2102831345

Tuesday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 21 BD 125H/ nAPP2214547737

Wednesday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 30 Big Sinks/ nAPP2209137379, nAPP2208351954, nAPP2206853301

Thursday

- PLU 30 Big Sinks/ nAPP2209137379, nAPP2208351954, nAPP2206853301
- JRU 108 / nAPP2217931599
- JRU 106 / nAPP2212344322

Thank you!



**Tacoma Morrissey**

Senior Geologist

337-257-8307

**Ensolum, LLC**

in f 



## APPENDIX F

### SDS for Friction Reducer

---



# SAFETY DATA SHEET

Issuing Date 01-Aug-2019

Revision Date 01-Aug-2019

Revision Number 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name POLYglide Xcel-200

### Other means of identification

Product Code(s) 10497

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use No information available

Uses advised against No information available

### Details of the supplier of the safety data sheet

#### Supplier Address

PfP Industries  
29738 Goynes Rd.  
Katy, TX 77493

#### Manufacturer Address

PfP Industries  
29738 Goynes Rd.  
Katy, TX 77493

### Emergency telephone number

Company Phone Number 281-371-2000

Emergency Telephone Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids

Category 4

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Warning

Combustible liquid



10497 - POLYglide Xcel-200

Revision Date 01-Aug-2019

|                          |                              |                         |
|--------------------------|------------------------------|-------------------------|
| <b>Appearance</b> Opaque | <b>Physical state</b> Liquid | <b>Odor</b> Mineral Oil |
|--------------------------|------------------------------|-------------------------|

**Precautionary Statements - Prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Information**

May be harmful in contact with skin  
Harmful to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

| Chemical name                             | CAS No     | Weight-% | Trade secret |
|-------------------------------------------|------------|----------|--------------|
| Petroleum distillates, hydrotreated light | 64742-47-8 | 40 - 70  |              |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures**

|                                           |                                                                                                                                                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                         | Remove to fresh air.                                                                                                                                                                                                                |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.            |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.                                                                                                                               |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water.                                                                                                                                                                        |
| <b>Self-protection of the first aider</b> | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

10497 - POLYglide Xcel-200

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## 5. FIRE-FIGHTING MEASURES

|                                                       |                                                                                                                                    |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>                   | Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam.                                              |
| <b>Unsuitable extinguishing media</b>                 | CAUTION: Use of water spray when fighting fire may be inefficient.                                                                 |
| <b>Specific hazards arising from the chemical</b>     | Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray.        |
| <b>Explosion data</b>                                 |                                                                                                                                    |
| <b>Sensitivity to Mechanical Impact</b>               | None.                                                                                                                              |
| <b>Sensitivity to Static Discharge</b>                | None.                                                                                                                              |
| <b>Special protective equipment for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

|                             |                                                                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b> | Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Environmental precautions

|                                  |                                                                                                                |
|----------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Environmental precautions</b> | Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. |
|----------------------------------|----------------------------------------------------------------------------------------------------------------|

### Methods and material for containment and cleaning up

|                                        |                                                                                                                                                            |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods for containment</b>         | Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.                 |
| <b>Methods for cleaning up</b>         | Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. |
| <b>Prevention of secondary hazards</b> | Clean contaminated objects and areas thoroughly observing environmental regulations.                                                                       |

## 7. HANDLING AND STORAGE

### Precautions for safe handling

|                                |                                                                                                                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advice on safe handling</b> | Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Conditions for safe storage, including any incompatibilities

|                           |                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage Conditions</b> | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** No special protective equipment required.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** Opaque  
**Color** Milky white to yellow  
**Odor** Mineral Oil  
**Odor threshold** No information available

| <u>Property</u>                | <u>Values</u>            | <u>Remarks • Method</u> |
|--------------------------------|--------------------------|-------------------------|
| pH                             | No data available        | None known              |
| Melting point / freezing point | No data available        | None known              |
| Boiling point / boiling range  | No data available        | None known              |
| Flash point                    | >= 67 °C / 153 °F        |                         |
| Evaporation rate               | No data available        | None known              |
| Flammability (solid, gas)      | No data available        | None known              |
| Flammability Limit in Air      |                          | None known              |
| Upper flammability limit:      | No data available        |                         |
| Lower flammability limit:      | No data available        |                         |
| Vapor pressure                 | No data available        | None known              |
| Vapor density                  | No data available        | None known              |
| Relative density               | 0.97 - 1.03              |                         |
| Water solubility               | Miscible in water        |                         |
| Solubility in other solvents   | No data available        | None known              |
| Partition coefficient          | No data available        | None known              |
| Autoignition temperature       | No data available        | None known              |
| Decomposition temperature      | No data available        | None known              |
| Kinematic viscosity            | ≥150 mm <sup>2</sup> /s  |                         |
| Dynamic viscosity              | No data available        | None known              |
| Explosive properties           | No information available |                         |
| Oxidizing properties           | No information available |                         |

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**Other Information**

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |
| VOC Content (%)  | No information available |
| Liquid Density   | No information available |
| Bulk density     | No information available |

**10. STABILITY AND REACTIVITY**

|                                    |                                           |
|------------------------------------|-------------------------------------------|
| Reactivity                         | No information available.                 |
| Chemical stability                 | Stable under normal conditions.           |
| Possibility of hazardous reactions | None under normal processing.             |
| Conditions to avoid                | Heat, flames and sparks.                  |
| Incompatible materials             | None known based on information supplied. |
| Hazardous decomposition products   | None known based on information supplied. |

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

|              |                                                                   |
|--------------|-------------------------------------------------------------------|
| Inhalation   | Specific test data for the substance or mixture is not available. |
| Eye contact  | Specific test data for the substance or mixture is not available. |
| Skin contact | Specific test data for the substance or mixture is not available. |
| Ingestion    | Specific test data for the substance or mixture is not available. |

**Symptoms related to the physical, chemical and toxicological characteristics**

|          |                           |
|----------|---------------------------|
| Symptoms | No information available. |
|----------|---------------------------|

**Numerical measures of toxicity****Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document.

|                               |                |
|-------------------------------|----------------|
| ATEmix (oral)                 | 5,005.00 mg/kg |
| ATEmix (dermal)               | 2,002.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 5.20 mg/l      |

**Component Information**

| Chemical name                                              | Oral LD50            | Dermal LD50             | Inhalation LC50        |
|------------------------------------------------------------|----------------------|-------------------------|------------------------|
| Petroleum distillates,<br>hydrotreated light<br>64742-47-8 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 5.2 mg/L ( Rat ) 4 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|                           |                           |
|---------------------------|---------------------------|
| Skin corrosion/irritation | No information available. |
|---------------------------|---------------------------|

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|                                   |                           |
|-----------------------------------|---------------------------|
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity            | No information available. |
| Carcinogenicity                   | No information available. |
| Reproductive toxicity             | No information available. |
| STOT - single exposure            | No information available. |
| STOT - repeated exposure          | No information available. |
| Aspiration hazard                 | No information available. |

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

| Chemical name                                        | Algae/aquatic plants | Fish                                                                                                                                                 | Toxicity to microorganisms | Crustacea                                       |
|------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------|
| Petroleum distillates, hydrotreated light 64742-47-8 | -                    | 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static<br>45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static | -                          | 4720: 96 h Den-dronereides heteropoda mg/L LC50 |

|                               |                                    |
|-------------------------------|------------------------------------|
| Persistence and degradability | No information available.          |
| Bioaccumulation               | There is no data for this product. |
| Other adverse effects         | No information available.          |

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

|                                     |                                                                                                                 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging              | Do not reuse empty containers.                                                                                  |

## 14. TRANSPORT INFORMATION

|            |                                                                           |
|------------|---------------------------------------------------------------------------|
| <u>DOT</u> | Not regulated. Product does not sustain combustion (49 CFR 173.120(b)(3)) |
|------------|---------------------------------------------------------------------------|

## 15. REGULATORY INFORMATION

### International Inventories

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL/NDL       | Complies        |
| EINECS/ELINCS | Complies        |
| ENCS          | Does not comply |
| IECSC         | Complies        |
| KECL          | Complies        |



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PICCS Complies  
AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | No  |
| Chronic Health Hazard             | No  |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

**US State Regulations** This product does not contain any substances regulated by state right-to-know regulations

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

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**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

|             |                |   |              |   |                  |   |                                  |   |
|-------------|----------------|---|--------------|---|------------------|---|----------------------------------|---|
| <u>NFPA</u> | Health hazards | 2 | Flammability | 2 | Instability      | 0 | Physical and chemical properties | - |
| <u>HMIS</u> | Health hazards | 2 | Flammability | 2 | Physical hazards | 0 | Personal protection              | X |

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Revision Note No information available.

Disclaimer

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**End of Safety Data Sheet**

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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 165007

**CONDITIONS**

|                                                                             |                                                           |
|-----------------------------------------------------------------------------|-----------------------------------------------------------|
| Operator:<br>XTO ENERGY, INC<br>6401 Holiday Hill Road<br>Midland, TX 79707 | OGRID:<br>5380                                            |
|                                                                             | Action Number:<br>165007                                  |
|                                                                             | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

| Created By | Condition                                                                                                                                                                                                                                                                                                       | Condition Date |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| rhamlet    | We have received your closure report and final C-141 for Incident #NAPP2215147527 PLU 21 BRUSHY DRAW 905H, thank you. This closure is approved. Please be aware that any contaminants left on pad above reclamation standards will need to be addressed at the time the site/facility is plugged and abandoned. | 3/13/2023      |