

October 15, 2021

Kris Rowe  
HRL Compliance Solutions, Inc.  
2385 F 1/2 Road  
Grand Junction, CO 81505

RE: Project: TERRA ENERGY PARTNERS - RIVER  
Pace Project No.: 60383152

Dear Kris Rowe:

Enclosed are the analytical results for sample(s) received by the laboratory on October 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

The shipment for this project was delayed a day, which resulted in all of the ice melting and arriving at a higher temperature than is recommended. Per the client's request, we continued with the analysis of the samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Heather Wilson  
heather.wilson@pacelabs.com  
1(913)563-1407  
Project Manager

Enclosures

cc: Mike Gardner, Terra Energy Partners



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

---

### **Pace Analytical Services Kansas**

9608 Loiret Boulevard, Lenexa, KS 66219

Missouri Inorganic Drinking Water Certification #: 10090

Arkansas Drinking Water

Arkansas Certification #: 20-020-0

Arkansas Drinking Water

Illinois Certification #: 2000302021-3

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212020-2

Oklahoma Certification #: 9205/9935

Florida: Cert E871149 SEKS WET

Texas Certification #: T104704407-19-12

Utah Certification #: KS000212019-9

Illinois Certification #: 004592

Kansas Field Laboratory Accreditation: # E-92587

Missouri SEKS Micro Certification: 10070

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Lab ID      | Sample ID                 | Matrix | Date Collected | Date Received  |
|-------------|---------------------------|--------|----------------|----------------|
| 60383152001 | WETLAND - UG 1            | Water  | 10/11/21 15:00 | 10/14/21 09:30 |
| 60383152002 | WETLAND - BREACH PT       | Water  | 10/11/21 15:30 | 10/14/21 09:30 |
| 60383152003 | WETLAND - DG 1            | Water  | 10/11/21 15:45 | 10/14/21 09:30 |
| 60383152004 | CONFLUENCE - DG 2         | Water  | 10/11/21 16:00 | 10/14/21 09:30 |
| 60383152005 | ACCESS RD CULVERT - DG 3  | Water  | 10/11/21 16:30 | 10/14/21 09:30 |
| 60383152006 | ROBINSON A CULVERT - DG 4 | Water  | 10/11/21 17:00 | 10/14/21 09:30 |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE ANALYTE COUNT

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Lab ID      | Sample ID                 | Method         | Analysts | Analytes Reported | Laboratory |
|-------------|---------------------------|----------------|----------|-------------------|------------|
| 60383152001 | WETLAND - UG 1            | EPA 5030B/8260 | CJC      | 11                | PASI-K     |
|             |                           | SM 2540C       | BLA      | 1                 | PASI-K     |
|             |                           | EPA 300.0      | ALH      | 2                 | PASI-K     |
| 60383152002 | WETLAND - BREACH PT       | EPA 5030B/8260 | CJC      | 11                | PASI-K     |
|             |                           | SM 2540C       | BLA      | 1                 | PASI-K     |
|             |                           | EPA 300.0      | ALH      | 2                 | PASI-K     |
| 60383152003 | WETLAND - DG 1            | EPA 5030B/8260 | CJC      | 11                | PASI-K     |
|             |                           | SM 2540C       | BLA      | 1                 | PASI-K     |
|             |                           | EPA 300.0      | ALH      | 2                 | PASI-K     |
| 60383152004 | CONFLUENCE - DG 2         | EPA 5030B/8260 | CJC      | 11                | PASI-K     |
|             |                           | SM 2540C       | BLA      | 1                 | PASI-K     |
|             |                           | EPA 300.0      | ALH      | 2                 | PASI-K     |
| 60383152005 | ACCESS RD CULVERT - DG 3  | EPA 5030B/8260 | CJC      | 11                | PASI-K     |
|             |                           | SM 2540C       | BLA      | 1                 | PASI-K     |
|             |                           | EPA 300.0      | ALH      | 2                 | PASI-K     |
| 60383152006 | ROBINSON A CULVERT - DG 4 | EPA 5030B/8260 | CJC      | 11                | PASI-K     |
|             |                           | SM 2540C       | BLA      | 1                 | PASI-K     |
|             |                           | EPA 300.0      | ALH      | 2                 | PASI-K     |

PASI-K = Pace Analytical Services - Kansas City

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Sample: WETLAND - UG 1              |         | Lab ID: 60383152001   | Collected: 10/11/21 15:00 | Received: 10/14/21 09:30 | Matrix: Water |                |            |      |
|-------------------------------------|---------|---|---------------------------|--------------------------|---------------|----------------|------------|------|
| Parameters                          | Results | Units   | Report Limit              | DF                       | Prepared      | Analyzed       | CAS No.    | Qual |
| <b>8260 MSV</b>                     |         | Analytical Method: EPA 5030B/8260<br>Pace Analytical Services - Kansas City |                           |                          |               |                |            |      |
| Benzene                             | 3.2     | ug/L  | 0.50                      | 1                        |               | 10/14/21 14:21 | 71-43-2    |      |
| Ethylbenzene                        | ND      | ug/L  | 0.50                      | 1                        |               | 10/14/21 14:21 | 100-41-4   |      |
| Naphthalene                         | ND      | ug/L  | 10.0                      | 1                        |               | 10/14/21 14:21 | 91-20-3    |      |
| Toluene                             | 5.4     | ug/L  | 1.0                       | 1                        |               | 10/14/21 14:21 | 108-88-3   |      |
| 1,2,4-Trimethylbenzene              | 1.1     | ug/L  | 1.0                       | 1                        |               | 10/14/21 14:21 | 95-63-6    |      |
| 1,3,5-Trimethylbenzene              | 1.6     | ug/L  | 1.0                       | 1                        |               | 10/14/21 14:21 | 108-67-8   |      |
| Xylene (Total)                      | 11.4    | ug/L  | 1.5                       | 1                        |               | 10/14/21 14:21 | 1330-20-7  |      |
| <b>Surrogates</b>                   |         |   |                           |                          |               |                |            |      |
| 4-Bromofluorobenzene (S)            | 99      | %   | 80-120                    | 1                        |               | 10/14/21 14:21 | 460-00-4   |      |
| Toluene-d8 (S)                      | 97      | %   | 80-120                    | 1                        |               | 10/14/21 14:21 | 2037-26-5  |      |
| 1,2-Dichlorobenzene-d4 (S)          | 99      | %   | 80-120                    | 1                        |               | 10/14/21 14:21 | 2199-69-1  |      |
| Preservation pH                     | 1.0     |   | 0.10                      | 1                        |               | 10/14/21 14:21 |            |      |
| <b>2540C Total Dissolved Solids</b> |         | Analytical Method: SM 2540C<br>Pace Analytical Services - Kansas City       |                           |                          |               |                |            |      |
| Total Dissolved Solids              | 1110    | mg/L  | 13.3                      | 1                        |               | 10/14/21 12:55 |            |      |
| <b>300.0 IC Anions 28 Days</b>      |         | Analytical Method: EPA 300.0<br>Pace Analytical Services - Kansas City      |                           |                          |               |                |            |      |
| Chloride                            | 205     | mg/L  | 20.0                      | 20                       |               | 10/15/21 10:38 | 16887-00-6 |      |
| Sulfate                             | 150     | mg/L  | 20.0                      | 20                       |               | 10/15/21 10:38 | 14808-79-8 |      |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Sample: WETLAND - BREACH PT         |         | Lab ID: 60383152002   | Collected: 10/11/21 15:30 | Received: 10/14/21 09:30 | Matrix: Water |                |            |      |
|-------------------------------------|---------|---|---------------------------|--------------------------|---------------|----------------|------------|------|
| Parameters                          | Results | Units   | Report Limit              | DF                       | Prepared      | Analyzed       | CAS No.    | Qual |
| <b>8260 MSV</b>                     |         | Analytical Method: EPA 5030B/8260<br>Pace Analytical Services - Kansas City |                           |                          |               |                |            |      |
| Benzene                             | 1790    | ug/L  | 12.5                      | 25                       |               | 10/15/21 12:09 | 71-43-2    |      |
| Ethylbenzene                        | 127     | ug/L  | 2.5                       | 5                        |               | 10/14/21 14:36 | 100-41-4   |      |
| Naphthalene                         | ND      | ug/L  | 50.0                      | 5                        |               | 10/14/21 14:36 | 91-20-3    |      |
| Toluene                             | 4000    | ug/L  | 25.0                      | 25                       |               | 10/15/21 12:09 | 108-88-3   |      |
| 1,2,4-Trimethylbenzene              | 149     | ug/L  | 5.0                       | 5                        |               | 10/14/21 14:36 | 95-63-6    |      |
| 1,3,5-Trimethylbenzene              | 103     | ug/L  | 5.0                       | 5                        |               | 10/14/21 14:36 | 108-67-8   |      |
| Xylene (Total)                      | 2020    | ug/L  | 7.5                       | 5                        |               | 10/14/21 14:36 | 1330-20-7  |      |
| <b>Surrogates</b>                   |         |   |                           |                          |               |                |            |      |
| 4-Bromofluorobenzene (S)            | 102     | %   | 80-120                    | 5                        |               | 10/14/21 14:36 | 460-00-4   |      |
| Toluene-d8 (S)                      | 97      | %   | 80-120                    | 5                        |               | 10/14/21 14:36 | 2037-26-5  |      |
| 1,2-Dichlorobenzene-d4 (S)          | 99      | %   | 80-120                    | 5                        |               | 10/14/21 14:36 | 2199-69-1  |      |
| Preservation pH                     | 1.0     |   | 0.10                      | 5                        |               | 10/14/21 14:36 |            |      |
| <b>2540C Total Dissolved Solids</b> |         | Analytical Method: SM 2540C<br>Pace Analytical Services - Kansas City       |                           |                          |               |                |            |      |
| Total Dissolved Solids              | 3430    | mg/L  | 66.7                      | 1                        |               | 10/14/21 12:56 |            |      |
| <b>300.0 IC Anions 28 Days</b>      |         | Analytical Method: EPA 300.0<br>Pace Analytical Services - Kansas City      |                           |                          |               |                |            |      |
| Chloride                            | 927     | mg/L  | 100                       | 100                      |               | 10/15/21 11:11 | 16887-00-6 |      |
| Sulfate                             | 161     | mg/L  | 10.0                      | 10                       |               | 10/14/21 19:49 | 14808-79-8 |      |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Sample: WETLAND - DG 1              |         | Lab ID: 60383152003   | Collected: 10/11/21 15:45 | Received: 10/14/21 09:30 | Matrix: Water |                |            |      |
|-------------------------------------|---------|---|---------------------------|--------------------------|---------------|----------------|------------|------|
| Parameters                          | Results | Units   | Report Limit              | DF                       | Prepared      | Analyzed       | CAS No.    | Qual |
| <b>8260 MSV</b>                     |         | Analytical Method: EPA 5030B/8260<br>Pace Analytical Services - Kansas City |                           |                          |               |                |            |      |
| Benzene                             | 132     | ug/L  | 0.50                      | 1                        |               | 10/14/21 14:51 | 71-43-2    |      |
| Ethylbenzene                        | 10.3    | ug/L  | 0.50                      | 1                        |               | 10/14/21 14:51 | 100-41-4   |      |
| Naphthalene                         | ND      | ug/L  | 10.0                      | 1                        |               | 10/14/21 14:51 | 91-20-3    |      |
| Toluene                             | 337     | ug/L  | 5.0                       | 5                        |               | 10/15/21 12:24 | 108-88-3   |      |
| 1,2,4-Trimethylbenzene              | 18.9    | ug/L  | 1.0                       | 1                        |               | 10/14/21 14:51 | 95-63-6    |      |
| 1,3,5-Trimethylbenzene              | 14.1    | ug/L  | 1.0                       | 1                        |               | 10/14/21 14:51 | 108-67-8   |      |
| Xylene (Total)                      | 264     | ug/L  | 1.5                       | 1                        |               | 10/14/21 14:51 | 1330-20-7  |      |
| <b>Surrogates</b>                   |         |   |                           |                          |               |                |            |      |
| 4-Bromofluorobenzene (S)            | 101     | %   | 80-120                    | 1                        |               | 10/14/21 14:51 | 460-00-4   |      |
| Toluene-d8 (S)                      | 99      | %   | 80-120                    | 1                        |               | 10/14/21 14:51 | 2037-26-5  |      |
| 1,2-Dichlorobenzene-d4 (S)          | 98      | %   | 80-120                    | 1                        |               | 10/14/21 14:51 | 2199-69-1  |      |
| Preservation pH                     | 1.0     |   | 0.10                      | 1                        |               | 10/14/21 14:51 |            |      |
| <b>2540C Total Dissolved Solids</b> |         | Analytical Method: SM 2540C<br>Pace Analytical Services - Kansas City       |                           |                          |               |                |            |      |
| Total Dissolved Solids              | 1050    | mg/L  | 13.3                      | 1                        |               | 10/14/21 12:56 |            |      |
| <b>300.0 IC Anions 28 Days</b>      |         | Analytical Method: EPA 300.0<br>Pace Analytical Services - Kansas City      |                           |                          |               |                |            |      |
| Chloride                            | 250     | mg/L  | 20.0                      | 20                       |               | 10/15/21 11:22 | 16887-00-6 |      |
| Sulfate                             | 155     | mg/L  | 10.0                      | 10                       |               | 10/14/21 20:00 | 14808-79-8 |      |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Sample: CONFLUENCE - DG 2    |         | Lab ID: 60383152004   |              | Collected: 10/11/21 16:00 |          | Received: 10/14/21 09:30 |            | Matrix: Water |  |
|------------------------------|---------|---|--------------|---------------------------|----------|--------------------------|------------|---------------|--|
| Parameters                   | Results | Units   | Report Limit | DF                        | Prepared | Analyzed                 | CAS No.    | Qual          |  |
| 8260 MSV                     |         | Analytical Method: EPA 5030B/8260<br>Pace Analytical Services - Kansas City |              |                           |          |                          |            |               |  |
| Benzene                      | ND      | ug/L  | 0.50         | 1                         |          | 10/14/21 15:06           | 71-43-2    |               |  |
| Ethylbenzene                 | ND      | ug/L  | 0.50         | 1                         |          | 10/14/21 15:06           | 100-41-4   |               |  |
| Naphthalene                  | ND      | ug/L  | 10.0         | 1                         |          | 10/14/21 15:06           | 91-20-3    |               |  |
| Toluene                      | 1.9     | ug/L  | 1.0          | 1                         |          | 10/14/21 15:06           | 108-88-3   |               |  |
| 1,2,4-Trimethylbenzene       | ND      | ug/L  | 1.0          | 1                         |          | 10/14/21 15:06           | 95-63-6    |               |  |
| 1,3,5-Trimethylbenzene       | ND      | ug/L  | 1.0          | 1                         |          | 10/14/21 15:06           | 108-67-8   |               |  |
| Xylene (Total)               | ND      | ug/L  | 1.5          | 1                         |          | 10/14/21 15:06           | 1330-20-7  |               |  |
| Surrogates                   |         |   |              |                           |          |                          |            |               |  |
| 4-Bromofluorobenzene (S)     | 99      | %   | 80-120       | 1                         |          | 10/14/21 15:06           | 460-00-4   |               |  |
| Toluene-d8 (S)               | 99      | %   | 80-120       | 1                         |          | 10/14/21 15:06           | 2037-26-5  |               |  |
| 1,2-Dichlorobenzene-d4 (S)   | 97      | %   | 80-120       | 1                         |          | 10/14/21 15:06           | 2199-69-1  |               |  |
| Preservation pH              | 1.0     |   | 0.10         | 1                         |          | 10/14/21 15:06           |            |               |  |
| 2540C Total Dissolved Solids |         | Analytical Method: SM 2540C<br>Pace Analytical Services - Kansas City       |              |                           |          |                          |            |               |  |
| Total Dissolved Solids       | 224     | mg/L  | 5.0          | 1                         |          | 10/14/21 12:56           |            |               |  |
| 300.0 IC Anions 28 Days      |         | Analytical Method: EPA 300.0<br>Pace Analytical Services - Kansas City      |              |                           |          |                          |            |               |  |
| Chloride                     | 96.3    | mg/L  | 10.0         | 10                        |          | 10/14/21 20:34           | 16887-00-6 |               |  |
| Sulfate                      | 94.2    | mg/L  | 10.0         | 10                        |          | 10/14/21 20:34           | 14808-79-8 |               |  |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

**Sample:** ACCESS RD CULVERT - DG 3      **Lab ID:** 60383152005      Collected: 10/11/21 16:30      Received: 10/14/21 09:30      Matrix: Water

| Parameters                             | Results | Units | Report Limit | DF | Prepared | Analyzed       | CAS No.    | Qual |
|--|---------|-------|--------------|----|----------|----------------|------------|------|
| <b>8260 MSV</b>                        |         |       |              |    |          |                |            |      |
| Analytical Method: EPA 5030B/8260      |         |       |              |    |          |                |            |      |
| Pace Analytical Services - Kansas City |         |       |              |    |          |                |            |      |
| Benzene                                | ND      | ug/L  | 0.50         | 1  |          | 10/14/21 15:20 | 71-43-2    |      |
| Ethylbenzene                           | ND      | ug/L  | 0.50         | 1  |          | 10/14/21 15:20 | 100-41-4   |      |
| Naphthalene                            | ND      | ug/L  | 10.0         | 1  |          | 10/14/21 15:20 | 91-20-3    |      |
| Toluene                                | ND      | ug/L  | 1.0          | 1  |          | 10/14/21 15:20 | 108-88-3   |      |
| 1,2,4-Trimethylbenzene                 | ND      | ug/L  | 1.0          | 1  |          | 10/14/21 15:20 | 95-63-6    |      |
| 1,3,5-Trimethylbenzene                 | ND      | ug/L  | 1.0          | 1  |          | 10/14/21 15:20 | 108-67-8   |      |
| Xylene (Total)                         | ND      | ug/L  | 1.5          | 1  |          | 10/14/21 15:20 | 1330-20-7  |      |
| <b>Surrogates</b>                      |         |       |              |    |          |                |            |      |
| 4-Bromofluorobenzene (S)               | 99      | %     | 80-120       | 1  |          | 10/14/21 15:20 | 460-00-4   |      |
| Toluene-d8 (S)                         | 98      | %     | 80-120       | 1  |          | 10/14/21 15:20 | 2037-26-5  |      |
| 1,2-Dichlorobenzene-d4 (S)             | 98      | %     | 80-120       | 1  |          | 10/14/21 15:20 | 2199-69-1  |      |
| Preservation pH                        | 1.0     |       | 0.10         | 1  |          | 10/14/21 15:20 |            |      |
| <b>2540C Total Dissolved Solids</b>    |         |       |              |    |          |                |            |      |
| Analytical Method: SM 2540C            |         |       |              |    |          |                |            |      |
| Pace Analytical Services - Kansas City |         |       |              |    |          |                |            |      |
| Total Dissolved Solids                 | 274     | mg/L  | 5.0          | 1  |          | 10/14/21 12:56 |            |      |
| <b>300.0 IC Anions 28 Days</b>         |         |       |              |    |          |                |            |      |
| Analytical Method: EPA 300.0           |         |       |              |    |          |                |            |      |
| Pace Analytical Services - Kansas City |         |       |              |    |          |                |            |      |
| Chloride                               | 166     | mg/L  | 10.0         | 10 |          | 10/14/21 20:46 | 16887-00-6 |      |
| Sulfate                                | 187     | mg/L  | 10.0         | 10 |          | 10/14/21 20:46 | 14808-79-8 |      |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

Sample: **ROBINSON A CULVERT - DG 4** Lab ID: **60383152006** Collected: 10/11/21 17:00 Received: 10/14/21 09:30 Matrix: Water

| Parameters                             | Results | Units | Report Limit | DF | Prepared | Analyzed       | CAS No.    | Qual |
|--|---------|-------|--------------|----|----------|----------------|------------|------|
| <b>8260 MSV</b>                        |         |       |              |    |          |                |            |      |
| Analytical Method: EPA 5030B/8260      |         |       |              |    |          |                |            |      |
| Pace Analytical Services - Kansas City |         |       |              |    |          |                |            |      |
| Benzene                                | ND      | ug/L  | 0.50         | 1  |          | 10/14/21 15:35 | 71-43-2    |      |
| Ethylbenzene                           | ND      | ug/L  | 0.50         | 1  |          | 10/14/21 15:35 | 100-41-4   |      |
| Naphthalene                            | ND      | ug/L  | 10.0         | 1  |          | 10/14/21 15:35 | 91-20-3    |      |
| Toluene                                | ND      | ug/L  | 1.0          | 1  |          | 10/14/21 15:35 | 108-88-3   |      |
| 1,2,4-Trimethylbenzene                 | ND      | ug/L  | 1.0          | 1  |          | 10/14/21 15:35 | 95-63-6    |      |
| 1,3,5-Trimethylbenzene                 | ND      | ug/L  | 1.0          | 1  |          | 10/14/21 15:35 | 108-67-8   |      |
| Xylene (Total)                         | ND      | ug/L  | 1.5          | 1  |          | 10/14/21 15:35 | 1330-20-7  |      |
| <b>Surrogates</b>                      |         |       |              |    |          |                |            |      |
| 4-Bromofluorobenzene (S)               | 99      | %     | 80-120       | 1  |          | 10/14/21 15:35 | 460-00-4   |      |
| Toluene-d8 (S)                         | 96      | %     | 80-120       | 1  |          | 10/14/21 15:35 | 2037-26-5  |      |
| 1,2-Dichlorobenzene-d4 (S)             | 99      | %     | 80-120       | 1  |          | 10/14/21 15:35 | 2199-69-1  |      |
| Preservation pH                        | 1.0     |       | 0.10         | 1  |          | 10/14/21 15:35 |            |      |
| <b>2540C Total Dissolved Solids</b>    |         |       |              |    |          |                |            |      |
| Analytical Method: SM 2540C            |         |       |              |    |          |                |            |      |
| Pace Analytical Services - Kansas City |         |       |              |    |          |                |            |      |
| Total Dissolved Solids                 | 584     | mg/L  | 10.0         | 1  |          | 10/14/21 12:56 |            |      |
| <b>300.0 IC Anions 28 Days</b>         |         |       |              |    |          |                |            |      |
| Analytical Method: EPA 300.0           |         |       |              |    |          |                |            |      |
| Pace Analytical Services - Kansas City |         |       |              |    |          |                |            |      |
| Chloride                               | 250     | mg/L  | 20.0         | 20 |          | 10/15/21 11:34 | 16887-00-6 |      |
| Sulfate                                | 446     | mg/L  | 50.0         | 50 |          | 10/15/21 11:45 | 14808-79-8 |      |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

|  |                |                       |  |
|--|----------------|-----------------------|--|
| QC Batch:  | 749509         | Analysis Method:      | EPA 5030B/8260                         |
| QC Batch Method:   | EPA 5030B/8260 | Analysis Description: | 8260 MSV Water 10 mL Purge             |
|  |                | Laboratory:           | Pace Analytical Services - Kansas City |
| Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006 |                |                       |  |

METHOD BLANK: 3001448

Matrix: Water

Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006

| Parameter                  | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,2,4-Trimethylbenzene     | ug/L  | ND           | 1.0             | 10/14/21 11:34 |            |
| 1,3,5-Trimethylbenzene     | ug/L  | ND           | 1.0             | 10/14/21 11:34 |            |
| Benzene                    | ug/L  | ND           | 0.50            | 10/14/21 11:34 |            |
| Ethylbenzene               | ug/L  | ND           | 0.50            | 10/14/21 11:34 |            |
| Naphthalene                | ug/L  | ND           | 10.0            | 10/14/21 11:34 |            |
| Toluene                    | ug/L  | ND           | 1.0             | 10/14/21 11:34 |            |
| Xylene (Total)             | ug/L  | ND           | 1.5             | 10/14/21 11:34 |            |
| 1,2-Dichlorobenzene-d4 (S) | %     | 99           | 80-120          | 10/14/21 11:34 |            |
| 4-Bromofluorobenzene (S)   | %     | 97           | 80-120          | 10/14/21 11:34 |            |
| Toluene-d8 (S)             | %     | 96           | 80-120          | 10/14/21 11:34 |            |

LABORATORY CONTROL SAMPLE: 3001449

| Parameter                  | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,2,4-Trimethylbenzene     | ug/L  | 20          | 19.7       | 99        | 80-125       |            |
| 1,3,5-Trimethylbenzene     | ug/L  | 20          | 19.8       | 99        | 80-125       |            |
| Benzene                    | ug/L  | 20          | 19.6       | 98        | 80-120       |            |
| Ethylbenzene               | ug/L  | 20          | 20.2       | 101       | 80-120       |            |
| Naphthalene                | ug/L  | 20          | 20.9       | 105       | 70-120       |            |
| Toluene                    | ug/L  | 20          | 18.9       | 95        | 80-120       |            |
| Xylene (Total)             | ug/L  | 60          | 59.9       | 100       | 80-120       |            |
| 1,2-Dichlorobenzene-d4 (S) | %     |             |            | 99        | 80-120       |            |
| 4-Bromofluorobenzene (S)   | %     |             |            | 100       | 80-120       |            |
| Toluene-d8 (S)             | %     |             |            | 97        | 80-120       |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

QC Batch: 749792

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60383152002, 60383152003

METHOD BLANK: 3002351

Matrix: Water

Associated Lab Samples: 60383152002, 60383152003

| Parameter                  | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|----------------------------|-------|--------------|-----------------|----------------|------------|
| Benzene                    | ug/L  | ND           | 0.50            | 10/15/21 09:38 |            |
| Toluene                    | ug/L  | ND           | 1.0             | 10/15/21 09:38 |            |
| 1,2-Dichlorobenzene-d4 (S) | %     | 100          | 80-120          | 10/15/21 09:38 |            |
| 4-Bromofluorobenzene (S)   | %     | 100          | 80-120          | 10/15/21 09:38 |            |
| Toluene-d8 (S)             | %     | 96           | 80-120          | 10/15/21 09:38 |            |

LABORATORY CONTROL SAMPLE: 3002352

| Parameter                  | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------------|-------|-------------|------------|-----------|--------------|------------|
| Benzene                    | ug/L  | 20          | 19.9       | 99        | 80-120       |            |
| Toluene                    | ug/L  | 20          | 18.7       | 93        | 80-120       |            |
| 1,2-Dichlorobenzene-d4 (S) | %     |             |            | 99        | 80-120       |            |
| 4-Bromofluorobenzene (S)   | %     |             |            | 99        | 80-120       |            |
| Toluene-d8 (S)             | %     |             |            | 97        | 80-120       |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

|                  |          |                       |  |
|------------------|----------|-----------------------|--|
| QC Batch:        | 749494   | Analysis Method:      | SM 2540C                               |
| QC Batch Method: | SM 2540C | Analysis Description: | 2540C Total Dissolved Solids           |
|                  |          | Laboratory:           | Pace Analytical Services - Kansas City |

Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006

METHOD BLANK: 3001387 Matrix: Water

Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006

| Parameter              | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| Total Dissolved Solids | mg/L  | ND           | 5.0             | 10/14/21 12:55 |            |

LABORATORY CONTROL SAMPLE: 3001388

| Parameter              | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Total Dissolved Solids | mg/L  | 1000        | 956        | 96        | 80-120       |            |

SAMPLE DUPLICATE: 3001389

| Parameter              | Units | 60383152001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------------|-------|--------------------|------------|-----|---------|------------|
| Total Dissolved Solids | mg/L  | 1110               | 1090       | 2   | 10      |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

|                  |           |                       |  |
|------------------|-----------|-----------------------|--|
| QC Batch:        | 749497    | Analysis Method:      | EPA 300.0                              |
| QC Batch Method: | EPA 300.0 | Analysis Description: | 300.0 IC Anions                        |
|                  |           | Laboratory:           | Pace Analytical Services - Kansas City |

Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006

METHOD BLANK: 3001407 Matrix: Water

Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Chloride  | mg/L  | ND           | 1.0             | 10/14/21 18:52 |            |
| Sulfate   | mg/L  | ND           | 1.0             | 10/14/21 18:52 |            |

METHOD BLANK: 3002647 Matrix: Water

Associated Lab Samples: 60383152001, 60383152002, 60383152003, 60383152004, 60383152005, 60383152006

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Chloride  | mg/L  | ND           | 1.0             | 10/15/21 08:15 |            |
| Sulfate   | mg/L  | ND           | 1.0             | 10/15/21 08:15 |            |

LABORATORY CONTROL SAMPLE: 3001408

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Chloride  | mg/L  | 5           | 4.9        | 97        | 90-110       |            |
| Sulfate   | mg/L  | 5           | 4.9        | 99        | 90-110       |            |

LABORATORY CONTROL SAMPLE: 3002648

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Chloride  | mg/L  | 5           | 4.9        | 98        | 90-110       |            |
| Sulfate   | mg/L  | 5           | 5.1        | 101       | 90-110       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3001409 3001410

| Parameter | Units | 60383152001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Chloride  | mg/L  | 205                | 100            | 100             | 311       | 310        | 106      | 105       | 80-120       | 0   | 15      |      |
| Sulfate   | mg/L  | 150                | 100            | 100             | 254       | 253        | 104      | 103       | 80-120       | 0   | 15      |      |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### SAMPLE QUALIFIERS

Sample: 60383152001

[1] Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.

Sample: 60383152002

[1] Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.

Sample: 60383152003

[1] Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.

Sample: 60383152004

[1] Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.

Sample: 60383152005

[1] Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.

Sample: 60383152006

[1] Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TERRA ENERGY PARTNERS - RIVER

Pace Project No.: 60383152

| Lab ID      | Sample ID                 | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|---------------------------|-----------------|----------|-------------------|------------------|
| 60383152001 | WETLAND - UG 1            | EPA 5030B/8260  | 749509   |                   |                  |
| 60383152002 | WETLAND - BREACH PT       | EPA 5030B/8260  | 749509   |                   |                  |
| 60383152002 | WETLAND - BREACH PT       | EPA 5030B/8260  | 749792   |                   |                  |
| 60383152003 | WETLAND - DG 1            | EPA 5030B/8260  | 749509   |                   |                  |
| 60383152003 | WETLAND - DG 1            | EPA 5030B/8260  | 749792   |                   |                  |
| 60383152004 | CONFLUENCE - DG 2         | EPA 5030B/8260  | 749509   |                   |                  |
| 60383152005 | ACCESS RD CULVERT - DG 3  | EPA 5030B/8260  | 749509   |                   |                  |
| 60383152006 | ROBINSON A CULVERT - DG 4 | EPA 5030B/8260  | 749509   |                   |                  |
| 60383152001 | WETLAND - UG 1            | SM 2540C        | 749494   |                   |                  |
| 60383152002 | WETLAND - BREACH PT       | SM 2540C        | 749494   |                   |                  |
| 60383152003 | WETLAND - DG 1            | SM 2540C        | 749494   |                   |                  |
| 60383152004 | CONFLUENCE - DG 2         | SM 2540C        | 749494   |                   |                  |
| 60383152005 | ACCESS RD CULVERT - DG 3  | SM 2540C        | 749494   |                   |                  |
| 60383152006 | ROBINSON A CULVERT - DG 4 | SM 2540C        | 749494   |                   |                  |
| 60383152001 | WETLAND - UG 1            | EPA 300.0       | 749497   |                   |                  |
| 60383152002 | WETLAND - BREACH PT       | EPA 300.0       | 749497   |                   |                  |
| 60383152003 | WETLAND - DG 1            | EPA 300.0       | 749497   |                   |                  |
| 60383152004 | CONFLUENCE - DG 2         | EPA 300.0       | 749497   |                   |                  |
| 60383152005 | ACCESS RD CULVERT - DG 3  | EPA 300.0       | 749497   |                   |                  |
| 60383152006 | ROBINSON A CULVERT - DG 4 | EPA 300.0       | 749497   |                   |                  |

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.





# Sample Condition Upon Receipt

WO#: 60383152



Client Name: HRL

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: 5002 0651 9271 Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: T-296 Type of Ice: Wet Blue ☐ None ☐

Cooler Temperature (°C): As-read 10.9 Corr. Factor -0.3 Corrected 10.6

Date and initials of person examining contents:

Temperature should be above freezing to 6°C

|   |  |  |
|---|--|--|
| Chain of Custody present:   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <u> cooler delay in transit. All ice melted. </u>                          |
| Chain of Custody relinquished:  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Samples arrived within holding time:  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Short Hold Time analyses (<72hr):   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Rush Turn Around Time requested:  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <u>24Hr</u>  |
| Sufficient volume:  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Correct containers used:  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Pace containers used:   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Containers intact:  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?  | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A |  |
| Filtered volume received for dissolved tests?   | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A |  |
| Sample labels match COC: Date / time / ID / analyses  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Samples contain multiple phases? Matrix: <u>WT</u>  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT# | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | List sample IDs, volumes, lot #'s of preservative and the date/time added. |
| Cyanide water sample checks:  |  |  |
| Lead acetate strip turns dark? (Record only)  | <input type="checkbox"/> Yes <input type="checkbox"/> No   |  |
| Potassium iodide test strip turns blue/purple? (Preserve)   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |  |
| Trip Blank present:   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Headspace in VOA vials (>6mm):  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A |  |
| Samples from USDA Regulated Area: State:  | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A |  |
| Additional labels attached to 5035A / TX1005 vials in the field?  | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A |  |

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_



9608 Loriet Blvd  
Lenexa, KS 66219  
Ph: 913-563-1407  
Ph: 702-888-2153

[illegible]

**Table 915-1  
CLEANUP CONCENTRATIONS**

| <b>Contaminant of Concern</b>   | <b>Concentrations</b>               |
|---|-------------------------------------|
| Soil TPH (total volatile [C <sub>6</sub> -C <sub>10</sub> ] and extractable [C <sub>10</sub> -C <sub>36</sub> ] hydrocarbons) | 500mg/kg                            |
| Soils and Groundwater - liquid hydrocarbons including condensate and oil  | below visual detection limits       |
| <b>Soil Suitability for Reclamation</b>   |                                     |
| Electrical conductivity (EC) (by saturated paste method) <sup>1,2</sup>   | <4mmhos/cm                          |
| Sodium adsorption ratio (SAR) (by saturated paste method) <sup>1,2,3</sup>  | <6                                  |
| pH (by saturated paste method) <sup>1,2</sup>   | 6–8.3                               |
| boron (hot water soluble soil extract) <sup>1,2,3</sup>   | 2mg/l                               |
| <b>Organic Compounds in Groundwater<sup>4</sup></b>   |                                     |
| benzene   | 5µg/l                               |
| toluene <sup>5</sup>  | 560 to 1,000µg/l                    |
| ethylbenzene  | 700µg/l                             |
| xlenes (sum of o-, m- and p- isomers = total xlenes) <sup>5</sup>   | 1,400 to 10,000µg/l                 |
| naphthalene   | 140µg/l                             |
| 1,2,4-trimethylbenzene  | 67µg/l                              |
| 1,3,5-trimethylbenzene  | 67µg/l                              |
| <b>Groundwater Inorganic Parameters<sup>4</sup></b>   |                                     |
| total dissolved solids (TDS) <sup>1</sup>   | <1.25 X local background            |
| chloride ion <sup>1</sup>   | 250mg/l or <1.25 X local background |
| sulfate ion <sup>1</sup>  | 250mg/l or <1.25 X local background |