

Date of Issue: 09/07/2023 04:04:26

DEP Bureau of Laboratories - Harrisburg P.O. Box 1467 2575 Interstate Drive Harrisburg, PA 17105-1467

Contact Phone Number: (717) 346-7200

NELAP - accredited by

NJ DEP - Laboratory Number: PA059 PA DEP LAP - DEP Lab ID: 22-00223

Analytical Report For Oil And Gas Mgmt

 Sample ID:
 9550 018
 Date Collected:
 08/03/2023 09:55:00 AM
 Lab Sample ID:
 12023012651
 Status:
 Completed

Name of Sample Collector: Alicia M Furey

Date Received: 08/04/2023

County: Venango State:

Municipality: Sugarcreek Boro

RENO BELLOWS SPRING

RENO PA.

Sample Medium: Ground Water

Sample Medium Type: Water

Location: Bellows Spring 2 **Reason:** Complaint

Project: NOT INDICATED

Standard Anlysis: 946

Matrix: Water

| Field Tests | | |
|----------------------|------|----------|
| рН | 5.09 | pH units |
| Specific Conductance | 1290 | umhos/cm |

Stream Condition:

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 Sample ID:
 9550 018
 Date Collected:
 08/03/2023 09:55:00 AM
 Lab Sample ID:
 I2023012651
 Status:
 Completed

Appearance: clear, no odor

| Test Codes / CAS # - Description | Reported Results | Date And Time Analyzed | Approved by | Test Method |
|---|------------------|------------------------|-------------|----------------|
| 00410 ALKALINITY AS CaCO3 @ pH 4.5 | 0.0 mg/L | 08/07/2023 02:55 PM | JAHOGUE | SM 2320B |
| ** Comment ** Sample bottle had headspace present before analysis | | | | |
| 01105H ALUMINUM, TOTAL (WATER & WASTE) ICPMS | 1450.000 ug/L | 08/17/2023 10:42 AM | ELEEDY | EPA 200.8 |
| 01002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS | <3.00 ug/L (U) | 08/10/2023 12:57 PM | ELEEDY | EPA 200.8 |
| 01007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP | 0.412 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 71870 BROMIDE BY ION CHROMATOGRAPHY | 3.296 mg/L | 08/04/2023 10:00 PM | TVOROBEYCH | EPA 300.0 |
| 00916A CALCIUM, TOTAL (WATER & WASTE) BY ICP | 44.500 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 00900 HARDNESS, TOTAL (CALCULATED) | 163 mg/L | 08/10/2023 10:58 AM | CREITMEYER | SM 2340 B |
| ** Comment ** Accredited by NJ only - accreditation not available from PA | | | | |
| 01045M IRON, TOTAL IN MG/L (WATER & WASTE) BY ICP | <0.100 mg/L (U) | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 01132A LITHIUM, TOTAL (WATER & WASTE) BY ICP | <25.0 ug/L (U) | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP | 12.60 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP | 0.309 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 00403 pH, Lab (Electrometric) | 4.9 pH units | 08/07/2023 02:55 PM | JAHOGUE | SM 4500-H+ B |
| ** Comment ** Holding time exceeded | | | | |
| 00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP | 1.73 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 01147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS | 9.140 ug/L | 08/10/2023 12:57 PM | ELEEDY | EPA 200.8 |
| 00929A SODIUM, TOTAL (WATER & WASTE) BY ICP | 168.00 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 00095 SPECIFIC CONDUCTIVITY @ 25.0 C | 1237.00 umhos/cm | 08/04/2023 03:36 PM | MTUZINSKI | SM 2510B |
| 01082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP | 0.771 mg/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |
| 00403T Temperature at which pH is measured | 21.27 C | 08/07/2023 02:55 PM | JAHOGUE | SM 4500-H+ B |
| 00940 Total Chloride-Ion Chromatograph | 423.70 mg/L | 08/09/2023 02:22 AM | TVOROBEYCH | EPA 300.0 |
| 70300 TOTAL DISSOLVED SOLIDS @ 180C | 732 mg/L | 08/04/2023 12:08 PM | JRONEMUS | SM 2540C-15 |
| 00945 Total Sulfate-Ion Chromatograph | 5.99 mg/L | 08/04/2023 10:00 PM | TVOROBEYCH | EPA 300.0 |
| 00530 TOTAL SUSPENDED SOLIDS | <20 mg/L (U) | 08/07/2023 09:01 AM | CLONTZ | USGS I-3765-85 |
| 82079 TURBIDITY, NEPHELMETRIC | <1 NTU (U) | 08/04/2023 02:55 PM | JAHOGUE | EPA 180.1 |
| 01092A ZINC, TOTAL (WATER & WASTE) BY ICP | 62.00 ug/L | 08/10/2023 10:58 AM | CREITMEYER | EPA 200.7 |

Analytical Report For Oil And Gas Mgmt

The results of the analyses provided in this laboratory report relate only to the sample(s) identified therein. Unless otherwise noted, the results presented on this laboratory report meet all requirements of the 2016 TNI standard. Sample was in acceptable condition when received by the Laboratory. Any exceptions are noted in the report.

* denotes tests that the laboratory is not accredited for

- U Indicates analysis was performed for the test but it was not detected. The sample quantitation limit is reported.
- J Indicates an estimated value, reported between Reporting Limit (RL) and Minimum Detection Limit (MDL).

Jennifer Fesler, Technical Director, Bureau of Laboratories