

Date of Issue: 10/05/2023 04:06:42

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: 9548 005 Date Collected: 09/18/2023 10:00:00 AM Lab Sample ID: 12023015486 Status: Completed Name of Sample Collector: Alan J Wolf Date Received: 09/19/2023 County: Venango State: Municipality: Sugarcreek Boro **BELLOWS SPRING** RENO PA. Sample Medium: Water Sample Medium Type: Water Location: Bellows Spring -Composite Reason: Complaint Project: NOT INDICATED Standard Anlysis: 946 Matrix: Water Legal Seal: 1206234 Intact: Yes Legal Seal: 1206236 Intact: Yes Legal Seal: 1206235 Intact: Yes Stream Condition:

Analytical Report For Oil And Gas Mgmt

Sample ID: 9548 005 Date Collected: 09/18	8/2023 10:00:00 AM	Lab Sample ID: 12023015486	Status: Completed	
Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method
0410 ALKALINITY AS CaCO3 @ pH 4.5	2.0 mg/L	09/19/2023 11:32 AM	JAHOGUE	SM 2320B
* Comment ** Sample bottle had headspace present before analysis				
1105H ALUMINUM, TOTAL (WATER & WASTE) ICPMS	285.000 ug/L	09/21/2023 11:13 AM	ELEEDY	EPA 200.8
1002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	<3.00 ug/L (U)	09/21/2023 11:13 AM	ELEEDY	EPA 200.8
1007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.144 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
1870 BROMIDE BY ION CHROMATOGRAPHY	1.063 mg/L	09/19/2023 08:15 PM	TVOROBEYCH	EPA 300.0
0916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	15.650 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
00900 HARDNESS, TOTAL (CALCULATED)	61 mg/L	09/20/2023 10:49 AM	CWINDLE	SM 2340 B
* Comment ** Accredited by NJ only - accreditation not available from PA				
1045M IRON, TOTAL IN MG/L (WATER & WASTE) BY ICP	<0.100 mg/L (U)	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
1132A LITHIUM, TOTAL (WATER & WASTE) BY ICP	<25.0 ug/L (U)	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	5.33 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	0.114 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
00403 pH, Lab (Electrometric)	5.4 pH units	09/19/2023 11:32 AM	JAHOGUE	SM 4500-H+ B
** Comment ** Holding time exceeded				
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	1.09 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
1147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	<4.00 ug/L (U)	09/21/2023 11:13 AM	ELEEDY	EPA 200.8
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	51.51 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	428.00 umhos/cm	09/25/2023 04:46 PM	MTUZINSKI	SM 2510B
1082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.245 mg/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7
00403T Temperature at which pH is measured	19.23 C	09/19/2023 11:32 AM	JAHOGUE	SM 4500-H+ B
00940 Total Chloride-Ion Chromatograph	119.21 mg/L	10/03/2023 04:10 PM	TVOROBEYCH	EPA 300.0
70300 TOTAL DISSOLVED SOLIDS @ 180C	290 mg/L	09/19/2023 09:50 AM	JRONEMUS	SM 2540C-15
00945 Total Sulfate-Ion Chromatograph	6.34 mg/L	09/19/2023 08:15 PM	TVOROBEYCH	EPA 300.0
0530 TOTAL SUSPENDED SOLIDS	<20 mg/L (U)	09/19/2023 08:53 AM	CLONTZ	USGS I-3765-85
2079 TURBIDITY, NEPHELMETRIC	<1 NTU (U)	09/19/2023 11:10 AM	JAHOGUE	EPA 180.1
1092A ZINC, TOTAL (WATER & WASTE) BY ICP	30.00 ug/L	09/20/2023 10:49 AM	CWINDLE	EPA 200.7

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

Analytical Report For Oil And Gas Mgmt

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