

Date of Issue: 10/02/2023 07:26:20

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	<b>ID:</b> 9548 002	Date Collected: 09/1		Lab Sample ID: 120230	14936	Status: Completed		
N	lame of Sample Collector:	Alan J Wolf						
	Date Received:	09/12/2023						
	County:	Venango		State:				
	Municipality:	Sugarcreek Boro						
		BELLOWS SPRING						
		RENO PA.						
	Sample Medium:	Water						
	Sample Medium Type:							
	Location:	Bellows Spring -BS2						
		Complaint						
	-	NOT INDICATED						
	Standard Anlysis:							
	Matrix:	Water						
Legal Seal:	1024018	Intact:	Yes					
Legal Seal:	1024020	Intact:	Yes					
Legal Seal:	1024019	Intact:	Yes					
	Stream Condition:							

## Analytical Report For Oil And Gas Mgmt

Sample ID: 9548 002 Date Collected: 09/11	/2023 09:58:00 AM	Lab Sample ID: 12023014936	Status:	Status: Completed	
Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method	
0410 ALKALINITY AS CaCO3 @ pH 4.5	0.2 mg/L	09/12/2023 12:05 PM	JAHOGUE	SM 2320B	
* Comment ** Sample bottle had headspace present before analysis					
1105H ALUMINUM, TOTAL (WATER & WASTE) ICPMS	348.000 ug/L	09/13/2023 10:11 AM	ELEEDY	EPA 200.8	
1002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	<3.00 ug/L (U)	09/13/2023 10:11 AM	ELEEDY	EPA 200.8	
1007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.152 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
1870 BROMIDE BY ION CHROMATOGRAPHY	1.139 mg/L	09/12/2023 09:53 PM	TVOROBEYCH	EPA 300.0	
0916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	16.600 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
00900 HARDNESS, TOTAL (CALCULATED)	64 mg/L	09/13/2023 12:05 PM	CREITMEYER	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)	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
1132A LITHIUM, TOTAL (WATER & WASTE) BY ICP	<25.0 ug/L (U)	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	5.53 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	0.145 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
00403 pH, Lab (Electrometric)	5.2 pH units	09/12/2023 12:05 PM	JAHOGUE	SM 4500-H+ B	
* Comment ** Holding time exceeded					
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	1.15 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
1147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	<4.00 ug/L (U)	09/13/2023 10:11 AM	ELEEDY	EPA 200.8	
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	56.80 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	477.00 umhos/cm	09/15/2023 02:24 PM	MTUZINSKI	SM 2510B	
1082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.267 mg/L	09/13/2023 12:05 PM	CREITMEYER	EPA 200.7	
00403T Temperature at which pH is measured	18.81 C	09/12/2023 12:05 PM	JAHOGUE	SM 4500-H+ B	
00940 Total Chloride-Ion Chromatograph	129.34 mg/L	09/13/2023 09:59 PM	TVOROBEYCH	EPA 300.0	
70300 TOTAL DISSOLVED SOLIDS @ 180C	342 mg/L	09/12/2023 10:00 AM	JRONEMUS	SM 2540C-15	
0945 Total Sulfate-Ion Chromatograph	6.23 mg/L	09/12/2023 09:53 PM	TVOROBEYCH	EPA 300.0	
0530 TOTAL SUSPENDED SOLIDS	<20 mg/L (U)	09/12/2023 08:42 AM	CLONTZ	USGS I-3765-85	
2079 TURBIDITY, NEPHELMETRIC	<1 NTU (U)	09/12/2023 11:32 AM	JAHOGUE	EPA 180.1	
1092A ZINC, TOTAL (WATER & WASTE) BY ICP	37.00 ug/L	09/13/2023 12:05 PM	CREITMEYER	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

Lab Sample ID: 12023014936