

Date of Issue: 08/04/2023 09:15:53

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 001	Date Collected: 07/31/		-	Lab Sample ID: 12023012423	Status: Completed		
Nar	ne of Sample Collector:	Alan J Wolf						
	Date Received:	08/01/2023						
	County:	Venango			State:			
	Municipality:	Sugarcreek Boro						
		SHAFER RUN SPRING						
		RENO PA.						
	Sample Medium:	Water						
	Sample Medium Type:							
	Location:	Shafer Run Spring Cistern						
	Reason:	Complaint						
	Project:	NOT INDICATED						
	Standard Anlysis:	946						
	Matrix:	Water						
egal Seal:	1206086	Intact:	Yes]				
egal Seal:	1206085	Intact:	Yes					
egal Seal:	1206087	Intact:	Yes					
	Stream Condition:			-				

Analytical Report For Oil And Gas Mgmt

Sample ID: 9548 001 Date Collected: 07/3	1/2023 11:08:00 AM	Lab Sample ID: 12023012423	Status:	Status: Completed	
Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method	
00410 ALKALINITY AS CaCO3 @ pH 4.5	46.0 mg/L	08/02/2023 11:14 AM	JAHOGUE	SM 2320B	
** Comment ** Sample bottle had headspace present before analysis					
01105H ALUMINUM, TOTAL (WATER & WASTE) ICPMS	20.600 ug/L	08/02/2023 10:42 AM	SCHOY	EPA 200.8	
01002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	<3.00 ug/L (U)	08/02/2023 10:42 AM	SCHOY	EPA 200.8	
01007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.026 mg/L	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
71870 BROMIDE BY ION CHROMATOGRAPHY	<0.2 mg/L (U)	08/01/2023 06:44 PM	TVOROBEYCH	EPA 300.0	
00916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	13.600 mg/L	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
00900 HARDNESS, TOTAL (CALCULATED)	54 mg/L	08/03/2023 10:15 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)	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
01132A LITHIUM, TOTAL (WATER & WASTE) BY ICP	<25.0 ug/L (U)	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	4.88 mg/L	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	<0.010 mg/L (U)	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
00403 pH, Lab (Electrometric)	6.1 pH units	08/02/2023 11:14 AM	JAHOGUE	SM 4500-H+ B	
** Comment ** Holding time exceeded					
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	1.67 mg/L	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
01147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	<4.00 ug/L (U)	08/02/2023 10:42 AM	SCHOY	EPA 200.8	
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	9.27 mg/L	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	154.20 umhos/cm	08/02/2023 04:50 PM	MTUZINSKI	SM 2510B	
01082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.068 mg/L	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	
00403T Temperature at which pH is measured	17.46 C	08/02/2023 11:14 AM	JAHOGUE	SM 4500-H+ B	
00940 Total Chloride-Ion Chromatograph	14.96 mg/L	08/01/2023 06:44 PM	TVOROBEYCH	EPA 300.0	
70300 TOTAL DISSOLVED SOLIDS @ 180C	86 mg/L	08/01/2023 09:56 AM	JRONEMUS	SM 2540C-15	
00945 Total Sulfate-Ion Chromatograph	11.58 mg/L	08/01/2023 06:44 PM	TVOROBEYCH	EPA 300.0	
00530 TOTAL SUSPENDED SOLIDS	<20 mg/L (U)	08/01/2023 02:59 PM	CLONTZ	USGS I-3765-85	
* Comment ** Standard out of range					
32079 TURBIDITY, NEPHELMETRIC	<1 NTU (U)	08/01/2023 11:47 AM	JAHOGUE	EPA 180.1	
01092A ZINC, TOTAL (WATER & WASTE) BY ICP	<30.0 ug/L (U)	08/03/2023 10:15 AM	CREITMEYER	EPA 200.7	

Analytical Report For Oil And Gas Mgmt

Lab Sample ID: 12023012423

Status: Completed

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).

Date Collected: 07/31/2023 11:08:00 AM

Jennifer Fesler, Technical Director, Bureau of Laboratories