

Date of Issue: 10/30/2023 04:06:51

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: 10/10/2023 09:41:00 AM Lab Sample ID: 12023016842 Status: Completed

Name of Sample Collector: Alan J Wolf

Date Received: 10/11/2023

County: NOT INDICATED State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Complaint

Project: NOT INDICATED

Standard Anlysis: 946

Matrix: Water

Legal Seal:	1206209	Intact:	Yes	
Legal Seal:	1206208	Intact:	Yes	
Legal Seal:	1206210	Intact:	Yes	

Stream Condition:

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method
00410 ALKALINITY AS CaCO3 @ pH 4.5	0.2 mg/L	10/11/2023 12:27 PM	JAHOGUE	SM 2320B
** Comment ** Sample bottle had headspace present before analysis				
01105H ALUMINUM, TOTAL (WATER & WASTE) ICPMS	116.000 ug/L	10/12/2023 11:25 AM	SCHOY	EPA 200.8
01002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	<3.00 ug/L (U)	10/12/2023 11:25 AM	SCHOY	EPA 200.8
01007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.097 mg/L	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7

Analytical Report For Oil And Gas Mgmt

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approved by	Test Method		
71870 BROMIDE BY ION CHROMATOGRAPHY	0.766 mg/L	10/11/2023 02:41 PM	FVODOPIVEC	EPA 300.0		
00916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	10.500 mg/L	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
00900 HARDNESS, TOTAL (CALCULATED)	42 mg/L	10/16/2023 04:25 PM	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)	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
01132A LITHIUM, TOTAL (WATER & WASTE) BY ICP	<25.0 ug/L (U)	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	3.88 mg/L	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	0.069 mg/L	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
00403 pH, Lab (Electrometric)	5.5 pH units	10/11/2023 12:27 PM	JAHOGUE	SM 4500-H+ B		
** Comment ** Holding time exceeded						
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	<1.00 mg/L (U)	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
01147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	<4.00 ug/L (U)	10/12/2023 11:25 AM	SCHOY	EPA 200.8		
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	34.40 mg/L	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	322.00 umhos/cm	10/17/2023 01:05 PM	MTUZINSKI	SM 2510B		
01082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.161 mg/L	10/16/2023 04:25 PM	CREITMEYER	EPA 200.7		
00403T Temperature at which pH is measured	19.33 C	10/11/2023 12:27 PM	JAHOGUE	SM 4500-H+ B		
00940 Total Chloride-Ion Chromatograph	84.73 mg/L	10/11/2023 07:24 PM	FVODOPIVEC	EPA 300.0		
70300 TOTAL DISSOLVED SOLIDS @ 180C	222 mg/L	10/11/2023 02:00 PM	JRONEMUS	SM 2540C-15		
00945 Total Sulfate-Ion Chromatograph	6.46 mg/L	10/11/2023 02:41 PM	FVODOPIVEC	EPA 300.0		
00530 TOTAL SUSPENDED SOLIDS	<20 mg/L (U)	10/12/2023 01:04 PM	CLONTZ	USGS I-3765-85		
82079 TURBIDITY, NEPHELMETRIC	<1 NTU (U)	10/11/2023 12:17 PM	JAHOGUE	EPA 180.1		
ANSWER RECHECKED BY ANALYST						
01092A ZINC, TOTAL (WATER & WASTE) BY ICP	<30.0 ug/L (U)	10/16/2023 04:25 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.

Jennifer Fesler, Technical Director, Bureau of Laboratories

^{*} 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).