



Date of Issue: 02/03/2023 04:05:59

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
Mining And Reclamation

Sample ID: 4182 897

Date Collected: 12/21/2022 01:10:00 PM

Lab Sample ID: I2022021967

Name of Sample Collector: Jaimie L Weyant

Date Received: 12/22/2022

County: NOT INDICATED

State:

Municipality: NOT INDICATED

Location: NOT INDICATED

Reason: Routine Sampling

Project: NOT INDICATED

Standard Analysis: 946

Matrix: Water

Stream Condition:

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Approv
00410 ALKALINITY AS CaCO3 @ pH 4.5	963.2 mg/L	12/22/2022 03:40 PM	JAHOG
** Comment ** Sample bottle had headspace present before analysis			
01105H ALUMINUM, TOTAL (WATER & WASTE) ICPMS	<75.000 ug/L	01/10/2023 10:11 AM	ELEED
** Comment ** Diluted Before Analysis			
DETECTION LIMIT NOT MET - INTERFERENCE			
01002H ARSENIC, TOTAL (WATER & WASTE) BY ICPMS	<15.000 ug/L	01/10/2023 10:11 AM	ELEED

Module 8.1A By Primary Facility

Primary Facility: 30743711

Monitoring Point: 001

ID	Seq	Date Collected	Initial Flow	Final Flow	Determ Method	pH units	ALK MG/L	HOT A MG/L	FE MG/L	MN MG/L	AL MG/L
82	000	01/15/2020	0	0	Meas						
82	048	02/04/2020	4586	4586	Meas	8.0	1173.4	-1074.00	.593	.308	<.3
82	115	07/28/2020	4875	4875	Meas	7.8	1264.0	-1158.00	1.61	.395	<.5
82	122	08/13/2020	2350	2350	Meas	7.8	1346.4	-1202.00	<.3	.23	<.5
82	129	08/20/2020				8.2	138.2	-123.60	<.3	.087	<.5
82	172	10/22/2020	5339	5339	Meas	7.8	1365.0	-1232.00	.358	.27	<.5
82	204	11/24/2020	4890	4890	Meas	8.1	>1400	-1324.00	<.3	.255	<.5
82	253	01/13/2021	4107	4107	Meas	8.3	1271.2	-1258.00	.411	.282	<.5
82	274	02/17/2021	5430	5430	Meas	7.9	1362.0	-1316.00	<.3	.396	<.5
82	318	03/16/2021	3000	3000	Est	8.0	1273.2	-1218.00	.854	.306	<.5
82	000	04/19/2021	0	0	Meas						
82	399	05/26/2021	3000	3000	Est	8.3	550.8	-527.00	.847	.195	<.5
82	471	08/25/2021	4000	4000	Est	7.7	1123.0	-1072.00	.665	.414	<.5
82	506	10/19/2021	5000	5000	Est	8.1	1083.4	-1018.00	.742	.473	<.3
82	526	11/12/2021	2000	2000	Est	8.0	1306.6	-1268.00	.654	.135	<.5
82	577	01/27/2022	200	200	Est	7.7	1395.2	-1322.00	.314	.129	.502
82	639	03/24/2022	500	500	Est	7.7	1018.8	-847.20	<.1	.172	<.3
82	697	05/18/2022	1000	1000	Est	7.8	>1400	-1424.00	.309	.178	<.5
82	755	07/29/2022	3000	3000	Est	7.5	974.8	-910.80	1.987	1.071	<.5
82	768	08/17/2022	1000	1000	Est	8.2	>1400	-1378.00	.208	.089	<.3
82	820	09/28/2022	3000	3000	Est	7.9	>1400	-1294.00	.344	.18	<.5
82	881	11/29/2022	3000	3000	Est	8.1	0.0	-1382.00	.164	.281	<.3
82	896	12/21/2022	3000	3000	Est	7.6	950.6	-938.40	1.32	.606	<.3
82	897	12/21/2022	3000	3000	Est	7.9	963.2				
82	967	03/23/2023	3000	30000	Est	8.1	0.0	-1306.00	.33	.181	<.5
82	019	05/11/2023	3000	3000	Est	8.4	>1400	-1284.00	<.3	.228	<.5
82	087	09/20/2023	4000	4000	Est	8.0	0.0	-1050.00	.841	.273	<.5
82	161	12/28/2023	3000	3000	Est	7.9	1022.2	-467.80	1.1	.742	1.297

Mining And Reclamation

Sample ID: 4182 897

Date Collected: 12/21/2022 01:10:00 PM

Lab Sample ID: I2022021967

Test Codes / CAS # - Description	Reported Results	Date And Time Analyzed	Appro
** Comment ** Diluted Before Analysis			
DETECTION LIMIT NOT MET - INTERFERENCE			
01007M BARIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	0.019 mg/L	01/04/2023 02:45 PM	CREITI
71870 BROMIDE BY ION CHROMATOGRAPHY	9.881 mg/L	12/22/2022 06:46 PM	TVORC
00916A CALCIUM, TOTAL (WATER & WASTE) BY ICP	214.000 mg/L	01/04/2023 02:45 PM	CREITI
00900 HARDNESS, TOTAL (CALCULATED)	835 mg/L	01/04/2023 02:45 PM	CREITI
** Comment ** Accredited by NJ only - accreditation not available from PA			
01045M IRON, TOTAL IN MG/L (WATER & WASTE) BY ICP	1.280 mg/L	01/04/2023 02:45 PM	CREITI
01132A LITHIUM, TOTAL (WATER & WASTE) BY ICP	90.00 ug/L	01/04/2023 02:45 PM	CREITM
00927A MAGNESIUM, TOTAL (WATER & WASTE) BY ICP	72.90 mg/L	01/04/2023 02:45 PM	CREITM
01055M MANGANESE, TOTAL in MG/L (WATER & WASTE) BY ICP	0.584 mg/L	01/04/2023 02:45 PM	CREITM
00403 pH, Lab (Electrometric)	7.9 pH units	12/22/2022 03:40 PM	JAHOG
** Comment ** Holding Time Exceeded			
00937A POTASSIUM, TOTAL (WATER & WASTE) BY ICP	8.12 mg/L	01/04/2023 02:45 PM	CREITM
01147H SELENIUM, TOTAL (WATER & WASTE) BY ICPMS	50.700 ug/L	01/12/2023 09:35 AM	ELEED
00929A SODIUM, TOTAL (WATER & WASTE) BY ICP	2879.00 mg/L	01/04/2023 02:45 PM	CREITM
00095 SPECIFIC CONDUCTIVITY @ 25.0 C	10730.00 umhos/cm	12/29/2022 11:58 AM	MTUZIN
01082M STRONTIUM, TOTAL in MG/L (WATER & WASTE) BY ICP	7.280 mg/L	01/04/2023 02:45 PM	CREITM
00403T Temperature at which pH is measured	18.67 C	12/22/2022 03:40 PM	JAHOG
00940 Total Chloride-Ion Chromatograph	1736.32 mg/L	12/22/2022 07:02 PM	TVORO
70300 TOTAL DISSOLVED SOLIDS @ 180C	7790 mg/L	01/17/2023 09:11 AM	JMULH
** Comment ** Holding Time Exceeded			
169 Aliquot of sample used for analysis yielded >200 mg of dried residue 147 Estimated values, could not rerun sample			
00945 Total Sulfate-Ion Chromatograph	2948.68 mg/L	12/22/2022 07:02 PM	TVORO
00530 TOTAL SUSPENDED SOLIDS	<20 mg/L (U)	12/28/2022 01:33 PM	ANFRIE
** Comment ** Holding Time Exceeded			
82079 TURBIDITY, NEPHELMETRIC	12.50 NTU	12/22/2022 12:18 PM	JAHOG
ANSWER RECHECKED BY ANALYST			
01092A ZINC, TOTAL (WATER & WASTE) BY ICP	42.00 ug/L	01/04/2023 02:45 PM	CREITM

Primary Facility: 30743711

Monitoring Point: 001

Old ID	Seq	Date Collected	Initial Flow	Final Flow	Determ Method	pH units	ALK MG/L	HOT A MG/L	FE MG/L	MN MG/L	AL MG/L	SO4 MG/L	TSS MG/L	NA MG/L
182	000	01/15/2020	0	0	Meas	8.0	1173.4	-1074.00	.593	.308	<.3	3590.4	16	
182	048	02/04/2020	4586	4586	Meas	7.8	1264.0	-1158.00	1.61	.395	<.5	3297.0	6	
182	115	07/28/2020	4875	4875	Meas	7.8	1346.4	-1202.00	<.3	.23	<.5	3333.0	14	
182	122	08/13/2020	2350	2350	Meas	8.2	138.2	-123.60	<.3	.087	<.5	32.1	<5	
182	129	08/20/2020	5339	5339	Meas	7.8	1365.2	-1232.00	.358	.27	<.5	3846.0	34	
182	172	10/22/2020	4890	4890	Meas	8.1	>1400	-1324.00	<.3	.255	<.5	3373.0	44	
182	204	11/24/2020	4107	4107	Meas	8.3	1271.2	-1258.00	.411	.282	<.5	3566.0	24	
182	253	01/13/2021	5430	5430	Meas	7.9	1362.0	-1316.00	<.3	.396	<.5	4058.0	40	
182	274	02/17/2021	3000	3000	Est	8.0	1273.2	-1218.00	.854	.306	<.5	3034.0	50	
182	318	03/16/2021	0	0	Meas									
182	000	04/19/2021	3000	3000	Est	8.3	550.8	-527.00	.847	.195	<.5	1720.0	6	
182	399	05/26/2021	4000	4000	Est	7.7	1123.0	-1072.00	.665	.414	<.5	3515.0	20	
182	471	08/25/2021	5000	5000	Est	8.1	1083.4	-1018.00	.742	.473	<.3	3937.0	26	
182	506	10/19/2021	2000	2000	Est	8.0	1306.6	-1268.00	.654	.135	<.5	2784.0	30	
182	526	11/12/2021	2000	2000	Est	7.7	1395.2	-1322.00	.314	.129	<.5	2655.0	28	
182	577	01/27/2022	500	500	Est	7.7	1018.8	-847.20	<.1	.172	<.3	2316.0	<20	
182	639	03/24/2022	1000	1000	Est	7.8	>1400	-1424.00	.309	.178	<.5	3747.0	<20	
182	697	05/18/2022	3000	3000	Est	7.5	974.8	-910.80	1.987	1.071	<.5	3453.0	<20	
182	755	07/29/2022	1000	1000	Est	8.2	>1400	-1378.00	.208	.089	<.3	3372.0	<20	
182	768	08/17/2022	3000	3000	Est	7.9	>1400	-1294.00	.344	.18	<.5	3694.0	52	
182	820	09/28/2022	3000	3000	Est	8.1	0.0	-1382.00	.164	.281	<.3	3896.0	<20	
182	881	11/29/2022	3000	3000	Est	7.6	950.6	-938.40	1.332	.606	<.3	2827.0	<20	
182	896	12/21/2022	3000	3000	Est	7.9	963.2						<20	
182	897	12/21/2022	3000	3000	Est	8.1	0.0	-1306.00	.33	.181	<.5	3607.0	40	
182	967	03/23/2023	3000	3000	Est	8.4	>1400	-1284.00	<.3	.228	<.5	2814.0	29	
182	019	05/11/2023	4000	4000	Est	8.0	0.0	-1050.00	.841	.273	<.5	3411.6	37	
182	087	09/20/2023	3000	3000	Est	7.9	1022.2	-467.80	1.1	.742	1.297	2647.0	76	
182	161	12/28/2023	3000	3000	Est									

2879.00

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