BLUEBERRY TISSUE MONITORING NEAR THE EAGLE MINE AND HUMBOLDT MILL

Superior Watershed Partnership

Community Environmental Monitoring Program

2015 – 2020 Monitoring Results

www.superiorwatersheds.org

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Berry and Plant Tissue Monitoring Study Near the Eagle Mine and Humboldt Mill

Introduction

The Community Environmental Monitoring Program (CEMP) of the Eagle Mine, located in Marquette County, Michigan began in 2012 based on community concerns regarding potential environmental and cultural impacts associated with mining operations. The CEMP is implemented by the Superior Watershed Partnership (SWP), the Keweenaw Bay Indian Community (KBIC), and the Community Foundation of Marquette County (CFMC) and is defined and governed by formal agreements between these organizations and Eagle Mine LLC, a subsidiary of Lundin Mining. The CEMP is designed to build a comprehensive and accurate picture of environmental impacts that may be a result of Eagle Mine's operations at the mine site, the Humboldt Mill, and along the designated transportation route. The CEMP is independent, transparent, and based on the highest scientific standards. Monitoring results of Eagle Mine's environmental performance are made available to the public on the CEMP website www.swpcemp.org.

During 2015, CEMP monitoring was expanded to evaluate concerns raised by the Keweenaw Bay Indian Community and other community members regarding potential impacts from mining operations on nearby edible plant species and species of high cultural value. Fruit bearing plants located near the Eagle Mine and the Humboldt Mill were identified as a priority for the study. They included; blueberry, juneberry, chokecherry, pin cherry, raspberry, blackberry, strawberry, thimbleberry, cranberry, juniper berry, and wild rice. Specific objectives of the monitoring program included:

- Locate and identify edible and culturally-important plant species in the immediate vicinity/adjacent to the Eagle Mine and Humboldt Mill sites.
- Obtain plant tissue (berries, leaves, and/or roots) for analysis at a certified laboratory.
- Evaluate concentrations of various metals observed in tissue samples and compare them to US Environmental Protection Agency's (US EPA) oral tolerable intake values (TDI), and/or the Food and Drug Administration's (FDA) recommended Daily Values (DV).
- Use data/results to monitor short-term and long-term changes that may indicate impacts from mining activities.

After three initial years (2015-2017) of sampling various priority species and difficulties experienced in locating and collecting sufficient quantities for some priority species at all three collection locations (mine, mill, control sites), CEMP staff decided to streamline sample collection by focusing only on blueberries at each site. Broadly available within each sampling radius, blueberries were selected to serve as an "indicator" species. Streamlining sampling to include only one culturally significant species has served to eliminate unnecessary and costly analysis fees while still providing valuable data. As opposed to varying the species collected at each site, collection of multiple replicates of blueberries within each two mile sampling radius may provide added value to the study.

Methods and Results

Study methods and activities included the following:

1) *Selection of test and control site locations including culturally important plant species*
   Monitoring locations consisted of two test sites that were established within a two mile radius of the Eagle Mine and the Humboldt Mill. Following reconnaissance efforts, a third site (control site) was established in an area that is unlikely to be impacted by mining activities (Figures 1-4). Exact sample locations within each designated two mile radius vary according to the distribution and seasonal variability of each species. Sample dates and collection site coordinates are provided in Table 1.

2) *Plant tissue collection from test and control sites*
   Sample collection began in 2015. All plant tissue specimens were identified in the field and collected by experienced SWP/CEMP staff in accordance with guidelines established by White Water Associates, Inc. Plant species identified and collected included: blueberry fruit (*Vaccinium spp*; 2015-2020), blueberry plant tissue (stems, leaves, and roots;

2015), raspberry fruit (*Rubus idaeus*; 2015-2016), blackberry fruit (*Rubus spp*.; 2016-2017), strawberry plant tissue (*Fragaria spp*.; stems, leaves, and roots; 2017), and wintergreen plant tissue (*Gaultheria procumbens*; stems, leaves, and roots; 2017). Beginning in 2018, only blueberries were collected. Sample collection occurred during the peak fruit maturation period for each species each year.

This report reflects blueberry tissue data from samples collected from 2015 to 2020.* When possible, multiple replicates of blueberries (up to three samples) were collected within each sampling radius (mine, mill, control sites). Each sample consisted of greater than 100 grams. Samples were collected while wearing clean nitrile gloves, placed in labelled plastic bags, and stored on ice. Samples were shipped overnight to White Water Associates, Inc. for general chemistry and trace metal analysis.

** Data and analysis for all species and samples collected from 2015-2017 can be viewed in the first published berry study report here.*

3) *Laboratory analysis of plant tissue*

Analytical services were conducted by White Water Associates, Inc. using analytical QA/QC and reporting protocols of NELAP, USEPA, CLP, DoD QSM, SW846, 40 CFR Part 136, ASTM, Standard Methods, and in-house Standard Operating Procedures (SOPs).

Analytical Tests

Analytical test results for each blueberry sample are noted by location and year in Tables 2-8. Sample parameters were considered to be present if detected at values greater than the method detection limit (MDL) and results were considered to be non-detect (i.e. not present) if below the MDL. Non-detect sample results are reported as less than the respective MDL in Tables 2-8. For example, if the MDL for a given parameter was listed as 1.0 mg/kg and the parameter was not detected, the result would be listed as <1.0 mg/kg. The MDL is a value derived from a statistical calculation in which the lab is 99% confident that the result is greater than zero. When an average value of multiple samples was used to determine parameter results (years 2018-2020), and MDL values varied by sample, non-detect samples are simply labeled as "Not Detected."

The laboratory also calculates a value known as the method quantitation limit (MQL). The MQL is higher than the MDL and is a value in which precision and accuracy limits can be reliably achieved (greater than 99% confidence). In the event that a sample result is detected above the MDL, but is not greater than the MQL, the sample result is considered estimated because the laboratory can only say with 99% confidence that the result is greater than zero. In these situations, the sample result is highlighted in blue (Tables 2-8), indicating that it is an estimated value. Sample results greater than the MQL do not require any qualification since the laboratory can reliably test to those levels.

Tolerable Daily Intake Values (TDI)

Also listed in Tables 2-8 are non-carcinogen oral tolerable intake values (TDI) for some parameters tested (Persistent Organic Pollutants Toolkit, adapted from US EPA). Tolerable daily intake refers to the estimated amount of a potentially harmful substance in food or drinking water that can be ingested daily over a lifetime without appreciable health risk. For parameters in which a TDI value exists, equations were used to calculate the amount of blueberries that would need to be ingested on a daily basis (in both kilograms and cups of berries) in order to exceed the TDI. These values were calculated using the following formulas:

Kg needed to ingest to exceed TDI = (TDI x 70 kg) / (Parameter test result)
Equivalent in cups of blueberries = (kg needed to exceed TDI) / (0.140 kg)

In the above formulas, 70 kg, equal to approximately 154 pounds, was used to represent the mass of the average adult, while 0.140 kg was used to represent the average mass of one cup of blueberries.

Recommendations for Future Sampling

The sample set collected during the 2015-2020 field seasons provides baseline data regarding metal concentrations in blueberries collected near the Eagle Mine and Humboldt Mill sites. Referencing these data in future years may help to support whether or not bioaccumulation of metals is occurring in this species. Due to a small sample size and various other potential confounding factors including regional variation, species specific differences, insufficient length of study, and potential alternate sources of pollution, any differences noted between control and test samples cannot be reliably attributed to mining activities at this time. Continued collection is recommended in order to expand the data set and provide more accurate support as to whether or not changes attributable to mining practices are occurring over time.

TABLES AND FIGURES

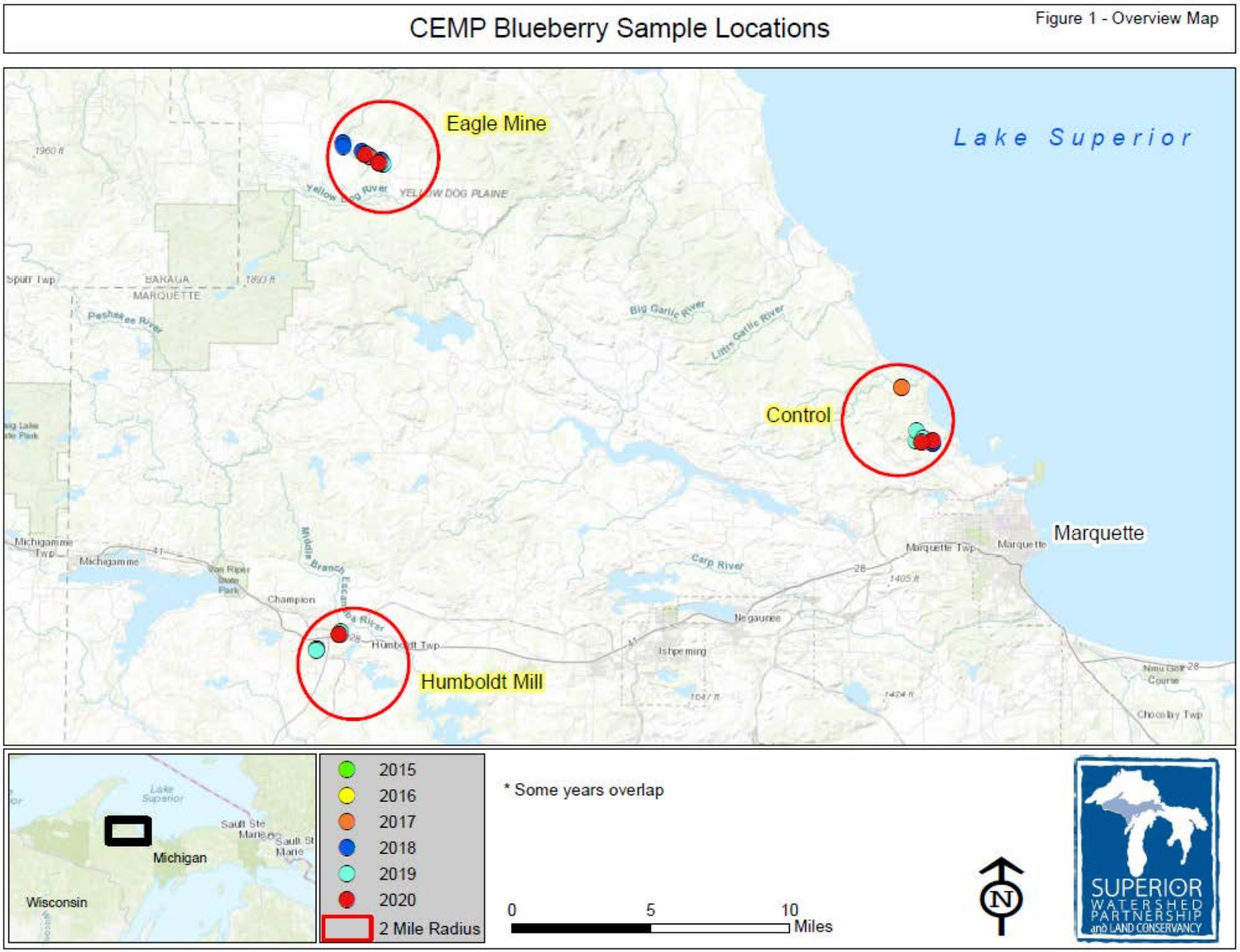

Figure 1. Map of two mile radius sampling locations at the mine, mill, and control sites

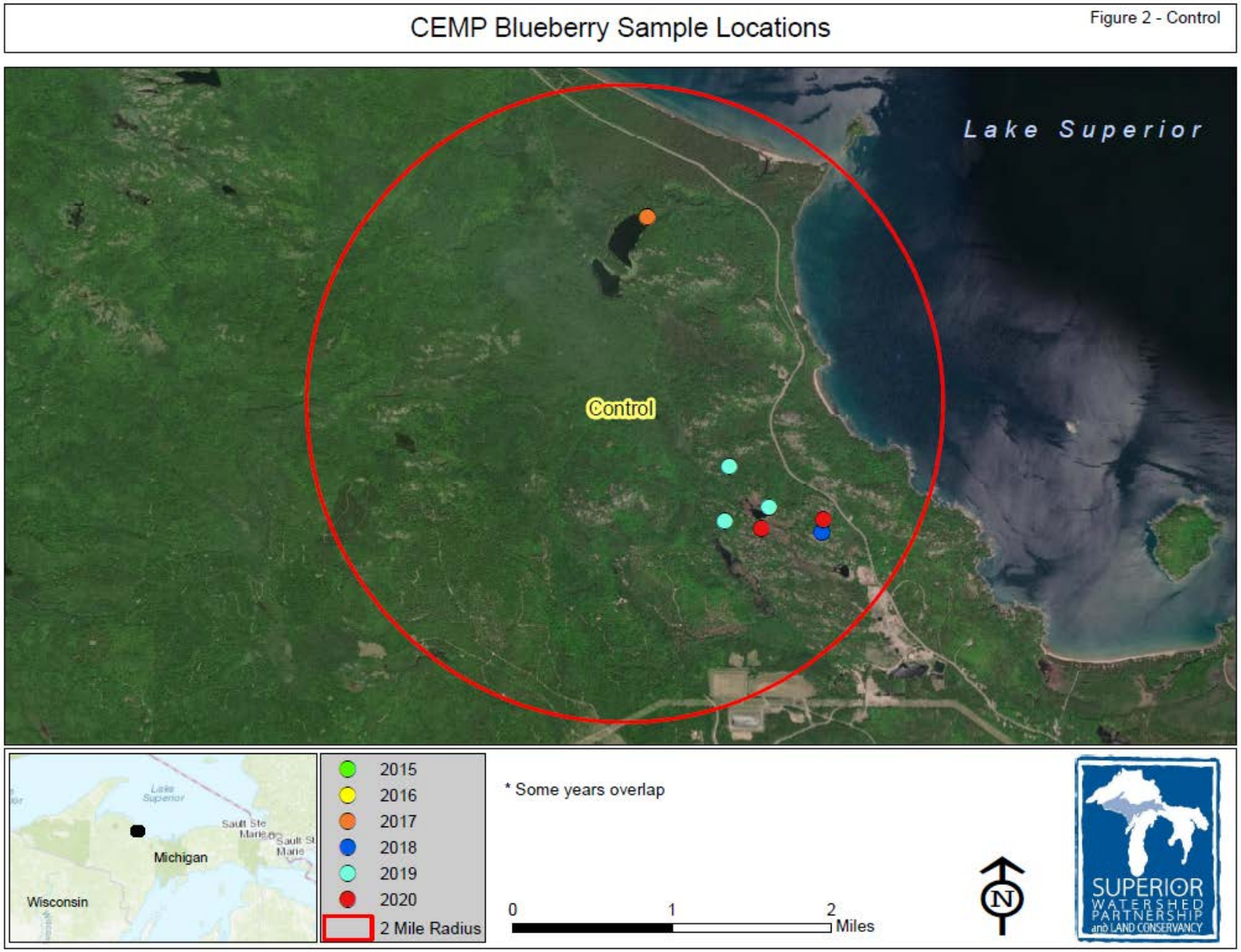

Figure 2. Blueberry sampling locations at the control site

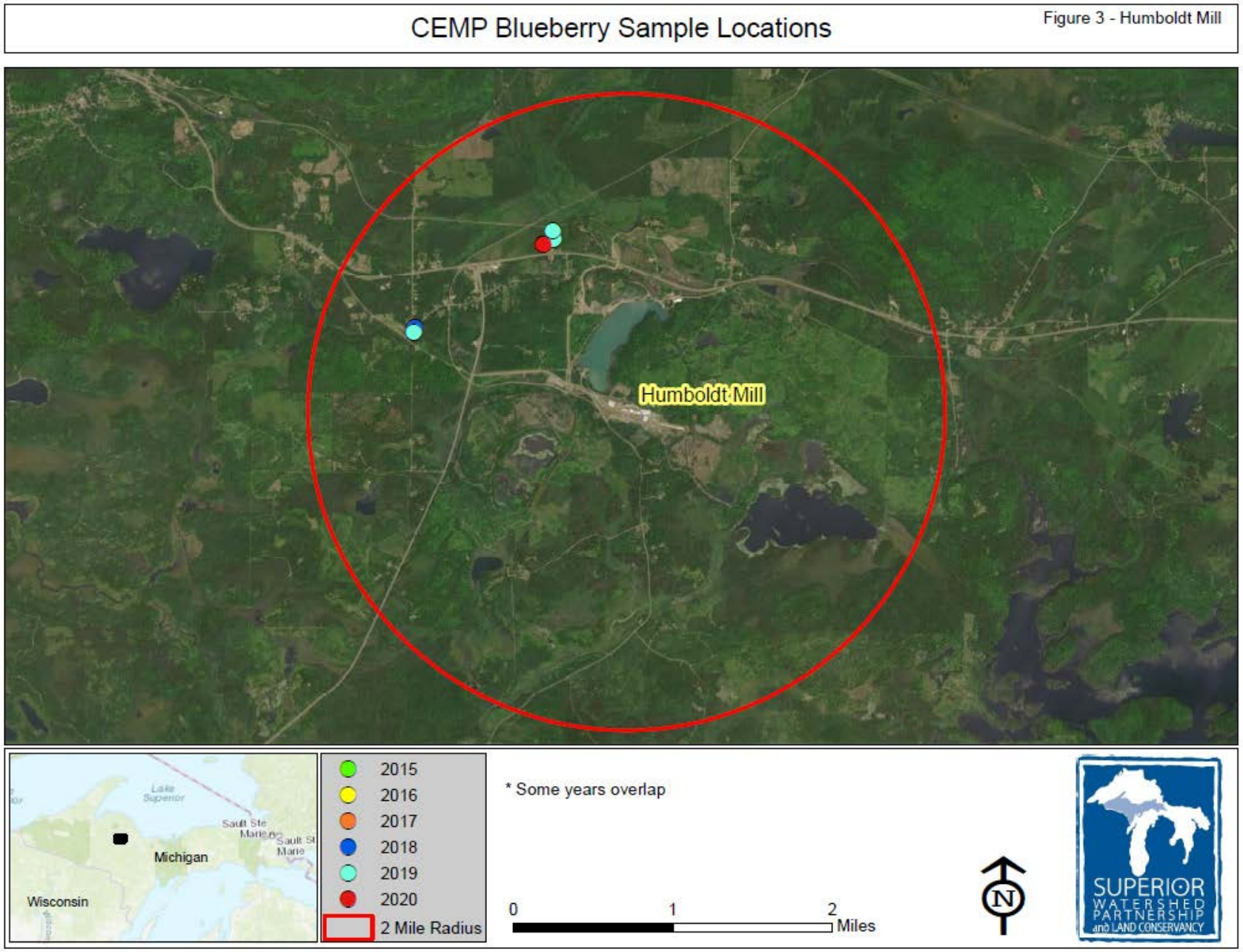

Figure 3. Blueberry sampling locations at the mill site

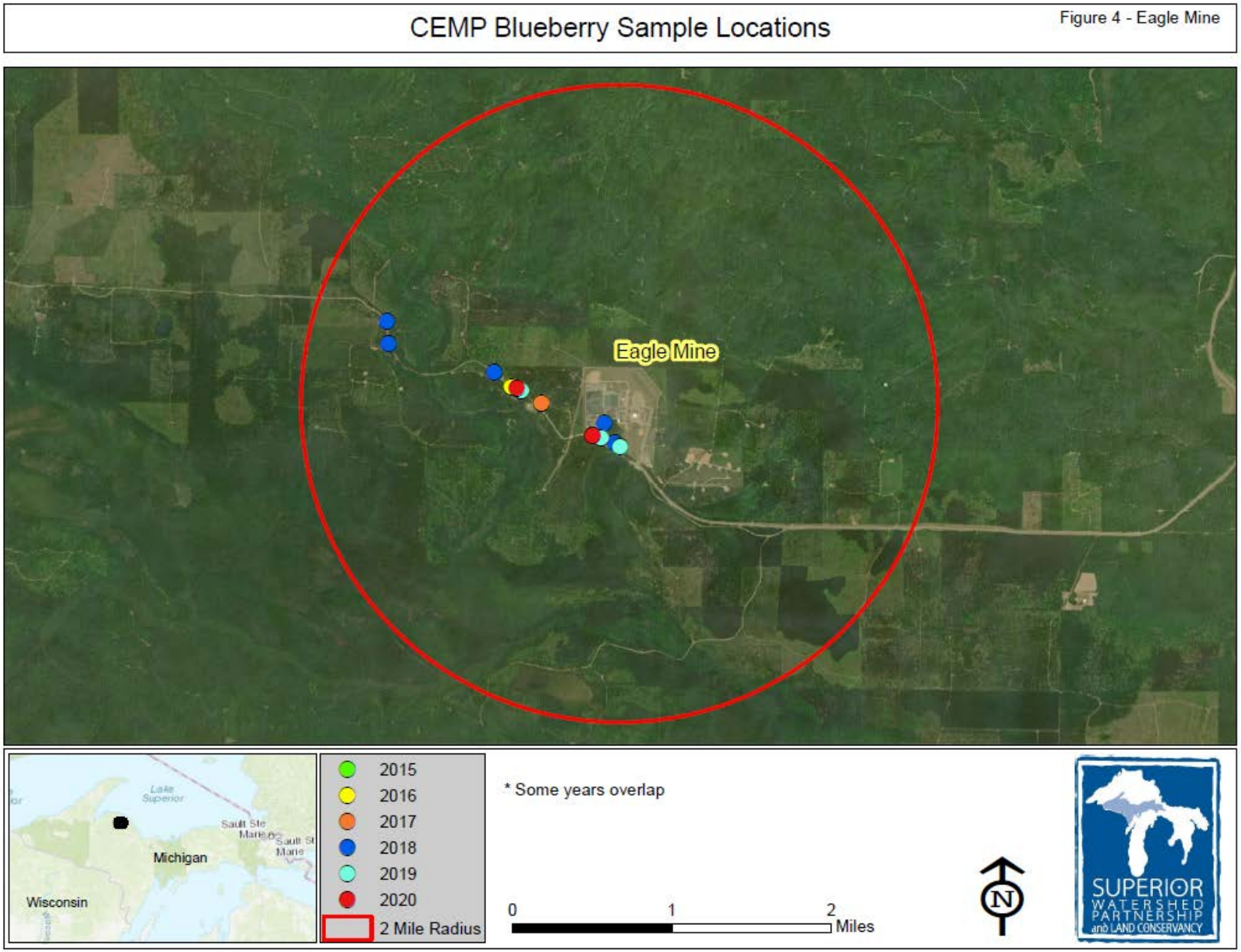

Figure 4. Blueberry sampling locations at the mine site

Table 1. Summary of blueberry samples, by date and location

Date	Species	Sample Location (Mine, Mill, Control)	Latitude	Longitude
7/17/2015	Blueberry	Mill	46.491366	-87.928213
7/22/2015	Blueberry	Mine	46.748434	-87.892364
7/23/2015	Blueberry	Control	46.630398	-87.48711
7/20/2016	Blueberry	Mill	46.491366	-87.928213
7/21/2016	Blueberry	Mine	46.749817	-87.89633
7/21/2016	Blueberry	Control	46.630398	-87.48711
8/2/2017	Blueberry	Mill	46.491366	-87.928213
8/2/2017	Blueberry	Mine	46.748434	-87.892364
8/3/2017	Blueberry	Control	46.630398	-87.48711
7/15/2018	Blueberry	Control - 1	46.601866	-87.463746
7/15/2018	Blueberry	Control - 2	46.601866	-87.463746
7/15/2018	Blueberry	Control - 3	46.601866	-87.463746
7/18/2018	Blueberry	Mill	46.491366	-87.928213
7/19/2018	Blueberry	Mine - 1	46.75562	-87.91288
7/19/2018	Blueberry	Mine - 2	46.7536	-87.91262
7/19/2018	Blueberry	Mine - 3	46.75112	-87.89861
7/31/2018	Blueberry	Eagle Rock - 1	46.7466	-87.88398
7/31/2018	Blueberry	Eagle Rock -2	46.7448	-87.8825
7/30/2019	Blueberry	Mill - 1	46.49095	-87.928383
7/30/2019	Blueberry	Mill - 2	46.49957	-87.91012
7/30/2019	Blueberry	Mill -3	46.50033	-87.91022
7/31/2019	Blueberry	Control - 1	46.60282	-87.4766
7/31/2019	Blueberry	Control - 3	46.6078	-87.47602
7/31/2019	Blueberry	Control - 3	46.60415	-87.47073
8/6/2019	Blueberry	Mine - 1	46.744468	-87.881857
8/6/2019	Blueberry	Mine - 2	46.745323	-87.884362
8/6/2019	Blueberry	Mine - 3	46.749492	-87.894994
7/27/2020	Blueberry	Control - 1	46.603067	-87.463567
7/27/2020	Blueberry	Control - 2	46.60215	-87.471783
7/27/2020	Blueberry	Mill - 1	46.499017	-87.911567
7/27/2020	Blueberry	Mill - 2	46.49905	-87.911417
7/27/2020	Blueberry	Mine - 1	46.745483	-87.885517
7/27/2020	Blueberry	Mine - 2	46.745483	-87.885517
7/27/2020	Blueberry	Mine - 3	46.749733	-87.8956

Table 2. Laboratory test results for blueberries sampled at all locations during 2020

Parameter	US EPA Oral Tolerable Daily Intake Volues (TDI), mg/kg-d	Control 1	Control 2	Control Average	kg needed to ingest to exceed (TDI)* - based on avg results	Equivalent in Cups of Berries**	Mill 1	Mill 2	Mill Average	kg needed to ingest to exceed (TDI)* - based on avg results	Equivalent in Cups of Berries**	Mine 1	Mine 2	Mine 3	Mine Average	kg needed to ingest to exceed (TDI)* - based on avg results	Equivalent in Cups of Berries**
Aluminum	1	<37.6	<36.7	Not Detected	-	-	47.7	85.0	66.4	1.1	7.5	<32.3	44.4	65.3	54.9	1.3	9.1
Ammonia		25.9	<0.97	25.9	-	-	<0.93	<0.97	Not Detected	-	-	2.2	<1.1	<0.86	2.2	-	-
Antimony	0.0004	<1.9	<1.8	Not Detected	-	-	<1.6	<1.9	Not Detected	-	-	<1.6	<1.8	<1.5	Not Detected	-	-
Arsenic	0.0003	<1.9	<1.8	Not Detected	-	-	<1.6	<1.9	Not Detected	-	-	<1.6	<1.8	<1.5	Not Detected	-	-
Barium	0.2	17.1	<11.0	17.1	0.8	5.8	21.8	32.6	27.2	0.5	3.7	24.4	27.7	35.0	29.0	0.5	3.4
Beryllium	0.002	<1.1	<1.1	Not Detected	-	-	1.0	<1.1	1.0	-	-	<0.97	<1.1	<0.88	Not Detected	-	-
Boron	0.2	<18.8	<18.4	Not Detected	-	-	<16.4	<18.5	Not Detected	-	-	<16.1	<18.2	<14.6	Not Detected	-	-
Cadmium	0.000057	<1.1	<1.1	Not Detected	-	-	<0.98	<1.1	Not Detected	-	-	<0.97	<1.1	<0.88	Not Detected	-	-
Calcium		1710	680	1195.0	-	-	1400	1990	1695.0	-	-	1870.0	1680.0	2260.0	1936.7	-	-
Chromium	0.003	<1.9	<1.8	Not Detected	-	-	<1.6	<1.9	Not Detected	-	-	<1.6	<1.8	<1.5	Not Detected	-	-
Cobalt		<11.3	<11.0	Not Detected	-	-	<9.8	<11.1	Not Detected	-	-	<9.7	<10.9	<8.8	Not Detected	-	-
Copper	0.04	7.1	<5.5	7.1	0.4	2.8	<4.9	8.4	8.4	0.3	2.4	<4.8	<5.4	<4.4	Not Detected	-	-
Iron	0.7	27.1	<18.4	27.1	1.8	12.9	28.2	27.3	27.8	1.8	12.6	19.7	61.9	65.4	49.0	1.0	7.1
lead		<1.9	<1.8	Not Detected	-	-	<1.6	<1.9	Not Detected	-	-	<1.6	<1.8	<1.5	Not Detected	-	-
Lithium	0.02	<11.3	<11.0	Not Detected	-	-	<9.8	<11.1	Not Detected	-	-	<9.7	<10.9	<8.8	Not Detected	-	-
Magnesium		638	337	487.5	-	-	513	601	557.0	-	-	564.0	659.0	657.0	626.7	-	-
Manganese	0.14	346	44.8	195.4	0.1	0.4	496	655	575.5	0.0	0.1	277.0	135.0	111.0	174.3	0.1	0.4
Mercury		<0.091	<0.091	Not Detected	-	-	<0.080	<0.096	Not Detected	-	-	<0.089	<0.10	<0.080	Not Detected	-	-
Molybdenum	0.005	<7.5	<7.3	Not Detected	-	-	<6.6	<7.4	Not Detected	-	-	<6.5	<7.3	<5.9	Not Detected	-	-
Nickel	0.02	<7.5	<7.3	Not Detected	-	-	<6.6	<7.4	Not Detected	-	-	<6.5	<7.3	<5.9	Not Detected	-	-
Nitrate Nitrite		<4.2	<3.9	Not Detected	-	-	<3.9	<4.0	Not Detected	-	-	4.1	<4.2	<3.5	4.1	-	-
Phosphorus		152	<79.7	152.0	-	-	408	230.0	319.0	-	-	433.0	117.0	445.0	331.7	-	-
Potassium		4290	4220	4255.0	-	-	5370	7000.0	6185.0	-	-	5080.0	5290.0	4770.0	5046.7	-	-
Selenium	0.005	<4.5	<4.4	Not Detected	-	-	<3.9	<4.5	Not Detected	-	-	<3.9	<4.4	<3.5	Not Detected	-	-
Sodium		<188	<184	Not Detected	-	-	<164	<185	Not Detected	-	-	<161	<182	<146	Not Detected	-	-
Strontium	0.6	4.3	2.2	3.3	12.9	92.3	2.4	2.1	2.3	18.7	133.3	2.0	3.9	4.7	3.5	11.9	84.9
Sulfate		470	500	485.0	-	-	610	630	620.0	-	-	<300	350.0	320.0	335.0	-	-
Sulfur		<1130	<1100	Not Detected	-	-	<985	1150	1150.0	-	-	<968	<1090	<878	Not Detected	-	-
Thallium	0.00007	<3.8	<3.7	Not Detected	-	-	<3.3	<3.7	Not Detected	-	-	<3.2	<3.6	<2.9	Not Detected	-	-
Total Kjeldahl Nitrogen		6790	3280	5035.0	-	-	10100	4910	7505.0	-	-	6790.0	6100.0	7700.0	6863.3	-	-
Uranium	0.0002	0.52	<0.29	0.5	0.0	0.2	<0.26	<0.30	Not Detected	-	-	<0.26	<0.29	<0.23	Not Detected	-	-
Vanadium	0.001	<11.3	<11.0	Not Detected	-	-	<9.8	<11.1	Not Detected	-	-	<9.7	<10.9	<8.8	Not Detected	-	-
Zinc	0.3	<11.3	<11.0	Not Detected	-	-	<9.8	15.0	15.0	1.4	10.0	<9.7	<10.9	<8.8	Not Detected	-	-

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

Blue cells indicate that the quantitation is an estimated value because the result is less than the sample method quantitation limit (MQL) but greater than the method detection limit (MDL)

All parameters that were not detected in a sample are listed as < the respective MDL

Table 3. Laboratory test results for blueberries sampled near the control site (2015-2017)

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2015 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2016 Result (mg/kg)	kg needed to ingest to exceed (TDI)*	Equivalent in cups of berries**	2017 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Aluminum (s)	1	**<8.9**	-	-	**<10**	-	-	**16**	-	-
Ammonia-N (s)	-	**<110**	-	-	**<2.0**	-	-	**<2.0**	-	-
Antimony (s)	0.0004	**<1.8**	-	-	**<2.0**	-	-	**<2.5**	-	-
Arsenic (s)	0.0003	**<1.8**	-	-	**<3.6**	-	-	**<4.0**	-	-
Barium (s)	0.2	**7.5**	1.87	13.3	**15**	0.93	6.67	**13**	1.08	7.7
Beryllium (s)	0.002	**<0.036**	-	-	**<0.040**	-	-	**<0.037**	-	-
Boron (s)	0.2	**6**	2.33	16.7	**9**	1.56	11.11	**6**	2.33	16.7
Cadmium (s)	0.001	**<0.089**	-	-	**0.4**	0.18	1.25	**<0.12**	-	-
Calcium (s)	-	**840**	-	-	**1200**	-	-	**1200**	-	-
Chromium (s)	0.003	**0.66**	0.32	2.3	**0.22**	0.95	6.82	**0.27**	0.78	5.6
Cobalt (s)	-	**0.26**	-	-	**<0.20**	-	-	**<0.20**	-	-
Copper (s)	0.04	**4.6**	0.61	4.3	**4.9**	0.57	4.08	**3.3**	0.85	6.1
Iron (s)	0.7	**17**	2.88	20.6	**24**	2.04	14.58	**19**	2.58	18.4
Lead (s)	-	**<0.89**	-	-	**<1.0**	-	-	**<1.4**	-	-
Lithium (s)	0.02	**<0.54**	-	-	**<4.0**	-	-	**<4.6**	-	-
Magnesium (s)	-	**510**	-	-	**630**	-	-	**530**	-	-
Manganese (s)	0.14	**130**	0.08	0.5	**140**	0.07	0.50	**210**	0.05	0.3
Molybdenum (s)	0.005	**<0.27**	-	-	**<0.50**	-	-	**<6.8**	-	-
Mercury	-	**-**	-	-	**<0.071**	-	-	**<0.035**	-	-
Nickel (s)	0.02	**<0.89**	-	-	**1.6**	0.88	6.25	**<1.2**	-	-
Nitrate/Nitrite-N (s)	-	**82**	-	-	**<110**	-	-	**<150**	-	-
Potassium (s)	-	**3300**	-	-	**5200**	-	-	**5000**	-	-
Selenium (s)	0.005	**2**	0.18	1.25	**8**	0.04	0.31	**7.4**	0.05	0.3
Silver (s)	0.005	**<0.27**	-	-	**-**	-	-	**-**	-	-
Sodium (s)	-	**<45**	-	-	**<50**	-	-	**<67**	-	-
Strontium (s)	0.6	**2**	21.00	150.0	**3.8**	11.05	78.95	**1.8**	23.33	166.7
Sulfate (s)	-	**2200**	-	-	**5900**	-	-	**6700**	-	-

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2015 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2016 Result (mg/kg)	kg needed to ingest to exceed (TDI)*	Equivalent in cups of berries**	2017 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Thallium (s)	0.00007	**<1.8**	-	-	**<5.0**	-	-	**<3.9**	-	-
Total Kjeldahl Nitrogen (s)	-	**2500**	-	-	**3700**	-	-	**3700**	-	-
Total Phosphorus (s)	-	**450**	-	-	**950**	-	-	**850**	-	-
Uranium (9/22/15)	0.0002	**-**	-	-	**-**	-	-	**-**	-	-
Vanadium (s)	0.001	**<0.36**	-	-	**<0.60**	-	-	**<0.54**	-	-
Zinc (s)	0.3	**10**	2.10	15.0	**9.6**	2.19	15.63	**6.8**	3.09	22.1

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

All parameters that were not detected in a sample are listed as < the respective MDL

Table 4. Laboratory test results for blueberries sampled near the control site (2018-2020**)**

Parameter	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2018 Avg Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2019 Avg Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2020 Avg Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Aluminum (s)	1	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Ammonia-N (s)	-	**22.3**	-	-	**Not Detected**	-	-	**25.9**	-	-
Antimony (s)	0.0004	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Arsenic (s)	0.0003	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Barium (s)	0.2	**2.3**	6.1	43.5	**3.7**	3.8	26.8	**17.1**	0.8	5.8
Beryllium (s)	0.002	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Boron (s)	0.2	**0.9**	15.6	111.1	**Not Detected**	-	-	**Not Detected**	-	-
Cadmium (s)	0.001	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Calcium (s)	-	**205**	-	-	**360.0**	-	-	**1195**	-	-
Chromium (s)	0.003	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Cobalt (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Copper (s)	0.04	**0.7**	4.0	28.6	**0.2**	11.5	81.8	**7.1**	0.4	2.8
Iron (s)	0.7	**6.4**	7.7	54.7	**3.9**	12.7	90.9	**27.1**	1.8	12.9
Lead (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Lithium (s)	0.02	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Magnesium (s)	-	**81.6**	-	-	**160.7**	-	-	**487.5**	-	-
Manganese (s)	0.14	**26.4**	0.4	2.7	**83.7**	0.1	0.8	**195.4**	0.1	0.4
Molybdenum (s)	0.005	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Mercury	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Nickel (s)	0.02	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Nitrate/Nitrite-N (s)	-	**13.7**	-	-	**1.0**	-	-	**Not Detected**	-	-
Potassium (s)	-	**726**	-	-	**1373.3**	-	-	**4255**	-	-
Selenium (s)	0.005	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Silver (s)	0.005	**-**	-	-	**-**	-	-	**-**	-	-
Sodium (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-

Parameter	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2018 Avg Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2019 Avg Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2020 Avg Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Strontium (s)	0.6	**0.8**	52.5	375.0	**0.7**	60.3	430.6	**3.25**	12.9	92.3
Sulfate (s)	-	**355.7**	-	-	**348.3**	-	-	**485**	-	-
Thallium (s)	0.00007	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Total Kjeldahl Nitrogen (s)	-	**5273.3**	-	-	**1660.0**	-	-	**5035**	-	-
Total Phosphorus (s)	-	**236.3**	-	-	**93.0**	-	-	**152**	-	-
Uranium (9/22/15)	0.0002	**0.2**	0.1	0.5	**0.1**	0.2	1.3	**0.52**	-	-
Vanadium (s)	0.001	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Zinc (s)	0.3	**2.9**	7.2	51.7	**2.3**	9.3	66.7	**Not Detected**	-	-

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

Table 5. Laboratory test results for blueberries sampled near the mill site (2015-2017)

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2015 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2016 Result (mg/kg)	kg needed to ingest to exceed (TDI)*	equivalent in cups of berries**	2017 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Aluminum (s)	1	**16**	4.38	31.3	**16**	4.38	31.25	**14**	5.00	35.7
Ammonia-N (s)	-	**<160**	-	-	**2.2**	-	-	**<2.0**	-	-
Antimony (s)	0.0004	**<1.9**	-	-	**<2.0**	-	-	**3.5**	0.01	0.1
Arsenic (s)	0.0003	**<1.9**	-	-	**<3.7**	-	-	**<4.3**	-	-
Barium (s)	0.2	**20**	0.70	5.0	**13**	1.08	7.69	**14**	1.00	7.1
Beryllium (s)	0.002	**<0.037**	-	-	**<0.041**	-	-	**<0.040**	-	-
Boron (s)	0.2	**6**	2.33	16.7	**5**	2.80	20.00	**5**	2.80	20.0
Cadmium (s)	0.001	**<0.093**	-	-	**0.37**	0.19	1.35	**<0.13**	-	-
Calcium (s)	-	**1400**	-	-	**1200**	-	-	**1100**	-	-
Chromium (s)	0.003	**1.2**	0.18	1.3	**<0.10**	-	-	**0.31**	0.68	4.8
Cobalt (s)	-	**<0.19**	-	-	**<0.20**	-	-	**<0.22**	-	-
Copper (s)	0.04	**5.7**	0.49	3.5	**3.2**	0.88	6.25	**3.9**	0.72	5.1
Iron (s)	0.7	**24**	2.04	14.6	**33**	1.48	10.61	**20**	2.45	17.5
Lead (s)	-	**<0.93**	-	-	**<1.0**	-	-	**<1.5**	-	-
Lithium (s)	0.02	**<0.56**	-	-	**<4.1**	-	-	**<5.0**	-	-
Magnesium (s)	-	**630**	-	-	**540**	-	-	**500**	-	-
Manganese (s)	0.14	**160**	0.06	0.4	**120**	0.08	0.58	**200**	0.05	0.4
Molybdenum (s)	0.005	**<0.28**	-	-	**<0.51**	-	-	**<6.8**	-	-
Mercury	-	**-**	-	-	**<0.077**	-	-	**<0.019**	-	-
Nickel (s)	0.02	**2.6**	0.54	3.8	**2.4**	0.58	4.17	**1.9**	0.74	5.3
Nitrate/Nitrite-N (s)	-	**220**	-	-	**89**	-	-	**<130**	-	-
Potassium (s)	-	**5300**	-	-	**4300**	-	-	**4600**	-	-
Selenium (s)	0.005	**<1.9**	-	-	**<5.1**	-	-	**<5.9**	-	-
Silver (s)	0.005	**<0.28**	-	-	**-**	-	-	**-**	-	-
Sodium (s)	-	**<46**	-	-	**<50**	-	-	**<72**	-	-

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2015 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2016 Result (mg/kg)	kg needed to ingest to exceed (TDI)*	equivalent in cups of berries**	2017 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Strontium (s)	0.6	**3.6**	11.67	83.3	**2.5**	16.80	120.00	**2.9**	14.48	103.4
Sulfate (s)	-	**<2400**	-	-	**16000**	-	-	**50000**	-	-
Thallium (s)	0.00007	**<1.9**	-	-	**<5.1**	-	-	**<4.2**	-	-
Total Kjeldahl Nitrogen (s)	-	**2800**	-	-	**5000**	-	-	**5100**	-	-
Total Phosphorus (s)	-	**440**	-	-	**700**	-	-	**900**	-	-
Uranium	0.0002	**-**	-	-	**-**	-	-	**-**	-	-
Vanadium (s)	0.001	**<0.37**	-	-	**<0.61**	-	-	**<0.58**	-	-
Zinc (s)	0.3	**11**	1.91	13.6	**7.4**	2.84	20.27	**7.6**	2.76	19.7

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

All parameters that were not detected in a sample are listed as < the respective MDL

Table 6. Laboratory test results for blueberries sampled near the mill site (2018-2020)

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2018 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2019 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2020 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Aluminum (s)	1	**59.7**	1.2	8.4	**82.7**	0.8	6.0	**66.4**	1.1	7.5
Ammonia-N (s)	-	**15.1**	-	-	**2.8**	-	-	**Not Detected**	-	-
Antimony (s)	0.0004	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Arsenic (s)	0.0003	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Barium (s)	0.2	**19.6**	0.7	5.1	**19.4**	0.7	5.2	**27.2**	0.5	3.7
Beryllium (s)	0.002	**Not Detected**	-	-	**Not Detected**	-	-	**1.0**	0.1	1.0
Boron (s)	0.2	**7.5**	1.9	13.3	**Not Detected**	-	-	**Not Detected**	-	-
Cadmium (s)	0.001	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Calcium (s)	-	**1470**	-	-	**1300.0**	-	-	**1695.0**	-	-
Chromium (s)	0.003	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Cobalt (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Copper (s)	0.04	**5.8**	0.5	3.4	**5.1**	0.5	3.9	**8.4**	0.3	2.4
Iron (s)	0.7	**64.7**	0.8	5.4	**90.1**	0.5	3.9	**27.8**	1.8	12.6
Lead (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Lithium (s)	0.02	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Magnesium (s)	-	**607**	-	-	**612.0**	-	-	**557.0**	-	-
Manganese (s)	0.14	**214**	0.0	0.3	**220.7**	0.0	0.3	**575.5**	0.0	0.1
Molybdenum (s)	0.005	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Mercury	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Nickel (s)	0.02	**2**	0.7	5.0	**Not Detected**	-	-	**Not Detected**	-	-
Nitrate/Nitrite-N (s)	-	**13.4**	-	-	**0.6**	-	-	**Not Detected**	-	-
Potassium (s)	-	**5680**	-	-	**6133.3**	-	-	**6185.0**	-	-
Selenium (s)	0.005	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Silver (s)	0.005	**-**	-	-	**-**	-	-	**-**	-	-
Sodium (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2018 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2019 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2020 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Strontium (s)	0.6	**3.4**	12.4	88.2	**3.0**	14.2	101.7	**2.3**	18.7	133.3
Sulfate (s)	-	**235**	-	-	**1576.7**	-	-	**620.0**	-	-
Thallium (s)	0.00007	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Total Kjeldahl Nitrogen (s)	-	**12500**	-	-	**931.7**	-	-	**7505.0**	-	-
Total Phosphorus (s)	-	**258**	-	-	**85.1**	-	-	**319.0**	-	-
Uranium	0.0002	**0.17**	0.1	0.6	**Not Detected**	-	-	**Not Detected**	-	-
Vanadium (s)	0.001	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Zinc (s)	0.3	**23.5**	0.9	6.4	**11.5**	1.8	13.0	**15.0**	1.4	10.0

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

Table 7. Laboratory test results for blueberries sampled near the mine site (2015-2017)

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2015 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2016 Result (mg/kg)	kg needed to ingest to exceed (TDI)*	Equivalent in cups of berries**	2017 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Aluminum (s)	1	**21**	3.33	23.8	**34**	2.06	14.71	**32**	2.19	15.6
Ammonia-N (s)	-	**<130**	-	-	**2.2**	-	-	**2.2**	-	-
Antimony (s)	0.0004	**<1.8**	-	-	**<2.0**	-	-	**2.8**	0.01	0.1
Arsenic (s)	0.0003	**<1.8**	-	-	**<3.5**	-	-	**<4.3**	-	-
Barium (s)	0.2	**32**	0.44	3.1	**21**	0.67	4.76	**14**	1.00	7.1
Beryllium (s)	0.002	**<0.036**	-	-	**<0.039**	-	-	**<0.040**	-	-
Boron (s)	0.2	**9**	1.56	11.1	**8**	1.75	12.50	**4**	3.50	25.0
Cadmium (s)	0.001	**<0.091**	-	-	**0.51**	0.14	0.98	**<0.13**	-	-
Calcium (s)		**2100**	-	-	**1400**	-	-	**910**	-	-
Chromium (s)	0.003	**0.94**	0.22	1.6	**<0.098**	-	-	**0.26**	0.81	5.8
Cobalt (s)	-	**0.25**	-	-	**<0.20**	-	-	**<0.22**	-	-
Copper (s)	0.04	**4.7**	0.60	4.3	**3.2**	0.88	6.25	**4.2**	0.67	4.8
Iron (s)	0.7	**35**	1.40	10.0	**56**	0.88	6.25	**53**	0.92	6.6
Lead (s)	-	**<0.91**	-	-	**<0.98**	-	-	**<1.5**	-	-
Lithium (s)	0.02	**<0.6**	-	-	**<3.9**	-	-	**<5.0**	-	-
Magnesium (s)	-	**630**	-	-	**670**	-	-	**490**	-	-
Manganese (s)	0.14	**260**	0.04	0.3	**130**	0.08	0.54	**170**	0.06	0.4
Molybdenum (s)	0.005	**<0.3**	-	-	**<0.49**	-	-	**<6.8**	-	-
Mercury (9/22/15)	-	**-**	-	-	**<0.074**	-	-	**<0.023**	-	-
Nickel (s)	0.02	**0.93**	1.51	10.8	**1.6**	0.88	6.25	**1.3**	1.08	7.7
Nitrate/Nitrite-N (s)	-	**110**	-	-	**85**	-	-	**<150**	-	-
Potassium (s)	-	**5900**	-	-	**4600**	-	-	**4900**	-	-
Selenium (s)	0.005	**<1.8**	-	-	**<4.9**	-	-	**6**	0.06	0.4
Silver (s)	0.005	**<0.27**	-	-	**-**	-	-	**-**	-	-
Sodium (s)	-	**<45**	-	-	**<49**	-	-	**<72**	-	-
Strontium (s)	0.6	**2.2**	19.09	136.4	**2.2**	19.09	136.36	**1.4**	30.00	214.3

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2015 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2016 Result (mg/kg)	kg needed to ingest to exceed (TDI)*	Equivalent in cups of berries**	2017 Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Sulfate (s)	-	**2800**	-	-	**2600**	-	-	**13000**	-	-
Thallium (s)	0.00007	**<1.8**	-	-	**<4.9**	-	-	**<4.2**	-	-
Total Kjeldahl Nitrogen (s)	-	**4400**	-	-	**1500**	-	-	**3900**	-	-
Total Phosphorus (s)	-	**760**	-	-	**650**	-	-	**660**	-	-
Uranium (9/22/15)	0.0002	**-**	-	-	**-**	-	-	**-**	-	-
Vanadium (s)	0.001	**<0.36**	-	-	**<0.59**	-	-	**<0.58**	-	-
Zinc (s)	0.3	**11**	1.91	13.6	**6.6**	3.18	22.73	**6.8**	3.09	22.1

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

All parameters that were not detected in a sample are listed as < the respective MDL

Table 8. Laboratory test results for blueberries sampled near the mine site (2018-2020)

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2018 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2019 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2020 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Aluminum (s)	1	**158.7**	0.4	3.2	**15.7**	4.5	31.8	**54.9**	1.3	9.1
Ammonia-N (s)	-	**78.9**	-	-	**Not Detected**	-	-	**2.2**	-	-
Antimony (s)	0.0004	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Arsenic (s)	0.0003	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Barium (s)	0.2	**16.5**	0.8	6.1	**5.5**	2.5	18.2	**29.0**	0.5	3.4
Beryllium (s)	0.002	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Boron (s)	0.2	**3.8**	3.7	26.3	**Not Detected**	-	-	**Not Detected**	-	-
Cadmium (s)	0.001	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Calcium (s)		**1316.7**	-	-	**359.3**	-	-	**1936.7**	0.0	0.0
Chromium (s)	0.003	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Cobalt (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Copper (s)	0.04	**4.3**	0.7	4.7	**2.1**	1.3	9.5	**Not Detected**	-	-
Iron (s)	0.7	**167.0**	0.3	2.1	**11.9**	4.1	29.3	**49.0**	1.0	7.1
Lead (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Lithium (s)	0.02	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Magnesium (s)	-	**540.7**	-	-	**156.7**	-	-	**626.7**	-	-
Manganese (s)	0.14	**199.0**	0.0	0.4	**42.0**	0.2	1.7	**174.3**	0.1	0.4
Molybdenum (s)	0.005	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Mercury	-	**0.1**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Nickel (s)	0.02	**1.5**	0.9	6.7	**Not Detected**	-	-	**Not Detected**	-	-
Nitrate/Nitrite-N	-	**11.9**	-	-	**0.7**	-	-	**4.1**	-	-
Potassium (s)	-	**4730.0**	-	-	**1796.7**	-	-	**5046.7**	-	-
Selenium (s)	0.005	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Silver (s)	0.005	**-**	-	-	**-**	-	-	**-**	-	-
Sodium (s)	-	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Strontium (s)	0.6	**3.0**	14.0	100.0	**0.6**	72.0	514.3	**3.5**	11.9	84.9
Sulfate (s)	-	**396.7**	-	-	**480.7**	-	-	**335.0**	-	-
Thallium (s)	0.00007	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-

	US EPA Oral Tolerable Daily Intake Values (TDI), mg/kg-d	2018 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2019 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**	2020 Average Result (mg/kg)	kg needed to ingest to exceed TDI*	Equivalent in cups of berries**
Total Kjeldahl Nitrogen (s)	-	**5880.0**	-	-	**1850.0**	-	-	**6863.3**	-	-
Total Phosphorus (s)	-	**244.7**	-	-	**66.3**	-	-	**331.7**	-	-
Uranium	0.0002	**0.1**	0.1	1.0	**4.3**	0.0	0.0	**Not Detected**	-	-
Vanadium (s)	0.001	**Not Detected**	-	-	**Not Detected**	-	-	**Not Detected**	-	-
Zinc (s)	0.3	**11.3**	1.9	13.3	**3.1**	6.8	48.4	**Not Detected**	-	-

* Based on body weight of 70 kg (approximately 154 lb), and 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula: (TDI x 70 kg)/Test Result

** Based on 1 cup of blueberries = 140 grams = 0.140 kg; Calculated using the formula (kg needed to exceed TDI)/(0.140 kg)

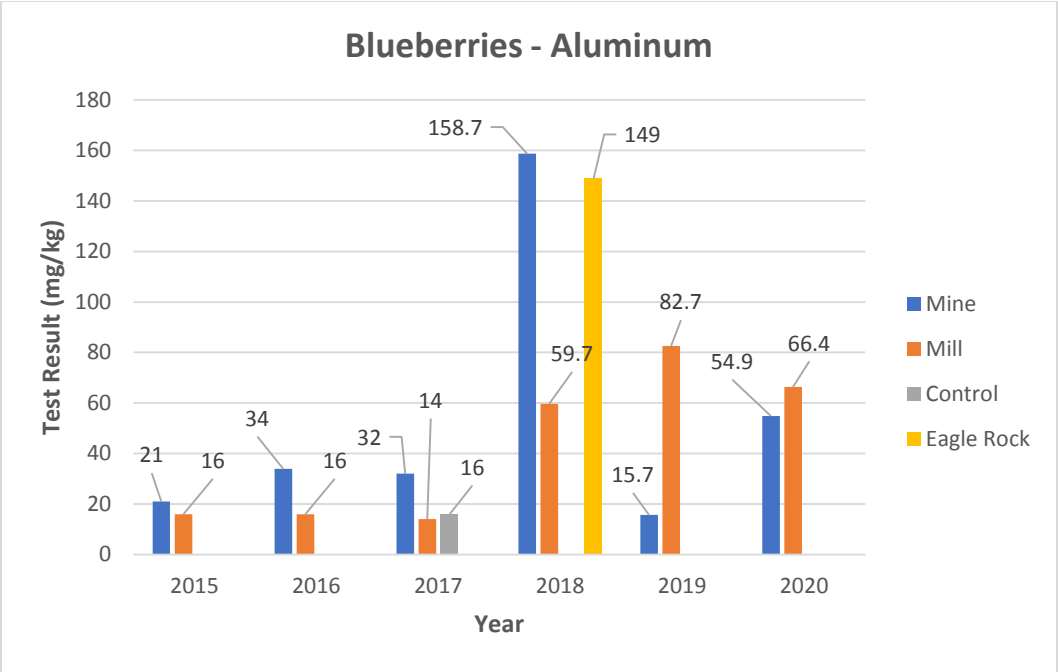

Figure 5. Bar graphs comparing test results for aluminum (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

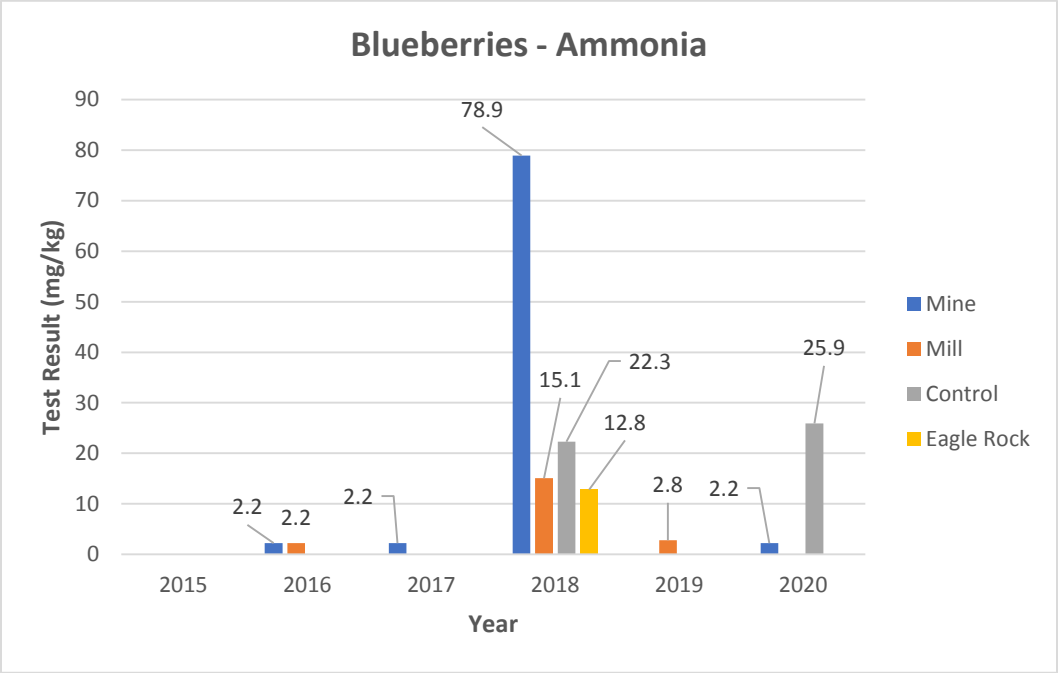

Figure 6. Bar graphs comparing test results for ammonia (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

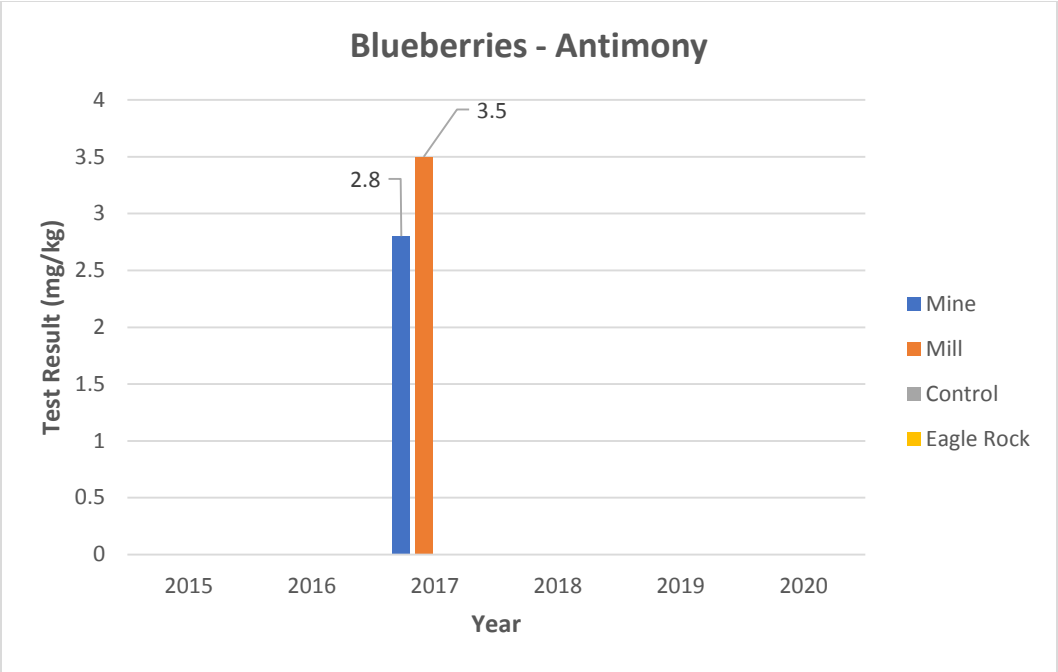

Figure 7. Bar graphs comparing test results for antimony (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

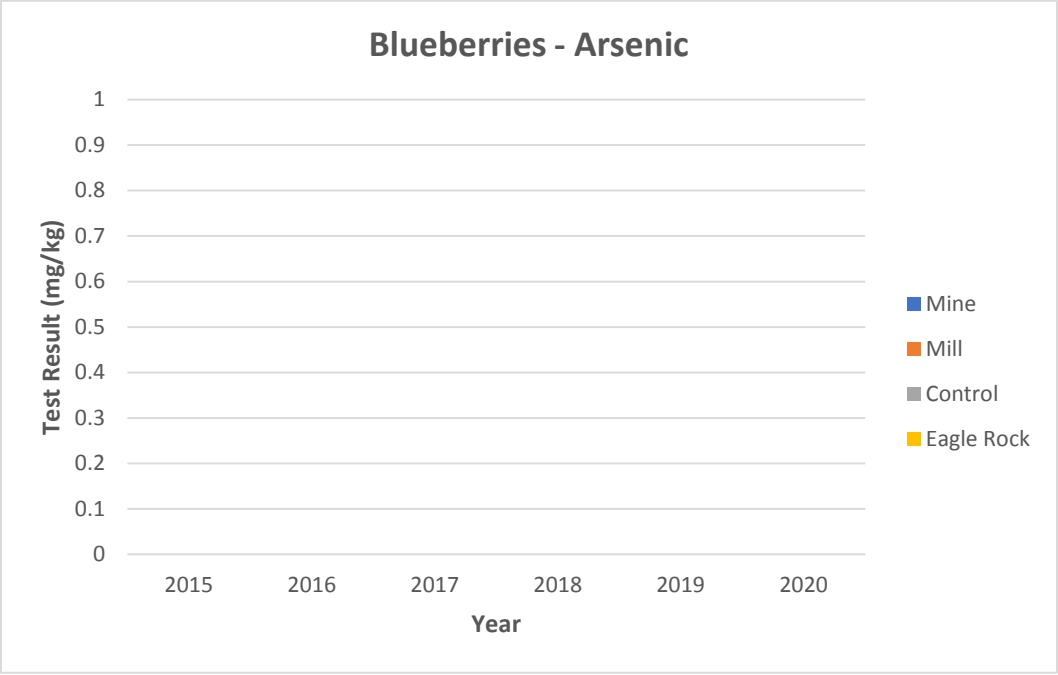

Figure 8. Bar graphs comparing test results for arsenic (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

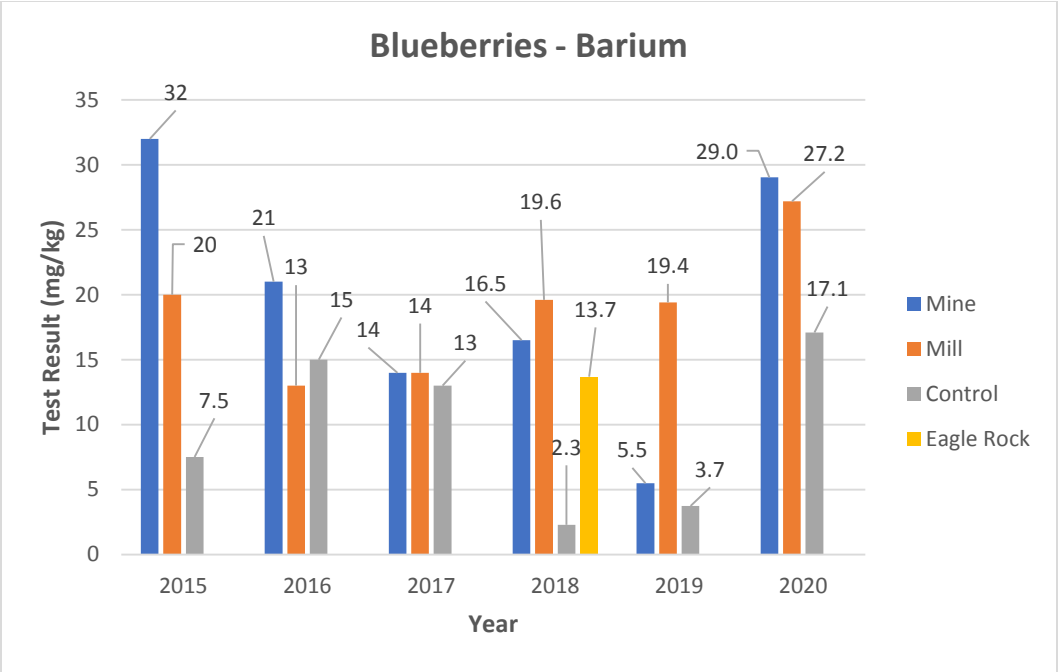

Figure 9. Bar graphs comparing test results for barium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

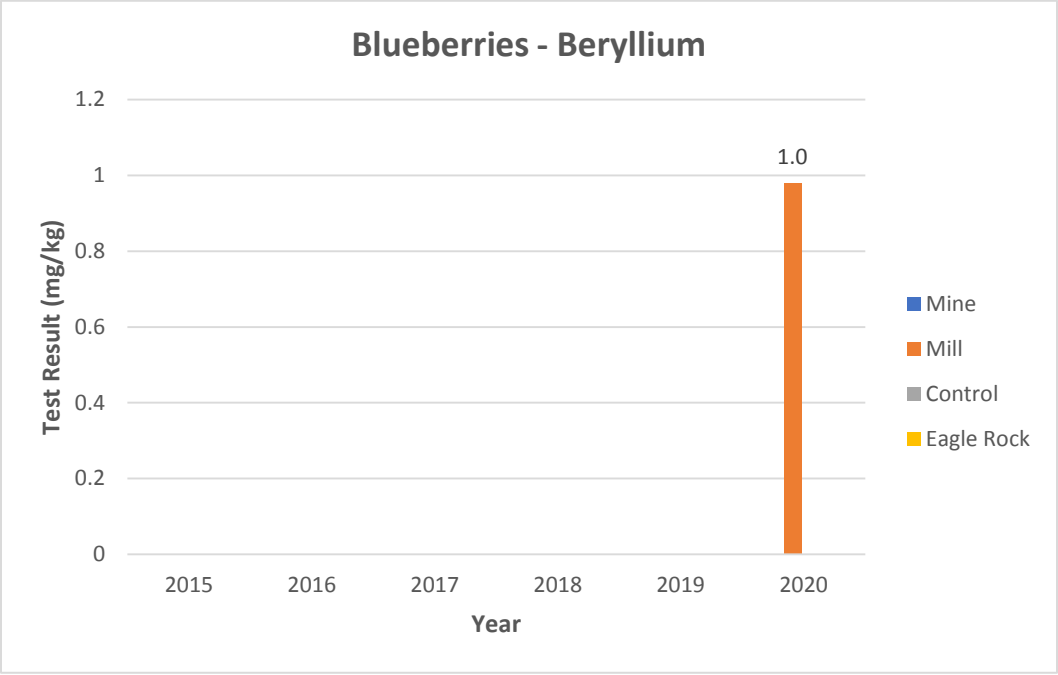

Figure 10. Bar graphs comparing test results for beryllium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

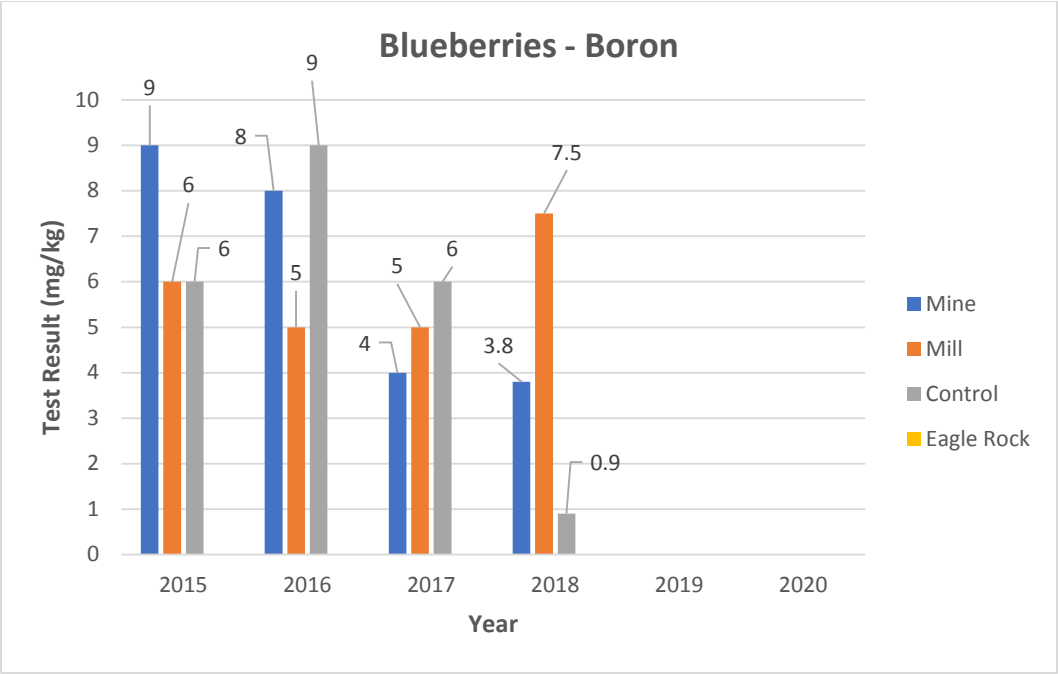

Figure 11. Bar graphs comparing test results for boron (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

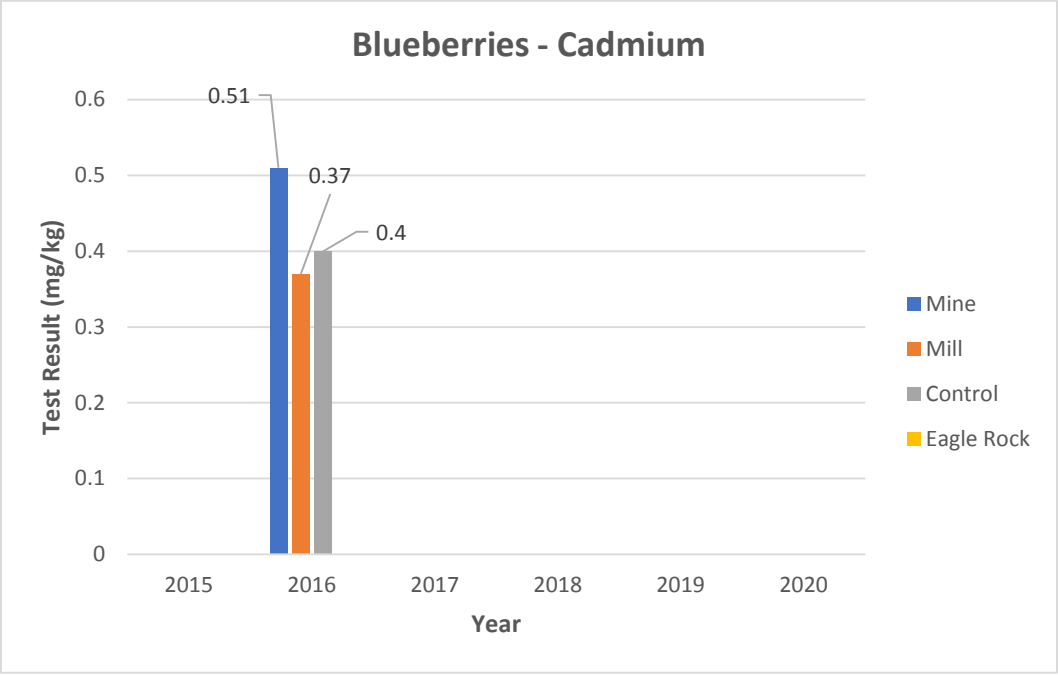

Figure 12. Bar graphs comparing test results for cadmium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

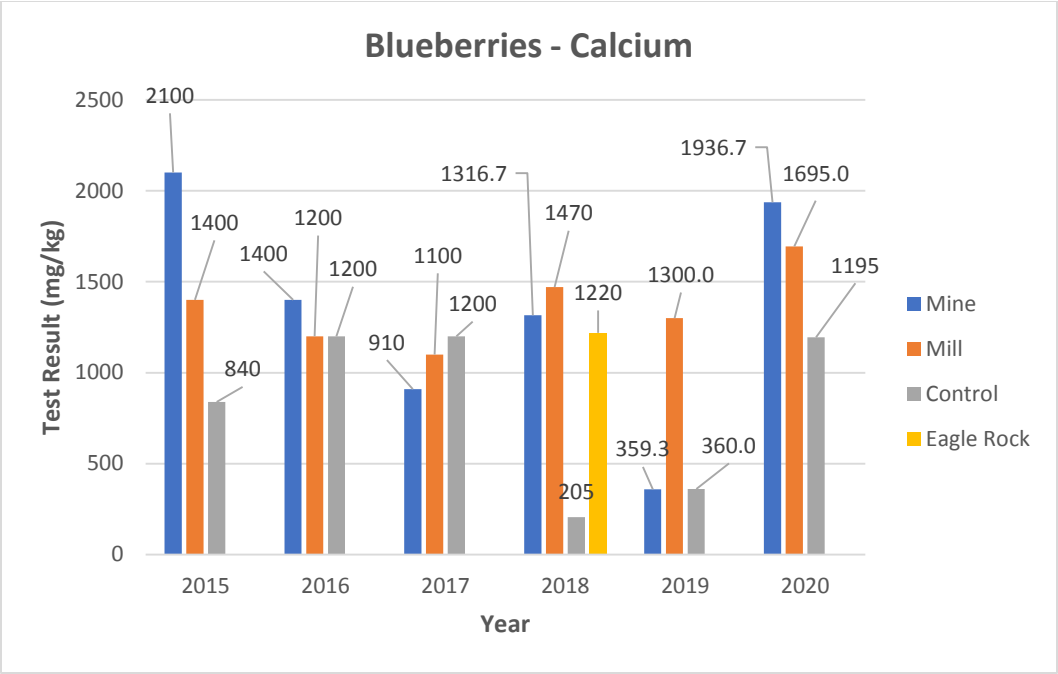

Figure 13. Bar graphs comparing test results for calcium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

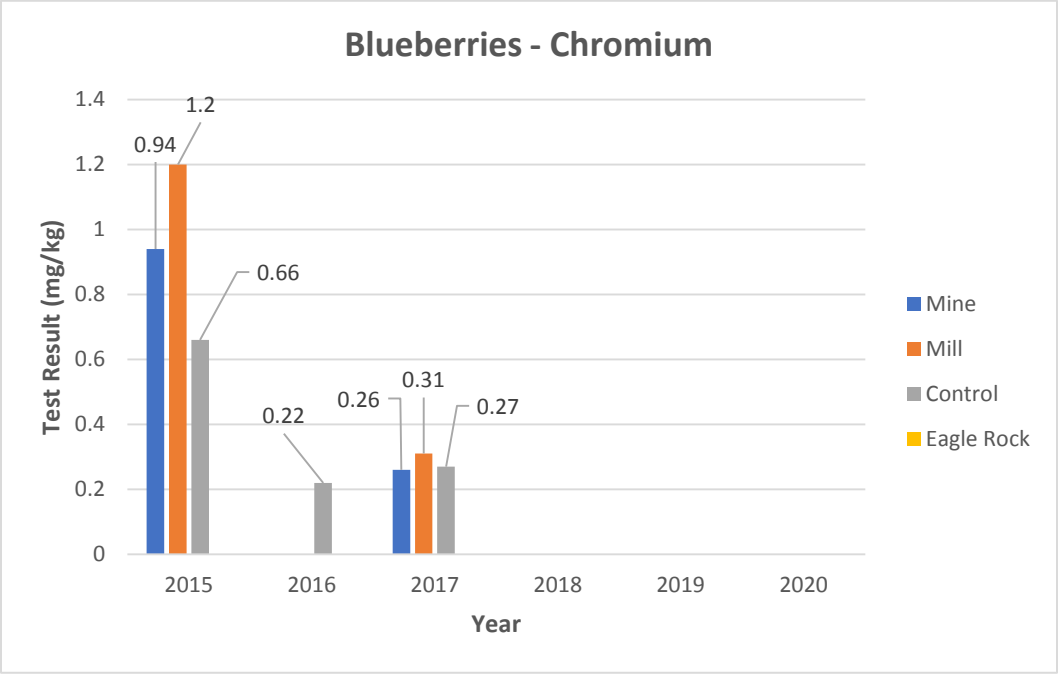

Figure 14. Bar graphs comparing test results for chromium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

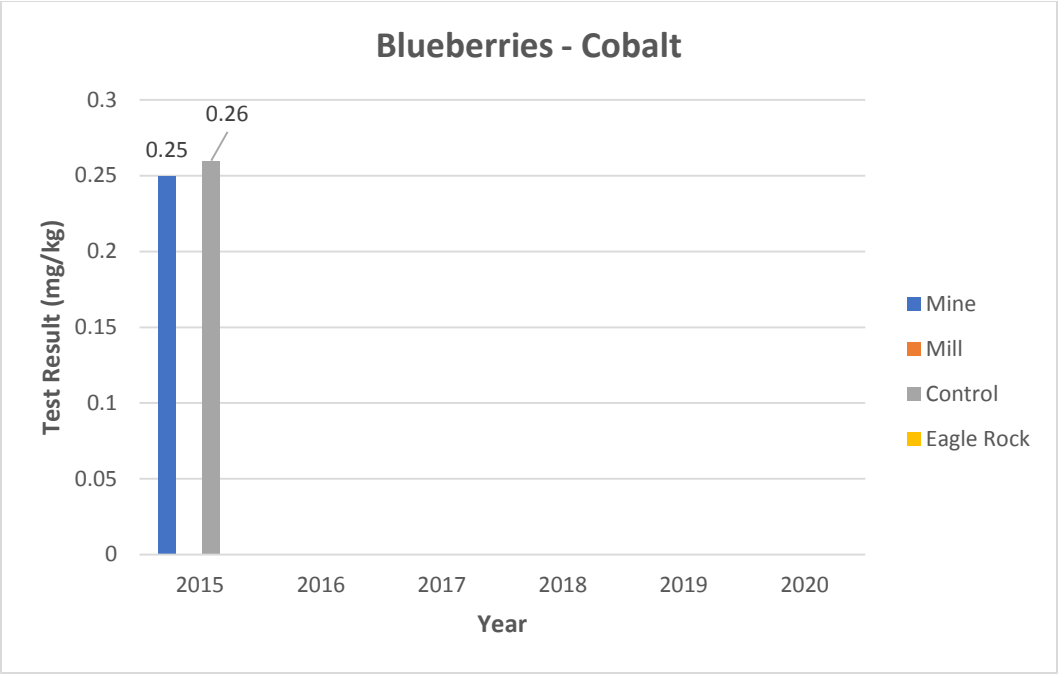

Figure 15. Bar graphs comparing test results for cobalt (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

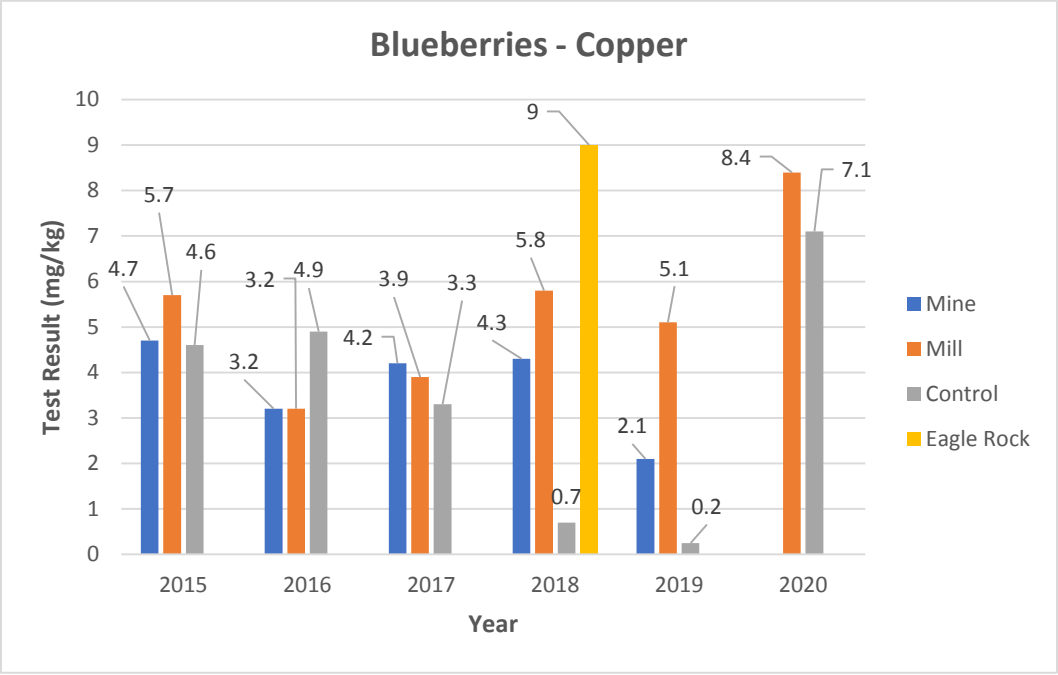

Figure 16. Bar graphs comparing test results for copper (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

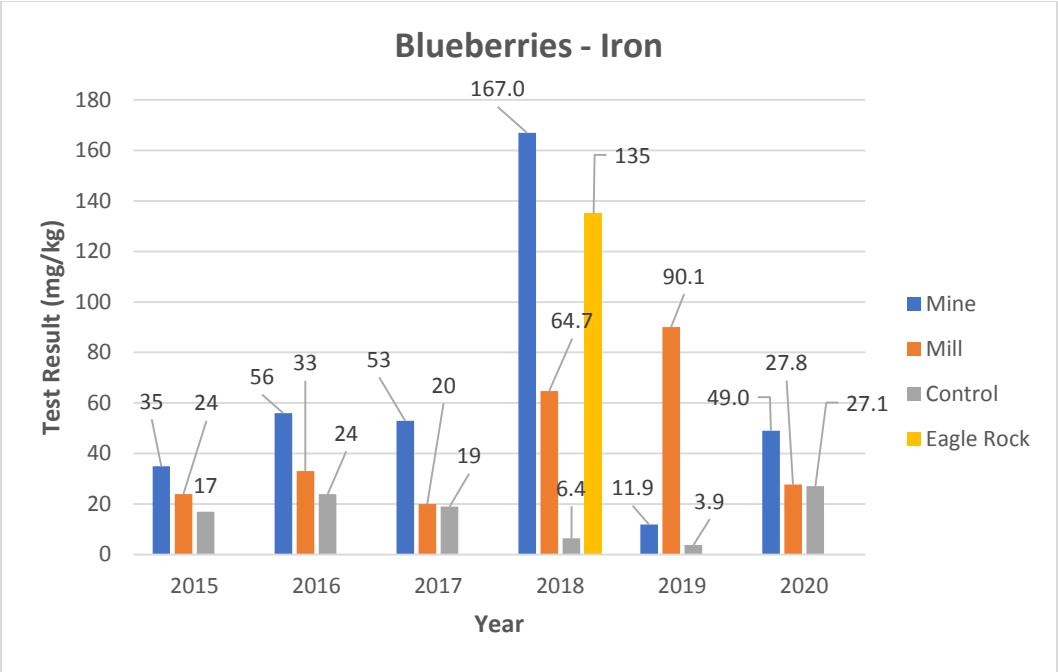

Figure 17. Bar graphs comparing test results for iron (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

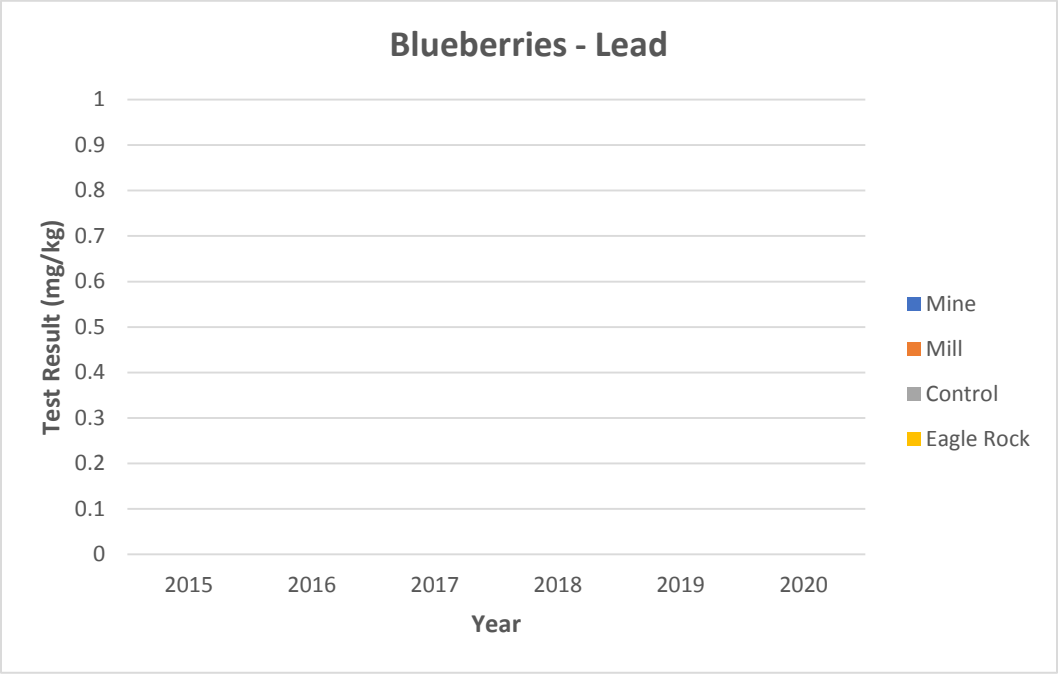

Figure 18. Bar graphs comparing test results for lead (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

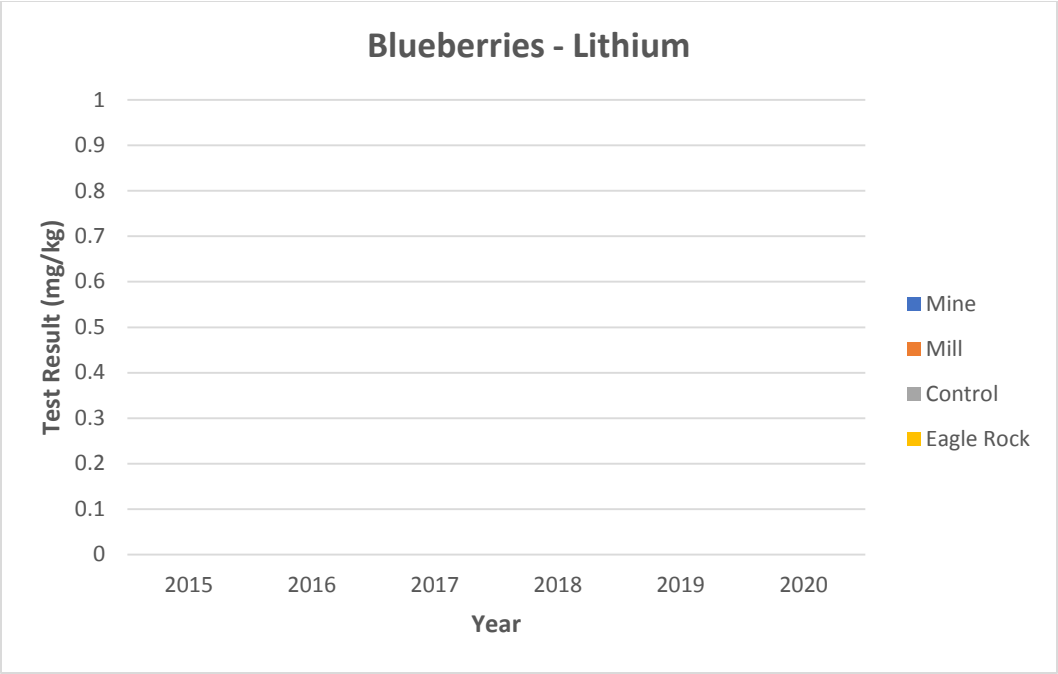

Figure 19. Bar graphs comparing test results for lithium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

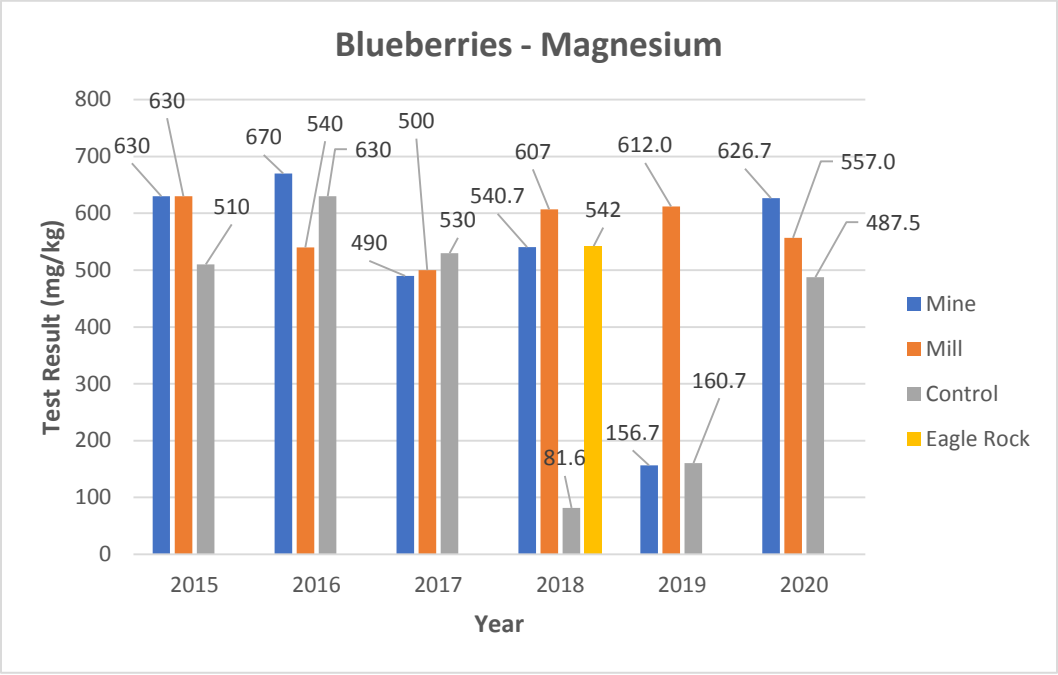

Figure 20. Bar graphs comparing test results for magnesium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

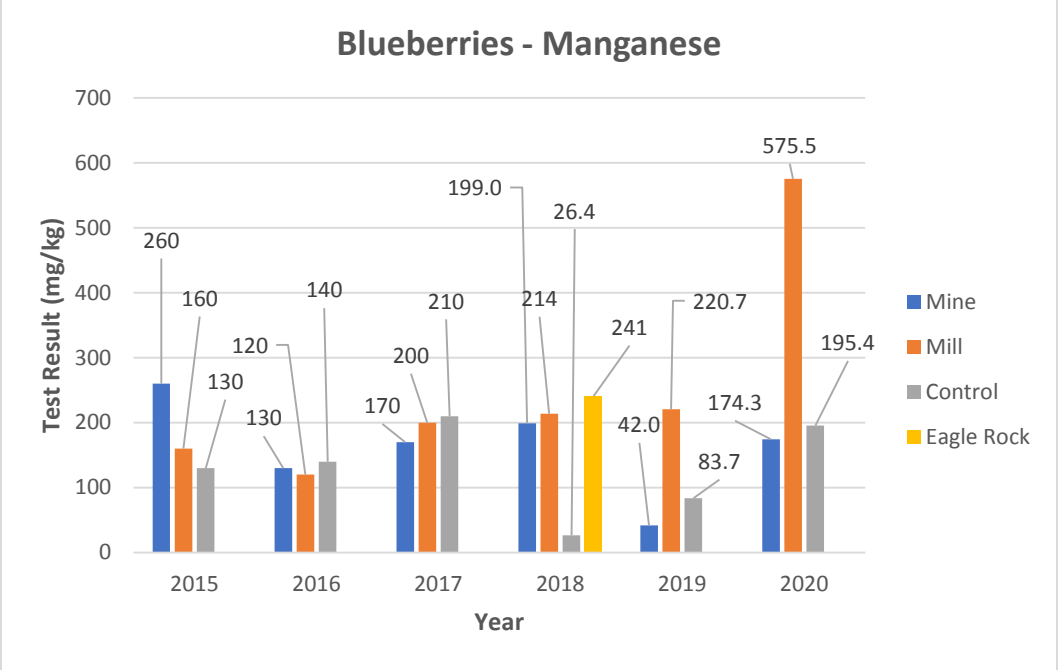

Figure 21. Bar graphs comparing test results for manganese (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

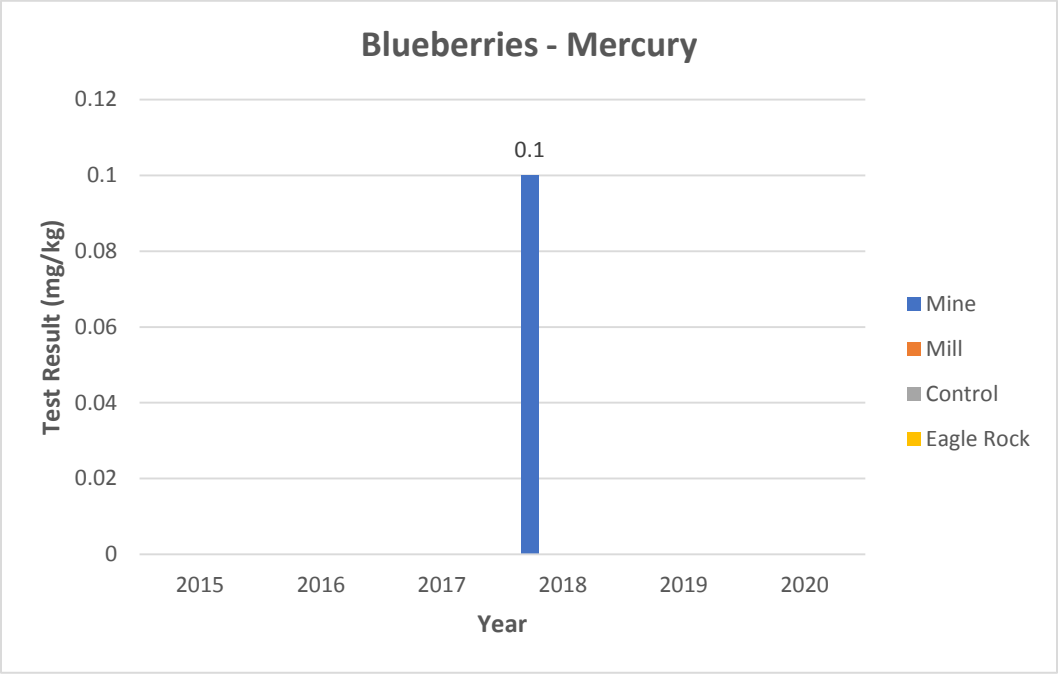

Figure 22. Bar graphs comparing test results for mercury (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

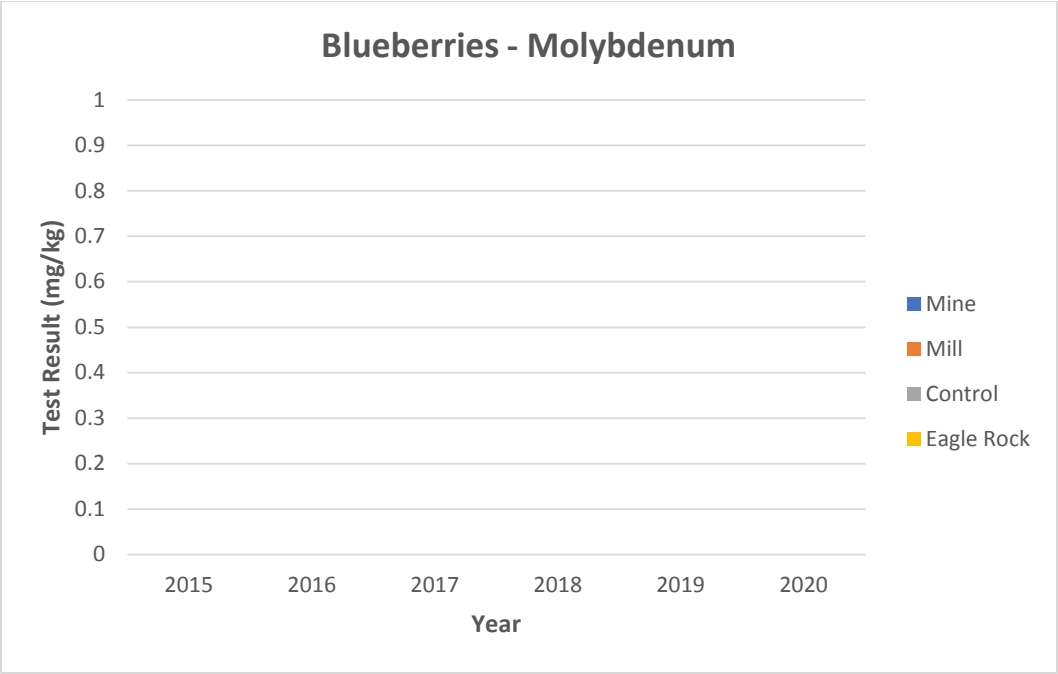

Figure 23. Bar graphs comparing test results for molybdenum (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

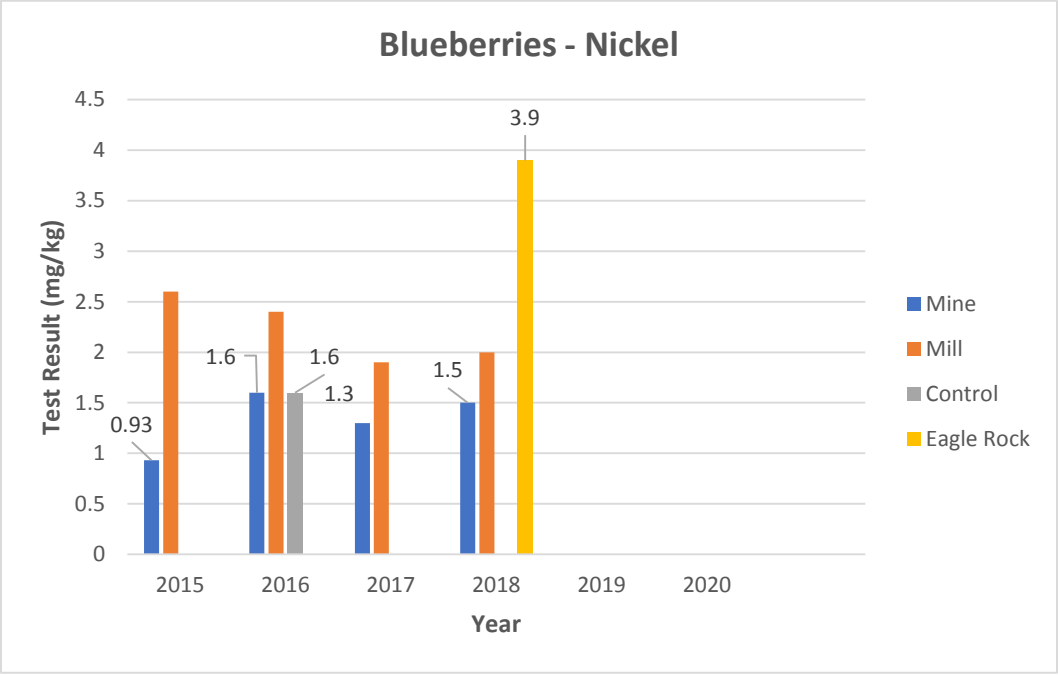

Figure 24. Bar graphs comparing test results for nickel (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

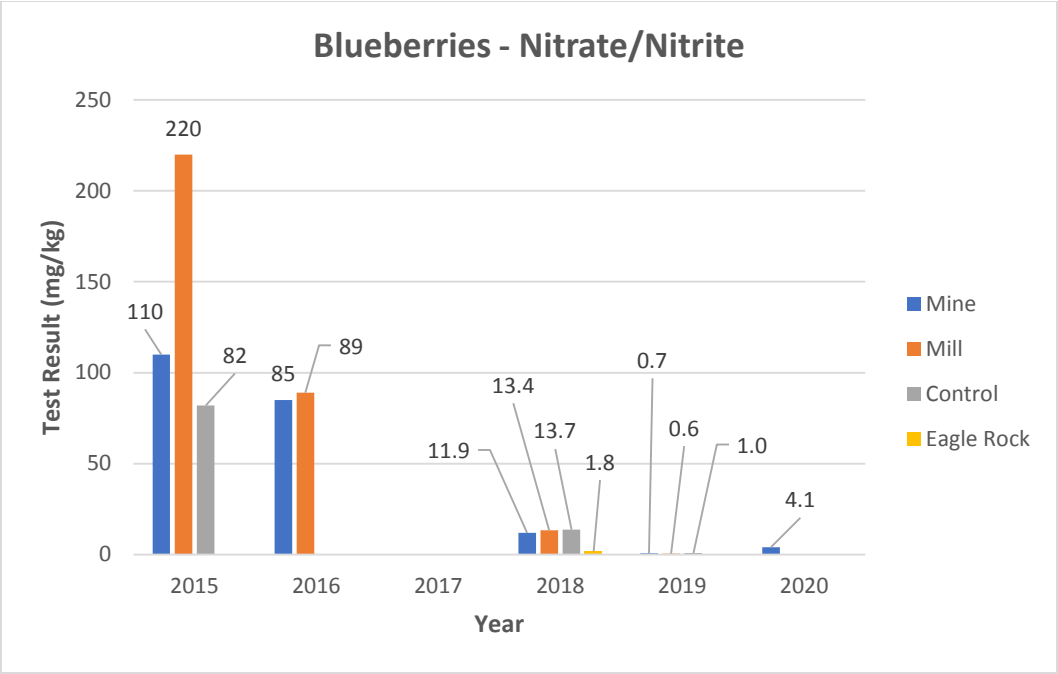

Figure 25. Bar graphs comparing test results for nitrate/nitrite (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

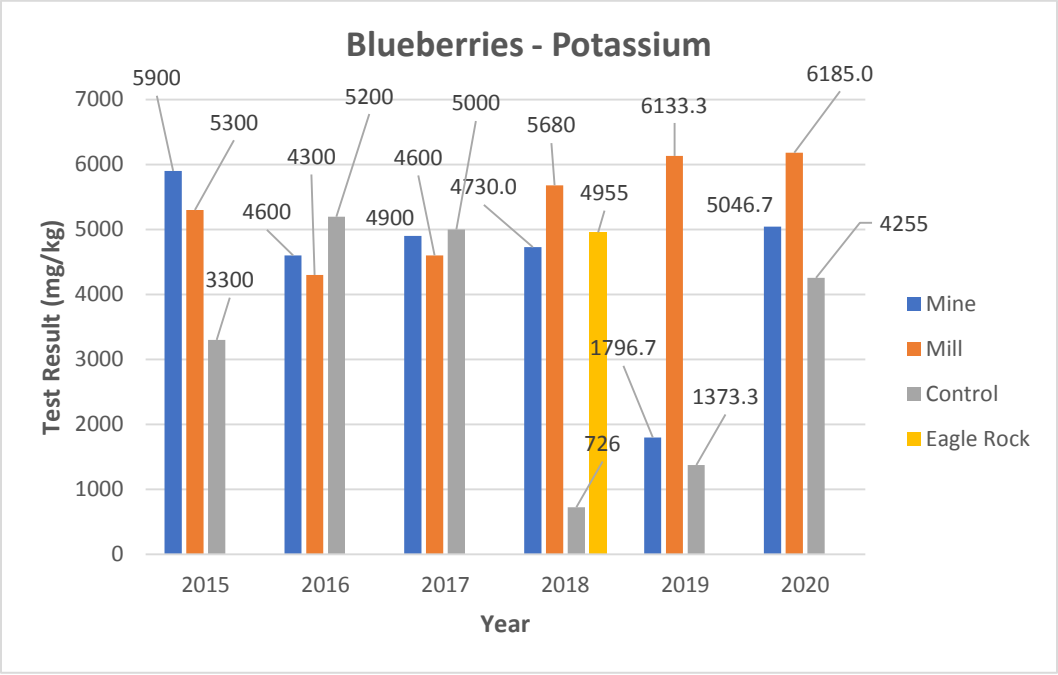

Figure 26. Bar graphs comparing test results for potassium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

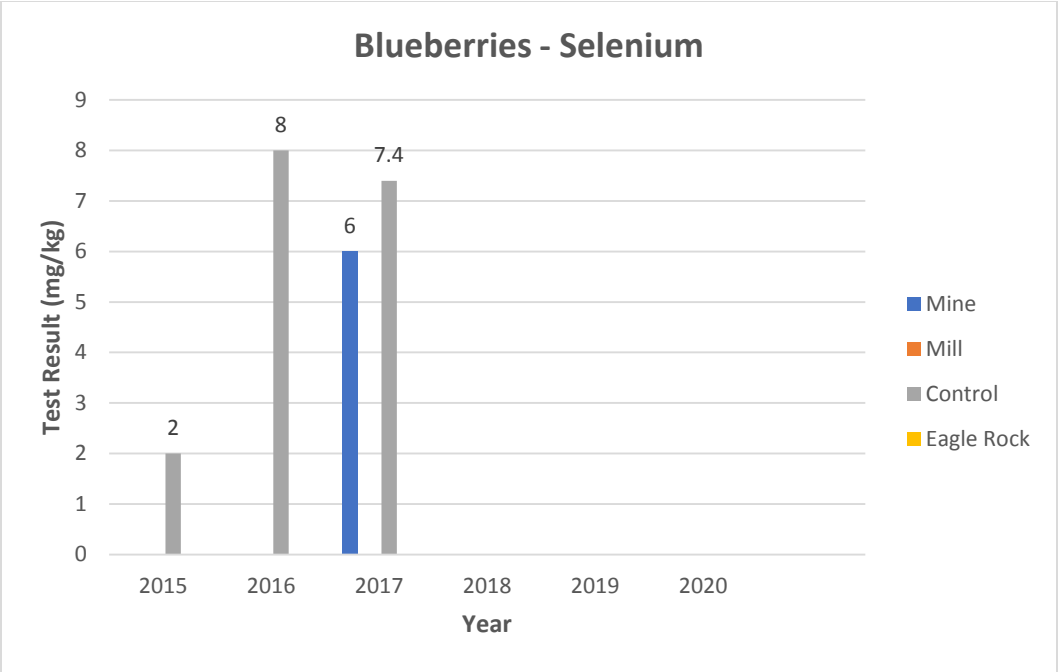

Figure 27. Bar graphs comparing test results for selenium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

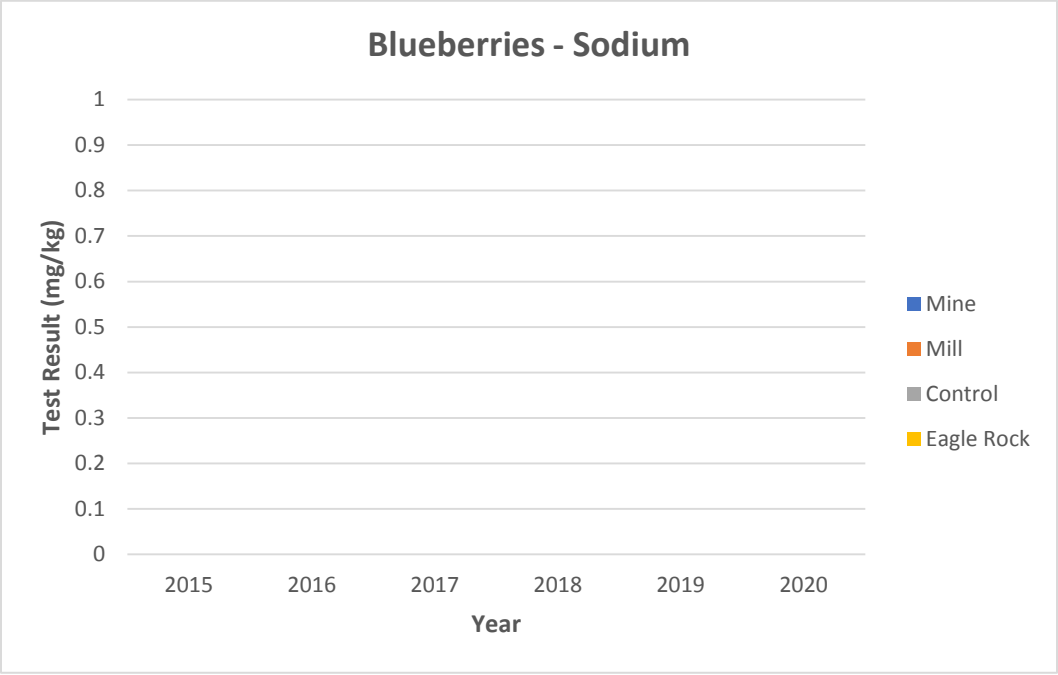

Figure 28. Bar graphs comparing test results for sodium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

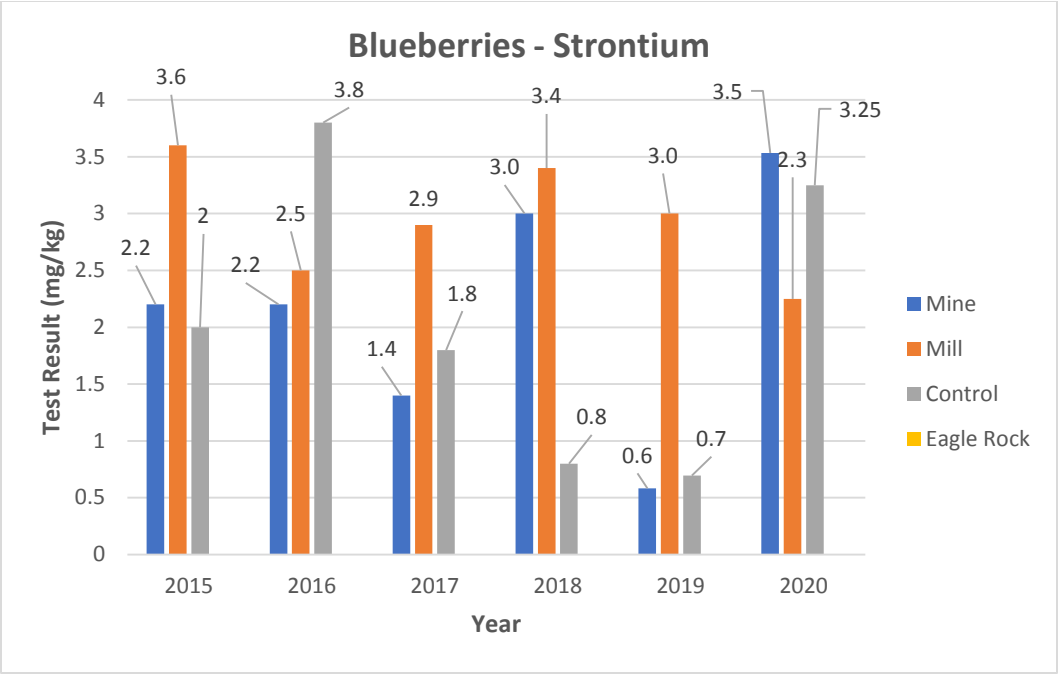

Figure 29. Bar graphs comparing test results for strontium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

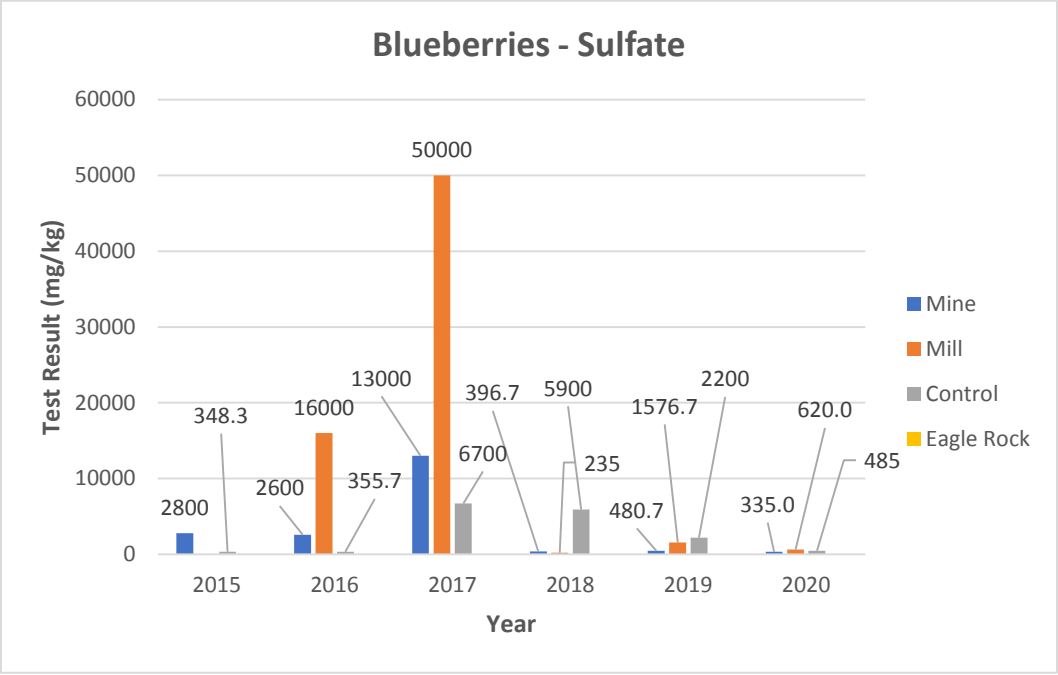

Figure 30. Bar graphs comparing test results for sulfate (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

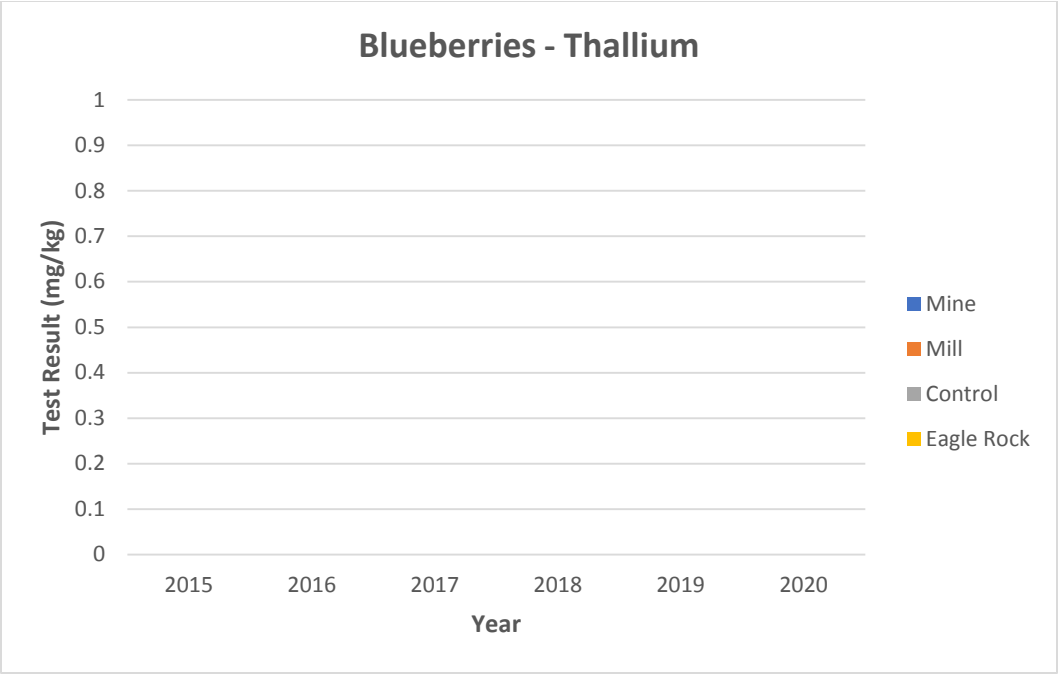

Figure 31. Bar graphs comparing test results for thallium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

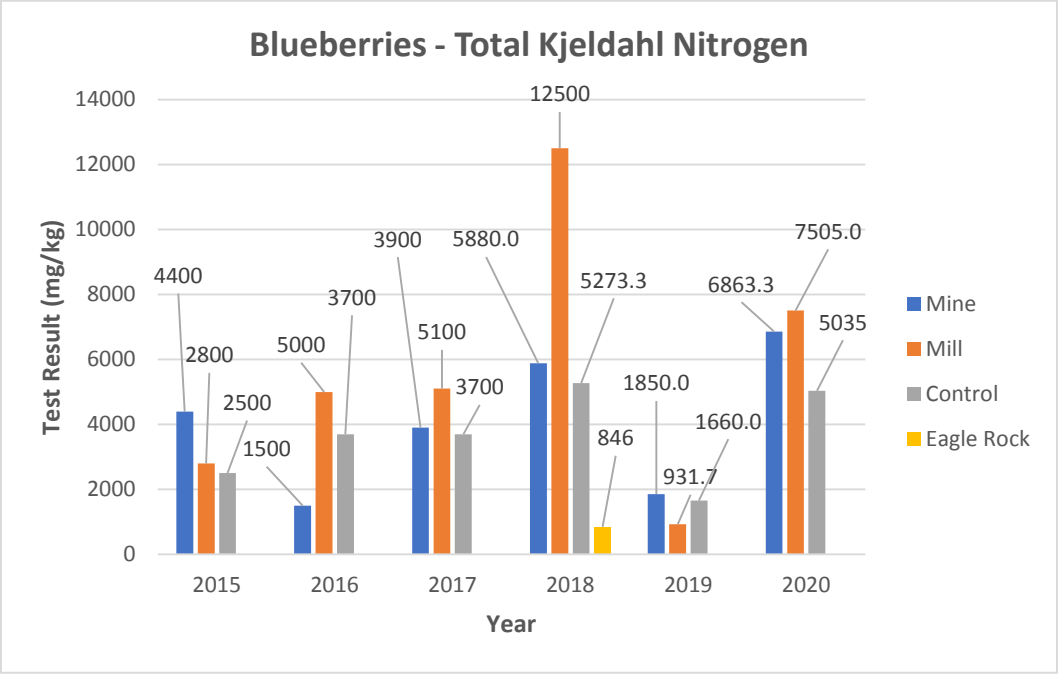

Figure 32. Bar graphs comparing test results for total Kjeldahl nitrogen (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

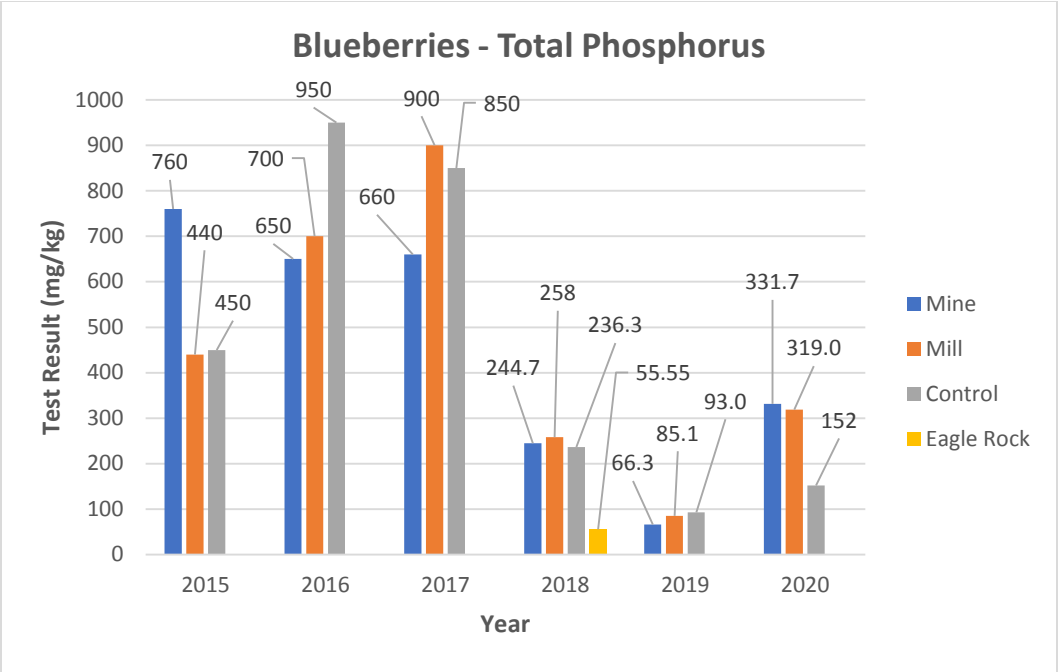

Figure 33. Bar graphs comparing test results for total phosphorus (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

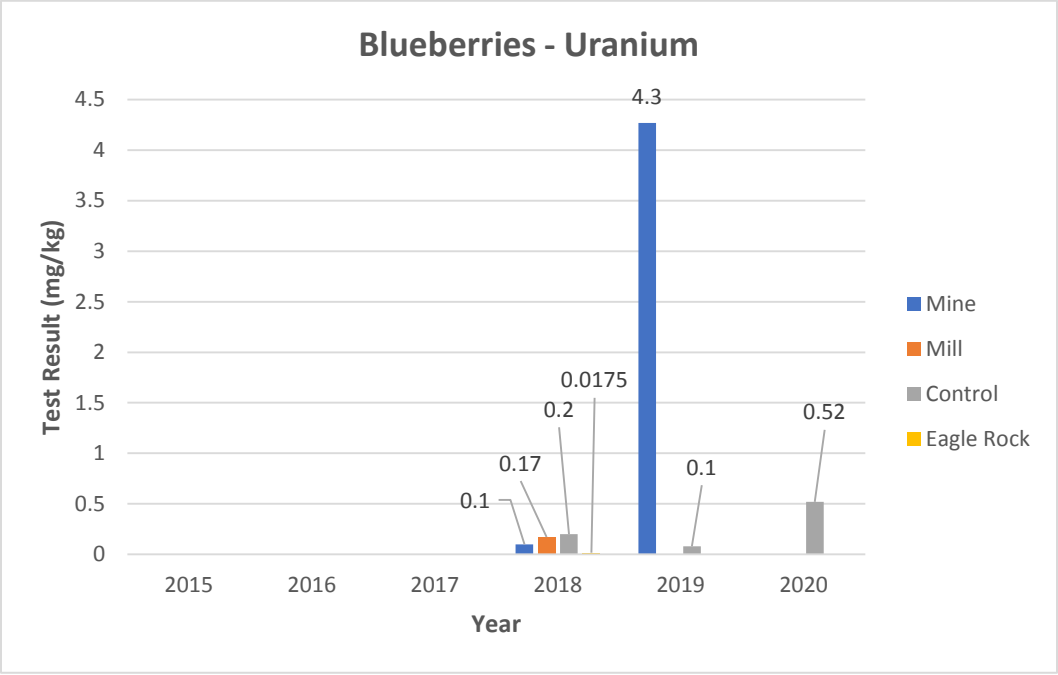

Figure 34. Bar graphs comparing test results for uranium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

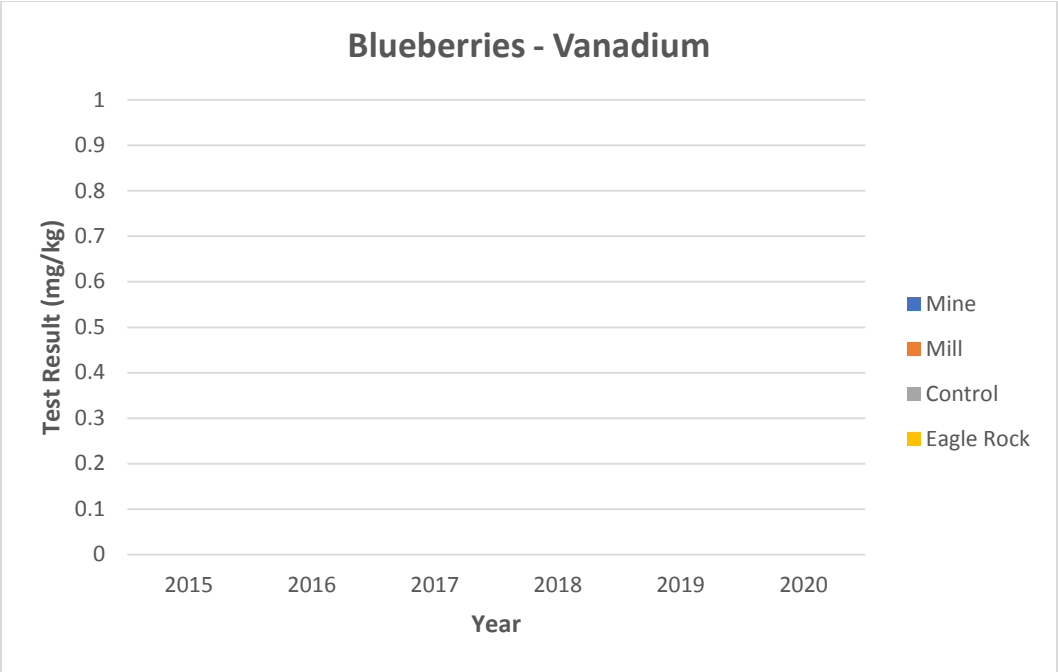

Figure 35. Bar graphs comparing test results for vanadium (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).

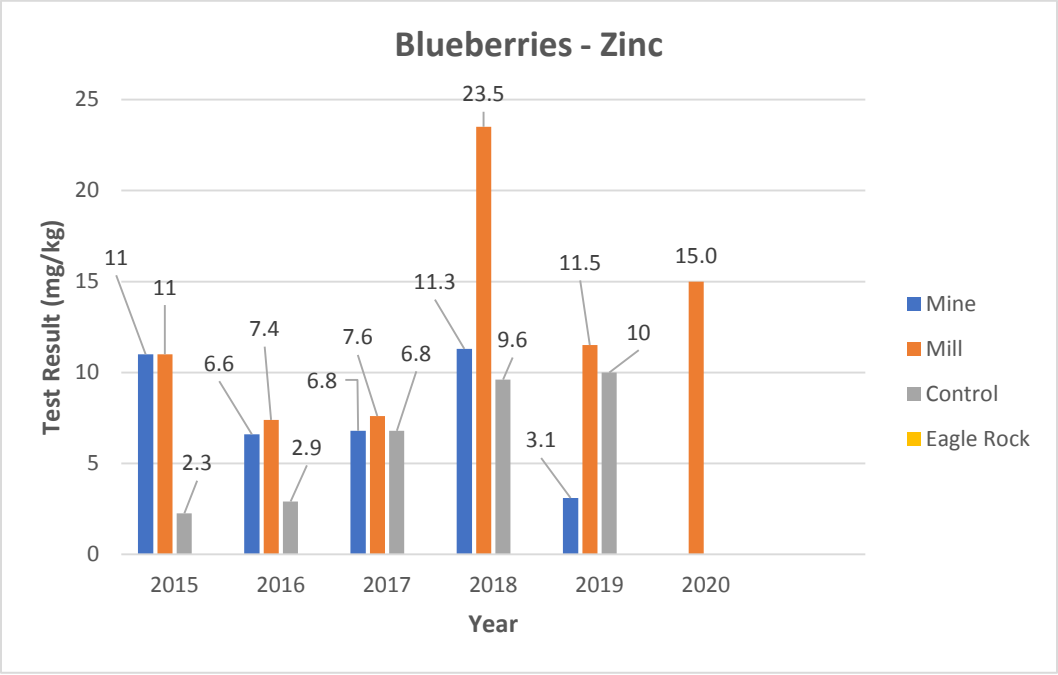

Figure 36. Bar graphs comparing test results for zinc (mg/kg) in blueberry samples collected within a two mile radius of the mine, mill, and control sites as well as at Eagle Rock (2015-2020).