

GROUNDWATER MONITORING DATA RELEASE FALL 2024 SAMPLING EVENT LUCKEY FUSRAP SITE

U.S. Army Corps of Engineers Buffalo District



Executive Summary

Groundwater monitoring occurred at the Luckey Formerly Utilized Sites Remedial Action Program (FUSRAP) Site in Luckey, Ohio from September 16 to 18, 2024. The purpose was to obtain additional information and groundwater data for Atomic Energy Commission (AEC) related Constituents of Concern (COCs) prior to implementing monitored natural attenuation of groundwater, as documented in the February 2008 *Record of Decision* (ROD), *Groundwater Operable Unit, Luckey Site*. A total of 16 groundwater monitoring wells, two former production wells, and one residential well were sampled for AEC related COCs including, beryllium, lead, and total uranium. COCs and associated U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) or action levels for protection of drinking water include beryllium (4 micrograms per liter [μ g/L]), lead (15 μ g/L), and total uranium (30 μ g/L).

Samples collected in September 2024 from groundwater monitoring wells MW-01(I), MW-02(S), MW-22R(I), and MW-25(I) had concentrations above the USEPA MCL for beryllium. These wells are located on-site and are not used for water supply. No other samples contained COCs at concentrations exceeding the MCLs. The residential well did not contain COCs at concentrations above the MCLs or the action level.

Groundwater sample collection will occur again during the next scheduled groundwater monitoring event, which takes place in spring of 2025.

Formerly Utilized Sites Remedial Action Program (FUSRAP)

FUSRAP was initiated in 1974 to identify, investigate and, if necessary, clean up or control sites throughout the United States that were contaminated by Manhattan Engineer District or early Atomic Energy Commission (AEC) activities. When implementing FUSRAP, the United States Army Corps of Engineers follows the investigation and response framework of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan.

Site Description

The Luckey Site is located at 21200 Luckey Road near the Village of Luckey, Ohio, 22 miles southeast of Toledo. It is bordered by Luckey Road to the west, Gilbert Road to the south, abandoned railroad tracks to the east, and privately-owned farm fields to the north. The site is zoned industrial but is currently not being used. It covers approximately 40 acres and includes open areas as well as unused buildings and concrete slabs where several buildings were removed. Several of the open areas were previously used to store byproducts from beryllium ore processing.

Site History

In 1942 the federal government built a magnesium processing facility at the site, which was operated by National Lead for the federal government from 1942 to 1945. In 1949 Brush Beryllium Company (later Brush Wellman) began production of beryllium oxide, beryllium hydroxide, and beryllium pebbles at the site under contract to the AEC. Brush Beryllium Company operated the facility for the AEC until 1958 when beryllium production ceased. In 1959, AEC contracted with Brush Beryllium Company to close the facility. Closing operations consisted of constructing a two-acre diked disposal area in the northeast corner of the property where sludge from three on-site lagoons was placed. The General Services Administration sold the facility in 1961 and the site has had various owners since then.

Purpose

Groundwater monitoring is being performed to obtain additional information and groundwater data for AEC related Constituents of Concern (COCs) prior to implementing monitored natural attenuation of groundwater, as documented in the February 2008 *Record of Decision* (ROD), *Groundwater Operable Unit, Luckey Site.*

Hydrogeologic conditions and the nature and extent of groundwater contamination at the site are presented in the ROD. Groundwater is present in three primary water-bearing zones: shallow, intermediate, and deep bedrock. It is present under unconfined and semi-confined conditions. The horizontal flow of groundwater within these zones in the vicinity of the site is northerly and northwesterly. COCs and associated U.S. Environmental Protection Agency (USEPA) maximum contaminant levels (MCLs) or action levels for protection of drinking water include beryllium (4 micrograms per liter [μ g/L]), lead (15 μ g/L), and total uranium (30 μ g/L).

The current groundwater monitoring program (well number and locations) varies from the 2008 ROD due to the decommissioning of site wells in conjunction with a soil remediation program. The ROD-based monitoring program will be reestablished once the soils remedy is completed.

Results and Interpretations

From September 16 to 18, 2024, 16 groundwater monitoring wells (illustrated on Figure 1), two former production wells (PW-(E) and PW-(W)), and one residential well (GW0002) were sampled for beryllium, lead, and total uranium. Groundwater surface elevations measured during this event are presented in Table 1.

Analytical results are presented in Table 2. Samples collected in September 2024 with concentrations above the USEPA MCLs are listed below and highlighted in Figure 1 and Table 2.

• Beryllium [MW-01(I), MW-02(S), MW-22R(I), and MW-25(I)]

The exceedances from wells MW-01(I), MW-02(S), and MW-22R(I) are consistent with previous results. The beryllium groundwater result from the field filtered sample at monitoring well MW-25(I) was 12.9 µg/L, which is approximately 40 times greater than historical average and 25 times greater than the raw (unfiltered) groundwater sample concentration. It is unlikely that the anomalous result is representative of true site conditions, since the filtered and unfiltered results are typically similar at well MW-25(I), and the September 2024 results do not compare to historical field filtered beryllium results at the well. Thus, the beryllium groundwater result from the field filtered sample at monitoring well MW-25(I) is considered unusable for any trending of the data. Groundwater sample collection from well MW-25(I) will be tested again during the next groundwater monitoring event.

The wells with beryllium exceedances in September 2024 are located on-site and are not used for water supply. Residential well GW0002 did not contain COCs at concentrations above the MCLs or the action level.

<u>Beryllium</u>

Plots of beryllium concentrations against time are presented on Figure 2 (unfiltered samples) and Figure 3 (filtered samples) for monitoring wells MW-01(I), MW-02(S), MW-22R(I), and for residential well GW0002. The Mann-Kendall test was used to determine if the data exhibit statistically significant upward trends or downward trends.¹ Results are summarized in Table 3. The following conclusions are made from the data plots and trend analysis:

- A downward trend is observed for wells MW-02(S) (filtered and unfiltered samples).
- No trends are observed for wells MW-01(I) (filtered and unfiltered samples) and MW-22R(I) (filtered and unfiltered samples).

¹ Statistical significance was evaluated at the 90 percent level of confidence.

• There are no discernible trends overtime at residential well GW0002 (filtered and unfiltered samples). Beryllium in groundwater has been consistently below the MCL at residential well GW0002 overtime.

<u>Lead</u>

Plots of lead concentrations against time are presented on Figure 4 (unfiltered samples) and Figure 5 (filtered samples) for wells MW-21(I), GW0002, and PW(E). Trend analysis results are summarized in Table 3. The following conclusions are made from the data plots and trend analysis:

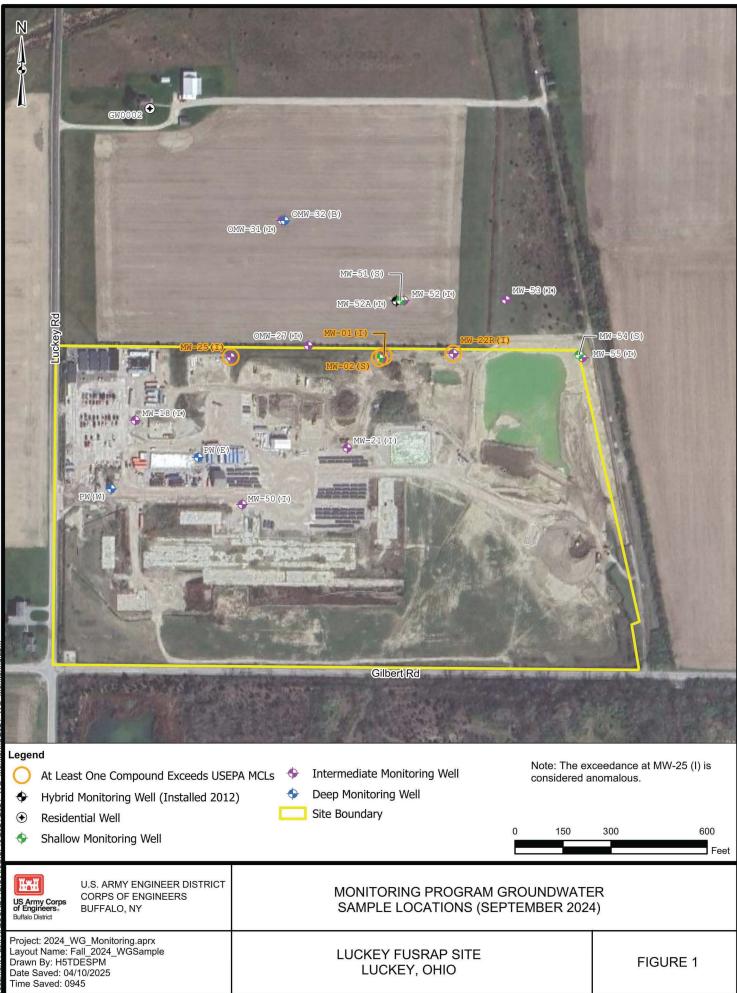
- A downward trend is observed for wells MW-21(I) (filtered and unfiltered samples) and PW(E) (unfiltered sample).
- No trends are observed for wells GW0002 (filtered and unfiltered samples) and PW(E) (filtered sample). Lead in groundwater has consistently been below the MCL at the residential well GW0002 overtime.

Total Uranium

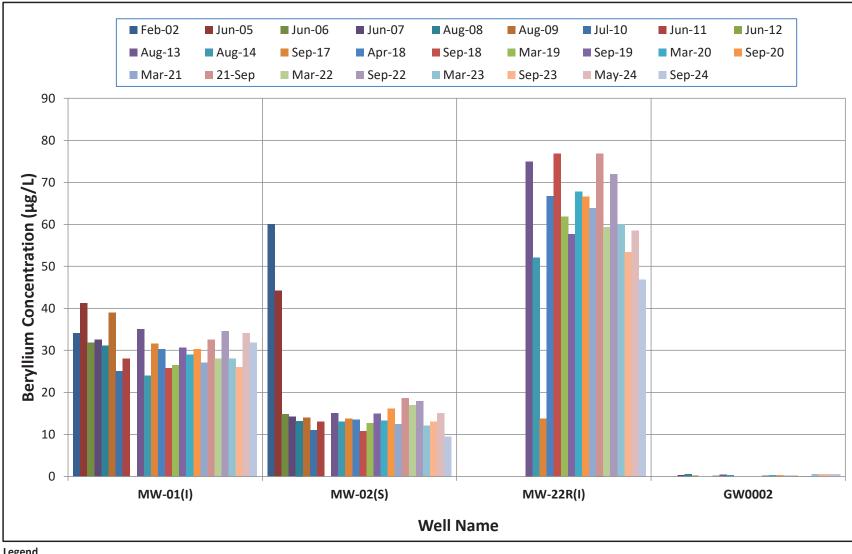
Plots of total uranium concentrations against time are presented on Figure 6 (unfiltered samples) and Figure 7 (filtered samples) for wells MW-21(I) and GW0002. Trend analysis results are summarized in Table 3. The following conclusions are made from the data plots and trend analysis:

- A downward trend is observed for well MW-21(I) (filtered and unfiltered samples).
- No trend is observed for well GW0002 (filtered and unfiltered samples). Total uranium in groundwater has been consistently below the MCL at residential well GW0002 overtime.

FIGURES







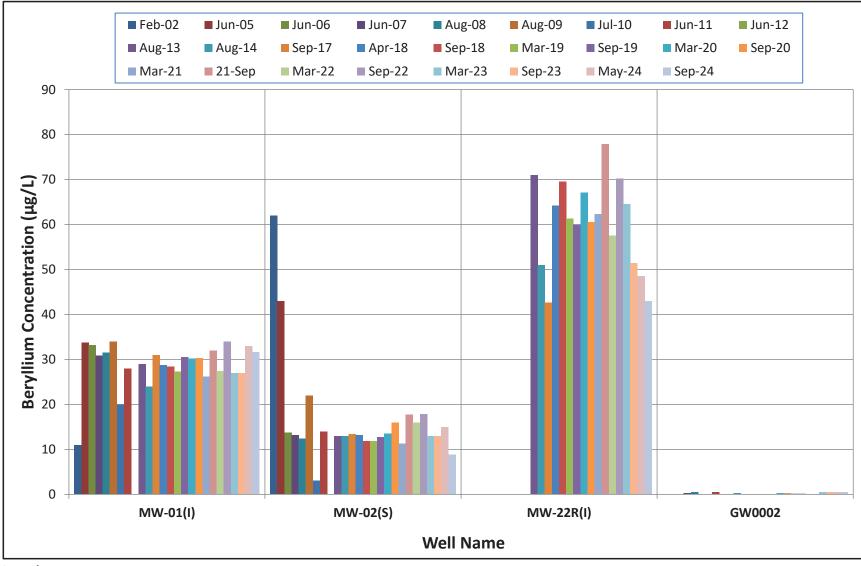
(S) - shallow monitoring well

(I) - intermediate monitoring well

USEPA Beryllium MCL - 4 µg/L

GW0002 - residential well µg/L - micrograms per liter





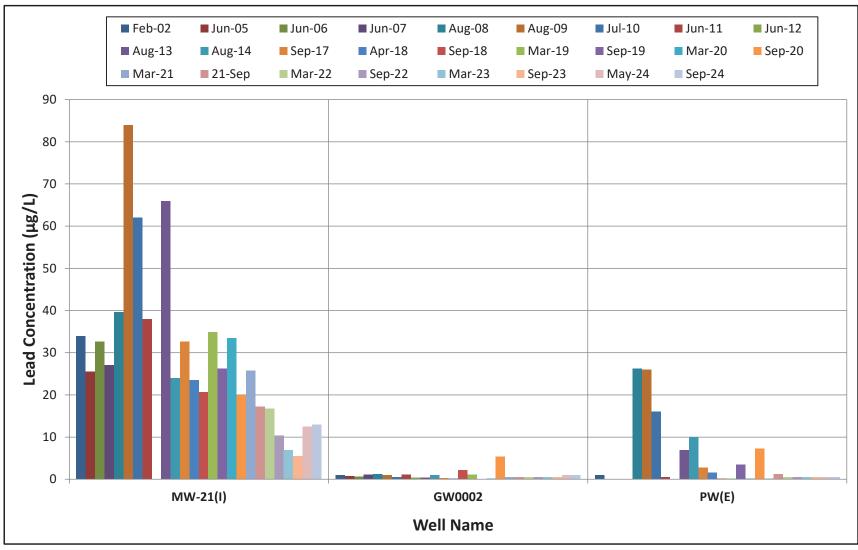
(S) - shallow monitoring well

(I) - intermediate monitoring well

USEPA Beryllium MCL - 4 µg/L

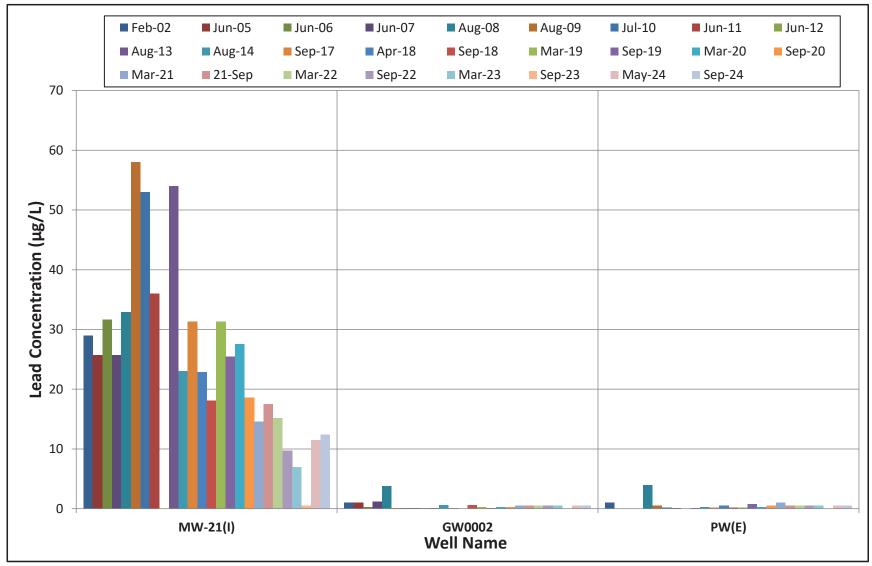
GW0002 - residential well µg/L - micrograms per liter





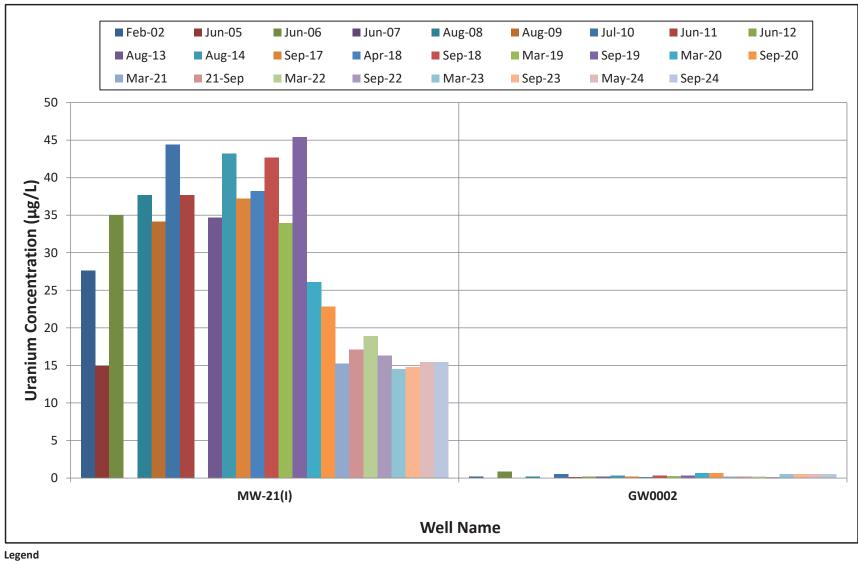
(I) - intermediate monitoring well GW0002 - residential well USEPA Lead MCL - 15 μg/L $\mathsf{PW}(\mathsf{E})$ - former water supply well for the Luckey Site (east) $\mu g/L$ - micrograms per liter





(I) - intermediate monitoring well GW0002 - residential well USEPA Lead MCL - 15 µg/L PW(E) - former water supply well for the Luckey Site (east) $\mu g/L$ - micrograms per liter

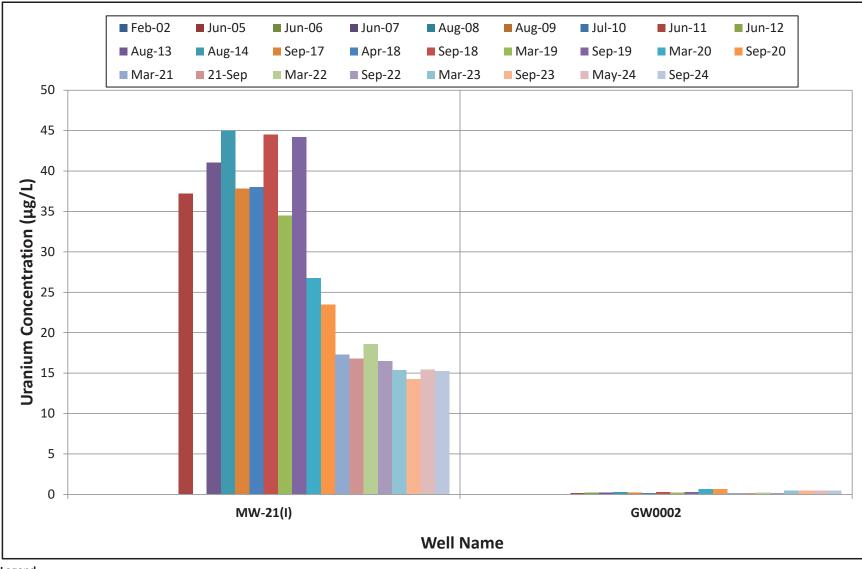




(I) - intermediate monitoring well GW0002 - residential well

μg/L - micrograms per liter USEPA Uranium MCL -₃₀ μg/L





(I) - intermediate monitoring well GW0002 - residential well μg/L - micrograms per liter USEPA Uranium MCL - 30 μg/L

TABLES

Table 1: Groundwater Elevations (September 2024)

Well	Geologic Zone	Depth to Water (ft btoc)	Measuring Point Elevation (ft amsl)	Groundwater Elevation (ft amsl)
		Shallow Monitoring Wel	ls	
MW-02(S)	SH	12.27	650.27	638.00
MW-26(S)	SH	Ab	andoned and sealed on 8/8	/2022
MW-51(S)	SH	11.77	650.09	638.32
MW-54(S)	SH	11.73	650.27	638.54
		Intermediate Monitoring W	Vells	
MW-01(I)	IN	12.36	650.52	638.16
MW-05(I)	IN	Aba	andoned and sealed on 4/2	1/2022
MW-18(I)	IN	9.48	647.54	638.06
MW-19(I)	IN	Aba	indoned and sealed on 12/1	3/2022
MW-21(I)	IN	13.32	651.45	638.13
MW-22R(I)	IN	11.88	649.98	638.10
MW-25(I)	IN	11.24	649.31	638.07
OMW-27(I)	IN	11.87	649.97	638.10
OMW-31(I)	IN	10.44	648.68	638.24
MW-50(I)	IN	14.81	652.92	638.11
MW-52(I)	IN	11.96	650.21	638.25
MW-53(I)	IN	11.37	649.69	638.32
MW-55(I)	IN	10.55	650.19	639.64
		Deep Monitoring Wells	5	
OMW-32(B)	BR	10.46	648.74	638.28
PW(E)	BR	NA	NA	NA
PW(W)	BR	NA	NA	NA
		Hybrid Monitoring Well	s	
MW-52A(I)	HY	11.54	649.31	637.77

Geologic Zones: Notes: Above mean sea level amsl SH IN NM Not measured NA Not available BR ft Foot (Feet) ΗY btoc Below top of casing

Shallow water bearing zone (overburden)

Intermediate water bearing zone (shallow bedrock] Deep water bearing zone (deep bedrock)

Multiple zones (hybrid well)

Well	Year	Beryllium	Lead	Total Uranium		
Units		μg/L	μg/L	μg/L		
SEPA MCL		4	15	3		
	2002	0.0 U	2.0 U	0.1		
	2004	0.158 U	1.72 U	0.37		
	2005	0.13 U	0.8 J	0.044		
	2006	0.088 U	0.6 J	0.85		
	2007	0.51 U	2.4 U			
	2008	1.0 U	2.5 U	0.35		
	2009	0.17 J	0.96	0.088		
	2010	0.056 U	0.58	1		
	2011	0.1 U	1.2	0.146		
	2012	0.25 U	0.38 J	0.191		
	2013	0.36 J	0.48 J	0.20		
	2014	0.5 U	1.0	0.30		
	2017	0.1 U	0.36	0.1		
GW0002	2018 (April)	0.1 U	0.238 J	0.126		
	2018 (October)	0.0412 UJ	2.19 J	0.303		
	2019 (April)	0.05 U	1.11	0.238		
	2019 (September)	0.179 J	0.2 U	0.34		
	2020 (March)	0.5 U	0.5 U	1.25		
	2020 (September)	0.5 U	5.39	1.25		
	2021 (March)	0.4 U	1.0 U	0.155		
	2021(September)	0.4 U	1.0 J	0.159		
	2022 (March)	0.2 U	1.0 U	0.2		
	2022 (September)	0.2 U	1.0 U	0.15		
	2023 (March)	1.0 U	1.0 U	1.0		
	2023 (September)	1.0 U	1.0 U	1.0		
	2024 (May)	1.0 U	1.0 J	1.0		
	2024 (September)	1.0 U	1.0 J	1.0		
Notes:						
U		ed for but not detected. Th	e associated value is th	e compound limit of		
UJ	detection. The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate		
R	Result was rejected bec	ause of quality issues				
J	Result is estimated	Result was rejected because of quality issues				
В	Result is estimated Constituent also detected in laboratory blank					
blank cells	Not analyzed					
old entries highlighted orange		Aaximum Contaminant Lev	el (MCL) for protection	of drinking water		
μg/L	micrograms per liter					
1	Anomalous results show	ld not be used in data tren	ding			

Well	Year	Beryllium	Lead	Total Uranium	
Units	; ;	μg/L	μg/L	μg/L	
USEPA MCL		4	15	30	
	2002	0.0 U	2.0 U		
	2004	0.158 U	1.72 U		
	2005	0.13 U	1.0 J		
	2006	0.088 U	0.49 U		
	2007	0.51 U	2.4 U		
	2008	1.0 U	3.8 B		
	2009	0.076 J	0.14 J		
	2010	0.056 U	0.094 J		
	2011	0.1 U	0.12 J	0.153	
	2012	0.25 U	0.24 U	0.205	
	2013	0.25 U	0.24 U	0.21	
	2014	0.5 U	0.59 J	0.292	
	2017	0.1 U	0.16	0.1	
GW0002	2018 (April)	0.1 U	0.1 U	0.133	
(Filtered)	2018 (October)	0.0412 UJ	0.641 J	0.292	
	2019 (April)	0.05 U	0.280 J	0.237	
	2019 (September)	0.128 J	0.2 U	0.294	
	2020 (March)	0.5 U	0.5 U	1.25 (
	2020 (September)	0.5 U	0.5 U	1.25 (
	2021 (March)	0.4 U	1.0 U	0.144	
	2021(September)	0.4 U	1.0 U	0.158	
	2022 (March)	0.2 U	1.0 U	0.2	
	2022 (September)	0.2 U	1.0 U	0.16	
	2023 (March)	1.0 U	1.0 U	1.0 \	
	2023 (September)	1.0 U	1.0 U	1.0 ሀ	
	2024 (May)	1.0 U	1.0 U	1.0 ሀ	
	2024 (September)	1.0 U	1.0 U	1.0 L	
Notes:					
U	The analyte was analyz	ed for but not detected.	The associated value is th	e compound limit of	
	detection.				
UJ	The analyte was analyz	ed for but not detected.	The associated limit of de	tection is an estimate	
R	Result was rejected be	cause of quality issues			
J	Result is estimated	. ,			
В	Constituent also detect	ed in laboratory blank			
blank cells	Not analyzed				
bold entries highlighted orange	Result exceeds USEPA I	Maximum Contaminant L	evel (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1		uld not be used in data tre	ending		
Field duplicate sample results we					

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
ISEPA MCL		4	15	30	
	2002	34	2.0 U	3.19	
	2004	31.1	1.72 U	3.10	
	2005	41.2	2.8 U	3.32	
	2006	31.8	0.49 U	2.8	
	2007	32.5	4.8 U		
	2008	31.1	2.5 U	2.6	
	2009	39	0.57	2.39	
	2010	25	0.74	2.9	
	2011	28	0.45	2.99	
	2013	35	2.3	2.90	
	2014	24	1.5	3.08	
	2017	31.6	0.82	3.08	
	2018 (April)	30.3	0.52 J	2.9	
MW-01(I)	2018 (September)	25.7 J	0.328 UJ	5.77	
	2019 (March)	26.4 J	0.328 J	5.0	
	2019 (September)	30.6 J	0.2 U	4.6	
	2020 (March)	28.9	0.5 U	2.9	
	2020 (September)	30.2	0.5 U		
	2021 (March)	27	1.0 U	2.9	
	2021(September)	32.5	1.0 U	2.8	
	2022 (March)	28	1.0 U	3.32	
	2022 (September)	34.5	1.0 U	2.9	
	2023 (March)	28	1.0 U	2.8	
	2023 (September)	26 J	1.0 U	2.8	
	2024 (May)	34	1.0 U	3.23	
	2024 (September)	31.8	1.0 U	3.00	
Notes:					
U	The analyte was anal detection.	yzed for but not detected	. The associated value is th	e compound limit of	
UJ		yzed for but not detected	. The associated limit of de	tection is an estimate.	
R	Result was rejected b	ecause of quality issues			
J	Result is estimated				
В	Constituent also detected in laboratory blank				
blank cells	Not analyzed				
bold entries highlighted orange	Result exceeds USEP	A Maximum Contaminant	Level (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1	÷ .	ould not be used in data t	trending		
ield duplicate sample results we					

Table 2: Analytical Res					
Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
JSEPA MCL		4	15	30	
	2002	11	3.0		
	2004	32.7	1.72 U		
	2005	33.8	0.57 U		
	2006	33.2	0.62 J		
	2007	30.9	4.8 U		
	2008	31.5	2.5 U		
	2009	34	0.46		
	2010	20	0.35 J		
	2011	28	0.36 J	2.88	
	2013	29	0.41 J	2.8	
	2014	24	0.46 J	3.09	
	2017	31	0.39	3.:	
MW-01(I)	2018 (April)	28.7	0.18 J	2.9	
(Filtered)	2018 (September)	28.4 J	0.328 UJ	5.73	
	2019 (March)	27.3 J	0.307 J	5.2	
	2019 (September)	30.5 J	0.2 U	4.39	
	2020 (March)	30.2	0.5 U	3.0	
	2020 (September)	30.3	0.5 U	3.08	
	2021 (March)	26.2	1.0 U	2.9	
	2021(September)	32	1.0 U	2.8	
	2022 (March)	27.4	1.0 U	3.3	
	2022 (September)	33.99	1.0 U	2.9:	
	2023 (March)	27	1.0 U	2.7	
	2023 (September)	27 J	1.0 U	2.8	
	2024 (May)	33	1.0 U	3.2	
	2024 (September)	31.6	1.0 U	2.9	
Notes:					
U	The analyte was anal	yzed for but not detected	d. The associated value is the	ne compound limit of	
	detection.				
UJ	The analyte was anal	yzed for but not detected	d. The associated limit of de	etection is an estimate	
R	Result was rejected b	because of quality issues			
J	Result is estimated				
В	Constituent also detected in laboratory blank				
blank cells	Not analyzed				
bold entries highlighted orange	Result exceeds USEP	Result exceeds USEPA Maximum Contaminant Level (MCL) for protection of drinking water			
μg/L	micrograms per liter				
1		ould not be used in data	trending.		
ield duplicate sample results we			-		

Well	Year	Beryllium	Lead	Total Uranium		
Units		μg/L	μg/L	μg/L		
SEPA MCL		4	15	30		
	2002	60	6.0	6.9		
	2004	77.8	1.7 J	6.2		
	2005	44.2	1.5 J	5.2		
	2006	14.8	1.8	4.1		
	2007	14.2	4.8 U			
	2008	13.2	2.5 U	3.9		
	2009	14	1.3	3.6		
	2010	11	1.3	4.1		
	2011	13	1.1	4.3		
	2013	15	1.1	4.0		
	2014	13	0.75 J	4.4		
	2017	13.7	0.77	4.7		
MW-02(S)	2018 (April)	13.5	0.81 J	4.6		
WW 02(5)	2018 (September)	10.7 J	0.612 J	9.35		
	2019 (March)	12.7	0.810 J	5.5		
	2019 (September)	14.9 J	0.221 J	9.29		
	2020 (March)	13.3	0.5 U	5.8		
	2020 (September)	16.1	0.5 J	5.3		
	2021 (March)	12.4	1.0 U	5.		
	2021(September)	18.6	1.0 J	5.7		
	2022 (March)	16.9	1.0 U	5.7		
	2022 (September)	17.88	1.0 U	5.2		
	2023 (March)	12.00	1.0 U	4.7		
	2023 (September)	13 J	1.0 U	5.2		
	2024 (May)	15	1.0 J	5.8		
	2024 (September)	9.4	1.0 J	5.1		
<u>Notes</u> : U	The analyte was analyze	ed for but not detected. Th	e associated value is th	e compound limit of		
-	detection.					
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate		
R	Result was rejected bec	ause of quality issues				
J	Result is estimated					
В	Constituent also detect	Constituent also detected in laboratory blank				
blank cells	Not analyzed					
oold entries highlighted orange	Result exceeds USEPA Maximum Contaminant Level (MCL) for protection of drinking water					
μg/L	micrograms per liter					
1		Ild not be used in data tren				

Table 2: Analytical Res	ults					
Well	Year	Beryllium	Lead	Total Uranium		
Units		μg/L	μg/L	μg/L		
USEPA MCL		4	15	30		
	2002	62	2.0 U			
	2004	79.6	1.72 U			
	2005	43	2.3 J			
	2006	13.7	1.4			
	2007	13.2	4.8 U			
	2008	12.4	2.5 U			
	2009	22	1.3			
	2010	3.1	0.72			
	2011	14	0.87	4.20		
	2013	13	0.72 J	3.90		
	2014	13	0.58 J	4.22		
	2017	13.4	0.73	4.58		
MW-02(S)	2018 (April)	13.2	0.474 J	4.50		
(Filtered)	2018 (September)	11.9 J	0.677 J	9.29		
	2019 (March)	11.9	0.696 J	5.44		
	2019 (September)	12.8 J	0.2 U	8.98		
	2020 (March)	13.5	0.5 U	5.74		
	2020 (September)	16	0.5 U	5.18		
	2021 (March)	11.3	1.0 U	5.44		
	2021(September)	17.8	1.0 U	5.69		
	2022 (March)	16.0	1.0 U	5.77		
	2022 (September)	17.83	1.0 U	5.15		
	2023 (March)	13.00	1.0 U	4.77		
	2023 (September)	13 J	1.0 U	5.25		
	2024 (May)	15	1.0 J	5.86		
	2024 (September)	8.8	1.0 J	5.28		
Notes:						
U	The analyte was anal	yzed for but not detected	d. The associated value is t	he compound limit of		
	detection.					
UJ	The analyte was anal	yzed for but not detected	l. The associated limit of d	etection is an estimate.		
R	Result was rejected b	because of quality issues				
J	Result is estimated					
В	Constituent also dete	Constituent also detected in laboratory blank				
blank cells	Not analyzed					
bold entries highlighted orange	Result exceeds USEP	A Maximum Contaminant	Level (MCL) for protectio	n of drinking water		
μg/L	micrograms per liter					
1		ould not be used in data	trending.			
Field duplicate sample results we	re averaged with pare	ent sample results.				

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
SEPA MCL		4	15	3	
	2017	0.1 U	1.01	1.3	
	2018 (April)	0.1 U	0.704 J	2.4	
	2018 (September)	0.0412 UJ	0.647 J	4.61 L	
	2019 (April)	0.05 J	1.64	6.4	
	2019 (September)	0.05 U	0.789 J	6.85	
	2020 (March)	0.5 U	0.5 U	4.2	
	2020 (September)	0.5 U	0.8 U	4.5	
MW-18(I)	2021 (March)	0.4 U	0.798 J	3.2	
	2021(September)	0.4U	1.0 U	3.4	
	2022 (March)	0.2 U	6.53	5.3	
	2022 (September)	0.2 U	1.0 U	1.0	
	2023 (March)	1.0 U	1.0 U	1.0	
	2023 (September)	1.0 U	1.0 U	1.49	
	2024 (May)	1.0 U	1.0 J	5.1	
	2024 (September)	1.0 U	2.0 J	1.30	
	2017	0.1 U	0.89	1.3	
	2018 (April)	0.1 U	2.23	2.3	
	2018 (September)	0.0412 UJ	0.548 J	4.23	
	2019 (April)	0.05 J	1.19	6.7	
	2019 (September)	0.05 U	0.466 J	6.61	
	2020 (March)	0.5 U	0.5 U	5.5	
	2020 (September)	0.5 U	0.696 U	4.5	
MW-18(I)	2021 (March)	0.4 U	0.81 J	3.0	
(Filtered)	2021(September)	0.4U	1.0 U	3.3	
	2022 (March)	0.2 U	1.0 U	4.6	
	2022 (September)	0.2 U	1.0 U	1.0	
	2023 (March)	1.0 U	1.0 U	1.0	
	2023 (September)	1.0 U	1.0 U	1.55	
	2024 (May)	1.0 U	1.0 U	5.2	
	2024 (September)	1.0 U	1.0 U	1.36	
Notes:		110 0	1.0 0	1.00	
U	The analyte was analyze detection.	ed for but not detected. Th	e associated value is th	e compound limit of	
UJ		ed for but not detected. Th	e associated limit of de	tection is an estimate	
R	Result was rejected bec	ause of quality issues			
J	Result is estimated	• •			
В		ed in laboratorv blank			
blank cells	Constituent also detected in laboratory blank Not analyzed				
oold entries highlighted orange		Aaximum Contaminant Lev	el (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1		ld not be used in data tren	ding		

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
SEPA MCL		4	15	3	
	2002	0.0 U	34	27.6	
	2004	0.158 U	32.5	13.5	
	2005	0.63 U	25.5	14.9	
	2006	0.088 U	32.7	35	
	2007	1.0 U	27.1		
	2008	1.0 U	39.6	37	
	2009	0.056 U	84		
	2009			34	
	2010	2.6	62	44	
	2011	0.5 U	38	37	
	2013	0.25 U	66	34	
	2014	1.0 U	24	43	
	2017	0.1 U	32.7	37	
MW-21(I)	2018 (April)	0.1 U	23.5	38	
	2018 (September)	0.049 J	20.7 J	42.3	
	2019 (March)	0.185 J	34.9	33	
	2019 (September)	0.05 U	26.2	45.4	
	2020 (March)	0.5 U	33.5	26	
	2020 (September)	0.5 U	19.9	22	
	2021 (March)	0.4 U	25.7 J	15	
	2021(September)	0.4 U	17.2	17	
	2022 (March)	0.2 U	16.8	18	
	2022 (September)	0.20 U	10.32	16.2	
	2023 (March)	1.0 U	7.0	14.4	
	2023 (September)	1.0 U	5.23	14.3	
	2024 (May)	1.0 U	12.5	15.4	
	2024 (September)	1.0 U	13.0	15.4	
Notes:					
U	The analyte was analyze detection.	d for but not detected. Th	e associated value is th	e compound limit of	
UJ	The analyte was analyze	d for but not detected. Th	e associated limit of de	etection is an estimat	
R	Result was rejected bec	ause of quality issues			
J	Result is estimated				
В	Constituent also detected in laboratory blank				
blank cells	Not analyzed				
oold entries highlighted orange	Result exceeds USEPA N	1aximum Contaminant Lev	el (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1					

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
ISEPA MCL		4	15	30	
	2002	0.0 U	29		
	2004	0.158 U	37.5		
	2005	0.63 U	25.7		
	2006	0.088 U	31.7		
	2007	1.0 U	25.7		
	2008	1.0 U	32.9		
	2009	0.028 U	58		
	2010	0.28 U	53		
	2011	0.5 U	36	37.2	
	2013	0.25 U	54	4	
	2014	0.5 U	23	4	
	2017	0.1 U	31.3	37.8	
MW-21(I)	2018 (April)	0.1 U	22.9	3	
(Filtered)	2018 (September)	0.067 J	18.1 J	44.5	
	2019 (March)	0.061 J	31.3	34.	
	2019 (September)	0.05 U	25.5	44.2	
	2020 (March)	0.5 U	27.6	26.	
	2020 (September)	0.5 U	18.6	23.	
	2021 (March)	0.4 U	14.6	17.	
	2021(September)	0.4 U	17.5	16.	
	2022 (March)	0.2 U	15.2	18.	
	2022 (September)	0.2 U	9.77	16.4	
	2023 (March)	1.0 U	7.0	15.3	
	2023 (September)	1.0 U	8.5	14.2	
	2024 (May)	1.0 U	11.5	15.4	
	2024 (September)	1.0 U	12.4	15.24	
Notes:					
U	The analyte was analyze	ed for but not detected. Th	e associated value is th	e compound limit of	
	detection.			-	
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate	
R	Result was rejected bec	ause of quality issues			
J	Result is estimated				
В	Constituent also detecte	ed in laboratory blank			
blank cells	Not analyzed				
bold entries highlighted orange		1aximum Contaminant Lev	el (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1		ld not be used in data trer	11		

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
SEPA MCL		4	15	3	
	2013	75	2.2	5.0	
	2014	52	2.4	6.8	
	2017	13.7	4.85	10	
	2018 (April)	66.7	1.5	5.0	
	2018 (September)	76.8 J	1.43 J	9.16	
	2019 (March)	61.8	1.3	5.3	
	2019 (September)	57.6 J	1.99 J	11.1	
	2020 (March)	67.8	1.17	4.8	
MW-22R(I)	2020 (September)	66.6	2.42	5.3	
	2021 (March)	63.9	2.59	4.6	
	2021(September)	76.9	1.54J	4.5	
	2022 (March)	59.3	2.04	5.6	
	2022 (September)	71.93	2.07	5.2	
	2023 (March)	60	1.5 J	6.4	
	2023 (September)	53.3 J	1.88 J	6.1	
	2024 (May)	58.5	3	6.1	
	2024 (September)	46.8	1.0 J	5.5	
	2013	71	1.7	5.0	
	2014	51	2.4	6.7	
	2017	42.6	4.66	10	
	2018 (April)	64.2	1.44	5.0	
	2018 (September)	69.6 J	1.38 J	9.32	
	2019 (March)	61.3	1.22	5.5	
	2019 (September)	60 J	2.33	12.3	
NAVA(220/1)	2020 (March)	67.1	1.11	4.9	
MW-22R(I) (Filtered)	2020 (September)	60.6	1.38	5.5	
(Intered)	2021 (March)	62.3	1.16 J	4.5	
	2021(September)	77.9	1.39 J	4.7	
	2022 (March)	57.5	1.32 J	5.7	
	2022 (September)	70.17	1.48 J	5.7	
	2023 (March)	64.50	1.0 J	6.9	
	2023 (September)	51.4 J	1.0 J	6.9	
	2024 (May)	48.5	3	6.5	
	2024 (September)	43.0	1.0 J	5.6	
Notes:					
U		ed for but not detected. Th	e associated value is th	e compound limit of	
UJ	detection. The analyte was analyze	ed for but not detected. Th	e associated limit of de	etection is an estimate	
R		6 In 1			
J	Result was rejected bec	ause of quality issues			
B	Result is estimated				
blank cells	Constituent also detected in laboratory blank				
	Not analyzed	1aximum Contaminant Lev	el (MCL) for protection	of drinking water	
pold entries highlighted orange µg/L			er inter for protection	or anniking water	
не/ L	micrograms per liter				

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
SEPA MCL		4	15	30	
	2008	1.0 U	2.5 U	1.2	
	2009	0.2 J	0.59		
	2009			0.700 (
	2010	0.056 J	0.42	3.3	
	2011	0.1 U	0.53	2.6	
	2013	1.2	0.47 J	2.3	
	2014	0.5 U	0.5 U	1.1	
	2017	0.1 U	0.17 J	0.6	
	2018 (April)	0.1 U	0.1 U	0.72	
	2018 (September)	0.083 J	0.328 UJ	1.35	
	2019 (March)	0.278 J	0.257 J	1.1	
MW-25(I)	2019 (September)	0.05 U	0.2 U	0.967	
	2020 (March)	0.5 U	0.5 U	1.25	
	2020 (September)	0.5 U	0.5 U	1.25	
	2021 (March)	0.4 U	1.0 U	0.60	
	2021(September)	0.4 U	1.0 U	0.59	
	2022 (March)	0.21 J	1.0 U	0.6	
	2022 (September)	0.20 U	1.0 U	0.5	
	2023 (March)	1.0 U	1.0 U	1.0	
	2023 (September)	1.0 UJ	1.0 U	1.0	
	2024 (May)	1.0 U	1.0 U	1.0	
	2024 (September)	1.0 U	1.0 U	1.0	
Notes:					
U	The analyte was analyze detection.	ed for but not detected. Th	e associated value is th	e compound limit of	
UJ		ed for but not detected. Th	e associated limit of de	tection is an estimate	
R	Result was rejected bec	ause of quality issues			
J	Result is estimated				
В	Constituent also detecte	ed in laboratory blank			
blank cells	Not analyzed				
old entries highlighted orange	Result exceeds USEPA N	laximum Contaminant Lev	el (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1		ld not be used in data tren			

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
SEPA MCL		4	15	3
	2008	1.0 U	5.9 B	
	2009	0.21	0.11 J	
	2010	0.056 U	0.072 J	
	2011	0.1 U	0.32 J	2.6
	2013	1.4	0.24 U	2.2
	2014	0.5 U	0.5 U	1.2
	2017	0.1 U	0.11 J	0.6
	2018 (April)	0.1 U	0.1 U	0.69
	2018 (September)	0.0412 UJ	0.328 UJ	1.28
MW-25(I)	2019 (March)	0.071 J	0.2 U	1.1
(Filtered)	2019 (September)	0.113 J	0.2 U	1.12
	2020 (March)	0.5 U	0.5 U	1.25
	2020 (September)	0.5 U	0.5 U	1.25
	2021 (March)	0.4 U	1.0 U	0.5
	2021(September)	0.4 U	1.0 U	0.59
	2022 (March)	0.2 U	1.0 U	0.6
	2022 (September)	0.20 U	1.0 U	0.5
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 UJ	1.0 U	1.0
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	12.9 ⁽¹⁾	1.0 J	1.0
Notes:				
U	The analyte was analyz detection.	ed for but not detected.	The associated value is th	e compound limit of
UJ		ed for but not detected.	The associated limit of de	etection is an estimate
R	Result was rejected bed	cause of quality issues		
J	Result is estimated			
В	Constituent also detect	ed in laboratory blank		
blank cells	Not analyzed	· ·		
oold entries highlighted orange		Maximum Contaminant I	Level (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1		uld not be used in data tr	rending.	

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
ISEPA MCL		4	15	3
	2010	0.082 J	0.72	2.1
	2011	0.1 U	1.6	1.1
	2013	0.25 U	0.25 J	1.1
	2014	0.5 U	0.45 J	0.92
	2017	0.1 U	0.63	1.3
	2018 (April)	0.1 U	0.338 J	1.2
	2018 (September)	0.060 UJ	0.328 UJ	2.55
	2019 (April)	0.05 U	0.996 J	2.8
	2019 (September)	0.05 U	0.378 J	1.89
MW-50(I)	2020 (March)	0.5 U	0.549 J	2.5
	2020 (September)	0.5 U	0.752 J	1.41
	2020 (September)	0.5 C	0.959 J	1.41
	2021(September)	0.4 U	1.57 J	3.1
	2022 (March)	0.2 U	1.0 U	1.5
	2022 (September)	0.2 U	1.0 U	1.1
	2023 (March)	1.0 U	1.0 U	1.75
	2023 (September)	1.0 U	1.0 J	1.48
	2024 (May)	1.0 U	1.0	1.34
	2024 (September)	1.0 U	1.0 U	1.03
	2010	0.06 J	0.15 J	
	2011	0.1 U	0.62	1.1
	2013	0.25 U	0.24 U	1.0
	2013	0.5 U	0.32 J	1.1
	2017	0.1 U	0.62	1.4
	2018 (April)	0.1 U	0.410 J	1.2
	2018 (September)	0.0412 UJ	0.368 J	2.67
	2018 (September) 2019 (April)	0.0412 0J	1.14	2.07
	2019 (September)	0.05 U	0.2 U	1.48
MW-50(I)			0.2 U	2.5
(Filtered)	2020 (March)	0.5 U 0.5 U		
	2020 (September)		0.69 J 0.882 J	1.52
	2021 (March)	0.4 U 0.4 U	0.882 J 1.0 J	1.7
	2021(September)	0.4 U	1.0 J	3.0
	2022 (March) 2022 (September)	0.2 U	1.0 U	1.0
	2022 (September) 2023 (March)	1.0 U	1.0 U	1.83
	2023 (September)	1.0 U	1.0 J	1.85
	2023 (September) 2024 (May)	1.0 U	1.0 J	1.80
	2024 (September)	1.0 U	1.0 U	1.3
Notes:	Lot (ocptermoer)	210 0	110 0	2.0
U		d for but not detected. Th	ne associated value is th	e compound limit of
UJ	detection. The analyte was analyze	d for but not detected. Th	ne associated limit of de	tection is an estimate
D				
R J	Result was rejected bec	ause of quality issues		
	Result is estimated			
B	Constituent also detecte	ed in laboratory blank		
blank cells	Not analyzed			
	Result exceeds USEPA N	laximum Contaminant Lev	vel (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1	Anomalous result; shou	ld not be used in data trer	nding.	

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
SEPA MCL		4	15	ŝ
	2010	0.35 U	1.4 J	
	2011	0.1 U	0.13 J	4.
	2012	0.25 U	0.24 U	9.
	2013	0.25 U	0.24 U	9.
	2014	0.5 U	0.5 U	5
	2017	0.1 U	0.13	6
	2018 (April)	0.1 U	0.1 U	8.
	2018 (September)	0.0412 UJ	0.328 UJ	17.
	2019 (March)	0.05 U	0.2 U	9.
	2019 (September)	0.05 U	0.2 U	9.2
MW-51(S)	2020 (March)	0.5 U	0.5 U	9.
	2020 (September)	0.5 U	0.5 U	5.
	2021 (March)	0.4 U	1.0 U	7.
	2021(September)	0.4 U	1.0 U	8.
	2022 (March)	0.2 U	1.0 U	7.
	2022 (September)	0.2 U	1.0 U	8.
	2023 (March)	1.0 U	1.0 U	6.
	2023 (September)	1.0 U	1.0 U	7
	2024 (May)	1.0 U	1.0 U	8.
	2024 (September)	1.0 U	1.0 U	7.
	2010	0.35 U	0.17 U	
	2011	0.1 U	0.15 J	0.
	2012	0.25 U	0.24 U	7.
	2013	0.25 U	0.24 U	8.
	2014	0.5 U	0.5 U	2.
	2017	0.1 U	0.1	6
	2018 (April)	0.1 U	0.1 U	8
	2018 (September)	0.0412 UJ	0.328 UJ	15.
	2019 (March)	0.05 U	0.2 U	7.
MW-51(S)	2019 (September)	0.05 U	0.2 U	10.4
(Filtered)	2020 (March)	0.5 U	0.5 U	8.
	2020 (September)	0.5 U	0.5 U	3.
	2021 (March)	0.4 U	1.0 U	6.
	2021(September)	0.4 U	1.0 U	8.
	2022 (March)	0.2 U	1.0 U	8.
	2022 (September)	0.2 U	1.0 U	8.
	2023 (March)	1.0 U	1.0 U	7.
	2023 (September)	1.0 U	1.0 J	1.4
	2024 (May)	1.0 U	1.0 U	6.
	2024 (September)	1.0 U	1.0 U	6.
Notes:	· · · · · · · · · · · · · · · · · · ·	I.		
U	The analyte was analyze	ed for but not detected. Th	e associated value is th	e compound limit of
	detection.			-
UJ	The analyte was analyze	d for but not detected. Th	e associated limit of de	tection is an estimat
R				
J	Result was rejected bec	ause of quality issues		
B	Result is estimated	d in Jaharatan: Hards		
blank cells	Constituent also detect	ed in laboratory blank		
	Not analyzed			
old entries highlighted orange	Result exceeds USEPA N	1aximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter		-	
1	Anomalous result; shou	ld not be used in data tren	ding.	

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
ISEPA MCL		4	15	30
	2010	0.35 U	6.8	
	2011	0.37 J	0.74	2.76
	2012	0.25 U	0.5 J	2.76
	2013	0.25 U	0.76 J	2.6
	2014	0.5 U	0.94 J	2.72
	2017	0.1 U	0.85	2.76
	2018 (April)	0.1 U	0.786 J	2.45
	2018 (September)	0.0412 UJ	0.87 J	4.95
	2019 (March)	0.05 U	0.999 J	4.2
MW-52(I)	2019 (September)	0.104 J	0.71 J	4.42
	2020 (March)	0.5 U	0.504 J	2.07
	2020 (September)	0.5 U	8.91	2.72
	2021 (March)	0.4 U	1.16 J	2.35
	2021(September)	0.4 U	1.33 J	2.53
	2022 (March)	0.2 U	1.0 U	2.53
	2022 (September)	0.2 U	1.15 J	2.33
	2023 (March)	1.0 U	2.0 J	2.48
	2023 (September)	1.0 U	1.0 J	2.35
	2024 (May)	1.0 U	2	2.63
	2024 (September) 2010	1.0 U 0.35 U	1.0 J 7.3	2.64
	2010	0.35 U	0.4	2.68
	2012	0.1 U	0.35 J	2.65
	2013	0.25 U	0.46 J	2.66
	2014	0.5 U	0.47 J	2.56
	2017	0.1 U	0.68	2.7
	2018 (April)	0.1 U	0.676 J	2.5
	2018 (September)	0.0412 UJ	0.683 J	4.90
	2019 (March)	0.05 U	0.535 J	4.3
MW-52(I)	2019 (September)	0.083 J	0.547 J	4.29
(Filtered)	2020 (March)	0.5 U	0.721 J	2.02
	2020 (September)	0.5 U	0.654 J	2.62
	2021 (March)	0.4 U	1.0 U	2.32
	2021(September)	0.4 U	1.0 J	2.52
	2022 (March)	0.2 U	1.0 U	2.52
	2022 (September)	0.2 U	1.0 U	2.32
	2023 (March)	1.0 U	1.0 J	2.64
	2023 (September)	1.0 J	2.0	5.57
	2024 (May)	1.0 U	1.0 J	2.69
	2024 (September)	1.0 U	1.0 J	2.64
<u>Notes</u> : U	The analyte was analyze	ed for but not detected. Th	e associated value is th	e compound limit of
	detection.			
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate.
R	Result was rejected bec	ause of quality issues		
J	Result is estimated			
В	Constituent also detecte	ed in laboratory blank		
blank cells	Not analyzed			
bold entries highlighted orange	Result exceeds USEPA N	1aximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1	Anomalous result; shou	ld not be used in data tren	ding.	

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
SEPA MCL		4	15	30
	2012	0.64 J	11	15.
	2013	0.75 J	10	15.
	2014	0.6 J	9.4	14.
	2017	1.23	10.4	15.
	2018 (April)	1.3	9.05	16.
	2018 (September)	0.735 J	6.39 J	18.9
	2019 (March)	0.903 J	9.49	16
	2019 (September)	0.354 J	5.87	25
NAVA (52 A (1)	2020 (March)	0.5 U	0.5 U	1.25
MW-52A(I)	2020 (September)	0.5 U	0.594	9.1
	2021 (March)	1.24	6.73	12.
	2021(September)	0.86	5.49	10.
	2022 (March)	0.88	5.32	10.
	2022 (September)	0.84	5.07	9.4
	2023 (March)	1.0 U	4	8.8
	2023 (September)	1.0 J	2.0	5.5
	2024 (May)	1.0 J	1.0 J	3.8
	2024 (September)	1.0 U	2.0	4.1
	2012	0.67 J	10	15
	2013	0.8 J	9.4	16
	2014	0.5 U	9.4	15
	2017	1.51	10.3	16
	2018 (April)	1.43	9.32	16
	2018 (September)	1.01 J	11 J	19.3
	2019 (March)	0.974 J	9.63	16
	2019 (September)	0.501 J	7.51	26
MW-52A(I)	2020 (March)	0.5 U	0.5 U	1.25
(Filtered)	2020 (September)	0.5 U	6.33	1
	2021 (March)	1.62	6.49	12.
	2021(September)	0.71	5.37	10
	2022 (March)	1.28	5.39	11.
	2022 (September)	0.94	5.09	9.5
	2023 (March)	1.0 U	4	8.8
	2023 (September)	1.0 U	1.0 U	7.8
	2024 (May)	1.0 J	1.0 J	3.8
	2024 (September)	1.0 U	2.0	4.2
Notes:			1	
U	The analyte was analyze detection.	d for but not detected. The	e associated value is th	e compound limit of
ιIJ	The analyte was analyze	d for but not detected. The	e associated limit of de	tection is an estimate
R	Result was rejected beca	ause of quality issues		
J	Result is estimated			
В	Constituent also detecte	ed in laboratory blank		
blank cells	Not analyzed			
	Result exceeds USEPA N	1aximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1	Anomalous result: shou	ld not be used in data tren	ding.	

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
SEPA MCL		4	15	30
	2010	0.056 U	0.17 J	1.00
	2011	0.1 U	0.87	0.40
	2012	0.25 U	0.66 J	0.43
	2013	3.7	8.7	0.45
	2014	0.5 U	0.5 U	0.45
	2017	0.1 U	0.49	0.38
	2018 (April)	0.1 U	0.544 J	0.36
	2018 (September)	0.412 UJ	0.328 UJ	0.756
	2019 (March)	0.05 U	0.525 J	0.68
MW-53(I)	2019 (September)	0.05 U	0.582 J	0.212
10100-55(1)	2020 (March)	0.5 U	0.5 U	1.25
	2020 (September)	0.5 U	0.721 U	1.25
	2021 (March)	0.4 U	1.0 U	0.3
	2021(September)	0.4 U	1.0 U	0.3
	2022 (March)	0.2 U	1.0 U	0.3
	2022 (September)	0.2 U	1.0 U	0.3
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 U	1.0 U	1.0
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	1.0 U	1.0 U	1.0
	2010	0.056 U	0.07 J	
	2011	0.1 U	0.096 U	0.40
	2012	0.25 U	0.24 U	0.39
	2013	3.4	0.24 U	0.45
	2014	0.5 U	0.5 U	0.56
	2017	0.1 U	0.63	0.37
	2018 (April)	0.1 U	0.1 U	0.36
	2018 (September)	0.412 UJ	0.328 UJ	0.718
	2019 (March)	0.05 U	0.2 U	0.646
MW-53(I)	2019 (September)	0.05 U	0.2 U	0.218
(Filtered)	2020 (March)	0.5 U	0.5 U	1.25
	2020 (September)	0.5 U	2.28	1.25
	2021 (March)	0.4 U	1.0 U	0.32
	2021(September)	0.4 U	1.0 U	0.34
	2022 (March)	0.2 U	1.0 U	0.3
	2022 (September)	0.2 U	1.0 U	0.3
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 U	1.0 J	1.86
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	1.0 U	1.0 U	1.0
Notes:	-	16.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		
U	detection.	d for but not detected. The	e associated value is th	e compound limit of
UJ		16.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		
	The analyte was analyze	d for but not detected. The	e associated limit of de	tection is an estimate
R	Result was rejected bec	ause of quality issues		
J	Result is estimated			
В	Constituent also detecte	ed in laboratory blank		
blank cells	Not analyzed			
oold entries highlighted orange	Result exceeds USEPA N	1aximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1	Anomalous result; shou	ld not be used in data tren	ding.	

Well	Year	Beryllium	Lead	Total Uranium
Units	Tear	μg/L	μg/L	μg/L
ISEPA MCL		4	15	30
	2010	0.11 J	0.21 J	4.9
	2011	0.1 U	0.096 U	7.
	2012	0.25 U	0.24 U	4.3
	2012	0.25 U	0.24 0	5.2
	2013	0.23 U	0.77 J	5.6
	2014	0.3 U	0.54 J	5.7
	2018 (April)	0.1 U	0.1 U	4.7
	2018 (September)	0.412 UJ	0.328 UJ	8.88
	2019 (March)	0.05 U	0.2 U	5.3
	2019 (September)	0.05 U	0.2 U	9.42
MW-54(S)	2020 (March)	0.5 U	0.5 U	2.00
	2020 (September)	0.5 U	0.5 U	5.7
	2021 (March)	0.4 U	1.0 U	4.
	2021(September)	0.4 U	1.0 U	5.6
	2022 (March)	0.2 U	1.0 U	6.2
	2022 (September)	0.2 U	1.0 U	6.1
	2023 (March)	1.0 U	1.0 U	6.1
	2023 (September)	1.0 UJ	1.0 U	6.8
	2024 (May)	1.0 U	1.0 U	8.2
	2024 (September)	1.0 U	1.0 U	5.5
	2010	0.056 U	0.072 J	
	2011	0.1 U	0.096 U	8.1
	2012	0.25 U	0.24 U	4.5
	2013	0.25 U	0.24 U	4.4
	2014	0.5 U	0.5 U	4.6
	2017	0.1 U	0.1 U	5.3
	2018 (April)	0.1 U	0.1 U	4.2
	2018 (September)	0.412 UJ	0.328 UJ	9.86
	2019 (March)	0.06 J	0.2 U	5.9
MW-54(S)	2019 (September)	0.05 U	0.2 U	8.56
(Filtered)	2020 (March)	0.5 U	0.5 U	2.01
	2020 (September)	0.5 U	0.5 U	5.
	2021 (March)	0.4 U	1.0 U	4.9
	2021(September)	0.4 U	1.0 U	6.1
	2022 (March)	0.2 U	1.0 U	6.2
	2022 (September)	0.2 U	1.0 U	5.8
	2023 (March)	1.0 U	1.0 U	6.2
	2023 (September)	1.0 UJ	1.0 U	6.9
	2024 (May)	1.0 U	1.0 U	7.2
	2024 (September)	1.0 U	1.0 U	4.5
Notes:				
U	The analyte was analyze detection.	ed for but not detected. Th	e associated value is th	e compound limit of
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate
R	Result was rejected bec	ause of quality issues		
J	Result is estimated			
В		ed in laboratorv blank		
blank cells	Constituent also detected in laboratory blank Not analyzed			
		Naximum Contaminant Lev	vel (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1		ld not be used in data trer	nding.	
Field duplicate sample results wer			ыны <u></u> ,	

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
SEPA MCL		4	15	3
	2010	0.056 U	0.06 J	1.00
	2011	0.1 U	0.096 U	0.6
	2012	0.25 U	0.24 U	0.43
	2013	0.25 U	1.0	0.4
	2014	0.5 U	0.5 U	0.4
	2017	0.1 U	0.1 U	0.
	2018 (April)	0.1 U	0.1 U	0.4
	2018 (September)	0.412 UJ	0.328 UJ	0.82
	2019 (March)	0.092 J	0.226 J	0.84
MW-55(I)	2019 (September)	0.05 U	0.2 U	0.2
10100-55(1)	2020 (March)	0.5 U	0.5 U	2.2
	2020 (September)	0.5 U	0.5 U	1.25
	2021 (March)	0.4 U	1.0 U	0.3
	2021(September)	0.4 U	1.0 U	0.4
	2022 (March)	0.2 U	1.0 U	0.
	2022 (September)	0.2 U	1.0 U	0.
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 UJ	1.0 U	1.0
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	1.0 U	1.0 U	1.0
	2010	0.056 U	0.064 J	
	2011	0.1 U	0.096 U	0.3
	2012	0.25 U	0.24 U	0.4
	2013	0.25 U	0.24 U	0.4
	2014	0.5 U	0.5 U	0.5
	2017	0.1 U	0.1 U	0.
	2018 (April)	0.1 U	0.1 U	0.4
	2018 (September)	0.412 UJ	0.328 UJ	0.80
	2019 (March)	0.05 U	0.2 U	0.73
MW-55(I)	2019 (September)	0.05 U	0.2 U	0.24
(Filtered)	2020 (March)	0.5 U	2.18	3.
	2020 (September)	0.5 U	0.5 U	1.25
	2021 (March)	0.4 U	1.0 U	0.3
	2021(September)	0.4 U	1.0 U	0.4
	2022 (March)	0.2 U	1.0 U	0.
	2022 (September)	0.2 U	1.0 U	0.
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 U	1.0 U	1.0
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	1.0 U	1.0 U	1.0
Notes:				
U		d for but not detected. Th	e associated value is th	e compound limit of
UJ	detection.			
0,	The analyte was analyze	d for but not detected. Th	e associated limit of de	tection is an estimat
R	Result was rejected bec	ause of quality issues		
J	Result is estimated			
В	Constituent also detecte	ed in laboratory blank		
blank cells	Not analyzed	,		
old entries highlighted orange		laximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter			
1		ld not be used in data tren		

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
PA MCL		4	15	10
	2008	1.0 U	2.5 U	
	2009	0.056 U	0.73	
	2010	0.056 U	1.20	â
	2011	0.1 U	1.20	:
	2012	0.25 U	0.32 J	:
	2013	0.25 U	0.9 J	:
	2014	0.62 J	0.94 J	:
	2017	0.1 U	1.18	:
	2018 (April)	0.1 U	0.378 J	:
	2018 (September)	0.0412 UJ	0.375 J	3.
OMW-27(I)	2019 (March)	0.05 UJ	0.557 J	:
010100-27(1)	2019 (September)	0.05 U	0.2 U	:
	2020 (March)	0.5 U	0.5 U	
	2020 (September)	0.5 U	0.5 U	2.
	2021 (March)	0.4 U	1.0 U	:
	2021(September)	0.4 U	1.0 U	
	2022 (March)	0.2 U	1.0 U	:
	2022 (September)	0.2 U	1.0 U	1
	2023 (March)	1.0 U	1.0 U	1.
	2023 (September)	1.0 U	1.0 J	
	2024 (May)	1.0 U	1.0 J	1.
	2024 (September)	1.0 U	1.0 J	1.
	2008	1.0 U	2.5 U	
	2009	0.028 U	0.54	
	2010	0.056 U	0.55	
	2011	0.1 U	0.49	1
	2012	0.25 U	0.24 U	1
	2013	0.25 U	1.10	:
	2014	0.5 U	0.5 J	:
	2017	0.1 U	2.27	:
	2018 (April)	0.1 U	0.375 J	:
	2018 (September)	0.0412 UJ	0.484 J	3.
OMW-27(I)	2019 (March)	0.05 UJ	0.611 J	3
(Filtered)	2019 (September)	0.05 U	0.2 U	
	2020 (March)	0.5 U	0.5 U	
	2020 (September)	0.5 U	0.5 U	2.
	2021 (March)	0.4 U	1.0 U	
	2021(September) 2022 (March)	0.4 U	1.0 U 1.0 U	
		0.2 U 0.2 U	1.0 U	
	2022 (September) 2023 (March)	1.0 U	1.0 U	1.
	2023 (Warch) 2023 (September)	1.0 U	1.0 U	1.
	2023 (September) 2024 (May)	1.0 U	1.0 J	1.
	2024 (September)	1.0 U	1.0 J	1.
Notes:	2024 (September)	1.0 0	1.0 5	1.
U	The analyte was analyze	ed for but not detected. Th	e associated value is th	e compound limit o
Ũ	detection.			
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimation
R	Result was rejected box	ause of quality issues		
J	Result was rejected because of quality issues			
B	Result is estimated			
blank cells	Constituent also detected in laboratory blank			
d entries highlighted orange	Not analyzed Result exceeds USEPA N	Aaximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter			-

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
SEPA MCL		4	15	30	
	2002	0.0 U	2.0 U	0.6	
	2004	0.158 U	1.72 U	0.98	
	2005	0.13 U	0.57 U	1.4	
	2006	0.088 U	0.49 U	1.81	
	2007	1.0 U	4.8 U		
	2008	1.0 U	2.5 U	0.525	
	2009	0.056 U	0.27 J	0.469	
	2010	0.056 U	0.66	1.00	
	2011	0.1 U	1.2	1.2	
	2012	0.25 U	0.3 J	0.42	
	2013	0.25 U	0.24 U	0.33	
	2014	1.8	1.9	0.159	
	2017	0.1 U	0.13	0.6	
OMW-31(I)	2018 (April)	0.1 U	0.1 U	0.49	
	2018 (September)	0.0412 UJ	0.328 UJ	0.8	
	2019 (March)	0.05 UJ	0.2 U	0.796	
	2019 (September)	0.05 U	0.2 U	0.2	
	2020 (March)	0.5 U	0.5 U	1.25	
	2020 (September)	0.5 U	0.5 U	1.25	
	2021 (March)	0.4 U	1.0 U	0.172	
	2021(September)	0.4 U	1.0 U	0.20	
	2022 (March)	0.2 U	1.0 U	0.4	
	2022 (September)	0.2 U	1.0 U	0.4	
	2023 (March)	1.0 U	1.0 U	1.0	
	2023 (September)	1.0 U	1.0 U	1.0	
	2024 (May)	1.0 U	1.0 U	1.0	
	2024 (September)	1.0 U	1.0 U	1.0	
Notes:			· · · ·		
U	The analyte was analyze detection.	ed for but not detected. Th	e associated value is th	e compound limit of	
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate	
R	Result was rejected bec	ause of quality issues			
J	Result is estimated				
В	Constituent also detect	ed in laboratory blank			
blank cells	Not analyzed				
oold entries highlighted orange		Aaximum Contaminant Lev	el (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1		ld not be used in data tren			

Well	Year	Beryllium	Lead	Total Uranium	
Units		μg/L	μg/L	μg/L	
SEPA MCL		4	15	3	
	2002	0.0 U	2.0 U		
	2004	0.158 U	1.72 U		
	2005	0.13 U	0.57 U		
	2006	0.088 U	0.49 U		
	2007	1.0 U	4.8 U		
	2008	1.0 U	2.5 U		
	2009	0.035 J	0.35		
	2010	0.056 U	0.22 J		
	2011	0.1 U	0.25 J	0.5	
	2012	0.25 U	0.24 U	0.51	
	2013	0.25 U	0.24 U	0.39	
	2014	0.5 U	0.32 J	0.45	
	2017	0.1 U	0.1 U	0.5	
OMW-31(I)	2018 (April)	0.1 U	0.1 U	0.56	
(Filtered)	2018 (September)	0.0412 UJ	0.328 UJ	0.892	
	2019 (March)	0.05 UJ	0.2 U	0.924	
	2019 (September)	0.05 U	0.2 U	0.2	
	2020 (March)	0.5 U	0.5 U	1.25	
	2020 (September)	0.5 U	0.5 U	1.25	
	2021 (March)	0.4 U	1.0 U	0.23	
	2021(September)	0.4 U	1.0 U	0.21	
	2022 (March)	0.2 U	1.0 U	0.4	
	2022 (September)	0.2 U	1.0 U	0.4	
	2023 (March)	1.0 U	1.0 U	1.0	
	2023 (September)	1.0 U	1.0 U	1.0	
	2024 (May)	1.0 U	1.0 U	1.0	
	2024 (September)	1.0 U	1.0 U	1.0	
Notes:	· · · ·				
U	The analyte was analyze	ed for but not detected. Th	e associated value is th	e compound limit of	
	detection.				
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimate	
R	Result was rejected bec	ause of quality issues			
J	Result is estimated				
В	Constituent also detect	ed in laboratory blank			
blank cells	Not analyzed				
old entries highlighted orange	Result exceeds USEPA N	Aaximum Contaminant Lev	el (MCL) for protection	of drinking water	
μg/L	micrograms per liter				
1		ld not be used in data tren	ding		

Well	Year	Beryllium	Lead	Total Uranium
Units		μg/L	μg/L	μg/L
PA MCL		4	15	ś
	2008	1.0 U	2.5 U	0.258
	2009	0.056 U	0.13 J	0.016
	2010	0.056 U	0.18 J	1.00
	2011	0.36 J	0.57	0.17
	2012	0.25 U	0.48 J	0.14
	2013	0.25 U	0.29 J	0.08
	2014	0.5 U	0.64 J	0.11
	2017	0.1 U	0.5	0.
	2018 (April)	0.1 U	0.1 U	0.04
	2018 (September)	0.412 UJ	0.328 UJ	0.08
ON414/ 22/D)	2019 (March)	0.05 UJ	0.2 U	0.2
OMW-32(B)	2019 (September)	0.05 U	0.2 U	0.2
	2020 (March)	0.5 U	0.5 U	1.25
	2020 (September)	0.5 U	0.5 U	1.25
	2021 (March)	0.4 U	1.0 U	0.134
	2021(September)	0.4 U	1.01 J	1.
	2022 (March)	0.2 U	1.0 U	0.1
	2022 (September)	0.2 U	1.0 U	0.10
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 U	1.0 U	1.0
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	1.0 U	1.0 U	1.0
	2008	1.0 U	2.5 U	
	2009	0.028 U	0.28	
	2010	0.056 U	0.18 J	
	2011	0.1 U	0.18 J	0.08
	2012	0.25 U	0.24 U	0.14
	2013	0.25 U	0.25 J	0.086
	2014	0.5 U	0.5 U	0.17
	2017	0.1 U	0.65	0.0
	2018 (April)	0.1 U	0.1 U	0.044
	2018 (September)	0.412 UJ	0.328 UJ	0.10
OMW-32(B)	2019 (March)	0.05 UJ	0.2 U	0.2
(Filtered)	2019 (September)	0.05 U	0.2 U	0.2
	2020 (March)	0.5 U	0.5 U	1.25
	2020 (September)	0.5 U	0.5 U	1.25
	2021 (March)	0.4 U	1.0 U	0.134
	2021(September)	0.4 U	3.48	1.0
	2022 (March)	0.2 U	1.0 U	0.1
	2022 (September)	0.2 U	1.0 U	0.10
	2023 (March)	1.0 U	1.0 U	1.0
	2023 (September)	1.0 U	1.0 U	1.0
	2024 (May)	1.0 U	1.0 U	1.0
	2024 (September)	1.0 U	1.0 U	1.0
Notes:				
U		ed for but not detected. Th	e associated value is th	e compound limit of
	detection.			
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimat
R	Desult was rejected has	auco of quality issues		
1	Result was rejected bec	ause of quality issues		
В	Result is estimated			
blank cells	Constituent also detected in laboratory blank			
Id entries highlighted orange	Not analyzed Result exceeds USEPA M	Aaximum Contaminant Lev	el (MCL) for protection	of drinking water
μg/L	micrograms per liter		a machine protection	o. or mixing water
1		ld not be used in data tren	ding	
	re averaged with parent		5	

Well	Year	Beryllium	Lead	Total Uranium		
Units		μg/L	μg/L	μg/L		
PA MCL		4	15			
	2002	0.0 U	2.0 U	C		
	2004	0.158 U	1.72 U	0.		
	2004	1.0 U	26.2	0.24		
	2009	0.17 J	26	0.10		
	2005	0.098 J	16	1.0		
	2010	0.098 J	0.54			
	2011	0.1 0 0.25 U	6.9	0.1		
	2014	0.5 U	10	0.		
	2017	0.1 U	2.82	(
	2018 (April)	0.1 U	1.65	0.03		
PW(E)	2018 (September)	0.412 UJ	0.328 UJ	0.0522		
PVV(E)	2019 (April)	0.05 U	0.212 J	0.3		
	2019 (September)	0.086 J	3.52 J	0.7		
	2020 (March)	0.5 U	0.92 J	1.2		
	2020 (September)	0.5 U	7.33	1.2		
	2021 (March)	0.4 U	1.43 J	0.		
	2021(September)	0.4 U	1.31 J	0.		
	2022 (March)	0.2 U	1.0 U	(
	2022 (September)	0.2 U	1.0 U	(
	2023 (March)	1.0 U	1.0 U	1		
	2023 (September)	1.0 U	1.0 U	1		
	2024 (May)	1.0 U	1.0 U	1.		
	2024 (September)	1.0 U	1.0 U	1.		
	2002	0.0 U	2.0 U			
	2004	0.158 U	3.2 J			
	2008	1.0 U	4.0 B			
	2009	0.028 J	0.56			
	2010	0.056 U	0.18 J			
	2011	0.1 U	0.12 J	0.		
	2013	0.25 U	0.24 U	0.		
	2014	0.5 U	0.5 U	(
	2017	0.1 U	0.24	(
	2018 (April)	0.1 U	0.1 U	0.0		
PW(E)	2018 (September)	0.412 UJ	0.328 UJ	0.052		
(Filtered)	2019 (April)	0.05 U	0.214 J	0.3		
. ,	2019 (September)	0.271 J	0.801 J	0.9		
	2020 (March)	0.5 U	0.5 U	1.2		
	2020 (September)	0.5 U	0.566 J	1.2		
	2021 (March)	0.4 U	0.998 J	0.		
	2021(September)	0.4 U	1.0 U	0.		
	2022 (March)	0.2 U	1.0 U	(
	2022 (September)	0.2 U	1.0 U	(
	2023 (March)	1.0 U	1.0 U	1.		
	2023 (September)	1.0 U	1.0 U	1		
	2024 (May)	1.0 U	1.0 U	1.		
	2024 (September)	1.0 U	1.0 U	1.		
Notes:						
U	The analyte was analyze detection.	ed for but not detected. Th	e associated value is th	e compound limit o		
UJ	The analyte was analyzed for but not detected. The associated limit of detection is an estimate					
R	Result was rejected because of quality issues					
J	Result is estimated					
В	Constituent also detected in laboratory blank					
blank cells	Not analyzed					
μg/L	micrograms per liter					
1						

Well	Year	Beryllium	Lead	Total Uranium		
Units		μg/L	μg/L	μg/L		
A MCL		4	15	10		
-	2004	4.1 J	1.72 U	8.		
	2004	11.3	2.5 U	4.		
	2009	11.5	2.20	3.		
	2005	7.5	1.30	3.		
	2010	6.8	0.91	3.		
	2013	7.5	1.20	2.		
	2014	4.6	0.55 J	2.		
	2017	1.18	2.69	6.		
	2018 (April)	0.1 U	8.85	0.4		
	2018 (September)	0.052 UJ	22 J	0.73		
	2019 (April)	0.05 U	8.68	1.		
PW(W)	2019 (September)	0.303 J	6.88 J	0.7		
	2020 (March)	0.5 U	7.52	1.25		
		0.5 U	5.51	1.25		
	2020 (September)					
	2021 (March)	0.4 U	1.9 J	0.7		
	2021(September)	0.4 U	3.4	0.9		
	2022 (March)	0.2 U	4.46	0.		
	2022 (September)	0.2 U	1.82 J	0.		
	2023 (March)	1.0 U	5	2.		
	2023 (September)	1.0 U	2.0	.8		
	2024 (May)	1.0 U	5	1.5		
	2024 (September)	1.0 U	2.8	0.8		
	2004	4.4 J	6.50			
	2008	11	2.5 U			
	2009	18	1.60			
	2010	8.7	0.85			
	2011	6.6	0.71	3.		
	2013	7.1	0.42 J	2.		
	2014	5.3	0.38 J	3.		
	2017	0.74	0.60 J	6.		
	2018 (April)	0.1 U	1.04	0.4		
	2018 (September)	0.412 UJ	2.10 J	0.68		
PW(W)	2019 (April)	0.05 U	1	1.		
(Filtered)	2019 (September)	0.216 J	0.736 J	0.72		
	2020 (March)	0.5 U	0.567 J	1.25		
	2020 (September)	0.5 U	1.06	1.25		
	2021 (March)	0.4 U	1.0 U	0.7		
	2021(September)	0.4 U	1.0 J	1.		
	2022 (March)	0.2 U	1.51 J	0		
	2022 (September)	0.2 U	1.0 U	0.		
	2023 (March)	1.0 U	2	2.		
	2023 (September)	1.0 U	1.0 J	.8		
	2024 (May)	1.0 U	2	1.6		
	2024 (September)	1.0 U	1.0 U	0.8		
Notes:		·	· · · · · ·			
U	The analyte was analyzed for but not detected. The associated value is the compound limit of					
UJ	The analyte was analyze	ed for but not detected. Th	e associated limit of de	tection is an estimat		
R						
	Result was rejected because of quality issues					
J	Result is estimated					
B	Constituent also detected in laboratory blank					
blank cells						
	Not analyzed					
entries highlighted orange	Result exceeds USEPA Maximum Contaminant Level (MCL) for protection of drinking water					
μg/L	micrograms per liter					
1	Anomalous result; should not be used in data trending.					

Table 3: Summary of Mann-Kendall Test Results for Large Sample Size

Well	Constituent	Sample Size (n)	Test Statistic (z)	Critical Value $(Z_{1-\alpha})^1$	Conclusion	Notes
GW0002	total beryllium	27	test not performed ²		No discernable trend	All results < MCL; 24 of 27 results < detection limit
GW0002	filtered beryllium	27	test not pe	erformed ²	No discernable trend	All results < MCL; 25 of 27 results < detection limit
GW0002	total lead	27	-0.82	-1.28	No trend	All results < MCL; 11 of 27 results < detection limit
GW0002	filtered lead	27	-1.28	-1.28	No trend	All results < MCL; 18 of 27 results < detection limit
GW0002	total uranium	26	0.09	1.28	No trend	All results < MCL; 10 of 26 results < detection limit
GW0002	filtered uranium	19	0.04	1.28	No trend	All results < MCL; 6 of 19 results < detection limit
MW-01(I)	total beryllium	26	-1.17	-1.28	No trend	All results > MCL
MW-01(I)	filtered beryllium	26	-0.37	-1.28	No trend	All results > MCL
MW-02(S)	total beryllium	26	-1.54	-1.28	Downward trend	All results > MCL
MW-02(S)	filtered beryllium	27	-1.48	-1.28	Downward trend	26 of 27 results > MCL; Zero results < detection limit
MW-21(I)	total lead	26	-3.99	-1.28	Downward trend	21 of 26 results > MCL; Zero results < detection limit
MW-21(I)	filtered lead	26	-4.37	-1.28	Downward trend	20 of 26 results > MCL; Zero results < detection limit
MW-21(I)	total uranium	25	-2.06	-1.28	Downward trend	12 of 25 results > MCL; Zero results < detection limit
MW-21(I)	filtered uranium	18	-4.24	-1.28	Downward trend	8 of 18 results > MCL; Zero results < detection limit
MW-22R(I)	total beryllium	17	-0.95	1.28	No trend	All results > MCL
MW-22R(I)	filtered beryllium	18	-1.36	1.28	No trend	All results > MCL
PW(E)	total lead	23	-3.23	-1.28	Downward trend	3 of 23 results > MCL; 9 of 23 results < detection limit
PW(E)	filtered lead	23	-0.82	-1.28	No trend	All results < MCL; 13 of 23 results < detection limit

1 Critical values at 90% level of confidence

2 The Mann-Kendall Test was not performed on beryllium at GW0002 since the majority of the results have been below the detection limit and the few results above the detection limit have all been below the MCL.