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15 February 2017

Ms Andrea Kock, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal & State Materials & Environmental Management Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852-2738

Dear Ms Kock:

SUBJECT: Sweetwater Uranium Project – Docket Number 40-8584
Source Material License No. SUA-1350 – Annual Corrective Action Program Review and Groundwater Monitoring Report

Enclosed is a CD-ROM containing Kennecott Uranium Company's Annual Corrective Action Program Review for 2016.

The report summarizes all monitoring and mitigation efforts in the area of the tailings cell under the ground water corrective action program, as defined in License Condition 11.3 of USNRC Source Materials License SUA-1350, and contains the ground water monitoring data required to be submitted under License Condition 12.3.

If you have any questions, please do not hesitate to contact me at (307) 328-1476.

Sincerely,

Oscar A Paulson

Oscar A. Paulson
Facility Supervisor

cc: James Webb, Project Manager – USNRC
Director – NRC DRSS – Region IV (w/o enc.)
James P. O'Connor, P.G., Wyoming Department of Environmental Quality

KENNECOTT URANIUM COMPANY
ANNUAL CORRECTIVE ACTION PROGRAM REVIEW
January 2016 through December 2016

EXCURSION PUMPBACK SYSTEM

Perched Wells

All perched wells around the tailings impoundment were essentially dry as of the fall of 1989 and have not been pumped since that time. In the course of preparing a response to a Request for Additional Information (RAI) dated July 13, 2015 related to Kennecott Uranium Company's request to renew Source Material License (SML) SUA-1350 an investigation of the perched wells around the tailings impoundment was conducted. One well, TMW-55 was discovered to have sufficient water to allow collection of a sample on August 4, 2015. The table below shows water quality data for five (5) parameters for that well on that date:

Water Quality Data, TMW-55, August 4, 2015

Analytes	Units	Result
Sulfate	mg/L	1,760
Iron	mg/L	ND (reporting limit = 0.05
Manganese	mg/L	ND (reporting limit = 0.01)
Uranium, activity	pCi/L	1,150
Radium-226/228	pCi/L	3.5

The above data table was submitted as part of the response dated October 12, 2015 to the July 13, 2015 Requests for Additional Information (RAIs).

Complete water quality data is reported in the section containing the well data at the end of this report.

In the 2015 Corrective Action Program (CAP) Review all of the perched (shallow) wells in the vicinity of the tailings impoundment were listed as "DRY" on the table entitled Monitor Well Coordinates; however, some that were measured as part of site water level collection activities had water in them as was shown in the Groundwater Elevations table provided in Appendix 1 of the CAP Review. The table entitled "Monitor Well Coordinates" was a legacy table that had not been updated to reflect current conditions. This discrepancy was investigated in the field as part of the routine Nuclear Regulatory Commission (NRC) inspection conducted on September 20, 2016. The inspection report concluded:

> However, the inspectors had questions regarding contradictory information provided in the licensee's annual reports which described all perched wells as "dry", yet the licensee reported water level measurements for three of these wells (TMWs 54, 55 and 67). The inspectors observed site personnel obtaining water level and total depth measurements in 16 perched wells selected by the inspectors. Ten of the wells (TMWs 19, 22, 21, 30, 34, 38, 65, 88, 80 and 85) were found to be dry, but six wells (TMWs 54, 55, 67, 74, 87 and 86) contained between 3 and more than 19 feet of water. The inspectors concluded that this finding was not safety significant, but future groundwater corrective action reports should be modified to reflect the as-found conditions in the field.

The Groundwater Elevations table has been modified to reflect the measurements taken during the inspection. In addition, water level measurements were taken of all of the perched (shallow) wells on December 14, 2016. This data is presented in the Groundwater Elevations table. The Monitor Well Coordinate table has been revised to reflect the status of the perched (shallow) wells as of December 14, 2016, when water levels were taken for these wells.

The table below shows the December 14, 2016 depths to water versus total depths from the completion records for the perched wells, as well as casing tops (casing heights above ground) and total depths measured during the inspection on September 20, 2016.

Well Number	Total Depth from Completion Record	Total Depth and Casing Top Measurements - September 20, 2016		Depth to Water – December 14, 2016	Comments
		Total Depth Below Casing Top Measured with Tape (September 20, 2016)	Casing Top Height Above Ground		
	(Feet)	(Feet)	(Feet)	(Feet)	
TMW-19	38	36	0.81	DRY	
TMW-20	59			59.51	Small amount of water at casing bottom
TMW-21	53	55.21	1.42	DRY	
TMW-22	48	49.90	1.45	49.25	Small amount of water at casing bottom
TMW-23	44.5			DRY	
TMW-30	38.5	38.75	0.83	DRY	
TMW-34	35.7	37.24	1.55	DRY	
TMW-38	97	107.62	1.56	DRY	
TMW-54	58.5	61	1.15	58.26	2.7 feet of water above measured total depth of well
TMW-55	75	76.37	1.48	56.98	19.4 feet of water above measured total depth of well
TMW-65	77.1	83.02	1.40	DRY	
TMW-66	68			DRY	
TMW-67	72	79.33	1.55	71.80	7.5 feet of water above measured total depth of well
TMW-68	91			93	Small amount of water at casing bottom
TMW-74	62.5	67.49	0.92	64.39	3.1 feet of water above measured total depth of well
TMW-76	76			DRY	
TMW-77	30.5			DRY	
TMW-79	60			DRY	
TMW-80	82	85.21	1.44	DRY	
TMW-81	47.5			DRY	
TMW-83	65			64.10	Small amount (0.9 feet) of water above casing bottom
TMW-85	90	98.5	1.82	DRY	
TMW-86	89.5	87.5	1.99	81.84	7.66 feet of water above measured total depth of well
TMW-87	88	96.5	2.15	89.99	6.5 feet of water above measured total depth of well
TMW-88	85.5	94.14	1.88	DRY	

Note: Sixteen (16) of the twenty-five (25) perched wells were measured during the September 20, 2016 inspection.

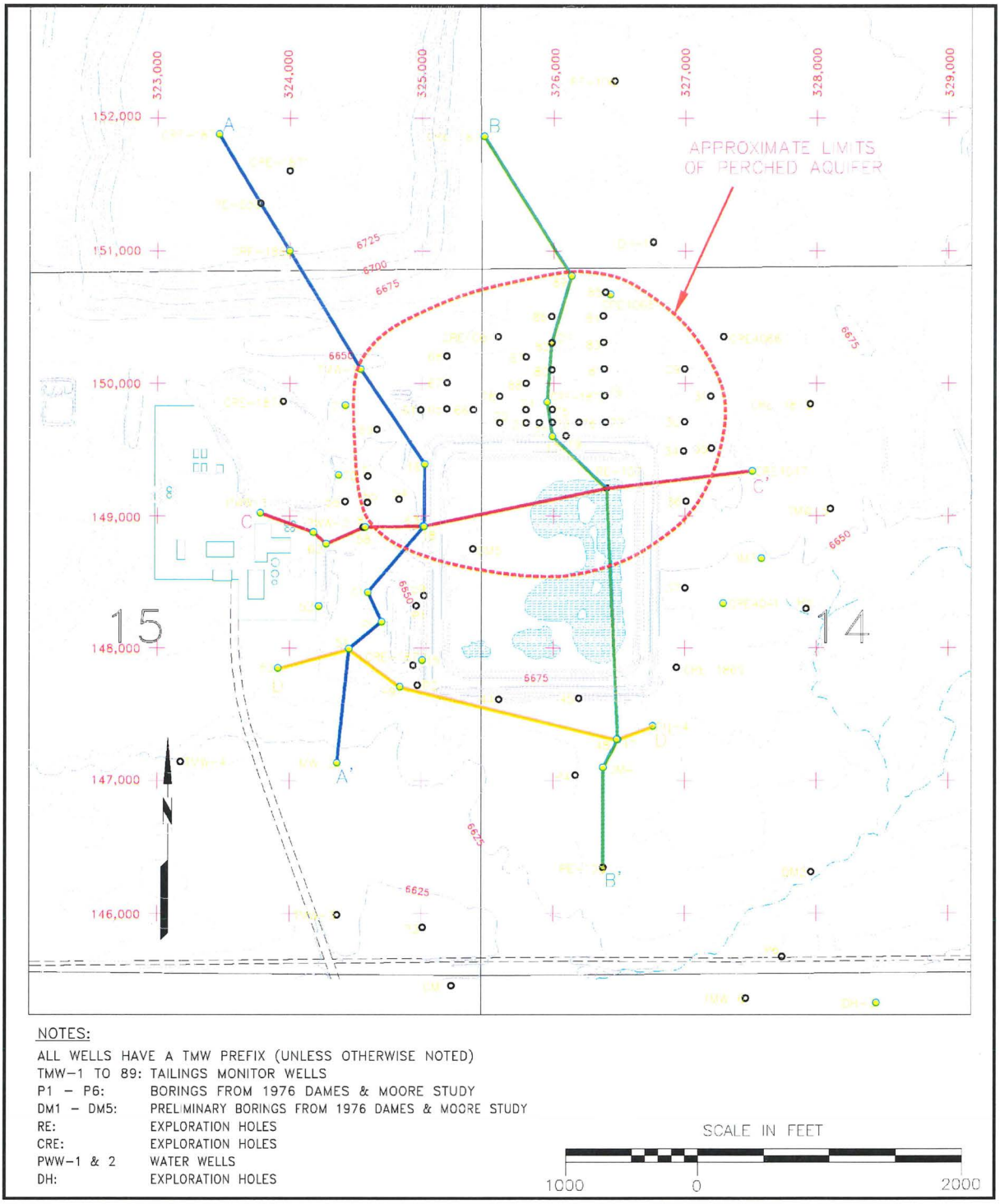
Of the twenty-five (25) perched wells listed in the table above fifteen (15) are entirely dry. Six (6) of the wells have small (up to 3.1 feet in the case of TMW-74) amounts of water above the casing bottom. It would be impossible to pump and obtain a high quality water sample from wells with so little water.

Only four (4) perched wells; TMW-55, 67, 86 and TMW-87 have any significant (greater than 3.1 feet) water in them (19.4 feet above the measured casing bottom in the case of TMW-55, 7.5 feet in the case of TMW-67, 7.66 feet in the case of TMW-86 and 6.5 feet in the case of TMW-87). It was possible to obtain a sample of TMW-55. It was sampled on August 4, 2015 as part of the preparation of the responses to the Requests for Additional Information (RAIs) related to the July 24, 2014 license renewal application. The sampling data was presented in the response document. The Combined Radium-226/228 result was 3.5 pCi/L which is below the Groundwater Protection Standard (GPS) of 5.8 pCi/L and below the Combined Radium-226/228 activity of the June 8, 2016 tailings fluid sample of 29.2 pCi/L. TMW-55 and TMW-83 were pumped dry in the fall of 1989 with a total of 101,875 gallons pumped from them.

It should be noted that TMWs-30, 34, 38, 76, 77 and 85 which are all near the impoundment's Northeast corner where the leak occurred in 1983 are all now dry. TMWs- 76 and 85 had fluids pumped from them. Pumping from TMW-76 ceased by April 1, 1988 with a total slightly exceeding 43,293 gallons pumped from it. Pumping from TMW-85 ceased by April 1, 1987 with a total of 142,110.2 gallons pumped from it. These wells were pumped dry and remain so to this day.

TMWs-55 and 76 along with other selected perched wells were measured and discussed with staff during the September 20, 2016 inspection and it was concluded that "*...this finding was not safety significant, but future groundwater corrective action reports should be modified to reflect the as-found conditions in the field.*"

The approximate limits of the perched zone are shown in the map below from the Addendum to the Revised Environmental Report – Geologic Cross Sections and Aquifer Information dated July, 1995:



SHEPHERD MILLER

FIGURE 2
LOCATION OF GEOLOGIC CROSSECTIONS

Date:	AUG. 1995
Project:	06-442
File:	WELLS-3

The response to the Request for Additional Information (RAI) analyzed the current status of the perched zone and the presence of water in TMW-55 and concluded:

The potential for tailings fluid migration within the perched horizon is strictly vertical and driven by precipitation recharge because:

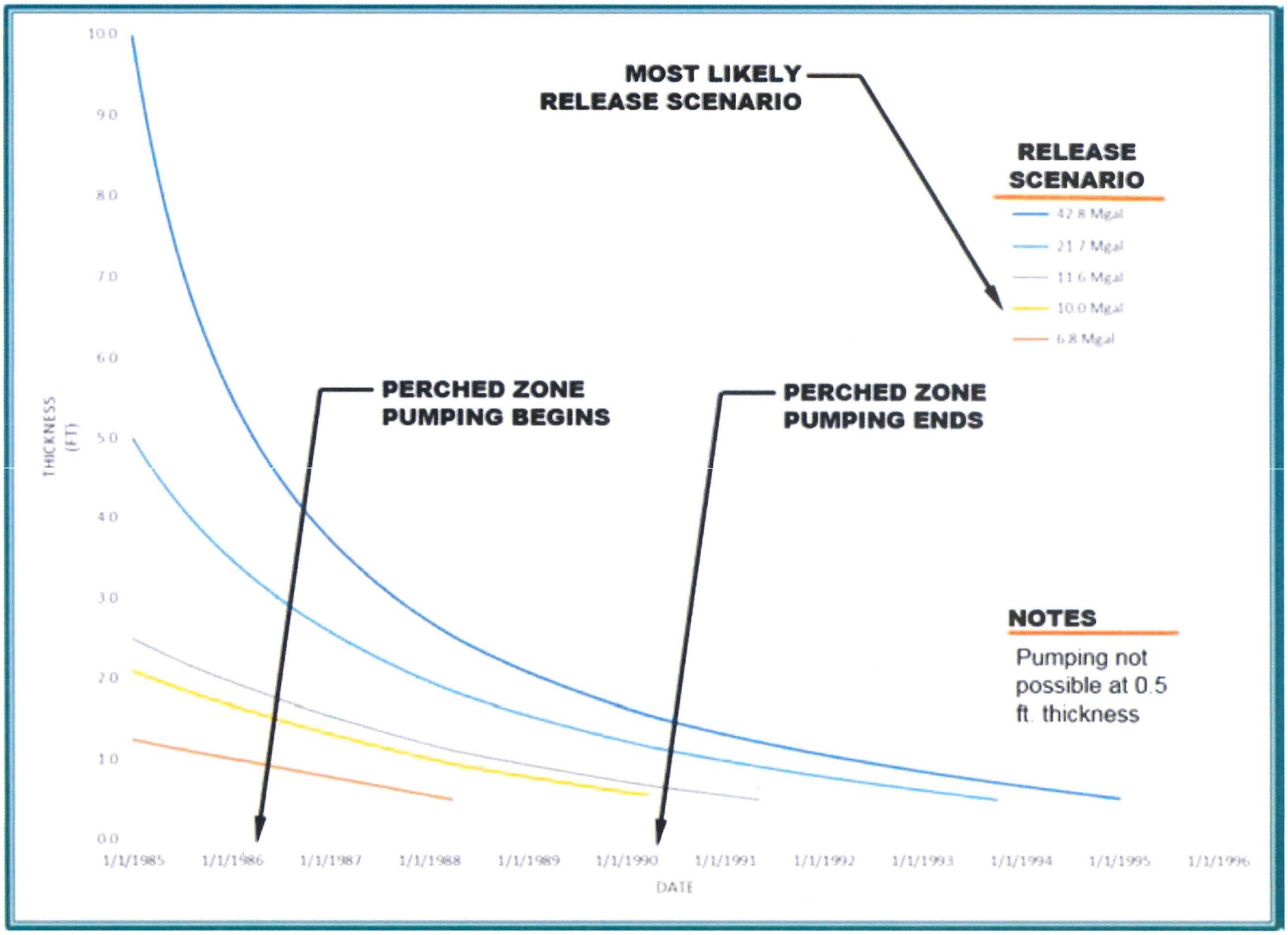
- *The mounded portion of the initial fluid volume released has essentially entirely drained to the underlying aquifer*
- *The clay lens likely binds remnant constituents that are transported via vertical percolation driven by precipitation recharge*

The potential for radium-226/228 from the tailings fluids to migrate beyond the current extents in the Battle Spring Aquifer is very unlikely because:

- *Tailings fluids have drained from the perched zone and cannot migrate horizontally*
- *Percolated fluids from the clay lenses in the perched zone are entirely within the Mill-area capture zone created by CAP pumping (shown on Figure 1-8).* Note: Please refer to the response to the July 13, 2015 Request for Additional Information (RAI) dated October 12, 2015 to see this figure.

Moreover, water leaching downward from the perched zone does not and will not be expected to carry radium-226/228 in concentration nor in volume sufficient to materially affect water quality in the Battle Spring Aquifer.

A Conceptual Perched Zone Water Flow Summary from the response to the July 13, 2015 Request for Additional Information (RAI) is included below:



The two (2) perched wells, TMW-90 and TMW-105 that were pumped during 2005 in preparation for the excavation of the contaminated soils beneath and around the Catchment Basin were removed at the completion of the excavation, prior to backfilling. These wells were located just west of the Catchment Basin and were pumped to remove fluid (spilled during operation of the Catchment Basin from 1980-1983) that was perched on a clay layer approximately forty (40) feet below ground surface, in part, to prepare the area for excavation.

These two wells were not considered part of the ground water Corrective Action Program (CAP) since their purpose was to recover spilled fluid as opposed to recovering contaminated ground water from the Battle Spring Aquifer, which is what the CAP regulates.

The use of these wells to recover these fluids was authorized by the site's Safety and Environmental Review Panel (SERP) under Safety and Environmental Evaluation (SEE) #6, approved on September 9, 2003, and an amendment to that document approved on March 26, 2004. These documents were inspected by the Nuclear Regulatory Commission (NRC) during an inspection on July 21, 2004. The inspector concluded that: *"The SEEs were found to be technically adequate. The SERP had made decisions in accordance with the conditions of the performance based license."*

The table below summarizes the performance of these wells:

WELL #	DATE STARTED	DATE SHUT DOWN	FLOW RATE (Gallons per Minute)	VOLUME PUMPED (Gallons)
TMW-90	03/01/05	11/14/05	0.01	3,693
TMW-105	03/15/05	11/14/05	0.02	7,123

Water sample data, flow information and salts removed data for these wells are included in the 2005 report. The wells were pumped by venturi pumps installed at the well bottom, driven by surface feed pumps, and a reservoir barrel, which overflowed into a tank that was pumped periodically to the tailings impoundment.

The pumping of these wells was successful in that when the Catchment Basin excavation attained its complete depth (essentially the bottoms of these wells), no substantial amounts of free perched fluid were encountered. Pumping of these wells allowed for a dry excavation bottom. These wells were removed once the excavation attained bottom (approximately 6585 feet above mean sea level) in the area around these wells. The area around TMW-90 was excavated deeper than the planned depth of 6590 feet above mean sea level to remove some hydrocarbon contamination around the well.

Aquifer Wells

Tails Monitor Wells (TMW-) 7, 17, 18, 57, 58, 59, 75, 96 and 97 (pumpback wells west of the Catchment Basin) were pumped into the tails cell during 2016 at the following rates:

WELL #	PUMP HORSEPOWER	ANNUAL AVG. RATE (GPM)	OPERATING DAYS AT LISTED RATE
TMW-7	¾ HP	2.99	366
TMW-17	¾ HP	9.09	366
TMW-18	¾ HP	10.93	366
TMW-57	¾ HP	5.12	244
TMW-58	¾ HP	8.17	244
TMW-59	¾ HP	7.77	366
TMW-75	¾ HP/½ HP Controller	3.63	366
TMW-96	¾ HP	3.10	244
TMW-97	¾ HP	8.41	230
TOTAL		59.21	

Note: Extended periods of down time are not included in well operating time for computation of flow rates.

TMW-75 and TMW-17 were pumped to collect the portion of the excursion along the cell's north wall. Wells 7, 18 and 59 maintained a cone of depression along the west side of the tailings cell intercepting the major portion of the excursion. TMW-57 and TMW-58 maintained a cone of depression extending west of the western side of the cell, centered on these two (2) wells. TMW-57 and 58 were not pumped for the entire year since their Total Dissolved Solids (TDS) levels are lower (412 ppm and 1040 ppm, respectively, July 2016) and they are farther from the tailings impoundment, meaning that the lines leading from them to the impoundment are more prone to freezing in winter. This was the case as well with TMW-96 and 97 that are on the east side of the Solvent Extraction (SX) building. These two (2) wells maintain a cone of depression in the vicinity of the now removed Catchment Basin.

TMW-18 and 59 were pumped at the highest rates and for the longest periods of time since they contained the water with the highest Total Dissolved Solids (TDS) concentrations, 2160 and 2190 ppm respectively (January 14, 2015).

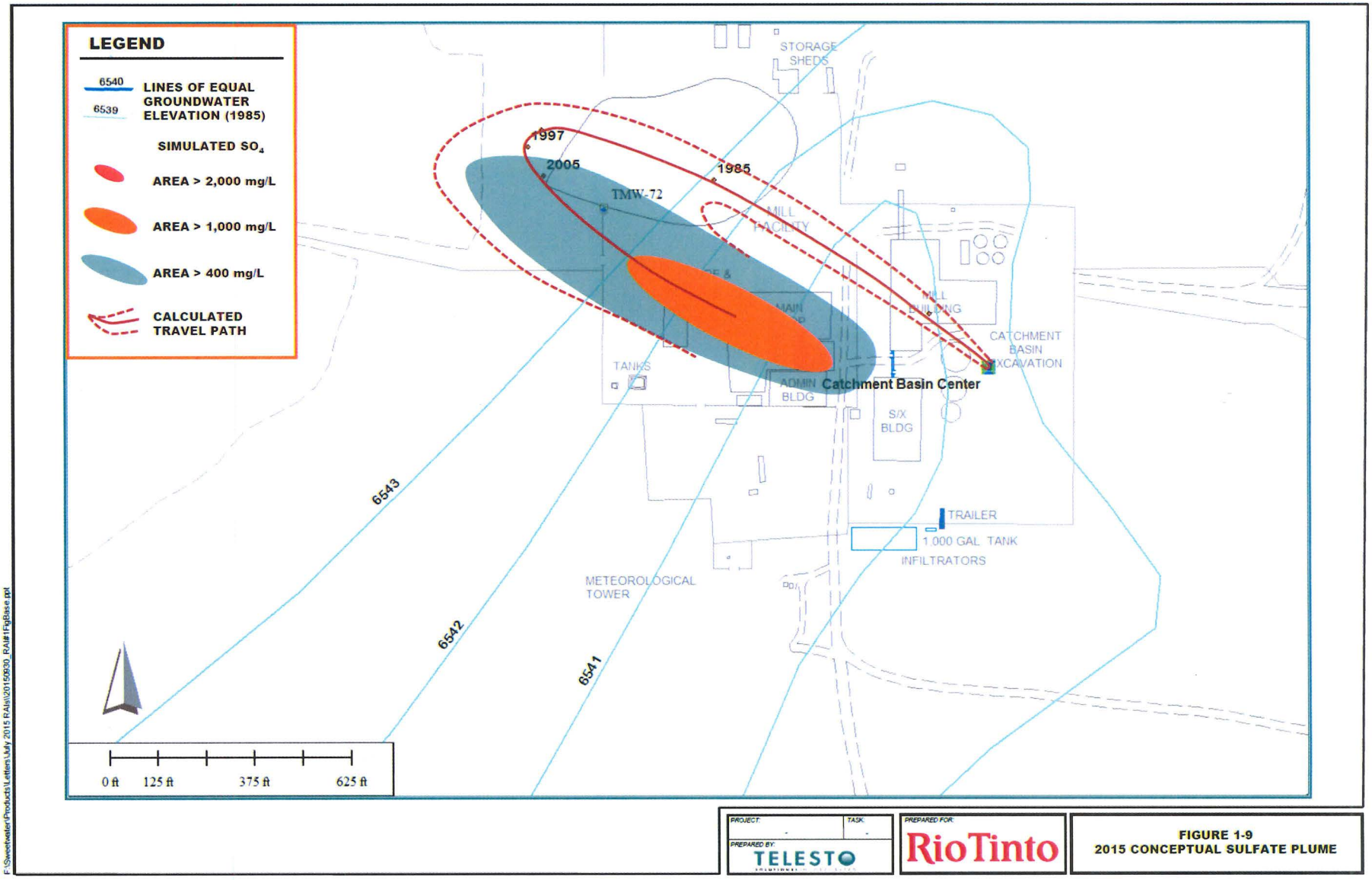
TMW-96 and TMW-97, located along the east wall of the Solvent Extraction Building, were pumped to collect the highest levels of uranium in the Catchment Basin plume. TMW-96 and 97 have shown a remarkable drop in contaminant concentrations since pumping started. TMW-96 has gone from a Total Dissolved Solids (TDS) concentration of 2430 mg/L (9/20/04) to a low of 655 mg/L (10/21/14) and a uranium concentration of 760 pCi/L (9/20/04) to a low of 13.9 pCi/L (10/1/13). TMW-97 has gone from a TDS concentration of 2210 mg/L (3/7/05) to a low of 731 mg/L (10/1/13) and a uranium concentration of 548 pCi/L (3/7/05) to 21.8 pCi/L (10/01/13). Kennecott Uranium Company believes that these declines indicate that the plume associated with the Catchment Basin is of limited magnitude. The lowest Total Dissolved Solids (TDS) concentrations for these two (2) wells were observed while they were being actively pumped. Given their long distance from the impoundment (approximately ¼ mile) they are shut down during cold weather since they are prone to freezing.

The response above to the July 13, 2015 Request for Additional Information (RAI) supports the above articulated belief that the Catchment Basin plume is of limited magnitude. The response concludes:

Pumping at the Catchment Basin that began in 2005 started moving the eastern portion of the sulfate plume back toward the Mill area

TMWs 18 and 59 continue to exhibit the highest Total Dissolved Solids (TDS) of any of the pumpback wells at a maximum of 2110 ppm each, in 2016.

The drawing below from the response to the July 13, 2015 Request for Additional Information (RAI) supports the above statement regarding the sulfate plume: No sulphate concentrations in excess of 2000 milligrams per liter have been detected west of the Mill building. The plume is depicted by sulphate concentrations exceeding 400 and 1,000 milligrams per liter.



TMW-16 was replaced with a new well, TMW-7, completed approximately sixty (60) feet south of it, on August 18, 2003. TMW-16 exhibited continuing problems and would not, in spite of repeated attempts to clean, acidize or bleach it, yield sufficient water to support a pump. When operating it would yield water; however, the well would frequently cease pumping and be down for extended periods while being cleaned. TMW-7 was screened at a depth (100-150 feet) that fully overlapped the completion interval (120-145 feet) of TMW-16. TMW-16 ceased pumping on May 15, 2003. Pumping was initiated in TMW-7 on December 1, 2003. Completion of this replacement well was discussed with Elaine Brummett in a telephone conversation at 1:50 pm on August 20, 2003, and a follow-up email message on that date. The well produced 3.47 gallons per minute of water in 2015 and has not required any of the maintenance or cleaning that its predecessor, TMW-16, required.

A pump was installed and started in TMW-58 in late June of 1994. The well was completed in July 1985. TMW-58 continues to yield water at a rate of 6.21 gallons per minute in 2014. Installation of the pump followed receipt of a letter dated April 8, 1994 from NRC/URFO which stated, *"We find that the proposed changes to your Corrective Action Program (CAP) are responsive to our review findings submitted to your company on September 3, 1992. We also consider that specific seepage collection locations are no longer required. Rather, Kennecott should use its discretion in maintaining the CAP, and all changes should be described in routine annual progress reports."*

This letter was in response to a review prepared by Kennecott Uranium Company and submitted in response to a letter dated September 3, 1992 which was received from NRC/URFO requesting Kennecott Uranium Company to review the most recent monitoring data from the Corrective Action Program (CAP) and propose modifications to the program. The review dated December 4, 1992 and submitted to NRC/URFO contained the following conclusions:

1. The contaminant plume is confined solely to the upper fifty (50) feet of the saturated zone of the Battle Spring Formation. This conclusion is based on the sample results from three (3) monitor wells completed in deeper sand in 1991, which show no evidence of contamination.
2. The existing five (5) pumpback wells are adequate to recover the groundwater contaminated by past leakage.

Kennecott Uranium Company, in order to accelerate the remediation process, had requested an amendment to SUA-1350 in the December 4, 1992 review to install a pump of at least 1/3 horsepower in TMW-58. Upon receipt of the letter dated December 4, 1992, however, it became clear that such an amendment was not required.

A pump was installed in TMW-57 on May 17, 2001. This well yielded an average of 5.12 gallons per minute during 2016.

The observed TDS values in TMW-63 and TMW-18 are within approximately 55% of each other. (See *Comparison of TMW-18 and TMW-63,* below.) There is a difference in Total Dissolved Solids concentrations vertically across the upper fifty-feet of the aquifer. The Total Dissolved Solids (TDS) concentration in TMW-63 is approximately 55% higher than in TMW-18.

COMPARISON OF TMW-18 AND TMW-63

MAJOR IONS mg/l:	TMW-18 7/6/16	TMW-63 8/30/16	Reporting Limit 7/15/16
Ca	444	758	0.5
Mg	43	55	0.5
Na	93.2	128	0.5
K	6.3	8	0.5
CO3	<1	<1	5.0
HCO3	447	827	5.0
SO4	954	1480	2.0
Cl	82	221	1.0
NO3	<0.1	<0.1	0.1
F	<0.1	<0.1	0.1
SiO2	21	22.9	0.2
TDS @ 180° C.	2100	3250	20
Cond (umho/cm)	2450	3690	5.0
Alk-CaCO3	366	678	5.0
pH (units)	7.08	7.03	0.01
TRACE METALS mg/l:			
Al	<0.10	<0.10	0.1
As	<0.001	<0.001	0.001
Ba	<0.10	<0.10	0.1
Be	<0.01	<0.01	0.01
B	<0.10	<0.10	0.1
Cd	<0.005	<0.005	0.005
Cr	<0.01	<0.01	0.01
Co	<0.001	<0.001	0.001
Cu	<0.01	<0.01	0.01
CN	<0.005	<0.005	0.005
Fe	7.99	<0.05	0.05
Pb	<0.01	0.2	0.01
Mn	1.5	0.59	0.01
Hg	<0.0002	<0.0002	0.0002
Mo	<0.01	<0.01	0.01
Ni	<0.01	<0.01	0.01
Se	<0.001	<0.001	0.001
Ag	<0.01	<0.01	0.01
Tl	<0.01	<0.01	0.01
V2O5	<0.1	<0.1	0.1
Zn	<0.01	0.02	0.01
RADIOMETRIC pCi/L:			
U	0.8	2.0	0.2
Ra226	2.7 ± 0.62	2.9 ± 0.64	
Ra228	12.8 ± 2.6	11.8 ± 2.4	
Th230	0.02 ± 0.08	0.007 ± 0..05	
Pb210	2.5 ± 3.2	0.2 ± 0.9	
Gross Alpha	7.3 ± 2.2	6.3 ± 2.1	
Q.A. DATA %:			
Anion/Cation Bal:	0.73	-2.50	

A sample of TMW-63 was also collected on May 3, 2016. Data from this sample is not being used since the natural uranium, TDS, silica, Radium-228, magnesium and calcium concentrations are not in keeping with historical concentrations for this well and that the results appear to have been impacted by sampling or laboratory problems. The August 30, 2016 sample was consistent with previous sampling results and was used.

In the summer of 1991, TMW-8, TMW-24 and TMW-47 were completed in the Battle Spring Aquifer at depths below 200 feet to test saturated sands beneath a clay layer separating them from the upper fifty (50) feet of the saturated zone. Samples from wells TMWs 8, 24 and 47 (shown on the following table, *Lower Saturated Sand Monitor Well Sampling Results*) however, clearly show that the contaminants have not penetrated the sands beneath the upper fifty (50) feet of the saturated zone since the TDS concentrations in 2016 were all below 200 parts per million. While TMW-47 has shown some elevated Combined Radium-226/228 results in the past, this is believed not to be anthropogenic, but rather due to fluctuations in background. This is based upon the fact that the Total Dissolved Solids (TDS) concentrations in TMW-47 have historically been low (less than 200 milligrams per liter) and at background levels.

LOWER SATURATED SAND MONITOR WELL SAMPLING RESULTS

MAJOR IONS mg/l:	**TMW-8 7/27/16**	**TMW-24 2/22/16**	**TMW-47 2/29/16**	**Reporting Limit 2/10/16**
Ca	22.3	20.4	20.3	0.5
Mg	0.9	0.9	0.9	0.5
Na	47	29.7	32.7	0.5
K	1.6	1.4	1.4	0.5
CO3	<1	<1	<1	5.0
HCO3	107	111	121	5.0
SO4	47	34	32	1.0
Cl	3	2	2	1.0
NO3	<0.1	<0.1	<0.1	0.1
F	0.1	0.2	0.2	0.1
SiO2	13.8	13.0	13.4	0.2
TDS @ 180° C.	184	159	153	10
Cond (umho/cm)	273	249	243	5.0
Alk-CaCO3	88	91	99	5.0
pH (units)	8.17	8.25	8.25	0.01
TRACE METALS, mg/l:				
Al	<0.1	<0.1	<0.1	0.1
As	0.001	0.001	0.001	0.001
Ba	<0.1	<0.1	<0.1	0.1
Be	<0.01	<0.01	<0.01	0.01
B	<0.1	<0.1	<0.1	0.1
Cd	<0.005	<0.005	<0.005	0.005
Cr	<0.01	<0.01	<0.01	0.01
Co	<0.001	<0.001	<0.001	0.001
Cu	<0.01	<0.01	<0.01	0.01
CN	<0.005	<0.005	<0.005	0.005
Fe	<0.05	<0.05	<0.05	0.05
Pb	<0.01	<0.01	<0.01	0.01
Mn	0.02	0.01	<0.01	0.01
Hg	<0.0002	<0.0002	<0.0002	0.0002
Mo	<0.01	<0.01	<0.01	0.01
Ni	<0.01	<0.01	<0.01	0.01
Se	<0.001	<0.001	<0.001	0.001
Ag	<0.01	<0.01	<0.01	0.01
Tl	<0.01	<0.01	<0.01	0.01
V2O5	<0.1	<0.1	<0.1	0.1
Zn	<0.01	<0.01	<0.01	0.01
RADIOMETRIC pCi/L:				
U	1.1	0.4	0.7	0.2
Ra226	0.61 ± 0.18	0.62 ± 0.17	3.6 ± 0.76	
Ra228	0.8 ± 0.9	1.8 ± 0.8	1.1 ± 0.8	
Th230	<0.2	0.05 ± 0.1	0.07 ± 0.1	
Pb210	<1.0	0.7 ± 0.9	1.4 ± 0.9	
Gross Alpha	1.1 ± 1.0	4.4 ± 1.6	3.6 ± 1.2	
Q.A. DATA %:				
A/C Balance (±5)	0.09	-3.64	-3.07	

During 1995, Shepherd Miller, Inc. completed a background groundwater study for the area around the Sweetwater Uranium Project. The object of this study was to define background in groundwater around the Sweetwater Uranium Project for a number of chemical and radiological constituents. The study examined the results of over 1000 groundwater samples collected in the vicinity of the project including samples from TMWs 8, 24 and 47 and concluded, *"Water quality sampling of three wells completed within the lower saturated sand, TMWs 8, 24 and 47, shows it to be unaffected by seepage from the cell, indicating that flow from the upper to lower saturated sands is retarded by the clay stone layer."* Thus samples from TMWs 8, 24, and 47 show that the contamination is confined to, and distributed in, the upper fifty (50) feet of the saturated zone of the Battle Spring Aquifer and penetrates no deeper.

This issue was re-examined in 2008 by Telesto Solutions, Inc., who in their report entitled "**Final Draft Groundwater Plume Interpretation Revision III**", stated:

> *Monitoring wells TMW-8 and 24 were completed in a deeper sand of the Battle Spring Aquifer to determine if there is downward migration of affected ground water into the lower portion of the aquifer (Kennecott Uranium Company, 1994). Chemical concentration plots of the deep wells and adjacent shallow-completion wells (TMW-58 and -82) confirm the conclusion of no significant downward migration of affected ground water over the period of sampling (1991 to present). The deep wells do not exhibit the concentration spikes for U-Nat, Ra226-228, sulfate and TDS that are observed in the shallow wells (Attachment A).*
>
> *Chemical concentration plots for shallow well TMW-48 and adjacent deep well TMW-47 indicate that impacted ground water is not currently present south of the Tailings Impoundment.*

(Please note that only the *text* from the Telesto Solutions, Inc. report has been included in this discussion. Any attachments or figures mentioned in the quoted text have not been included.)

The 1995 and 2008 evaluations conclude that deeper sands are not impacted by the tailings impoundment leak.

Kennecott Uranium Company submitted a study entitled "Addendum to the Revised Environmental Report Background Ground Water Quality and Detection Standards" on February 2, 1996. This study examined the results of over 1000 water samples, with the intent of defining background parameters for chemical and radiological constituents in the Battle Spring Aquifer around the site. The study proposed new Groundwater Protection Standards (GPS) for the site based upon these newly developed background values. This study was submitted with a request to amend SUA-1350 to change the Groundwater Protection Standards to the levels proposed in the study as well as to eliminate some groundwater protection standards (GPS).

By license amendment dated May 28, 1998, the NRC amended the Groundwater Protection Standards in SUA-1350 to those values requested by Kennecott Uranium Company in an amendment request dated January 1996 entitled "Addendum to the Revised Environmental Report - Background Ground Water Quality and Detection Standards". In addition, Groundwater Protection Standards for barium, cyanide, lead, mercury, molybdenum, silver and thallium were deleted from the license. The table below outlines the changes to the Groundwater Protection Standards in SUA-1350. The control charts reflect these Groundwater Protection Standards.

Constituent	Former NRC Ground Water Protection Standard, License SUA-1350	Revised NRC Ground Water Protection Standard, License SUA-1350
		(Revised May 28, 1998)
Arsenic	0.05 mg/l	0.05 mg/l
Barium	1.0	Deleted
Beryllium	0.01	0.01 mg/l
Cadmium	0.01	0.01 mg/l
Chromium	0.05	0.05 mg/l
Cyanide	0.005	Deleted
Lead	0.05	Deleted
$Lead^{210}$	1.4 pCi/l	8.9 pCi/l
Mercury	0.002	Deleted
Molybdenum	0.04	Deleted
Nickel	0.01	0.01 mg/l
Ra^{226}/Ra^{228}	2.8 pCi/l	5.8 pCi/l
Selenium	0.01	0.01 mg/l
Silver	0.05	Deleted
Thallium	0.01	Deleted
$Thorium^{230}$	10.0 pCi/l	7.0 pCi/l
Natural Uranium	1.7 pCi/l	36.0 pCi/l
Gross Alpha	6.6 pCi/l	15 pCi/l
		Added May 26, 2005
Aluminum	None	1.8 mg/l
Iron	None	0.6 mg/l
Manganese	None	0.2 mg/l
1,1-dichloroethane	None	3.0 mg/l
1,1-dichloroethene	None	0.007 mg/l
DRO	None	10 mg/l
GRO	None	10 mg/l
Naphthalene	None	1.5 mg/l
Toluene	None	1 mg/l
1,1,1-Trichloroethane	None	0.20 mg/l
1,2,4-Trimethylbenzene	None	0.012 mg/l
1,3,5-Trimethylbenzene	None	0.012 mg/l
M+p xylenes	None	10 mg/l

In a submittal dated December 15, 2004 Kennecott Uranium Company proposed groundwater protection standards (GPS) for aluminum, iron, manganese and ten (10) organic constituents. These proposed standards are also based on the background ground water study. They have been approved. They were proposed in response to the contamination of the aquifer found around the Catchment Basin. These are shown as well, in the table above.

The ground water Corrective Action Program was revised to include the groundwater plume around the Catchment Basin by a license amendment dated May 26, 2005. This amendment was granted following these submittals and an Environmental Assessment (EA):

- Source Material License SUA-1350 Request for Amendment to License Condition 11.3 – Groundwater Corrective Action Program – May 12, 2004
- Response to Comments – July 22, 2004
- Response to Request for Additional Information – October 28, 2004
- Environmental Assessment for Amendment of Source Material License SUA-1350 for the Catchment Basin Reclamation – May 5, 2005

This report includes the plume around the tailings impoundment and the Catchment Basin.

Maps of the natural uranium, combined radium 226/228 and total dissolved solids plumes are included in this report. The table on the following page entitled Monitor Well Coordinates shows the screened intervals in the vicinity of the tailings impoundment for the wells around the tailings impoundment and Catchment Basin. The plume exists in the upper saturated fifty (50) feet of the Battle Spring Formation, roughly from 100 to 150 feet below surface.

The following table has been revised from the one in the 2015 report. The table in the 2015 report showed all of the perched (shallow) wells as being "dry" when some, in fact, were not. This issue was raised in the 2016 Inspection Report and is discussed at the beginning of this review. All of the perched (shallow) aquifer wells were measured on December 14, 2016 and this table has been revised based on those measurements, to show as "Dry" only those wells that have been measured and proven to contain no water, whatsoever.

MONITOR WELL COORDINATES

WELL #:	NORTHING	EASTING	SURFACE ELEVATION	CASING HEIGHT	CASING ELEVATION	T.D. ELEVATION	PERCH (P)/ AQUIFER(A)	SCREEN INTERVAL
TMW 1	150,107.66	324,536.42	6,648.22	0.00	6,648.22	300.00	A	160-260, 280-300
TMW 2	147,133.96	324,360.13	6,626.32	0.77	6,627.09	300.00	A	135-295, 295-300
TMW 3	145,984.03	324,361.03	6,624.74	1.53	6,626.27	300.00	A	100-267
TMW	147,141.81	323,176.55	6,625.74	1.15	6,626.89	267.00	A	100-267
TMW 5	149,053.50	328,102.80	6,656.49	2.10	6,658.59	270.00	A	100-267
TMW 6	145,356.25	327,464.50	6,640.26	1.40	6,641.66	267.00	A	100-267
TMW 7	149,339.63	325,014.08	6,652.96	1.44	6,654.40	150.00	A	100-150
TMW 8	149,912.15	324,561.80	6,645.64	0.83	6,646.47	260.00	A	220-240
TMW 10	149,145.59	323,037.81	6,556.23	0.69	6,556.92	19	A	0
TMW 15	147,910.39	325,006.29	6,642.09	1.17	6,643.26	128.00	A	78-120
TMW 16	149,397.99	325,023.08	6,654.35	1.27	6,655.62	145.00	A	95-145
TMW 17	149,602.14	325,994.00	6,660.19	0.68	6,660.87	150.00	A	100-150
TMW 18	148,922.42	325,018.57	6,654.91	1.07	6,655.98	146.00	A	96-146
TMW 19	149,601.80	326,095.60	6,660.36	1.18	6,661.54	38.00	P (DRY)	20-38
TMW 20	149,700.99	325,592.79	6,659.62	1.67	6,661.29	59.00	P	39-59
TMW 21	149,700.09	325,793.65	6,658.05	1.35	6,659.40	53.00	P (DRY)	33-53
TMW 22	149,701.66	325,893.48	6,658.27	1.41	6,659.68	48.00	P	28-48
TMW 23	149,703.49	325,993.59	6,658.32	0.96	6,659.28	44.50	P (DRY)	15-44.5
TMW 24	150,307.90	325,992.24	6,659.20	2.01	6,661.21	245.00	A	215-235
TMW 29	150,108.27	326,786.49	6,655.98	0.66	6,656.64	150.00	A	100-150
TMW 30	149,708.73	326,995.29	6,658.41	0.81	6,659.22	38.50	P (DRY)	18.5-38.5
TMW 31	149,901.61	327,194.15	6,660.04	1.05	6,661.09	149.50	A	99.5-149.5
TMW 34	149,487.48	326,987.78	6,656.35	1.57	6,657.92	35.70	P (DRY)	24.7-35.7
TMW 35	149,509.35	327,198.92	6,656.54	1.21	6,657.75	147.00	A	97-147
TMW 36	149,108.62	327,007.02	6,656.48	1.27	6,657.75	146.00	A	96-146
TMW 37	148,455.68	326,999.77	6,649.39	1.34	6,650.73	138.50	A	88.5-138.5
TMW-38	149,353.55	326,798.27	6,656.78	2.07	6,658.85	97.00	P (DRY)	67-97
TMW 44	147,612.17	325,588.96	6,636.84	0.68	6,637.52	135.00	A	85-135
TMW 45	147,619.66	326,196.14	6,640.37	0.63	6,641.00	135.00	A	85-135
TMW 47	147,310.10	326,491.24	6,638.73	1.62	6,640.35	230.00	A	197-217
TMW 48	147,312.58	326,482.99	6,638.50	1.22	6,639.72	160.00	A	100-150
TMW 49	147,708.93	324,836.10	6,639.23	0.96	6,640.19	150.00	A	100-150
TMW 50	148,198.81	324,697.71	6,646.76	1.04	6,647.80	150.00	A	100-150
TMW 51	147,995.26	324,449.18	6,648.40	1.60	6,650.00	170.00	A	110-160
TMW 52	148,316.56	324,221.64	6,643.25	1.45	6,644.70	150.00	A	100-150
TMW 53	147,849.28	323,913.72	6,640.03	1.44	6,641.47	160.00	A	100-150
TMW 54	149,122.85	324,827.05	6,650.73	1.33	6,652.06	58.51	P	43.5-58.5
TMW 55	149,098.35	324,587.76	6,648.10	1.38	6,649.48	75.00	P	49-75
TMW 56	149,105.02	324,418.67	6,646.15	1.57	6,647.72	137.00	A	87-137
TMW 57	149,296.82	324,590.47	6,647.74	2.12	6,649.86	137.00	A	87-137
TMW 58	148,915.74	324,570.92	6,645.75	1.21	6,646.96	137.00	A	87-137
TMW 59	148,403.85	325,013.86	6,647.46	0.69	6,648.15	138.00	A	90-138
TMW 61	148,422.32	324,592.68	6,648.30	1.06	6,649.36	150.00	A	100-150
TMW 62	148,789.00	324,277.11	6,645.12	1.01	6,646.13	150.00	A	100-150
TMW 63	148,924.39	325,009.90	6,653.83	0.94	6,654.77	130.00	A	110-130
TMW 64	149,797.71	324,991.71	6,651.55	0.70	6,652.25	150.00	A	97-147
TMW 65	149,805.22	325,191.36	6,653.48	1.40	6,654.88	77.85	P (DRY)	54.7-77.7
TMW 66	149,799.18	325,392.21	6,656.76	1.29	6,658.05	68.00	P (DRY)	58-68
TMW 67	150,003.26	325,192.80	6,655.02	1.61	6,656.63	72.00	P	54-72
TMW 68	150,203.84	325,189.90	6,653.60	1.44	6,655.04	93.00	P	76-91
TMW 69	149,649.27	324,659.43	6,653.46	1.01	6,654.47	150.00	A	100-150
TMW 70	149,309.09	324,369.82	6,649.83	1.23	6,651.06	160.00	A	100-150
TMW 71	149,835.18	324,420.67	6,652.59	1.93	6,654.52	160.00	A	100-150
TMW 72	149,020.47	322,991.15	6,640.35	1.06	6,641.41	114.00	A	90-114
TMW 73	149,055.70	322,896.82	6,643.31	1.54	6,644.85	115.00	A	90-115
TMW 74	149,799.32	325,791.92	6,659.23	0.95	6,660.18	62.50	P	42.5-62.5
TMW 75	149,801.01	325,992.80	6,658.93	1.25	6,660.18	150.00	A	97-147
TMW 76	149,703.72	326,194.12	6,657.24	1.24	6,658.48	76.00	P (DRY)	46-76
TMW 77	149,705.25	326,394.40	6,656.93	1.35	6,658.28	30.50	P (DRY)	15.5-30.5
TMW 78	149,900.26	325,592.38	6,657.66	0.84	6,658.50	150.00	A	99-149
TMW 79	149,905.36	326,388.81	6,659.70	1.82	6,661.52	53.00	P (DRY)	48-60
TMW 80	150,100.82	325,989.30	6,660.04	1.48	6,661.52	83.00	P (DRY)	57-82
TMW 81	150,107.59	326,384.61	6,658.50	1.46	6,659.96	47.50	P (DRY)	37.5-47.5
TMW 82	150,302.15	325,987.47	6,659.56	1.08	6,660.64	150.00	A	100-150
TMW 83	150,307.20	326,379.40	6,657.86	1.01	6,658.87	65.00	P	40-65
TMW 84	150,506.27	326,376.61	6,660.36	1.50	6,661.86	147.00	A	97-147
TMW 85			6,657.31	1.81	6,659.12	94.00	P (DRY)	50-90
TMW 86	150,502.85	325,986.77	6,658.16	1.92	6,660.08	89.50	P	71.5-89.5
TMW 87	150,200.92	325,789.12	6,658.49	2.11	6,660.60	88.00	P	64-88
TMW 88	149,998.44	325,792.37	6,658.71	1.78	6,660.49	85.50	P (DRY)	62.5-85.5
TMW 89	150,809.67	326,137.13	6,659.33	1.42	6,660.75	160.00	A	100-150
TMW 90	148,611.25	323,958.92	6,638.27	1.55	6,639.82	55.00	P (DRY)	35-55
TMW 91	148,518.38	323,956.86	6,638.18	1.43	6,639.61	110.00	A	90-110
TMW-92	148,504.47	323,951.33	6,638.32	1.83	6,640.15	130.00	A	110-130
TMW-93	148,399.92	324,099.96	6,638.62	2.40	6,641.02	145.00	A	95-145
TMW-94	148,400.13	324,000.02	6,638.57	1.96	6,640.53	145.00	A	95-145
TMW-95	148,399.94	323,900.08	6,638.57	2.00	6,640.57	143.00	A	93-143
TMW-96	148,500.01	323,807.75	6,639.26	1.07	6,640.33	145.00	A	95-145
TMW-97	148,599.86	323,799.93	6,639.64	1.75	6,641.39	145.00	A	95-145
TMW-98	148,699.84	323,810.19	6,642.39	1.21	6,643.60	145.00	A	95-145
TMW-99	148,707.32	323,898.85	6,712.42	1.42	6,713.84	145.00	A	95-145
TMW-100	148,799.77	324,004.42	6,638.60	1.25	6,639.85	150.00	A	95-145
TMW-101	148,800.10	324,100.06	6,639.58	2.06	6,641.64	145.00	A	95-145
TMW-102	148,600.02	323,968.63	6,638.18	1.56	6,639.74	150.00	A	130-150
TMW-104	148,508.55	324,122.60	6,637.96	1.75	6,639.71	145.00	A	95-145
TMW-105	148,581.02	323,943.82	6,638.28	1.90	6,640.18	40.00	P (DRY)	20-40
TMW-111	148,800.06	324,200.03	6,642.39	1.56	6,643.95	145.00	A	95-145
TMW-112	148,700.09	324,199.95	6,641.49	1.75	6,643.24	145.00	A	95-145
TMW-113	148,600.06	324,199.95	6,641.55	1.96	6,643.51	145.00	A	95-145
TMW-115	148,499.96	324,199.79	6,640.92	2.00	6,642.92	145.00	A	95-145
	Elevations taken via submerged pressure transducer / not measured with tape.							
	Removed by Catchment Basin excavation.							

When wells are sampled the pump is run to the bottom of the well and then retracted several feet and the sample collected. If the well is deeper than the length of hose on the sampling truck reel (approximately 300 feet) the pump is lowered until several wraps of hose remain on the drum and the sample is collected. Provided that the screen is not plugged the water sample will generally come from the section of screen nearest the pump. The two samples (A and B) were collected from TMW-108 during each sample event. The "A" sample is a shallow sample collected at approximately 112 feet below surface, while the "B" sample is a deep sample collected at approximately 143 feet below surface. This was done to compare uranium concentrations in TMW-108 with the slightly higher (5590 pCi/L – 11/3/14) uranium concentrations in the adjoining shallow well, TMW-109. The uranium concentrations at 112 feet in TMW-108 are lower (3200 pCi/L – 11/3/14) than they are in TMW-109.

A new water sampling unit was deployed on February 12, 2013. Images of it are provided below:





Water levels of the monitor wells are not collected within one week of pumping of either PWW-1 and/or PWW-2. This prevents the cone of depression from the pumping of these wells from interfering with the cone of depression formed by the nine (9) pump back wells.

TMWs 8, 24 and 47 were intentionally completed solely in the range of 197 to 240 feet below surface to sample the sands beneath the plume. Samples from these wells have never been used to construct natural uranium, combined radium 226/228 or total dissolved solids plume maps.

In spite of the fact that TMW 5 is not completed solely in the plume, it is being used to define it since it is the only boundary well to the east of the plume. A single average concentration plume map for Natural Uranium, Combined Radium 226/228 and Total Dissolved Solids (TDS) was prepared for the area around the tailings impoundment and former Catchment Basin. The plume outlines were not extended west of the Mill building since this is an area of uncertainty as described later in the text.

In October 2008 a water level sensor was installed in TMW-10 so water levels could be read at the surface without having to enter the excavation. A hose and pump were also installed in the well to allow it to be sampled from the surface, as well. This was done so that personnel sampling the well would not be exposed to risks associated with falling rock from the excavation's high wall that is immediately south of the well. Water level data for this well is gathered electronically and not with a water level tape, meaning that only water elevations and not depth to water readings are available.

On Monday, February 6, 2012 an attempt to sample TMW-10 was made. No water could be pumped from it. The well has either filled with sand or the pump has failed due to sand. This was documented in an email to James Webb of the Nuclear Regulatory Commission on Monday, February 6, 2010.

This well is not required to be sampled either in Source Material License SUA-1350 or in Table 5-1 NRC Standby Environmental Monitoring Summary, referenced in License Condition 11.5. Regardless, the well was sampled on a quarterly basis and the sample results were reported in the Annual Corrective Program (CAP) Review. No attempt will be made to repair this well at this time due to its proximity to the excavation high wall and the risks that the high wall poses to personnel working near it.

Well sampling records were reviewed during the September 20, 2016 Nuclear Regulatory Commission (NRC) inspection of the site. The Inspection Report concluded: *The inspectors confirmed that the licensee had sampled the wells specified in the license.*

Several wells (TMWs 92, 93, 94, 95, 98 and 99) that required quarterly sampling were sampled very early (within the first two weeks) of the fourth quarter of 2016, as opposed to in the third quarter of 2016, due to electrical and other problems

with the sampling unit. They were then sampled a second time in November 2016 for a fourth quarter 2016 sample. Steps have been taken to insure collection of samples sufficiently early in the quarter to allow for potential problems.

No water levels were collected for TMW-59 in January and February 2016. The level measuring probe repeatedly became hung at 89 feet before reaching the water.

No water level was collected for well TMW-97 in February 2016 due to an obstruction. No water level was collected for well M-1 in January 2016 due to snow.

No water levels were collected for PWW-2 beginning in July 2015, since the well was blocked below surface; the water level probe became hung in the well and could not be removed.

A large quantity of diesel contaminated soil was excavated at the Sweetwater Uranium Project between November 2001 and March of 2003. This operation was reported to the Nuclear Regulatory Commission. Two (2) monitor wells, TMW-72 and 73 were completed immediately down gradient of the excavation and are shown on the maps in blue as Contaminated Soil Excavation Monitor Wells. TMW-72 and 73 were completed into the very top of the saturated portion of the Battle Spring Aquifer at 90 – 114 and 90 – 115 feet below surface, respectively. These wells are completed approximately ten feet above and fifteen feet into the saturated zone.

The purpose of these wells was to sample the top of the aquifer for hydrocarbons that may float on top of the aquifer surface. Since these wells were completed solely for monitoring of organics, the sampling/analysis instructions for these wells included only sampling and analyzing for organics. In several instances, however, the wells were sampled and analyzed for inorganics (Guideline 8 plus radiometrics), but since the wells were completed for hydrocarbon monitoring, the inorganic results were never checked and were filed separately from the organic results that were checked. During a review of water sample data these inorganic results were discovered and are presented in the Section entitled Diesel Excavation Monitor Wells. TMW-72, the easternmost well, exhibited elevated uranium concentrations. The current concentration (7/25/16) is 1360 pCi/L (2.0 ppm). TMW-73, the westernmost well, currently exhibits a concentration (7/25/16) of 4360 pCi/l (6.44 ppm).

Upon discovery of this information, the following was done:

- TMW-72 was re-sampled and the sample analyzed for inorganics on October 26, 2006.
- TMW-73 was also re-sampled on October 26, 2006 and on November 8, 2006. On November 8, 2006 the well was pumped and samples collected after 59, 450 and 932 gallons had been pumped, to determine if the uranium extended substantially beyond the well bore.
- The results of this sampling are attached in the section entitled Diesel Contaminated Soil Excavation Monitor Wells.

The sample results were reported verbally to Stephen Cohen of the NRC in two telephone conversations on February 7 and 14, 2007.

These results are puzzling for the following reasons:

- TMW-72 and 73 are approximately 106 feet apart and completed to the same depths.
- The wells exhibit vastly different uranium concentrations (869 pCi/L – TMW 72 and 5300 pCi/L – TMW 73).

The source of uranium in these wells is unclear. A number of potential sources have been considered and rejected. The primary concern was that the uranium present was related to the two other sources of groundwater contamination on site, specifically the tailings impoundment and the Catchment Basin.

In 2007 the following was done:

- Six (6) monitor wells (three shallow – depth 115 feet and three deep – depth 145 feet, were completed in a north-south line west of the Mill and Solvent Extraction (SX) buildings.
    - The odd numbered wells TMW-103, 107 and 109, are shallow.
    - The even numbered wells TMW-106, 108 and 110 are deep.
    - These wells are shown on the map entitled "Well Locations". These are the wells shown in the map entitled Proposed Well Locations in the 2006 CAP Review.
    - These wells were sampled quarterly following completion. The results are included in this report.
- In August 2007 a seventh well TMW-10 was completed in the upper portion of the Battle Spring Formation in the bottom of the diesel contamination excavation. This well was completed by excavation with a trackhoe and

installation of fifteen (15) inch diameter polyethylene casing surrounded by a gravel pack in the dug hole. This well was completed in this manner so that:

- A well could be completed very near to TMW-72 and 73 and upgradient of them.
- The well excavation could be examined and carefully sampled for any evidence of mineralization.
- The results of the examination of the well excavation are included.
- Sampling results for this well are included in this report.

The following table details the (July 2016) key sampling results of the newly completed wells as well as TMWs 72 and 73:

Well	Depth	Natural Uranium (pCi/L)	Combined Radium-226/228 (pCi/L)
TMW-10	Shallow	Not sampled - Pump failed	
TMW-72	Shallow	1360	7.6
TMW-73	Shallow	4360	28.9
TMW-103	Shallow	10.7	23.0
TMW-106	Deep	17.3	31.2
TMW-107	Shallow	17.2	9.0
TMW-108B	Deep	4160	16.3
TMW-109	Shallow	6510	19.0
TMW-110	Deep	5.4	8.5

Shallow – Completed in upper saturated fifteen (15) feet of the aquifer.
Deep – Completed in the upper saturated 45 to 50 feet of the aquifer.
Uses samples from July 2016

Kennecott Uranium Company hired Telesto Solutions, Inc. to prepare a groundwater study for the site in 2008. This study included:

- Preparation of a Microsoft Access groundwater database. This database has been used on an ongoing basis since, for report preparation and storage and management of groundwater data.
- Study of the hydrology and ground water chemistry in the vicinity of the mill tailings impoundment and catchment basin excavation.
- Study of scatter plots of zinc, sulfate, chloride, selenium and natural uranium in site water samples.
- An oxygen and sulfur stable isotope study of TMWs 18, 59, 96, 97, 10, 72 and 73, using a sample of water from the North Camp Well as an example of naturally occurring water and a sample of sulphuric acid etched limestone chips from the Mill's acid pump room as a source of sulfate from sulphuric acid used in the mill/process.

A copy of this study was reviewed on site by John L. Saxton, Hydrogeologist, of the Nuclear Regulatory Commission (NRC) during an inspection on August 4 to 5, 2009.

The report concluded by stating the following:

An original objective of this evaluation was to identify the existence of historical chemical sources and evaluate the development of ground water chemical plumes extending down gradient of these sources. Compilation of the chemical and water level data show that a highly plausible explanation of the distribution of chemicals in the Battle Spring Aquifer near the mill is that:

1. *Tailings leakage created a large, perched water body that sourced (and may continue to source) chemicals to the underlying ground water system. The current signature of this water is that of higher sulfate concentrations and relatively low U-Nat concentrations.*
2. *Leakage from the bottom of the Catchment Basin impacted the ground water system during milling. These constituents were pulled toward the pit during pit dewatering and then reversed travel direction with the reversal in ground water gradients back toward the mill area.*

In terms of the distribution of ground water quality:

- *All ground waters in the Mill, Diesel Contaminated Soil Excavation and Tailings areas are a mixture of process and natural waters*
- *Ground water quality near the Diesel Contaminated Soil Area is more like mill process water but different than tailings process water*
- *Ground water quality to the south and east of the pumping centers is being influenced by background ground water that is being captured along with process influenced ground water*
- *Anomalies exist within the Battle Spring Aquifer ground water quality such as the extraordinarily high uranium concentration in TMW-73.*

Natural sources of uranium may influence local concentrations and may contribute to the "patchy distribution" observed in uranium concentrations. Several hypotheses are proposed in this report to explain the patch nature of impacted ground water across the area of interest. These include:

- *Slow back-diffusion of chemicals from low permeability strata with nearly stagnant ground water into more permeable strata with active ground water flow*
- *Slow and non-uniform drainage of a historical perched water body that developed around the Tailings Impoundment due to a leak that occurred in the 1980s*
- *Mobilization (dissolution) of chemicals from naturally occurring minerals due to water table fluctuations associated with historical mine dewatering that occurred between 1979 and 1983, but which affected site water levels into the 1990s.*

While the hydrogeologic and chemical data indicate that ground water in the Diesel Contaminated Soil Excavation Area is more like process water than background ground water, and that observed concentrations in the Diesel Contaminated Soil Excavation Area could be highly influenced from the Catchment Basin, there is a weight of evidence that high uranium concentrations may be naturally occurring radioactive material. There are a number of instances in the near vicinity of the Sweetwater mine and mill, and in the Red Desert area, of naturally occurring high uranium concentrations:

1. *The mine area of course yielded an ore body naturally high in uranium concentrations.*
2. *The Lost Creek Schroeckingerite deposits located approximately 15-20 miles northwest of the mill exhibited spotty distributions of soils and ground water with high natural uranium and sulfate concentrations.*
3. *The North Camp Well, located about a mile southwest of the mill, has exhibited natural uranium concentrations in ground water.*
4. *The Metallurgical Test Pit which is located approximately one mile southwest of the mill exhibited high U-Nat and sulfate.*
5. *The Lost Creek background well date collected from wells approximately 3.5 to 6 miles north of the Sweetwater Uranium Project, especially the data from well LC31M, which is completed in the DE Horizon (upper 150 feet of the Battle Spring Formation at that location) shows uranium from 1.4 to 2.1 mg/L and sulfate from 277 to 316 mg/L.*
6. *In the course of excavating in the vicinity of the catchment basin, a dark, organic deposit was discovered which was naturally high in uranium concentrations. This affected area was very limited in extent however other such deposits may exist scattered through the formation. Information about this material is provided in Attachment D.*

The Telesto report specifically discussed natural sources of uranium in the vicinity, stating:

On Site Natural Sources

Soil samples collected from the south side of the excavation at the Petroleum Remediation show elevated solid concentrations of radium with some uranium. The uranium is out of equilibrium with the Ra-226 suggesting that uranium has been leached from the soils leaving the less mobile radium behind. A spreadsheet with an image and sample data for the soil samples is included as Attachment C.

In the course of excavating in the vicinity of the Catchment Basin, a dark, organic deposit was discovered that had measured concentrations of uranium ranging from 21.9 to 2550 mg/Kg (uranium mass divided by total dry mass). This affected area was very limited in extent; however other such deposits may exist scattered through the formation near the mill site. These laboratory results along with a Petrographic report on this material are included in Attachment D.

Figure 27 is an equilibrium diagram of the uranium minerals expected to exist in the Battle Spring Aquifer. These natural uranium minerals, by their presence, have to influence the uranium concentration in ground water. As evidenced by the test pits at the Diesel Contaminated Soil Excavation Area, the uranium mineralization is quite heterogeneous around the site. Under natural conditions, the areas of the Battle Spring Aquifer below the water table that contain uranium mineralization (likely uraninite) probably produces concentrations similar to those determined from the background studies. However, as the water table fluctuates due to mine dewatering or water supply pumping (for example), the geochemical equilibrium of the

aquifer changes. Zones that once were saturated now become unsaturated and oxygen (an electron provider) becomes available. Under such oxidized conditions, the stable uranium mineral in the system transfe3rs from uraninite to schoepite. As the ground water table rebounds in the presence of schoepite, the solubility of uranium in the ground water is increased dramatically over that of pre-water table fluctuation. Geochemical equilibrium calculations show that schoepite in equilibrium with ground water containing dissolved oxygen, carbon dioxide, and alkalinity (from calcite) in ground water is approximately five orders of magnitude more soluble than uraninite under anaerobic conditions. That is not to say that schoepite in a natural system will produce five orders of magnitude higher U-Nat concentrations, but that it will provide a potential for higher U-Nat concentrations to be generated than concentrations in the presence of only uraninite. Thus, in a ground water system with uraninite as the stable uranium-bearing mineral phase, a fluctuation in the ground water table due to pit dewatering would result in a change in the stable uranium-bearing mineralogy such that when the ground water table reestablishes the equilibrium concentration of uranium in ground water could increase.

During mine dewatering (1979-1983), the water table in the Diesel Contaminated Soil Excavation Area fell by 35 to 40 feet, exposing portions of the previously saturated zone to air. The resulting oxidizing conditions may have increased the solubility of naturally occurring uranium within the aquifer when the water table was depressed. After dewatering ended, the water table rose by 25 to 30 feet to its current stabilized position. As the water table rose, it is possible that the more soluble schoepite mineral could have contributed to the higher U-Nat concentrations observed.

Natural Sources in the Vicinity

A study performed in the area of the barium chloride treatment ponds (Water, Waste & Land, Inc., 1984), concluded that a fluctuating water table was responsible for mobilizing naturally occurring selenium, and this led to increased selenium concentrations in North Camp Well and other ground water wells. The fluctuation resulted from a water table rise associated with fluid disposal at the ponds, followed by a water table fall resulting from pit dewatering. Because the study was performed in 1984, it did not track water quality effects after the end of pit dewatering, which led to a subsequent rise of the water table. While the study focused on selenium, there appeared to be a fairly strong correlation between water table fluctuations and changes in uranium and sulfate concentrations, and a moderate correlation between radium concentration changes in the North Camp Well lending credence to the aforementioned mechanism for increasing uranium ground water concentrations from natural sources.

The largest known (as of 1961) group of Schroeckingerite (a hydrated fluo-carbonate-sulfate of sodium, calcium and uranium) deposits in the world is located just northwest of the Sweetwater site (Sheridan, et. al. 1961). Schroeckingerite is highly soluble in water and thus exists primarily in the unsaturated zone. It is also an evaporite and thus is most common near the ground surface, although it may be encountered throughout the entire unsaturated zone if conditions exist where it cannot be mobilized by infiltrating meteoric water. While a likely source of uranium in a ground water system that fluctuates through the unsaturated zone, it is not a likely candidate as a significant source in the ground water system on site unless some of it was encountered during placement of wells and transported to the ground water system. However, if Schroeckingerite exists or one existed up gradient of the Sweetwater site in areas where ground water is near the ground surface, its dissolution could have increased concentrations in the ground water. Up gradient ground water would have transported down gradient to Sweetwater, and thusly, this mechanism may explain some of the concentrations of U-nat and sulfate in the ground water system.

Minerals Exploration Company dug a metallurgical test pit in 1975 prior to opening the facility. The test pit is located in the southwest quarter of Section 16, T24N, R93W, approximately one-mile southwest of the Petroleum Remediation Area. The test pit was excavated to a depth of 70 feet. During excavation of the pit, the first seep of ground water occurred at a depth of 58 feet. Standard chemical analyses and radiochemical analyses of ground water collected at the test pit in 1975 were performed, and indicated naturally high levels of both sulfate (1450 mg/L) and uranium (3.15 mg/L and 13.3 mg/L, corresponding to 2130 pCi/L and 9004 pCi/L). These data indicate that mineralized portions of the Battle Spring Aquifer are located quite close to the mill and can exhibit sulfate and uranium concentrations similarly high to those being observed in TMW-73. It should be noted that this test pit and related water were collected prior to mining and milling operations at the site.

A potential in-situ uranium recovery site is in the process of being explored for its commercial potential; with the center of the exploration area located about six miles northeast of the mill and tailings area. This site is

located within the same Battle Spring Draw surface drainage basin, and the exploration wells have been drilled into the same Battle Spring Aquifer that underlies the Sweetwater Uranium Facility. Exploration wells have been drilled to depths as great as about 550 feet, with four identified hydrostratigraphic horizons: 1) a shallow unconfined sandstone horizon to a depth of about 175 feet; 2) a deeper confined sandstone horizon from about 175 to 350 feet below the surface; 3) a confined mineralized horizon from about 350 to 500 feet in depth; and 4) an underlying sandstone aquifer below 500 feet.

Exploration well LC31M is of particular interest for the purpose of evaluating the presence of naturally occurring radiological material in the vicinity of the Sweetwater mill. It is located 3.5 miles due north of the tailings impoundment, and was completed in the upper unconfined sandstone, the same portion of the Battle Spring Aquifer measured by the TMW wells completed at any depth less than about 150 to 175 feet. Chemical tests of the background ground water quality measured at this well show sulfate concentrations of 277 to 316 ppm, and uranium concentrations of 1.40 to 2.10 mg/L (945 to 1422 pCi/L). While not all the exploration wells of the potential Lost Creek project show these more elevated concentrations of uranium, the data indicate spotty, naturally elevated areas of uranium mineralization in a portion of the Battle Spring Aquifer analogous to the Sweetwater site.

The Sweetwater Uranium ore body is, of course, a natural source. Overburden extracted from above the mineralized zone had measurable quantities of uranium mineralization (Shepherd Miller, Inc., 1999). This mineralization has been shown to increase uranium (and sulfate) concentrations in water bodies. During dewatering, the dewatering wells exhibited low concentrations of uranium and sulfate. After dewatering ceased and ground water started flowing through backfilled overburden material, the water collecting in the pit lake had elevated concentrations of uranium and sulfate. The leaching of naturally occurring uranium and sulfate from the backfill material exhibits that uranium and sulfate minerals exist naturally in the area outside of the ore zone. This observation of elevated uranium and sulfate outside of the ore zone and in the area of the site is also supported by Mason and Miller's (2004) reporting of uranium and high sulfate data in a well in Section 34, Township 25 North, Range 90 West.

(Please note that only the *text* from the Telesto Solutions, Inc. report has been included in this discussion. Any attachments or figures mentioned have not been included.)

The Telesto Solutions, Inc. report concludes by recommending that up to ten (10) additional monitor wells be completed west of the Mill building to better define the plume to the west. This has been superseded by the 2015 response to a July 13, 2015 Request for Additional Information (RAI) that proposes six (6) additional monitor wells and states:

In total, six new monitoring wells are recommended. The wells would target the upper Battle Spring Aquifer and not be completed in suspected perched zones. Wells are proposed to be completed over an approximate 60-foot zone extending from approximately 10 feet above the water table to approximately 50 feet below the water table, or from approximately 90 to 150 feet below ground surface.

On August 18, 2016 there was a public conference call regarding the license renewal, during which draft license conditions for the renewed license were discussed. Based on that call, a letter dated September 1, 2016 was submitted to the agency committing to *"...a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future."* A schedule for characterizing the plume's western margin was provided in a table attached to the letter. The first step in this table was to prepare and submit for agency review a characterization plan by September 16, 2016. This characterization plan was submitted on September 15, 2016 and Kennecott Uranium Company is awaiting the results of the agency's review. The September 1, 2016 letter committing to submit a characterization plan and the characterization plan submitted on September 15, 2016 are included in Appendix 5 – Characterization Plan.

The 2009 Telesto Solutions, Inc. report states that:

"The ground water level contour map (Figure 6) clearly shows that well pumping at the site has created an effective containment system, which removes chemical mass and eliminates offsite migration. These beneficial effects are being accomplished at a modest total pumping rate of about 50 gpm."

The natural ground water direction has been reversed in the mill site area, and ground water impacted by site activities appears to be captured by the pumping system. Therefore, the system is working as designed, is

extracting impacted ground water, and is containing contaminated ground water.

U-natural concentrations continue to increase throughout the plume. Particularly in the area nearest the pumping wells, concentrations of U-natural are increasing. Because these higher-concentration waters are being pumped out of the system, this is desirable, as the chemical load within the aquifer can best be remediated by removing higher concentration water.

The primary pumping wells are TMW-18 and 59 which are located along the west edge of the impoundment as well as TMW-57 which is located approximately 400 feet west of the north half of the west edge of the impoundment. An examination of the 2013 Spring and Fall Piezometric Contour Maps shows that the heart of the pumpback system's cone of depression immediately west of the impoundment is located around these wells. These wells are undoubtedly pulling uraniferous water toward them increasing uranium concentrations in proximity wells such as TMW-16 and in wells further away but still within the cone of depression, such as TMW-36.

Uranium concentrations are also increasing in TMW-36. This well is on the east edge of the tailings impoundment. Historically, before pumping began, this well would have been proximate to the location of tailings fluid leakage the identified source of ground water contamination. It is assumed that water from the tailings pond area migrated east and southeast of the tailings pond before the pumping wells were installed. We still see remnants of this contamination east of TMW-36, but in low concentrations (relative to other wells on site). It is likely that due to high salts and to uranium and other contaminants historically in the area around TMW-36, this material is currently desorbing from aquifer materials and flowing back past TMW-36, toward the pumping wells.

Based on ground water elevation data, TMW-36 is within the areas of influence of the cone of depression of the pumpback system and that groundwater should be flowing from East to West past TMW-36 toward the recovery wells.

Naturally occurring sources of uranium impact ground water at other locations and at various wells in the area.

The Geology of the Lost Creek Schroeckingerite Deposits Sweetwater County, Wyoming (Geological Survey Bulletin 1087-J) by Charles Maxwell et al reported uranium concentrations in water samples collected in bore holes ranging from 0.010 to 46 parts per million. Clearly, very high naturally occurring uranium concentrations in ground water can exist in the Red Desert. The uranium encountered in the water in this borehole may be entirely natural. The levels of uranium in ground water reported in the Survey Bulletin tended to be very spotty which is similar to the spotty nature of the uranium observed in TMWs 72 & 73.

A well, 25-92-21BA, in the northeast quarter of Section 21, Township 25 North Range 92 West, also exhibits elevated uranium activities. In a sample collected on October 5, 2010, the well water contained 1.05 mg/L uranium, 6.7 pCi/L Radium-226 and 7.5 pCi/L Radium-228. This well is upgradient of the Sweetwater Uranium Project and is depicted in the image below:



Well (25-92-21BA) – Well equipped with Bureau of Land Management (BLM) solar powered pump for livestock and wildlife watering

A test pit was excavated by Union Oil Company of California prior to the start of operations near the southeast corner of Section 16, Township 24 North, Range 93 West, that was 68 feet deep (bottom elevation was approximately 6540 feet above mean sea level). It was excavated to obtain samples of uranium mineralization above the water table. A bulk sample of mineralized sand above the water table was removed that contained 0.011% U_3O_8 and a bulk sample from below the water table was also removed that contained 0.033% U_3O_8. (Recovery of Uranium from Red Desert Sandstone Ore by

H_2SO_4 Leach and Solvent Extraction – Hazen Research, Inc. February 18, 1976) This test pit was approximately 0.9 miles southwest of TMW 73. Some soil samples were collected in the diesel contaminated soil excavation along the south wall closest to TMWs 72 and 73. One sample contained 43.3 milligrams per kilogram uranium. It was collected from a depth of approximately 35 feet below ground surface. Background for uranium in surface soils around the project is 2.44 milligrams per kilogram. The concentrations discovered in the above described sample are substantially above background and represent mineralized sands. Localized bodies of mineralized sands could be the source of the elevated uranium in TMWs 72 and 73. A map entitled Background Radionuclide Sample Locations – West End Diesel Contaminated Soil Excavation, showing the locations of four soil samples collected in the excavation as well as the analytical results are included in the section entitled Diesel Excavation Monitor Wells.

The fact that the discharge of water onto the surface at the Barium Chloride Ponds was able to mobilize naturally occurring uranium in surface soils and elevate uranium concentrations in the underlying aquifer shows that uranium mobilized by downward percolating surface water can elevate uranium concentrations in underlying aquifers. Surface water (rainfall, snowmelt) percolating through mineralized sands may be the cause of the elevated uranium concentrations in TMWs 72 & 73.

Naturally occurring high concentrations of uranium are known to exist in the area within forty (40) feet of the surface and rainwater and snow melt could leach uranium from these occurrences down into the Battle Spring Aquifer. The following is sample data for some uraniferous sands found in the northeast corner (Kminus3 area) of the Catchment Basin excavation:

Location	Sample Type	Northing	Easting	Diesel Range	Oil Range	Total Extractable	Natural Uranium (milligrams per kilogram)	Natural Uranium (picocuries per gram)	Thorium 230 (picocuries per gram)	Th230 Uncertainty	Radon Result	Radon Uncertainty
K Minus 3 NORM area	Black material	148982.97	324146.97	226	804	1000	2550	1726.35	393.0	17.0	396	9
K Minus 3 NORM area	Sand	148982.97	324146.97	211	650	834	2350	1590.95	708.0	29.0	326	6.4

This uranium, radium-226 and thorium-230 is clearly naturally occurring as per the attached report entitled "Petrographic Evaluation of Sample #CO7051289-001A".

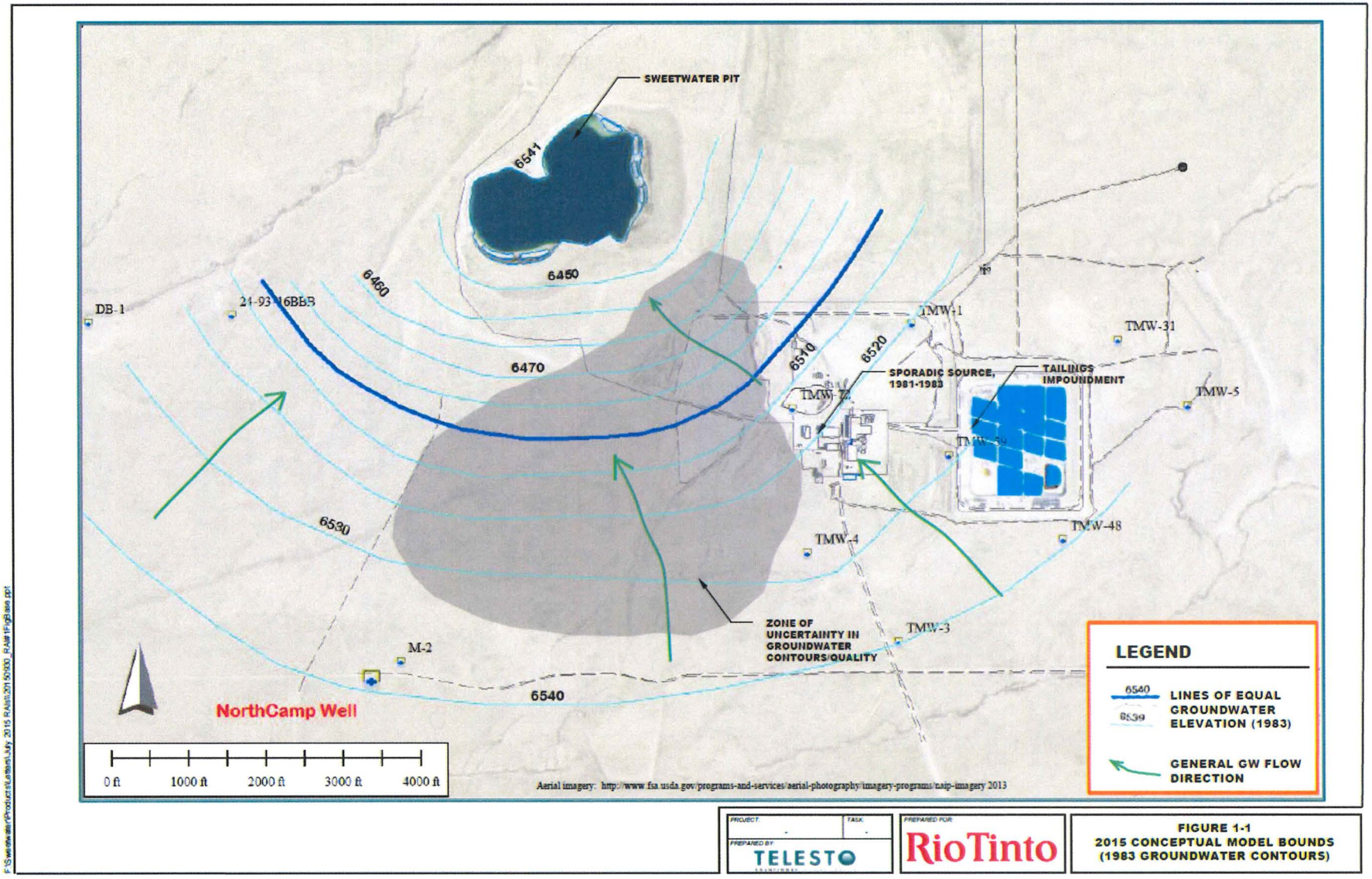
When TMW-10 was completed in the bottom of the Diesel Contaminated Soil Excavation it was completed by digging a hole into the aquifer with a trackhoe. This allowed the wall of the excavation to be carefully examined and sampled. The south wall of the excavation was photographed with a stadia rod in the image and one-half foot composite samples were collected and tested for uranium and radium-226. The results are included on the spreadsheet that follows. In addition, bulk samples above, at and below the water table were collected and analyzed. The results are included on the second spreadsheet.

This data shows very high naturally occurring radium-226 concentrations comprising what would be considered a relict or "phantom" uranium deposit. Specifically, one in which the soluble uranium had been leached and mobilized by downward percolating groundwater leaving the radium-226 and its gamma emitting decay products behind. Phenomena such as the previously described naturally occurring uranium in organic matter and this naturally occurring radium-226 would provide an explanation for elevated uranium and radium concentrations in TMWs 72, 73, 10 and other wells. Groundwater data for the seven (7) new wells (TMWs 10, 103, 106, 107, 108, 109 and 110) as well as TMW 72 and 73 were provided to Stephen Cohen at his request in three emails dated September 30, November 8 and November 20, 2007.

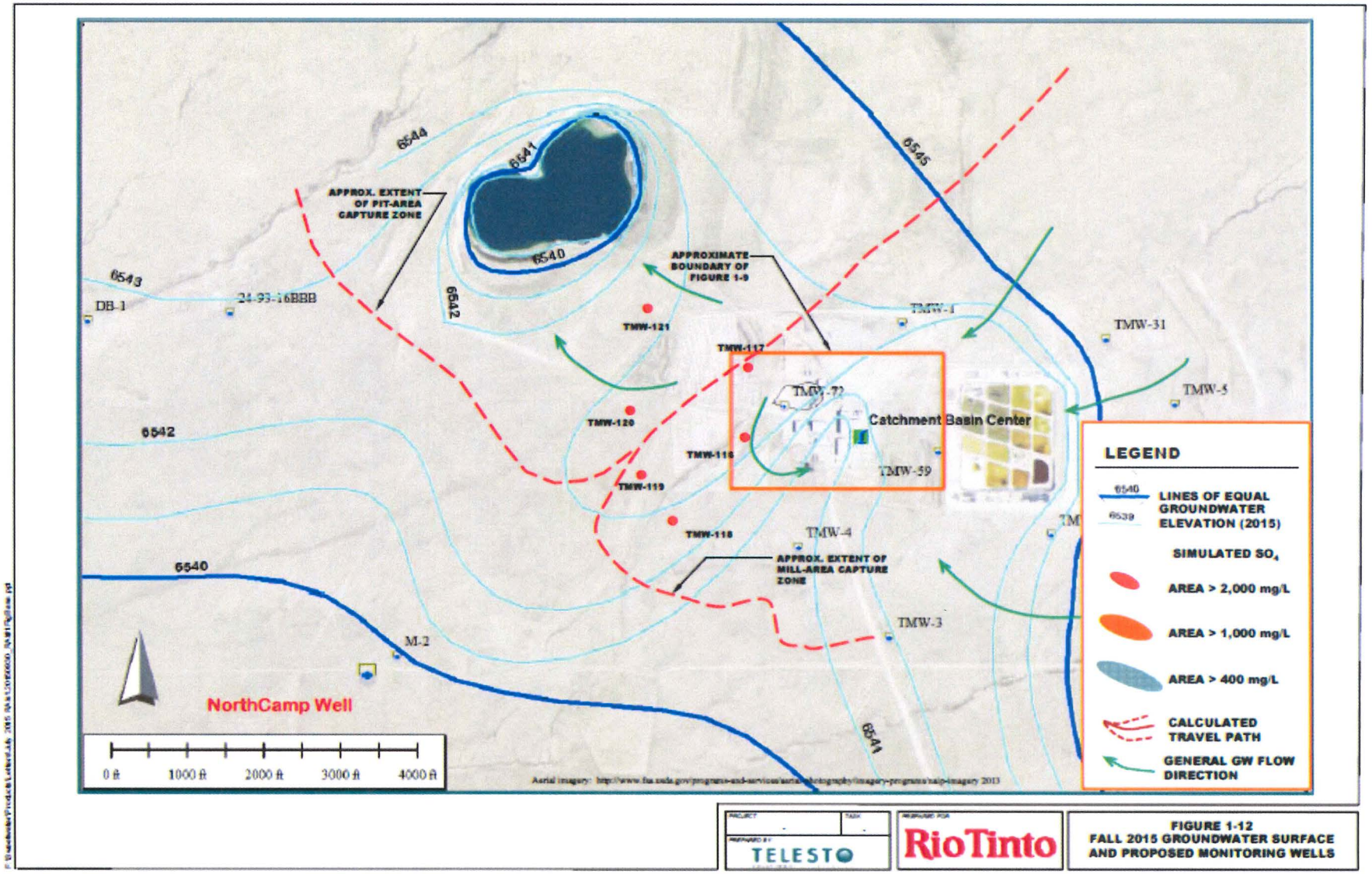
The issue regarding uranium in groundwater west of the Mill building was re-examined in the 2015 response to a July 13, 2015 Request for Additional Information (RAI). The response states:

> *There was no direct correlation between mill-influenced waters and groundwater in the concentrations of radium-226/228, natural uranium, manganese or iron due to these constituents occurring naturally in the underlying aquifer.*

The response defines a zone of uncertainty regarding the Western extent of the plume as shown in the figure below:



The response proposes completing six (6) new monitoring wells west of the Mill building as shown in the figure from the response below:



The response states that the purpose of these wells is to resolve whether uranium, radium and other constituents encountered in the area west of the Mill building are natural or anthropogenic. The response states:

> *The uncertainty regarding the western margin of the Catchment Basin release (as represented by the sulfate plume) can be reduced by the installation and testing of monitoring wells in the gray area shown in Figure 1-1. Focus is on the Catchment Basin releases conservatively defined by the sulfate plume because the Tailings Impoundment release has been well defined and effectively contained by pumping under the CAP since April 1986, and because of the relative uncertainty of plume extents to the west. The 2015 Conceptual Model provides guidance as to where the placement of monitoring wells would most likely improve the understanding of the plume extents. Recommended well locations are depicted in Figure 1-12. In total, six new monitoring wells are recommended. The wells would target the upper Battle Spring Aquifer and not be completed in suspected perched zones. Wells are proposed to be completed over an approximate 60-foot zone extending from approximately 10 feet above the water table to approximately 50 feet below the water table, or from approximately 90 to 150 feet below ground surface.*
>
> *Associated with the installation of monitoring wells, we recommend that cores be cut and sampled above, at, and below the water table for the purpose of assessing the baseline geochemistry of the well completion area. The solid samples should be tested for constituent release by performing precipitation leaching tests (e.g., standard precipitation leach procedure, or meteoric water mobility procedure) and a kinetic weathering test (e.g., batch humidity cell test). The resulting data from these tests would help bolster the understanding of the potential release of naturally occurring constituents at these locations. These data would thus help to distinguish between naturally occurring and mill-influenced groundwater concentrations in the area. The naturally occurring release of constituents (e.g., U-nat and radium 226/228) has been shown to occur throughout the Battle Spring Aquifer and most recently in the area of TMW-10. In 2002, the Battle Spring Formation was sampled and extensively tested as part of the remediation activities in the DRA. The results of the testing showed the remnants of uranium decay (thorium and subsequently radium 226/228) in the soil profile above and below the water table. The samples showed little or no corresponding natural uranium, which indicates that that natural uranium was once present and that it had leached out leaving the decay products behind. By including the core sampling with the installation of monitoring wells, the processes associated with historical, natural releases of natural uranium can be detected and the source of groundwater concentrations can be discerned. For example, if sulfate is not found in the uncertain area, but natural uranium is present in the ground water, the presence of natural uranium and/or its daughter products will lend a strong argument that the dissolved uranium is naturally occurring and not from the release at the Catchment Basin.*

On August 18, 2016 there was a public conference call regarding the license renewal, during which draft license conditions for the renewed license were discussed. Based on that call, a letter dated September 1, 2016 was submitted to the agency committing to *"...a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future."* A schedule for characterizing the plume's western margin was provided in a table attached to the letter. The first step in this table was to prepare and submit for agency review a characterization plan by September 16, 2016. This characterization plan was submitted on September 15, 2016 and Kennecott Uranium Company is awaiting the results of the agency's review. The September 1, 2016 letter committing to submit a characterization plan and the characterization plan submitted on September 15, 2016 are included in Appendix 5 – Characterization Plan.

Current Status of the Plume

Three (3) plume maps have been prepared for this report. There is one (1) map each for Natural Uranium (U-Nat), Combined Radium-226/228 and Total Dissolved Solids (TDS). Each map uses the average concentration for the wells for 2015. With the exception of the pumpback wells which are sampled quarterly, the monitor wells (TMWs) are sampled semiannually. Each map depicts the plume around the tailings impoundment and former catchment basin, but does not depict the plume in the area west of the Mill building.

The Uranium (U-nat) Contour Map (see Maps) shows the 36.0 pCi/L natural uranium contour. The map shows the plume extent using the average uranium value for each well in 2016. The Combined Radium-226/228 Contour map (see Maps) shows the 5.8 pCi/L Combined Radium-226/228 contour. The map shows the plume extent using the average value for each well in 2016. The Total Dissolved Solids (TDS) Contour Map (see Maps) shows the TDS plume in the vicinity of the

tailings impoundment. It shows TDS contours in 500 milligram per liter increments. The map shows the plume extent using the average value for each well in 2016.

The plume areas, for the plumes around the tailings impoundment and former catchment basin, are as follows:

Contaminant	2014 Minimum Plume Area (acres)	2014 Maximum Plume Area (acres)	2015 Average Plume Area (acres)	2016 Average Plume Area (acres)
Natural Uranium	48.9	56.6	54.2	52.4
Combined Radium 226/228	166.0	193.5	160.7	182.1
Total Dissolved Solids (TDS)	178.6	178.3	173.9	180.9

The 2016 average Natural Uranium (U-Nat) plume area is 1.8 acres smaller than the corresponding plume area for 2015. The 2016 average Combined Radium 226/228 plume is 21.4 acres larger than the corresponding plume area for 2015. The 2016 average Total Dissolved Solids (TDS) plume is 7.0 acres larger than the corresponding plume area for 2015.
The ultimate plume area will depend on further characterization that will be performed in the future, primarily in the area west of the currently defined plume. On August 18, 2016 there was a public conference call regarding the license renewal, during which draft license conditions for the renewed license were discussed. Based on that call, a letter dated September 1, 2016 was submitted to the agency committing to *"...a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future."* A schedule for characterizing the plume's western margin was provided in a table attached to the letter. The first step in this table was to prepare and submit for agency review a characterization plan by September 16, 2016. This characterization plan was submitted on September 15, 2016 and Kennecott Uranium Company is awaiting the results of the agency's review. The September 1, 2016 letter committing to submit a characterization plan and the characterization plan submitted on September 15, 2016 are included in Appendix 5 – Characterization Plan.

Elevation Data

In November 1996, as part of the field work program to develop a final design for tailings management for the Sweetwater Uranium Project, eighteen control points (section corners, quarter corners, etc.) covering a nine square mile area around the mill were surveyed with a global positioning system. The original elevation of the southeast corner of Section 15, Township 24 North, Range 93 West was found to be wrong. Please see the memo submitted as Appendix A of the 1996 Corrective Action Program (CAP) Review from Kent Bruxvoort of Shepherd Miller, Inc. This point was used to establish ground surface and casing elevations for the tailings monitor wells (TMW) around the tailings impoundment.

As a result of this discovery, all of the casing elevations for all of the tailings monitor wells and potable water wells (PWW) were resurveyed by Inberg-Miller Engineers, Inc. of Riverton, Wyoming. A mark was filed into the top of the casing in each well and the casing elevation was surveyed at that mark. All water level measurements have been taken from that mark as well, to insure accuracy and consistency of results. In addition, the casing heights of each well were measured so accurate ground elevations for each well could be obtained. These elevations are listed in Table 2.3 of "Evaluation of Aquifer Test Data", submitted as Appendix B of the 1996 Corrective Action Program (CAP) Review. The correction of the casing heights has affected the piezometric contours for the aquifer.

As work has been performed in the Catchment Basin excavation area (fill added to enhance compaction, etc.) and well repairs have been completed, wells have been resurveyed as required.

Pumpback Volumes and Impoundment Evaporative Capacity

The evaporative capacity of the tailings impoundment currently stands at a minimum of 29.46 million gallons per year. Please refer to the table below:

Tailings Impoundment Evaporation Capacity

Lagoon Designation	Area		Evaporation at Maximum Pan Rate (Gallons per year)	Evaporation at Calculated Lake Evaporation Rate (Gallons per year)
	Square Feet	Acres		
1-O	81,798.56	1.88	3,095,164.46	2,166,615.13
1-W	99,531.68	2.28	3,766,165.55	2,636,315.89
1-E	100,230.07	2.30	3,792,591.84	2,654,814.29
2-W	72,017.00	1.65	2,725,041.36	1,907,528.95
2-E	77,418.51	1.78	2,929,428.35	2,050,599.85

3-W	68,249.06	1.57	2,582,466.80	1,807,726.76
3-E	53,191.59	1.22	2,012,709.26	1,408,896.48
4-W	58,982.00	1.35	2,231,811.79	1,562,268.25
4-E	78,433.96	1.80	2,967,851.83	2,077,496.28
5-W	58,665.02	1.35	2,219,817.63	1,553,872.34
5-E	57,500.41	1.32	2,175,750.11	1,523,025.08
6-W	60,862.93	1.40	2,302,984.04	1,612,088.83
6-E	68,160.91	1.56	2,579,131.30	1,805,391.91
8-E	112,197.27	2.58	4,245,417.07	2,971,791.95
9-W	65,113.85	1.49	2,463,834.02	1,724,683.81
Total:	**1,112,352.82**	**25.53**	**42,090,165.41**	**29,463,115.79**

The above table shows the amount of fluid that can be evaporated from the existing tailings impoundment lagoons based upon their area and a maximum evaporation rate (pan evaporation rate) of 60.7 inches per year and a minimum evaporation rate (lake evaporation rate) of 0.7 times the pan rate. The pan evaporation rate is from the site's Revised Environmental Report dated August 1994. Determination of a lake evaporation at 70 percent of pan evaporation is based on Seller, 1965. Even at the minimum calculated evaporation rate the currently lined lagoons are more than adequate to evaporate the current maximum pumpback volume of 25 million gallons per year. Thus the tailings impoundment in its current configuration can evaporate the currently generated pumpback volumes.

This issue was discussed with James Webb in telephone conversations on Thursday, September 27 and Monday, October 1, 2012. He suggested submitting a letter regarding the situation. One was submitted dated October 10, 2012. A reply dated November 15, 2012 was received. Kennecott Uranium Company prepared a Safety and Environmental Evaluation (SEE) to increase the pumpback limits in 2013 from 25 million to 27 million gallons per year.

The 27 million gallon per year limit was considered appropriate given the calculated evaporative capacity of the impoundment. This change was made by SEE #23 – Establishment of Annual Pumpback Volume Based upon Tailings Impoundment Evaporative Capacity. In 2016 a total of 26,811,900 gallons were pumped into the impoundment, below the limit of 27 million gallons established by Safety and Environmental Evaluation #23 (SEE-23).

It is planned for 2017 to operate the pumpback wells at the following approximate flow rates:

WELL #	Gallons per Minute
TMW-96	3.0
TMW-97	4.0
TMW-59	7.5
TMW-75	3.5
TMW-17	9.0
TMW-7	3.0
TMW-57	3.5
TMW-18	10.0
TMW-58	7.5
Total:	**51.0**

TMWs 59 and 18 have the highest Total Dissolved Solids concentrations (2110 ppm – January 5, 2016, and 2110 ppm – January 6, 2016 maximum in 2016) so they will be operated at the highest flow rates with the other less contaminated wells pumped at lower rates so that the total pumped volume does not exceed 27 million gallons, as specified in Safety and Environmental Evaluation (SEE) #23.

Since execution of Safety and Environmental Evaluation (SEE) #23 on May 31, 2013, pumpback rates were increased and 26,645,670 gallons were pumped into the impoundment in 2014. Observations of the impoundment show that to date there have been no problems in evaporating the additional volume.

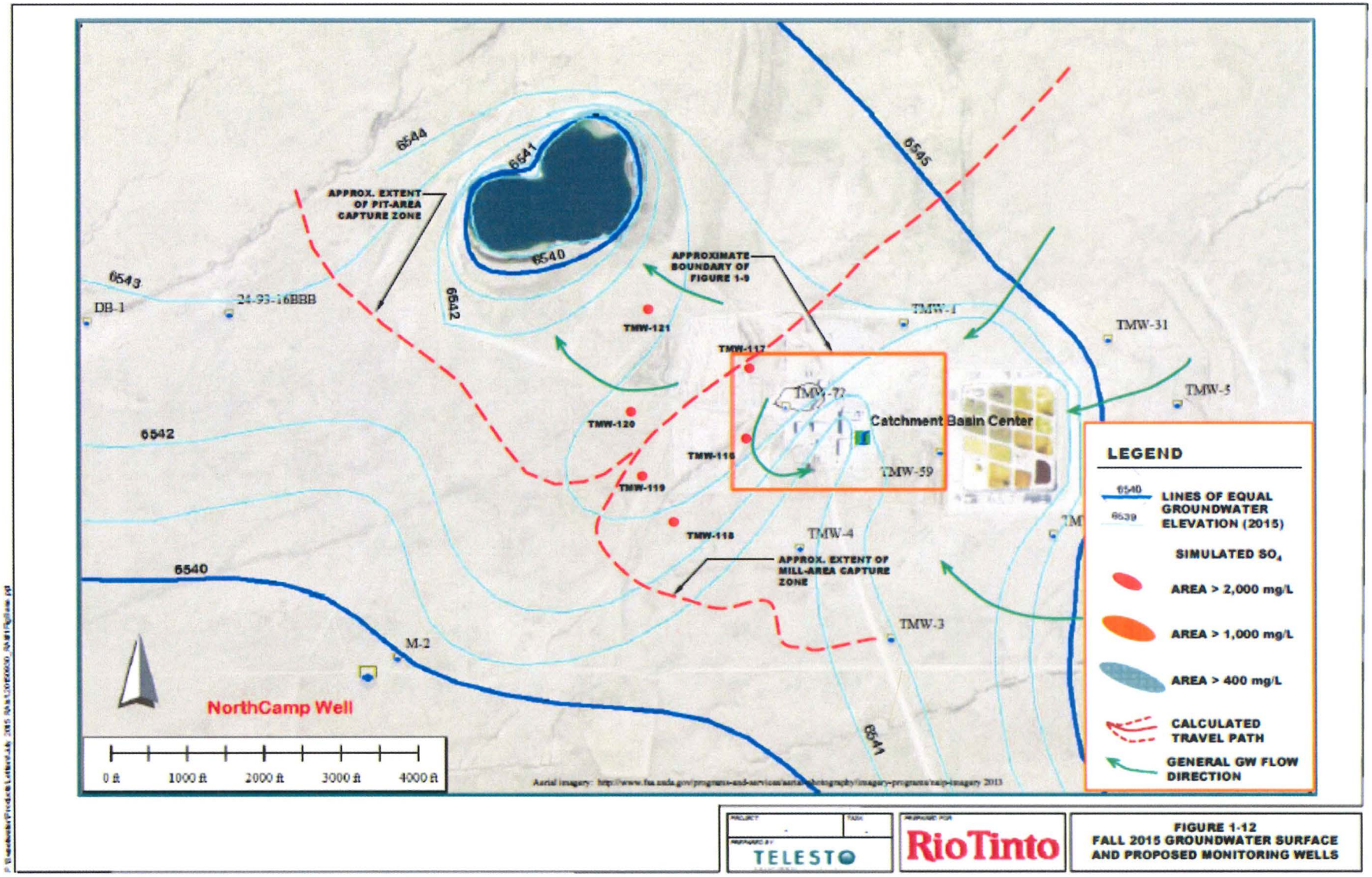
The following groundwater contour maps are included with this report:

- *Spring 2016 Piezometric Contour Map* shows the groundwater contours around the tailings impoundment and Catchment Basin in spring 2016.
- *Fall 2016 Piezometric Contour Map* shows the groundwater contours around the tailings impoundment and Catchment Basin in fall 2016.

Five (5) foot contours are in red while one (1) foot contours are in dashed black on both maps. These maps show the extent of the cone of depression created by the pumpback wells. These maps were created using groundwater elevation data from all of the aquifer monitor wells regardless of the completion depth, since the piezometric surface is believed to be a property of the aquifer as a whole.

No water levels were collected within one (1) week of operation of PWW-1 and/or PWW-2 so that the operation of these wells would not interfere with the depiction of the potentiometric surface created by the operation of the pumpback wells.

Included below is a figure from the 2015 response to a July 13, 2015 Request for Additional Information (RAI) that depicts the Fall 2015 groundwater surface: It shows the approximate capture zones of the groundwater sink created by the pumpback system and the one created by the evaporative sink of the pit lake.



Salts/Contaminants Removed from the Battle Spring Aquifer

Table 2 – Mass of Salts and Other Constituents Removed from the Perched and Battle Spring Aquifers and Pumped Back into the Tailings Cell lists the cumulative quantities of salts (contaminants) pumped back from the Battle Spring Aquifer into the tailings cell via the pumpback system. Charts showing the quantities of salts returned to the tailings cell are also included for each of the wells pumped back into the impoundment in 2016.

TMWs 90 and 105 were removed during the course of the excavation of the contaminated soils around the Catchment Basin in 2006. They have no longer been present since 2006.

Tailings Impoundment Water Evaporation System

The transfer pump remained in operation as needed during 2016 when the impoundment was not frozen, to pump fluid from the southeast corner into the lined ponds.

Operation of the evaporative drip system, which allows tailings fluid to drip down exposed portions of the liner on the western embankment of the impoundment, was suspended in 2000. Two sections of liner used as surfaces on which tailings fluid was allowed to drip were damaged by high winds by April 10, 2000, requiring the operation of the drip system to be terminated.

Extensive regrading of the tailings was performed during 2008. Regraded areas were bermed and lined to create shallow ponds on the tailings surface to enhance evaporation and prevent blowing tailings. Lagoons 2-W and 4-W were lined in the summer of 2009. Included with this report are the following four (4) maps showing the changes to the impoundment over time:

- *Existing Impoundment Configuration – January 2006*
  This map shows the distribution of the tailings and evaporation ponds prior to commencement of the Catchment Basin excavation.
- *Existing Contours – October 2007*
  This map shows the distribution of the tailings and evaporation ponds after addition of the 233,268 cubic yards of material removed from the Catchment Basin excavation in 2006 and 2007.
- *Existing Contours – December 29, 2008*
  This map shows the distribution of the tailings and evaporation ponds after the 2008 tailings regrading and lagoon construction effort.
- *Tailings Area Survey – July 2009*
  This map shows the impoundment and lagoons as of July 2009
- *Impoundment – December 2009*
  This map shows the water covered areas as of December 2009. This map shows the configuration of the impoundment as it is at present.
    - The various plume and piezometric contour maps show the water covered areas of the impoundment as of July 30, 2015 shaded in blue.
- In addition, Google Earth images of the impoundment for July 21, 1994, July 10, 2006, July 4, 2009, and June 8, 2014 are provided.

In the case of Lagoon 8-W and Lagoon 7-W, these are composed of wet materials with intermittent standing fluid. These non-water covered areas will either be flooded or sprayed with tailings fluid as required during the non-freezing months so that they will be kept wet to minimize blowing tailings.

Tailings Impoundment Fluid Level

The fluid level on November 1, 2016 was 6610.83 feet above MSL. This elevation is taken in the deepest pool in the impoundment's southeast corner. The fluid level at this location was within one (1) foot of the level of 6610.19 feet above MSL on November 9, 2015. The control point used to measure these elevations was surveyed by Worthington, Lenhart and Carpenter on July 28, 2016 for quality assurance/control purposes.

Current water covered area (pool area plus lagoons) is estimated to be approximately 1,011,335 square feet (2016 Method 115 Report). The water covered area has decreased slightly from the 2015 area (1,029,128 square feet). This area is based

on a ground survey of the impoundment conducted by Worthington, Lenhart and Carpenter on July 28, 2016. The decrease was due in part to the fact that the pool in the impoundment's southeast corner had decreased in area.

At no time did fluids rise to within five (5) feet of the top of the repaired liner.

Substantial repairs were made to the tailings impoundment liner in 2007 and 2008 along the interiors of the northern and eastern embankments. The tailings were regraded in 2008 and thirteen (13) lined evaporation ponds were constructed on top of the regraded tailings. Two (2) additional ponds were lined in the summer of 2009.

The impoundment and associated work was described in the Telesto Solutions, Inc. July 14, 2016 report entitled "2016 Inspection of Tailings Impoundment Liner", as follows:

> *Ongoing maintenance of the impoundment serves to allow Kennecott Uranium Company to meet its operational objectives. Specific maintenance completed or ongoing during 2016-2016 includes 1) repair of the liner to keep it functional within five feet of the tailings; 2) ongoing maintenance of the water management system including activities such as pump repair and/or replacement; 3) monitoring of sandbag weights along the south embankment to limit liner buffeting under windy conditions; 4) maintenance and repair of the outer surfaces of the embankments against erosion effects; 5) intentional cutting of a small portion of liner along the south embankment above the bench to limit the potential for vertical tearing as a result of wind; and 6) a test program to relocate the key trench from the outer edge to the inner edge of the bench.*
>
> *Kennecott Uranium Company continues to effectively manage the tailings impoundment through as-needed maintenance of the liner within five vertical feet of the tailings or tailings fluid and keeping the tailings covered with filled evaporation lagoons. Additionally, KUC is maintaining the exposed liner to limit potential for tearing and tensile strain. Through these efforts, potential for fluid to escape through the remaining Hypalon® liner remains limited, potential for windblown tailings is decreased, potential for radon emissions is decreased, the surface of the tailings has been lowered to a level everywhere below the surrounding native ground surface, tailings consolidation throughout the impoundment is promoted, and evaporation over a large surface area within the impoundment is enhanced.*

The inspection of the diversion channel documented in the June 30, 2016 report entitled *2016 Inspection of Diversion Channel* concluded that:

> *Little evidence of change in the channel's overall form has been observed from the May 2015 to the June 2016 inspections, either in terms of vertical adjustment of the channel bed or in terms of lateral movement of the channel's banks. The diversion channel's capacity has not decreased measurably since its construction, and the channel is expected to continue to operate as designed.*

The June 30, 2016 report entitled 2016 Inspection of Tailings Impoundment Embankments states;

> *In summary, embankment conditions were noted to be of a generally acceptable nature; no conditions of concern were noted in the June 2016 observations. No settlement of the crest was observed. No erosional rilling was observed that would extend to the crest. The extent of rilling should continue to be monitored and repaired at any point at which a rill may extend to the crest. Water levels continue to be maintained at a level below the surrounding ground surface.*

The report also noted that, *"Consequently, there is almost no potential for tailings fluid to escape through the embankments, even in the event of a hypothetical, catastrophic failure of an embankment."*

The October 3, 2016 report of the September 20, 2016 Nuclear Regulatory Commission (NRC) inspection of the site discussed the impoundment stating:

> *The inspectors observed that the tailings impoundment embankments were in generally good condition. The inspectors did not identify any leaks or significant erosion during site tours,* and;
>
> *The ponds were found to be in good condition, and none of the ponds appeared to be overfilled. The pump-back system was in operation, collecting seepage and transferring the liquid to the evaporation ponds.*

It concluded by stating:

> *The licensee continued to inspect and maintain the tailings impoundment in accordance with license requirements. The tailings impoundment appeared to be in good condition with no observable leaks or erosion.*

Copies of Telesto Solution's 2016 inspection reports of the impoundment (2016 Inspection of Tailings Diversion Channel, Embankments and Impoundment Liner) are included in Appendices 2, 3 and 4.

The substantial regrading of the tailings and material excavated from the Catchment Basin area that was performed in 2007 and 2008 has resulted in a more organized and manageable impoundment.

Battle Spring Aquifer Water Levels

Recovery of the cone of depression caused by dewatering operations around the Sweetwater Pit was complete by 1998. The current water level in the pit stands at 6538.20 feet above MSL on October 12, 2016, a rise of 0.04 feet from a level of 6538.16 feet above MSL on October 13, 2015. Please see attached chart entitled *Sweetwater Pit Water Levels.* Kennecott Uranium Company believes that water levels in the pit have reached "steady state" essentially since 1998.

In September 2015 the water levels in the existing dewatering (DW), piezometer and research and development (RDW) wells around the pit lake were measured and the water level elevations were compared to that of the potentiometric surface elevation of the pit lake. The data is shown in the table below:

Wells Measured in Fall 2015 to Verify Pit Lake Evaporative Sink

Well Number	Piezometer	Northing	Easting	Ground Elevation	Casing Height (Feet)	Collar Elevation	Water Elevation 9/15
DW 1		151,185	321,415	6656.40	0.60	6657.00	6541.85
DW 2		151,487	321,588	6660.12	1.51	6661.63	6542.29
DW 3		151,912	321,667	6660.53	1.37	6661.90	6542.74
DW 4		152,397	321,689	6666.69	1.45	6668.14	6543.10
DW 5		152,738	321,616	6671.68	0.77	6672.45	6543.00
DW 7		153,074	320,905	6669.93	0.45	6670.38	6542.54
DW 8		153,138	320,549	6668.37	0.75	6669.12	6543.22
DW 9		153,080	320,210	6667.87	0.39	6668.26	6543.79
DW 17		150,793	321,136	6651.43	0.76	6652.19	6541.77
DW 20		152,282	319,570	6655.34	0.36	6655.70	6541.99
DW 21		152,448	319,072	6654.50	0.45	6654.95	6541.83
DW 22		152,091	318,769	6647.24	1.19	6648.43	6542.92
DW 24		151,250	318,559	6648.18	0.87	6649.05	6540.84
DW 25		150,890	318,496	6643.85	0.69	6644.54	6541.30
DW 31		150,299	318,524	6641.49	1.10	6642.59	6541.96
DW 32		150,015	318,981	6640.16	1.18	6641.34	6542.34
DW 33		149,831	319,444	6634.53	1.35	6635.88	6541.25
DW 34		149,629	319,944	6635.29	1.83	6637.12	6542.73
DW 39		150,464	320,524	6645.63	1.12	6646.75	6542.06
DW 40		150,064	320,355	6640.83	1.39	6642.22	6542.54
PH 3	P-1	152,195	321,985	6664.18	1.09	6665.27	6542.71
PH 5	P-1	153,184	320,821	6669.82	0.79	6670.61	6542.63
PH 6	P-1	153,379	320,852	6673.41	0.94	6674.35	6543.83
PH 8	P-1	151,465	318,609	6644.34	0.84	6645.18	6541.15
RDW 1		151,601	322,138	6699.16	1.04	6700.20	6544.69
RDW 8		152,433	319,248	6662.49	1.70	6664.66	6541.83
UNK-2		152,191	318,769	6648.62		6651.67	6541.03
UNK-3		151,250	318,459	6648.36	6.14	6654.50	6542.03

The pit lake continues to be an evaporative sink.

Beginning in January 2009 a section of slotted pipe was installed in a hole in the sand along the shore of the pit lake. Please see the following image:



The top of the pipe section was surveyed by Robert Jack Smith and Associates on Monday, January 5, 2009. The elevation of the top of the pipe section was 6542.68 feet above mean sea level. Pit lake elevations are now taken by measuring down from the pipe section top to the top of the water inside of it. This is a superior system to the use of a rebar since it is not susceptible to ice damage and there is no uncertainty due to wave action.

The top of the pipe section is surveyed annually for quality assurance/quality control purposes. A table of the survey pipe elevations is included below:

Date	Casing Elevation (feet above mean sea level)
January 5, 2009	6542.68
December 15, 2009	6542.99
August 9, 2010	6542.72
August 8, 2011	6542.80
January 16, 2012	6542.99
July 23, 2012	6543.02
July 26, 2013	6543.08
July 28, 2014	6543.08
July 30, 2015	6543.36
July 28, 2016	6542.97

The reclaimed pit remains as a lake and evaporative sink. Water loss via evaporation from the pit lake surface creates a slight permanent cone of depression around the pit, meaning that the potentiometric surface of the aquifer in that area will never return to pre-mining levels.

Groundwater Direction and Velocity / Effectiveness of the Pumpback System

The regional ground water flow is to the southwest (the center of the Great Divide Basin). Localized flows in the Battle Spring Aquifer immediately surrounding the Sweetwater Pit are toward the pit since it is an evaporative sink as described in the section above.

Localized groundwater flows in the vicinity of the pumpback wells are toward TMWs 7, 17, 18, 57, 58, 59, 75, 96 and 97 since they showed decreased water levels as they are being actively pumped. The greatest decreases in water level are in the areas of TMW-18 and TMW-59. This is logical since TMW-18 yields a pumpback rate of 10.93 gpm and TMW-59 yields a pumpback rate of 7.77 gpm. These wells are pumping at the highest rates. The spreadsheet *Groundwater Elevations 11/96 to Present* is included in Appendix 1.

The groundwater in the immediate vicinity of the tailings impoundment and Catchment Basin is flowing toward TMWs 7, 17, 18, 57, 58, 59, 75, 96 and 97, as these wells have overcome regional groundwater flows toward the southwest due to pumping in 2016. The piezometric contour maps show the potentiometric surface of the Battle Spring Aquifer around the tailings impoundment and Catchment Basin in spring and fall 2016. The cone of depression created by the pumpback wells encompasses the existing plume. The groundwater contour maps for spring and fall 2016 clearly show a cone of depression by the western edge of the tailings impoundment and around the Solvent Extraction (SX) building by the Catchment Basin pumpback wells TMW 96 and TMW 97.

The Telesto Solutions, Inc. report entitled **"Final Ground Plume Interpretation"** dated February 2009, states:

The ground water level contour map (Figure 6) clearly shows that well pumping at the site has created an effective containment system, which removes chemical mass and eliminates offsite migration. These beneficial effects are being accomplished at a modest total pumping rate of about 50 gpm.

Clearly, ground water within the impacted area is flowing in toward the pumpback wells. The report continues by stating:

The water level contours and flow directions on Figure 6 clearly show that the ground water pumping wells are providing complete containment of any water that could be impacted by the Tailings Impoundment, or facilities in the Catchment Basin area. Flow within the Battle Spring Aquifer converges towards the pumping centers and there is no potential for off-site excursion of potentially impacted ground water or wells that show elevated concentrations of U-Nat or Ra 226-228.

This report was updated in 2014 as part of the license renewal process and concluded:

The natural ground water direction has been reversed in the mill site area, and ground water impacted by site activities appears to be captured by the pumping system. Therefore, the system is working as designed, is extracting impacted ground water, and is containing contaminated ground water.

The above conclusions were updated again as part of the response to a July 13, 2015 Request for Additional Information (RAI). The response states:

Based on the high certainty in the analysis, we can conclude that:

- *The current extent of the combined radium-226/228 plume from the Catchment Basin and Tailings Impoundment releases are contained within the Mill-area capture zone and due to the chemical nature of radium, have not traveled as far as the sulfate plume.*
- *The current extent of the natural uranium plume from the Catchment Basin and Tailings Impoundment releases are contained within the Mill area capture zone. Due to the chemical nature of uranium in oxidized conditions, uranium released from the Catchment Basin may have traveled in a similar manner to the sulfate plume. Uranium released from the Tailings Impoundment has been contained by CAP pumping.*
- *Ongoing exceedances of the manganese and iron GPS are in wells that are within the Mill-area capture zone and are thus contained. As described in Telesto (2009), the exceedances of constituent concentrations above groundwater protection standards are expected to continue, but the plume will remain wholly contained within the Mill-area capture zone via pumping under the CAP.*

Ground water in the vicinity of the mill and tailings impoundment flows toward the pumpback wells.

Progress toward Attaining Groundwater Protection Standards

The pumping of aquifer wells TMW-7, 17, 18, 58, 59 and 75 at the toe, north and west of the tails cell, will continue to intercept any contaminated water coming through from beneath the tailings impoundment. The capture of contaminated water at the toe of the tails cell will prevent any constituents that may be present from migrating away from the cell and thus, in time, attain groundwater protection standards (GPS). A pump was installed in TMW-57 in May 2001. A new well, TMW-7, was completed on August 18, 2003. A pump was installed and started in it on December 1, 2003.

The major portion of the excursion lies beneath the tailings impoundment, as seen on the respective contour maps. This makes sense given the fact that the fluids leaked from the impoundment's northeast corner and flowed to the west under the impoundment to the sink created by the then mostly dewatered Sweetwater Pit. The impacted fluids beneath the tailings impoundment can only be collected from wells at or near the edge of the impoundment since wells cannot be drilled through the bottom of the lined impoundment. This limitation greatly hinders removal of impacted fluids from the aquifer. The most impacted fluids lie beneath the impoundment as shown on the TDS Contour Maps. The pumpback wells with the highest TDS, TMWs-18 and 59 (2110 ppm maximum each in 2016) lie immediately against the western embankment. Being forced to recover impacted fluids from the edge of the plume and being unable to recover fluids from the area of highest concentration, the plume's core beneath the center of the tailings impoundment prolongs any attempt to attain groundwater protection standards (GPS).

The following italicized text (February 7, 2004) are from a consultant's report prepared by Kent Bruxvoort Consulting dated February 7, 2004.

> *"The CAP has been successful in containing and reducing quantities and concentrations of hazardous constituents beneath the impoundment. As of the fourth quarter of 2002, about 248.4 million gallons of groundwater had been pumped back into the impoundment. A cumulative net amount of 1,323,500 kg of contaminants has been pumped back, representing 58 percent of the estimated total amount released. In calculating this net amount, background quantities of constituents, as defined by concentrations in the background monitoring well, TMW-5, were subtracted from the total mass of constituents pumped. The following plot compares the cumulative net mass of contaminants removed to the cumulative amount of released contaminants remaining in the aquifer. The average pumpback volume from 1993 through 2002 was 93,000 kg/year."* (February 7, 2004)

The above citation is from the February 7, 2004 report and reflects 2004 information. The mass of salts recovered for 2015 also includes salts recovered from the plume around the Catchment Basin. The volume of fluids leaked from the Catchment Basin and the mass of salts associated with that fluid is unknown. As such, no adjustment was made to the mass of constituents remaining to reflect constituents leaked from the Catchment Basin.

The pumpback program was also reviewed by Telesto Solutions, Inc. in their report, **"Final Groundwater Plume Interpretation"** dated February 2009. In it they stated:

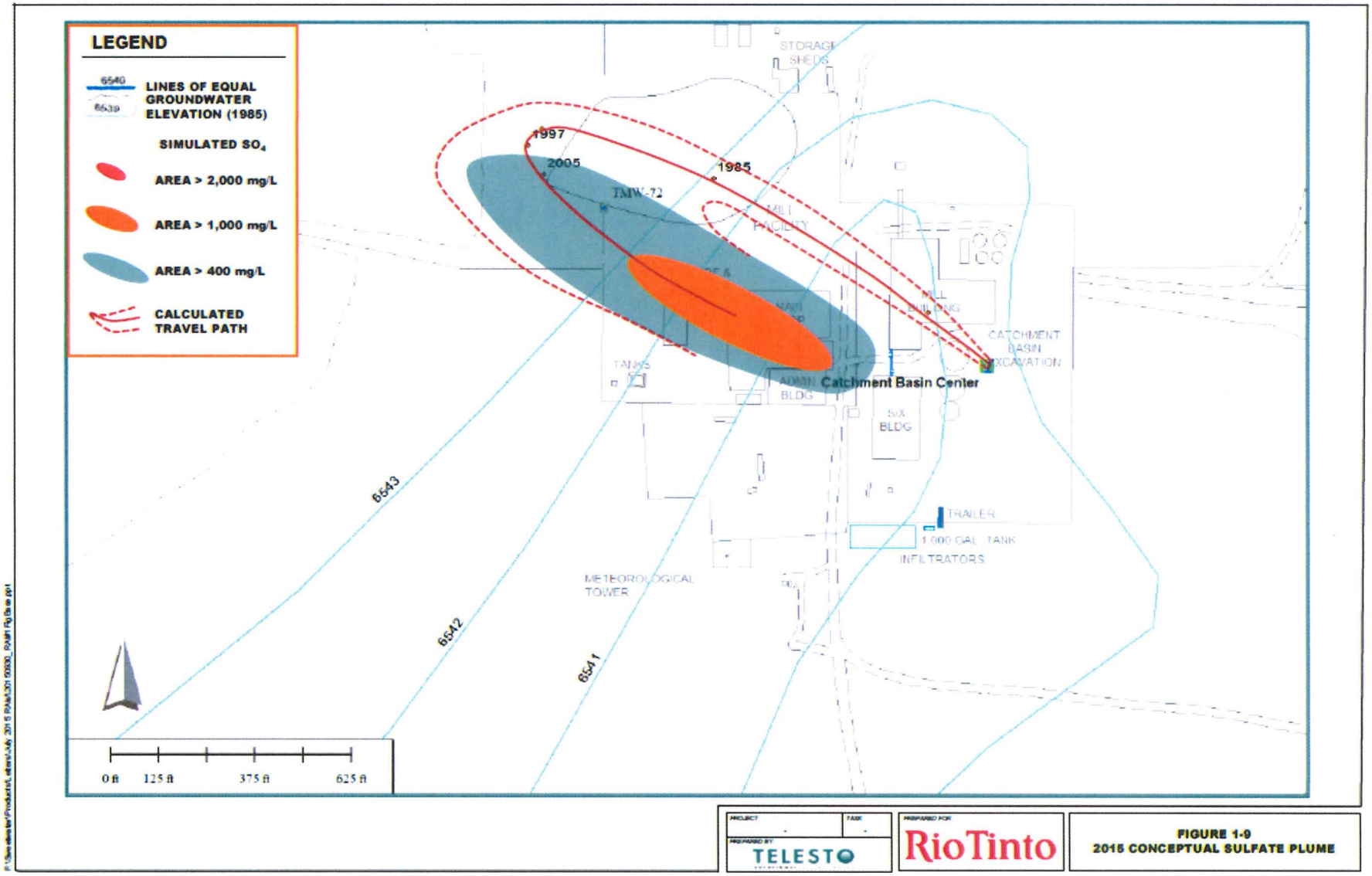
> *The ground water level contour map (Figure 6) clearly shows that well pumping at the site has created an effective containment system which removes chemical mass and eliminates offsite migration. The beneficial effects are being accomplished at a modest total pumping rate of about 50 gpm.*

The February 2009 report "Final Groundwater Plume Interpretation" was reviewed and updated via a technical memorandum in 2014. It concluded:

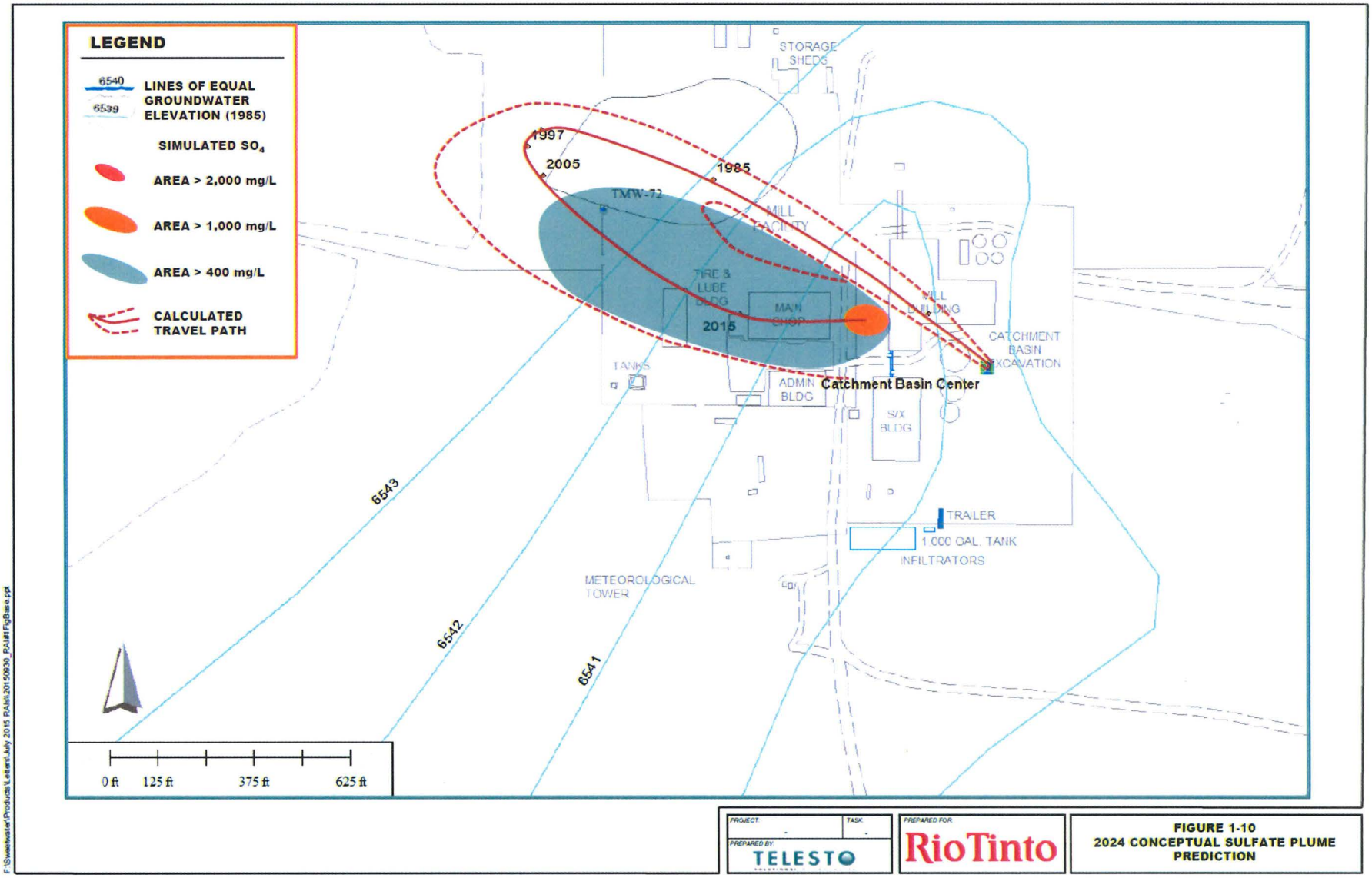
> *The main and important finding is that the pumping system appears to be capturing the contaminant plume. Higher concentrations east of the tailings impoundment do not seem to indicate a spreading plume, but rather a plume in which analytes are concentrating. Potentiometric mapping indicates that ground water in monitoring wells at the far eastern extent of the well network (east of the tailings impoundment) is moving in the direction of the pumping wells, and is thus being captured.*

:

The system is making progress toward remediating the contamination. The figure below from the response to a July 13, 2015 Request for Additional Information (RAI) shows how as of 2015 the pumpback system has begun to reverse the Western migration of the sulfate plume:



The response predicts that at current pumping rates the plume should be further reversed and withdrawn by 2024 (within nine (9) years as depicted below:



The estimate of time discussed with the accompanying map on the previous page is subject to change depending upon further plume characterization work planned to be conducted primarily west of the existing delineated plume.

On August 18, 2016 there was a public conference call regarding the license renewal, during which draft license conditions for the renewed license were discussed. Based on that call, a letter dated September 1, 2016 was submitted to the agency committing to *"...a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future."* A schedule for characterizing the plume's western margin was provided in a table attached to the letter. The first step in this table was to prepare and submit for agency review a characterization plan by September 16, 2016. This characterization plan was submitted on September 15, 2016 and Kennecott Uranium Company is awaiting the results of the agency's review. The September 1, 2016 letter committing to submit a characterization plan and the characterization plan submitted on September 15, 2016 are included in Appendix 5 – Characterization Plan.

The above issue was also discussed in the inspection report dated October 3, 2016 for the September 20, 2016 Nuclear Regulatory Commission (NRC) inspection of the site. The report stated:

> *By letter dated August 25, 2016 (ML16203A102 and ML16203A124), the NRC submitted a draft renewal license to the licensee. The NRC staff noted that the current corrective action plan, specified in License Conditions 11.3 and 11.5, was not achieving compliance with the groundwater protection standard limits approved for the site. In particular, the NRC noted that groundwater contamination may extend beyond the western boundary, and this area may not be fully characterized by the licensee.*
>
> *The licensee responded to the NRC's observations by letter dated September 1, 2016 (ML16250A354). The licensee committed to develop a characterization plan to better delineate the western margins of the potential groundwater plume. The licensee subsequently submitted a proposed characterization plan to the NRC by letter dated September 15, 2016 (ML16263A073). This program area will be reviewed by the NRC as part of the license renewal process. The NRC staff will continue to review the licensee's implementation of the groundwater corrective action program during future inspections, to ensure that the licensee's corrective action program continues to be implemented with the objective of returning the groundwater concentrations to NRC-approved levels.*

Areal Extent and Concentration of Hazardous Constituents

The areal extent of the excursion at this time is shown by the Uranium, Combined Radium and TDS Contour Maps. All hazardous constituents (except for Uranium, Combined Ra226/228 and Gross Alpha) have stabilized below groundwater protection standards in the majority of aquifer wells. TDS values of over 500 ppm, Natural Uranium values of over 36.0 pCi/L and Radium 226/228 values 5.8 pCi/L show a plume north, northeast and west of the tails cell and around the Catchment Basin. The surface area underlain by the plume varies depending upon the constituent in question. The Combined Radium 226/228 plume covers 182.1 acres, as drawn. The 500 ppm TDS contour shown defines an area of 180.9 acres. The 36 pCi/L Uranium plume covers an area of 52.4 acres. These areas are from the plume maps included in this document.

These areas are based on the included plume maps which show the plumes as being open ended to the west. This is because it is still unclear as to whether natural uranium, radium-226 and total dissolved solids encountered in the Battle Spring Aquifer in TMW-10, 72 and 73 are natural or process related. This question can be further addressed by the completion of additional monitor wells to the west, that was discussed in Kennecott Uranium Company's response to the July 13, 2015 Requests for Additional Information (RAI's).

In addition, on August 18, 2016 there was a public conference call regarding the license renewal, during which draft license conditions for the renewed license were discussed. Based on that call, a letter dated September 1, 2016 was submitted to the agency committing to *"...a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future."* A schedule for characterizing the plume's western margin was provided in a table attached to the letter. The first step in this table was to prepare and submit for agency review a characterization plan by September 16, 2016. This characterization plan was submitted on September 15, 2016 and Kennecott Uranium Company is awaiting the results of the agency's review. The September 1, 2016 letter committing to submit a characterization plan and the characterization plan submitted on September 15, 2016 are included in Appendix 5 – Characterization Plan.

Vertical Extent of Contamination

TMW-8, 24 and 47 (see page 5) were each completed in deeper sand than the other monitor wells. The sample results from these wells clearly show that groundwater contamination from the cell has not migrated into deeper sands. These results show that the contamination is confined to the upper fifty (50) feet of the saturated portion of the Battle Spring Formation.

This was substantiated by Shepherd Miller, Inc. when they completed the groundwater background study dated January 1996. In the study they concluded, *"Water quality sampling of three wells completed within the lower saturated sand, TMW's 8, 24 and 47, shows it to be unaffected by seepage from the cell, indicating that flow from the upper to lower saturated sands is retarded by the clay stone layer."*

This issue was also investigated by Telesto Solutions, Inc. and discussed in their February 2009 report, **"Final Ground Water Plume Interpretation".** In the report they stated:

> *Monitoring wells TMW-8 and 24 were completed in a deeper sand of the Battle Spring Aquifer to determine if there is downward migration of affected ground water into the lower portion of the aquifer (Kennecott Uranium Company, 1994). Chemical concentration plots of the deep wells and adjacent shallow-completion wells (TMW-58 and -82) confirm the conclusion of no significant downward migration of affected ground water over the period of sampling (1991 to present). The deep wells do not exhibit the concentration spikes for U-Nat, Ra226-228, sulfate and TDS that are observed in the shallow wells (Attachment A).*
>
> *Chemical concentration plots for shallow well TMW-48 and adjacent deep well TMW-47 indicate that impacted ground water is not currently present south of the Tailings Impoundment.*

(Please note that only the *text* from the Telesto Solutions, Inc. report has been included in this discussion. Any attachments or figures mentioned in the quoted text have not been included.)

Estimate of Time Needed to Obtain Compliance

In a letter to the NRC dated July 29, 1999, Kennecott Uranium Company stated: "In the eleven years of CAP operation (1988 through 1998), 47 percent of the estimated mass of released contaminants have been removed via pumping." Based upon this estimate of the mass of released contaminants removed by pumpback operations, an estimate of ten (10) years to terminate the Corrective Action Program (CAP) was made. This estimate was revised and updated by Kent Bruxvoort Consulting on February 7, 2004. This update concludes that 58% of the estimated total amount of the contaminants had been returned to the tailings impoundment by the end of 2002. This February 7, 2004 update was subsequently revised (2009 Corrective Action Program (CAP) Review) and then showed that 83.8% of the estimated total amount of the contaminants had been removed by the end of 2009.

However, the scope of the CAP has changed with the license amendment request granted on May 26, 2005 to include the contaminated plume in the aquifer around the Catchment Basin. The volume of fluid released through the unlined bottom of the Catchment Basin is unknown, so the mass of salts added to the aquifer from the Catchment Basin cannot be accurately estimated.

This estimate of ten (10) years for the tailings impoundment plume is based solely on removal of contaminants that leaked from the tailings impoundment and does not include contaminants that escaped from the bottom of the Catchment Basin as the volume of contaminants entering the Battle Spring Aquifer from the Catchment Basin is unknown. Any estimate is also subject to change depending upon future plans. For example, should operations at the mill resume, use of pumpback fluids as a source of mill feed water has been considered as a means to hasten removal of the impacted fluids.

Telesto Solutions, Inc. discussed the plume in their February 2009 report entitled **"Final Groundwater Plume Interpretation"**. In discussing remediation times for the entire plume involving both contaminants from the tailings impoundment and the Catchment Basin, they stated:

> *The migration distance between TMW-89 and pumping well TMW-75 is about 310 feet, so the computed ground water travel time between these wells is on the order of 3.3 years. Industrial experience in ground water remediation has shown that in the absence of operating chemical sources, the time required for ground water cleanup is typically 5 or more times the ground water travel time to pumping wells. So it would be*

reasonable to assume that the current ground water pump and treat system will need to be operated for a minimum of 17 years. This differs from original estimates included in previous CAP Reviews that were based on contamination being derived solely from the tailings impoundment leak. This new time estimate includes remediation of fluids leaked from the Catchment Basin as well. The volume of fluid leaked from the Catchment Basin is unknown. This computed time frame is valid only if chemical sources are no longer operating.

Simple calculations suggest that in areas where chemicals in ground water are purely residual (that is, not affected by a current chemical source such as naturally occurring minerals), the additional time for remediation is likely to be on the order of 10 to 20 years. In these areas, one would expect to see systematic decreases in chemical concentration, which should eventually fall below regulatory levels.

As discussed in previous sections, a common situation observed at the site is chemical concentrations that are above ground water protection standards or corrective action levels, and which are either increasing or do not show a consistent downward trend. This suggests that mechanisms exist which are continuing to introduce chemical mass into the ground water aquifer. Where this occurs, the additional time for remediation is likely to be significantly longer than 20 years.

Two mechanisms can be envisioned for introducing chemical mass into the active ground water flow system. One possibility is that chemically affected water exists in low permeability strata that contain essentially stagnant ground water. Chemical transport out of the low permeability strata may occur by diffusion that slowly bleeds chemical mass from the stagnant zones and into the more permeable zones with active ground water flow induced by pumping. Although this "back-diffusion" process was first recognized decades ago, it has recently become an active topic in the technical literature and is the subject of current research. An important characteristic of this transport mechanism is that it is a very slow process that cannot be sped up by increasing the flow rate of ground water pumping systems. This is because pumping increases flow in the permeable zones, but does not have a significant effect on the low permeability zones with stagnant ground water.

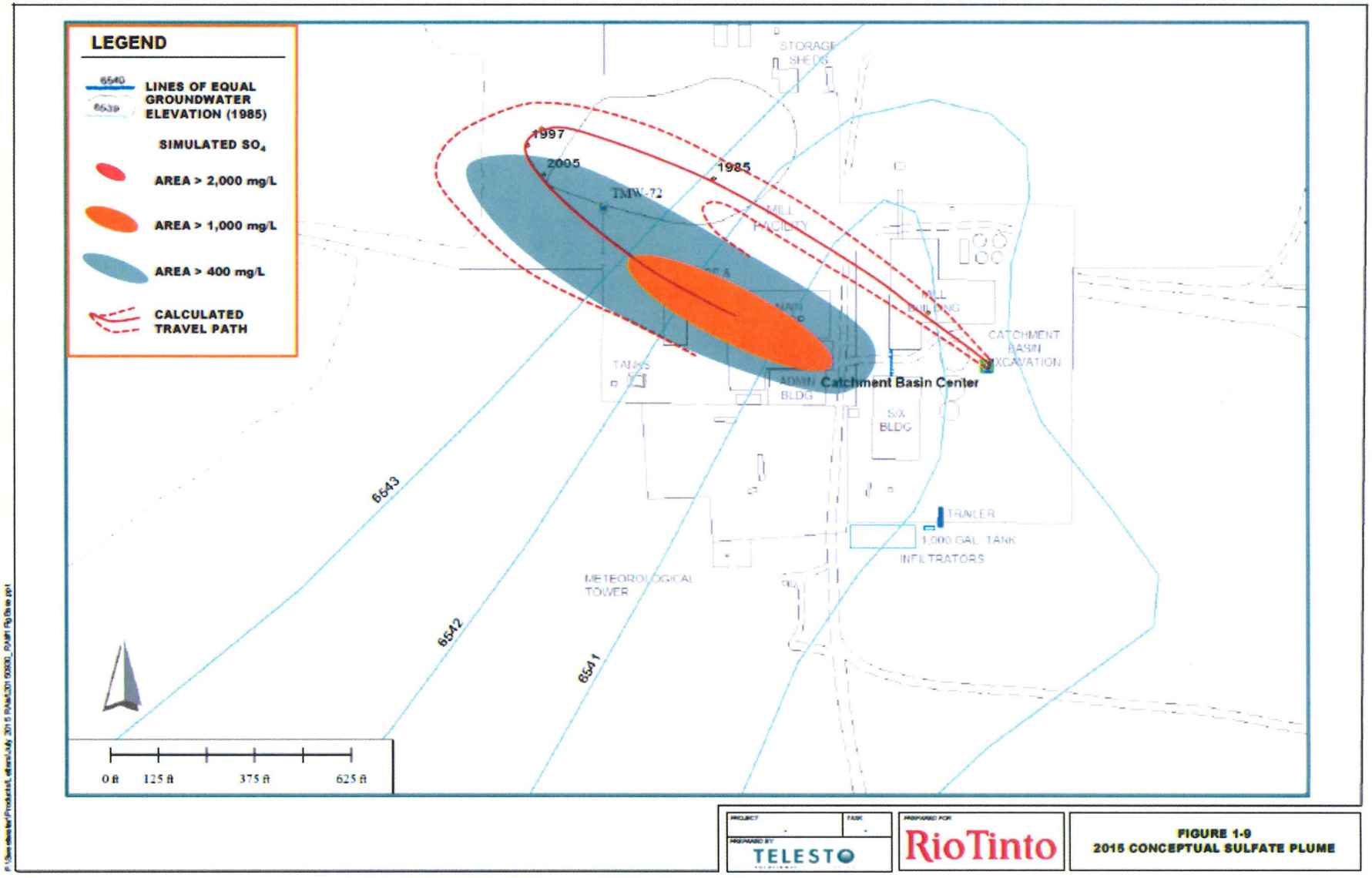
Another mechanism that may delay the introduction of chemical mass into ground water is the perched water body that historically existed north, east and west of the tailings impoundment. Having been fed by tailings leakage, the perched water contained high concentrations of regulated chemicals. After the tailings leak was mitigated, the perched water body would have drained slowly downward towards the water table. Even though saturated conditions in the historical perched water zone are largely gone, slow unsaturated flow to water table is probably ongoing and this can introduce chemicals to ground water at the water table. In addition, typical heterogeneity in the geologic system likely leads to non-uniform vertical drainage that causes more chemicals to enter the ground water at some locations compared to others. The result is chemical hotspots that do not correspond to expected lateral transport originating at or below the tailings. This mechanism likely operated in the vicinity of the Tailings Impoundment, within the area outlined by the historical maximum extent of the perched water body (see Figure 1).

This report was updated by a technical memorandum in 2014 which discussed this issue stating:

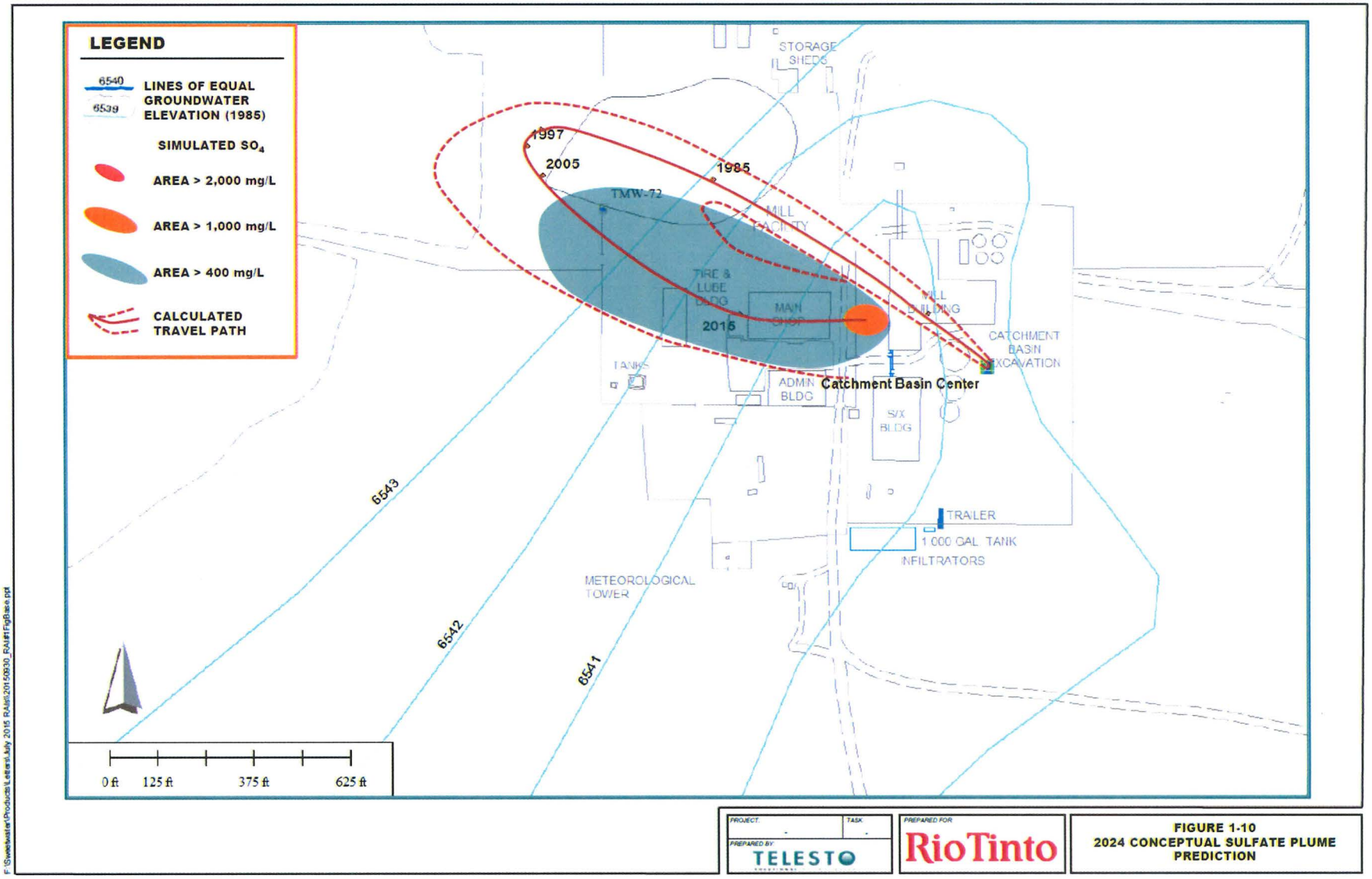
The extent of the source of uranium in ground water is not known at this time, as discussed in prior NRC-submitted documents (Corrective Action Program Reviews – Kennecott Uranium Company 2005 to 2013, inclusive). Because the amount of uranium that was deposited in the Catchment Basin is not known, the time to remediate ground water cannot be determined with any accuracy. The previous estimate of 10-20 years is a reasonable assumption. An estimate longer than 20 years would not affect surety costs, because of present worth costing. And at this time, continued operation of the pumping system is the best way to evaluate remediation progress.

(Please note that only the *text* from the Telesto Solutions, Inc. report has been included in this discussion. Any attachments of figures mentioned in the quoted text have not been included.)

In the responses to the July 13, 2015 Request for Additional Information (RAI) Telesto Solutions, Inc. shows how as of 2015 the pumpback system has begun to reverse the Western migration of the sulfate plume in the figure below:



The response to the July 13, 2015 Request for Additional Information (RAI) Telesto Solutions, Inc. predicts that at current pumping rates the plume should be further reversed and withdrawn by 2024 (within nine (9) years as depicted below:



The estimate of time required to obtain compliance could also be impacted by the results of planned plume characterization work planned to be conducted primarily west of the existing delineated plume.

On August 18, 2016 there was a public conference call regarding the license renewal, during which draft license conditions for the renewed license were discussed. Based on that call, a letter dated September 1, 2016 was submitted to the agency committing to *"...a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future."* A schedule for characterizing the plume's western margin was provided in a table attached to the letter. The first step in this table was to prepare and submit for agency review a characterization plan by September 16, 2016. This characterization plan was submitted on September 15, 2016 and Kennecott Uranium Company is awaiting the results of the agency's review. The September 1, 2016 letter committing to submit a characterization plan and the characterization plan submitted on September 15, 2016 are included in Appendix 5 – Characterization Plan.

This issue was also discussed in the inspection report dated October 3, 2016 for the September 20, 2016 Nuclear Regulatory Commission (NRC) inspection of the site. The report stated:

> *By letter dated August 25, 2016 (ML16203A102 and ML16203A124), the NRC submitted a draft renewal license to the licensee. The NRC staff noted that the current corrective action plan, specified in License Conditions 11.3 and 11.5, was not achieving compliance with the groundwater protection standard limits approved for the site. In particular, the NRC noted that groundwater contamination may extend beyond the western boundary, and this area may not be fully characterized by the licensee.*
>
> *The licensee responded to the NRC's observations by letter dated September 1, 2016 (ML16250A354). The licensee committed to develop a characterization plan to better delineate the western margins of the potential groundwater plume. The licensee subsequently submitted a proposed characterization plan to the NRC by letter dated September 15, 2016 (ML16263A073). This program area will be reviewed by the NRC as part of the license renewal process. The NRC staff will continue to review the licensee's implementation of the groundwater corrective action program during future inspections, to ensure that the licensee's corrective action program continues to be implemented with the objective of returning the groundwater concentrations to NRC-approved levels.*

Aquifer Water Quality

Water quality (as judged by a decreasing trend in TDS values) in aquifer monitor wells TMWs 18, 35, 36, 50, 51, 52, 56, 57, 59, 71, 75, 78, 94, 95, 99, 101, 102 and 109 is improving. An increasing trend in TDS values is observed in TMWs 7, 15, 37, 44, 45, 58, 62, 63, 104, 108, 110 and 115. TMW-4 has shown anomalous total dissolved solids (TDS) concentrations, manganese, iron and nickel values, as well as a depressed pH. Total Dissolved Solids in TMW-4 have declined from 692 mg/L (1/4/05) to 414 mg/L (7/18/16). In the same time period nickel has declined from 0.16 mg/L to 0.04 mg/L, manganese has declined from 0.61 mg/L to 0.23 mg/L and iron declined from 28.1 mg/L to 6.05 mg/L. During the same time period, pH has increased from 6.34 to 7.05. The elevated TDS in this well is clearly due to factors other than the tailings impoundment plume, since wells with lower TDS values and no anomalous nickel values (TMW-2 and 53) lie between TMW-4 and the plume. The anomalous total dissolved solids values observed in TMW-6 in 2005 have declined from 608 mg/L (1/10/05) to 521 mg/L (7/18/16). TMW-48 (with lower TDS concentrations) lies between TMW-6 and the plume. The elevated total dissolved solids concentrations in these two wells and anomalous iron, manganese and nickel values in TMW-4 may be due to mobilization of materials used to complete the wells. Kennecott Uranium Company will continue to provide a specific discussion regarding these wells until it is clear that the situation is fully understood or resolved.

TMW-4 still exhibits nickel values that exceed the Groundwater Protection Standard (GPS) as seen in the July 18, 2016 sample, which has a nickel concentration of 0.04 mg/L. The concentration has been dropping since 2005. TMWs 35, 99, 108 and 109 exhibited nickel values that exceed the GPS in 2016. These wells with the exception of TMW-35 are in the vicinity of the Catchment Basin. TMWs 4, 7, 16, 18, 36, 59, 63, 99, 108 and 109 exhibited manganese concentrations that exceeded the GPS in 2016. TMWs 4, 7, 18, 35, 36, 58, 59, 99, 108, 109 and 112 exhibited iron concentrations that exceeded the GPS in 2016. The groundwater plume is primarily a Total Dissolved Solids, Natural Uranium and Combined Radium-226/228 plume, with some localized exceedances of other metals, primarily nickel, iron and manganese.

Kennecott Uranium Company believes that an increase in TDS and sulphate (a major component of TDS) followed by a decrease in pH is the first sign of seepage in a monitor well. An increase in TDS appears first because the native soils are

alkaline and neutralize the low pH tails cell water. Most metals will not migrate through these soils until the buffering capacity of the soil has been exhausted. This is clearly shown in the Uranium Contour Map, which shows the limited areal extent of the Uranium plume when compared to the areal extent of groundwater with TDS in excess of 500 ppm shown in the TDS Contour Map.

In the responses to the July 13, 2015 Request for Additional Information (RAI) Telesto Solutions, Inc. discusses the plume chemistry stating:

> *In addition, in the geochemical environment of the Battle Spring Aquifer, sulfate travels as a conservative element (i.e., it travels unimpeded with the groundwater flow). Uranium and manganese in an oxidized environment (e.g., top of the water table) can also be considered to travel as conservative elements, but the persistent and spotty natural presence of these constituents tends to make each an uncertain indicator parameter. Radium and iron tend to be more restricted in their transport due to geochemical and adsorption processes. Therefore the term sulfate plume is used herein to describe the likely extents of mill-derived constituents released from the Catchment Basin.*

Sulphate is a major component of Total Dissolved Solids (TDS) related to the plume hence Total Dissolved Solids (TDS) remains a good indicator of the plume's location.

The Battle Spring Aquifer pumpback wells immediately around the Catchment Basin exhibit anomalous TDS, radium, uranium, iron and manganese values, with well TMW 99 currently exhibiting anomalous nickel values. Some of the wells in the vicinity of the Catchment Basin showed traces of organic contamination in 2016. They are as follows:

- TMW-96 – 1,1,1-Trichloroethane
- TMW-97 – 1,1-Dichloroethane
- TMW-99 – 1,1-Dichloroethane
- TMW-103 – Methylene chloride, chloroform
- TMW-108 – 1,1-Dichloroethane
- TMW-109 – 1,1-Dichloroethane

In 2012 some wells showed methylene chloride believed to be derived from a new sampling pump hose. A number of wells that are tested for hydrocarbons returned results for methylene chloride in 2012. At first these results were believed to some sort of laboratory error. It was discovered that:

- Wells that were not sampled with the sampling unit but rather via the downhole pump in them (pumpback wells) that included TMWs 96 and 97 showed no anomalous methylene chloride during 2012.
- Wells that were pumped with the sampling unit and did not previously show anomalous methylene chloride only began to show methylene chloride in samples collected on or after April 16, 2012 following installation of a new sampling hose. Following deployment of the new sampling unit on February 12, 2013 only a single well (TMW-103) yielded a result for methylene chloride in 2016 and this was only in the first two (2) quarters. The third and fourth quarter samples tested free of methylene chloride.
- The observed methylene chloride in the samples was clearly due to contamination from a new hose installed on the old sampling unit immediately prior to April 16, 2012. Once the new sampling unit with a new hose was deployed on February 12, 2013, the methylene chloride anomalies abated.

TMW-100 exhibited an anomalous Diesel Range Organic (DRO) result of 7 mg/L when sampled on August 8, 2016. The well never yielded a DRO result previously. The well was sampled on October 18 and November 9, 2016 and yielded DRO results of 6.6 and 1.9 mg/L respectively. It was resampled following thorough pre-sample pumping on December 19, 2016. The Diesel Range Organic (DRO) result was non-detect. It is believed that the anomalous result is due to some form of sample contamination and not the presence of Diesel Range Organics (DRO) in the aquifer around the well.

Appendix 1

Study, Charts, Tables in Support of Text

Kennecott Uranium Company
Sweetwater Uranium Project
Diesel Contaminated Soil Excavation
South Pit Wall Uranium Study

Depth Above Hole Bottom (feet)	Elevation (Feet above mean sea level)	Gamma Exposure (micro/R/hour)	Density (grams per cubic centimeter)	Moisture (Percent)	Chemical Uranium Concentration (milligrams per kilogram)	Chemical Uranium Concentration (Percent)	Chemical U3O8 Concentration (milligrams per kilogram)	Chemical U3O8 Concentration (Percent)	Radium-226 (picocuries per gram)	Gamma Equivalent Uranium Concentration (milligrams per kilogram)	Gamma Equivalent Uranium Concentration (Percent)	Notes	Sample Sequence Image
7.50	6556.2											Nail Set - Five (5) feet Above Water table	
7.00		156										Dry	
6.75			2.48	10.8	51.7	0.005	61.0	0.006	65	196	0.020	Dry	
6.50		222										Dry	
6.25			2.73	10.6	14	0.001	16.5	0.002	113	340	0.034	Dry	
6.00		351										Dry	
5.75			2.35	12.3	13.1	0.001	15.4	0.002	209	631	0.063	Dry	
5.50		422										Dry	
5.25			2.54	12.6	33.3	0.003	39.2	0.004	301	909	0.091	Dry	
5.00		464										Dry	
4.75			2.62	11.8	14.8	0.001	17.5	0.002	254	766	0.077	Dry	
4.50		524										Dry	
4.25			2.59	14.3	16.1	0.002	19.0	0.002	206	623	0.062	Dry	
4.00		548										Dry	
3.75			2.68	14.8	18.8	0.002	22.2	0.002	332	1000	0.100	Dry	
3.50		634										Dry	
3.25			2.44	16.3	26.3	0.003	31.0	0.003	224	676	0.068	Dry	
3.00		593										Dry	
2.75			2.69	18.5	39.7	0.004	46.9	0.005	379	1150	0.115	Dry	
2.50	6552.4	691										Top of Water Table - Nail Set	
2.25			2.66	17.1	33	0.003	38.9	0.004	265	799	0.080	Wet	
2.00		751										Wet	
1.75			2.76	18.8	18.3	0.002	21.6	0.002	306	923	0.092	Wet	
1.50		655										Wet	
1.25			2.29	20.3	23.7	0.002	28.0	0.003	309	933	0.093	Wet	
1.00		448										Wet	
0.75			2.43	21.6	26.6	0.003	31.3	0.003	44.1	133	0.013	Wet	
0.50		351										Wet	
0.25			2.53	26.7	22	0.002	25.9	0.003	58.7	177	0.018	Wet	
0.00		340										Wet	
Average:		477	2.56	16.2	25.1	0.003	29.6	0.003	219.0	661	0.066		
Median:		464	2.57	15.6	22.9	0.002	27.0	0.003	239.0	721	0.072		
Maximum:		751	2.76	26.7	51.7	0.005	61.0	0.006	379.0	1150	0.115		
Minimum:		156	2.29	10.6	13.1	0.001	15.4	0.002	44.1	133	0.013		
Standard Deviation:		173	0.14	4.7	11.1	0.001	13.1	0.001	109.4	331	0.033		



Coordinates:

	Northing	Easting	Elevation
Nail at 7.5 Feet	149142.0	323018.63	6556.2
Nail at Water Table	149144.1	323019.84	6552.41

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June 13, 2007

Mr. Steve Dobos
Energy Laboratories, Inc.
2393 Salt Creek Hwy.
Casper, WY 82602

RE: **Petrographic Evaluation of Sample #C07051289-001A from P.O. # 1845**

Dear Mr. Dobos,

Work requested in your purchase order of 5-29-07 for sample #C07051289-001A to perform carbon identification using reflected-light optical microscopy has been completed and the final report is attached.

If there are any questions or concerns, please call or e-mail me directly.

Thank you.

Sincerely,

Gareth Mitchell

Enclosure: Report

Final Report

To: Mr. Steve Dobos
From: Gareth D. Mitchell
Date: June 13, 2007
Subject: **Petrographic Evaluation of Sample #C07051289-001A from P.O. # 1845**

Request

A sample identified as **#C07051289-001A** was received 6-7-07 for petrographic evaluation. The sample had been shipped in a cooler containing bags of ice and was still cold when received. Consequently, the specimen was placed under refrigeration until sample preparation was initiated. As established from our email conversation of 5-24-07, optical microscopy was to be employed to determine the nature of the organic matter found in the sample and specifically to determine if "any naturally-occurring organic matter" (such as lignin, kerogen, bitumen, etc. that might have precipitated uranium at this location) was present.

Procedures

The sample was found to be composed of three fairly large angular particles (~10 g) and a coarse powder (~11 g). These components were separated and allowed to come to room temperature before they were inspected. The largest particle was soft, organic matter which had prominent bedding and considerable surface moisture, whereas the particulate matter ranged in particle size (0.5 – 3.0 mm), appeared to be a mixture of light and dark colored materials and was agglomerated with surface moisture. To prepare an optical mount suitable for reflected-light microscopy, the moisture content had to be reduced. The large particle was placed in a drying pan and a one-quarter split of the particulate sample retrieved by riffling was placed in second pan. Both samples were placed in a vacuum oven between 30-50°C for about 18 hrs with the result that the large particle had become swollen, desiccated and broken into smaller segments, while the particulate sample was composed of individual loose particles.

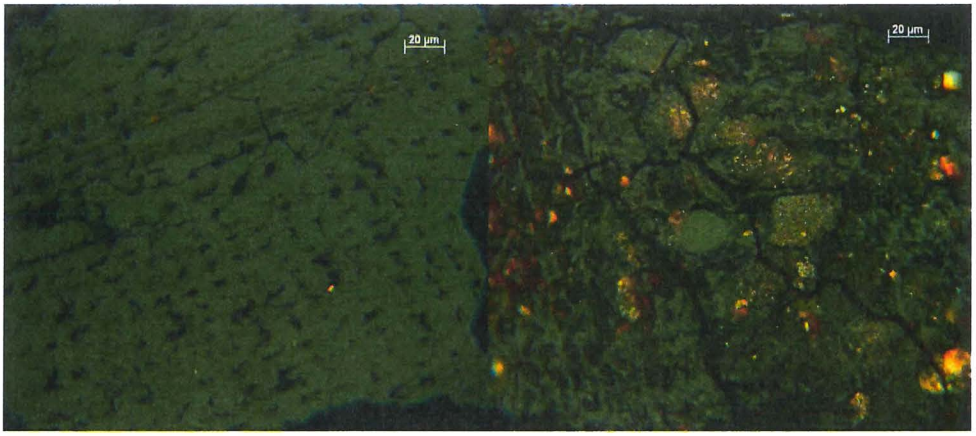
Remnants of the large particle were glued fast to the bottom of a 28 mm sample mold and embedded under vacuum with a cold-setting epoxy (EL01). The particulate sample (EL02) was vacuum impregnated in epoxy resin and placed in a centrifuge to establish a density/particle-size gradient. After hardening, the sample was cut longitudinally to expose the particle gradation and mounted 25 mm sample mold with additional epoxy. Both specimen surfaces were ground using 400 and 600 grit papers and polished using 0.3 and 0.05 micron alumina slurries on a high-nap cloth and silk, respectively. The sample was examined first in air using blue-light (436 nm) irradiation inspecting the 520 nm emission surface at 500X magnification and then using white light employing an oil immersion objective at 625X magnification using Zeiss research microscopes. In addition, a few reflectance readings were taken from the main organic

component identified in EL01. A Leitz MPV2 reflectance photometer system at 625 X magnification in oil immersion and polarized white-light was used to collect maximum reflectance values from 11 different areas and the mean value is provided below. Mean reflectance values are an acceptable procedure for determination of organic maturity.

Results

The organic matter observed in both specimens (EL01 and EL02) separated from sample #C07051289-001A is basically humified woody tissue of very low maturity (mean maximum reflectance in oil of 0.18 % ±0.01) that contains fluorescent and presumably resinous material within open cell lumens and along some open fractures. A few fluorescent bodies appearing to be amorphous organic matter were the only other organic matter observed in either sample.

As seen in the photomicrographs below, the regular alignment of cell wall and filled or open lumens taken from EL01 are compared with a fragment of humified and gelified woody tissue found in specimen EL02. The large particle separated as EL01 was composed entirely



EL01 **EL02**

of woody tissue that had gone through the biochemical stage of coalifiaction in which the cell walls were gelified and converted to humic matter. The tissue observed in the EL01 photograph exhibits little detail within the remnant cell walls and most of the lumens were filled with amorphous humic material or a fluorescing resin (dark areas), suggesting that the tissue has gone beyond the peat stage. However, the very low mean reflectance suggests that it may not have reached the rank of lignite in terms of coal maturity.

The photograph of the dominant organic matter in specimen EL02 shows many rounded bodies which in brown coal terminology are referred to as gelinite. As the name implies the

humic matter from which they were derived were once gelatinous and have since formed into these amorphous bodies surrounded by the remnants of cell walls. In addition to organic matter, specimen EL02 contained mostly angular fragments of minerals and rocks composed of quartz, other silicates and carbonate. Furthermore, some of the organic material had been infilled and was in the early stage of being replaced by silica.

These observations demonstrate that the organic matter contained in sample #C07051289-001A were derived from terrestrial plants with secondary woody tissues that have gone through at least the initial stage of coalification. Depending upon stratigraphy and sample location in the field, the type and condition of organic matter and mineralization observed suggests that it is naturally occurring.

Kennecott Uranium Company
Sweetwater Uranium Project
Diesel Contaminated Soil Excavation
South Pit Wall Uranium Study

Bulk Sample Identification	Chemical Uranium Concentration as U (milligrams per kilogram)	Chemical Uranium Concentration as U (Percent)	Chemical Uranium Concentration as U3O8 (miligrams per kilogram)	Chemical Uranium Concentration as U3O8 (Percent)	Radium-226 (picocuries per gram)	Gamma Equivalent Uranium Concentration as U (miligrams per kilogram)	Gamma Equivalent Uranium Concentration as U (Percent)	Gamma Equivalent Uranium Concentration as U3O8 (miligrams per kilogram)	Gamma Equivalent Uranium Concentration as U3O8 (Percent)	Equilibrium ratio Chemical uranium divided by gamma equivalent uranium
Above Water Table - Barrel #1	23.9	0.002	28.2	0.003	225	679	0.068	800	0.080	0.04
Above Water Table - Barrel #2	35.2	0.004	41.4	0.004	277	838	0.084	988	0.099	0.04
At Water Table	24.7	0.002	29.1	0.003	226	681	0.068	803	0.080	0.04
Below Water Table	20	0.002	23.6	0.002	77.4	234	0.023	276	0.028	0.09

bulk_sampling_bottom.xls
Oap:9/30/2007

KENNECOTT URANIUM COMPANY
Groundwater Elevations

Well No.	Northing	Easting	Revised 11/96 Measuring Point Elev.	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
TMW-1				105.54	105.89	105.60	105.71	105.65	105.69	105.60	105.86	105.72	105.89	105.91	105.10
TMW-1	150,107.66	324,536.42	6648.22	6,544.12	6,543.77	6,544.06	6,543.95	6,544.01	6,543.97	6,544.06	6,543.80	6,543.94	6,543.77	6,543.75	6,544.56
TMW-2				85.00	85.04	84.82	84.90	84.95	84.85	85.11	85.07	85.05	85.00	85.15	84.90
TMW-2	147,133.96	324,360.13	6627.09	6,542.09	6,542.05	6,542.27	6,542.19	6,542.14	6,542.24	6,541.98	6,542.02	6,542.04	6,542.09	6,541.94	6,542.19
TMW-3				84.53	84.44	84.48	84.50	84.54	84.49	84.52	84.71	84.55	84.58	84.73	84.51
TMW-3	145,984.03	324,361.03	6626.27	6,541.74	6,541.83	6,541.79	6,541.77	6,541.73	6,541.78	6,541.75	6,541.56	6,541.72	6,541.69	6,541.54	6,541.76
TMW-4				85.71	85.65	85.50	85.48	85.60	85.50	85.49	85.62	85.60	85.61	85.88	85.57
TMW-4	147,141.81	323,176.55	6626.89	6,541.18	6,541.24	6,541.39	6,541.41	6,541.29	6,541.39	6,541.40	6,541.27	6,541.29	6,541.28	6,541.01	6,541.32
TMW-5				110.71	110.70	110.75	110.80	110.85	110.79	110.69	110.77	110.81	110.89	110.93	110.71
TMW-5	149,053.50	328,102.80	6658.59	6,547.76	6,547.77	6,547.72	6,547.67	6,547.62	6,547.68	6,547.78	6,547.70	6,547.66	6,547.58	6,547.54	6,547.76
TMW-6				97.55	97.22	97.34	97.39	97.46	97.38	97.35	97.31	97.38	97.40	97.59	97.34
TMW-6	145,356.25	327,464.50	6641.66	6,544.11	6,544.44	6,544.32	6,544.27	6,544.20	6,544.28	6,544.31	6,544.35	6,544.28	6,544.26	6,544.07	6,544.32
TMW-7				115.09	115.15	115.07	115.35	115.40	115.31	115.37	115.86	115.65	115.48	115.19	115.35
TMW-7	149,339.65	325,014.01	6654.40	6,539.60	6,539.54	6,539.62	6,539.34	6,539.29	6,539.38	6,539.32	6,538.83	6,539.04	6,539.21	6,539.50	6,539.34
TMW-8				103.16	103.24	102.91	103.04	103.11	103.09	103.00	103.36	103.15	103.35	103.35	103.20
TMW-8	148,912.15	324,561.80	6646.47	6,543.31	6,543.23	6,543.56	6,543.43	6,543.36	6,543.38	6,543.47	6,543.11	6,543.32	6,543.12	6,543.12	6,543.27
TMW-10															
TMW-10	149,145.59	323,037.81	6556.92	6,545.13	----	6,545.18	6,545.26	6,545.71	6,545.73	6,545.55	6,545.37	6,545.32	6,545.27	6,545.05	6,545.01
TMW-15				101.16	100.91	101.00	100.97	101.18	101.30	101.33	101.32	101.37	101.70	101.85	101.42
TMW-15	147,910.39	325,006.29	6643.26	6,542.10	6,542.35	6,542.26	6,542.29	6,542.08	6,541.96	6,541.93	6,541.94	6,541.89	6,541.56	6,541.41	6,541.84
TMW-16				113.05	113.12	112.75	112.98	113.07	113.14	113.19	113.43	113.44	113.61	113.55	113.54
TMW-16	149,397.99	325,023.08	6655.62	6,542.57	6,542.50	6,542.87	6,542.64	6,542.55	6,542.48	6,542.43	6,542.19	6,542.18	6,542.01	6,542.07	6,542.08
TMW-17				123.99	123.35	123.59	122.19	122.14	120.47	121.41	123.14	123.21	123.61	123.88	122.70
TMW-17	149,602.14	325,994.00	6660.87	6,536.88	6,537.52	6,537.28	6,538.68	6,538.73	6,540.40	6,539.46	6,537.73	6,537.66	6,537.26	6,536.99	6,538.17
TMW-18				Unable to access		126.99	127.10	127.40	122.45	127.60	127.86	127.74	127.61	127.44	128.23
TMW-18	148,922.42	325,018.57	6655.98			6,528.99	6,528.88	6,528.58	6,533.53	6,528.38	6,528.12	6,528.24	6,528.37	6,528.54	6,527.75
TMW-19												DRY			DRY
TMW-19	149,601.80	326,095.60	6661.54									0.00			0.00
TMW-20															59.51
TMW-20	149,700.99	325,592.79	6661.29												6,601.78
TMW-21												DRY			DRY
TMW-21	149,700.09	325,793.65	6659.40									0.00			0.00
TMW-22												49.14			49.25
TMW-22	149,701.66	325,893.48	6659.68									6,610.54			6,610.43
TMW-23															DRY
TMW-23	149,703.49	325,993.59	6659.28												0.00
TMW-24				115.21	114.94	115.07	115.02	115.15	115.04	114.99	115.05	115.19	115.31	115.38	115.09
TMW-24	150,307.90	325,992.24	6661.21	6,546.00	6,546.27	6,546.14	6,546.19	6,546.06	6,546.17	6,546.22	6,546.16	6,546.02	6,545.90	6,545.83	6,546.12
TMW-29				110.80	110.59	110.76	110.62	110.84	110.68	110.61	110.63	110.75	111.00	111.20	110.63
TMW-29	150,108.27	326,786.49	6656.64	6,546.29	6,546.50	6,546.33	6,546.47	6,546.25	6,546.41	6,546.48	6,546.46	6,546.34	6,546.09	6,545.89	6,546.46
TMW-30												DRY			DRY
TMW-30	149,708.73	326,995.29	6659.22									0.00			0.00
TMW-31				114.99	114.71	114.97	114.82	115.05	114.89	114.81	114.81	114.94	115.16	115.39	114.85
TMW-31	149,901.61	327,194.15	6661.09	6,546.10	6,546.38	6,546.12	6,546.27	6,546.04	6,546.20	6,546.28	6,546.28	6,546.15	6,545.93	6,545.70	6,546.24
TMW-34												DRY			DRY
TMW-34	149,487.48	326,987.78	6657.92									0.00			0.00
TMW-35				111.87	111.80	112.50	112.00	112.04	111.90	111.84	111.86	112.00	112.25	112.48	111.90
TMW-35	149,509.35	327,198.92	6657.75	6,545.88	6,545.95	6,545.25	6,545.75	6,545.71	6,545.85	6,545.91	6,545.89	6,545.75	6,545.50	6,545.27	6,545.85
TMW-36				112.30	112.35	112.49	112.65	112.65	112.50	112.50	112.38	112.46	112.77	113.00	112.55
TMW-36	149,108.62	327,007.02	6657.75	6,545.45	6,545.40	6,545.26	6,545.10	6,545.10	6,545.25	6,545.25	6,545.37	6,545.29	6,544.98	6,544.75	6,545.20
TMW-37				105.52	105.35	105.65	105.71	105.67	105.55	105.51	105.49	105.65	105.85	106.08	105.58
TMW-37	148,455.68	326,999.77	6650.73	6,545.21	6,545.38	6,545.08	6,545.02	6,545.06	6,545.18	6,545.22	6,545.24	6,545.08	6,544.88	6,544.65	6,545.15
TMW-38												DRY			DRY
TMW-38	149,353.55	326,798.27	6658.85									0.00			0.00
TMW-44				94.48	94.47	94.55	94.42	94.60	94.55	94.59	94.59	94.61	94.93	95.16	94.62
TMW-44	147,612.17	325,588.96	6637.52	6,543.04	6,543.05	6,542.97	6,543.10	6,542.92	6,542.97	6,542.93	6,542.93	6,542.91	6,542.59	6,542.36	6,542.90
TMW-45				97.22	97.12	97.35	97.18	97.35	97.30	97.30	97.31	97.30	97.62	97.88	97.30
TMW-45	147,619.66	326,196.14	6641.00	6,543.78	6,543.88	6,543.65	6,543.82	6,543.65	6,543.70	6,543.70	6,543.69	6,543.70	6,543.38	6,543.12	6,543.70
TMW-47				95.45	95.34	95.51	95.48	95.65	95.58	95.47	95.55	95.60	95.70	95.80	95.45
TMW-47	147,310.10	326,491.24	6640.35	6,544.90	6,545.01	6,544.84	6,544.87	6,544.70	6,544.77	6,544.88	6,544.80	6,544.75	6,544.65	6,544.55	6,544.90

KENNECOTT URANIUM COMPANY
Groundwater Elevations

Well No.	Northing	Easting	Revised 11/96 Measuring Point Elev.	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
TMW-48				95.45	95.29	95.49	95.37	95.58	95.50	95.48	95.51	95.55	95.80	95.90	95.50
TMW-48	147,312.58	326,482.99	6639.72	6,544.27	6,544.43	6,544.23	6,544.35	6,544.14	6,544.22	6,544.24	6,544.21	6,544.17	6,543.92	6,543.82	6,544.22
TMW-49				98.08	97.78	97.96	97.87	98.19	98.10	98.16	98.16	98.26	98.55	98.69	98.47
TMW-49	147,708.93	324,836.10	6640.19	6,542.11	6,542.41	6,542.23	6,542.32	6,542.00	6,542.09	6,542.03	6,542.03	6,541.93	6,541.64	6,541.50	6,541.72
TMW-50				106.01	105.67	105.76	105.85	106.13	106.20	108.26	106.30	106.35	106.73	106.90	106.64
TMW-50	148,198.81	324,697.71	6647.80	6,541.79	6,542.13	6,542.04	6,541.95	6,541.67	6,541.60	6,539.54	6,541.50	6,541.45	6,541.07	6,540.90	6,541.16
TMW-51				108.11	107.81	108.00	107.98	108.25	108.32	108.42	108.40	108.41	108.80	108.99	108.70
TMW-51	147,995.26	324,449.18	6650.00	6,541.89	6,542.19	6,542.00	6,542.02	6,541.75	6,541.68	6,541.58	6,541.60	6,541.59	6,541.20	6,541.01	6,541.30
TMW-52				102.86	103.04	102.79	102.92	103.26	103.31	103.40	103.37	103.40	103.74	103.94	103.52
TMW-52	148,316.56	324,221.64	6644.70	6,541.84	6,541.66	6,541.91	6,541.78	6,541.44	6,541.39	6,541.30	6,541.33	6,541.30	6,540.96	6,540.76	6,541.18
TMW-53				99.72	99.41	99.60	99.55	99.81	99.89	99.90	99.93	99.97	100.25	100.44	100.15
TMW-53	147,849.28	323,913.72	6641.47	6,541.75	6,542.06	6,541.87	6,541.92	6,541.66	6,541.58	6,541.57	6,541.54	6,541.50	6,541.22	6,541.03	6,541.32
TMW-54				57.61	57.89	57.69	57.70	57.98	57.71	57.89	58.04	58.02	58.25	58.20	58.26
TMW-54	149,122.85	324,827.05	6,652.06	6,594.45	6,594.17	6,594.37	6,594.36	6,594.08	6,594.35	6,594.17	6,594.02	6,594.04	6,593.81	6,593.86	6,593.80
TMW-55				56.41	56.48	56.31	56.40	56.36	56.40	56.58	56.74	56.81	57.00	57.13	56.98
TMW-55	149,098.35	324,587.76	6,649.48	6,593.07	6,593.00	6,593.17	6,593.08	6,593.12	6,593.08	6,592.90	6,592.74	6,592.67	6,592.48	6,592.35	6,592.50
TMW-56				105.51	105.68	105.30	105.65	106.14	106.21	106.34	106.49	106.51	106.71	106.61	106.38
TMW-56	149,105.02	324,418.67	6,647.72	6,542.21	6,542.04	6,542.42	6,542.07	6,541.58	6,541.51	6,541.38	6,541.23	6,541.21	6,541.01	6,541.11	6,541.34
TMW-57				106.20	106.15	105.70	114.24	114.12	113.15	113.34	112.91	111.90	111.81	111.40	106.73
TMW-57	149,296.82	324,590.47	6,649.86	6,543.66	6,543.71	6,544.16	6,535.62	6,535.74	6,536.71	6,536.52	6,536.95	6,537.96	6,538.05	6,538.46	6,543.13
TMW-58				105.32	105.32	104.65	109.62	110.25	110.28	110.25	110.57	110.40	110.82	110.71	106.03
TMW-58	148,915.74	324,570.92	6,646.96	6,541.64	6,541.64	6,542.31	6,537.34	6,536.71	6,536.68	6,536.71	6,536.39	6,536.56	6,536.14	6,536.25	6,540.93
TMW-59				Obstructed		107.61	113.00	113.90	113.88	112.00	114.12	114.48	115.45	115.60	114.81
TMW-59	148,403.85	325,013.86	6,648.15			6,540.54	6,535.15	6,534.25	6,534.27	6,536.15	6,534.03	6,533.67	6,532.70	6,532.55	6,533.34
TMW-61				107.70	107.27	107.45	107.60	107.90	108.05	108.07	108.08	108.13	108.46	108.68	108.32
TMW-61	148,422.32	324,592.68	6,649.36	6,541.66	6,542.09	6,541.91	6,541.76	6,541.46	6,541.31	6,541.29	6,541.28	6,541.23	6,540.90	6,540.68	6,541.04
TMW-62				104.90	105.10	104.62	104.82	105.55	105.57	105.80	105.82	105.80	105.80	106.20	105.65
TMW-62	148,789.00	324,277.11	6,646.13	6,541.38	6,541.18	6,541.66	6,541.46	6,540.73	6,540.71	6,540.48	6,540.46	6,540.48	6,540.48	6,540.08	6,540.63
TMW-63				118.80	118.06	118.60	118.90	119.26	119.30	119.32	119.60	119.56	119.69	119.55	119.74
TMW-63	148,924.39	325,009.90	6,654.77	6,535.97	6,536.71	6,536.17	6,535.87	6,535.51	6,535.47	6,535.45	6,535.17	6,535.21	6,535.08	6,535.22	6,535.03
TMW-64				108.72	108.91	108.51	108.69	108.91	108.78	108.80	108.95	108.95	109.10	109.24	109.00
TMW-64	149,797.71	324,991.71	6,652.25	6,543.50	6,543.31	6,543.71	6,543.53	6,543.31	6,543.44	6,543.42	6,543.27	6,543.27	6,543.12	6,542.98	6,543.22
TMW-65												DRY			DRY
TMW-65	149,805.22	325,191.36	6,654.88									0.00			0.00
TMW-66															DRY
TMW-66	149,799.18	325,392.21	6,658.05												0.00
TMW-67				71.79	71.85	71.82	71.89	71.90	71.97	71.92	72.00	72.00	72.00	72.00	71.80
TMW-67	150,003.26	325,192.80	6,656.63	6,584.84	6,584.78	6,584.81	6,584.74	6,584.73	6,584.66	6,584.71	6,584.63	6,584.63	6,584.63	6,584.63	6,584.83
TMW-68															93.00
TMW-68	150,203.84	325,189.90	6,655.04												6,562.04
TMW-69				111.78	112.00	111.56	111.84	111.99	112.00	112.08	112.25	112.22	112.47	112.41	112.30
TMW-69	149,649.27	324,659.43	6,654.47	6,542.69	6,542.47	6,542.91	6,542.63	6,542.48	6,542.47	6,542.39	6,542.22	6,542.25	6,542.00	6,542.06	6,542.17
TMW-70				108.56	108.74	108.32	108.70	109.05	109.04	109.15	109.30	109.31	109.52	109.50	109.26
TMW-70	149,309.09	324,369.82	6,651.06	6,542.50	6,542.32	6,542.74	6,542.36	6,542.01	6,542.02	6,541.91	6,541.76	6,541.75	6,541.54	6,541.56	6,541.80
TMW-71				111.19	111.46	111.00	111.25	111.29	111.44	111.38	111.51	111.50	111.76	111.70	111.60
TMW-71	149,835.18	324,420.67	6,654.52	6,543.33	6,543.06	6,543.52	6,543.27	6,543.23	6,543.08	6,543.14	6,543.01	6,543.02	6,542.76	6,542.82	6,542.92
TMW-72				98.68	98.56	98.50	98.71	99.02	98.82	98.80	98.61	98.94	98.90	99.44	98.85
TMW-72	149,020.47	322,997.15	6,641.41	6,542.73	6,542.85	6,542.91	6,542.70	6,542.39	6,542.59	6,542.61	6,542.80	6,542.47	6,542.51	6,541.97	6,542.56
TMW-73				100.66	100.50	100.47	100.71	100.85	100.50	100.58	100.61	100.64	100.69	101.27	100.70
TMW-73	149,055.70	322,896.82	6,644.85	6,544.19	6,544.35	6,544.38	6,544.14	6,544.00	6,544.35	6,544.27	6,544.24	6,544.21	6,544.16	6,543.58	6,544.15
TMW-74												64.10			64.39
TMW-74	149,799.32	325,791.92	6,660.18									6,596.08			6,595.79
TMW-75				118.17	117.49	117.74	117.48	117.65	117.31	117.35	117.38	117.51	117.71	117.88	117.30
TMW-75	149,801.01	325,992.80	6,660.18	6,542.01	6,542.69	6,542.44	6,542.70	6,542.53	6,542.87	6,542.83	6,542.80	6,542.67	6,542.47	6,542.30	6,542.88
TMW-76															DRY
TMW-76	149,703.72	326,194.12	6,658.48												0.00
TMW-77															DRY
TMW-77	149,705.25	326,394.40	6,658.28												0.00
TMW-78				114.53	114.28	114.51	114.50	114.55	114.42	114.42	114.45	114.60	114.84	115.00	114.69
TMW-78	149,900.26	325,592.38	6,658.50	6,543.97	6,544.22	6,543.99	6,544.00	6,543.95	6,544.08	6,544.08	6,544.05	6,543.90	6,543.66	6,543.50	6,543.81

KENNECOTT URANIUM COMPANY
Groundwater Elevations

Well No.	Northing	Easting	Revised 11/96 Measuring Point Elev.	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
TMW-79															DRY
TMW-79	149,905.36	326,388.81	6,661.52												0.00
TMW-80												DRY			DRY
TMW-80	150,100.82	325,989.30	6,661.52									0.00			0.00
TMW-81															DRY
TMW-81	150,107.59	326,384.61	6,659.96												0.00
TMW-82				115.60	115.06	115.34	115.24	115.44	115.29	115.19	115.19	115.35	115.55	115.76	115.19
TMW-82	150,302.15	325,987.47	6,660.64	6,545.04	6,545.58	6,545.30	6,545.40	6,545.20	6,545.35	6,545.45	6,545.45	6,545.29	6,545.09	6,544.88	6,545.45
TMW-83				63.60	83.95	63.92	63.95	63.98	64.00	64.00	64.01	64.05	64.10	64.11	64.10
TMW-83	150,307.20	326,379.40	6,658.87	6,595.27	6,574.92	6,594.95	6,594.92	6,594.89	6,594.87	6,594.87	6,594.86	6,594.82	6,594.77	6,594.76	6,594.77
TMW-84				115.82	115.60	115.92	115.85	115.99	115.77	115.75	115.77	115.91	116.06	116.31	115.81
TMW-84	150,506.27	326,376.61	6,661.86	6,546.04	6,546.26	6,545.94	6,546.01	6,545.87	6,546.09	6,546.11	6,546.09	6,545.95	6,545.80	6,545.55	6,546.05
TMW-85												DRY			DRY
TMW-85			6,659.12									0.00			0.00
TMW-86												81.80			81.84
TMW-86	150,502.85	325,986.77	6,660.08									6,578.28			6,578.24
TMW-87				89.99	89.90	90.00	90.03	90.00	90.00	89.96	90.00	89.99	90.00	90.04	89.99
TMW-87	150,200.92	325,789.12	6,660.60	6,570.61	6,570.70	6,570.60	6,570.57	6,570.60	6,570.60	6,570.64	6,570.60	6,570.61	6,570.60	6,570.56	6,570.61
TMW-88												DRY			DRY
TMW-88	149,998.44	325,792.37	6,660.49									0.00			0.00
TMW-89				114.97	114.42	114.81	114.59	114.79	114.65	114.48	114.57	114.67	114.88	115.07	114.60
TMW-89	150,809.67	326,137.13	6,660.75	6,545.78	6,546.33	6,545.94	6,546.16	6,545.96	6,546.10	6,546.27	6,546.18	6,546.08	6,545.87	6,545.68	6,546.15
TMW-90															
TMW-90	148,611.42	323,958.91	6,639.82												
TMW-91				103.04	103.00	102.51	103.36	103.74	103.91	103.72	103.69	103.80	104.00	104.01	103.50
TMW-91	148,518.42	323,956.85	6,639.61	6,541.35	6,541.39	6,541.88	6,541.03	6,540.65	6,540.48	6,540.67	6,540.70	6,540.59	6,540.39	6,540.38	6,540.89
TMW-92				103.27	103.29	107.78	103.86	104.29	104.04	104.19	104.06	104.16	104.35	104.33	103.67
TMW-92	148,504.47	323,951.33	6,640.15	6,541.44	6,541.42	6,536.93	6,540.85	6,540.42	6,540.67	6,540.52	6,540.65	6,540.55	6,540.36	6,540.38	6,541.04
TMW-93				99.63	99.69	99.22	99.88	100.15	100.07	100.16	100.14	100.26	100.45	100.46	100.11
TMW-93	148,399.92	324,099.96	6,641.02	6,541.39	6,541.33	6,541.80	6,541.14	6,540.87	6,540.95	6,540.86	6,540.88	6,540.76	6,540.57	6,540.56	6,540.91
TMW-94				99.78	99.60	99.18	99.99	100.24	100.13	100.22	100.20	100.23	100.44	100.50	100.00
TMW-94	148,400.13	324,000.02	6,640.53	6,540.75	6,540.93	6,541.35	6,540.54	6,540.29	6,540.40	6,540.31	6,540.33	6,540.30	6,540.09	6,540.03	6,540.53
TMW-95				99.88	99.85	99.36	100.28	100.60	100.44	100.55	100.51	100.58	100.78	100.74	100.23
TMW-95	148,399.94	323,900.08	6,640.57	6,540.69	6,540.72	6,541.21	6,540.29	6,539.97	6,540.13	6,540.02	6,540.06	6,539.99	6,539.79	6,539.83	6,540.34
TMW-96				99.70	98.61	98.30	101.80	101.82	101.19	101.12	100.80	100.70	100.85	101.00	99.08
TMW-96	148,500.01	323,820.25	6,640.36	6,540.41	6,541.50	6,541.81	6,538.31	6,538.29	6,538.92	6,538.99	6,539.31	6,539.41	6,539.26	6,539.11	6,541.03
TMW-97				99.21	Obstruction	99.60	103.90	104.15	104.11	104.09	103.72	103.91	103.99	104.11	100.35
TMW-97	148,599.86	323,805.93	6,641.54	6,542.10		6,541.71	6,537.41	6,537.16	6,537.20	6,537.22	6,537.59	6,537.40	6,537.32	6,537.20	6,540.96
TMW-98				99.48	99.39	99.05	99.74	100.08	99.95	100.06	100.11	100.18	100.31	100.46	99.90
TMW-98	148,699.84	323,822.69	6,643.60	6,541.43	6,541.52	6,541.86	6,541.17	6,540.83	6,540.96	6,540.85	6,540.80	6,540.73	6,540.60	6,540.45	6,541.01
TMW-99				99.07	99.10	98.61	99.42	99.75	99.61	99.90	99.82	99.88	100.07	100.20	99.53
TMW-99	148,707.32	323,908.85	6,643.84	6,541.42	6,541.39	6,541.88	6,541.07	6,540.74	6,540.88	6,540.59	6,540.67	6,540.61	6,540.42	6,540.29	6,540.96
TMW-100				102.61	99.29	98.89	99.54	99.84	99.75	99.99	100.00	99.95	100.17	100.30	99.80
TMW-100	148,799.77	324,016.92	6,639.85	6,540.59	6,543.91	6,544.31	6,543.66	6,543.36	6,543.45	6,543.21	6,543.20	6,543.25	6,543.03	6,542.90	6,543.40
TMW-101				103.58	102.55	102.10	102.77	103.07	103.00	103.26	103.15	103.20	103.41	103.40	103.08
TMW-101	148,800.10	324,100.06	6,641.64	6,540.28	6,541.31	6,541.76	6,541.09	6,540.79	6,540.86	6,540.60	6,540.71	6,540.66	6,540.45	6,540.46	6,540.78
TMW-102				103.55	102.91	103.22	104.49	104.10	103.81	103.80	105.51	104.32	105.42	104.75	104.00
TMW-102	148,600.02	323,968.63	6,639.74	6,540.68	6,541.32	6,541.01	6,539.74	6,540.13	6,540.42	6,540.43	6,538.72	6,539.91	6,538.81	6,539.48	6,540.23
TMW-103				101.81	101.03	100.61	100.65	100.80	100.76	100.86	100.92	100.91	100.90	101.26	101.20
TMW-103	149,144.44	323,576.50	6,642.87	6,541.06	6,541.84	6,542.26	6,542.22	6,542.07	6,542.11	6,542.01	6,541.95	6,541.96	6,541.97	6,541.61	6,541.67
TMW-104				101.81	102.30	101.85	102.57	102.87	102.78	103.00	102.89	102.96	103.19	103.39	102.80
TMW-104	148,508.55	324,122.60	6,639.71	6,542.13	6,541.64	6,542.09	6,541.37	6,541.07	6,541.16	6,540.94	6,541.05	6,540.98	6,540.75	6,540.55	6,541.14
TMW-105															
TMW-105	148,581.02	323,943.82	6,640.18												
TMW-106				102.22	100.40	100.00	100.10	100.25	100.24	100.27	100.30	100.32	100.39	100.61	100.63
TMW-106	149,120.61	323,577.45	6,642.25	6,540.03	6,541.85	6,542.25	6,542.15	6,542.00	6,542.01	6,541.98	6,541.95	6,541.93	6,541.86	6,541.64	6,541.62
TMW-107				97.51	97.61	97.40	97.40	97.90	97.81	97.80	97.85	97.88	97.81	98.29	98.00
TMW-107	148,109.87	323,621.68	6,638.80	6,541.29	6,541.19	6,541.40	6,541.40	6,540.90	6,540.99	6,541.00	6,540.95	6,540.92	6,540.99	6,540.51	6,540.80
TMW-108				100.12	99.93	99.65	100.00	100.10	100.02	100.25	100.22	100.39	100.60	100.70	100.46
TMW-108	148,581.99	323,650.69	6,641.43	6,541.31	6,541.50	6,541.78	6,541.43	6,541.33	6,541.41	6,541.18	6,541.21	6,541.04	6,540.83	6,540.73	6,540.97

KENNECOTT URANIUM COMPANY
Groundwater Elevations

			Revised 11/96											
Well			Measuring											
No.	Northing	Easting	Point Elev.	*Jan-16*	*Feb-16*	*Mar-16*	*Apr-16*	*May-16*	*Jun-16*	*Jul-16*	*Aug-16*	*Sep-16*	*Oct-16*	*Nov-16*	*Dec-16*
TMW-109				99.84	99.65	99.42	99.59	99.84	99.84	100.00	100.02	100.15	100.29	100.48	100.20
TMW-109	148,563.38	323,651.83	6,641.21	6,541.37	6,541.56	6,541.79	6,541.62	6,541.37	6,541.37	6,541.21	6,541.19	6,541.06	6,540.92	6,540.73	6,541.01
TMW-110				97.38	97.55	97.31	97.30	97.68	97.70	97.74	97.75	97.81	97.72	98.16	97.82
TMW-110	148,088.65	323,625.57	6,638.71	6,541.33	6,541.16	6,541.40	6,541.41	6,541.03	6,541.01	6,540.97	6,540.96	6,540.90	6,540.99	6,540.55	6,540.89
TMW-111				102.29	102.58	102.09	102.72	103.00	102.94	103.21	103.11	103.20	103.38	103.37	103.06
TMW-111	148,800.06	324,188.03	6,643.95	6,542.10	6,541.81	6,542.30	6,541.67	6,541.39	6,541.45	6,541.18	6,541.28	6,541.19	6,541.01	6,541.02	6,541.33
TMW-112				103.48	103.75	103.25	103.90	104.19	104.15	104.35	104.27	104.37	104.57	104.59	104.25
TMW-112	148,700.09	324,188.95	6,643.24	6,542.10	6,541.83	6,542.33	6,541.68	6,541.39	6,541.43	6,541.23	6,541.31	6,541.21	6,541.01	6,540.99	6,541.33
TMW-113				102.44	102.72	102.25	102.89	103.20	103.15	103.29	103.26	103.38	103.61	103.57	103.27
TMW-113	148,600.06	324,192.45	6,643.51	6,541.93	6,541.65	6,542.12	6,541.48	6,541.17	6,541.22	6,541.08	6,541.11	6,540.99	6,540.76	6,540.80	6,541.10
TMW-115				102.16	102.40	101.92	102.58	102.88	102.82	102.90	102.90	103.00	103.22	103.22	102.91
TMW-115	148,499.96	324,199.79	6,642.92	6,540.41	6,540.17	6,540.65	6,539.99	6,539.69	6,539.75	6,539.67	6,539.67	6,539.57	6,539.35	6,539.35	6,539.66
M-1				Snow	147.51	147.54	147.69	147.70	147.70	147.50	147.61	147.62	147.63	147.83	147.58
M-1	159,190.56	323,580.63	6,711.30		6,563.79	6,563.76	6,563.61	6,563.60	6,563.60	6,563.80	6,563.69	6,563.68	6,563.67	6,563.47	6,563.72
M-2				66.27	66.10	66.17	66.18	66.18	66.13	66.12	66.20	66.18	66.19	66.32	66.15
M-2	145,731.13	317,919.02	6,607.29	6,541.02	6,541.19	6,541.12	6,541.11	6,541.11	6,541.16	6,541.17	6,541.09	6,541.11	6,541.10	6,540.97	6,541.14
PWW-1				100.50	100.30	100.20	100.30	100.40	100.30	100.40	100.30	100.30	100.60	100.40	100.30
PWW-1	149,023.15	323,779.27	6,643.08	6,542.58	6,542.78	6,542.88	6,542.78	6,542.68	6,542.78	6,542.68	6,542.78	6,542.78	6,542.48	6,542.68	6,542.78
PWW-2				Obstructed											
PWW-2	148,877.54	324,180.69	6,646.85		6,646.85	6,646.85	6,646.85	6,646.85	6,646.85	6,646.85	6,646.85	6,646.85	6,646.85	6,646.85	6,646.85
				0.00 = DRY for water elevation											
					= DRY									Red = obstruction	
					= Elevations taken via submerged pressure transducer / not measured with tape.										

KENNECOTT URANIUM COMPANY

Sweetwater Pit Water Levels

Recovery of water level after suspension of dewatering activities in May, 1983

DATE	ELAPSED TIME DAYS	WATER ELEVATION	WATER LEVEL CHANGE
04/25/83	0	6425.00	0.00
06/27/83	63	6440.00	15.00
07/04/83	70	6441.70	16.70
08/03/83	100	6450.00	25.00
01/16/84	266	6475.00	50.00
02/27/84	308	6481.00	56.00
05/07/84	378	6486.10	61.10
06/26/84	428	6488.60	63.60
08/28/84	491	6491.50	66.50
10/01/84	525	6492.80	67.80
11/19/84	574	6494.60	69.60
01/03/85	619	6497.30	72.30
02/26/85	673	6500.00	75.00
03/06/85	681	6500.40	75.40
05/14/85	750	6502.90	77.90
08/15/85	843	6505.39	80.39
04/14/86	1085	6513.19	88.19
06/23/86	1155	6514.87	89.87
09/26/86	1250	6515.93	90.93
04/14/87	1450	6520.42	95.42
06/23/87	1520	6521.80	96.80
09/16/87	1605	6522.33	97.33
11/01/87	1651	6523.41	98.41
11/19/87	1669	6523.41	98.41
03/08/88	1779	6525.00	100.00
06/06/88	1869	6526.31	101.31
07/25/88	1918	6526.54	101.54
08/30/88	1954	6526.55	101.55
10/10/88	1995	6526.88	101.88
10/31/88	2016	6526.88	101.88
04/03/89	2170	6529.29	104.29
07/24/89	2282	6529.77	104.77
08/28/89	2317	6529.51	104.51
09/25/89	2345	6529.63	104.63
04/23/90	2555	6531.67	106.67
06/11/90	2604	6531.48	106.48
07/02/90	2625	6531.99	106.99
10/08/90	2723	6532.02	107.02
11/11/90	2757	6531.98	106.98
04/17/91	2914	6531.44	106.44
07/02/91	2990	6533.64	108.64
08/14/91	3033	6534.17	109.17
09/05/91	3055	6533.49	108.49
10/07/91	3087	6533.36	108.36
12/10/91	3151	6533.84	108.84
04/29/92	3292	6535.24	110.24
05/26/92	3319	6534.96	109.96
09/14/92	3430	6533.70	108.70
11/05/92	3482	6535.34	110.34
05/04/93	3662	6536.93	111.93
06/30/93	3719	6536.51	111.51
08/18/93	3768	6536.55	111.55
10/11/93	3822	6536.38	111.38
06/06/94	4060	6537.20	112.20
07/05/94	4089	6537.69	112.69
09/21/94	4167	6536.90	111.90
10/10/94	4186	6536.80	111.80
04/05/95	4363	6538.23	113.23
05/01/95	4389	6538.37	113.37
06/10/95	4429	6538.86	113.86
07/06/95	4455	6538.78	113.78

KENNECOTT URANIUM COMPANY
Sweetwater Pit Water Levels
Recovery of water level after suspension of dewatering activities in May, 1983

DATE	ELAPSED TIME DAYS	WATER ELEVATION	WATER LEVEL CHANGE
08/02/95	4482	6538.57	113.57
09/07/95	4518	6538.31	113.31
10/03/95	4544	6538.24	113.24
11/02/95	4574	6538.21	113.21
05/13/96	4767	6539.40	114.40
08/09/96	4855	6538.90	113.90
09/03/96	4880	6538.70	113.70
10/03/96	4910	6538.50	113.50
10/08/96	4915	6538.60	113.60
12/03/96	4971	6538.66	113.66
03/31/97	5089	6539.44	114.44
04/25/97	5114	6539.43	114.43
05/29/97	5148	6539.55	114.55
06/11/97	5161	6539.70	114.70
07/28/97	5208	6539.30	114.30
09/01/97	5243	6539.20	114.20
09/22/97	5264	6539.16	114.16
10/15/97	5287	6539.01	114.01
11/25/97	5328	6539.00	114.00
12/03/97	5336	6538.99	113.99
05/04/98	5488	6540.25	115.25
05/18/98	5502	6540.40	115.40
06/11/98	5526	6540.38	115.38
07/01/98	5546	6540.40	115.40
07/29/98	5574	6540.26	115.26
08/20/98	5596	6540.10	115.10
09/29/98	5636	6539.92	114.92
10/06/98	5643	6539.84	114.84
11/05/98	5673	6539.80	114.80
11/10/98	5678	6539.78	114.78
11/30/98	5698	6539.72	114.72
12/03/98	5701	6539.72	114.72
12/16/98	5714	6539.71	114.71
03/31/99	5819	6540.43	115.43
04/02/99	5821	6540.40	115.40
04/28/99	5847	6540.56	115.56
05/22/99	5871	6540.70	115.70
06/09/99	5889	6540.72	115.72
06/27/99	5907	6540.64	115.64
07/19/99	5929	6540.41	115.41
08/08/99	5949	6540.32	115.32
08/29/99	5970	6540.17	115.17
09/08/99	5980	6540.12	115.12
09/19/99	5991	6540.01	115.01
10/21/99	6023	6539.82	114.82
10/27/99	6029	6539.80	114.80
11/10/99	6043	6539.76	114.76
11/17/99	6050	6539.81	114.81
11/22/99	6055	6539.76	114.76
12/06/99	6069	6539.76	114.76
12/14/99	6077	6539.76	114.76
12/23/99	6086	6539.67	114.67
04/28/00	6213	6540.15	115.15
05/03/00	6218	6540.82	115.82
05/26/00	6241	6540.17	115.17
06/01/00	6247	6540.12	115.12
06/30/00	6276	6539.79	114.79
07/17/00	6293	6539.54	114.54
07/30/00	6306	6539.37	114.37
08/10/00	6317	6539.24	114.24
06/17/00	6263	6539.18	114.18
08/28/00	6335	6539.03	114.03

KENNECOTT URANIUM COMPANY
Sweetwater Pit Water Levels
Recovery of water level after suspension of dewatering activities in May, 1983

DATE	ELAPSED TIME DAYS	WATER ELEVATION	WATER LEVEL CHANGE
08/30/00	6337	6539.04	114.04
09/03/00	6341	6539.03	114.03
09/17/00	6355	6538.88	113.88
10/04/00	6372	6538.86	113.86
10/22/00	6390	6538.83	113.83
11/13/00	6412	6538.75	113.75
04/05/01	6555	6540.07	115.07
04/16/01	6566	6540.13	115.13
04/24/01	6574	6540.30	115.30
05/10/01	6590	6540.22	115.22
05/16/01	6596	6540.20	115.20
06/21/01	6632	6539.89	114.89
07/02/01	6643	6539.83	114.83
07/03/01	6644	6539.84	114.84
07/16/01	6657	6539.78	114.78
07/20/01	6661	6539.68	114.68
08/21/01	6693	6539.35	114.35
09/06/01	6709	6539.22	114.22
09/26/01	6729	6539.11	114.11
10/18/01	6751	6538.98	113.98
11/05/01	6769	6538.84	113.84
11/11/01	6775	6538.90	113.90
11/27/01	6791	6538.98	113.98
12/03/01	6797	6538.98	113.98
03/31/02	6915	6539.75	114.75
04/04/02	6919	6539.75	114.75
04/08/02	6923	6539.77	114.77
04/15/02	6930	6539.77	114.77
04/29/02	6944	6539.82	114.82
05/16/02	6961	6539.76	114.76
05/28/02	6973	6539.74	114.74
06/27/02	7003	6539.53	114.53
07/03/02	7009	6539.44	114.44
07/08/02	7014	6539.40	114.40
07/09/02	7015	6539.40	114.40
07/17/02	7023	6539.28	114.28
07/29/02	7035	6539.13	114.13
08/06/02	7043	6539.07	114.07
09/03/02	7071	6538.51	113.51
09/29/02	7097	6538.63	113.63
10/09/02	7107	6538.65	113.65
10/14/02	7112	6538.61	113.61
11/06/02	7135	6538.43	113.43
03/16/03	7265	6539.42	114.42
04/21/03	7301	6539.54	114.54
05/29/03	7339	6539.61	114.61
06/17/03	7358	6539.49	114.49
06/26/03	7367	6539.55	114.55
07/16/03	7387	6539.34	114.34
07/17/03	7388	6539.33	114.33
08/31/03	7433	6538.91	113.91
09/30/03	7463	6538.74	113.74
10/07/03	7470	6538.75	113.75
10/20/03	7483	6538.63	113.63
11/16/03	7510	6538.49	113.49
12/03/03	7527	6538.57	113.57
03/21/04	7636	6539.65	114.65
03/24/04	7639	6539.65	114.65
03/28/04	7643	6539.75	114.75
04/05/04	7651	6539.65	114.65
04/18/04	7664	6539.80	114.80

KENNECOTT URANIUM COMPANY

Sweetwater Pit Water Levels

Recovery of water level after suspension of dewatering activities in May, 1983

DATE	ELAPSED TIME DAYS	WATER ELEVATION	WATER LEVEL CHANGE
05/20/04	7696	6539.84	114.84
06/15/04	7722	6539.70	114.70
06/21/04	7728	6539.73	114.73
07/04/04	7741	6539.76	114.76
07/07/04	7744	6539.70	114.70
07/26/04	7763	6539.52	114.52
08/10/04	7778	6539.40	114.40
08/24/04	7792	6539.26	114.26
09/13/04	7812	6539.26	114.26
09/20/04	7819	6539.17	114.17
10/04/04	7833	6539.15	114.15
11/07/04	7867	6539.16	114.16
11/11/04	7871	6539.18	114.18
11/22/04	7882	6539.20	114.20
12/13/04	7903	6539.21	114.21
03/16/05	7996	6539.78	114.78
03/27/05	8007	6539.82	114.82
04/05/05	8016	6539.82	114.82
05/18/05	8059	6539.95	114.95
06/08/05	8080	6539.82	114.82
06/25/05	8097	6539.70	114.70
07/06/05	8108	6539.58	114.58
07/18/05	8120	6539.47	114.47
08/17/05	8150	6539.18	114.18
09/19/05	8183	6538.90	113.90
10/17/05	8211	6538.86	113.86
04/02/06	8378	6539.37	114.37
04/03/06	8379	6539.27	114.27
04/12/06	8388	6539.45	114.45
04/18/06	8394	6539.45	114.45
05/10/06	8416	6539.40	114.40
06/19/06	8456	6539.14	114.14
07/12/06	8479	6538.94	113.94
07/26/06	8493	6538.84	113.84
08/30/06	8528	6538.50	113.50
09/13/06	8542	6538.40	113.40
10/08/06	8567	6538.26	113.26
03/26/07	8736	6539.18	114.18
04/30/07	8771	6539.26	114.26
05/31/07	8802	6539.20	114.20
06/26/07	8828	6539.06	114.06
07/25/07	8857	6538.85	113.85
08/30/07	8893	6538.66	113.66
09/11/07	8905	6538.59	113.59
10/03/07	8927	6538.45	113.45
10/15/07	8939	6538.39	113.39
04/01/08	9108	6539.11	114.11
05/30/08	9167	6539.21	114.21
06/04/08	9172	6539.09	114.09
06/27/08	9195	6538.97	113.97
07/31/08	9229	6538.73	113.73
08/19/08	9248	6538.38	113.38
09/08/08	9268	6538.26	113.26
10/20/08	9310	6538.17	113.17
03/31/09	9472	6539.26	114.26
04/20/09	9492	6539.07	114.07
05/27/09	9529	6539.21	114.21
06/16/09	9549	6539.29	114.29
07/16/09	9579	6539.13	114.13
08/12/09	9606	6539.04	114.04
09/09/09	9634	6538.78	113.78

KENNECOTT URANIUM COMPANY
Sweetwater Pit Water Levels
Recovery of water level after suspension of dewatering activities in May, 1983

DATE	ELAPSED TIME DAYS	WATER ELEVATION	WATER LEVEL CHANGE
09/23/09	9648	6538.67	113.67
10/21/09	9676	6538.63	113.63
11/09/09	9695	6538.56	113.56
04/20/10	9857	6539.40	114.40
05/27/10	9894	6539.48	114.48
06/10/10	9908	6539.51	114.51
07/09/10	9937	6539.53	114.53
08/19/10	9978	6539.29	114.29
09/14/10	10004	6538.98	113.98
10/13/10	10033	6538.90	113.90
11/02/10	10053	6538.79	113.79
12/06/10	10087	6539.93	114.93
04/12/11	10214	6539.64	114.64
05/16/11	10248	6539.66	114.66
06/07/11	10270	6539.77	114.77
07/21/11	10314	6539.50	114.50
08/16/11	10340	6539.27	114.27
09/15/11	10370	6538.96	113.96
10/10/11	10395	6538.85	113.85
11/09/11	10425	6538.70	113.70
12/06/11	10452	6538.70	113.70
04/22/12	10590	6539.40	114.40
05/02/12	10600	6539.36	114.36
06/05/12	10634	6539.09	114.09
07/03/12	10662	6538.80	113.80
08/11/12	10701	6538.55	113.55
09/11/12	10732	6538.21	113.21
10/01/12	10752	6538.11	113.11
11/28/12	10810	6537.94	112.94
12/17/12	10829	6537.52	112.52
01/02/13	10845	6538.02	113.02
02/07/13	10881	6538.28	113.28
03/12/13	10914	6538.28	113.28
04/03/13	10936	6538.28	113.28
06/10/13	11004	6538.61	113.61
07/02/13	11026	6538.38	113.38
08/01/13	11056	6538.19	113.19
09/03/13	11089	6537.93	112.93
10/07/13	11123	6538.07	113.07
11/04/13	11151	6538.03	113.03
12/02/13	11179	6538.04	113.04
01/14/14	11222	6538.37	113.37
02/11/14	11250	6538.57	113.57
03/03/14	11270	6538.70	113.70
04/01/14	11299	6538.88	113.88
05/12/14	11340	6538.84	113.84
06/02/14	11361	6538.85	113.85
07/02/14	11391	6538.61	113.61
08/05/14	11425	6538.40	113.40
09/02/14	11453	6538.26	113.26
10/06/14	11487	6538.13	113.13
11/06/14	11518	6538.06	113.06
12/08/14	11550	6538.01	113.01
01/14/15	11587	6538.26	113.26
03/02/15	11634	6538.57	113.57
04/13/15	11676	6538.72	113.72
05/05/15	11698	6538.78	113.78
06/01/15	11725	6539.07	114.07
07/21/15	11775	6538.78	113.78
08/12/15	11797	6538.46	113.46
09/01/15	11817	6538.46	113.46

KENNECOTT URANIUM COMPANY

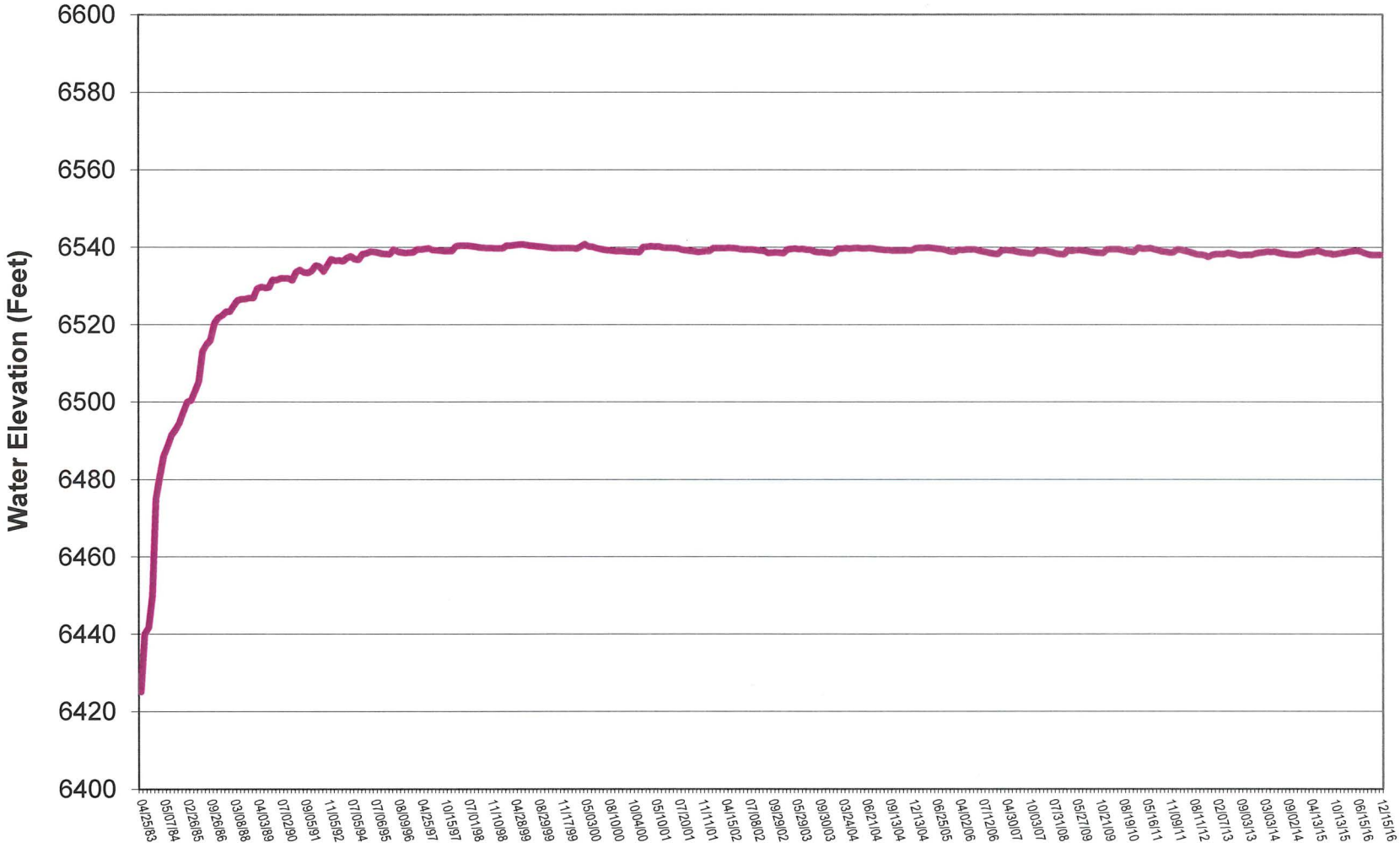
Sweetwater Pit Water Levels

Recovery of water level after suspension of dewatering activities in May, 1983

DATE	ELAPSED TIME DAYS	WATER ELEVATION	WATER LEVEL CHANGE
10/13/15	11859	6538.16	113.16
12/15/15	11922	6538.31	113.31
02/15/16	11984	6538.53	113.53
03/15/16	12013	6538.62	113.62
04/15/16	12044	6538.90	113.90
05/15/16	12074	6539.02	114.02
06/15/16	12105	6539.13	114.13
07/15/16	12135	6538.97	113.97
08/15/16	12166	6538.53	113.53
09/15/16	12197	6538.20	113.20
10/12/16	12224	6538.07	113.07
11/10/16	12253	6538.07	113.07
12/15/16	12288	6538.06	113.06

*Blue color is updated levels with yearly QA/QC PVC Survey

KENNECOTT URANIUM COMPANY
Sweetwater Pit Water Levels
April 25, 1983 through December 12, 2016



KENNECOTT URANIUM COMPANY PIT LAKE **PARAMETER** *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/9/2005	4/5/2005	4/11/2005	6/7/2005	8/3/2005	11/8/2005	4/10/2006	6/6/2006	8/28/2006	10/7/2006	4/18/2007	6/3/2007
TDS A/C Balance *(dec. %)*		1.06	1.01	1	1.01	1.04	0.98	0.98	1	0.9	1	0.96	0.98
Alk-CaC03		99	102	94	96	88	98	99	94	90	89	100	98
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		121	125	115	117	107	117	120	115	109	106	122	120
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		113	116	96	110	112	109	119	109	111	114	113	116
Carbonate (CO3)		<1	<1	<1	<1	<1	1	<1	<1	<1	1	<1	<1
Chloride (Cl)		16	20	17	20	19	20	19	20	47	18	19	19
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cond *(umhos/cm)*		971	968	986	962	1000	993	968	985	1060	1000	1030	1120
Cond-Field *(umhos/cm)*				660	700	800	660	650	918	1014	982	969	989
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.4	0.4	0.4	0.4
Gross Alpha *(pCi/L)*	GPS (15)	2	<1	3.1	1.2	2.7	2.8	2.3	2.7	2.4	3.2	1.7	7.7
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.03	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		10.1	10.1	8.8	10.1	10.4	10.3	10.7	10.9	10	10.7	10.7	10.9
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.08	<0.08	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.05	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.19	8.24	8.06	8.26	8.24	8.33	7.44	7.56	8.23	8.34	8.06	8.16
pH (Field) *(Std. Units)*				7.7	8	7.8	8.27	8.39	8.21	8.23	8.13	7.83	8.09
Potassium (K)		6.2	6.3	6.4	5.9	6.3	6.4	6.2	6.9	6	6.5	6.6	6.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	4.4	1.2	4.4	2.5	1.8	3.2	1.5	9.6	3.3	4.5	1.1	3.6
Radium 226 *(pCi/L)*		1.8	1.2	2.3	2.5	1.8	2	1.5	1.5	3.3	2.4	1.1	3.6
Radium 228 *(pCi/L)*		2.6	<1	2.1	<1	<1	1.2	<1	2.2	<1	2.1	<1	<1
Radon 222 *(pCi/L)*		--	--	--	--	--	--	--	--	--	--	--	--
Selenium (Se)	GPS (.01)	0.009	0.01	0.01	0.009	0.01	0.009	0.01	0.01	0.01	0.01	0.01	0.01
Silica (SiO2)		<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		93.1	91.9	81.1	91.8	89.2	92.1	83.4	91.9	89	96.1	95.4	95.3
TDS @ 180° *C.*	GPS (500)	716	690	637	672	692	670	676	680	644	694	680	700
Sulfate (SO4)		376	374	367	372	372	386	394	386	401	398	403	407
Temperature *(C)*				8	14	26	8.2	7.6	25.1	22.5	15	10.2	15.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	2850	2650	3090	2960	2920	3010	2720	3000	3050	2010	3040	2990
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY													
PIT LAKE													
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	8/16/2007	10/3/2007	4/21/2008	6/4/2008	8/25/2008	10/29/2008	4/15/2009	6/16/2009	8/12/2009	10/21/2009	4/20/2010	6/7/2010
TDS A/C Balance *(dec. %)*		0.94	1.12	2.62	2.96	1.01	2.44	4.9	-3.39	-3.25	-2.63	-3.71	-0.761
Alk-CaC03		98	96	93	88	92	94	98	94	93	98	96	99
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		119	117	114	107	112	115	120	115	113	119	117	119
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		120	99.6	122	117	117	117	121	104	112	108	105	111
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		18	21	19	13	19	16	17	17	17	17	20	18
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1040	1080	1000	1050	1040	1060	1060	1020	1020	1040	1000	1050
Cond-Field *(umhos/cm)*		1023	962	904	978	1042	980	897	1021	1040	1055	1017	1055
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.5	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.3
Gross Alpha *(pCi/L)*	GPS (15)	13	12.9	15.8	3.7	7.8	4.9	14	3	13	2.7	2.1	2.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	ND	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	-3.8	1.7	4.4	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		11.2	8.9	11.3	11.1	10.6	10.6	10.4	9.3	9	9.7	9.2	10.4
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.2	7.92	8.19	8.11	8.19	8.07	8.21	8.23	8.37	8.2	8.21	8.25
pH (Field) *(Std. Units)*		8	8.1	7.7	7.8	8.2	7.5	7.9	7.7	8	7.6	7.2	7.3
Potassium (K)		6.7	7.2	6.5	7	6.5	7.1	7.7	6.4	5.7	6.5	6.4	6.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.1	4.4	3.4	0.8	3.3	3.3	4.4	3.8	5.3	4	4.2	2.8
Radium 226 *(pCi/L)*		2.1	1.8	2.4	-0.2	2.5	2.4	2.2	2.6	2.8	2.4	2.7	2.1
Radium 228 *(pCi/L)*		<1	2.6	1	0.8	0.8	0.9	2.2	1.2	2.5	1.6	1.5	0.7
Radon 222 *(pCi/L)*		--	--	--	--	--	--	--	--	--	--	--	--
Selenium (Se)	GPS (.01)	0.011	0.01	0.009	0.009	0.01	0.01	0.01	0.009	0.01	0.01	0.009	0.009
Silica (SiO2)		<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		99.5	90.8	97.6	103	97	102	115	88.3	86.2	92.9	92	101
TDS @ 180° C.	GPS (500)	694	750	708	737	737	761	724	726	722	717	705	778
Sulfate (SO4)		425	382	404	415	409	407	409	398	411	408	407	414
Temperature *(C)*		20.2	13.5	7.9	12	20.6	15.7	6.1	18.5	18.2	13.9	10.6	18.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	2920	2990	3120	3080	3190	3135	3060	3050	3040	3160	2910	3070
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY														
PIT LAKE		Radon only (Water depth 12")											2013	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	8/25/2010	9/14/2010	11/1/2010	4/12/2011	6/7/2011	8/16/2011	10/23/2011	4/16/2012	8/14/2012	10/1/2012	4/8/2013	6/12/2013
TDS A/C Balance *(dec. %)*			-3.12	-4.29	0.563	-3.07	-1.06	-2.61	-2.36	-0.129	-1.87	-0.24	0.453
Alk-CaC03			101	95	98	99	92	92	82	98	96	94	93
Aluminum (Al)	GPS (1.8)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)			121	116	119	121	103	112	100	119	118	115	114
Boron (B)			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)			111	107	115	110	115	110	106	120	118	119	120
Carbonate (CO3)			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)			18	18	20	20	20	20	20	21	22	20	20
Chromium (Cr)	GPS (.05)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)			<0.001	<0.001	<0.001	<0.001	<0.001	0.005	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*			1050	1050	1040	1040	1050	1060	1050	1100	1080	1070	1100
Cond-Field *(umhos/cm)*			1057	1057	1075	1111	1088	1104	1148	1092	1088	1213	1129
Copper (Cu)			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)			0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Gross Alpha *(pCi/L)*	GPS (15)		2.6	2	2	2.1	3	2.3	2.7	2.8	2.4	2.9	2.9
Iron (Fe)	GPS (0.6)		<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)		<1	0.7	0.5	0.2	0.04	0.2	0.1	0.3	0.2	<1	<1
Lead (Pb)			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)			10	9.6	10.4	10.5	10.8	10.2	9.8	11.5	11.1	11.4	11.2
Manganese (Mn)	GPS (0.2)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)			<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)		8.21	8.27	8.28	8.19	8.42	8.16	8.07	8.3	8.26	8.13	8.24
pH (Field) *(Std. Units)*			8.3	8.3	8.3	8.1	8.2	8.1	7.8	8	7.89	7.9	8.1
Potassium (K)			6.6	6.3	7.4	6.5	6.9	6.6	6.3	7.9	7.4	7.1	7.4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)		3.1	3.8	3.2	2.9	3.1	3.8	3.1	4.1	3.1	2.4	4.7
Radium 226 *(pCi/L)*			2.1	2.4	2.3	2.1	2.2	2.2	1.8	2.4	1.9	2.4	2
Radium 228 *(pCi/L)*			1	1.4	0.9	0.8	0.9	1.6	1.3	1.7	1.2	0	2.7
Radon 222 *(pCi/L)*		144 ± 47.8	--	--	--	--	--	--	--	--	--	--	--
Selenium (Se)	GPS (.01)		0.01	0.01	0.011	0.008	0.009	0.009	0.009	0.01	0.009	0.008	0.008
Silica (SiO2)			<1	<1	1.2	<1	<1	<1	1.6	0.8	1.1	1.5	1.1
Silver (Ag)			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)			94.3	88.1	106	96.9	103	98.7	95.3	108	99.9	109	111
TDS @ 180° C.	GPS (500)		783	774	743	788	782	770	754	784	805	791	793
Sulfate (SO4)			422	414	420	425	435	430	417	446	442	451	449
Temperature *(C)*			16.2	14.2	10.7	12.8	21.1	10.9	10.4	19.3	16.5	5.7	16.3
Thallium (Tl)	GPS (7.0)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L)*			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)		2910	3060	2830	2750	2820	3180	2900	3310	2910	3080	3020
Vanadium (V205)			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)			<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY													
PIT LAKE				2014					2015				2016
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	8/6/2013	10/1/2013	4/14/2014	6/4/2014	8/12/2014	9/29/2014	10/20/2014	4/15/2015	6/8/2015	8/11/2015	11/3/2015	4/21/2016
TDS A/C Balance *(dec. %)*		1.87	-4.73	1.49	0.99	1.51	3.63	1.84	2.4	1.28	1.59	0.11	1.38
Alk-CaC03		93	93	94	93	92	91	90	89	93	85	84	83
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		114	113	114	113	113	111	110	109	113	104		102
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		122	110	117	122	116	118	114	109	117	123	120	119
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		20	20	20	22	22	22	23	22	22	22	21	21
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1120	1090	1090	1100	1120	1120	1120	1120	1120	1160	1130	1130
Cond-Field *(umhos/cm)*		1177	1146	1185	1102	1127	1130	1144	1137	1191	1128	1163	1201
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.3
Gross Alpha *(pCi/L)*	GPS (15)	2.9	2	2.8	2.1	2.1	2.9	3.2	8.8	3.2	3.1	8.1	3.7
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	0.7	-0.4	-0.3	-0.04	-0.4	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-0.1	5.6
Magnesium (Mg)		11.6	10	11.4	12	11.3	11.3	11.1	11	11.3	11.6	11.7	11.8
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.27	8.13	8.13	8.12	8.27	8.21	8.17	8.03	8.1	8.27	8.06	8.22
pH (Field) *(Std. Units)*		8.4	8.44	8.8	7	8.3	8.39	8.24	8.17	8.45	8.4	8.3	8.11
Potassium (K)		7.6	7.6	7.5	7.2	7.6	7.5	7.2	6.9	7.1	7.6	7.3	7.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.2	2.7	2.7	3.1	2.7	3.4	3.7	3.3	2.5	2.7	3.8	3.3
Radium 226 *(pCi/L)*		1.9	2	1.9	2.6	2	2.1	2.1	2	2	2.1	2.5	2.3
Radium 228 *(pCi/L)*		0.3	0.7	0.8	0.5	0.7	1.3	1.6	1.3	0.5	0.6	1.3	1
Radon 222 *(pCi/L)*		--	--	--	--	--	--	--	--	--	--	--	--
Selenium (Se)	GPS (.01)	0.008	0.008	0.007	0.008	0.008	0.007	0.006	0.007	0.007	0.007	0.008	0.008
Silica (SiO2)		0.9	0.8	1.1	1	0.8	1	1.2	1.2	1.1	1	1.3	1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		114	114	113	117	114	110	110	103	109	110	111	115
TDS @ 180° C.	GPS (500)	826	818	797	793	818	814	809	809	813	824	820	
Sulfate (SO4)		448	469	436	462	469	491	459	439	456	484	464	456
Temperature *(C)*		19.3	15.3	9.1	15.2	18.2	18.1	14.2	7.5	18.3	19.3	12.4	10.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	0.2	<0.2	-0.006	0.1	0.08	0.05	0.05	0.06	0.1
Uranium, natural *(pCi/L)*	GPS (36)	3260	3120	2970	3190	3120	2950	2970	2810	3100	2830	2950	3040
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY				
PIT LAKE				
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	6/8/2016	7/5/2016	10/10/2016
TDS A/C Balance *(dec. %)*			3.15	1.06
Alk-CaC03		90	92	86
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		110	112	105
Boron (B)		<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005
Calcium (Ca)		116	122	119
Carbonate (CO3)		<1	<1	<1
Chloride (Cl)		21	22	22
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1120	1140	1150
Cond-Field *(umhos/cm)*		1213	1346	1230
Copper (Cu)		<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005
Fluoride (F)		0.4	0.4	0.4
Gross Alpha *(pCi/L)*	GPS (15)	3.8	3.9	17.8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1
Lead (Pb)		0.56	3.3	-0.2
Magnesium (Mg)		17.2	11.7	12
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.02	8.15	8.21
pH (Field) *(Std. Units)*		5.74	6.98	8.46
Potassium (K)		7.5	7.5	7.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	3.7	4.1	3.5
Radium 226 *(pCi/L)*		2.5	2.1	2.5
Radium 228 *(pCi/L)*		1.2	2	1
Radon 222 *(pCi/L)*		--	--	--
Selenium (Se)	GPS (.01)	0.008	0.009	0.007
Silica (SiO2)		1.9	0.9	0.6
Silver (Ag)		<0.01	<0.01	<0.01
Sodium (Na)		112	112	118
TDS @ 180° *C.*	GPS (500)	819	831	821
Sulfate (SO4)		425	427	487
Temperature *(C)*		17.7	20	15.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.02	0.1	-0.01
Uranium, natural *(pCi/L)*	GPS (36)	2960	3000	3060
Vanadium (V205)		<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01

Tailings Impoundment Fluid Levels

DATE	WATER LEVEL OF POND (Ft)
04/14/87	6639.52
04/27/87	6639.20
05/05/87	6638.95
05/11/87	6638.84
06/23/87	6638.32
07/06/87	6637.95
07/13/87	6637.98
08/03/87	6637.31
08/24/87	6636.96
08/30/87	6637.13
09/08/87	6637.05
09/21/87	6636.66
09/30/87	6636.51
10/12/87	6636.12
11/19/87	6636.32
06/07/88	6635.04
06/13/88	6635.16
06/28/88	6634.62
07/11/88	6634.14
07/25/88	6633.70
08/01/88	6633.44
08/08/88	6633.27
08/22/88	6633.02
08/30/88	6632.91
09/05/88	6632.50
09/30/88	6632.40
10/10/88	6632.37
10/31/88	6632.03
04/03/89	6632.45
04/17/89	6632.54
05/01/89	6631.88
06/01/89	6631.52
06/19/89	6630.83
06/26/89	6630.87
07/14/89	6630.49
07/24/89	6630.16
08/22/89	6629.60
08/28/89	6629.54
09/25/89	6629.02
11/20/89	6628.96
03/29/90	6629.27
04/10/90	6630.45
04/23/90	6629.67
05/02/90	6629.54
06/11/90	6628.71
07/02/90	6629.29
07/24/90	6628.83
10/08/90	6627.85
11/11/90	6626.58
04/07/91	6627.70
07/02/91	6626.55
08/14/91	6625.90
09/05/91	6625.06
10/07/91	6624.55
04/28/92	6626.10
05/26/92	6625.30
09/14/92	6623.62
11/05/92	6622.20
05/04/93	6623.58
06/30/93	6623.33
08/18/93	6621.25
10/11/93	6621.05
06/06/94	6620.90
07/05/94	6620.70
09/21/94	6619.40
10/10/94	6618.90
04/05/95	6620.20
05/01/95	6620.30
06/28/95	6621.10

Tailings Impoundment Fluid Levels

DATE	WATER LEVEL OF POND (Ft)
07/31/95	6620.34
09/01/95	6619.42
10/03/95	6619.15
05/13/96	6620.60
06/14/96	6620.90
08/09/96	6618.80
09/11/96	6618.20
10/03/96	6617.90
04/18/97	6619.40
05/29/97	6621.00
06/11/97	6619.00
06/25/97	6618.54
07/02/97	6618.22
07/09/97	6617.97
07/16/97	6617.80
07/30/97	6617.25
08/04/97	6617.36
08/11/97	6617.30
08/18/97	6617.66
08/26/97	6617.55
09/02/97	6617.40
09/08/97	6617.17
09/18/97	6616.93
09/29/97	6617.06
10/09/97	6616.90
10/16/97	6616.80
05/14/98	6619.12
06/22/98	6618.55
07/01/98	6618.30
07/14/98	6617.76
07/27/98	6617.84
08/11/98	6617.30
09/14/98	6616.55
03/17/99	6617.90
***04/19/99**	6620.15
04/27/99	6620.39
05/20/99	6620.65
05/27/99	6620.45
06/03/99	6620.15
06/17/99	6619.35
06/30/99	6618.55
07/08/99	6618.02
07/27/99	6616.96
***07/28/99**	6617.09
08/11/99	6616.64
08/23/99	6615.93
09/15/99	6615.42
09/23/99	6615.38
09/29/99	6615.38
10/06/99	6615.19
10/22/99	6614.48
11/17/99	6614.56
04/06/00	6617.60
05/04/00	6616.00
05/24/00	6615.76
06/07/00	6615.65
06/29/00	6615.62
06/30/00	6615.62
07/03/00	6615.07
07/13/00	6614.47
07/24/00	6614.67
08/08/00	6613.90
***10/2/00**	6611.65
10/09/00	6610.94
11/09/00	6610.80
04/03/01	6617.80
04/15/01	6615.40
04/20/01	6618.10
05/16/01	6615.20

Tailings Impoundment Fluid Levels

DATE	WATER LEVEL OF POND (Ft)
06/26/01	6614.60
07/18/01	6614.30
08/16/01	6613.70
09/17/01	6612.40
10/11/01	6611.80
11/19/01	6611.40
12/22/01	6610.90
04/08/02	6615.90
05/13/02	6612.50
05/23/02	6611.10
06/20/02	6608.30
07/23/02	6609.50
08/19/02	6607.80
09/11/02	6608.90
10/08/02	6608.70
11/05/02	6607.10
04/17/03	6614.20
05/07/03	6613.00
05/14/03	6612.00
06/23/03	6611.20
07/14/03	6610.60
08/07/03	6609.90
09/10/03	6607.60
10/06/03	6606.80
04/05/04	6612.90
04/12/04	6611.50
04/21/04	6610.20
05/27/04	6609.75
06/17/04	6609.50
07/22/04	6608.20
08/11/04	6606.30
09/14/04	6609.20
10/14/04	6608.70
04/06/05	6613.40
05/10/05	6611.00
06/02/05	6610.80
07/15/05	6608.30
08/17/05	6606.95
09/20/05	6605.50
04/04/06	6613.30
04/25/06	6612.00
05/24/06	6610.50
06/26/06	6608.30
07/27/06	6609.70
08/23/06	6609.10
09/19/06	6608.70
03/13/07	6616.10
04/20/07	6609.30
05/29/07	6610.40
06/21/07	6608.70
07/25/07	6606.50
08/27/07	6608.30
09/24/07	6608.70
10/16/07	6609.30
12/14/07	6621.36
03/31/08	6625.60
04/14/08	6625.20
05/30/08	6625.70
06/27/08	6624.10
07/31/08	6624.00
08/29/08	6622.56
10/03/08	6621.30
10/31/08	6620.21
12/01/08	6618.61
12/29/08	6618.11
01/19/09	6619.30
02/25/09	6619.20
03/31/09	6619.00
04/30/08	6619.10

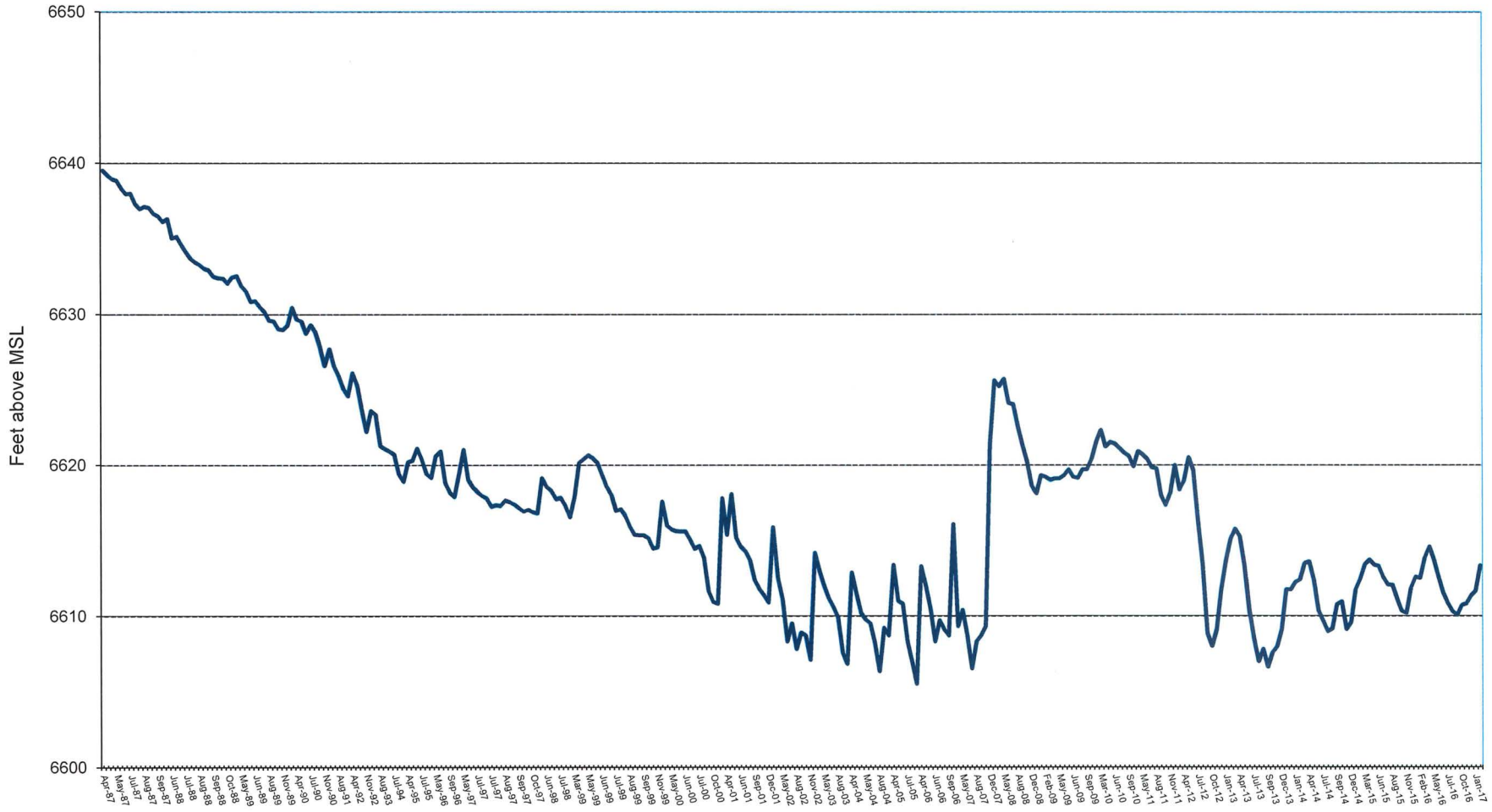
Tailings Impoundment Fluid Levels

DATE	WATER LEVEL OF POND (Ft)
05/12/09	6619.10
05/18/09	6619.30
06/09/09	6619.70
06/18/09	6619.20
07/27/09	6619.12
08/31/09	6619.70
09/30/09	6619.70
10/27/09	6620.40
02/15/10	6621.50
03/15/10	6622.30
04/13/10	6621.20
05/20/10	6621.50
06/24/10	6621.40
07/24/10	6621.10
08/09/10	6620.80
09/15/10	6620.60
10/21/10	6619.90
04/07/11	6620.90
05/23/11	6620.70
06/22/11	6620.40
07/25/11	6619.83
08/08/11	6619.78
09/08/11	6617.98
10/03/11	6617.36
11/16/11	6618.12
03/14/12	6619.99
03/27/12	6618.37
04/16/12	6618.97
05/23/12	6620.51
06/19/12	6619.64
07/23/12	6616.34
08/23/12	6613.44
09/17/12	6608.84
10/09/12	6608.00
11/07/12	6609.08
12/05/12	6611.73
01/22/13	6613.62
02/27/13	6615.13
03/25/13	6615.79
04/29/13	6615.29
05/22/13	6613.36
06/17/13	6610.40
07/17/03	6608.45
07/26/13	6606.97
08/19/13	6607.81
09/04/13	6606.61
10/08/13	6607.58
11/04/13	6607.97
12/3/2013	6609.10
12/3/2013	6611.75
1/14/2014	6611.75
1/1/3014	6612.25
2/10/2014	6612.41
3/13/2014	6613.51
4/14/2014	6613.62
5/1/2014	6612.39
06/09/14	6610.34
07/09/14	6609.67
07/29/14	6608.97
08/26/14	6609.16
09/15/24	6610.78
10/14/14	6610.97
11/17/2014	6609.11
12/2/2014	6609.58
1/15/2015	6611.76
2/9/2015	6612.47
3/18/2015	6613.41
4/28/2015	6613.74
5/20/2015	6613.39

Tailings Impoundment Fluid Levels

DATE	WATER LEVEL OF POND (Ft)
06/02/15	6613.32
07/15/15	6612.58
07/30/15	6612.07
08/18/15	6612.05
09/02/15	6611.13
10/15/2015	6610.33
11/9/2015	6610.19
12/16/2015	6611.87
1/20/2016	6612.59
2/8/2016	6612.53
3/3/2016	6613.87
4/4/2016	6614.60
5/2/2016	6613.74
6/13/2016	6612.59
7/5/2016	6611.54
7/28/2016	6610.87
8/4/2016	6610.30
9/12/2016	6610.05
10/10/2016	6610.71
11/01/16	6610.83
12/12/16	6611.34
01/02/17	6611.66
02/15/17	6613.36

KENNECOTT URANIUM COMPANY
SweetwaterTailings Impoundment Fluid Levels
April 14, 1987 through January 15, 2017



Notes:
- Pool elevation measured by surveying fluid elevation in pool in impoundment's southeast corner.
- Rise in pool elevation due to changes in size/configuration of pool caused by ongoing tailings regrading work.

KENNECOTT URANIUM COMPANY		CGL = Chemical & Geological Laboratories				ELI = Energy Laboratories, Inc.								*Revised*						
SWEETWATER TAILINGS CELL		CLI = Core Laboratories, Inc.				MEC = Minerals Exploration Company								*08/22/97*						
Surface Water Analysis																				
WYDEQ III Livestock Standard		1980	1981	1983	1984	1985	1986		1987	1988	1989	1990	1991	1992			1993		1994		1995
	Std	12/30/80	12/17/81	8/16/83	6/4/84	8/1/85	4/11/86	7/10/86	7/6/87	7/12/88	3/29/89	6/12/90	10/31/91	4/14/92	8/11/92	10/22/92	7/1/93	9/23/93	3/24/94	7/28/94	3/31/95
FIELD DATA mg/l:		(CGL)	(MEC)	(CGL)	(CLI)	(CLI)	(CLI)	(CLI)	(CLI)	(CLI)										
Temperature (C)			5					16.8	18.6	18.5	6.2	13.8				11.3	18.6	15.8	3.2	21.3	2
pH (Std. Units)			0.9					1.76	1.72	2.16	2.18	2.19				2.4	2.2	2.1	3	2.4	2.33
Cond (umho/cm)			15800					11300	9200	8009	3560	5290				13930	12450	13140	14700	12510	11310
TDS								1000+	1000+	1000+	1000+	1000+				6980	6180	6590	8010	6210	5650
MAJOR IONS mg/l:																					
Alk-CaC03		0	50	0	-5	0	-1	0	1	-1	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate (HCO3)		0		0	-1	0	0	0			0	0	0	0	0	0	0	0	0	0	0
Calcium (Ca)		158	126.7	370	420	472	519	502	497	510	320	478	580	588	726	529	445	449	423	421	348
Carbonate (CO3)		0		0	-1	0	0	0			0	0	0	0	0	0	0	0	0	0	0
Chloride (Cl)	**2000**	28	39.5	160	200	140	215	183	200	244	139	479	551	538	49.4	532	460	558	661	579	445
Fluoride (F)		0.45	0.5	0.09	0.22	8	5.4	0.3	14.5	11.9	-0.1	-0.1	0.1	84.7	-0.1	0.18	-0.1	0.11	0.13	0.1	0.12
Magnesium (Mg)		10		164	192	230	125	310	350	220	220	513	566	580	632	699	548	729	578	810	761
Nitrate-N (NO2)	**10**	0.11	ND	23.33	17.5	29.3	11.6	25	24	0.5	1.12	5.09	-0.01	146	97.1	-0.1	-0.1	0.2	2.7	0.14	0.27
Potassium (K)		3	1.4	42	44	45	96	53	61	63	29	41.2	10.8	14.3	9.17	5	2.9	0.9	1	1.1	0.87
Silica (SiO2)		18.6	186.4	496	556	527	523	435	43	79	364	618	681	745	393	631	554	615	476	495	338
Sodium (Na)		337	99.8	166	184	225	232	283	258	302	180	596	680	683	777	669	465	663	682	627	541
Sulfate (SO4)	**3000**	1090	9529	7400	6200	9200	8880	10400	10400	12600	5743	12760	14084	13850	13300	14793	10701	12976	12145	13539	11000
NON-METALS:																					
Cyanide (CN)											-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
PHYSICAL PROPERTIES:																					
Cond (umho/cm)		3075	15800	11000	10870	10830	11360	11800			7872	13611	13752	1420	12449	13115	12560	13928	14313	13085	11823
pH (units)	**-2**	2.3	0.9	1.4	1.8	1.7	1.82	1.9			2.3	1.97	2.57	2.23	2.24	2.34	2.58	2.46	2.43	2.48	2.7
TDS @ 180°	**5000**	1322	12958	9640	10580	14178	13990	14100	14700	16600	8464	19352	20408	21061	19300	21140	15441	17532	16887	17665	14566
TRACE METALS mg/l:																					
Aluminum (Al)	**5**	15.7	151.4	312	360	375	378		423	567	320	485	818	874	979	906	676	854	863	912	800
Arsenic (As)	**0.2**	-0.01	0.288	0.78	0.326	0.18	0.23	0.36	0.126	0.447	0.223	0.41	0.26	0.46	0.4	0.02	0.14	0.16	0.12	0.114	0.099
Barium (Ba)					0.052	0.01	0.01				-0.1	-0.1	-0.1	-0.1	0.37	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Beryllium (Be)											0.16	0.24	0.23	0.23	-0.01	0.26	0.23	-0.01	0.31	0.22	0.19
Boron (B)	**5**	-1	0	0.19	0.13	0.15	-0.1	-0.1	3	0.75	-0.1	0.1	0.13	-0.1	0.15	-0.1	3.98	4.5	3.08	1.9	0.78
Cadmium (Cd)	**0.05**	-0.01	-0.005	0.02	-0.01	0.23	-0.01	0.03	0.05		-0.005	0.024	0.093	-0.005	0.021	-0.005	-0.005	-0.005	-0.005	-0.01	0.07
Chromium (Cr)	**0.05**	0.06	1.7	3.59	-0.05	1.7	3.1	0.56	2.48	35	1.5	2.45	3.65	2.86	3.79	3.36	3.75	3.3	3.08	2.25	2.52
Cobalt (Co)	**1**														2.085	1.78	2.55	6.65	2.45	-	1.47
Copper (Cu)	**0.5**	0.04	0.9	1.09	0.86	1.1	1.1	1.2	1.5	1.46	0.76	1.31	2.11	2.28	2.79	2.41	2.48	2.82	1.73	1.83	1.88
Iron (Fe)		32.5		898	836	815	830	750	1290	1550		1297	1676	1703	638	1540	1256	1478	1125	991	840
Lead (Pb)	**0.1**	-0.05	0.8	0.66	0.48	0.33	0.49	0.42	-0.05	0.4	0.05	0.11	0.39	-0.01	-0.01	-0.01	-0.01	0.41	-0.01	-0.01	-0.01
Manganese (Mn)		0.82	23.2	19	26.9	26	26.6	27.7	30	48.7	22	46.2	74.87	62.9	83.9	72.2	66.7	76	65.4	63.1	62.2
Mercury (Hg)	**0.005**	-0.001	-0.005	-0.0004	-0.0004	0.0004	0.0043	-0.0004	-0.0004	-0.0004	-0.001	-0.001	-0.002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002
Molybdenum (Mo)		-0.1	0.1	-0.1	-0.1	-0.02	-0.02	-0.02	0.3	-0.5	-0.01	0.01	0.04	0.11	0.33	-0.01	-0.01	-0.01	-0.01	-0.1	-0.01
Nickel (Ni)		0.07	1.3	1.91	0.93	1.1	1.2	1.2	1.8	2.33	1.1	2.68	3.93	3.69	5.08	4.14	4.95	5.73	4.35	4.06	3.6
Selenium (Se)	**0.05**	-0.01	0.032	0.02	0.012	0.009	0.029	0.023	0.002	0.424	0.262	0.531	0.44	0.614	0.426	0.62	0.608	0.618	0.385	0.847	0.349
Silver (Ag)						-0.02	-0.02				-0.01	0.01	0.02	2.05	-0.01	0.12	-0.01	-0.01	-0.01	-0.01	-0.01
Thallium (Tl)											-0.015	0.49	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015	-0.015
Vanadium (V205)	**0.1**	0.41	2.8	2.91	2.72	3.1	4.3	4.7	7.6	9.64	2.5	2.04	2.06	2.05	2.38	1.93	2.1	1.89	1.5	1.2	1.14
Zinc (ZN)	**25**	1.11	31	1.7	1.72	3.1	2.1	2.2	3	4	1.9	4.03	6.02	5.72	7.02	6.45	6.38	7.71	6.67	5.95	5.9
RADIOMETRIC pCi/l:																					
Uranium, natural	**3385**	3012.7	3100.1	3046.5	3047	44	2006	2832	5416	4690 (0.2)	2269	8023	7777 (0.2)	7212	8480	6177	9030	10507	9864	10311	9242
Radium 226		114	99.14	102	59	11.2	41.9	25	13	12.7	303	439	126	70.1	74.4	54.7	38.1	40.4	53.9	112	25.7
Radium 226 Error Estimate		3	2.09	12	2	0.5	9	5.1	0.8	1	8.3	9.6	4.4	2.9	7.6	2.5	3.1	1.8	3.3	6	2.1
Radium 228											15.1	-1	15.8	1.8	4.2	5.8	9	3.5	9.6	7.6	-1
Radium 228 Error Estimate											+/- 2.0		+/- 2.1	+/- 0.7	+/- 0.9	+/- 0.7	+/- 2.9	+/- 0.9	+/- 9.4	+/- 5.4	
Combined Ra226/228	**5**										318.1	439	141.8	71.9	78.6	60.5	47.1	43.9	63.5	119.6	25.7
Radon 222																					
Radon 222 precision (±)																					
Thorium 230		1.24	3035	864	23567	6857	18461	39334	11000	15200	11521	2831	2820	19310	18700	5487	9880	3266	650	4136	28217
Thorium-230 Error Estimate		+/- 68	+/- 6.93	+/- 1195	+/- 1717	+/- 68		+/- 337	+/- 77	+/- 105	+/- 195	+/- 45.1	+/- 14	+/- 105	+/- 119	+/- 44	+/- 104	+/- 54	+/- 403	+/- 371	+/- 623
Lead (Pb210)		394	1541	513	2850	2598.6	2134	1890	1440	2	76.9	90.9	-1	6.3	5.4	5	-1	-1	3.5	9	1.8
Lead 210 Error Estimate		+/- 20	+/- 37	+/- 5	+/- 52	+/- 160	+/- 8	+/- 124	+/- 89	+/- 1.1	+/- 5.3	+/- 8.7		+/- 0.8	+/- 3.8	+/- 0.7			+/- 2.1	+/- 8.1	+/- 1.1
Polonium (Po210)		64	361	640	1581	476	176	782	1.8	17.5											
Polonium 210 Error Estimate		+/- 11	+/- 25	+/- 7	+/- 40	+/- 8	+/- 14	+/- 29	+/- 0.6	+/- 1.1											
Gross Alpha	**15**										14093	3325	3000	20000	27300	5541	9919	3312	718	4276	28244
Gross Alpha Error Estimate											+/- 119	+/- 58	+/- 55	+/- 400	+/- 165	+/- 74.4	+/-99	+/- 58	+/- 26.8	+/- 22	+/- 168
QUALITY ASSURANCE DATA:																					
A/C Balance (±5) %				51.4	49.1	57.86	12.69					1.115	0.964	1.033	1.13	1.037	1.064	0.999	1.044	1	1.02
(Energy Labs Inc unless noted)																					

KENNECOTT URANIUM COMPANY
SWEETWATER TAILINGS CELL
Surface Water Analysis

WYDEQ III Livestock Standard		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	Std	6/22/96	6/3/97	6/2/98	6/2/99	6/6/00	6/5/01	6/12/02	6/4/03	6/15/04	6/7/05	6/6/06	6/4/07	5/13/08	6/9/09	6/7/10	6/7/11	4/16/12	5/20/13	6/1/14	6/2/15	6/8/16
FIELD DATA mg/l:																						
Temperature (C)		17.1	18	14	14	16	10	12	14	16	14	27.2	4	4.2	12.3	14.8	16	8.3	13.9	18.1	19	20.9
pH (Std. Units)		2.53		2.8	2.8	2.7	2.8	2.8	2.8	16.2	2.1	2.78	3.34	3.1	7.8	2.8	3.2	3	3.5	3.4	3.39	2.84
Cond (umho/cm)		13400	11200	11600	13000	9000	1200	9600	10400	9000	8000	12550	10140	9860	11610	10950	12170	9130	5800	10160	10880	12650
TDS		6690																				
MAJOR IONS mg/l:																						
Alk-CaC03		0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-5	-5	-5
Bicarbonate (HCO3)		0	0	-0.1	-0.1	-0.1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-5	-5	-5
Calcium (Ca)		707	389	378	431	410	469	410	459	470	436	501	549	486	436	419	447	406	456	477	397	522
Carbonate (CO3)		0	0	-0.1	-0.1	-0.1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-5	-5	-5
Chloride (Cl)	2000	628	502	503	574	607	610	680	678	820	651	683	649	695	786	704	828	754	644	699	730	962
Fluoride (F)		26.5	24	24.1	25.1	30.4	36.5	42.4	43.7	38.4	16	44.9	13.5	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.1
Magnesium (Mg)		1010	880	830	880	931	1130	992	1130	1300	1140	1290	1110	1080	1040	827	952	931	856	862	836	1000
Nitrate-N (NO2)	10	0.3	1.86	0.14	1.1	0.83	0.67	0.4	2.4	0.17	-0.1	0.3	0.5	0.3	0.3	0.6	-0.1	0.3	0.1	0.1	0.1	0.1
Potassium (K)		0.7	1.03	1	1.9	0.5	0.7	-1	1.5	1	-0.5	1.4	5.3	5.9	5	3.9	4.4	3.8	7.3	7.9	7.1	8.7
Silica (SiO2)		364	252	237	232	188	175	151	138	130	119	117	105	48	103	77.4	167	76.3	81.6	92.3	78.7	91.1
Sodium (Na)		870	606	607	651	657	733	724	801	810	726	725	743	829	998	846	1060	872	868	899	846	1010
Sulfate (SO4)	3000	14281	13120	12300	12200	11500	13100	12500	13400	14000	12500	13500	10300	9950	10600	8670	10600	9430	8240	8710	8320	10400
NON-METALS:																						
Cyanide (CN)		-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
PHYSICAL PROPERTIES:																						
Cond (umho/cm)		12495	11800	12600	12900	14300	14000	14200	14100	14100	13600	13200	11500	12100	12700	10800	11700	11300	10700	10700	10900	12000
pH (units)	-2	2.55	2.61	2.82	2.81	2.83	2.81	2.83	2.88	2.95	2.94	3.09	3.37	3.55	3.01	3.19	3.16	3.1	3.49	3.47	3.36	3.38
TDS @ 180°	5000	19167	15900	18700	18600	19900	19400	20400	20100	21000	19100	18100	13600	14800	15200	12900	13900	13300	12300	12000	12200	14500
TRACE METALS mg/l:																						
Aluminum (Al)	5	920	974	1000	1150	916	1220	1150	1250	1300	1230	1060	554	495	495	508	533	496	405	427	414	486
Arsenic (As)	0.2	0.097	0.068	0.081	0.073	0.078	0.039	0.036	0.023	0.06	0.027	0.019	0.012	0.017	0.009	0.017	0.037	0.014	0.011	0.011	0.014	0.012
Barium (Ba)		-0.1	-0.1	-0.1	-0.1	0.89	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	-0.1	-0.1	-0.1
Beryllium (Be)		0.3	0.24	0.24	0.26	0.27	0.2	0.32	0.18	0.25	0.33	0.35	0.2	0.18	0.15	0.17	0.34	0.15	0.15	0.13	0.14	0.16
Boron (B)	5	-0.1	0.56	-0.1	0.75	-0.1	0.5	0.63	-0.22	-0.1	0.3	0.4	0.4	0.4	-0.1	-0.1	0.4	0.2	0.5	0.2	0.2	0.2
Cadmium (Cd)	0.05	0.11	0.028	0.022	0.02	0.038	0.019	0.034	0.02	0.03	0.019	0.017	0.014	0.028	0.018	0.014	0.024	0.008	0.017	0.017	0.007	0.007
Chromium (Cr)	0.05	3.21	2.38	2.12	2.23	2.35	1.83	2.47	1.31	2	1.7	1.44	0.55	0.24	0.31	0.25	0.44	0.19	0.18	0.16	0.13	0.21
Cobalt (Co)	1	2.19	1.83	2.47	1.69	2.07	1.95	2.78	1.87	3	2.63	2.96	2.09	2.21	2.03	2.13	2.2	1.87	1.83	1.67	1.62	2.05
Copper (Cu)	0.5	2.55	2	1.93	1.8	2.03	1.54	2.04	1.76	1.9	1.64	1.54	0.58	0.44	0.49	0.43	0.71	0.3	0.26	0.18	0.13	0.13
Iron (Fe)		874	722	573	418	348	313	250	232	230	139	115	59.5	135	134	108	171	174	300	265	240	309
Lead (Pb)	0.1	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.02	-0.01	-0.01	-0.01	0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	4.6	-0.01
Manganese (Mn)		82.4	80	76	78.6	79.5	61.7	94	70.4	110	84.4	94.4	67.4	79.6	80.2	67.8	72.1	64.7	60.9	60	51.3	71.7
Mercury (Hg)	0.005	-0.0002	-0.0002	-0.0002	-0.0002	0.0006	-0.0002	0.0005	-0.0004	0.0005	-0.0002	-0.0002	-0.0002	-0.0004	-0.0004	-0.0002	0.0007	-0.0002	-0.0002	0.0008	-0.0002	-0.0002
Molybdenum (Mo)		-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.04	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Nickel (Ni)		5.37	4.3	5.7	4	6.16	4.6	7.01	5.79	7.2	6.8	6.92	4.39	4.97	5.52	4.69	4.89	4.01	3.58	3.56	3.68	4.65
Selenium (Se)	0.05	0.608	0.888	0.655	0.641	0.706	0.591	0.618	0.579	0.24	0.534	0.461	0.414	0.287	0.256	0.198	0.327	0.132	0.101	0.109	0.078	0.104
Silver (Ag)		-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.05	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Thallium (Tl)		-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.16	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Vanadium (V205)	0.1	1.37	1.4	0.87	0.75	0.57	0.4	0.5	0.3	0.2	0.2	0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.1	0.2	0.1	0.2
Zinc (ZN)	25	0.79	6.68	7.48	6.99	7.65	5.8	9.19	11.6	9.5	8.25	7.48	5.72	4.75	6	5.07	5.18	4.47	3.78	3.28	3.68	3.67
RADIOMETRIC pCi/l:																						
Uranium, natural	3385	8973	8400	10800	11200	12000	12300	12321.4	12000	11000	10300	11100	8530	6350	7980	6420	10900	5660	5740	4940	4180	4800
Radium 226		55.3	60.6	45.8	567	83.1	59.8	55.9	69.8	46.2	23.8	1.5	20.2	25.2	10	7.6	5.7	5.3	6.9	8.3	14	25
Radium 226 Error Estimate		1.9	2.6	2	2.3	3	2.3	2.3	2.5	2.2	1.8	0.4	1.7	0.9	0.68	0.55	0.61	0.52	0.71	0.88	2.8	4.8
Radium 228		6.7	-1	1.9	2.9	3.6	1.9	-1	-1	-1	-1	8.9	-1	2.3	1.3	1.6	0.8	0.3	1	3.7	1.5	4.2
Radium 228 Error Estimate		+/- 0.5		+/- 1.1	+/- 0.5	+/- 0.2	+/- 1.0					+/-1.1		0.7	0.9	0.8	1	1.1	1.6	2	0.8	1.3
Combined Ra226/228	5	62	60.6	47.7	569.9	86.7	61.7	55.9	69.8	46.2	23.8	10.4	20.2	27.5	11.3	9.2	6.5	5.6	7.9	12	15.5	29.2
Radon 222																						
Radon 222 precision (±)																						
Thorium 230		7550	4526	6360	2340	11500	9440	3250	1890	2110	1650	1620	671	216	361	283	214	179	99.4	115	92.9	76.6
Thorium-230 Error Estimate		+/- 160	+/- 86	+/- 108	+/- 44.1	+/- 212	+/- 78	+/- 30.3	+/-19.7	+/- 34.9	+/-24.3	+/-113	+/-58.2	7.9	71.7	28.5	27.2	30.4	18.6	14.3	17.6	14.6
Lead (Pb210)		7.9	6.6	-1	5	-1	-1	-2.7	-2.7	-1	-1	-1	-1	1.9	6.2	5.7	1.6	1.1	0.9	2.7	4.6	3.1
Lead 210 Error Estimate		+/- 0.9	+/- 2.3		+/- 1.8									9.6	2.4	6.1	0.9	0.6	0.6	0.8	1.2	5.3
Polonium (Po210)											-	-	-	-	-							
Polonium 210 Error Estimate																						
Gross Alpha	15	16600	274	300	261	162	149	124	212	222	83.3	127	43.9	83.4	48.8	39.8	8	18.2	15.8	24.8	46.5	89.6
Gross Alpha Error Estimate		+/- 130	+/- 9.4	+/- 10.7	+/- 9.9	+/- 6.0	+/- 6.4	+/- 5.0	+/-7.2	+/- 10.9	+/- 5.3	+/-6.0	+/-2.0	3.3	3	2.7	0.8	1.4	1.4	2	9.4	17.8
QUALITY ASSURANCE DATA:																						
A/C Balance (±5) %		1.02	0.96	1.2	1.2	1.35	1.17	1.19	1.09	1.17	1.22	1.07	1.01	2.66	-1.87	-2.9	-4.96	-3.82	2.87	-1.38	2.92	-3.94
(Energy Labs Inc unless noted)																						

TABLE 1

GALLONS PUMPED TO TAILINGS IMPOUNDMENT

WELL:	TYPE:	April 1, 1986 to April 1, 1987	April 1, 1987 to April 1, 1988	April 1, 1988 to April 1, 1989	April 1, 1989 to April 1, 1990	April 1, 1990 to January 1, 1991	January 1, 1991 to December 1, 1991	December 1, 1991 to December 31, 1992	December 31, 1992 to December 31, 1993	December 31, 1993 to December 31, 1994
TMW 7	Aquifer									
TMW 16	Aquifer		973,474.00	1,669,570.00	1,012,740.00	824,139.00	375,942.00	825,270.00	1,202,150.00	976,840.00
TMW 17	Aquifer	3,652,911.00	3,699,987.00	3,096,627.00	2,289,813.00	2,526,771.00	5,248,474.00	5,988,820.00	4,284,690.00	4,387,290.00
TMW 18	Aquifer	743,540.00	1,612,795.00	3,125,776.00	4,329,036.00	4,286,378.00	5,905,911.00	5,262,910.00	5,019,830.00	5,307,990.00
TMW 55	Perch				**101,875.00**					
TMW 57	Aquifer									
TMW 58	Aquifer									2,713,490.00
TMW 59	Aquifer			277,190.00	1,035,242.00	1,262,117.00	2,237,358.00	2,478,090.00	1,528,780.00	2,356,260.00
TMW 65	Perch		*							
TMW 75	Aquifer			2,296,870.00	1,898,236.00	1,161,418.00	2,228,506.00	6,747,830.00	2,031,570.00	2,761,170.00
TMW 76	Perch	43,293.00	*							
TMW 79	Perch	39,875.00								
TMW 80	Perch	56,675.90	*	**53,655.00**						
TMW 83	Perch		**241,028.00**	*	*					
TMW 85	Perch	2,266.30								
TMW 91	Aquifer									
TMW 96	Aquifer									
TMW 97	Aquifer									
Bison Basin	Disposal				561,120.00					
GMIX	Disposal									
Subtotal:		4,538,561.20	6,527,284.00	10,519,688.00	11,228,062.00	10,060,823.00	15,996,191.00	21,302,920.00	14,067,020.00	18,503,040.00
Cumulative Gallons Pumped:			11,065,845.20	21,585,533.20	32,813,595.20	42,874,418.20	58,870,609.20	80,173,529.20	94,240,549.20	112,743,589.20

** **Bold** number is combined total of this well plus wells marked by asterisk.*

TABLE 1

GALLONS PUMPED TO TAILINGS IMPOUNDMENT

WELL:	TYPE:	December 31, 1994 to December 31, 1995	December 31, 1995 to December 31, 1996	December 31, 1996 to December 31, 1997	December 31, 1997 to December 31, 1998	December 31, 1998 to December 31, 1999	December 31, 1999 to December 31, 2000	December 31, 2000 to December 31, 2001	December 31, 2001 to December 31, 2002
TMW 7	Aquifer								
TMW 16	Aquifer	1,916,500.00	2,114,160.00	1,821,300.00	1,819,410.00	1,500,750.00	1,234,950.00	1,939,100.00	955,970.00
TMW 17	Aquifer	3,875,680.00	3,534,560.00	2,406,940.00	1,882,910.00	1,597,310.00	3,436,750.00	1,530,080.00	991,590.00
TMW 18	Aquifer	3,760,740.00	4,577,190.00	3,945,330.00	5,361,630.00	5,454,370.00	5,449,610.00	5,669,760.00	6,099,470.00
TMW 55	Perch								
TMW 57	Aquifer							1,958,380.00	2,165,880.00
TMW 58	Aquifer	3,853,980.00	3,450,330.00	3,680,030.00	2,558,000.00	3,081,960.00	2,854,470.00	2,312,330.00	1,738,740.00
TMW 59	Aquifer	2,307,730.00	2,048,600.00	2,099,550.00	2,236,360.00	2,148,390.00	2,231,660.00	1,953,690.00	1,654,000.00
TMW 65	Perch								
TMW 75	Aquifer	2,434,410.00	2,837,230.00	2,211,080.00	2,076,280.00	1,792,490.00	2,782,610.00	2,734,650.00	2,551,680.00
TMW 76	Perch								
TMW 79	Perch								
TMW 80	Perch								
TMW 83	Perch								
TMW 85	Perch								
TMW 91	Aquifer								
TMW 96	Aquifer								
TMW 97	Aquifer								
Bison Basin	Disposal								
GMIX	Disposal							15,000.00	
Subtotal:		18,149,040.00	18,562,070.00	16,164,230.00	15,934,590.00	15,575,270.00	17,990,050.00	18,112,990.00	16,157,330.00
Cumulative Gallons Pumped:		130,892,629.20	149,454,699.20	165,618,929.20	181,553,519.20	197,128,789.20	215,118,839.20	233,231,829.20	249,389,159.20

TABLE 1

GALLONS PUMPED TO TAILINGS IMPOUNDMENT

WELL:	TYPE:	December 31, 2002 to December 31, 2003	December 31, 2003 to December 31, 2004	January 1, 2005 to December 31, 2005	January 1, 2006 to December 31, 2006	January 1, 2007 to December 31, 2007	January 1, 2008 to December 31, 2008	January 1, 2009 to December 31, 2009	January 1, 2010 to December 31, 2010
TMW 7	Aquifer	262,880.00	3,371,090.00	2,638,080.00	2,011,900.00	2,807,610.00	2,679,730.00	1,651,640.00	1,889,200.00
TMW 16	Aquifer	1,008,140.00							
TMW 17	Aquifer	1,440,200.00	2,196,440.00	2,121,860.00	1,475,180.00	2,602,950.00	4,433,800.00	3,234,660.00	2,986,020.00
TMW 18	Aquifer	5,356,710.00	4,085,050.00	4,150,670.00	4,326,090.00	4,450,800.00	3,663,220.00	3,816,850.00	5,506,955.00
TMW 55	Perch								
TMW 57	Aquifer	1,364,700.00	1,907,680.00	2,066,070.00	2,619,800.00	2,963,350.00	1,532,830.00	1,705,610.00	1,574,480.00
TMW 58	Aquifer	2,122,770.00	2,705,370.00	1,776,710.00	2,170,120.00	821,270.00	508,430.00	2,316,780.00	2,545,390.00
TMW 59	Aquifer	1,754,410.00	1,741,170.00	2,233,710.00	2,312,760.00	2,829,940.00	2,577,980.00	4,056,297.00	4,489,890.00
TMW 65	Perch								
TMW 75	Aquifer	2,249,480.00	2,175,390.00	2,351,240.00	1,088,240.00	945,160.00	1,597,030.00	1,893,450.00	1,792,330.00
TMW 76	Perch								
TMW 79	Perch								
TMW 80	Perch								
TMW 83	Perch								
TMW 85	Perch								
TMW 91	Aquifer			4,702.00					
TMW 96	Aquifer			1,490,620.00	3,969,900.00	3,108,420.00	2,908,420.00	1,505,790.00	1,452,580.00
TMW 97	Aquifer			1,606,540.00	4,374,660.00	3,067,380.00	4,132,580.00	1,922,030.00	1,629,010.00
Bison Basin	Disposal								
GMIX	Disposal								
Subtotal:		15,559,290.00	18,182,190.00	20,440,202.00	24,348,650.00	23,596,880.00	24,034,020.00	22,103,107.00	23,865,855.00
Cumulative Gallons Pumped:		264,948,449.20	283,130,639.20	303,570,841.20	327,919,491.20	351,516,371.20	375,550,391.20	397,653,498.20	421,519,353.20

TABLE 1

GALLONS PUMPED TO TAILINGS IMPOUNDMENT

WELL:	TYPE:	January 1, 2011 to December 31, 2011	January 1, 2012 to December 31, 2012	January 1, 2013 to December 31, 2013	January 1, 2014 to December 31, 2014	January 1, 2015 to December 31, 2015	January 1, 2016 to December 31, 2016	
TMW 7	Aquifer	2,525,220.00	1,535,260.00	2,876,020.00	2,710,550.00	1,816,340.00	1,573,930.00	**30,349,450.00**
TMW 16	Aquifer							22,170,405.00
TMW 17	Aquifer	2,939,940.00	2,334,240.00	4,090,830.00	4,786,830.00	4,313,330.00	4,789,240.00	**98,176,723.00**
TMW 18	Aquifer	4,199,450.00	5,560,280.00	6,124,520.00	5,993,400.00	5,664,960.00	5,848,500.00	**144,659,721.00**
TMW 55	Perch							101,875.00
TMW 57	Aquifer	1,982,620.00	1,703,700.00	1,580,290.00	980,710.00	1,793,390.00	1,799,210.00	**29,698,700.00**
TMW 58	Aquifer	2,053,320.00	2,838,710.00	2,836,830.00	2,273,690.00	2,188,540.00	2,921,950.00	**56,323,210.00**
TMW 59	Aquifer	3,823,495.00	4,456,745.00	4,551,430.00	5,482,490.00	4,440,160.00	4,095,790.00	**76,701,284.00**
TMW 65	Perch							-
TMW 75	Aquifer	2,147,530.00	2,324,390.00	2,096,450.00	1,823,250.00	2,578,490.00	1,910,870.00	**65,519,330.00**
TMW 76	Perch							43,293.00
TMW 79	Perch							39,875.00
TMW 80	Perch							110,330.90
TMW 83	Perch							241,028.00
TMW 85	Perch							2,266.30
TMW 91	Aquifer							4,702.00
TMW 96	Aquifer	2,068,750.00	1,608,821.00	832,530.00	1,291,290.00	1,297,880.00	1,090,440.00	**22,625,441.00**
TMW 97	Aquifer	2,715,420.00	2,294,550.00	1,218,170.00	1,303,460.00	2,302,910.00	2,781,970.00	**29,348,680.00**
Bison Basin	Disposal							561,120.00
GMIX	Disposal							15,000.00
Subtotal:		24,455,745.00	24,656,696.00	26,207,070.00	26,645,670.00	26,396,000.00	26,811,900.00	**576,692,434.20**
Cumulative Gallons Pumped:		445,975,098.20	470,631,794.20	496,838,864.20	523,484,534.20	549,880,534.20	576,692,434.20	

KENNECOTT URANIUM COMPANY

TABLE 2
MASS OF SALTS AND OTHER CONSTITUENTS REMOVED FROM THE PERCHED AND BATTLE SPRINGS AQUIFERS
AND PUMPED BACK INTO THE TAILINGS CELL
AS OF DECEMBER 31, 2016

SALTS	TMW-7	TMW-16	TMW-17	TMW-18	TMW-55	TMW-57	TMW-58	TMW-59	TMW-65	TMW-75	TMW-76	TMW-79	TMW-80	TMW-83	TMW-85	TMW-91	TMW-96	TMW-97	TAILS CELL
(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)	(KG)
MAJOR IONS																			
Bicarbonate	23,175.76	27,851.82	57,702.86	291,419.08	-	14,677.75	45,891.66	104,028.45	-	44,445.91	-	-	-	-	-	2.49	12,441.76	14,094.12	635,731.66
Calcium	20,227.15	33,391.21	43,587.87	312,328.42	-	12,662.87	51,416.79	148,709.64	-	41,003.94	-	-	-	-	-	6.33	16,034.22	17,563.92	696,932.37
Carbonate	579.31	576.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.01	4.70	1,163.95
Chloride	4,058.20	5,014.43	6,657.97	49,517.73	-	1,376.51	6,724.02	23,154.05	-	5,849.30	-	-	-	-	-	1.01	2,476.00	2,513.98	107,343.20
Fluoride	7.58	2.42	43.25	6.59	-	15.14	19.11	44.45	-	32.44	-	-	-	-	-	-	8.47	13.36	192.81
Magnesium	2,075.39	2,572.42	2,709.47	22,220.81	-	954.59	3,974.13	18,834.48	-	3,162.36	-	-	-	-	-	0.49	1,188.22	1,291.92	58,984.28
Nitrate(NO3)	-	29.88	118.86	173.01	-	-	4.52	15.74	-	34.27	-	-	-	-	-	-	7.58	1.04	384.91
Potassium	430.28	481.94	1,216.14	3,629.68	-	360.04	932.90	2,055.23	-	885.78	-	-	-	-	-	0.08	339.49	397.37	10,728.93
Silica	1,904.46	1,430.36	5,238.04	12,340.62	-	1,550.67	3,258.93	5,541.42	-	3,763.12	-	-	-	-	-	0.23	1,186.85	1,577.79	37,792.49
Sodium	6,364.29	7,454.19	15,523.08	49,971.59	-	4,347.18	11,798.89	26,610.55	-	12,160.17	-	-	-	-	-	1.28	4,452.91	5,201.81	143,885.94
Sulfate	47,015.74	76,973.64	98,467.25	648,738.98	281.43	29,993.89	119,056.59	390,710.60	424.26	91,154.71	2,509.88	274.72	966.02	848.22	18.02	16.37	39,935.10	42,727.02	1,590,112.44
TDS	96,041.34	148,300.36	202,375.51	1,300,067.71	456.46	59,452.15	227,112.49	709,260.98	701.63	187,083.94	4,529.50	531.92	1,651.65	1,423.79	33.85	28.12	73,603.08	80,813.54	3,093,468.03
TRACE METALS																			
Aluminum	-	1.04	-	59.53	-	0.41	-	1.93	-	0.44	-	-	-	-	-	-	-	-	63.35
Arsenic	0.01	0.03	0.00	0.08	-	0.00	0.02	0.04	-	0.07	-	-	-	-	-	-	0.01	0.00	0.26
Barium	-	0.22	1.53	1.52	-	-	-	0.94	-	-	-	-	-	-	-	-	-	-	4.21
Beryllium	-	-	-	0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08
Boron	0.19	0.57	0.40	3.52	-	0.25	2.09	6.80	-	1.23	-	-	-	-	-	-	0.38	-	15.43
Cadmium	-	0.01	-	0.12	-	-	-	0.03	-	0.08	-	-	-	-	-	-	-	-	0.23
Chromium	0.03	0.43	0.59	1.90	-	0.04	0.22	0.22	0.04	0.01	0.03	-	-	-	-	-	-	-	3.51
Cobalt	0.02	0.03	0.00	0.59	-	0.61	0.32	3.05	-	0.02	-	-	-	-	-	-	0.00	-	4.66
Copper	-	0.22	0.70	0.75	-	-	-	0.19	-	0.08	-	-	-	-	-	-	0.00	-	1.93
Cyanide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	419.65	51.35	31.14	3,715.85	-	25.30	95.46	10,729.79	-	35.17	-	-	-	-	-	-	3.60	10.65	15,117.96
Lead	1.18	-	5.54	1.57	-	-	6.59	7.16	-	2.73	-	-	-	-	-	-	0.54	-	25.32
Manganese	72.65	35.54	25.33	616.96	-	13.32	43.87	1,052.20	-	28.18	-	-	-	-	-	-	9.45	12.23	1,909.73
Mercury	0.00	-	-	0.00	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	-	0.01
Molybdenum	-	0.02	0.17	0.06	-	-	-	0.26	-	0.26	-	-	-	-	-	-	-	-	0.76
Nickel	0.13	0.32	0.81	2.64	-	0.74	0.30	2.95	-	0.45	-	-	-	-	-	-	0.02	-	8.36
Selenium	0.00	0.06	0.12	0.45	0.07	0.01	0.19	0.18	0.18	0.12	0.41	0.03	0.25	0.22	-	-	0.62	0.01	2.92
Silver	-	0.27	0.56	0.48	-	-	-	0.06	-	0.02	-	-	-	-	-	-	-	-	1.39
Thallium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium	0.25	-	0.55	2.36	-	-	0.10	0.03	-	-	-	-	-	-	-	-	-	-	3.30
Zinc	0.25	2.94	7.49	7.91	-	0.93	4.39	3.12	-	2.58	-	-	-	-	-	-	0.28	0.21	30.10
RADIOMETRICS																			
Uranium (mg/l)	2.11	24.09	4.49	2.29	-	0.73	3.32	2.85	-	12.28	-	-	-	-	-	-	6.30	4.84	63.30

TMW-7												
CONTAMINANTS REMOVED												
(Started pumping 12/01/03)	**2016**											
DATE FS:	06-Jan-16			19-Apr-16			06-Jul-16			04-Oct-16		
		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		416,400	29,191,920		411,790	29,603,710		399,120	30,002,830		346,620	30,349,450
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
MAJOR IONS	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
Bicarbonate	177.00	279.00	22369.33	173.00	269.67	22639.01	192.00	290.08	22929.09	188.00	246.67	23175.76
Calcium	160.00	252.20	19485.54	162.00	252.52	19738.07	170.00	256.84	19994.91	177.00	232.24	20227.15
Carbonate	0.00	0.00	579.31	0.00	0.00	579.31	0.00	0.00	579.31	0.00	0.00	579.31
Chloride	45.00	70.93	3860.49	41.00	63.91	3924.41	46.00	69.50	3993.90	49.00	64.29	4058.20
Fluoride	0.10	0.16	7.30	0.00	0.00	7.30	0.10	0.15	7.45	0.10	0.13	7.58
Magnesium	23.80	37.51	1962.51	22.30	34.76	1997.27	26.00	39.28	2036.55	29.60	38.84	2075.39
Nitrate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potassium	3.60	5.67	414.41	3.30	5.14	419.55	3.80	5.74	425.29	3.80	4.99	430.28
Silica	15.90	25.06	1835.27	15.70	24.47	1859.75	15.70	23.72	1883.47	16.00	20.99	1904.46
Sodium	61.00	96.15	6083.19	59.20	92.28	6175.47	64.10	96.84	6272.31	70.10	91.98	6364.29
Sulfate	422.00	665.18	45128.10	410.00	639.11	45767.21	413.00	623.97	46391.18	476.00	624.56	47015.74
TDS	852.00	1342.96	92062.55	862.00	1343.68	93406.24	933.00	1409.61	94815.84	934.00	1225.50	96041.34
TRACE METALS												
Al	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Ba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Be	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.19
Cd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cr	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03
Co	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.02
Cu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe	7.86	12.39	382.31	7.64	11.91	394.22	8.85	13.37	407.59	9.19	12.06	419.65
Pb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.18	1.18
Mn	1.04	1.64	67.13	1.01	1.57	68.70	1.31	1.98	70.68	1.50	1.97	72.65
Hg	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ni	0.00	0.00	0.13	0.00	0.00	0.13	0.00	0.00	0.13	0.00	0.00	0.13
Se	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ag	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
V2O5	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25
Zn	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25
RADIOMETRICS												
U mg/l	0.03	0.04	1.97	0.06	0.09	2.06	0.02	0.03	2.09	0.02	0.03	2.11

TMW-17												
BATTLE SPRING AQUIFER												
CONTAMINANTS REMOVED	**2016**											
DATE FS	06-Jan-16			18-Apr-16			07-Jul-16			03-Oct-16		
(Started pumping 7/1/86)		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		1,325,800	94,713,283		1,006,090	95,719,373		1,214,440	96,933,813		1,242,910	98,176,723
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS												
Bicarbonate	141.00	707.64	55,770.33	146.00	556.04	56,326.37	150.00	689.57	57,015.94	146.00	686.92	57,702.86
Calcium	86.10	432.11	42,433.70	96.50	367.52	42,801.21	87.40	401.79	43,203.00	81.80	384.86	43,587.87
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	9.00	45.17	6,504.91	17.00	64.74	6,569.65	10.00	45.97	6,615.62	9.00	42.34	6,657.97
Fluoride	0.10	0.50	41.94	0.10	0.38	42.32	0.10	0.46	42.78	0.10	0.47	43.25
Magnesium	5.70	28.61	2,640.72	5.60	21.33	2,662.04	5.20	23.91	2,685.95	5.00	23.52	2,709.47
Nitrate(NO3)	0.00	0.00	118.86	0.00	0.00	118.86	0.00	0.00	118.86	0.00	0.00	118.86
Potassium	3.00	15.06	1,177.37	3.10	11.81	1,189.18	3.00	13.79	1,202.97	2.80	13.17	1,216.14
Silica	15.70	78.79	5,043.59	15.30	58.27	5,101.86	15.60	71.72	5,173.58	13.70	64.46	5,238.04
Sodium	38.30	192.22	15,032.38	38.00	144.72	15,177.10	37.70	173.31	15,350.41	36.70	172.67	15,523.08
Sulfate	184.00	923.44	95,780.64	268.00	1020.67	96,801.31	171.00	786.11	97,587.42	187.00	879.82	98,467.25
TDS	424.00	2127.93	196,363.86	567.00	2159.40	198,523.26	403.00	1852.65	200,375.92	425.00	1999.59	202,375.51
TRACE METALS												
Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium	0.00	0.00	1.53	0.00	0.00	1.53	0.00	0.00	1.53	0.00	0.00	1.53
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.00	0.00	0.40	0.00	0.00	0.40	0.00	0.00	0.40	0.00	0.00	0.40
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.59	0.00	0.00	0.59	0.00	0.00	0.59	0.00	0.00	0.59
Cobalt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Copper	0.00	0.00	0.70	0.00	0.00	0.70	0.00	0.00	0.70	0.00	0.00	0.70
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.05	0.25	29.13	0.06	0.23	29.36	0.08	0.37	29.73	0.30	1.41	31.14
Lead	0.00	0.00	0.00	0.00	0.00	0.00	1.00	4.60	4.60	0.20	0.94	5.54
Manganese	0.04	0.20	24.77	0.05	0.19	24.96	0.04	0.18	25.14	0.04	0.19	25.33
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.17	0.00	0.00	0.17	0.00	0.00	0.17	0.00	0.00	0.17
Nickel	0.00	0.00	0.81	0.00	0.00	0.81	0.00	0.00	0.81	0.00	0.00	0.81
Selenium	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12
Silver	0.00	0.00	0.56	0.00	0.00	0.56	0.00	0.00	0.56	0.00	0.00	0.56
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.55	0.00	0.00	0.55	0.00	0.00	0.55	0.00	0.00	0.55
Zinc	0.00	0.00	7.49	0.00	0.00	7.49	0.00	0.00	7.49	0.00	0.00	7.49
RADIOMETRICS												
Uranium (mg/l)	0.01	0.03	4.41	0.01	0.02	4.43	0.01	0.03	4.46	0.01	0.03	4.49

TMW-18												
BATTLE SPRING AQUIFER												
CONTAMINANTS REMOVE	**2016**											
DATE FS	06-Jan-16			19-Apr-16			06-Jul-16			04-Oct-16		
(Started pumping 10/8/86)		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		1,503,120	140314341		1,482,610	141,796,951		1,457,670	143,254,621		1,405,100	144,659,721
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS												
Bicarbonate	444.00	2526.33	284260.43	420.00	2357.16	286617.59	447.00	2466.49	289084.09	439.00	2334.99	291419.08
Calcium	469.00	2668.58	305251.62	415.00	2329.10	307580.72	444.00	2449.94	310030.66	432.00	2297.76	312328.42
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	84.00	477.95	48147.63	82.00	460.21	48607.84	82.00	452.47	49060.31	86.00	457.42	49517.73
Fluoride	0.00	0.00	6.59	0.00	0.00	6.59	0.00	0.00	6.59	0.00	0.00	6.59
Magnesium	45.20	257.18	21504.11	44.20	248.06	21752.17	43.00	237.27	21989.44	43.50	231.37	22220.81
Nitrate(NO3)	0.00	0.00	173.01	0.00	0.00	173.01	0.00	0.00	173.01	0.00	0.00	173.01
Potassium	6.30	35.85	3520.94	7.40	41.53	3562.47	6.30	34.76	3597.24	6.10	32.45	3629.68
Silica	22.10	125.75	12004.23	19.20	107.76	12111.98	21.00	115.88	12227.86	21.20	112.76	12340.62
Sodium	97.80	556.47	48406.96	95.70	537.10	48944.05	93.20	514.27	49458.32	96.50	513.27	49971.59
Sulfate	1050.00	5974.42	632348.09	978.00	5488.82	637836.91	954.00	5264.06	643100.97	1060.00	5638.02	648738.98
TDS	2110.00	12005.75	1265902.89	2080.00	11673.56	1277576.45	2100.00	11587.55	1289164.00	2050.00	10903.71	1300067.71
TRACE METALS												
Aluminum	0.00	0.00	59.53	0.00	0.00	59.53	0.00	0.00	59.53	0.00	0.00	59.53
Arsenic	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08
Barium	0.00	0.00	1.52	0.00	0.00	1.52	0.00	0.00	1.52	0.00	0.00	1.52
Beryllium	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08
Boron	0.00	0.00	3.52	0.00	0.00	3.52	0.00	0.00	3.52	0.00	0.00	3.52
Cadmium	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12
Chromium	0.00	0.00	1.90	0.00	0.00	1.90	0.00	0.00	1.90	0.00	0.00	1.90
Cobalt	0.00	0.01	0.59	0.00	0.00	0.59	0.00	0.00	0.59	0.00	0.00	0.59
Copper	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0.00	0.75	0.00	0.00	0.75
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	8.70	49.50	3581.95	7.36	41.31	3623.25	7.99	44.09	3667.34	9.12	48.51	3715.85
Lead	0.00	0.00	1.57	0.00	0.00	1.57	0.00	0.00	1.57	0.00	0.00	1.57
Manganese	1.48	8.42	593.85	1.25	7.02	600.86	1.50	8.28	609.14	1.47	7.82	616.96
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.06
Nickel	0.00	0.00	2.64	0.00	0.00	2.64	0.00	0.00	2.64	0.00	0.00	2.64
Selenium	0.00	0.00	0.45	0.00	0.00	0.45	0.00	0.00	0.45	0.00	0.00	0.45
Silver	0.00	0.00	0.48	0.00	0.00	0.48	0.00	0.00	0.48	0.00	0.00	0.48
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	2.36	0.00	0.00	2.36	0.00	0.00	2.36	0.00	0.00	2.36
Zinc	0.00	0.00	7.91	0.00	0.00	7.91	0.00	0.00	7.91	0.00	0.00	7.91
RADIOMETRICS												
Uranium (mg/l)	0.00	0.01	2.24	0.00	0.01	2.25	0.00	0.01	2.26	0.01	0.03	2.29

TMW-57												
CONTAMINANTS REMOVED												
PERCHED AQUIFER WELL	**2016**											
DATE FS	1/4/16			4/18/16			7/5/16			10/4/16		
(Started pumping May 2001)		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		0	27,899,490		768,200	28,667,690		658,340	29,326,030		372,670	29,698,700
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
MAJOR IONS	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
Bicarbonate	145.00	0.00	13,824.16	121.00	351.86	14176.03	130.00	323.97	14500.00	126.00	177.75	14677.75
Calcium	59.10	0.00	12,096.70	83.30	242.23	12338.93	84.70	211.08	12550.01	80.00	112.86	12662.87
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	5.00	0.00	1,324.94	7.00	20.36	1345.29	8.00	19.94	1365.23	8.00	11.29	1376.51
Fluoride	0.10	0.00	14.46	0.10	0.29	14.75	0.10	0.25	15.00	0.10	0.14	15.14
Magnesium	3.60	0.00	914.15	6.00	17.45	931.59	6.00	14.95	946.55	5.70	8.04	954.59
Nitrate(NO3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potassium	2.70	0.00	341.00	2.80	8.14	349.14	2.90	7.23	356.37	2.60	3.67	360.04
Silica	13.60	0.00	1,455.77	14.20	41.29	1497.06	13.70	34.14	1531.20	13.80	19.47	1550.67
Sodium	31.60	0.00	4,108.10	35.40	102.94	4211.05	34.70	86.48	4297.52	35.20	49.66	4347.18
Sulfate	119.00	0.00	28,747.46	182.00	529.25	29276.71	174.00	433.62	29710.33	201.00	283.55	29993.89
TDS	294.00	0.00	56,666.13	409.00	1189.35	57855.48	412.00	1026.74	58882.22	404.00	569.93	59452.15
TRACE METALS												
Aluminum	0.00	0.00	0.41	0.00	0.00	0.41	0.00	0.00	0.41	0.00	0.00	0.41
Arsenic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.04	0.00	0.00	0.04	0.00	0.00	0.04	0.00	0.00	0.04
Cobalt	0.00	0.00	0.60	0.00	0.00	0.60	0.00	0.00	0.61	0.00	0.00	0.61
Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.10	0.00	25.14	0.00	0.00	25.14	0.00	0.00	25.14	0.11	0.16	25.30
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manganese	0.04	0.00	12.92	0.06	0.17	13.09	0.06	0.15	13.24	0.06	0.08	13.32
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0.00	0.00	0.65	0.03	0.09	0.74	0.00	0.00	0.74	0.00	0.00	0.74
Selenium	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zinc	0.01	0.00	0.93	0.00	0.00	0.93	0.00	0.00	0.93	0.00	0.00	0.93
RADIOMETRICS												
Uranium (mg/l)	0.00	0.00	0.69	0.01	0.02	0.71	0.01	0.01	0.72	0.00	0.01	0.73

TMW-58 Sheet 2												
BATTLE SPRING AQUIFER												
CONTAMINANTS REMOVED	**2016**											
DATE FS	04-Jan-16			18-Apr-16			06-Jul-16			04-Oct-16		
(Started pumping 6/20/94)		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		-	53,401,260		1,048,280	54,449,540		1,072,520	55,522,060		801,150	56,323,210
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
MAJOR IONS	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
Bicarbonate	144.00	0.00	43,745.02	172.00	682.53	44427.55	206.00	836.35	45263.90	207.00	627.77	45891.66
Calcium	146.00	0.00	48,983.30	207.00	821.41	49804.71	229.00	929.72	50734.44	225.00	682.35	51416.79
Carbonate	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	21.00	0.00	6,342.64	31.00	123.01	6465.65	36.00	146.16	6611.81	37.00	112.21	6724.02
Fluoride	0.10	0.00	18.71	0.00	0.00	18.71	0.10	0.41	19.11	0.00	0.00	19.11
Magnesium	10.70	0.00	3,782.89	16.30	64.68	3847.58	17.80	72.27	3919.84	17.90	54.29	3974.13
Nitrate(NO3)	0.00	0.00	4.52	0.00	0.00	4.52	0.00	0.00	4.52	0.00	0.00	4.52
Potassium	3.40	0.00	887.14	4.00	15.87	903.01	4.30	17.46	920.47	4.10	12.43	932.90
Silica	13.60	0.00	3,096.57	15.00	59.52	3156.10	14.20	57.65	3213.75	14.90	45.19	3258.93
Sodium	46.20	0.00	11,182.65	53.80	213.49	11396.13	56.70	230.20	11626.33	56.90	172.56	11798.89
Sulfate	362.00	0.00	113,207.02	493.00	1956.31	115163.33	513.00	2082.74	117246.07	597.00	1810.51	119056.59
TDS	700.00	0.00	215,883.37	948.00	3761.83	219645.20	1040.00	4222.33	223867.52	1070.00	3244.97	227112.49
TRACE METALS												
Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.00	0.00	2.09	0.00	0.00	2.09	0.00	0.00	2.09	0.00	0.00	2.09
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.22	0.00	0.00	0.22	0.00	0.00	0.22	0.00	0.00	0.22
Cobalt	0.00	0.00	0.32	0.00	0.00	0.32	0.00	0.00	0.32	0.00	0.01	0.32
Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.27	0.00	89.30	0.50	1.98	91.28	0.50	2.03	93.31	0.71	2.15	95.46
Lead	0.00	0.00	0.00	0.00	0.00	0.00	1.40	5.68	5.68	0.30	0.91	6.59
Manganese	0.11	0.00	41.70	0.18	0.71	42.41	0.21	0.85	43.27	0.20	0.61	43.87
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0.00	0.00	0.30	0.00	0.00	0.30	0.00	0.00	0.30	0.00	0.00	0.30
Selenium	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.19
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.10	0.00	0.00	0.10	0.00	0.00	0.10	0.00	0.00	0.10
Zinc	0.02	0.00	4.23	0.04	0.16	4.39	0.00	0.00	4.39	0.00	0.00	4.39
RADIOMETRICS												
Uranium (mg/l)	0.03	0.00	3.17	0.01	0.05	3.23	0.01	0.05	3.28	0.01	0.04	3.32

TMW-59													
CONTAMINANTS REMOVED		2016											
DATE FS		5-Jan-16			21-Apr-16			6-Jul-16			3-Oct-16		
(Started pumping 9/1/88)	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE	45,361,284		671,140	73,276,634		935,060	74,211,694		1,237,710	75,449,404		1,251,880	76,701,284
CONSTITUENTS	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS													
Bicarbonate	65596.81	325.00	825.68	100043.80	303.00	1072.49	101116.29	307.00	1438.37	102554.66	311.00	1473.79	104028.45
Calcium	94351.65	442.00	1122.92	143274.90	424.00	1500.78	144775.69	429.00	2009.97	146785.66	406.00	1923.99	148709.64
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	13896.08	74.00	188.00	22218.32	70.00	247.77	22466.09	73.00	342.02	22808.12	73.00	345.94	23154.05
Fluoride	20.24	0.20	0.51	41.38	0.20	0.71	42.09	0.20	0.94	43.02	0.30	1.42	44.45
Magnesium	11279.09	60.50	153.70	18050.85	62.30	220.52	18271.36	59.30	277.83	18549.20	60.20	285.28	18834.48
Nitrate(NO3)	15.74	0.00	0.00	15.74	0.00	0.00	15.74	0.00	0.00	15.74	0.00	0.00	15.74
Potassium	1193.71	6.70	17.02	1965.91	7.00	24.78	1990.68	7.10	33.27	2023.95	6.60	31.28	2055.23
Silica	3354.26	18.10	45.98	5315.25	18.10	64.07	5379.32	17.00	79.65	5458.97	17.40	82.46	5541.42
Sodium	15502.81	91.50	232.46	25394.57	95.50	338.03	25732.60	91.40	428.23	26160.83	94.90	449.72	26610.55
Sulfate	242066.63	1150.00	2921.62	376166.19	1100.00	3893.55	380059.74	1100.00	5153.77	385213.50	1160.00	5497.10	390710.60
TDS	438312.33	2110.00	5360.54	682486.02	2080.00	7362.34	689848.36	2080.00	9745.30	699593.67	2040.00	9667.32	709260.98
TRACE METALS													
Aluminum	1.48	0.00	0.00	1.93	0.00	0.00	1.93	0.00	0.00	1.93	0.00	0.00	1.93
Arsenic	0.01	0.00	0.00	0.03	0.00	0.01	0.04	0.00	0.00	0.04	0.00	0.00	0.04
Barium	0.94	0.00	0.00	0.94	0.00	0.00	0.94	0.00	0.00	0.94	0.00	0.00	0.94
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	5.95	0.00	0.00	6.80	0.00	0.00	6.80	0.00	0.00	6.80	0.00	0.00	6.80
Cadmium	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03
Chromium	0.22	0.00	0.00	0.22	0.00	0.00	0.22	0.00	0.00	0.22	0.00	0.00	0.22
Cobalt	2.16	0.01	0.01	2.98	0.01	0.02	3.00	0.00	0.02	3.02	0.01	0.03	3.05
Copper	0.19	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.19	0.00	0.00	0.19
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	5579.27	39.40	100.10	10275.56	37.00	130.96	10406.52	33.80	158.36	10564.88	34.80	164.91	10729.79
Lead	0.12	0.00	0.00	0.12	0.00	0.00	0.12	1.20	5.62	5.74	0.30	1.42	7.16
Manganese	611.97	3.41	8.66	1009.65	3.34	11.82	1021.47	3.27	15.32	1036.79	3.25	15.40	1052.20
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.26	0.00	0.00	0.26	0.00	0.00	0.26	0.00	0.00	0.26	0.00	0.00	0.26
Nickel	2.73	0.00	0.00	2.95	0.00	0.00	2.95	0.00	0.00	2.95	0.00	0.00	2.95
Selenium	0.16	0.00	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.18
Silver	0.06	0.00	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.06
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.03
Zinc	2.82	0.00	0.00	3.12	0.00	0.00	3.12	0.00	0.00	3.12	0.00	0.00	3.12
RADIOMETRICS													
Uranium (mg/l)	1.54	0.01	0.03	2.69	0.01	0.04	2.73	0.01	0.06	2.79	0.01	0.06	2.85

TMW-75												
CONTAMINANTS REMOVED	**2016**											
DATE FS	5-Jan-16			18-Apr-16			7-Jul-16			3-Oct-16		
(Started pumping 5/1/88)		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		554,770	64,163,230		463,130	64,626,360		454,610	65,080,970		438,360	65,519,330
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS												
Bicarbonate	162.00	340.21	43640.05	139.00	243.69	43883.74	156.00	268.46	44152.20	177.00	293.71	44445.91
Calcium	123.00	258.30	40398.11	119.00	208.62	40606.73	118.00	203.06	40809.79	117.00	194.15	41003.94
Carbonate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chloride	18.00	37.80	5774.34	9.00	15.78	5790.12	18.00	30.98	5821.09	17.00	28.21	5849.30
Fluoride	0.10	0.21	31.92	0.10	0.18	32.10	0.10	0.17	32.27	0.10	0.17	32.44
Magnesium	9.80	20.58	3114.63	9.40	16.48	3131.11	8.90	15.32	3146.43	9.60	15.93	3162.36
Nitrate(NO3)	0.00	0.00	34.27	0.00	0.00	34.27	0.00	0.00	34.27	0.00	0.00	34.27
Potassium	3.10	6.51	869.36	3.10	5.43	874.80	3.20	5.51	880.31	3.30	5.48	885.78
Silica	14.70	30.87	3691.03	14.70	25.77	3716.80	13.90	23.92	3740.72	13.50	22.40	3763.12
Sodium	44.10	92.61	11934.04	44.00	77.14	12011.18	42.80	73.65	12084.83	45.40	75.34	12160.17
Sulfate	286.00	600.61	89923.80	185.00	324.33	90248.13	252.00	433.66	90681.79	285.00	472.92	91154.71
TDS	587.00	1232.72	184431.45	416.00	729.31	185160.76	566.00	974.02	186134.78	572.00	949.16	187083.94
TRACE METALS												
Aluminum	0.00	0.00	0.44	0.00	0.00	0.44	0.00	0.00	0.44	0.00	0.00	0.44
Arsenic	0.00	0.00	0.07	0.00	0.00	0.07	0.00	0.00	0.07	0.00	0.00	0.07
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.00	0.00	1.23	0.00	0.00	1.23	0.00	0.00	1.23	0.00	0.00	1.23
Cadmium	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08
Chromium	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Cobalt	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02
Copper	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08	0.00	0.00	0.08
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.19	0.40	34.28	0.21	0.37	34.64	0.12	0.21	34.85	0.19	0.32	35.17
Lead	0.00	0.00	0.00	0.00	0.00	0.00	1.30	2.24	2.24	0.30	0.50	2.73
Manganese	0.11	0.23	27.61	0.11	0.19	27.81	0.11	0.19	27.99	0.11	0.18	28.18
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.26	0.00	0.00	0.26	0.00	0.00	0.26	0.00	0.00	0.26
Nickel	0.00	0.00	0.45	0.00	0.00	0.45	0.00	0.00	0.45	0.00	0.00	0.45
Selenium	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12
Silver	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zinc	0.00	0.00	2.58	0.00	0.00	2.58	0.00	0.00	2.58	0.00	0.00	2.58
RADIOMETRICS												
Uranium (mg/l)	0.02	0.04	12.19	0.02	0.03	12.22	0.02	0.03	12.25	0.02	0.03	12.28

TMW-96												
CONTAMINANTS REMOVED	**2016**											
DATE FS	16-Feb-16			21-Apr-16			11-Jul-16			3-Oct-16		
Started pumping June 30, 2005		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		0	21,535,001		464,920	21,999,921		387,610	22,387,531		237,910	22,625,441
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS												
Bicarbonate	156.00	0.00	11833.78	143.00	251.67	12085.45	152.00	223.02	12308.48	148.00	133.29	12441.76
Calcium	326.00	0.00	15210.78	205.00	360.78	15571.56	203.00	297.85	15869.41	183.00	164.81	16034.22
Carbonate	0.00	0.00	3.01	0.00	0.00	3.01	0.00	0.00	3.01	0.00	0.00	3.01
Chloride	91.00	0.00	2352.51	30.00	52.80	2405.30	31.00	45.49	2450.79	28.00	25.22	2476.00
Fluoride	0.10	0.00	8.21	0.10	0.18	8.38	0.00	0.00	8.38	0.10	0.09	8.47
Magnesium	48.70	0.00	1132.04	14.80	26.05	1158.09	12.80	18.78	1176.87	12.60	11.35	1188.22
Nitrate(NO3)	2.80	0.00	7.58	0.00	0.00	7.58	0.00	0.00	7.58	0.00	0.00	7.58
Potassium	4.60	0.00	322.84	4.10	7.22	330.05	4.10	6.02	336.07	3.80	3.42	339.49
Silica	11.60	0.00	1128.97	14.40	25.34	1154.32	13.70	20.10	1174.42	13.80	12.43	1186.85
Sodium	92.00	0.00	4229.20	57.20	100.67	4329.87	51.70	75.86	4405.72	52.40	47.19	4452.91
Sulfate	912.00	0.00	38010.93	492.00	865.88	38876.80	442.00	648.53	39525.33	455.00	409.77	39935.10
TDS	1680.00	0.00	69874.10	940.00	1654.32	71528.42	899.00	1319.07	72847.49	839.00	755.59	73603.08
TRACE METALS												
Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.00	0.00	0.38	0.00	0.00	0.38	0.00	0.00	0.38	0.00	0.00	0.38
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cobalt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.00	0.00	3.33	0.05	0.09	3.42	0.06	0.09	3.50	0.11	0.10	3.60
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.54	0.54
Manganese	0.08	0.00	8.93	0.13	0.23	9.16	0.12	0.18	9.34	0.12	0.11	9.45
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02
Selenium	0.17	0.00	0.60	0.01	0.01	0.61	0.00	0.01	0.62	0.00	0.00	0.62
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zinc	0.00	0.00	0.28	0.00	0.00	0.28	0.00	0.00	0.28	0.00	0.00	0.28
RADIOMETRICS												
Uranium (mg/l)	0.68	0.00	6.11	0.06	0.11	6.22	0.04	0.05	6.27	0.03	0.03	6.30

TMW-97												
CONTAMINANTS REMOVED	**2016**											
DATE FS	21-Mar-16			20-Jun-16			7-Sep-16			7-Nov-16		
Started pumping 9/6/05		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE		VOLUME 2016	CUMULATIVE
GALLONAGE		0	26,566,710		900,750	27,467,460		1,092,230	28,559,690		788,990	29,348,680
CONSTITUENTS	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED	ANALYSIS	QUANTITY REMOVED	QUANTITY REMOVED
	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)	(PPM)	(KG)	(KG)
MAJOR IONS												
Bicarbonate	157.00	0.00	12703.62	133.00	453.49	13157.11	132.00	545.76	13702.87	131.00	391.25	14094.12
Calcium	317.00	0.00	15807.25	165.00	562.60	16369.85	166.00	686.33	17056.19	170.00	507.73	17563.92
Carbonate	0.00	0.00	4.70	0.00	0.00	4.70	0.00	0.00	4.70	0.00	0.00	4.70
Chloride	58.00	0.00	2228.50	27.00	92.06	2320.56	28.00	115.77	2436.33	26.00	77.65	2513.98
Fluoride	0.10	0.00	12.31	0.10	0.34	12.65	0.10	0.41	13.06	0.10	0.30	13.36
Magnesium	43.90	0.00	1167.87	11.30	38.53	1206.40	11.80	48.79	1255.18	12.30	36.74	1291.92
Nitrate(NO3)	0.00	0.00	1.04	0.00	0.00	1.04	0.00	0.00	1.04	0.00	0.00	1.04
Potassium	4.80	0.00	359.16	3.60	12.27	371.43	3.60	14.88	386.32	3.70	11.05	397.37
Silica	13.80	0.00	1425.76	14.60	49.78	1475.54	14.40	59.54	1535.08	14.30	42.71	1577.79
Sodium	80.50	0.00	4686.00	45.80	156.16	4842.16	50.00	206.73	5048.89	51.20	152.92	5201.81
Sulfate	920.00	0.00	38181.70	429.00	1462.77	39644.47	440.00	1819.20	41463.67	423.00	1263.35	42727.02
TDS	1610.00	0.00	72378.42	792.00	2700.49	75078.91	799.00	3303.50	78382.41	814.00	2431.13	80813.54
TRACE METALS												
Aluminum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Beryllium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cadmium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Chromium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cobalt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Copper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cyanide	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0.67	0.00	9.00	0.09	0.31	9.31	0.18	0.74	10.05	0.20	0.60	10.65
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Manganese	0.25	0.00	11.08	0.11	0.38	11.45	0.11	0.45	11.91	0.11	0.33	12.23
Mercury	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Molybdenum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Selenium	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Silver	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thallium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vanadium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Zinc	0.02	0.00	0.12	0.00	0.00	0.12	0.00	0.00	0.12	0.03	0.09	0.21
RADIOMETRICS												
Uranium (mg/l)	0.44	0.00	4.47	0.04	0.12	4.59	0.03	0.14	4.73	0.04	0.11	4.84

Appendix 2

Inspection of Diversion Channel

TELESTO
SOLUTIONS • INCORPORATED

June 30, 2016

Via Electronic Mail

Oscar Paulson
Sweetwater Uranium Facility
Kennecott Uranium Company
P.O. Box 1500
Rawlins, WY 82301-1500

Subject: 2016 Observation of Diversion Channel

Dear Oscar:

OVERVIEW

On June 13, 2016, I observed conditions in the Sweetwater Uranium Project diversion channel, located east of the tailings impoundment. The diversion channel was designed to divert Battle Spring Draw runoff around the impoundment during facility operations and standby. It will be modified, or a new channel constructed, during site reclamation to divert Probable Maximum Precipitation runoff around the tailings. I have performed the annual inspections since 1994 and have documented the characteristics of the diversion channel, observing processes in bed and bank erosion or deposition. The objective of the observation is to determine whether the channel is performing as designed and whether any maintenance is required to allow the channel to continue functioning as designed. The attached Figure 1 is an aerial Google Earth image from June 2014, depicting the location of the diversion channel relative to the tailings impoundment.

The discussion below is organized by the five relatively unique channel reaches observed to have formed within the channel since its construction in 1980. The berm located to the west of the channel is comprised of soil material excavated from the channel. The berm is a stable feature—erosion from the sides of the berm is negligible and native vegetation is growing across the entire berm.

REACH 1

This most upstream reach is about 350 to 400 feet in length and is characterized by the deposition of sand (Photograph 1) derived from headcutting that has occurred at the entrance to the channel (see Photograph 2). The amount of headcutting appears similar to that last observed in 2015. The banks of the channel in this reach, with the exception of the entrance itself, are stable.

REACH 2

The second reach, progressing downstream, is approximately 100 feet in length, appearing to be somewhat shortened from previous observations due to additional upstream sand deposition. It has a shallow, low-flow channel that meanders across the channel bottom. This reach has more vegetation on the bed than the first reach, which provides some control against erosion (Photograph 3). The banks in this reach exhibit only minor erosion.

REACH 3

This middle reach is about 450 to 500 feet in length, has the greatest percentage of channel bed covered by vegetation, and has no observable low flow channel (see Photograph 4). The banks of this reach have three to four specific locations where storm water or snowmelt runoff enters the channel from the side, thus creating some rill erosion with consequent local fan deposition of bank sediments. These localized influences have little impact on the overall functioning of the channel to convey storm flow.

REACH 4

Reach 4 is about 450 feet in length. It has experienced some minor rill erosion along the banks where local runoff enters the channel, as in Reach 3. It has less bed vegetation that Reaches 2 and 3, and has a shallow low flow channel (Photograph 5).

REACH 5

This most downstream reach, about 470 feet in length, begins near the location of an isolated sandstone outcrop (Photograph 6). This outcrop acts as an erosional benchmark; if it were to be covered with sediment this would be evidence of deposition, and if it were to become more exposed this would be evidence of scour. The outcrop remains little changed from previous observations. Reach 5 downstream of the outcrop has more grass in its bed and little evidence of a low flow channel (Photograph 7). The bed material is more clayey than elsewhere, which may be evidence of some minor deposition as the channel transitions to its outlet. The banks are shorter in this reach, and exhibit localized, minor rill erosion.

BANK EROSION

Bank erosion throughout the length of the diversion channel occurs as localized rilling where runoff flows into the channel. Broader, lateral migration from flows within the channel is not occurring. Photograph 8 shows an example of localized rilling in the bank, with consequent sand deposition in a fan at the bank's toe.

CONCLUSION

Little evidence of change in the channel's form has been observed from the May 2015 to the June 2016 inspections, either in terms of vertical adjustment of the channel bed or in terms of lateral movement of the channel's banks. The diversion channel's capacity has not decreased measurably since its construction, and the channel is expected to continue to operate as designed. If you have any questions, please do not hesitate to contact me.

Sincerely,
Telesto Solutions, Inc.

Kent Bruxvoort

Kent Bruxvoort
Senior Engineer

KJB





PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 1, REACH 1, BED
PHOTO 2, REACH 1, ENTRANCE

PREPARED FOR: RioTinto





PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS, INCORPORATED

PHOTO 3, REACH 2, BED
PHOTO 4, REACH 3, BED

PREPARED FOR: RioTinto





PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 5, REACH 4, BED
PHOTO 6, SANDSTONE OUTCROP

PREPARED FOR: RioTinto





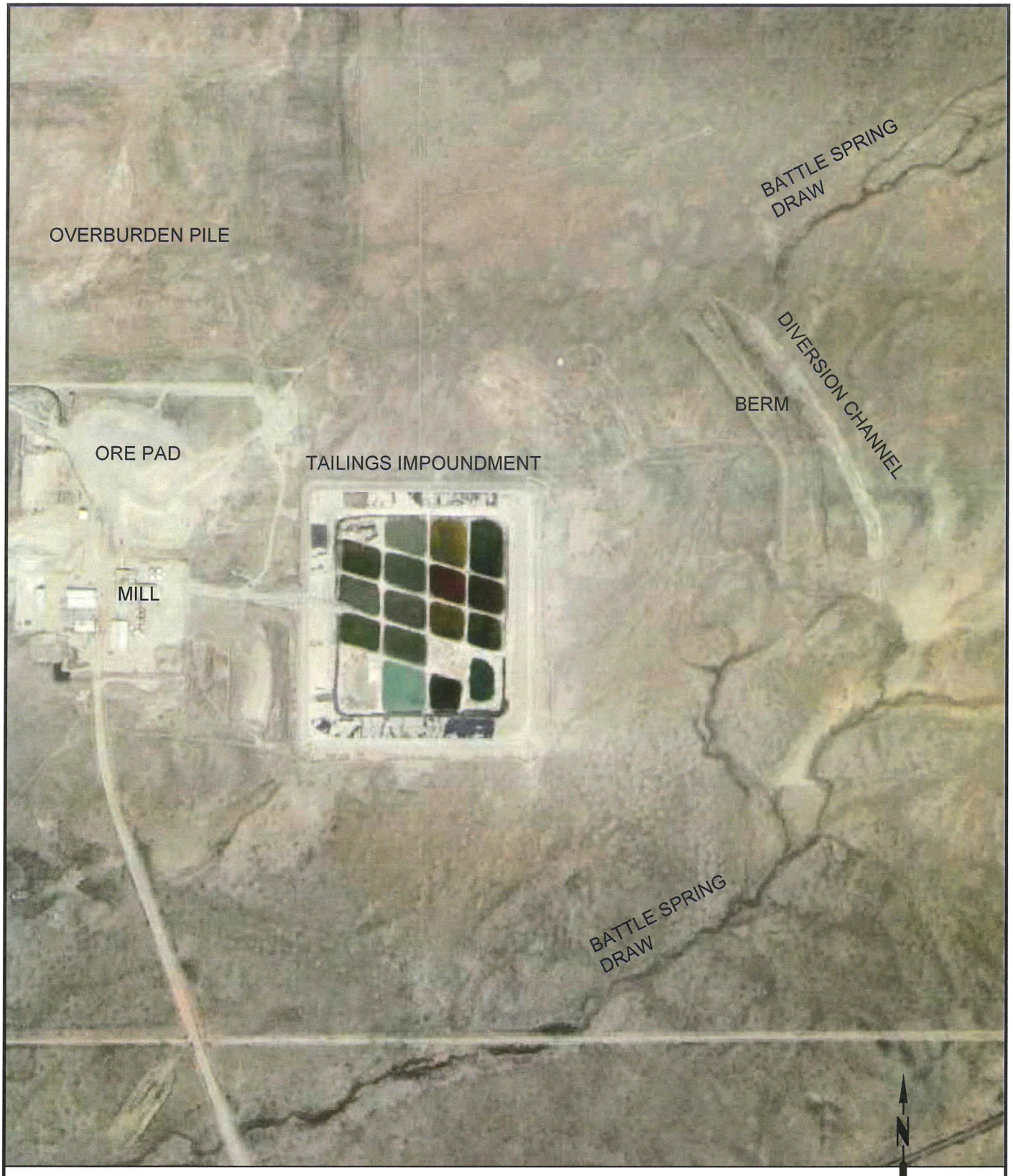
PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 7, REACH 5 OVERVIEW
PHOTO 8, REACH 3, BANK EROSION

PREPARED FOR: RioTinto



REFERENCE INFORMATION:
AERIAL PHOTO PER GOOGLE EARTH- JUNE 2014

SCALE IN FEET
0 1000

PROJECT:	TASK:
451101	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

FIGURE 1
AERIAL IMAGE OF FACILITY (6/2014)

PREPARED FOR: SWEETWATER URANIUM FACILITY

9/30/2014 R:\Sweetwater\SweetwaterUranium\Calculations\AutoCad\20140930-aerial image_2014.dwg

Appendix 3

Inspection of Tailings Impoundment Embankment

TELESTO
SOLUTIONS • INCORPORATED

June 30, 2016

Via Electronic Mail

Oscar Paulson
Sweetwater Uranium Company
P.O. Box 1500
Rawlins, Wyoming 82301-1500

Subject: 2016 Inspection of Tailings Impoundment Embankments

Dear Oscar:

OVERVIEW

On June 13, 2016 I inspected the tailings impoundment embankments at the Sweetwater Uranium Facility, both inside and outside the impoundment. These observations were performed so that any conditions adversely affecting performance of the embankments could be noted. Figure 1 presents a view of the impoundment in an aerial photograph, based on 2014 photography.

EMBANKMENTS OBSERVATIONS

I observed the interior of the embankments by walking along the entire crest. I observed the exterior of the four tailings embankments by driving slowly around its exterior perimeter and walking to those portions of the embankments that required closer observation.

The tailings regrading effort that occurred from 2006 through 2008 lowered the formerly elevated beach portions of the tailings and created a number of evaporation lagoons internal to the impoundment. This resulted in an enhancement of the evaporation of tailings fluid and water from the Battle Spring Aquifer which is being pumped into the impoundment as part of the facility's Corrective Action Program. This effort also resulted in a lowering of the water levels within the impoundment. The native ground elevation at the outside perimeter of the tailings impoundment varies from 6,634 feet above mean sea level at the impoundment's southwest corner to 6,658 feet at its northeast corner. Water levels in the various evaporation lagoons vary from approximately 6,629 in the southwest corner inside the impoundment to approximately 6,632 feet in the north-central portion of the impoundment. The elevation of the free water within pool at the southeast corner of the impoundment on June 13, 2016 was measured at 6,615.26 feet (NAVD 88). Consequently,

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there is almost no potential for tailings fluid to escape through the embankments, even in the event of a hypothetical, catastrophic failure of an embankment. Figure 2 depicts key elevations within and outside the impoundment.

The embankment ranges in height at its exterior perimeter from about 30 feet at its northeast corner to about 50 feet at its southwest corner. No significant evidence of either settlement or displacement of the embankment was observed during the June 2016 field visit. No erosion of the outer surface of the embankments has occurred that might extend to the crest. Kennecott Uranium Company (KUC) has annually monitored and repaired as necessary rill erosion along the outside of the embankments. KUC has also maintained a low berm on the outer perimeter of the embankment crest to keep runoff from the crest itself inside the impoundment.

Photographs 1 and 2 are of the west embankment, depicting the general acceptable condition of the embankment and specific maintenance performed where necessary. Photograph 3 was taken of the south embankment, and depicts the overall acceptable condition of the embankment. Photographs 4 and 5 show the east embankment, including recent repair of rill erosion as depicted in Photograph 5. Photograph 6 was taken of the north embankment, the shortest of the four. Little erosion and no settlement is observable for this embankment.

SUMMARY

In summary, embankment conditions were noted to be of a generally acceptable nature; no conditions of concern were noted in the June 2016 observations. No settlement of the crest was observed. No erosional rilling was observed that would extend to the crest. The extent of rilling should continue to be monitored and repaired at any point at which a rill may extend to the crest. Water levels continue to be maintained at a level below the surrounding ground surface.

If you have any questions, please do not hesitate to contact me.

Sincerely,
Telesto Solutions, Inc.

Kent Bruxvoort

Kent Bruxvoort
Senior Engineer

KJB





PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 1, WEST EMBANKMENT, NORTH END
PHOTO 2, WEST EMBANKMENT, SOUTH END

PREPARED FOR: RioTinto





PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT: -	TASK: -
PREPARED BY: TELESTO SOLUTIONS • INCORPORATED	

PHOTO 3, SOUTH EMBANKMENT
PHOTO 4, EAST EMBANKMENT

PREPARED FOR: RioTinto



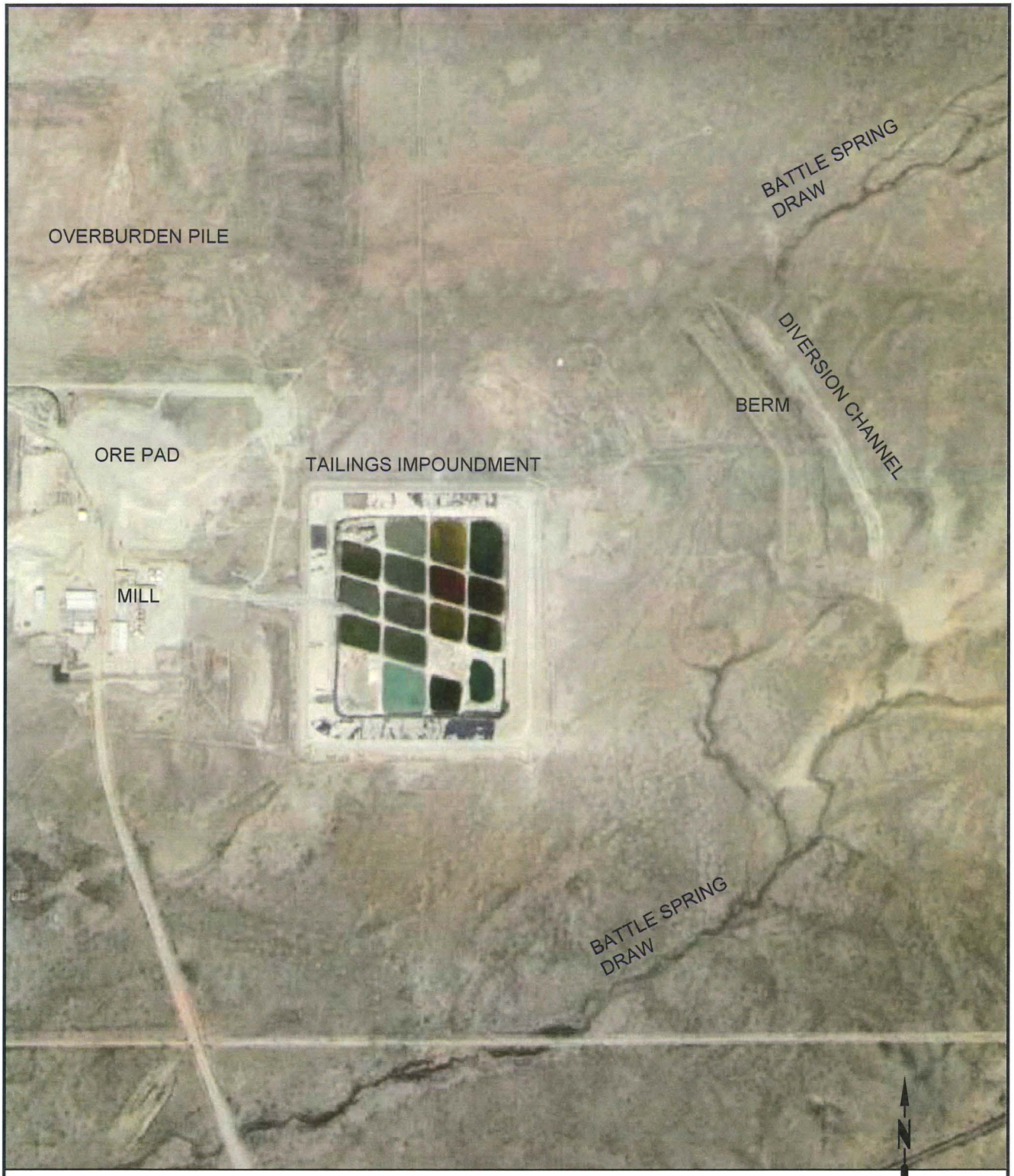


PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT: -	TASK: -
PREPARED BY: TELESTO SOLUTIONS • INCORPORATED	

PHOTO 5, EAST EMBANKMENT, REPAIRED RILL
PHOTO 6, NORTH EMBANKMENT

PREPARED FOR: RioTinto



REFERENCE INFORMATION:
AERIAL PHOTO PER GOOGLE EARTH- JUNE 2014

SCALE IN FEET
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PROJECT:	TASK:
451101	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

FIGURE 1
AERIAL IMAGE OF FACILITY (6/2014)

PREPARED FOR: SWEETWATER URANIUM FACILITY

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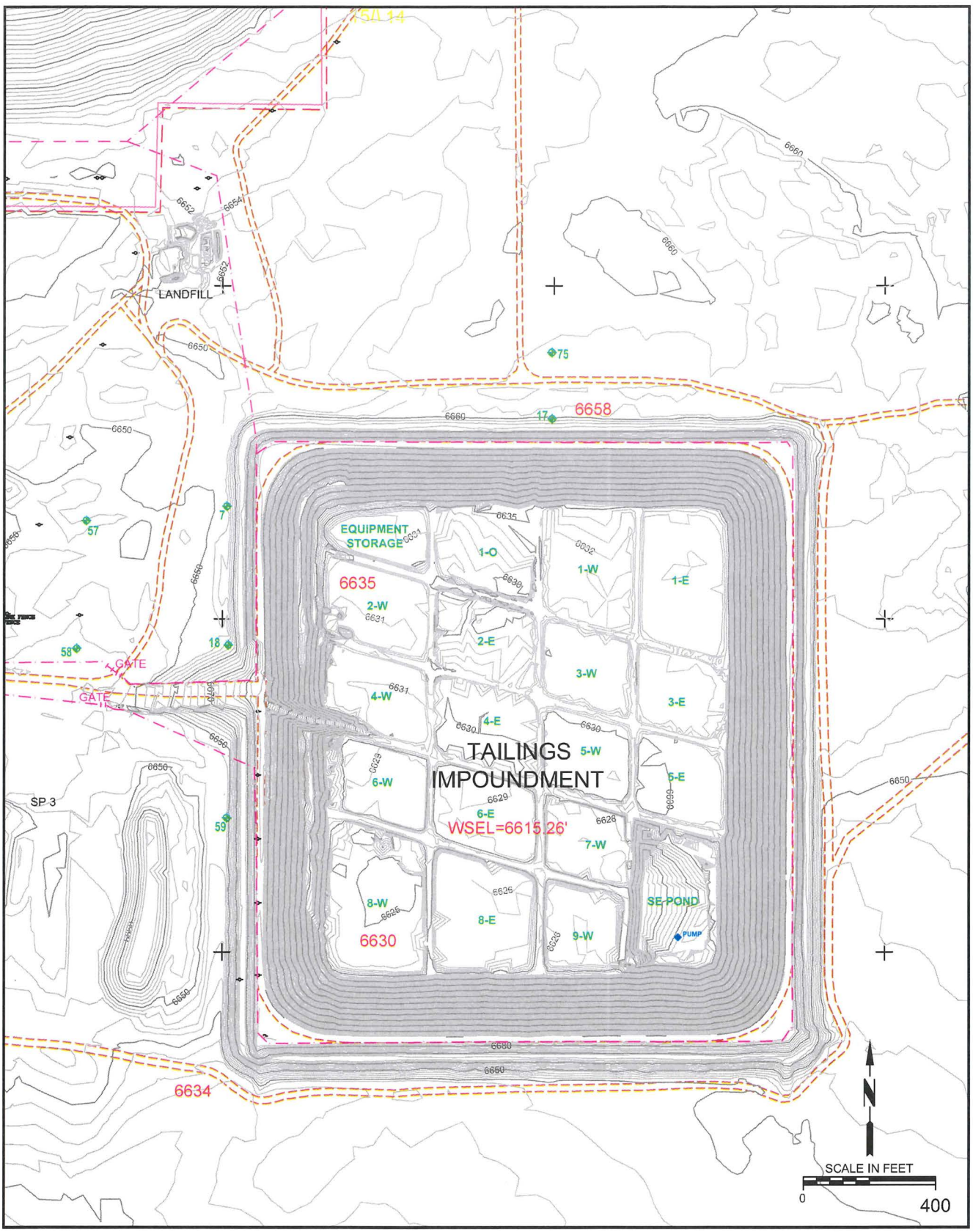

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PROJECT:	TASK:
451101	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

FIGURE 2
JULY 2009 TAILINGS AREA SURVEY

PREPARED FOR:
SWEETWATER URANIUM FACILITY

Appendix 4

Inspection of Tailings Impoundment Liner

TELESTO
SOLUTIONS • INCORPORATED

July 14, 2016

Via Electronic Mail

Oscar Paulson
Sweetwater Uranium Company
P.O. Box 1500
Rawlins, Wyoming 82301-1500

Subject: **2016 Observation of Tailings Impoundment**
Sweetwater Uranium Project

Dear Oscar:

OVERVIEW AND OBJECTIVE

On June 13, 2016, Telesto Solutions, Inc. (Telesto) inspected specific details of the Sweetwater Uranium Project's tailings impoundment liner, per recommendations in a July 13, 1979 letter report from D'Appolonia Consulting Engineers, Inc. D'Appolonia's letter report recommended inspection as follows:

> *"Annual inspection (by a registered engineer and by a person not involved with the daily inspection) should be made to assess the soil cover at the top of the dike (and at the bench until it is covered by water), assure that the membrane is not being pulled from the trenches, assure that chemical or physical action is not exposing the scrim in the Hypalon, and evaluate the general character of the Hypalon, particularly significant decrease in membrane plyability."*

Management activities within the tailings impoundment consist of primarily two objectives: 1) assuring that the existing Hypalon® liner is maintained within five vertical feet of tailings, and 2) assuring that the impoundment receives and evaporates groundwater pumped from the Battle Spring Aquifer under the facility's Corrective Action Program. Evaporation lagoons have been created inside the impoundment to cover tailings and to enhance evaporation of water within the impoundment.

BACKGROUND

Most of the liner material from within five feet of the tailings upward to the embankment crest has been lost; liner failure at the facility has been documented elsewhere and noted in annual inspection letters since the mid-1990s. Telesto received from Kennecott Uranium

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(KUC) a copy of a file letter prepared by the previous site licensee, Minerals Exploration Company (Minerals) on October 4, 1984 and addressed to W.L. Garland of the Wyoming Department of Environmental Quality, Water Quality Division, which described the nature of the liner tear in detail. Quoting from this letter,

> *"Briefly what occurred is: 1) debris from the tailings distribution system punctured the liner allowing water to 2) cut wave-cut benches and differentiate rocks in the subgrade, which wore through the liner allowing more water behind the liner and washing finer sand down to bulge at the glue seam at the bench. As the water level decreased 3) the process continued and more rocks wore through the liner and the bulge grew larger until 4) the bulge forced the glue seam to separate, creating another larger area for seepage. As the water level continued to drop below the bench 5) seepage above the bench ended; however, 6) unsealed vent holes below the bench allowed differentiation of subgrade material below the bench and 7) some of this material wore through the line allowing seepage."*

Minerals also noted in this letter that the liner tears were exacerbated by wind which ripped sections of liner. As a result of these tears, Minerals decreased the water level in the impoundment, drilled monitoring and pumping wells, and began the site's Corrective Action Program. Thus, a portion of the original intent of the above D'Appolonia recommendation is no longer applicable. As of the June 13, 2016 observation date, no portions of the key trench at the crest of the embankments are functioning as originally designed. KUC intentionally cut the only remaining segments of liner between the crest and the bench to decrease the likelihood of a liner tear progressing from top to bottom, as discussed in greater detail below. The twofold focus of this letter thus regards the maintenance of the liner within five feet of the tailings or tailings fluid and general management activities within the impoundment.

IMPOUNDMENT MAINTENANCE

From February 2006 through May 2007 an estimated total of 230,000 cubic yards of additional 11(e).2 soils from the vicinity of the Sweetwater Mill's catchment basin were placed near the northeast portion of the impoundment. A ramp was constructed from the west embankment in the center of the impoundment to the tailings surface. During the latter half of 2007 and in 2008 the tailings surface and the additional 11(e).2 soils were regraded. Beach sands were moved from the elevated western edge of the impoundment to the lower eastern portion of the impoundment. Substantial progress was thereby achieved toward meeting tailings management objectives: 1) regrading the tailings to a more regular surface in anticipation of either reclamation or future tailings storage; 2) leveling the tailings to create a surface that is entirely below the bench and essentially below the elevation of the surrounding native ground, more sheltered from wind, and easier

to keep moistened; 3) covering the tailings to limit wind erosion potential; and 4) creating stable, flat, bermed areas as evaporation lagoons for tailings dewatering and pump-back water evaporation.

The attached Figure 1 is an aerial photograph of the site (June 2014 aerial image) and Figure 2 presents the existing topography of the tailings impoundment, as surveyed in July 2009. These figures indicate the location of evaporation lagoons. To date, 15 lagoons are being maintained (1-0, 1-W & 1-E, 2-W & 2-E, 3W & 3E, 4W & 4E, 5W & 5E, 6W & 6E, 8-E, and 9-W). Each lagoon is lined with a single polyethylene liner to limit the amount of water that could infiltrate into the tailings which would have to be pumped from the free pool back into the lagoons. Tailings have been placed over the liners to limit wind exposure and related wind damage. Because these lagoons are for fluid management purposes, and are within the impoundment and below the level of maintained Hypalon® liner, temporary loss of lagoon liners is of relatively minor concern. Groundwater protection is provided by the existing Hypalon® liner below the entire tailings impoundment. The free water pool is located in the southeast corner of the impoundment, as seen in Figure 2, and the northwestern corner is dedicated to storage of equipment classified as 11(e).2 byproduct material.

In regrading the tailings, the surface has been everywhere lowered to elevations below the surrounding native ground. The surfaces of the lagoons range in elevation from 6,625 feet to 6,632 feet, with berm elevations up to about 6,635 feet. At the southwest corner of the impoundment, the nearest lagoon berm elevation of about 6,630 feet is four feet lower than the elevation of the native ground adjacent to the outside impoundment toe. At the northeast corner, the berm elevation of about 6,635 feet is 23 feet lower than the elevation of the adjacent native ground. The elevation of the free water within pool at the southeast corner of the impoundment on June 13, 2016 was measured at 6,615.26 feet (NAVD 88). Consequently, there is almost no potential for tailings fluid to escape through the embankments, even in the event of a hypothetical, catastrophic failure of an embankment. Figure 2 depicts key elevations within and outside the impoundment.

Between the date of the 2015 observations (May 18, 2015) and the June 13, 2016 observations, impoundment maintenance activities continued. Specific maintenance completed or ongoing during 2015-2016 included 1) repair of the liner to keep it functional within five feet of the tailings; 2) ongoing maintenance of the water management system including activities such as pump repair and/or replacement; 3) monitoring of sandbag weights along the south embankment to limit liner buffeting under windy conditions; and 4) maintenance and repair of the outer surfaces of the embankments against erosion effects. In addition, KUC intentionally cut the approximately 200 feet of what had been continuous liner from the crest to the bench along a portion of the south embankment. This was done to prevent this portion of liner from potentially being lifted by high winds and propagating a tear through the bench downward toward the tailings surface. This cut was in a portion

of liner that served no purpose. In 2016, KUC also began a project to alleviate an observed tautness in the liner along the south embankment between the bench and the tailings surface. The key trench at the bench as originally designed and constructed is located to the outside edge of the bench, and the liner surface below the bench experiences a degree of tension. For an approximate 100 feet of length in the southwest corner (Photograph 1), KUC has cut the liner at the edge of the existing key trench, and re-placed the liner in a new key trench installed at the inside edge of the bench, thereby decreasing the observed liner tension. The intent of this project is to create a test area to see whether a lessening of observed liner tension may decrease the potential for vertical tears in the liner surface. This test trench was observed on June 13, 2016 to be effective at locally decreasing the observed tension by creating slack in the liner between the bench and the tailings surface.

FLUID LEVELS

Fluid into the impoundment includes precipitation and groundwater pumped as part of the facility's Corrective Action Program. Evaporation from the impoundment has helped to offset these fluid inputs, as shown in Table 1 below. The tailings regrading effort of 2006/2007 also raised the elevation of the tailings surface below the free pool, displacing much of the pool volume. Consequently, elevations of the pool surface measured prior to 2007 cannot be compared to post-2007 elevations without taking into account the tailings regrading; note in Table 1 how the water surface of the pool rose in 2008. The pool elevation in November 2015 was at an elevation of about 6,610 feet (NGVD 29), about 1.0 feet higher than in November 2014. The free pool can be seen in the center of Photograph 2.

During 2015 a total of 26,396,000 gallons of groundwater were pumped into the impoundment. Table 2 presents pumpback volume data from 1986 through June 13, 2016. During each year the pumpback system is monitored and managed to limit the volume of pumpback water to a maximum defined by the Corrective Action Program. This maximum was raised from 25,000,000 to 27,000,000 gallons by Safety and Environmental Evaluation (SEE) #23, "Establishment of Annual Pumpback Volume Based upon Tailings Impoundment Evaporative Capacity." The rationale for this increase is the additional evaporative capacity afforded by the 15 lined lagoons, and the increase became effective on June 1, 2013.

INSPECTION OVERVIEW

Photographs 1 through 8 depict the condition of the impoundment observed on June 13, 2016 (Photograph 2 shows a portion of liner previously removed from the impoundment for testing). The visual inspection was performed by walking along the entire crest and by walking along the bench where it could be safely walked.

TAILINGS/FLUID SURFACE TO BENCH

The liner has been damaged below the bench along the east, north, and west embankments. However, the liner within five vertical feet of the tailings or tailings fluid surface has been maintained intact. A section of liner was removed in May 2016 to be sent to Golder Associates for physical testing, shown in Photograph 3, and observed by Telesto on June 13, 2016. The liner remains, by observation, plyable and there is no evidence of exposed scrim by either physical or chemical means.

Geomembrane testing was performed by Golder Associates, Inc. and TRI Environmental in June 2016, with test results attached. Results for thickness, breaking strength, and hydrostatic resistance showed the liner to meet reference value standards. Tear resistance (tongue tear), hardness, and low temperature bend test results failed to meet reference values. Tear resistance in the June 2016 testing, at 31.4 and 28.7 lbs, was below the reference value of 35 lbs. Hardness, Shore A, at a value of 80, was less than the reference value range of 83 to 87. Low Temperature Bend (-40°C) testing indicated a "fail" condition in 5 of 10 tests.

The tests indicate the liner meets thickness testing, and remains resistant to tensile strain, but is vulnerable to tearing. KUC performs daily and weekly inspections of the liner in accordance with License Condition 10.6, which states in part, "during any period of mill standby at least a weekly inspection of the tailings area shall be performed and documented." Therefore, KUC's program to inspect the liner, maintain the liner within five vertical feet of the tailings surface, and perform other efforts to mitigate against potential tearing promotes the continuing performance of the liner to limit leakage potential.

Photograph 4 shows an example of liner repair within five vertical feet of the tailings or tailings fluid surface. The liner along the southern embankment was covered with sandbag weights in Spring 2015, and continues through 2016, as a preventive measure against buffeting in windy conditions (Photograph 5). Photograph 6 shows the liner below the bench along the southern embankment, looking west, in the lower right portion of the photograph, and shows sections of damaged liner above the bench. Photograph 7 shows the east embankment and the maintained liner within five vertical feet of the tailings, with the non-existent liner above that.

BENCH TO CREST

The bench, after tailings regrading, is everywhere exposed (except where under the ramp). The bench is observed to be functioning as designed only along the southern embankment. Elsewhere the key trench along the bench is rendered as non-functioning due to liner tears.

Between the bench and the crest of the impoundment, the liner is essentially no longer functional along any of the four sides of the embankment. Photographs 6 through 8 show much of that portion of the impoundment between the bench and the crest. As of the date of the 2016 impoundment observation, the entire perimeter of the impoundment has no functioning length of liner. Everywhere the liner above the bench has been significantly torn and is in most areas non-existent, and where previously connected, KUC has intentionally cut the liner to limit the potential for a vertical tear progressing to the tailings surface.

The key trench at the crest is no longer functioning as designed due to liner loss between the bench and the crest. The crest is graded as needed and is relatively smooth for safe vehicle traffic and is not impacted by erosion from the outside edges of the embankments.

SUMMARY

Above the bench, the liner is no longer functional, and the key trench at the crest thus no longer provides a function. The liner along the bench and the seam at the bench is functional only along the south embankment and a portion of the west embankment. The liner is fully maintained and repaired as necessary within five vertical feet of the tailings or tailings fluid around the entire perimeter of the impoundment. The liner remains, by observation and testing, plyable, and has been tested to demonstrate acceptable resistance against tensile force. However, testing shows the tear resistance properties of the liner to be below the reference value. There is no evidence of exposed scrim by either physical or chemical means.

Ongoing maintenance of the impoundment serves to allow Kennecott Uranium Company to meet its operational objectives. Specific maintenance completed or ongoing during 2015-2016 includes 1) repair of the liner to keep it functional within five feet of the tailings; 2) ongoing maintenance of the water management system including activities such as pump repair and/or replacement; 3) monitoring of sandbag weights along the south embankment to limit liner buffeting under windy conditions; 4) maintenance and repair of the outer surfaces of the embankments against erosion effects; 5) intentional cutting of a small portion of liner along the south embankment above the bench to limit the potential for vertical tearing as a result of wind; and 6) a test program to relocate the key trench from the outer edge to the inner edge of the bench.

Kennecott Uranium Company continues to effectively manage the tailings impoundment through as-needed maintenance of the liner within five vertical feet of the tailings or tailings fluid and keeping the tailings covered with filled evaporation lagoons. Additionally KUC is maintaining the exposed liner to limit potential for tearing and tensile strain. Through these efforts, potential for fluid to escape through the remaining Hypalon® liner remains limited, potential for windblown tailings is decreased, potential for radon

emissions is decreased, the surface of the tailings has been lowered to a level everywhere below the surrounding native ground surface, tailings consolidation throughout the impoundment is promoted, and evaporation over a large surface area within the impoundment is enhanced. Photograph 8 shows water in the evaporation lagoons as viewed from the north.

If you have any questions, please do not hesitate to contact me.

Sincerely,
Telesto Solutions, Inc.

Kent Bruxvoort
Senior Engineer

KJB
Enclosure

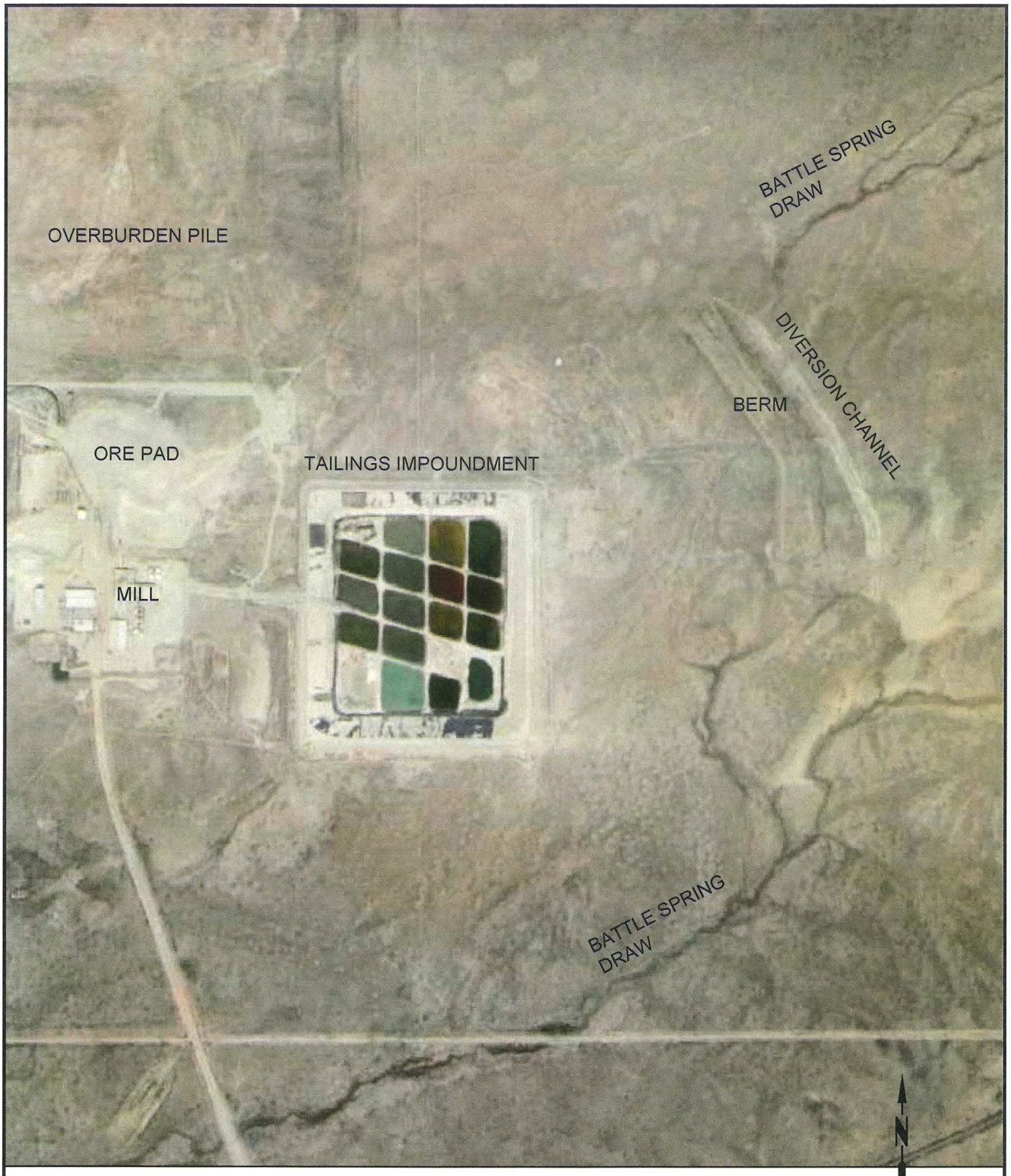
Table 1 Summary of Tailings Impoundment Fluid Levels

END-OF-YEAR MEASUREMENT DATE	FLUID ELEVATION, POOL SURFACE
November 19, 1987	6636.3
October 31, 1988	6632.0
November 20, 1989	6629.0
November 11, 1990	6626.6
October 7, 1991	6624.6
November 5, 1992	6622.2
October 11, 1993	6621.1
October 10, 1994	6618.9
October 3, 1995	6619.2
October 3, 1996	6617.9
October 16, 1997	6616.8
September 14, 1998	6616.6
November 17, 1999	6614.6
November 9, 2000	6610.8
November 19, 2001	6611.4
November 5, 2002	6607.1
October 6, 2003	6606.8
October 14, 2004	6608.7
September 5, 2005	6605.5
September 19, 2006	6608.7
October 16, 2007	6609.3
October 31, 2008	6620.2
October 27, 2009	6620.4
October 21, 2010	6619.9
October 3, 2011	6617.4
November 12, 2012	6609.1
November 4, 2013	6608.0
November 17, 2014	6609.1
November 9, 2015	6610.2
June 13, 2016	6612.2

Note: Elevations are normalized to the facility datum originally established by Minerals Exploration Company for control point TLT-203 (NGVD 29).

Table 2 Summary of Corrective Action Program Pumpback Volumes

DATES	PUMPBACK VOLUME, GALLONS
April 1, 1986 to April 1, 1987	4,538,561
April 1, 1987 to April 1, 1988	6,527,284
April 1, 1988 to April 1, 1989	10,519,688
April 1, 1989 to April 1, 1990	11,228,062
April 1, 1990 to January 1, 1991	10,060,823
January 1, 1991 to December 1, 1991	15,996,191
December 1, 1991 to December 31, 1992	21,302,920
December 31, 1992 to December 31, 1993	14,067,020
December 31, 1993 to December 31, 1994	18,503,040
December 31, 1994 to December 31, 1995	18,149,040
December 31, 1995 to December 31, 1996	18,562,070
December 31, 1996 to December 31, 1997	16,164,230
December 31, 1997 to December 31, 1998	15,934,590
December 31, 1998 to December 31, 1999	15,575,270
December 31, 1999 to December 31, 2000	17,990,050
December 31, 2000 to December 31, 2001	18,112,990
December 31, 2001 to December 31, 2002	16,157,330
December 31, 2002 to December 31, 2003	15,559,290
December 31, 2003 to December 31, 2004	18,182,190
January 1, 2005 to December 31, 2005	20,440,202
January 1, 2006 to December 31, 2006	24,348,650
January 1, 2007 to December 31, 2007	23,596,880
January 1, 2008 to December 31, 2008	24,034,020
January 1, 2009 to December 31, 2009	22,103,107
January 1, 2010 to December 31, 2010	23,865,855
January 1, 2011 to December 31, 2011	24,455,745
January 1, 2012 to December 31, 2012	24,656,696
January 1, 2013 to December 31, 2013	26,207,070
January 1, 2014 to December 31, 2014	26,645,670
January 1, 2015 to December 31, 2015	26,396,000
January 1, 2016 to June 13, 2016	10,654,369



REFERENCE INFORMATION:
AERIAL PHOTO PER GOOGLE EARTH- JUNE 2014

SCALE IN FEET
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PROJECT:	TASK:
451101	-

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 1
AERIAL IMAGE OF FACILITY (6/2014)

PREPARED FOR: SWEETWATER URANIUM FACILITY

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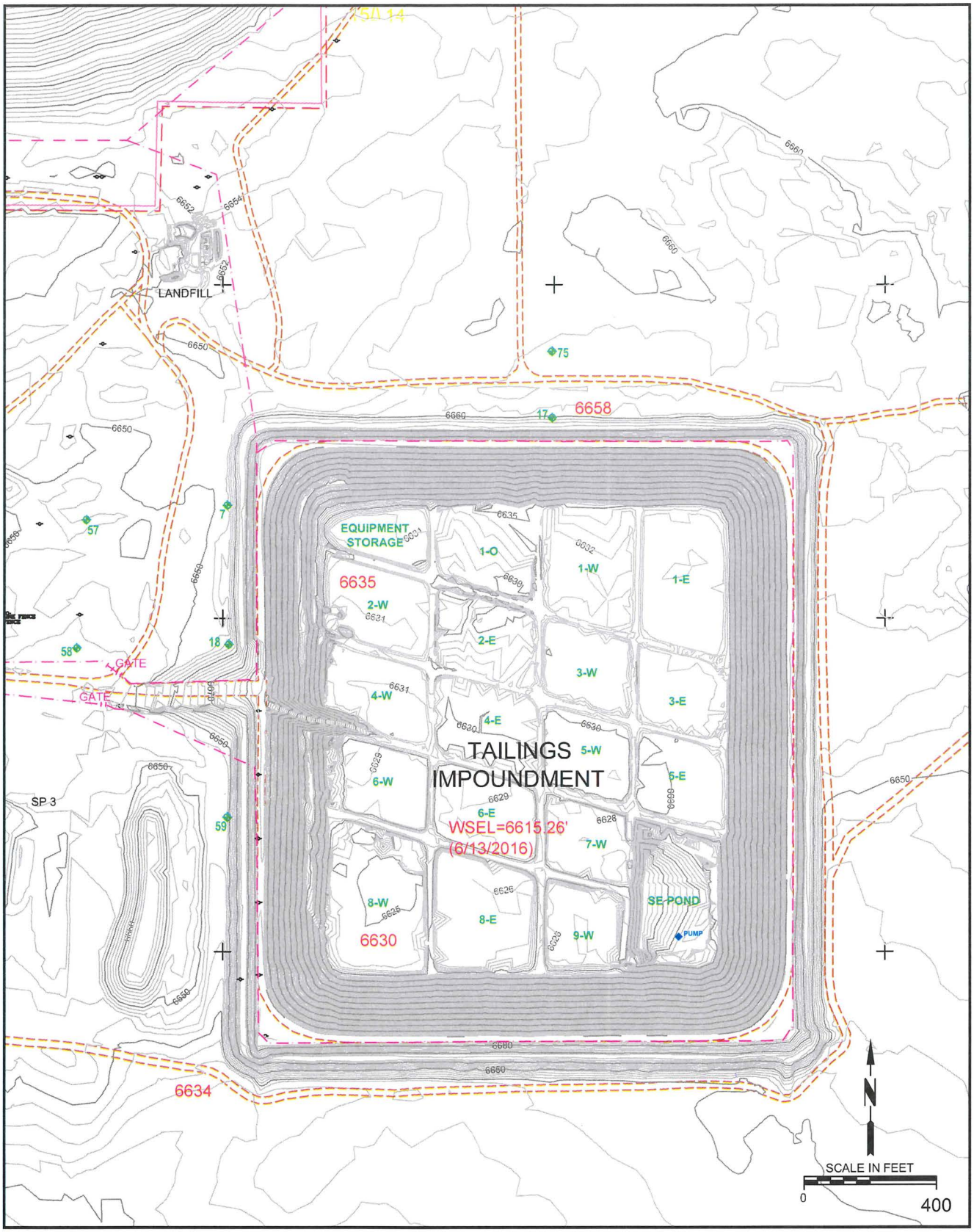

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PROJECT:	TASK:
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PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 2
JULY 2009 TAILINGS AREA SURVEY

PREPARED FOR:
SWEETWATER URANIUM FACILITY





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PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

PHOTO 1, RELOCATION OF KEY TRENCH
PHOTO 2, FREE WATER POOL

PREPARED FOR: RioTinto





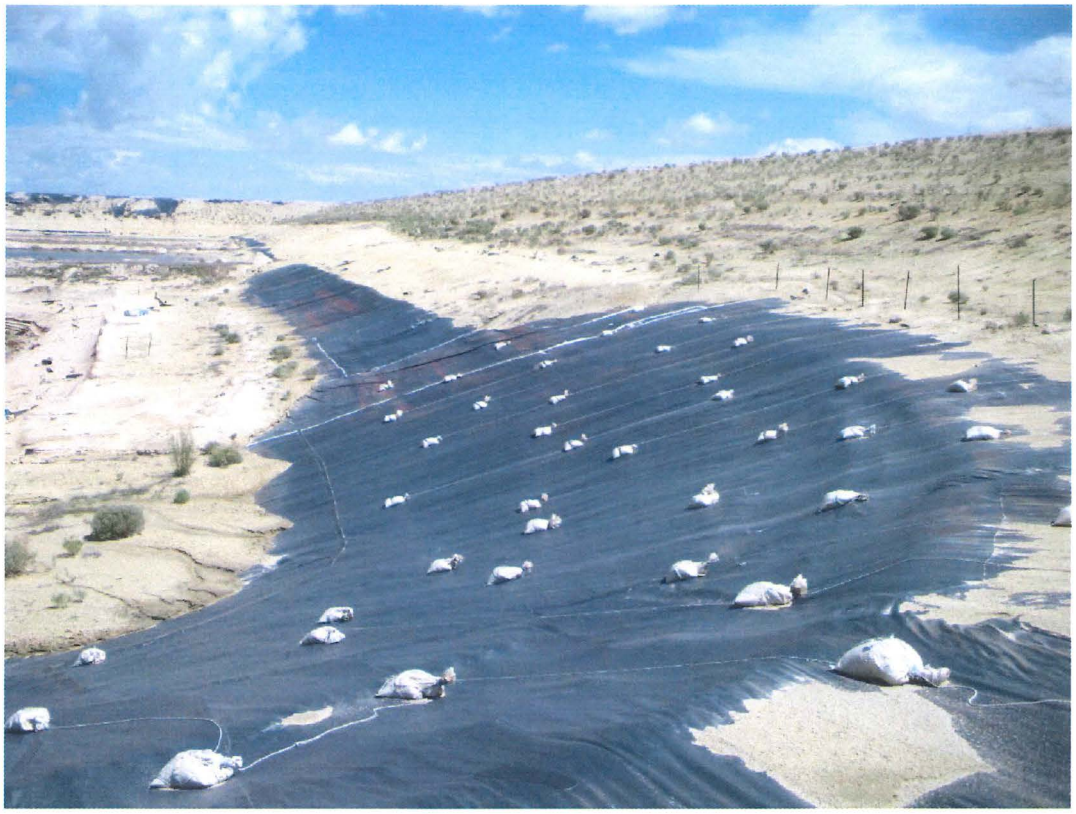
PLACE PATH AND FILE NAME OF POWERPOINT FILE HERE

PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 3, REMOVED SECTION OF LINER
PHOTO 4, LINER REPAIRS

PREPARED FOR: RioTinto





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PROJECT:	TASK:
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PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 5, WEIGHTS FOR WIND PROTECTION
PHOTO 6, SOUTH EMBANKMENT LINER

PREPARED FOR: RioTinto





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PROJECT:	TASK:
-	-

PREPARED BY: TELESTO SOLUTIONS • INCORPORATED

PHOTO 7, EAST EMBANKMENT LINER
PHOTO 8, LOOKING TOWARD THE SOUTHWEST

PREPARED FOR: RioTinto

JUNE 2016

SUMMARY OF REINFORCED GEOMEMBRANE CONFORMANCE TEST RESULTS
RIO TINTO
KENNECOTT URANIUM COMPANY
WYOMING

1659637

SAMPLE DESIGNATION	Reference Value	HYPALON LINER	HYPALON LINER-2012	HYPALON LINER-2014	HYPALON LINER-2016	-	-	-	-	-	-
DATE TESTED:	Value	Jan-2011	Sept-2012	Sept-2014	June-2016	-	-	-	-	-	-
THICKNESS (mils) ASTM D751	36	37.1	37.7	36.2	36.8	-	-	-	-	-	-
BREAKING STRENGTH (GRAB METHOD) (lbs)(A/B)(1)	200	337.4	294.4	290.9	272.9	-	-	-	-	-	-
ASTM D 751	200	372.3	290.7	298.5	263.1	-	-	-	-	-	-
TEAR RESISTANCE (TONGUE TEAR) (lbs)(A/B)(1)	35	37.4	24.8	33.0	31.4	-	-	-	-	-	-
ASTM D751	35	53.8	27.9	27.1	28.7	-	-	-	-	-	-
HYDROSTATIC RESISTANCE (psi)(2) ASTM D751	250	484	350	430	366	-	-	-	-	-	-
HARDNESS TYPE A ASTM D2240	83-87	83	85	87	80	-	-	-	-	-	-
LOW TEMPERATURE BEND (-40°C) (% passing)(A/B)(1)(2)	100	100	100	100	60	-	-	-	-	-	-
ASTM D2136	100	100	100	100	40	-	-	-	-	-	-

(1) A/B corresponds to A Direction / B Direction.
(2) Performed by TRI Environmental.

JUNE 2016 1659637

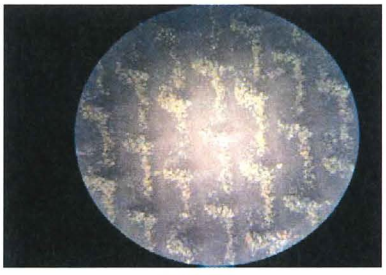
GEOMEMBRANE TEST RESULTS

PROJECT NAME: RIO TINTO/KENNECOTT URANIUM CO/WY
SAMPLE IDENTIFICATION: HYPALON LINER-2016

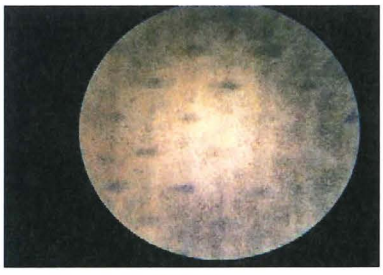
	THICKNESS (mils)	BREAKING STRENGTH (pounds) A	BREAKING STRENGTH (pounds) B	TEAR RESISTANCE (pounds) A	TEAR RESISTANCE (pounds) B	HYDROSTATIC RESISTANCE (psi)[1]
1.	37.2	244.6	232.9	25.6	20.6	310
2.	36.5	259.1	258.9	22.4	40.9	300
3.	35.3	301.3	283.1	35.3	24.0	380
4.	36.6	272.2	222.8	35.0	23.0	380
5.	36.9	287.4	317.9	38.9	34.9	380
6.	37.0					300
7.	37.6					440
8.	37.6					420
9.	36.6					380
10.	36.5					370
AVG	36.8	272.9	263.1	31.4	28.7	366

	HARDNESS TYPE A	LOW TEMP. BEND (-40°C)[1] A	LOW TEMP. BEND (-40°C)[1] B
1.	83	Fail	Fail
2.	77	Fail	Fail
3.	81	Pass	Fail
4.	78	Pass	Pass
5.	80	Pass	Pass
		% Passing	
	80	60	40

VISUAL EXAMINATION[2]



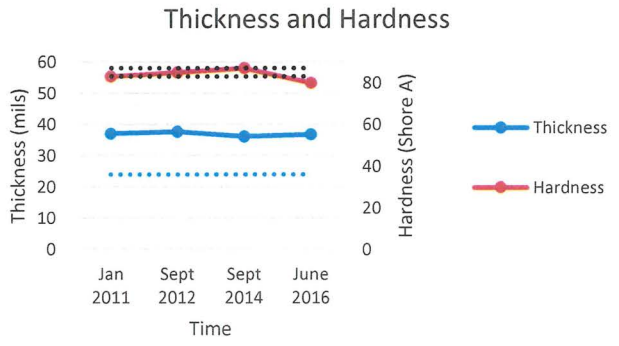
Side 1

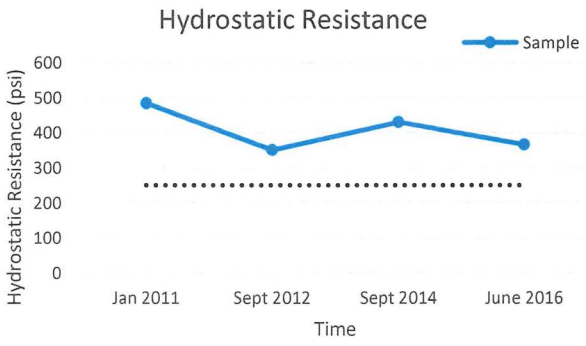


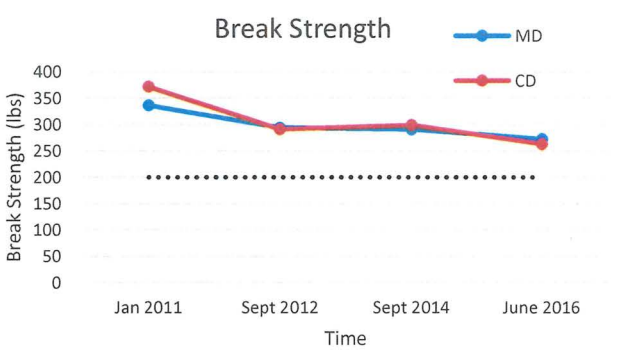
Side 2

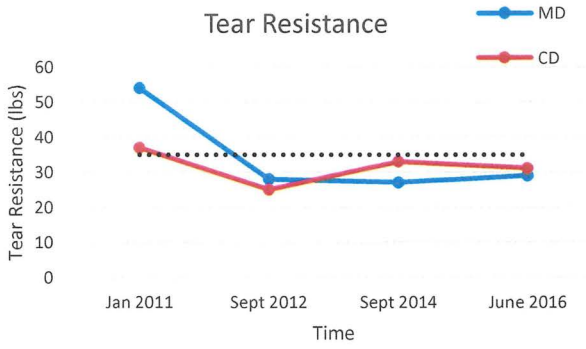
No visible defects were observed upon examination of the exposed surface
A build-up of some material on the surface of Side 2.

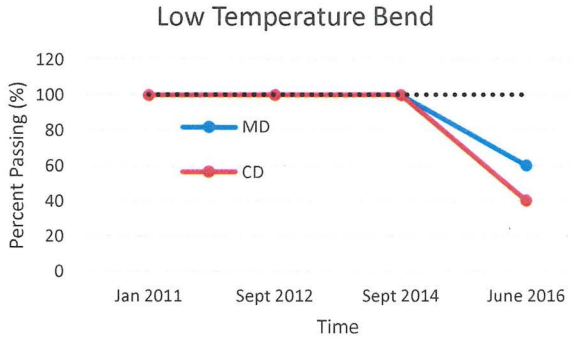
1. Performed by TRI Environmental.
2. 10x magnification


Thickness and Hardness
Thickness (mils)
Hardness (Shore A)
Thickness
Hardness
Jan 2011
Sept 2012
Sept 2014
June 2016
Time


Hydrostatic Resistance
Sample
Hydrostatic Resistance (psi)
Jan 2011
Sept 2012
Sept 2014
June 2016
Time


Break Strength
MD
CD
Break Strength (lbs)
Jan 2011
Sept 2012
Sept 2014
June 2016
Time


Tear Resistance
MD
CD
Tear Resistance (lbs)
Jan 2011
Sept 2012
Sept 2014
June 2016
Time


Low Temperature Bend
Percent Passing (%)
MD
CD
Jan 2011
Sept 2012
Sept 2014
June 2016
Time

Appendix 5

Characterization Plan

Kennecott Uranium Company
Sweetwater Uranium Project
42 Miles NW of Rawlins
PO Box 1500
Rawlins, Wyoming 82301-1500
USA
T +1 (307) 328-1476
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September 1, 2016

Via Electronic Mail

Ms. Andrea Kock, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852-2738

Dear Ms. Kock:

Subject: **Sweetwater Uranium Project – Docket Number: 40-8584**
Source Material License SUA-1350 - Responses to Public Conference Call of August 18, 2016 Specific to License Condition 11.3

The U.S. Nuclear Regulatory Commission (NRC) is conducting a review of the Kennecott Uranium Company (Kennecott) Sweetwater Uranium Project request for a ten-year renewal of Source Material License SUA-1350 that was submitted on July 24, 2014. The NRC provided Requests for Additional Information (RAIs) in letters dated July 13, 2015 and February 12, 2016. On August 18, 2016, a public conference call involving Kennecott and the agency was held to discuss specific license conditions that will be modified as part of the license renewal process. One condition that is planned to be modified is License Condition 11.3 that defines the site's Corrective Action Program (CAP). This letter provides a commitment and a schedule for providing a plan to better characterize the existing plume along its western margin (License Condition 11.3) and modify the site's CAP in accordance with characterization data to be acquired in the future.

With this letter, Kennecott commits to a characterization plan. Facility operations by the previous site licensee (Minerals Exploration Company (MEC)) resulted in fluids from mill operations entering the Battle Spring Aquifer via the unlined catchment basin and via leaks in the tailing impoundment's single Hypalon® liner. These process fluid-influenced waters have resulted in a plume, that is, a small area of the Battle Spring aquifer with discrete water quality parameters measurably above background levels but which in cases do not exceed drinking water standards or are not listed as National Primary Drinking Water Standards. Kennecott operates a CAP to control the extent of the plume. The CAP includes pumpback wells to recapture mill-influenced fluids, and monitoring wells which allow evaluation of the efficacy of the CAP. Questions exist regarding the extents of the western margin of this plume. The following steps will be implemented by Kennecott to address issues regarding the plume:

1. Prepare a plan to better characterize the western margins of the plume. The plan will address the phasing, number, locations, depth(s), and completion interval(s) of monitoring wells, as well as sampling quality assurance/quality control, and sampling/testing parameters. The plan will reference the recommendations made in the responses to the above-mentioned RAIs prepared by Telesto Solutions, Inc. on behalf of Kennecott Uranium Company.
2. Submit the plan to the agency for review and comment
3. Implement the plan as proposed and modified following agency comment. Implementation will consist of monitoring well completion, sampling, and data analysis
4. Submit to the agency, the data and analysis/characterization for review and comment

5. Continue characterization plan phasing as applicable
6. Modify the CAP as necessary based on the results of the analysis of the characterization data and the agency's comments. In submitting the modified CAP, Kennecott will request that the ability to add or remove pumpback wells from service with the goal of improving the performance of the CAP be retained in License Condition 11.3.

The timeline to implement these six steps is presented in Table 1.

If you have any questions please do not hesitate to contact me.

Sincerely yours,

Oscar A Paulson

Oscar Paulson
Facility Supervisor

Cc: James Webb – Project Manager – (2)
Director – USNRC DNMS – Region IV (w/o enc.)
Rich Atkinson

Table 1 Anticipated Schedule for Characterizing the Plume's Western Margin

Step	Anticipated Date	Comment
1. Prepare characterization plan	September 16, 2016	Submittal date to NRC
2. NRC review/comment	Begin September 16, 2016	Anticipate 30 days for review and comment
3. Implement characterization plan (drilling, sampling, and data analysis)	Completed within seven (7) months following NRC's review of the characterization plan.	Arrange for drilling in advance of receipt of NRC comments; collect and analyze 3 months of data. Timeframe initiation dependent on NRC review schedule.
4. Submit characterization data and analysis	Completed within seven (7) months following NRC's review of the characterization plan.	Submit at completion of step 3. Timeframe dependent on NRC review schedule for step 2.
5. Continue characterization plan phasing, depending upon NRC comments and further review of data as applicable	Completed within four (4) months following NRC's review of characterization data.	
6. Modify CAP as necessary	Completed within four (4) months following completion of NRC's review of characterization data.	

Rio Tinto

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September 15, 2016

Via Electronic Mail

Ms. Andrea Kock, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
11545 Rockville Pike
Rockville, MD 20852-2738

Dear Ms. Kock:

Subject: **Sweetwater Uranium Project – Docket Number: 40-8584**
Source Material License SUA-1350 - Sweetwater County, Wyoming -
Characterization Plan- Extent Of Groundwater Contamination

The U.S. Nuclear Regulatory Commission (NRC) is conducting a review of the Kennecott Uranium Company (Kennecott) Sweetwater Uranium Project request for a ten-year renewal of Source Material License SUA-1350 that was submitted on July 24, 2014. The NRC provided Requests for Additional Information (RAIs) in letters dated July 13, 2015 and February 12, 2016. On August 18, 2016, a public conference call involving Kennecott and the agency was held to discuss specific license conditions that will be modified as part of the license renewal process. A letter dated August 25, 2016 entitled *Draft Renewal Materials License, Sweetwater Uranium Project; Sweetwater County, Wyoming* was received following the conference call. This letter contained draft language for License Conditions 9.10, 11.3 and 11.4. In partial response to this letter, specifically to the item entitled License Condition 11.3, Kennecott provided a letter dated September 1, 2016 that committed to provide a characterization plan for the groundwater plume by Friday, September 16, 2016 for agency review.

Attached please find *Attachment 1- Characterization Plan Extent Of Groundwater Contamination* for review.

If you have any questions please do not hesitate to contact me.

Sincerely yours,

Oscar A Paulson

Oscar Paulson
Facility Supervisor

Cc: James Webb – Project Manager – (2)
Director – USNRC DNMS – Region IV (w/o enc.)
Rich Atkinson

NM5520
NMSS

ATTACHMENT 1

CHARACTERIZATION PLAN
EXTENT OF GROUNDWATER CONTAMINATION

OVERVIEW

This attachment presents a plan for Kennecott Uranium Company (Kennecott) to characterize the extent of groundwater contamination at the Sweetwater Uranium Project. The contaminated groundwater is in the Battle Spring Aquifer and is the result of releases of mill process fluids, from the catchment basin and/or the existing tailings impoundment, which occurred during operations (1981 to 1983) prior to Kennecott's acquisition of the facility,

In a letter dated August 25, 2016, the NRC stated,

> "*NRC staff is therefore requiring the licensee to fully characterize the current extent of groundwater contamination and provide a revised corrective action plan (CAP) to bring the groundwater into compliance with the groundwater standards.*" ... "*The revised CAP shall propose acceptable methods to achieve and demonstrate compliance for those parameters in exceedance of the corresponding groundwater protection standard and also include a time limit to reach compliance.*"

BACKGROUND

Facility operations by the previous site licensee (Minerals Exploration Company, a wholly owned subsidiary of Union Oil Company of California (UNOCAL)) resulted in fluids from mill operations entering the Battle Spring Aquifer through the unlined bottom of the catchment basin and from leaks in the tailings impoundment's single Hypalon® liner. These process fluid-influenced waters have resulted in a relatively small portion of the aquifer with water quality parameters measurably above background levels.

Kennecott operates the CAP to contain, control and monitor the extent of the groundwater contaminants as well as to remove contaminants from the aquifer. Every year Kennecott monitors and reports on the mass of salts removed from the aquifer above expected background levels. This analysis shows that considerable mass has been removed from the aquifer. The CAP includes pumpback wells to recapture mill-influenced fluids and maintain a cone of depression containing the plume, and monitoring wells which allow evaluation of the groundwater (including water levels and quality) and efficacy of the CAP.

The areal extent of the groundwater contamination has been influenced by local and regional groundwater flow paths, which have changed over time. Prior to site operations, the long-term regional groundwater gradient was toward the southwest. During mill operations the open pit mine was dewatered via a ring of wells creating a large cone of depression and a localized groundwater gradient. This artificial gradient influenced the groundwater flow direction to the northwest in the mill vicinity.

When the mill ceased operation and went into standby on April 15, 1983, pit dewatering ceased on April 25, 1983, and the localized groundwater gradient to the northwest began to dissipate. The open pit slowly filled, reaching steady state as an evaporative sink by 1998. The water elevation in the pit annually fluctuates between approximately 6539 to 6540 feet above mean sea level (NGVD 29). The flooded open pit remains an evaporative sink with the elevation of the water being approximately 1.5 to 2.0 feet below the elevation of the water in the surrounding Battle Spring Aquifer.

Additionally, operation of the pumpback wells under the CAP, which has been ongoing since 1986, has formed a capture cone that creates short-term localized effects on groundwater flow paths. This capture cone creates a localized flow path in the vicinity of the tailings impoundment and mill toward the pumpback wells shown in Figure 1.

Mill process fluids were first introduced into the Battle Spring Aquifer in 1981 from the catchment basin and in 1983 to 1984 from the tailings impoundment. Flow paths in the mill and tailings impoundment vicinity have changed over time, from the natural southwest flow direction, to a northwesterly influence during pit dewatering and for some time thereafter, and then toward pumpback wells over the last 30 years. Monitoring wells are numerous near the tailings impoundment and immediately east of the mill building around the now remediated catchment basin. However, monitoring wells west of the mill are fewer in number. Plots of constituent concentrations in the groundwater (combined radium-226/228, natural uranium, and sulfate, for example) based on existing wells including TMWs-108 and 109 indicate that elevated levels of these constituents persist to the west of the mill building.

The Sweetwater Pit is located in a natural uranium deposit, and thus naturally high levels of natural uranium, radium-226, selenium and other associated constituents to the west of the mill are to be expected. Pit closure and reclamation (including bioremediation of the 1.2 billion gallons of water in the pit lake) has resulted in a lake with a stable water surface elevation resulting in a local groundwater sink. As a result, groundwater flow paths near the pit point toward the pit lake. It is essential that any characterization plan consider the various local and regional influences on groundwater flow and quality in the mill and tailings impoundment vicinity. This is especially true west of the mill because of the presence of naturally high background concentrations of radionuclides.

Telesto completed a groundwater characterization report in 2009 which interpreted the groundwater hydrology and geochemistry in the vicinity of the groundwater plume. Telesto has also assisted Kennecott in the preparation of annual groundwater contour and constituent concentration mapping, and has prepared responses to two NRC Requests for Additional Information regarding the groundwater contamination and plume characteristics. These documents will be referenced in the characterization plan.

CHARACTERIZATION PLAN

This document provides an approach to locate and complete monitoring wells and/or borings west of the mill facility, and north and east of the tailings impoundment. Groundwater and formation samples will be used to fully characterize the extent of groundwater contamination, and help determine influences of naturally occurring mineralization.

Plan for Installation of Monitoring Wells

Task 1 Data Review

A preliminary review of existing groundwater quality data has been conducted to identify where the margins of existing groundwater contamination are not well defined. Three general areas have been identified (Figure 1):

- north of well TMW-89
- east of well TMW-36 between TMW-36 and TMW-5
- northwest, west and south of TMW 73

A more detailed review of groundwater quality data will be conducted to better locate drilling sites before drilling begins. This more detailed review will include additional groundwater sampling data gathered from project files or from recent sampling efforts by Kennecott including:

- sample data from dewatering wells operated between September 1979 and April 25, 1983
- other well samples from recently located data not previously included in the site groundwater database
- additional groundwater elevation data including data collected from the dewatering wells and the pit lake in fall 2015

Prior to conducting drilling operations, existing core will be examined for signs of natural uranium presence and movement in the Battle Spring Formation. This core was collected in 1996 by Shepherd Miller, Inc. as part of a site geotechnical evaluation for construction of a new tailings impoundment, and remains stored on site. This core can be analyzed for parameters that would not be affected by long exposure to air.

Task 2 Drilling and Sampling

Hollow stem auger drilling will be the primary drilling method utilized to complete boreholes to determine the extent of groundwater contamination. If for any reason hollow stem auger drilling cannot be used, drilling methods that allow for satisfactory sample collection and borehole completion will be employed. Boreholes may vary in diameter and will be either completed as groundwater monitoring wells or used as test borings and abandoned in accordance with Wyoming State Engineer's Office Regulations and Instructions Part III Water Well Minimum Constructions Standards revised June 2011.

The water table is expected to be encountered at approximately 100 feet below ground surface in the proximity of the study area. The surface elevation and proximity to the CAP cone of depression will influence the depth to the water table. For the sake of consistency, boreholes that are to be completed as monitoring wells will be constructed in the same manner as recently

completed monitoring wells. Fifty feet of well screen will be installed across the water table with approximately five feet of screen above and 45 feet below the water table. Other completion configurations may be used as warranted by site specific conditions.

A split-spoon/SPT sampler will be used to collect at least two formation samples above the water table and two formation samples below the water table for each borehole. A fifth formation sample may be collected at the water table. The samples will be inspected and the lithology will be logged and described on site. Formation samples will be sent to a laboratory and tested for natural uranium, thorium-230, radium-226, metals, total organic carbon (TOC) and general chemical parameters resulting from whole rock and the Synthetic Precipitation Leaching Procedure (SPLP) tests. Field measurements will be performed on collected formation samples and will include paste pH and redox (oxidation) state using a standard platinum probe.

These data will be used to characterize the natural leaching/mobilization process of uranium and other constituents of concern resulting from percolating rainfall or snowmelt, fluctuating water table, and groundwater movement. These data will also be used to estimate the influence of localized and naturally occurring mineralization on groundwater quality, which likely result in elevated naturally occurring uranium concentrations in groundwater at the very top of the Battle Spring Aquifer.

Groundwater samples will be collected during the drilling process. The samples will be collected at approximately ten foot intervals below the water table from the inside of the hollow stem auger. Samples will be collected using a bailer or a small downhole submersible electric pump. Field analysis will be conducted for pH, redox potential, conductivity, total dissolved solids (TDS), total iron, ferrous iron (Fe^{+2}), and sulfate. Larger quantities of selected groundwater samples will be collected, filtered, preserved and sent chilled to an analytical laboratory for additional analysis. Collection and handling of these samples will be performed in accordance with site Standard Operating Procedures (SOPs) EP-13 and EP-13B.

The purpose of this approach of real-time assessment of field data is to fine-tune the selection of well placement to generate the best data at reasonable cost. The formation and groundwater samples collected and field-analyzed during drilling will be used to determine if the well location and/or proposed 50 foot screened interval is appropriate for each well completion and if adjustments are required. The formation and groundwater samples will also be used in an initial estimation of the extent of the contaminant plumes. If the data obtained are useful, the boring will be completed as a monitoring well; however, if the data indicate the boring to be redundant, the borehole will be abandoned in accordance with the Wyoming State Engineer's Office Regulations and Instructions Part III Water Well Minimum Constructions Standards revised June 2011. This field data collection and initial estimation of contamination extent will be used to determine where to locate additional drilling.

A minimum of six wells are planned; more may be drilled and completed as a result of the field data assessment. Two wells will initially be drilled to better define the extent of contamination north and east of the tailings impoundment associated with wells TMW 89 and TMW 36 respectively, to be supplemented with additional wells as necessary. TMW-89 has exceeded the Groundwater Protection Standard (GPS) for uranium and is unbounded to the North. TMW-36 exceeds the Groundwater Protection Standard (GPS) for uranium and while bounded to the East by TMW-5, the distance between the wells is over 1,000 feet creating uncertainty in that area. Two wells will initially be drilled west and south of TMW 73, to be supplemented with additional wells as necessary. Figure 1 depicts those areas targeted for initial drilling. An additional one to three borings may be drilled and abandoned while identifying the optimal locations to install monitoring wells.

Permits from the Office of the Wyoming State Engineer will not be required because these will be monitor wells that are four inches in diameter or under (see Attachment 1-A). Those completed within the area of Permit to Mine #481 will be included within that permit and their reclamation covered under the associated surety. Other wells will be completed within the NRC bonded area. Reclamation of these sites will be covered by the surety for Source Material License SUA-1350. It is expected that at least two of these wells will be on unpatented mill sites held by Kennecott Uranium Company but outside of lands held in fee. The Bureau of Land Management (BLM) has recently prepared a letter dated April 11, 2016 pursuant to 43 CFR 3809.400 concluding that Kennecott's recent submission of the Supplemental Environmental Report for the facility is accepted as complete. BLM notes that an archaeological survey is required prior to disturbing any un-surveyed areas.

The wells will be completed according to the Wyoming State Engineer's Office Regulations and Instructions, Part III, Water Well Minimum Constructions Standards, revised June 2011. A well completion diagram is included in Attachment 1-B. Four-inch schedule 40 PVC pipe and casing will be used to construct the wells. No glued joints will be used as a measure to prevent hydrocarbon contamination. The annulus around the slotted pipe will be gravel- or sand-packed. The filter pack will continue at least six feet above the top of the well screen. At least five feet of bentonite chips will be placed above the gravel or sand pack. The annulus will be filled with neat cement according to the current Wyoming Department of Environmental Quality standards: Guideline 8, Hydrology, Coal and Non-Coal and Chapter 26, Well Construction Standards.

Task 3 Monitoring Well Data Collection

The newly installed monitoring wells will be developed by bailing and/or jetting and airlifting. The wells will be allowed to sit for at least one week to allow and sediments in the wells to settle prior to sampling.

Groundwater samples from the newly installed wells will be collected and analyzed monthly for a period of three months. At least three casing volumes will be pumped from the well prior to sample collection and the samples will be filtered, preserved and refrigerated on site, and sent chilled to an analytical laboratory for analysis. Collection and handling of these samples will be performed in accordance with Kennecott's Standard Operating Procedures (SOPs) EP-13 and EP-13B.

Task 4 Data Analysis

The data returned from the field and laboratory tests will be reviewed and evaluated. These data will be added to the site conceptual model, which will then be updated to fully characterize the groundwater flow field and extents of ground water contamination originating from mill operations. The conceptual model will include an updated description on the influence of naturally occurring mineralization (uranium in particular) on local groundwater quality.

The groundwater surface elevations of new wells will be evaluated in comparison to existing nearby wells and trends in the potentiometric surface. A potentiometric map using new and existing data will be prepared.

The formation chemistry results will be evaluated and assessed for the relative influence from mill fluids or from background geochemical conditions, in particular for natural uranium. The formation chemistry will be compared to the groundwater quality at each well.

Task 5 Reporting

New contaminant extent maps for constituents of concern will be prepared following data analysis, and a data analysis report will be submitted to the NRC for review. The data analysis report will also include analysis of local background groundwater quality. If the data evaluation determines it to be necessary, we will develop a revision to the background groundwater quality parameters developed and submitted in the Addendum to the Revised Environmental Report Background Ground Water Quality and Detection Standards (Shepherd Miller, Inc., January 23, 1996.

Sampling Parameters and QA/QC

The license, CAP, and sampling and analysis protocols established by Kennecott provide an already-proven definition of parameters to be sampled. The existing sampling and analysis QA/QC plan will be followed while monitoring the samples. Kennecott Environmental Procedures EP-13 and EP-13B will be followed during the sampling and analysis portion of this project. EP-13 describes the sampling and sample procedures and EP-13B describes the sampling and sample preparation procedures and water level measurement procedures.

CAP Compliance and Time Limit

Following review by NRC staff, the CAP may be modified based on the conclusions of the data analysis report and NRC comments. Per NRC comment, any CAP modification will be based on an approach and estimated schedule to achieve compliance with groundwater standards.

Attachment 1-A

Policy Memo from the Wyoming State Engineer's Office, Permitting Requirements for Groundwater Monitoring Wells, March 12, 2013

State Engineer's Office

HERSCHLER BUILDING, 4-E CHEYENNE, WYOMING 82002
(307) 777-7354 FAX (307) 777-5451
seoleg@seo.wyo.gov

MATTHEW H. MEAD
GOVERNOR

PATRICK TYRRELL
STATE ENGINEER

POLICY MEMO: PERMITTING REQUIREMENTS FOR GROUNDWATER MONITORING WELLS

TO: State Engineer's Office

FROM: Patrick T. Tyrrell, State Engineer

DATE: March 12, 2013

SUBJECT: Permitting requirements for groundwater monitoring wells

The State Engineer issued a Policy Memo, dated January 4, 2005, captioned "Policy Memo: Permitting Requirements for Groundwater Monitoring Wells".

Several questions have arisen recently as to whether the policy enunciated in that memo is still applicable to Wyoming's groundwater appropriators.

To the extent it may still be applicable, that policy memo is rescinded effective immediately, and is replaced with the following statement of policy:

Policy:

To streamline the permitting process and effectively utilize existing resources, the State Engineer's Office – Ground Water Division will no longer require monitoring wells to be permitted through the Division. This policy is effective immediately.

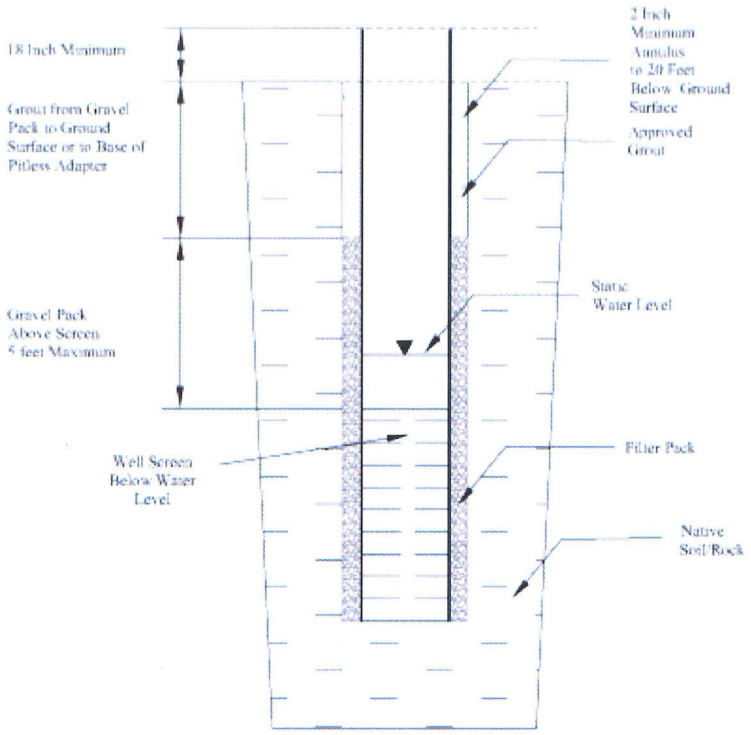
Justification:

A water right is a right to use the water of the state, when such use has been acquired by the beneficial application of water under the laws of the state relating thereto, and in conformity with the rules and regulations dependent thereon. W.S. § 41-3-101 states, in part, that beneficial use shall be the basis, the measure and limit of the right to use water at all times. In general, monitoring wells are used to measure water levels and/or collect water samples for analytical purposes. Monitor wells are not used for production of water for beneficial use.

Attachment 1-B

Well Completion Diagram Appendix C-3 from the Wyoming State Engineer's Office, Regulations and Instructions Part III Water Well Minimum Construction Standards June 2011

Appendix C-3
TYPE III WELLS



Version 11.20.2009

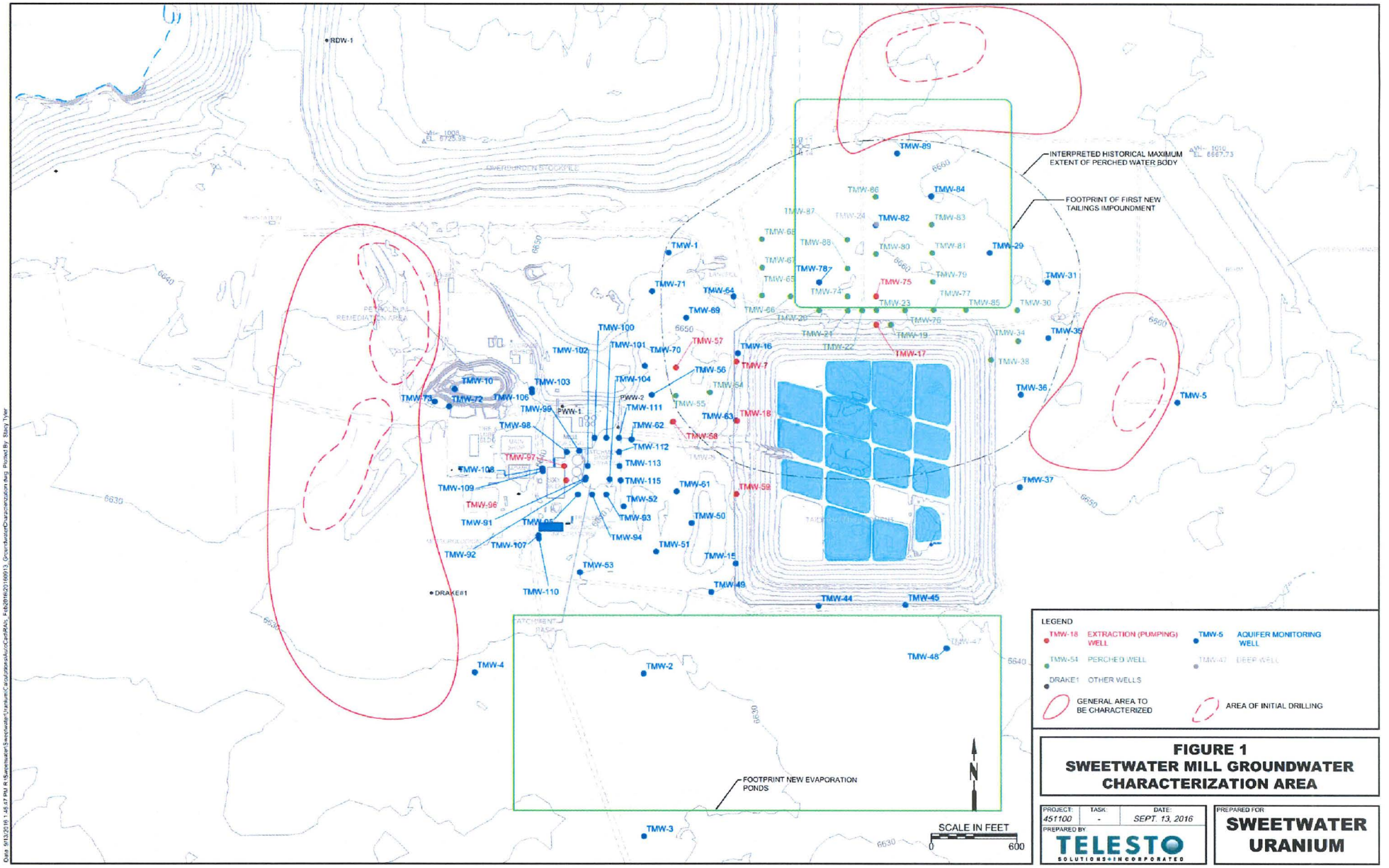


FIGURE 1
SWEETWATER MILL GROUNDWATER CHARACTERIZATION AREA

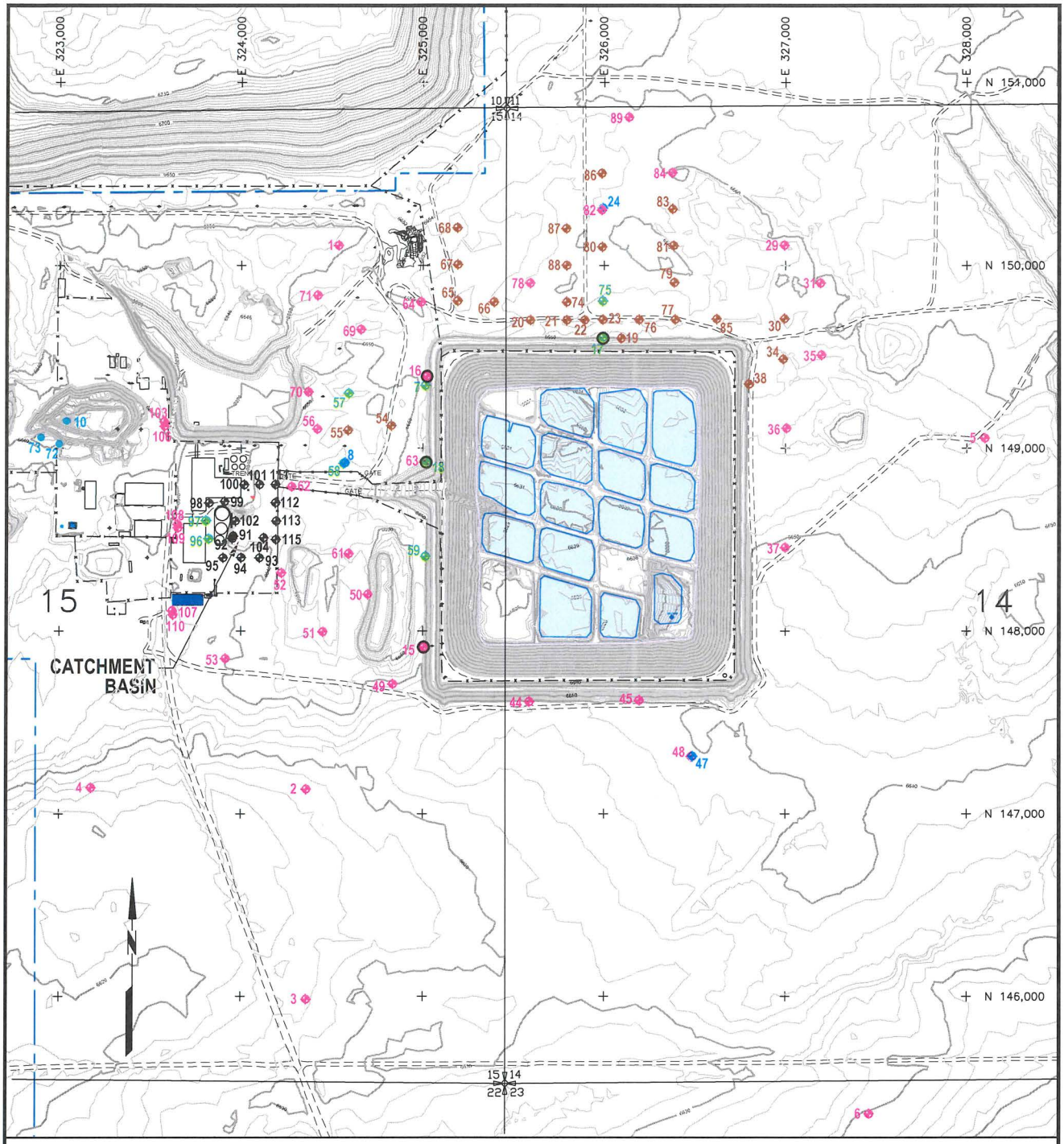
PROJECT:	TASK:	DATE:
451100	-	SEPT. 13, 2016

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

PREPARED FOR: SWEETWATER URANIUM

Date: 9/13/2016 1:46:47 PM R:\Sweetwater\Sweetwater Uranium\Calculations\AutoCad\RAIs_Feb2016\20160913_GroundwaterCharacterization.dwg Plotted By: Stacy Tyler

Maps



SCALE IN FEET

0 800

TOPOGRAPHY UPDATED JULY 2008
BY: WORTHINGTON, LENHART, AND CARPENTER
P.O. BOX 1104, 1015 HARSHMAN ST.
RAWLINS, WY 82301

CONTOURS FOR TAILINGS AND SOME OTHER AREAS ARE IN ONE (1) FOOT INTERVALS
UPDATED JULY 2013

NOTE:
ALL WELLS HAVE A TMW PREFIX (TYP.)

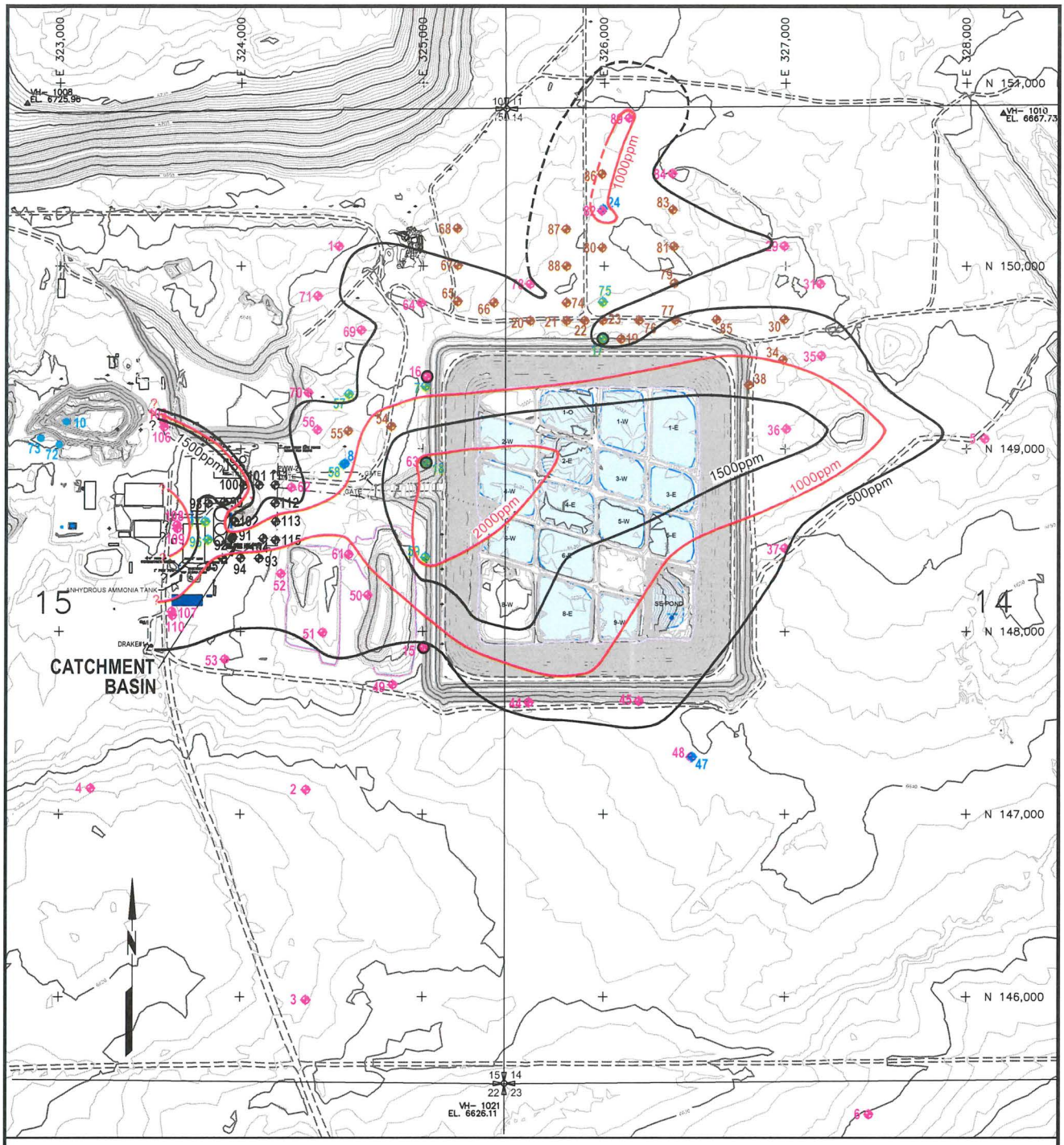
LEGEND

- SHALLOW WELLS (PERCHED)
- DEEP AQUIFER WELLS
- AQUIFER WELLS
- PUMPBACK WELLS, AQUIFER
- COMPLIANCE MONITORING WELLS
- POINT OF COMPLIANCE (POC) WELLS (TAILINGS IMPOUNDMENT)
- CONTAMINATED SOIL EXCAVATION MONITOR WELLS

RioTinto

SWEETWATER URANIUM FACILITY
MONITOR WELL LOCATIONS
2016 CORRECTIVE ACTION PROGRAM REVIEW

Date:	JANUARY 2017
Project:	06-442\REP2016
File:	2016-Wells.dwg



SCALE IN FEET

0 800

TOPOGRAPHY UPDATED JULY 2008
BY: WORTHINGTON, LENHART, AND CARPENTER
P.O. BOX 1104, 1015 HARSHMAN ST.
RAWLINS, WY 82301

CONTOURS FOR TAILINGS AND SOME OTHER AREAS ARE IN ONE (1) FOOT INTERVALS
UPDATED JULY 2013

LEGEND

500 ppm TDS CONTOUR
TOTAL DISSOLVED SOLIDS (TDS) CONTOURS BASED ON THE AVERAGE TOTAL DISSOLVED SOLIDS (TDS) ANALYSIS RESULT FOR A GIVEN WELL IN 2016

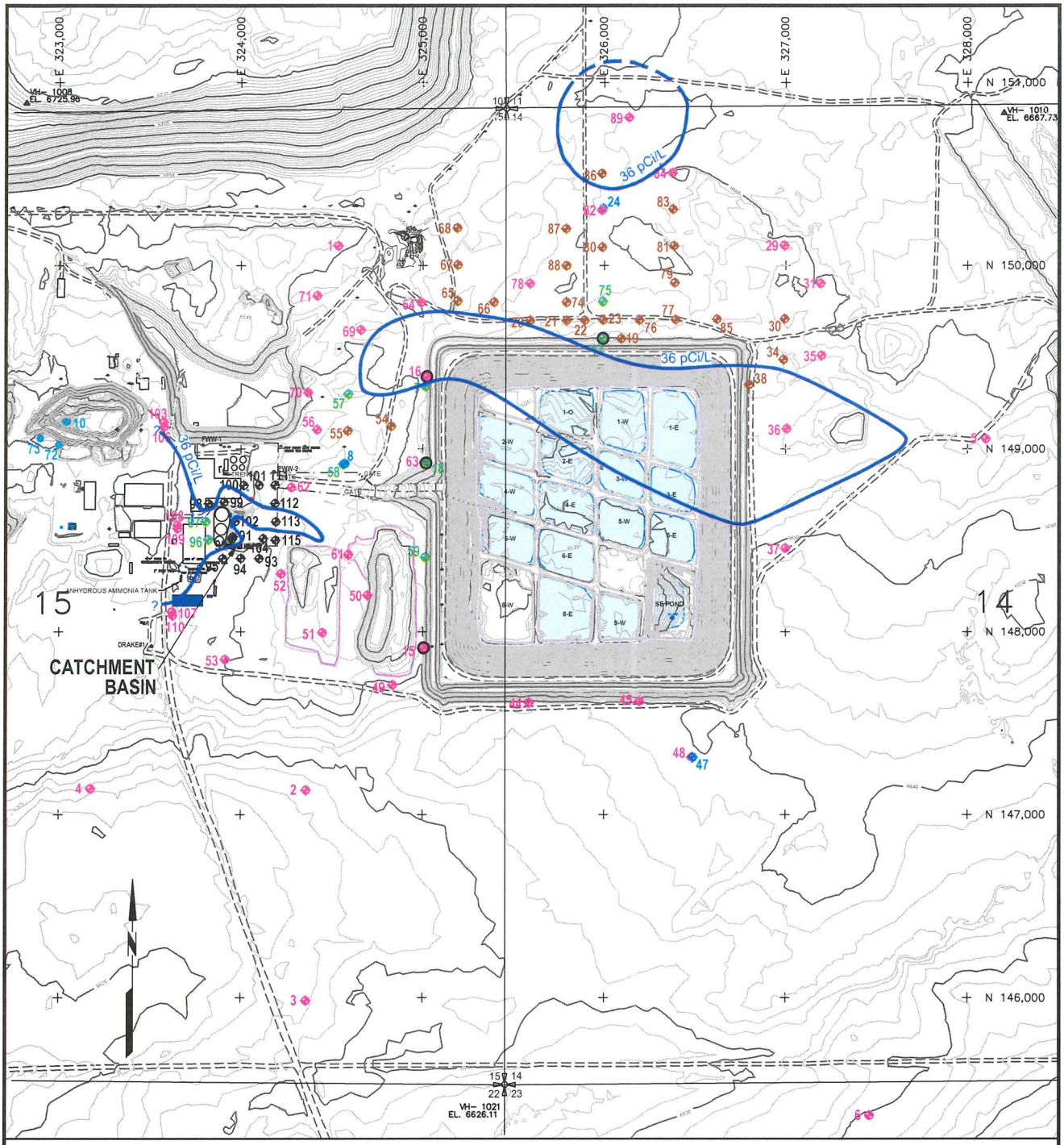
NOTE:
ALL WELLS HAVE A TMW PREFIX (TYP.)

- SHALLOW WELLS (PERCHED)
- DEEP AQUIFER WELLS
- AQUIFER WELLS
- PUMPBACK WELLS, AQUIFER
- COMPLIANCE MONITORING WELLS
- POINT OF COMPLIANCE (POC) WELLS (TAILINGS IMPOUNDMENT)
- CONTAMINATED SOIL EXCAVATION MONITOR WELLS

RioTinto

SWEETWATER URANIUM FACILITY
AVERAGE TDS CONTOUR MAP
2016 CORRECTIVE ACTION PROGRAM REVIEW

Date:	FEBRUARY 2017
Project:	06-442\REP2016
File:	2016-Corrective Action Program Review.dwg



SCALE IN FEET

0 800

TOPOGRAPHY UPDATED JULY 2008
BY: WORTHINGTON, LENHART, AND CARPENTER
P.O. BOX 1104, 1015 HARSHMAN ST.
RAWLINS, WY 82301

CONTOURS FOR TAILINGS AND SOME OTHER AREAS ARE IN ONE (1) FOOT INTERVALS
UPDATED JULY 2013

LEGEND

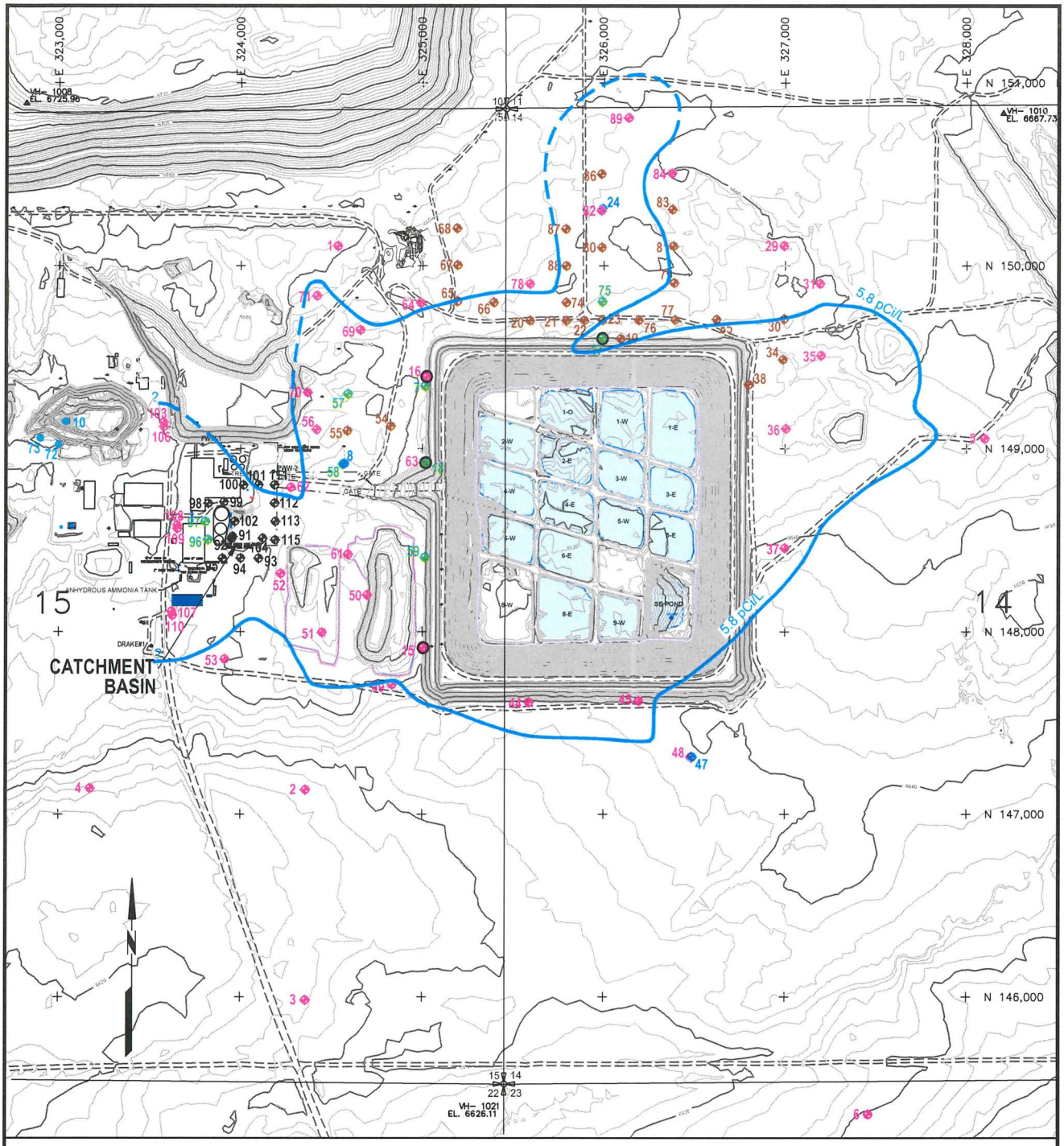
- AVERAGE URANIUM (UNAT) CONTOUR
- SHALLOW WELLS (PERCHED)
- DEEP AQUIFER WELLS
- AQUIFER WELLS
- PUMPBACK WELLS, AQUIFER
- COMPLIANCE MONITORING WELLS
- POINT OF COMPLIANCE (POC) WELLS (TAILINGS IMPOUNDMENT)
- CONTAMINATED SOIL EXCAVATION MONITOR WELLS

NOTE:
ALL WELLS HAVE A TMW PREFIX (TYP.)

Rio Tinto

SWEETWATER URANIUM FACILITY
AVERAGE NATURAL URANIUM (U-nat) PLUME MAP
2016 CORRECTIVE ACTION PROGRAM REVIEW

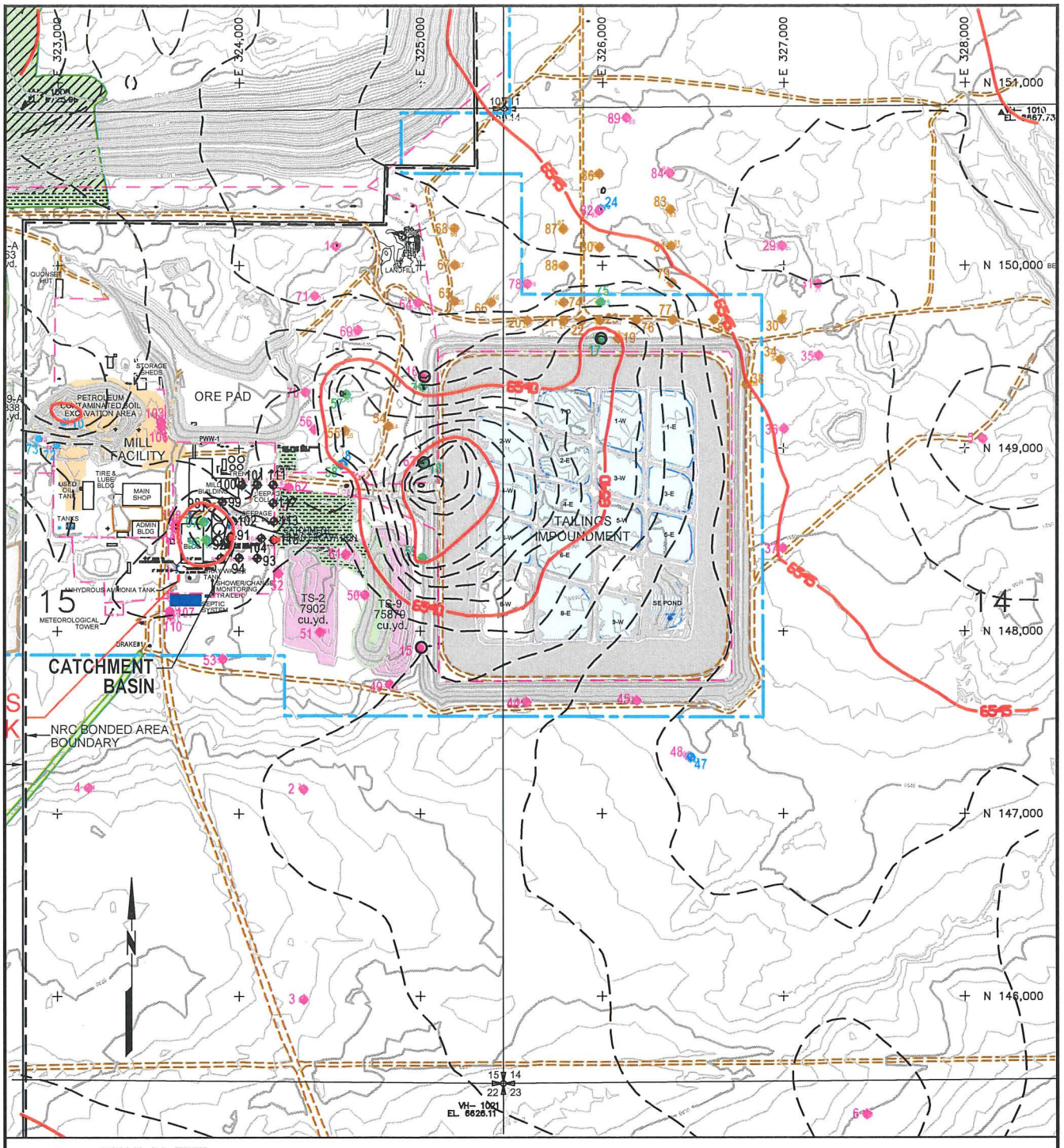
Date:	FEBRUARY 2017
Project:	06-442\REP2016
File:	2016-Corrective Action Program Review.dwg



RioTinto

SWEETWATER URANIUM FACILITY
AVERAGE COMBINED RADIUM-226/228
CONTOUR MAP
2016 CORRECTIVE ACTION PROGRAM REVIEW

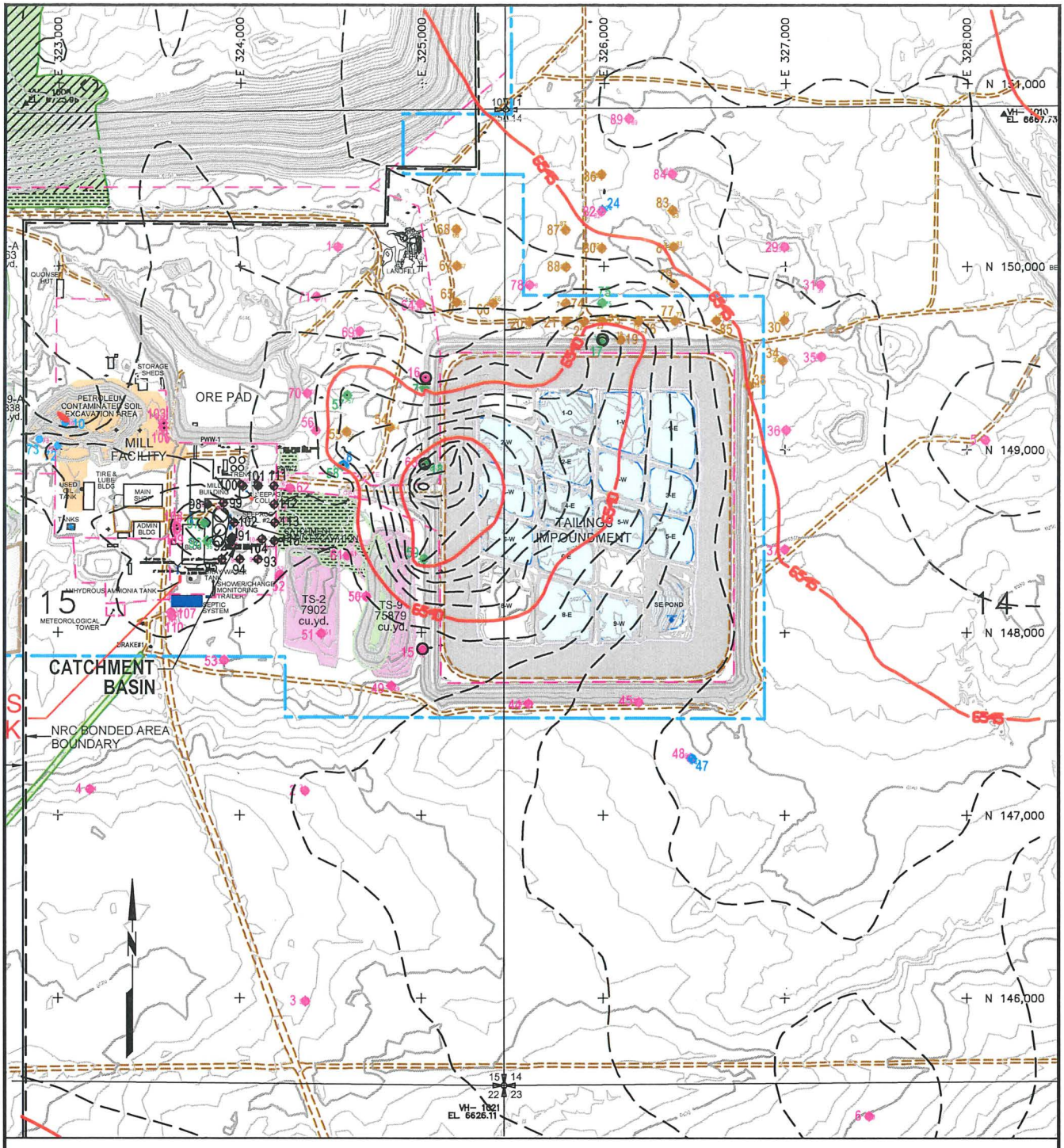
Date:	FEBRUARY 2017
Project:	06-442\REP2016
File:	2016-Corrective Action Program Review.dwg



RioTinto

SWEETWATER URANIUM FACILITY
SPRING PIEZOMETRIC CONTOUR MAP
2016 CORRECTIVE ACTION PROGRAM REVIEW

Date:	JANUARY 2017
Project:	06-442\REP2016
File:	2016-GW-Spring.dwg


E 323,000
E 324,000
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E 326,000
E 327,000
E 328,000
N 151,000
N 150,000
N 149,000
N 148,000
N 147,000
N 146,000
ORE PAD
MILL FACILITY
PETROLEUM CONTAMINATED SOIL EXCAVATION AREA
STORAGE SHEDS
QUONSET HUT
LANDFILL
TAILINGS IMPOUNDMENT
SE POND
TS-2 7902 cu.yd.
TS-9 75879 cu.yd.
CATCHMENT BASIN
NRC BONDED AREA BOUNDARY
METEOROLOGICAL TOWER
ANHYDROUS AMMONIA TANK
SHOWER/CHANGE TRAILER
SEPTIC SYSTEM
MAIN SHOP
ADMIN BLDG
TANKS
USED OIL TANK
TIRE & LUBE BLDG
MILL BUILDING
PWW-1
6545
6550
6555
6560
6565
6570
6575
6580
6585
6590
6595
6600
6605
6610
6615
6620
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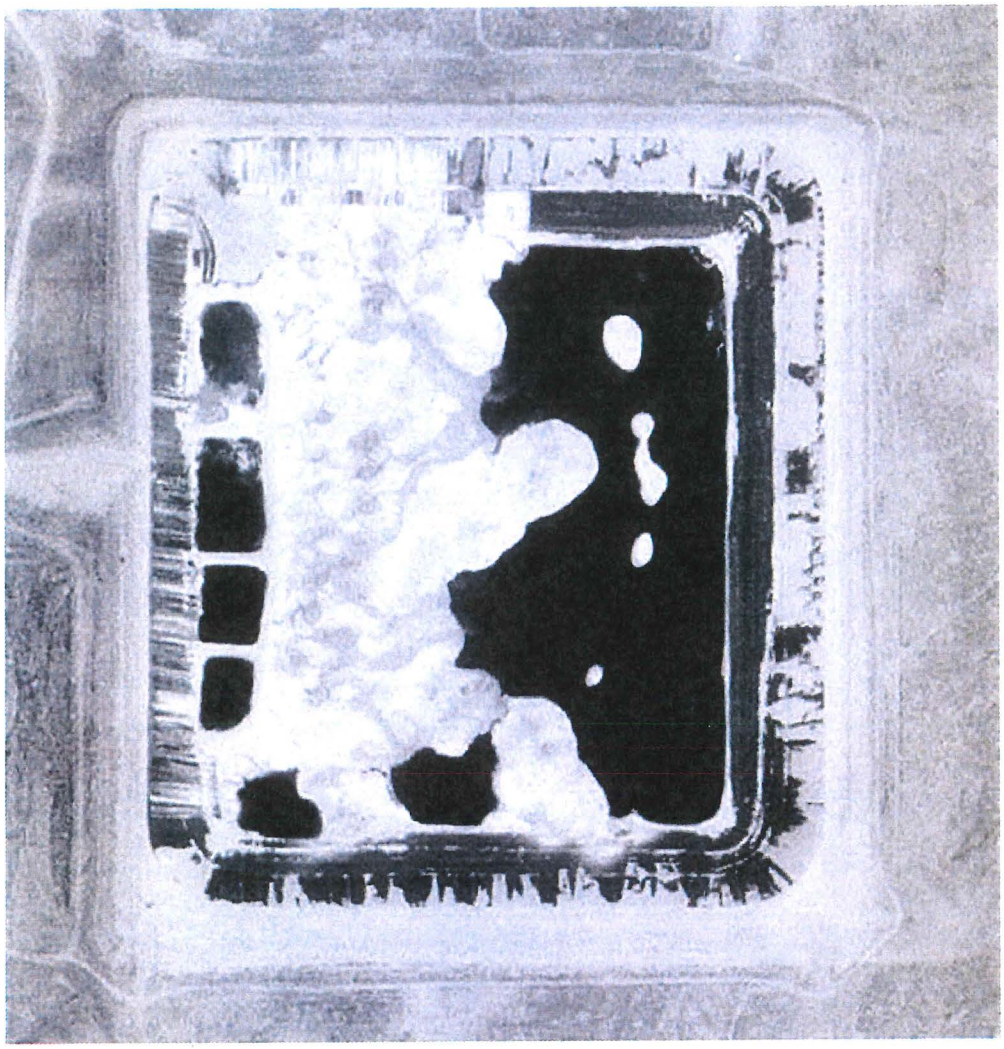
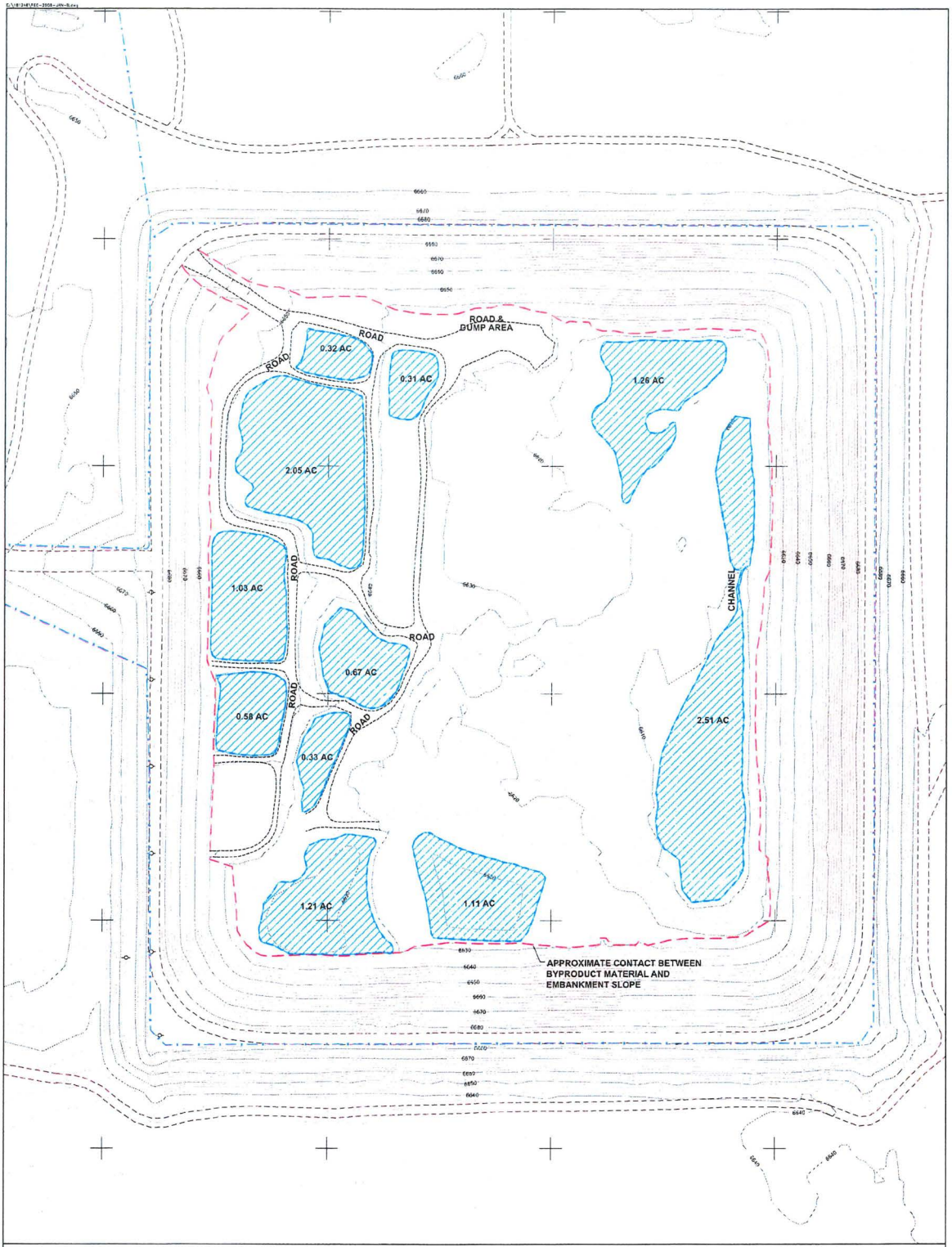


Tailings Impoundment – July 21, 1994

Image from Google Earth



NOTES:

1. TOPOGRAPHY OF TAILINGS AREA FROM GPS SURVEY BY ROBERT JACK SMITH & ASSOC. AUGUST 23, 2005
2. SURROUNDING TOPOGRAPHY FROM NOVEMBER 3, 1986 AERIAL PHOTOGRAPHY.
3. APPROXIMATE TAILINGS POND AREAS FROM AUGUST 23, 2005 GPS SURVEY DATA AND JULY 25, 2005 DIGITAL PHOTOGRAPHY BY MFG, INC.
4. APPROXIMATE SYNTHETIC LINER AREAS FROM JULY 25, 2005 DIGITAL PHOTOGRAPHY BY MFG, INC.

LEGEND:

APPROXIMATE POND AREAS, JULY-AUGUST 2005

APPROXIMATE AREAS OF WIND-DAMAGED SYNTHETIC LINER, JULY 2005

N

SCALE IN FEET

100 0 100

REVISIONS

No.	DESCRIPTION	BY	CHKD	DATE
A	PREPARED FOR KEC USE AND CONTRACTOR BIDDING	CLS		01/06

PREPARED BY

consulting scientists and engineers

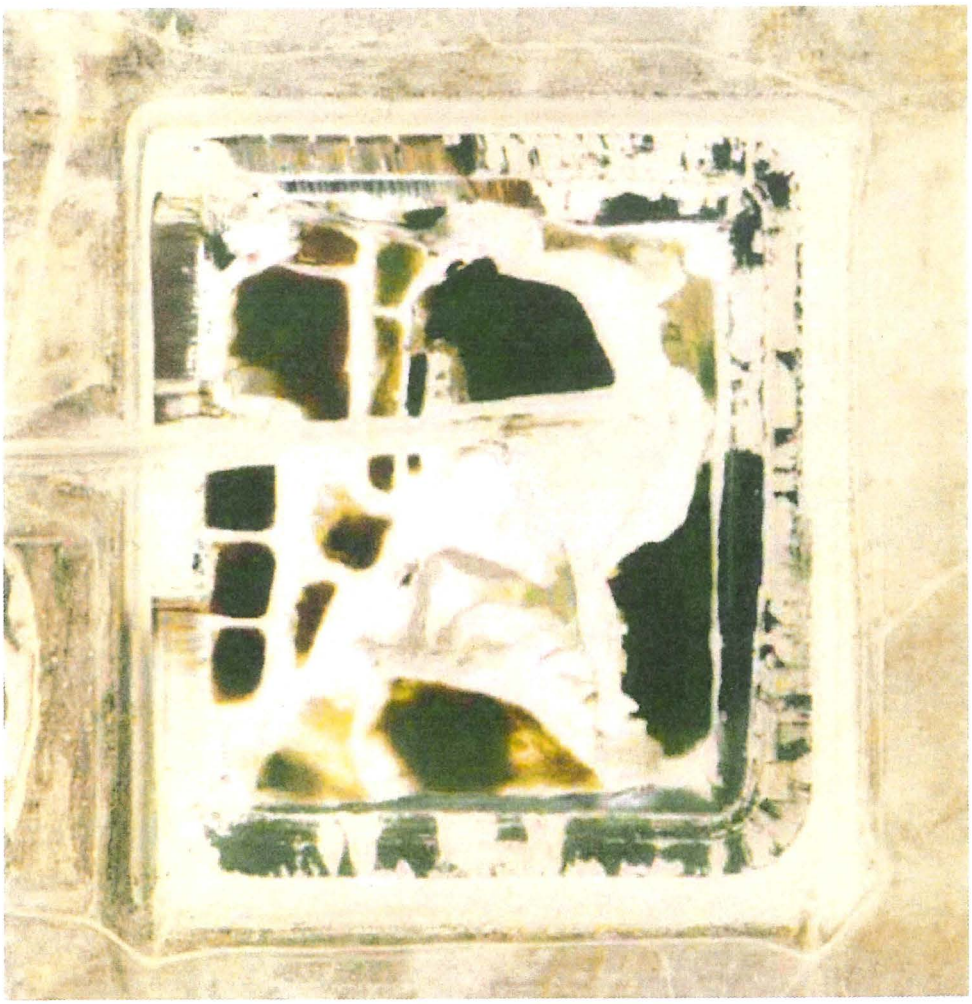
PREPARED FOR

Kennecott Energy

SWEETWATER URANIUM PROJECT

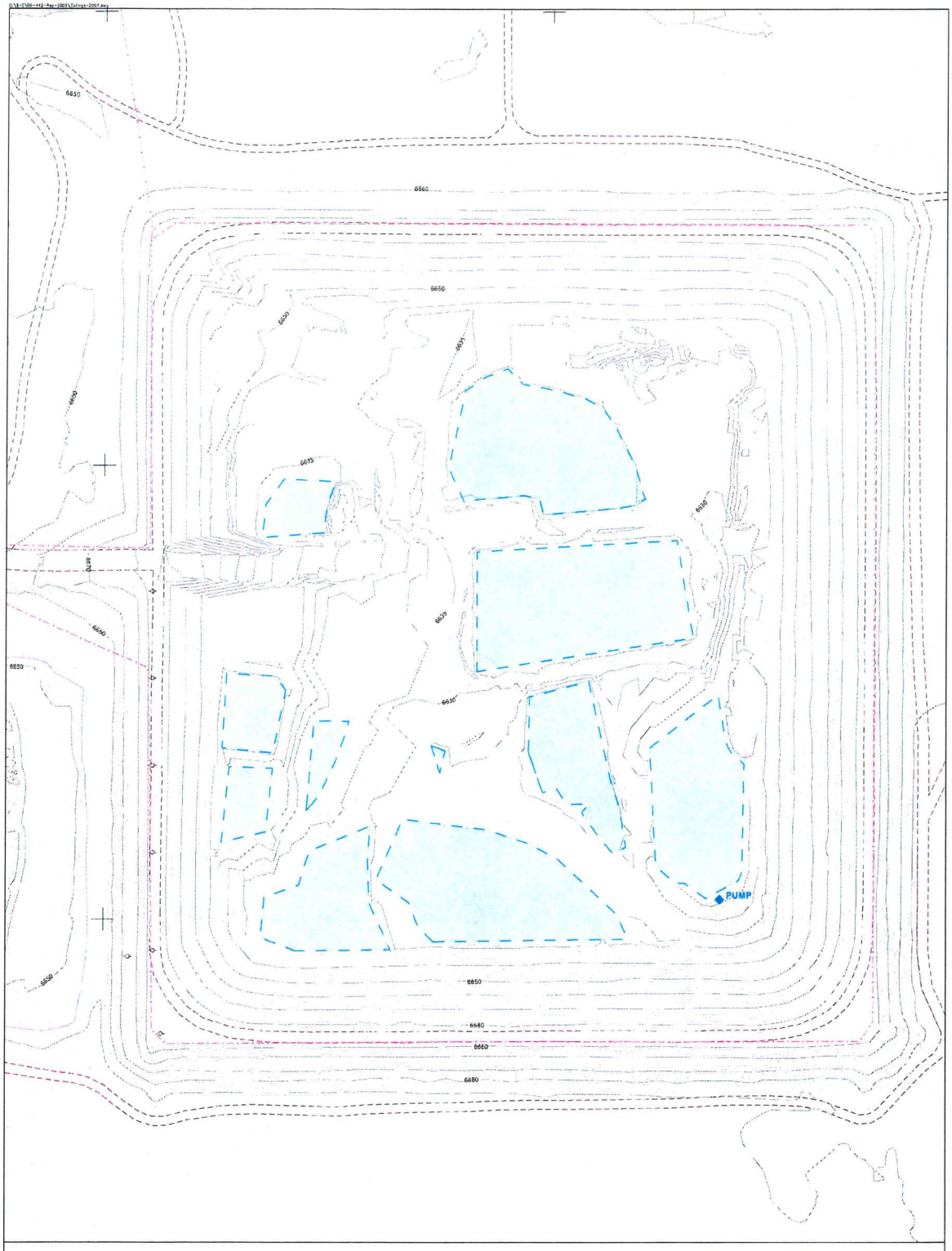
EXISTING IMPOUNDMENT CONFIGURATION

PROJECT	181246	DATE	JANUARY 2006	DRAWING	REVISION
SCALE	AS SHOWN	FILENAME	REC-2006-JAN-B.dwg	1	A



Tailings Impoundment – July 10, 2006

Image from Google Earth



LEGEND:

WATER COVERED AREA

SCALE IN FEET

100 0 200

REVISIONS	No.	DESCRIPTION	BY	CHKD.	DATE

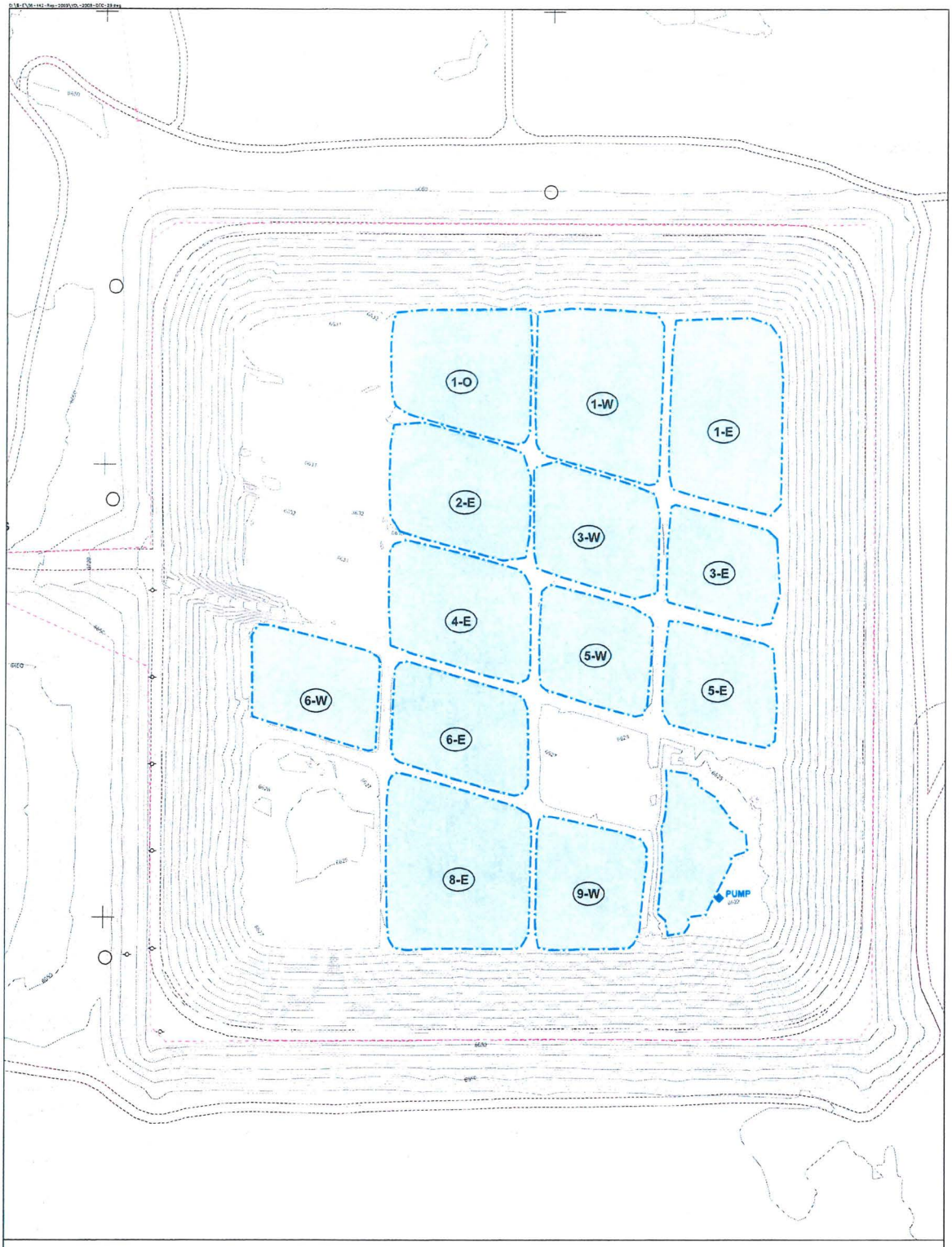
PREPARED BY: TETRA TECH

PREPARED FOR: RIO TINTO ENERGY AMERICA

SWEETWATER URANIUM PROJECT

EXISTING CONTOURS
OCTOBER 2007

PROJECT	18089 (181246)	DATE	FEBRUARY 2008	DRAWING NO.	REVISION
SCALE	AS SHOWN	ACAD FILE	TAILINGS-2007.dwg	*	



LEGEND:

1W POND DESIGNATION

WATER COVERED AREA

POST-REGRADING CONTOURS FROM DECEMBER 29, 2008

SCALE IN FEET

100 0 200

REVISIONS No.	DESCRIPTION	BY	CHKD	DATE

PREPARED BY

TETRA TECH

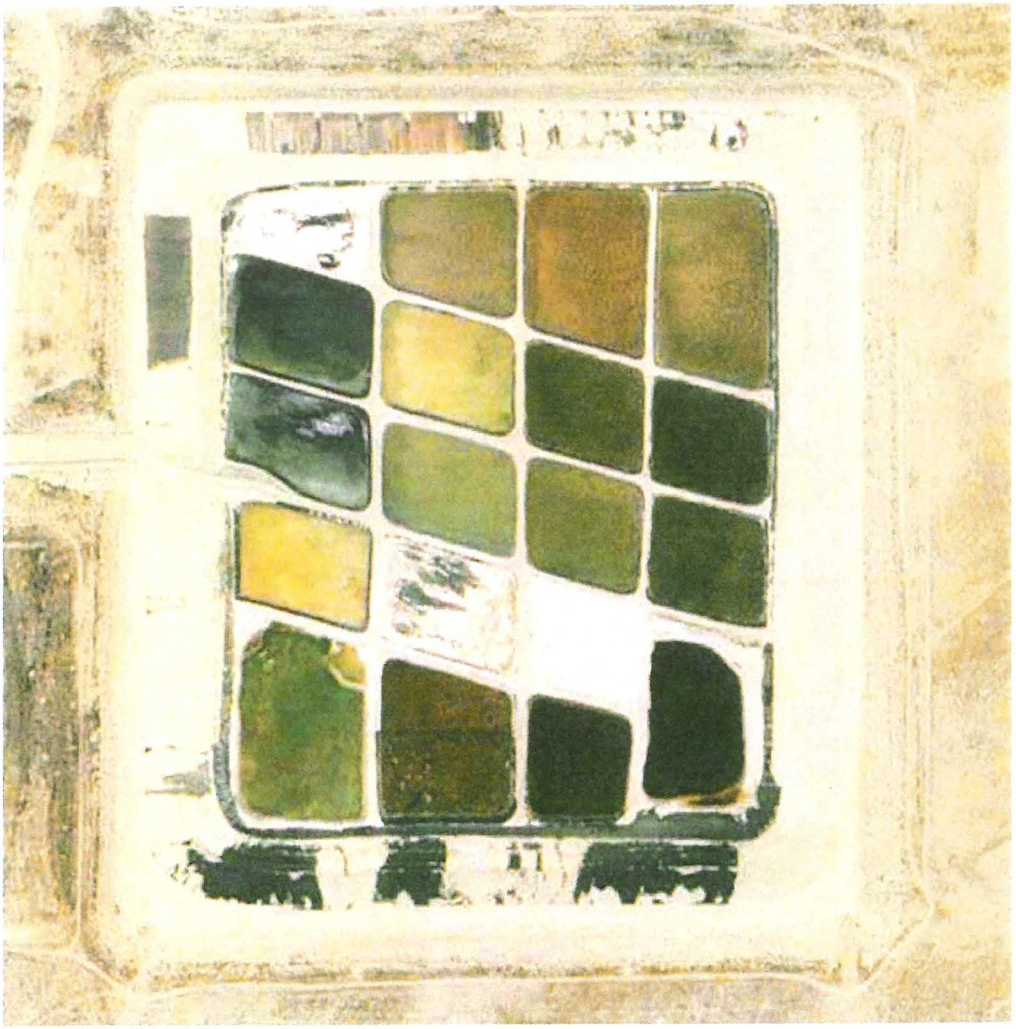
PREPARED FOR

RIO TINTO ENERGY AMERICA

SWEETWATER URANIUM PROJECT

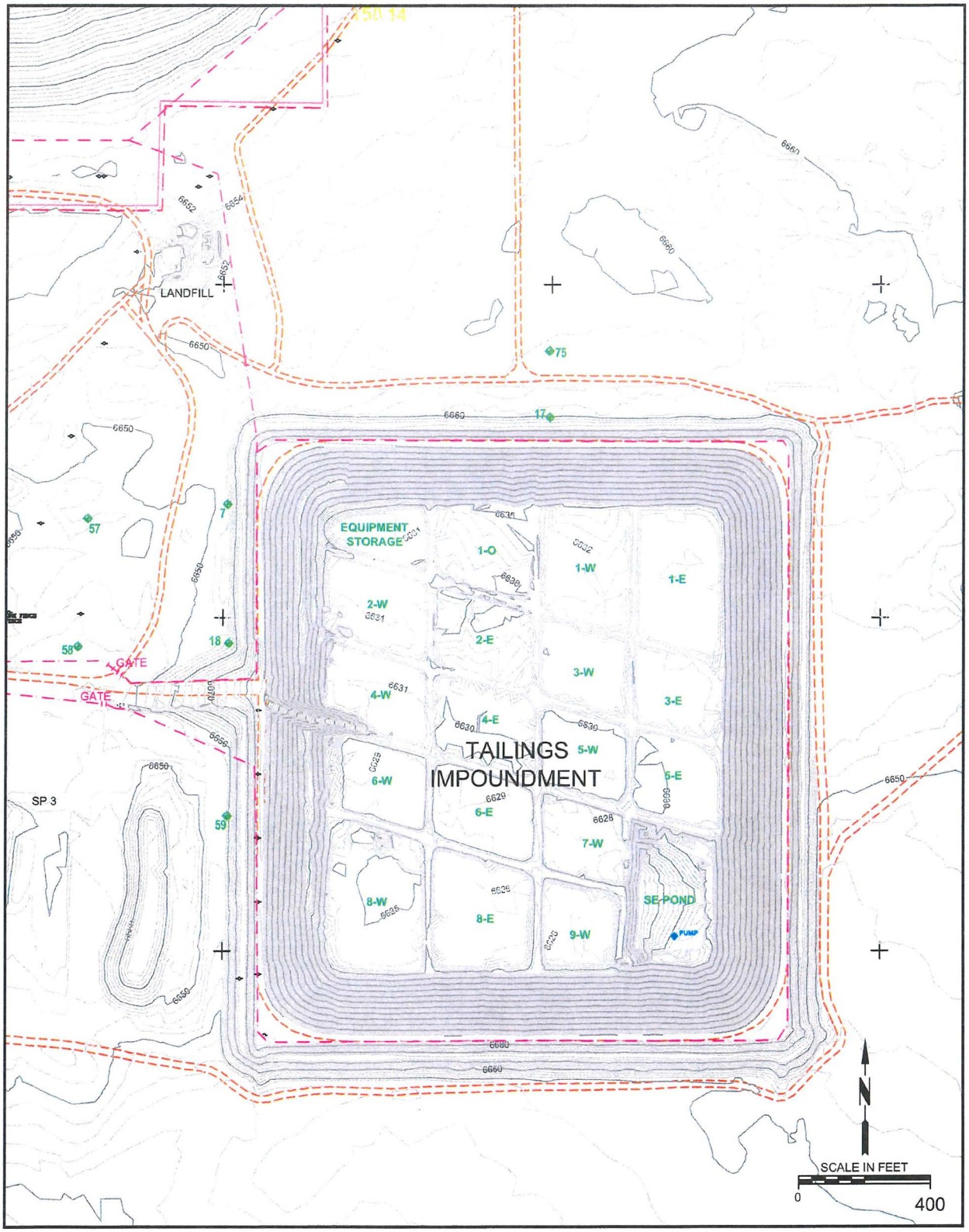
EXISTING CONTOURS
DECEMBER 29, 2008

PROJECT 160889 (181246)	DATE JANUARY 2009	DRAWING -	REVISION
SCALE AS SHOWN	ACADFILE VOL-2008-DEC-29.dwg		



Tailings Impoundment – July 4, 2009

Image from Google Earth



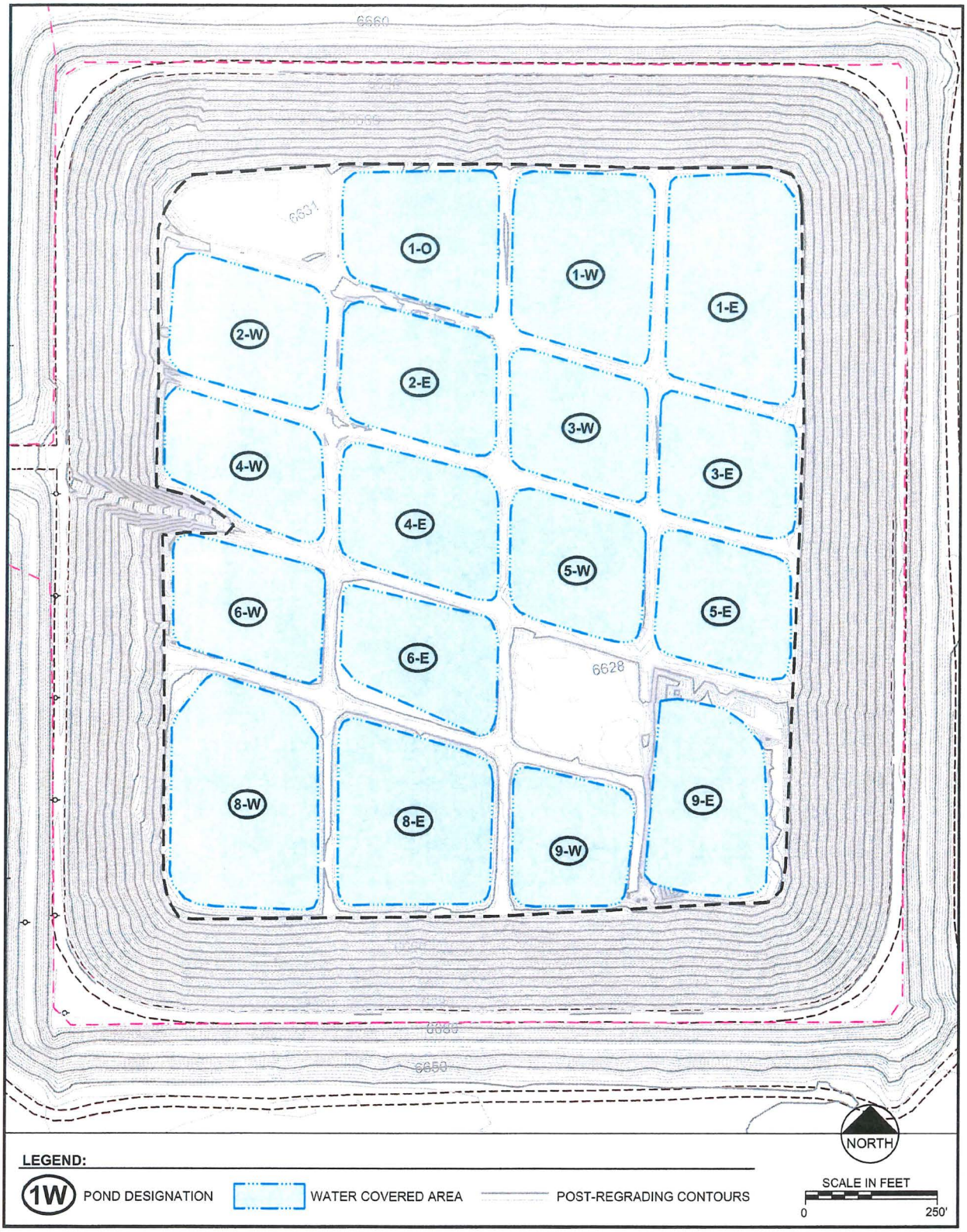
7/8/2010 R:\Sweetwater\SweetwaterUranium\Calculations\AutoCad\TOPO2009-JUL_Telesto exhibits.dwg

PROJECT:	TASK:
451101	-

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 2
JULY 2009 TAILINGS AREA SURVEY

PREPARED FOR: SWEETWATER URANIUM FACILITY



	SWEETWATER URANIUM FACILITY TAILINGS IMPOUNDMENT – DECEMBER 2009	Date: FEBRUARY 2010 Project: 06-442\REP2010\ File: Tailings 2009-Dec.dwg



Tailings Impoundment – June 8, 2014

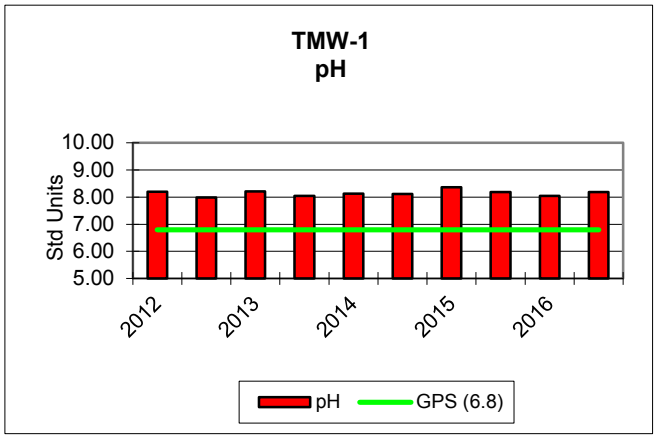
Image from Google Earth

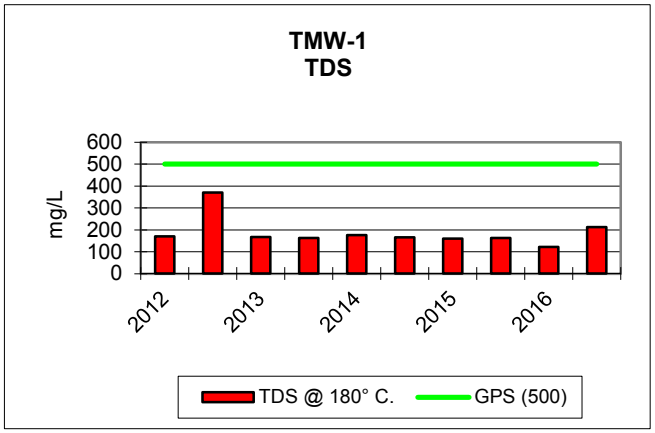


October 31, 2016

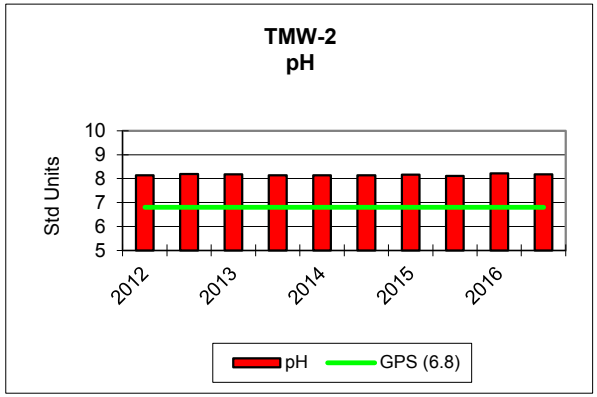
Tailings Monitor Well Data Analyses & Control Charts

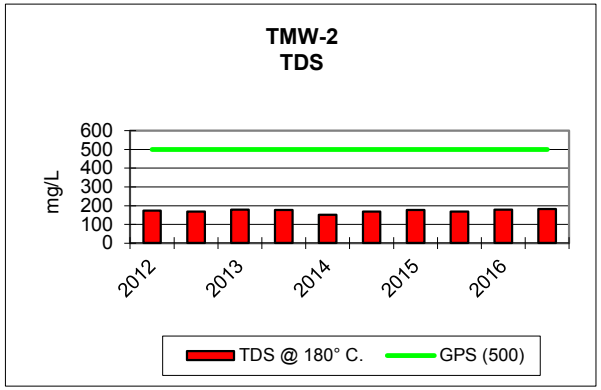
KENNECOTT URANIUM COMPANY											
TMW-1		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/23/2012	7/10/2012	2/13/2013	7/15/2013	1/18/2014	7/1/2014	1/13/2015	7/7/2015	1/26/2016	7/19/2016
TDS A/C Balance *(dec. %)*		-1.17	3.86	-1.45	-2.94	-1.46	0.04	2.43	0.87	18.6	0.69
Alk-CaC03		80	112	87	96	90	87	84	90	62	88
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	<0.001	0.002	0.002	0.002	0.002	0.001	0.001	0.002	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		97	137	106	117	110	107	103	109	76	107
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		17.2	79.1	19.3	18.8	23.1	18.8	17.9	19.5	18.2	17.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		2	4	2	2	3	2	3	2	2	2
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		245	562	258	251	289	249	285	248	176	250
Cond-Field *(umhos/cm)*		341	612	285	280	313	279	278	278	253	379
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.3	2.2	1.5	0.9	1.4	1.2	8.3	1.9	4.2	3.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	1.1	<1	<1	<1	<1	0.2	0.4	-0.02	0.78
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		0.8	4.3	1	0.9	1.2	0.8	0.8	0.9	1.2	0.8
Manganese (Mn)	GPS (0.2)	0.01	0.08	0.01	0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.20	7.99	8.21	8.04	8.13	8.11	8.36	8.19	8.05	8.19
pH (Field) *(Std. Units)*		7.8	7.7	7.8	8.65	8.1	8.8	8.09	8.11	8.41	7.63
Potassium (K)		1.3	2.6	1.4	1.4	1.5	1.4	1.3	1.4	1.5	1.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	1.79	5.4	2.2	3.39	3.6	1.66	2.6	5.4	4	2.02
Radium 226 *(pCi/L)*		0.69	3	1.5	0.89	1.6	0.96	1.3	1.4	1.2	0.92
Radium 228 *(pCi/L)*		1.1	2.4	0.7	2.5	2	0.7	2.9	4	2.8	1.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		11.5	12.3	13.8	13.5	12.8	13.2	13	14.8	13.1	12.4
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		33.8	38	34.3	34.8	35.7	34.8	32.7	36.4	36.5	31.9
TDS @ 180° *C.*	GPS (500)	171	371	168	163	176	166	161	164	123	213
Sulfate (SO4)		40	155	40	35	50	36	36	36	24	38
Temperature *(C)*		11	12.1	8.4	13.8	9.8	10.3	9.3	10	9	12.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	0.02	0.2	0.03	0.04	0.2	0.1	-0.006	0.0007
Uranium, natural *(pCi/L)*	GPS (36)	2	16.7	3.4	1.8	2.5	1.2	1.1	0.7	0.8	1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

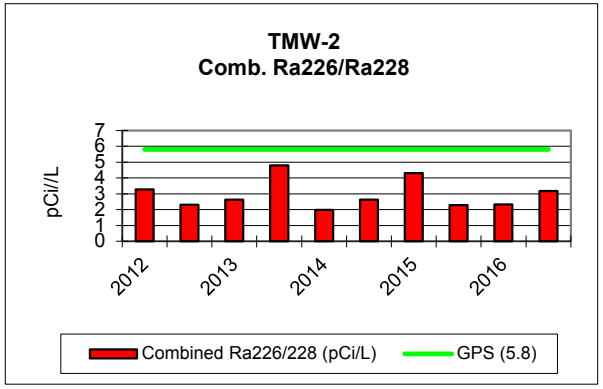

TMW-1
pH
10.00
9.00
8.00
7.00
6.00
5.00
Std Units
2012
2013
2014
2015
2016
pH
GPS (6.8)


TMW-1
TDS
600
500
400
300
200
100
0
mg/L
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

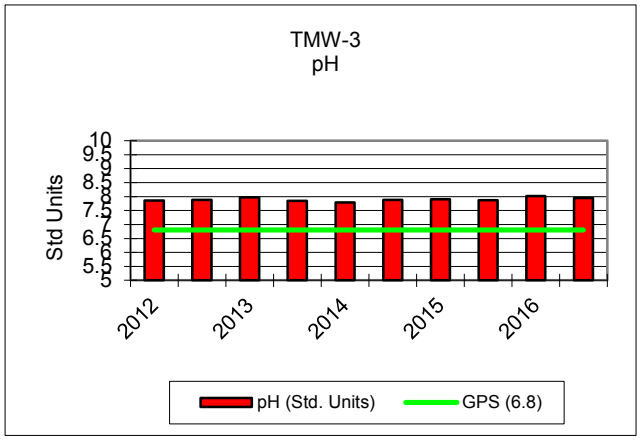
KENNECOTT URANIUM COMPANY											
TMW-2		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/24/2012	8/28/2012	2/12/2013	7/15/2013	1/18/2014	7/14/2014	1/13/2015	7/14/2015	1/17/2016	7/18/2016
TDS A/C Balance *(dec. %)*		-1.74	-5.25	-1.49	-2.96	-1.86	1.09	1	1.22	2.4	0.36
Alk-CaC03		87	100	92	100	89	92	90	92	91	93
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.002	0.001	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		100	122	112	122	109	112	109	112	111	113
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		21.3	22.7	22.8	23.8	20.2	22.7	25	26.6	23.9	25.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		2	3	2	2	2	3	3	3	3	3
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		264	269	267	275	261	275	278	271	276	282
Cond-Field *(umhos/cm)*		281	310	284	287	297	236	299	280	285	422
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	0.6	0.7	0.6	1	0.7	0.6	7.5	5.5	7	1.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	-0.04	0.5
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05
Magnesium (Mg)		1.1	1.1	1.2	1.3	1	1.3	1.3	1	1.2	1.4
Manganese (Mn)	GPS (0.2)	0.01	0.01	0.01	0.01	<0.01	0.01	0.01	0.01	0.01	0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.14	8.19	8.18	8.14	8.14	8.14	8.16	8.11	8.22	8.18
pH (Field) *(Std. Units)*		8.1	8	7.86	8.45	8	6.8	8.69	8.31	8.32	7.41
Potassium (K)		1.4	1.5	1.4	1.5	1.4	1.7	1.6	4.3	1.5	1.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	3.28	2.3	2.63	4.79	1.99	2.62	4.3	2.29	2.32	3.17
Radium 226 *(pCi/L)*		0.58	1.1	0.83	0.99	0.89	0.82	1.6	0.89	0.82	0.87
Radium 228 *(pCi/L)*		2.7	1.2	1.8	3.8	1.1	1.8	2.7	1.4	1.5	2.3
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.3	13.1	13.1	14	13.4	15	14	15	12.9	13.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		32.4	32.1	32.4	33.2	33.2	34.3	33.7	28	31.4	34.3
TDS @ 180° *C.*	GPS (500)	174	169	179	178	151	169	177	169	179	182
Sulfate (SO4)		42	42	40	41	39	43	44		44	48
Temperature *(C)*		10.9	12.3	11.7	12.9	8.4	10.7	9	10.2	8.6	11.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.02	<0.2	0.03	0.04	0.5	0.2	0.08	0.2	-0.009	-0.03
Uranium, natural *(pCi/L)*	GPS (36)	0.7	0.4	0.2	0.2	0.5	0.7	0.4	0.4	0.4	1.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

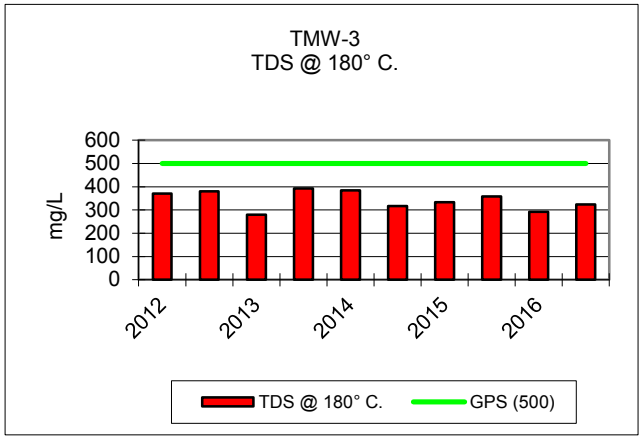

TMW-2
pH
Std Units
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH
GPS (6.8)


TMW-2
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

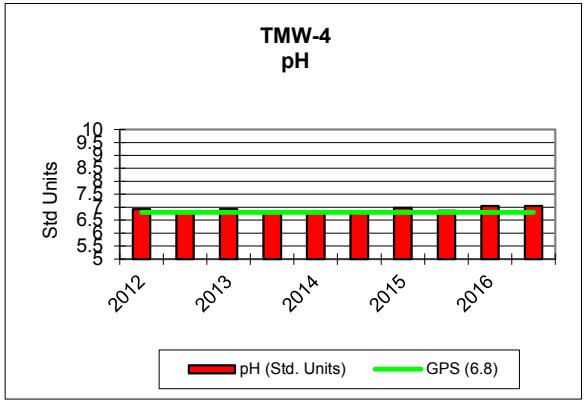

TMW-2
Comb. Ra226/Ra228
pCi/L
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

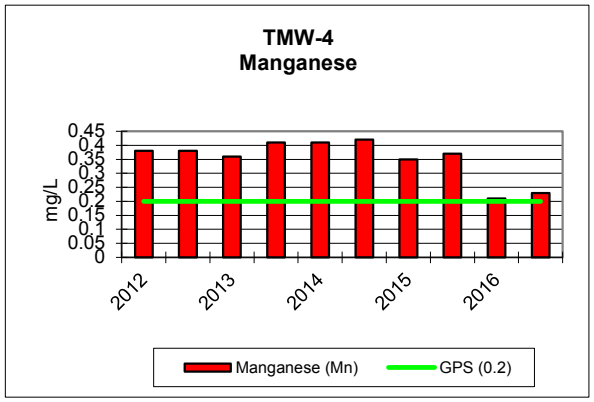
KENNECOTT URANIUM COMPANY											
TMW-3		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/19/2012	8/13/2012	2/12/2013	7/15/2013	1/18/2014	7/14/2014	1/13/2015	7/14/2015	1/17/2016	7/18/2016
TDS A/C Balance *(dec. %)*		-2.49	-0.475	-1.44	-1.83	0.21	0.09	0.72	2.58	4.56	0.23
Alk-CaC03		105	109	98	119	105	104	98	104	97	102
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		128	133	119	146	128	127	120	127	119	125
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		68.5	71.8	46.4	73.9	74.8	66.5	61.1	67.1	47.4	58.6
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		5	5	4	6	5	5	5	5	4	5
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		566	567	415	572	581	543	495	535	434	492
Cond-Field *(umhos/cm)*		612	605	439	586	651	623	499	577	449	596
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	2.1	3.5	1	1.4	1.4	1.3	8.4	4.9	3.7	2.4
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	0.08	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	0.2	0.08	-0.6	-0.2	-0.1	0.04	0.1	0.9
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		6.6	6.6	3.4	6.4	6.6	6.3	4.9	5.3	3.5	4.7
Manganese (Mn)	GPS (0.2)	0.05	0.05	0.03	0.05	0.05	0.05	0.04	0.05	0.03	0.04
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.86	7.88	7.97	7.85	7.79	7.88	7.9	7.87	8.02	7.95
pH (Field) *(Std. Units)*		7.7	7.2	7.52	7.9	7.9	8.1	8.43	7.67	8.05	6.93
Potassium (K)		2	2.3	1.8	2.3	2.2	2.3	2.2	2.9	1.7	2.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	3.3	2.73	4.5	5	4.97	5.8	5.7	3.8	3.34	4.4
Radium 226 *(pCi/L)*		1.1	0.93	0.8	1.2	0.97	1.1	2.3	1.2	0.84	1.3
Radium 228 *(pCi/L)*		2.2	1.8	3.7	3.8	4	4.7	3.4	2.6	2.5	3.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15.7	15.5	14.9	13.7	13.7	15.2	13.8	14.5	12.8	13.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		36.3	36.1	34.9	37.7	36.7	38.9	37.6	33.4	31.8	36.8
TDS @ 180° *C.*	GPS (500)	370	380	280	392	384	317	333	358	292	324
Sulfate (SO4)		174	167	106	172	175	162	142	162	115	135
Temperature *(C)*		12.2	11.7	11.1	13.3	9.5	13	8.4	9.3	8.5	13.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	0.006	0.05	0.3	0.1	0.07	0.1	0.02	0.08
Uranium, natural *(pCi/L)*	GPS (36)	1.6	1.7	0.5	1.4	1.3	1.2	1	1.2	0.8	1.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.01	0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

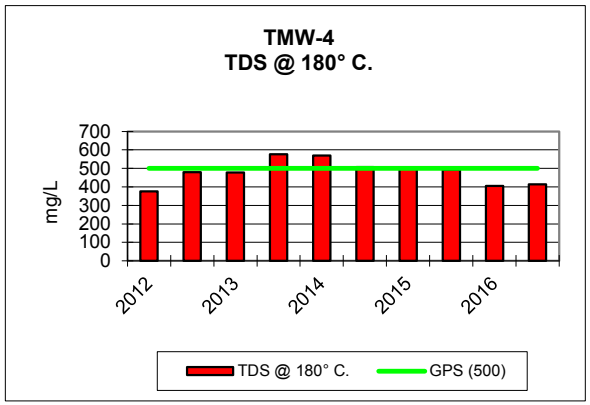

TMW-3
pH
Std Units
10
9.5
8.5
7.5
7
6.5
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

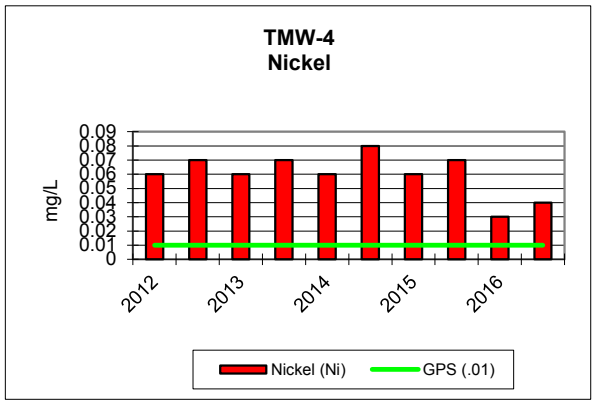

TMW-3
TDS @ 180° C.
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

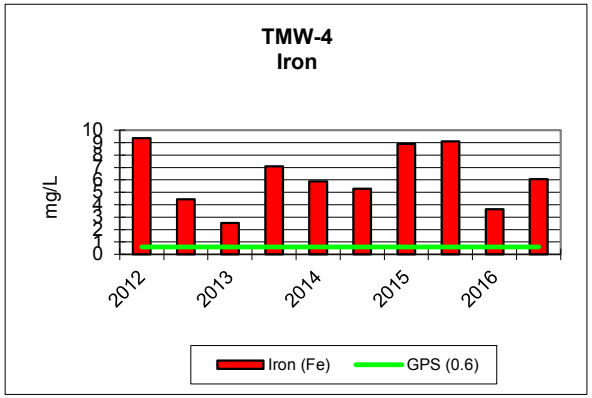
KENNECOTT URANIUM COMPANY											
TMW-4		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/24/2012	8/13/2012	2/12/2013	7/16/2013	1/18/2014	7/14/2014	1/13/2015	7/14/2015	1/17/2016	7/18/2016
TDS A/C Balance *(dec. %)*		-1.67	-0.149	1.16	-1.53	-1.5	0.15	0.39	1.35	4.4	2.42
Alk-CaC03		72	74	73	81	82	73	74	74	75	76
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	<0.001	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		88	91	90	99	100	89	90	90	92	93
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		75.6	78.7	80	95.1	96.1	91.7	81.4	89.9	60.3	65.6
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		5	5	5	6	6	6	6	5	5	5
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.044	0.046	0.042	0.051	0.051	0.053	0.043	0.046	0.024	0.026
Cond *(umhos/cm)*		671	699	673	795	797	768	707	712	582	604
Cond-Field *(umhos/cm)*		729	732	725	826	890	917	664	758	624	861
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.6	2.2	2	2	2.3	3.5	12.7	8.8	3.9	1.7
Iron (Fe)	GPS (0.6)	9.36	4.43	2.52	7.09	5.87	5.28	8.9	9.09	3.64	6.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	0.07	0.6	-0.6	0.1	-0.1	-0.07	0.6	0.96
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		14.5	14.6	14.1	16.4	16.7	18	14.4	12.3	9.5	10.1
Manganese (Mn)	GPS (0.2)	0.38	0.38	0.36	0.41	0.41	0.42	0.35	0.37	0.21	0.23
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.06	0.07	0.06	0.07	0.06	0.08	0.06	0.07	0.03	0.04
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	6.93	6.85	6.93	6.81	6.8	6.77	6.98	6.86	7.05	7.05
pH (Field) *(Std. Units)*		6.7	6.7	6.88	6.71	6.9	6.8	6.96	6.41	7.009	6.6
Potassium (K)		2.6	2.8	2.8	3	3	3.2	2.9	5.7	2.3	2.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	7.3	5.6	7.1	7.9	9	8.4	9.4	6.3	3.9	8.8
Radium 226 *(pCi/L)*		1.3	1.5	1.3	2.1	1.9	1.6	3.3	1.7	1.3	1.4
Radium 228 *(pCi/L)*		6	4.1	5.8	5.8	7.1	6.8	6.1	4.6	2.6	7.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.2	15.2	13.2	14.3	13.9	15.4	13.8	15.5	11.7	13.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		42	42.2	42.4	44	43	45.2	42.8	35.8	37.2	43.1
TDS @ 180° *C.*	GPS (500)	376	480	478	577	570	507	498	494	406	414
Sulfate (SO4)		264	260	254	314	315	310	268	278	207	
Temperature *(C)*		11.8	21.7	10.5	13.5	9.1	10.5	8.7	10.1	8.5	10.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.2	0.1	0.02	0.02	0.05	0.07	0.06	0.05	-0.02	0.005
Uranium, natural *(pCi/L)*	GPS (36)	2.9	4	4.3	6.2	6.7	7.4	7.3	7.2	5.3	9.7
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.03	0.03	0.02	0.04	0.04	0.06	0.04	0.03	0.01	0.02

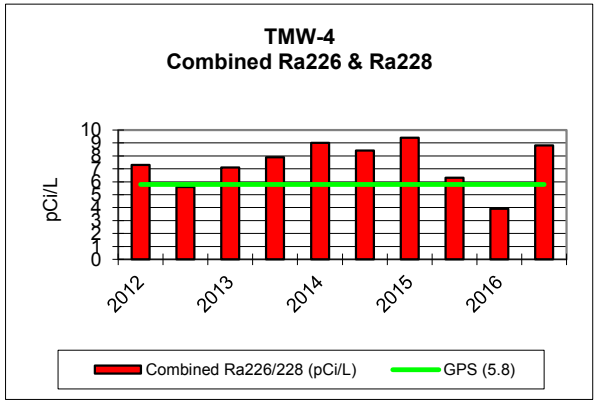

TMW-4
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-4
Manganese
mg/L
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

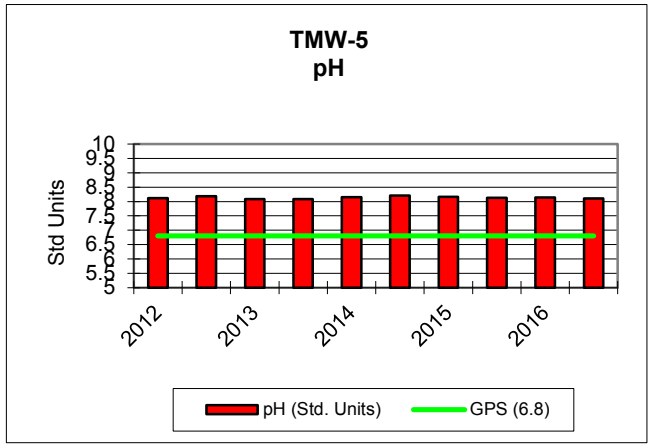

TMW-4
TDS @ 180° C.
mg/L
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

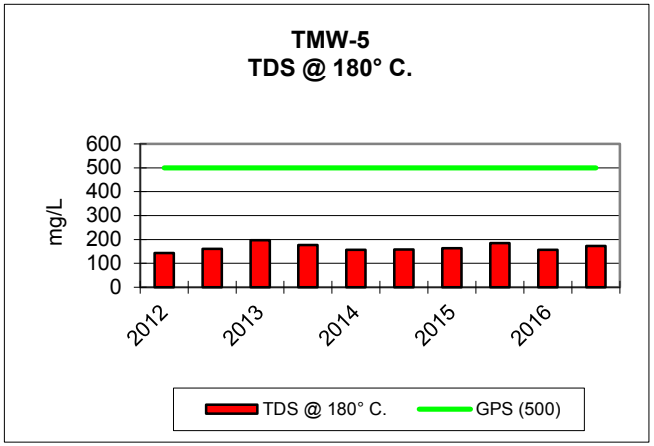

TMW-4
Nickel
mg/L
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)


TMW-4
Iron
mg/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

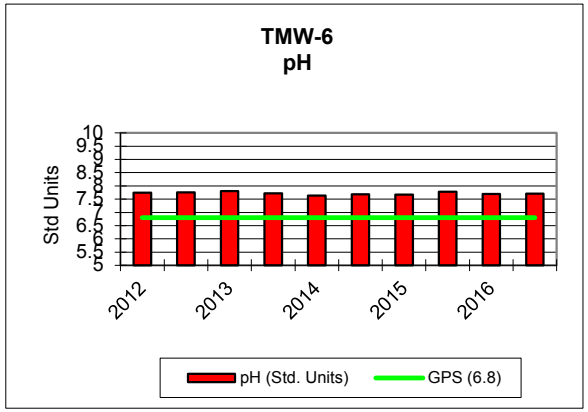

TMW-4
Combined Ra226 & Ra228
pCi/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

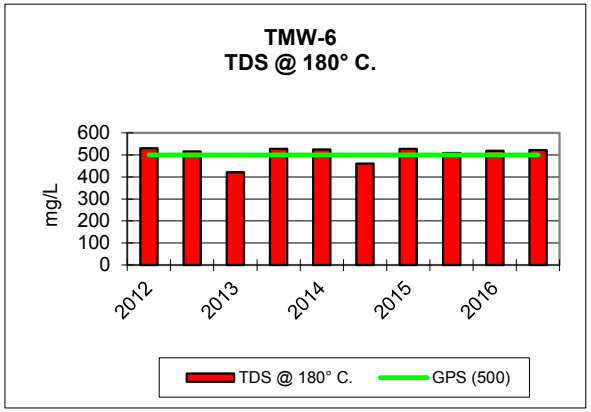
KENNECOTT URANIUM COMPANY											
TMW-5		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/24/2012	8/27/2012	2/13/2013	7/15/2013	1/18/2014	7/14/2014	1/13/2015	7/7/2015	1/27/2016	7/19/2016
TDS A/C Balance *(dec. %)*		-1.47	-1.37	-0.561	-3.8	-1	1.16	1.94	2.53	0.83	0.35
Alk-CaC03		87	94	97	107	92	99	89	98	93	94
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.1
Barium (Ba)		<0.1	<0.1	<0.1	0.3	<0.1	1.3	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		106	115	118	131	113	121	109	119	113	115
Boron (B)		<0.1	<0.1	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		21.1	23.6	26.7	24	22.7	23.7	23.8	24.6	23.1	21.7
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		2	2	3	2	2	3	3	3	2	3
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		248	263	286	265	258	263	263	272	254	262
Cond-Field *(umhos/cm)*		256	287	322	279	304	238	292	282	255	388
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	2.2	0.8	2.1	0.9	1.4	2.1	6.1	2.4	5.8	2.7
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	0.3	-1	0.5	0.2	-0.4	0.4	-1.7
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		1	1.1	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	0.02	<0.01	1.02	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	0.02	<0.01	1.02	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.12	8.18	8.08	8.08	8.15	8.21	8.16	8.13	8.14	8.11
pH (Field) *(Std. Units)*		7.5	8.4	7.2	8.64	8.2	8.4	8.72	8.08	8.1	7.25
Potassium (K)		1.4	1.5	1.5	1.4	1.5	1.6	1.6	1.4	1.6	1.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.11	2.6	3.8	6.37	4.2	3.4	4.5	2.9	2.6	2.58
Radium 226 *(pCi/L)*		0.71	1.1	1.7	0.87	1.5	1.6	2.7	1.7	1.2	0.98
Radium 228 *(pCi/L)*		1.4	1.5	2.1	5.5	2.7	1.8	1.8	1.2	1.4	1.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.5	14.4	15.9	14	14.2	16.1	14.3	14.4	14.3	12.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		30.3	31.8	33.3	32.6	30.7	33.3	32.5	31.5	32.2	29.6
TDS @ 180° *C.*	GPS (500)	143	160	197	177	156	158	163	185	157	172
Sulfate (SO4)		37	38	45	36	35	37	37	40	34	37
Temperature *(C)*		10.2	12.1	8.5	14	10.2	10.5	8.7	9.6	8.7	12.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	0.3	0.2	0.06	0.09	0.07	0.003
Uranium, natural *(pCi/L)*	GPS (36)	0.3	0.7	0.5	0.6	0.3	0.4	0.3	0.4	0.3	0.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.07	<0.01	0.02	<0.01	<0.01	<0.01	0.02

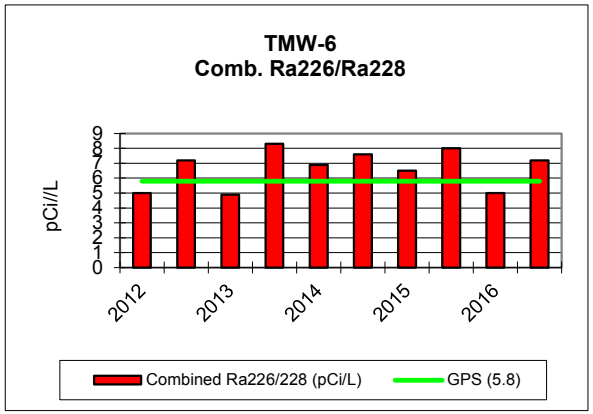

TMW-5
pH
Std Units
10
9.5
8.5
7.5
6.5
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-5
TDS @ 180° C.
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

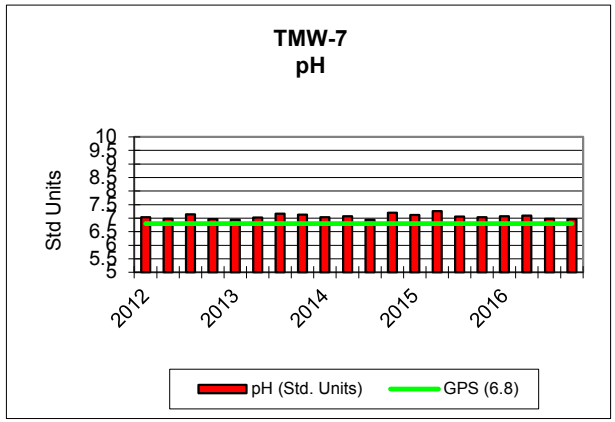
KENNECOTT URANIUM COMPANY											
TMW-6		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/19/2012	8/28/2012	2/13/2013	7/15/2013	1/18/2014	7/14/2014	1/13/2015	7/20/2015	1/17/2016	7/18/2016
TDS A/C Balance *(dec. %)*		2.21	-2.39	0.416	-0.749	-0.427	1.05	1.14	2.83	4.36	1.66
Alk-CaC03		131	139	124	153	139	138	132	139	134	139
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		160	170	152	187	170	168	161	170	163	170
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		116	102	82.3	111	107	109	110	106	99.1	109
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	6	4	6	6	6	6	6	6	6
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		748	739	602	749	750	743	751	749	730	763
Cond-Field *(umhos/cm)*		802	800	647	765	830	628	778	783	762	983
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.8	2.8	3.4	3.3	3.3	4.5	19.9	7.6	6.9	3.8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	0.17	0.06	0.18
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	1	0.5	0.3	-0.3	0.2	0.3	-0.2	0.3	0.95
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		9.4	9	7.1	9.4	9.2	9.8	9.2	8.7	8	9
Manganese (Mn)	GPS (0.2)	0.07	0.08	0.11	0.08	0.08	0.08	0.08	0.08	0.07	0.08
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.74	7.75	7.8	7.72	7.63	7.68	7.67	7.78	7.7	7.71
pH (Field) *(Std. Units)*		7.4	7.5	6.96	7.69	7.7	7.6	7.74	7.27	7.64	7.34
Potassium (K)		2.8	2.6	2.4	2.9	2.7	3	2.9	2.8	2.6	3.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	5	7.2	4.9	8.3	6.9	7.6	6.5	8	5	7.2
Radium 226 *(pCi/L)*		2.4	2.7	3.3	2.8	2.6	2.6	2.4	2.5	2.8	2.7
Radium 228 *(pCi/L)*		2.6	4.5	1.6	5.5	4.3	5	4.1	5.5	2.2	4.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.3	12.9	13.1	13.3	13.1	15.2	13.4	13.3	12.3	13.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		38.5	38.3	38.1	41.1	38.6	41.4	40.8	39.6	35.6	41.3
TDS @ 180° *C.*	GPS (500)	530	516	422	527	524	460	527	509	518	521
Sulfate (SO4)		247	240	180	242	239	241	245	255	241	266
Temperature *(C)*		10.2	11.1	8.7	13.1	9.7	13.9	8.8	9.8	8.4	11.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	0.1	0.02	0.06	0.2	0.05	0.007
Uranium, natural *(pCi/L)*	GPS (36)	3	2.9	1.9	2.7	2.5	2.7	2.3	1.8	4	3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

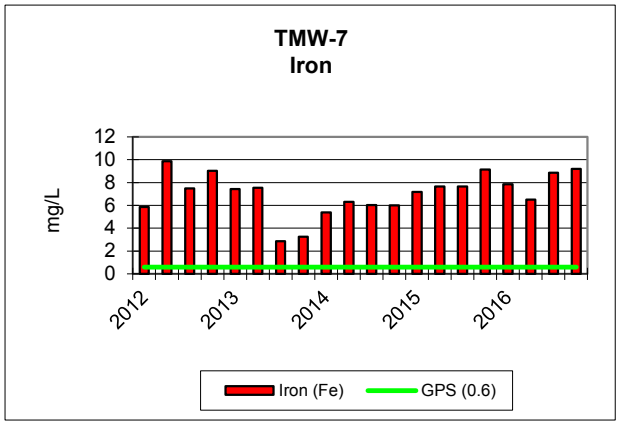

TMW-6
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

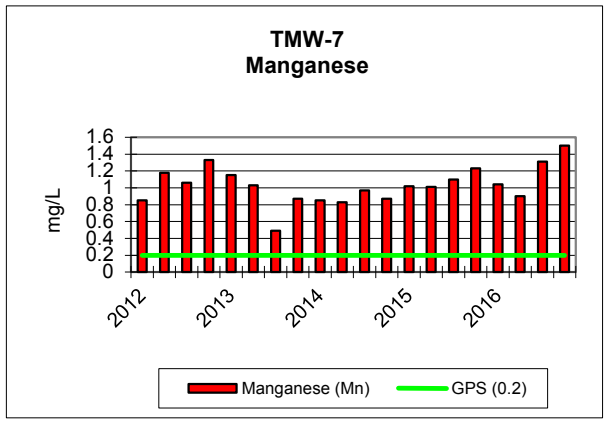

TMW-6
TDS @ 180° C.
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

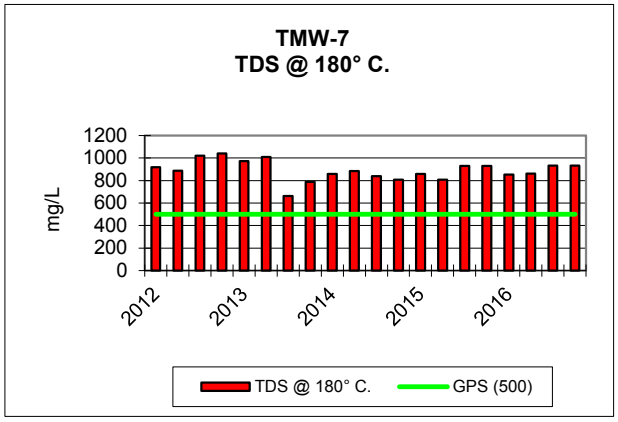

TMW-6
Comb. Ra226/Ra228
pCi/L
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

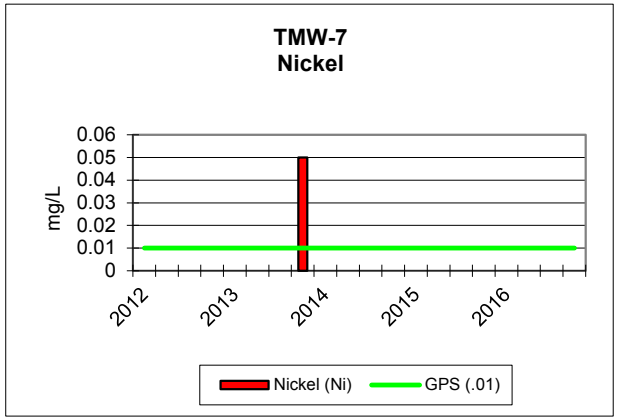
KENNECOTT URANIUM COMPANY																				
TMW-7	2012				2013				2014				2015				2016			
PARAMETER *(mg/L unless noted)*	1/4/2012	4/10/2012	7/10/2012	10/22/2012	1/14/2013	4/2/2013	7/9/2013	10/1/2013	1/18/2014	4/1/2014	7/1/2014	10/15/2014	1/14/2015	4/8/2015	7/14/2015	10/26/2015	1/6/2016	4/19/2016	7/6/2016	10/4/2016
TDS A/C Balance *(dec. %)*	-0.443	-2.65	1.82	3.34	3.4	-2.67	-0.122	-3.31	-4.75	1.3	0.3	0.58	1.29	5.1	3.66	0.34	1.05	0.13	1.81	0.11
Alk-CaC03	155	165	167	180	169	174	143	153	161	159	152	151	154	151	160	156	145	142	158	154
Aluminum (Al)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)	189	201	203	219	206	213	174	187	196	193	186	185	188	184	195	191	177	173	192	188
Boron (B)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)	186	165	203	223	214	192	133	151	151	165	161	155	175	175	181	167	160	162	170	177
Carbonate (CO3)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)	46	46	51	56	51	55	27	35	40	43	39	38	46	42	49	45	45	41	46	49
Chromium (Cr)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	0.002	0.003
Cond *(umhos/cm)*	1310	1220	1350	1400	1270	1350	956	1060	1160	1190	1130	1100	1230	1100	1250	1210	1150	1160	1260	1260
Cond-Field *(umhos/cm)*	1311	1292	1403	1395	1438	1470	917	1127	1175	1254	1196	1158	1221		1293	1327	1200	1298	1525	1378
Copper (Cu)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.1
Gross Alpha *(pCi/L)*	2.3	3.2	2.9	3.9	2.5	4.4	1.4	2.4	4.4	4	3.1	2.7	19.7	19	13.9	23.5	8.4	15.3	3.1	24.8
Iron (Fe)	5.86	9.88	7.48	9.02	7.43	7.53	2.87	3.26	5.39	6.31	6.03	5.99	7.19	7.64	7.66	9.13	7.86	6.51	8.85	9.19
Lead (Pb210) *(pCi/L)*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.3	0.1	0.04	0.2	<1	<1	<1	<1
Lead (Pb)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-0.3	0.87	6.1	0.9
Magnesium (Mg)	22.6	23.1	27.4	30.5	28.2	26.4	13.6	17.2	19.8	22	21	19.9	23.8	24.1	21.4	25.4	23.8	22.3	26	29.6
Manganese (Mn)	0.85	1.18	1.06	1.33	1.15	1.03	0.49	0.87	0.85	0.83	0.97	0.87	1.02	1.01	1.1	1.23	1.04	0.9	1.31	1.5
Mercury (Hg)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	7.04	6.98	7.14	6.97	6.94	7.02	7.16	7.13	7.03	7.07	6.94	7.2	7.12	7.26	7.06	7.03	7.07	7.09	6.98	6.97
pH (Field) *(Std. Units)*	6.8	6.6	6.9	6.83	7.14	6.8	7.1	7.12	6.8	6.9	7	7.08	6.96	6.82	6.55	6.76	6.95	6.8	6.32	6.68
Potassium (K)	3.7	3.4	4.3	4.1	4.1	3.7	3.5	3.4	3.2	3.6	3.7	3.4	3.9	3.8	6	4	3.6	3.3	3.8	3.8
Combined Ra226/228 *(pCi/L)*	9.3	11.2	10.4	9.9	8.2	11	7.4	9.4	11.1	12.4	7.5	11.2	9.4	9.8	10.6	9.6	8.2	8.7	10	8.4
Radium 226 *(pCi/L)*	2.3	3.3	2.8	2.2	2.9	2.8	1.4	2	1.8	3.3	1.7	2.3	3.3	2.5	2.1	2.9	1.5	2.3	2.1	2.2
Radium 228 *(pCi/L)*	7	7.9	7.6	7.7	5.3	8.2	6	7.4	9.3	9.1	5.8	8.9	6.1	7.3	8.5	6.7	6.7	6.4	7.9	6.2
Selenium (Se)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)	15.5	15.5	16.9	16.8	17.9	15.9	16.3	15.6	14.7	15.7	15.9	15.7	16.4	15.7	17.6	15.9	15.9	15.7	15.7	16
Silver (Ag)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)	60.1	59.8	67.3	72.8	68.4	65.9	49.5	50.2	54.3	59.8	60.1	56.2	65.8	64.6	54.7	66.6	61	59.2	64.1	70.1
TDS @ 180° *C.*	918	888	1020	1040	974	1010	662	788	860	885	840	809	859	808	931	929	852	862	933	934
Sulfate (SO4)	460	427	484	511	492	503	307	380	404	417	404	382	431	389	469	437	422	410	413	476
Temperature *(C)*	10.4	13.5	11.7	11.3	5.9	10	14.8	13.3	8.4	9.8	11.1	10.7	9.6	10.4	11.4	10.4	9.6	11.1	12.6	9.9
Thallium (Tl)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.1	0.04	0.07	0.05	0.1	-0.007	0.03
Uranium, natural *(pCi/L)*	21.8	13.9	27.9	23.1	28.9	33.3	8	10.7	20.3	25.3	14.2	18.6	24.9	30.8	17.2	15.4	19.2	37.9	14.4	14.3
Vanadium (V205)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

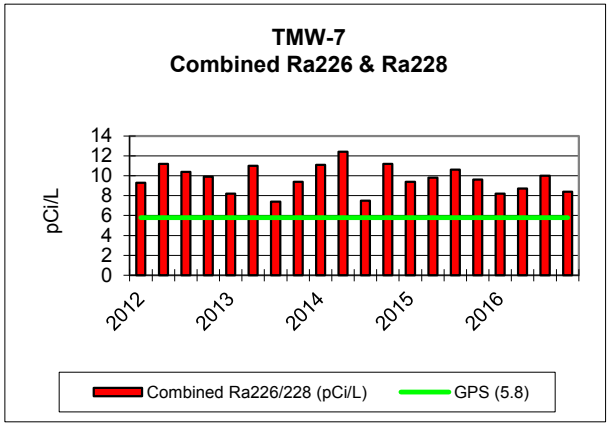

TMW-7
pH
Std Units
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-7
Iron
mg/L
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

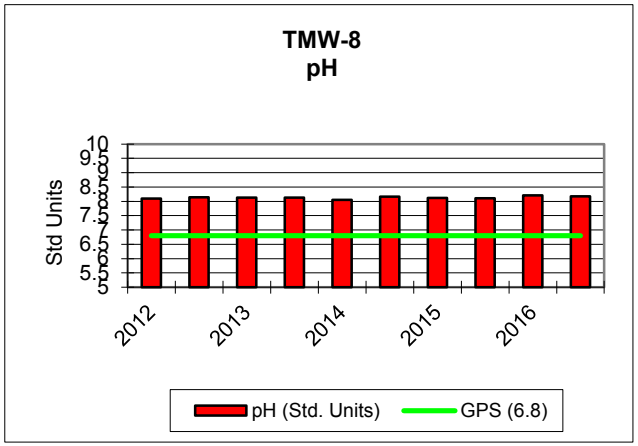

TMW-7
Manganese
mg/L
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

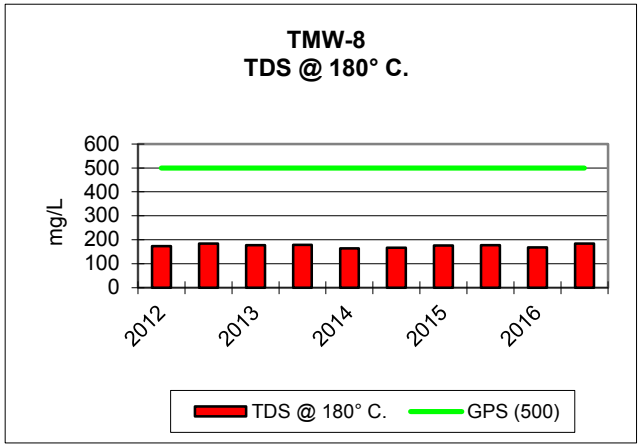

TMW-7
TDS @ 180° C.
mg/L
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-7
Nickel
mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

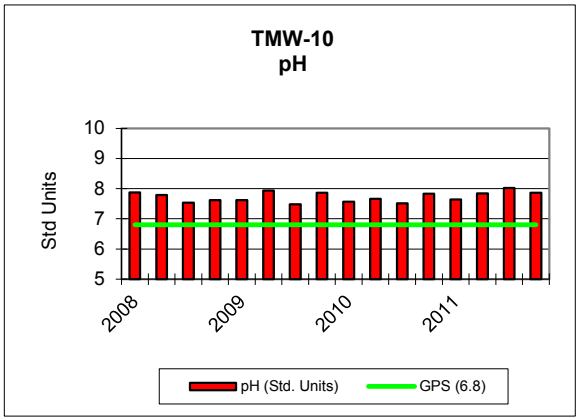

TMW-7
Combined Ra226 & Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

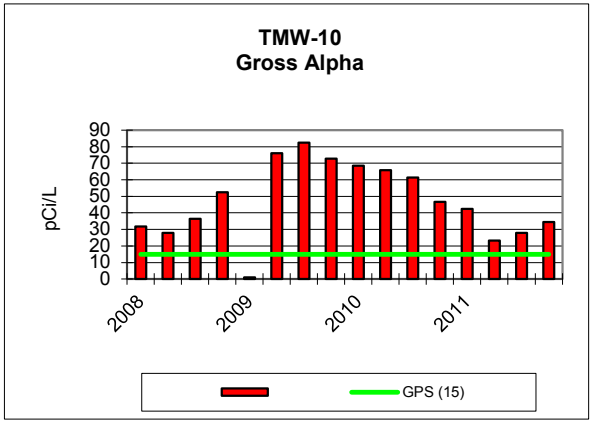
KENNECOTT URANIUM COMPANY											
TMW-8		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/24/2012	8/15/2012	2/12/2013	7/16/2013	2/17/2014	7/21/2014	1/13/2015	7/14/2015	1/27/2016	7/27/2016
TDS A/C Balance *(dec. %)*		-1.56	-3.38	-0.051	-3.09	0.78	1.1	1.06	1.61	4.4	0.09
Alk-CaC03		81	90	88	95	87	91	84	88	87	88
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.002	0.002	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		99	110	107	116	107	111	103	108	107	107
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		20.6	22	23	22.3	21.8	24.1	22.5	22.5	20.3	22.3
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		3	3	3	2	3	3	3	3	3	3
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		267	278	274	278	274	277	275	271	272	273
Cond-Field *(umhos/cm)*		274	300	306	303	323	287	302	284	279	375
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.1	0.4	0.5	0.4	0.5	0.3	6.1	4.3	3	1.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	1.05	<0.06
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	0.01	-0.8	-0.4	0.4
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		0.8	0.9	0.9	0.9	0.9	0.8	0.9	0.8	0.9	0.9
Manganese (Mn)	GPS (0.2)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.09	8.14	8.13	8.13	8.05	8.16	8.12	8.11	8.21	8.17
pH (Field) *(Std. Units)*		7.7	8	7.52	8.55	8.1	8.6	8.58	8.13	8.34	6.74
Potassium (K)		1.4	1.5	1.5	1.5	1.5	1.5	1.5	2.3	1.4	1.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.11	1.45	1.73	2.44	2.25	4.44	2.81	2.49	6.18	1.41
Radium 226 *(pCi/L)*		0.41	0.55	0.63	0.54	0.45	0.54	0.61	0.69	0.48	0.61
Radium 228 *(pCi/L)*		1.7	0.9	1.1	1.9	1.8	3.9	2.2	1.8	5.7	0.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.2	15.8	13.6	13.7	13.8	14	13.8	14.4	12.6	13.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		34.5	34.3	35.8	35.5	35.8	36.8	36.3	34	32.8	36.8
TDS @ 180° *C.*	GPS (500)	173	184	178	179	164	167	176	177	168	184
Sulfate (SO4)		49	48	47	47	46	45	47	46	46	47
Temperature *(C)*		10.6	11.2	10.4	13.4	9.8	11.2	8.5	9.9	9.1	12.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.06	0.05	0.01	0.04	0.03	0.05	0.1	0.07	0.4	-0.02
Uranium, natural *(pCi/L)*	GPS (36)	<0.2	0.3	0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	1.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

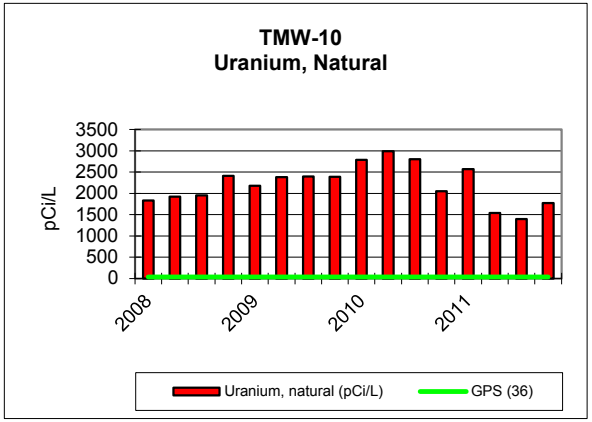

TMW-8
pH
Std Units
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

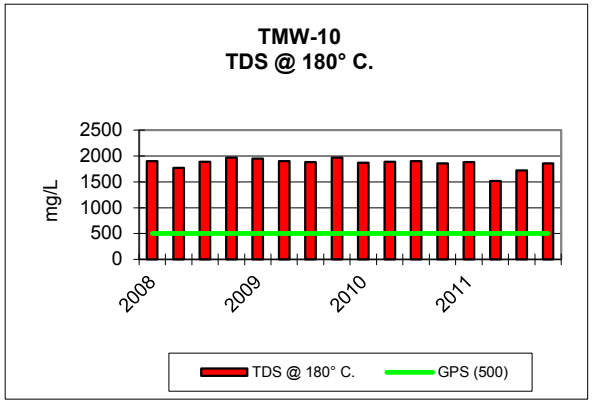

TMW-8
TDS @ 180° C.
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

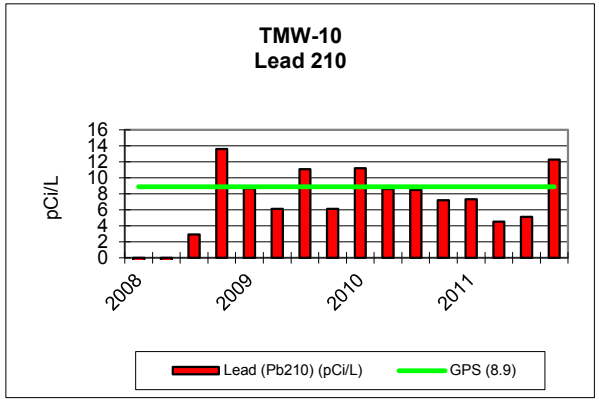
KENNECOTT URANIUM COMPANY																			
TMW-10		2008				2009				2010				2011				No sampling of this well has been done since 2011. It can no longer be safely pumped.	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/13/2008	4/1/2008	8/11/2008	11/18/2008	1/12/2009	4/7/2009	7/8/2009	10/6/2009	1/18/2010	4/12/2010	7/7/2010	10/4/2010	1/17/2011	4/4/2011	7/11/2011	10/23/2011		
TDS A/C Balance *(dec. %)*		2.29	1.43	1.49	0.989	0.493	0.457	-1.83	-2.31	0.952	-3.19	-1.08	-3.97	-1.9	-0.89	-0.142	-0.475		
Alk-CaC03		103	94	93	96	97	99	96	101	110	115	109	99	103	87	93	91		
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Arsenic (As)	GPS (.05)	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001		
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Bicarbonate (HCO3)		126	115	113	117	118	121	117	124	134	141	133	121	125	106	114	111		
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Calcium (Ca)		377	398	413	410	339	377	380	384	400	379	403	352	370	318	343	369		
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Chloride (Cl)		129	122	125	115	116	122	116	125	126	125	115	90	113	53	87	98		
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Cobalt (Co)		<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001		
Cond *(umhos/cm)*		2320	2220	2260	2340	2320	2320	2270	2290	2270	2250	2230	2110	2170	1790	2000	2170		
Cond-Field *(umhos/cm)*		2370	1921	2300	2370	1961	1808	2250	2430	2390	2380	2290	2310	2370	1830	2160	2230		
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01		
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		
Fluoride (F)		<0.1	<0.1	0.1	0.1	0.1	ND	0.1	0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	0.1	0.1		
Gross Alpha *(pCi/L)*	GPS (15)	31.7	27.9	36.4	52.5	1	76.1	82.4	72.7	68.6	65.8	61.4	46.6	42.4	23.3	27.9	34.4		
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05		
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-1.2	-1.6	2.9	13.6	8.7	6.1	11.1	6.1	11.2	8.6	8.5	7.2	7.3	4.5	5.1	12.3		
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Magnesium (Mg)		41.4	45.2	44.5	44.2	38.7	40.2	39.6	42.5	42.9	40.8	42.7	36.8	39.4	33.9	35.6	38.6		
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02	<0.01	0.01		
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	0.0009	<0.0002	<0.0002	<0.0002	<0.0002		
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01		
Nitrogen, Nitrate+Nitrite as N		7.6	6.1	9.1	8.6	8	8.12	8.2	9.8	8.6	8.9	8.2	6.5	7	3.8	7	7.4		
pH *(Std. Units)*	GPS (6.8)	7.88	7.79	7.54	7.62	7.62	7.94	7.48	7.86	7.57	7.66	7.51	7.83	7.64	7.84	8.02	7.86		
pH (Field) *(Std. Units)*		7.8	7.5	7.4	7.2	7.3	7.4	7	7.1	6.8	7	7.3	7.4	7.3	7.6	7.4	7.6		
Potassium (K)		5.5	4.8	5.7	5.5	4.6	5.1	5.4	5.6	5.5	4.9	5.5	5.3	5.4	4.9	5.1	5.8		
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	27.6	27.1	38.9	48.5	52.5	77	91.3	65.7	71.1	70.4	74.2	49.4	36.4	26.8	25.6	33.1		
Radium 226 *(pCi/L)*		24.2	24.5	36	44	49	72	87	61	68	68	70	45	33	23	22	29		
Radium 228 *(pCi/L)*		3.4	2.6	2.9	4.5	3.5	5	4.3	4.7	3.1	2.4	4.2	4.4	3.4	3.8	3.6	4.1		
Selenium (Se)	GPS (.01)	0.512	0.442	0.432	0.483	0.527	0.478	0.443	0.496	0.464	0.493	0.475	0.428	0.448	0.277	0.489	0.564		
Silica (SiO2)		7	6	8.3	7.4	7	5.8	8.2	7.7	7.4	6	7.7	7.8	8.3	7.5	7.7	7.7		
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND		
Sodium (Na)		86.8	100	93	98	94	94.9	89.8	91.9	98.8	98.7	99.4	86.2	92.5	81.5	80.1	90.4		
TDS @ 180° *C.*	GPS (500)	1900	1770	1890	1970	1950	1900	1880	1970	1870	1890	1900	1860	1880	1520	1720	1860		
Sulfate (SO4)		1010	1030	1040	1060	878	966	1030	1050	1030	1060	1090	1030	1010	922	912	998		
Temperature *(C)*		7.3	5.3	13.5	12	8	9	17.4	11.3	8	12.6	18.5	17.2	11.7	7.4	20.8	14.1		
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ND	ND	ND	ND		
Thorium 230 *(pCi/L:)*		0.1	0.08	0.1	0.1	0	0.06	0.04	0.03	0.08	0.02	0.03	0.04	0.2	0.08	0.03	0.1		
Uranium, natural *(pCi/L)*	GPS (36)	1830	1920	1950	2410	2180	2380	2400	2390	2790	2990	2800	2050	2570	1540	1400	1770		
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Zinc (ZN)		0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.01	0.02	0.23		

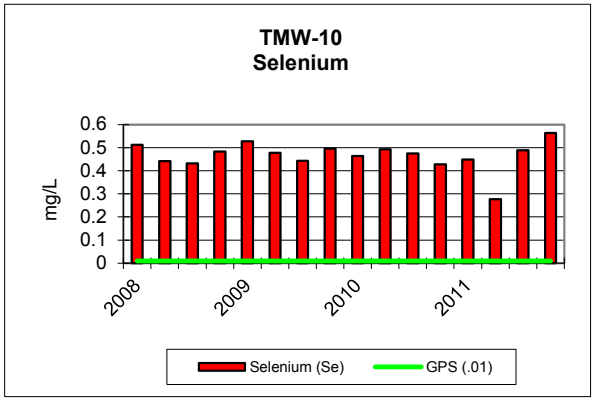

TMW-10
pH
Std Units
10
9
8
7
6
5
2008
2009
2010
2011
pH (Std. Units)
GPS (6.8)

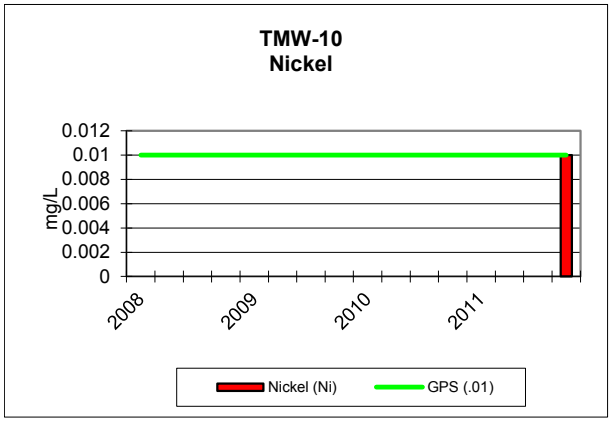

TMW-10
Gross Alpha
pCi/L
90
80
70
60
50
40
30
20
10
0
2008
2009
2010
2011
GPS (15)

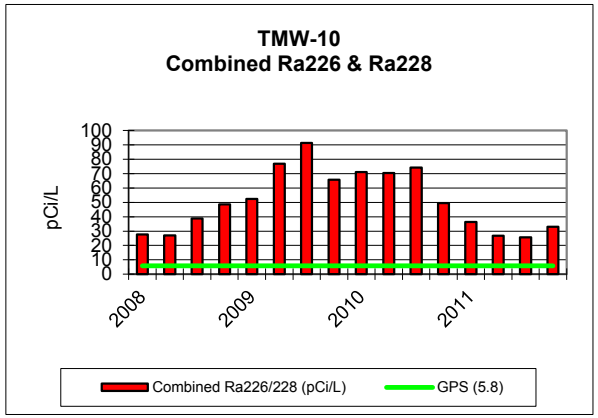

TMW-10
Uranium, Natural
pCi/L
3500
3000
2500
2000
1500
1000
500
0
2008
2009
2010
2011
Uranium, natural (pCi/L)
GPS (36)


TMW-10
TDS @ 180° C.
mg/L
2500
2000
1500
1000
500
0
2008
2009
2010
2011
TDS @ 180° C.
GPS (500)

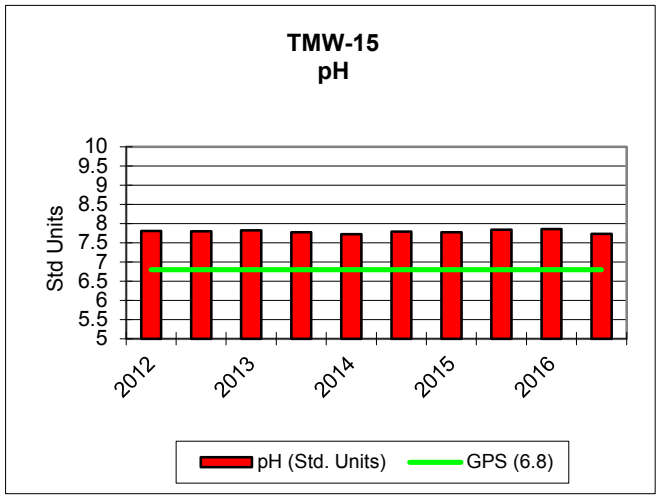

TMW-10
Lead 210
pCi/L
16
14
12
10
8
6
4
2
0
2008
2009
2010
2011
Lead (Pb210) (pCi/L)
GPS (8.9)

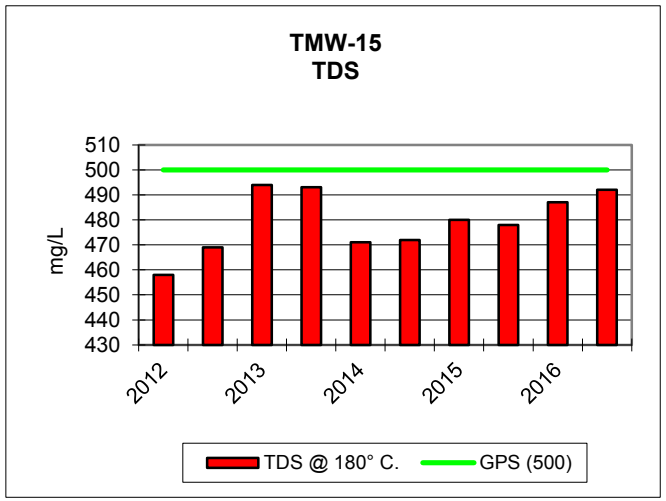

TMW-10
Selenium
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0
2008
2009
2010
2011
Selenium (Se)
GPS (.01)

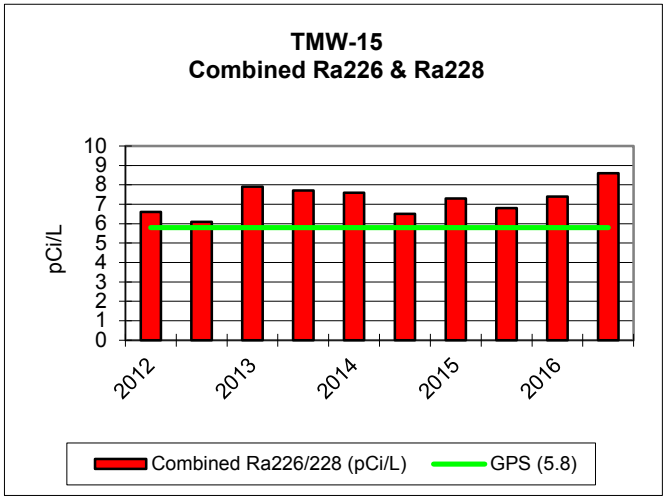

TMW-10
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2008
2009
2010
2011
Nickel (Ni)
GPS (.01)


TMW-10
Combined Ra226 & Ra228
pCi/L
100
90
80
70
60
50
40
30
20
10
0
2008
2009
2010
2011
Combined Ra226/228 (pCi/L)
GPS (5.8)

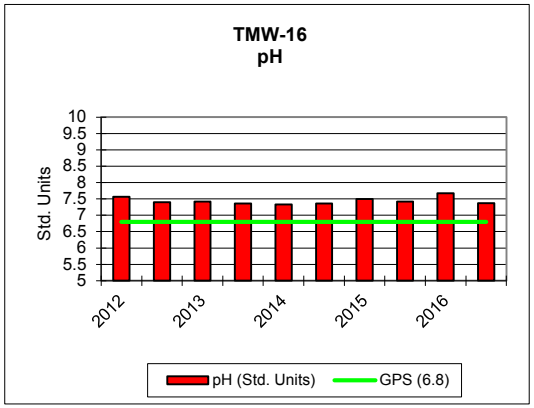
KENNECOTT URANIUM COMPANY											
TMW-15		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/25/2012	8/14/2012	3/4/2013	7/16/2013	1/21/2014	7/21/2014	1/20/2015	7/20/2015	1/26/2016	7/31/2016
TDS A/C Balance *(dec. %)*		-0.994	-0.753	3.62	-1.83	-1.08	2.45	0.53	3.65	2.18	0.08
Alk-CaC03		120	133	129	135	129	134	130	143	131	130
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		147	163	158	165	158	163	159	174	159	159
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		94.9	98.1	103	98.5	98.4	111	103	97.7	96.9	101
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		8	8	7	8	15	8	8	8	8	9
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		658	686	686	703	679	694	683	698	690	698
Cond-Field *(umhos/cm)*		690	723	730	704	765	645	773	732	696	869
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.8	3.9	1.9	2.5	2.9	3.2	5.3	7.2	8.8	4.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	0.12	0.09	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	0.7	-0.2	-0.4	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		7.8	8.1	8	7.9	7.9	7.7	8	7.6	8.1	8
Manganese (Mn)	GPS (0.2)	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.08	0.07	0.09
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.81	7.8	7.82	7.77	7.72	7.79	7.77	7.84	7.86	7.73
pH (Field) *(Std. Units)*		7.4	7.4	7.35	7.71	7.8	7.8	7.98	7.34	7.67	7.19
Potassium (K)		2.8	3	3.1	2.9	3	3	3.2	2.9	2.9	2.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.6	6.1	7.9	7.7	7.6	6.5	7.3	6.8	7.4	8.6
Radium 226 *(pCi/L)*		1.5	1.8	1.9	2	1.7	2.1	1.9	2	1.9	2
Radium 228 *(pCi/L)*		5.1	4.3	6	5.7	5.9	4.4	5.4	4.8	5.5	6.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.4	16.5	15.2	14.9	15.2	14.9	14.9	14.7	13.7	14.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.4	33.9	37.9	35.8	36.5	37.2	38.2	36.3	36.3	37
TDS @ 180° *C.*	GPS (500)	458	469	494	493	471	472	480	478	487	492
Sulfate (SO4)		216	207	202	217	209	221	222	222	223	216
Temperature *(C)*		9.7	10.3	8.8	13.6	9.2	11.6	8.5	9.8	8.7	14.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.08	0.2	0.2	-0.03
Uranium, natural *(pCi/L)*	GPS (36)	1.7	1.5	1.4	1.3	2	1.2	1.3	1.3	1.2	1.7
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

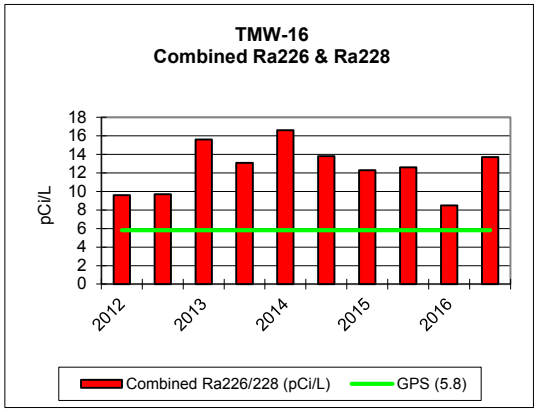

TMW-15
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

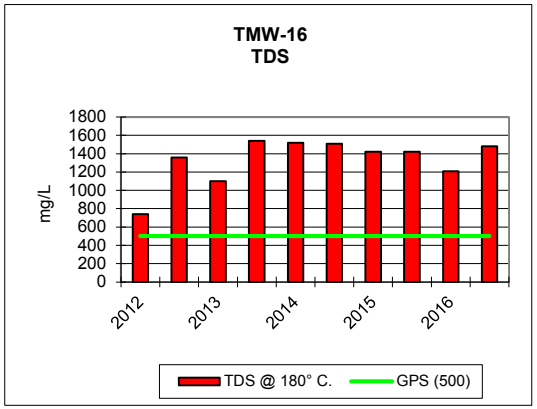

TMW-15
TDS
mg/L
510
500
490
480
470
460
450
440
430
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

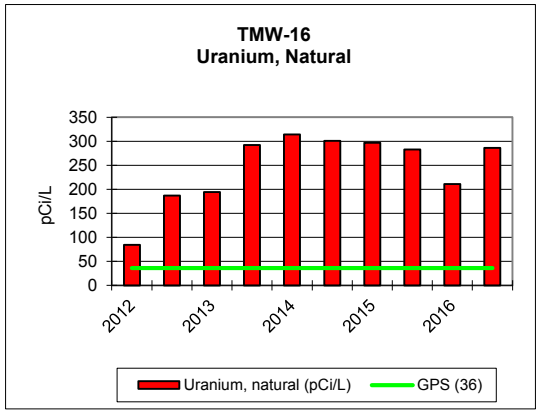

TMW-15
Combined Ra226 & Ra228
pCi/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

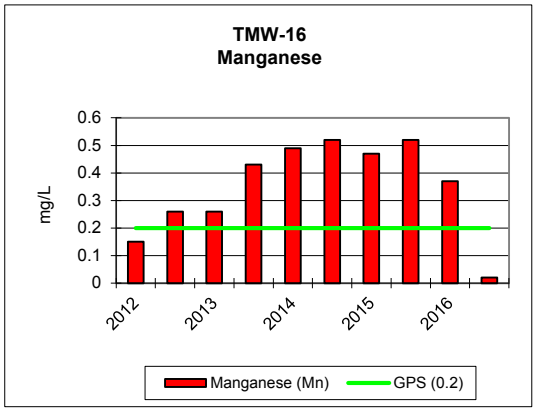
KENNECOTT URANIUM COMPANY											
TMW-16		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/23/2012	9/6/2012	3/4/2013	7/16/2013	2/17/2014	7/22/2014	1/20/2015	7/15/2015	1/26/2016	7/27/2016
TDS A/C Balance *(dec. %)*		-1.65	-1.79	-0.671	-2	0.42	1.2	0.6	3.97	6.95	1.46
Alk-CaC03		131	172	161	187	191	193	185	191	168	187
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		160	210	196	229	233	236	226	233	205	229
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		146	270	209	293	289	318	282	260	197	289
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		30	64	47	76	71	71	68	67	52	65
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1000	1600	1380	1880	1860	1880	1730	1810	1530	1830
Cond-Field *(umhos/cm)*		1074	1740	1473	1847	1987	889	1784	1875	1490	204
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	<0.1	<0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2	2.5	2.6	3.6	3.8	8.4	17.3	10.3	18.7	5.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	0.13	0.12	0.15	0.24	0.26	0.28	0.3
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.05	0.5	0.3	-0.08	0.9	0.6	0.8	-0.3	-0.1	0.6
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		18.5	39.2	28.5	43.2	43.9	45.1	41.5	40.1	31.2	43.7
Manganese (Mn)	GPS (0.2)	0.15	0.26	0.26	0.43	0.49	0.52	0.47	0.52	0.37	0.02
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.57	7.4	7.42	7.36	7.33	7.36	7.5	7.42	7.67	7.37
pH (Field) *(Std. Units)*		7.5	7.13	7.02	7.17	7.4	7.4	7.47	6.91	7.37	6.87
Potassium (K)		3.4	5.6	4.1	5.1	5.1	5.7	5.2	5	4	5.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.6	9.7	15.6	13.1	16.6	13.8	12.3	12.6	8.5	13.7
Radium 226 *(pCi/L)*		2.4	2.5	3.1	3.1	3.8	3.3	3.7	2.7	2.9	3.5
Radium 228 *(pCi/L)*		7.2	7.2	12.5	10	12.8	10.5	8.6	9.9	5.6	10.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		11.2	13.8	11.8	11.3	11.2	11	11.9	11.5	9.5	11.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		50	75.3	65.7	84.4	85.2	91.1	85.8	82.5	67	90
TDS @ 180° *C.*	GPS (500)	742	1360	1100	1540	1520	1510	1420	1420	1210	1480
Sulfate (SO4)		381	750	547	817	779	829	742	765	620	761
Temperature *(C)*		10.8	12.9	7.6	13.6	9.6	14.5	8.3	9.7	7.37	12.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.1	0.1	0.05	-0.002
Uranium, natural *(pCi/L)*	GPS (36)	84.1	187	194	292	314	301	297	283	211	286
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH	Std. Units	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
TDS	mg/L	500	500	500	500	500	500	500	500	500	500
Manganese	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Comb. Ra226/Ra228	pCi/L	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Gross Alpha	pCi/L	15	15	15	15	15	15	15	15	15	15
Lead (Pb210)	pCi/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Uranium, Natural	pCi/L	36	36	36	36	36	36	36	36	36	36

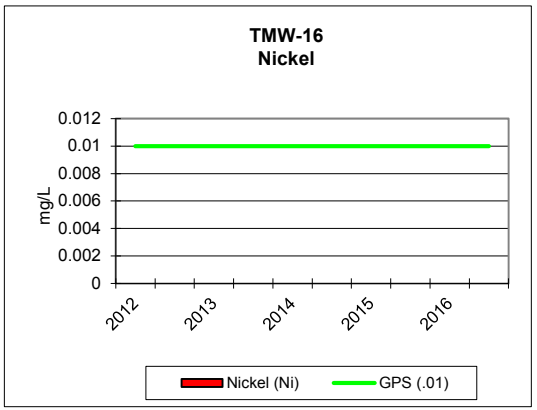

TMW-16
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-16
Combined Ra226 & Ra228
pCi/L
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-16
TDS
mg/L
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

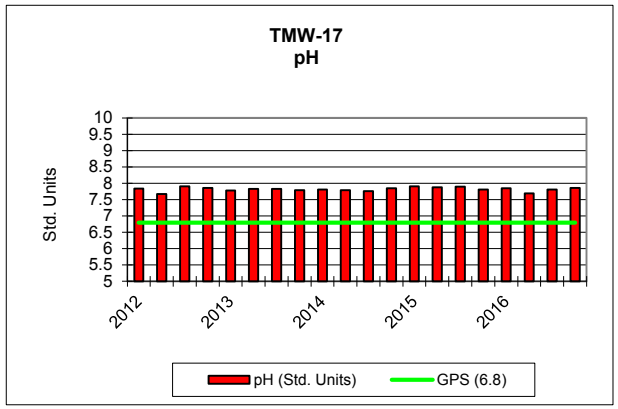

TMW-16
Uranium, Natural
pCi/L
350
300
250
200
150
100
50
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

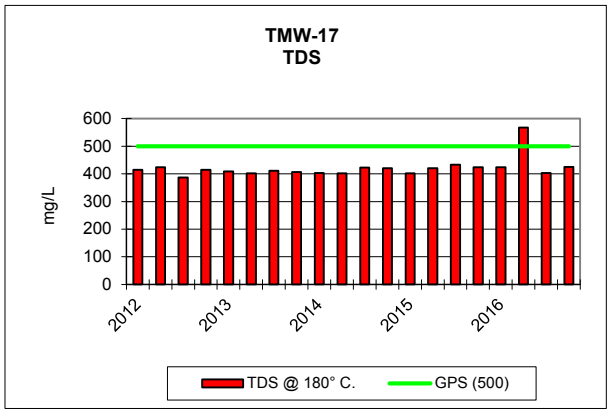

TMW-16
Manganese
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

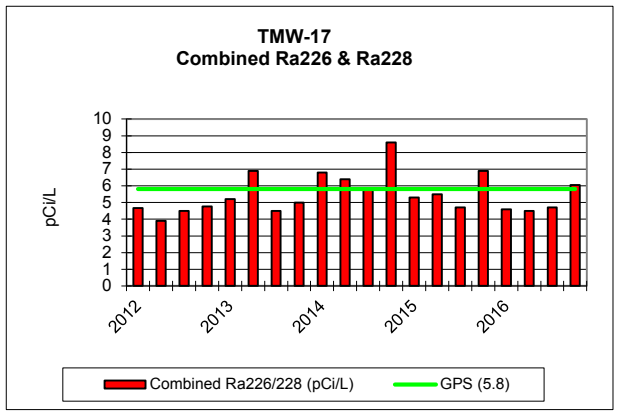

TMW-16
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

KENNECOTT URANIUM COMPANY																				
TMW-17		2012				2013				2014				2015				2016		
PARAMETER (mg/L unless noted)	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	5/3/2012	7/10/2012	10/22/2012	1/15/2013	4/2/2013	7/9/2013	10/1/2013	1/18/2014	4/1/2014	7/1/2014	10/14/2014	1/14/2015	4/8/2015	7/13/2015	11/2/2015	1/6/2016	4/18/2016	7/7/2016
TDS A/C Balance (dec. %)		3.99	-4.69	1.69	4.46	5.04	-2.54	0.772	-1.84	-1.51	1.87	0.91	1.25	1.34	0.31	0.93	0.21	0.94	9.39	1.73
Alk-CaC03		111	115	120	119	119	118	119	120	119	133	120	121	120	120	123	124	116	119	123
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		135	140	147	145	146	144	145	146	145	162	146	148	147	146	151	152	141	146	150
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		92.7	74	85.9	90.9	95.4	79.6	83.6	80.3	78.6	81.4	85	84.4	83.3	84.4	87.7	84.7	86.1	96.5	87.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		8	10	8	8	8	8	8	7	8	8	8	9	9	8	8	8	9	17	10
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond (umhos/cm)		620	602	607	600	588	602	610	585	593	600	607	618	624	595	606	607	610	796	568
Cond-Field (umhos/cm)		666	616	666	618	663	672	707	656	674	538	665	646	652		643	661	609	672	811
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	ND	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha (pCi/L)	GPS (15)	0.9	1	1.6	1.3	1.3	1.9	0.7	1.5	2.2	1.7	1.5	2.8	6.3	8.4	4.8	4.5	4.4	5.9	2
Iron (Fe)	GPS (0.6)	<0.05	<0.05	0.1	<0.05	<0.05	0.09	0.06	<0.05	<0.05	0.09	<0.05	0.07	0.05	0.06	0.06	0.34	<0.05	0.06	0.08
Lead (Pb210) (pCi/L)	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-0.6	0.3	0.6	0.4	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.5	0.29	1
Magnesium (Mg)		5.5	5	5.1	5.6	5.6	4.9	5.1	4.6	4.8	5	5.1	5.1	5.3	5.1	5.1	5.1	5.7	5.6	5.2
Manganese (Mn)	GPS (0.2)	0.05	0.1	0.04	0.05	0.05	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.05	0.05	0.04	0.05	0.04
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH (Std. Units)	GPS (6.8)	7.84	7.67	7.91	7.86	7.78	7.83	7.83	7.79	7.81	7.79	7.76	7.85	7.91	7.88	7.9	7.81	7.85	7.69	7.81
pH (Field) (Std. Units)		8.4	7.5	6.9	7.35	7.84	7.6	8.1	7.93	7.9	8.1	7.9	7.98	8.57	7.62	7.63	7.6	7.66	7.6	6.89
Potassium (K)		3.1	2.7	2.9	3	2.9	2.7	3.1	2.8	2.6	2.7	3	2.8	2.9	3.1	2.9	3.1	3	3.1	3
Combined Ra226/228 (pCi/L)	**GPS (5.8)**	4.66	3.9	4.5	4.76	5.2	6.9	4.5	5	6.8	6.4	5.8	8.6	5.3	5.5	4.7	6.9	4.59	4.5	4.7
Radium 226 (pCi/L)		0.96	1.1	1.2	0.86	1.3	1.2	1.1	1.1	1	1.5	1.1	2.5	2	1.6	1.1	1.3	0.89	1.2	1.1
Radium 228 (pCi/L)		3.7	2.8	3.3	3.9	3.9	5.7	3.4	3.9	5.8	4.9	4.7	6.1	3.3	3.9	3.6	5.6	3.7	3.3	3.6
Selenium (Se)	**GPS (.01)**	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		17.8	17	15.9	15.9	19.1	15.4	15.7	15	15.1	15.3	15.4	15.2	15.4	15.3	15.6	15.3	15.7	15.7	15.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		421	36.2	37.2	37.7	37.2	35.6	38.5	34.6	35	37.3	37.9	36.8	37.6	38	37.4	38	38.3	38	37.7
TDS @ 180° C.	GPS (500)	415	424	387	415	409	402	411	407	403	402	423	421	402	421	433	424	424	567	403
Sulfate (SO4)		184	180	171	170	175	178	175	172	168	169	175	181	182	177	176	175	184	268	171
Temperature (C)		8.9	13.4	11.3	10.9	4.6	8.9	12.8	12.1	7.3	7.9	12.6	11	8.2	9.5	11.2	10.8	8.1	9.6	11.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 (pCi/L:)		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.06	0.2	0.1	0.08	0.1	0.08	-0.01
Uranium, natural (pCi/L)	GPS (36)	2.7	5.2	3.6	4.4	3.7	3.7	4	4.7	4.1	26.4	3.9	5.8	5.8	4.3	4	4.1	3.4	3.9	4
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY		
TMW-17		
PARAMETER (mg/L unless noted)	Groundwater Protection Standard (GPS) as of 5/26/05	10/3/2016
TDS A/C Balance (dec. %)		2.82
Alk-CaC03		119
Aluminum (Al)	GPS (1.8)	<0.1
Arsenic (As)	GPS (.05)	<0.001
Barium (Ba)		<0.1
Beryllium (Be)	GPS (.01)	<0.01
Bicarbonate (HCO3)		146
Boron (B)		<0.1
Cadmium (Cd)	GPS (.01)	<0.005
Calcium (Ca)		81.8
Carbonate (CO3)		<1
Chloride (Cl)		9
Chromium (Cr)	GPS (.05)	<0.01
Cobalt (Co)		<0.001
Cond (umhos/cm)		615
Cond-Field (umhos/cm)		666
Copper (Cu)		<0.01
Cyanide (CN)		<0.005
Fluoride (F)		0.1
Gross Alpha (pCi/L)	GPS (15)	3.1
Iron (Fe)	GPS (0.6)	0.3
Lead (Pb210) (pCi/L)	GPS (8.9)	<1
Lead (Pb)		0.2
Magnesium (Mg)		5
Manganese (Mn)	GPS (0.2)	0.04
Mercury (Hg)		<0.0002
Molybdenum (Mo)		<0.01
Nickel (Ni)	GPS (.01)	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1
pH (Std. Units)	GPS (6.8)	7.86
pH (Field) (Std. Units)		7.78
Potassium (K)		2.8
Combined Ra226/228 (pCi/L)	**GPS (5.8)**	6.05
Radium 226 (pCi/L)		0.95
Radium 228 (pCi/L)		5.1
Selenium (Se)	**GPS (.01)**	<0.001
Silica (SiO2)		13.7
Silver (Ag)		<0.01
Sodium (Na)		36.7
TDS @ 180° C.	GPS (500)	425
Sulfate (SO4)		187
Temperature (C)		10.6
Thallium (Tl)	GPS (7.0)	<0.01
Thorium 230 (pCi/L:)		0.1
Uranium, natural (pCi/L)	GPS (36)	3.8
Vanadium (V205)		<0.1
Zinc (ZN)		<0.01

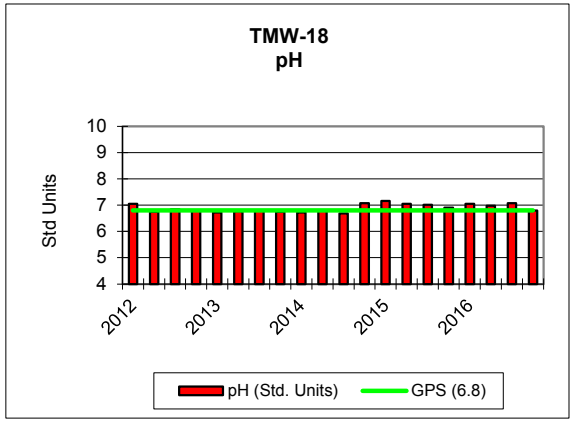

TMW-17
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

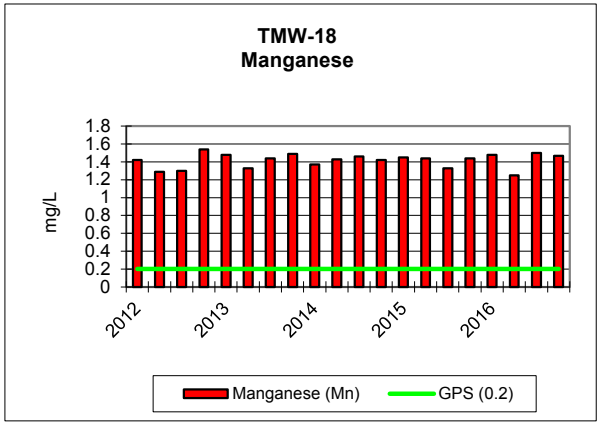

TMW-17
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

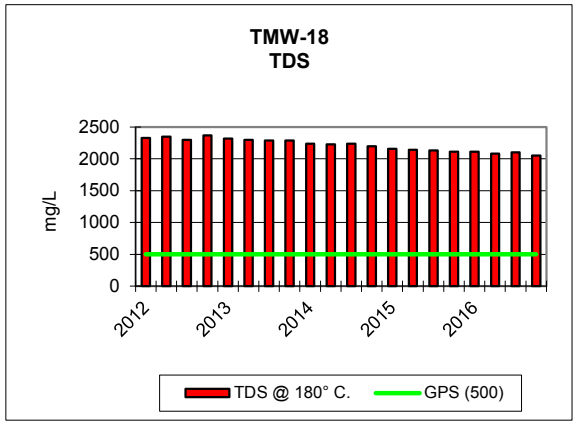

TMW-17
Combined Ra226 & Ra228
pCi/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

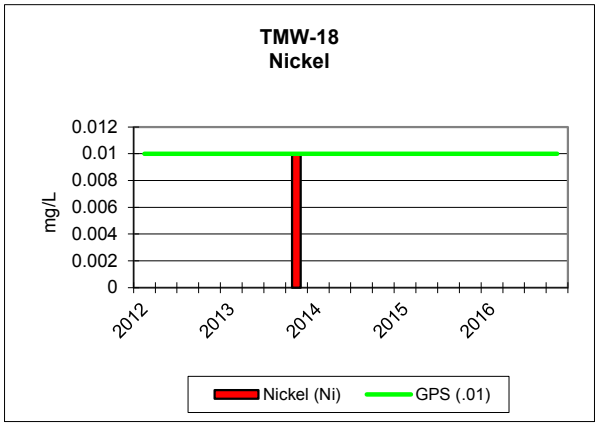
KENNECOTT URANIUM COMPANY																		
TMW-18		2012				2013				2014				2015				2016
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/10/2012	7/10/2012	10/22/2012	1/14/2013	4/2/2013	7/9/2013	10/1/2013	1/18/2014	4/1/2014	7/1/2014	10/15/2014	1/14/2015	4/8/2015	7/15/2015	10/26/2015	1/6/2016
TDS A/C Balance *(dec. %)*		-0.319	-4.54	0.109	0.177	1.06	-3.97	-0.693	-3.5	-3.12	1.89	1.18	1.63	0.75	2.34	2.43	0.95	0.22
Alk-CaC03		405	419	405	422	416	413	407	413	404	396	390	397	375	388		377	364
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		494	511	494	514	508	504	496	504	493	483	476	484	457	473	468	460	444
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		538	493	518	530	538	504	511	519	480	509	521	494	486	480	458	479	469
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		85	85	81	83	83	91	84	88	86	88	84	81	89	94	87	85	84
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	0.002	0.002	0.002	<0.001	0.001	0.002	0.002	0.003	0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		2810	2660	2660	2700	2580	2600	2620	2550	2560	2640	2550	2510	2560	2440	2390	2460	2410
Cond-Field *(umhos/cm)*		279	2880	2770	2780	2820	2820	2820	2730					259		2640	2680	2560
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.9	3.3	3	4.2	2.5	3	2.4	4.3	5.7	4.8	4.4	4.4	29.2	38.3	4.6	41.5	18.1
Iron (Fe)	GPS (0.6)	8.91	7.46	7.94	7.69	8.66	8.32	8.9	8.21	8.13	8.4	8.58	7.57	7.92	8.78	8.04	8.66	8.7
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.3	0.3	0.6	0.3	0.3	0.2	0.2	0.5	<1	0.02	0.1	0.5	0.7	0.4	0.5	0.5	0.7
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		44.6	41.8	45.1	43.5	46.6	43.7	46.3	37.4	42.5	38.4	44.2	44	44.4	43.7	43	43.4	45.2
Manganese (Mn)	GPS (0.2)	1.42	1.29	1.3	1.54	1.48	1.33	1.44	1.49	1.37	1.43	1.46	1.42	1.45	1.44	1.33	1.44	1.48
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.05	6.75	6.85	6.78	6.72	6.77	6.79	6.75	6.72	6.8	6.69	7.07	7.16	7.05	7.02	6.9	7.05
pH (Field) *(Std. Units)*		6.7	6.5	6.6	6.67	7.19	6.5	6.5	6.59					7.24	6.79	6.57	6.74	6.8
Potassium (K)		6.3	6.1	7.3	6.3	6.8	6.2	7	6.4	5.9	6.2	6.5	6	6.6	6.4	6.5	6.6	6.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	18	19.5	15.7	19.4	17.1	18.7	21.1	16.3	23.3	19.4	15.5	24.1	19.1	20.5	14	16.8	13.2
Radium 226 *(pCi/L)*		3.3	2.9	3	2.4	3.4	2.9	2.3	2.6	2.5	2.9	2.5	3.1	4.8	4.1	1.8	4.6	1.8
Radium 228 *(pCi/L)*		14.7	16.6	12.7	17	13.7	15.8	18.8	13.7	20.8	16.5	13	21	14.3	16.4	12.2	12.2	11.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		22.4	22.2	22.6	23.3	23.7	22	23	21.8	21.6	24.4	21.9	21.6	22.1	21.5	21.5	21.4	22.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		96.4	96	93.6	93.8	103	97.6	105	84.1	94.8	83.7	99.7	97.1	101	98.2	97.9	99.4	97.8
TDS @ 180° *C.*	GPS (500)	2330	2350	2300	2370	2320	2300	2290	2290	2240	2230	2240	2200	2160	2140	2130	2110	2110
Sulfate (SO4)		1180	1190	1120	1120	1150	1200	1150	1180	1120	1110	1110	1030	1100	1110	1070	1030	1050
Temperature *(C)*		9.9	12.7	11.3	10.6	7.6	9.7	13.7	12.6					7.8	10	12.1	9.8	8.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.07	0.07	0.1	0.04	0.005
Uranium, natural *(pCi/L)*	GPS (36)	0.9	0.7	0.9	0.8	0.8	0.9	0.8	0.9	0.9	0.8	0.8	1.2	0.8	0.7	0.7	0.9	0.7
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

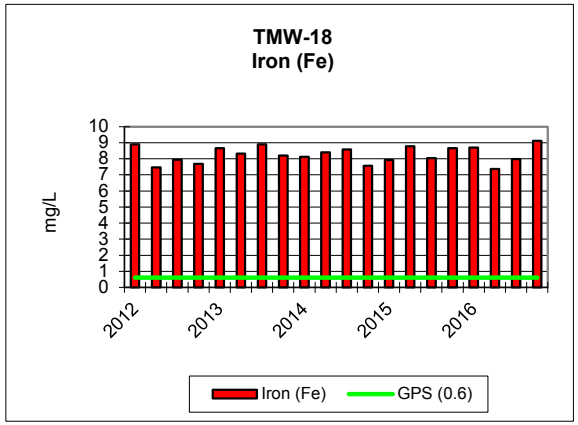
KENNECOTT URANIUM COMPANY				
TMW-18				
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	4/19/2016	7/6/2016	10/4/2016
TDS A/C Balance *(dec. %)*		1.45	0.73	3.74
Alk-CaC03		344	366	359
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		420	447	439
Boron (B)		<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005
Calcium (Ca)		415	444	432
Carbonate (CO3)		<1	<1	<1
Chloride (Cl)		82	82	86
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	0.002
Cond *(umhos/cm)*		2400	2450	2460
Cond-Field *(umhos/cm)*		2690	2860	2700
Copper (Cu)		<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	23	7.3	32.1
Iron (Fe)	GPS (0.6)	7.36	7.99	9.12
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.6	2.5	0.7
Lead (Pb)		<0.01	<0.01	<0.01
Magnesium (Mg)		44.2	43	43.5
Manganese (Mn)	GPS (0.2)	1.25	1.5	1.47
Mercury (Hg)		<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	6.98	7.08	6.79
pH (Field) *(Std. Units)*		6.63	6.32	6.47
Potassium (K)		7.4	6.3	6.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	18.7	15.5	17.7
Radium 226 *(pCi/L)*		3.7	2.7	1.6
Radium 228 *(pCi/L)*		15	12.8	16.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001
Silica (SiO2)		19.2	21	21.2
Silver (Ag)		<0.01	<0.01	<0.01
Sodium (Na)		95.7	93.2	96.5
TDS @ 180° *C.*	GPS (500)	2080	2100	2050
Sulfate (SO4)		978	954	1060
Temperature *(C)*		9.8	11	9.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.08	0.02	0.01
Uranium, natural *(pCi/L)*	GPS (36)	0.8	0.8	4.2
Vanadium (V205)		<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01

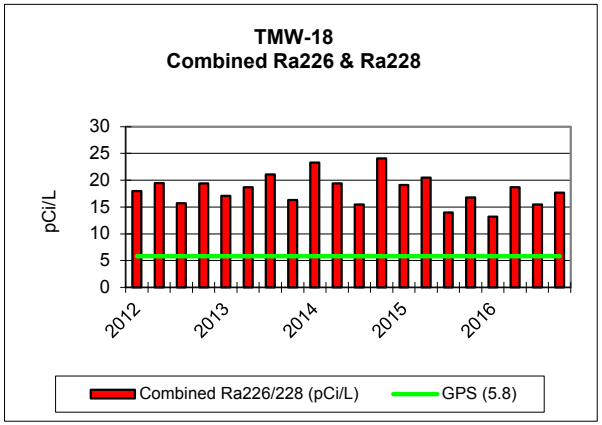

TMW-18
pH
Std Units
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-18
Manganese
mg/L
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

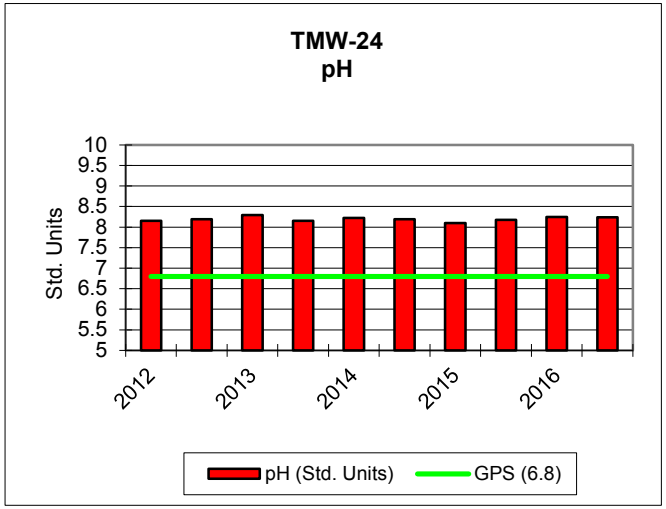

TMW-18
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

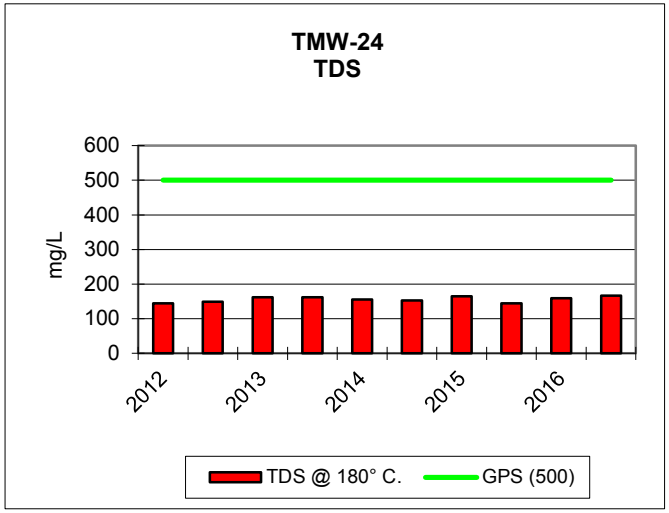

TMW-18
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)


TMW-18
Iron (Fe)
mg/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

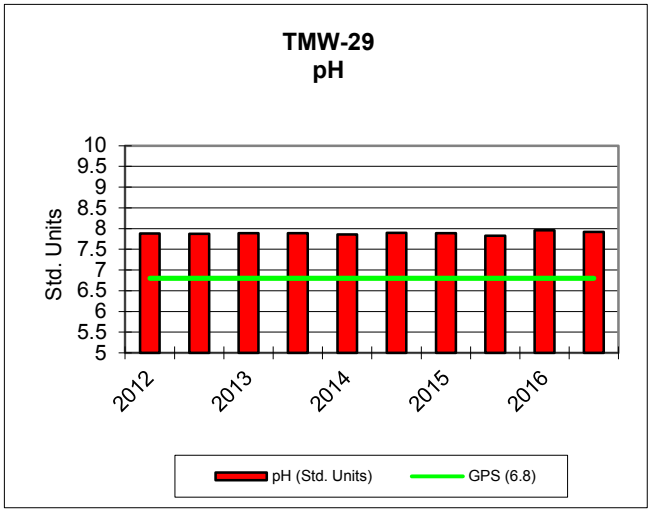

TMW-18
Combined Ra226 & Ra228
pCi/L
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

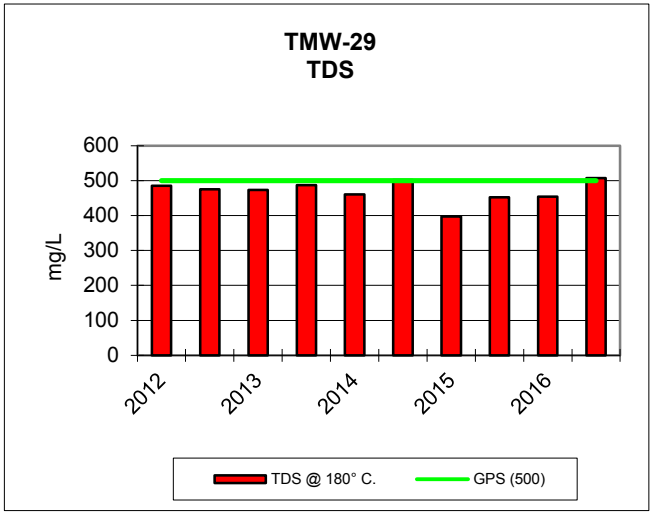
KENNECOTT URANIUM COMPANY											
TMW-24		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/26/2012	8/27/2012	2/18/2013	7/16/2013	2/11/2014	8/12/2014	2/17/2015	8/18/2015	2/22/2016	8/29/2016
TDS A/C Balance *(dec. %)*		-1.25	-1.8	-1.35	-2.15	2.23	0.17	4.62	0.21	3.64	2.33
Alk-CaC03		86	90	93	96	92	91	101	88	91	93
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.002	0.002	0.001	0.001	0.002	0.001	0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		104	110	113	117	112	111	124	107	111	113
Boron (B)		<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		20.1	21.2	20.4	21.6	21.2	21.2	21.7	21.5	20.4	19.8
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		2	2	2	2	2	2	2	2	2	2
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		251	248	251	253	250	250	249	250	249	256
Cond-Field *(umhos/cm)*		279	270	297	262	272	262	280	256	273	292
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	0.9	1	1.1	0.6	1.5	0.4	0.5	3.5	4.4	1.7
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	-0.5	0.04	0.7	0.6
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		0.9	0.9	1.2	1.1	1	1	0.9	1	0.9	1.1
Manganese (Mn)	GPS (0.2)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.15	8.19	8.29	8.15	8.22	8.19	8.1	8.18	8.25	8.24
pH (Field) *(Std. Units)*		8.1	8.3	7	8.56	6.4	8.7	8.23	8.39	8.26	8.14
Potassium (K)		1.5	1.5	1.6	1.4	1.6	1.5	1.6	1.5	1.4	2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.56	1.88	3.48	1.6	2.58	2.63	1.9	2.6	2.42	2.73
Radium 226 *(pCi/L)*		0.66	0.78	0.98	0.5	0.58	0.83	1.1	1	0.62	0.93
Radium 228 *(pCi/L)*		1.9	1.1	2.5	1.1	2	1.8	0.8	1.6	1.8	1.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15.2	13.9	13.3	13.8	13.4	13.9	13.8	14	13	16.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		30.2	31	32.1	31.6	30.4	32.2	31.4	31	29.7	31.9
TDS @ 180° *C.*	GPS (500)	145	149	162	162	156	153	165	145	159	167
Sulfate (SO4)		34	34	33	33	34	34	34	34	34	34
Temperature *(C)*		11.1	12.1	10.1	13.6	9.5	10.3	10.7	9.6	10.1	13.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	0.2	<0.2	<0.2	<0.2	0.009	0.3	0.05	-0.002
Uranium, natural *(pCi/L)*	GPS (36)	0.3	0.8	1.8	0.4	0.5	0.8	0.2	0.4	0.4	0.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.17	0.01	0.01	<0.01	<0.01	<0.01	<0.01


TMW-24
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

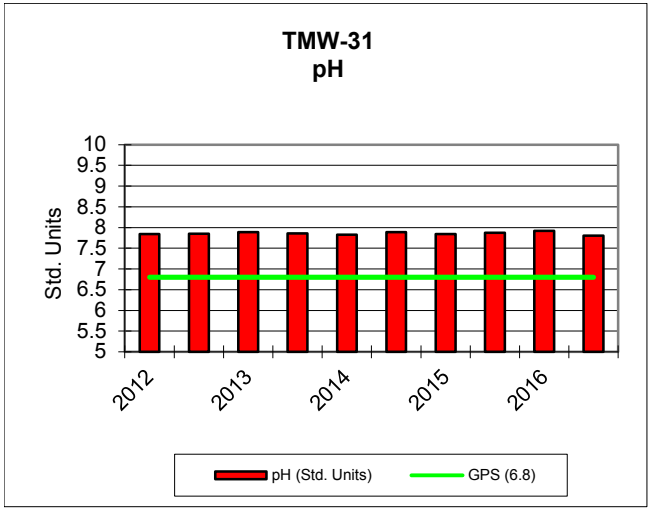

TMW-24
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

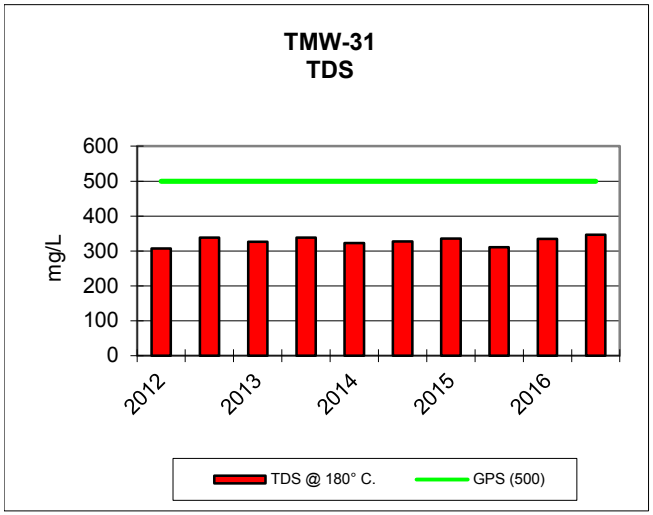
KENNECOTT URANIUM COMPANY											
TMW-29		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/30/2012	8/14/2012	2/18/2013	7/16/2013	2/11/2014	8/25/2014	2/17/2015	8/17/2015	2/22/2016	8/10/2016
TDS A/C Balance *(dec. %)*		-1.21	-1.12	1.78	-1.65	0.33	0	0.66	0.82	3.89	2.11
Alk-CaC03		113	122	117	121	118	122	119	114	123	117
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.002	0.001	0.002	0.001	0.002	0.001	0.001	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		138	149	143	148	144	149	146	139	150	143
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		87.4	98.9	104	101	95.5	109	80.5	97.4	90	105
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		9	11	10	13	10	13	8	11	10	11
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		628	680	680	706	671	720	573	686	652	707
Cond-Field *(umhos/cm)*		676	717	735	717	701	780	608	704	757	808
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.7	2.5	1.3	1.6	2.1	1.5	2.5	8.1	3.9	1.6
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	1	<1	<1	<1	<1	-0.1	-0.2	-0.2	0.02
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		6	6.6	6.8	6.6	6.2	7	5.1	6.3	5.9	6.9
Manganese (Mn)	GPS (0.2)	0.1	0.11	0.09	0.07	0.07	0.07	0.05	0.06	0.05	0.06
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.88	7.87	7.89	7.89	7.86	7.9	7.89	7.83	7.96	7.92
pH (Field) *(Std. Units)*		7.7	7.5	7.42	7.89	6.7	8.1	7.89	7.83	7.8	7.56
Potassium (K)		2.8	3.1	3	2.9	3	3.2	2.9	3.1	3	3.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	5.3	4.2	3.7	4	4.3	3.4	3.6	4.4	4.2	7
Radium 226 *(pCi/L)*		1.5	1.7	1.4	1.3	1.4	1	1.6	1.6	1.2	1.6
Radium 228 *(pCi/L)*		3.8	2.5	2.3	2.7	2.9	2.4	2	2.8	3	5.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16	16	14.6	14.4	14.3	14.4	14.8	14.6	14	14.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.4	35.2	37.8	36.8	36.4	39	36.1	37.2	35	39.1
TDS @ 180° *C.*	GPS (500)	485	475	473	487	461	502	397	452	454	507
Sulfate (SO4)		197	216	219	226	208	239	170	210	209	221
Temperature *(C)*		10.7	11.7	8.5	14.5	8.8	9.9	8.6	9.6	8.5	14.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.01	0.01	0.009	0.05	0.1	0.06	0.008	0.3	-0.008	-0.02
Uranium, natural *(pCi/L)*	GPS (36)	5.8	7.1	7.1	6.9	6.1	7	5.1	5	4.9	6.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01


TMW-29
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

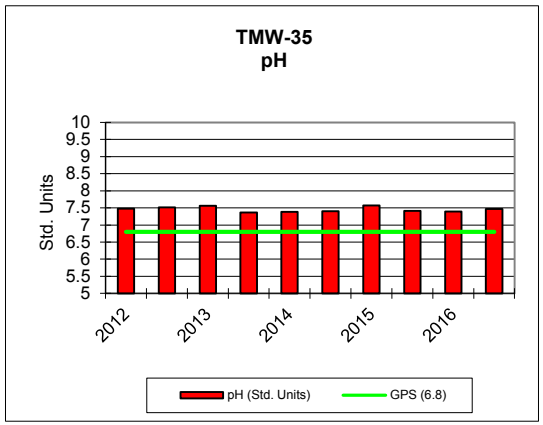

TMW-29
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

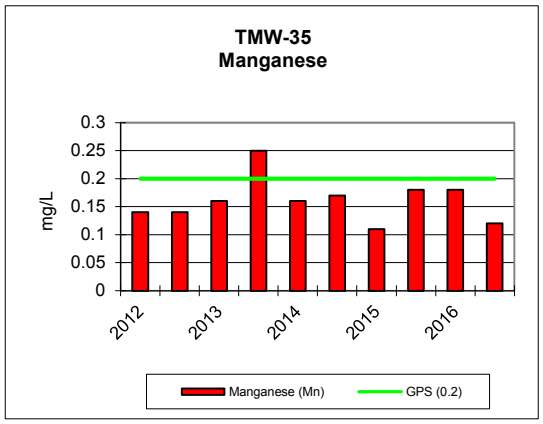
KENNECOTT URANIUM COMPANY											
TMW-31		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/30/2012	8/14/2012	2/18/2013	7/16/2013	2/11/2014	8/25/2014	2/17/2015	8/17/2015	2/22/2016	8/10/2016
TDS A/C Balance *(dec. %)*		0.14	-1.18	0.382	-1.99	0.2	0.12	0.19	0.54	4.94	0.97
Alk-CaC03		112	121	116	121	117	117	117	113	121	118
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		137	147	142	148	142	142	143	137	148	144
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		68.6	67.3	69	67.1	66.3	67.4	67.7	66.6	63.7	68.2
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	6	6	8	6	6	6	6	6	7
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		486	504	492	503	492	491	483	499	496	500
Cond-Field *(umhos/cm)*		525	538	530	513	503	535	534	514	642	642
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	2.8	2	2	1.6	1.2	1.1	4.4	4.9	4.4	2.3
Iron (Fe)	GPS (0.6)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.03	1	0.1	0	0.2	0.07	-0.6	-0.05	0.1	0.02
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		5.1	5.5	5.1	5.1	5	5	4.9	5	4.8	5.1
Manganese (Mn)	GPS (0.2)	0.08	0.09	0.08	0.08	0.07	0.07	0.06	0.06	0.06	0.05
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.84	7.85	7.89	7.86	7.83	7.89	7.84	7.87	7.92	7.8
pH (Field) *(Std. Units)*		7.6	7.6	7.5	7.81	8	8.1	7.81	7.7	7.73	7.64
Potassium (K)		2.7	2.6	2.6	2.4	2.7	2.5	2.6	2.6	2.3	2.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	4.1	3.4	3.7	4	4.4	5	5	4.2	3.57	3.5
Radium 226 *(pCi/L)*		1.3	1.3	1.2	1.1	1.3	1.2	1.4	1.3	0.97	1.1
Radium 228 *(pCi/L)*		2.8	2.1	2.5	2.9	3.1	3.8	3.6	2.9	2.6	2.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15.6	16.7	15	14.6	14.8	14.7	14.8	14.8	13.8	13.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		28.9	27.5	29.9	28.7	29.2	29.6	30.3	29.5	28	31.2
TDS @ 180° *C.*	GPS (500)	307	338	326	338	323	327	336	311	335	347
Sulfate (SO4)		132	125	129	127	123	126	128	125	132	123
Temperature *(C)*		10.6	12.1	7.5	13.6	8.8	10.4	8.6	9.8	8.4	14.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-0.02	0.3	0.09	0.0002
Uranium, natural *(pCi/L)*	GPS (36)	1.3	1.5	1.5	1.4	1.1	1.3	1.3	1.1	1.2	1.4
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

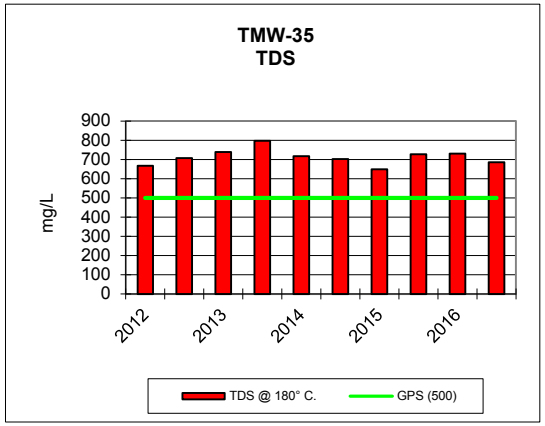

TMW-31
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

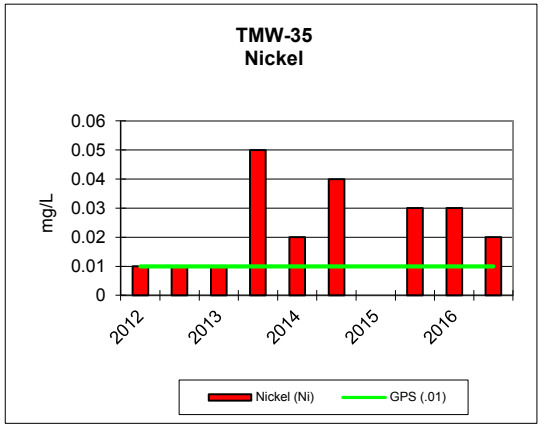

TMW-31
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

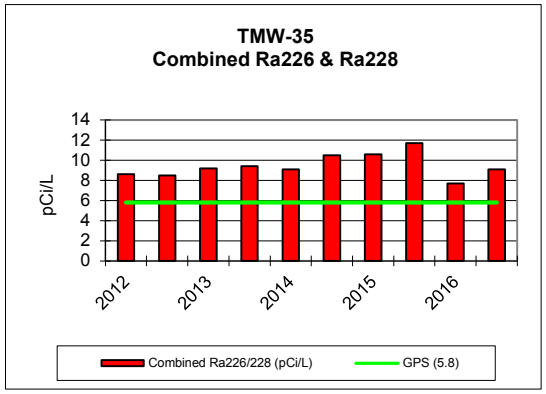
KENNECOTT URANIUM COMPANY											
TMW-35		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/30/2012	8/14/2012	2/18/2013	7/23/2013	2/10/2014	8/27/2014	2/17/2015	8/18/2015	2/22/2016	8/17/2016
TDS A/C Balance *(dec. %)*		-0.706	0.73	1.09	-0.523	1.06	1.03	1.1	1.25	3.79	0.25
Alk-CaC03		140	150	143	142	0.91	0.98	145	132	140	140
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		171	183	174	174	173	171	177	161	170	171
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		148	156	158	167	149	145	138	152	143	145
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		7	7	6	7	7	7	7	7	7	7
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.005	0.004	0.006	0.023	0.01	0.013	0.002	0.014	0.013	0.007
Cond *(umhos/cm)*		930	961	971	1040	958	946	868	1000	970	952
Cond-Field *(umhos/cm)*		992	1010	1628	1058	1087	1131	917	1023	1102	1034
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.5	3.2	2.7	3.7	2.8	2.6	4	13.2	3.9	7.1
Iron (Fe)	GPS (0.6)	0.25	0.35	0.06	0.96	0.64	1.79	0.48	1.86	2.04	1.16
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.1	0.5	0.5	-0.2	0.09	0.4	0.05	-0.2	-0.08	0.8
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		18.5	18.8	19.7	23.2	19	18.9	15.6	20.1	19.6	18.9
Manganese (Mn)	GPS (0.2)	0.14	0.14	0.16	0.25	0.16	0.17	0.11	0.18	0.18	0.12
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.01	0.01	0.01	0.05	0.02	0.04	<0.01	0.03	0.03	0.02
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.48	7.52	7.56	7.37	7.38	7.4	7.57	7.41	7.39	7.47
pH (Field) *(Std. Units)*		7.2	7.1	7.36	7.07	7.5	7.3	7.46	7.1	7.23	6.96
Potassium (K)		3.4	3.9	3.4	3.7	3.6	3.4	3.4	3.5	3.2	3.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	8.6	8.5	9.2	9.4	9.1	10.5	10.6	11.7	7.7	9.1
Radium 226 *(pCi/L)*		1.9	1.9	1.9	2.2	2.2	2	2.4	2	1.2	1.8
Radium 228 *(pCi/L)*		6.7	6.6	7.3	7.2	6.9	8.5	8.2	9.7	6.5	7.3
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16.6	17.2	15.5	15.5	15.3	15.1	14.7	15.1	14.5	11.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.6	35.5	35.6	36.9	36.2	36.5	36.4	36.6	34.6	36.9
TDS @ 180° *C.*	GPS (500)	667	707	738	797	717	702	649	727	731	685
Sulfate (SO4)		369	366	377	433	358	370	313	401	391	361
Temperature *(C)*		9.9	11.7	7.2	13.6	9.2	10.3	8.6	9.3	8.5	11
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-0.01	0.3	0.2	-0.01
Uranium, natural *(pCi/L)*	GPS (36)	5.3	5.9	5.4	5.8	5.2	5.9	5.1	5.6	4.8	4.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.01	0.01	0.02	0.02	0.02	<0.01	0.02	0.01	0.02

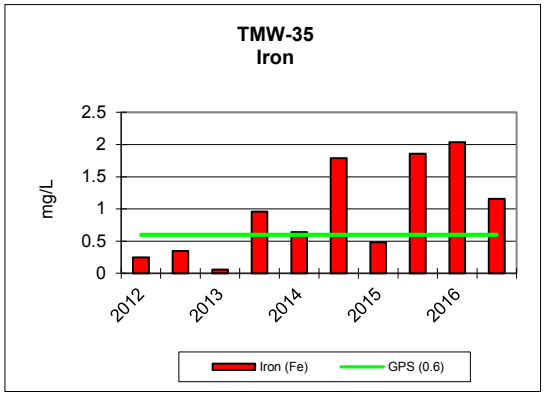

TMW-35
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-35
Manganese
mg/L
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

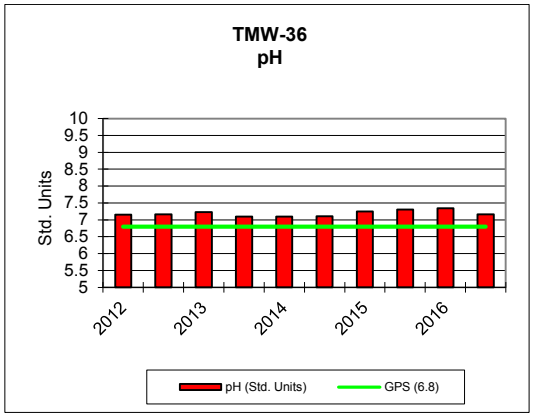

TMW-35
TDS
mg/L
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

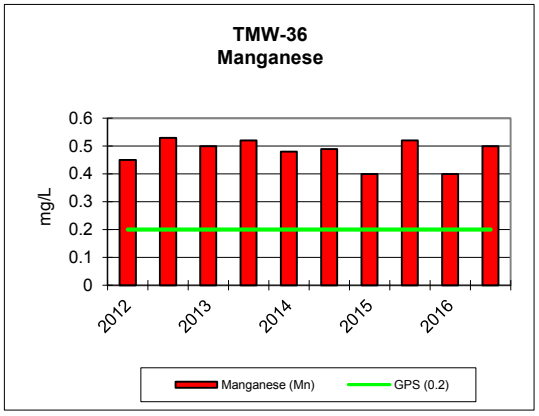

TMW-35
Nickel
mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

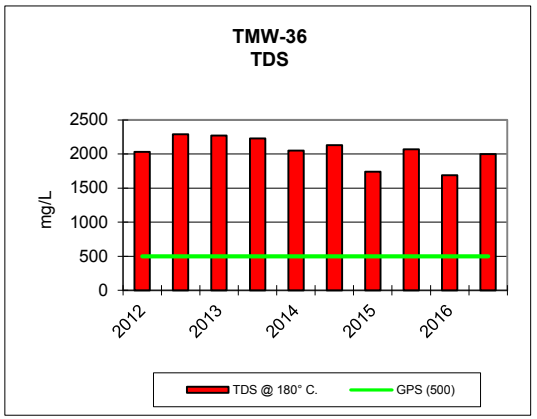

TMW-35
Combined Ra226 & Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

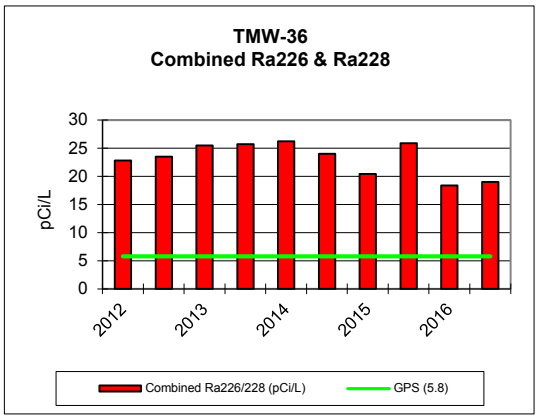

TMW-35
Iron
mg/L
2.5
2
1.5
1
0.5
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

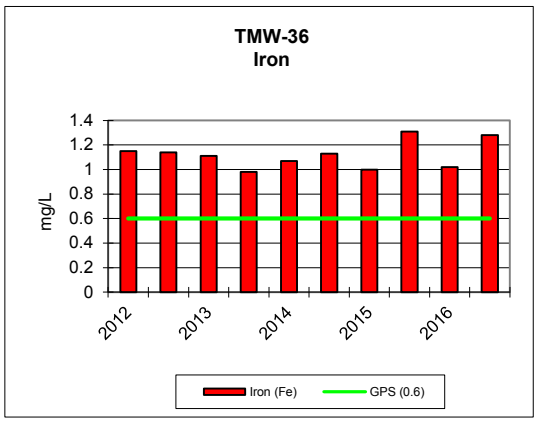
KENNECOTT URANIUM COMPANY											
TMW-36		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/25/2012	8/14/2012	2/19/2013	7/23/2013	2/10/2014	8/25/2014	2/11/2015	8/18/2015	2/23/2016	8/17/2016
TDS A/C Balance *(dec. %)*		-2.02	-1.43	0.323	1.22	0.55	4.33	0.96	0.51	5.12	0.32
Alk-CaC03		183	215	207	205	199	221	197	194	171	201
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	1.002	2.002	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		223	262	253	250	242	269	240	236	209	245
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		420	486	487	484	445	472	391	454	430	430
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		12	14	12	12	13	14	13	13	12	14
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.003	0.004	0.003	0.004	0.003	0.004	0.002	0.004	0.003	0.004
Cond *(umhos/cm)*		2100	2430	2370	2360	2220	2460	1980	2360	2150	2420
Cond-Field *(umhos/cm)*		2060	2540	2590	2420	2390	2440	1997	2360	1900	2240
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	<0.1	0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	1.1
Gross Alpha *(pCi/L)*	GPS (15)	7.4	11.7	7	8.5	7.7	5.4	27.7	30.7	12.1	14.7
Iron (Fe)	GPS (0.6)	1.15	1.14	1.11	0.98	1.07	1.13	1	1.31	1.02	1.28
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	0.4	0.4	-0.3	0.8	0.3	0.5
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		60.9	70.2	69.7	69.5	63.1	62.1	53.2	63.4	49.4	59.4
Manganese (Mn)	GPS (0.2)	0.45	0.53	0.5	0.52	0.48	0.49	0.4	0.52	0.4	0.5
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	1.01	2.01	0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.15	7.16	7.23	7.1	7.1	7.11	7.25	7.3	7.34	7.16
pH (Field) *(Std. Units)*		6.9	6.8	7	6.86	7.1	6.9	7.06	6.69	6.88	6.69
Potassium (K)		5.8	6.7	6.1	6.6	6.3	5.9	5.4	6.2	5	6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	22.8	23.5	25.5	25.7	26.2	24	20.4	25.9	18.4	19
Radium 226 *(pCi/L)*		4.5	5.6	6.2	5.8	5.7	5	4.5	5.8	3.9	4.6
Radium 228 *(pCi/L)*		18.3	17.9	19.3	19.9	20.5	19	15.9	20.1	14.5	14.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		9.5	10.3	10.4	10.7	10.3	9.8	10	10.5	10.1	10.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		45	47.5	47.1	49.6	46	45.6	41.6	46.8	40.4	47.2
TDS @ 180° *C.*	GPS (500)	2030	2290	2270	2230	2050	2130	1740	2070	1690	2000
Sulfate (SO4)		1210	1370	1320	1300	1200	1380	1010	1250	1010	1170
Temperature *(C)*		10	11.3	8.8	13.5	9.7	9.7	9	9.1	9.3	12.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.09	0.2	0.1	-0.01
Uranium, natural *(pCi/L)*	GPS (36)	87.5	112	105	102	95.7	94.2	87.6	91.9	83	99.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.01	0.02	0.01	0.02	0.03	<0.01	<0.01	<0.01	<0.01

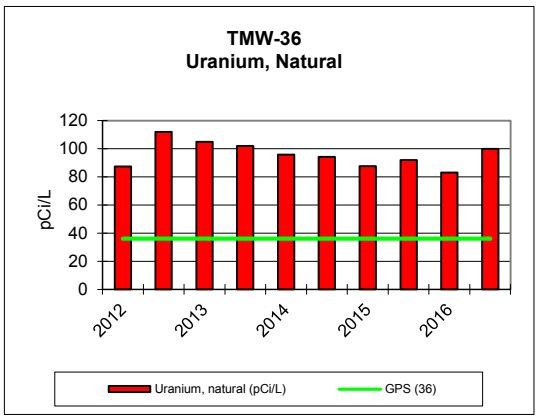

TMW-36
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-36
Manganese
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

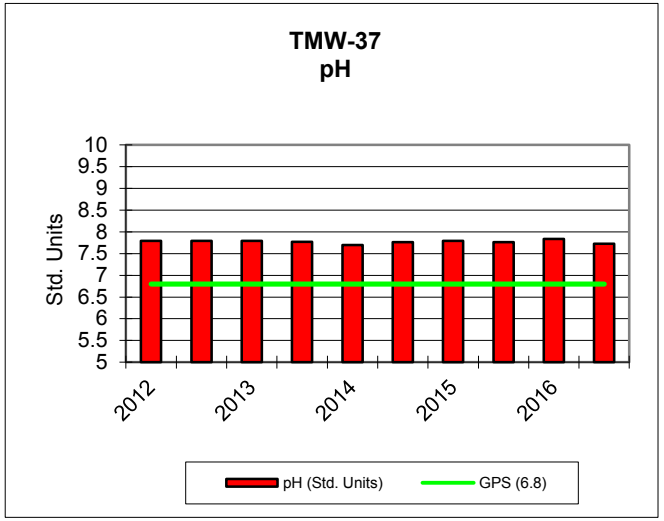

TMW-36
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

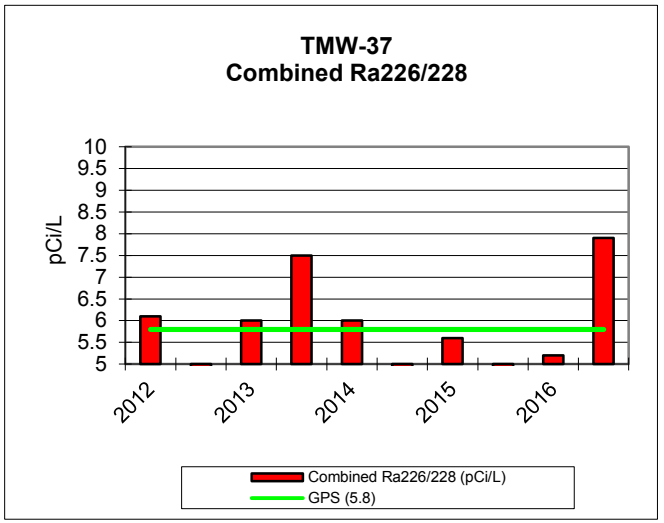

TMW-36
Combined Ra226 & Ra228
pCi/L
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

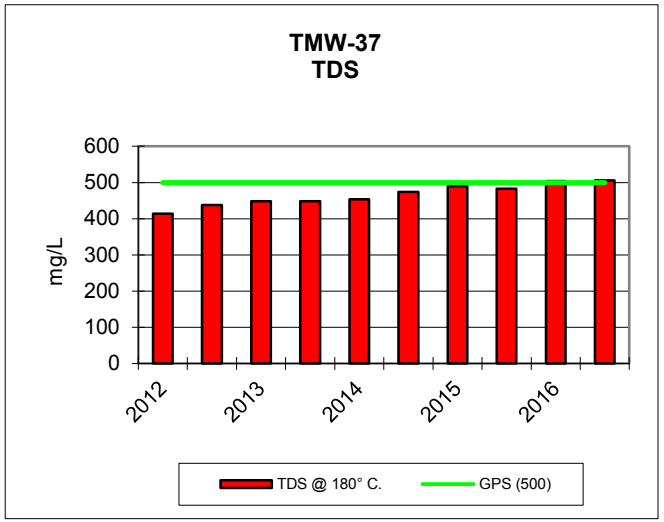

TMW-36
Iron
mg/L
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)


TMW-36
Uranium, Natural
pCi/L
120
100
80
60
40
20
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

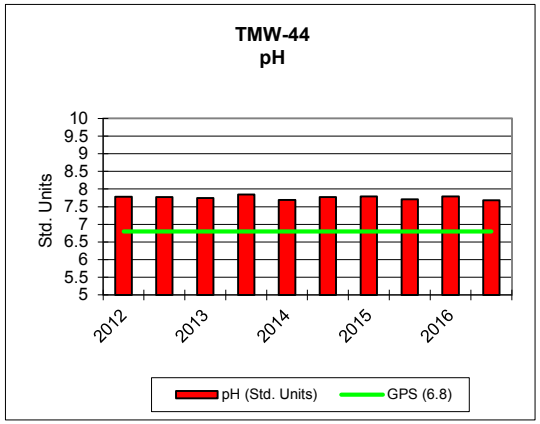
KENNECOTT URANIUM COMPANY											
TMW-37		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/30/2012	8/14/2012	2/19/2013	7/22/2013	2/10/2014	8/25/2014	2/11/2015	8/18/2015	2/23/2016	8/17/2016
TDS A/C Balance *(dec. %)*		0.722	-0.379	1.41	0.65	0.86	0.59	1.48	1.26	3.12	1.29
Alk-CaC03		128	137	133	128	128	127	129	123	119	120
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.026	0.027	0.019	0.023	0.02	0.019	0.018	0.015	0.014	0.015
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		156	167	162	157	156	155	157	150	146	147
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		94.1	96.4	97.3	95.2	94.4	99.6	104	103	100	107
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	7	6	6	7	7	6	6	7	7
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cond *(umhos/cm)*		636	658	652	663	667	681	704	717	719	749
Cond-Field *(umhos/cm)*		684	700	710	715	719	734	737	742	827	786
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		0.2
Gross Alpha *(pCi/L)*	GPS (15)	3.7	2.8	2.5	1.8	2.5	1.5	9.4	8.2	5.2	4
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	-0.6	0.3	-0.2	0.4
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		7.8	8	8	7.8	7.7	8	8.4	8.3	7.8	8.5
Manganese (Mn)	GPS (0.2)	0.09	0.08	0.07	0.06	0.07	0.06	0.06	0.05	0.05	0.05
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.79	7.79	7.79	7.77	7.7	7.76	7.79	7.76	7.84	7.73
pH (Field) *(Std. Units)*		7.4	7.5	7.6	8.1	7.5	8	7.56	7.57	7.36	7.36
Potassium (K)		3.4	3.6	3.3	3.2	3.4	3.3	3.3	3.4	3.1	3.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.1	4	6	7.5	6	4.6	5.6	4.9	5.2	7.9
Radium 226 *(pCi/L)*		2.2	1.5	1.8	1.8	2.1	1.8	2	1.6	2.4	1.8
Radium 228 *(pCi/L)*		3.9	2.5	4.2	5.7	3.9	2.8	3.6	3.3	2.8	6.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.6	13.2	12.2	11.3	11.5	11.9	11.9	12.2	11.5	11.2
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35	33.9	36.2	35.4	34.6	36.4	35.8	36.7	34.5	39.4
TDS @ 180° *C.*	GPS (500)	414	438	448	448	454	474	490	483	504	506
Sulfate (SO4)		197	200	199	201	207	223	219	241	246	261
Temperature *(C)*		10.4	11.1	8.8	11	8.4	9.7	9.4	8.9	8.4	12.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.2	0.3	0.02
Uranium, natural *(pCi/L)*	GPS (36)	3.8	4	3	3.5	3.1	3	2	2.4	2.1	10.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

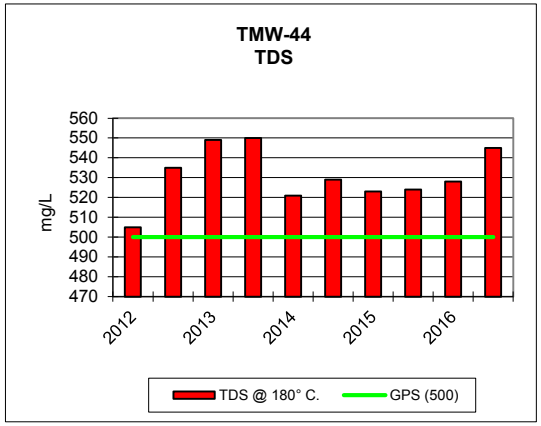

TMW-37
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

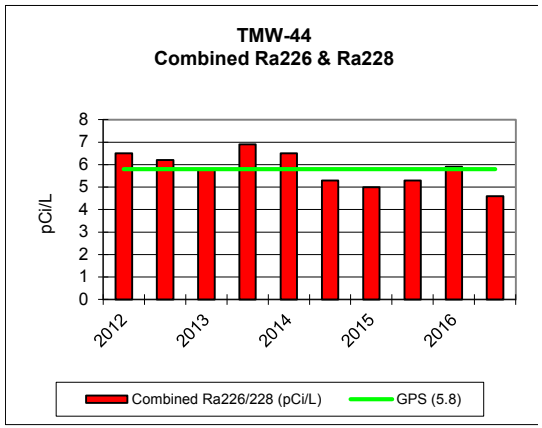

TMW-37
Combined Ra226/228
pCi/L
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-37
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

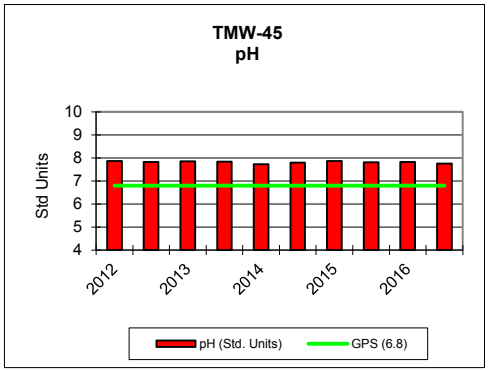
KENNECOTT URANIUM COMPANY											
TMW-44		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/25/2012	8/14/2012	2/19/2013	7/23/2013	2/10/2014	7/21/2014	2/11/2015	8/17/2015	2/24/2016	8/9/2016
TDS A/C Balance *(dec. %)*		-2.12	-0.791	1.18	0.735	0.09	1.4	1.29	0.14	1.79	2.62
Alk-CaC03		128	137	132	135	131	133	132	128	122	134
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		156	167	161	165	160	163	161	157	149	164
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		103	110	113	115	108	116	112	110	106	108
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		8	8	7	8	8	8	8	9	8	8
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		723	770	745	773	744	766	750	775	748	763
Cond-Field *(umhos/cm)*		766	804	807	804	842	770	791	790	834	898
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.4	2.7	2	2.6	2.1	2.9	8	8.3	4.7	2.3
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.13	0.09	0.11	0.1
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	-0.04	0.8
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		9.6	10.2	9.7	10.2	9.4	9.9	9.5	9.8	9	9.5
Manganese (Mn)	GPS (0.2)	0.07	0.07	0.08	0.08	0.08	0.07	0.08	0.07	0.07	0.07
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.78	7.77	7.75	7.85	7.69	7.77	7.79	7.71	7.79	7.68
pH (Field) *(Std. Units)*		7.6	7.4	7.6	7.86	7.6	7.7	7.76	7.48	7.34	7.17
Potassium (K)		3	3.1	3.1	3.2	3.2	3.1	3.2	3.3	2.9	3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.5	6.2	5.8	6.9	6.5	5.3	5	5.3	5.9	4.6
Radium 226 *(pCi/L)*		1.5	1.9	1.3	1.7	1.7	1.6	1.7	1.7	1.7	1.7
Radium 228 *(pCi/L)*		5	4.3	4.5	5.2	4.8	3.7	3.3	3.6	4.2	2.9
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.4	16.8	15.5	14.9	15.3	14.8	14.7	15.2	14.5	14.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		38.1	37.3	38.8	39.6	38.5	40.5	39	39.5	37.1	37.9
TDS @ 180° *C.*	GPS (500)	505	535	549	550	521	529	523	524	528	545
Sulfate (SO4)		251	250	247	256	243	255	242	256	256	259
Temperature *(C)*		9.8	10.6	9.4	11.6	9.2	11.5	9.3	9.5	9.2	12.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.01	0.08	0.1	0.05	0.03	0.08	0.2	0.3	0.1	0.03
Uranium, natural *(pCi/L)*	GPS (36)	0.8	1.8	0.9	1.4	0.6	0.9	0.3	1.1	1.3	5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

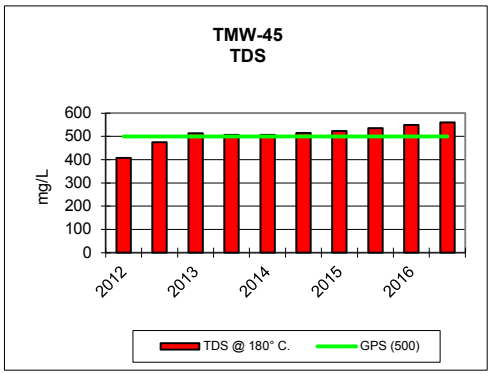

TMW-44
pH
Std. Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-44
TDS
mg/L
560
550
540
530
520
510
500
490
480
470
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

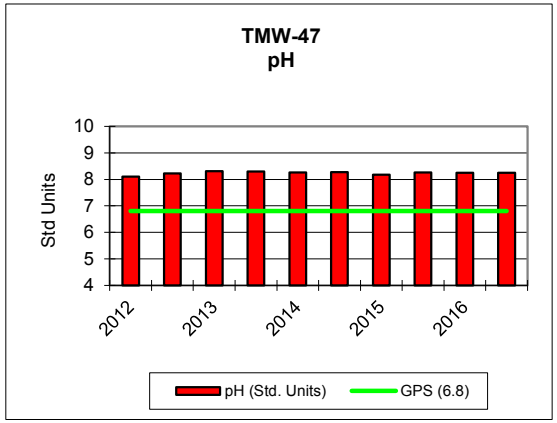

TMW-44
Combined Ra226 & Ra228
pCi/L
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

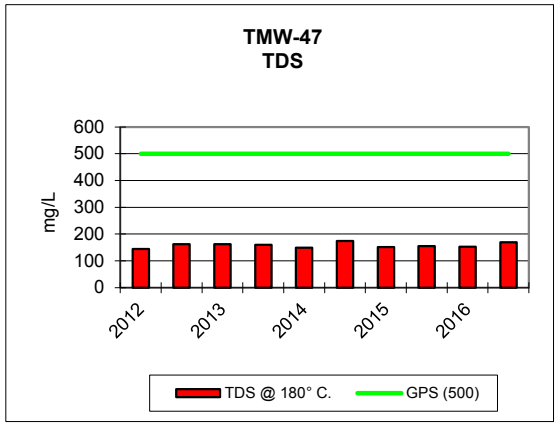
KENNECOTT URANIUM COMPANY											
TMW-45		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/25/2012	8/14/2012	2/19/2013	7/23/2013	1/21/2014	7/21/2014	2/11/2015	8/11/2015	2/24/2016	8/9/2016
TDS A/C Balance *(dec. %)*		-1.15	-0.13	0.588	2.09	-1.05	1.44	1.09	195	5.91	0.59
Alk-CaC03		129	146	151	143	153	148	146	156	137	150
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		157	178	184	175	187	180	178	190	167	183
Boron (B)		<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		95.6	101	106	106	108	116	116	116	94.7	115
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	7	6	6	6	6	7	7	6	6
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		668	700	702	712	724	746	758	778	780	780
Cond-Field *(umhos/cm)*		705	731	759	731	755	788	787	796	848	867
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.5	2.2	1.6	1.6	1.2	1.4	6.1	8.8	2.9	2.2
Iron (Fe)	GPS (0.6)	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.03	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		7.6	8.2	8.1	8.3	8.4	8.6	8.9	8.7	6.9	8.9
Manganese (Mn)	GPS (0.2)	0.07	0.08	0.07	0.07	0.08	0.08	0.08	0.08	0.06	0.08
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.86	7.82	7.85	7.83	7.72	7.79	7.86	7.81	7.82	7.75
pH (Field) *(Std. Units)*		7.7	7.5	7.5	7.88	7.9	7.8	7.69	7.49	7.16	7.56
Potassium (K)		3	3.2	2.9	3	3.3	3.4	3.2	3.5	3.3	3.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	3.2	3.5	1.3	2.94	3.4	3	6.2	3.8	2.4	5.9
Radium 226 *(pCi/L)*		1.1	1.4	1.3	0.74	1.1	1.2	1.9	1.5	1.2	1.5
Radium 228 *(pCi/L)*		2.1	2.1	0	2.2	2.3	1.8	4.3	2.3	1.2	4.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.4	17.7	15.7	15.9	16	15.7	15.3	14.8	12.4	15.3
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.3	35.8	40.8	38.5	38.2	38.7	37.5	36.8	40.7	38.1
TDS @ 180° *C.*	GPS (500)	408	475	513	507	507	515	523	536	549	560
Sulfate (SO4)		211	206	217	210	229	235	237	250	259	246
Temperature *(C)*		10.3	10.8	9.7	12.9	9.4	12.9	8.9	9.7	9.8	14.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	0.2	0.2	<0.2	<0.2	<0.2	<0.2	0.4	0.06	-0.009
Uranium, natural *(pCi/L)*	GPS (36)	0.7	1.4	2.9	2.4	1.5	1.6	0.9	0.0041	25.1	2.2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.21	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

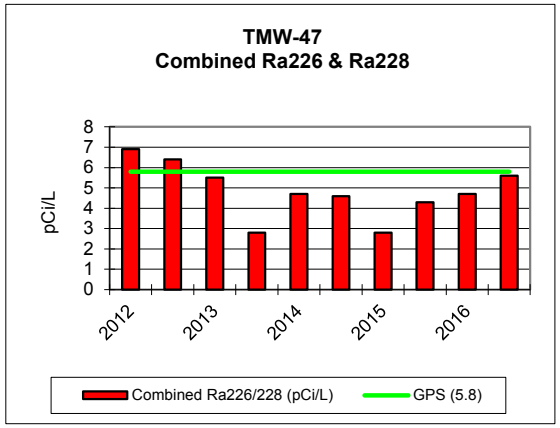

TMW-45
pH
Std Units
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-45
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

KENNECOTT URANIUM COMPANY											
TMW-47		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/26/2012	8/15/2012	2/13/2013	7/23/2013	1/21/2014	8/5/2014	2/10/2015	8/11/2015	2/29/2016	8/29/2016
TDS A/C Balance *(dec. %)*		-3.67	-3.87	-1.29	1.66	-1.28	1.35	0.07	0.75	3.07	3.17
Alk-CaC03		92	93	89	91	90	92	90	87	99	91
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		113	113	109	111	110	111	110	107	121	112
Boron (B)		<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		18.8	19.3	19.1	20.6	19.3	19.9	19.8	19.4	20.3	17.6
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		2	2	2	2	2	2	2	2	2	2
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		246	244	240	246	242	243	241	247	243	246
Cond-Field *(umhos/cm)*		293	265	258	257	294	405	161	257	270	269
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	4.6	4.2	4	2.6	3.9	3.4	6.3	37.5	3.6	6.6
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	1	2.4	1.4	1.1	1.1	0.6	1.5	-0.7	1.4	
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		0.8	0.8	0.8	1	0.8	0.9	0.8	0.8	0.9	0.8
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.1	8.22	8.31	8.3	8.26	8.27	8.18	8.26	8.25	8.25
pH (Field) *(Std. Units)*		7.7	8.2	8.9	8.67	8.6	8.5	8.33	8.42	8.51	8.38
Potassium (K)		1.4	1.4	1.3	1.3	1.4	1.4	1.5	1.6	1.4	1.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.9	6.4	5.5	2.8	4.7	4.6	2.8	4.3	4.7	5.6
Radium 226 *(pCi/L)*		4.3	5.2	3.9	2.4	3.6	2.6	2.7	3.1	3.6	3.9
Radium 228 *(pCi/L)*		2.6	1.2	1.6	0.4	1.1	2	0.1	1.2	1.1	1.7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15	16.2	15.1	13.4	13.8	13.9	13.7	13.4	13.4	15.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		31.6	30.7	31.7	33.7	32.3	31.9	32.9	31.3	32.7	32.1
TDS @ 180° *C.*	GPS (500)	144	162	162	160	149	174	152	155	153	170
Sulfate (SO4)		33	32	30	30	31	31	31	31	32	31
Temperature *(C)*		10.2	11.5	8.5	13.1	9.1	13.6	9	9.6	8.8	13.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	0.07	-0.002
Uranium, natural *(pCi/L)*	GPS (36)	0.3	0.2	0.3	0.5	0.3	0.2	0.2	0.3	0.7	0.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

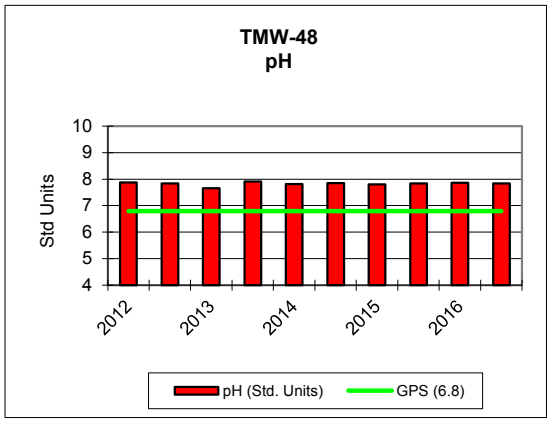

TMW-47
pH
Std Units
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

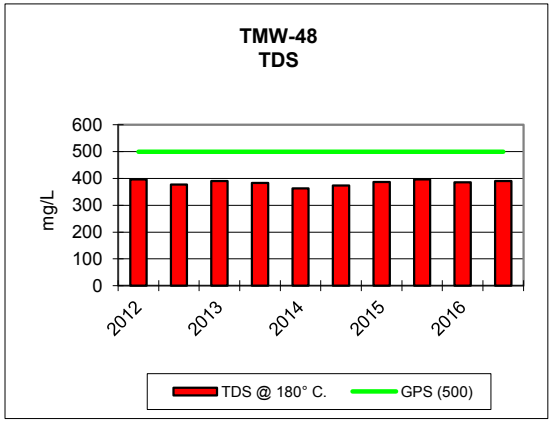

TMW-47
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

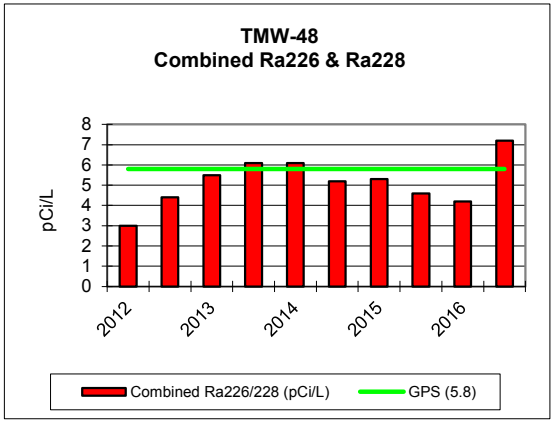

TMW-47
Combined Ra226 & Ra228
pCi/L
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

TMW-47

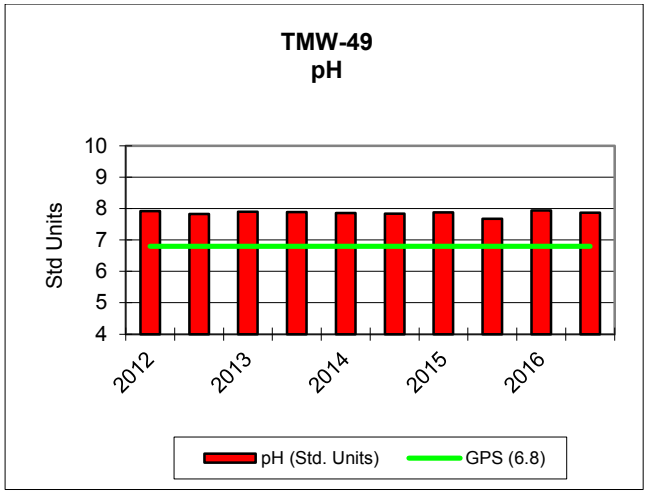
KENNECOTT URANIUM COMPANY											
TMW-48		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/25/2012	8/15/2012	2/13/2013	7/23/2013	1/21/2014	8/5/2014	2/10/2015	8/11/2015	2/29/2016	8/30/2016
TDS A/C Balance *(dec. %)*		-0.508	-1.92	0.145	0.877	-0.293	0.44	0.61	0.98	1.59	0.09
Alk-CaC03		106	120	118	117	116	119	118	113	108	119
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		129	147	144	142	141	145	143	138	132	145
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		72.8	76.3	79.8	79.5	74.4	79.9	81.7	83.1	80	81.8
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		5	5	5	4	5	5	5	5	5	5
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		523	554	560	564	548	557	563	582	544	584
Cond-Field *(umhos/cm)*		552	571	615	586	609	356	609	595	607	620
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	2.8	2	2.7	2.7	2.4	2.6	5.9	21.2	3.2	4.5
Iron (Fe)	GPS (0.6)	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.1	0.5	0.7	0.7	0.6	0.8	0.8	1.3	0.7	0.5
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		4.6	4.9	4.9	5	4.7	5	5	5.1	5	5.1
Manganese (Mn)	GPS (0.2)	0.04	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.05
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.88	7.84	7.66	7.91	7.82	7.85	7.8	7.84	7.86	7.84
pH (Field) *(Std. Units)*		7.8	7.6	8.15	7.71	8.1	7.8	7.76	7.61	7.72	7.35
Potassium (K)		2.6	2.8	2.7	2.7	2.7	2.7	2.8	2.9	3.3	2.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	3	4.4	5.5	6.1	6.1	5.2	5.3	4.6	4.2	7.2
Radium 226 *(pCi/L)*		1.4	2.4	3.2	2.6	1.9	1.8	1.8	2.3	2.1	2.8
Radium 228 *(pCi/L)*		1.6	2	2.3	3.5	4.2	3.4	3.5	2.3	2.1	4.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14	17.5	16.3	15.3	15.3	15.4	15.1	15	15	16.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		31.1	30.7	33	33	32.4	32.5	33.8	31.9	34.3	33.8
TDS @ 180° *C.*	GPS (500)	396	377	391	383	363	374	387	397	386	390
Sulfate (SO4)		155	157	162	159	151	164	166	168	167	168
Temperature *(C)*		10.2	11.2	8.4	12	8.6	11.6	8.6	9.2	8.3	10.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.05	0.0007
Uranium, natural *(pCi/L)*	GPS (36)	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

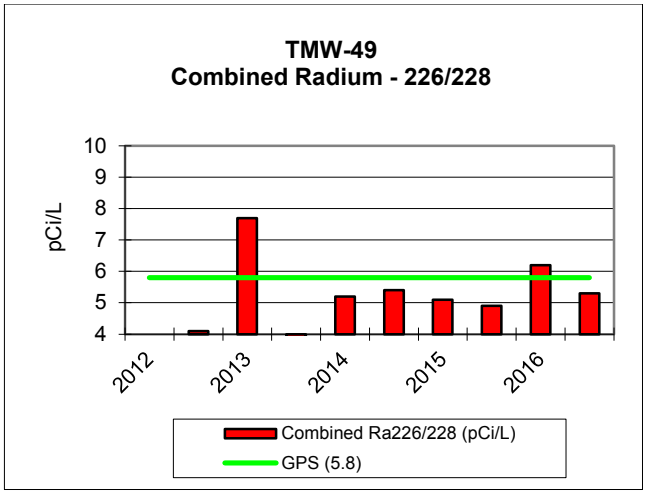

TMW-48
pH
Std Units
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

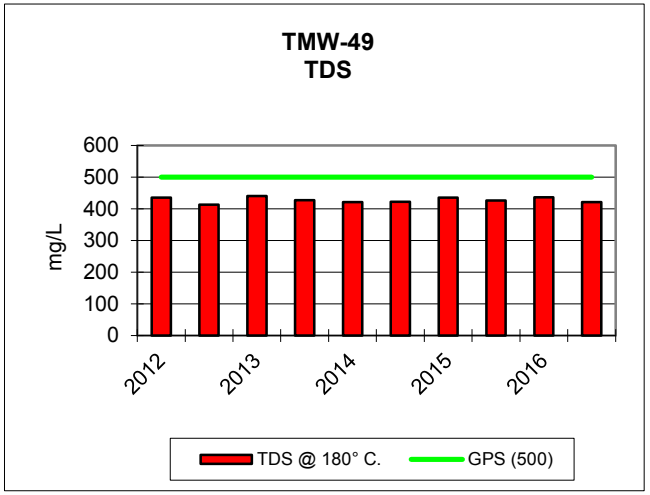

TMW-48
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-48
Combined Ra226 & Ra228
pCi/L
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

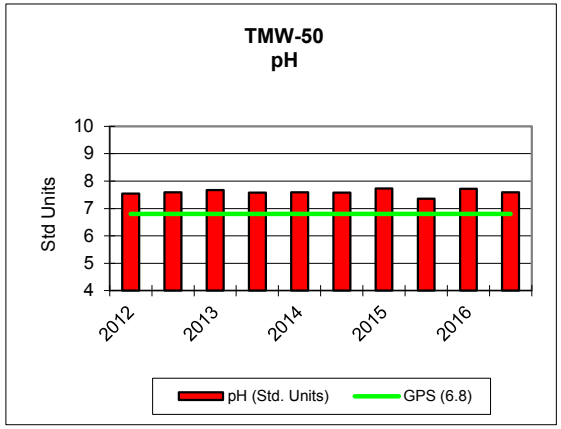
KENNECOTT URANIUM COMPANY											
TMW-49		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/20/2012	8/27/2012	3/4/2013	8/6/2013	2/11/2014	9/5/2014	3/17/2015	9/1/2015	3/21/2016	9/21/2016
TDS A/C Balance *(dec. %)*		-0.454	-0.778	0.0502	-0.403	0.07	1.53	2.25	0.92	1.56	1.38
Alk-CaC03		105	111	126	118	112	113	112	119	109	111
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		129	136	154	145	137	137	136	145	133	135
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		85.8	85.9	86	86.3	86.9	85.7	90.4	89.5	85.5	88.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		7	7	6	6	7	7	8	7	7	8
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		620	621	610	622	616	616	628	622	613	627
Cond-Field *(umhos/cm)*		662	646	648	695	642	657	1107	648	596	776
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.2	0.2	0.1	0.1	0.1	<0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.7	1.5	1.3	2.1	1.9	1.5	2.1	4.4	2.2	2.7
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	0.06	<0.05	0.06
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.09	-0.1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		4.2	4.2	4.3	4.4	4.3	4.2	4.6	4.5	4.4	4.5
Manganese (Mn)	GPS (0.2)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.92	7.83	7.9	7.89	7.86	7.84	7.88	7.68	7.94	7.87
pH (Field) *(Std. Units)*		7.7	7.8	7.99	7.9	7	7.9	7.85	7.89	7.68	8.16
Potassium (K)		2.9	2.8	2.8	2.9	2.7	2.7	3	2.9	2.8	3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	4	4.1	7.7	2.9	5.2	5.4	5.1	4.9	6.2	5.3
Radium 226 *(pCi/L)*		1.4	1.7	1.3	1.4	1.3	2.2	1.6	1.4	1.4	1.8
Radium 228 *(pCi/L)*		2.6	2.4	6.4	1.5	3.9	3.2	3.5	3.5	4.8	3.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16.9	15.4	15.5	15	15.4	14.8	17.3	15.8	15.5	15.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		36.7	37.7	38.7	39.3	38	37.2	39.7	39.9	38.6	40.8
TDS @ 180° *C.*	GPS (500)	436	413	441	428	422	423	436	427	437	422
Sulfate (SO4)		195	193	177	190	191	194	189	190	202	211
Temperature *(C)*		9.7	11.9	10.8	11.2	9.1	9.9	9.1	9.6	8.9	13.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.05	-0.01
Uranium, natural *(pCi/L)*	GPS (36)	0.5	0.9	0.4	0.4	0.4	0.3	0.4	0.6	0.4	1.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

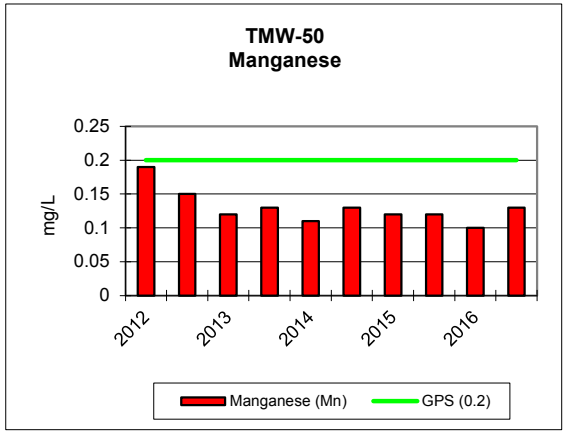

TMW-49
pH
Std Units
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

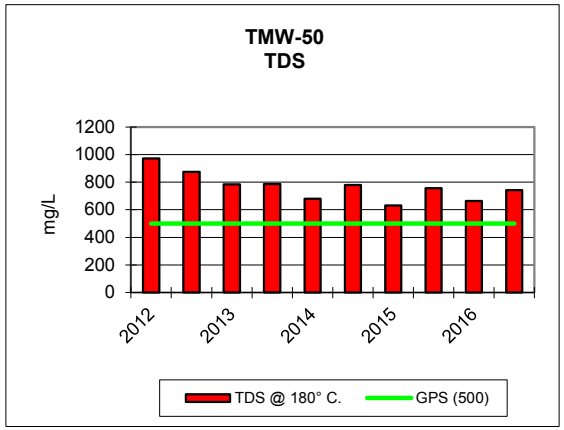

TMW-49
Combined Radium - 226/228
pCi/L
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

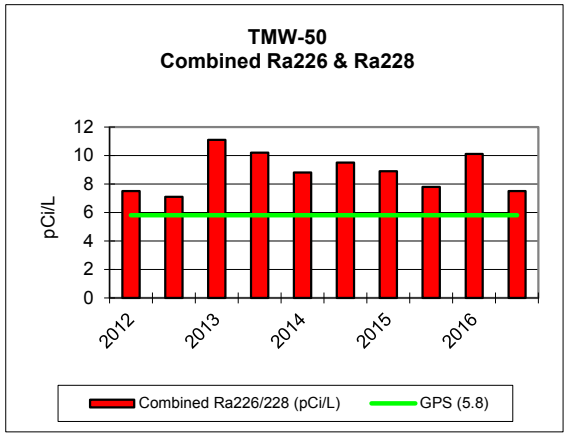

TMW-49
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

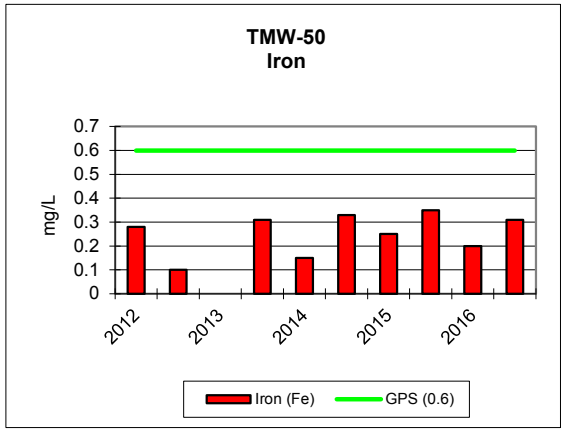
KENNECOTT URANIUM COMPANY											
TMW-50		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/20/2012	9/17/2012	3/4/2013	8/6/2013	2/18/2014	9/5/2014	3/17/2015	9/1/2015	3/21/2016	9/21/2016
TDS A/C Balance *(dec. %)*		0.952	-1.47	2.11	1.77	1.16	2.81	0.54	2.5	2.32	0.76
Alk-CaC03		162	162	154	150	155	162	140	144	150	147
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		197	198	188	182	190	198	171	175	183	179
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		217	190	168	175	146	170	132	170	160	164
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		21	21	17	15	16	15	15	12	14	13
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1240	1150	1030	1050	929	1030	889	1010	893	1010
Cond-Field *(umhos/cm)*		1273	1157	1085	1146	955	1075	1570	1044	978	1008
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	0.1	0.1	0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.5	2.8	2.3	3.2	3.1	3.4	5.8	10.2	3	3
Iron (Fe)	GPS (0.6)	0.28	0.1	<0.05	0.31	0.15	0.33	0.25	0.35	0.2	0.31
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.5	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		16	12.5	11.5	12.8	10.2	12.3	10.3	12.8	10.1	12.1
Manganese (Mn)	GPS (0.2)	0.19	0.15	0.12	0.13	0.11	0.13	0.12	0.12	0.1	0.13
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.54	7.59	7.67	7.58	7.59	7.58	7.73	7.36	7.72	7.59
pH (Field) *(Std. Units)*		7.2	7.46	7.32	7.4	7.7	7.4	7.55	7.32	7.33	7.45
Potassium (K)		4.3	3.8	3.7	3.9	3.5	3.4	3.6	3.7	3.8	3.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	7.5	7.1	11.1	10.2	8.8	9.5	8.9	7.8	10.1	7.5
Radium 226 *(pCi/L)*		2.4	2.5	2.2	2.1	2.5	3	1.8	2.2	1.8	2.2
Radium 228 *(pCi/L)*		5.1	4.6	8.9	8.1	6.3	6.5	7.1	5.6	8.3	5.3
Selenium (Se)	GPS (.01)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		19.2	17.9	17	16.7	16.9	16.2	19.3	17.1	16.3	16.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		49.6	45.4	46.2	48.2	44.9	44.2	45.9	46.5	44.2	46.9
TDS @ 180° *C.*	GPS (500)	972	874	785	787	679	779	632	756	664	742
Sulfate (SO4)		495	438	354	391	328	408	299	377	333	393
Temperature *(C)*		9	12.3	10.3	11.5	9.3	9.7	8.9	9.7	9.1	12.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	0.2	0.2	<0.2	<0.2	<0.2	0.3	0.06	0.04
Uranium, natural *(pCi/L)*	GPS (36)	1.8	1.6	1.2	1.5	1.2	1.4	1.2	1.6	1.1	1.4
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01


TMW-50
pH
Std Units
10
9
8
7
6
5
4
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

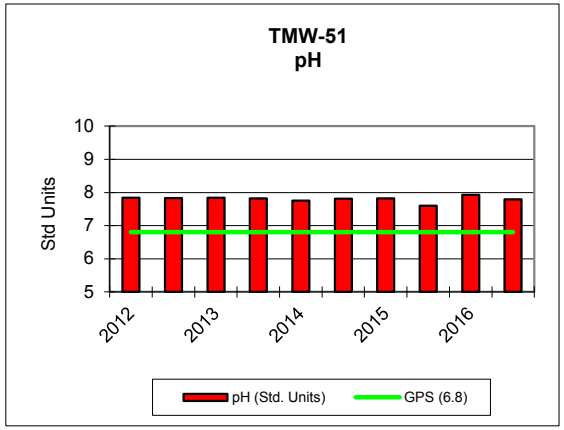

TMW-50
Manganese
mg/L
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

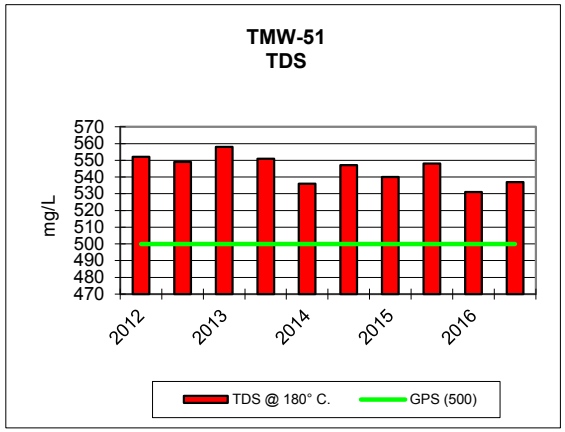

TMW-50
TDS
mg/L
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

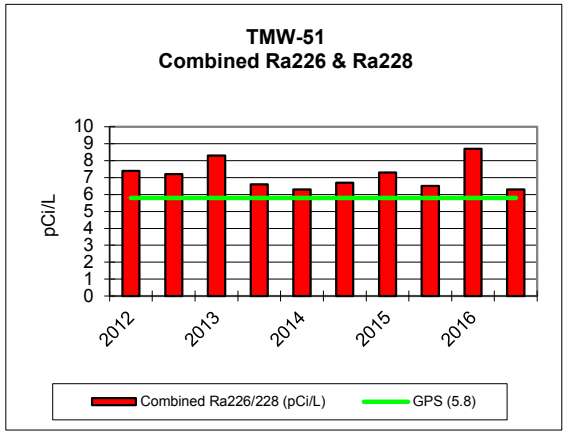

TMW-50
Combined Ra226 & Ra228
pCi/L
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-50
Iron
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

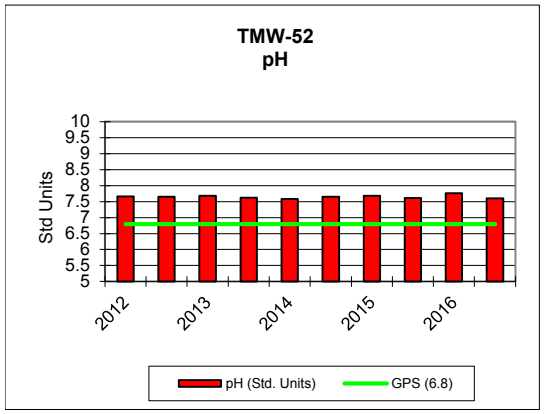
KENNECOTT URANIUM COMPANY											
TMW-51		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/16/2012	9/18/2012	3/4/2013	8/6/2013	2/18/2014	9/5/2014	3/17/2015	9/1/2015	3/29/2016	10/5/2016
TDS A/C Balance *(dec. %)*		1.38	-2.13	-1.46	2.44	0.68	1.45	1.17	2.1	1.62	2.11
Alk-CaC03		125	134	133	125	134	133	131	127	128	129
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		153	163	162	152	163	162	160	155	156	157
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		117	112	113	121	116	116	114	119	110	115
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		9	9	9	9	10	10	10	10	9	10
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		764	780	764	781	773	771	769	773	746	765
Cond-Field *(umhos/cm)*		833	807	833	804	807	811	1302	802	836	825
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.1	0.2	0.2	0.1	0.1	0.1	<0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.2	2.5	2.3	1.7	2.5	2.3	2.9	7.4	3.7	3.8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	0.06	0.08	0.13	0.14	0.09	0.14
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	-0.6	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		8.2	7.6	8	8.6	8.4	8.1	8.5	8.4	7.8	7.5
Manganese (Mn)	GPS (0.2)	0.08	0.08	0.07	0.08	0.08	0.07	0.08	0.07	0.07	0.06
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.84	7.83	7.84	7.82	7.75	7.81	7.82	7.6	7.93	7.79
pH (Field) *(Std. Units)*		7.7	7.45	7.7	7.6	8	7.6	7.7	7.63	7.7	7.84
Potassium (K)		3.5	3.1	3.1	3.5	3.3	3.1	3.3	3.2	2.9	3.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	7.4	7.2	8.3	6.6	6.3	6.7	7.3	6.5	8.7	6.3
Radium 226 *(pCi/L)*		1.8	2.2	1.7	1.5	2	2.7	1.8	1.6	1.8	1.6
Radium 228 *(pCi/L)*		5.6	5	6.6	5.1	4.3	4	5.5	4.9	6.9	4.7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		17	15.3	15.5	15.6	16	14.9	17.7	15.9	15	15.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		39.3	37.5	39.1	43	41.4	39	41.5	41.5	37.6	36.5
TDS @ 180° *C.*	GPS (500)	552	549	558	551	536	547	540	548	531	537
Sulfate (SO4)		254	254	259	266	254	264	248	256	254	266
Temperature *(C)*		10.4	9.8	9.2	9.6	9.1	9.5	9.8	10.1	8.7	9.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.08	0.05
Uranium, natural *(pCi/L)*	GPS (36)	1.9	2	1.8	2.5	1.9	2	1.8	2	1.9	1.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.08

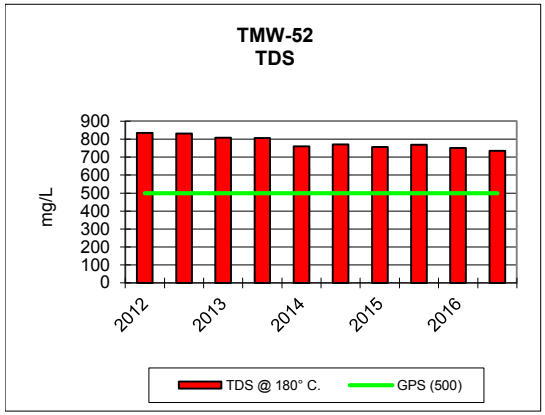

TMW-51
pH
Std Units
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

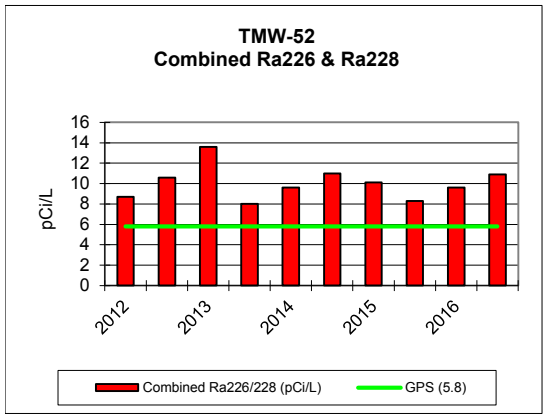

TMW-51
TDS
mg/L
570
560
550
540
530
520
510
500
490
480
470
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-51
Combined Ra226 & Ra228
pCi/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

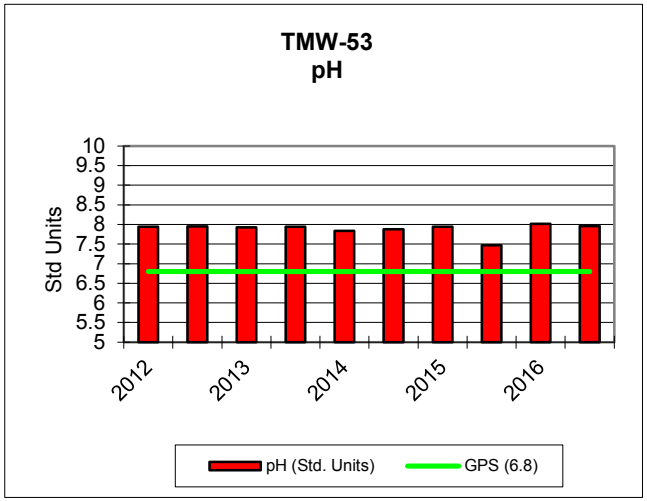
KENNECOTT URANIUM COMPANY											
TMW 52		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/16/2012	9/18/2012	3/4/2013	8/6/2013	2/18/2014	9/5/2014	3/17/2015	9/1/2015	3/21/2016	9/28/2016
TDS A/C Balance *(dec. %)*		-1.9	-4.31	1.86	3.12	0.35	2.03	0.52	1.9	1.59	1.58
Alk-CaC03		155	167	153	152	151	153	146	146	144	144
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		190	203	186	185	184	187	179	178	175	176
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		175	175	174	181	168	168	163	171	162	156
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		20	21	17	18	19	20	19	17	18	16
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1100	1110	1050	1070	1020	1030	1020	1030	1010	970
Cond-Field *(umhos/cm)*		1182	1120	1100	1162	1066	1073	1828	1071	1145	1091
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	4.9	3.9	3.4	4.5	2.8	3.4	5.9	10.7	3	5.3
Iron (Fe)	GPS (0.6)	<0.05	0.05	<0.05	0.06	0.16	0.16	0.28	0.26	0.27	0.26
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.3	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		11.1	10.6	11.2	11.7	11.2	10.7	10.7	11	10.7	9.8
Manganese (Mn)	GPS (0.2)	0.12	0.13	0.12	0.12	0.12	0.11	0.11	0.12	0.11	0.11
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.66	7.65	7.68	7.62	7.58	7.65	7.68	7.61	7.76	7.6
pH (Field) *(Std. Units)*		7.5	7.09	7.43	7.4	7.7	7.7	7.54	7.42	7.34	7.85
Potassium (K)		4.2	3.8	3.9	4.3	3.9	3.7	3.9	3.9	3.7	3.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	8.7	10.6	13.6	8	9.6	11	10.1	8.3	9.6	10.9
Radium 226 *(pCi/L)*		3.2	3.7	2.7	3.1	2.7	3.7	2.5	2.5	2.7	2.6
Radium 228 *(pCi/L)*		5.5	6.9	10.9	4.9	6.9	7.3	7.6	5.8	6.9	8.3
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		18.1	16.7	16.7	17.1	16.9	16.1	16.2	17.1	16.6	16.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		48.9	46	50.5	53.1	50.8	47.5	47.5	50.2	47.7	45.4
TDS @ 180° *C.*	GPS (500)	835	832	808	806	760	771	756	769	751	736
Sulfate (SO4)		417	423	380	389	384	397	376	378	390	370
Temperature *(C)*		10.6	11.1	11	13	9.2	9.4	9.5	9..4	9.1	14.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	0.2	0.01	-0.002
Uranium, natural *(pCi/L)*	GPS (36)	2.4	2.5	2.5	2.6	2.6	2.3	2.5	2.4	2	2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	1.02

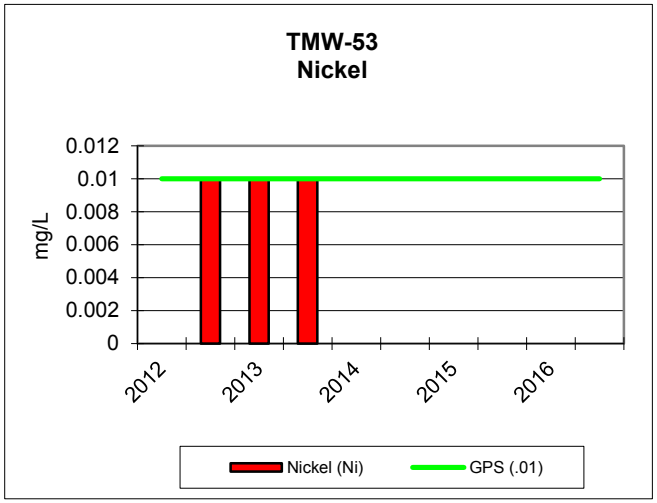

TMW-52
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

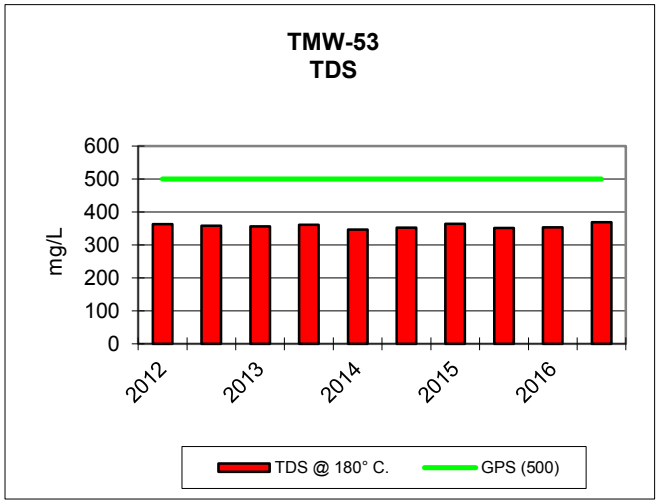

TMW-52
TDS
mg/L
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-52
Combined Ra226 & Ra228
pCi/L
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

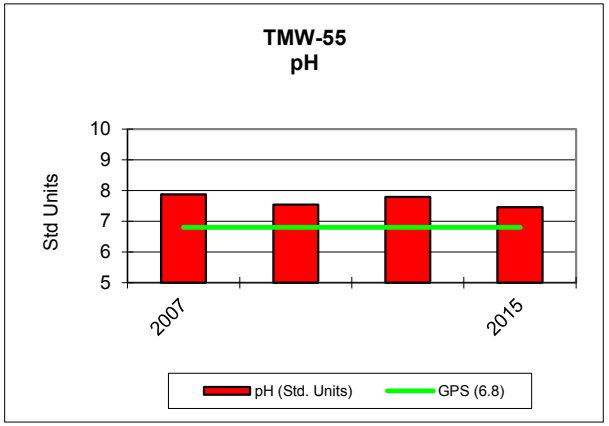
KENNECOTT URANIUM COMPANY											
TMW-53		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/16/2012	9/18/2012	2/19/2013	8/5/2013	2/17/2014	9/5/2014	3/17/2015	9/1/2015	3/29/2016	10/5/2016
TDS A/C Balance *(dec. %)*		-0.514	-3.55	0.264	1.95	0.89	0.79	1.81	2.51	0.7	4.05
Alk-CaC03		100	106	105	104	105	105	104	101	102	108
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		122	129	128	127	128	128	126	123	122	132
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		67.2	64.6	67.7	68.9	67.7	67.1	69.6	69.1	65.7	62.3
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	6	5	5	6	6	6	6	6	6
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		529	536	523	532	527	527	532	530	521	530
Cond-Field *(umhos/cm)*		592	554	582	631	575	556	959	549	582	579
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.6	1.2	1.6	1.4	1.2	1.3	1.7	3.7	2.2	5.4
Iron (Fe)	GPS (0.6)	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	-0.1	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		3	2.7	3.1	3.1	3.2	3	3.1	3.1	3	3.1
Manganese (Mn)	GPS (0.2)	0.03	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.04	0.04
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.94	7.95	7.93	7.94	7.84	7.88	7.94	7.47	8.02	7.96
pH (Field) *(Std. Units)*		7.8	7.52	7.9	7.3	8.2	8	7.93	7.98	7.94	8
Potassium (K)		2.6	2.4	2.3	2.6	2.5	2.4	2.5	2.5	2.3	2.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.93	4.1	3.62	2.42	4.29	4.2	4.6	3.11	3.1	1.98
Radium 226 *(pCi/L)*		0.93	1.3	0.92	0.82	0.89	1.2	1.2	0.91	1	0.38
Radium 228 *(pCi/L)*		2	2.8	2.7	1.6	3.4	3	3.4	2.2	2.1	1.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16.8	14.9	15.2	15.6	15.6	14.5	15.6	15.5	14.5	15
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		38.4	36.1	37.9	40.9	41	38.5	40.7	40.8	37.5	40.7
TDS @ 180° *C.*	GPS (500)	363	359	357	361	347	353	364	352	354	369
Sulfate (SO4)		154	152	147	148	150	151	150	149	148	158
Temperature *(C)*		10.5	11.9	8.8	13.2	9.4	9.2	10.2	9.2	8.7	9.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.05	-0.006
Uranium, natural *(pCi/L)*	GPS (36)	0.4	0.5	0.3	0.3	0.3	0.8	0.3	0.6	0.3	0.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.01

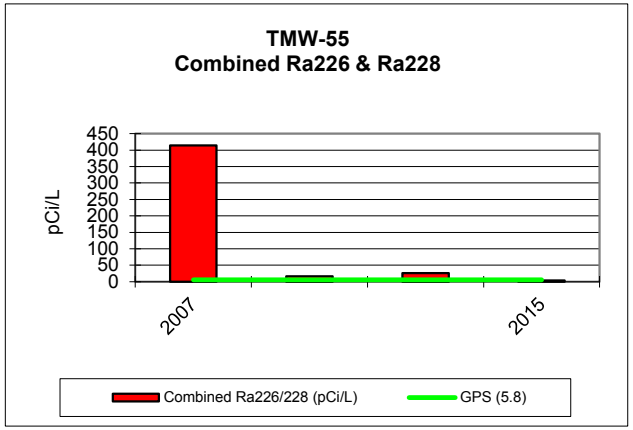

TMW-53
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

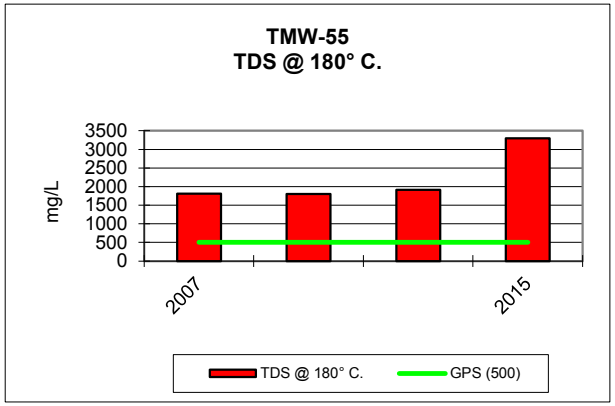

TMW-53
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

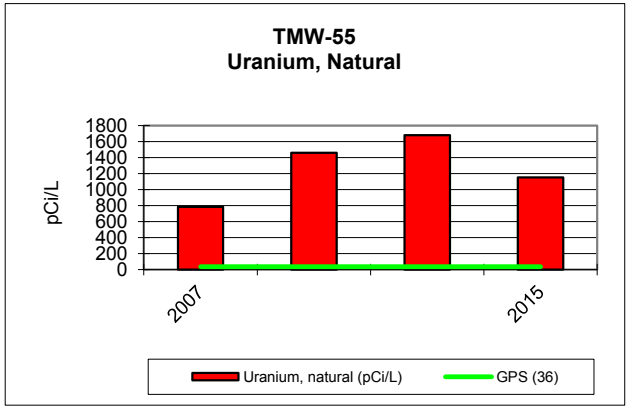

TMW-53
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

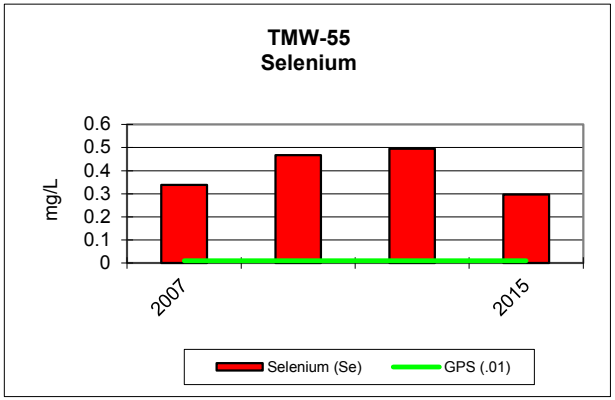
KENNECOTT URANIUM COMPANY					
TMW-55		2007			2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	8/21/2007	9/5/2007	12/5/2007	8/4/2015
TDS A/C Balance *(dec. %)*		1.05	0.97	1.11	1.2
Alk-CaC03		88	86	99	223
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		108	105	120	272
Boron (B)		<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		382	425	380	760
Carbonate (CO3)		<1	<1	<1	<1
Chloride (Cl)		86	117	132	248
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	0.002
Cond *(umhos/cm)*		2210	2220	2280	3660
Cond-Field *(umhos/cm)*		1985	236	235	
Copper (Cu)		<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.3	0.3	0.1	
Gross Alpha *(pCi/L)*	GPS (15)	429	15.4	30.1	2.6
Iron (Fe)	GPS (0.6)	<0.05	<0.05	0.17	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	1.9	1.6
Lead (Pb)		<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		40	42.9	39.4	57.4
Manganese (Mn)	GPS (0.2)	0.03	0.02	0.02	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	0.02
Nitrogen, Nitrate+Nitrite as N		4.8	7.3	7.5	6.7
pH *(Std. Units)*	GPS (6.8)	7.88	7.54	7.79	7.46
pH (Field) *(Std. Units)*		7.7	7.4	7.4	
Potassium (K)		7.4	8	5.9	8.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	414.2	16.5	26.1	3.5
Radium 226 *(pCi/L)*		410	13	22.6	1.8
Radium 228 *(pCi/L)*		4.2	3.5	3.5	1.7
Selenium (Se)	GPS (.01)	0.338	0.467	0.495	0.297
Silica (SiO2)		10	8	8	6.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01
Sodium (Na)		79.6	88.6	86.8	161
TDS @ 180° *C.*	GPS (500)	1810	1800	1910	3300
Sulfate (SO4)		1040	1080	976	1760
Temperature *(C)*		18	16.2	9	
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	0.02
Uranium, natural *(pCi/L)*	GPS (36)	785	1460	1680	1150
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.27


TMW-55
pH
Std Units
10
9
8
7
6
5
2007
2015
pH (Std. Units)
GPS (6.8)

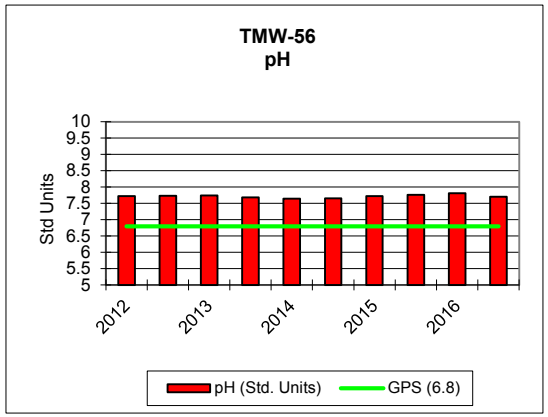

TMW-55
Combined Ra226 & Ra228
pCi/L
450
400
350
300
250
200
150
100
50
0
2007
2015
Combined Ra226/228 (pCi/L)
GPS (5.8)

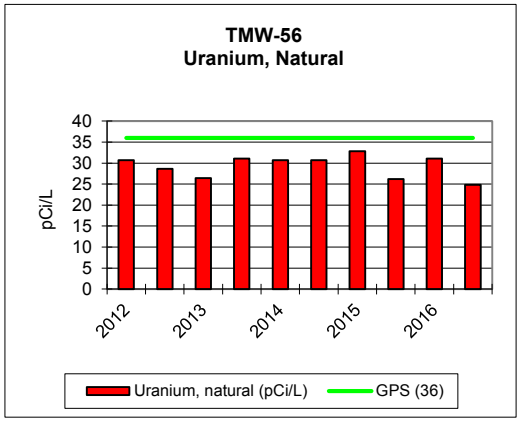

TMW-55
TDS @ 180° C.
mg/L
3500
3000
2500
2000
1500
1000
500
0
2007
2015
TDS @ 180° C.
GPS (500)

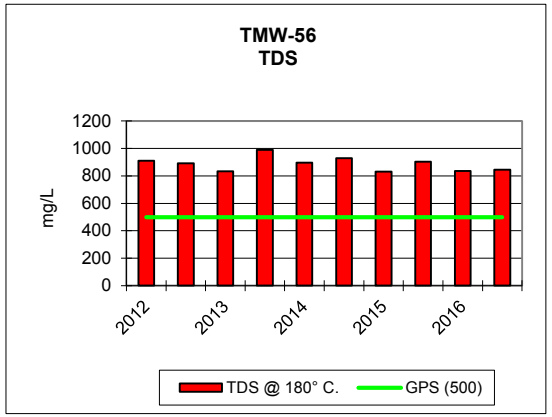

TMW-55
Uranium, Natural
pCi/L
1800
1600
1400
1200
1000
800
600
400
200
0
2007
2015
Uranium, natural (pCi/L)
GPS (36)

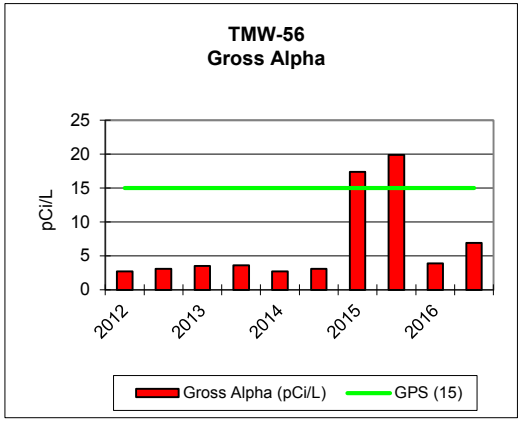

TMW-55
Selenium
mg/L
0.6
0.5
0.4
0.3
0.2
0.1
0
2007
2015
Selenium (Se)
GPS (.01)

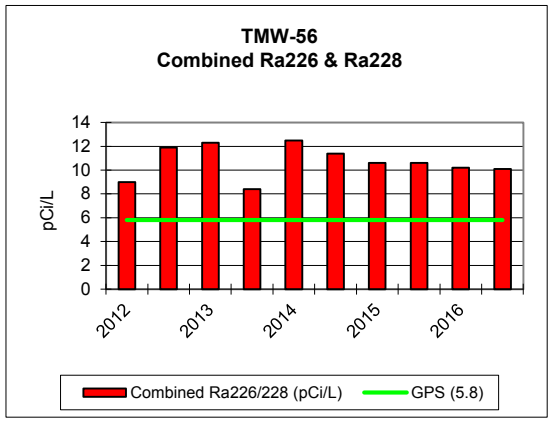
KENNECOTT URANIUM COMPANY											
TMW-56		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/20/2012	9/18/2012	3/5/2013	8/5/2013	2/18/2014	9/19/2014	3/23/2015	9/2/2015	3/22/2016	9/7/2016
TDS A/C Balance *(dec. %)*		0.0678	-1.24	-1.56	2.11	0.87	2.64	1.57	1.36	2.15	4.45
Alk-CaC03		92	99	96	92	98	97	96	95	98	99
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.016	0.015	0.014	0.015	0.014	0.017	0.017	0.014	0.013	0.014
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		113	120	117	112	119	118	118	115	119	121
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		192	181	167	210	184	193	199	196	176	170
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		31	29	25	38	29	39	32	34	26	31
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.003	0.002	0.001	0.002	0.001	0.002	0.002	0.001	0.001	0.001
Cond *(umhos/cm)*		1170	1180	1080	1270	1170	1200	1200	1190	1090	1130
Cond-Field *(umhos/cm)*		1209	1190	1153	1401	1208	1231	2080	1242	1247	1225
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.7	3.1	3.5	3.6	2.7	3.1	17.4	19.9	3.9	6.9
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.1	0.1	0.09	0.09
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	0.4	0.8	0.4	0.2
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		14.8	13.5	13.3	16.6	15	15.2	15.6	15.8	14.2	14
Manganese (Mn)	GPS (0.2)	0.1	0.09	0.09	0.11	0.11	0.1	0.12	0.1	0.09	0.09
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.72	7.73	7.74	7.68	7.64	7.65	7.72	7.76	7.81	7.7
pH (Field) *(Std. Units)*		7.4	7.28	7.09	7	7.9	7.8	7.59	7.42	7.47	7.36
Potassium (K)		4.4	4.1	3.6	4.5	4.2	4.4	4.6	4.3	4.1	4.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9	11.9	12.3	8.4	12.5	11.4	10.6	10.6	10.2	10.1
Radium 226 *(pCi/L)*		3.2	3.8	3.2	2.8	3.5	3	4	2.3	3.2	2.5
Radium 228 *(pCi/L)*		5.8	8.1	9.1	5.6	9	8.4	6.6	8.3	7	7.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		10.8	9.7	9.8	10.6	10.1	10	10	10.8	10.3	9.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		48.5	46.3	45.4	56	51.3	51.2	53.4	54.6	49.9	47.8
TDS @ 180° *C.*	GPS (500)	911	891	834	990	897	929	831	904	835	845
Sulfate (SO4)		494	470	443	522	490	524	500	498	483	485
Temperature *(C)*		9.8	12.4	9.8	13.8	9.1	9.7	9.3	10	8.5	11.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.05	0.1	0.02	0.04
Uranium, natural *(pCi/L)*	GPS (36)	30.7	28.6	26.4	31.1	30.7	30.7	32.8	26.2	31.1	24.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

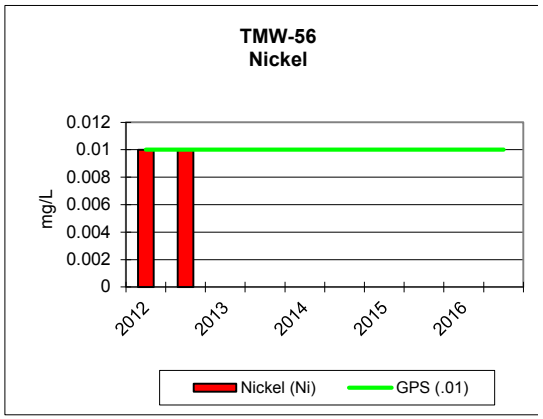

TMW-56
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-56
Uranium, Natural
pCi/L
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)


TMW-56
TDS
mg/L
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

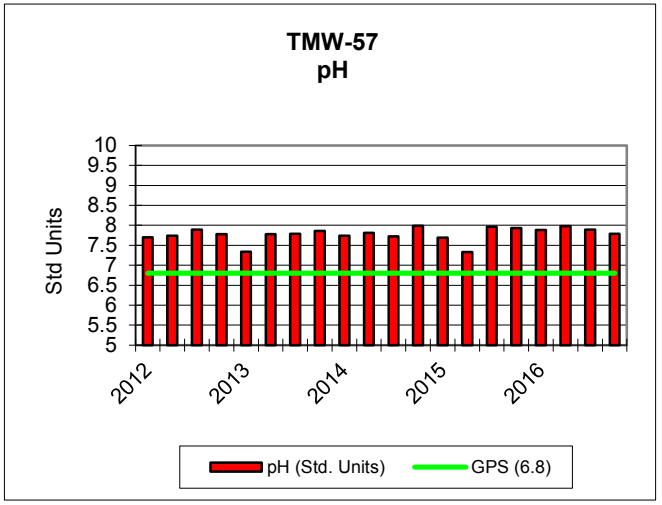

TMW-56
Gross Alpha
pCi/L
25
20
15
10
5
0
2012
2013
2014
2015
2016
Gross Alpha (pCi/L)
GPS (15)

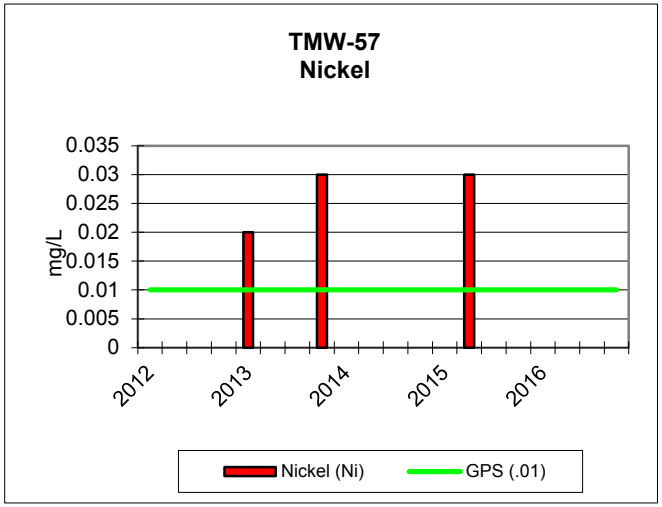

TMW-56
Combined Ra226 & Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

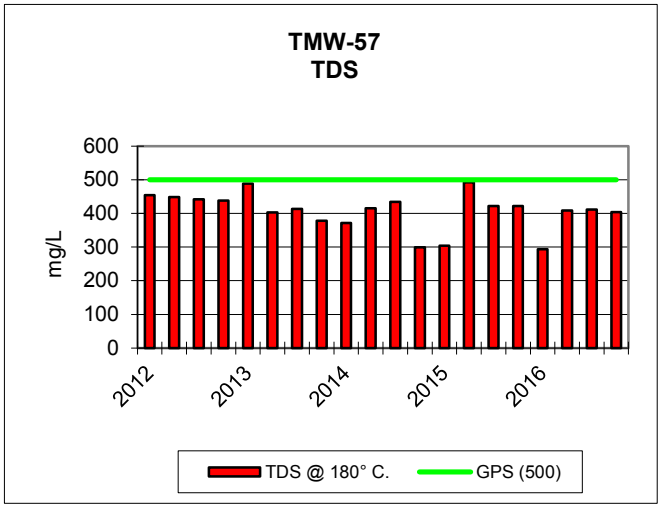

TMW-56
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

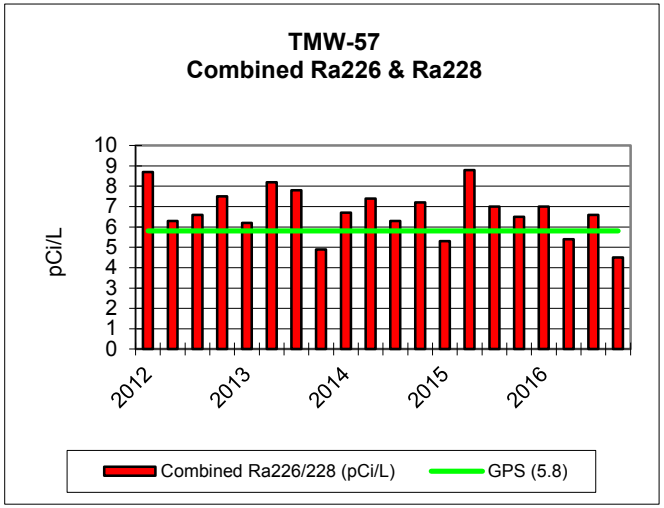
KENNECOTT URANIUM COMPANY															
TMW-57		2012				2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/10/2012	7/10/2012	10/22/2012	1/22/2013	4/2/2013	7/9/2013	10/1/2013	3/18/2014	4/1/2014	7/1/2014	10/15/2014	1/14/2015	4/8/2015
TDS A/C Balance *(dec. %)*		0.844	-1.63	2.12	4.69	2.85	-2.89	1.77	-1.47	0.55	1.42	1.51	0.75	0.42	0.68
Alk-CaC03		96	104	101	106	100	105	105	122	105	105	114	101	102	92
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		117	126	123	129	122	128	128	149	128	128	139	124	124	112
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		92.1	88.6	90.5	99.7	106	79.3	88.4	77.3	74.3	86.1	87.8	56.4	60.4	95.3
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		9	9	8	8	7	8	7	7	7	8	8	5	5	9
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.001	0.002	0.002	0.002	0.016	<0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.018
Cond *(umhos/cm)*		674	647	644	630	694	603	623	548	571	612	627	445	480	665
Cond-Field *(umhos/cm)*		720	718	677	661	744	694	743	593	676	688	666	481	521	
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.2	0.1	0.1	<0.1	0.2	0.2	0.1	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.7	1.3	1.5	2	2.2	2.2	1.6	1.5	2.1	2.5	1.8	2	4.9	8.7
Iron (Fe)	GPS (0.6)	0.13	0.1	0.15	<0.05	1.4	0.1	0.09	0.08	0.13	0.06	<0.05	0.13	0.23	1.19
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	-0.2
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		6.7	6.1	6.4	6.9	11.1	5.6	6.3	5	5.4	6.3	6.2	3.4	4.1	10.7
Manganese (Mn)	GPS (0.2)	0.07	0.07	0.07	0.08	0.26	0.06	0.07	0.07	0.06	0.07	0.07	0.05	0.07	0.28
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	0.03
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.7	7.74	7.89	7.78	7.34	7.78	7.79	7.86	7.74	7.81	7.72	7.99	7.69	7.33
pH (Field) *(Std. Units)*		7.96	7.4	7.8	7.61	7.13	7.9	7.8	7.76	7.5	8.1	8	7.92	8.24	7.21
Potassium (K)		2.8	2.7	3	3	3	2.7	3.2	2.7	2.7	2.9	3	2.4	2.6	2.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	8.7	6.3	6.6	7.5	6.2	8.2	7.8	4.9	6.7	7.4	6.3	7.2	5.3	8.8
Radium 226 *(pCi/L)*		1.9	1.2	1.4	1.7	1.8	1.9	2	1.2	1.9	1.9	1.4	1.2	1.6	2.5
Radium 228 *(pCi/L)*		6.8	5.1	5.2	5.8	4.4	6.3	5.8	3.7	4.8	5.5	4.9	6	3.7	6.3
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13	13.6	14.5	14.8	17.7	14.1	14.4	13.9	13.3	14.2	13.9	14.7	14.6	16.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.4	34.5	35.1	36.1	33.7	34.3	37.2	34.9	34.1	36.4	36.2	31.5	31.9	34.8
TDS @ 180° *C.*	GPS (500)	454	449	442	438	489	403	413	378	372	415	434	299	304	492
Sulfate (SO4)		215	211	198	201	246	193	196	163	161	191	204	116	127	241
Temperature *(C)*		8.7	11.9	11.8	11	8.1	9.3	13.7	13.8	9.6	9.4	10.3	12	7.8	9.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.06	-0.02
Uranium, natural *(pCi/L)*	GPS (36)	3.7	3.7	3.4	4	3.3	3.3	3.7	3.6	4.2	4.8	4.2	2.8	2.2	1.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01

KENNECOTT URANIUM COMPANY							
TMW-57				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	7/13/2015	10/26/2015	1/4/2016	4/18/2016	7/5/2016	10/4/2016
TDS A/C Balance *(dec. %)*		0.21	0.46	3.34	2.28	2.69	3.21
Alk-CaC03		108	107	119	99	106	103
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		132	130	145	121	130	126
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		89	83.5	59.1	83.3	84.7	80
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		8	8	5	7	8	8
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.001	<0.001	<0.001	<0.001	0.001	0.001
Cond *(umhos/cm)*		624	597	452	588	605	603
Cond-Field *(umhos/cm)*		659	672	460	652	758	654
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	5.4	9.8	1.9	6.8	1.7	6.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	0.1	<0.05	<0.05	0.11
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.3	0.8	0.6	0.21	1.5	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		5.9	6	3.6	6	6	5.7
Manganese (Mn)	GPS (0.2)	0.07	0.06	0.04	0.06	0.06	0.06
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	0.05	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.96	7.93	7.88	7.98	7.89	7.79
pH (Field) *(Std. Units)*		7.79	7.46	7.69	7.63	6.78	7.86
Potassium (K)		2.9	3.1	2.7	2.8	2.9	2.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	7	6.5	7	5.4	6.6	4.5
Radium 226 *(pCi/L)*		1.9	1.5	1.2	1.5	1.4	1.4
Radium 228 *(pCi/L)*		5.1	5	5.8	3.9	5.2	3.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.5	14	13.6	14.2	13.7	13.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		36.1	36.6	31.6	35.4	34.7	35.2
TDS @ 180° *C.*	GPS (500)	422	422	294	409	412	404
Sulfate (SO4)		200		119	182	174	201
Temperature *(C)*		10.8	9.6	8.8	9.4	13.7	10.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.03	0.1	-0.003	0.1	0.006	0.05
Uranium, natural *(pCi/L)*	GPS (36)	3.8	3.7	2.8	4	3.5	3.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.01	<0.01	<0.01	<0.01


TMW-57
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

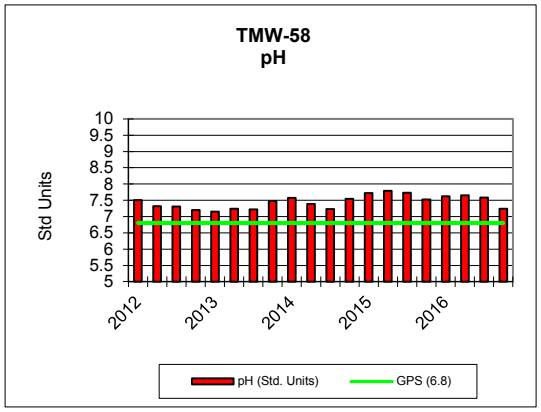

TMW-57
Nickel
mg/L
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

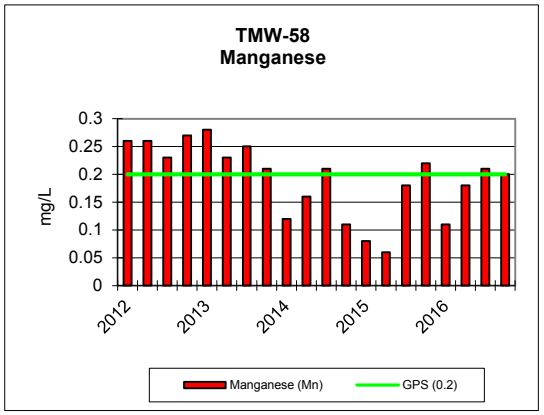

TMW-57
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

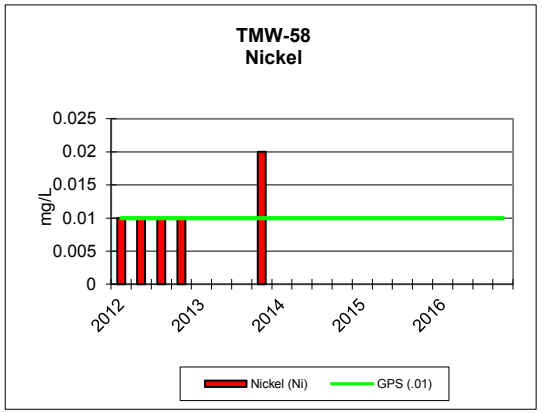

TMW-57
Combined Ra226 & Ra228
pCi/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

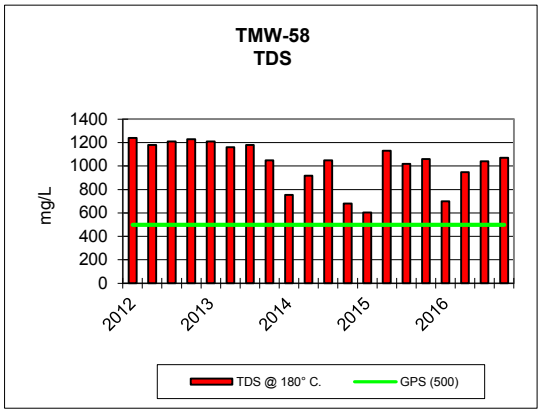
KENNECOTT URANIUM COMPANY																
TMW-58		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/23/2012	7/10/2012	10/22/2012	1/14/2013	4/2/2013	7/9/2013	10/1/2013	3/12/2014	4/1/2014	7/1/2014	10/15/2014	1/14/2015	4/8/2015	7/13/2015
TDS A/C Balance *(dec. %)*		-0.417	-2.66	1.25	4	4.36	-3.76	1.51	-4.7	0.07	1.94	0.47	2.42	2.83	0.74	2.13
Alk-CaC03		188	189	193	207	204	204	193	175	116	149	171	131	110	115	167
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		229	231	235	253	248	248	236	214	142	182	209	160	135	140	204
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		276	251	264	298	302	254	268	216	156	198	228	143	123	243	217
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		43	41	38	42	41	42	38	33	22	28	32	20	18	48	34
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	0.001	0.001	0.002	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1640	1450	1520	1500	1460	1480	1220	1320	1010	1190	1340	926	880	1400	1310
Cond-Field *(umhos/cm)*		1644	1566	1556	1531	1553	1590	1545	1395	1079	1292	1358	990	885		1360
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	<0.1	<0.1	0.1	0.1	<0.1	0.1	0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	4.3	4.2	3.7	5.9	3.5	5.3	3.6	6.5	4.3	5.9	4.2	5.5	37.4	61.5	13.9
Iron (Fe)	GPS (0.6)	0.83	0.3	0.75	0.65	0.8	0.79	0.8	0.13	0.23	<0.05	0.52	0.44	0.18	0.16	0.48
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.2	0.06	-0.6
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		21.7	20.4	20.6	22.6	23	19.7	20.8	15.2	12.5	15.8	17.6	10	8.8	25.7	17.2
Manganese (Mn)	GPS (0.2)	0.26	0.26	0.23	0.27	0.28	0.23	0.25	0.21	0.12	0.16	0.21	0.11	0.08	0.06	0.18
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.51	7.32	7.31	7.2	7.15	7.24	7.22	7.48	7.58	7.39	7.23	7.55	7.72	7.79	7.73
pH (Field) *(Std. Units)*		6.83	6.9	7.1	7.1	7.58	7	7	7.57	7.4	7.4	7.6	7.11	8.43	7.25	7.18
Potassium (K)		4.3	4.4	4.6	4.8	4.9	4.3	4.8	3.8	3.6	4.1	4.3	3.4	3.4	5.2	4.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	16.7	14.5	13	15	12.1	15.3	18.7	14.9	11.4	12.9	11.3	17.1	11	15	12.1
Radium 226 *(pCi/L)*		4.6	3.5	3.8	4	3.7	2.8	3.4	3.6	3.1	4.3	2.6	3.7	4.8	5.7	2.9
Radium 228 *(pCi/L)*		12.1	11	9.2	11	8.4	12.5	15.3	11.3	8.3	8.6	8.7	13.4	6.2	9.3	9.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.015	<0.001
Silica (SiO2)		15.1	14.1	15.8	17.1	18	16	16.2	14.7	12.9	14.7	15.1	13.9	12.7	9.3	15.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		60.3	59.8	56.1	63.9	63.9	58.9	63.3	48.6	47.5	54	56.9	45.5	43	56.8	57.1
TDS @ 180° *C.*	GPS (500)	1240	1180	1210	1230	1210	1160	1180	1050	754	917	1050	680	603	1130	1020
Sulfate (SO4)		646	618	579	614	625	626	598	538	387	449	540	351	318	646	537
Temperature *(C)*		9.7	11.1	11.2	10.5	7.7	9.5	13.2	13.8	10.2	10.3	10.5	11.9	7.4	10.8	12.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	0.1	0.07	0.1
Uranium, natural *(pCi/L)*	GPS (36)	10.1	9.5	9.2	10.6	9.6	10.5	10.2	10	11.2	11	10	6.9	7.6	62.8	9.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.02	<0.01	<0.01	<0.01	<0.01

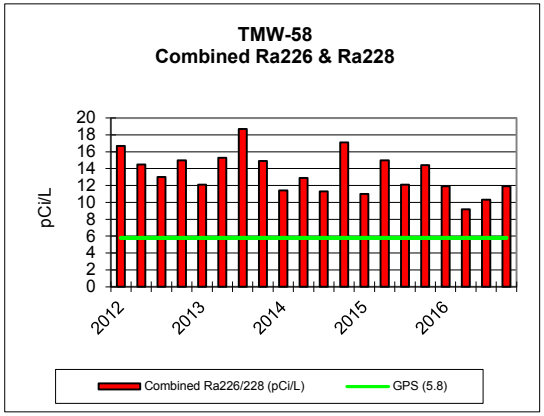
KENNECOTT URANIUM COMPANY						
TMW-58			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	11/3/2015	1/4/2016	4/18/2016	7/6/2016	10/4/2016
TDS A/C Balance *(dec. %)*		0.52	1.09	0.55	1.33	4.94
Alk-CaC03		176	118	141	168	169
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		215	144	172	206	207
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		245	146	207	229	225
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		36	21	31	36	37
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	0.002
Cond *(umhos/cm)*		1390		1210	1240	1400
Cond-Field *(umhos/cm)*		1268	975	1360	1569	1502
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	8.2	15	15.9	5	26.7
Iron (Fe)	GPS (0.6)	0.5	0.27	0.5	0.5	0.71
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.4	<1	<1	<1	<1
Lead (Pb)		<0.01	0.2	0.25	1.4	0.3
Magnesium (Mg)		18.3	10.7	16.3	17.8	17.9
Manganese (Mn)	GPS (0.2)	0.22	0.11	0.18	0.21	0.2
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	0.15	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.53	7.62	7.65	7.59	7.24
pH (Field) *(Std. Units)*		6.95	7.5	7.27	6.66	6.95
Potassium (K)		4.2	3.4	4	4.3	4.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	14.4	11.9	9.2	10.3	11.9
Radium 226 *(pCi/L)*		3.1	4.2	3.5	2.4	2.7
Radium 228 *(pCi/L)*		11.3	7.7	5.7	7.9	9.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.9	13.6	15	14.2	14.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		57.3	46.2	53.8	56.7	56.9
TDS @ 180° *C.*	GPS (500)	1060	700	948	1040	1070
Sulfate (SO4)		559	362	493	513	597
Temperature *(C)*		10.7	9	9.2	12.1	10
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.1	0.09	0.07	0.03	0.08
Uranium, natural *(pCi/L)*	GPS (36)	9.9	17.5	9.2	8.9	8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.02	0.04	<0.01	<0.01

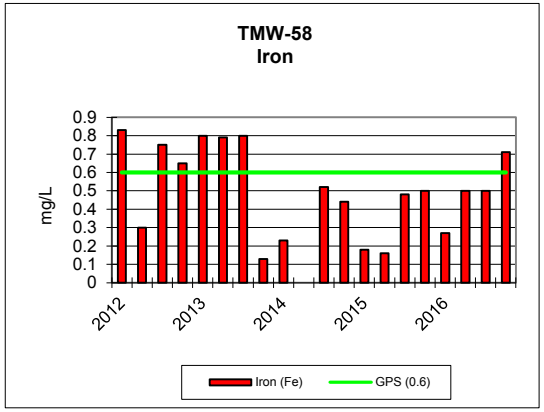

TMW-58
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

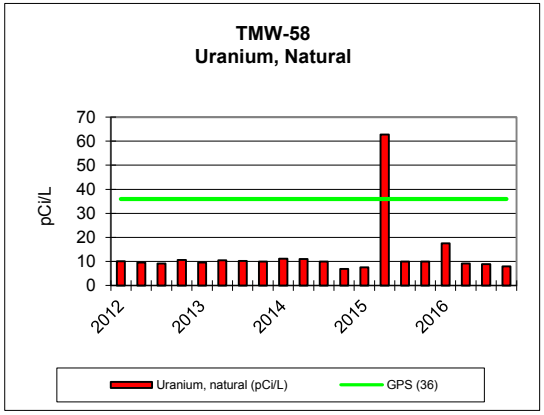

TMW-58
Manganese
mg/L
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)


TMW-58
Nickel
mg/L
0.025
0.02
0.015
0.01
0.005
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)


TMW-58
TDS
mg/L
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

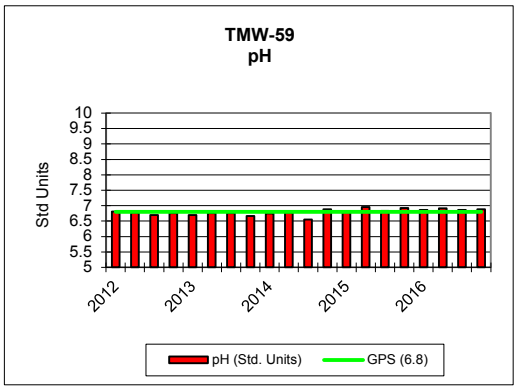

TMW-58
Combined Ra226 & Ra228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

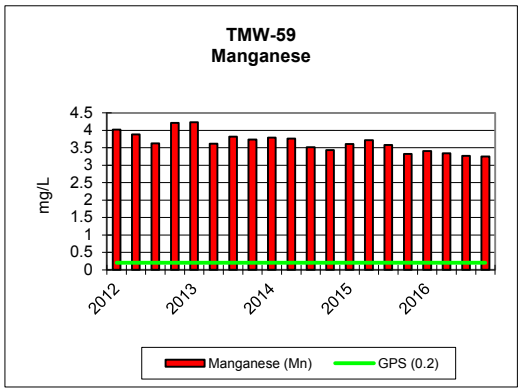

TMW-58
Iron
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

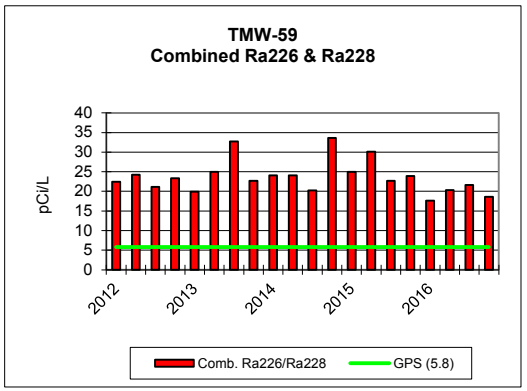

TMW-58
Uranium, Natural
pCi/L
70
60
50
40
30
20
10
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

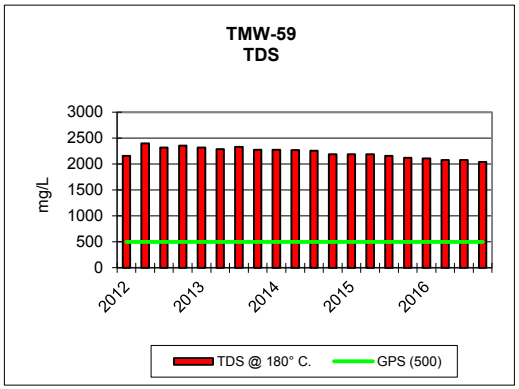
KENNECOTT URANIUM COMPANY																
TMW-59		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/10/2012	7/10/2012	10/22/2012	1/14/2013	4/2/2013	7/9/2013	10/1/2013	1/21/2014	4/1/2014	7/1/2014	10/15/2014	1/14/2015	4/8/2015	7/8/2015
TDS A/C Balance *(dec. %)*		-4.23	-3.96	-3.34	-1.75	-1.17	-4.59	-1.35	-3.49	-1.89	4.62	1.29	2.74	2.06	1.04	0.9
Alk-CaC03		266	270	244	286	282	286	250	269	270	277	253	255	251	254	273
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.002	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		325	329	297	349	343	349	305	329	330	338	309	311	306	310	333
Boron (B)		0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		446	448	442	488	481	459	456	442	449	448	488	452	441	454	442
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		78	78	77	82	79	84	77	77	78	79	75	71	79	85	73
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.008	0.008	0.007	0.008	0.008	0.007	0.006	0.007	0.006	0.007	0.006	0.009	0.006	0.005	0.006
Cond *(umhos/cm)*		2750	2680	2630	2700	2590	2590	2610	2490	2580	2650	2530	2490	2570	2440	2410
Cond-Field *(umhos/cm)*		278	2900	2830	2790	2920	2910	2890	2780	2890	2870	2700	2690	2600		2680
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	3.9	3.9	3.8	4.9	3.6	5.7	4.9	6.9	7.1	8.3	7.1	6.3	50.4	47	27.7
Iron (Fe)	GPS (0.6)	49.9	44.9	43.9	47.2	47.3	44.4	46.6	41.5	43.5	40.4	40.9	39.5	42.5	42.7	36.1
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.9	0.7	0.3	0.6	-0.3	-0.2	-0.08
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		64.1	62.7	63.9	66.9	69.6	65.1	65.3	53.9	64.6	57	63.3	61.4	63.1	64.2	58.4
Manganese (Mn)	GPS (0.2)	4.02	3.88	3.63	4.21	4.23	3.62	3.82	3.74	3.79	3.76	3.52	3.43	3.61	3.72	3.58
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	6.81	6.78	6.7	6.76	6.7	6.76	6.76	6.66	6.75	6.78	6.55	6.88	6.79	6.95	6.83
pH (Field) *(Std. Units)*		6.84	6.7	6.7	6.69	6.77	6.6	6.6	6.88	6.8	6.9	6.8	7.26	7.17	6.81	6.64
Potassium (K)		6.6	6.9	8.4	7.4	7.5	7.2	7.7	6.8	7.3	7.1	7.2	6.7	7.2	7.3	8.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	22.4	24.2	21.1	23.3	19.9	25	32.7	22.7	24.1	24.1	20.2	33.6	25	30.1	22.7
Radium 226 *(pCi/L)*		4.2	4.2	3.9	3.9	4.4	4.6	3.8	3.9	3.7	4.7	3.6	4.3	6.7	5.7	6.5
Radium 228 *(pCi/L)*		18.2	20	17.2	19.4	15.5	20.4	28.9	18.8	20.4	19.4	16.6	29.3	18.3	24.4	16.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16.6	18.3	17.4	18.6	18.7	17.8	18.6	17.8	18.5	20.1	17.7	17.7	18.2	18.1	19.3
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		90.2	92.6	83.3	95.6	97.4	97	99	82	96.7	83.7	95.9	91.9	95.3	96.5	84.7
TDS @ 180° *C.*	GPS (500)	2160	2400	2320	2360	2320	2290	2330	2280	2280	2270	2260	2190	2190	2190	2160
Sulfate (SO4)		1290	1280	1260	1310	1300	1330	1270	1190	1240	1250	1240	1100	1230	1230	1140
Temperature *(C)*		11	11.9	11.8	10.6	6.5	10.7	14	11.1	9.3	9.3	10.4	10.6	8	9.9	12.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.08	0.05	0.07	0.09	0.1	0.2	0.2
Uranium, natural *(pCi/L)*	GPS (36)	6.8	6.4	6.8	7.2	6.3	7	7	7.8	7.7	8.5	8	7.7	8.3	7.3	8.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.04	0.02	<0.01	<0.01	<0.01	<0.01

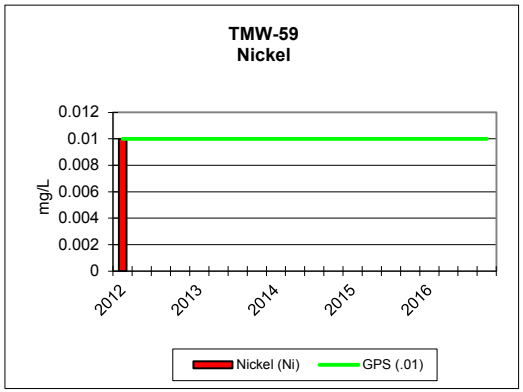
KENNECOTT URANIUM COMPANY						
TMW-59			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	11/2/2015	1/5/2016	4/21/2016	7/6/2016	10/3/2016
TDS A/C Balance *(dec. %)*		0.07	0.39	1.2	0.57	3.01
Alk-CaC03		276	266	249	251	255
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		336	325	303	307	311
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		440	442	424	429	406
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		73	74	70	73	73
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.005	0.005	0.005	0.004	0.007
Cond *(umhos/cm)*		2480	2370	2350	2240	2440
Cond-Field *(umhos/cm)*		2700	2600	2710	2840	2630
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.3
Gross Alpha *(pCi/L)*	GPS (15)	12	21.3	12.2	7	13.6
Iron (Fe)	GPS (0.6)	39	39.4	37	33.8	34.8
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.5	<1	<1	<1	<1
Lead (Pb)		<0.01	0.08	0.14	1.2	0.3
Magnesium (Mg)		60	60.5	62.3	59.3	60.2
Manganese (Mn)	GPS (0.2)	3.32	3.41	3.34	3.27	3.25
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	6.92	6.86	6.91	6.86	6.88
pH (Field) *(Std. Units)*		6.52	6.86	6.78	6.26	6.73
Potassium (K)		7.2	6.7	7	7.1	6.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	23.9	17.6	20.3	21.6	18.6
Radium 226 *(pCi/L)*		3.5	3.5	5.9	3.2	3.5
Radium 228 *(pCi/L)*		20.4	14.1	14.4	18.4	15.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		17.5	18.1	18.1	17	17.4
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		93.3	91.5	95.5	91.4	94.9
TDS @ 180° *C.*	GPS (500)	2120	2110	2080	2080	2040
Sulfate (SO4)		1130	1150	1100	1100	1160
Temperature *(C)*		11.2	9.5	12.5	12.5	10.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.2	0.0008	0.05	0.1	0.02
Uranium, natural *(pCi/L)*	GPS (36)	8.2	8.4	8.4	8.5	8.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01

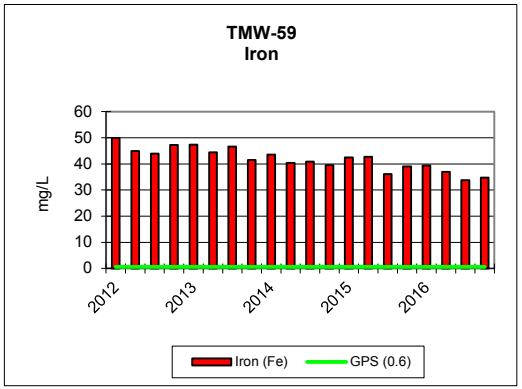

TMW-59
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

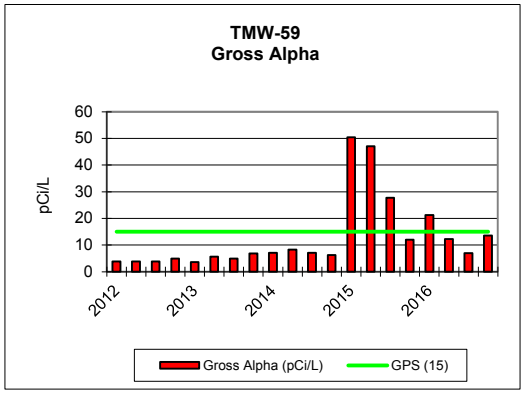

TMW-59
Manganese
mg/L
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)


TMW-59
Combined Ra226 & Ra228
pCi/L
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Comb. Ra226/Ra228
GPS (5.8)

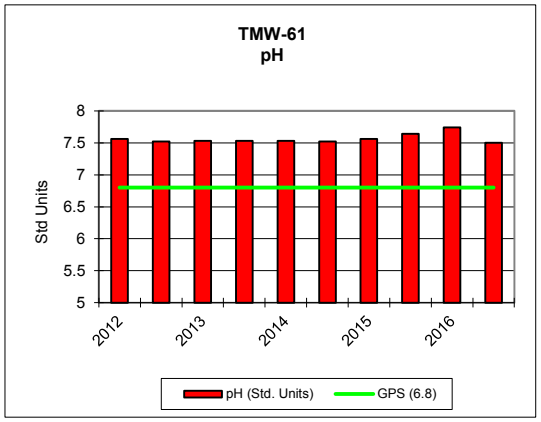

TMW-59
TDS
mg/L
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

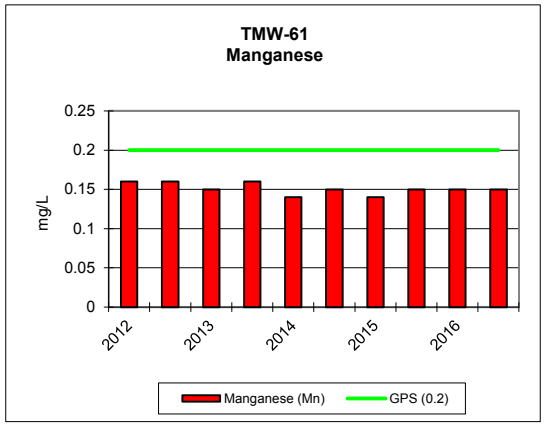

TMW-59
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

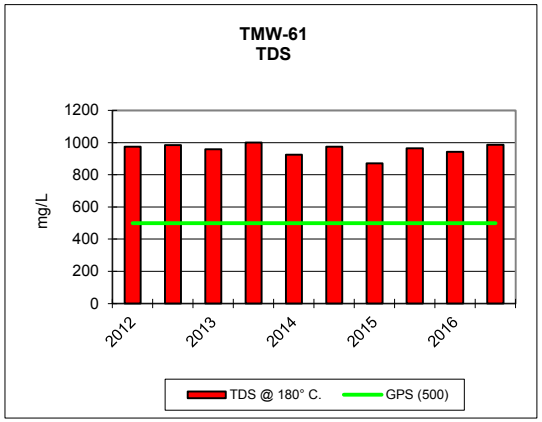

TMW-59
Iron
mg/L
60
50
40
30
20
10
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

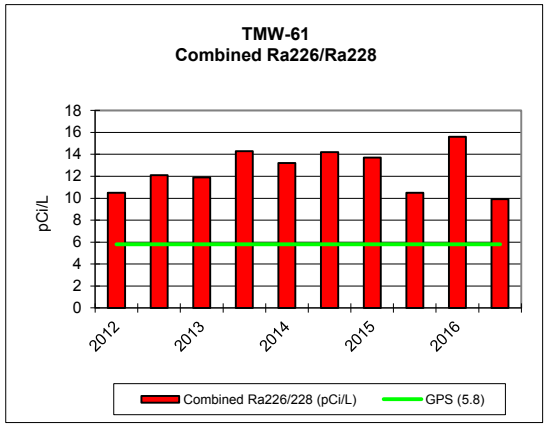

TMW-59
Gross Alpha
pCi/L
60
50
40
30
20
10
0
2012
2013
2014
2015
2016
Gross Alpha (pCi/L)
GPS (15)

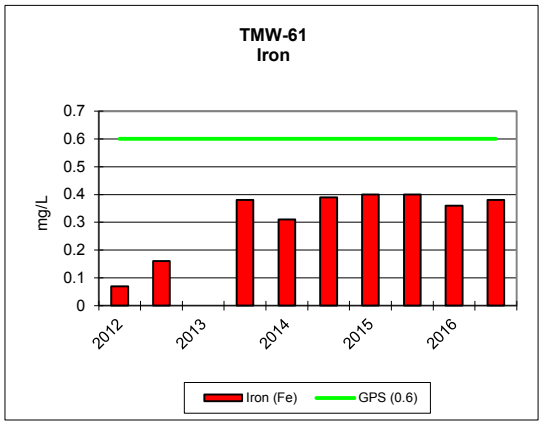
KENNECOTT URANIUM COMPANY											
TMW-61		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/16/2012	9/17/2012	3/4/2013	8/6/2013	2/11/2014	9/5/2014	3/17/2015	9/2/2015	3/29/2016	9/28/2016
TDS A/C Balance *(dec. %)*		1.31	-2.86	2.57	1.46	1.77	1.98	0.43	1.1	0.43	2.3
Alk-CaC03		161	171	167	167	165	169	157	161	159	166
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		197	209	204	204	202	206	191	197	194	202
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		219	208	209	224	196	216	192	218	207	212
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	ND	ND
Chloride (Cl)		23	25	21	25	24	29	25	27	27	28
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1240	1280	1220	1280	1200	1250	1150	1250	1200	1300
Cond-Field *(umhos/cm)*		1336	1288	1221	1280	1220	1289	2070	1295	1350	1395
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	4.5	4.1	3.5	4	5	4.2	6.8	16.1	7.5	7
Iron (Fe)	GPS (0.6)	0.07	0.16	<0.05	0.38	0.31	0.39	0.4	0.4	0.36	0.38
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	1.1	0.3	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		12.5	11.8	12.2	13.2	11.4	12.5	11.3	12.8	12.3	12.8
Manganese (Mn)	GPS (0.2)	0.16	0.16	0.15	0.16	0.14	0.15	0.14	0.15	0.15	0.15
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3.6	ND
pH *(Std. Units)*	GPS (6.8)	7.56	7.52	7.53	7.53	7.53	7.52	7.56	7.64	7.74	7.5
pH (Field) *(Std. Units)*		7.4	7.12	7.2	7.23	7	7.3	7.41	7.14	7.28	7.36
Potassium (K)		4.7	4.2	4.2	4.6	3.8	4.2	4.1	4.4	4	4.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	10.5	12.1	11.9	14.3	13.2	14.2	13.7	10.5	15.6	9.9
Radium 226 *(pCi/L)*		3.1	3.8	3.3	3.8	3.1	4.7	3.9	3.3	3.9	3
Radium 228 *(pCi/L)*		7.4	8.3	8.6	10.5	10.1	9.5	9.8	7.2	11.7	6.9
Selenium (Se)	GPS (.01)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		20.5	19.7	18.5	18.9	17.4	17.7	17.6	18.3	17.6	16.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		53.1	50.4	53.8	57.1	50.5	54.4	51.2	56.8	52.3	53.5
TDS @ 180° *C.*	GPS (500)	974	985	958	1000	924	975	871	965	942	987
Sulfate (SO4)		486	497	444	500	455	512	437	490	477	510
Temperature *(C)*		9.7	12.7	9.5	9.2	9	9.6	9.5	9.7	9	14.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.2	0.5	0.04
Uranium, natural *(pCi/L)*	GPS (36)	2.2	2.2	1.5	1.7	1.5	1.7	1.5	1.7	1.9	10.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01


TMW-61
pH
Std Units
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

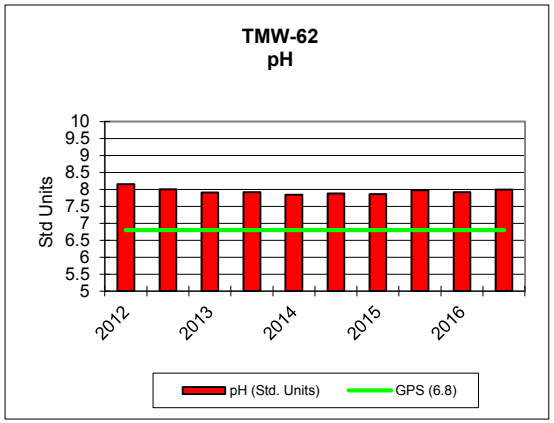

TMW-61
Manganese
mg/L
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

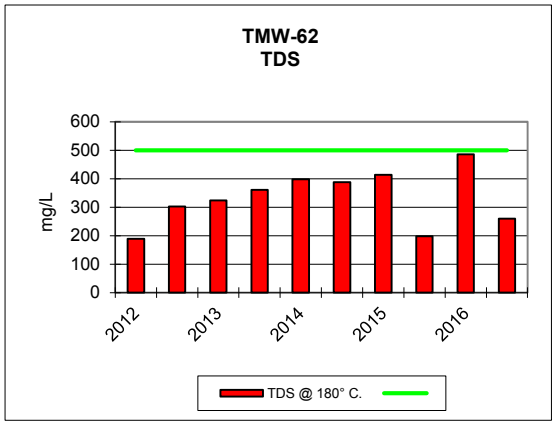

TMW-61
TDS
mg/L
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

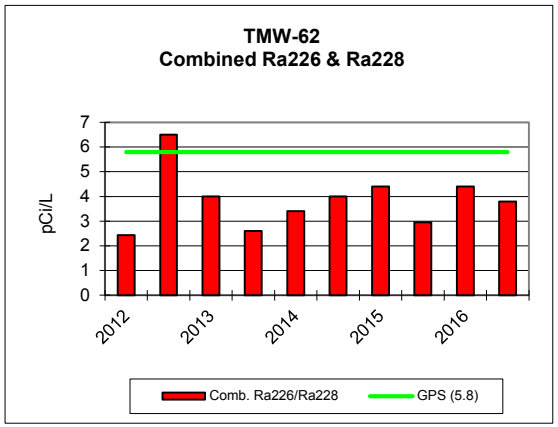

TMW-61
Combined Ra226/Ra228
pCi/L
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-61
Iron
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

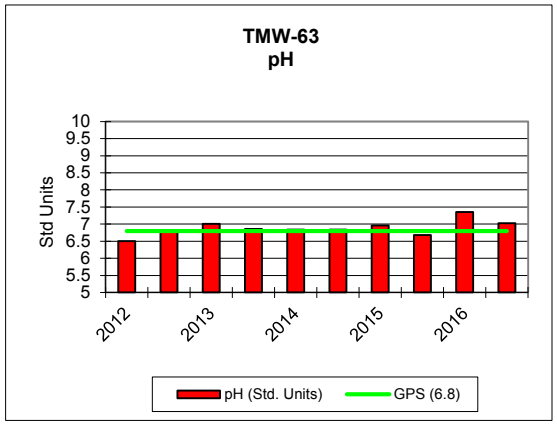
KENNECOTT URANIUM COMPANY											
TMW-62		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/12/2012	4/22/2013	8/19/2013	5/19/2014	9/26/2014	5/11/2015	12/21/2015	5/4/2016	11/7/2016
TDS A/C Balance *(dec. %)*		-4.91	-2.72	-1.85	0.686	0.97	1.29	4.83	2.77	2.59	0.15
Alk-CaC03		87	94	103	105	104	102	114	96	94	98
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		106	115	126	128	127	125	139	118	115	120
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		21.6	47.5	60.3	74.6	80.4	78.6	81.7	32.4	94.9	45.7
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		3	5	5	5	6	5	6	3	7	4
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		285	451	499	551	589	580	602	322	678	401
Cond-Field *(umhos/cm)*		307	481	575	597	656	644	376	346	772	479
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	0.5	4.8	0.5	0.9	1.5	2.2	3.6	6.9	4	1.9
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.36	1.5
Magnesium (Mg)		2	4.2	5.1	6.6	7.1	7.1	6.2	2.9	8.6	3.9
Manganese (Mn)	GPS (0.2)	0.02	0.03	0.04	0.05	0.05	0.06	0.05	0.03	0.06	0.03
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.15	8	7.91	7.92	7.84	7.88	7.86	7.97	7.92	7.99
pH (Field) *(Std. Units)*		8.2	7.33	7.9	8.1	8.2	8.2	7.88	8.11	7.85	8.44
Potassium (K)		1.3	1.8	2.1	2.3	2.2	2.2	2	1.8	2.3	2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.43	6.5	4	2.6	3.4	4	4.4	2.95	4.4	3.8
Radium 226 *(pCi/L)*		0.73	4.7	1.1	1.2	1.4	1.7	1.1	0.55	1.6	1
Radium 228 *(pCi/L)*		1.7	1.8	2.9	1.4	2	2.3	3.3	2.4	2.8	2.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.5	11.2	11.4	12	11.7	11.9	11.6	11.4	11.9	11.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		31.2	35.5	34	34.5	34.8	34.6	30.2	29.2	39.3	34.1
TDS @ 180° *C.*	GPS (500)	189	302	324	361	398	388	414	198	485	260
Sulfate (SO4)		51	120	141	168	194	193	197	65	229	99
Temperature *(C)*		10.9	9.8	9	12.6	9.8	10.9	10.4	8.3	9.3	11.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.06	0.1
Uranium, natural *(pCi/L)*	GPS (36)	2.7	4.3	6.5	7	7.2	6.4	6.3	3.2	6.6	4.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

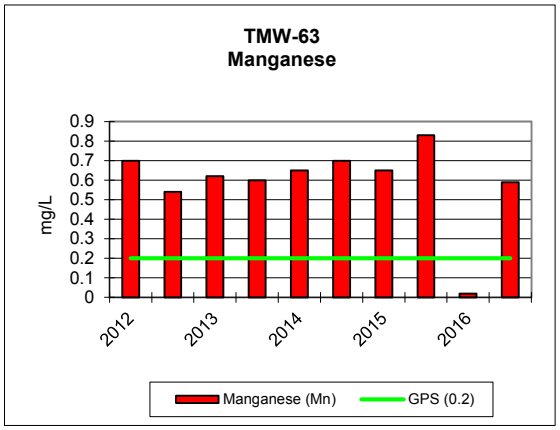

TMW-62
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

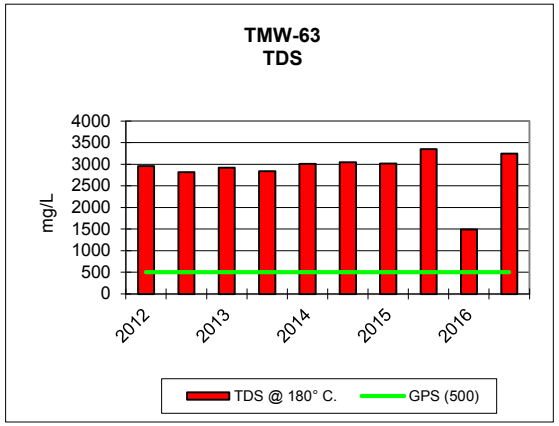

TMW-62
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.

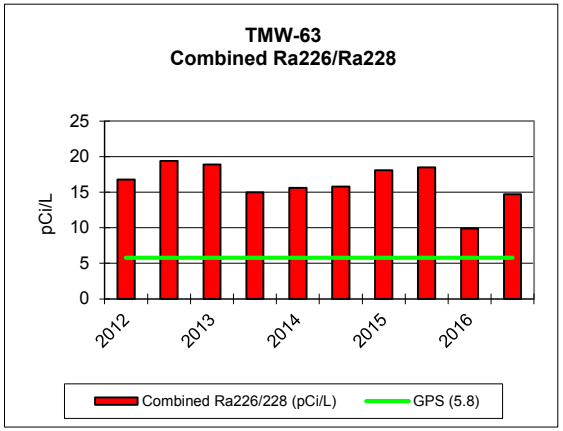

TMW-62
Combined Ra226 & Ra228
pCi/L
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Comb. Ra226/Ra228
GPS (5.8)

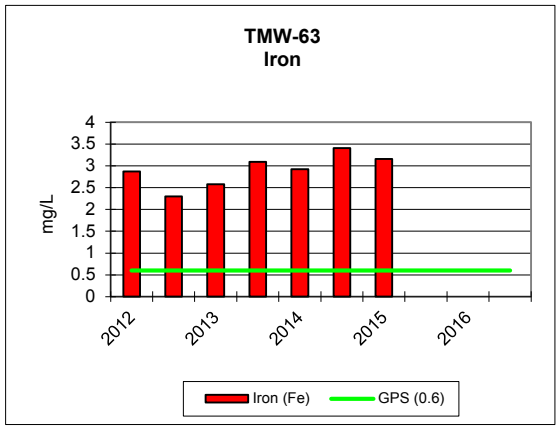
KENNECOTT URANIUM COMPANY											
TMW-63		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/2/2012	11/12/2012	4/29/2013	8/20/2013	5/20/2014	9/26/2014	5/11/2015	12/21/2015	5/3/2016	8/30/2016
TDS A/C Balance *(dec. %)*		-1.65	4.67	-0.856	-1.48	2.69	2.71	3.65	4.8	0.62	2.5
Alk-CaC03		548	498	513	514	507	526	476	676	89	678
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		669	608	626	627	619	642	581	825	109	827
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		676	752	692	673	693	722	708	799	339	758
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		163	130	146	130	167	172	170	239	82	221
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	0.002	0.001	0.002	0.002	0.001	0.001	0.002	<0.001	<0.001
Cond *(umhos/cm)*		3280	3100	3280	3100	3260	3400	3320	3690	1810	3690
Cond-Field *(umhos/cm)*		3300	3340	3420	3360	1813	3350	3510	3600	1837	3930
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.3	8.4	6.4	3.3	5.4	9.2	20.5	37.2	10.8	6.3
Iron (Fe)	GPS (0.6)	2.87	2.3	2.58	3.09	2.92	3.41	3.16	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.2	0.4	0.2	0.05	0.4	1.1	0.2	0.6	<0.2	<0.2
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.3	0.2
Magnesium (Mg)		46	51.6	51.3	49.1	51.1	52.3	42.9	50	19.6	55
Manganese (Mn)	GPS (0.2)	0.7	0.54	0.62	0.6	0.65	0.7	0.65	0.83	0.02	0.59
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	6.5	6.77	7.01	6.86	6.84	6.84	6.96	6.68	7.35	7.03
pH (Field) *(Std. Units)*		6.89	6.87	6.7	6.7	6.8	6.6	6.52	6.83	7.28	6.38
Potassium (K)		7	7.7	7	6.8	7.2	7.3	7.1	7.3	4.3	8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	16.8	19.4	18.9	15	15.6	15.8	18.1	18.5	9.9	14.7
Radium 226 *(pCi/L)*		4.5	6.8	4.3	2.7	3.8	4.9	3.2	4.5	6.2	2.9
Radium 228 *(pCi/L)*		12.3	12.6	14.6	12.3	11.8	10.9	14.9	14	3.7	11.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Silica (SiO2)		22	20.4	22.2	22.1	20.5	21.3	20.5	23.1	9.9	22.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		103	108	110	107	113	115	92.6	112	67.4	128
TDS @ 180° *C.*	GPS (500)	2960	2820	2920	2840	3010	3050	3020	3350	1490	3250
Sulfate (SO4)		1350	1390	1450	1430	1510	1570	1540	1620	826	1480
Temperature *(C)*		11.4	9.8	18.2	15.2	13	13	12.5	9.9	13.6	14.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	0.02	0.02	0.02	0.03	0.03	0.007
Uranium, natural *(pCi/L)*	GPS (36)	3	1.9	7.2	1.7	2.3	1.3	1.5	3	878	2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.06	0.03	0.2	0.02	0.03	0.01	<0.01	0.03	0.01	0.02


TMW-63
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

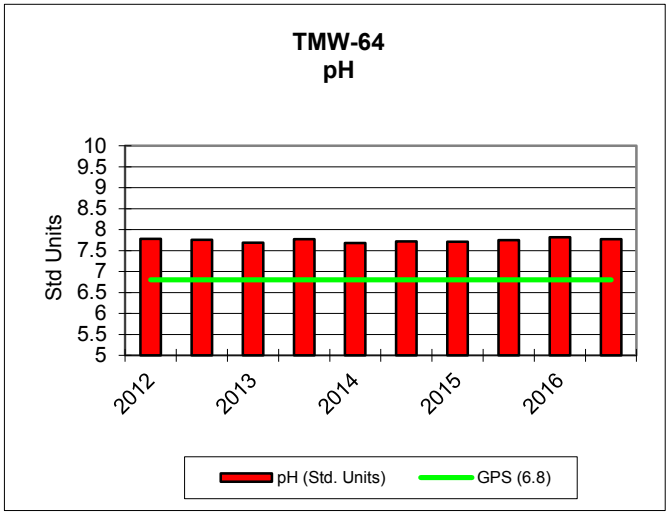

TMW-63
Manganese
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

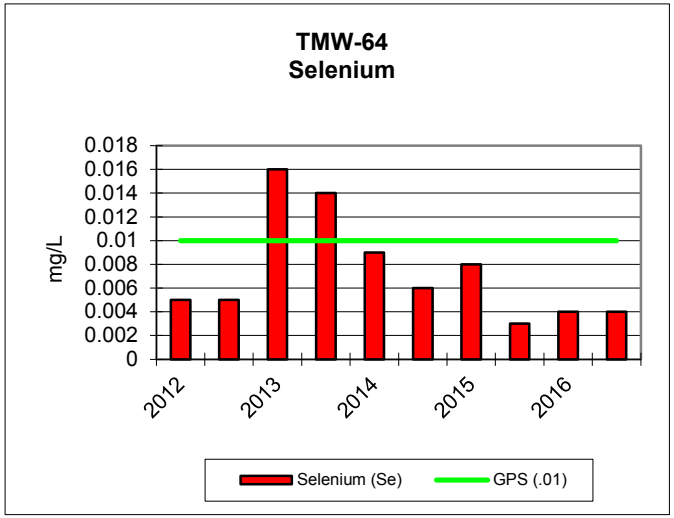

TMW-63
TDS
mg/L
4000
3500
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

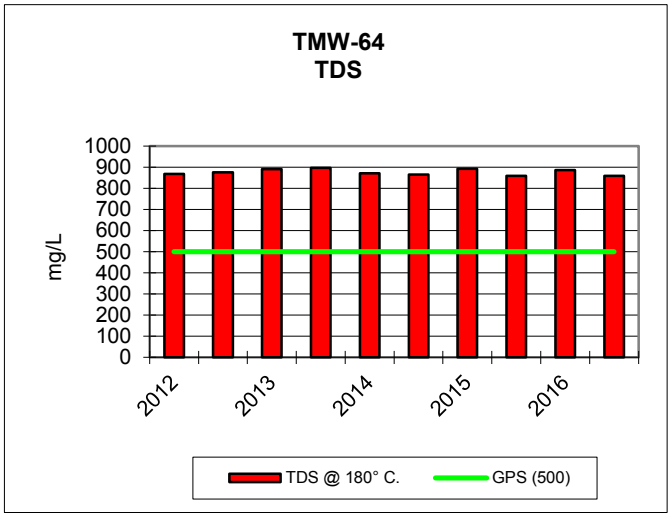

TMW-63
Combined Ra226/Ra228
pCi/L
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

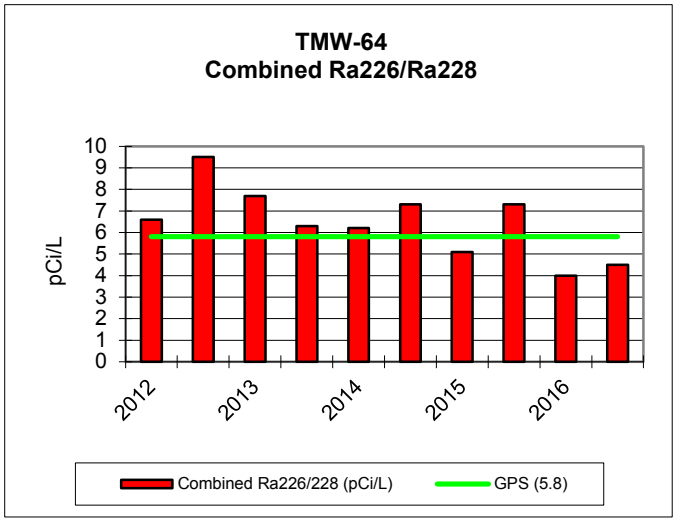

TMW-63
Iron
mg/L
4
3.5
3
2.5
2
1.5
1
0.5
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

KENNECOTT URANIUM COMPANY											
TMW-64		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/12/2012	4/23/2013	8/5/2013	5/6/2014	9/26/2014	5/11/2015	12/20/2015	5/3/2016	11/2/2016
TDS A/C Balance *(dec. %)*		-1.04	-0.98	-3.31	3.01	1.91	3.05	4.53	3.46	1.71	0
Alk-CaC03		71	72	70	69	71	82	71	75	66	72
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		87	87	85	84	87	100	87	92	81	88
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		177	172	172	186	178	180	183	170	169	177
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		32	31	34	30	32	33	34	35	36	32
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1140	1130	1180	1150	1120	1150	1150	1140	1150	1130
Cond-Field *(umhos/cm)*		1139	1176	1233	1272	1261	1184	1269	1198	1295	1251
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.3	5.6	2.3	3.1	3.9	4.5	6	10.1	5.1	5.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.2	0.4	0.8	0.2	0.4	0.5	0.9	0.7	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.5	0.7
Magnesium (Mg)		15.3	15.2	15.4	16	15.1	15.3	11.9	14.6	14.7	15.4
Manganese (Mn)	GPS (0.2)	0.04	0.04	<0.01	0.01	0.04	0.04	0.04	ND	0.02	0.03
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.78	7.76	7.69	7.77	7.68	7.72	7.71	7.75	7.82	7.77
pH (Field) *(Std. Units)*		7.8	7.2	7.6	7.1	8.1	7.9	7.53	7.76	7.77	7.77
Potassium (K)		4.2	3.9	3.7	4.3	3.8	3.9	3.8	3.8	3.8	4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.6	9.5	7.7	6.3	6.2	7.3	5.1	7.3	4	4.5
Radium 226 *(pCi/L)*		2.6	5	2.4	1.6	2.2	2.9	1.8	1.8	1.9	2
Radium 228 *(pCi/L)*		4	4.5	5.3	4.7	4	4.4	3.3	5.5	2.1	2.5
Selenium (Se)	GPS (.01)	0.005	0.005	0.016	0.014	0.009	0.006	0.008	0.003	0.004	0.004
Silica (SiO2)		10	9.3	8.6	9.5	8.9	9.3	9.2	8.4	8.4	9.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		50.4	51.8	51.7	55.4	50.9	52.4	40.2	50.7	50.2	52.7
TDS @ 180° *C.*	GPS (500)	868	876	891	898	871	866	893	859	886	860
Sulfate (SO4)		496	486	512	486	508	520	514	498	480	478
Temperature *(C)*		10.9	10.5	9.9	13.1	10.1	9.4	9.1	8.5	9.4	9.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.02	0.04
Uranium, natural *(pCi/L)*	GPS (36)	15.5	15.5	16.5	15.2	12.2	12.8	12.1	11.3	12.6	11.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

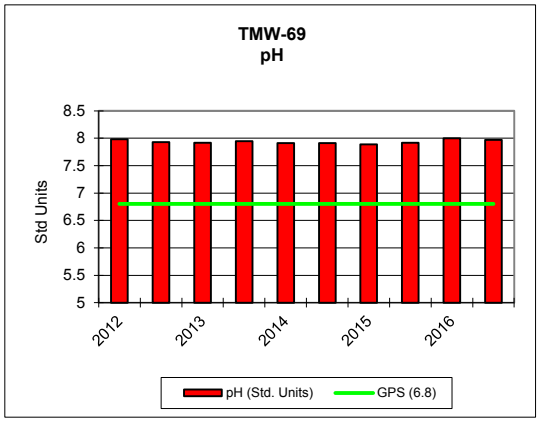

TMW-64
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

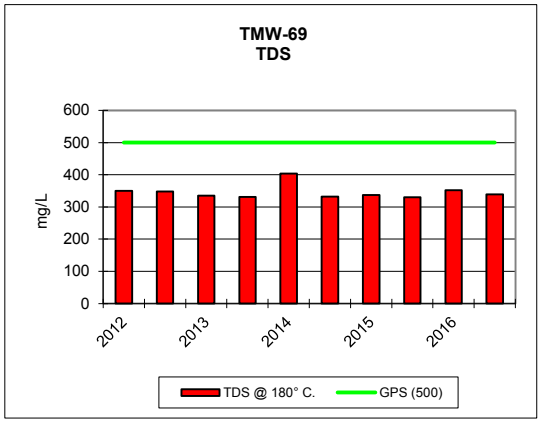

TMW-64
Selenium
mg/L
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Selenium (Se)
GPS (.01)

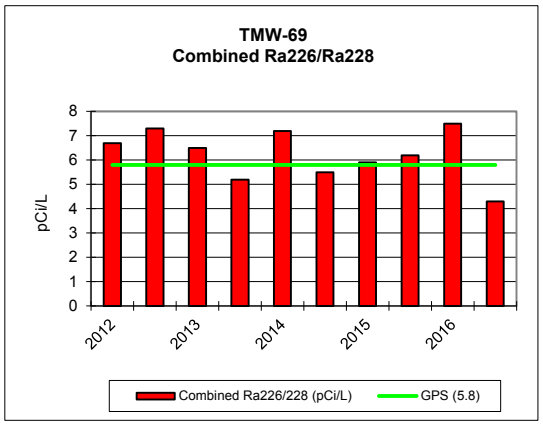

TMW-64
TDS
mg/L
1000
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-64
Combined Ra226/Ra228
pCi/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

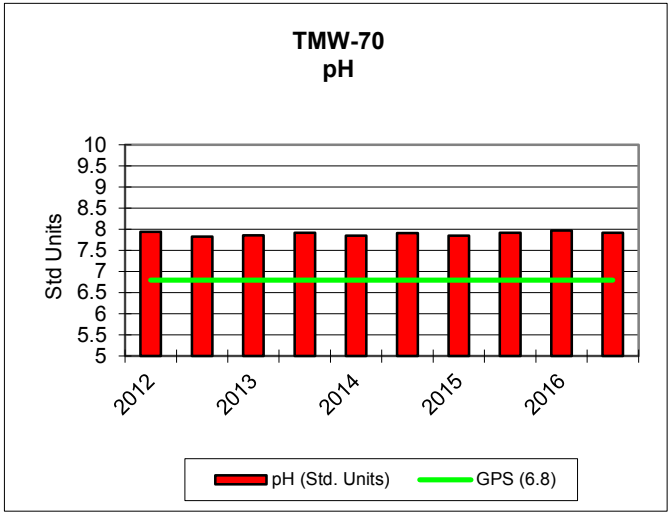
KENNECOTT URANIUM COMPANY											
TMW-69		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/12/2012	4/23/2013	8/19/2013	4/22/2014	9/19/2014	5/11/2015	12/16/2015	5/4/2016	11/2/2016
TDS A/C Balance *(dec. %)*		-1.45	-1.98	-2.96	0.0118	0.44	1.49	3.58	3.13	3.6	3.15
Alk-CaC03		112	104	107	109	108	108	106	127	96	122
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		136	127	131	133	132	132	129	155	118	149
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		68.7	65.2	63.9	67.8	67.9	65.6	68.4	67.5	67.6	66.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	6	6	6	6	6	6	6	6	6
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		510	508	511	506	500	504	506	496	501	495
Cond-Field *(umhos/cm)*		531	536	562	551	558	525	490	504	555	554
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.8	2.6	1.6	1.6	2.2	2.1	6.1	4.3	4.5	5.6
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	4.1	0.9
Magnesium (Mg)		4.1	4	4	4.1	4.2	3.9	3.3	4	4.1	4.1
Manganese (Mn)	GPS (0.2)	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.98	7.93	7.92	7.95	7.91	7.91	7.89	7.92	8	7.97
pH (Field) *(Std. Units)*		7.9	7.55	7.4	7.8	8.3	8.1	7.86	7.95	8.03	8.55
Potassium (K)		3	2.5	2.5	2.7	2.8	2.7	2.5	2.8	2.7	2.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.7	7.3	6.5	5.2	7.2	5.5	5.9	6.2	7.5	4.3
Radium 226 *(pCi/L)*		1.8	2.5	1.5	1.1	1.8	1.4	1.6	1.5	1.5	1.2
Radium 228 *(pCi/L)*		4.9	4.8	5	4.1	5.4	4.1	4.3	4.7	6	3.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16	13.7	14.3	14.2	14	13.5	14	14.2	14.4	14.2
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		31.5	31.5	32.2	33	34	31.8	26.2	33.6	33.6	33.6
TDS @ 180° *C.*	GPS (500)	350	348	335	331	404	332	337	330	352	339
Sulfate (SO4)		142	142	142	138	144	138	143	137	133	139
Temperature *(C)*		11.1	10.8	9.5	12.8	10.1	10.2	9.2	8.2	9.2	9.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	-0.02	0.06
Uranium, natural *(pCi/L)*	GPS (36)	3.6	3.6	3.9	3.7	3.7	4.1	3.6	3.2	3.6	3.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01

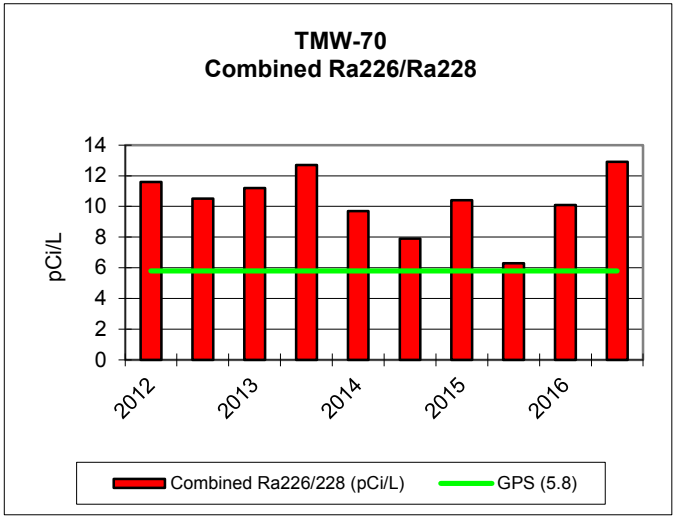

TMW-69
pH
Std Units
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

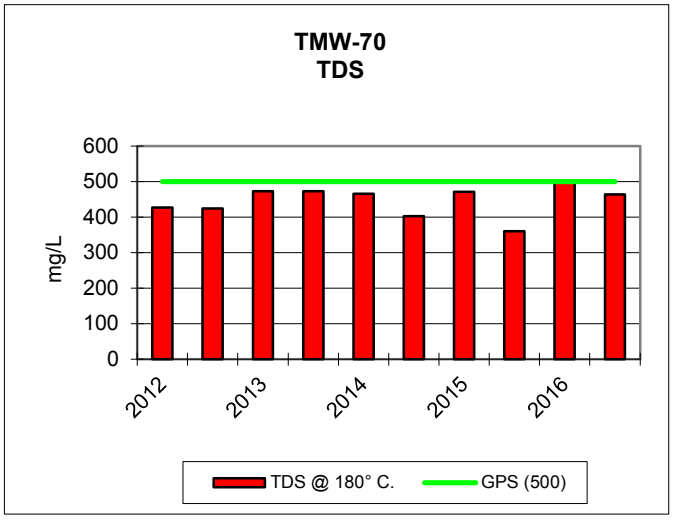

TMW-69
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

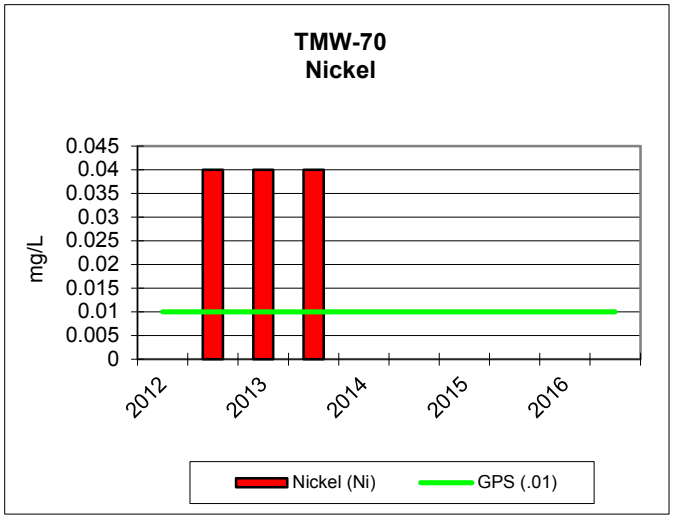

TMW-69
Combined Ra226/Ra228
pCi/L
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

KENNECOTT URANIUM COMPANY											
TMW-70		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/12/2012	4/22/2013	8/19/2013	4/22/2014	9/19/2014	5/11/2015	12/16/2015	5/4/2016	11/2/2016
TDS A/C Balance *(dec. %)*		-4.3	-0.185	-2.77	0.811	0.18	1.5	2.32	0.74	1.7	0.61
Alk-CaC03		94	90	88	90	89	98	87	102	80	91
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		114	110	108	110	108	119	107	125	98	111
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		78.9	83.2	92	99.2	97.9	80.1	95.4	71.8	90.5	92.8
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		19	10	12	11	12	9	11	7	11	10
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		613	610	691	688	671	597	668	530	684	652
Cond-Field *(umhos/cm)*		634	636	752	744	737	614	745	566	624	680
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	3.8	4.7	5	4.9	3.6	3.9	6.6	5.4	9.4	9.3
Iron (Fe)	GPS (0.6)	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	0.1
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.69	1.1
Magnesium (Mg)		5	5.1	5.7	6	6	4.8	4.9	4.3	5.5	5.6
Manganese (Mn)	GPS (0.2)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	0.04	0.04	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.94	7.83	7.86	7.92	7.85	7.91	7.85	7.92	7.97	7.92
pH (Field) *(Std. Units)*		7.7	7.75	7.9	7.8	8.3	9.7	7.87	7.97	8.05	8.65
Potassium (K)		2.8	2.8	2.8	3.1	3.3	2.9	2.9	2.7	2.8	3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	11.6	10.5	11.2	12.7	9.7	7.9	10.4	6.3	10.1	12.9
Radium 226 *(pCi/L)*		5.6	4.7	4.6	4.9	4.6	3.4	3.9	3.1	3.5	4
Radium 228 *(pCi/L)*		6	5.8	6.6	7.8	5.1	4.5	6.5	3.2	6.6	8.9
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15.2	13.8	13.1	13.3	13.3	13.1	13.1	14.6	12.6	14
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		37.2	36.5	37.7	39	40.4	35.1	32.6	36.3	36.9	39.4
TDS @ 180° *C.*	GPS (500)	427	424	473	473	466	403	471	360	499	464
Sulfate (SO4)		201	200	243	239	246	191	236	157	238	225
Temperature *(C)*		12.4	11.5	9.4	13	10.1	8.2	9.4	8.3	9.2	10.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	0.06	0.1
Uranium, natural *(pCi/L)*	GPS (36)	3	3.4	3.7	3.8	3.5	3.9	3.4	2.5	3.2	4
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01

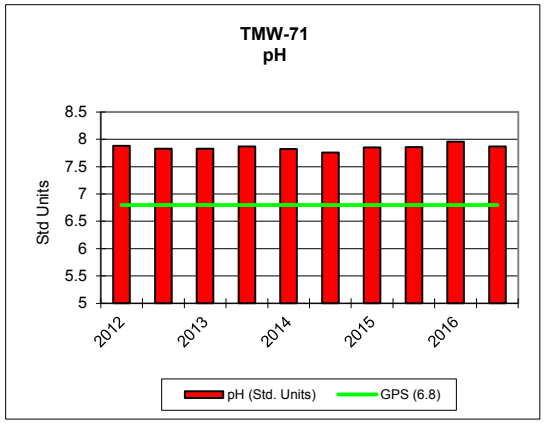

TMW-70
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

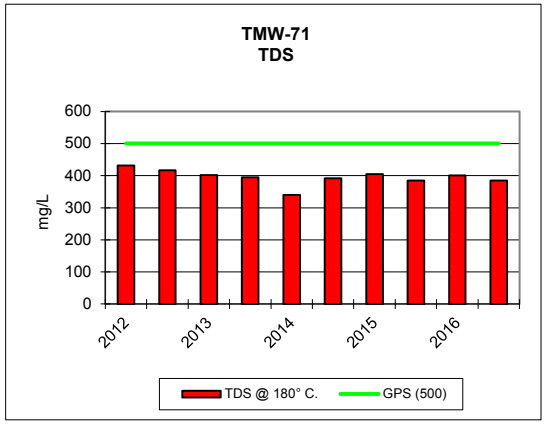

TMW-70
Combined Ra226/Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

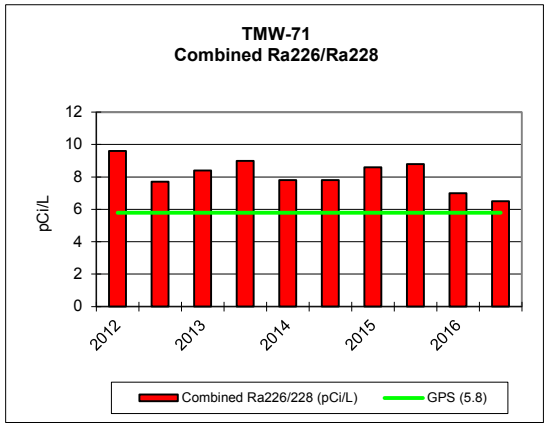

TMW-70
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-70
Nickel
mg/L
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

KENNECOTT URANIUM COMPANY											
TMW-71		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/12/2012	4/22/2013	8/19/2013	4/22/2014	9/19/2014	5/12/2015	12/20/2015	5/4/2016	11/2/2016
TDS A/C Balance *(dec. %)*		-0.296	-0.47	-3.24	0.251	0.97	1.5	1.12	2.34	3.54	0.63
Alk-CaC03		119	119	131	121	122	120	120	133	107	117
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		145	145	160	148	145	147	146	163	130	142
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		90.2	85.2	82	84.9	85	82	83.3	83.2	82.1	79.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	5	5	5	5	5	5	5	5	5
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		612	600	598	590	580	581	605	570	565	549
Cond-Field *(umhos/cm)*		675	633	662	630	648	606	595	614	630	643
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.6	4	3	3.1	3.6	3.5	8.6	10.2	5.8	5.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.99	1
Magnesium (Mg)		5.4	5.2	5	5.1	5.2	4.8	4.9	5	5	4.9
Manganese (Mn)	GPS (0.2)	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.88	7.83	7.83	7.87	7.82	7.76	7.85	7.86	7.96	7.87
pH (Field) *(Std. Units)*		7.4	7.67	7.8	7.6	8.2	8.1	7.52	7.85	7.92	8.19
Potassium (K)		3.4	2.8	2.7	2.9	3	3	2.9	2.9	2.9	2.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.6	7.7	8.4	9	7.8	7.8	8.6	8.8	7	6.5
Radium 226 *(pCi/L)*		4.3	3.3	3.2	3	3.5	2.8	3	2.3	3.2	2.6
Radium 228 *(pCi/L)*		5.3	4.4	5.2	6	4.3	5	5.6	6.5	3.8	3.9
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		17	15.1	15.1	15.2	14.7	14.5	15	14.3	15.2	15.3
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		30.4	33.3	32.7	33.9	33.8	32	32.9	33	33.1	32.4
TDS @ 180° *C.*	GPS (500)	432	417	402	395	340	392	405	385	401	385
Sulfate (SO4)		185	179	174	173	180	172	163	171	160	159
Temperature *(C)*		9.7	10.6	8.7	12.5	12.1	9.9	10	8.3	9.1	9.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.07	0.02
Uranium, natural *(pCi/L)*	GPS (36)	4.8	4.9	4.8	4.5	4.6	4.6	4.2	4.9	3.9	4.2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.01

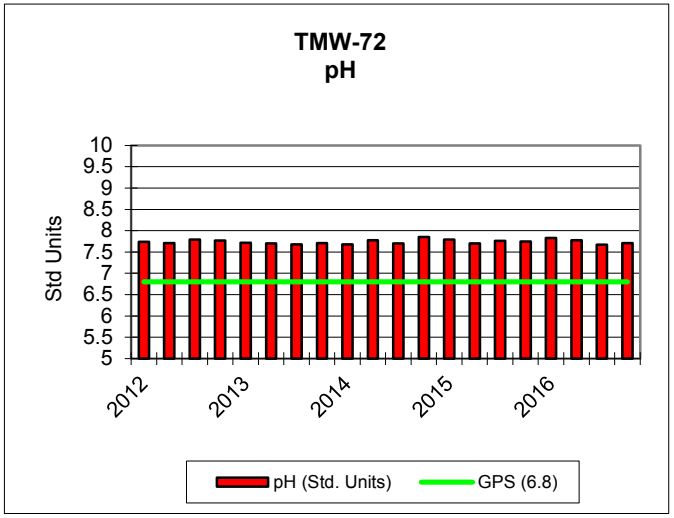

TMW-71
pH
Std Units
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

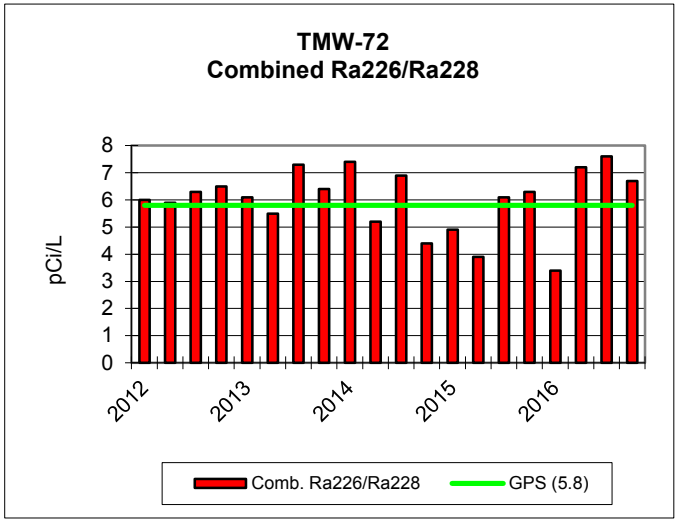

TMW-71
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

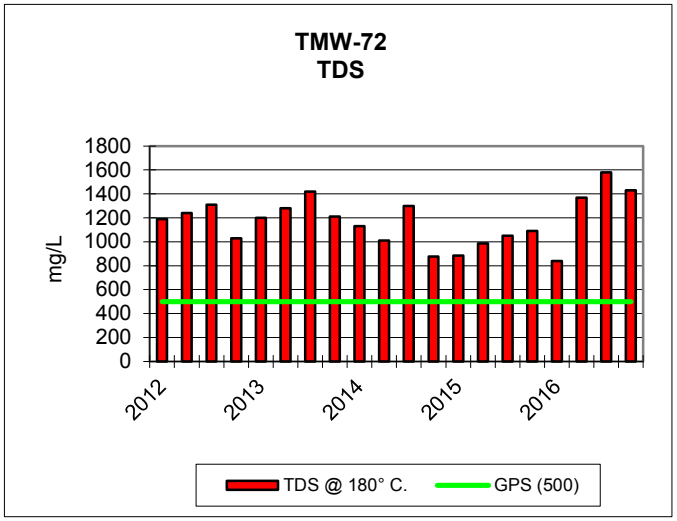

TMW-71
Combined Ra226/Ra228
pCi/L
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

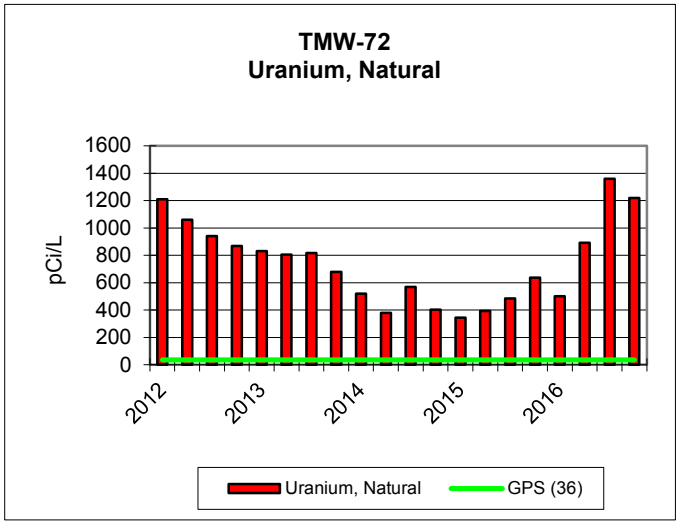
KENNECOTT URANIUM COMPANY															
TMW-72		2012				2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/23/2012	4/16/2012	7/10/2012	10/2/2012	1/21/2013	4/22/2013	7/8/2013	10/28/2013	1/18/2014	4/8/2014	7/15/2014	10/21/2014	1/20/2015	4/22/2015
TDS A/C Balance *(dec. %)*		0.0528	0.463	2.36	-0.145	0.0157	-1.79	1.49	0.0235	1.08	4.68	0.02	1.25	0.8	4.03
Alk-CaC03		71	72	72	79	74	70	63	71	73	78	64	94	82	76
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		87	87	88	96	90	86	77	86	89	95	79	115	100	93
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		260	256	278	223	254	262	308	263	238	200	291	197	184	191
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		48	47	48	40	47	54	62	54	49	45	69	40	39	44
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1500	1500	1580	1280	1500	1590	1710	1530	1410	1280	1610	1170	1140	1270
Cond-Field *(umhos/cm)*		1768	1774	1762	1417	1711	1747	1735	1826	1649	1418	996	1546	1146	1245
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	3.8	3.4	3.2	1.4	2.7	2.2	3	3.5	2.8	1.6	4	3.3	3.2	8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	1	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Magnesium (Mg)		17.4	17.4	18.6	15.2	17.4	17.9	20.7	<1	<1	<1	<1	<1	12.2	12.5
Manganese (Mn)	GPS (0.2)	0.01	0.01	0.01	<0.02	<0.02	<0.02	<0.02	0.01	0.01	<0.02	<0.02	<0.02	<0.02	<0.02
Mercury (Hg)		<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	**GPS (6.8)**	7.74	7.71	7.79	7.77	7.72	7.7	7.68	7.71	7.68	7.78	7.7	7.85	7.79	7.7
pH (Field) *(Std. Units)*		7.3	7.5	7.5	7.18	7.25	7.7	7.9	7.8	7.7	7.7	7.9	7.88	8.24	7.72
Potassium (K)		4.1	4	4.4	4.1	3.9	4.1	4.9	4.2	4	3.7	4.8	3.7	3.7	3.7
Combined Ra226/228 *(pCi/L)*	**GPS (5.8)**	6	5.9	6.3	6.5	6.1	5.5	7.3	6.4	7.4	5.2	6.9	4.4	4.9	3.9
Radium 226 *(pCi/L)*		2.8	2.5	2.7	1.9	2.5	2.2	2.2	2	2.3	2.9	2.9	1.7	1.9	1.7
Radium 228 *(pCi/L)*		3.2	3.4	3.6	4.6	3.6	3.3	5.1	4.4	5.1	2.3	4	2.7	3	2.2
Selenium (Se)	GPS (.01)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.7	11.7	12.1	13.2	13.2	11.6	11.6	12.8	11.9	12	12.8	12.5	12.7	12.4
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		63.6	63.8	68.8	55.5	64.9	65	74.7	67.3	61	52	72.9	56.2	54.1	54.7
TDS @ 180° *C.*	**GPS (500)**	1190	1240	1310	1030	1200	1280	1420	1210	1130	1010	1300	876	885	987
Sulfate (SO4)		696	679	713	588	682	730	810	706	613	569	783	484	485	545
Temperature *(C)*		10.4	10.5	13.2	12.9	10	9	13.5	9.1	8.9	10	11	9.7	8	10
Thallium (Tl)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*	GPS (7.0)	0.01	<0.2	0.06	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	0.6
Uranium, natural *(pCi/L)*	**GPS (36)**	1210	1060	942	869	832	805	817	679	520	379	569	404	345	393
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.03	0.02	<0.01	<0.01	<0.01	0.02	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY							
TMW-72				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	7/22/2015	12/2/2015*	2/3/2016	4/12/2016	7/25/2016	10/17/2016
TDS A/C Balance *(dec. %)*		2.36	3.08	0.76	2.63	1.64	1.56
Alk-CaC03		75	84	90	61	55	59
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	0.015
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		91	102	109	74	67	73
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		236	227	174	302	341	306
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		47	53	36	67	76	69
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1340	1410	1110	1650	1890	1770
Cond-Field *(umhos/cm)*		1012	1758	1873	2040	2340	1903
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	7.5	8.1	5	12.7	5.1	3.8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.05	<0.05	0.6	1.8	1.5	2
Magnesium (Mg)		14.9	15.9	11.8	20.5	22.7	20.7
Manganese (Mn)	GPS (0.2)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	**GPS (6.8)**	7.76	7.75	7.83	7.78	7.67	7.71
pH (Field) *(Std. Units)*		7.64	7.8	7.54	7.6	6.88	7.74
Potassium (K)		4.2	4.1	3.6	4.5	5.1	4.6
Combined Ra226/228 *(pCi/L)*	**GPS (5.8)**	6.1	6.3	3.4	7.2	7.6	6.7
Radium 226 *(pCi/L)*		2.3	2.7	1.4	3.9	2.7	2
Radium 228 *(pCi/L)*		3.8	3.6	2	3.3	4.9	4.7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	0.004	<0.001	<0.001
Silica (SiO2)		12.7	12	12.5	11.6	10.4	10.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		58.2	63.8	52.3	77.6	78	76.3
TDS @ 180° *C.*	**GPS (500)**	1050	1090	839	1370	1580	1430
Sulfate (SO4)		581	640	450	763	886	836
Temperature *(C)*		9.9	7.7	7.6	10.3	16.6	10.1
Thallium (Tl)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*	GPS (7.0)	<0.2	<0.2	0.03	0.1	0.003	0.02
Uranium, natural *(pCi/L)*	**GPS (36)**	486	638	501	892	1360	1220
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.02


TMW-72
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

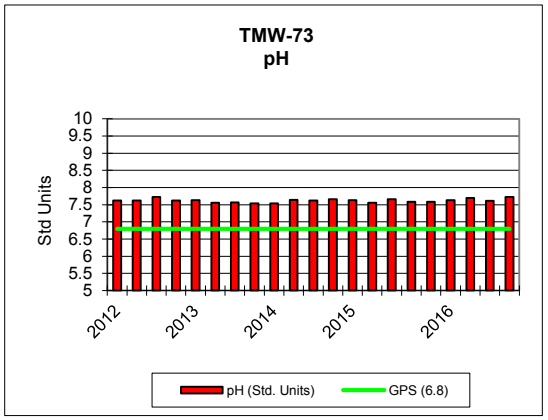

TMW-72
Combined Ra226/Ra228
pCi/L
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Comb. Ra226/Ra228
GPS (5.8)

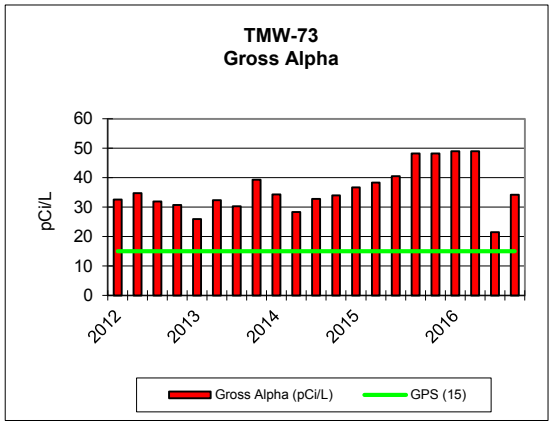

TMW-72
TDS
mg/L
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

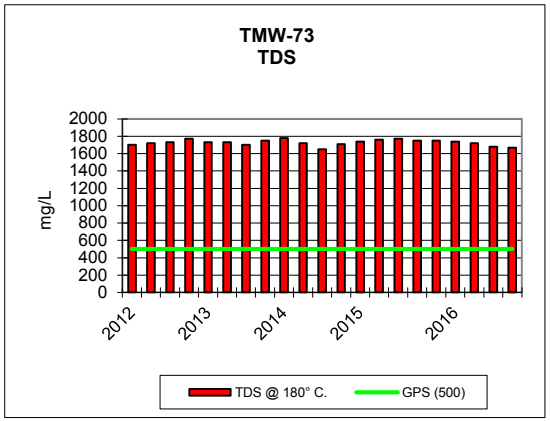

TMW-72
Uranium, Natural
pCi/L
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
Uranium, Natural
GPS (36)

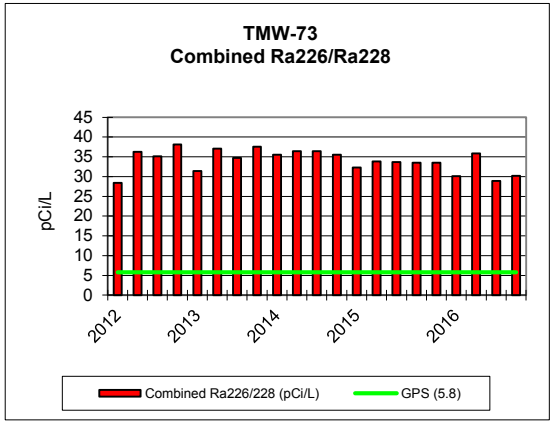
KENNECOTT URANIUM COMPANY																
TMW-73		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/23/2012	4/16/2012	7/10/2012	10/2/2012	1/21/2013	4/22/2013	7/8/2013	10/28/2013	1/18/2014	4/8/2014	7/15/2014	10/21/2014	1/20/2015	4/28/2015	7/22/2015
TDS A/C Balance *(dec. %)*		0.113	-0.752	0.944	0.262	1.48	0.513	0.674	2.11	0.106	2.75	0.35	0.86	0.57	1.14	
Alk-CaC03		86	93	92	98	96	102	101	101	101	101	101	102	101	99	103
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		105	114	113	120	118	124	124	123	124	124	123	125	123	120	125
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		355	336	343	358	367	354	348	369	343	330	337	342	353	357	366
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		78	81	82	93	97	97	95	99	97	95	100	102	100	98	100
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001
Cond *(umhos/cm)*		2020	2010	2040	1980	2080	2100	2060	2080	2080	2030	2020	2090	2030	2110	2140
Cond-Field *(umhos/cm)*		2060	2210	2100	2140	2100	2220	2170	2190	2250	2160	1684	2170	2160	2050	1877
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	32.6	34.8	31.9	30.7	26	32.4	30.3	39.3	34.3	28.3	32.8	34	36.7	38.3	40.5
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	7.8	8.4	7.1	9	3.8	8.3	8.2	4.6	6.5	9.2	5.1	9.5	6.1	6.6	6.1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		36.8	37.1	37.5	38.7	39.9	37.9	38.1	41	38.4	35	40.9	37.2	37.4	37.9	37.6
Manganese (Mn)	GPS (0.2)	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02
Mercury (Hg)		<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		4.7	5.6	5.7	5.6	5.4	6	6	6.2	6.5	5.1	6	6.4	6.5	5.5	6.4
pH *(Std. Units)*	GPS (6.8)	7.62	7.62	7.72	7.62	7.63	7.56	7.57	7.54	7.54	7.64	7.62	7.66	7.63	7.56	7.66
pH (Field) *(Std. Units)*		6.9	7.6	7.3	6.87	7.23	6.6	7.5	7.7	7.6	7.5	7.3	7.68	7.98	7.56	7.33
Potassium (K)		5.2	4.9	5.1	5.7	5.5	5.1	5.5	5.3	5	4.8	5.3	5.2	5.3	5.2	5.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	28.4	36.3	35.1	38.1	31.4	37.1	34.7	37.6	35.5	36.4	36.4	35.5	32.3	33.8	33.7
Radium 226 *(pCi/L)*		23	32	31	32	25	31	28	30	29	32	28	29	26	28	26
Radium 228 *(pCi/L)*		5.4	4.3	4.1	6.1	6.4	6.1	6.7	7.6	6.5	4.4	8.4	6.5	6.3	5.8	7.7
Selenium (Se)	GPS (.01)	0.343	0.346	0.432	0.416	0.376	0.398	0.358	0.372	0.423	0.348	0.39	0.294	0.366	0.355	0.351
Silica (SiO2)		6.7	6.1	6.2	6.5	6.3	6.3	6.3	6.9	6.1	4.9	6.9	6	6	6.1	6.3
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		91.9	93.8	95.8	96.4	99.5	96.3	102	104	98.3	88.9	105	99.5	100	100	98.4
TDS @ 180° *C.*	GPS (500)	1700	1720	1730	1770	1730	1730	1700	1750	1780	1720	1650	1710	1740	1760	1770
Sulfate (SO4)		988	954	937	975	973	946	942	966	935	938	953	946	943	949	952
Temperature *(C)*		10.3	9.7	13.2	11.8	9.4	10.4	14.3	9.9	9.7	11.1	10.7	10.3	8.7	9	9.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.04	0.02	0.009	0.07	0.05	0.2	0.02	0.3	0.1	0.2	0.1	0.07	0.1	0.1	0.06
Uranium, natural *(pCi/L)*	GPS (36)	5090	5290	5270	5300	4900	5220	5210	5090	4400	4650	4600	4100	4670	4340	4360
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.03	0.03	<0.01	<0.01	0.02	0.03	0.02	0.02	0.02	0.01	<0.01	<0.01	<0.01	<0.01

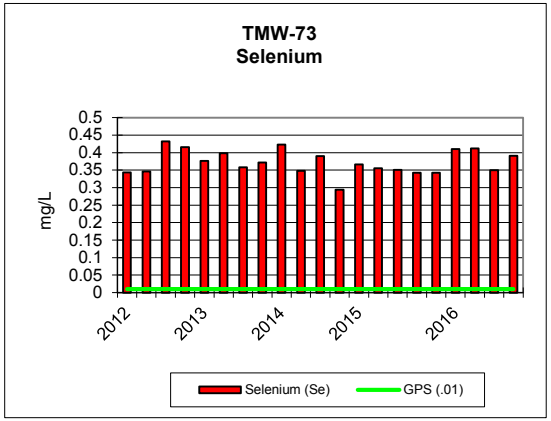
KENNECOTT URANIUM COMPANY							
TMW-73				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	12/2/2015*	12/2/2015	2/3/2016	4/12/2016	7/25/2016	10/17/2016
TDS A/C Balance *(dec. %)*		0.17	0.17	3.3	2.55	0.39	0.95
Alk-CaC03		103	103	109	115	109	105
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	0.013	0.014	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		126	126	133	141	133	129
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		352	352	362	360	323	322
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		102	102	96	95	91	89
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	1.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		2090	2090	2070	2050	2030	2060
Cond-Field *(umhos/cm)*		2290	2290	2050	2340	2400	2250
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	48.2	48.2	49	49	21.5	34.2
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	9.5	9.5	<0.01	<0.01	<0.01	<0.01
Lead (Pb)		<0.01	<0.01	13	5.2	4.8	4
Magnesium (Mg)		39.4	39.4	38.5	39.2	34.6	36.4
Manganese (Mn)	GPS (0.2)	0.01	0.01	0.01	0.01	0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		6.5	6.5	7.2	7.7	7	6.4
pH *(Std. Units)*	GPS (6.8)	7.58	7.58	7.63	7.7	7.61	7.72
pH (Field) *(Std. Units)*		7.6	7.6	7.15	7.42	7.16	7.57
Potassium (K)		5.4	5.4	5.7	5.1	5.2	5.4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	33.5	33.5	30.1	35.9	28.9	30.2
Radium 226 *(pCi/L)*		29	29	24	27	20	24
Radium 228 *(pCi/L)*		4.5	4.5	6.1	8.9	8.9	6.2
Selenium (Se)	GPS (.01)	0.342	0.342	0.41	0.412	0.35	0.391
Silica (SiO2)		6	6	6.3	6.5	6.5	10.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		105	105	106	111	93.6	99.2
TDS @ 180° *C.*	GPS (500)	1750	1750	1740	1720	1680	1670
Sulfate (SO4)		961	961	914	927	872	905
Temperature *(C)*		7.5	7.5	8	10.2	16	10.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.07	0.07	0.01	0.1	0.02	0.03
Uranium, natural *(pCi/L)*	GPS (36)	4600	4600	4390	4700	4360	4160
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.08

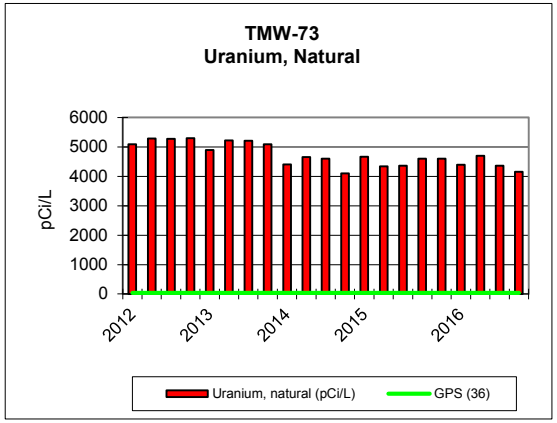

TMW-73
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-73
Gross Alpha
pCi/L
60
50
40
30
20
10
0
2012
2013
2014
2015
2016
Gross Alpha (pCi/L)
GPS (15)


TMW-73
TDS
mg/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

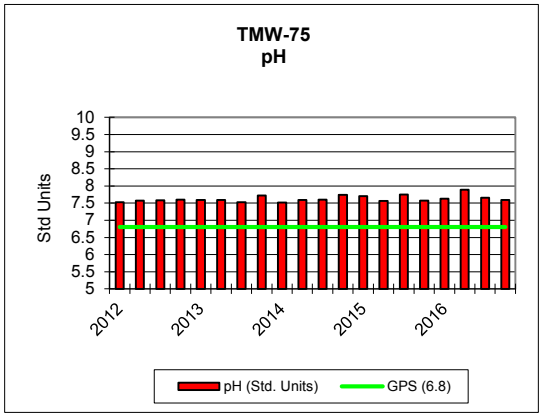

TMW-73
Combined Ra226/Ra228
pCi/L
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

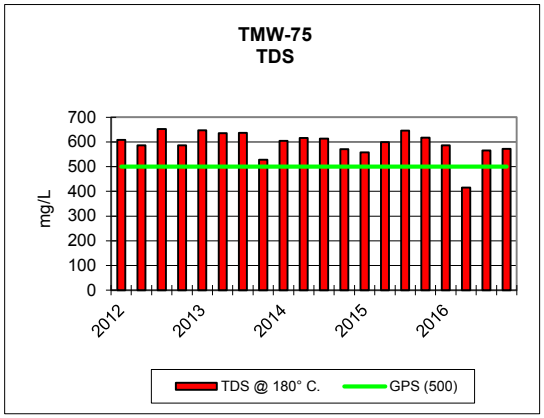

TMW-73
Selenium
mg/L
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Selenium (Se)
GPS (.01)

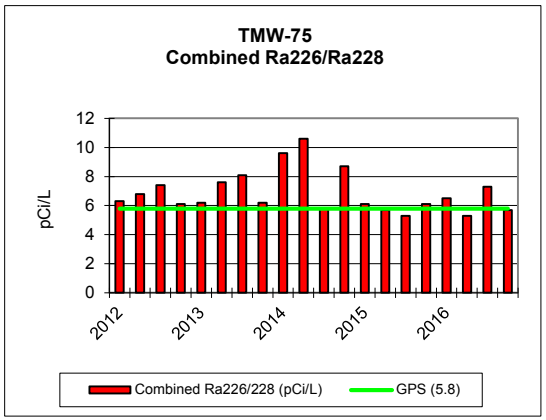

TMW-73
Uranium, Natural
pCi/L
6000
5000
4000
3000
2000
1000
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

KENNECOTT URANIUM COMPANY																
TMW-75		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/10/2012	7/10/2012	10/22/2012	1/15/2013	4/2/2013	7/9/2013	10/1/2013	1/18/2014	4/1/2014	7/1/2014	10/14/2014	1/14/2015	4/21/2015	7/13/2015
TDS A/C Balance *(dec. %)*		2.91	-1.39	2.14	-1.06	4.85	-4.11	1.43	-2.47	-0.456	2.55	1.38	0.12	0.12	4.12	2
Alk-CaC03		121	126	127	127	134	132	132	123	128	129	127	127	126	132	137
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		148	154	155	155	163	161	161	150	156	157	154	155	154	161	167
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		141	119	136	119	155	124	138	104	125	131	127	117	118	127	127
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		19	16	18	16	19	19	19	13	17	17	16	16	17	19	20
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		916	836	909	830	884	897	906	735	853	864	846	814	820	858	886
Cond-Field *(umhos/cm)*		965	886	916	916	958	980	958	804	817	959	825	848	887	895	913
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.2	0.1	0.1	0.1	0.1	<0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.6	1	0.9	2.4	1.3	2.3	1.1	2.1	2.4	2.7	1.9	2.1	9.5	10.3	4.7
Iron (Fe)	GPS (0.6)	0.11	0.16	0.18	0.09	<0.05	0.19	0.18	<0.05	0.13	0.2	0.15	0.14	0.13	0.18	0.17
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.5	<1	0.7	1.1	0.2	0.007	0.6	0.05	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		10.5	8.6	10.7	9.2	11.9	10	10.8	7.2	9.7	10.3	9.5	8.7	8.7	9.8	10.1
Manganese (Mn)	GPS (0.2)	0.11	0.08	0.11	0.1	0.13	0.1	0.12	0.08	0.1	0.1	0.11	0.09	0.09	0.1	0.12
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.53	7.57	7.58	7.6	7.59	7.59	7.53	7.72	7.52	7.59	7.6	7.74	7.7	7.56	7.75
pH (Field) *(Std. Units)*		7.42	7.7	7.3	7.34	7.5	6.9	7.6	7.63	7.7	7.7	7.8	7.49	8.49	7.33	7.04
Potassium (K)		3.5	3	3.4	3.1	3.5	2.9	3.6	3	3.1	3.4	3.5	3	3.4	3.2	3.4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.3	6.8	7.4	6.1	6.2	7.6	8.1	6.2	9.6	10.6	5.8	8.7	6.1	5.7	5.3
Radium 226 *(pCi/L)*		1.3	1	1.5	1.4	1.8	1.4	1.4	1.3	1.2	2	1.5	2.2	2	1.8	1.1
Radium 228 *(pCi/L)*		5	5.8	5.9	4.7	4.4	6.2	6.7	4.9	8.4	8.6	4.3	6.5	4.1	3.9	4.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15.3	14.2	15.1	15.1	17.3	13.7	14.8	14.5	14.1	14.9	14.6	14.4	15	14.4	16.2
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		45.6	42.4	44.6	43	45.3	43.1	48	38.6	42.7	46.7	45.8	42.1	44.7	45.5	45.2
TDS @ 180° *C.*	GPS (500)	608	586	653	587	647	635	637	528	605	616	614	571	558	599	646
Sulfate (SO4)		309	281	298	280	316	315	313	245	289	287	286	263	271	254	302
Temperature *(C)*		12.2	11.4	12.8	10.7	6.7	8.5	15.8	11.1	7.5	8.5	16	12.2	8	11.3	11.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	17.4	12.1	15.5	13.5	15.1	16	17.1	10.7	15	13.7	13.4	13.9	12.2	14.3	13.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.03	<0.01	<0.01	<0.01	<0.01

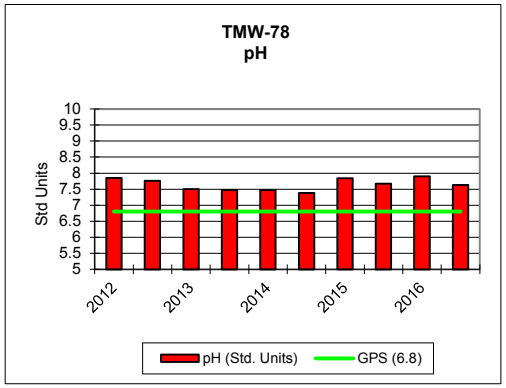
KENNECOTT URANIUM COMPANY						
TMW-75			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	11/2/2015	1/5/2016	4/18/2016	7/7/2016	10/3/2016
TDS A/C Balance *(dec. %)*		0.7	1.01	15.8	1.47	3.41
Alk-CaC03		134	133	110	128	145
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		163	162	139	156	177
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		126	123	119	118	117
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		19	18	9	18	17
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		849	815	604	757	822
Cond-Field *(umhos/cm)*		869	851	877	979	886
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.6	4.8	5.8	3	4.4
Iron (Fe)	GPS (0.6)	0.21	0.19	0.21	0.12	0.19
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	-0.1	0.14	1.3	0.3
Magnesium (Mg)		10.1	9.8	9.4	8.9	9.6
Manganese (Mn)	GPS (0.2)	0.11	0.11	0.11	0.11	0.11
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.57	7.63	7.89	7.66	7.59
pH (Field) *(Std. Units)*		7.33	7.46	7.37	6.83	7.32
Potassium (K)		3.5	3.1	3.1	3.2	3.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.1	6.5	5.3	7.3	5.7
Radium 226 *(pCi/L)*		1.1	1.4	1.3	1.2	1.2
Radium 228 *(pCi/L)*		5	5.1	4	6.1	4.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.4	14.7	14.7	13.9	13.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		45.3	44.1	44	42.8	45.4
TDS @ 180° *C.*	GPS (500)	617	587	416	566	572
Sulfate (SO4)		281	286	185	252	285
Temperature *(C)*		11.8	8.3	9	11.1	11.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	-0.02	0.07	-0.03	-0.01
Uranium, natural *(pCi/L)*	GPS (36)	13.5	12.2	11.6	11.3	11.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01

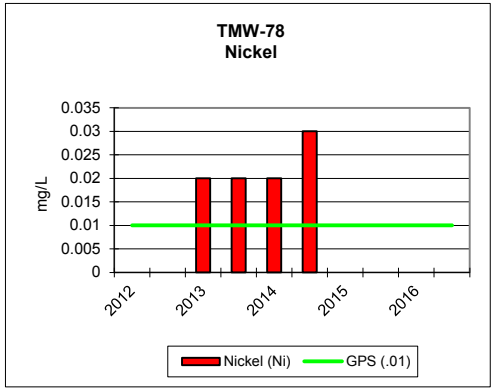

TMW-75
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

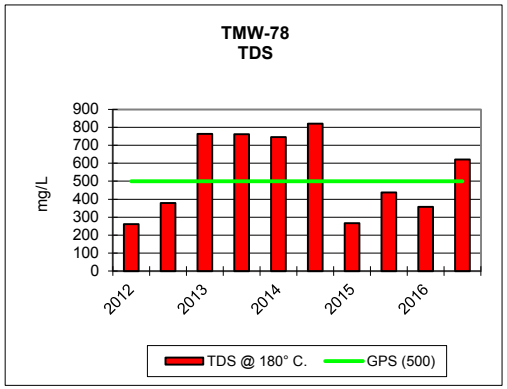

TMW-75
TDS
mg/L
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

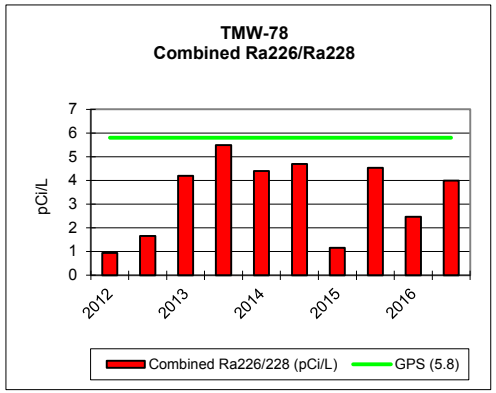

TMW-75
Combined Ra226/Ra228
pCi/L
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

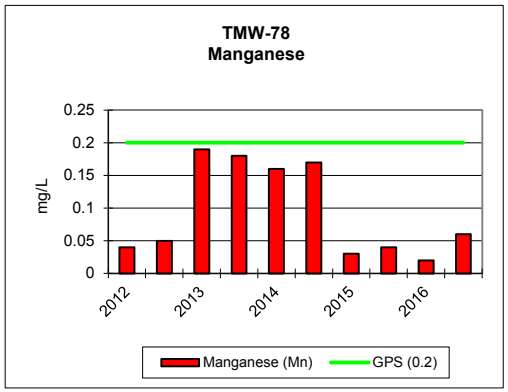
KENNECOTT URANIUM COMPANY											
TMW-78		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/2/2012	11/13/2012	4/23/2013	8/19/2013	5/20/2014	9/19/2014	5/12/2015	12/20/2015	5/10/2016	11/8/2016
TDS A/C Balance *(dec. %)*		-3.69	-2.5	-3.64	-0.231	0.51	1.74	0.47	3.04		0
Alk-CaC03		101	97	87	88	86	85	101	97	97	90
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		123	118	106	108	105	104	123	118	119	109
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		40.9	69.2	145	159	152	172	46.6	82.8	64.4	127
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		5	6	11	11	11	13	4	7	6	9
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.001	0.002	0.009	0.009	0.009	0.01	0.001	0.002	<0.001	0.003
Cond *(umhos/cm)*		401	556	1020	999	964	1080	395		531	857
Cond-Field *(umhos/cm)*		441	594	1076	1042	858	1145	425	703	599	1428
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.1
Gross Alpha *(pCi/L)*	GPS (15)	1.2	1.4	1.6	1.5	1.4	1.7	2.8	2.2	1.2	2.8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.92	0.4
Magnesium (Mg)		5.3	7.9	18.1	18.7	17.6	19.7	5	9.1	6.8	14.1
Manganese (Mn)	GPS (0.2)	0.04	0.05	0.19	0.18	0.16	0.17	0.03	0.04	0.02	0.06
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	0.02	0.02	0.02	0.03	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.85	7.76	7.5	7.47	7.47	7.38	7.84	7.67	7.9	7.63
pH Field *(Std Units)*		7.7	7.3	7.3	7.3	6.8	7.3	7.69	7.62	7.72	7.4
Potassium (K)		2.3	2.6	3.6	4	3.8	4.3	2.4	2.8	2.3	3.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	0.95	1.66	4.2	5.5	4.4	4.7	1.16	4.53	2.47	4
Radium 226 *(pCi/L)*		0.65	0.86	1.8	1.6	1.7	2	0.46	0.83	0.97	1.2
Radium 228 *(pCi/L)*		0.3	0.8	2.4	3.9	2.7	2.7	0.7	3.7	1.5	2.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.4	12.8	12.2	11.8	11.7	10.8	13.2	11.8	12.1	11.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		29.6	30.8	36.4	38.1	38.3	38.6	30	31.9	29.4	36.2
TDS @ 180° *C.*	GPS (500)	262	378	763	762	746	820	267	437	358	622
Sulfate (SO4)		95	177	440	442	416	497	92	221	164	342
Temperature *(C)*		11.4	10.8	9.6	13.4	13	9.8	9.5	8.7	8.6	10.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2	-0.02	0.1
Uranium, natural *(pCi/L)*	GPS (36)	12.1	10.6	9.2	11.3	10.8	13.9	10.7	9.2	9.4	9.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01


TMW-78
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

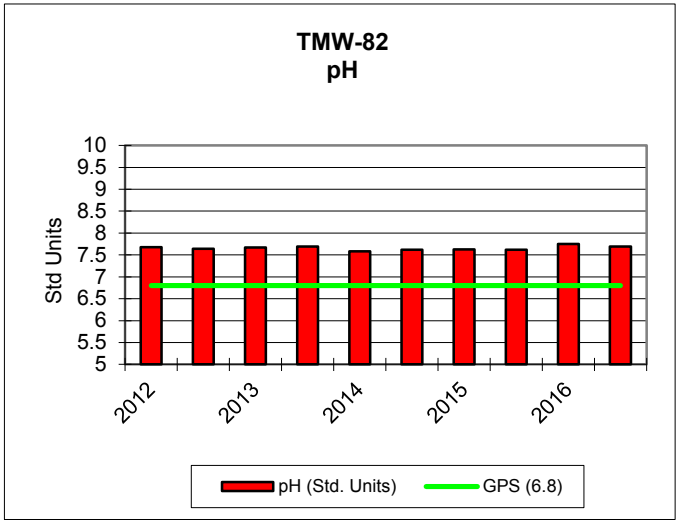

TMW-78
Nickel
mg/L
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

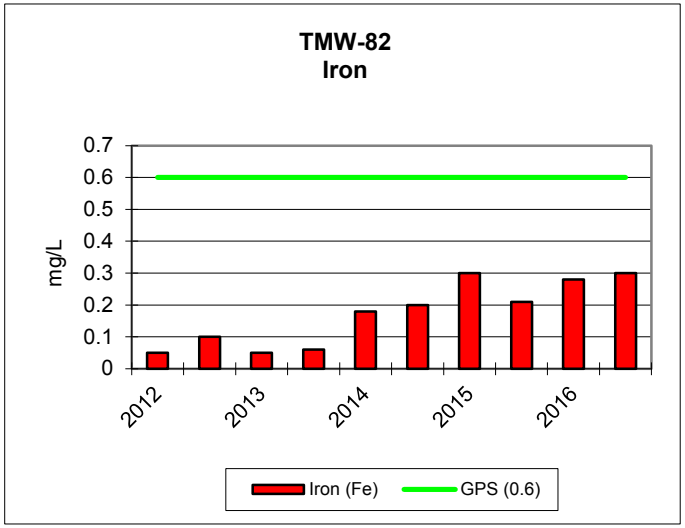

TMW-78
TDS
mg/L
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

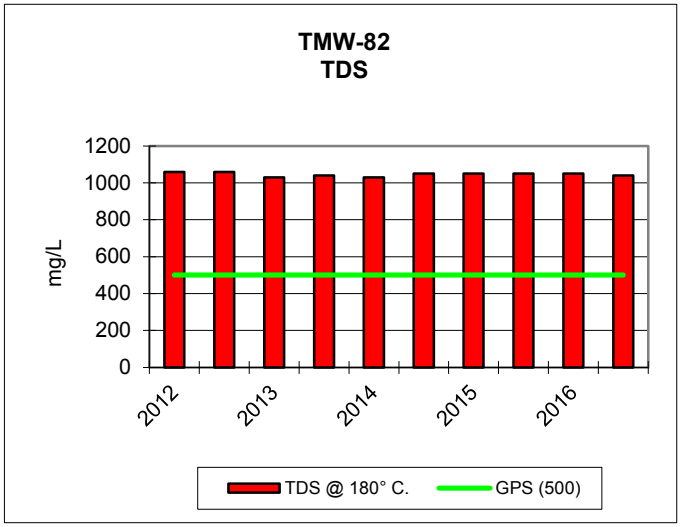

TMW-78
Combined Ra226/Ra228
pCi/L
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

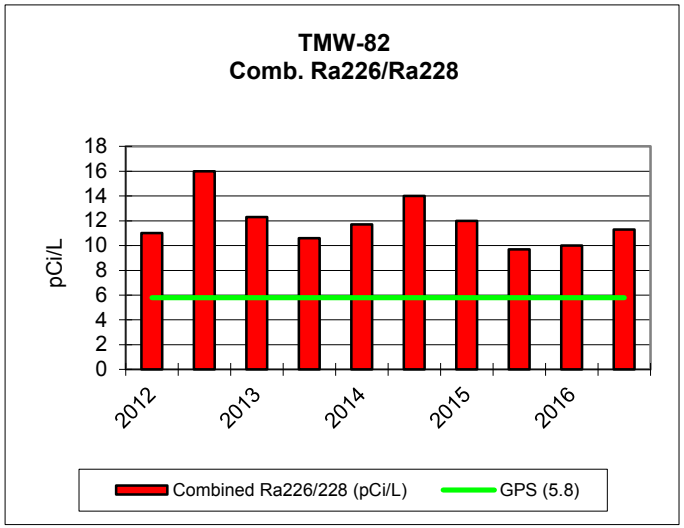

TMW-78
Manganese
mg/L
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

KENNECOTT URANIUM COMPANY											
TMW-82		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/13/2012	4/23/2013	8/6/2013	5/6/2014	8/12/2014	5/12/2015	12/20/2015	5/10/2016	11/8/2016
TDS A/C Balance *(dec. %)*		-1.29	-1.62	-2.65	2.99	0.17	1.79	0.97	3.58	1.48	1.15
Alk-CaC03		97	96	97	96	96	96	98	99	98	98
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		118	117	119	117	117	117	120	121	119	119
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		217	217	212	226	220	215	224	211	224	221
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		23	25	23	22	23	24	22	23	21	22
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1310	1310	1320	1290	1270	1300	1300	1310	1290	1310
Cond-Field *(umhos/cm)*		1318	1334	1363	1402	1399	1297	686	874	1429	1373
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.6	8	5.4	2.5	6.4	3.1	10.8	10.8	3.1	2.6
Iron (Fe)	GPS (0.6)	0.05	0.1	0.05	0.06	0.18	0.2	0.3	0.21	0.28	0.3
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	0.1	1.2	-0.09	0.2	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.72	0.9
Magnesium (Mg)		18.9	19.7	18.3	19.6	18.9	18.7	19.2	18.6	19.8	19.9
Manganese (Mn)	GPS (0.2)	0.11	0.1	0.1	0.11	0.1	0.1	0.11	0.1	0.1	0.1
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.68	7.64	7.67	7.69	7.58	7.62	7.63	7.62	7.75	7.69
pH (Field) *(Std. Units)*		7.6	7.43	7.6	7.6	8	8	7.49	7.64	7.66	7.87
Potassium (K)		4.3	4.2	4.1	4.5	4.4	4.4	4.2	4.1	4.1	4.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	11	16	12.3	10.6	11.7	14	12	9.7	10	11.3
Radium 226 *(pCi/L)*		3.6	7.1	2.6	2.2	2.4	2.6	2.4	1.9	2.2	1.9
Radium 228 *(pCi/L)*		7.4	8.9	9.7	8.4	9.3	11.4	9.6	7.8	7.8	9.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15	13.8	13.2	13.7	13.3	13.8	13.4	12.2	13.4	13.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		47.3	53.2	50.2	55.6	53.5	54.6	53.2	51.7	54	55.2
TDS @ 180° *C.*	GPS (500)	1060	1060	1030	1040	1030	1050	1050	1050	1050	1040
Sulfate (SO4)		592	613	603	575	600	611	591	617	590	621
Temperature *(C)*		11.2	10.7	8.8	11.5	10.4	9.9	8.7	8.3	8.3	9.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.04	0.2
Uranium, natural *(pCi/L)*	GPS (36)	4.4	5.1	5	4.8	4.4	4.9	5	4.4	6.9	5.2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

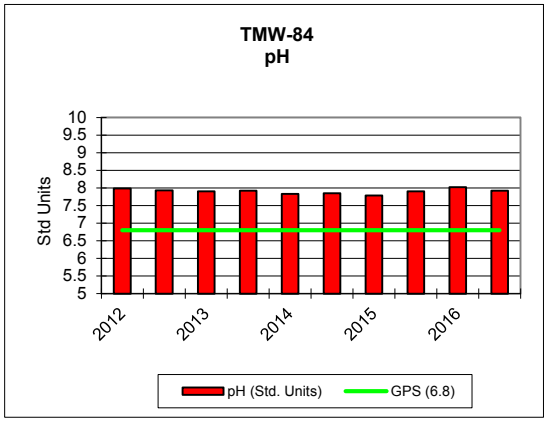

TMW-82
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

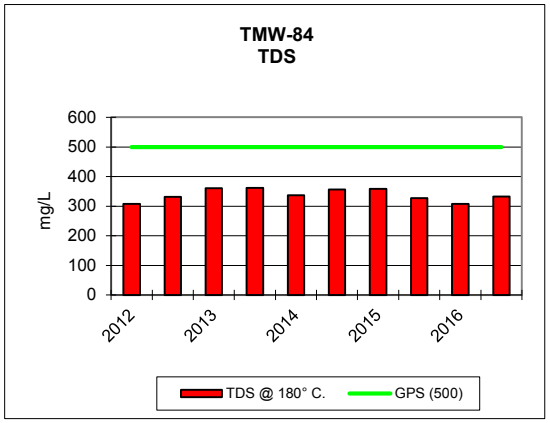

TMW-82
Iron
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

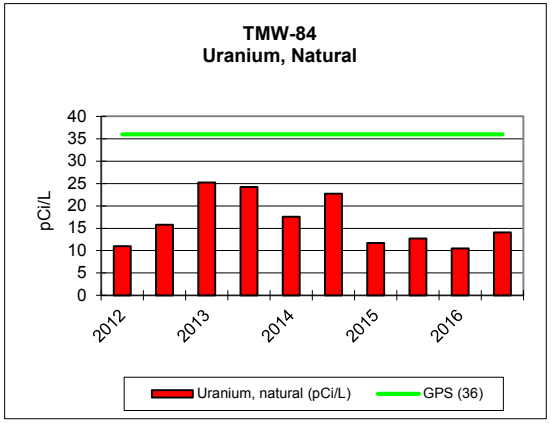

TMW-82
TDS
mg/L
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-82
Comb. Ra226/Ra228
pCi/L
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

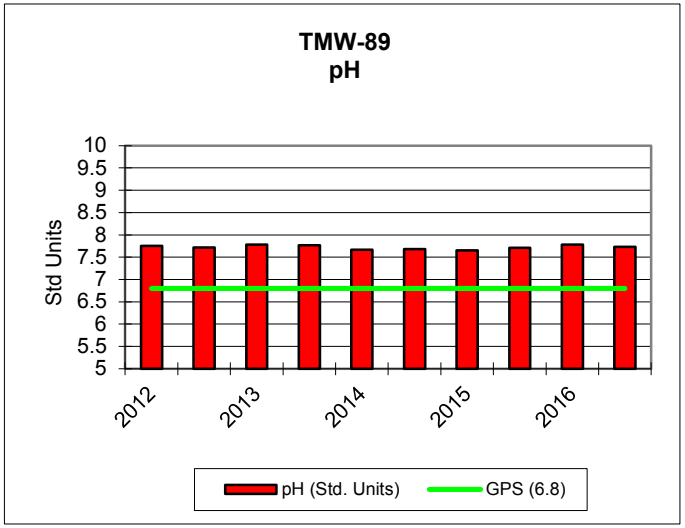
KENNECOTT URANIUM COMPANY											
TMW-84		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/1/2012	11/13/2012	4/23/2013	8/6/2013	5/6/2014	9/19/2014	5/13/2015	12/20/2015	5/10/2016	11/8/2016
TDS A/C Balance *(dec. %)*		-3.41	-1.37	-3.27	3.14	0.17	3.08	1.71	0.61	6.79	1.18
Alk-CaC03		104	104	108	104	106	108	103	108	105	105
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.025	0.027	0.034	0.033	0.027	0.031	0.019	0.021	0.017	0.02
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		126	127	132	127	129	131	126	132	128	128
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		52.6	62.8	70.3	77.6	70.2	70.7	74.8	67.6	53.6	70.4
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		6	8	8	8	8	9	9	8	7	9
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		457	493	559	550	512	544	534	500	467	540
Cond-Field *(umhos/cm)*		517	524	627	658	636	590	591	545	524	692
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.2	1.3	2.1	1.1	1.5	1.4	3.1	3.2	1.2	2.3
Iron (Fe)	GPS (0.6)	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<0.005	<0.005	<0.005	0.03	<0.005	0.6	<0.005	<0.006	<0.007
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.59	0.9
Magnesium (Mg)		3.9	4.2	4.6	5	4.7	4.5	4.7	4.3	3.5	4.5
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.99	7.93	7.9	7.92	7.83	7.85	7.79	7.9	8.02	7.92
pH (Field) *(Std. Units)*		8	7.81	7.9	7.8	8.4	7.9	7.8	7.91	8.03	8.19
Potassium (K)		2.6	2.7	3.2	3.4	3.1	3.1	2.8	3.1	2.5	3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	2.1	3.07	2.9	2.8	3.1	3.1	4.2	3.91	3.12	2.11
Radium 226 *(pCi/L)*		1	0.97	1.2	0.8	1.1	1.2	1	0.81	0.82	0.91
Radium 228 *(pCi/L)*		1.1	2.1	1.7	2	2	1.9	3.2	3.1	2.3	1.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.4	11.5	9.8	10.4	10.8	10	12.2	11.4	10.5	10.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		31.5	31.5	31.4	36.2	33.5	31.7	35.4	34.5	28.9	33.3
TDS @ 180° *C.*	GPS (500)	308	331	361	362	337	356	359	327	308	333
Sulfate (SO4)		116	132	158	157	148	158	155	138	125	153
Temperature *(C)*		10.5	10.2	9.4	13.2	10	9.7	9.2	8.5	8.6	9.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.5	<0.2	0.03	0.05
Uranium, natural *(pCi/L)*	GPS (36)	11	15.8	25.2	24.2	17.6	22.7	11.7	12.7	10.5	14.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

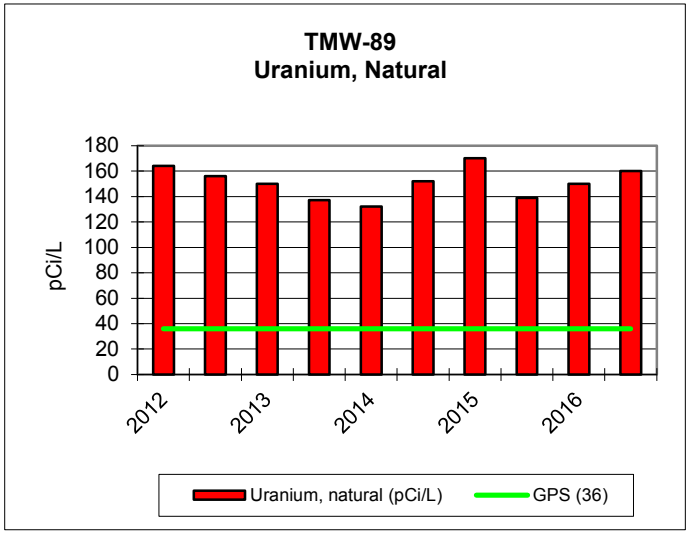

TMW-84
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

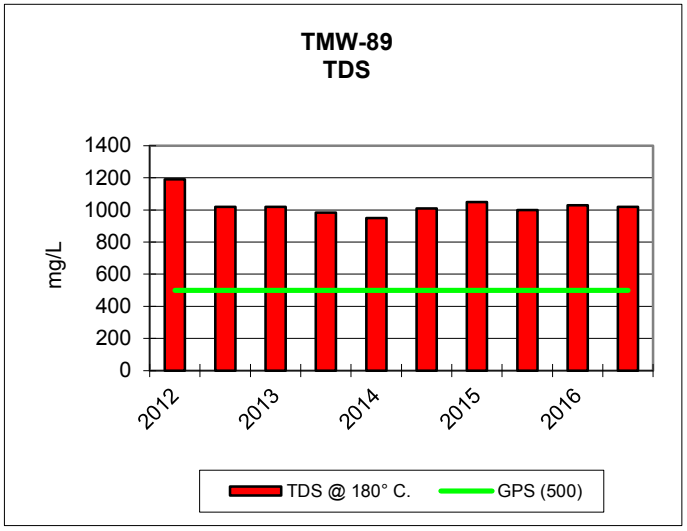

TMW-84
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

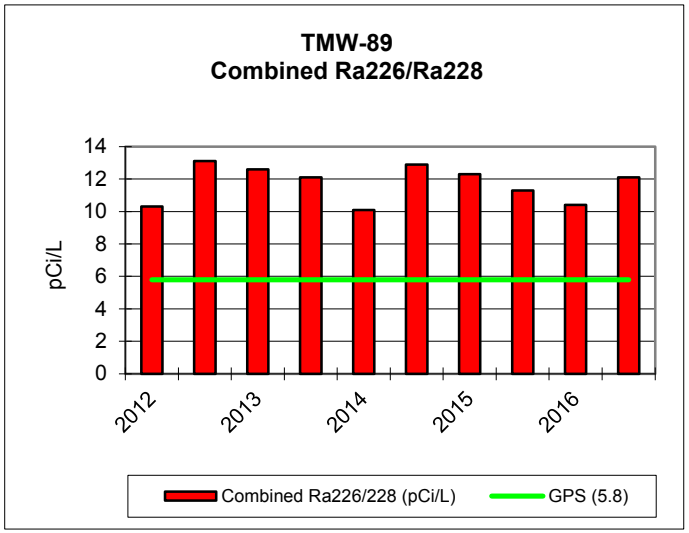

TMW-84
Uranium, Natural
pCi/L
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

KENNECOTT URANIUM COMPANY											
TMW-89		2012		2013		2014		2015		2016	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/2/2012	11/13/2012	4/23/2013	8/6/2013	5/6/2014	9/16/2014	5/12/2015	12/20/2015	5/10/2016	11/8/2016
TDS A/C Balance *(dec. %)*		-0.0103	-1.24	-3.58	0.294	1.6	1.5	0.99	0.1	0.63	1.1
Alk-CaC03		72	79	84	98	86	88	92	88	85	85
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		88	97	103	119	105	107	113	107	104	104
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		247	211	206	210	204	214	222	217	212	219
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		24	21	19	18	18	23	18	18	17	19
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	0.002	0.001	0.002	0.001	0.001	0.001	0.001	0.001	0.001
Cond *(umhos/cm)*		1440	1270	1310	1230	1190	1270	1290	1270	1280	1320
Cond-Field *(umhos/cm)*		1414	1288	1325	1334	1165	1286	1350	1362	1421	1386
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	5.4	6.5	6.1	4.9	8	7.9	9.9	17.1	6.3	14.3
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	1.5	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.95	0.8
Magnesium (Mg)		22.6	19.7	18.5	19.2	18.7	19.4	21.1	20.3	20	20.8
Manganese (Mn)	GPS (0.2)	0.06	0.04	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.75	7.72	7.78	7.77	7.67	7.68	7.65	7.71	7.78	7.73
pH (Field) *(Std. Units)*		7.7	7.52	7.7	7.6	8	7.9	7.6	7.71	7.8	8.39
Potassium (K)		5.9	5.1	5.1	5.3	5.3	5.1	5.3	5.1	4.8	5.4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	10.3	13.1	12.6	12.1	10.1	12.9	12.3	11.3	10.4	12.1
Radium 226 *(pCi/L)*		7.2	5.6	5.1	4.3	4.2	5.4	4.4	4.5	4.3	4.3
Radium 228 *(pCi/L)*		3.1	7.5	7.5	7.8	5.9	7.5	7.9	6.8	6.1	7.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		5	5.8	6.4	7.1	7	6.7	5.6	6.8	6.2	6.4
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		52.9	50.5	46.6	51.5	51.1	50.8	52.1	51.7	50	52.6
TDS @ 180° *C.*	GPS (500)	1190	1020	1020	983	949	1010	1050	1000	1030	1020
Sulfate (SO4)		698	607	613	569	590	608	602	603	602	632
Temperature *(C)*		10.5	11	9.8	13	9.7	10.3	9.3	8.4	8.7	11.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	0.2	<0.2	<0.2	0.2	<0.2	0.09	0.1
Uranium, natural *(pCi/L)*	GPS (36)	164	156	150	137	132	152	170	139	150	160
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01


TMW-89
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

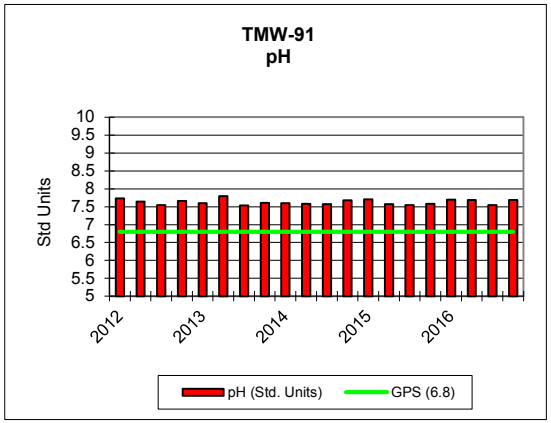

TMW-89
Uranium, Natural
pCi/L
180
160
140
120
100
80
60
40
20
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

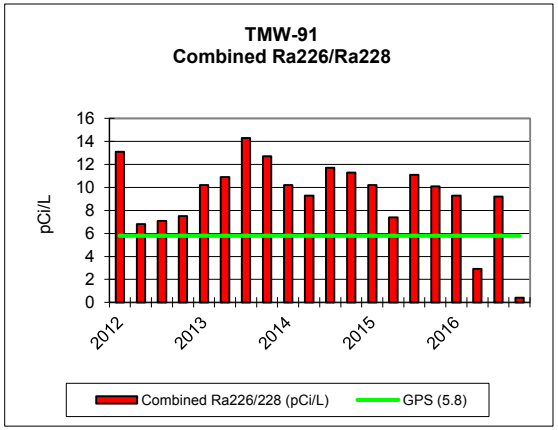

TMW-89
TDS
mg/L
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

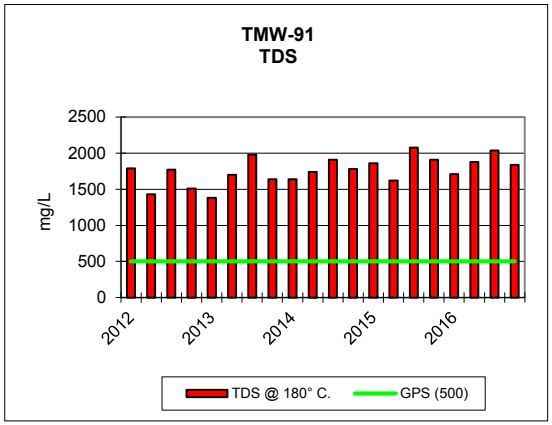

TMW-89
Combined Ra226/Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

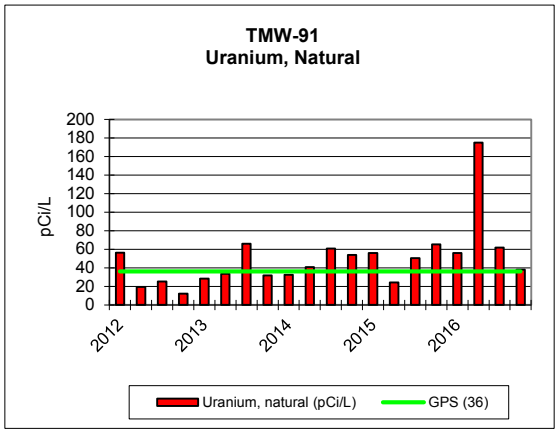
KENNECOTT URANIUM COMPANY																	
TMW-91		2012				2013				2014				2015			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/7/2012	5/9/2012	8/19/2012	10/23/2012	2/19/2013	4/29/2013	7/23/2013	10/21/2013	1/27/2014	4/22/2014	7/22/2014	10/28/2014	1/26/2015	4/28/2015	7/21/2015	12/1/2015
TDS A/C Balance *(dec. %)*		-0.756	-1.14	-2.81	2.6	5.05	-1.42	2.88	2.75	0	0.21	2.85	0.37	0.91	1.3	3.9	1.9
Alk-CaC03		120	113	115	114	106	115	113	112	111	110	111	111	111	106	110	101
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		147	138	140	138	130	140	138	137	135	134	135	135	135	129	134	123
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		394	305	378	349	330	370	449	357	359	389	444	394	398	335	420	436
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		75	53	76	60	52	73	83	61	68	74	84	77	80	68	95	88
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		2210	1740	1970	1800	1650	2060	2210	1880	1930	1990	2200	2100	2130	1930	2350	2220
Cond-Field *(umhos/cm)*		1930	1855	2150	1783	2160	2260	2520	2310	2260	2190	2500	2160	2260	1868	2380	2500
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.2	0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.4	1.7	2.2	1.8	3.1	3.1	4.3	2.2	3.5	3.6	5.6	4.4	6.4	5.2	9.9	8.5
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		31.5	23.2	29	26.8	25.8	29.3	35.3	28.6	28.9	30.2	35.6	31.5	30.9	26.2	32.5	35.9
Manganese (Mn)	GPS (0.2)	0.15	0.06	0.12	0.1	0.12	0.13	0.18	0.12	0.11	0.12	0.16	0.15	0.12	0.07	0.14	0.15
Mercury (Hg)		<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.73	7.64	7.55	7.66	7.6	7.8	7.54	7.61	7.6	7.58	7.57	7.68	7.71	7.57	7.55	7.58
pH (Field) *(Std. Units)*		7.8	7.9	7.5	7.62	7.4	8	7.53	7.9	8.2	7.4	7.1	7.56	8.05	7.52	7.24	7.55
Potassium (K)		5.4	4.7	6	5.3	5.3	5.3	5.8	5.6	5.1	5.8	6.2	6	5.8	5.7	5.3	6.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	13.1	6.8	7.1	7.5	10.2	10.9	14.3	12.7	10.2	9.3	11.7	11.3	10.2	7.4	11.1	10.1
Radium 226 *(pCi/L)*		4.3	2.7	2.1	1.5	2.1	3.3	2.9	3.1	2.2	2.5	2.7	2.6	2.9	2.2	3	3.1
Radium 228 *(pCi/L)*		8.8	4.1	5	6	8.1	7.6	11.4	9.6	8	6.8	9	8.7	7.3	5.2	8.1	7
Selenium (Se)	GPS (.01)	<0.001	0.002	<0.001	<0.001	0.002	<0.001	0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Silica (SiO2)		9.5	9.8	12.4	11.9	10.1	10.3	9.6	11.2	9.8	10.5	10	9.6	9.2	10.1	10.7	9.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		79.3	64.7	76.6	71.6	71.2	76.1	88.6	74.2	78	82.1	90.6	84.9	86.6	75.9	88.1	92
TDS @ 180° *C.*	GPS (500)	1790	1430	1770	1510	1380	1700	1980	1640	1640	1740	1910	1780	1860	1620	2080	1910
Sulfate (SO4)		1040	804	1040	853	775	992	1110	879	946	1020	1100	1030	1070	906	1200	1120
Temperature *(C)*		9.2	13.8	15.5	7	9.3	10.1	10.9	12.8	6.1	11.2	12	10.3	9.6	10.6	10.6	7.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.02	0.02	0.2	<0.2	0.03	0.05	0.04	0.03	0.03	0.03	0.1	0.1	0.05	0.04	0.1	0.02
Uranium, natural *(pCi/L)*	GPS (36)	56.5	19.4	25.2	12.1	28.4	33.6	66.1	31.7	32.6	40.8	60.9	54	55.9	24.1	50.6	65.4
Vanadium (V205)		<0.1	<0.1	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Zinc (ZN)		0.05	0.04	0.02	0.02	0.04	0.04	0.01	0.05	0.04	0.03	0.04	0.08	0.11	0.14	0.03	0.06

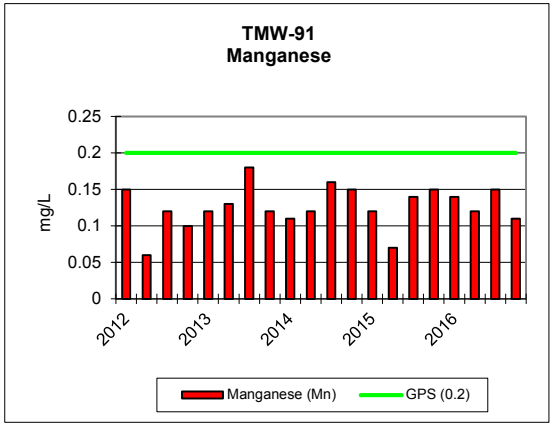
KENNECOTT URANIUM COMPANY					
TMW-91		2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/16/2016	4/13/2016	7/26/2016	10/12/2016
TDS A/C Balance *(dec. %)*		4.65	0.05	1.97	2.23
Alk-CaC03		106	102	113	111
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		130	125	138	135
Boron (B)		<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		428	395	462	391
Carbonate (CO3)		<1	<1	<1	<1
Chloride (Cl)		77	86	93	82
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	0.002
Cond *(umhos/cm)*		1990	2110	2370	2180
Cond-Field *(umhos/cm)*		2500	2300	2720	2390
Copper (Cu)		<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.1	9.8		4.2
Iron (Fe)	GPS (0.6)	0.07	<0.05	<0.05	0.08
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1
Lead (Pb)		-0.2	0	1	-0.07
Magnesium (Mg)		34.9	32.8	35.9	31
Manganese (Mn)	GPS (0.2)	0.14	0.12	0.15	0.11
Mercury (Hg)		0.0004	0.0003	0.0004	0.0003
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.7	7.69	7.55	7.69
pH (Field) *(Std. Units)*		7.39	7.5	6.96	7.69
Potassium (K)		5.7	5.7	5.9	5.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.3	2.91	9.2	0.4
Radium 226 *(pCi/L)*		2.9	0.51	2.5	2.4
Radium 228 *(pCi/L)*		6.4	2.4	6.7	-2
Selenium (Se)	GPS (.01)	<0.001	0.002	<0.001	0.002
Silica (SiO2)		8.8	9.3	10.1	10.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01
Sodium (Na)		71.7	91.6	94.8	82.1
TDS @ 180° *C.*	GPS (500)	1710	1880	2040	1840
Sulfate (SO4)		997	1060	1160	1080
Temperature *(C)*		8.7	13.9	14.6	10.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		-0.004	0.04	-0.03	0.07
Uranium, natural *(pCi/L)*	GPS (36)	56	175	61.8	38
Vanadium (V205)		<0.01	<0.01	<0.01	<0.01
Zinc (ZN)		0.09	0.17	0.04	0.07


TMW-91
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-91
Combined Ra226/Ra228
pCi/L
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-91
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

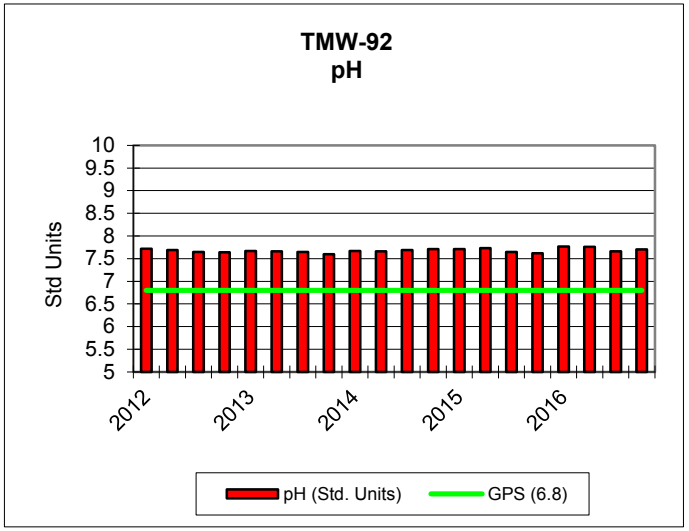

TMW-91
Uranium, Natural
pCi/L
200
180
160
140
120
100
80
60
40
20
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

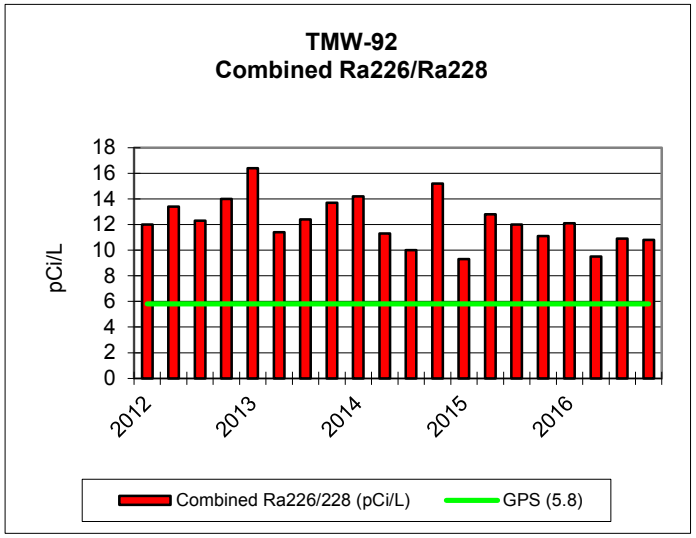

TMW-91
Manganese
mg/L
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

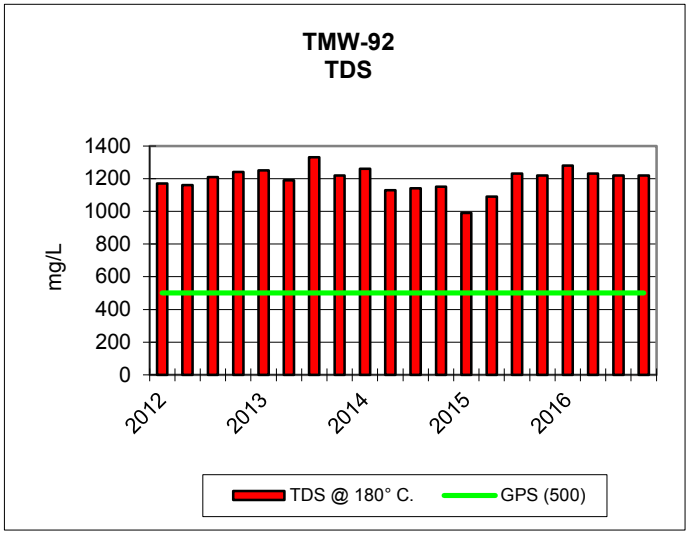
Graphs

KENNECOTT URANIUM COMPANY															
TMW-92		2012				2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	3/5/2012	5/8/2012	9/24/2012	11/5/2012	1/29/2013	6/11/2013	9/10/2013	10/29/2013	1/27/2014	5/20/2014	7/22/2014	11/11/2014	3/23/2015	6/1/2015
TDS A/C Balance *(dec. %)*		-0.572	-3.83	-4.17	0.591	1.65	2.06	-0.537	1.43	1.73	1.02	1.72	0.84	1.62	0.11
Alk-CaC03		101	103	105	102	104	98	105	103	104	107	108	103	107	107
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		123	126	129	124	126	120	128	126	127	130	132	126	130	131
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		254	238	238	271	284	264	279	272	282	245	260	259	247	235
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		31	45	34	36	39	33	36	34	40	32	30	34	30	28
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1410	1450	1490	1480	1530	1450	1540	1500	1530	1380	1430	1480	1370	1350
Cond-Field *(umhos/cm)*		1989	1447	1520	1566	1546	1509	1652	1548	1671	1495	1099	1525	2500	804
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1	<0.1	<0.1	0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	4.7	3.8	3.8	5.5	5.2	4.5	3.8	5.8	5.6	3.9	5.9	4.6	15.2	24.7
Iron (Fe)	GPS (0.6)	0.07	0.13	0.09	<0.05	<0.05	0.12	0.16	0.11	<0.05	<0.05	<0.05	0.05	0.16	0.15
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		17	15.5	17	18.7	20.2	17.9	18.3	19.6	19.6	16.8	17.3	17.5	16.4	16.1
Manganese (Mn)	GPS (0.2)	0.17	0.17	0.18	0.18	0.19	0.19	0.19	0.18	0.2	0.16	0.17	0.17	0.16	0.15
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.72	7.69	7.65	7.64	7.67	7.66	7.65	7.6	7.67	7.66	7.69	7.71	7.71	7.73
pH (Field) *(Std. Units)*		7.9	7.5	7.69	7.63	7.67	7.7	7	7.8	7.7	8.7	7.9	7.64	7.69	7.63
Potassium (K)		4.8	4.1	4	4.3	4.8	4.6	4.7	4.7	4.4	4.4	4.5	4.8	4.6	4.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	12	13.4	12.3	14	16.4	11.4	12.4	13.7	14.2	11.3	10	15.2	9.3	12.8
Radium 226 *(pCi/L)*		3.5	3.9	3.3	3.1	3.3	2.9	3	3.5	3.4	3.6	2.7	4.6	3.1	3.3
Radium 228 *(pCi/L)*		8.5	9.5	9	10.9	13.1	8.5	9.4	10.2	10.8	7.7	7.3	10.6	6.2	9.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.4	11.4	14.9	14.1	14.2	13.1	12.6	14.3	12.9	13.2	13	13.1	13.2	13.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		60.1	52.2	55.5	66	63.3	62.2	59	61.4	65.7	59.4	61.3	61.5	58.3	59.9
TDS @ 180° *C.*	GPS (500)	1170	1160	1210	1240	1250	1190	1330	1220	1260	1130	1140	1150	990	1090
Sulfate (SO4)		679	645	678	709	717	665	731	693	712	654	653	694	615	615
Temperature *(C)*		9.7	10.7	10.9	9.4	10.6	12.6	11	11.2	7.2	10.2	13.4	8.5	8.8	10.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		-0.006	0.06	0.004	0.004	0.02	0.09	0.1	0.2	0.1	0.03	0.1	0.2	0.02	0.09
Uranium, natural *(pCi/L)*	GPS (36)	6.6	5.3	15.2	7.5	7.1	8.1	8.3	7.1	9.9	7.6	7.1	8.5	7.6	8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY							
TMW-92				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	9/14/2015	12/14/2015	3/8/2016	6/20/2016	10/10/2016	11/14/2016
TDS A/C Balance *(dec. %)*		0.52	1.68	1.91	0.07	2.87	0.56
Alk-CaC03		100	101	98	116	106	108
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		123	124	119	141	129	132
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		271	270	275	273	257	263
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		33	35	39		35	33
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1560	1510	1550	1500	1520	1550
Cond-Field *(umhos/cm)*		799	1613	1735	1620	1636	1637
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	<0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	8.9	9.7	13.4	2.7	8.2	12
Iron (Fe)	GPS (0.6)	0.12	0.17	0.09	0.13	0.11	0.18
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	-0.2	0.57	0.2	0.4
Magnesium (Mg)		18.7	18.8	18.9	19	18.1	18.6
Manganese (Mn)	GPS (0.2)	0.17	0.19	0.17	0.17	0.16	0.17
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.65	7.62	7.77	7.76	7.66	7.7
pH (Field) *(Std. Units)*		7.67	7.73	7.26	6.36	7.68	7.83
Potassium (K)		4.6	4.6	4.6	4.5	4.6	4.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	12	11.1	12.1	9.5	10.9	10.8
Radium 226 *(pCi/L)*		4	3.3	3.3	3	3.3	2.7
Radium 228 *(pCi/L)*		8	7.8	8.8	6.5	7.6	8.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.4	13.4	12.9	13.2	12.8	13.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		62.5	61.9	62.3	62	61.5	63.5
TDS @ 180° *C.*	GPS (500)	1230	1220	1280	1230	1220	1220
Sulfate (SO4)		710	682	756	708	721	703
Temperature *(C)*		10.4	7.8	8.4	16.8	12.2	10.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.3	0.03	0.2	-0.03	0.06	0.1
Uranium, natural *(pCi/L)*	GPS (36)	6.9	6.9	8.4	7.3	7.9	8.4
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

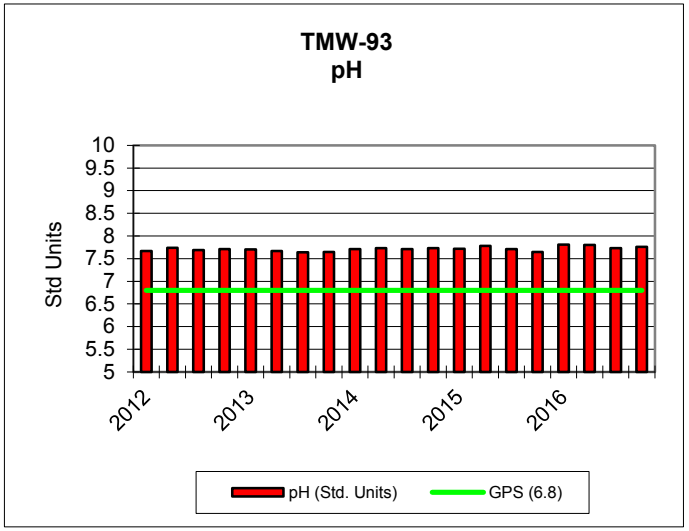

TMW-92
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

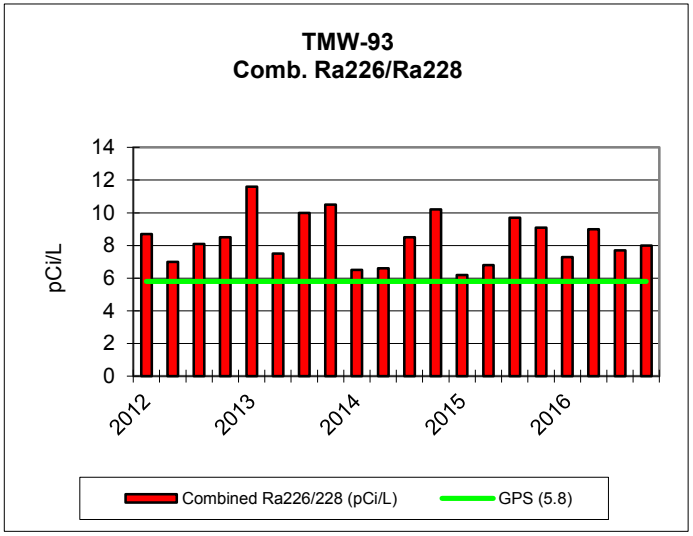

TMW-92
Combined Ra226/Ra228
pCi/L
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

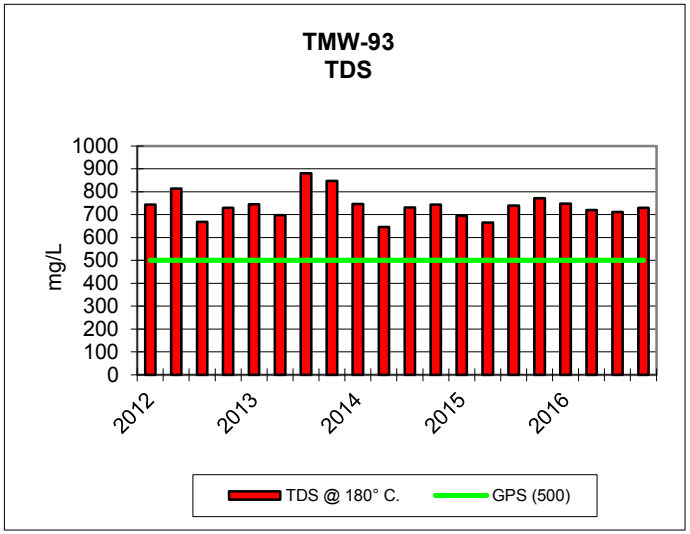

TMW-92
TDS
mg/L
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

KENNECOTT URANIUM COMPANY														
TMW-93		2012				2013				2014				2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	3/7/2012	5/7/2012	9/24/2012	11/5/2012	1/29/2013	6/10/2013	9/9/2013	10/21/2013	2/24/2014	4/28/2014	8/26/2014	11/12/2014	3/23/2015
TDS A/C Balance *(dec. %)*		-0.623	-4.84	-0.602	2.78	2.66	0.627	0.264	1.83	2.03	0.52	0.84	0.69	3.34
Alk-CaC03		144	152	147	146	148	142	158	168	150	142	146	150	144
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		175	186	179	178	181	174	193	205	183	173	179	183	176
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		162	159	145	164	170	149	185	188	157	135	155	162	148
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		15	17	13	15	14	14	17	17	15	13	16	16	16
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		975	1090	933	961	1010	930	1110	1130	1020	864	986	1020	1010
Cond-Field *(umhos/cm)*		1054	1141	960	1010	1017	990	1265	1210	1057	1017	1018	1018	1661
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.1	2.5	2.3	2.7	3.8	4	2.7	3.6	4.2	3.7	2.1	3.7	12.2
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-0.3	-0.2	0.5	0.8	0.4	0.8	-0.03	0.3	0.6	-0.009	-0.04	0.04	-0.4
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		10.3	11.1	10	11.6	11.7	10.3	11.8	13	11.2	9.6	10.8	10.9	10.9
Manganese (Mn)	GPS (0.2)	0.1	0.11	0.1	0.11	0.1	0.1	0.14	0.15	0.1	0.08	0.11	0.1	0.1
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.67	7.74	7.69	7.71	7.7	7.67	7.64	7.65	7.71	7.73	7.71	7.73	7.72
pH (Field) *(Std. Units)*		7.7	7.6	7.77	7.67	7.65	6.6	7	7.9	7.8	8	7.8	7.8	7.7
Potassium (K)		4	3.6	3.5	3.4	3.8	3.5	3.9	4.2	3.6	3.6	3.7	3.8	3.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	8.7	7	8.1	8.5	11.6	7.5	10	10.5	6.5	6.6	8.5	10.2	6.2
Radium 226 *(pCi/L)*		2.9	2.1	2.2	1.8	3	1.8	2.3	3.3	2.2	1.8	2.2	3.1	2.3
Radium 228 *(pCi/L)*		5.8	4.9	5.9	6.7	8.6	5.7	7.7	7.2	4.3	4.8	6.3	7.1	3.9
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.7	13.8	14.2	15.5	16	13.9	14.9	15.9	13.9	13.2	14.4	14.4	13.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		44.5	46.8	46	55.2	50.1	48.3	52	55.4	50.1	46.1	49.5	50.3	47.1
TDS @ 180° *C.*	GPS (500)	743	813	668	730	745	697	880	847	746	646	731	744	694
Sulfate (SO4)		374	410	336	367	372	342	426	416	388	313	370	382	376
Temperature *(C)*		10.4	10.4	11	11.1	11.7	13.7	11.1	9.8	9.9	9.5	10.6	8.4	8.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02
Thorium 230 *(pCi/L:)*		0.06	<0.2	0.03	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	8.6	6.1	8.2	7.1	5.5	5.9	5.1	5.4	7.1	6.5	5.5	6.6	7
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY								
TMW-93					2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	6/1/2015	9/14/2015	12/14/2015	3/8/2016	6/21/2016	10/5/2016	11/14/2016
TDS A/C Balance *(dec. %)*		0.86	1.03	1.61	0.07	1.6	0.37	0.07
Alk-CaC03		141	142	147	140	151	143	149
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		172	174	179	171	185	174	182
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		142	162	171	160	152	162	158
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		13	15	18	16		16	16
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		912	1020	1050	1000	980	977	1010
Cond-Field *(umhos/cm)*		779	801	1202	1140	1071	1032	1096
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.2	<0.1	<0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	33.2	7.7	11.6	10.7	2.5	4.7	13.3
Iron (Fe)	GPS (0.6)	<0.05	0.07	0.1	<0.05	0.05	0.09	0.12
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.4	0.5	-0.05	<0.2	<0.2	<0.2	<0.2
Lead (Pb)		<0.01	<0.01	<0.01	-0.2	-0.062	0.6	0.6
Magnesium (Mg)		10.3	11.3	11.7	11.1	10.8	10.2	11.1
Manganese (Mn)	GPS (0.2)	0.08	0.11	0.12	0.09	0.1	0.11	0.1
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.78	7.71	7.65	7.81	7.8	7.73	7.76
pH (Field) *(Std. Units)*		7.74	7.81	7.61	7.4	6.46	7.63	7.86
Potassium (K)		3.5	3.8	4	3.9	3.7	3.7	3.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.8	9.7	9.1	7.3	9	7.7	8
Radium 226 *(pCi/L)*		2.4	2.6	2.8	2.2	2	2.7	2.8
Radium 228 *(pCi/L)*		4.4	7.1	6.3	5.1	7	5	5.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.6	14.5	15.3	14.4	14.3	14.4	14.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		48.7	50.7	52.4	51.2	49.2	46.4	51.4
TDS @ 180° *C.*	GPS (500)	665	740	772	748	720	712	729
Sulfate (SO4)		324	374	388	384	334	367	370
Temperature *(C)*		9.8	9.9	8.3	8.5	16.1	11.3	10.6
Thallium (Tl)	GPS (7.0)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Thorium 230 *(pCi/L:)*		<0.2	0.2	<0.2	0.06	0.03	-0.02	0.1
Uranium, natural *(pCi/L)*	GPS (36)	6.9	4.9	4.6	5.4	4.9	4.3	4.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01

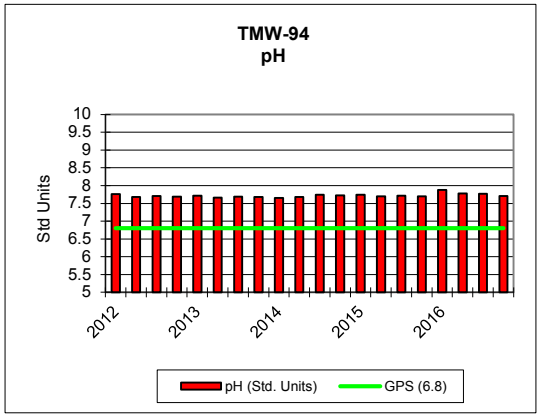

TMW-93
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

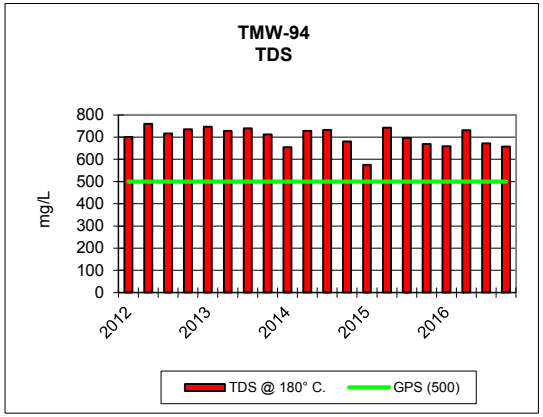

TMW-93
Comb. Ra226/Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

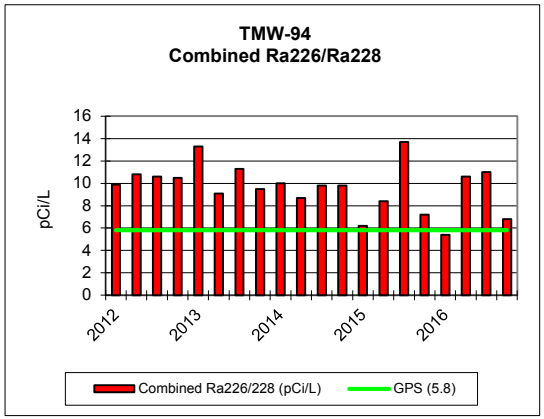

TMW-93
TDS
mg/L
1000
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

KENNECOTT URANIUM COMPANY														
TMW-94		2012				2013				2014				2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	3/5/2012	5/8/2012	9/24/2012	11/5/2012	1/29/2013	6/10/2013	9/9/2013	10/21/2013	2/4/2014	4/28/2014	8/26/2014	11/11/2014	3/23/2015
TDS A/C Balance *(dec. %)*		-0.354	-4.43	0.249	0.855	2.75	0.575	-1.09	2	1.53	0.45	0.68	2.26	0.88
Alk-CaC03		137	145	142	140	144	141	144	145	137	141	141	141	135
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		167	176	173	170	175	172	175	177	168	171	172	173	164
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		158	146	156	163	171	155	153	156	142	157	156	143	146
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		14	14	14	14	13	14	13	13	12	15	15	14	13
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		963	1030	986	971	1000	973	961	965	909	969	982	946	919
Cond-Field *(umhos/cm)*		1022	1036	1006	1020	1029	1029	1094	1042	942	1105	998	981	1664
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.6	3.1	2.9	3.9	4.2	4.4	2.8	3.4	3	4.5	2.5	3	12.6
Iron (Fe)	GPS (0.6)	<0.05	0.14	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	0.06	<0.05	0.08	0.12	0.1
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		9.8	9.4	9.8	10.5	10.6	9.8	9.1	9.4	8.9	10.2	10.1	8.8	9.3
Manganese (Mn)	GPS (0.2)	0.1	0.11	0.11	0.11	0.11	0.1	0.1	0.1	0.07	0.09	0.11	0.09	0.08
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.76	7.68	7.71	7.69	7.72	7.66	7.69	7.68	7.65	7.68	7.74	7.73	7.74
pH (Field) *(Std. Units)*		7.8	7.5	7.63	7.56	7.62	7.6	7	8	7.8	8	7.9	7.71	7.72
Potassium (K)		4	3.5	3.6	3.9	3.9	3.6	3.8	3.8	3.5	3.8	3.8	3.5	3.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.9	10.8	10.6	10.5	13.3	9.1	11.3	9.5	10	8.7	9.8	9.8	6.2
Radium 226 *(pCi/L)*		2.4	3.5	2.9	2.4	3.8	2.8	2.6	3.1	2.3	2.3	2.7	3.9	2.5
Radium 228 *(pCi/L)*		7.5	7.3	7.7	8.1	9.5	6.3	8.7	6.4	7.7	6.4	7.1	5.9	3.7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		17.2	14	15.3	16.7	17.8	15.6	15.3	16.5	15.4	15.4	15.6	15.3	15.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		49.8	45.6	47.2	51.4	50.4	48.6	46.1	49.2	46.8	49.5	49.4	46.1	47.8
TDS @ 180° *C.*	GPS (500)	701	760	717	735	747	728	740	712	654	728	732	680	575
Sulfate (SO4)		379	374	359	382	377	357	359	341	315	374	374	345	334
Temperature *(C)*		11.6	10.8	12.1	11.5	11	13.5	11.5	9.6	8.2	9.2	10.4	8.9	9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	3	2.6	4.4	3.7	2.7	3.1	2.7	2.3	3	3.3	3.3	3.2	3.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY								
TMW-94					2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	6/1/2015	9/14/2015	12/14/2015	3/8/2016	6/13/2016	10/5/2016	11/14/2016
TDS A/C Balance *(dec. %)*		1.14	0.96	0.19	11.5	3.1	0.69	1.06
Alk-CaC03		140	134	137	132	144	137	148
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		171	163	167	161	176	167	181
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		163	153	145	112	149	150	141
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		14	14	14	13	14	13	12
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1010	976	923	899	966	927	914
Cond-Field *(umhos/cm)*		612	599	991	1023	1094	1001	995
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	47	8.2	8.8	8.7	5.8	9.3	17.5
Iron (Fe)	GPS (0.6)	0.13	0.08	0.11	0.06	0.13	0.1	0.12
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	-0.3	0.27	0.4	0.9
Magnesium (Mg)		10.7	9.8	9	7	9.7	8.6	9
Manganese (Mn)	GPS (0.2)	0.1	0.1	0.1	0.06	0.1	0.09	0.09
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.7	7.72	7.7	7.88	7.78	7.77	7.71
pH (Field) *(Std. Units)*		7.73	7.79	7.65	7.44	6.77	7.57	7.83
Potassium (K)		3.9	3.7	3.7	2.9	3.4	3.6	3.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	8.4	13.7	7.2	5.4	10.6	11	6.8
Radium 226 *(pCi/L)*		2.5	3.1	2.4	1.5	2.4	2.4	2.1
Radium 228 *(pCi/L)*		5.9	10.6	4.8	3.9	8.2	8.6	4.7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16	15.8	16.1	12.3	14.4	15.7	15.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		53.3	49.5	47.6	37.9	45.7	43.5	48.4
TDS @ 180° *C.*	GPS (500)	742	697	669	659	731	672	658
Sulfate (SO4)		383	357	337	333	370	345	330
Temperature *(C)*		10.3	10.1	7.9	8.3	9.7	11	10.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	0.2	<0.2	0.08	-0.002	0.01	0.2
Uranium, natural *(pCi/L)*	GPS (36)	3.9	3.1	2.5	2.1	3.2	2.3	2.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.03	<0.01	0.04	<0.01

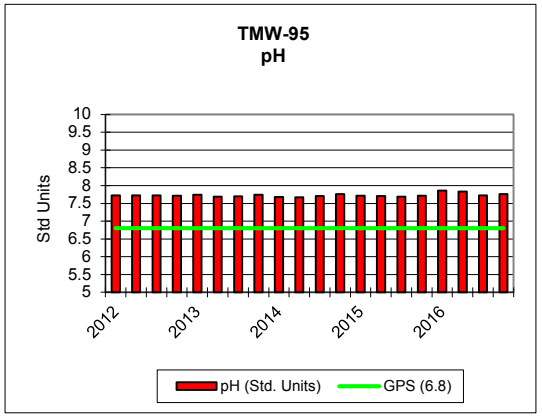

TMW-94
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

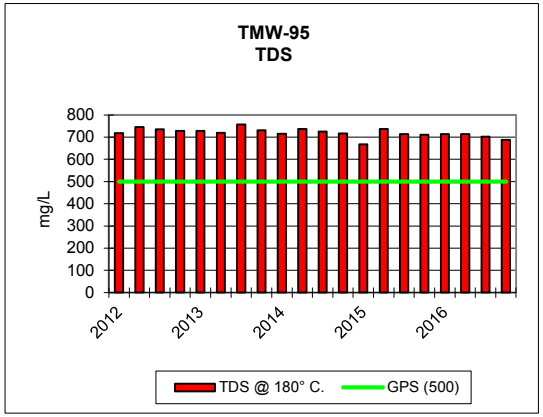

TMW-94
TDS
mg/L
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

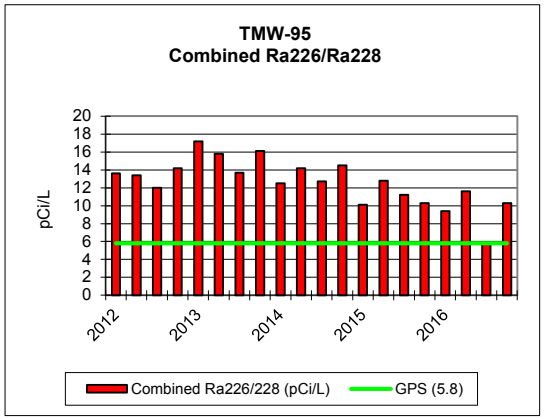

TMW-94
Combined Ra226/Ra228
pCi/L
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

KENNECOTT URANIUM COMPANY														
TMW-95		2012				2013				2014				2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/6/2012	5/8/2012	9/24/2012	11/5/2012	1/29/2013	6/10/2013	9/9/2013	10/21/2013	2/4/2014	4/28/2014	8/26/2014	11/12/2014	3/23/2015
TDS A/C Balance *(dec. %)*		-3.18	2.41	-0.445	1.28	4.33	1.99	-0.409	3.22	0.95	1.42	1.15	0.75	4.6
Alk-CaC03		135	139	144	139	141	140	143	145	141	142	142	145	151
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		164	170	175	170	172	170	174	176	172	173	174	177	184
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		153	147	160	168	176	157	157	165	151	158	156	160	147
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		15	13	15	16	15	14	15	14	15	16	16	16	16
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1030	1000	999	978	994	969	978	985	981	972	976	985	994
Cond-Field *(umhos/cm)*		1034	1030	1014	1022	1000	1034	1111	1058	1012	1089	985	1013	1757
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	ND	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	5.6	4.5	4.3	6.3	6.4	6.2	3.7	4.7	4.7	6.1	5.3	4.4	13.4
Iron (Fe)	GPS (0.6)	0.08	0.12	<0.05	<0.05	<0.05	0.07	0.05	<0.05	<0.05	<0.05	0.13	0.15	0.15
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		8.5	8.5	8.8	9.5	9.7	8.9	8.6	9.1	8.5	9	9	9	8.4
Manganese (Mn)	GPS (0.2)	0.1	0.1	0.1	0.1	0.11	0.09	0.09	0.1	0.09	0.09	0.1	0.1	0.09
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.73	7.73	7.73	7.72	7.74	7.69	7.7	7.74	7.68	7.67	7.71	7.76	7.72
pH (Field) *(Std. Units)*		7.6	7.6	7.68	7.64	7.73	7.7	7.2	8	7.8	7.8	8	7.5	7.79
Potassium (K)		3.5	3.5	3.7	3.6	3.9	3.6	3.9	4	3.5	3.8	3.7	3.8	3.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	13.6	13.4	12	14.2	17.2	15.8	13.7	16.1	12.5	14.2	12.7	14.5	10.1
Radium 226 *(pCi/L)*		4.7	4.8	4.2	3.9	5.5	3.9	3.2	4.3	3.5	3.5	4	4.8	4
Radium 228 *(pCi/L)*		8.9	8.6	7.8	10.3	11.7	11.9	10.5	11.8	9	10.7	8.7	9.7	6.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.9	14.9	14.9	16.9	17.8	15.4	15	16.5	14.9	15.5	15.8	15.9	15.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		45	46.2	47.6	48.4	50.7	49.1	47	48.5	47.5	49.1	49.4	49.5	45.7
TDS @ 180° *C.*	GPS (500)	718	746	735	728	728	720	757	731	715	737	725	716	668
Sulfate (SO4)		380	313	369	377	368	344	359	345	352	378	371	359	366
Temperature *(C)*		10.8	11.4	12.5	11.7	11.4	13	11.2	10.1	8.6	9.2	11.5	7.2	8.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.03	0.04	<0.02	<0.02	0.2	0.2	0.1	<0.02	0.05	0.02	<0.02	0.2	0.07
Uranium, natural *(pCi/L)*	GPS (36)	3.3	1.7	2.7	2.1	1.8	1.8	1.8	1.7	2	1.9	1.8	2	1.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY								
TMW-95					2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	6/1/2015	9/14/2015	12/14/2015	3/8/2016	6/13/2016	10/10/2016	11/15/2016
TDS A/C Balance *(dec. %)*		2.34	1.74	1.42	0.41	2.27	0.17	0.61
Alk-CaC03		140	136	135	136	157	141	141
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		171	166	165	166	191	172	172
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		162	158	156	154	154	152	152
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		15	15	16	15	15	15	14
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		987	996	967	959	952	958	938
Cond-Field *(umhos/cm)*		1055	1021	641	1088	1116	1044	1031
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	0.03	11.9	12.9	16.5	6.6	8.1	5.9
Iron (Fe)	GPS (0.6)	0.15	0.09	0.13	0.12	0.16	0.13	0.16
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.6	0.2	0.8	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	0.2	0.49	-0.6	0.7
Magnesium (Mg)		9.2	9.1	8.8	8.7	8.7	8.7	8.7
Manganese (Mn)	GPS (0.2)	0.1	0.09	0.1	0.09	0.09	0.09	0.09
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.71	7.69	7.72	7.86	7.83	7.73	7.76
pH (Field) *(Std. Units)*		7.76	7.77	7.7	7.49	7.44	7.68	7.92
Potassium (K)		3.8	3.8	3.8	3.9	3.6	3.8	3.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	12.8	11.2	10.3	9.4	11.6	5.7	10.3
Radium 226 *(pCi/L)*		4.3	4.4	3.6	3.3	3.9	4.4	3.3
Radium 228 *(pCi/L)*		8.5	6.8	6.7	6.1	7.7	1.3	7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16.5	15.9	16.2	15.9	15.3	15.9	15.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		53.5	50.3	49.5	50.2	48	49.3	48.7
TDS @ 180° *C.*	GPS (500)	737	714	711	714	714	702	688
Sulfate (SO4)		361	356	350	357	361	353	344
Temperature *(C)*		10.2	10.3	8.2	8.3	8.9	11.4	10.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.02	0.1	0.02	0.3	0.1	-0.02	0.8
Uranium, natural *(pCi/L)*	GPS (36)	1.7	1.5	1.4	1.5	1.4	1.4	1.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01

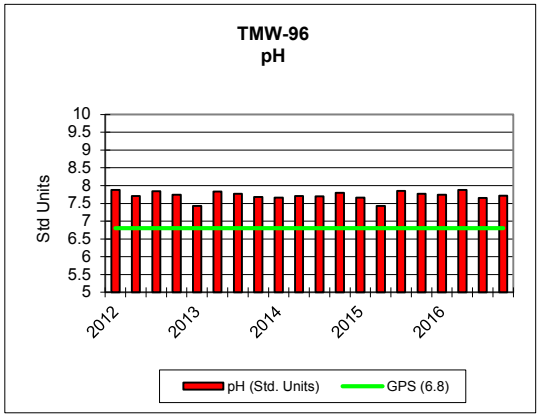

TMW-95
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

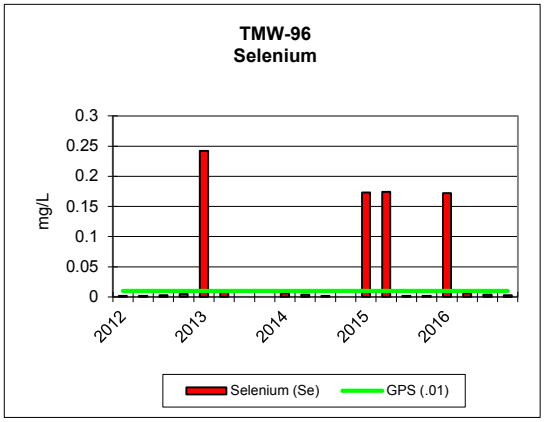

TMW-95
TDS
mg/L
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

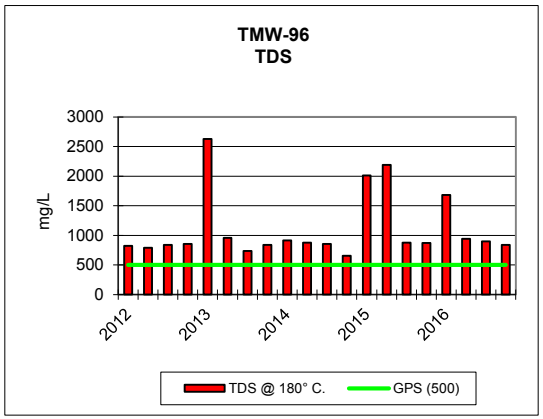

TMW-95
Combined Ra226/Ra228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

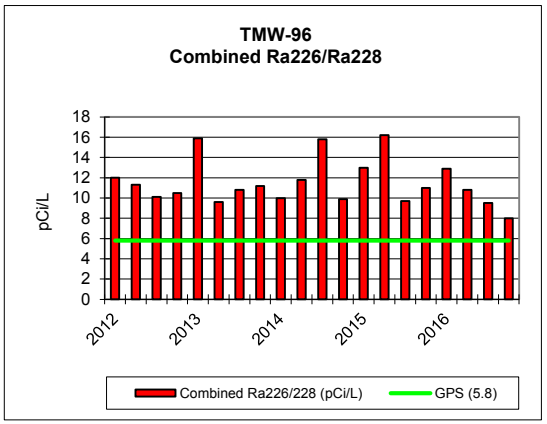
KENNECOTT URANIUM COMPANY																
TMW-96		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/16/2012	7/10/2012	10/16/2012	3/25/2013	4/29/2013	7/8/2013	10/1/2013	3/18/2014	4/1/2014	7/8/2014	10/21/2014	1/26/2015	4/15/2015	7/20/2015
TDS A/C Balance *(dec. %)*		0.485	-3.01	1.04	1.51	-1.03	0.168	1.93	0.782	1.05	3.34	0.35	0.52	0.25	0.69	1.41
Alk-CaC03		111	119	118	125	168	127	105	124	125	134	124	117	139	150	124
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		135	146	145	153	204	155	128	152	152	163	151	143	169	183	151
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		178	168	176	185	483	198	160	187	195	184	186	140	386	414	185
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		25	25	24	26	162	31	22	23	30	28	28	20	123	135	28
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Cond *(umhos/cm)*		1120	1090	1110	1090	2880	1280	1000	1090	1180	1190	1140	921	2340	2560	1160
Cond-Field *(umhos/cm)*		1089	1159	1126	1137	3010	1387	1216	1191	1363	1369	1160	956	2440	2600	1205
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	<0.1	0.1	<0.1	0.1	0.1	<0.1	0.1	0.2	ND	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.5	3.5	3.4	3.3	4.7	4.3	2	3.7	5	3.2	3.7	4.4	17.4	23.1	11.1
Iron (Fe)	GPS (0.6)	0.12	0.08	0.1	<0.05	<0.05	<0.05	0.07	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	0.05	0.06
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.7	-0.07	1	0.5	0.6	0.2	0.3	0.2	0.9	0.2	0.5	0.2	-0.2	0.4	0.2
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		11.7	11.6	12.2	13.7	91.7	17.2	11.6	10.8	14.7	11.7	12.5	8.6	59.5	66.1	12.1
Manganese (Mn)	GPS (0.2)	0.11	0.11	0.11	0.12	0.05	0.07	0.11	0.12	0.1	0.11	0.12	0.08	0.08	0.06	0.12
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	5.4	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3.6	3.6	<0.1
pH *(Std. Units)*	GPS (6.8)	7.88	7.71	7.84	7.74	7.43	7.83	7.77	7.68	7.66	7.71	7.7	7.8	7.66	7.43	7.85
pH (Field) *(Std. Units)*			6.9	7.6	7.64	7.6	7.9	7.6	7.79	7.9	7.8	7.8	7.97	7.44	7.13	7.59
Potassium (K)		3.8	3.6	4	4.1	6.1	3.9	3.7	3.8	4	3.8	4	3.4	5.6	5.7	3.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	12	11.3	10.1	10.5	15.9	9.6	10.8	11.2	10	11.8	15.8	9.9	13	16.2	9.7
Radium 226 *(pCi/L)*		3.2	3	3.1	3	3.7	3.3	2.4	2.8	3.4	2.8	2.4	2.6	4.6	4.5	2.7
Radium 228 *(pCi/L)*		8.8	8.3	7	7.5	12.2	6.3	8.4	8.4	6.6	9	13.4	7.3	8.4	11.7	7
Selenium (Se)	GPS (.01)	0.002	0.002	0.003	0.005	0.242	0.01	<0.001	<0.001	0.006	0.004	0.002	<0.001	0.173	0.174	0.002
Silica (SiO2)		15	14.4	14.4	15.2	10.3	12.8	14.6	13.4	13.4	15.6	14.1	13.1	11.9	12.1	14.2
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		49	48.9	47.9	54.6	144	56.5	49.9	48.1	55	47	53.4	46.1	115	113	52
TDS @ 180° *C.*	GPS (500)	824	790	837	857	2630	957	738	841	916	880	854	655	2010	2190	876
Sulfate (SO4)		435	441	415	443	1470	498	387	437	473	464	451	336	1090	1180	464
Temperature *(C)*		11.3	11.4	12.2	11.8	10	12.2	13.1	12.2	9.6	9.7	11.4	10.8	9.6	10.2	11.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.08	0.05	0.02	0.05	0.07	0.09	0.04	0.1	0.2	0.04	0.04	0.1	0.07	0.6	0.1
Uranium, natural *(pCi/L)*	GPS (36)	22	23.1	24.1	33.1	1500	101	32.7	13.9	45.1	33.7	23.6	16	795	967	19.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.001	<0.01	<0.01	<0.01	0.01	<0.01

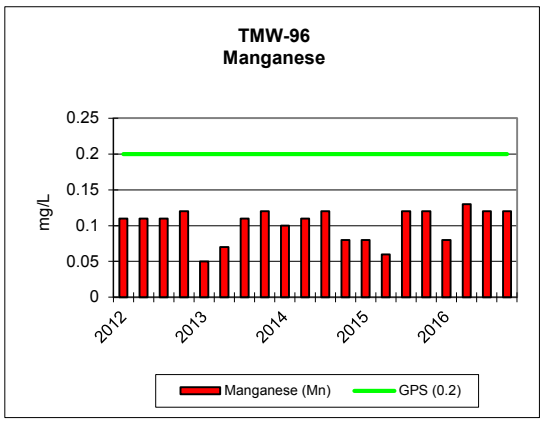
KENNECOTT URANIUM COMPANY						
TMW-96			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	11/3/2015	2/16/2016	4/21/2016	7/11/2016	10/3/2016
TDS A/C Balance *(dec. %)*		0.38	0.21	2.14		0.63
Alk-CaC03		129	128	118	124	121
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		157	156	143	152	148
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		191	326	205	203	183
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		28	91	30	31	28
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	0.001
Cond *(umhos/cm)*		1150	2020	1190	1080	1130
Cond-Field *(umhos/cm)*		1209	2250	1303	1429	1214
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	7.4	4.6	6.7	4.6	8.3
Iron (Fe)	GPS (0.6)	0.06	<0.05	<0.05	<0.05	0.11
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.7	<0.2	<0.2	<0.2	<0.2
Lead (Pb)		<0.01	0.6	-0.23	-0.1	0.6
Magnesium (Mg)		12.8	48.7	14.8	12.8	12.6
Manganese (Mn)	GPS (0.2)	0.12	0.08	0.13	0.12	0.12
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	2.8	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.77	7.74	7.88	7.65	7.72
pH (Field) *(Std. Units)*		7.59	7.17	7.47	6.76	7.58
Potassium (K)		3.9	4.6	4.1	4.1	3.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	11	12.9	10.8	9.5	8
Radium 226 *(pCi/L)*		2.7	4.1	3.3	2.6	2.3
Radium 228 *(pCi/L)*		8.3	8.8	7.5	6.9	5.7
Selenium (Se)	GPS (.01)	0.002	0.172	0.006	0.004	0.003
Silica (SiO2)		14.7	11.6	14.4	13.7	13.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		53.7	92	57.2	51.7	52.4
TDS @ 180° *C.*	GPS (500)	872	1680	940	899	839
Sulfate (SO4)		459	912	492	442	455
Temperature *(C)*		11.7	10.8	10.6	11.2	11.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.05	0.06	0.02	0.04	0.02
Uranium, natural *(pCi/L)*	GPS (36)	15.9	463	41.8	24.4	19.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01

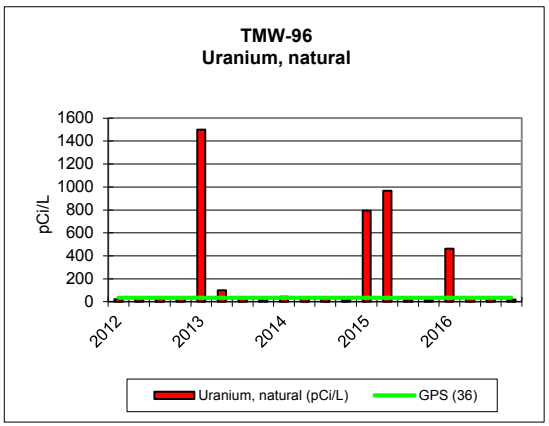

TMW-96
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-96
Selenium
mg/L
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Selenium (Se)
GPS (.01)


TMW-96
TDS
mg/L
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

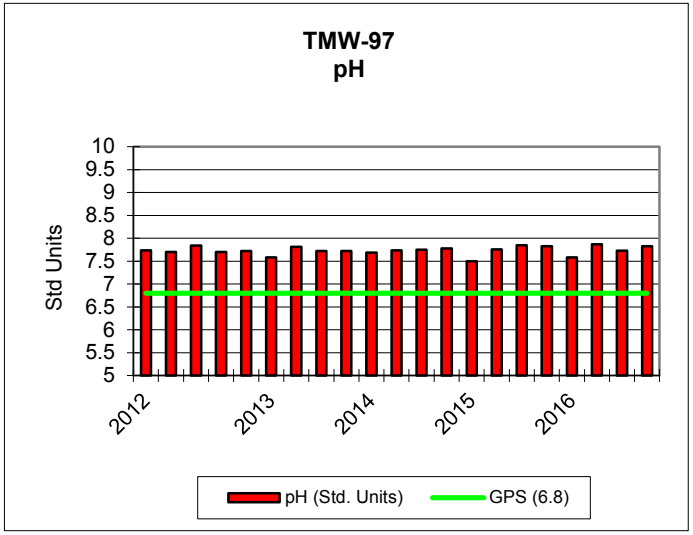

TMW-96
Combined Ra226/Ra228
pCi/L
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

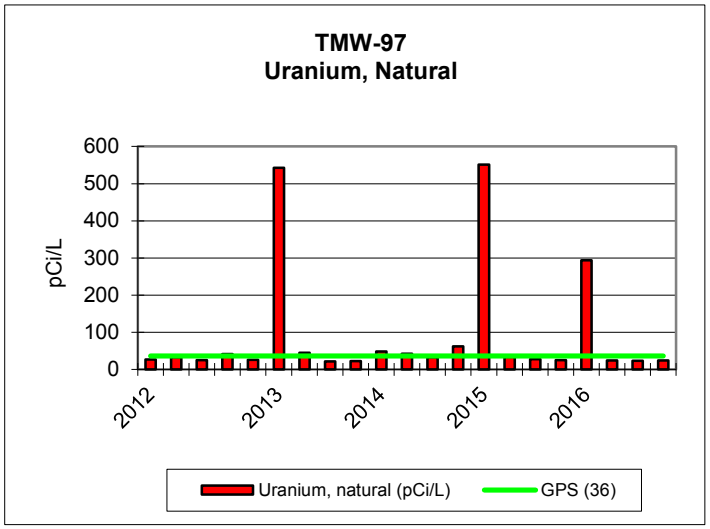

TMW-96
Manganese
mg/L
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

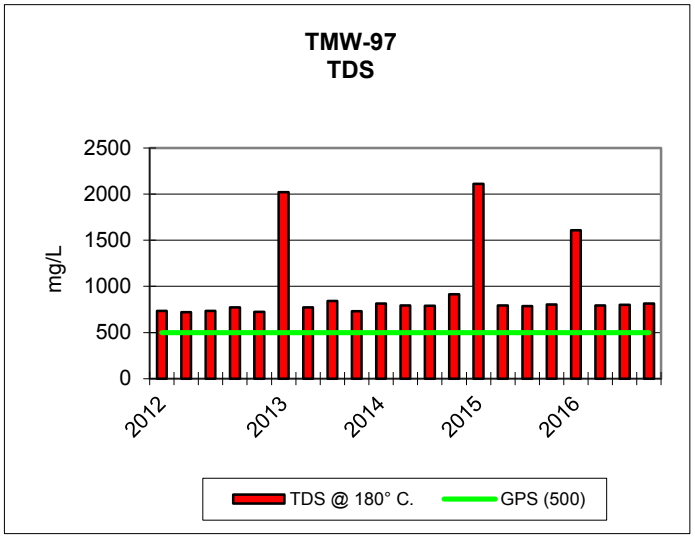

TMW-96
Uranium, natural
pCi/L
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

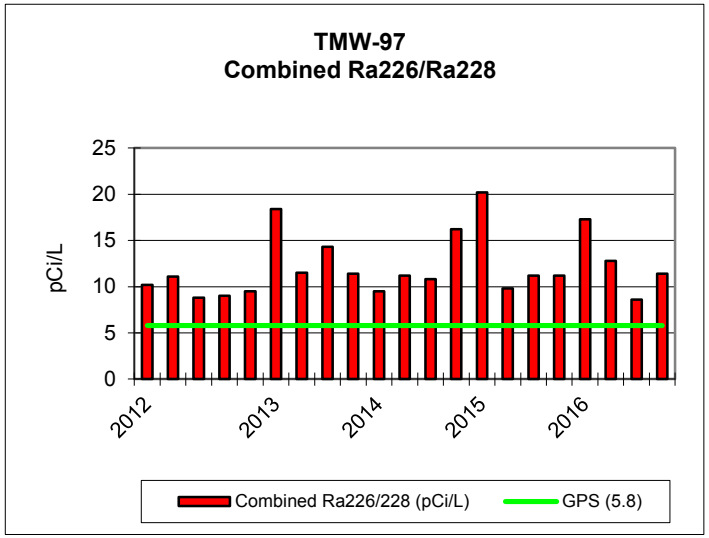
KENNECOTT URANIUM COMPANY																
TMW-97		2012					2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/4/2012	4/10/2012	7/10/2012	9/6/2012	11/5/2012	3/25/2013	4/29/2013	7/8/2013	10/1/2013	3/18/2014	4/1/2014	7/8/2014	11/10/2014	3/25/2015	6/2/2015
TDS A/C Balance *(dec. %)*		-0.117	-1.32	1.07	-0.344	2.61	-0.503	0.019	0.421	-2.34	0.37	1.47	0.12	2.12	0.21	2.6
Alk-CaC03		94	103	100	106	104	155	107	133	105	106	105	105	108	154	105
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.002	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		115	125	122	129	126	189	131	162	128	129	128	128	131	188	128
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		154	148	150	164	161	407	158	186	147	167	165	166	191	417	152
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		23	22	21	25	23	72	24	25	24	26	27	27	36	74	28
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1010	965	980	990	957	2260	1060	1130	965	1070	1100	1050	1200	2490	1080
Cond-Field *(umhos/cm)*		1138	1073	1011	1021	1033	2380	1063	1021	999	1196	1156	1102	1232	4270	1138
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.2	<0.1	0.1	0.1	<0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3.1	1.9	2.8	4.1	4	4.6	4.1	2.9	3.3	4.6	4	2.7	4.3	49.8	10.9
Iron (Fe)	GPS (0.6)	0.13	0.08	0.1	0.13	0.06	<0.05	0.1	<0.05	0.11	0.19	0.14	0.08	0.13	0.89	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.3	<1	0.5	0.5	1.2	0.6	0.3	0.2	0.3	0.8	0.2	<1	<1	2	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		10.9	10.3	10.9	12.5	11.4	56.3	12.4	12.4	9.2	13.3	12.2	12.1	12.6	65.4	12.4
Manganese (Mn)	GPS (0.2)	0.1	0.09	0.1	0.11	0.1	0.29	0.1	0.12	0.11	0.11	0.11	0.11	0.13	0.3	0.12
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.74	7.7	7.84	7.7	7.72	7.58	7.81	7.72	7.72	7.69	7.74	7.75	7.78	7.5	7.76
pH (Field) *(Std. Units)*		7.62	7.1	7.7	7.33	7.6	7	7.2	8	7.8	7.9	8	8.2	7.83	7.4	7.7
Potassium (K)		3.5	3.2	3.6	3.7	3.5	5.8	3.4	4.1	3.3	3.5	3.6	3.7	3.9	5.8	3.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	10.2	11.1	8.8	9	9.5	18.4	11.5	14.3	11.4	9.5	11.2	10.8	16.2	20.2	9.8
Radium 226 *(pCi/L)*		2.5	2.2	2.4	2.2	2.3	3.9	2.7	2.9	2.4	3.1	2.6	2.3	3.8	4	1.7
Radium 228 *(pCi/L)*		7.7	8.9	6.4	6.8	7.2	14.5	8.8	11.4	9	6.4	8.6	8.5	12.4	16.2	8.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.7	13.9	14.6	15.5	15.5	12.4	14.4	14.6	14	13.9	15.6	13.9	13.7	11.2	14.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		46.1	45.3	44.5	45.3	48.9	97.1	48.2	53.9	42.6	49.7	47.1	49.8	51.3	103	53.9
TDS @ 180° *C.*	GPS (500)	733	720	734	771	725	2020	773	842	731	815	793	790	916	2110	792
Sulfate (SO4)		392	377	365	408	379	1180	398	445	372	420	426	416	493	1240	419
Temperature *(C)*		10.5	13.5	12.7	15.5	11.5	9.9	8.8	12	14	9.3	9.8	11.5	8.8	9.8	12.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	26.9	33.3	24.9	41.4	26.4	543	44.9	21.8	22.2	48	42.7	33.2	62	551	33.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY							
TMW-97				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	9/2/2015	11/3/2015	3/21/2016	6/20/2016	9/7/2016	11/7/2016
TDS A/C Balance *(dec. %)*		2.77	0.93	0.65	2.81	5.02	0.49
Alk-CaC03		102	122	128	109	108	107
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		125	148	157	133	132	131
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		172	172	317	165	166	170
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		25	26	58	27	28	26
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1050	1070	1880	1050	1070	1080
Cond-Field *(umhos/cm)*		1093	1111	2140	1159	1156	1188
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	15.3	7.3	6.8	3.5	4.9	6.3
Iron (Fe)	GPS (0.6)	0.1	0.16	0.67	0.09	0.18	0.2
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	0.4	0.85	0.6	1.3
Magnesium (Mg)		12.5	11.9	43.9	11.3	11.8	12.3
Manganese (Mn)	GPS (0.2)	0.11	0.11	0.25	0.11	0.11	0.11
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.85	7.83	7.58	7.87	7.73	7.83
pH (Field) *(Std. Units)*		7.6	7.62	7.24	6.51	7.47	7.96
Potassium (K)		3.7	3.6	4.8	3.6	3.6	3.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	11.2	11.2	17.3	12.8	8.6	11.4
Radium 226 *(pCi/L)*		2.6	3.1	4.1	2.6	2.3	2.9
Radium 228 *(pCi/L)*		8.6	8.1	13.2	10.2	6.3	8.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.9	14.1	13.8	14.6	14.4	14.3
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		52.1	49.9	80.5	45.8	50	51.2
TDS @ 180° *C.*	GPS (500)	787	805	1610	792	799	814
Sulfate (SO4)		412	426	920	429	440	423
Temperature *(C)*		12.1	11.9	10.3	14.1	11.2	10.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.2	<0.2	0.1	0.06	0.02	0.1
Uranium, natural *(pCi/L)*	GPS (36)	27.5	25.3	294	24.2	23.2	24.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.02	<0.01	<0.01	0.03


TMW-97
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

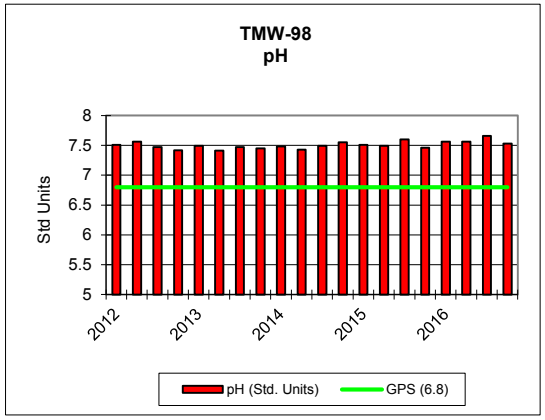

TMW-97
Uranium, Natural
pCi/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

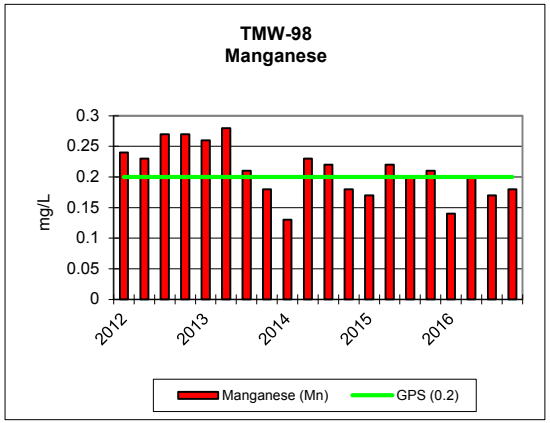

TMW-97
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

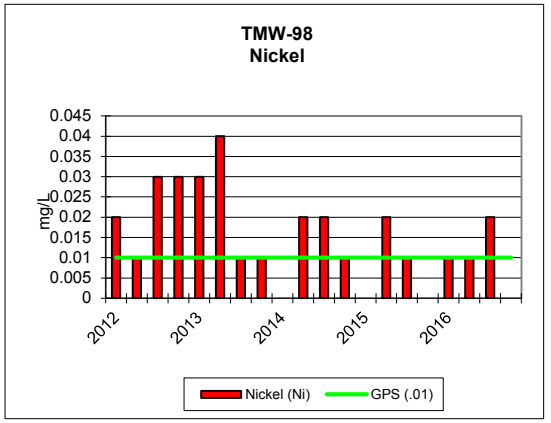

TMW-97
Combined Ra226/Ra228
pCi/L
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

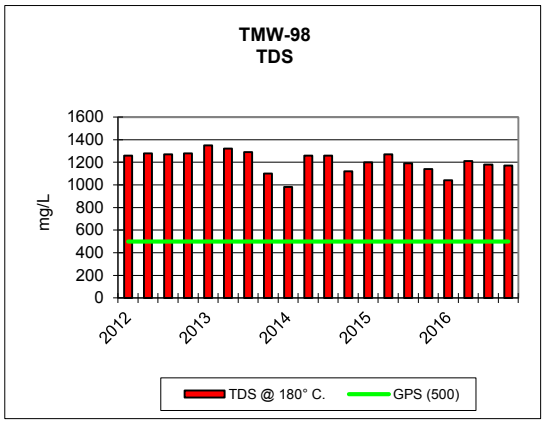
KENNECOTT URANIUM COMPANY																
TMW-98		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	3/5/2012	5/8/2012	9/24/2012	11/5/2012	3/5/2013	6/11/2013	9/9/2013	10/28/2013	2/4/2014	4/29/2014	8/11/2014	11/10/2014	3/30/2015	6/2/2015	9/2/2015
TDS A/C Balance *(dec. %)*		0.626	-2.51	0.465	0.00345	3.06	-0.563	-1.01	0.898	0.43	3	2.17	3.33	2.57	1.43	1.92
Alk-CaC03		117	112	111	109	109	108	110	109	110	110	106	111	110	106	102
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	0.001	0.001	<0.001	0.002	0.001	<0.001	<0.001	0.001	0.001	0.002	<0.001	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		143	137	136	133	133	132	134	133	134	134	129	135	135	129	124
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		283	258	277	279	299	283	264	244	217	268	265	228	262	258	262
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		27	27	27	29	27	32	30	35	29	32	32	36	36	32	31
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.013	0.009	0.023	0.023	0.017	0.027	0.008	0.009	0.004	0.013	0.014	0.013	0.004	0.016	0.007
Cond *(umhos/cm)*		1510	1550	1540	1510	1570	1570	1480	1390	1320	1490	1540	1400	1480	1590	1470
Cond-Field *(umhos/cm)*		1591	1542	1541	1548	1629	1583	1652	1511	1329	1349	942	1438	2640	1686	1506
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.3	3.2	2.4	6	2.5	5.9	2.8	3.7	2.9	6.1	3.1	2.6	5.3	10.1	14.9
Iron (Fe)	GPS (0.6)	0.2	0.3	0.18	0.35	0.15	0.6	0.25	0.13	0.07	0.31	0.08	0.25	0.19	0.47	0.33
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		25	22.5	24.6	26.3	27.5	26.4	22.6	22.7	17.8	23.7	23.6	19.1	21.8	24.7	22.6
Manganese (Mn)	GPS (0.2)	0.24	0.23	0.27	0.27	0.26	0.28	0.21	0.18	0.13	0.23	0.22	0.18	0.17	0.22	0.2
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.02	0.01	0.03	0.03	0.03	0.04	0.01	0.01	<0.01	0.02	0.02	0.01	<0.01	0.02	0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.51	7.56	7.47	7.42	7.49	7.41	7.47	7.45	7.48	7.43	7.49	7.55	7.51	7.49	7.6
pH (Field) *(Std. Units)*		7.5	7.3	7.47	7.45	7.46	7.3	6.6	7.5	7.7	7.9	7.4	7.61	7.52	7.4	7.34
Potassium (K)		5.5	4.7	5.1	5.6	4.9	5.1	5.2	4.9	4.2	5	5.1	4.5	5.2	5.4	5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.6	9.6	10.3	10.9	12.3	9.9	10.4	10.4	11	9.8	9.5	12.3	13.2	11	7.7
Radium 226 *(pCi/L)*		2.2	2.7	2.4	2.4	2.6	1.9	1.8	2.4	2.2	3.1	2.3	2.8	3.7	2.4	2.1
Radium 228 *(pCi/L)*		7.4	6.9	7.9	8.5	9.7	8	8.6	8	8.8	6.7	7.2	9.5	9.5	8.6	5.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.1	11.4	11.2	12.6	12.6	12	11.3	13.6	12	12	12.2	11.6	12.3	12.6	12.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		56.4	51.2	53	60	53.7	56.5	52.9	54.9	51.6	55.3	57.4	51.5	58	59.6	56.4
TDS @ 180° *C.*	GPS (500)	1260	1280	1270	1280	1350	1320	1290	1100	982	1260	1260	1120	1200	1270	1190
Sulfate (SO4)		741	717	726	761	746	770	711	630	564	761	747	629	733	727	669
Temperature *(C)*		10.7	11	12.4	11.8	10.2	12.9	11.2	9.1	8.7	9.8	11.3	8.2	11.1	11.8	10.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.2	0.02	0.04	0.3	0.05	0.09	0.1
Uranium, natural *(pCi/L)*	GPS (36)	39.7	37.3	44.4	44.2	41.7	40.1	37.5	35	23.7	36.4	33	28.6	29.4	33.8	27.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	0.01	0.01	0.02	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01

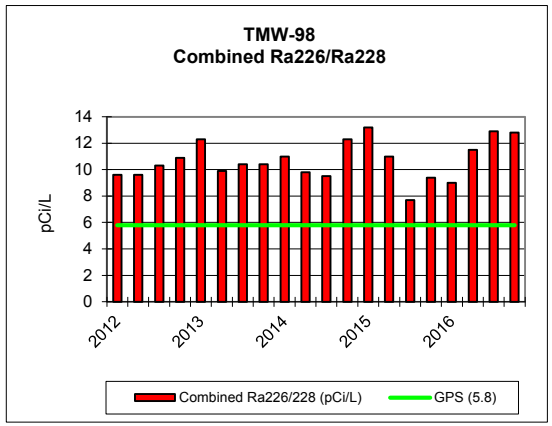
KENNECOTT URANIUM COMPANY						
TMW-98			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	12/15/2015	3/15/2016	6/21/2016	10/11/2016	11/9/2016
TDS A/C Balance *(dec. %)*		4.05	0.24	0.62	1.87	1.7
Alk-CaC03		107	104	122	111	105
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		131	127	148	135	128
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		227	225	255	250	249
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		42		32	35	35
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.008	0.004	0.009	0.006	0.006
Cond *(umhos/cm)*		1420	1310	1480	1460	1490
Cond-Field *(umhos/cm)*		1479				
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	<0.1	<0.1	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	8.7	2.4	4.8	3.6	17.4
Iron (Fe)	GPS (0.6)	0.27	0.14	0.34	0.27	0.29
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	0.3	0.41	-0.02	0.5
Magnesium (Mg)		21.8	17.7	22.2	21.5	21.3
Manganese (Mn)	GPS (0.2)	0.21	0.14	0.2	0.17	0.18
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	0.01	0.01	0.02	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.46	7.56	7.56	7.66	7.53
pH (Field) *(Std. Units)*		7.42				
Potassium (K)		4.8	4.5	4.8	4.7	4.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.4	9	11.5	12.9	12.8
Radium 226 *(pCi/L)*		1.9	2.2	1.8	2	2.8
Radium 228 *(pCi/L)*		7.5	6.8	9.7	10.9	10
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.8	12.8	12.2	12.1	12.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		56.8	55.4	55.2	55.3	54.6
TDS @ 180° *C.*	GPS (500)	1140	1040	1210	1180	1170
Sulfate (SO4)		649	584	649	681	680
Temperature *(C)*		9.2				
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.02	0.08	-0.006	0.5	0.04
Uranium, natural *(pCi/L)*	GPS (36)	28.6	22	26.5	22.4	27.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.02	<0.01	<0.01	<0.01

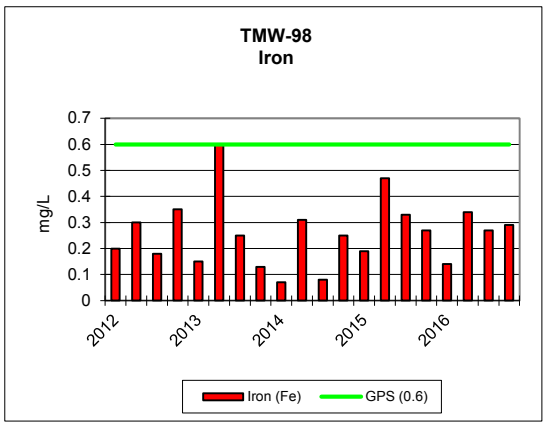

TMW-98
pH
Std Units
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

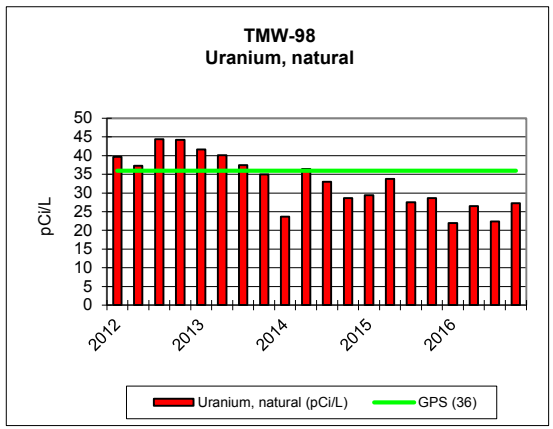

TMW-98
Manganese
mg/L
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)


TMW-98
Nickel
mg/L
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)


TMW-98
TDS
mg/L
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

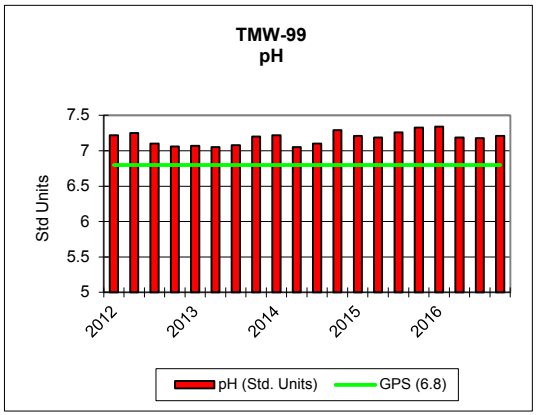

TMW-98
Combined Ra226/Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

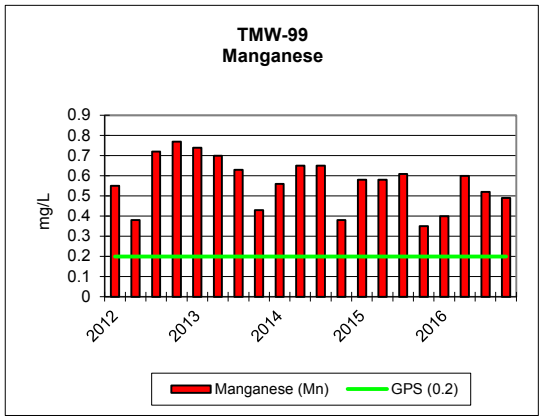

TMW-98
Iron
mg/L
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

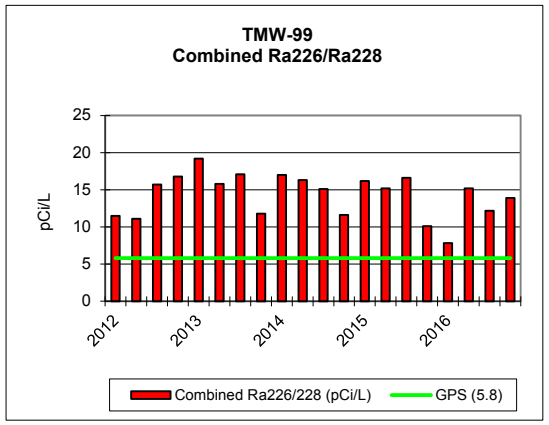

TMW-98
Uranium, natural
pCi/L
50
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

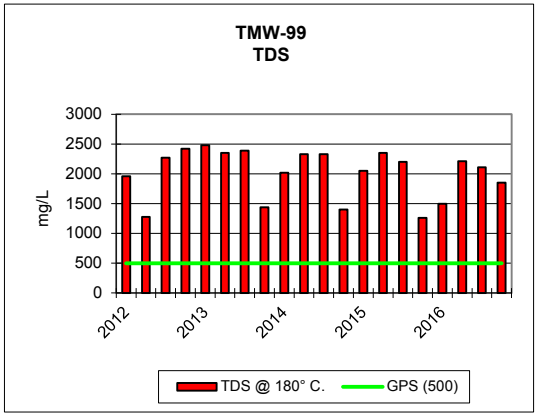
KENNECOTT URANIUM COMPANY																
TMW-99		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	3/5/2012	6/5/2012	9/24/2012	11/5/2012	3/5/2013	6/11/2013	9/9/2013	11/11/2013	2/24/2014	5/6/2014	8/12/2014	11/12/2014	3/30/2015	6/2/2015	9/2/2015
TDS A/C Balance *(dec. %)*		0.866	0.362	-1	-3.67	2.57	0.459	0.411	0.753	1.15	0.59	0.54	0.02	2	5.77	2.03
Alk-CaC03		121	110	141	130	133	136	134	121	129	130	130	120	127	126	123
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	<0.001	<0.001	<0.001	0.001	0.002	0.002	0.003	0.003	0.001	0.003	0.004	0.002	0.002	0.003
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		148	134	172	159	162	166	163	148	157	158	158	146	155	155	150
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		416	252	467	499	477	479	477	299	419	495	500	289	427	418	470
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		36	23	39	48	40	41	36	26	38	41	39	25	45	41	35
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.027	0.017	0.04	0.043	0.041	0.041	0.025	0.016	0.023	0.033	0.032	0.015	0.022	0.032	0.021
Cond *(umhos/cm)*		2170	1570	2500	2530	2560	2470	2430	1720	2260	2460	2480	1670	2190	2570	2410
Cond-Field *(umhos/cm)*		2400	1606	2580	2690	2400	1606	2580	2690	1993	2770	2480	1717	4140	2520	2520
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	4	2.5	3.3	7.2	4.5	7.6	2.9	2.6	7.3	9.8	4.6	3	6.6	16.9	24.8
Iron (Fe)	GPS (0.6)	3.73	2.57	5.31	5.8	5.06	6.61	4.77	3.04	5.01	4.68	4.34	2.8	4.78	4.7	4.52
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.08	0.04	1.4	0.4	1.8	0.5	0.9
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		50.8	33.2	56.8	65.1	64.7	59.7	54.1	34.8	51	58.6	57.2	34.5	52.5	60.8	56.3
Manganese (Mn)	GPS (0.2)	0.55	0.38	0.72	0.77	0.74	0.7	0.63	0.43	0.56	0.65	0.65	0.38	0.58	0.58	0.61
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04
Nickel (Ni)	GPS (.01)	0.05	0.02	0.05	0.05	0.05	0.04	0.04	0.02	0.03	0.05	0.04	0.02	0.03	0.05	0.04
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.22	7.25	7.1	7.06	7.07	7.05	7.08	7.2	7.22	7.05	7.1	7.29	7.21	7.19	7.26
pH (Field) *(Std. Units)*		7.4	7.3	7.16	7.07	7.4	7.3	7.16	7.07	7.3	7.4	7	7.33	7.28	7.07	6.9
Potassium (K)		6.2	4.4	6	6.7	6.3	6.3	6.5	4.9	5.9	6.1	6.6	5	6.5	6	6.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	11.5	11.1	15.7	16.8	19.2	15.8	17.1	11.8	17	16.3	15.1	11.6	16.2	15.2	16.6
Radium 226 *(pCi/L)*		2.3	2.3	3.4	3.1	3.8	3.8	2.8	2.9	3.8	4	3.1	3.8	4.1	3.3	2.9
Radium 228 *(pCi/L)*		9.2	8.8	12.3	13.7	15.4	12	14.3	8.9	13.2	12.3	12	7.8	12.1	11.9	13.7
Selenium (Se)	GPS (.01)	0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.2	13.4	11	12.9	12	12	11.2	11.9	12.1	11.9	11.9	11.5	11.9	12.9	12.4
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06
Sodium (Na)		88.4	67	88.4	99.5	96	92.6	83	65.8	85.2	87.9	90	65	89	95.8	85.7
TDS @ 180° *C.*	GPS (500)	1960	1280	2270	2420	2480	2350	2390	1440	2020	2330	2330	1400	2050	2350	2200
Sulfate (SO4)		1200	737	1380	1610	1340	1380	1350	832	1180	1410	1430	821	1300	1450	1310
Temperature *(C)*		9.7	11.6	12.7	11.3	1.17	1.09	1.15	1.07	9.4	11..1	11.2	7.3	9.5	10.2	9.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	0.2	0.2	<0.2	0.2	0.03	0.03	0.04	0.07	0.03	0.07	0.3
Uranium, natural *(pCi/L)*	GPS (36)	146	90.7	274	301	338	294	336	216	334	268	311	194	287	334	291
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.05	0.02	<0.01	<0.01	<0.01	<0.01	0.01

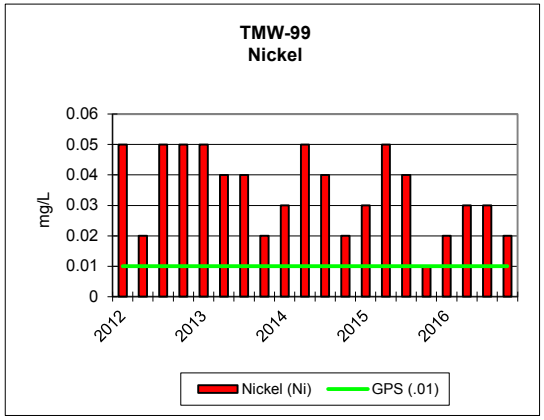
KENNECOTT URANIUM COMPANY						
TMW-99			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	12/15/2015	3/15/2016	6/21/2016	10/11/2016	11/9/2016
TDS A/C Balance *(dec. %)*		1.84	0.85	4.43	1.65	0.4
Alk-CaC03		126	119	128	126	121
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.002	0.001	<0.001	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		153	145	156	153	148
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		254	306	464	439	385
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		21	27	35	38	33
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.011	0.01	0.024	0.019	0.017
Cond *(umhos/cm)*		1520	1740	2400	2350	2180
Cond-Field *(umhos/cm)*		1266	1974	2740	2580	2280
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	11.8	3.5	3.6	7.4	24.3
Iron (Fe)	GPS (0.6)	2.21	2.22	4.15	3.91	3.54
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-0.05	<1	<1	<1	<1
Lead (Pb)		<0.01	0.3	0.55	0.4	0.8
Magnesium (Mg)		30.6	36.6	56.1	52.2	47.2
Manganese (Mn)	GPS (0.2)	0.35	0.4	0.6	0.52	0.49
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.01	0.02	0.03	0.03	0.02
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.33	7.34	7.19	7.18	7.21
pH (Field) *(Std. Units)*		7.28	6.99	6.28	7	7.2
Potassium (K)		4.5	5	6.2	5.8	5.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	10.1	7.84	15.2	12.2	13.9
Radium 226 *(pCi/L)*		1.9	0.24	2.9	3.1	3
Radium 228 *(pCi/L)*		8.2	7.6	12.3	9.1	10.9
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		11.3	11.6	12.2	11.4	11.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		58	66.5	84.8	79.2	76.6
TDS @ 180° *C.*	GPS (500)	1260	1500	2210	2110	1850
Sulfate (SO4)		740	890	1220	1310	1120
Temperature *(C)*		8	8.7	15.1	11.1	10.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		-0.02	0.07	0.01	-0.004	-0.04
Uranium, natural *(pCi/L)*	GPS (36)	204	280	322	304	318
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01

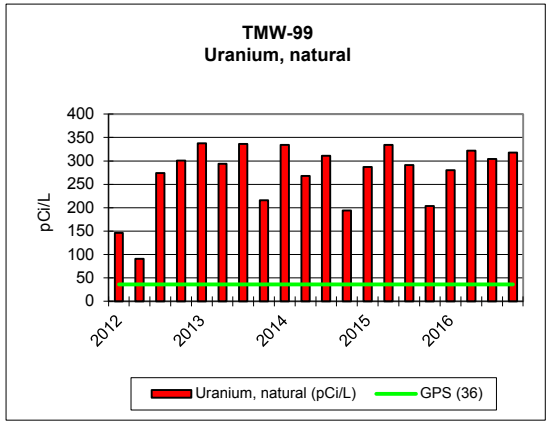

TMW-99
pH
Std Units
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

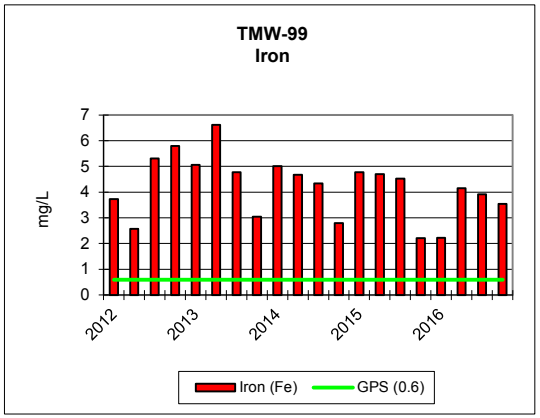

TMW-99
Manganese
mg/L
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)


TMW-99
Combined Ra226/Ra228
pCi/L
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-99
TDS
mg/L
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

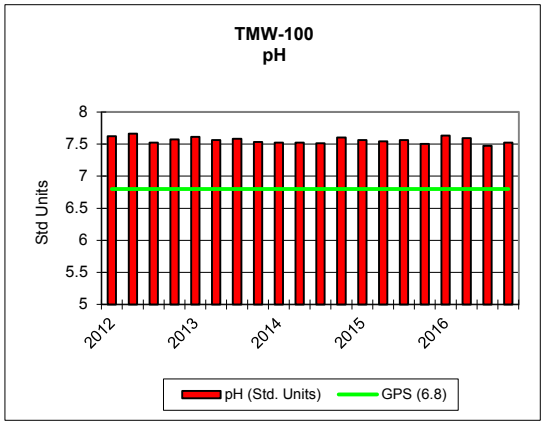

TMW-99
Nickel
mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

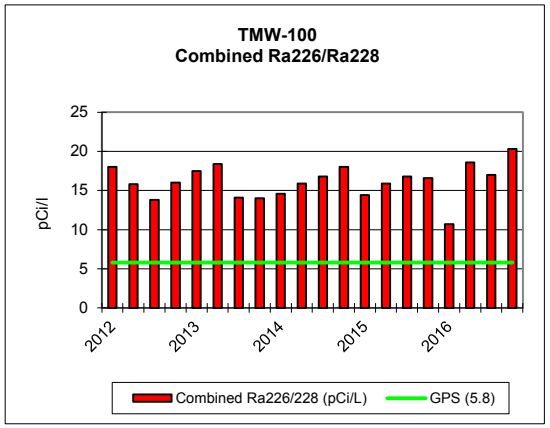

TMW-99
Uranium, natural
pCi/L
400
350
300
250
200
150
100
50
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

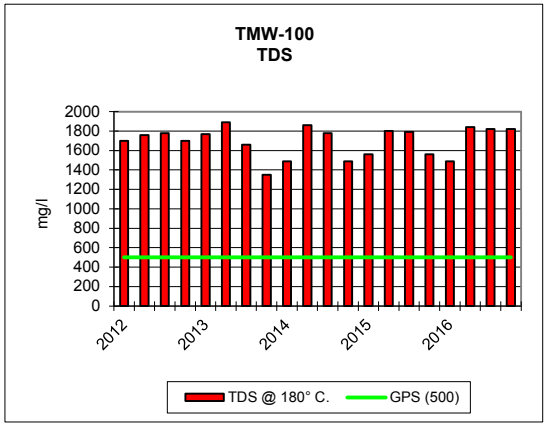

TMW-99
Iron
mg/L
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

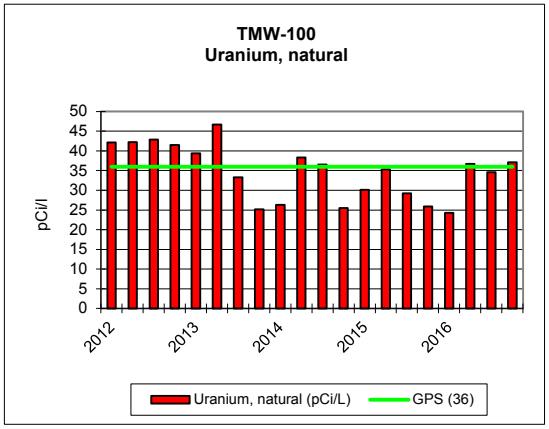
KENNECOTT URANIUM COMPANY															
TMW-100		2012				2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/31/2012	6/5/2012	8/19/2012	11/6/2012	1/29/2013	5/20/2013	8/13/2013	10/29/2013	2/3/2014	4/29/2014	8/11/2014	11/18/2014	2/10/2015	6/2/2015
TDS A/C Balance *(dec. %)*		-2.07	1.48	-1.53	0.094	2.97	1.99	0.287	-0.297	0.9	0.14	0.3	0.78	0.06	5.33
Alk-CaC03		104	110	114	111	112	115	126	124	119	118	116	123	120	116
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.003	0.003	0.004	0.004	0.003	0.003	0.005	0.003	0.002	0.003	0.003	0.005	0.003	0.003
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		127	134	139	135	137	141	154	151	146	144	142	150	146	142
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		366	380	375	368	399	409	354	293	309	406	392	328	340	325
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		31	32	35	31	31	30	29	28	29	34	31	31	33	31
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.001
Cond *(umhos/cm)*		1930	2000	2010	1890	1990	2190	1870	1610	1750	2010	2010	1760	1810	2080
Cond-Field *(umhos/cm)*		2110	2180	2140	1961	2080	2210	2080	1640	1808	1685	1475	1732	1868	1776
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	5.4	3.4	4.1	7.2	7	6.6	7.7	6	5.1	8.4	5.3	4.9	14.8	15.5
Iron (Fe)	GPS (0.6)	0.18	0.27	0.14	0.31	0.32	0.37	0.06	0.26	0.17	0.43	0.06	0.42	0.46	0.44
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	1	<1	<1	<1	<1	0.4	0.06	1.1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		36.4	37	36.4	35.2	36.9	39.3	33.6	26.6	28.2	37.5	35.8	29.4	31.3	37.2
Manganese (Mn)	GPS (0.2)	0.22	0.24	0.24	0.22	0.24	0.27	0.23	0.18	0.19	0.23	0.24	0.21	0.21	0.24
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.62	7.66	7.52	7.57	7.61	7.56	7.58	7.53	7.52	7.52	7.51	7.6	7.56	7.54
pH (Field) *(Std. Units)*		7.6	7.6	7.5	7.57	7.55	7.5	7.46	7.7	7.7	7.9	7.6	7.73	7.43	7.66
Potassium (K)		5	5.3	5.6	5.3	5.4	5.4	5	4.6	4.5	5.5	5.3	5.1	5	4.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	18	15.8	13.8	16	17.5	18.4	14.1	14	14.6	15.9	16.8	18	14.4	15.9
Radium 226 *(pCi/L)*		4	4.9	4.2	3.8	4.5	4.7	2.9	3.1	3.9	4.7	4.3	3.6	3.7	3.5
Radium 228 *(pCi/L)*		14	10.9	9.6	12.2	13	13.7	11.2	10.9	10.7	11.2	12.5	14.4	10.7	12.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.1	9.2	12	11.8	11.9	11.3	12	13.7	12.1	11.5	11.4	12.8	12.3	11.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		69.2	72.8	69.8	73	70.4	77.5	67.9	62.6	62.6	72.7	72.4	67.7	68.4	76
TDS @ 180° *C.*	GPS (500)	1700	1760	1780	1700	1770	1890	1660	1350	1490	1860	1780	1490	1560	1800
Sulfate (SO4)		1080	1030	1070	1030	1030	1100	962	792	853	1120	1090	873	928	1060
Temperature *(C)*		9.9	11.6	10.7	10.5	11.5	10.2	12.6	9.2	9.2	9.4	16.5	8.6	10.2	10.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.06	0.004	0.07	0.005	0.1	0.06
Uranium, natural *(pCi/L)*	GPS (36)	42.1	42.2	42.9	41.5	39.4	46.7	33.3	25.2	26.3	38.3	36.5	25.5	30.1	35.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01

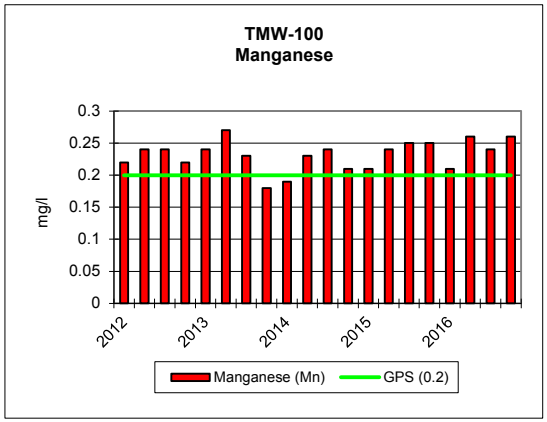
KENNECOTT URANIUM COMPANY							
TMW-100				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	8/12/2015	12/15/2015	2/15/2016	6/21/2016	8/8/2016	11/9/2016
TDS A/C Balance *(dec. %)*		0.41	3.15	1.58	3.09	2.32	0.15
Alk-CaC03		112	123	127	121	119	119
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.004	0.004	0.003	0.003	0.003	0.003
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		137	150	155	147	145	146
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		385	303	336	390	376	389
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		30	30	30	29	32	29
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.001	<0.001	1.001	<0.001	2.001	<0.001
Cond *(umhos/cm)*		2100	1800	1730	2060	2080	2110
Cond-Field *(umhos/cm)*		715	1692	1800	2360	2580	2240
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	38	17.2	5.6	4.2	5.5	26.2
Iron (Fe)	GPS (0.6)	0.47	0.5	0.36	0.53	0.49	0.51
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	0.4	0.93	0.2	0.5
Magnesium (Mg)		35.6	31.7	28.9	38.7	36.2	38.7
Manganese (Mn)	GPS (0.2)	0.25	0.25	0.21	0.26	0.24	0.26
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.56	7.5	7.63	7.59	7.47	7.52
pH (Field) *(Std. Units)*		7.27	7.51	7.31	6.49	7.06	7.65
Potassium (K)		5.8	4.9	5	5.4	5.3	5.4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	16.8	16.6	10.7	18.6	17	20.3
Radium 226 *(pCi/L)*		4.7	3.9	3.6	4.1	3.7	5.3
Radium 228 *(pCi/L)*		12.1	12.7	7.1	14.5	13.3	15
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		11.6	12.9	12.4	11.3	10.7	11.2
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		67.8	67.9	65.2	74.1	68.1	73.8
TDS @ 180° *C.*	GPS (500)	1790	1560	1490	1840	1820	1820
Sulfate (SO4)		1070	894	865	1020	1090	1100
Temperature *(C)*		10.2	7.9	8.9	14.1	13.3	10.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.1	<0.2	0.08	-0.007	0.001	0.03
Uranium, natural *(pCi/L)*	GPS (36)	29.2	25.9	24.3	36.7	34.6	37.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.03	0.02


TMW-100
pH
Std Units
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-100
Combined Ra226/Ra228
pCi/l
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

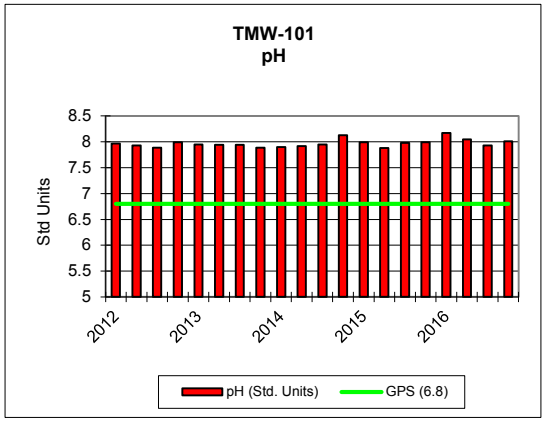

TMW-100
TDS
mg/l
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

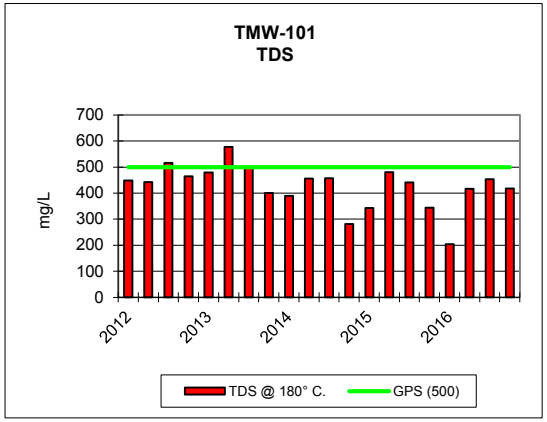

TMW-100
Uranium, natural
pCi/l
50
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

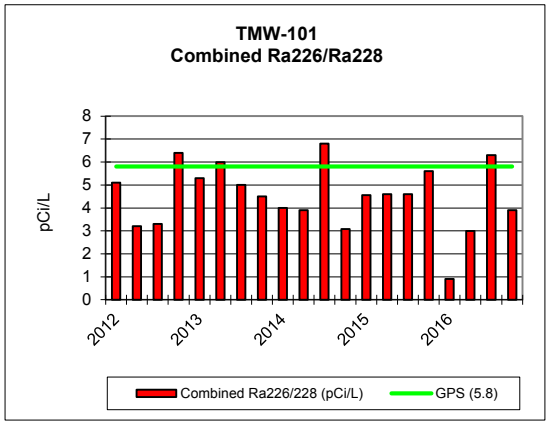

TMW-100
Manganese
mg/l
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

KENNECOTT URANIUM COMPANY															
TMW-101		2012				2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/31/2012	5/8/2012	8/19/2012	12/10/2012	1/29/2013	5/20/2013	8/13/2013	10/29/2013	2/3/2014	4/29/2014	8/11/2014	11/19/2014	2/10/2015	6/2/2015
TDS A/C Balance *(dec. %)*		-1.4	-1.71	0.153	1	5	4.28	0.473	1.14	1.99	2.28	0.44	1.14	0.82	1.61
Alk-CaC03		89	92	97	93	93	95	93	93	92	95	93	92	91	94
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		109	112	118	113	114	116	114	113	112	115	114	112	111	114
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		82.8	82.1	104	101	104	116	94.1	70.8	67.8	83.8	84.6	40	62.6	82.9
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		10	10	13	11	11	13	12	9	9	11	11	5	8	11
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		644	650	724	665	707	827	714	601	592	649	664	408	527	708
Cond-Field *(umhos/cm)*		680	689	793	711	726	894	790	642	715	755	860	416	608	674
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.5	1.7	1.4	1.2	1.7	2.6	1.9	2.3	1.3	2.1	1.6	-0.2	4.6	3.4
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.2	<1	1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		7.7	7	9.3	7.5	8.9	9.7	7.9	5.6	5.6	7.2	7.4	3.2	5.1	7.9
Manganese (Mn)	GPS (0.2)	0.05	0.03	0.06	0.05	0.04	0.06	0.06	0.04	0.03	0.04	0.05	0.02	0.03	0.05
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.97	7.93	7.89	7.99	7.95	7.94	7.94	7.89	7.9	7.92	7.95	8.13	7.99	7.88
pH (Field) *(Std. Units)*		7.8	7.9	7.8	7.81	7.62	7.9	7.34	8.2	7.9	8.6	8.3	8.15	7.98	8.18
Potassium (K)		2	1.9	2.3	2.1	2.2	2.5	2.4	2.2	1.9	2.1	2.2	1.7	1.9	2.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	5.1	3.2	3.3	6.4	5.3	6	5	4.5	4	3.9	6.8	3.08	4.56	4.6
Radium 226 *(pCi/L)*		1.3	1.3	1.1	1.1	1.8	1.7	1.5	1.4	1.2	1.2	1.2	0.88	0.86	1.2
Radium 228 *(pCi/L)*		3.8	1.9	2.2	5.3	3.5	4.3	3.5	3.1	2.8	2.7	5.6	2.2	3.7	3.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.2	10.2	12.8	11	13.1	11.8	11.7	12.2	10.8	11.1	11.4	11.2	11	11.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		40.8	37.7	42.2	41.9	46.2	56.7	50.7	49.2	43.5	43.7	47	40.2	43.2	49.2
TDS @ 180° *C.*	GPS (500)	448	442	516	464	479	578	498	401	389	456	457	281	343	481
Sulfate (SO4)		225	214	265	232	243	293	256	190	188	232	231	104	160	241
Temperature *(C)*		9.8	11.2	10.8	10.7	11.3	10.1	12.4	9.6	9.4	9.6	12.6	10	9.8	10.7
Thallium (Tl)	GPS (7.0)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thorium 230 *(pCi/L:)*		0.08	<0.02	0.04	<0.02	<0.02	0.07	0.1	0.4	0.07	0.05	0.03	0.002	0.0008	0.008
Uranium, natural *(pCi/L)*	GPS (36)	8.3	7.5	10.7	10.4	9.6	10.2	7.7	6	5.8	6.8	7.7	4.9	5.3	9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY							
TMW-101				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	8/12/2015	12/16/2015	2/15/2016	6/22/2016	8/2/2016	11/9/2016
TDS A/C Balance *(dec. %)*		1.08	2.19	2.58	0.86	1.47	0.08
Alk-CaC03		92	96	107	99	96	97
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		112	117	131	120	118	119
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		85.3	57.1	33	73.2	79.4	75.9
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		10	6	3		10	9
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		664	516	334	607	647	627
Cond-Field *(umhos/cm)*		690	504	340	683	813	672
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	8.4	2.8	0.6	1.3	2.5	6.8
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	0.4	-0.099	0.07	0.3
Magnesium (Mg)		7.1	4.6	2.3	6.4	6.9	6.5
Manganese (Mn)	GPS (0.2)	0.05	0.03	0.01	0.04	0.04	0.03
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.98	7.99	8.17	8.05	7.93	8.01
pH (Field) *(Std. Units)*		8.03	8.08	8.15	6.98	7.31	8.43
Potassium (K)		2.3	1.8	2.1	2	2.1	2.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	4.6	5.6	0.91	3	6.3	3.9
Radium 226 *(pCi/L)*		1.3	1	0.51	1.4	1.4	1.4
Radium 228 *(pCi/L)*		3.3	4.6	0.4	1.6	4.9	2.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		10.1	10.7	8.9	11.2	11.1	11.4
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		46.4	41.9	39	44.8	46	47.8
TDS @ 180° *C.*	GPS (500)	441	344	204	416	454	418
Sulfate (SO4)		223	153	73	185	219	204
Temperature *(C)*		10.4	8.8	9.7	13.8	13.4	10.9
Thallium (Tl)	GPS (7.0)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Thorium 230 *(pCi/L:)*		0.009	0.008	0.04	0.07	0.04	0.04
Uranium, natural *(pCi/L)*	GPS (36)	6.9	4.1	3.3	5.4	6.4	6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

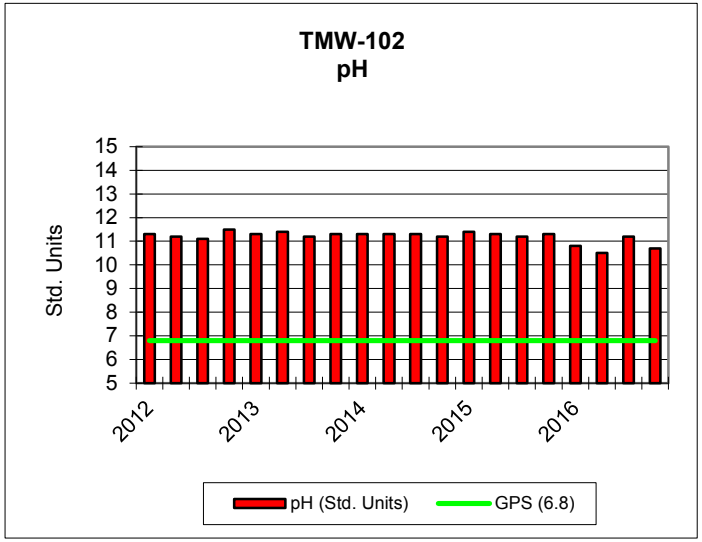

TMW-101
pH
Std Units
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

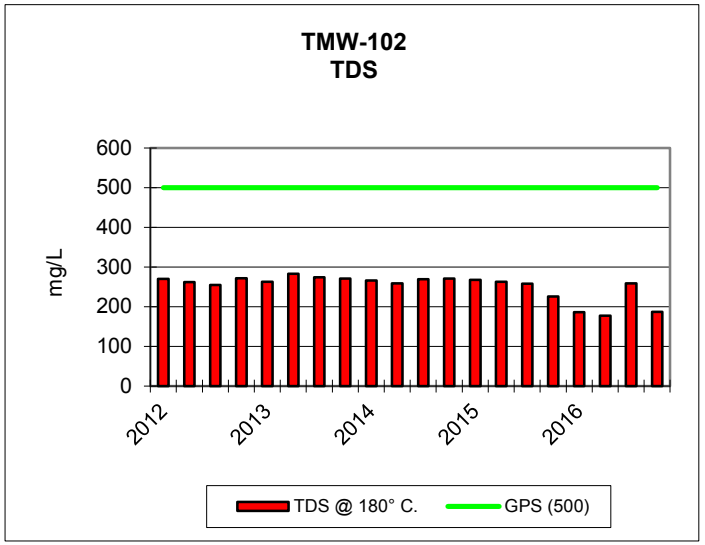

TMW-101
TDS
mg/L
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-101
Combined Ra226/Ra228
pCi/L
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

KENNECOTT URANIUM COMPANY														
TMW-102		2012				2013				2014				2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/7/2012	5/9/2012	8/19/2012	10/23/2012	2/19/2013	4/29/2013	7/23/2013	10/21/2013	1/27/2014	4/22/2014	7/22/2014	10/28/2014	1/26/2015
TDS A/C Balance *(dec. %)*		11.5	15.2	6.31	13.7	4.7	8.95	6.96	5.7	5	14.7	12.3	2.94	3.24
Alk-CaC03		70	54	98	79	116	97	119	111	117	90	96	141	132
Aluminum (Al)	GPS (1.8)	0.7	0.7	0.7	0.8	0.7	0.8	0.9	0.9	0.8	0.9	1	1	1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		45	44	47.7	51.1	51.6	51	52.3	49.9	52.5	55	55.6	56.7	55.5
Carbonate (CO3)		24	23	35	25	26	27	31	31	28	28	28	56	31
Chloride (Cl)		4	3	4	4	3	3	3	3	3	3	3	3	3
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		574	548	539	610	596	655	628	658	642	644	666	614	641
Cond-Field *(umhos/cm)*		699	633	743	608	588	615	629	723	561	609	570	730	636
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.1	0.9	0.4	1.1	1	0.9	1.1	0.8	1.1	0.7	0.8	0.9	2.6
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
pH *(Std. Units)*	GPS (6.8)	11.3	11.2	11.1	11.5	11.3	11.4	11.2	11.3	11.3	11.3	11.3	11.2	11.4
pH (Field) *(Std. Units)*		13.5	12.8	12.8	12.88	12.9	12.6	13.55	13.5	12.8	13	13.7	11.14	11.24
Potassium (K)		6.7	6	7.3	6.4	6.9	5.1	6.1	6.7	6.1	6.5	6.1	6.6	6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	1.61	0.42	0.79	0.84	-0.33	0.09	1.02	1.8	1.56	1.54	5.1	2.53	1.08
Radium 226 *(pCi/L)*		0.81	0.48	0.59	0.64	0.67	0.69	1.1	1.1	0.66	0.74	1	0.83	0.98
Radium 228 *(pCi/L)*		0.8	-0.06	0.2	0.2	-1	-0.6	-0.08	0.7	0.9	0.8	4.1	1.7	0.1
Selenium (Se)	GPS (.01)	0.001	0.001	0.002	0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		27.6	26	35.5	31.6	32	30.7	29	29.9	29	28.5	28	28.5	27.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.7	33.4	34.4	35	34.3	33.2	28.6	33.5	33.1	34.8	33.4	34.7	34.9
TDS @ 180° *C.*	GPS (500)	270	262	255	272	263	283	274	271	266	259	269	271	268
Sulfate (SO4)		78	74	72	73	69	67	66	65	66	67	67	64	68
Temperature *(C)*		6.7	11.9	13.5	7.4	8.1	10.7	11.2	11.6	7.7	10.5	13.6	10.1	8.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	0.06	0.03	0.07	0.2	0.03
Uranium, natural *(pCi/L)*	GPS (36)	1.8	0.9	0.3	0.2	0.2	0.5	0.2	0.2	<0.2	0.3	<0.2	0.3	0.3
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01

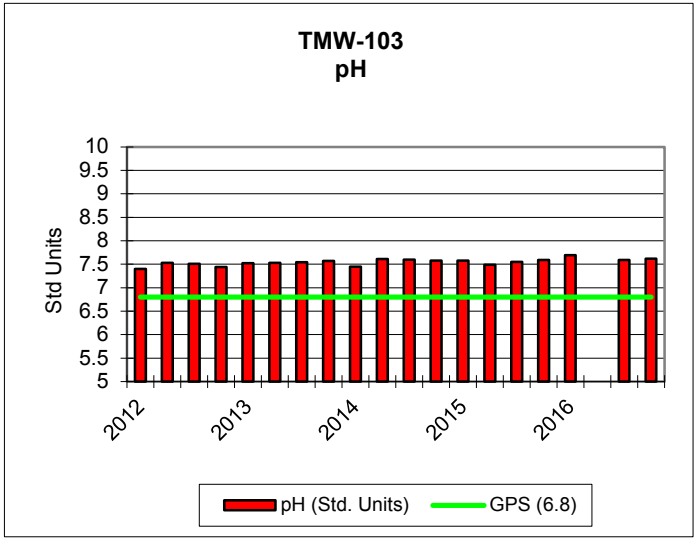
KENNECOTT URANIUM COMPANY								
TMW-102					2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	5/4/2015	7/22/2015	12/2/2015	2/16/2016	4/13/2016	7/27/2016	10/12/2016
TDS A/C Balance *(dec. %)*		6.11	7.75	4.31	2.26	3.87	0.73	0.94
Alk-CaC03		107	108	92	44	39	82	51
Aluminum (Al)	GPS (1.8)	0.8	0.8	1	0.2	0.3	0.6	0.3
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		<1	<1	<1	<1	<1	<1	<1
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		55.2	55.4	35.8	22.6	22.4	37.6	25.6
Carbonate (CO3)		28	37	27	25	23	33	30
Chloride (Cl)		3	3	3	3	3	4	4
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		654	650	611	325	283	464	326
Cond-Field *(umhos/cm)*		724	395	799	305	305	501	347
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	0.2	1.3	0.5	0.7	1.9	2.6	2.1
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	0.3	0.1	0.05	-0.3
Magnesium (Mg)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	11.3	11.2	11.3	10.8	10.5	11.2	10.7
pH (Field) *(Std. Units)*		12.38	13.33	11.72	11.22	11.32	12.35	13.19
Potassium (K)		5.5	6.2	4.6	3.6	4.2	5.2	4.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	1.47	1.44	1.88	0.8	4.8	2.7	5.35
Radium 226 *(pCi/L)*		0.67	0.94	0.58	1	1.5	1.8	0.95
Radium 228 *(pCi/L)*		0.8	0.5	1.3	-0.2	3.3	0.9	4.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	0.006	0.002	<0.001	0.001	<0.001
Silica (SiO2)		26.7	25.9	23.2	18.2	19.8	20.7	18.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		27.5	30.8	24.9	28.4	33	32.5	29.9
TDS @ 180° *C.*	GPS (500)	263	258	226	186	177	259	187
Sulfate (SO4)		66	67	65		77	78	78
Temperature *(C)*		10.4	10.6	11.74	8.8	10.2	15.9	9.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.07	0.07	0.1	0.07	0.08	0.03	0.05
Uranium, natural *(pCi/L)*	GPS (36)	<0.2	<0.2	6.2	0.9	4.7	1.6	0.6
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01

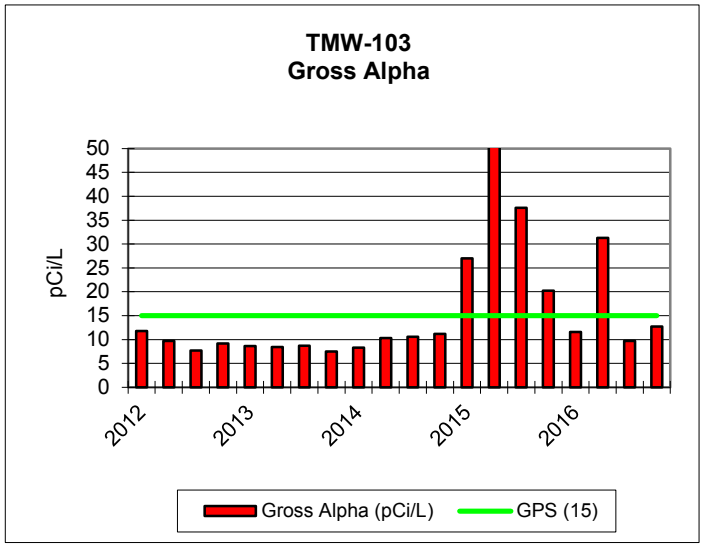

TMW-102
pH
Std. Units
15
14
13
12
11
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

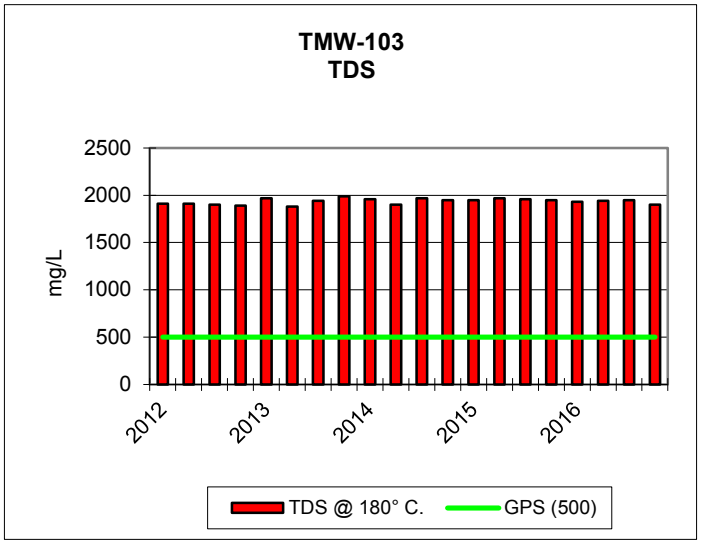

TMW-102
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

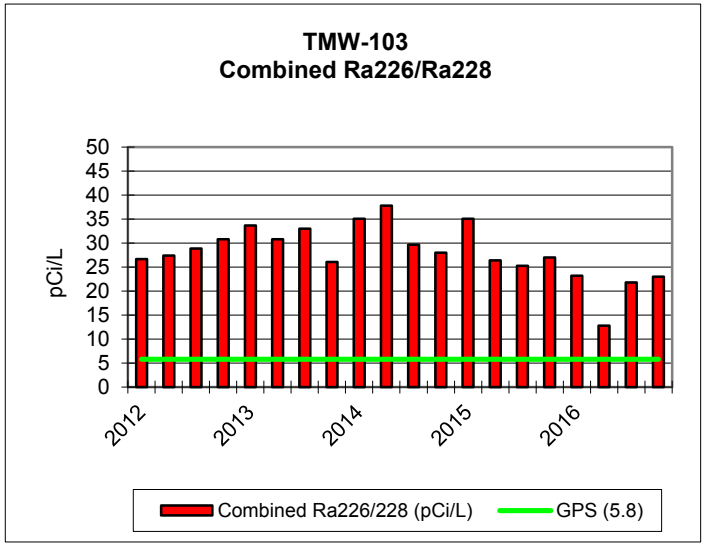
KENNECOTT URANIUM COMPANY																
TMW-103		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/23/2012	7/13/2012	10/15/2012	1/21/2013	4/2/2013	7/7/2013	10/14/2013	1/13/2014	4/7/2014	7/8/2014	10/29/2014	1/26/2015	4/22/2015	7/22/2015
TDS A/C Balance *(dec. %)*		1.65	-2.13	1.74	1.25	1.87	0.758	1.33	-0.279	0.806	0.03	0.36	0.8	0.69	0.07	1.93
Alk-CaC03		24	26	24	26	24	24	25	28	25	27	24	23	26	22	23
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.003	0.002	<0.001	0.003	0.003	0.002	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		29	32	29	32	29	30	31	34	31	33	30	28	32	27	28
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		423	379	417	431	429	408	405	424	399	410	404	411	421	419	427
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		149	145	142	147	145	139	124	128	123	123	127	129	131		127
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		2280	2160	2250	2200	2250	2220	2260	2250	2220	2230	2260	2250	2250	2290	2290
Cond-Field *(umhos/cm)*		2270	2290	2370	2290	2300	2390	2370	2510	2530	2320	2170	2330	2060	2140	2190
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
Gross Alpha *(pCi/L)*	GPS (15)	11.8	9.7	7.7	9.2	8.6	8.4	8.7	7.5	8.3	10.3	10.6	11.2	27	60.8	37.6
Iron (Fe)	GPS (0.6)	0.09	<0.05	<0.05	<0.05	<0.05	0.13	0.07	0.13	0.09	0.1	<0.05	0.14	0.12	<0.05	0.14
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-0.02	0.5	0.9
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		31.6	31.3	31.7	32.1	32.5	31	31.5	30.3	31.9	30	30.9	31.8	30.6	31.2	31
Manganese (Mn)	GPS (0.2)	0.16	0.16	0.17	0.16	0.15	0.15	0.15	0.16	0.16	0.15	0.14	0.14	0.13	0.14	0.13
Mercury (Hg)		0.0002	0.0002	0.0004	0.0003	<0.0002	0.0003	0.0003	0.0003	0.0005	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.4	7.53	7.51	7.44	7.52	7.53	7.54	7.57	7.45	7.61	7.6	7.58	7.58	7.49	7.55
pH (Field) *(Std. Units)*		6.8	7.7	7.2	7.1	6.78	7.4	8	6.9	6.5	10.5	8.3	7.21	7.86	7.82	7.88
Potassium (K)		5.9	5.4	6.3	5.9	5.9	5.7	6.2	5.8	5.8	5.7	6	6.1	5.9	5.9	6.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	26.7	27.4	28.9	30.8	33.7	30.8	33	26.1	35.1	37.8	29.7	28	35.1	26.4	25.3
Radium 226 *(pCi/L)*		8	8.2	8.7	9.2	7.6	7.4	9.6	6.5	9.4	9.7	7.7	7.7	9.9	8.8	7.6
Radium 228 *(pCi/L)*		18.7	19.2	20.2	21.6	26.1	23.4	23.4	19.6	25.7	28.1	22	20.3	25.2	17.6	17.7
Selenium (Se)	GPS (.01)	0.002	0.003	<0.001	<0.001	0.002	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.001	<0.002	1.001	<0.003
Silica (SiO2)		10.7	8.5	10.1	6.8	9.3	9.1	9.2	8.8	8.8	9.7	8.2	8	8	8	8.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		91.5	90	116	94	96.6	94.1	97.7	90.2	96.2	87.9	96.5	99.4	100	96	97.4
TDS @ 180° *C.*	GPS (500)	1910	1910	1900	1890	1970	1880	1940	1990	1960	1900	1970	1950	1950	1970	1960
Sulfate (SO4)		1070	1060	1110	1100	1100	1070	1080	1140	1080	1100	1090	1110	1130	1130	1110
Temperature *(C)*		10.3	12	13.3	13.4	9.5	11.3	13.7	9.5	8.1	7.5	13.5	10.8	10.1	9.6	10
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.01	<0.01	<0.01	<0.01	0.03	0.03	<0.01	0.06	0.2	0.2	0.09	0.2	0.05	0.3	0.07
Uranium, natural *(pCi/L)*	GPS (36)	3.8	6.7	6.4	7.7	9.4	5.6	7.1	7.9	11.6	10.1	9.3	13.1	15.3	14.2	12.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02	0.02	0.02	0.02	0.03	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY						
TMW-103			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	11/16/2015	2/17/2016	4/11/2016	7/31/2016	10/19/2016
TDS A/C Balance *(dec. %)*		0.52	1.64		4.27	1.29
Alk-CaC03		13		26	27	23
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.003	0.002	0.001	0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)			30	32	33	28
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		414	397	415	434	413
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		131	128	122	117	123
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		2250	2240	2210	2230	2320
Cond-Field *(umhos/cm)*		2410	2550	2500	2510	2520
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	2.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	20.2	11.6	31.3	9.7	12.7
Iron (Fe)	GPS (0.6)	0.11	0.07	<0.05	0.09	0.14
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.5	<1	<1	<1	<1
Lead (Pb)		<0.01	1.1	0.7	0.5	0.1
Magnesium (Mg)		31	29.7	33.1	30.6	30.7
Manganese (Mn)	GPS (0.2)	0.13	0.12	0.13	0.13	0.12
Mercury (Hg)		<0.0002	0.0004	0.0003	<0.0002	0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.59	7.69		7.59	7.62
pH (Field) *(Std. Units)*		7.82	7.86	7.5	6.6	7.88
Potassium (K)		5.9	5.6	7	5.7	6.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	27	23.2	12.8	21.8	23
Radium 226 *(pCi/L)*		7.1	6.6	11	6.4	7.5
Radium 228 *(pCi/L)*		19.9	16.6	1.8	15.4	15.5
Selenium (Se)	GPS (.01)	0.002	<0.003	0.002	0.002	0.004
Silica (SiO2)		7.8	7.3	8.8	7.9	7.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		97.1	92.7	97.3	95.1	98.6
TDS @ 180° *C.*	GPS (500)	1950	1930	1940	1950	1900
Sulfate (SO4)		1120	1110		1060	1100
Temperature *(C)*		9.9	9	9.9	16	10.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.2	0.05	0.05	0.03	0.009
Uranium, natural *(pCi/L)*	GPS (36)	16	16.8	11.2	10.7	17.2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.02	<0.01	0.07


TMW-103
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

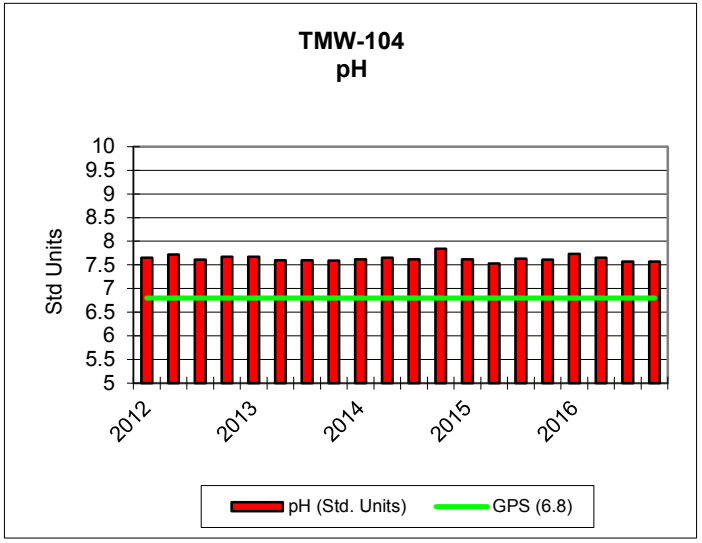

TMW-103
Gross Alpha
pCi/L
50
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Gross Alpha (pCi/L)
GPS (15)

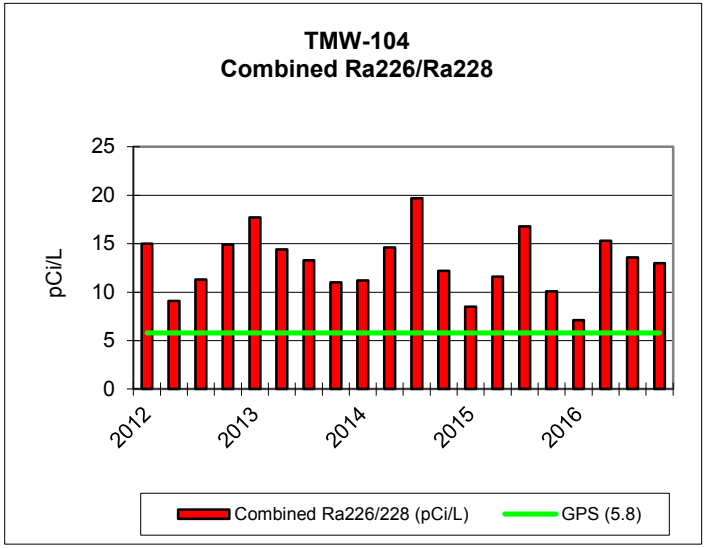

TMW-103
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

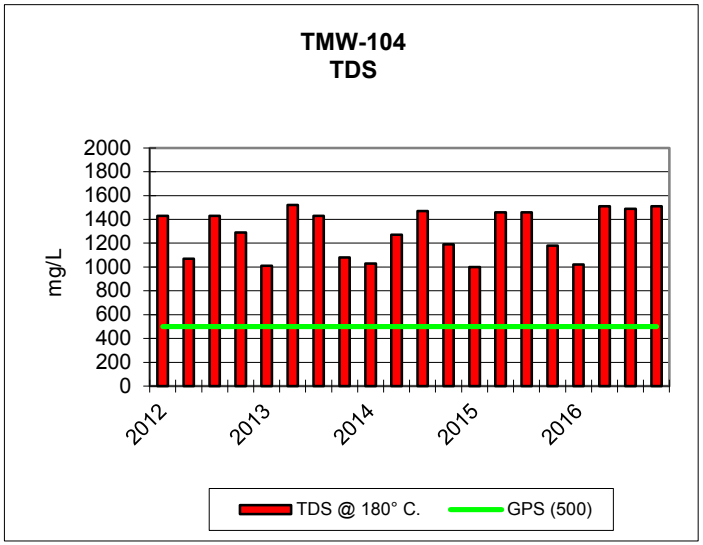

TMW-103
Combined Ra226/Ra228
pCi/L
50
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

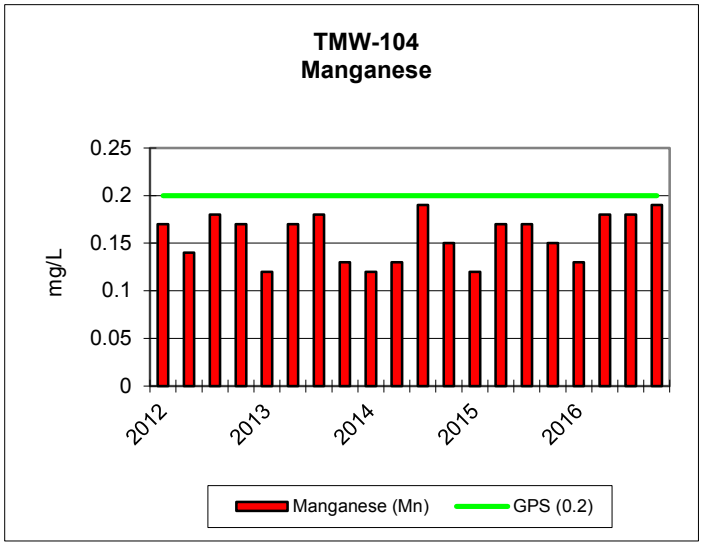
KENNECOTT URANIUM COMPANY																
TMW-104		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/30/2012	5/7/2012	8/19/2012	12/11/2012	1/28/2013	6/11/2013	8/13/2013	10/29/2013	2/3/2014	4/8/2014	7/15/2014	11/19/2014	2/3/2015	6/3/2015	8/12/2015
TDS A/C Balance *(dec. %)*		-2.03	-2.87	-1.13	1.02	1.17	0.741	2.52	1.46	2.65	0.54	1.22	0.23	0.13	0.04	0.73
Alk-CaC03		118	112	125	127	121	115	130	126	124	119	123	124	119	121	122
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		144	137	153	155	147	141	159	153	152	145	150	151	145	147	149
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		308	213	313	308	228	328	320	239	210	273	324	255	216	314	318
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		27	20	27	24	19	26	24	19	20	24	27	21	19	26	26
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1690	1350	1650	1530	1260	1730	1680	1350	1310	1520	1760	1460	1270	1760	1780
Cond-Field *(umhos/cm)*		1756	1396	1729	1568	1284	1756	1851	1390	1386	1627	1773	1497	1291	1785	1750
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<0.1	0.1	0.1	<0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	4	2.5	3.2	4.1	4	6.3	5.6	3.8	2.2	2.4	2.6	3.3	5.7	20.2	36.6
Iron (Fe)	GPS (0.6)	0.05	0.07	<0.05	<0.05	<0.05	0.2	<0.05	0.06	<0.05	<0.05	<0.05	0.06	0.13	0.13	0.18
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.05	<1	0.7	<1	0.6	0.4	-0.7
Lead (Pb)		<0.01	<0.01	<0.01	0.9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		24.4	16.1	24	22.9	18	25.1	24.7	18.3	15.5	20.5	27.8	19.7	15.8	24	24.5
Manganese (Mn)	GPS (0.2)	0.17	0.14	0.18	0.17	0.12	0.17	0.18	0.13	0.12	0.13	0.19	0.15	0.12	0.17	0.17
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0003	<0.0004	<0.0005
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	1.01	2.01	3.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.65	7.72	7.61	7.67	7.67	7.6	7.6	7.59	7.62	7.65	7.62	7.84	7.62	7.53	7.63
pH (Field) *(Std. Units)*		7.6	7.6	7.4	7.59	7.59	7.6	7.48	7.9	7.9	7.8	7.8	7.44	7.6	7.62	7.24
Potassium (K)		4.7	3.8	5.2	4.6	4.1	4.8	5	4.2	3.7	4.6	5.2	4.3	4.2	5	5.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	15	9.1	11.3	14.9	17.7	14.4	13.3	11	11.2	14.6	19.7	12.2	8.5	11.6	16.8
Radium 226 *(pCi/L)*		3.3	2.1	2.6	2.9	3.9	3.8	2.9	2.2	2.1	4.2	3.3	2.9	1.6	2.7	3.2
Radium 228 *(pCi/L)*		11.7	7	8.7	12	13.8	10.6	10.4	8.8	9.1	10.4	16.4	9.3	6.9	8.9	13.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.8	12.2	14	12	14.1	12	13	13.9	11.7	10.7	13.8	12.6	12.5	12.6	12.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		66.2	55.2	66.2	63.9	57.4	69.2	70.3	57.8	52.9	64.2	73	59.7	57.4	68.4	67.4
TDS @ 180° *C.*	GPS (500)	1430	1070	1430	1290	1010	1520	1430	1080	1030	1270	1470	1190	1000	1460	1460
Sulfate (SO4)		869	599	855	751	584	874	811	604	570	739	917	676	564	846	868
Temperature *(C)*		10.8	10	11.6	10.2	10.3	12.3	13.1	8.8	11.5	9.5	12.1	9.7	8.7	9.5	10.9
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.03	0.07	0.2	0.02	0.07	0.1	0.03
Uranium, natural *(pCi/L)*	GPS (36)	13.9	8.9	15.6	14.3	11.1	16.6	15.9	12.2	9.9	12.2	16.8	15.5	10.9	13.9	13.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY						
TMW-104			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	12/16/2015	2/15/2016	6/22/2016	8/2/2016	11/15/2016
TDS A/C Balance *(dec. %)*		2.07	0.29	2.55	1.29	0.74
Alk-CaC03		110	125	128	124	125
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		134	153	156	151	152
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		259	226	325	321	328
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		21	19	24	25	25
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1450	1290	1770	1750	1770
Cond-Field *(umhos/cm)*		846	1335	1946	2030	1952
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		<0.1	0.1	<0.1	<0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	7.4	3.1	3.7	6.5	3.1
Iron (Fe)	GPS (0.6)	0.15	0.14	0.09	0.18	0.24
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-0.7	<1	<1	<1	<1
Lead (Pb)		<0.01	0.08	-0.004	0.08	0.8
Magnesium (Mg)		19.6	16.7	25.2	24.6	25.4
Manganese (Mn)	GPS (0.2)	0.15	0.13	0.18	0.18	0.19
Mercury (Hg)		<0.0006	<0.0007	<0.0008	<0.0009	<0.0010
Molybdenum (Mo)		4.01	<0.01	<0.01	0.02	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.61	7.73	7.65	7.57	7.57
pH (Field) *(Std. Units)*		7.59	7.5	6.59	7.04	7.72
Potassium (K)		4.4	4.3	4.9	5	5.1
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	10.1	7.1	15.3	13.6	13
Radium 226 *(pCi/L)*		2.4	1.9	2.5	3.2	2.9
Radium 228 *(pCi/L)*		7.7	5.2	12.8	10.4	10.1
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13	12.3	12.7	12.8	12.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		61.6	56.1	69.8	69.6	70.2
TDS @ 180° *C.*	GPS (500)	1180	1020	1510	1490	1510
Sulfate (SO4)		666	580	823	838	894
Temperature *(C)*		7.7	8.2	13.7	13.3	10.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.005	0.02	-0.01	-0.007	0.9
Uranium, natural *(pCi/L)*	GPS (36)	10.6	11.5	13.3	13	14.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01


TMW-104
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-104
Combined Ra226/Ra228
pCi/L
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

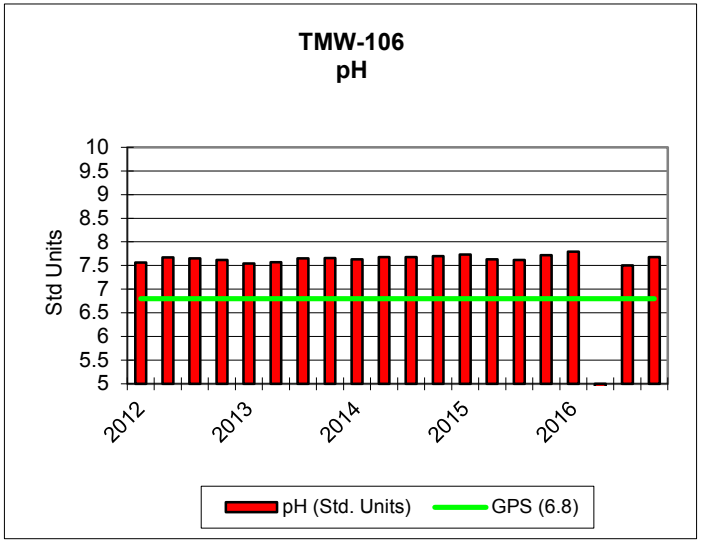

TMW-104
TDS
mg/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

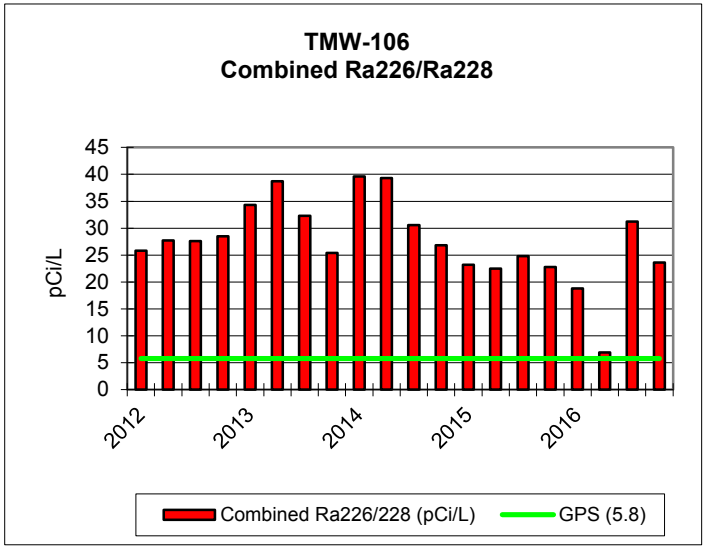

TMW-104
Manganese
mg/L
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

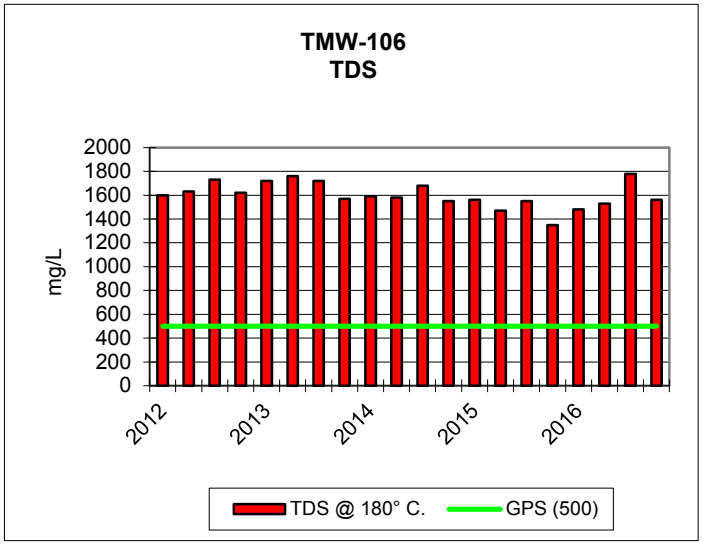
KENNECOTT URANIUM COMPANY												
TMW-105		2004				2005					2006	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/19/2004	4/12/2004	7/13/2004	10/12/2004	1/12/2005	4/11/2005	7/18/2005	10/5/2005	10/31/2005	1/19/2006	*Final well sample collected on January 19, 2006. The well was subsequently removed by Catchment Basin excavation.*
TDS A/C Balance *(dec. %)*		1.02	1.13	1.23	1.13	1.1	1.14	1.08	1.1	1.05	1.13	
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Aluminum (Al)	GPS (1.8)	<0.1	2.4	2.9	2.8	1.3	3.7	3.5	2.8	2.6	1.1	
Alk-CaC03		39.5	1.6	<1	<1	20	<1	<1	2	<1	5	
Arsenic (As)	GPS (.05)	<0.001	<0.001	0.002	0.001	0.002	0.003	0.001	0.001	0.001	0.001	
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Boron (B)		<0.1	0.16	0.2	0.2	<0.1	<0.1	0.1	0.1	0.2	<0.1	
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Calcium (Ca)		168	303	334	328	322	333	429	406	427	310	
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Chloride (Cl)		23	67.3	56	66	54	84	113	118	128	89	
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Cobalt (Co)		0.067	0.136	0.16	0.153	0.117	0.184	0.193	0.197	0.202	0.177	
Chromium (Cr)	GPS (.05)	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Copper (Cu)		<0.01	0.01	0.03	0.02	<0.01	0.02	0.04	0.03	0.03	0.14	
Cond *(umhos/cm)*		1300	2180	5840	2380	2040	2410	2700	2710	2890	2330	
Cond-Field *(umhos/cm)*		800	1120	580	1140	980	1400	1240	980		860	
Fluoride (F)		0.2	0.4	0.4	0.4	0.3	0.4	0.4	0.5	<0.1	0.4	
Iron (Fe)	GPS (0.6)	9.41	50.5	50	49.1	30.3	58.3	57.5	57.5	56.8	57.4	
Gross Alpha *(pCi/L)*	GPS (15)	19.1	22.4	23.6	14.9	12.8	14.7	27.7	15.9	18.2	8.8	
Bicarbonate (HCO3)		48.2	1.9	<1	<1	25	<1	<1	3	<1	6	
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Potassium (K)		5.8	6.5	6	6.9	6.8	7.2	6.4	7	7.2	7.4	
Magnesium (Mg)		24.8	51.4	62.9	49.6	51.7	54	64.8	67.3	68.7	48.2	
Manganese (Mn)	GPS (0.2)	1.09	2.26	2.54	2.58	2.19	3.07	3.21	3.22	3.42	2.45	
Molybdenum (Mo)		<0.01	<0.01	<0.08	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Sodium (Na)		60.5	73	92	70	71.5	84	106	107	104	85.9	
Nickel (Ni)	GPS (.01)	0.08	0.13	0.15	0.17	0.13	0.19	0.21	0.2	0.23	0.2	
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Lead (Pb)		<0.01	0.04	<0.03	0.04	0.03	0.05	0.04	0.03	0.03	0.05	
pH *(Std. Units)*	GPS (6.8)	6.54	4.7	2.01	4.66	5.5	4.54	4.39	4.99	4.85	5.11	
pH (Field) *(Std. Units)*		6.8	3.6	51	3.7	4.4	3.9	3.5	4.38		5.15	
Radium 226 *(pCi/L)*		18.7	10.7	14.1	12	9.5	11.9	18.3	16.7	13.4	6.3	
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	22.4	36.5	27.2	25	18.6	26.2	35.3	37	29.1	16.6	
Radium 228 *(pCi/L)*		3.7	25.8	13.1	13	9.1	14.3	17	20.3	15.7	10.3	
Selenium (Se)	GPS (.01)	0.01	0.013	0.018	0.021	0.01	0.054	0.064	0.083	0.086	0.031	
Silica (SiO2)		28	53.1	51	53	43	50	55	52	51	44	
Sulfate (SO4)		637	1160	1290	1060	1100	1210	1490	1440	1500	1160	
TDS @ 180° *C.*	GPS (500)	964	1880	2330	1850	1830	2080	2430	2420	2400	1980	
Temperature *(C)*		8	19	40	27	10	18	32	11.3		9.5	
Thorium 230 *(pCi/L:)*	GPS (7.0)	<0.2	<0.2	<0.2	<0.2	1.1	<0.2	3.9	<0.2	0.6	<0.2	
Thallium (Tl)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Uranium, natural *(pCi/L)*	GPS (36)	228	858	692	741	560	582	1100	569	687	183	
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Zinc (ZN)		0.17	0.43	0.77	0.74	0.5	0.7	0.72	0.67	0.67	0.69	

KENNECOTT URANIUM COMPANY																
TMW-106		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/23/2012	7/13/2012	10/15/2012	1/21/2013	4/2/2013	7/7/2013	10/14/2013	1/13/2014	4/7/2014	7/8/2014	10/29/2014	1/26/2015	4/22/2015	7/22/2015
TDS A/C Balance *(dec. %)*		2.67	-1.95	-0.342	-2.84	1.76	1.98	1.54	0.385	1.49	1.97	0.23	0.73	1.25	0.53	1.64
Alk-CaC03		37	40	33	40	32	29	35	44	41	39	45	43	44	46	42
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.003	0.002	<0.001	0.002	0.002	0.003	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		45	48	41	49	39	35	42	54	50	48	55	52	53	56	52
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		375	326	359	331	382	409	360	344	337	336	352	341	323	316	319
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		116	116	121	119	128	136	121	110	110	116	121	113	111	103	109
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1990	1890	2040	1910	2050	2080	2030	1870	1880	1930	2000	1890	1870	1810	1890
Cond-Field *(umhos/cm)*		2050	2130	2260	1982	2140	2320	2250	2130	2140	2180	2040	1924	1928	1880	2050
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	13.6	11	9.9	9.1	9.2	11.2	11.4	8.1	7.9	9.6	11.5	11.6	27.1	43.4	27.1
Iron (Fe)	GPS (0.6)	0.1	0.15	<0.05	<0.05	<0.05	0.13	0.12	0.17	0.15	0.14	0.05	0.18	0.17	0.17	0.2
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.5	0.9	0.7	1.1	-0.4	0.01	0.3
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		28	27.6	28	27.3	30.3	28.5	28.2	24.7	26.2	24.6	27	26.3	24.7	24	24.5
Manganese (Mn)	GPS (0.2)	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.11	0.11	0.11
Mercury (Hg)		<0.0002	<0.0002	0.0005	0.0002	<0.0002	0.0004	0.0004	0.0003	0.0004	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.56	7.67	7.65	7.62	7.54	7.57	7.65	7.66	7.63	7.68	7.68	7.7	7.73	7.63	7.62
pH (Field) *(Std. Units)*		7.8	7.9	7.5	7.37	7.07	7	8	7.8	7.8	8.2	8.4	7.57	7.77	7.83	7.87
Potassium (K)		5.8	5.1	5.9	5.4	5.8	5.4	5.9	5.4	5	5.1	5.5	5.3	5.2	5.1	5.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	25.8	27.7	27.6	28.5	34.3	38.7	32.3	25.4	39.6	39.3	30.6	26.8	23.2	22.5	24.8
Radium 226 *(pCi/L)*		8.5	9	8	9.7	11	9.7	11	8.2	11	11	8.5	7	10	8.9	7.9
Radium 228 *(pCi/L)*		17.3	18.7	19.6	18.8	23.3	29	21.3	17.2	28.6	28.3	22.1	19.8	13.2	13.6	16.9
Selenium (Se)	GPS (.01)	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Silica (SiO2)		11.3	8.4	10.5	9.9	9.4	9.1	9.8	9.8	9.9	10.7	9.3	10	10.2	10.1	10.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		80.1	80.6	86.1	78.2	84.3	81.9	85.4	74.6	79	72.5	82.3	81.5	81.7	76.5	77
TDS @ 180° *C.*	GPS (500)	1600	1630	1730	1620	1720	1760	1720	1570	1590	1580	1680	1550	1560	1470	1550
Sulfate (SO4)		930	911	975	934	973	1010	927	884	861	908	925	889	882	823	874
Temperature *(C)*		9.3	11.4	12.3	10.6	10.3	11.1	11.6	9.2	9.2	9.8	12.1	10.3	9.3	9.2	9.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.2	0.04	0.05	0.09	0.0006	0.005	0.02	0.1	0.2	0.2	0.08	0.2	0.03	0.1	0.02
Uranium, natural *(pCi/L)*	GPS (36)	7	7.8	11.2	9.6	14.9	10.6	14	14.1	13.5	12.9	13.1	17.7	12.8	11.3	12.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY						
TMW-106			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	11/16/2015	2/17/2016	4/11/2016	7/31/2016	10/13/2016
TDS A/C Balance *(dec. %)*		0.06	3.97		4.39	1.19
Alk-CaC03		51	47	43	30	42
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.001	0.001	0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		62	57	53	36	51
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		286	288	331	389	324
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		92	102	106	122	112
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1660	1800	1820	2080	1930
Cond-Field *(umhos/cm)*		1834	2100	2060	2520	2090
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.1	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	15	9.6	29.7	11	14.4
Iron (Fe)	GPS (0.6)	0.13	0.15	<0.05	0.15	0.18
Lead (Pb210) *(pCi/L)*	GPS (8.9)	0.2	<1	<1	<1	<1
Lead (Pb)		<0.01	0.8	0.4	0.7	0.9
Magnesium (Mg)		22.2	22.7	26.4	28.7	25.7
Manganese (Mn)	GPS (0.2)	0.1	0.1	0.11	0.12	0.11
Mercury (Hg)		<0.0002	0.0003	0.0004	0.0003	0.0003
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.72	7.79		7.5	7.68
pH (Field) *(Std. Units)*		7.89	7.75	7.78	6.89	7.82
Potassium (K)		4.8	4.5	6	5.5	5.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	22.8	18.8	6.9	31.2	23.6
Radium 226 *(pCi/L)*		6.1	7.4	6.1	8	7.7
Radium 228 *(pCi/L)*		16.7	11.4	0.8	23.2	15.9
Selenium (Se)	GPS (.01)	0.001	<0.001	0.001	<0.001	<0.001
Silica (SiO2)		10.7	9.4	10.6	8.5	9.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		71.4	70.1	79.9	84.2	80.8
TDS @ 180° *C.*	GPS (500)	1350	1480	1530	1780	1560
Sulfate (SO4)		754	826	830	932	887
Temperature *(C)*		8.6	9	9.1	13.2	11.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.04	0.05	0.03	0.06	-0.04
Uranium, natural *(pCi/L)*	GPS (36)	13.8	10.4	11	17.3	13.9
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.12

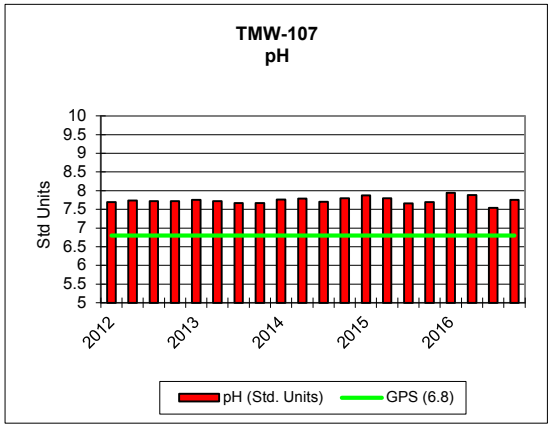

TMW-106
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

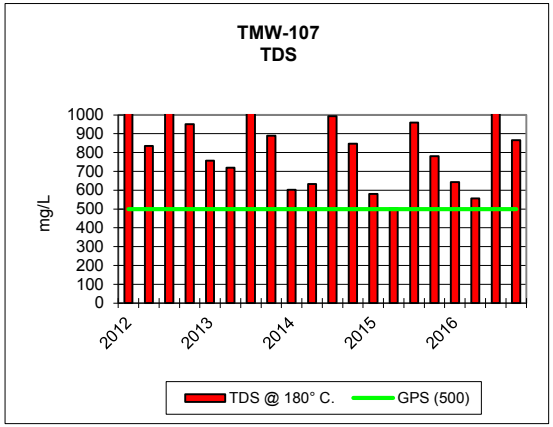

TMW-106
Combined Ra226/Ra228
pCi/L
45
40
35
30
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

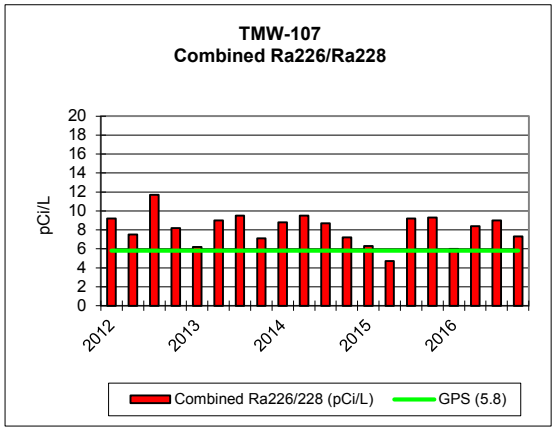

TMW-106
TDS
mg/L
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

KENNECOTT URANIUM COMPANY														
TMW-107		2012				2013				2014				2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/16/2012	7/13/2012	10/15/2012	1/21/2013	4/22/2013	7/7/2013	10/14/2013	1/13/2014	4/7/2014	7/21/2014	10/29/2014	1/21/2015
TDS A/C Balance *(dec. %)*		1.3	0.763	0.264	1.82	3.86	-1.22	2.18	-1.9	4.55	1.14	3.7	0.26	0.04
Alk-CaC03		117	120	137	126	123	124	127	126	128	122	129	126	122
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	0.001	0.001	0.001	<0.001	0.002	<0.001	0.001	0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		142	147	167	153	150	152	155	154	156	149	157	153	149
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		243	185	246	218	181	153	301	190	115	139	240	183	124
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		20	16	23	20	15	15	31	20	12	14	24	21	12
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1340	1120	1370	1180	1020	988	1570	1140	839	886	1270	1110	829
Cond-Field *(umhos/cm)*		1355	1201	1562	1250	1039	1093	1683	1228	930	1094	1605	1097	844
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	3.7	3.1	3.4	2.8	2.2	2.2	4.6	2.2	1.7	2	3.7	3.3	2.1
Iron (Fe)	GPS (0.6)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-0.1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		19.8	15.7	20.6	18.5	15.1	12.7	26.4	15.7	9.7	11.8	20.3	16	10.7
Manganese (Mn)	GPS (0.2)	0.11	0.08	0.08	0.08	0.06	0.05	0.13	0.09	0.06	0.06	0.06	0.08	0.06
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.69	7.74	7.72	7.72	7.75	7.72	7.67	7.67	7.76	7.79	7.7	7.8	7.87
pH (Field) *(Std. Units)*		7.3	7.7	7.4	7.68	7.61	7.6	7.7	7.7	8	8	7.5	7.58	7.74
Potassium (K)		4.2	3.5	4.1	3.8	3.7	3.3	4.2	3.6	2.9	3.3	4.2	3.7	3.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.2	7.5	11.7	8.2	6.2	9	9.5	7.1	8.8	9.5	8.7	7.2	6.3
Radium 226 *(pCi/L)*		2.8	2.2	3.7	2.8	2.1	2.5	2.8	2.3	1.9	2.5	2.7	2.1	1.7
Radium 228 *(pCi/L)*		6.4	5.3	8	5.4	4.1	6.5	6.7	4.8	6.9	7	6	5.1	4.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		14.7	13.3	14.5	15.6	14.7	12.6	9.5	13.1	11.9	14.1	13	13.2	12.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		49.8	45.2	51.8	47	45.6	42.3	55.4	43.5	36.9	43	49.7	46.2	41
TDS @ 180° *C.*	GPS (500)	1030	835	1100	950	757	720	1340	890	602	633	994	847	581
Sulfate (SO4)		610	456	618	524	411	381	743	487	293	326	553	456	294
Temperature *(C)*		7.6	10.4	12.1	11.2	11.3	8.8	11.8	9.1	8.9	10.5	13.5	9.9	8.7
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.1	0.2	0.04	0.3	0.04
Uranium, natural *(pCi/L)*	GPS (36)	7.5	9.1	9.6	9.5	7.6	8.8	10.8	8.7	6.1	7	9.7	10.4	7.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.01	0.01	<0.01	<0.01	<0.01	0.14	0.02	<0.01	0.02	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY								
TMW-107					2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	4/28/2015	7/21/2015	12/16/2015	2/17/2016	4/12/2016	7/31/2016	10/18/2016
TDS A/C Balance *(dec. %)*		0.81	0.09	1.35	3.66	0.94	0.28	0.35
Alk-CaC03		136	123	126	125	117	139	120
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		166	149	154	153	143	170	146
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		104	217	171	127	115	228	183
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		9	25	19	14		29	22
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		713	1240		884	782	1330	1140
Cond-Field *(umhos/cm)*		626	1432	1135	980	855	1621	1245
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	5.1	10.2	5.2	2.5	6.3	6	4.6
Iron (Fe)	GPS (0.6)	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	<0.01
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-0.1	0.3	-0.1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	-0.3	-0.05	0.3	0.8
Magnesium (Mg)		9.1	18.5	15.5	11.6	10.3	21.1	16.8
Manganese (Mn)	GPS (0.2)	0.05	0.07	0.05	0.04	0.04	0.03	0.03
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<1	<1	<1	<1	<1	<1	<1
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.8	7.66	7.69	7.94	7.88	7.54	7.75
pH (Field) *(Std. Units)*		7.77	7.48	7.48	7.61	7.59	6.89	7.77
Potassium (K)		3	3.5	3.5	2.8	2.9	3.9	3.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	4.7	9.2	9.3	6	8.4	9	7.3
Radium 226 *(pCi/L)*		1.8	3	1.9	1.8	1.7	2.7	2.6
Radium 228 *(pCi/L)*		2.9	6.2	7.4	4.2	6.7	6.3	4.7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.9	13.3	13	12.1	12.9	13.1	13
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		40	49.4	44.6	38.9	41.3	49.5	46.5
TDS @ 180° *C.*	GPS (500)	503	960	781	643	556	1080	865
Sulfate (SO4)		236	550	407	329	271	562	466
Temperature *(C)*		9.1	9.8	8.9	8.5	9.2	13.3	10.6
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.08	0.2	0.009	0.1	0.07	0.08	0.006
Uranium, natural *(pCi/L)*	GPS (36)	7.1	9.6	7.1	6.2	11.7	17.2	8.2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.01

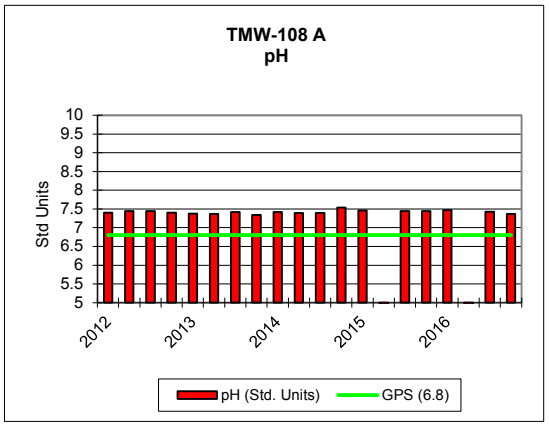

TMW-107
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

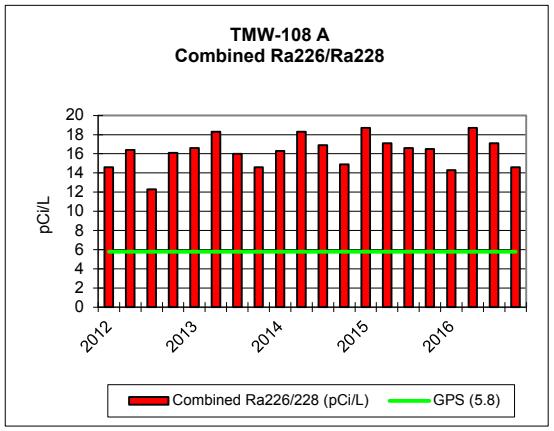

TMW-107
TDS
mg/L
1000
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

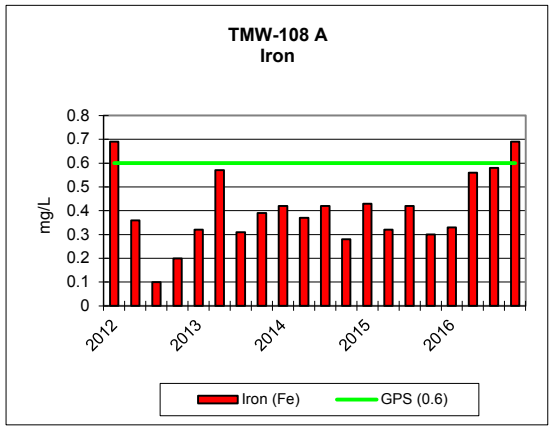

TMW-107
Combined Ra226/Ra228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

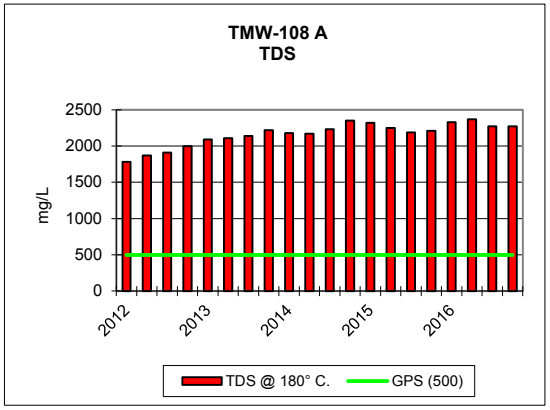
KENNECOTT URANIUM COMPANY														
TMW-108A (at 112' depth)		2012				2013				2014				2015
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/23/2012	4/23/2012	7/13/2012	10/15/2012	1/21/2013	4/15/2013	7/7/2013	10/15/2013	1/14/2014	4/1/2014	7/8/2014	11/3/2014	1/20/2015
TDS A/C Balance *(dec. %)*		1.41	-2.4	-0.566	-2.77	0.933	0.905	0.853	-0.414	-1.38	3.09	1.53	0.59	1.02
Alk-CaC03		93	100	94	108	103	102	101	103	105	102	105	111	110
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.001	0.001	0.001	0.002	0.002	0.003	0.004	0.003	0.003	0.001	0.002	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		114	122	115	132	126	125	123	126	128	125	129	135	134
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		362	332	352	373	400	417	403	422	383	394	409	447	429
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		82	81	85	92	98	99	99	104	100	101	108	110	107
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.033	0.03	0.035	0.031	0.027	0.03	0.024	0.024	0.021	0.034	0.019	0.029	0.024
Cond *(umhos/cm)*		2060	2090	2200	2190	2390	2490	2410	2440	2410	2510	2500	2620	2510
Cond-Field *(umhos/cm)*		2050	2280	2390	2360	2430	2600	2620	2740	2480	2700	2670	2720	2710
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3	3.8	2.4	2.5	3.3	3	3.7	3.3	2.9	3.3	4.1	3.8	18
Iron (Fe)	GPS (0.6)	0.69	0.36	0.1	0.2	0.32	0.57	0.31	0.39	0.42	0.37	0.42	0.28	0.43
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		47.8	53.8	52.2	56.6	66.5	65.9	61.9	61.2	62.6	59.4	67	74.1	71.9
Manganese (Mn)	GPS (0.2)	0.24	0.25	0.25	0.25	0.25	0.26	0.25	0.25	0.25	0.29	0.25	0.26	0.24
Mercury (Hg)		<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0003	0.0002	0.0003	0.0003	<0.0002	0.0004	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.05	0.04	0.05	0.04	0.05	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.04
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.2	0.1	0.2	0.2	0.3
pH *(Std. Units)*	GPS (6.8)	7.4	7.44	7.44	7.4	7.38	7.37	7.42	7.34	7.42	7.39	7.39	7.54	7.46
pH (Field) *(Std. Units)*		7.6	7.4	7.3	7.49	7.47	7.5	7.5	7.4	7.6	7.5	6.5	7.27	7.54
Potassium (K)		6	5.8	7.5	5.9	6.7	7.3	6.3	6.6	6	6.3	6.5	6.9	6.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	14.6	16.4	12.3	16.1	16.6	18.3	16	14.6	16.3	18.3	16.9	14.9	18.7
Radium 226 *(pCi/L)*		2.7	2.6	3.2	4	3.3	3.3	3.9	2.6	3.8	3.3	3.2	2.7	3.5
Radium 228 *(pCi/L)*		11.9	13.8	9.1	12.1	13.3	15	12.1	12	12.5	15	13.7	12.2	15.2
Selenium (Se)	GPS (.01)	0.011	0.012	0.012	0.012	0.012	0.014	0.006	0.011	0.01	0.016	0.022	0.019	0.029
Silica (SiO2)		11.8	8.5	10.6	10.1	9.6	9.8	9.7	8.9	8.9	10.5	9.5	8.8	8.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		94.6	102	126	102	117	119	109	104	108	97.7	114	128	120
TDS @ 180° *C.*	GPS (500)	1780	1870	1910	2000	2090	2110	2140	2220	2180	2170	2230	2350	2320
Sulfate (SO4)		1030	1080	1130	1180	1210	1260	1190	1250	1200	1240	1290	1360	1350
Temperature *(C)*		11	12.2	11.9	12.6	10.7	10.3	10.9	9.5	11.7	9.5	11.4	9.9	9.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.04	0.05	0.09	0.2	0.009
Uranium, natural *(pCi/L)*	GPS (36)	1680	1910	1840	2100	2410	2480	2470	2870	2580	3020	2750	3200	3520
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.04	0.01	0.01	0.02

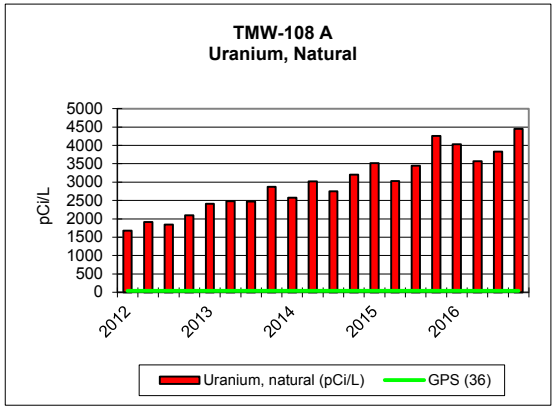
KENNECOTT URANIUM COMPANY								
TMW-108A (at 112' depth)					2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	4/21/2015	7/20/2015	11/16/2015	1/12/2016	4/11/2016	7/13/2016	10/11/2016
TDS A/C Balance *(dec. %)*		1.37	1.88	2.18	4.35		2.55	2.16
Alk-CaC03		123	110	94	115	112	114	119
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.002	0.002	0.002	0.002	0.003	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		150	134	114	141	137	139	146
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		421	413	423	417	446	422	437
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		109	108	114	115	109	114	115
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.02	0.023	0.019	0.02	0.027	0.03	0.03
Cond *(umhos/cm)*		2470	2500	2570	2560	2580	2380	2660
Cond-Field *(umhos/cm)*		2400	2620	2730	2740	2620	3050	2920
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	<0.1	0.1	0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	37.3	22.2	11.8	36.7	23.9	6.2	5.4
Iron (Fe)	GPS (0.6)	0.32	0.42	0.3	0.33	0.56	0.58	0.69
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	1.1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	0.4	0.8	0.62	0.7
Magnesium (Mg)		69.9	72.2	68.6	73.6	89.4	68.7	76.8
Manganese (Mn)	GPS (0.2)	0.23	0.25	0.24	0.25	0.24	0.25	0.24
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.04	0.04	0.03	0.03	0.05	0.03	0.05
Nitrogen, Nitrate+Nitrite as N		0.3	<0.1	<0.1	0.1	0.3	0.2	<0.1
pH *(Std. Units)*	GPS (6.8)		7.44	7.44	7.47		7.43	7.37
pH (Field) *(Std. Units)*		7.29	7.1	7.52	7.38	7.14	6.77	7.2
Potassium (K)		6.6	7.5	6.4	6.2	8.8	6.4	6.7
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	17.1	16.6	16.5	14.3	18.7	17.1	14.6
Radium 226 *(pCi/L)*		4.6	3.4	2.7	3.4	5.2	2.7	2.9
Radium 228 *(pCi/L)*		12.5	13.2	13.8	10.9	13.5	14.4	11.7
Selenium (Se)	GPS (.01)	0.037	0.029	0.017	0.015	0.026	0.021	0.029
Silica (SiO2)		8.6	10.2	9.6	8.7	9.3	9.9	9.3
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		119	123	116	118	134	115	124
TDS @ 180° *C.*	GPS (500)	2250	2190	2210	2330	2370	2270	2270
Sulfate (SO4)		1230	1350	1360	1450	1380	1350	1420
Temperature *(C)*		9.4	9.7	8.8	8.5	10.9	12.7	12.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.2	0.1	0.06	0.07	0.02	0.0002	0.05
Uranium, natural *(pCi/L)*	GPS (36)	3030	3450	4260	4030	3570	3830	4450
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.01	0.01	0.01	0.01	0.01	0.02	0.02

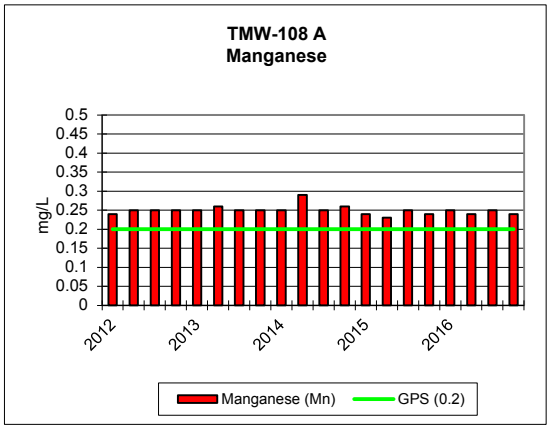

TMW-108 A
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

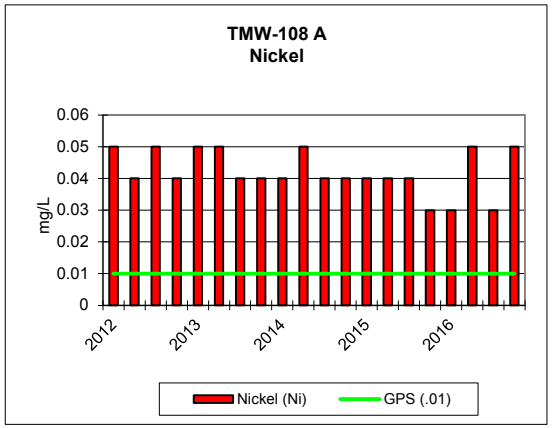

TMW-108 A
Combined Ra226/Ra228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-108 A
Iron
mg/L
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)


TMW-108 A
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

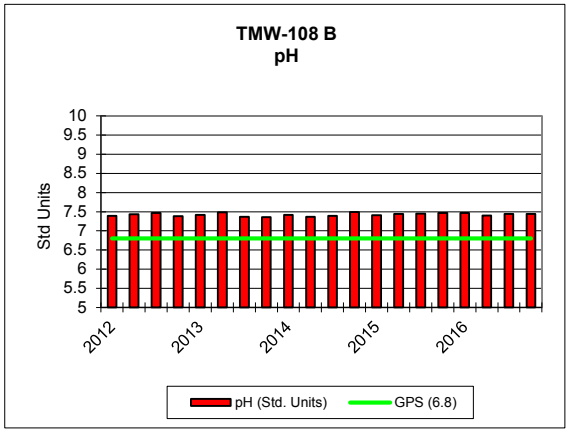

TMW-108 A
Uranium, Natural
pCi/L
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

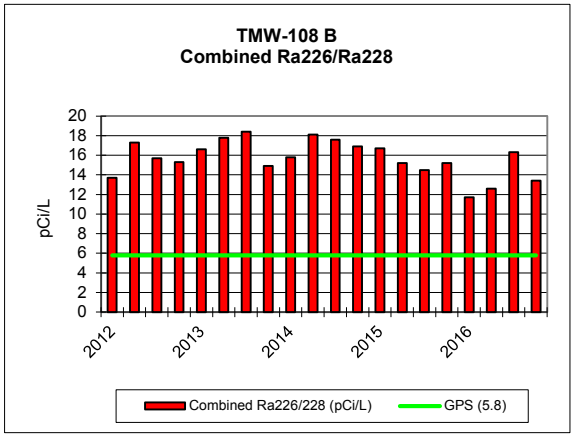

TMW-108 A
Manganese
mg/L
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

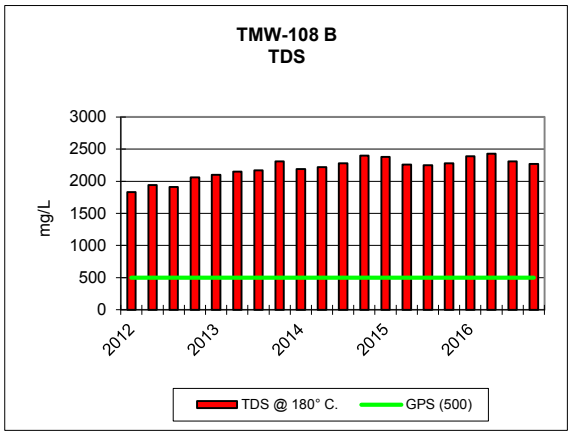

TMW-108 A
Nickel
mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

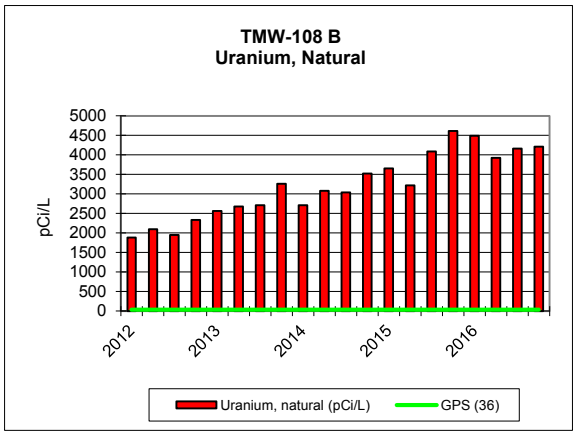
KENNECOTT URANIUM COMPANY																		
TMW-108B (at 143' depth)		2012				2013				2014				2015				2016
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/23/2012	4/23/2012	7/13/2012	10/15/2012	1/21/2013	4/15/2013	7/7/2013	10/15/2013	1/14/2014	4/1/2014	7/8/2014	11/3/2014	1/20/2015	4/21/2015	7/20/2015	11/16/2015	1/12/2016
TDS A/C Balance *(dec. %)*		-0.000833	-3.62	-0.643	0.345	2.51	-2.1	0.546	-0.57	0.765	0.57	1.74	0.81	1.49	1.14	3.14	2.74	2.66
Alk-CaC03		94	101	94	102	110	104	101	107	104	104	106	113	112	115	111	108	117
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.001	0.001	0.001	0.001	0.002	0.003	0.004	0.003	0.003	0.001	0.002	0.002	0.002	0.002	0.002	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		115	123	114	124	134	127	123	130	127	127	129	138	136	140	136	132	142
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		360	342	358	385	412	413	406	447	403	426	412	456	427	427	420	434	461
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		84	87	87	93	97	102	101	110	100	103	110	112	108	107	113	118	119
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.029	0.028	0.033	0.033	0.029	0.026	0.025	0.023	0.028	0.034	0.019	0.031	0.026	0.02	0.025	0.02	0.021
Cond *(umhos/cm)*		2120	2160	2230	2220	2410	2510	2450	2550	2420	2570	2550	2610	2540	2510	2560	2500	2600
Cond-Field *(umhos/cm)*		2150	2400	2420	2390	2480	2540	2620	2820	2210	2800	2400	2730	2730	2360	2190	2790	2810
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	3	3.8	2.8	3.9	4.3	2.8	3.3	3.2	3.4	3.5	4.1	3.6	13.9	29.8	16.9	20	40.4
Iron (Fe)	GPS (0.6)	0.5	0.33	ND	0.31	0.36	0.27	0.25	0.32	0.4	0.57	0.34	0.24	0.43	0.32	0.34	0.27	0.36
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.09
Magnesium (Mg)		49.6	56	53.7	63.2	71.1	68	64.2	66.9	66.5	62.8	69.6	77.2	72.4	72.1	74.3	71.7	79.5
Manganese (Mn)	GPS (0.2)	0.22	0.25	0.24	0.26	0.25	0.25	0.25	0.26	0.26	0.27	0.26	0.27	0.25	0.22	0.25	0.25	0.26
Mercury (Hg)		<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0003	0.0002	0.0003	0.0003	<0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.05	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.04	0.05	0.03	0.03
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.1	0.3	0.2	0.4	0.4	0.2	<0.1	0.1
pH *(Std. Units)*	GPS (6.8)	7.39	7.43	7.47	7.38	7.42	7.48	7.37	7.36	7.42	7.37	7.39	7.49	7.41	7.44	7.45	7.47	7.47
pH (Field) *(Std. Units)*		7.2	7.1	7	7.34	7.38	7.1	7.4	7.4	7.6	7.5	7.9	7.26	7.59	7.25	6.98	7.49	7.37
Potassium (K)		5.9	5.8	7	6.5	6.9	6.9	6.2	6.8	6.3	6.8	6.7	7.4	6.6	6.6	7.8	6.5	6.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	13.7	17.3	15.7	15.3	16.6	17.8	18.4	14.9	15.8	18.1	17.6	16.9	16.7	15.2	14.5	15.2	11.7
Radium 226 *(pCi/L)*		3.1	3.1	3.7	3.6	3	2.5	3.6	3.1	4.1	3.3	2.9	3.3	3.7	4.7	2.7	3.1	3.1
Radium 228 *(pCi/L)*		10.6	14.2	12	11.7	13.6	15.3	14.8	11.8	11.7	14.8	14.7	13.6	13	10.5	11.8	12.1	8.6
Selenium (Se)	GPS (.01)	0.009	0.012	0.011	0.01	0.012	0.012	0.007	0.009	0.011	0.02	0.024	0.027	0.03	0.044	0.032	0.014	0.015
Silica (SiO2)		11.4	9	10.3	10	9.3	9.3	9.5	8.7	8.8	10.2	9.2	8.5	8.1	8.5	9.3	9.5	8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		96.2	101	120	112	117	119	111	111	112	103	117	130	118	120	125	119	125
TDS @ 180° *C.*	GPS (500)	1830	1940	1910	2060	2100	2150	2170	2310	2190	2220	2280	2400	2380	2260	2250	2280	2390
Sulfate (SO4)		1060	1140	1140	1180	1210	1340	1220	1340	1210	1270	1320	1390	1360	1280	1410	1400	1510
Temperature *(C)*		11.7	12.6	11.6	11.8	11.8	10.6	11.5	9.7	12.1	9.4	11.6	10.3	9	9.5	10.1	8.9	8.5
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.08	0.2	0.09	0.1	<0.2	<0.2	<0.2	<0.2	0.007
Uranium, natural *(pCi/L)*	GPS (36)	1880	2100	1950	2330	2560	2680	2710	3260	2710	3080	3040	3520	3650	3220	4090	4610	4490
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.03	0.03	0.05	0.03	0.02	0.02	0.01	0.02	0.01	<0.01
pH		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
TDS		500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
Manganese		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Comb. Ra226/228		5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Uranium, natural		36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Nickel		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

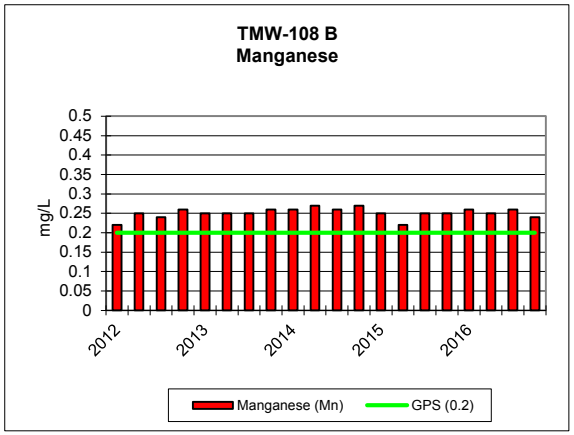
KENNECOTT URANIUM COMPANY				
TMW-108B (at 143' depth)				
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	4/11/2016	7/13/2016	10/11/2016
TDS A/C Balance *(dec. %)*			2.57	0.98
Alk-CaC03		114	116	118
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.004	<0.001
Barium (Ba)		<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		139	141	143
Boron (B)		<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005
Calcium (Ca)		451	420	435
Carbonate (CO3)		<1	<1	<1
Chloride (Cl)		111	116	111
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01
Cobalt (Co)		0.028	0.02	0.029
Cond *(umhos/cm)*		2640	2420	2600
Cond-Field *(umhos/cm)*		3020	3080	2850
Copper (Cu)		<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005
Fluoride (F)		<0.1	0.1	<0.1
Gross Alpha *(pCi/L)*	GPS (15)	27.9	10.7	8.2
Iron (Fe)	GPS (0.6)	0.52	0.81	0.48
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1
Lead (Pb)		1	2.1	0.7
Magnesium (Mg)		82.4	72.6	74.1
Manganese (Mn)	GPS (0.2)	0.25	0.26	0.24
Mercury (Hg)		0.0003	0.0003	0.0003
Molybdenum (Mo)		<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.05	0.04	0.05
Nitrogen, Nitrate+Nitrite as N		0.3	0.2	<0.1
pH *(Std. Units)*	GPS (6.8)	7.4	7.44	7.44
pH (Field) *(Std. Units)*		7.14	6.84	7.26
Potassium (K)		8.8	6.7	6.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	12.6	16.3	13.4
Radium 226 *(pCi/L)*		5.4	3.2	2.4
Radium 228 *(pCi/L)*		7.2	13.1	11
Selenium (Se)	GPS (.01)	0.026	0.031	0.025
Silica (SiO2)		9	9.8	9.4
Silver (Ag)		<0.01	<0.01	<0.01
Sodium (Na)		139	120	120
TDS @ 180° *C.*	GPS (500)	2430	2310	2270
Sulfate (SO4)		1400	1370	1360
Temperature *(C)*		11.2	12.2	12.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.0004	0.06	0.05
Uranium, natural *(pCi/L)*	GPS (36)	3920	4160	4210
Vanadium (V205)		<0.1	<0.1	<0.1
Zinc (ZN)		0.01	0.02	0.02
pH		6.8	6.8	6.8
TDS		500	500	500
Manganese		0.2	0.2	0.2
Comb. Ra226/228		5.8	5.8	5.8
Uranium, natural		36	36	36
Nickel		0.01	0.01	0.01

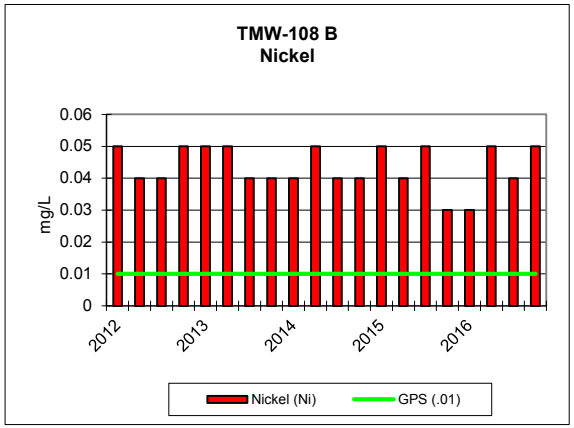

TMW-108 B
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-108 B
Combined Ra226/Ra228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-108 B
TDS
mg/L
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-108 B
Uranium, Natural
pCi/L
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

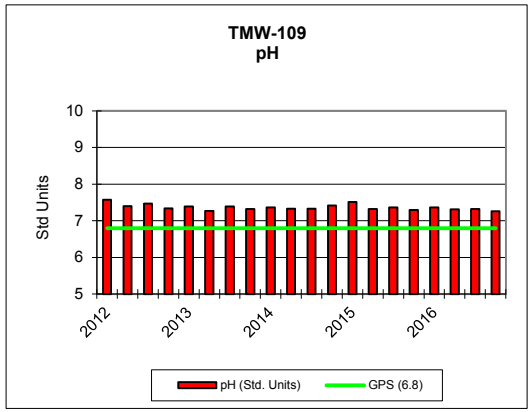

TMW-108 B
Manganese
mg/L
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

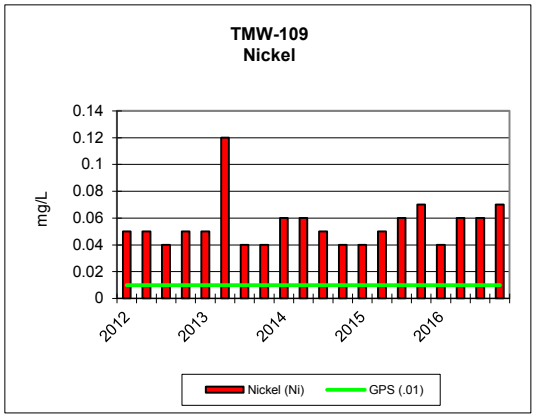

TMW-108 B
Nickel
mg/L
0.06
0.05
0.04
0.03
0.02
0.01
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

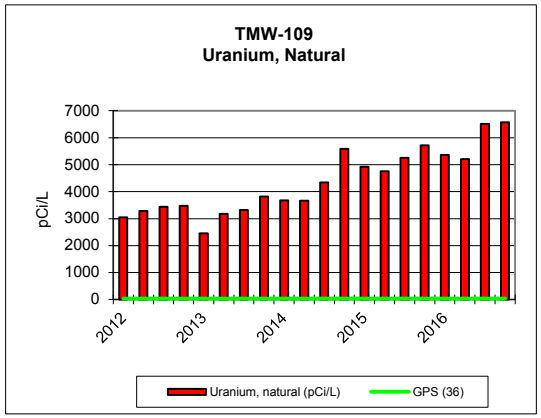
TMW-108B

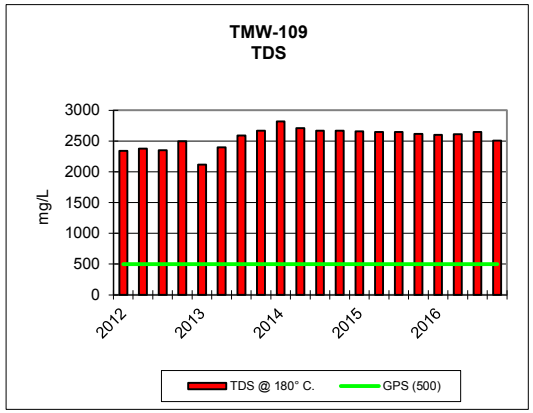
KENNECOTT URANIUM COMPANY													
TMW-109		2012				2013				2014			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/23/2012	7/13/2012	10/15/2012	1/22/2013	4/2/2013	7/7/2013	10/15/2013	1/13/2014	4/8/2014	7/8/2014	11/3/2014
TDS A/C Balance *(dec. %)*		1.38	-2.45	-3.47	-5.23	2.44	-2.5	0.788	-0.83	1.54	3.02	0.9	2.03
Alk-CaC03		101	109	107	113	104	109	116	104	106	108	114	124
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.003	0.003	0.002	0.002	0.002	0.003	0.005	0.007	0.006	0.002	0.002	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		123	132	130	138	127	133	142	127	129	131	139	151
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		470	442	453	435	409	457	494	513	534	522	502	512
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		91	92	91	95	95	87	100	113	108	117	113	115
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	VV	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.03	0.041	0.035	0.036	0.031	0.089	0.026	0.026	0.036	0.034	0.034	0.035
Cond *(umhos/cm)*		2640	2520	2660	2590	2380	2610	2730	2890	2840	2870	2880	2890
Cond-Field *(umhos/cm)*		2690	2750	2850	2790	2410	2840	3020	3190	3130	1631	2360	3010
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	4.8	4.2	3.4	3.6	3.4	3.5	3.3	3.1	3.7	3.5	4.5	4.1
Iron (Fe)	GPS (0.6)	0.6	0.62	0.16	0.53	0.38	1.91	0.86	1.31	1.32	1	1.22	1.56
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	0.1	0.03	0.4	0.06
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		63.1	62	61.3	60.1	67.6	64.4	69.6	70	77.5	74.1	75.5	78.4
Manganese (Mn)	GPS (0.2)	0.36	0.39	0.36	0.37	0.26	0.44	0.35	0.38	0.4	0.37	0.38	0.36
Mercury (Hg)		<0.0002	<0.0002	0.0002	0.0003	<0.0002	0.0002	0.0005	0.0004	0.0004	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.05	0.05	0.04	0.05	0.05	0.12	0.04	0.04	0.06	0.06	0.05	0.04
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.57	7.4	7.47	7.34	7.39	7.27	7.39	7.32	7.36	7.33	7.33	7.42
pH (Field) *(Std. Units)*		7.4	7.3	7.5	7.45	7.2	7.1	7.5	7.6	7.5	7.3	7.9	7.34
Potassium (K)		7.1	6.6	5.8	6.3	6.7	6.6	6.4	7.7	7.2	7	7.3	7.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	17.7	16.4	17.8	16.3	16	21.1	23.3	22.6	22.3	22.9	21.5	17.9
Radium 226 *(pCi/L)*		4.4	3.2	2.7	4.2	3.6	3.3	4.4	3.4	4.6	6.5	3.5	2.9
Radium 228 *(pCi/L)*		13.3	13.2	15.1	12.1	12.4	17.8	18.9	19.2	17.7	16.4	18	15
Selenium (Se)	GPS (.01)	0.001	0.002	<0.001	<0.001	0.015	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001
Silica (SiO2)		9.4	8.6	8.8	6.8	9.2	10.5	6	7.9	8.8	9	9.3	8.8
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		125	124	103	113	118	115	122	124	136	127	133	139
TDS @ 180° *C.*	GPS (500)	2340	2380	2350	2500	2120	2400	2590	2670	2820	2710	2670	2670
Sulfate (SO4)		1380	1420	1440	1450	1200	1460	1450	1550	1570	1670	1560	1490
Temperature *(C)*		10.1	13.1	12.4	11.9	10.9	12.1	13	10.2	9.8	11.2	14.4	10.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.2	0.09	0.2	0.07	0.1
Uranium, natural *(pCi/L)*	GPS (36)	3050	3280	3440	3470	2460	3180	3320	3820	3680	3670	4340	5590
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.01	0.02	0.02	0.02	0.02	0.1	0.04	0.04	0.05	0.04	0.04	0.02

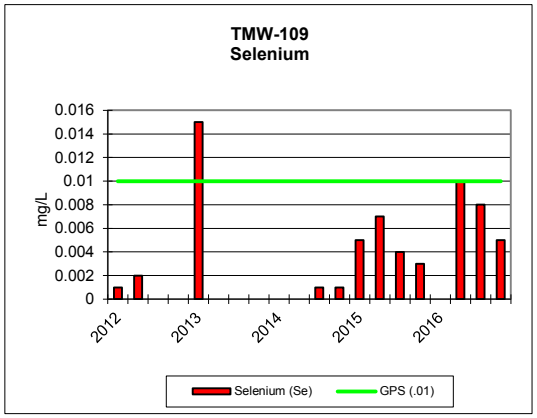
KENNECOTT URANIUM COMPANY									
TMW-109		2015				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/21/2015	4/21/2015	7/21/2015	12/1/2015	1/12/2016	4/19/2016	7/13/2016	10/19/2016
TDS A/C Balance *(dec. %)*		1.08	1.35	2.78	2.5	5.04	0.25	3.59	0.43
Alk-CaC03		119	119	136	123	122	113	130	127
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.003	0.003	0.002	0.002	0.002	0.002	0.003	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		145	145	165	150	149	138	158	155
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		503	505	496	490	484	480	489	469
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		110	107	110	132		113	118	113
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Cobalt (Co)		0.02	0.025	0.036	0.03	0.028	0.032	0.05	0.042
Cond *(umhos/cm)*		2790	2780	2890	2880	2800	2810	2700	2880
Cond-Field *(umhos/cm)*		2800	2950	2940	3050	2990	3210	3500	3100
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.2	<0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	9.3	39.9	30.8	24.2	34.4	27.1	9.2	17.8
Iron (Fe)	GPS (0.6)	0.98	0.74	0.66	1.32	1.13	1.1	0.83	1.71
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-0.08	0.2	-0.6	0.5	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	0.05	0.98	0.7	0.1
Magnesium (Mg)		77.3	77.5	75.6	85.3	81.3	90.7	81.6	84.7
Manganese (Mn)	GPS (0.2)	0.37	0.33	0.39	0.34	0.33	0.36	0.39	0.33
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.04	0.05	0.06	0.07	0.04	0.06	0.06	0.07
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.51	7.32	7.36	7.29	7.36	7.31	7.32	7.26
pH (Field) *(Std. Units)*		7.45	7.22	6.92	7.27	7.21	7.09	6.74	7.05
Potassium (K)		7.2	7.4	6.9	7.6	7.5	9.4	7.2	7.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	22.4	21.9	22.2	19.9	21.3	19.2	19	21.3
Radium 226 *(pCi/L)*		4.4	5.3	4.3	4.9	3.6	4.3	3.3	3.5
Radium 228 *(pCi/L)*		18	16.6	17.9	15	17.7	14.9	15.7	17.8
Selenium (Se)	GPS (.01)	0.005	0.007	0.004	0.003	<0.001	0.01	0.008	0.005
Silica (SiO2)		9.4	10.3	10.2	8.8	8.2	10.2	9.5	8.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		134	136	137	142	137	144	134	135
TDS @ 180° *C.*	GPS (500)	2660	2650	2650	2620	2600	2610	2650	2510
Sulfate (SO4)		1580	1500	1600	1610	1680	1550	1630	1490
Temperature *(C)*		9.4	10.9	11	9.7	9.1	9.3	11.2	10.8
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.04	0.3	0.07	0.006	0.09	0.02	0.1	0.01
Uranium, natural *(pCi/L)*	GPS (36)	4920	4760	5260	5720	5360	5210	6510	6570
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.03	0.02	0.02	0.03	0.03	0.02	0.04	0.08

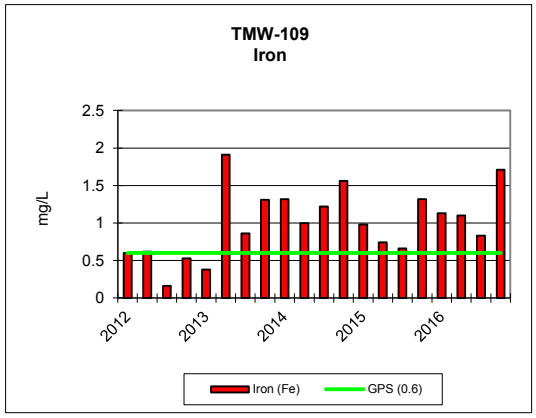

TMW-109
pH
Std Units
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

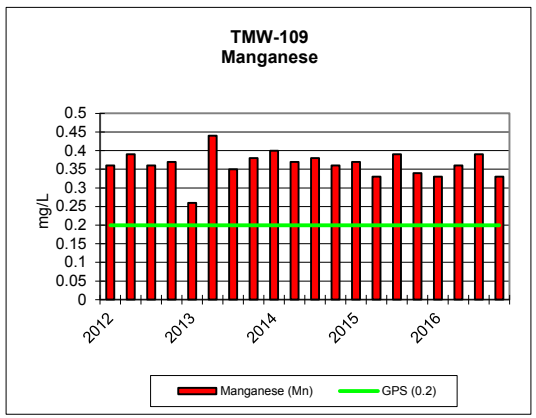

TMW-109
Nickel
mg/L
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

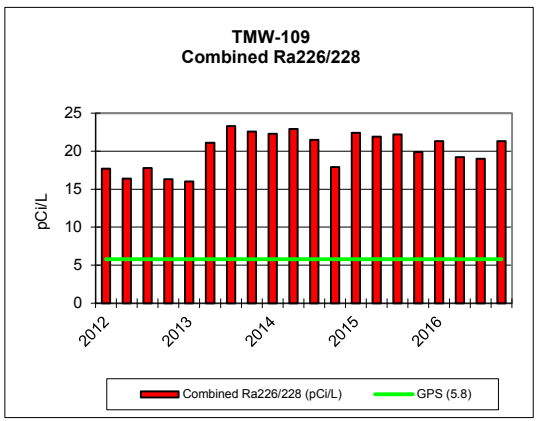

TMW-109
Uranium, Natural
pCi/L
7000
6000
5000
4000
3000
2000
1000
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)


TMW-109
TDS
mg/L
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-109
Selenium
mg/L
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Selenium (Se)
GPS (.01)

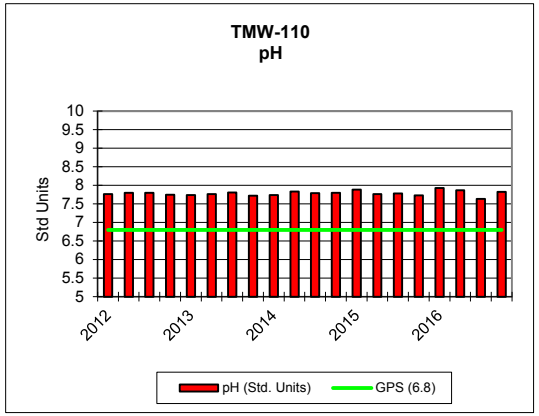

TMW-109
Iron
mg/L
2.5
2
1.5
1
0.5
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

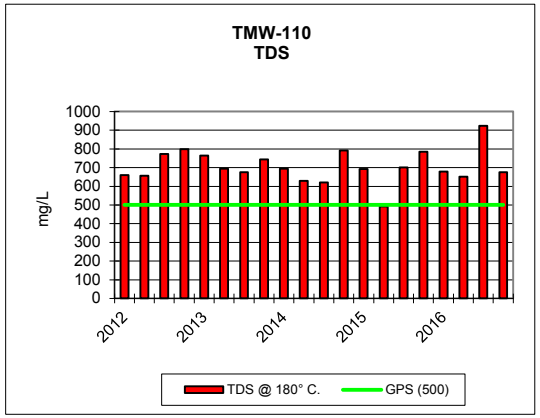

TMW-109
Manganese
mg/L
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

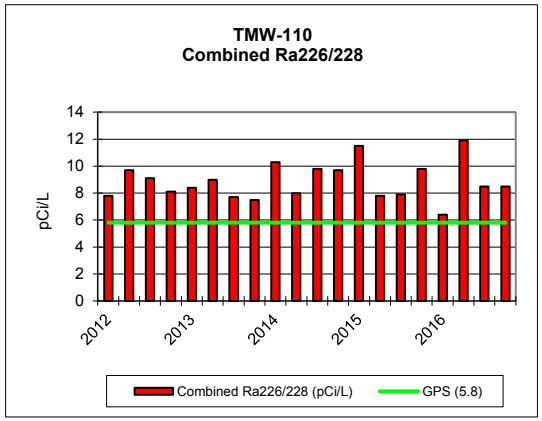

TMW-109
Combined Ra226/228
pCi/L
25
20
15
10
5
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

KENNECOTT URANIUM COMPANY																
TMW-110		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/16/2012	7/13/2012	10/15/2012	1/21/2013	4/15/2013	7/7/2013	10/14/2013	1/13/2014	4/7/2014	7/15/2014	10/29/2014	1/21/2015	4/28/2015	7/21/2015
TDS A/C Balance *(dec. %)*		3.77	-0.673	0.335	2.35	3.3	-3.81	1.71	0.158	0.825	1.66	0.93	0.17	1.23	3.49	0.87
Alk-CaC03		116	122	120	125	124	136	123	124	125	125	124	125	125	124	124
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	<0.001	<0.001	0.001	<0.001	0.002	0.002	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		141	149	146	153	152	166	150	151	152	152	151	153	152	152	151
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		159	138	165	182	181	141	145	163	148	141	148	176	148	127	148
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		12	12	13	14	14	12	11	13	12	11	12	15	12	10	13
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		950	914	1030	1030	1030	978	919	985	927	885	921	1060	940	815	960
Cond-Field *(umhos/cm)*		997	1006	1160	1081	1058	1049	998	1092	976	790	1041	1101			
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	ND	0.1	0.2	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	4	4.2	3.6	3.2	3.2	2.4	2.5	2.7	2.4	3	3.7	3.9	3.8	6.5	7.6
Iron (Fe)	GPS (0.6)	<0.05	0.08	<0.05	<0.05	<0.05	0.09	0.1	0.12	0.06	ND	ND	0.17	0.11	0.1	0.1
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		11.6	9.9	12.5	14.5	14.1	11	11	12.3	11.3	10.4	11.8	13.9	11.4	9.5	11.5
Manganese (Mn)	GPS (0.2)	0.08	0.08	0.09	0.1	0.09	0.08	0.08	0.09	0.08	0.07	0.07	0.09	0.07	0.07	0.07
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.76	7.8	7.8	7.75	7.74	7.76	7.81	7.72	7.74	7.83	7.79	7.8	7.88	7.76	7.78
pH (Field) *(Std. Units)*		7.8	7.6	7.6	7.76	7.62	7.8	7.9	7.7	9.3	8	8	7.76			
Potassium (K)		3.7	3.4	3.5	3.7	3.8	3.6	3.8	3.7	3.4	3.4	3.5	3.7	3.5	3.5	3.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	7.8	9.7	9.1	8.1	8.4	9	7.7	7.5	10.3	8	9.8	9.7	11.5	7.8	7.9
Radium 226 *(pCi/L)*		3.4	3.3	3.3	3	3.2	2.2	3.1	2.5	2.6	2.9	2.5	2.7	2.6	2.3	2.7
Radium 228 *(pCi/L)*		4.4	6.4	5.8	5.1	5.2	6.8	4.6	5	7.7	5.1	7.3	7	8.9	5.5	5.2
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		16.1	14.9	15.9	17.2	16.6	14.4	14.3	14.2	14.6	15.8	15.4	14.1	14.1	14.7	14
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		46.9	45.8	49	47.8	48.6	45.8	46.6	43.6	44.8	42.8	45.5	46.5	44.7	44.2	46.2
TDS @ 180° *C.*	GPS (500)	660	656	773	798	764	694	676	744	694	629	621	792	693	492	701
Sulfate (SO4)		365	343	415	431	420	371	344	397	352	322	357	440	348	274	373
Temperature *(C)*		9.1	11.1	12.2	10.9	11.6	10.1	11.6	9	8	10.6	10.5	9.8			
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.2	0.2	<0.2	<0.2	0.2
Uranium, natural *(pCi/L)*	GPS (36)	4.2	3.8	6.2	5.6	4.7	4.4	4.4	4.2	3.5	3.6	5.1	5.2	3.9	3.3	4.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY						
TMW-110			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	12/6/2015	2/17/2016	4/12/2016	7/31/2016	10/18/2016
TDS A/C Balance *(dec. %)*		2.38	3.21	0	0.21	1.14
Alk-CaC03		128	127	121	125	124
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		156	155	148	152	151
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		168	133	135	191	147
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		15	13	12	16	12
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1040	921	892	1170	931
Cond-Field *(umhos/cm)*			1050	894	1450	1026
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	ND	0.1
Gross Alpha *(pCi/L)*	GPS (15)	5.5	3.4	8.9	3.4	4.3
Iron (Fe)	GPS (0.6)	0.1	0.08	0.11	0.11	0.13
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	0.02	<1	<1	<1
Lead (Pb)		<0.01	-0.3	-0.4	0.3	0.8
Magnesium (Mg)		13.7	10.7	10.6	15.8	12.2
Manganese (Mn)	GPS (0.2)	0.08	0.06	0.06	0.08	0.06
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.73	7.93	7.87	7.63	7.82
pH (Field) *(Std. Units)*			7.65	7.63	6.98	7.79
Potassium (K)		3.8	3	3.1	3.6	3.4
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.8	6.4	11.9	8.5	8.5
Radium 226 *(pCi/L)*		2.9	3.1	2.7	2.8	2.1
Radium 228 *(pCi/L)*		6.9	3.3	9.2	5.7	6.4
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.9	13.2	14.1	13.6	13.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		45.1	41.3	46	46.4	43
TDS @ 180° *C.*	GPS (500)	785	678	651	924	675
Sulfate (SO4)		440	342	332	478	349
Temperature *(C)*			8.6	9.4	11.5	10
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	0.06	0.06	0.03	0.03
Uranium, natural *(pCi/L)*	GPS (36)	4.7	3.2	4.6	5.4	5.2
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	0.13

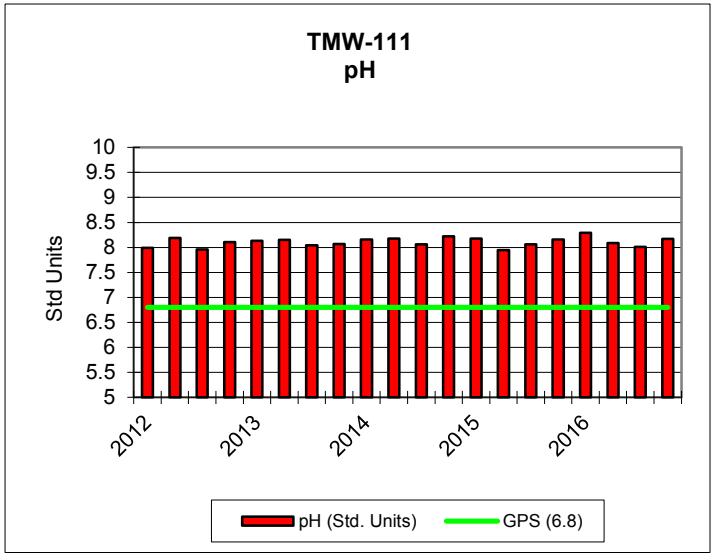

TMW-110
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

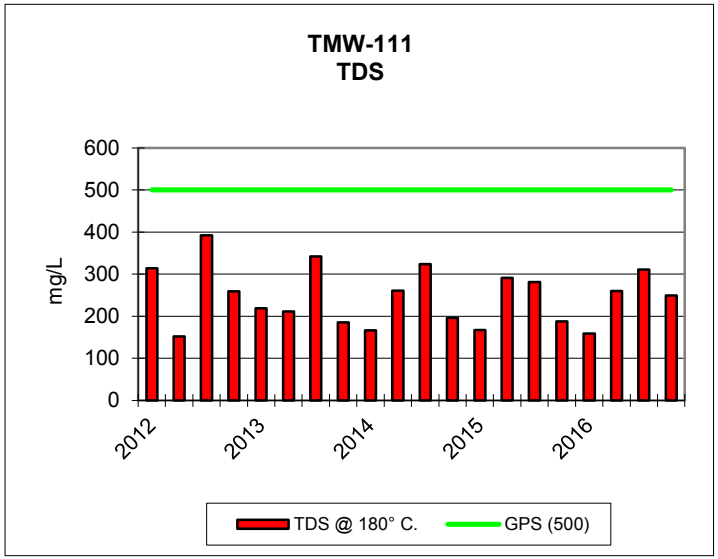

TMW-110
TDS
mg/L
1000
900
800
700
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-110
Combined Ra226/228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

KENNECOTT URANIUM COMPANY																
TMW-111		2012				2013				2014				2015		
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/30/2012	4/17/2012	8/19/2012	12/11/2012	1/28/2013	4/1/2013	7/7/2013	10/15/2013	1/27/2014	4/8/2014	8/4/2014	11/19/2014	2/3/2015	6/3/2015	8/12/2015
TDS A/C Balance *(dec. %)*		-2.1	-2	-0.724	3.57	0.745	-2.82	0.0866	-4.27	0.77	2.28	1.72	1.18	0.33	2.76	0.7
Alk-CaC03		101	85	105	93	92	93	100	89	88	93	103	90	87	109	96
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.001	0.001	0.001	<0.001	0.002	0.002	0.001	0.002	0.002	0.001	0.001	0.001	0.002	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		124	104	128	113	112	113	122	109	105	114	126	110	106	133	117
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		58.7	17	76.2	48.9	32.4	29.9	62.2	23.5	18.6	43	56	22.1	18.5	47.8	48.6
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		4	2	5	3	3	3	5	2	2	4	4	2	2	4	4
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		484	266	575	407	341	351	514	295	270	434	490	287	273	456	446
Cond-Field *(umhos/cm)*		518	300	666	438	358	429	594	335	317	569	565	364	321	411	460
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	1.3	0.8	1.1	0.5	0.7	0.2	1.1	0.3	0.7	0.5	0.6	1.6	1	2.3	4
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	-0.6	0.7	-0.6
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		5.5	1.5	6.7	4.5	3.1	2.8	5.8	2.1	1.5	3.8	5.1	2	1.6	4.3	4.7
Manganese (Mn)	GPS (0.2)	0.01	ND	0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.99	8.19	7.96	8.11	8.13	8.15	8.04	8.07	8.16	8.18	8.06	8.22	8.18	7.95	8.06
pH (Field) *(Std. Units)*		7.9	8.2	7.8	7.67	7.8	5.8	8	8.2	8.1	8.5	7.8	8.2	8.32	8.28	8.06
Potassium (K)		1.9	1.2	2.2	1.7	1.4	1.3	2	1.3	1.2	1.6	1.8	1.2	1.2	1.7	1.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	3.4	0.78	2.74	1.81	3.98	1.92	2.93	1.31	0.9	1.53	2.48	1.13	2.46	1.29	3.06
Radium 226 *(pCi/L)*		0.9	0.28	0.84	0.41	0.78	0.42	0.83	0.31	0.1	0.93	0.78	0.33	0.26	0.39	0.76
Radium 228 *(pCi/L)*		2.5	0.5	1.9	1.4	3.2	1.5	2.1	1	0.8	0.6	1.7	0.8	2.2	0.9	2.3
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.1	10.8	12.7	9.9	12.3	11	11.1	10.8	10.7	11.8	10.9	10.8	10.4	10.8	10.7
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.3	36.6	38.9	36	38.1	37.8	40.6	32.6	39.9	40.8	38.9	36.4	38.9	40.5	42.2
TDS @ 180° *C.*	GPS (500)	314	152	392	259	219	211	342	185	166	261	324	196	167	291	281
Sulfate (SO4)		145	45	189	104	76	79	156	56	45	119	141	51	46	120	117
Temperature *(C)*		10.3	10.6	11.6	11.1	11.5	10.6	13	9.2	8.6	10.5	11.4	9.4	8.6	9.4	10.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.08	0.3	0.06	<0.2	0.05	0.2	0.3
Uranium, natural *(pCi/L)*	GPS (36)	3.8	2.4	4.8	4.1	3.3	3.3	4.5	3.9	2.5	3.9	5.6	3.7	2.8	4.5	3.8
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

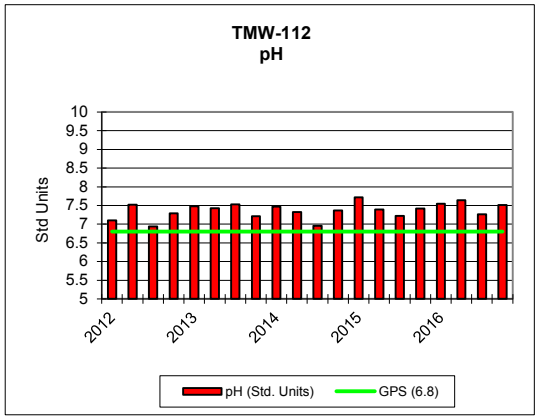
KENNECOTT URANIUM COMPANY						
TMW-111			2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	12/6/2015	2/15/2016	6/27/2016	8/1/2016	11/7/2016
TDS A/C Balance *(dec. %)*		4.87	3.99	4.92	0.52	1.62
Alk-CaC03		107	91	98	100	100
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.001	0.002	0.002	0.001	0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		131	111	120	122	123
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		27.2	18.3	36.2	51.5	37.2
Carbonate (CO3)		<1	<1	<1	<1	<1
Chloride (Cl)		3	2	3	5	3
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		305	270	407	466	380
Cond-Field *(umhos/cm)*		323	279	476	611	419
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	0.1	0.2
Gross Alpha *(pCi/L)*	GPS (15)	2	0.3	0.6	2.1	2.4
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05
Lead (Pb210) *(pCi/L)*	GPS (8.9)	-0.08	<1	<1	<1	<1
Lead (Pb)		<0.01	0.3	-1	0.3	0.7
Magnesium (Mg)		2.6	1.7	4.8	4.8	3.4
Manganese (Mn)	GPS (0.2)	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	8.16	8.29	8.09	8.01	8.17
pH (Field) *(Std. Units)*		8.21	8.35	8.13	7.43	8.49
Potassium (K)		1.5	1.3	1.7	1.8	1.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	1.33	1.37	2.57	2.66	2.44
Radium 226 *(pCi/L)*		0.53	0.27	0.67	0.86	0.64
Radium 228 *(pCi/L)*		0.8	1.1	1.9	1.8	1.8
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		11.1	9.3	9.6	10.9	10.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		35.8	35.9	35.2	40.8	38.8
TDS @ 180° *C.*	GPS (500)	188	159	260	311	249
Sulfate (SO4)		61	47	101	130	91
Temperature *(C)*		8.6	8.8	9.7	13.7	11
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.02	0.07	0.01	0.07	0.2
Uranium, natural *(pCi/L)*	GPS (36)	3	2.8	7.3	4.2	3.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01

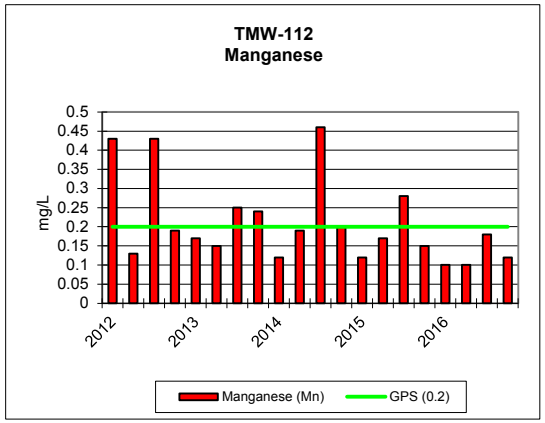

TMW-111
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

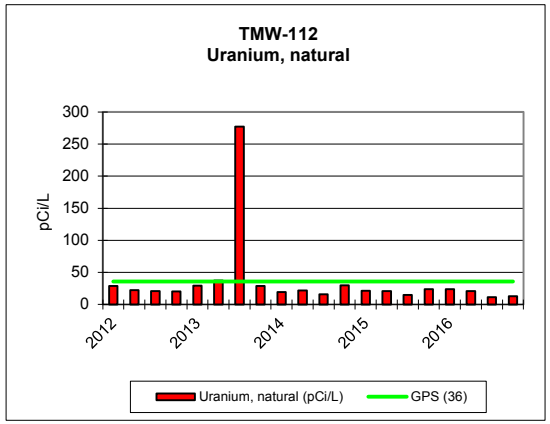

TMW-111
TDS
mg/L
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

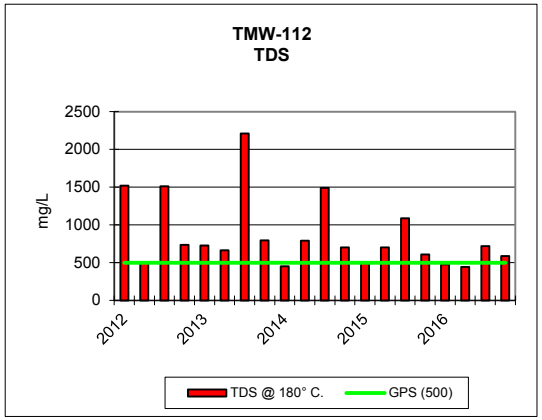
KENNECOTT URANIUM COMPANY																	
TMW-112		2012				2013				2014				2015			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/17/2012	7/13/2012	10/16/2012	1/22/2013	4/1/2013	7/7/2013	10/15/2013	1/27/2014	4/8/2014	8/4/2014	11/4/2014	1/21/2015	5/4/2015	7/22/2015	12/6/2015
TDS A/C Balance *(dec. %)*		1.7	-1.79	-1.02	4.03	-2.33	-2	1.76	-1.86	1.43	0.86	0.43	0.95	0.52	2.3	2.55	0.48
Alk-CaC03		70	92	71	91	91	93	137	91	94	89	72	94	95	91	86	96
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		86	112	86	112	112	114	168	111	115	108	88	114	115	111	105	117
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		326	92.7	302	160	135	131	454	157	88.8	164	310	141	95.7	137	217	121
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		21	8	21	12	13	12	40	11	7	11	21	10	7	10	15	10
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.055	0.011	0.05	0.016	0.012	0.011	0.003	0.027	0.008	0.015	0.055	0.028	0.01	0.011	0.033	0.014
Cond *(umhos/cm)*		1780	721	1760	950	964	913	2370	1030	652	1040	1730	962	709	947	1360	837
Cond-Field *(umhos/cm)*		1844	760	1842	995	1013	1048	1894	1132	701	1109	708	1022	725	959	1376	912
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.1	0.2	0.2	0.2	ND	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Gross Alpha *(pCi/L)*	GPS (15)	7.7	1.7	3.5	1.6	1.6	3.4	2.8	1.4	1.9	2.7	4.3	1.7	3.3	6.7	21.7	3.6
Iron (Fe)	GPS (0.6)	5.46	0.7	2.34	1.49	0.64	0.86	0.25	1.63	0.17	0.65	0.38	1.85	1.13	0.93	3.97	1.52
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0.05	0.3	0.1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		37.5	10.3	35.9	18.8	15.2	14.1	46.2	17.9	10	18.3	36.9	16.7	10.9	13.9	24.3	14.5
Manganese (Mn)	GPS (0.2)	0.43	0.13	0.43	0.19	0.17	0.15	0.25	0.24	0.12	0.19	0.46	0.2	0.12	0.17	0.28	0.15
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	0.06	<0.01	0.05	0.01	0.02	<0.01	0.02	0.03	<0.01	0.02	0.06	0.02	<0.01	0.01	0.03	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.1	7.52	6.94	7.29	7.48	7.43	7.53	7.21	7.47	7.32	6.96	7.37	7.72	7.39	7.22	7.42
pH (Field) *(Std. Units)*		6.8	7.2	6.9	7.14	7.36	6.9	6.9	7.5	7.5	7.2	6.8	7.35	7.76	7.45	6.81	7.42
Potassium (K)		5.5	2.8	5.4	3.8	3.5	2.9	6.5	3.5	2.6	3.6	5.2	3.2	2.8	3	4.4	3.2
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	15	4.7	15.4	6.7	6	7.9	9.9	5.5	5.2	9.5	17.2	9.1	7.7	8.3	12	5.9
Radium 226 *(pCi/L)*		5	1.1	4.2	2.3	1.7	1.9	1.8	1.6	1.1	2.8	3.9	2.3	1.5	1.8	3.2	1.3
Radium 228 *(pCi/L)*		10	3.6	11.2	4.4	4.3	6	8.1	3.9	4.1	6.7	13.3	6.8	6.2	6.5	8.8	4.6
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.7	10.6	13	12.3	12.5	10.6	11.7	11.3	10.8	9.8	12.9	11	10.9	11.4	12.5	11.6
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		67	39.1	69.4	51	40.8	40.7	110	42.2	39.4	47.7	65.3	43.4	39	40.1	49.6	42
TDS @ 180° *C.*	GPS (500)	1520	495	1510	735	727	663	2210	794	450	790	1490	702	496	701	1090	608
Sulfate (SO4)		943	261	941	419	390	371	1270	457	228	459	944	386	253	391	661	336
Temperature *(C)*		8.4	10.8	12.4	10.3	10.1	9.6	11.7	9	8.2	9.2	11.9	9.1	9	9.9	10.6	8.2
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.009	0.2	0.06	0.06
Uranium, natural *(pCi/L)*	GPS (36)	28.8	22.2	20.8	20.5	29.2	37.2	277	28.9	19.3	21.9	16.1	30.1	21.4	21.1	14.7	24.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		0.02	0.01	0.03	<0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	0.02	<0.01	<0.01	<0.01	0.01	<0.01

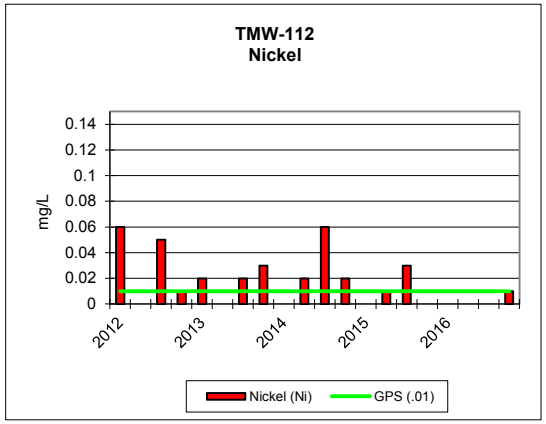
KENNECOTT URANIUM COMPANY					
TMW-112		2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	2/29/2016	4/13/2016	7/31/2016	10/13/2016
TDS A/C Balance *(dec. %)*		0.28	3.86	1.26	1.74
Alk-CaC03		91	91	87	89
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		112	112	106	109
Boron (B)		<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		93.4	89.2	143	114
Carbonate (CO3)		<1	<1	<1	<1
Chloride (Cl)		7	6	11	10
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.009	0.007	0.012	0.012
Cond *(umhos/cm)*		688	630	956	820
Cond-Field *(umhos/cm)*		771	721	1143	898
Copper (Cu)		<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.2	0.2	0.2	
Gross Alpha *(pCi/L)*	GPS (15)	2.2	8.6	3.7	2.2
Iron (Fe)	GPS (0.6)	0.91	0.59	ND	ND
Lead (Pb210) *(pCi/L)*	GPS (8.9)	ND	ND	ND	ND
Lead (Pb)		0.3	0.3	0.8	0.5
Magnesium (Mg)		10.9	10	16	12.2
Manganese (Mn)	GPS (0.2)	0.1	0.1	0.18	0.12
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.55	7.64	7.26	7.51
pH (Field) *(Std. Units)*		7.5	7.47	6.68	7.41
Potassium (K)		3.7	2.6	3.1	2.8
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6	1.55	9.8	8
Radium 226 *(pCi/L)*		1.4	0.45	2.3	1.5
Radium 228 *(pCi/L)*		4.6	1.1	7.5	6.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		11.1	11.7	11.7	11.2
Silver (Ag)		<0.01	<0.01	<0.01	<0.01
Sodium (Na)		37.9	40.4	43	40.8
TDS @ 180° *C.*	GPS (500)	479	443	720	589
Sulfate (SO4)		255	219	389	325
Temperature *(C)*		8.3	9.1	13.8	10.1
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.06	0.03	0.07	-0.009
Uranium, natural *(pCi/L)*	GPS (36)	23.7	20.9	11.6	13.1
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01

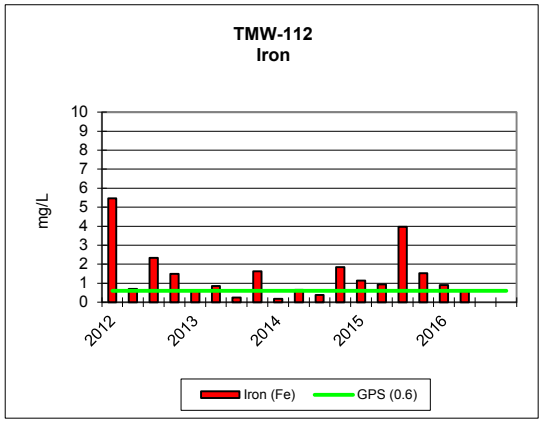

TMW-112
pH
Std Units
10
9.5
9
8.5
8
7.5
7
6.5
6
5.5
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)

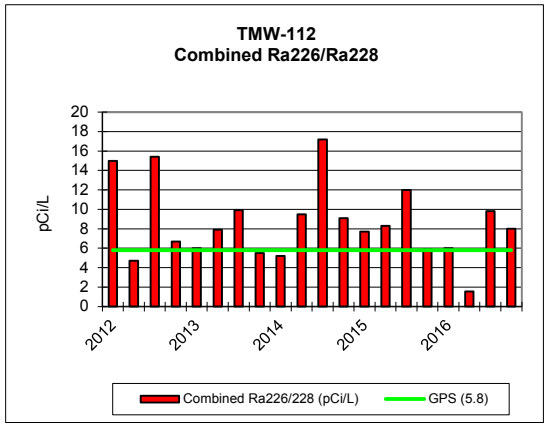

TMW-112
Manganese
mg/L
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)


TMW-112
Uranium, natural
pCi/L
300
250
200
150
100
50
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)


TMW-112
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

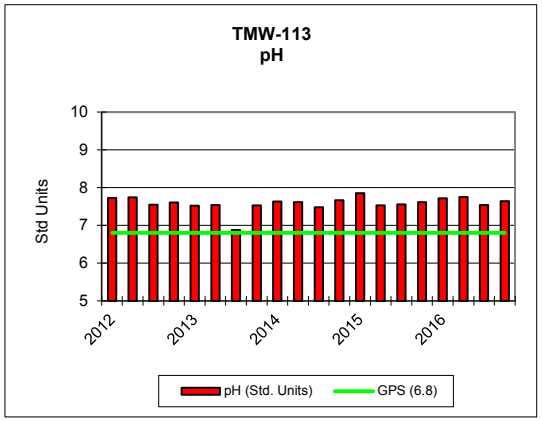

TMW-112
Nickel
mg/L
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

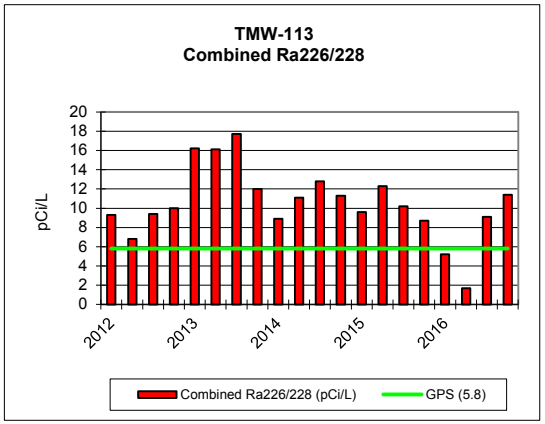

TMW-112
Iron
mg/L
10
9
8
7
6
5
4
3
2
1
0
2012
2013
2014
2015
2016
Iron (Fe)
GPS (0.6)

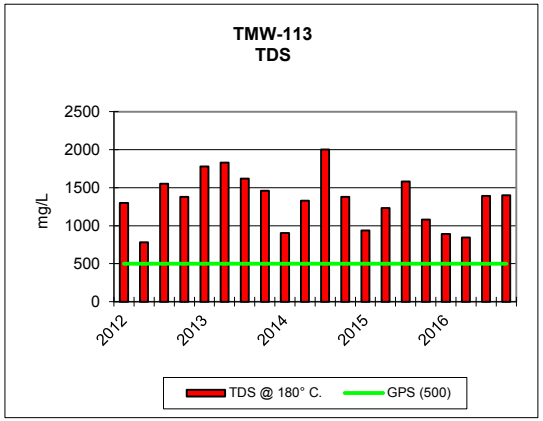

TMW-112
Combined Ra226/Ra228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

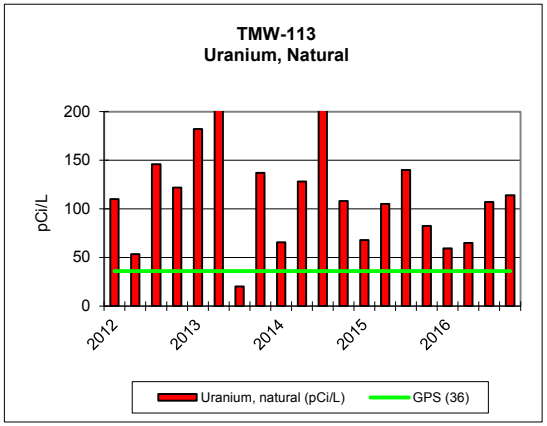
KENNECOTT URANIUM COMPANY															
TMW-113		2012				2013				2014				2015	
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	4/17/2012	8/19/2012	10/15/2012	1/28/2013	4/1/2013	7/7/2013	10/15/2013	2/3/2014	4/8/2014	8/4/2014	11/4/2014	1/21/2015	5/4/2015
TDS A/C Balance *(dec. %)*		1.43	-0.314	-2.14	3.96	1.76	-0.654	1.7	1.42	4.85	0.61	0.17	0.16	1.09	4.5
Alk-CaC03		106	104	122	120	128	142	68	121	109	118	132	119	108	115
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.002	0.002	0.002	0.002	<0.001	0.003	0.002	0.004	0.002	0.002	0.003	0.003	0.002	0.002
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		129	127	149	146	156	174	83	148	134	144	161	146	132	140
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		292	158	323	293	384	381	320	321	175	278	430	288	193	254
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		26	16	32	26	34	37	22	28	19	25	38	27	19	24
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	0.001	0.002	0.001	0.001	0.002	0.062	0.002	<0.001	<0.001	0.001	0.002	<0.001	0.001
Cond *(umhos/cm)*		1680	1050	1780	1580	2000	2080	1830	1720	1210	1600	2240	1680	1200	1510
Cond-Field *(umhos/cm)*		1655	1097	1842	1670	2160	2340	2580	1858	1288	1520	1792	1715	1231	1560
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	ND	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	3	1.7	2.6	2	3.5	5.2	3.5	1.5	1.9	2.3	3.4	2.5	3	9.4
Iron (Fe)	GPS (0.6)	0.05	<0.05	<0.05	<0.05	<0.05	0.26	5.86	0.19	<0.05	0.09	0.17	0.35	0.18	0.2
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	1.4	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium (Mg)		27.2	13.7	32.2	30.5	37.8	35.2	39.2	29.1	15.5	26.3	41.8	28.1	16.9	22.8
Manganese (Mn)	GPS (0.2)	0.16	0.1	0.2	0.16	0.21	0.19	0.47	0.17	0.08	0.14	0.24	0.16	0.1	0.14
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.73	7.74	7.55	7.61	7.52	7.54	6.88	7.53	7.63	7.62	7.48	7.67	7.85	7.53
pH (Field) *(Std. Units)*		7.5	7.8	7.5	7.55	7.39	7.5	7.5	7.6	7.7	7.5	7.5	7.31	7.97	7.58
Potassium (K)		4.6	3.3	5.1	5	5.1	4.7	5.6	5.1	3.3	4.6	5.6	4.9	3.8	4.3
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	9.3	6.8	9.4	10	16.2	16.1	17.7	12	8.9	11.1	12.8	11.3	9.6	12.3
Radium 226 *(pCi/L)*		2.3	1.6	2	2.5	3.1	2.3	4.8	2.1	1.7	3.1	2.8	3	1.7	2.4
Radium 228 *(pCi/L)*		7	5.2	7.4	7.5	13.1	13.8	12.9	9.9	7.2	8	10	8.3	7.9	9.9
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		13.2	11.8	12.7	13.3	12.9	11.6	13.4	12.1	10.6	10.3	11.6	11.9	11.9	11.9
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		70.1	49.4	78.6	80.9	90.2	85.3	72.4	74.3	49.5	73.6	96.9	75.7	57	67.6
TDS @ 180° *C.*	GPS (500)	1300	781	1550	1380	1780	1830	1620	1460	905	1330	2000	1380	936	1230
Sulfate (SO4)		796	422	958	771	1050	1070	949	862	516	794	1220	811	537	782
Temperature *(C)*		9.7	10	11.2	10.7	9.8	9.5	11.6	9	8.4	9	11.5	9.2	8.2	9.3
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.2	<0.2	<0.2
Uranium, natural *(pCi/L)*	GPS (36)	110	53.3	146	122	182	228	20.1	137	65.7	128	207	108	67.8	105
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

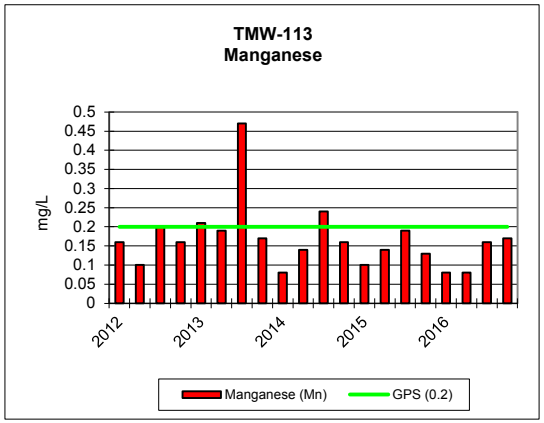
KENNECOTT URANIUM COMPANY							
TMW-113				2016			
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	7/22/2015	12/6/2015	2/29/2016	4/13/2016	7/31/2016	10/13/2016
TDS A/C Balance *(dec. %)*		0.81	2.24	4.72	2.99	1.55	1.04
Alk-CaC03		123	114	105	105	119	118
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	0.003	0.002	0.002	0.002	0.003	ND
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		150	139	128	128	145	145
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		330	219	205	181	270	285
Carbonate (CO3)		<1	<1	<1	<1	<1	<1
Chloride (Cl)		29	22	16	15	25	26
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		0.002	0.001	<0.001	<0.001	<0.001	0.002
Cond *(umhos/cm)*		1790	1370	1150	1080	1660	1690
Cond-Field *(umhos/cm)*		1919	1382	1230	1218	1930	1827
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	
Gross Alpha *(pCi/L)*	GPS (15)	17.7	3.2	0.9	10.6	3.8	4.1
Iron (Fe)	GPS (0.6)	0.38	0.17	0.12	0.11	<0.05	0.32
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	0.4	0.02	-0.03	0.6
Magnesium (Mg)		31.3	21.5	18.6	16.4	27	28.3
Manganese (Mn)	GPS (0.2)	0.19	0.13	0.08	0.08	0.16	0.17
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.56	7.62	7.72	7.75	7.54	7.64
pH (Field) *(Std. Units)*		7.11	7.56	7.66	7.58	6.99	7.56
Potassium (K)		5.1	4.1	4.6	3.6	4.1	4.6
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	10.2	8.7	5.2	1.69	9.1	11.4
Radium 226 *(pCi/L)*		2.3	1.7	1.3	0.29	2.1	1.9
Radium 228 *(pCi/L)*		7.9	7	3.9	1.4	7	9.5
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		12.2	12.2	11.1	12.8	11.3	12.1
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		77.3	64	55	59.8	69.7	75.1
TDS @ 180° *C.*	GPS (500)	1580	1080	890	846	1390	1400
Sulfate (SO4)		941	645	501	469	785	827
Temperature *(C)*		9.1	7.9	7.8	8.6	12.8	10.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	0.02	0.1	0.02	0.04
Uranium, natural *(pCi/L)*	GPS (36)	140	82.2	59.3	64.8	107	114
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01


TMW-113
pH
Std Units
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-113
Combined Ra226/228
pCi/L
20
18
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)

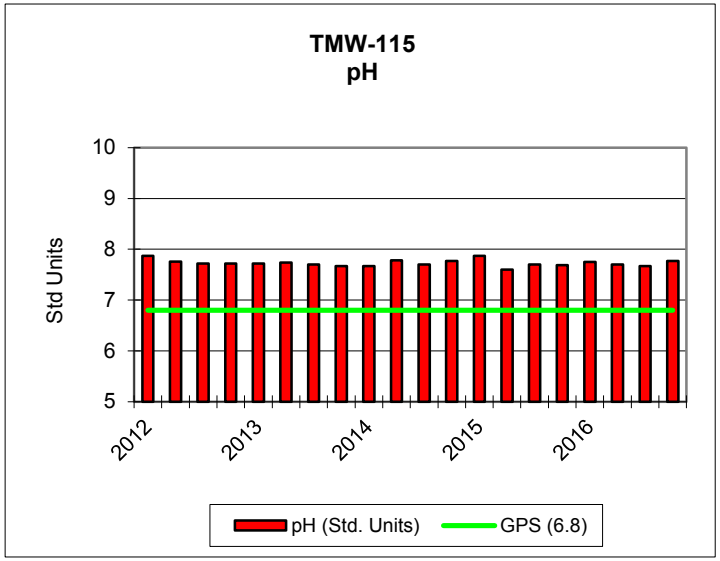

TMW-113
TDS
mg/L
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)

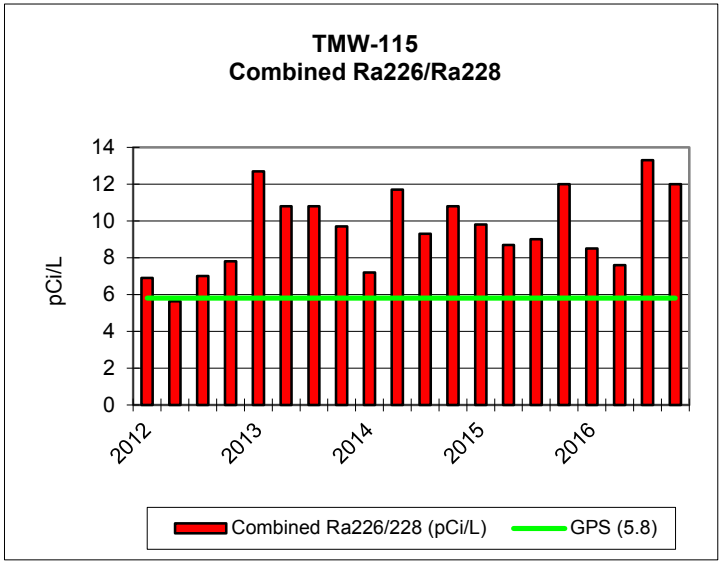

TMW-113
Uranium, Natural
pCi/L
200
150
100
50
0
2012
2013
2014
2015
2016
Uranium, natural (pCi/L)
GPS (36)

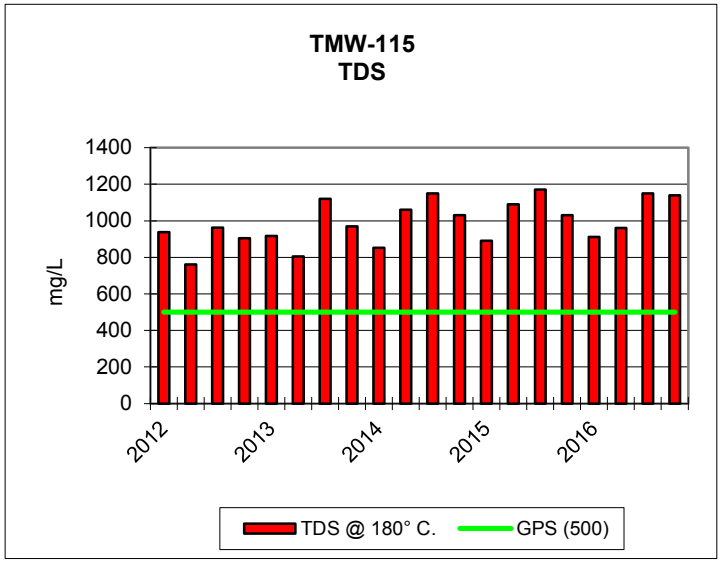

TMW-113
Manganese
mg/L
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
2012
2013
2014
2015
2016
Manganese (Mn)
GPS (0.2)

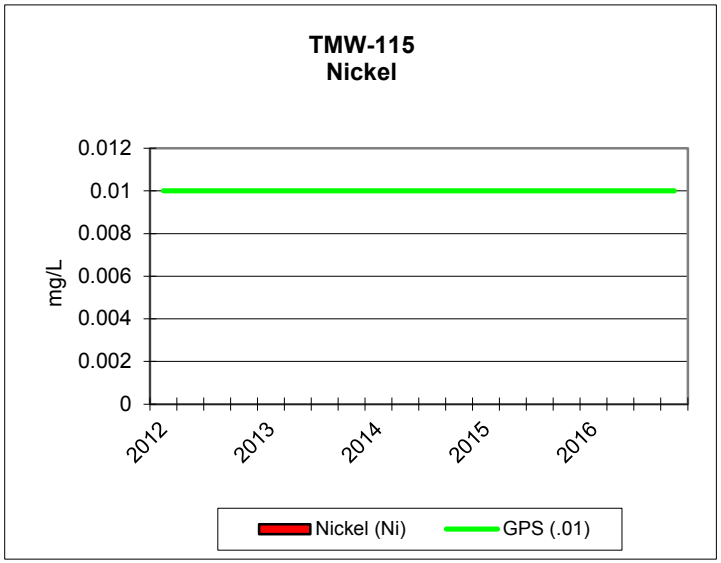
KENNECOTT URANIUM COMPANY																		
TMW-115		2012				2013				2014				2015				2016
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	1/17/2012	5/7/2012	8/19/2012	10/15/2012	1/28/2013	4/1/2013	7/7/2013	10/15/2013	2/3/2014	4/7/2014	8/4/2014	11/3/2014	1/21/2015	5/4/2015	7/22/2015	12/6/2015	2/29/2016
TDS A/C Balance *(dec. %)*		3.5	-3.04	-1.69	-0.321	2.8	-2.37	0.601	0.881	3.3	0.08	0.99	0.86	0.52	3.38	0.21	1.26	0.66
Alk-CaC03		119	132	132	132	127	128	128	132	123	121	130	132	124	117	129	134	124
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		145	161	161	161	155	156	157	161	150	147	159	161	151	142	158	163	152
Boron (B)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium (Ca)		224	151	201	187	206	167	241	218	170	235	255	221	188	234	254	217	193
Carbonate (CO3)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride (Cl)		15	13	16	15	15	15	18	17	16	18	19	19	17	18	20	20	18
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1240	1060	1200	1140	1170	1080	1410	1240	1120	1340	1430	1310	1160	1360	1460	1310	1170
Cond-Field *(umhos/cm)*		1283	1072	1293	1200	1233	1258	1504	1356	1223	1140	1642	1334	1204	1322	1541	1408	1331
Copper (Cu)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoride (F)		0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	<0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	2.6	1	1.7	1.9	2.9	2.3	1.9	1.6	1.6	1.9	1.8	2.1	3.3	8.8	18.6	5	4.7
Iron (Fe)	GPS (0.6)	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.12	0.14	0.18	0.13	0.13
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead (Pb)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.8
Magnesium (Mg)		17.1	12.8	17.2	16.3	17.7	13.7	20	16.5	14	18.1	21	18.3	15.6	17.3	20.1	18.6	16.1
Manganese (Mn)	GPS (0.2)	0.11	0.09	0.11	0.1	0.11	0.08	0.12	0.11	0.09	0.12	0.15	0.13	0.11	0.13	0.14	0.13	0.1
Mercury (Hg)		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.87	7.76	7.72	7.72	7.72	7.74	7.7	7.67	7.67	7.78	7.7	7.77	7.87	7.6	7.7	7.69	7.75
pH (Field) *(Std. Units)*		7.7	7.6	7.3	7.68	7.64	7.8	7.9	7.8	7.7	7.9	7.9	7.56	8.02	7.67	7.42	7.62	7.65
Potassium (K)		4.3	3.5	4.2	4	4.1	3.5	4.7	4.3	3.3	4.2	4.2	4.2	3.9	4.2	4.6	4.3	3.9
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	6.9	5.63	7	7.8	12.7	10.8	10.8	9.7	7.2	11.7	9.3	10.8	9.8	8.7	9	12	8.5
Radium 226 *(pCi/L)*		1.3	0.63	1.6	1.9	2.9	1.6	2.4	2.1	1.6	3	1.9	2.7	1.8	1.9	2.2	1.8	1.5
Radium 228 *(pCi/L)*		5.6	5	5.4	5.9	9.8	9.2	8.4	7.6	5.6	8.7	7.4	8.1	8	6.8	6.8	10.2	7
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silica (SiO2)		15.1	12.7	14.6	13.6	14.7	13.3	13.4	13.5	12	14.4	13.3	13.3	13	12.9	13.5	13.5	13.5
Silver (Ag)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sodium (Na)		54.6	46.5	52.2	55	55.6	50.1	62.2	52.2	47.2	55.6	61.3	59.5	53.8	53.6	59.9	60.7	54.4
TDS @ 180° *C.*	GPS (500)	938	761	962	904	916	805	1120	969	852	1060	1150	1030	890	1090	1170	1030	911
Sulfate (SO4)		540	402	538	489	504	449	634	540	464	615	693	565	493	662	672	589	
Temperature *(C)*		10.2	10.9	11.8	11.7	10.1	9.9	12	9.3	9	9.6	10.7	9.5	8.4	9.5	9.3	7.9	7.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.08
Uranium, natural *(pCi/L)*	GPS (36)	9.7	10.4	11.6	14.4	10.9	10.6	12.1	12.4	9.8	11.6	12.6	13.7	10.7	11.5	11.7	12.7	23.5
Vanadium (V205)		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

KENNECOTT URANIUM COMPANY				
TMW-115				
PARAMETER *(mg/L unless noted)*	Groundwater Protection Standard (GPS) as of 5/26/05	4/19/2016	8/1/2016	10/13/2016
TDS A/C Balance *(dec. %)*		3.23	0.48	1.04
Alk-CaC03		119	132	136
Aluminum (Al)	GPS (1.8)	<0.1	<0.1	<0.1
Arsenic (As)	GPS (.05)	<0.001	<0.001	<0.001
Barium (Ba)		<0.1	<0.1	<0.1
Beryllium (Be)	GPS (.01)	<0.01	<0.01	<0.01
Bicarbonate (HCO3)		145	161	166
Boron (B)		<0.1	<0.1	<0.1
Cadmium (Cd)	GPS (.01)	<0.005	<0.005	<0.005
Calcium (Ca)		189	244	239
Carbonate (CO3)		<1	<1	<1
Chloride (Cl)		18	21	20
Chromium (Cr)	GPS (.05)	<0.01	<0.01	<0.01
Cobalt (Co)		<0.001	<0.001	<0.001
Cond *(umhos/cm)*		1220	1450	1440
Cond-Field *(umhos/cm)*		1365	913	1550
Copper (Cu)		<0.01	<0.01	<0.01
Cyanide (CN)		<0.005	<0.005	<0.005
Fluoride (F)		<0.1	<0.1	0.1
Gross Alpha *(pCi/L)*	GPS (15)	11.6	3.6	3.5
Iron (Fe)	GPS (0.6)	0.14	0.12	0.17
Lead (Pb210) *(pCi/L)*	GPS (8.9)	<1	<1	<1
Lead (Pb)		0.98	0.6	0.6
Magnesium (Mg)		15.5	20.5	20.5
Manganese (Mn)	GPS (0.2)	0.1	0.14	0.15
Mercury (Hg)		<0.0002	<0.0002	<0.0002
Molybdenum (Mo)		<0.01	<0.01	<0.01
Nickel (Ni)	GPS (.01)	<0.01	<0.01	<0.01
Nitrogen, Nitrate+Nitrite as N		<0.1	<0.1	<0.1
pH *(Std. Units)*	GPS (6.8)	7.7	7.67	7.77
pH (Field) *(Std. Units)*		7.55	6.87	7.67
Potassium (K)		3.5	4.4	4.5
Combined Ra226/228 *(pCi/L)*	GPS (5.8)	7.6	13.3	12
Radium 226 *(pCi/L)*		2.6	1.8	1.7
Radium 228 *(pCi/L)*		5	11.5	10.3
Selenium (Se)	GPS (.01)	<0.001	<0.001	<0.001
Silica (SiO2)		12.3	13.3	13.3
Silver (Ag)		<0.01	<0.01	<0.01
Sodium (Na)		51.3	63.7	63.9
TDS @ 180° *C.*	GPS (500)	960	1150	1140
Sulfate (SO4)		528	641	651
Temperature *(C)*		8.5	12.9	11.4
Thallium (Tl)	GPS (7.0)	<0.01	<0.01	<0.01
Thorium 230 *(pCi/L:)*		0.1	0.04	0.06
Uranium, natural *(pCi/L)*	GPS (36)	10.2	9.5	11.9
Vanadium (V205)		<0.1	<0.1	<0.1
Zinc (ZN)		<0.01	<0.01	0.01


TMW-115
pH
Std Units
10
9
8
7
6
5
2012
2013
2014
2015
2016
pH (Std. Units)
GPS (6.8)


TMW-115
Combined Ra226/Ra228
pCi/L
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
Combined Ra226/228 (pCi/L)
GPS (5.8)


TMW-115
TDS
mg/L
1400
1200
1000
800
600
400
200
0
2012
2013
2014
2015
2016
TDS @ 180° C.
GPS (500)


TMW-115
Nickel
mg/L
0.012
0.01
0.008
0.006
0.004
0.002
0
2012
2013
2014
2015
2016
Nickel (Ni)
GPS (.01)

Diesel Excavation Monitor Wells

Kennecott Uranium Company		Collected in																		
Sweetwater Uranium Project		uncased																		
TMW-10		hole		2008			2009				2010				2011				2012	
Northing: 149145.59 Easting: 323037.81	Groundwater Protection	08/21/07	09/05/07	02/13/08	08/11/08	11/18/08	01/12/09	04/07/09	07/08/09	10/06/09	01/18/10	04/12/10	07/07/10	10/04/10	01/17/11	04/04/11	07/11/11	10/23/11		
ORGANICS mg/L:																				
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	TMW-10 was found to	
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	be "plugged" or blocked	
VOLATILE ORGANIC COMPOUNDS mg/L:																			by sand in 2012 and	
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	could not be	
Chloroform		0.0011	0.011	ND	0.02	0.019	0.023	0.019	0.018	0.02	0.017	0.019	0.017	0.014	0.02	0.0085	0.012	0.021	pumped/sampled. The	
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	well remains blocked.	
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	0.0016	ND	0.003	0.0032	0.0035	0.0035	0.003	0.0033	0.003	0.0035	0.0031	0.0023	0.0031	0.0013	0.0015	0.0028		
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
(1) - EPA MCL																				
(2) - WY Drinking Water Equivalent Level																				
(3) - WY VRP, Fact Sheet 12																				
(4) - EPA RBC - Tap Water																				
(LAB: Energy Labs Inc. unless noted.)																				

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	**TMW-72**													
Northing:	149020.470			**Top**		**Bottom**								
Easting:	322997.150			**Below Surface**	**Elevation**	**Below Surface**	**Elevation**							
Elevation:	6640.350		**Screen:**	90.000	6550.350	114.000	6526.350							
Constituent	**Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water**	**WDEQ Drinking Water Equivalent Level (DWEL)**	**2/5/02**	**3/12/02**	**5/8/02**	**5/16/02**	**6/26/02**	**7/31/02**	**8/20/02**	**9/11/02**	**10/10/02**	**11/18/02**	**12/10/02**	**1/7/03**
	micrograms per liter	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**
1,1-Dichloroethane		3000	ND	ND	ND	ND	1.8	1.7	1.5	1.7	2.0	1.9	1.4	1.3
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**
Gasoline Range Organics			ND	0.826	0.228	0.199	0.121	0.060	0.051	0.055	0.032	0.023	0.029	0.025
Diesel Range Organics			ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	**TMW-72**													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	**Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water**	**WDEQ Drinking Water Equivalent Level (DWEL)**	**2/10/03**	**3/12/03**	**4/23/03**	**5/14/03**	**6/4/03**	**7/14/03**	**8/5/03**	**9/17/03**	**10/22/03**	**11/11/03**	**12/9/03**	**1/13/04**
	micrograms per liter	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**	**micrograms per liter**
1,1-Dichloroethane		3000	1.8	1.8	1.4	1.5	1.0	1.5	1.1	1.2	1.6	1.3	1.6	1.7
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**	**milligrams per liter**
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/11/04	3/16/04	4/12/04	5/11/04	6/10/04	7/14/04	8/4/04	9/16/04	10/13/04	11/8/04	12/8/04	1/19/05
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	1.1	1.3	ND	1.0	1.2	ND	1.2	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/9/05	3/8/05	4/12/05	5/10/05	6/9/05	7/19/05	8/9/05	9/22/05	10/25/05	11/29/05	12/12/05	1/11/06
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	12	12	2.5
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/2/06	3/1/06	4/10/06	5/2/06	6/5/06	7/25/06	8/15/06	9/5/06	10/2/06	11/8/06	12/13/06	1/10/07
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	1.0	ND	ND	1.0	1.3	ND	1.0	ND	ND	ND	ND
Chloromethane			1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/14/07	3/5/07	4/3/07	5/1/07	6/3/07	7/17/07	8/1/07	9/5/07	10/1/07	11/7/07	12/5/07	1/13/08
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	1.7	ND	ND	ND	1.0	1.3	1.1
Chloromethane			ND	ND	ND	ND	ND	3.0	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/20/08	3/19/08	4/7/08	5/13/08	6/4/08	7/15/08	8/8/08	9/23/08	10/5/08	11/18/08	12/2/08	1/12/09
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	1.0	ND	1.1	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/4/09	3/7/09	4/7/09	5/12/09	6/15/09	7/8/09	8/14/09	9/14/09	10/6/09	11/8/09	12/1/09	1/18/10
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/3/10	3/9/10	4/12/10	5/19/10	6/7/10	7/7/10	8/16/10	9/7/10	10/4/10	11/8/10	12/1/10	1/17/11
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	1.3	1.1	ND	1.8
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/21/11	3/7/11	4/4/11	5/10/11	6/19/11	7/11/11	8/8/11	9/20/11	10/23/11	11/7/11	12/5/11	1/23/12
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/6/12	3/5/12	4/16/12	5/2/12	6/5/12	7/10/12	8/22/12	9/18/12	10/2/12	11/27/12	12/10/12	1/21/13
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)			Methylene chloride (ug/L):		6.0	1.8	2.7	5.7	1.7	1.1	3.2	2.0	4.1	2.0

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/4/13	3/18/13	4/22/13	5/20/13	6/12/13	7/8/13	8/13/13	9/10/13	10/28/13	11/11/13	12/16/13	1/18/2014
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)			2.3	1.7	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/4/2014	3/12/2014	4/8/2014	5/19/2014	5/28/2014	6/3/2014	7/15/2014	8/11/2014	9/16/2014	10/21/2014	11/18/14	12/2/2014
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Kennecott Uranium Company														
Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-72													
Northing:	149020.470													
Easting:	322997.150													
Elevation:	6640.350													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	1/20/2015	2/3/2015	3/30/2015	4/22/2015	5/13/2015	6/8/2015	7/22/2015	8/11/2015	9/1/2015	12/2/2015*	12/2/2015	2/3/2016*
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
												*This sample was taken for the Nov monthly sample		*This sample was taken for the Jan monthly sample

Kennecott Uranium Company													
Sweetwater Uranium Project													
Hydrocarbon Analysis Data													
Monitor Well:	TMW-72												
Northing:	149020.470												
Easting:	322997.150												
Elevation:	6640.350												
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	2/3/2016	3/22/2016	4/12/2016	5/3/2016	6/27/2016	7/25/2016	8/8/2016	9/21/2016	10/17/2016	11/15/2016	12/6/2016
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
			milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70					Top		Bottom						
Easting:	322896.82					Below Surface	Elevation	Below Surface	Elevation					
Elevation:	6643.31				Screen:	90.00	6553.31	114.00	6529.31					
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	4/16/02	4/30/02	5/14/02	6/26/02	7/31/02	8/20/02	9/11/02	10/10/02	11/18/02	12/10/02	1/7/03
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		2.8	3.2	2.7	3.3	3.4	2.9	3.0	3.5	3.1	2.5	2.8
1,1-Dichloroethene	7			ND	1.0	1.0	1.4	2.0	1.6	1.2	1.7	1.4	1.7	1.6
1,1,1-Trichloroethane	200			3.2	4.0	5.2	4.3	5.0	4.7	4.5	5.4	4.1	3.3	4.0
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	ND	1.0	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				0.032		ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND		ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	2/10/03	3/12/03	4/23/03	5/14/03	6/4/03	7/14/03	8/5/03	9/17/03	10/22/03	11/11/03	12/9/03
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		2.5	3.1	2.6	2.6	2.5	2.4	2.9	2.4	2.2	2.0	2.3
1,1-Dichloroethene	7			1.8	2.1	1.8	1.6	1.7	1.5	1.7	1.9	1.4	1.5	1.7
1,1,1-Trichloroethane	200			4.1	5.2	4.2	3.8	4.0	3.2	3.8	3.8	2.5	2.9	3.5
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	1/12/04	2/11/04	3/16/04	4/12/04	5/11/04	6/10/04	7/14/04	8/4/04	9/16/04	10/13/04	11/8/04
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		2.4	1.5	2.2	2.5	2.2	2.5	2.0	2.2	2.4	1.8	2.3
1,1-Dichloroethene	7			1.4	1.8	1.6	1.7	1.5	1.9	1.3	1.5	1.5	1.8	1.7
1,1,1-Trichloroethane	200			3.2	2.7	3.7	3.3	3.5	4.2	2.9	3.7	3.7	3.7	4.2
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	ND	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND		ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	12/8/04	1/19/05	2/9/05	3/8/05	4/12/05	5/10/05	6/9/05	7/19/05	8/9/05	9/22/05	10/25/05
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		2.1	2.1	2.6	2.2	1.8	2.0	2.1	2.1	1.9	2.0	2.1
1,1-Dichloroethene	7			1.6	1.5	1.8	1.7	1.5	1.5	1.5	1.4	1.3	1.6	1.4
1,1,1-Trichloroethane	200			3.7	3.4	3.6	3.6	3.4	3.5	3.8	3.6	4.0	3.7	3.2
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND		ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	11/29/05	12/12/05	1/11/06	2/2/06	3/1/06	4/6/06	5/2/06	6/5/06	7/25/06	8/15/06	9/5/06
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		2.1	1.9	1.9	1.8	2.0	2.0	2.0	1.9	2.1	1.8	1.9
1,1-Dichloroethene	7			1.4	1.3	1.6	1.5	1.5	1.4	1.5	1.5	1.6	1.5	1.6
1,1,1-Trichloroethane	200			3.7	3.6	3.6	3.5	3.7	3.5	3.3	3.3	3.6	2.8	3.1
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	11	11	3.4	1.4	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	10/2/06	11/8/06	12/13/06	1/10/07	2/14/07	3/5/07	4/3/07	5/1/07	6/3/07	7/17/07	8/1/07
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.8	1.8	1.9	1.7	2.1	1.6	1.7	1.8	1.9	2.3	1.2
1,1-Dichloroethene	7			1.4	1.3	1.5	1.6	1.7	1.7	1.7	1.4	1.6	2.1	1.4
1,1,1-Trichloroethane	200			2.8	3.0	3.1	3.4	3.6	3.0	3.4	3.0	3.3	4.0	3.0
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	ND
Tetrachloroethene	5			ND	ND	ND	1.1	ND	ND	ND	1.0	1.2	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	2.700	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	9/5/07	10/1/07	11/7/07	12/5/07	1/13/08	2/20/08	3/19/08	4/7/08	5/13/08	6/4/08	7/15/08
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.7	ND	1.7	2.3	2	2.1	2.1	1.8	1.5	1.1	1.4
1,1-Dichloroethene	7			1.4	2.3	1.1	1.9	1.3	1.7	1.5	1.1	1.3	1	1.2
1,1,1-Trichloroethane	200			3.3	2.8	2.3	4.4	3.4	4.1	3	3	3.3	2.9	3.4
Chloroform				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			1.1	ND	ND	1.0	ND	1.3	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	0.310	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	8/12/08	9/23/08	10/5/08	11/18/08	12/2/08	1/12/09	2/4/09	3/7/09	4/7/09	5/12/09	6/15/09
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.7	1.6	1.3	1.5	ND	ND	1.8	1.5	1.4	1.3	1.6
1,1-Dichloroethene	7			1.2	1.2	ND	1.3	ND	1.3	1.2	1.3	1.2	1.1	ND
1,1,1-Trichloroethane	200			3.2	3.9	3.5	3.5	ND	3.1	3.1	3.7	3.3	3.1	2.5
Chloroform				2.5	3.4	2.9	3.6	3.5	3.6	3.6	4.2	4.0	4.1	3.9
Chloromethane			120	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	ND	1.1	ND	1.0	ND	1.4	1.0	1.1	1.1
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	7/8/09	8/12/09	9/14/09	10/6/09	11/8/09	12/1/09	1/18/10	2/3/10	3/9/10	4/12/10	5/19/10
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.5	1.5	1.3	1.3	1.3	1.1	ND	ND	1.3	1.2	1.2
1,1-Dichloroethene	7			1.1	1.0	1.0	1.0	1.2	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200			3.0	2.6	3.0	3.0	3.5	2.5	2.4	2.7	2.6	3.0	3.1
Chloroform				5.0	5.0	5.7	6.3	6.0	4.8	4.1	4.2	4.9	5.3	5.0
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	1.1	1.1	ND	ND	1.2	1.4	ND	1.3	1.0
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	6/7/10	7/7/10	8/16/10	9/7/10	10/4/10	11/8/10	12/1/10	1/17/11	2/21/11	3/7/11	4/4/11
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.1	1.2	1.4	1.3	1.2	1.1	1.2	1.1	ND	1.0	ND
1,1-Dichloroethene	7			ND	1.0	1.0	ND	ND	ND	1.0	1.1	1.1	ND	ND
1,1,1-Trichloroethane	200			3.1	3.1	3.3	3.1	3.1	2.8	2.9	3.2	3.5	2.6	2.8
Chloroform				5.1	5.3	5.9	5.6	6.4	5.4	5.6	4.7	4.6	3.7	4.1
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			1.1	1.2	1.4	1.2	1.2	1.1	1.4	1.1	1.4	1.2	1.2
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)														

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	5/10/11	6/19/11	7/11/11	8/8/11	9/20/11	10/23/11	11/7/11	12/5/11	1/23/12	2/6/12	3/5/12
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.2	ND	ND	1.1	ND	1.4	1.2	ND	ND	ND	ND
1,1-Dichloroethene	7			ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200			3.2	2.3	2.4	2.9	2.2	4.2	2.1	3.1	2.0	2.5	1.9
Chloroform				4.5	3.8	4.2	5.2	3.8	6.8	3.2	5.0	3.8	4.3	3.5
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			1.5	1.2	1.3	1.4	1.2	1.4	1.4	1.4	ND	1.1	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)												Methylene chloride (ug/L)		

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	4/16/12	5/2/12	6/5/12	7/10/12	8/22/12	9/18/12	10/2/12	11/27/12	12/10/12	1/21/13	2/4/13
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		ND	1.1	ND	ND	ND	1.0	ND	ND	1.8	ND	ND
1,1-Dichloroethene	7			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	200			2.2	2.7	ND	1.8	2.3	2.1	2.2	2.5	2.5	2.0	ND
Chloroform				4.0	4.8	ND	3.7	4.6	3.9	4.4	4.6	4.0	3.2	3.0
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			1.1	1.1	ND	ND	1.1	1.1	ND	ND	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)				12.0	5.7	1.3	9.7	4.4	1.9	2.6	2.1	1.9	1.4	1.4

Sweetwater Uranium Project															
Hydrocarbon Analysis Data															
Monitor Well:	TMW-73														
Northing:	149055.70														
Easting:	322896.82														
Elevation:	6643.31														
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	3/18/13	4/22/13	5/20/13	6/12/13	7/8/13	8/13/13	9/10/13	10/28/13	11/11/13	12/16/13	1/18/2014	2/4/2014
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per	micrograms per
1,1-Dichloroethane		3000		ND	1.2	ND	ND	ND	1.0	ND	ND	ND	ND	ND	1.1
1,1-Dichloroethene	7			ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND	1.8	1
1,1,1-Trichloroethane	200			2.1	2.2	ND	2.0	2.3	2.1	2.3	2.2	2.5	2.2	3.2	2.8
Chloroform				3.0	3.3	1.4	2.9	3.1	3.0	2.8	3.2	3.2	2.9	3.4	3.8
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	1.1	ND	ND	1.1	ND	ND	1.0	ND	ND	1.7	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)				1.4	2.5	4.8	1.1	1.4	ND	ND	ND	ND	ND	ND	ND

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	3/12/2014	4/8/2014	5/19/2014	5/28/2014	6/3/2014	7/15/2014	8/11/2014	9/16/2014	10/21/2014	11/18/2014	12/2/2014
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND
1,1-Dichloroethene	7			ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND
1,1,1-Trichloroethane	200			2.7	2.6	2.3	2.3	2.3	2.2	2.6	2.8	2.5	2.1	1.9
Chloroform				3.2	3.2	ND	ND	2.5	2.5	2.5	2.3	2.6	2.2	2.2
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	ND	ND	ND	ND	ND	1.1	ND	1	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sweetwater Uranium Project														
Hydrocarbon Analysis Data														
Monitor Well:	TMW-73													
Northing:	149055.70													
Easting:	322896.82													
Elevation:	6643.31													
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	1/20/2015	2/3/2015	3/30/2015	4/28/2015	5/13/2015	6/8/2015	7/22/2015	8/11/2015	9/1/2015	12/2/2015	12/2/2015
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1	1.4	ND	1	1.6	1.6	1.5	1.3	ND	1.2	1.2
1,1-Dichloroethene	7			ND	1.2	ND	1.1	1.3	1.1	1.5	1.2	ND	ND	ND
1,1,1-Trichloroethane	200			2	2.6	2.2	2.1	2.2	2.4	3	2.4	1.9	2.5	2.5
Chloroform				1.9	2.4	2.2	2.2	2.2	2.6	2.9	2.2	1.5	1.9	1.9
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			ND	ND	1.1	1	ND	ND	ND	ND	1.2	1.5	1.5
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
													*This sample was taken for the Nov monthly sample	

Sweetwater Uranium Project													
Hydrocarbon Analysis Data													
Monitor Well:	TMW-73												
Northing:	149055.70												
Easting:	322896.82												
Elevation:	6643.31												
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	2/3/2016	3/22/2016	4/12/2016	5/3/2016	6/27/2016	7/25/2016	8/8/2016	9/21/2016	10/17/2016	11/15/2016
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		1.2	2	1.6	1.4	1.2	ND	1.2	1	1.1	ND
1,1-Dichloroethene	7			ND	2.3	1.4	1.2	1	ND	1	ND	ND	ND
1,1,1-Trichloroethane	200			2.3	4.5	3.3	2.7	ND	2.1	2.3	1.7	2	1.2
Chloroform				2.3	4.5	3.3	2.7	ND	2.1	2.3	1.7	2	1.2
Chloromethane			120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5			1	1.3	1	ND	1.1	ND	1	ND	ND	ND
m+p-Xylenes	10000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter	milligrams per liter
Gasoline Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diesel Range Organics				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride (ug/L)				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
				*This sample was taken for the Jan monthly sample									

Sweetwater Uranium Project				
Hydrocarbon Analysis Data				
Monitor Well:	TMW-73			
Northing:	149055.70			
Easting:	322896.82			
Elevation:	6643.31			
Constituent	Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) for Drinking Water	WDEQ Drinking Water Equivalent Level (DWEL)	Calculated Drinking Water Equivalent Level (DWEL)	12/6/2016
	micrograms per liter	micrograms per liter	micrograms per liter	micrograms per liter
1,1-Dichloroethane		3000		ND
1,1-Dichloroethene	7			ND
1,1,1-Trichloroethane	200			1.6
Chloroform				1.6
Chloromethane			120	ND
Tetrachloroethene	5			ND
m+p-Xylenes	10000			ND
Toluene	1000			ND
				milligrams per liter
Gasoline Range Organics				ND
Diesel Range Organics				ND
Methylene chloride (ug/L)				ND

KENNECOTT URANIUM COMPANY																				
TMW-91																				
NORTHING: 148,518.38	Groundwater																			
EASTING: 323,956.86	Protection	2012				2013			2014				2015				2016			
ND = Non-detectable	Standard	2/7/12	5/9/12	8/19/12	10/23/12	02/19/13	04/29/13	10/21/13	1/27/2014	04/22/14	07/22/14	10/28/14	1/26/2015	4/28/2015	7/21/2015	12/1/2015	2/16/2016	4/13/2016	7/26/2016	10/12/2016
	(GPS)																			
	as of 5/26/05																			
ORGANICS mg/L:																				
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																				
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	0.001	0.0014	ND	ND	0.0012	ND	ND	0.0013	ND	ND	ND	ND	0.0011	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																				
(2) - WY Drinking Water Equivalent Level																				
(3) - WY VRP, Fact Sheet 12																				
(4) - EPA RBC - Tap Water																				

KENNECOTT URANIUM COMPANY																					
TMW-92																					
NORTHING: 148,504.47	Groundwater																				
EASTING: 323,951.33	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	3/5/12	5/8/12	9/24/12	11/5/12	1/29/13	6/11/13	9/10/13	10/29/13	1/27/14	5/20/14	7/22/14	11/11/14	3/23/2015	6/1/2015	9/14/2015	12/14/15	3/8/2016	6/20/2016	10/10/2016	11/14/2016
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0016	0.0026	0.0025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																						
TMW-94																						
NORTHING: 148,400.13 EASTING: 324,000.02	Groundwater Protection	2012				2013				2014				2015				2016				
ND = Non-detectable	Standard	3/5/12	5/8/12	9/24/12	11/5/12	1/29/13	6/10/13	9/9/13	10/21/13	2/4/14	4/28/14	8/26/14	11/11/14	03/23/15	06/01/15	09/14/15	12/14/15	3/8/2016	6/13/2016	10/5/2016	11/14/2016	
ORGANICS m/L:																						
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
VOLATILE ORGANIC COMPOUNDS mg/L:																						
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride		ND	0.0029	0.0011	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
(1) - EPA MCL																						
(2) - WY Drinking Water Equivalent Level																						
(3) - WY VRP, Fact Sheet 12																						
(4) - EPA RBC - Tap Water																						
(LAB: Energy Labs Inc. unless noted.)																						

KENNECOTT URANIUM COMPANY																					
TMW-95																					
NORTHING: 148,399.94 EASTING: 323,900.08	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	2/6/12	5/8/12	9/24/12	11/5/12	1/29/13	6/10/13	9/9/13	10/21/13	2/4/14	4/28/14	8/26/14	11/12/14	3/23/15	6/1/15	9*/14/15	12/14/15	3/8/2016	6/13/2016	10/10/2016	11/15/2016
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0021	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-96																					
NORTHING: 148,500.01 EASTING: 323,807.75	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/4/12	4/16/12	7/10/12	10/16/12	3/25/13	4/29/13	7/8/13	10/1/13	3/18/14	4/1/14	7/8/14	10/21/14	1/26/15	4/15/15	7/20/15	11/3/15	2/16/2016	4/21/2016	7/11/2016	10/3/2016
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	0.0019	ND	ND	ND	ND	ND	ND	ND	0.0017	0.0021	ND	ND	0.0017	0.0021	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																						
TMW-97																						
NORTHING: 148,599.86 EASTING: 323,799.93	Groundwater Protection	2012				2013				2014				2015				2016				
ND = Non-detectable	Standard	1/4/12	4/10/12	7/10/12	9/6/12	3/25/13	4/29/13	7/8/13	10/1/13	3/18/14	4/1/14	7/8/14	11/10/14	3/25/15	6/2/15	9/2/15	11/3/15	3/21/16	6/20/16	9/7/16	11/7/16	
ORGANICS mg/L:																						
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
VOLATILE ORGANIC COMPOUNDS mg/L:																						
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0024	ND	ND	ND	0.0013	ND	ND	ND	
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Methylene chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
(1) - EPA MCL																						
(2) - WY Drinking Water Equivalent Level																						
(3) - WY VRP, Fact Sheet 12																						
(4) - EPA RBC - Tap Water																						
(LAB: Energy Labs Inc. unless noted.)																						

KENNECOTT URANIUM COMPANY																					
TMW-98																					
NORTHING: 148699.84 EASTING: 323810.19	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	3/5/12	5/8/12	9/24/12	11/5/12	3/5/13	6/11/13	9/9/13	10/28/13	2/4/14	4/29/14	8/11/14	11/10/14	3/30/15	6/2/15	9/2/15	12/15/15	3/15/16	6/21/16	10/11/16	11/9/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-99																					
NORTHING: 148707.32	Groundwater																				
EASTING: 323898.85	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	3/5/12	6/5/12	9/24/12	11/5/12	3/5/13	6/11/13	9/9/13	11/11/13	2/24/14	5/6/14	8/12/14	11/12/14	3/30/15	6/2/15	9/2/15	12/15/15	3/15/16	6/21/16	10/11/16	11/9/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	0.0024	0.0014	0.0022	0.0025	ND	0.0026	0.002	0.0013	0.0018	0.002	0.0016	0.0017	0.0019	0.003	0.0015	0.0013	0.0012	0.0019	0.0012	0.0013
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																								
TMW-100																								
NORTHING: 148799.77	Groundwater					By Bail																		
EASTING: 324004.42	Protection	2012					2013				2014				2015				2016					
ND = Non-detectable	Standard	1/31/12	6/5/12	8/19/12	11/6/12	11/6/12	1/29/13	5/20/13	8/13/13	10/29/13	2/3/14	4/29/14	8/11/14	11/18/14	2/10/15	6/2/15	8/12/15	12/15/15	2/15/16	6/21/16	8/8/16	10/18/16	11/9/16	12/19/16
ORGANICS mg/L:																								
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	6820	ND	ND	ND	ND	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND	7	6.6	1.9	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																								
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
Methylene chloride		ND	ND	0.0028	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
(1) - EPA MCL																								
(2) - WY Drinking Water Equivalent Level																								
(3) - WY VRP, Fact Sheet 12																								
(4) - EPA RBC - Tap Water																								
(LAB: Energy Labs Inc. unless noted.)																								

KENNECOTT URANIUM COMPANY																					
TMW-101																					
NORTHING: 148,800.10 EASTING: 324,100.06	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/31/12	5/8/12	8/19/12	12/10/12	1/29/13	5/20/13	8/13/13	10/29/13	2/3/14	4/29/14	8/11/14	11/19/14	2/10/15	6/2/15	8/12/15	12/16/15	2/15/2016	6/22/2016	8/2/2016	11/9/2016
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0013	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																				
TMW-102																				
NORTHING: 148,600.02	Groundwater																			
EASTING: 323,968.63	Protection	2012	By Bail			2013			2014				2015				2016			
ND = Non-detectable	Standard	2/7/12	5/9/12	8/19/12	10/23/12	2/19/13	4/29/13	10/21/13	1/27/14	4/22/14	7/22/14	10/28/14	1/26/15	5/4/15	7/22/15	12/2/15	2/16/2016	4/13/2016	7/27/2016	10/12/2016
ORGANICS mg/L:																				
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																				
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																				
(2) - WY Drinking Water Equivalent Level																				
(3) - WY VRP, Fact Sheet 12																				
(4) - EPA RBC - Tap Water																				
(LAB: Energy Labs Inc. unless noted.)																				

KENNECOTT URANIUM COMPANY																					
TMW-103																					
NORTHING: 149,144.44 EASTING: 323,576.50	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	4/23/12	7/13/12	10/15/12	1/21/13	4/2/13	7/7/13	10/14/13	1/13/14	4/7/14	7/8/14	10/29/14	1/26/15	4/24/15	7/22/15	11/16/15	2/17/16	4/11/16	7/31/16	10/19/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	0.005 (1)	0.0021	0.0061	0.005	0.0059	0.0027	0.0027	0.0022	0.0016	0.0026	0.002	0.0023	0.0012	0.0022	0.0017	0.0016	0.0014	0.0015	0.0017	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform		0.0035	0.0032	0.0026	0.003	0.0027	0.0047	0.0021	0.002	0.0017	0.0015	0.0016	0.0014	0.0016	0.0013	0.0013	0.0013	0.0011	0.0011	ND	0.0013
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-104																					
NORTHING: 148,508.55	Groundwater																				
EASTING: 324,122.60	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/30/12	5/7/12	8/19/12	12/11/12	1/28/13	6/11/13	8/13/13	10/29/13	2/3/14	4/8/14	7/15/14	11/19/14	2/3/15	6/3/15	8/12/15	12/16/15	2/15/16	6/22/16	8/2/16	11/15/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																						
TMW-106																						
NORTHING: 149,120.61 EASTING: 323,577.45	Groundwater Protection	2012				2013				2014				2015				2016				
ND = Non-detectable	Standard	1/17/12	4/23/12	7/13/12	10/15/12	1/21/13	4/2/13	7/7/13	10/14/13	1/13/14	4/7/14	7/8/14	10/29/14	1/26/15	4/22/15	7/22/15	11/16/15	2/17/16	4/11/16	7/31/16	10/13/16	
ORGANICS mg/L:																						
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																						
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	0.005 (1)	0.001	0.0031	0.0028	0.0031	0.0017	0.0016	ND	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																						
(2) - WY Drinking Water Equivalent Level																						
(3) - WY VRP, Fact Sheet 12																						
(4) - EPA RBC - Tap Water																						
(LAB: Energy Labs Inc. unless noted.)																						

KENNECOTT URANIUM COMPANY																					
TMW-107																					
NORTHING: 148,109.87	Groundwater																				
EASTING: 323,621.68	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	4/16/12	7/13/12	10/15/12	1/21/13	4/22/13	7/7/13	10/14/13	1/13/14	4/7/14	7/15/14	10/29/14	1/21/15	4/28/15	7/21/15	12/16/15	2/17/16	4/12/16	7/31/16	10/18/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0026	0.0014	0.0015	ND	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																						
TMW-108		**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**
NORTHING: 148,581.99	Groundwater																					
EASTING: 323,650.69	Protection	2012								2013								2014				
ND = Non-detectable	Standard	1/23/12	1/23/12	4/23/12	4/23/12	7/13/12	7/13/12	10/15/12	10/15/12	1/21/13	1/21/13	4/15/13	4/15/13	7/7/13	7/7/13	10/15/13	10/15/13	1/14/214	1/14/14	4/1/14	4/1/14	7/8/14
ORGANICS mg/L:																						
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																						
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	0.0012	0.0011	ND	ND	ND	ND	ND	0.001	0.001	0.001	ND	ND	ND	ND	0.0012	0.001	ND	ND	ND	0.001
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0011	0.001	ND	ND	ND
Methylene chloride		ND	ND	0.004	0.005	0.0026	0.003	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																						
(2) - WY Drinking Water Equivalent Level																						
(3) - WY VRP, Fact Sheet 12																						
(4) - EPA RBC - Tap Water																						
(LAB: Energy Labs Inc. unless noted.)																						

KENNECOTT URANIUM COMPANY																				
TMW-108		**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**
NORTHING: 148,581.99	Groundwater																			
EASTING: 323,650.69	Protection				2015								2016							
ND = Non-detectable	Standard	7/8/14	11/3/14	11/3/14	1/20/15	1/20/15	4/21/15	4/21/15	7/20/15	7/20/15	11/16/15	11/16/15	1/12/16	1/12/16	4/11/16	4/11/16	7/13/16	7/13/16	10/11/16	10/11/16
ORGANICS mg/L:																				
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																				
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	0.0011	ND	ND	0.0011	0.0011	0.001	0.0011	ND	ND	0.001	ND	0.0011	ND	0.002	0.0012	0.0011	0.001	0.001	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0016	0.001	ND	ND	ND	ND
Methylene chloride		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0013	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																				
(2) - WY Drinking Water Equivalent Level																				
(3) - WY VRP, Fact Sheet 12																				
(4) - EPA RBC - Tap Water																				
(LAB: Energy Labs Inc. unless noted.)																				

KENNECOTT URANIUM COMPANY																					
TMW-109																					
NORTHING: 148,563.38	Groundwater																				
EASTING: 323,651.83	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	4/23/12	7/13/12	10/15/12	1/22/13	4/2/13	7/7/13	10/15/13	1/13/14	4/8/14	7/8/14	11/3/14	1/21/15	4/21/15	7/21/15	12/1/15	1/12/16	4/19/16	7/13/16	10/19/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
1,1-Dichloroethane	GPS 3 (2)	0.001	ND	ND	0.0012	ND	0.002	ND	0.001	ND	ND	ND	ND	ND	ND	0.0013	ND	ND	0.0011	0.001	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	0.005 (1)	ND	0.0044	0.0046	0.0025	0.0016	0.0014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-110																					
NORTHING: 148,088.65 EASTING: 323,625.57	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	4/16/12	7/13/12	10/15/12	1/21/13	4/15/13	7/7/13	10/14/13	1/13/14	4/7/14	7/15/14	10/29/14	1/21/15	4/28/15	7/21/15	12/6/15	2/17/16	4/12/16	7/31/16	10/18/16
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
1,1-Dichloroethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0019	0.0015	0.0018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-111																					
NORTHING: 148,800.06 EASTING: 324,200.03	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/30/12	4/17/12	8/19/12	12/11/12	1/28/13	4/1/13	7/7/13	10/15/13	1/27/14	4/8/14	8/4/14	11/19/14	2/3/15	6/3/15	8/12/15	12/6/15	2/15/2016	6/27/2016	8/1/2016	11/7/2016
ORGANICS:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.004	0.0013	0.0012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-112																					
NORTHING: 148,700.09	Groundwater																				
EASTING: 324,199.95	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	4/17/12	7/13/12	10/16/12	1/22/13	4/1/13	7/7/13	10/15/13	1/27/14	4/8/14	8/4/14	11/4/14	1/21/15	5/4/15	7/22/15	12/6/15	2/29/2016	4/13/2016	7/31/2016	10/13/2016
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0027	0.0013	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-113																					
NORTHING: 148,600.06 EASTING: 324,199.95	Groundwater Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	4/17/12	8/19/12	10/15/12	1/28/13	4/1/13	7/7/13	10/15/13	2/3/14	4/8/14	8/4/14	11/4/14	1/21/2015	5/4/2015	7/22/2015	12/6/2015	2/29/2016	4/13/2016	7/31/2016	10/13/2016
	(GPS)																				
	as of 5/26/05																				
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	0.0012	ND	0.0013	0.003	0.0018	0.0011	0.002	ND	ND	ND	ND	0.0018	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0018	0.001	0.0024	0.0013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					

KENNECOTT URANIUM COMPANY																					
TMW-115																					
NORTHING: 148,499.96	Groundwater																				
EASTING: 324,199.79	Protection	2012				2013				2014				2015				2016			
ND = Non-detectable	Standard	1/17/12	5/7/12	8/19/12	10/15/12	1/28/13	4/1/13	7/7/13	10/15/13	2/3/14	4/7/14	8/4/14	11/3/14	1/21/2015	5/4/2015	7/22/2015	12/6/2015	2/29/2016	4/19/2016	8/1/2016	10/13/2016
FIELD DATA mg/l:	(GPS)																				
Temperature (C)	as of 5/26/05																				
ORGANICS mg/L:																					
Diesel Range Organics (DRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Gasoline Range Organics (GRO)	GPS 10 (3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
VOLATILE ORGANIC COMPOUNDS mg/L:																					
Chloromethane	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	GPS 3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	GPS 0.007 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride		ND	0.0038	ND	0.0017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	GPS 1.3 (2)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	GPS 1 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	GPS 0.20 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	GPS 0.012 (4)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p Xylenes	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	GPS 10 (1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
(1) - EPA MCL																					
(2) - WY Drinking Water Equivalent Level																					
(3) - WY VRP, Fact Sheet 12																					
(4) - EPA RBC - Tap Water																					
(LAB: Energy Labs Inc. unless noted.)																					