Department of Energy
Savannah River Operations Office
P.O. Box A
Aiken, South Carolina 29802

August 27, 2026

Ms. Susan B. Fulmer, P. G., Manager
Federal Remediation Section
Division of Site Assessment, Remediation and Revitalization
Bureau of Land and Waste Management
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, South Carolina 29201

Mr. Jon Richards
Savannah River Site Remedial Project Manager
Superfund and Emergency Management Division
U. S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: R-Area Groundwater and R-Area Reactor Seepage Basins/108-4R Overflow Basin Operable Units Combined Data Summary Letter, SEMS Numbers: 95, 25

In accordance with the terms of the Federal Facility Agreement (FFA), the U. S. Department of Energy (DOE) is submitting this data summary letter report for your review. Please review the subject letter report and provide your response within one hundred twenty (120) days of receipt. The effort and time that the South Carolina Department of Environmental Services and the U. S. Environmental Protection Agency have given on the subject operable unit are greatly appreciated.

Comments or questions from you or your staff may be directed to me at (803) 952-6211.

Sincerely,

MATTHEW BAKER
Digitally signed by MATTHEW BAKER
Date: 2026.08.26 11:10:09 -04'00'

Matthew R. Baker
Acting FFA Remedial Project Manager
DOE-Savannah River Operations Office
Remediation, Deactivation, and Decommissioning Division

RDDD-26-170

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R-AREA GROUNDWATER AND R-AREA REACTOR SEEPAGE BASINS/ 108-4R OVERFLOW BASIN OPERABLE UNITS COMBINED DATA SUMMARY LETTER

R-Area Groundwater

Introduction

The R-Area Operable Unit (RAOU) is listed as a Resource Conservation and Recovery Act (RCRA)/ Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) unit in Appendix C of the Federal Facility Agreement (FFA) for Savannah River Site (SRS). The R-Area Groundwater (RAGW) is a subunit of the RAOU and encompasses three tritium plumes and one volatile organic compound (VOC) groundwater plume that resulted from past activities within R Area. As stated in the *Record of Decision Remedial Alternative Selection for the R-Area Operable Unit* (SRNS-RP-2010-01062, Revision 1, December 2010), the final remedial action for the RAOU consists of Land Use Controls (LUCs) for the entire RAOU and monitored natural attenuation (MNA) for the RAGW subunit. The MNA portion of the remedy includes both groundwater and surface water monitoring to evaluate the effectiveness of the MNA remedy.

Additionally, a non-time critical (NTC) removal action was identified in the *Early Action Record of Decision Remedial Alternative Selection for the C-, K-, L-, and R-Reactor Complexes* (SRNS-RP-2009-00707, Revision 1, September 2009). As part of the NTC removal action, in-situ decommissioning (ISD) of the R-Reactor Building (105-R) Complex (RBC) was completed. The ISD remedy for the RBC was designed to significantly reduce contaminant mobility and allow for radioactive decay of contaminants within the structure. The ISD monitoring wells were installed to verify the remedial action for the RBC is functioning as designed and to demonstrate that the ISD remedy remains effective in preventing impact to groundwater.

This data summary letter documents and summarizes the groundwater monitoring data collected from January 2023 through December 2025 in compliance with the *Effectiveness Monitoring Plan for the R-Area Operable Unit (U)* (SRNS-RP-2010-01259, Revision 1, April 2011) and subsequent agreements.

RAGW MNA Monitoring

The RAGW consists of four monitoring networks (northern tritium, western tritium, eastern tritium, and eastern VOC) and currently includes 30 groundwater wells, four seepline locations, and seven surface water locations (Figure 1 and Table 1). Data are collected biennially from all monitoring locations. Due to increasing trichloroethylene (TCE) concentrations at plume definition well RAG008B since 2010, monitoring for VOCs and tritium at RAG008B, RAG008BL, and RBP011B occurs annually. The analytical suites vary across the monitoring networks but encompass the following analytes: carbon tetrachloride; chloroform; TCE; cis-1,2-dichloroethylene; vinyl chloride; and tritium. All analytical data collected during this reporting period are shown in Tables 2 through 4. The next sampling event will occur in the fourth quarter of 2026, followed by a full report submittal in August 2028.

ISD Monitoring

The ISD monitoring network includes 11 wells (Figure 1 and Table 1). The full ISD sampling event occurs once every five years and includes the following analytes: carbon-14, chlorine-36, and iodine-129, and tritium. Due to elevated tritium and carbon-14 results in well RDB 3D in 2017, SRS began monitoring for carbon-14 and tritium at five ISD monitoring wells (RDB 1D, RDB 2D, RDB 3D, RDB003DU, and RDB005C) annually for five years (2018 to 2022). Due to the continuous detections observed in RDB 3D, annual monitoring of the five ISD wells continued in 2023 to 2025. All analytical data collected during this reporting period are shown in Tables 2 through 4. The next sampling event will occur in the fourth quarter of 2026, followed by a full report submittal in August 2028.

Sampling and Analysis Issues

No sampling or analysis issues were encountered during this reporting period.

Water Elevations

Within the RAOU LUC boundary, potentiometric heads in the A/AA horizon of the upper aquifer zone (UAZ) are generally about 0.6-meters (m) to 2.4-m (2-feet [ft] to 8-ft) higher than corresponding heads in the transmissive zone (TZ) of the UAZ, indicating that flow is generally downward in this groundwater recharge area. Groundwater in the TZ was demonstrated to flow radially from a local mounded area centered to the northeast of the RBC, as documented in *The Regional Water Table of the Savannah River Site and Related Coverages* (WSRC-TR-98-00045, September 1998) and the *Effectiveness Monitoring Plan for the R-Area Operable Unit (U)* (SRNS-RP-2010-01259, Revision 1, April 2011). The potentiometric surface transitions to a generally eastward slope in the deeper aquifer horizons (middle

aquifer zone [MAZ] and lower aquifer zone [LAZ]). The MAZ is discontinuous across the RAOU, therefore the LAZ is sampled to provide vertical control on migration. The potentiometric surfaces were mapped using fourth quarter 2025 (4Q25) water elevation data for the UAZ, MAZ, and LAZ. Water elevations are displayed in Figures 2 through 4 and Tables 2 through 4.

In 2025, the water table elevation in the mounded area of the RAOU LUC boundary is approximately (~) 85-m (~280-ft) above mean sea level (amsl). Groundwater flow is radial in the water table but for reference flow in the north is toward Mill Creek (~79-m [~260-ft] amsl) and to the west toward Joyce Branch (~67-m [~220-ft] amsl). Groundwater in the MAZ and LAZ flows to the northeast toward Joyce Branch.

RAGW MNA Results

None of the action concentration limits associated with the individual source area wells were exceeded during the 2023 sampling event. Action concentration limits are established for key source area monitoring wells. If observed concentrations in these wells exceed 150% of the observed maximum between 2002 and 2010, a confirmation sample will be collected, and the frequency of sampling will be increased to quarterly for one year. The action concentration limits for each source area well associated with the individual plumes are defined in Table 5. The refined constituents of concern (RCOCs) that exceeded their specific maximum contaminant levels (MCLs) in 2023 are TCE and tritium. TCE was detected above the MCL (5 micrograms per liter [µg/L]) in two plume definition wells: RAG008B and RAG008DL. Tritium was detected above the MCL (20 picocuries per milliliter [pCi/mL]) in two source area wells: RDB005C and RPS004C. All other results were non-detect or below the respective MCLs.

During the 2024 sampling event TCE was the only analyte detected above MCLs in the RAGW monitoring wells. TCE was detected above the MCL (5 µg/L) in plume definition wells RAG008B and RAG008DL. All other wells associated with the RAGW monitoring were non-detect or below the respective MCLs.

None of the action concentration limits associated with the individual source area wells were exceeded during the 2025 sampling event. The RCOCs that exceeded their specific MCLs in 2025 are TCE and tritium. TCE was detected above the MCL (5 µg/L) in two plume definition wells: RAG008B and RAG008DL. Tritium was detected above the MCL (20 pCi/mL) in two source area wells: RDB005C and RPS004C. All other results were non-detect or below the respective MCLs. Contaminant plumes associated with the 4Q25 data are shown in Figure 5.

ISD Results

During the 2023 sampling event tritium was detected above the MCL (20 pCi/mL) in three wells: RDB 3D, RPS004C, and RDB005C. RPS004C and RDB005C are also used to evaluate the RAGW MNA and have historically exceeded the tritium MCL. All other wells were detected at low levels above the estimated quantitation limit (EQL) except RDB 1D, which was non-detect. All carbon-14 results were non-detect. It is important to highlight that the EQLs for carbon-14 were significantly higher than typical EQLs; however, they remained substantially below the MCL of 2,000 picocuries per liter (pCi/L).

During the 2024 sampling event tritium was detected above the MCL (20 pCi/mL) in wells RDB 3D and RDB005C. All other wells were detected at low levels above the EQL except RDB 1D, which was detected as an estimated value above the method detection limit but less than the EQL. Carbon-14 was detected at a low level above the EQL in RDB 2D. All other wells were detected as estimated values, except well RDB 3D which was non-detect. All detections were well below the carbon-14 MCL of 2,000 pCi/L.

During the 2025 sampling event tritium was detected above the MCL (20 pCi/mL) in three wells: RDB 3D, RPS004C, and RDB005C. All other wells were detected at low levels above the EQL except RDB 1D, which was detected as an estimated value. Carbon-14 was detected at a low level above the EQL but significantly below the MCL of 2,000 pCi/L in RDB 3D. All other wells were non-detect. Contaminant plumes associated with the 4Q25 data are shown in Figure 5.

Conclusions

The following conclusions were made based on the 2023 to 2025 monitoring of the MNA remedy for the RAGW:

- There were no action concentration limit exceedances in the respective source area wells.
- There were no MCL exceedances in boundary wells.
- The data indicated that the remedies are functioning as intended and continue to be protective of human health and the environment.

The following conclusions were made based on the 2023 to 2025 monitoring of the ISD remedy for the RAOU:

- Tritium concentrations exceeded the MCL at three wells, RDB 3D, RPS004C, and RDB005C, during all three sampling events. RPS004C and RDB005C, which are also monitored as part of the MNA remedy, typically exceeds the MCL for tritium. Tritium concentrations in RDB 3D have remained above the MCL since 2017 but below the highest historical detection (1930 pCi/mL).
- In 2024, carbon-14 was detected in all wells except RDB 3D, significantly below the MCL. In 2025, carbon-14 was detected only in well RDB 3D.

Recommendations

SRS recommends continued annual sampling for carbon-14 and tritium for another two sample events at five monitoring wells (RDB 1D, RDB 2D, RDB 3D, RDB003DU, and RDB005C) near the RBC to track carbon-14 and tritium concentrations.

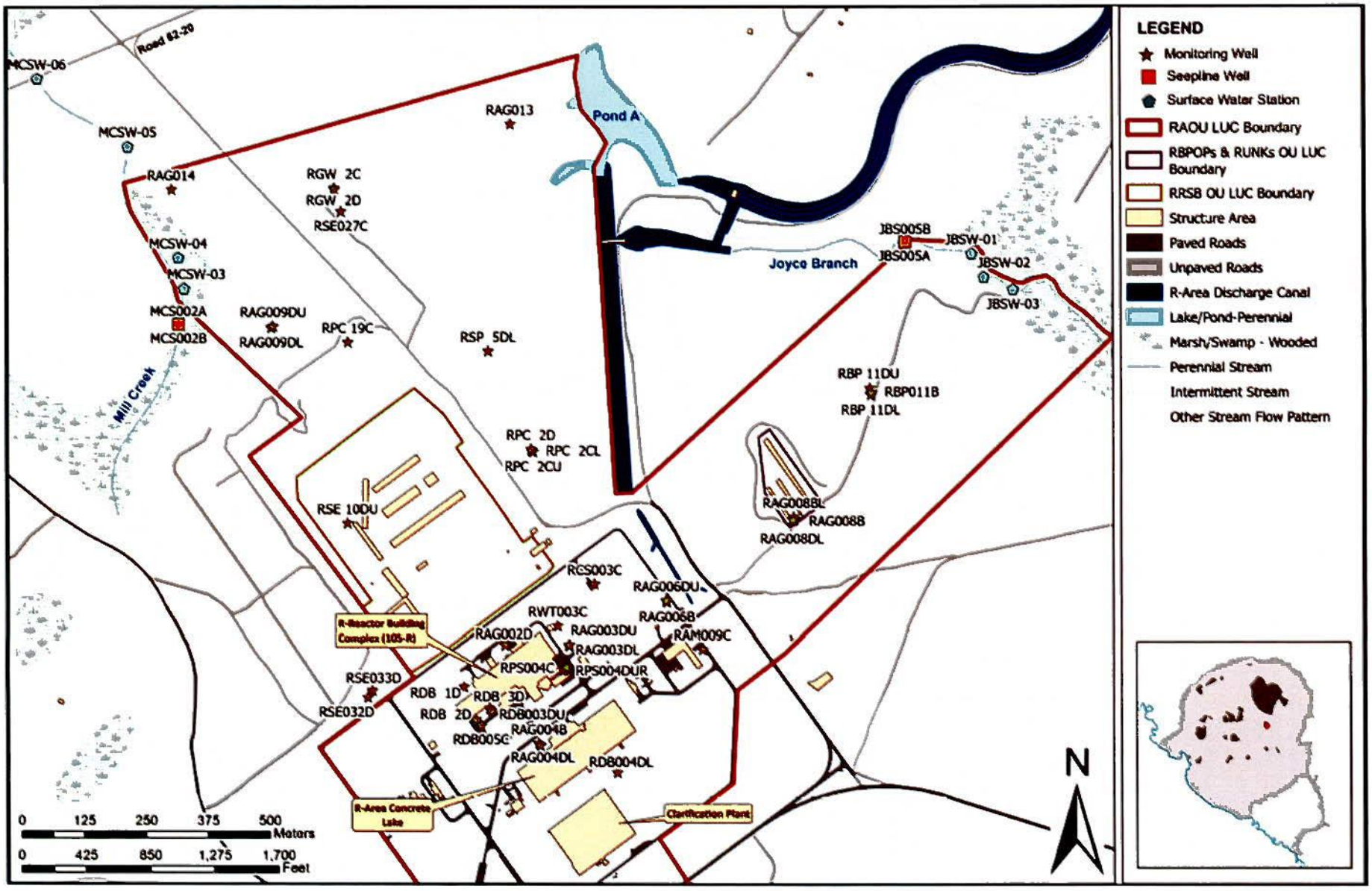


Figure 1. RAOU Monitoring Network

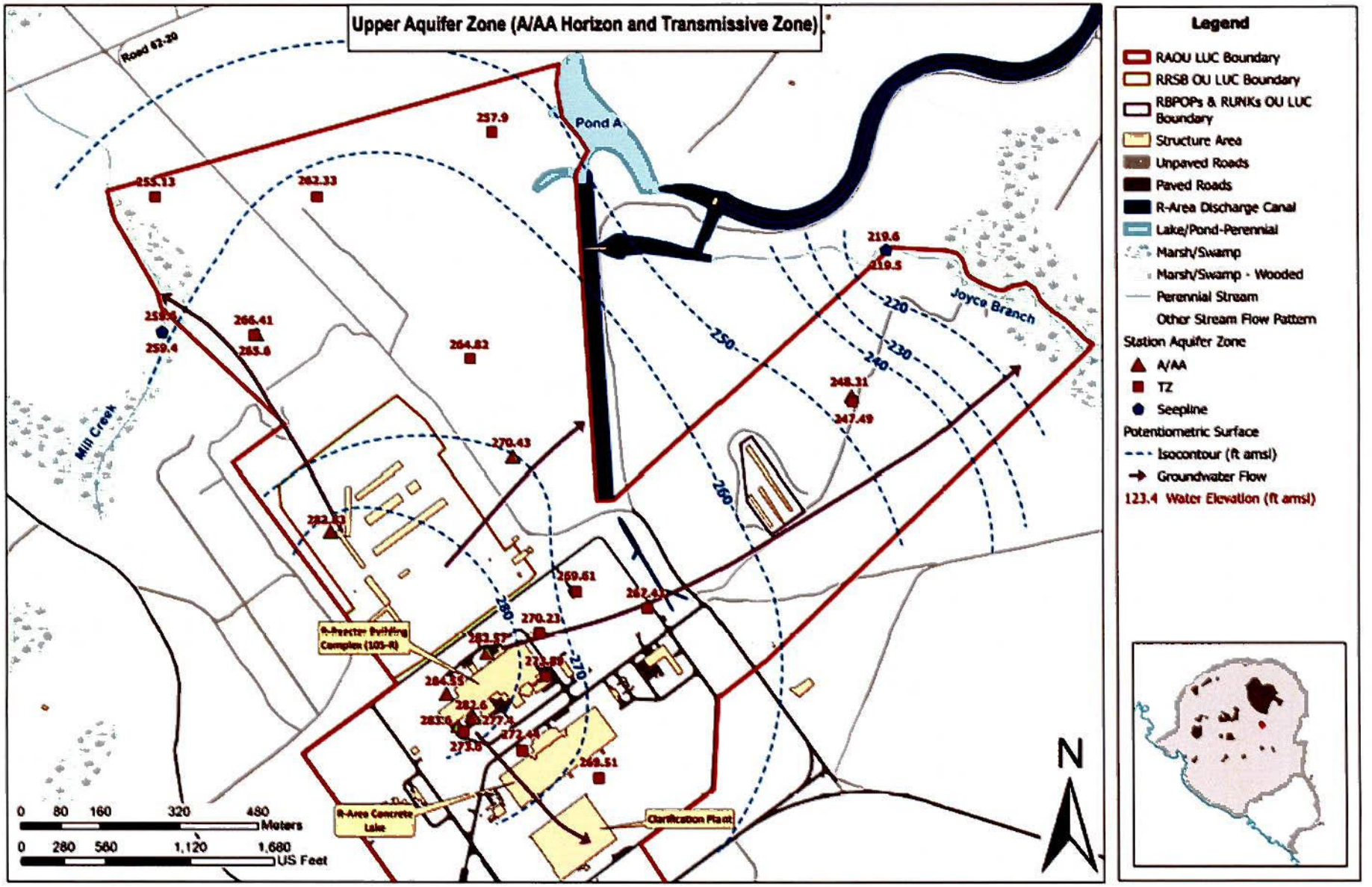


Figure 2. RAOU UAZ Potentiometric Surface Map, Fourth Quarter 2025

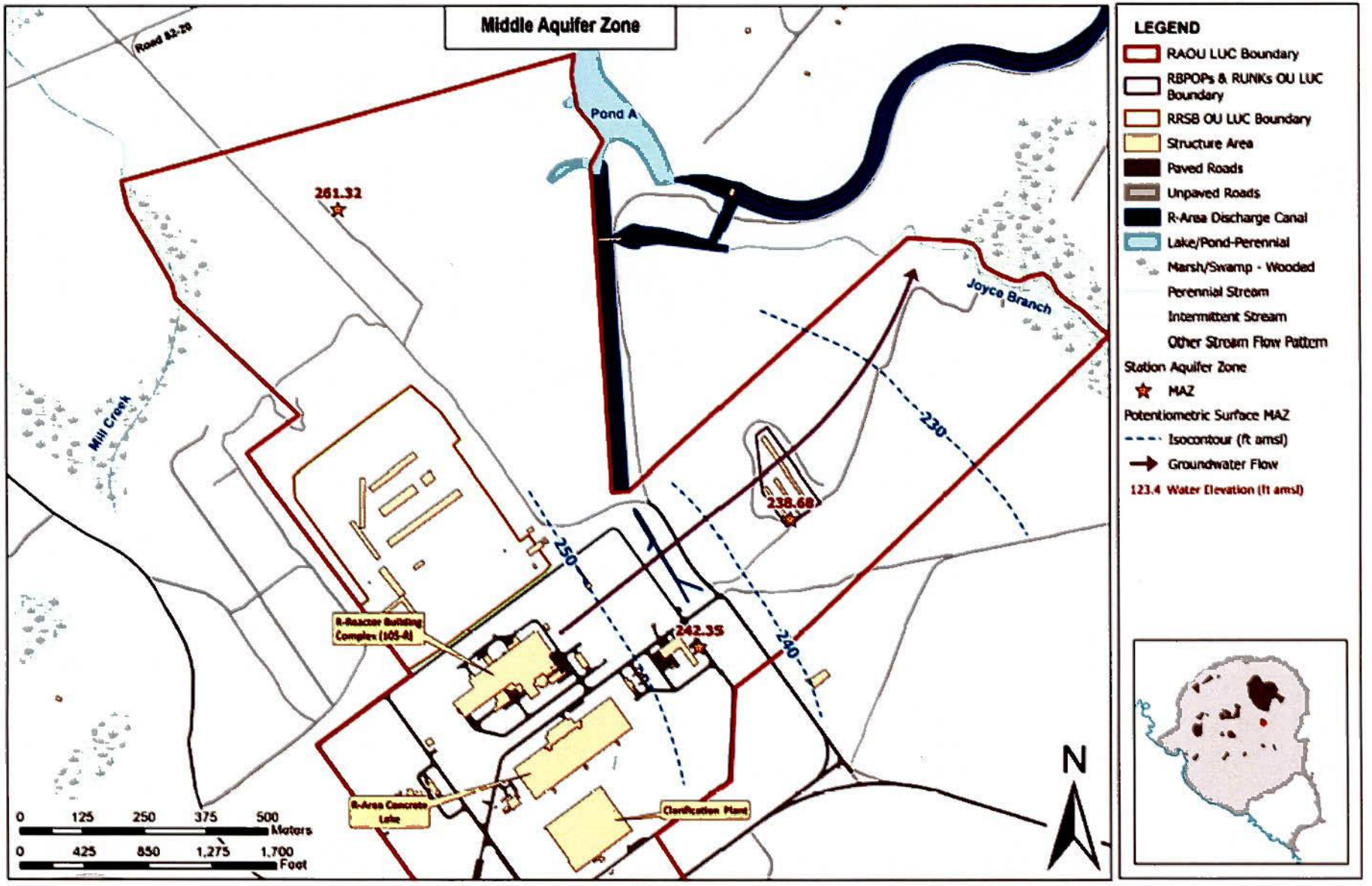


Figure 3. RAOU MAZ Potentiometric Surface Map, Fourth Quarter 2025

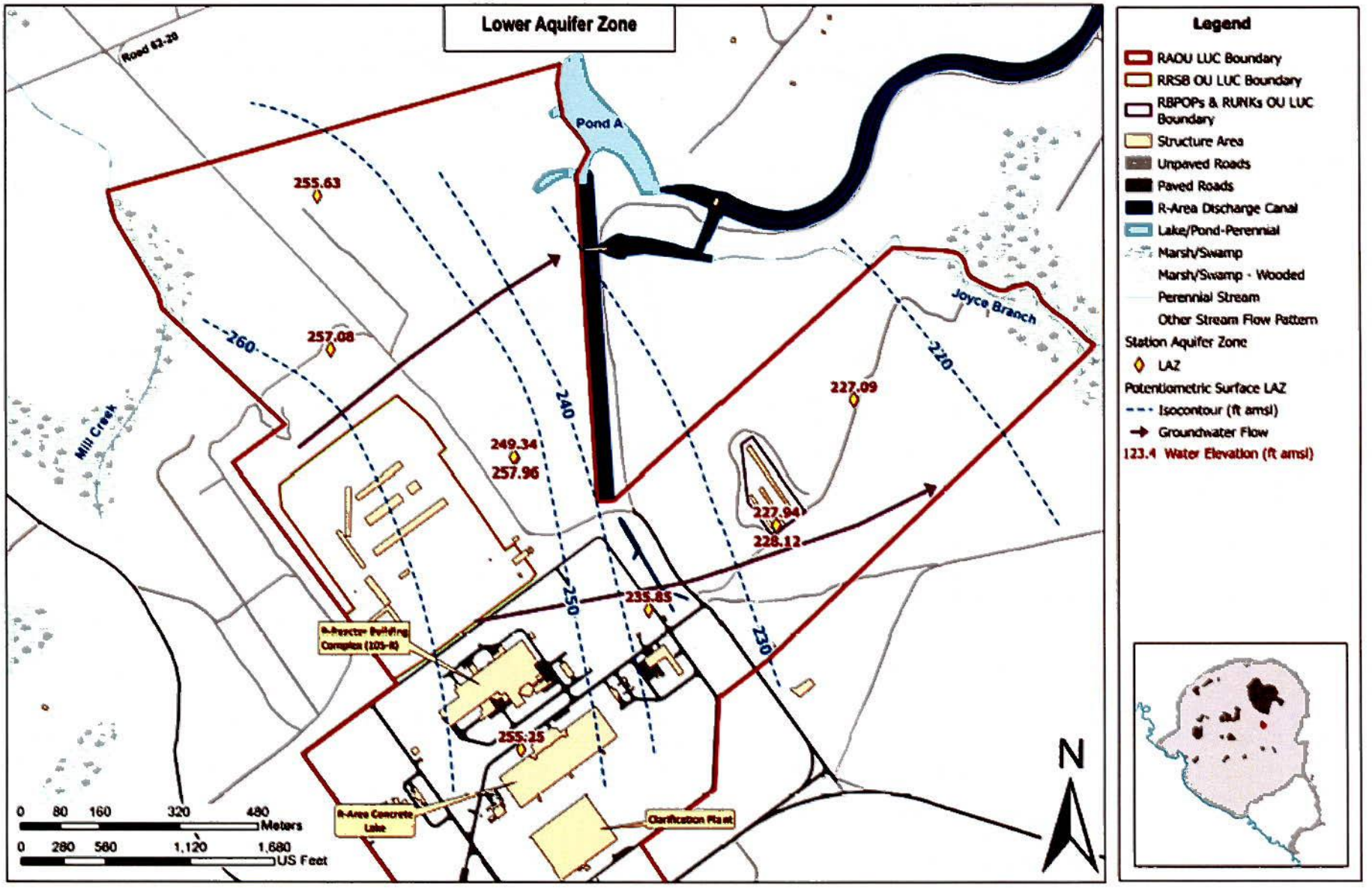


Figure 4. RAOU LAZ Potentiometric Surface Map, Fourth Quarter 2025

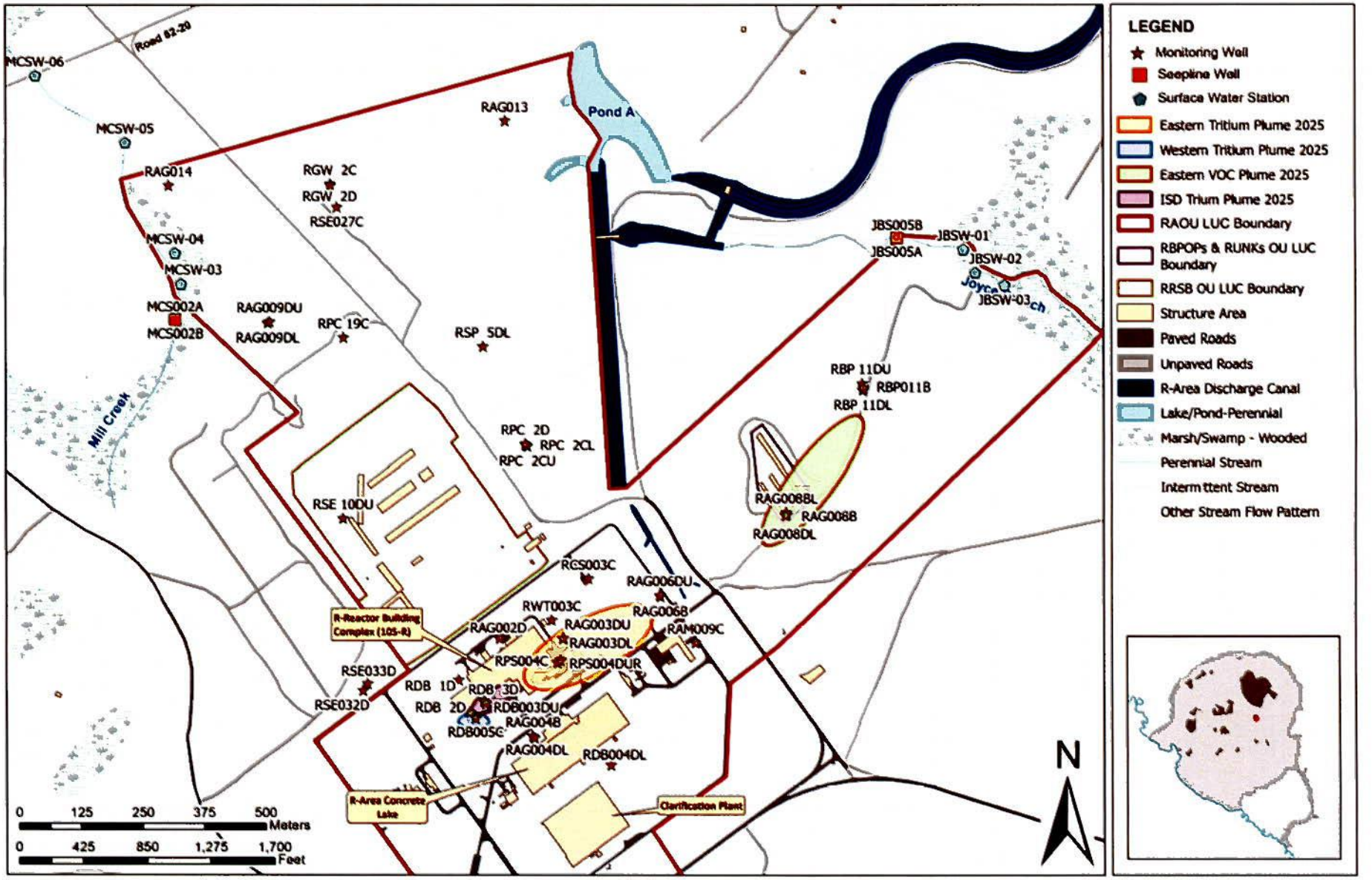


Figure 5. RAOU Contaminant Plume Map, Fourth Quarter 2025

Table 1. RAOU Monitoring Stations

Plume	Station ID	Aquifer Zone	Purpose	UTM-Northing	UTM-Easting	Top of Casing	Screen Top Elevation	Screen Bottom Elevation
						(ft amsl)		
Eastern VOC	RAG002D	A/AA	Plume Definition Monitoring Well	3681720.40	446009.30	293.15	263.15	253.15
Eastern VOC	RWT003C	TZ	Source Area Monitoring Well	3681758.00	446116.35	292.46	204.00	194.00
Eastern VOC and Tritium	JBS005A	TZ	LUC Boundary Seepline Well	3682523.90	446822.19	228.80	220.30	217.80
Eastern VOC and Tritium	JBS005B	TZ	LUC Boundary Seepline Well	3682524.90	446823.38	222.70	215.20	212.70
Eastern VOC and Tritium	JBSW-01	NA	LUC Boundary Surface Water	3682501.80	446958.40	NA	NA	NA
Eastern VOC and Tritium	JBSW-02	NA	LUC Boundary Surface Water	3682455.00	446982.80	NA	NA	NA
Eastern VOC and Tritium	JBSW-03	NA	LUC Boundary Surface Water	3682430.00	447042.20	NA	NA	NA
Eastern VOC and Tritium	RAG006DU	TZ	Plume Definition Monitoring Well	3681805.30	446338.11	287.05	102.80	92.80
Eastern VOC and Tritium	RAG006B	LAZ	Plume Definition Monitoring Well	3681805.30	446338.11	287.05	102.80	92.80
Eastern VOC and Tritium	RAG008B	LAZ	Plume Definition Monitoring Well	3681970.60	446596.74	309.84	172.83	162.83
Eastern VOC and Tritium	RAG008BL	LAZ	Plume Boundary Monitoring Well	3681975.1	446596.0	310.26	148.74	138.74
Eastern VOC and Tritium	RAG008DL	MAZ	Plume Definition Monitoring Well	3681968.80	446594.12	310.08	225.45	215.45
Eastern VOC and Tritium	RAM009C	MAZ	Plume Definition Monitoring Well	3681712.18	446409.86	290.67	197.20	187.20
Eastern VOC and Tritium	RBP 11DL	TZ	Plume Definition Monitoring Well	3682219.05	446752.89	290.07	222.59	212.59
Eastern VOC and Tritium	RBP 11DU	A/AA	Plume Definition Monitoring Well	3682232.04	446751.49	289.43	231.87	221.80
Eastern VOC and Tritium	RBP011B	LAZ	Plume Boundary Monitoring Well	3682219.00	446753.00	286.20	175.71	165.70
Eastern VOC and Tritium	RCS003C	TZ	Plume Definition Monitoring Well	3681841.00	446191.38	292.12	202.12	192.12
Eastern VOC and Tritium & ISD Performance	RPS004C	TZ	Source Area Monitoring Well & ISD Source Well	3681671.76	446128.19	292.90	211.30	201.30
Former Northern Tritium	MCS002A	A/AA	LUC Boundary Seepline Well	3682360.70	445350.21	263.30	260.30	254.80
Former Northern Tritium	MCS002B	A/AA	LUC Boundary Seepline Well	3682359.10	445350.70	263.40	255.90	253.40
Former Northern Tritium	MCSW-03	NA	LUC Boundary Surface Water	3682428.70	445355.00	NA	NA	NA
Former Northern Tritium	MCSW-04	NA	LUC Boundary Surface Water	3682493.70	445350.70	NA	NA	NA
Former Northern Tritium	MCSW-05	NA	LUC Boundary Surface Water	3682716.00	445249.00	NA	NA	NA
Former Northern Tritium	MCSW-06	NA	LUC Boundary Surface Water	3682852.00	445067.00	NA	NA	NA
Former Northern Tritium	RAG009DL	TZ	Plume Definition Monitoring Well	3682353.32	445538.11	283.72	193.10	183.10
Former Northern Tritium	RAG009DU	A/AA	Plume Definition Monitoring Well	3682356.13	445542.13	283.66	241.13	231.13
Former Northern Tritium	RAG013	TZ	LUC Boundary Monitoring Well	3682760.27	446022.85	266.10	202.50	192.50
Former Northern Tritium	RAG014	TZ	Plume Definition Monitoring Well	3682629.87	445337.18	278.00	201.00	191.00
Former Northern Tritium	RGW 2C	LAZ	Plume Definition Monitoring Well	3682633.20	445665.82	306.83	151.83	141.83
Former Northern Tritium	RGW 2D	TZ	Plume Definition Monitoring Well	3682629.97	445666.21	307.48	200.00	190.00
Former Northern Tritium	RPC 2CL	LAZ	Plume Definition Monitoring Well	3682107.95	446064.67	294.85	107.35	97.35
Former Northern Tritium	RPC 2CU	LAZ	Plume Definition Monitoring Well	3682106.22	446067.51	294.87	158.67	148.67
Former Northern Tritium	RPC 2D	A/AA	Plume Definition Monitoring Well	3682111.08	446063.41	294.60	279.39	259.39
Former Northern Tritium	RPC 19C	LAZ	Plume Boundary Monitoring Well	3682324.35	445692.68	304.22	160.22	150.22
Former Northern Tritium	RSE 10DU	A/AA	Source Area Monitoring Well	3681962.80	445691.31	283.72	273.10	253.00
Former Northern Tritium	RSE027C	MAZ	Plume Definition Monitoring Well	3682586.20	445679.59	308.52	178.94	168.94
Former Northern Tritium	RSP 5DL	TZ	LUC Boundary Monitoring Well	3682306.51	445976.95	296.82	186.52	176.52
Western Tritium	RAG004B	LAZ	Plume Boundary Monitoring Well	3681524.54	446077.40	293.05	125.56	115.56
Western Tritium	RAG004DL	TZ	Plume Definition Monitoring Well	3681521.36	446080.81	293.49	218.80	208.80
Western Tritium	RDB004DL	TZ	Plume Boundary Monitoring Well	3681467.14	446236.70	294.11	213.40	203.40
Western Tritium & ISD Performance	RDB005C	TZ	Source Area Monitoring Well & ISD Source Well	3681560.48	445960.77	293.49	208.60	198.60
ISD Performance	RSE032D	A/AA	ISD Background Well	3681616.50	445731.16	301.9	262.6	252.6
ISD Performance	RSE033D	TZ	ISD Background Well	3681630.20	445740.30	302.5	221.1	211.1
ISD Performance	RAG003DL	TZ	ISD Source Well	3681719.82	446138.79	292.7	195.9	185.9
ISD Performance	RAG003DU	A/AA	ISD Source Well	3681721.20	446140.70	292.5	237.9	227.9
ISD Performance	RDB 1D	A/AA	ISD Source Well	3681637.70	445925.99	292.7	285.5	265.5
ISD Performance	RDB 2D	A/AA	ISD Temporary Well	3681572.94	445949.65	292.9	285.7	265.7
ISD Performance	RDB 3D	A/AA	ISD Source Well	3681594.41	445978.05	293.0	285.8	265.8
ISD Performance	RDB003DU	A/AA	ISD Source Well	3681589.92	445981.24	293.1	238.7	228.7
ISD Performance	RPS004DUR	A/AA	ISD Source Well	3681676.74	446134.42	293.0	238.2	228.2

Notes:

A/AA	upper portion zone of the upper aquifer zone
ft amsl	feet above mean sea level
ISD	in-situ decommissioning
LAZ	lower aquifer zone
LUC	land use control
MAZ	middle aquifer zone
NA	not applicable
TZ	transmissive zone (lower portion of the upper aquifer zone)
UTM	Universal Transverse Mercator
VOC	volatile organic compound

Table 2. RAOU Groundwater Monitoring Results, Fourth Quarter 2023

2023 RAOU Monitoring Data			Field Data									RAOU Refined Constituents of Concern						
												Organics					Radionuclides	
			SAMPLE COLLECTION DATE	SPECIFIC CONDUCTANCE	WATER TEMPERATURE	TURBIDITY	SAMPLING EVENT WATER ELEVATION	OXYGEN	OXIDATION/REDUCTION POTENTIAL	Constituent	FIELD CONDITIONS	CARBON TETRACHLORIDE	CHLOROETHENE (VINYL CHLORIDE)	CHLOROFORM	CIS-1,2-DICHLOROETHYLENE	TRICHLOROETHYLENE (TCE)	CARBON-14	TRITIUM
			day-month-year	uS/cm	degC	NTU	ft	mg/L	mV	Unit		ug/L	ug/L	ug/L	ug/L	ug/L	pCi/L	pCi/mL
Station	Well Use	Aquifer Zone				15				GWPS		5	2	70	70	5		20
RSE032D	ISD Background Well	A_UAZ_UTRAU	09-Oct-2023	27	17.5	1.6	278.21	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE033D	ISD Background Well	TZ_UAZ_UTRAU	09-Oct-2023	28	17.2	0.9	278.74	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RDB_2D	ISD Auxiliary	TZ_UAZ_UTRAU	04-Oct-2023	252	26.4	[redacted]	286.87	NS	NS		T	NS	NS	NS	NS	NS	<EQL (123) J	3.52
RAG013	LUC Boundary Monitoring Well	TZ_UAZ_UTRAU	03-Oct-2023	29	18.1	9.1	260.09	4.29	104		No Comments	NS	NS	NS	NS	NS	NS	[redacted]
RSP_5DL	LUC Boundary Monitoring Well	TZ_UAZ_UTRAU	04-Oct-2023	120	18.2	2.1	265.15	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	[redacted]
											LD							
JBS005A	LUC Boundary Seepline Well	TZ_UAZ_UTRAU	04-Oct-2023	33	20.1	8	219.8	3.8	182		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	[redacted]
JBS005B	LUC Boundary Seepline Well	TZ_UAZ_UTRAU	04-Oct-2023	14	19.5	4.7	219.9	3.6	186		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.04) J
MCS002A	LUC Boundary Seepline Well	A_UAZ_UTRAU	04-Oct-2023	22	19.1	[redacted]	260.8	NS	NS		T	NS	NS	NS	NS	NS	NS	<EQL (1.09) J
MCS002B	LUC Boundary Seepline Well	A_UAZ_UTRAU	04-Oct-2023	18	19.4	[redacted]	261	NS	NS		T	NS	NS	NS	NS	NS	NS	<EQL (1.07) J
RAG004B	Plume Boundary Well	LAZ_UTRAU	03-Oct-2023	25	20.3	0.9	256.21	4.36	232		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.06) J
RAG008BL	Plume Boundary Well	LAZ_UTRAU	03-Oct-2023	243	18.7	2.7	228.04	3.84	120		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.05) J
RBP011B	Plume Boundary Well	LAZ_UTRAU	04-Oct-2023	183	17.9	13.7	227.69	3.08	228		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	1.19	NS	<EQL (1.31) J
RDB004DL	Plume Boundary Well	TZ_UAZ_UTRAU	03-Oct-2023	36	18.6	5.9	270.51	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.27) J
RPC 19C	Plume Boundary Well	LAZ_UTRAU	04-Oct-2023	28	20.2	1.1	257.5	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.24) J
RAG002D	Plume Definition Well	A_UAZ_UTRAU	03-Oct-2023	158	22.3	10.7	287.67	1.42	-4		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	[redacted]	<EQL (1) J	NS	NS
RAG004DL	Plume Definition Well	TZ_UAZ_UTRAU	03-Oct-2023	35	20.3	3.1	276	3.38	176		No Comments	NS	NS	NS	NS	NS	NS	1.8
RAG006B	Plume Definition Well	LAZ_UTRAU	03-Oct-2023	223	20.3	0.5	236.78	2.73	76		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.02) J
RAG006DU	Plume Definition Well	A_UAZ_UTRAU	04-Oct-2023	35	19.6	1.1	269.75	3.2	188		No Comments	<EQL (1) J	1.01 J	<EQL (1) J	3.81	1.3 J	NS	10.8
RAG008B	Plume Definition Well	LAZ_UTRAU	03-Oct-2023	217	18.7	0.8	228.14	4.52	123		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	[redacted]	NS	<EQL (1.06) J
RAG008DL	Plume Definition Well	MAZ_UTRAU	03-Oct-2023	41	18.7	0.5	237.28	3.57	238		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	[redacted]	NS	2.07
RAG009DL	Plume Definition Well	TZ_UAZ_UTRAU	03-Oct-2023	17	18.8	14.1	268.07	4.16	222		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.09) J
RAG009DU	Plume Definition Well	A_UAZ_UTRAU	03-Oct-2023	22	19	0.8	269.45	4.33	242		No Comments	NS	NS	NS	NS	NS	NS	2.64
RAG014	Plume Definition Well	TZ_UAZ_UTRAU	04-Oct-2023	40	19.1	8.4	255.38	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.03) J
RAM009C	Plume Definition Well	TZ_UAZ_UTRAU	03-Oct-2023	51	20.1	[redacted]	242.19	3.24	219		T	<EQL (1) J	<EQL (1) J	<EQL (1) J	[redacted]	<EQL (1) J	NS	2.32
RBP 11DL	Plume Definition Well	TZ_UAZ_UTRAU	04-Oct-2023	38	18.1	0.8	248.26	2.97	249		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	[redacted]	3.78	NS	2.27
RBP 11DU	Plume Definition Well	A_UAZ_UTRAU	04-Oct-2023	31	18.2	0.4	250.08	2.59	246		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.28) J
RCS003C	Plume Definition Well	TZ_UAZ_UTRAU	03-Oct-2023	26	19.2	[redacted]	269.71	0	1		T	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	[redacted]	NS	[redacted]
RGW 2C	Plume Definition Well	LAZ_UTRAU	03-Oct-2023	85	18.9	12.1	256.23	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.27) J
RGW 2D	Plume Definition Well	TZ_UAZ_UTRAU	03-Oct-2023	22	18.7	11.8	263.18	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	2.59
RPC 2CL	Plume Definition Well	LAZ_UTRAU	04-Oct-2023	92	18.1	1.8	250.36	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	[redacted]
RPC 2CU	Plume Definition Well	LAZ_UTRAU	04-Oct-2023	22	18.7	0.9	260.16	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	3.03
RPC 2D	Plume Definition Well	TZ_UAZ_UTRAU	04-Oct-2023	28	20.3	11.3	280	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.23) J
RSE027C	Plume Definition Well	MAZ_UTRAU	04-Oct-2023	20	21.1	3	263.22	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.26) J
RAG003DL	ISD Source Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG003DU	ISD Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RDB 1D	ISD Source Well	A_UAZ_UTRAU	04-Oct-2023	293	24.1	6.9	288.04	NS	NS		No Comments	NS	NS	NS	NS	NS	<EQL (170) J	<EQL (1.29) J
											LD						<EQL (172) J	
RDB 3D	ISD Source Well	A_UAZ_UTRAU	03-Oct-2023	232	23.6	14.9	285.8	NS	NS		No Comments	NS	NS	NS	NS	NS	<EQL (178) J	[redacted]
RDB003DU	ISD Source Well	A_UAZ_UTRAU	03-Oct-2023	26	22	3.1	279.5	NS	NS		No Comments	NS	NS	NS	NS	NS	<EQL (172) J	1.54
RDB005C	Source Well/ ISD Source Well	TZ_UAZ_UTRAU	03-Oct-2023	25	23.6	[redacted]	273.3	2.12	198		T	NS	NS	NS	NS	NS	<EQL (175) J	[redacted]
RPS004C	Source Well/ ISD Source Well	TZ_UAZ_UTRAU	03-Oct-2023	69	22.5	13.6	274.14	1.97	140		No Comments	<EQL (1) J	1.51 J	<EQL (1) J	13.5	[redacted]	NS	[redacted]
RPS004DUR	ISD Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE 10DU	Source Well	A_UAZ_UTRAU	04-Oct-2023	57	24.2	3.9	283.25	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	9.28
											LD							8.99
RWT003C	Source Well	TZ_UAZ_UTRAU	03-Oct-2023	27	21.8	12	270.13	2.02	89		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	NS
JBSW-01	Surface Water	Unknown	05-Oct-2023	23	16.9	[redacted]	NS	NS	NS		T	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.32) J
JBSW-02	Surface Water	Unknown	05-Oct-2023	32	17.2	[redacted]	NS	NS	NS		T	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.29) J
JBSW-03	Surface Water	Unknown	05-Oct-2023	37	17.4	5.9	NS	NS	NS		No Comments	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	<EQL (1) J	NS	<EQL (1.32) J
MCSW-03	Surface Water	Unknown	05-Oct-2023	42	17.9	2.6	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.37) J
MCSW-04	Surface Water	Unknown	05-Oct-2023	29	17.6	3.1	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	[redacted]
MCSW-05	Surface Water	Unknown	05-Oct-2023	25	17.5	14.6	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.33) J
MCSW-06	Surface Water	Unknown	05-Oct-2023	53	18	3.4	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.36) J

Explanation

[redacted]	EPA Functional Guideline Code of "J" was applied to the result, indicating an estimated quantity
<EQL(##)	Constituent was below detection. The sample-specific Estimated Quantitation Limit is in parentheses
[redacted]	Result exceeds applicable limit
REJ	Result Rejected
	Result is less than the applicable limit and without EPA Functional Guidline qualifiers
NS	Requested to be sampled but was not. See comments as to why not.
Blue Text	Not a required sample analysis
LD	Laboratory duplicate
T	Excessive turbidity

Table 3. RAOU Groundwater Monitoring Results, Fourth Quarter 2024

2024 RAOU Monitoring Data			Field Data									RAOU Refined Constituents of Concern: Organics					Radionuclides	
			SAMPLE COLLECTION DATE	SPECIFIC CONDUCTANCE	WATER TEMPERATURE	TURBIDITY	SAMPLING EVENT WATER ELEVATION	OXYGEN	OXIDATION/REDUCTION POTENTIAL	Constituent	FIELD CONDITIONS	CARBON TETRACHLORIDE	CHLOROETHENE (VINYL CHLORIDE)	CHLOROFORM	CIS-1,2-DICHLOROETHYLENE	TRICHLOROETHYLENE (TCE)	CARBON-14	TRITIUM
			day-month-year	uS/cm	degC	NTU	ft	mg/L	mV	Unit		ug/L	ug/L	ug/L	ug/L	ug/L	pCi/L	pCi/mL
Station	Well Use	Aquifer Zone				15				GWPS		5	2	70	70	5		20
RSE032D	ISD Background Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE033D	ISD Background Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RDB 2D	ISD Auxiliary	TZ_UAZ_UTRAU	05-Dec-2024	248	25.2	11.7	287	3.2	156		No Comments	NS	NS	NS	NS	NS	55.2	3.11
											LD							
RAG013	LUC Boundary Monitoring Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSP_5DL	LUC Boundary Monitoring Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
JBS005A	LUC Boundary Seepline Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
JBS005B	LUC Boundary Seepline Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
MCS002A	LUC Boundary Seepline Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
MCS002B	LUC Boundary Seepline Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG004B	Plume Boundary Well	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG005BL	Plume Boundary Well	LAZ_UTRAU	05-Dec-2024	247	18.9	0.8	228.28	7.9	235		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (0.913)
RBP011B	Plume Boundary Well	LAZ_UTRAU	10-Dec-2024	206	18	[redacted]	227.56	4.19	120		T	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.28	NS	[redacted]
											LD							
RDB004DL	Plume Boundary Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RPC 19C	Plume Boundary Well	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG002D	Plume Definition Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG004DL	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG006B	Plume Definition Well	LAZ_UTRAU	05-Dec-2024	225	19.2	0.9	236.86	3.2	186		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (0.890)
RAG006DU	Plume Definition Well	A_UAZ_UTRAU	05-Dec-2024	38	19.1	1.1	269.35	5.6	291		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	2.45	[redacted]	NS	11.5
RAG008B	Plume Definition Well	LAZ_UTRAU	05-Dec-2024	207	18.9	0.5	228.35	8	266		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[redacted]	NS	[redacted]
RAG008DL	Plume Definition Well	MAZ_UTRAU	05-Dec-2024	31	18.4	1.6	238.36	7.6	328		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	[redacted]	NS	1.58
RAG009DL	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG009DU	Plume Definition Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG014	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAM009C	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RBP 11DL	Plume Definition Well	TZ_UAZ_UTRAU	10-Dec-2024	34	20.2	0.9	249.04	1.97	259		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	3.42	NS	2.22
RBP 11DU	Plume Definition Well	A_UAZ_UTRAU	10-Dec-2024	31	19.3	0.8	247.77	3.23	316		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	[redacted]
RCS003C	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RGW 2C	Plume Definition Well	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RGW 2D	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RPC 2CL	Plume Definition Well	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RPC 2CU	Plume Definition Well	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RPC 2D	Plume Definition Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE027C	Plume Definition Well	MAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG003DL	ISD Source Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG003DU	ISD Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RDB 1D	ISD Source Well	A_UAZ_UTRAU	10-Dec-2024	201	21.9	2.4	288.25	1	31		No Comments	NS	NS	NS	NS	NS	[redacted]	
RDB 3D	ISD Source Well	A_UAZ_UTRAU	05-Dec-2024	208	22.1	[redacted]	286.3	4.6	145		T	NS	NS	NS	NS	NS	<EQL (36.3)	[redacted]
RDB003DU	ISD Source Well	A_UAZ_UTRAU	05-Dec-2024	26	20.5	13.5	280.3	4.2	95		No Comments	NS	NS	NS	NS	NS	[redacted]	2.14
RDB005C	Source Well/ ISD Source Well	TZ_UAZ_UTRAU	05-Dec-2024	24	20.2	[redacted]	273.79	3.8	99		T	NS	NS	NS	NS	NS	[redacted]	[redacted]
RPS004C	Source Well/ ISD Source Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RPS004DUR	ISD Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE 10DU	Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RWT003C	Source Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
JBSW-01	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
JBSW-02	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
JBSW-03	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
MCSW-03	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
MCSW-04	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
MCSW-05	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
MCSW-06	Surface Water	Unknown	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS

Explanation

[redacted]	EPA Functional Guideline Code of "J" was applied to the result, indicating an estimated quantity.
0 <EQL(dil)	Constituent was below detection. The sample-specific Estimated Quantitation Limit is in parentheses.
[redacted]	Result exceeds applicable limit
REJ	Result Rejected
	Result is less than the applicable limit and without EPA Functional Guidline qualifiers
NS	Requested to be sampled but was not. See comments as to why not
Blue Text	Not a required sample analysis
LD	Laboratory duplicate
T	Excessive turbidity

Table 4. RAOU Groundwater Monitoring Results, Fourth Quarter 2025

2025 RAOU Monitoring Data			Field Data									RAOU Refined Constituents of Concern						
												Organics					Radionuclides	
			SAMPLE COLLECTION DATE	SPECIFIC CONDUCTANCE	WATER TEMPERATURE	TURBIDITY	SAMPLING EVENT WATER ELEVATION	OXYGEN	OXIDATION/REDUCTION POTENTIAL	Constituent	FIELD CONDITIONS	CARBON TETRACHLORIDE	CHLOROETHENE (VINYL CHLORIDE)	CHLOROFORM	CIS-1,2-DICHLOROETHYLENE	TRICHLOROETHYLENE (TCE)	CARBON-14	TRITIUM
			day-month-year	uS/cm	degC	NTU	ft	mg/L	mV	Unit		ug/L	ug/L	ug/L	ug/L	ug/L	pCi/L	pCi/mL
Station	Well Use	Aquifer Zone				15				GWPS		5	2	70	70	5	2000	20
RSE032D	ISD Background Well	A_UAZ_UTRAU	28-Oct-2025	27	19.2	0.6	279.31	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE033D	ISD Background Well	TZ_UAZ_UTRAU	28-Oct-2025	27	19.4	0.7	279.09	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RDB_2D	ISD Auxiliary	TZ_UAZ_UTRAU	24-Nov-2025	236	25.5	66.1	283.6	NS	NS		T	NS	NS	NS	NS	NS	<EQL (23.6)	1.98
											LD						<EQL (23.9)	
RAG013	LUC Boundary Monitoring Well	TZ_UAZ_UTRAU	18-Nov-2025	27	15.8	28.3	257.9	NS	NS		T	NS	NS	NS	NS	NS	NS	<EQL (1.08)
											LD							<EQL (1.08)
RSP_5DL	LUC Boundary Monitoring Well	TZ_UAZ_UTRAU	24-Nov-2025	72	17.6	2	264.82	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	
JBS005A	LUC Boundary Seepline Well	TZ_UAZ_UTRAU	18-Nov-2025	13.2	17	2.7	219.6	3.2	201		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	
JBS005B	LUC Boundary Seepline Well	TZ_UAZ_UTRAU	18-Nov-2025	21	15	10	219.5	3.2	201		T	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (0.991)
MCS002A	LUC Boundary Seepline Well	A_UAZ_UTRAU	18-Nov-2025	22	12.9	100	259.4	NS	NS		T	NS	NS	NS	NS	NS	NS	<EQL (0.936)
MCS002B	LUC Boundary Seepline Well	A_UAZ_UTRAU	18-Nov-2025	18	14	20.2	259.6	NS	NS		T	NS	NS	NS	NS	NS	NS	<EQL (0.998)
RAG004B	Plume Boundary Well	LAZ_UTRAU	18-Nov-2025	27	19	1.8	255.25	6.9	275		No Comments	NS	NS	NS	NS	NS	NS	<EQL (0.987)
RAG008BL	Plume Boundary Well	LAZ_UTRAU	18-Nov-2025	239	18.9	1.5	227.94	4.1	125		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (0.952)
RBP011B	Plume Boundary Well	LAZ_UTRAU	19-Nov-2025	203.7	17.2	20.3	227.09	1.98	233		T	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	1.53	NS	
RDB004DL	Plume Boundary Well	TZ_UAZ_UTRAU	24-Nov-2025	33	18.2	2.6	269.51	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (0.983)
RPC 19C	Plume Boundary Well	LAZ_UTRAU	24-Nov-2025	27.9	18.8	1.2	257.08	0	0		No Comments	NS	NS	NS	NS	NS	NS	<EQL (0.912)
RAG002D	Plume Definition Well	A_UAZ_UTRAU	18-Nov-2025	180	22.2	8.4	282.57	2.1	16		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	NS
RAG004DL	Plume Definition Well	TZ_UAZ_UTRAU	18-Nov-2025	34	19.5	1.1	272.44	4.5	198		No Comments	NS	NS	NS	NS	NS	NS	2.02
RAG006B	Plume Definition Well	LAZ_UTRAU	18-Nov-2025	218	18.6	0.6	235.85	5.5	128		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (0.972)
RAG006DU	Plume Definition Well	A_UAZ_UTRAU	18-Nov-2025	33	18.7	0.9	267.43	3.8	250		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	2.13		NS	10.8
RAG008B	Plume Definition Well	LAZ_UTRAU	18-Nov-2025	206	18.8	1.1	228.12	7.8	14		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	27.9	NS	
RAG008DL	Plume Definition Well	MAZ_UTRAU	18-Nov-2025	30	18.7	0.7	238.68	2	135		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	5.11	NS	2.06
RAG009DL	Plume Definition Well	TZ_UAZ_UTRAU	18-Nov-2025	18	18.5	14.2	265.6	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	
RAG009DU	Plume Definition Well	A_UAZ_UTRAU	18-Nov-2025	27	19	6.6	266.41	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	4.88
RAG014	Plume Definition Well	TZ_UAZ_UTRAU	18-Nov-2025	39	17.7	14.7	255.13	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.03)
RAM009C	Plume Definition Well	TZ_UAZ_UTRAU	19-Nov-2025	74	18.6	100	242.35	1.78	128		T	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	
RBP 11DL	Plume Definition Well	TZ_UAZ_UTRAU	19-Nov-2025	35.1	18.5	1.3	248.31	1.44	200		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	3.74	NS	2.09
RBP 11DU	Plume Definition Well	A_UAZ_UTRAU	19-Nov-2025	30.2	19.3	0.9	247.49	2.24	273		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (1.08)
RCS003C	Plume Definition Well	TZ_UAZ_UTRAU	19-Nov-2025	25	18.6	100	269.61	2.05	222		T	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)		NS	
RGW_2C	Plume Definition Well	LAZ_UTRAU	24-Nov-2025	74	18.2	6.7	255.63	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (0.948)
RGW_2D	Plume Definition Well	TZ_UAZ_UTRAU	24-Nov-2025	22	18.3	4.4	262.33	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	2.34
RPC_2CL	Plume Definition Well	LAZ_UTRAU	24-Nov-2025	103	18.9	1.2	249.34	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	1.11
RPC_2CU	Plume Definition Well	LAZ_UTRAU	24-Nov-2025	23	20	0.9	257.96	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	2.8
RPC_2D	Plume Definition Well	TZ_UAZ_UTRAU	24-Nov-2025	57	22.1	148	270.43	NS	NS		T	NS	NS	NS	NS	NS	NS	<EQL (0.944)
RSE027C	Plume Definition Well	MAZ_UTRAU	24-Nov-2025	17	19	3	261.32	2.3	235		No Comments	NS	NS	NS	NS	NS	NS	<EQL (0.948)
RAG003DL	ISD Source Well	TZ_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RAG003DU	ISD Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RDB_1D	ISD Source Well	A_UAZ_UTRAU	24-Nov-2025	253	22.9	12.2	284.55	NS	NS		No Comments	NS	NS	NS	NS	NS	<EQL (24.3)	
											LD							
RDB_3D	ISD Source Well	A_UAZ_UTRAU	24-Nov-2025	193	22.6	22.8	282.6	NS	NS		T	NS	NS	NS	NS	NS	37	14.9
RDB003DU	ISD Source Well	A_UAZ_UTRAU	24-Nov-2025	27	21.3	2.7	277.4	NS	NS		No Comments	NS	NS	NS	NS	NS	<EQL (23.3)	2.67
RDB005C	Source Well/ ISD Source Well	TZ_UAZ_UTRAU	24-Nov-2025	30.6	20.7	396	273.6	0	0		T	NS	NS	NS	NS	NS	<EQL (23.5)	21.4
RPS004C	Source Well/ ISD Source Well	TZ_UAZ_UTRAU	19-Nov-2025	66	21	21.1	273.89	2.74	212		T	<EQL (1)		<EQL (1)	10.6		NS	57.2
RPS004DUR	ISD Source Well	A_UAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	NS
RSE 10DU	Source Well	A_UAZ_UTRAU	24-Nov-2025	56.5	23.3	3.2	282.83	0	0		No Comments	NS	NS	NS	NS	NS	NS	3.49
RWT003C	Source Well	TZ_UAZ_UTRAU	17-Dec-2025	27	18.8	12.2	270.23	2.1	103		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	NS
JBSW-01	Surface Water	Unknown	19-Nov-2025	21	11.3	42.3	NS	NS	NS		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (1.1)
JBSW-02	Surface Water	Unknown	19-Nov-2025	22	12	10.3	NS	NS	NS		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	<EQL (1.11)
JBSW-03	Surface Water	Unknown	19-Nov-2025	24	12.4	20	NS	NS	NS		No Comments	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)	NS	
MCSW-03	Surface Water	Unknown	24-Nov-2025	57	11.3	75.2	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	<EQL (1.03)
MCSW-04	Surface Water	Unknown	24-Nov-2025	31	12.4	4.6	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	
MCSW-05	Surface Water	Unknown	24-Nov-2025	27	12.4	5.2	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	
MCSW-06	Surface Water	Unknown	24-Nov-2025	67	12.5	3.8	NS	NS	NS		No Comments	NS	NS	NS	NS	NS	NS	

Explanation

	EPA Functional Guideline Code of 'J' was applied to the result, indicating an estimated quantity
<EQL(##)	Constituent was below detection. The sample-specific Estimated Quantitation Limit is in parentheses
	Result exceeds applicable limit
REJ	Result Rejected
	Result is less than the applicable limit and without EPA Functional Guidline qualifiers
NS	Requested to be sampled but was not. See comments as to why not
Blue Text	Not a required sample analysis
LD	Laboratory duplicate
T	Excessive turbidity

Table 5 RAOU Action Concentrations for Plume Source Wells

Source Well	Plume Name	Contaminant of Concern	Action Concentration	Units
RDB005C	Western Tritium	Tritium	76.8	pCi/mL
RSE 10DU	Northern Tritium	Tritium	252	pCi/mL
RPS004C	Eastern Tritium	Tritium	2610	pCi/mL
RWT003C	Eastern VOC	Trichloroethylene	56	µg/L

R-Area Reactor Seepage Basins/108-4R Overflow Basin Operable Unit

Introduction

The R-Area Reactor Seepage Basins (RRSB)/108-4R Overflow Basin Operable Unit (OU) is listed as a RCRA/CERCLA unit in Appendix C of the FFA for the SRS. The seepage basins and associated pipelines (source areas) were addressed through the placement of a reinforced-concrete intruder barrier system. The selected remedy for the groundwater at RRSB OU is groundwater mixing zone (GWMZ) with LUCs, which has been applied since 2007.

Sampling optimizations that were developed and presented in the *2021 Groundwater Mixing Zone Report for the R-Area Reactor Seepage Basins/108-4R Overflow Operable Unit (U)* (SRNS-RP-2022-00212, Revision 0, June 2022) were approved by the United States Environmental Protection Agency and the South Carolina Department of Environmental Services and implemented in 2023. These sampling optimizations continued in 2025. This summary letter presents the data collected during 4Q25.

Groundwater Monitoring

A total of 19 wells were sampled during the 4Q25, all of which were analyzed for strontium-90 (Sr-90). Per the agreed optimization, the six MAZ and LAZ monitoring wells were not sampled during 2025 due to the lack of a previous MCL exceedance in the overlying TZ wells. The monitoring network is shown in Figure 6. Table 6 presents all analytical data collected during this reporting period. The next sampling event will occur in the fourth quarter of 2027, followed by a full report submittal in August 2028.

Sampling and Analysis Issues

No sampling or analysis issues were encountered during the 4Q25 sampling event.

Water Elevations

Potentiometric heads in the A/AA horizon of the UAZ are generally about 0.6-m to 2.4-m (2-ft to 8-ft) higher than corresponding heads in the TZ of the UAZ, indicating that flow is generally downward in this groundwater recharge area. The potentiometric surface is radial in the TZ and transitions to a generally eastward slope in the deeper aquifer horizons (MAZ and LAZ). Per the agreed optimization, the six MAZ and LAZ wells were not sampled and therefore potentiometric surfaces were not drawn. Due to the limited monitoring network of the RRSB, the RAOU wells within the vicinity were used to depict the UAZ potentiometric surface in the area, as shown on Figure 7. RRSB OU water elevations are displayed in Table 6.

RRSB OU Strontium-90

The network of 16 GWMZ compliance monitoring wells and three auxiliary wells are analyzed biennially for Sr-90. Table 6 lists the results for the 4Q25 sampling event. Figure 8 displays the Sr-90 plume associated with the OU.

There were no mixing zone concentration limit (MZCL) exceedances of Sr-90 in plume/intermediate wells in 2025. Well RSE 10 was the only plume/intermediate well that exceeded the Sr-90 MCL of 8 pCi/L during the 2025 sampling event, with an observed concentration of 73.5 pCi/L. RSE 10 is screened in the A/AA horizon.

All boundary wells were below the Sr-90 MCL of 8 pCi/L in 2025.

Strontium-90 was detected in a field duplicate sample above the MCL of 8 pCi/L in auxiliary well RSE 26DL, with an observed concentration of 27 pCi/L. The was the first exceedance of Sr-90 in this well, however, the regular sample result was non-detect. RSE 26DL is screened in the TZ horizon. Strontium-90 was also detected as an estimated value in auxiliary well, RPC 11DU, which is screened in the A/AA horizon. Auxiliary wells are sampled in support of the effectiveness monitoring of the closed seepage basin remedy because they are indicators of future groundwater concentrations in other downgradient wells. They are not used as a determining factor for any additional corrective action. Even though auxiliary wells are not compared to MCLs as action levels, the remedy would not be considered complete until all wells have achieved the MCL.

Conclusions

The following conclusions were made based on the 2025 monitoring of the RRSB OU:

- There were no MZCL exceedances of Sr-90 in plume/intermediate wells.
- There were no MCL exceedances of Sr-90 in boundary wells.
- The 4Q25 data indicated that the remedy is functioning as intended and continues to be effective.

Recommendations

SRS has no recommendations for this reporting period other than continued monitoring per the optimized monitoring plan.

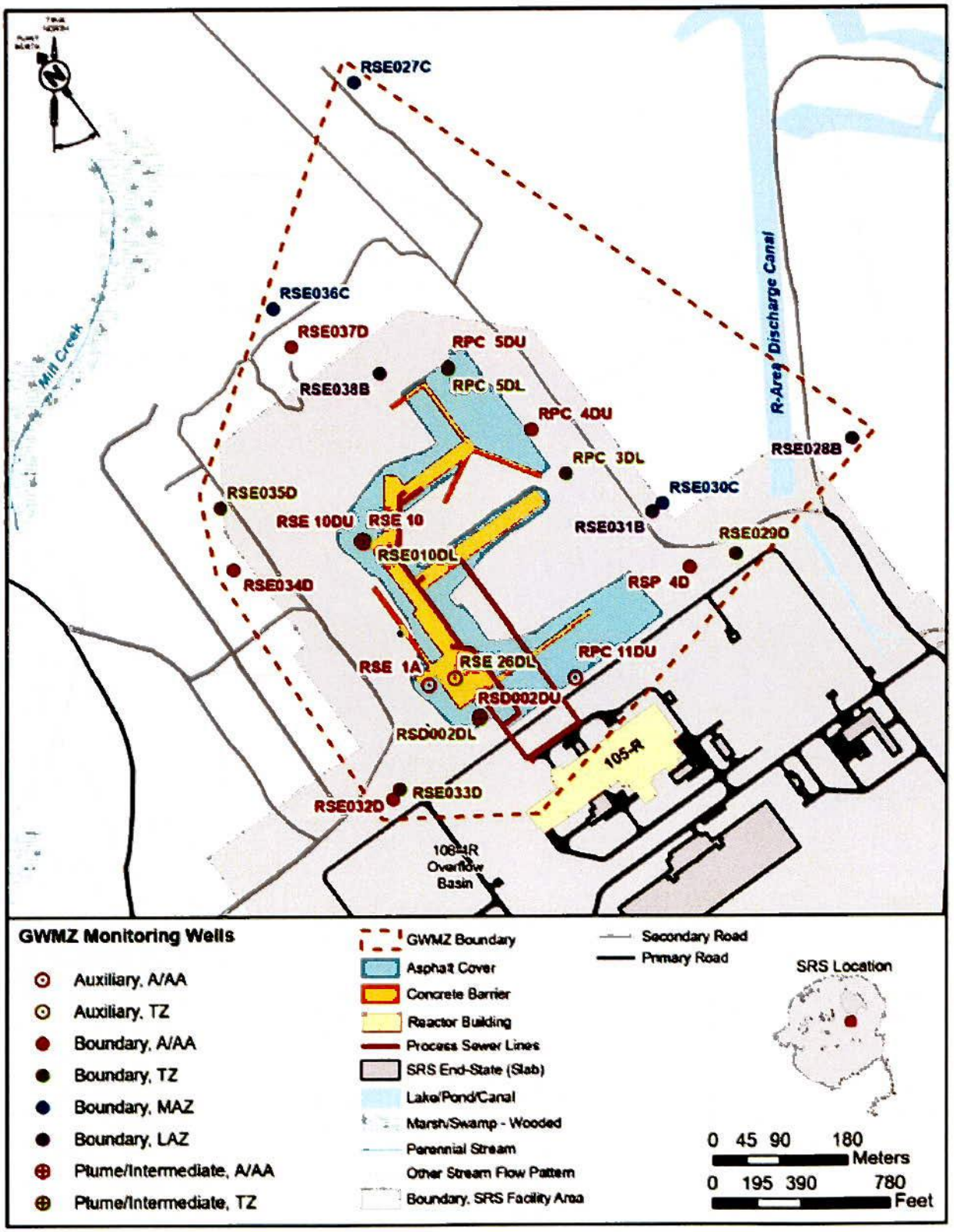


Figure 6. Groundwater Mixing Zone Boundary and Monitoring Well Network for RRSB OU

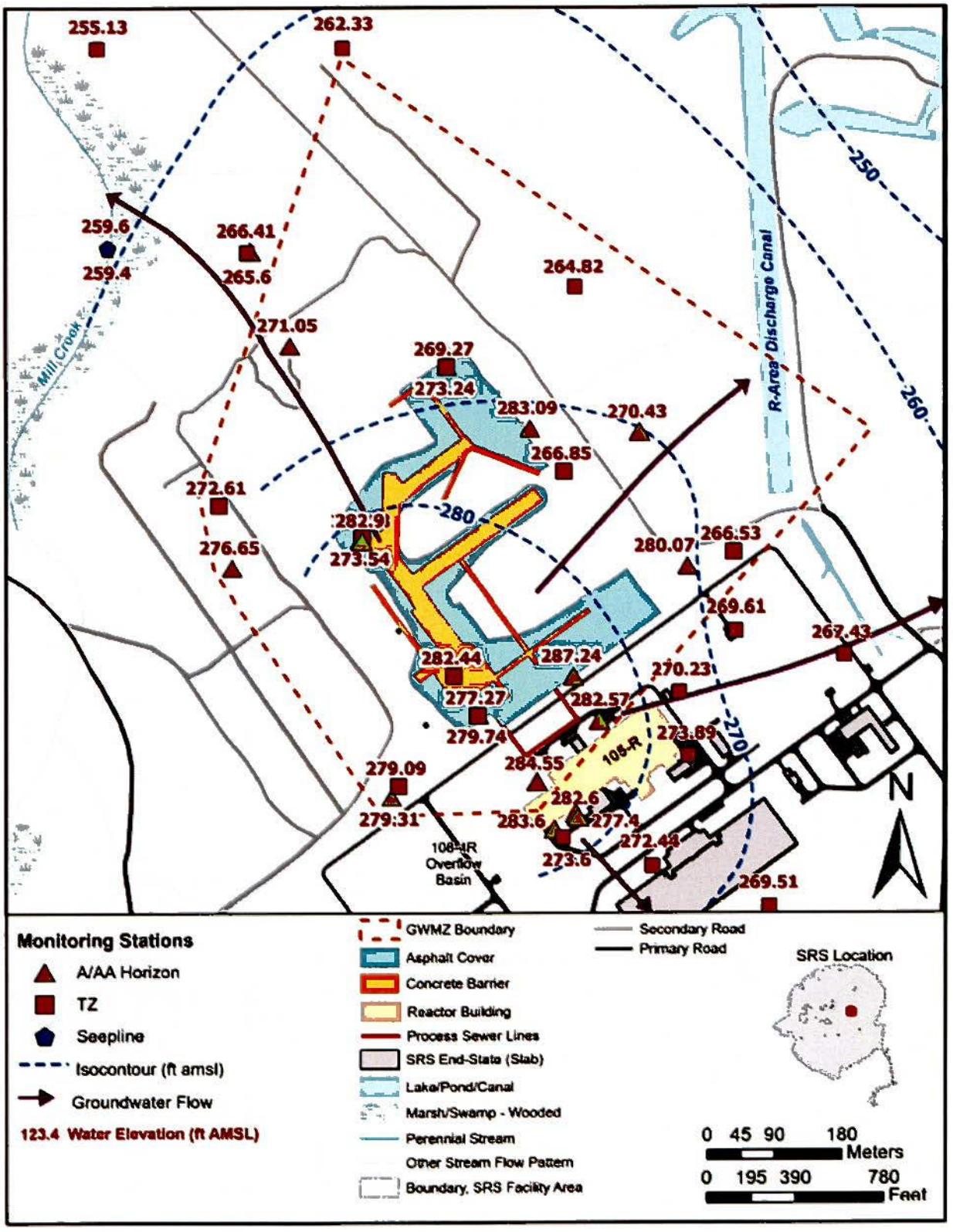


Figure 7. RRSB UAZ Potentiometric Surface Map, Fourth Quarter 2025

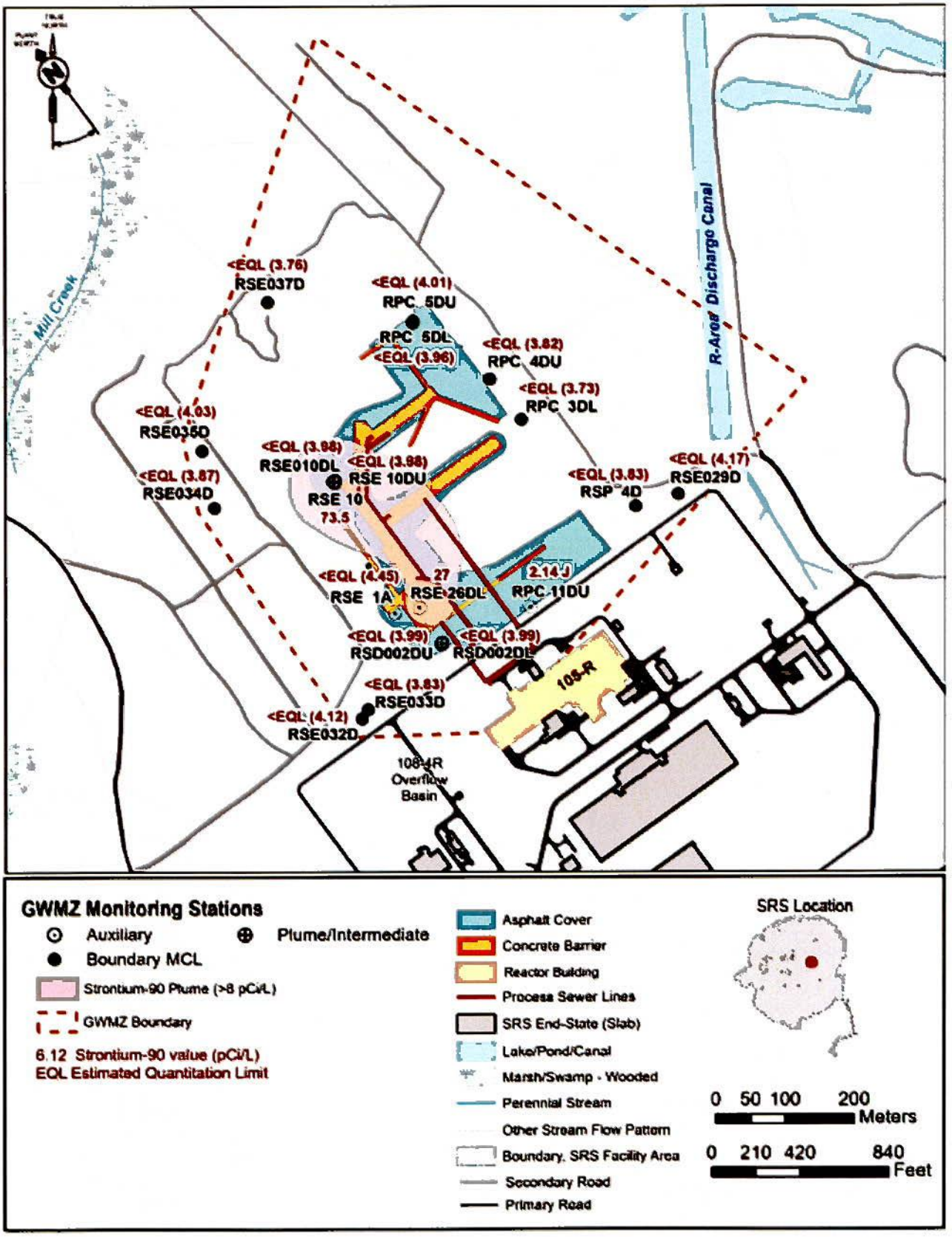


Figure 8. RRSB Contaminant Plume Map, Fourth Quarter 2025

Table 6. RRSB Mixing Zone Monitoring Results, Fourth Quarter 2025

2025 RRSB Monitoring Data			Field Data										R-Area Groundwater Compliance Monitoring Radionuclides
			SAMPLE COLLECTION DATE	PH	TURBIDITY	WATER TEMPERATURE	DEPTH TO WATER	SAMPLING EVENT WATER ELEVATION	VOLUME PURGED	SPECIFIC CONDUCTANCE	FIELD CONDITIONS	Constituent	STRONTIUM-89/90
			day-month-year	pH	NTU	degC	ft	ft	gal	uS/cm		Unit	pCi/L
												MZCL for RSE 10	2244
												MZCL for RSD002DU	1299
Station	Well Use	Aquifer Zone	Dates		15							MCL	8
RPC 11DU	Auxiliary	A_UAZ_UTRAU	28-Oct-2025	5.6	25	20.6	6.4	287.24	3	54	T		[F (4)]
RSE 1A	Auxiliary	A_UAZ_UTRAU	28-Oct-2025	5.1	10.4	24.1	19.82	284.38	1	38	No Comments		<EQL (4.45)
RSE 26DL	Auxiliary	TZ_UAZ_UTRAU	28-Oct-2025	4.8	0.7	22.3	25.76	282.44	2	33	No Comments		<EQL (3.97)
											FD		2
RPC 3DL	Boundary MCL	TZ_UAZ_UTRAU	28-Oct-2025	4.7	0.6	19	41.56	266.85	30	32	No Comments		<EQL (3.73)
											LD		<EQL (3.79)
RPC 4DU	Boundary MCL	A_UAZ_UTRAU	28-Oct-2025	4.7	6.3	19.9	19.2	283.09	1	36	No Comments		<EQL (3.82)
RPC 5DL	Boundary MCL	TZ_UAZ_UTRAU	28-Oct-2025	6.1	6.7	22.7	35.33	269.27	30	46	No Comments		<EQL (3.96)
RPC 5DU	Boundary MCL	A_UAZ_UTRAU	28-Oct-2025	5	1	23.1	31.36	273.24	18	32	No Comments		<EQL (4.01)
RSE027C	Boundary MCL	MAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS	NS	No Comments		NS
RSE028B	Boundary MCL	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS	NS	No Comments		NS
RSE029D	Boundary MCL	TZ_UAZ_UTRAU	28-Oct-2025	4.7	7.2	19.3	23.68	266.53	3	16	No Comments		<EQL (4.17)
RSE030C	Boundary MCL	MAZ_TC	NS	NS	NS	NS	NS	NS	NS	NS	No Comments		NS
RSE031B	Boundary MCL	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS	NS	No Comments		NS
RSE032D	Boundary MCL	A_UAZ_UTRAU	28-Oct-2025	4.5	0.6	19.2	22.62	279.31	3	27	No Comments		<EQL (4.12)
RSE033D	Boundary MCL	TZ_UAZ_UTRAU	28-Oct-2025	4.1	0.7	19.4	23.37	279.09	23	27	No Comments		<EQL (3.83)
RSE034D	Boundary MCL	A_UAZ_UTRAU	28-Oct-2025	4.4	0.3	19	28.79	276.65	3	24	No Comments		<EQL (3.87)
RSE035D	Boundary MCL	TZ_UAZ_UTRAU	28-Oct-2025	4.9	1.1	18.9	35.11	272.61	3	19	No Comments		<EQL (4.03)
RSE036C	Boundary MCL	MAZ_TC	NS	NS	NS	NS	NS	NS	NS	NS	No Comments		NS
RSE037D	Boundary MCL	A_UAZ_UTRAU	28-Oct-2025	4.7	1.5	18.1	22.33	271.05	2	31	No Comments		<EQL (3.76)
RSE038B	Boundary MCL	LAZ_UTRAU	NS	NS	NS	NS	NS	NS	NS	NS	No Comments		NS
RSP 4D	Boundary MCL	A_UAZ_UTRAU	28-Oct-2025	4.4	2.9	21.5	20.55	280.07	6	29	No Comments		<EQL (3.83)
RSD002DL	Plume/Intermediate	TZ_UAZ_UTRAU	28-Oct-2025	5	3.1	20.7	27.7	277.27	2	26	No Comments		<EQL (3.99)
RSD002DU	Plume/Intermediate	A_UAZ_UTRAU	28-Oct-2025	4.6	12.7	21.8	25.23	279.74	2	43	No Comments		<EQL (3.99)
RSE 10	Plume/Intermediate	A_UAZ_UTRAU	28-Oct-2025	5.4	0.7	24.1	22.55	284.54	1	116	No Comments		73.5
RSE 10DU	Plume/Intermediate	A_UAZ_UTRAU	28-Oct-2025	4.8	9.1	21.8	24.6	282.9	2	58	X		<EQL (3.98)
RSE010DL	Plume/Intermediate	TZ_UAZ_UTRAU	28-Oct-2025	5.1	1.8	21.3	33.65	273.54	2	19	No Comments		<EQL (3.98)

Explanation

	EPA Functional Guideline Code of 'J' was applied to the result, indicating an estimated quantity.
<EQL(##)	Constituent was below detection. The sample-specific Estimated Quantitation Limit is in parentheses
	Result exceeds applicable limit.
	For wells with MZCLs, result exceeds MCL but is below applicable MZCL
REJ	Result Rejected
	Result is less than the applicable limit and without EPA Functional Guidline qualifiers
NS	Requested to be sampled but was not. See comments as to why not.
Blue Text	Not a required sample analysis
FD	Field duplicate
LD	Laboratory duplicate
T	Excessive turbidity
X	Well purged dry during sampling but sampled after recovery