



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

September 29, 2025

Ms. Susan Fulmer, P. G., Manager  
Federal Facility Agreement 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:** 5-Year Monitoring Report (Data Summary Letter) for the K-Area Groundwater Operable Unit, 2021 through 2025, SEMS Number: 99

**Reference:** Letter, B. T. Hennessey (DOE) to S. B. Fulmer (SCDES) and R. H. Pope (EPA), *Pre-Workplan Characterization Data Reporting for the K-Area Groundwater Operable Unit (OU) (Including K-Area Tritium Anomaly) (NBN) CERCLIS Number: 99 (IACD-15-144, dated May 14, 2015)*

Per the referenced letter, the U. S. Department of Energy (DOE) is submitting the groundwater monitoring report (sampling summary) for your review. Per the referenced letter, sampling results will be presented in five (5) year data summary letter reports. This is the second data summary letter report to be submitted since the sampling summary was implemented. This letter is transmitting the *5-Year Monitoring Report (Data Summary Letter) for the K-Area Groundwater Operable Unit, 2021 through 2025*.

Please review the information and provide any comments that you may have 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.

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Questions from you or your staff may be directed to me at (803) 952-6211, or the DOE Program Manager, April Coffman, at (803) 508-0490.

Sincerely,

**MATTHEW  
BAKER**

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MATTHEW BAKER  
Date: 2025.09.25 15:46:08  
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Matthew R. Baker

Acting FFA Remedial Project Manager  
DOE-Savannah River Operations Office

Remediation, Deactivation, and Decommissioning Division

RDDD-25-166

Enclosure:

Attachment 1. KAGW 5-Year Data Table 2021 through 2025

cc w/o encl:

M. Reece, SCDES-Columbia

H. J. Porter, SCDES-Columbia

J. Blalock, SCDES-Columbia

S. French, SCDES-Columbia

R. G. Stewart, SCDES-Columbia

M. Mehta, SCDES-Columbia

G. O'Quinn, SCDES-Midlands Aiken Environmental Affairs Office

T. G. Corley, SCDES-Midlands Aiken Environmental Affairs Office

C. L. Robertson, SCDES-Midlands Aiken Environmental Affairs Office

E. G. Downing, SCDES-Midlands Aiken Environmental Affairs Office

H. L. Herlong, SCDES-Midlands Aiken Environmental Affairs Office

cc w/encl:

H. H. Cathcart, SCDES-Columbia

M. McRae, TechLaw, Inc.

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## **5-Year Monitoring Report (Data Summary Letter) for the K-Area Groundwater Operable Unit, 2021 through 2025**

### **Introduction**

A webcast meeting was held on April 22, 2015 between the United States Department of Energy (USDOE), the United States Environmental Protection Agency (USEPA), and the South Carolina Department of Environmental Services (SCDES)<sup>1</sup> to discuss the current groundwater conditions and to develop a path forward for the K-Area Groundwater Operable Unit (Including K-Area Tritium Anomaly) (KAGW OU) (*K-Area Groundwater Data Review* [ERD-EN-2015-0016, April 22, 2015]). Groundwater and surface water data and historical events and investigations with respect to the KAGW OU were discussed.

As of the date of this letter, the Federal Facility Agreement Work Plan Characterization Field Start date for the KAGW OU is September 2042. All parties agreed that pre-work plan characterization data would be beneficial in advance of the remedial investigation and final remedial decision to document contaminant conditions and trends. USDOE, USEPA, and SCDES agreed that annual sampling of a subset of monitoring wells (six) and surface water stations (seven) would provide long-term trend data to support further characterization efforts and to allow for monitoring of the known tritium and volatile organic compound (VOC) plumes. The sampling summary provided at the April 2015 meeting identifies the requirements of the KAGW OU monitoring (*K-Area Groundwater Operable Unit Sampling Summary* [ERD-EN-2015-0021, Revision 0, May 2015]). Groundwater and surface water samples are collected annually and the data provided in five (5) year data summary letter reports. Table 1 lists the required monitoring wells and surface water stations that are sampled annually and the constituents monitored. The first 5-year data summary letter report for the KAGW OU discussed the data for the period of 2016 through 2020 (IACD-20-182, dated September 29, 2020) and was approved by the USEPA and SCDES on May 17, 2021. This letter report is the second 5-year data summary letter report to be submitted for the KAGW OU. This data summary letter discusses the data for the period of 2021 through 2025.

### **KAGW History**

The KAGW OU is located in the Pen Branch watershed in the southwestern portion of the Savannah River Site (SRS). Groundwater from K Area discharges westward to Indian Grave Branch, a major tributary to Pen Branch.

K-Reactor achieved criticality in October 1954 and was put into stand-by status in 1988 while testing and upgrade activities were performed. K-Reactor was temporarily restarted in 1992 and only operated at low power for a short time. Based on historical monitoring data, it is known that groundwater and surface water in Indian Grave Branch and Pen Branch is contaminated with tritium. The K-Area Reactor Complex is the only source of tritium contamination to the Pen Branch stream system. Other radiological constituents have not been detected at elevated levels. Historically, a few wells have shown detections of

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<sup>1</sup> South Carolina Department of Environmental Services (SCDES) was known as South Carolina Department of Health and Environmental Control (SCDHEC) prior to July 1, 2024.

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VOCs, specifically trichloroethylene (TCE) and tetrachloroethylene (PCE), above maximum contaminant levels (MCLs). Over the operational period, tritiated water from the K-Area Reactor Complex was discharged to the K-Area Reactor Discharge Canal, the K-Area Reactor Seepage Basin (904-65G), and the K-Area Containment Basin (904-88G). Other potential tritium sources include the 105-K Reactor Building, including the K-Area Disassembly Basin, and associated process sewer lines, potential leaks from the 106-K Process Water Storage Tank, and two known leaks around the tritium distillation columns. The potential contaminant sources to groundwater are identified on Figure 1 and depict two distinct tritium plumes, one originating from the K-Area Containment Basin (904-88G), and the other from the K-Area Reactor Complex.

### **KAGW OU Monitoring Results**

A field measurement and analytical data table is provided in Attachment 1. The results are summarized below. A tritium plume map is provided in Figure 1. Data quality objectives were not specified for the KAGW OU pre-work plan characterization monitoring and default to standard verified and unvalidated (VU) criteria. Data from 2021 through 2024 was VU. Validation is the process of examining laboratory data and associated records to determine sufficient accuracy, while verification is the process of examining laboratory data and associated records to determine conformance to states requirements. Although not required, data in 2025 was verified and validated (VV) and included collection of three field duplicates and two split samples.

### **KAGW OU Tritium Results**

#### **Monitoring Well Tritium Results**

The laboratory analysis methods used for detecting tritium was EPA L3.21-10026. Tritium is monitored in five monitoring wells surrounding and downgradient of the K-Area Disassembly Basin (KDB 1, KDB 2, KDB 3, KDB 4, and KDB 5). Over the last five years, the majority of the tritium results were either non-detect or at levels below the MCL (20 picocuries per milliliter [pCi/mL]) in wells KDB 1, KDB 3, KDB 4, and KDB 5. Well KDB 2 displayed tritium contamination above the MCL but has historically shown a steadily decreasing trend with concentrations of 446 pCi/mL in 2016 to 92.6 pCi/mL in 2020. KDB 2 displayed a rise in tritium concentrations in 2022 to 190 pCi/mL, but levels decreased to concentrations of 97.4 pCi/mL (92.5 pCi/mL for the field duplicate sample) in 2025. Time trend plots of tritium concentrations at the KDB series wells can be seen in Figures 2, 3, and 4.

Well KRB 19D monitors tritium in groundwater directly downgradient of the K-Area Containment Basin (904-88G). Historically, this well displayed high concentrations of tritium (>90,000 pCi/mL) but has exhibited a steadily decreasing trend due to the cessation of tritiated discharges to the basin. However, concentrations remain elevated above the MCL of 20 pCi/mL. Due to an anomalous tritium concentration result from the sampling event in the first quarter of 2023, sampling was repeated in the third quarter of 2023. The result from this second sampling event (616 pCi/mL) was found to be more consistent with the overall trend than that in the first quarter. Tritium concentrations were detected at 816 pCi/mL in well KRB 19D in 2025 (Figure 4).

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### Surface Water Tritium Results

All seven surface water stations, located along Indian Grave Branch (KSW-01, KSW-05, KSW-06, KSW-07, and KSW-16) and Pen Branch (KSW-17 and KSW-18), are monitored annually for tritium. These results are indicators of the tritium transport in groundwater which discharges to surface water in Indian Grave Branch. Upgradient surface water location KSW-01 continues to show low estimated concentrations or is non-detect for tritium (Figure 5).

Surface water stations KSW-05 and KSW-06 monitor where the K-Area Containment Basin (904-88G) tritium plume discharges to Indian Grave Branch. Tritium concentrations at KSW-05 were relatively stable but have displayed a slightly increasing trend over the last 5 years (Figure 5). However, downgradient surface water station KSW-06 displays a decreasing trend which indicates that the impact of tritium from the K-Area Containment Basin (904-88G) on Indian Grave Branch may be decreasing overall.

Surface water station KSW-07 monitors surface water downgradient where the K-Area Containment Basin (904-88G) discharges into Indian Grave Branch and upgradient of the K-Area Reactor Complex tritium plume. In 2025, the tritium concentration at surface water station KSW-07 (26.3 pCi/mL) was approximately half of the tritium concentration observed at station KSW-06 (50.6 pCi/mL) (Figures 1 and 6). Downgradient surface water station KSW-16 captures discharges from the K-Area Reactor Complex tritium plume and the surface water discharges from minor tributaries which have previously shown higher tritium concentrations than Indian Grave Branch. The tritium concentration at KSW-16 during 2025 was 37.4 pCi/mL. The tritium concentrations at this surface water station show an overall decreasing trend, indicating the impact of the K-Area Reactor Complex tritium plume on Indian Grave Branch is also decreasing.

The two surface water stations located in Pen Branch after the confluence of Indian Grave Branch (KSW-17 and KSW-18) (Figure 1) display decreasing tritium concentrations (Figures 7 and 8). Concentrations in the furthest downgradient surface water station, KSW-18 (5.87 pCi/mL [5.28 pCi/mL for the field duplicate sample]), are lower than in the upgradient surface water station, KSW-17 (8.06 pCi/mL [7.81 pCi/mL for the field duplicate sample]). Both locations have been below the MCL since 2015.

### Tritium Flux Calculations

Stream flow measurements are also collected annually during sampling at surface water stations KSW-07, KSW-17, and KSW-18. This annual measurement is used to estimate the mass flux of tritium being discharged to Indian Grave Branch from both the K-Area Containment Basin (904-88G) plume and the K-Area Reactor Complex plume, which subsequently converges with Pen Branch. Surface water stations KSW-17 and KSW-18 are used for the measurement of the K-Area Reactor Complex plume instead of KSW-16 due to uncertainty of KSW-16's placement completely capturing that plume's contribution to the stream system. An estimate of the yearly tritium stream flux is calculated as follows:

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$$\text{Stream Flow} \frac{\text{ft}^3}{\text{sec}} \times 28316.8 \frac{\text{mL}}{\text{ft}^3} \times 31,557,600 \frac{\text{sec}}{\text{year}} \times \text{Surface Water Concentration} \frac{\text{pCi}}{\text{mL}} \times 10^{-12}$$

$$= \text{Tritium Stream Flux} \frac{\text{Ci}}{\text{year}}$$

Station KSW-06 did not have a stream flow measurement during 2025 due to a fallen tree laying in the stream. Because of this, the stream flow rate and tritium concentration from surface water station KSW-07 was used for the 2025 data point in Table 2. KSW-07 is located north of the majority of the K-Area Reactor Complex tritium plume, so it can alternately be used instead of KSW-06. Table 2 presents the tritium flux calculations for the streams on an annual basis. Based on the placement of the surface water stations upgradient and downgradient of the two tritium plumes, estimates on the flux from both plumes have been calculated.

Based on the calculations shown in Table 2, the K-Area Reactor Complex tritium plume contributed more tritium than the Containment Basin plume in 4 of the past 5 years. In 2021, the stream flow at surface water (SW) station KSW-17 was elevated above normal levels (22.91 cubic feet per second [ft<sup>3</sup>/s] compared to 7.28 ft<sup>3</sup>/s in 2022), leading to the anomalously high stream flux in 2021 at that station. This value should be considered suspect and biased high, as the flow rate exceeded that measured at KSW-18, which is downgradient and should have the higher flow as the section of Pen Branch between KSW-17 and KSW-18 is gaining. The Containment Basin appeared to contribute more tritium to the stream system in 2022 due to an elevated tritium concentration at station KSW-06 (98.2 pCi/mL). Due to variable stream flow rates, the K-Area tritium fluxes have significant uncertainty; but tritium concentrations indicate a decreasing trend at stations KSW-17 and KSW-18 over the past five years.

### **KAGW VOC Results**

The laboratory analysis methods used for detecting VOCs was EPA 8260D. VOCs (TCE, PCE, cis-1,2-dichloroethylene, and vinyl chloride) are sampled annually at monitoring wells KDB 1 and KDB 2 and at surface water station KSW-16. Only monitoring well KDB 1 displays PCE concentrations slightly above the groundwater MCL of 5 micrograms per liter (µg/L) with a concentration of 5.04 µg/L during 2025. VOC concentrations at KDB 1 display an overall decreasing trend (Figure 8). TCE was non-detect for the past five years at KDB 1. Groundwater concentrations at monitoring well KDB 2 show detections of both PCE and TCE, but at levels below the 5 µg/L MCL and display decreasing trends (Figure 9). Degradation products cis-1,2-dichloroethylene and vinyl chloride were not detected in any groundwater samples. Additionally, no VOCs were detected at surface water station KSW-16 over the last 5-year period (Figure 10).

### **Summary and Future Sampling and Reporting**

Groundwater and surface water tritium concentrations indicate an overall decreasing trend from the two combined sources in K-Area, the K-Area Containment Basin (904-88G) and the K-Area Reactor Complex. Variability in flux calculation results do not support determination of a trend over the five year reporting period. Only one well, KDB 1, shows an exceedance of VOCs (PCE) above MCLs in groundwater; however, PCE concentrations at KDB 1 are decreasing. VOCs are not detected in

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surface water. The data indicates that it is highly unlikely that there are continuing sources of contaminants to groundwater.

No changes are proposed for the sampling and analysis for KAGW OU. Monitoring and reporting will continue per the *K-Area Groundwater Operable Unit Sampling Summary* (ERD-EN-2015-0021, Revision 0, May 2015). The next groundwater summary letter report will be submitted by September 30, 2030. As stated in the Sampling Summary conditions, USDOE, USEPA, and SCDES will be notified if any of the following conditions occur:

- >25% increase in concentration of tritium at surface water sample locations KSW-17 and KSW-18 over a two-year period;
- >50% increase in concentration of tritium at all other sample locations over a two-year period;  
or
- Exceedance of any VOC MCL in surface water.

None of the Sampling Summary conditions for the KAGW OU were exceeded in the 5-year monitoring period (2021 through 2025) reported in this Data Summary Letter.

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**Table 1: KAGW OU Pre-Work Plan Characterization Required Monitoring Stations and Analyses**

Station	Station Type	UTM NAD 27 (Zone 17)		Total Depth (ft)	Screen Depths (ft)		Analyses		Stream Flow Measurements
		Easting	Northing		Top	Bottom	Tritium	VOCs	
KDB 1	Monitoring Well	437993.40	3674714.78	91.0	65.0	86.0	X	X	
KDB 2	Monitoring Well	437973.63	3674646.42	95.0	61.7	88.1	X	X	
KDB 3	Monitoring Well	432031.36	3674645.96	93.0	65.1	86.3	X		
KDB 4	Monitoring Well	437972.69	3674600.54	87.2	61.8	81.8	X		
KDB 5	Monitoring Well	437896.33	3674644.76	85.0	59.9	79.9	X		
KRB 19D	Monitoring Well	437657.94	3675062.46	94.9	73.0	93.0	X		
KSW-01	Surface Water	437619.36	3675394.90				X		
KSW-05	Surface Water	437202.50	3675129.99				X		
KSW-06	Surface Water	437034.98	3674820.02				X		X
KSW-07	Surface Water	436911.44	3674435.281				X		
KSW-16	Surface Water	437057.55	3673880.22				X	X	
KSW-17	Surface Water	437772.86	3671710.99				X		X
KSW-18	Surface Water	436029.40	3669064.80				X		X

UTM - Universal Transverse Mercator

NAD - North American Datum

VOCs include trichloroethylene (TCE), perchloroethylene (PCE), cis-1,2-dichloroethane (DCE), and Vinyl Chloride

Reference point for depths is the existing ground surface at each location

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**Table 2: Tritium Stream Flux Calculations (Ci/year)**

Station	Containment Basin Plume Contribution (Indian Branch SW Station)	Pen Branch SW Stations		Reactor Area Plume Contribution <sup>1</sup>
	KSW-06	KSW-17	KSW-18	
2021	76.66	179.75	99.05	103.09
2022	78.10	70.26	63.58	-7.84
2023	19.08	70.07	102.01	50.99
2024	35.28	76.88	82.08	41.60
2025	33.54 <sup>A</sup>	75.19	29.21	41.65 <sup>A</sup>

NA – Not available

<sup>1</sup> Reactor Area plume contribution = difference between KSW-06 and KSW-17

<sup>A</sup> The stream flow rate and tritium concentration for the Containment Basin Plume Contribution in 2025 are derived from surface water station KSW-07.

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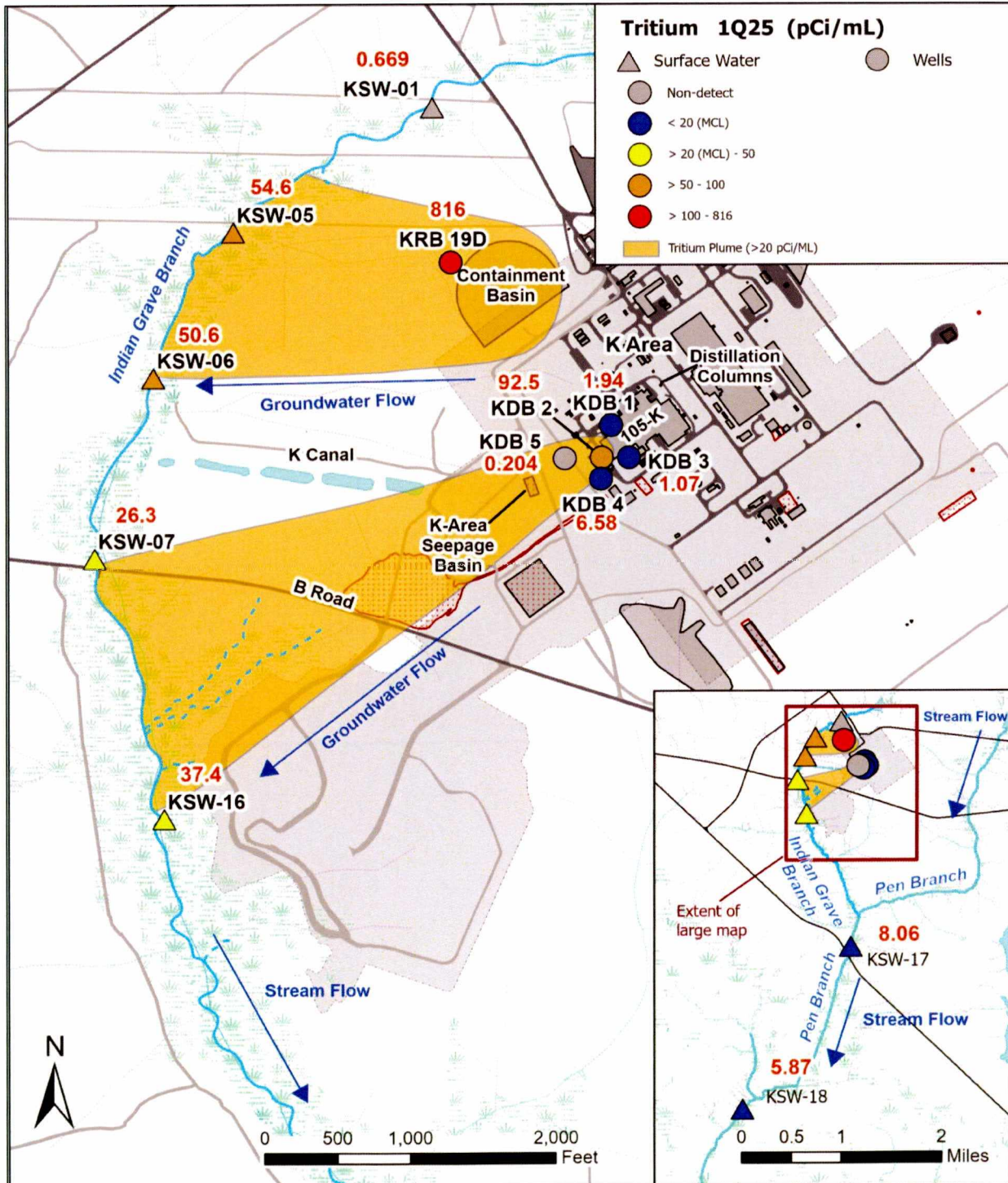


Figure 1: 1Q2025 Tritium Plume and Concentrations at KAGW OU

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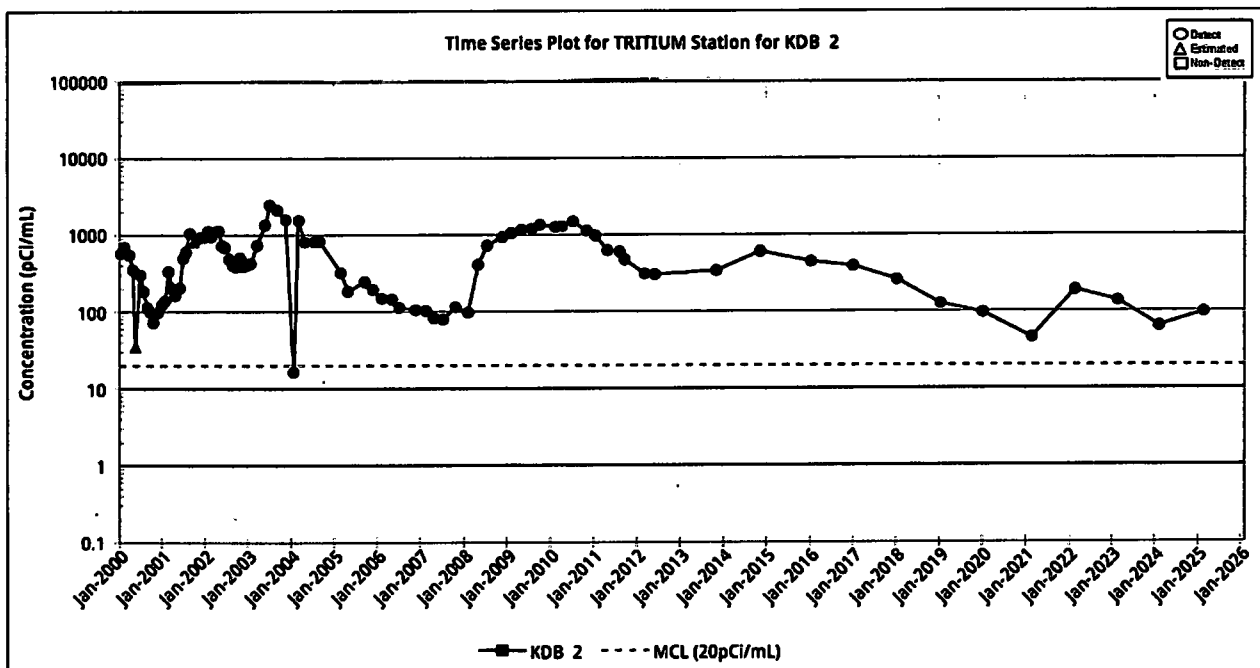
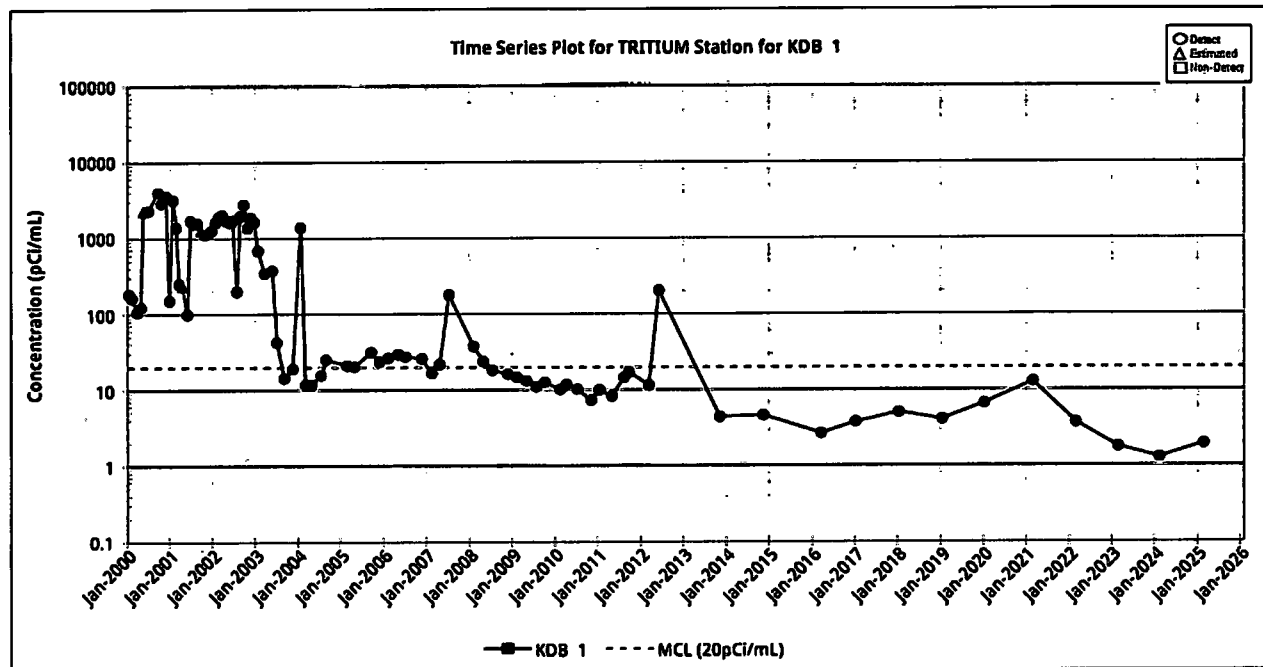


Figure 2: Tritium Concentration Trends at Wells KDB 1 and KDB 2

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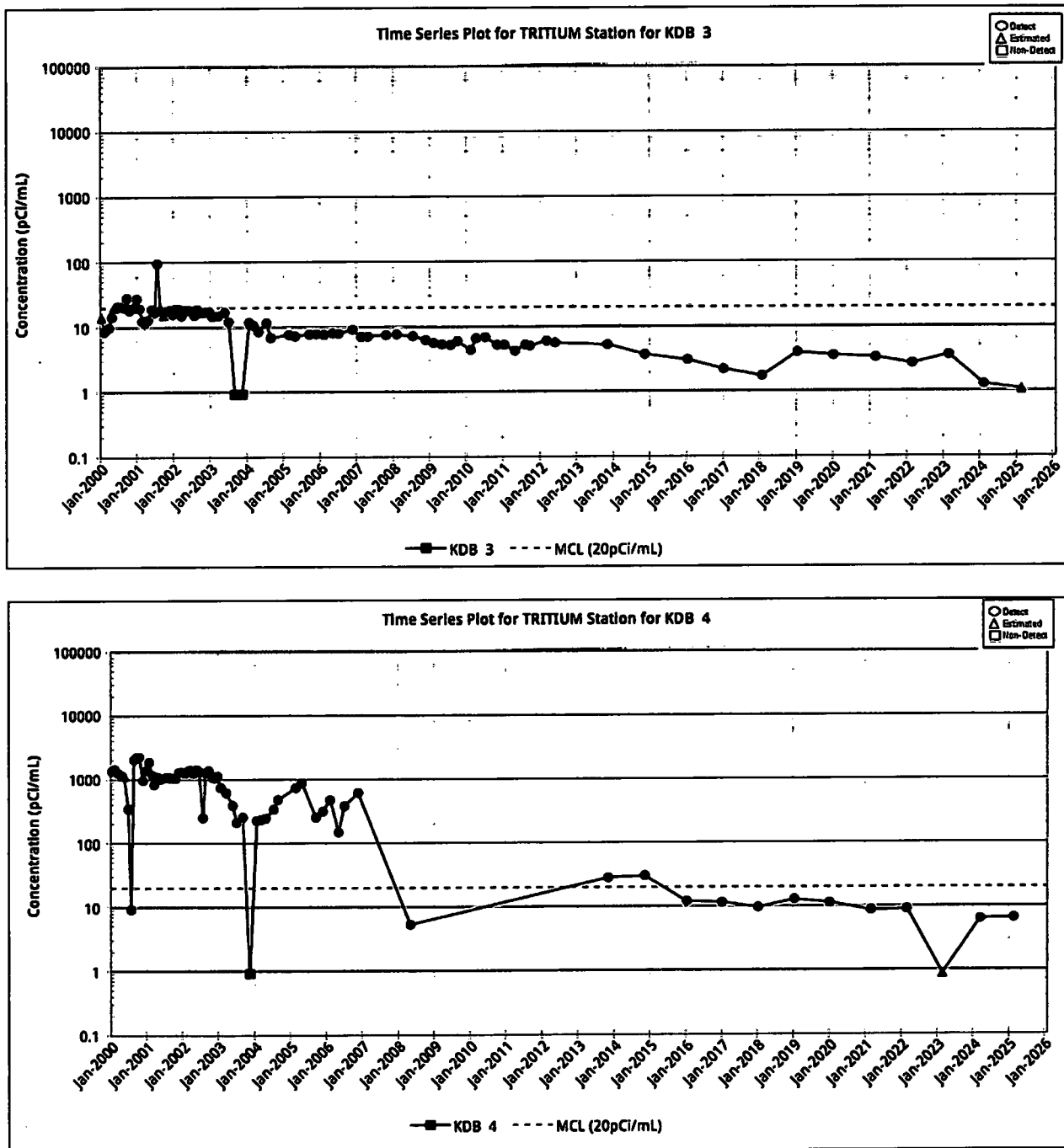


Figure 3: Tritium Concentration Trends at Wells KDB 3 and KDB 4

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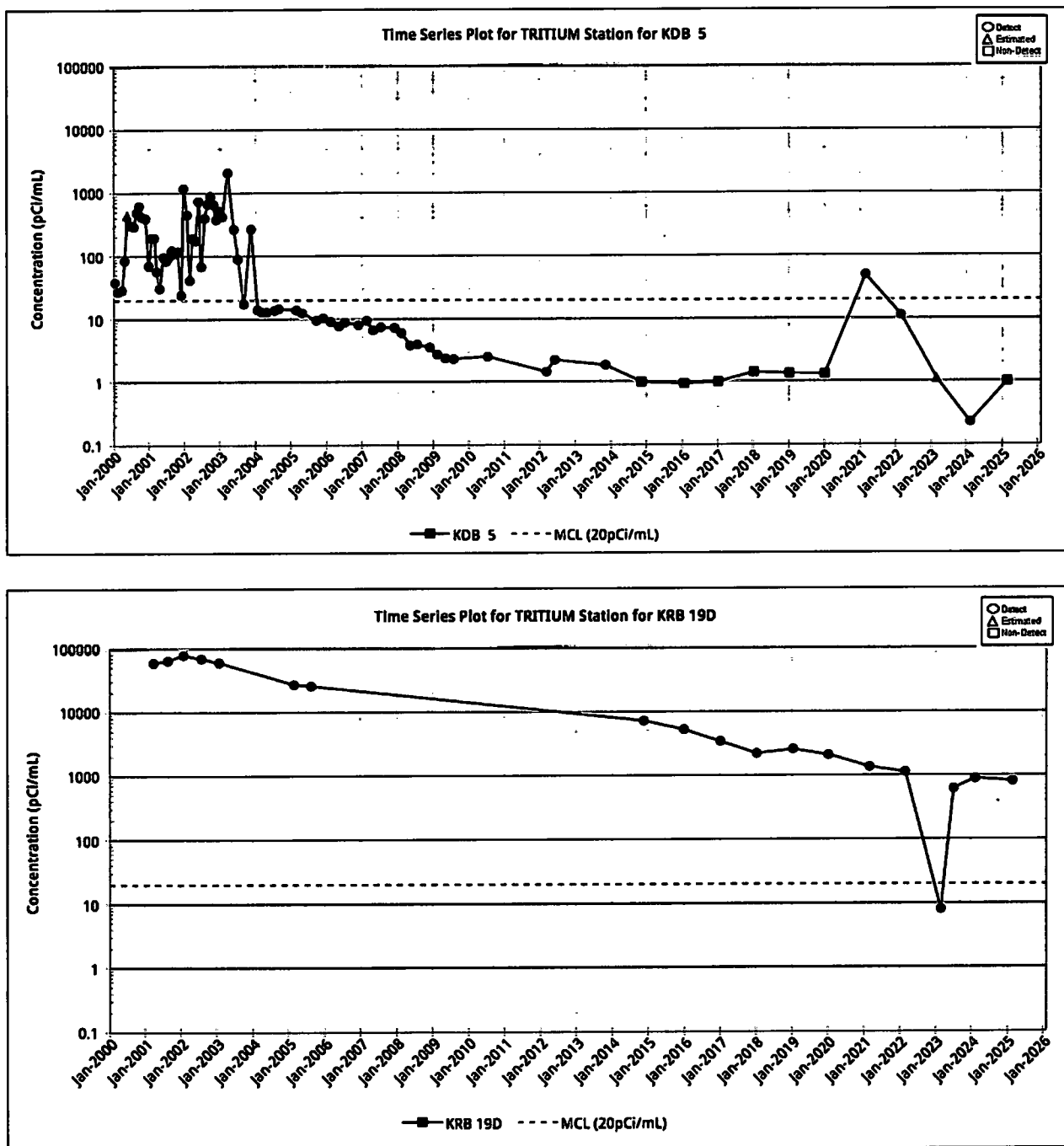


Figure 4: Tritium Concentration Trends at Wells KDB 5 and KRB 19D

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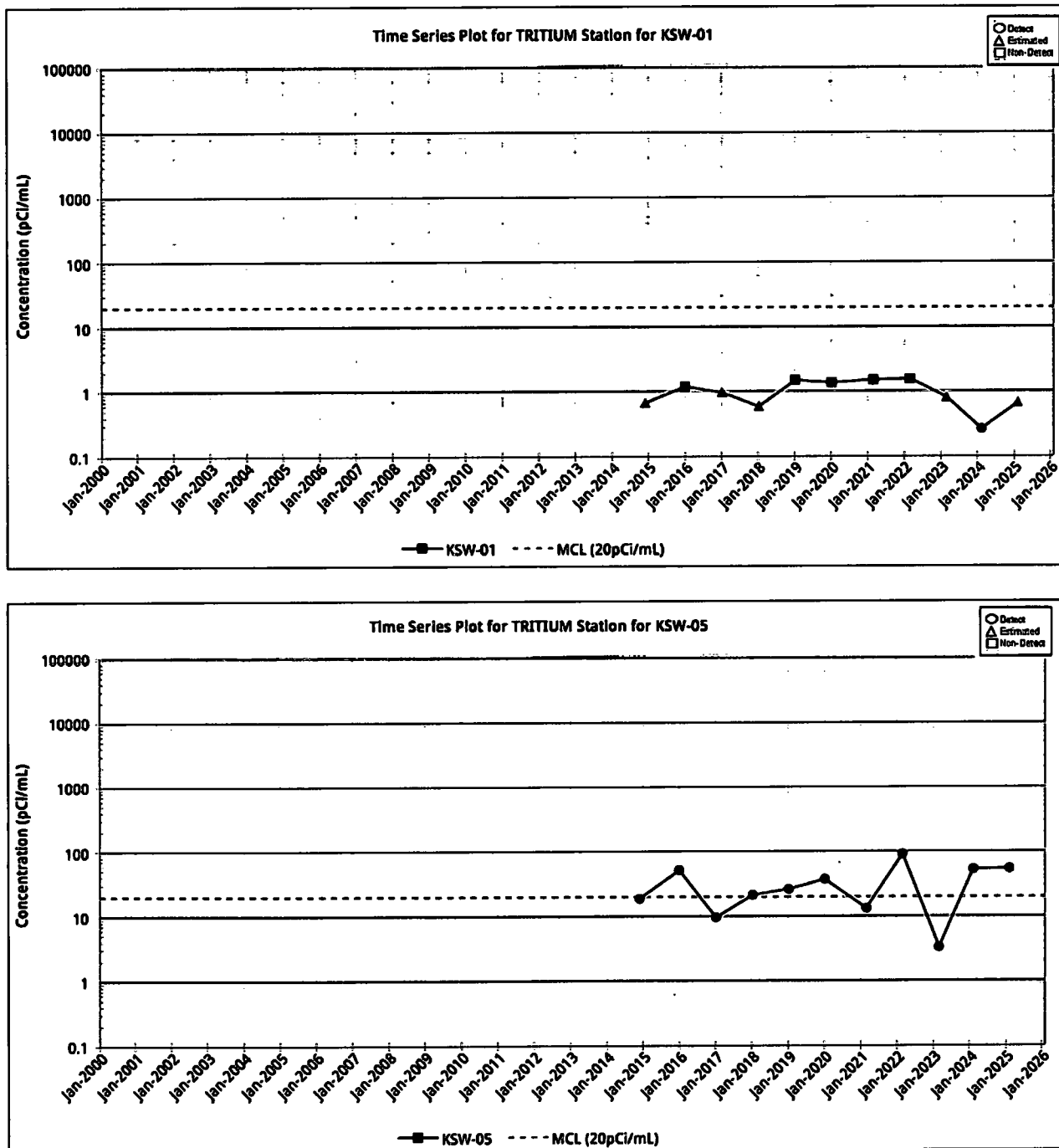
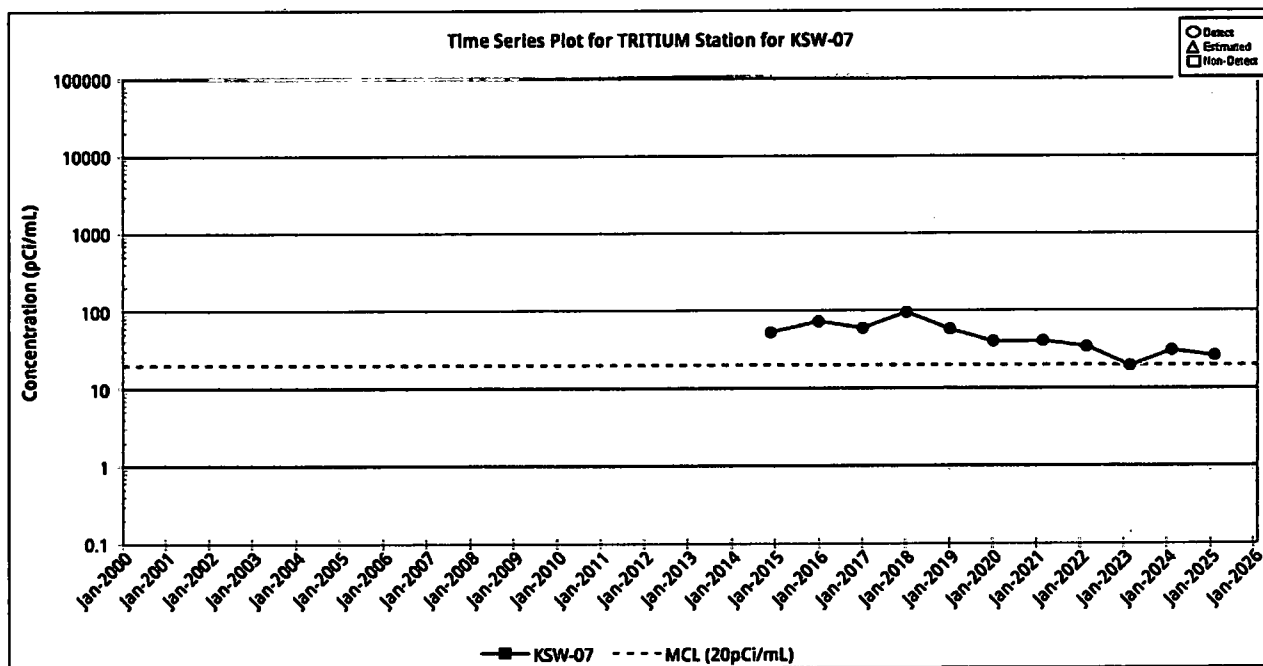
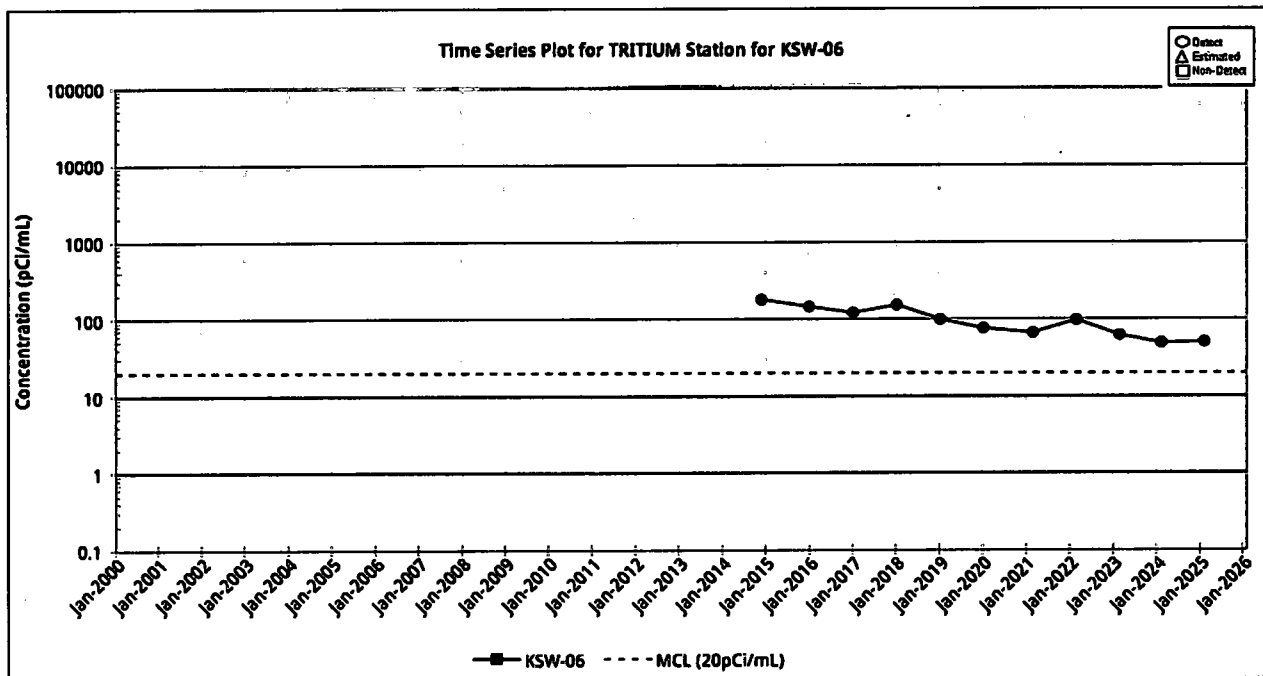


Figure 5: Tritium Concentration Trends at Surface Water Stations KSW-01 and KSW-05

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**Figure 6: Tritium Concentration Trends at Surface Water Stations KSW-06 and KSW-07**

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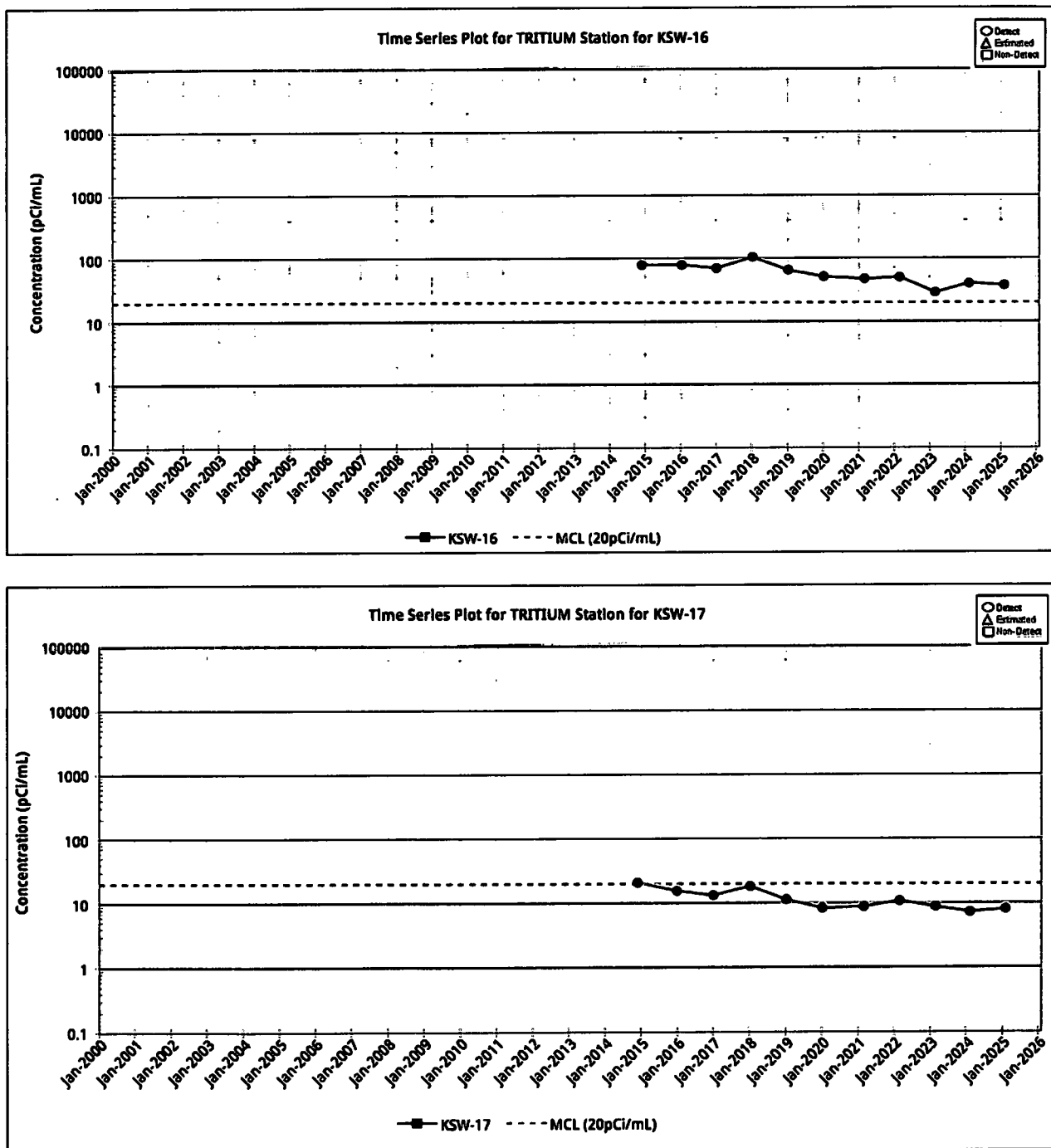
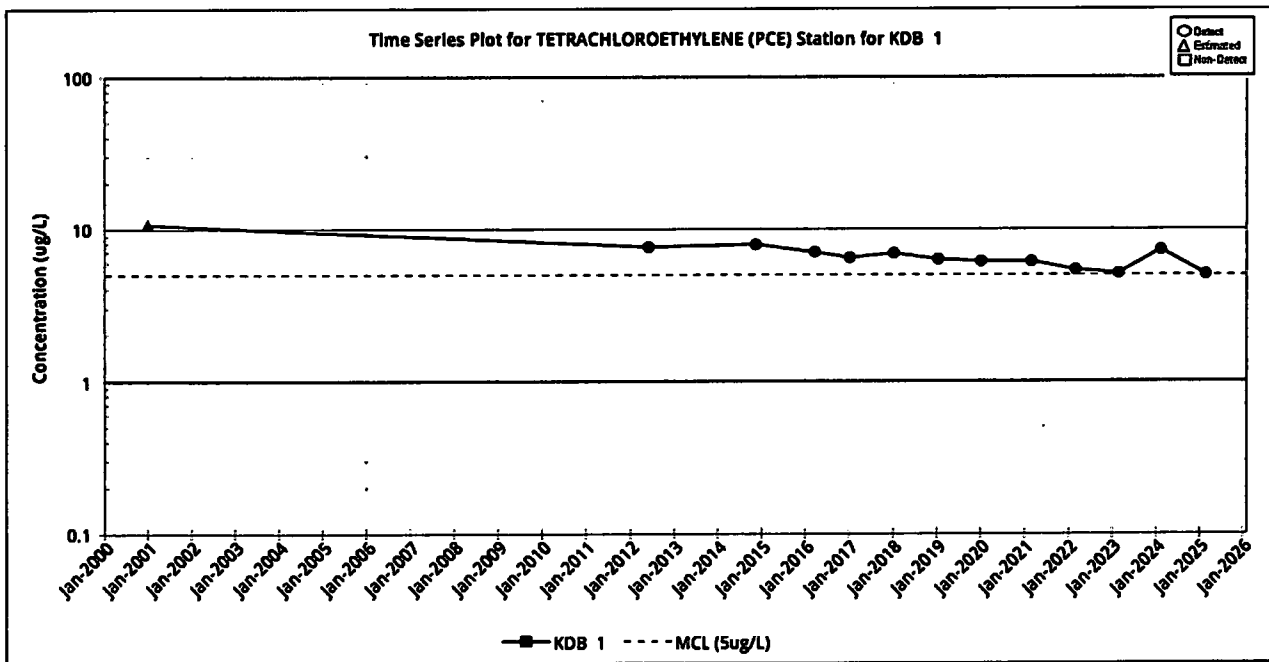
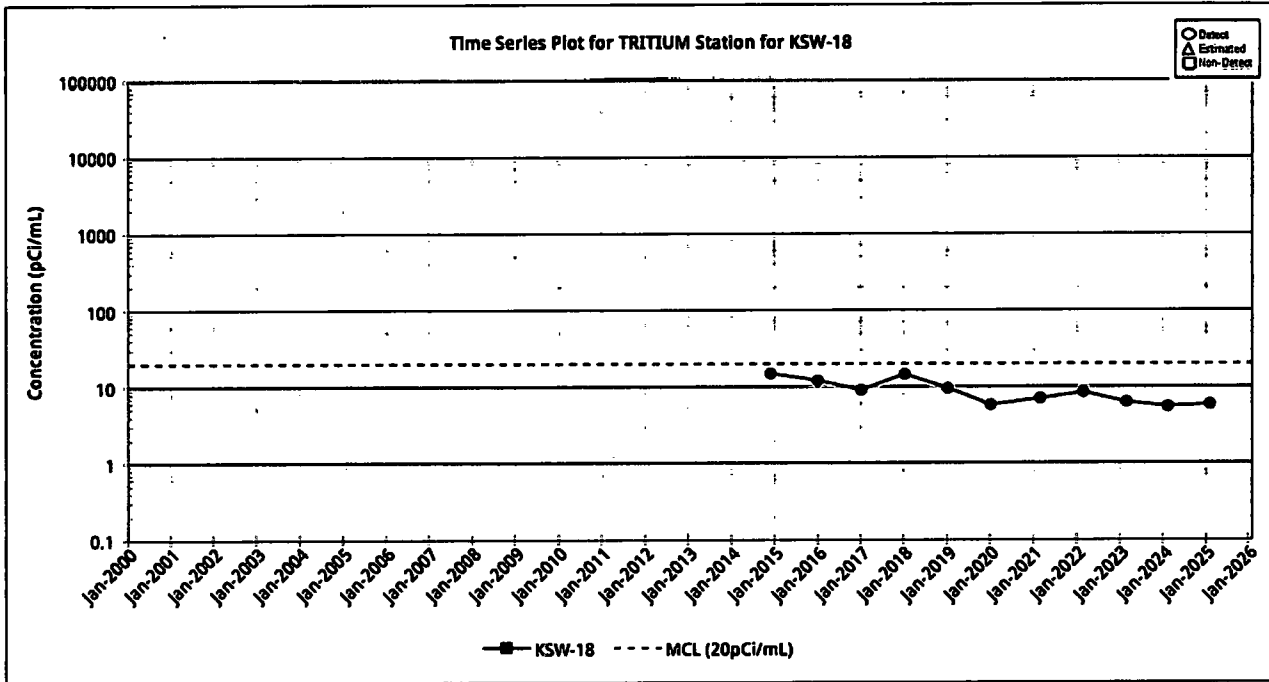


Figure 7: Tritium Concentration Trends at Surface Water Stations KSW-16 and KSW-17

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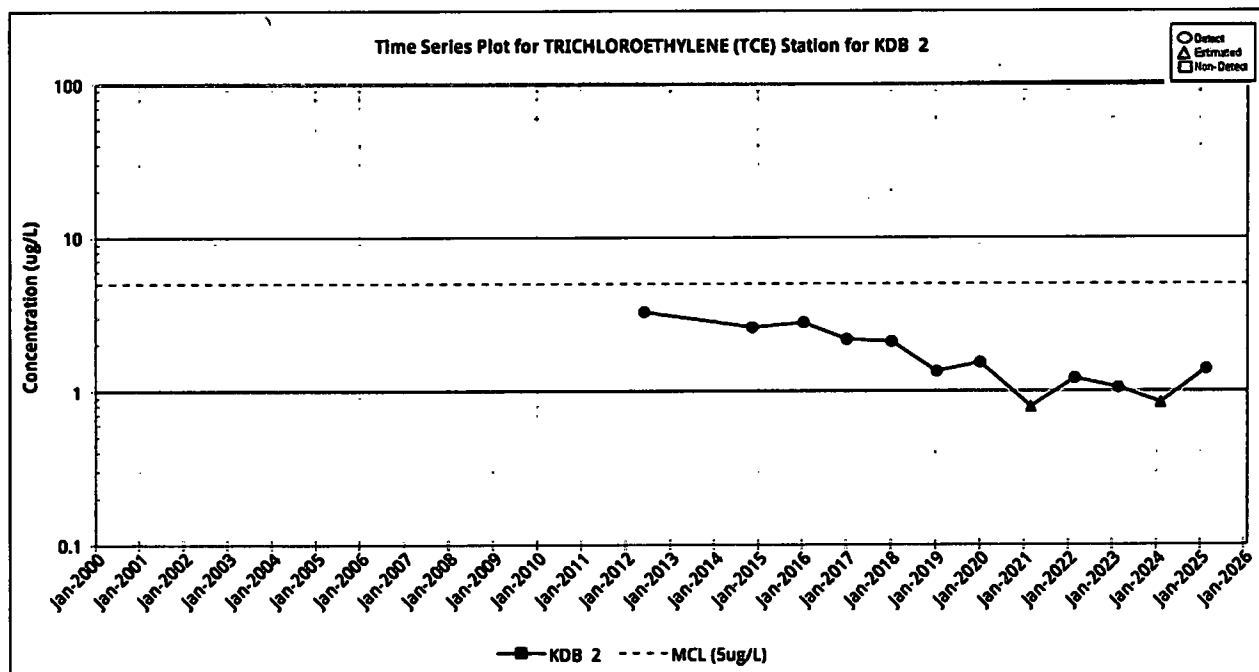
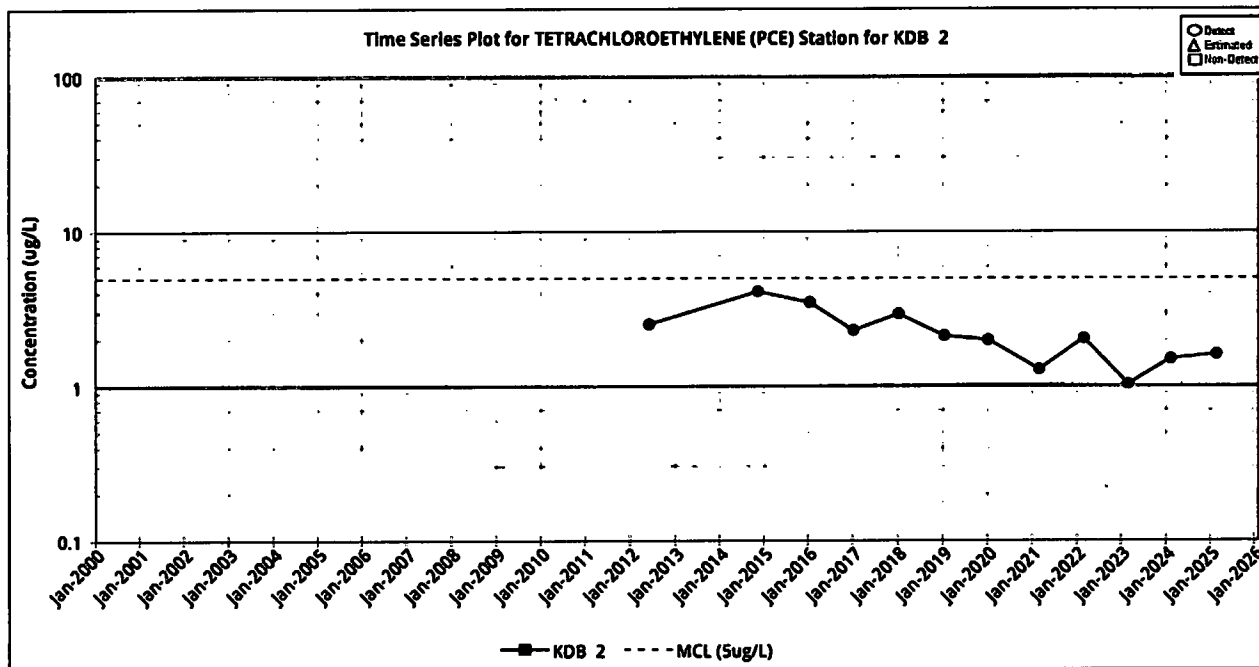


**Figure 8: Tritium Concentration Trends at Surface Water Station KSW-18 and PCE Concentration Trends at Well KDB 1**

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**Figure 9: PCE and TCE Concentration Trends at Wells KDB 2**

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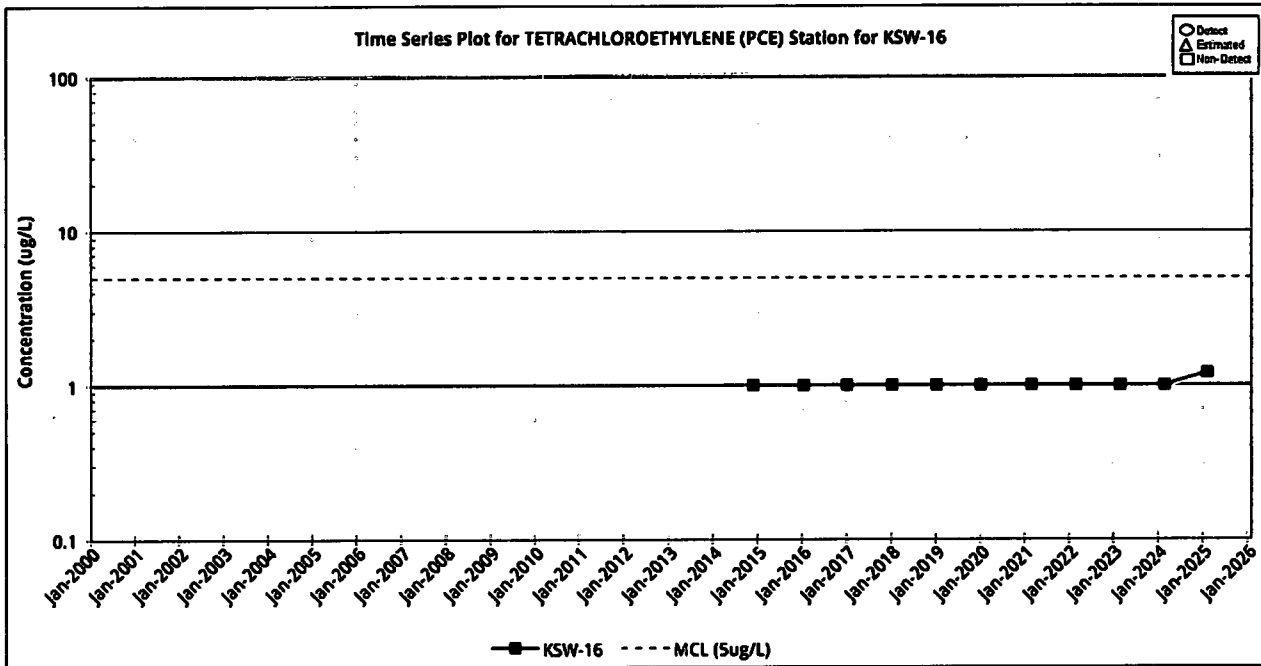


Figure 10: PCE Concentration Trend at Surface Water Station KSW-16

Attachment 1. KAGW 5-Year Data Table 2021 through 2025			Field Data										KAGW OU Analytical						
			SAMPLE COLLECTION DATE	DEPTH TO WATER	SAMPLING EVENT WATER ELEVATION	PH	TOTAL ALKALINITY (AS CaCO3)	TURBIDITY	SPECIFIC CONDUCTANCE	FLOW RATE	STREAM FLOW RATE	SAMPLING METHOD	Constituent	FIELD CONDITIONS	Radionuclides		VOC		
															TRITIUM	TRICHLOROETHYLENE (TCE)	TETRACHLOROETHYLENE (PCE)	CHLOROETHENE (VINYL CHLORIDE)	CIS-1,2-DICHLOROETHYLENE
Station	Well Use	Aquifer Zone	day-month-year	ft	ft	pH	mg/L	NTU	uS/cm	gal/min	ft3/sec	GWPS		pCi/mL	ug/L	ug/L	ug/L	ug/L	
								15						20		5	5	2	70
KDB 1	Monitoring Well	UTRA	15-Mar-2021	66.3	207	5.8	18	1.3	134	0.1	NA	Bladder Pump		12	<EQL (1)	6.13	<EQL (1)	<EQL (1)	
KDB 1	Monitoring Well	UTRA	15-Mar-2021	66.3	207	5.8	18	1.3	134	0.1	NA	Bladder Pump	Lab Duplicate	12.8	NA	NA	NA	NA	
KDB 1	Monitoring Well	UTRA	16-Mar-2022	67.56	205.74	5.4	7	0.5	139	0.1	NA	Bladder Pump		3.7	<EQL (1)	5.4	<EQL (1)	<EQL (1)	
KDB 1	Monitoring Well	UTRA	13-Mar-2023	68.33	204.97	6	16	3.3	151	0.2	NA	Bladder Pump		1.78	<EQL (1)	5.11	<EQL (1)	<EQL (1)	
KDB 1	Monitoring Well	UTRA	28-Feb-2024	67.56	205.74	5.8	27	0.6	127	0.2	NA	Bladder Pump		1.29	<EQL (1)	7.3	<EQL (2)	<EQL (1)	
KDB 1	Monitoring Well	UTRA	11-Mar-2025	67.91	205.39	5.6	28	0.4	127	0.2	NA	Bladder Pump		1.94	<EQL (1)	5.04	<EQL (1)	<EQL (1)	
KDB 2	Monitoring Well	UTRA	15-Mar-2021	68.74	204.96	5.6	12	1.4	35	1	NA	Single Speed Pump		45.5	[0.79]	1.28	<EQL (1)	<EQL (1)	
KDB 2	Monitoring Well	UTRA	16-Mar-2022	69.95	203.75	4.7	0	0.9	39	1	NA	Single Speed Pump		190	1.21	2.04	<EQL (1)	<EQL (1)	
KDB 2	Monitoring Well	UTRA	13-Mar-2023	72.02	201.68	5.1	1	6.7	38	1	NA	Single Speed Pump		137	1.05	1.03	<EQL (1)	<EQL (1)	
KDB 2	Monitoring Well	UTRA	28-Feb-2024	69.9	203.8	5.2	0	3.4	39	0.5	NA	Single Speed Pump		63.9	[0.84]	1.5	<EQL (2)	<EQL (1)	
KDB 2	Monitoring Well	UTRA	11-Mar-2025	70.2	203.5	4.7	0	1	36	1	NA	Single Speed Pump		97.4	1.39	1.61	<EQL (1)	<EQL (1)	
KDB 2	Monitoring Well	UTRA	11-Mar-2025	70.2	203.5	4.7	0	1	36	1	NA	Single Speed Pump	Field Duplicate	92.5	1.1	1.16	<EQL (1)	<EQL (1)	
KDB 3	Monitoring Well	UTRA	15-Mar-2021	67.7	205.8	6.6	63	7.3	334	1	NA	Single Speed Pump		3.3	NS	NS	NS	NS	
KDB 3	Monitoring Well	UTRA	16-Mar-2022	69.62	203.88	6.2	22	10.1	300	0.5	NA	Single Speed Pump		2.66	NS	NS	NS	NS	
KDB 3	Monitoring Well	UTRA	13-Mar-2023	70.28	203.22	5.9	27	20.5	294	1	NA	Single Speed Pump		3.61	NS	NS	NS	NS	
KDB 3	Monitoring Well	UTRA	28-Feb-2024	68.62	204.88	6.7	117	8.3	306	0.5	NA	Single Speed Pump		1.27	NS	NS	NS	NS	
KDB 3	Monitoring Well	UTRA	11-Mar-2025	69.2	204.3	6.5	134	14.7	217	1	NA	Single Speed Pump		[1.07]	NS	NS	NS	NS	
KDB 4	Monitoring Well	UTRA	15-Mar-2021	68.62	204.58	5.7	10	1	20	0.1	NA	Bladder Pump		8.7	NS	NS	NS	NS	
KDB 4	Monitoring Well	UTRA	16-Mar-2022	70.1	203.1	5.8	11	0.6	21	0.2	NA	Bladder Pump		9.01	NS	NS	NS	NS	
KDB 4	Monitoring Well	UTRA	13-Mar-2023	70.86	202.34	4.9	0	0.9	27	0.2	NA	Bladder Pump		[0.882]	NS	NS	NS	NS	
KDB 4	Monitoring Well	UTRA	02-Apr-2024	69.51	203.69	4.8	0	0.6	21	0.1	NA	Bladder Pump		6.33	NS	NS	NS	NS	
KDB 4	Monitoring Well	UTRA	11-Mar-2025	70.11	203.09	4.7	0	0.3	20	0.1	NA	Bladder Pump		6.58	NS	NS	NS	NS	
KDB 5	Monitoring Well	UTRA	15-Mar-2021	66.37	204.03	4.9	0	12	28	0.3	NA	Single Speed Pump		49	NS	NS	NS	NS	
KDB 5	Monitoring Well	UTRA	16-Mar-2022	68.38	202.02	4.9	0	3.4	30	0.5	NA	Single Speed Pump		11.2	NS	NS	NS	NS	
KDB 5	Monitoring Well	UTRA	13-Mar-2023	70.01	200.39	5.2	1	13.2	27	1	NA	Single Speed Pump		[1.12]	NS	NS	NS	NS	
KDB 5	Monitoring Well	UTRA	28-Feb-2024	67.4	203	4.8	0	5.4	32	0.5	NA	Single Speed Pump		0.226	NS	NS	NS	NS	
KDB 5	Monitoring Well	UTRA	11-Mar-2025	67.71	202.69	4.6	0	10.9	32	0.5	NA	Single Speed Pump		<EQL (1)	NS	NS	NS	NS	
KDB 5	Monitoring Well	UTRA	11-Mar-2025	67.71	202.69	4.6	0	10.9	32	0.5	NA	Single Speed Pump	Split Sample	<EQL (0.723)	NA	NA	NA	NA	
KRB 19D	Monitoring Well	UTRA	15-Mar-2021	79.3	202.6	4.7	0	1	30	0.5	NA	Single Speed Pump		1360	NS	NS	NS	NS	
KRB 19D	Monitoring Well	UTRA	16-Mar-2022	81.2	200.7	4.8	0	0.8	30	0.5	NA	Single Speed Pump		1130	NS	NS	NS	NS	
KRB 19D	Monitoring Well	UTRA	16-Mar-2022	81.2	200.7	4.8	0	0.8	30	0.5	NA	Single Speed Pump	Lab Duplicate	1020	NA	NA	NA	NA	
KRB 19D	Monitoring Well	UTRA	13-Mar-2023	81.42	200.48	4.9	1	10.1	37	1	NA	Single Speed Pump		8.06	NS	NS	NS	NS	
KRB 19D	Monitoring Well	UTRA	24-Jul-2023	81	200.9	4.8	0	3.4	33	1	NA	Single Speed Pump		616	NS	NS	NS	NS	
KRB 19D	Monitoring Well	UTRA	29-Feb-2024	80.73	201.17	4.8	0	1.5	30	1	NA	Single Speed Pump		885	NS	NS	NS	NS	
KRB 19D	Monitoring Well	UTRA	13-Mar-2025	81.27	200.63	3.8	0	11.7	31	1	NA	Single Speed Pump		816	NS	NS	NS	NS	

KSW-01	Surface Water		15-Mar-2021	NA	NA	5.8	4	3	18	NA	NS	Grab Sample			<EQL (1.51)	NS	NS	NS	NS
KSW-01	Surface Water		16-Mar-2022	NA	NA	5.9	5	9.7	20	NA	0	Grab Sample			<EQL (1.55)	NS	NS	NS	NS
KSW-01	Surface Water		15-Mar-2023	NA	NA	6.1	4	3.1	20	NA	NS	Grab Sample			[0.808]	NS	NS	NS	NS
KSW-01	Surface Water		28-Feb-2024	NA	NA	5.9	3	2.3	18	NA	0.3613	Grab Sample			0.264	NS	NS	NS	NS
KSW-01	Surface Water		24-Feb-2025	NA	NA	6.2	4	1.9	1.8	NA	NS	Grab Sample			[0.669]	NS	NS	NS	NS
KSW-05	Surface Water		15-Mar-2021	NA	NA	6.2	12	8.9	47	NA	NS	Grab Sample			13.2	NS	NS	NS	NS
KSW-05	Surface Water		16-Mar-2022	NA	NA	6.2	30	11.7	77	NA	0	Grab Sample			90.8	NS	NS	NS	NS
KSW-05	Surface Water		15-Mar-2023	NA	NA	6.7	6	7.8	38	NA	0	Grab Sample			3.31	NS	NS	NS	NS
KSW-05	Surface Water		28-Feb-2024	NA	NA	6.2	12	17	64	NA	0	Grab Sample			53.4	NS	NS	NS	NS
KSW-05	Surface Water		24-Feb-2025	NA	NA	7.6	13	8.7	50	NA	NS	Grab Sample			54.6	NS	NS	NS	NS
KSW-05	Surface Water		24-Feb-2025	NA	NA	NA	NA	NA	NA	NA	NA	Grab Sample	Lab Duplicate		55.7	NA	NA	NA	NA
KSW-05	Surface Water		24-Feb-2025	NA	NA	7.6	13	8.7	50	NA	NS	Grab Sample	Split Sample		54.4	NA	NA	NA	NA
KSW-06	Surface Water		15-Mar-2021	NA	NA	4.5	0	4.6	26	NA	1.29	Grab Sample			66.5	NS	NS	NS	NS
KSW-06	Surface Water		16-Mar-2022	NA	NA	6.4	5	6.7	32	NA	0.89	Grab Sample			98.2	NS	NS	NS	NS
KSW-06	Surface Water		15-Mar-2023	NA	NA	6.4	5	8.4	33	NA	0.3432	Grab Sample			62.2	NS	NS	NS	NS
KSW-06	Surface Water		28-Feb-2024	NA	NA	6.7	11	4.9	32	NA	0.8041	Grab Sample			49.1	NS	NS	NS	NS
KSW-06	Surface Water		24-Feb-2025	NA	NA	7.1	23	3.1	38	NA	0	Grab Sample			50.6	NS	NS	NS	NS
KSW-07	Surface Water		15-Mar-2021	NA	NA	6.8	14	4.1	42	NA	4.39	Grab Sample			40.7	NS	NS	NS	NS
KSW-07	Surface Water		16-Mar-2022	NA	NA	5.7	14	9.3	66	NA	1.73	Grab Sample			34.3	NS	NS	NS	NS
KSW-07	Surface Water		15-Mar-2023	NA	NA	5.9	11	5.2	59	NA	2.6457	Grab Sample			19.5	NS	NS	NS	NS
KSW-07	Surface Water		28-Feb-2024	NA	NA	6.6	12	4.3	54	NA	0.9187	Grab Sample			30.9	NS	NS	NS	NS
KSW-07	Surface Water		24-Feb-2025	NA	NA	6.9	18	2.9	56	NA	1.427	Grab Sample			26.3	NS	NS	NS	NS
KSW-16	Surface Water		15-Mar-2021	NA	NA	6.9	17	4.8	50	NA	3.05	Grab Sample			47.3	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
KSW-16	Surface Water		16-Mar-2022	NA	NA	6.5	17	5.7	67	NA	1.22	Grab Sample			50	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
KSW-16	Surface Water		15-Mar-2023	NA	NA	6.4	14	4.9	62	NA	2.5758	Grab Sample			28.7	<EQL (1)	<EQL (1)	<EQL (1)	<EQL (1)
KSW-16	Surface Water		28-Feb-2024	NA	NA	6.5	20	4.8	59	NA	2.1742	Grab Sample			40.1	NS	NS	NS	NS
KSW-16	Surface Water		13-Mar-2024	NA	NA	7.1	3	3.8	0	NA	2.0206	Grab Sample			NS	<EQL (1)	<EQL (1)	<EQL (2)	<EQL (1)
KSW-16	Surface Water		24-Feb-2025	NA	NA	8.7	27	4.9	63	NA	1.396	Grab Sample			37.4	<EQL (1)	<EQL (1.2)	<EQL (1)	<EQL (1)
KSW-17	Surface Water		15-Mar-2021	NA	NA	6.5	12	4.9	45	NA	22.91	Grab Sample			8.78	NS	NS	NS	NS
KSW-17	Surface Water		16-Mar-2022	NA	NA	6.9	16	5.7	59	NA	7.28	Grab Sample			10.8	NS	NS	NS	NS
KSW-17	Surface Water		15-Mar-2023	NA	NA	6.7	12	5.9	50	NA	8.9205	Grab Sample			8.79	NS	NS	NS	NS
KSW-17	Surface Water		28-Feb-2024	NA	NA	6.2	11	7.4	48	NA	11.8341	Grab Sample			7.27	NS	NS	NS	NS
KSW-17	Surface Water		24-Feb-2025	NA	NA	8.4	24	2.6	50	NA	10.773	Grab Sample			8.06	NS	NS	NS	NS
KSW-17	Surface Water		24-Feb-2025	NA	NA	8.4	24	2.6	50	NA	10.773	Grab Sample	Field Duplicate		7.81	NA	NA	NA	NA
KSW-18	Surface Water		15-Mar-2021	NA	NA	5.6	10	7.3	54	NA	15.79	Grab Sample			7.02	NS	NS	NS	NS
KSW-18	Surface Water		16-Mar-2022	NA	NA	7.3	16	9.2	61	NA	8.4	Grab Sample			8.47	NS	NS	NS	NS
KSW-18	Surface Water		15-Mar-2023	NA	NA	6.9	10	8.9	52	NA	18.1482	Grab Sample			6.29	NS	NS	NS	NS
KSW-18	Surface Water		28-Feb-2024	NA	NA	6.5	10	8.8	52	NA	16.6396	Grab Sample			5.52	NS	NS	NS	NS
KSW-18	Surface Water		24-Feb-2025	NA	NA	8.7	31	3.2	54	NA	6.19	Grab Sample			5.87	NS	NS	NS	NS
KSW-18	Surface Water		24-Feb-2025	NA	NA	8.7	31	3.2	54	NA	6.19	Grab Sample	Field Duplicate		5.28	NA	NA	NA	NA

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 Guideline qualifiers.
NS	Requested to be sampled but was not. See comments as to why not.
Blue Text	Not a required sample analysis.