Quarterly Report

Calendar Year 2026 – Third Quarter, July 1 – September 30, 2026

Prepared by:

Carlsbad Environmental Monitoring & Research Center
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Carlsbad Field Office

October 2026

Field Programs - Radiation Safety Group

WIPP Underground Effluent Monitoring (Station F)

From July 1st to September 30th, a total of 118 filters were collected from the primary skid at Station F, including 94 sample filters, 12 trip blanks, and 12 filter blanks. All 118 filters collected from the primary skid at Station F were processed by the Field Programs group (FP), including gravimetrics, sample flow volume, and mass concentration calculations, and were transferred to the Radiochemistry group (RC).

From July 1st to September 30th, a total of 8 filters were collected from the secondary skid at Station F, including 6 sample filters, 1 trip blank, and 1 filter blank. All 8 filters collected from the secondary skid at Station F were processed by FP, including gravimetrics, sample flow volume, and mass concentration calculations, and were transferred to the Environmental Chemistry group (EC). The Station F secondary skid operated during the first week of the quarter and remained secured for the remainder of the quarter.

WIPP Underground Effluent Monitoring (Station G)

From July 1st to September 30th, a total of 116 filters were collected from the primary skid at Station G, including 92 sample filters, 12 trip blanks, and 12 filter blanks. All 116 filters collected from the primary skid at Station G were processed by FP, including gravimetrics, sample flow volume, and mass concentration calculations, and were transferred to the Radiochemistry group (RC).

From July 1st to September 30th, a total of 116 filters were collected from the secondary skid at Station G, including 92 sample filters, 12 trip blanks, and 12 filter blanks. All 116 filters collected from the secondary skid at Station G were processed by FP, including gravimetrics, sample flow volume, and mass concentration calculations, and were transferred to the Environmental Chemistry group (EC).

Ambient Air Sampling

From July 1st to September 30th, 6 ambient air particulate filters from the previous sampling period were processed by FP, including gravimetrics, total air flow values, and notes of any irregularities, and were transferred to the Radiochemistry group (RC). During the third quarter, 12 ambient air particulate filters were part of the current sampling period. Six filters were collected and are currently being processed by FP, while the remaining 6 filters remain active in the field at the six perimeter and regional continuous sampling stations (On-Site, Near Field, Cactus Flats, WIPP East, Carlsbad, and Loving). Power outages and electrical interruptions occurred at sampling locations surrounding the WIPP site during the quarter.

Subtask - Non-Radiological analyses

From July 1st to September 30th, 2 Whatman-41 filters and 1 trip blank filter from the previous sampling period were processed by FP, including total airflow values and notes of any irregularities, and were transferred to the Environmental Chemistry group (EC). During the third quarter, 4 Whatman-41 filters and 2 trip blank filters were part of the current sampling period.

Two Whatman-41 filters and 1 trip blank filter were collected and are currently being processed by FP, while the remaining 2 Whatman-41 filters remain active in the field at the Near Field and Cactus Flats sampling sites. Power outages and electrical interruptions occurred at the Near Field station during the quarter.

Soils sampling

From July 1st to September 30th, no soil samples were collected. Of the 54 soil samples collected during the first quarter, 45 were processed during the third quarter, while 9 samples remain in processing.

Vegetation sampling

From July 1st to September 30th, 1 vegetation sample was collected. A total of 3 vegetation samples are currently being processed. No vegetation samples were transferred to the Radiochemistry group (RC) during this quarter.

Surface Water Monitoring

From July 1st to September 30th, 1 surface water sample was collected as part of the new monthly surface water sampling at Laguna Cinco. The sample was processed and transferred to both the Environmental Chemistry group (EC) and the Radiochemistry group (RC). Two scheduled monthly samples were not collected while site access and sampling authorization were being finalized.

Drinking Water Monitoring

No activity to report this quarter.

Sediment Monitoring

No activity to report this quarter.

Groundwater Monitoring

From July 1st to September 30th, 1 groundwater sample was collected, processed, and transferred to both the Environmental Chemistry group (EC) and the Radiochemistry group (RC).

Nuclear Materials Management and Safeguards

From July 1st to September 30th, the Radiation Safety group (RS) collected and bulked radioactive waste from NMSU and LANL Laboratories' personnel working in the CEMRC facility. Radiation Safety (RS) has performed monthly surveys of all laboratories where

radioactive materials are present, including smears, and dose rate measurements. All fume hoods were face-velocity checked; the date of the last inspection was August 12, 2026. Ventilation belts for fume hoods in Light Hall Laboratory 151 were changed. All hazardous acid waste was removed from CEMRC, LANL laboratories for proper waste disposal. Combustible and non-combustible waste was sealed and moved to secondary storage. Out-of-service equipment for LANL was smeared and prepared for removal from the laboratory. TLDs for all staff have been changed. Fire extinguishers were updated and taken for service. Cintas personnel made monthly stops to update first aid kits. CAM filters in LANL laboratories were checked monthly. The hand-and-foot monitor for Light Hall Laboratory 151 was calibrated. Ludlum 30/30 for waste room and Light Hall Laboratory 151were sent for calibration. Floor mats near doors were changed weekly; eye-wash stations and emergency showers were inspected to confirm that they function properly. The last inspection was conducted on August 12, 2026.

Radiochemistry Group

WIPP Underground Effluent Monitoring (Stations F and G)

Gross alpha and beta activities on individual filters collected from station F, taken before any high-efficiency particulate air (HEPA) filtration, and Station G, taken after HEPA filtration, were counted using a low-background gas proportional counter (Protean Instruments) for 1200 minutes (20 hours). The complete results for gross alpha and gross beta counts on FAS filters from both stations through September 2026 were submitted to CBFO on October 12, 2026.

1. Sample Processing Accomplishments (Year 2025 Samples)

.

- **Gamma Spectroscopy (Completed to Date):** 109 samples total (16 surface water, 8 drinking water, 8 groundwater, 6 HiVol, 8 FAS, 4 sediment, and 59 soil).

- **Actinide Analysis (Completed to Date):** 146 samples total (16 surface water, 8 drinking water, 8 groundwater, 41 HiVol, 22 FAS, 4 sediment, and 47 soil).

2. Remaining Sample Backlog (Year 2025 Samples)

- **Gamma Spectroscopy (125 samples remaining):** 7 soil, 52 FAS, 60 HiVol, and 6 vegetation.

- **Actinide Analysis (88 samples remaining):** 19 soil, 38 FAS, 25 HiVol, and 6 vegetation.

- **Strontium-90:** Analysis pending for all 2025 sample matrices.

Characteristic results are included in the following pages.

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070264.Cnf
Batch Identification: 2025 HiVol B3 Am
Sample Identification: 53571
Procedure Description: Am - 3 Days

Detector Name: 2-01
Env. Background: System Bkgd 78562

Sample Size: 5.0287E-01 +/- 0.0000E+00 unit
Sample Date/Time: 8/24/2026 10:24:13 AM
Acquisition Date/Time: 8/24/2026 10:24:13 AM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 1322_Am-243-4_T
Tracer Quantity: 0.110 mL
Counting Efficiency: 0.3378 +/- 0.0037 on 8/5/2026 1:53:55 PM
Chem. Rec. Factor (%): 114.13 +/- 2.2826

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)	
AM-241		5.419	55.00	30.21	7.00	3.6	
AM-243	T	5.269	3939.00	3.19	3.00	65.2	
<not ID'd>		5.273	4019.00	3.16	4.00	0.000E+00	65.1

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
AM-241	5479.10*	1.095E-03 +/- 3.328E-04	2.990E-04 +/- 9.994E-06
AM-243	5270.00*	7.869E-02 +/- 2.630E-03	2.150E-04 +/- 7.187E-06

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070267.Cnf
Batch Identification: 2025 HiVol B3 Am
Sample Identification: 53574
Procedure Description: Am - 3 Days

Detector Name: 2-06
Env. Background: System Bkgd 78567

Sample Size: 5.0219E-01 +/- 0.0000E+00 unit
Sample Date/Time: 8/24/2026 10:24:17 AM
Acquisition Date/Time: 8/24/2026 10:24:17 AM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 1322_Am-243-4_T
Tracer Quantity: 0.151 mL
Counting Efficiency: 0.3267 +/- 0.0037 on 8/4/2026 12:05:43 PM
Chem. Rec. Factor (%): 77.65 +/- 1.6155

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
AM-241		5.408	39.00	36.62	6.00	4.4
AM-243	T	5.269	3555.00	3.36	3.00	74.9

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
AM-241	5479.10*	1.182E-03 +/- 4.347E-04	4.273E-04 +/- 1.497E-05
AM-243	5270.00*	1.081E-01 +/- 3.785E-03	3.272E-04 +/- 1.146E-05

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070269.Cnf
Batch Identification: 2025 HiVol B3 Am
Sample Identification: 53576
Procedure Description: Am - 3 Days

Detector Name: 2-08
Env. Background: System Bkgd 78569

Sample Size: 5.1055E-01 +/- 0.0000E+00 unit
Sample Date/Time: 8/24/2026 10:24:20 AM
Acquisition Date/Time: 8/24/2026 10:24:20 AM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 1322_Am-243-4_T
Tracer Quantity: 0.175 mL
Counting Efficiency: 0.3378 +/- 0.0038 on 8/4/2026 12:06:16 PM
Chem. Rec. Factor (%): 66.18 +/- 1.3646

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
AM-241		5.412	190.00	14.96	6.00	13.9
AM-243	T	5.265	3643.00	3.32	6.00	73.8

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
AM-241	5479.10*	6.426E-03 +/- 9.869E-04	4.770E-04 +/- 1.653E-05
AM-243	5270.00*	1.236E-01 +/- 4.285E-03	4.785E-04 +/- 1.659E-05

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070552.Cnf
Batch Identification: 2025 HiVol B3 Pu
Sample Identification: 53571
Procedure Description: Pu - 3 Days

Detector Name: 2-12
Env. Background: System Bkgd 78573

Sample Size: 5.0290E-01 +/- 0.0000E+00 unit
Sample Date/Time: 8/24/2026 10:24:25 AM
Acquisition Date/Time: 8/24/2026 10:24:25 AM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 450_Pu-242_T
Tracer Quantity: 0.121 mL
Counting Efficiency: 0.3457 +/- 0.0038 on 8/5/2026 1:55:05 PM
Chem. Rec. Factor (%): 84.22 +/- 1.9372

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
PU-238		5.458	11.00	62.98	0.00	2.9
PU-239		5.123	86.00	22.06	2.00	5.2
PU-242	T	4.862	2550.00	3.96	0.00	62.6

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
PU-238	5487.10*	2.902E-04 +/- 1.831E-04	1.582E-04 +/- 6.368E-06
PU-239	5147.70*	2.269E-03 +/- 5.088E-04	2.450E-04 +/- 9.863E-06
PU-242	4890.70*	6.693E-02 +/- 2.695E-03	1.574E-04 +/- 6.337E-06

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070554.Cnf
Batch Identification: 2025 HiVol B3 Pu
Sample Identification: 53573
Procedure Description: Pu - 3 Days

Detector Name: 3-03
Env. Background: System Bkgd 78576

Sample Size: 4.9229E-01 +/- 0.0000E+00 unit
Sample Date/Time: 8/24/2026 10:24:27 AM
Acquisition Date/Time: 8/24/2026 10:24:27 AM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 450_Pu-242_T
Tracer Quantity: 0.161 mL
Counting Efficiency: 0.3260 +/- 0.0037 on 7/31/2026 11:01:46 AM
Chem. Rec. Factor (%): 69.92 +/- 1.5869

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
PU-238		5.457	9.00	80.12	2.00	3.0
PU-239		5.123	223.00	13.51	2.00	13.7
PU-242	T	4.865	2661.00	3.88	0.00	39.3

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
PU-238	5487.10*	3.097E-04 +/- 2.485E-04	3.196E-04 +/- 1.260E-05
PU-239	5147.70*	7.675E-03 +/- 1.080E-03	3.196E-04 +/- 1.260E-05
PU-242	4890.70*	9.112E-02 +/- 3.594E-03	2.053E-04 +/- 8.098E-06

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070557.Cnf
Batch Identification: 2025 HiVol B3 Pu
Sample Identification: 53576
Procedure Description: Pu - 3 Days

Detector Name: 3-06
Env. Background: System Bkgd 78579

Sample Size: 5.1055E-01 +/- 0.0000E+00 unit
Sample Date/Time: 8/24/2026 10:24:33 AM
Acquisition Date/Time: 8/24/2026 10:24:33 AM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 450_Pu-242_T
Tracer Quantity: 0.157 mL
Counting Efficiency: 0.3315 +/- 0.0037 on 7/31/2026 11:02:44 AM
Chem. Rec. Factor (%): 83.51 +/- 1.7815

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
PU-238		5.454	11.00	70.42	2.00	4.4
PU-239		5.114	371.00	10.40	0.00	28.2
PU-242	T	4.856	3160.00	3.56	1.00	56.5

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
PU-238	5487.10*	3.006E-04 +/- 2.119E-04	2.537E-04 +/- 9.213E-06
PU-239	5147.70*	1.014E-02 +/- 1.116E-03	1.638E-04 +/- 5.949E-06
PU-242	4890.70*	8.591E-02 +/- 3.120E-03	2.001E-04 +/- 7.265E-06

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070597.Cnf
Batch Identification: 2025 HiVol Batch
Sample Identification: 53556
Procedure Description: U - 3 Days (Blank Corrected)

Detector Name: 3-06
Env. Background: System Bkgd 78579

Sample Size: 4.9710E-01 +/- 0.0000E+00 unit
Sample Date/Time: 9/10/2026 2:50:03 PM
Acquisition Date/Time: 9/10/2026 2:50:03 PM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 1320_U232_2
Tracer Quantity: 0.145 mL
Counting Efficiency: 0.3315 +/- 0.0037 on 7/31/2026 11:02:44 AM
Chem. Rec. Factor (%): 87.18 +/- 4.6516

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
U-232	T	5.255	4523.00	2.97	1.00	77.6
U-234		4.704	6860.84	2.59	0.00	71.4
U-235		4.344	287.94	12.43	1.00	5.0
U-238		4.131	5697.35	2.85	0.00	66.9

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
U-232	5302.50*	1.217E-01 +/- 1.270E-02	1.980E-04 +/- 2.066E-05
U-234	4761.50*	1.846E-01 +/- 1.984E-02	2.907E-03 +/- 3.033E-04
U-235	4385.50*	9.557E-03 +/- 1.551E-03	7.083E-04 +/- 7.390E-05
U-238	4184.40*	1.526E-01 +/- 1.651E-02	2.732E-03 +/- 2.850E-04

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070612.Cnf
Batch Identification: 2025 HiVol Batch
Sample Identification: 53560
Procedure Description: U - 3 Days (Blank Corrected)

Detector Name: 3-10
Env. Background: System Bkgd 78583

Sample Size: 4.9210E-01 +/- 0.0000E+00 unit
Sample Date/Time: 9/10/2026 2:50:10 PM
Acquisition Date/Time: 9/10/2026 2:50:10 PM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 1320_U232_2
Tracer Quantity: 0.153 mL
Counting Efficiency: 0.3466 +/- 0.0039 on 7/31/2026 11:04:04 AM
Chem. Rec. Factor (%): 79.34 +/- 4.2322

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
U-232	T	5.272	4521.00	2.98	1.00	59.0
U-234		4.722	5452.05	2.95	2.00	58.3
U-235		4.359	226.94	14.18	1.00	14.4
U-238		4.145	4637.54	3.21	1.00	64.6

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
U-232	5302.50*	1.292E-01 +/- 1.348E-02	2.102E-04 +/- 2.193E-05
U-234	4761.50*	1.558E-01 +/- 1.689E-02	3.090E-03 +/- 3.224E-04
U-235	4385.50*	7.998E-03 +/- 1.408E-03	7.519E-04 +/- 7.845E-05
U-238	4184.40*	1.319E-01 +/- 1.440E-02	2.901E-03 +/- 3.027E-04

[PS 0



Sample Description:
Spectrum File: C:\Canberra\ApexAlpha\Root\Data\0000070606.Cnf
Batch Identification: 2025 HiVol Batch
Sample Identification: 53562
Procedure Description: U - 3 Days (Blank Corrected)

Detector Name: 3-11
Env. Background: System Bkgd 78584

Sample Size: 5.0000E-01 +/- 0.0000E+00 unit
Sample Date/Time: 9/10/2026 2:50:11 PM
Acquisition Date/Time: 9/10/2026 2:50:11 PM
Acquisition Live Time: 4320.0 minutes
Acquisition Real Time: 4320.1 minutes

Tracer Certificate: 1320_U232_2
Tracer Quantity: 0.151 mL
Counting Efficiency: 0.3319 +/- 0.0037 on 7/31/2026 11:04:25 AM
Chem. Rec. Factor (%): 87.78 +/- 4.6725

PEAK AREA REPORT

Nuclide		Energy (MeV)	Net Pk Area	Pk Area Error %	Ambient Backgnd	FWHM (keV)
U-232	T	5.271	4730.00	2.91	4.00	71.8
U-234		4.722	5528.45	2.94	1.00	74.9
U-235		4.356	261.25	13.16	1.00	14.4
U-238		4.145	4487.27	3.29	2.00	77.2

T = Tracer Peak used for Effective Efficiency

NUCLIDE ANALYSIS RESULTS

Nuclide	Energy (keV)	Activity (Bq /unit)	MDA (Bq /unit)
U-232	5302.50*	1.255E-01 +/- 1.307E-02	3.188E-04 +/- 3.320E-05
U-234	4761.50*	1.467E-01 +/- 1.588E-02	2.963E-03 +/- 3.085E-04
U-235	4385.50*	8.553E-03 +/- 1.435E-03	7.183E-04 +/- 7.481E-05
U-238	4184.40*	1.186E-01 +/- 1.295E-02	2.787E-03 +/- 2.902E-04

C E M R C G A M M A S P E C T R U M A N A L Y S I S

Sample ID : 57556
Sample Description : 2025 Soil
:
Calibration ID :
Background ID :

Sample Collection Date : 4/8/2025 1:00:00 PM
Count Start Date : 7/27/2026 7:50:35 AM

Sample Aliquot : 4.74700E-01
Aliquot Unc. : 0.00000E+00
Aliquot Unit : kg

Live Time (sec) : 172800
Real Time (sec) : 172820

Energy Calibration Used Done On : 10/1/2024
Efficiency Calibration Used Done On : 7/16/2024
Efficiency ID : DET03_soilEff_24

%Random Unc. : 0.0
%Systematic Unc. : 0.0

Nuclide	Energy	Eff%	UncEff%	Abun%	UncAbn%	HL(d)	UncHL(d)	Conc(Bq/unit)	Unc2sigma	MDC
K-40	1460.81	0.432	0.009	10.6700	0.1100	4.66412E+11	2.92192E+09	2.09332E+02	5.40308E+00	4.42090E+00
MN-54	834.82	0.700	0.010	99.9750	0.0000	3.12700E+02	0.00000E+00	2.98962E-01	1.96719E-01	6.47952E-01
CO-57	122.06	2.551	0.064	85.5100	0.1800	2.70900E+02	6.00000E-01	1.28444E-01	1.59614E-01	5.27622E-01
CO-57	136.47	2.566	0.061	10.6000	0.1800	2.70900E+02	6.00000E-01	9.24786E-01	2.02386E+00	6.68750E+00
CO-60	1173.22	0.524	0.008	100.0000	0.0000	1.92518E+03	3.65240E-01	1.64086E-01	1.40673E-01	

4.64886E-01
CO-60   1332.49   0.469 0.008 100.0000 0.0000 1.92518E+03 3.65240E-01 -2.97783E-02 7.78834E-02
2.66503E-01
ZN-65   1115.52   0.548 0.008 50.7500 0.0000 2.44400E+02 0.00000E+00 -7.59067E-01 9.19914E-01
3.09493E+00
CS-134   604.69   0.919 0.014 97.6000 0.0000 7.53125E+02 0.00000E+00 -7.13353E-01 2.14345E-01
7.21471E-01
CS-134   795.84   0.728 0.011 85.4000 0.0000 7.53125E+02 0.00000E+00 5.55147E-01 1.44133E-01
4.61993E-01
CS-137   661.65   0.851 0.013 85.1200 0.2300 1.10193E+04 1.09572E+01 1.42769E+00 1.25095E-01
3.75734E-01
RA-226   186.21   2.351 0.060   3.2800 0.0000 5.84384E+05 1.82620E+02 1.76447E+01 2.17040E+00
6.80778E+00
RA-228   911.07   0.650 0.009 27.7000 1.0000 2.10013E+03 0.00000E+00 1.00536E+01 6.95262E-01
1.67047E+00
AM-241   59.54   1.575 0.000 36.3000 0.0000 1.58153E+05 0.00000E+00 -2.62224E-01 2.37211E-01
0.00000E+00

  13 nuclide lines identified

****
***** P E A K A N A L Y S I S R E P O R T *****
****

Detector Name: DET03
Sample Title: 57556
Peak Analysis Performed on: 7/29/2026 7:51:00 AM
Peak Analysis From Channel: 50
Peak Analysis To Channel: 8190

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	240-	253	245.28	59.54	0.24	-1.227E+02	110.94	6.192E+03
2	495-	507	501.75	122.06	0.37	6.803E+01	84.52	3.659E+03
3	553-	575	560.86	136.47	0.72	6.107E+01	133.63	6.722E+03
4	752-	778	764.90	186.21	2.15	1.115E+03	134.19	6.274E+03
5	2472-	2499	2481.60	604.69	0.24	-3.392E+02	101.79	4.042E+03
6	2697-	2727	2715.26	661.65	2.05	8.237E+02	71.11	1.552E+03
7	3251-	3274	3265.74	795.84	0.75	1.829E+02	47.42	8.841E+02
8	3417-	3433	3425.65	834.82	0.38	5.974E+01	39.30	7.553E+02
9	3719-	3757	3738.44	911.07	2.06	1.269E+03	72.63	1.265E+03

10	4568- 4596	4577.14	1115.52	0.46	-4.489E+01	54.40	1.207E+03
11	4793- 4826	4813.82	1173.22	0.42	5.950E+01	51.00	9.395E+02
12	5459- 5477	5467.18	1332.49	0.24	-9.661E+00	25.27	3.317E+02
13	5972- 6014	5993.59	1460.81	2.73	7.916E+03	102.06	7.956E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

C E M R C G A M M A S P E C T R U M A N A L Y S I S

Sample ID : 57563
Sample Description : 2025 Soil
:
Calibration ID :
Background ID :

Sample Collection Date : 4/29/2025 1:00:00 PM
Count Start Date : 7/8/2026 12:53:49 PM

Sample Aliquot : 4.82000E-01
Aliquot Unc. : 0.00000E+00
Aliquot Unit : kg

Live Time (sec) : 172800
Real Time (sec) : 172820

Energy Calibration Used Done On : 10/1/2024
Efficiency Calibration Used Done On : 7/16/2024
Efficiency ID : DET03_soilEff_24

%Random Unc. : 0.0
%Systematic Unc. : 0.0

Nuclide	Energy	Eff%	UncEff%	Abun%	UncAbn%	HL(d)	UncHL(d)	Conc(Bq/unit)	Unc2sigma	MDC
K-40	1460.81	0.432	0.009	10.6700	0.1100	4.66412E+11	2.92192E+09	2.24779E+02	5.74075E+00	4.53242E+00
MN-54	834.82	0.700	0.010	99.9750	0.0000	3.12700E+02	0.00000E+00	1.93157E-01	2.16545E-01	7.17933E-01
CO-57	122.06	2.551	0.064	85.5100	0.1800	2.70900E+02	6.00000E-01	-6.86637E-02	2.12380E-01	7.04144E-01
CO-57	136.47	2.566	0.061	10.6000	0.1800	2.70900E+02	6.00000E-01	2.11041E+00	1.73316E+00	5.70786E+00
CO-60	1173.22	0.524	0.008	100.0000	0.0000	1.92518E+03	3.65240E-01	1.35042E-02	9.04741E-02	

3.04246E-01
CO-60   1332.49   0.469 0.008 100.0000 0.0000 1.92518E+03 3.65240E-01 1.09634E-01 7.76851E-02
2.56563E-01
ZN-65   1115.52   0.548 0.008 50.7500 0.0000 2.44400E+02 0.00000E+00 -3.06508E+00 9.19975E-01
3.14406E+00
CS-134   604.69   0.919 0.014 97.6000 0.0000 7.53125E+02 0.00000E+00 -7.97516E-01 1.98167E-01
6.69331E-01
CS-134   795.84   0.728 0.011 85.4000 0.0000 7.53125E+02 0.00000E+00 4.40151E-01 1.42955E-01
4.62802E-01
CS-137   661.65   0.851 0.013 85.1200 0.2300 1.10193E+04 1.09572E+01 2.08346E+00 1.28291E-01
3.64131E-01
RA-226   186.21   2.351 0.060   3.2800 0.0000 5.84384E+05 1.82620E+02 1.82764E+01 2.18352E+00
6.83642E+00
RA-228   911.07   0.650 0.009 27.7000 1.0000 2.10013E+03 0.00000E+00 1.06532E+01 6.82579E-01
1.53790E+00
AM-241   59.54   1.575 0.000 36.3000 0.0000 1.58153E+05 0.00000E+00 -2.01898E-01 2.66549E-01
0.00000E+00

  13 nuclide lines identified

****
*****   P E A K   A N A L Y S I S   R E P O R T   *****
****

     Detector Name: DET03
     Sample Title: 57563
     Peak Analysis Performed on: 7/10/2026 12:54:15 PM
               Peak Analysis From Channel: 50
               Peak Analysis To Channel: 8190

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	236-	251	245.28	59.54	0.48	-9.598E+01	126.66	7.511E+03
2	490-	510	501.75	122.06	0.27	-4.088E+01	126.44	6.402E+03
3	555-	575	560.86	136.47	0.44	1.567E+02	128.58	6.548E+03
4	752-	777	764.90	186.21	1.67	1.173E+03	136.90	6.683E+03
5	2474-	2499	2481.60	604.69	0.99	-3.994E+02	99.07	3.988E+03
6	2700-	2727	2715.26	661.65	1.97	1.224E+03	73.09	1.611E+03
7	3253-	3276	3265.74	795.84	1.74	1.528E+02	49.57	9.832E+02
8	3414-	3435	3425.65	834.82	0.24	4.280E+01	47.98	1.010E+03
9	3721-	3755	3738.44	911.07	2.41	1.384E+03	70.51	1.218E+03

10	4565- 4596	4577.14	1115.52	0.24	-2.060E+02	61.77	1.495E+03
11	4803- 4821	4813.82	1173.22	0.24	5.044E+00	33.79	5.820E+02
12	5458- 5476	5467.18	1332.49	0.30	3.664E+01	25.95	3.264E+02
13	5972- 6014	5993.59	1460.81	2.87	8.631E+03	106.51	8.517E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

UD = User Driven N-Sigma Test (In = Investigate, Ac = Action)
BS = Measurement Bias Test (In = Investigate, Ac = Action)

Reviewed by: _____

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**************************************************************************
* NOTE: DAILY QUALITY CONTROL SAMPLES (QC) ARE GIVEN A USER DRIVEN       *
*  N-SIGMA TEST.  INVESTIGATE MEANS THE MEASUREMENT IS BETWEEN           *
*  10% AND 15% OF THE BASELINE.  ACTION MEANS THAT THE MEASUREMENT       *
*  IS ABOVE 15% OF THE BASELINE.                                         *
*  LABORATORY CONTROL SAMPLES ARE GIVEN A BOUNDARY TEST.  THE RESULT     *
*  IS ACCEPTABLE IF IT LIES BETWEEN +/- 25% OF THE TRUE SOURCE           *
*  ACTIVITY.                                                             *
**************************************************************************
```

C E M R C G A M M A S P E C T R U M A N A L Y S I S

Sample ID	57568
Sample Description	2025 Soil
Calibration ID	
Background ID	
Sample Collection Date	10/7/2025 1:00:00 PM
Count Start Date	8/18/2026 11:51:39 AM
Sample Aliquot	4.65600E-01
Aliquot Unc.	0.00000E+00
Aliquot Unit	kg
Live Time (sec)	172800
Real Time (sec)	172818
Energy Calibration Used Done On	10/1/2024
Efficiency Calibration Used Done On	7/16/2024
Efficiency ID	DET03_soilEff_24
%Random Unc.	0.0
%Systematic Unc.	0.0

Nuclide	Energy	Eff%	UncEff%	Abun%	UncAbn%	HL(d)	UncHL(d)	Conc(Bq/unit)	Unc2sigma	MDC
K-40	1460.81	0.432	0.009	10.6700	0.1100	4.66412E+11	2.92192E+09	1.58231E+02	4.28333E+00	4.18534E+00
MN-54	834.82	0.700	0.010	99.9750	0.0000	3.12700E+02	0.00000E+00	5.90382E-02	1.62613E-01	5.42535E-01
CO-57	122.06	2.551	0.064	85.5100	0.1800	2.70900E+02	6.00000E-01	-1.17851E-01	1.05453E-01	3.52605E-01
CO-57	136.47	2.566	0.061	10.6000	0.1800	2.70900E+02	6.00000E-01	-6.29197E-01	7.25379E-01	2.42808E+00
CO-60	1173.22	0.524	0.008	100.0000	0.0000	1.92518E+03	3.65240E-01	-5.54604E-02	7.76811E-02	2.65839E-01
CO-60	1332.49	0.469	0.008	100.0000	0.0000	1.92518E+03	3.65240E-01	9.08566E-02	6.75964E-02	2.23702E-01
ZN-65	1115.52	0.548	0.008	50.7500	0.0000	2.44400E+02	0.00000E+00	2.62907E-01	5.10784E-01	1.70078E+00
CS-134	604.69	0.919	0.014	97.6000	0.0000	7.53125E+02	0.00000E+00	-1.77552E-01	1.66187E-01	5.54941E-01
CS-134	795.84	0.728	0.011	85.4000	0.0000	7.53125E+02	0.00000E+00	1.80560E-01	1.11994E-01	3.68429E-01
CS-137	661.65	0.851	0.013	85.1200	0.2300	1.10193E+04	1.09572E+01	1.65428E-01	7.85367E-02	2.56854E-01
RA-226	186.21	2.351	0.060	3.2800	0.0000	5.84384E+05	1.82620E+02	1.49880E+01	1.90739E+00	5.97445E+00
RA-228	911.07	0.650	0.009	27.7000	1.0000	2.10013E+03	0.00000E+00	6.48755E+00	5.28046E-01	1.35964E+00
AM-241	59.54	1.575	0.000	36.3000	0.0000	1.58153E+05	0.00000E+00	-5.86207E-02	2.21066E-01	0.00000E+00

13 nuclide lines identified

****
***** P E A K A N A L Y S I S R E P O R T *****
****

Detector Name: DET03
Sample Title: 57568
Peak Analysis Performed on: 8/20/2026 11:52:03 AM

Peak Analysis From Channel: 50
Peak Analysis To Channel: 8190

Peak No.	ROI start	ROI end	Peak centroid	Energy (keV)	FWHM (keV)	Net Peak Area	Net Area Uncert.	Continuum Counts
1	239-	253	245.28	59.54	0.28	-2.693E+01	101.56	4.981E+03
2	495-	509	501.75	122.06	0.31	-9.215E+01	82.42	3.316E+03
3	555-	566	560.86	136.47	0.24	-6.134E+01	70.69	2.706E+03
4	749-	774	764.90	186.21	1.80	9.294E+02	115.86	4.759E+03
5	2472-	2499	2481.60	604.69	0.24	-9.593E+01	89.78	3.126E+03
6	2705-	2724	2715.26	661.65	0.35	9.455E+01	44.87	9.054E+02
7	3252-	3273	3265.74	795.84	0.30	6.761E+01	41.92	7.594E+02
8	3416-	3438	3425.65	834.82	0.37	1.649E+01	45.42	8.925E+02
9	3721-	3755	3738.44	911.07	1.63	8.470E+02	60.58	9.580E+02
10	4570-	4596	4577.14	1115.52	2.26	2.400E+01	46.62	9.020E+02
11	4803-	4821	4813.82	1173.22	0.46	-2.089E+01	29.26	4.489E+02
12	5459-	5476	5467.18	1332.49	0.48	3.063E+01	22.78	2.564E+02
13	5972-	6013	5993.59	1460.81	2.97	5.869E+03	89.55	6.938E+02

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

C E M R C G A M M A S P E C T R U M A N A L Y S I S

Sample ID : 56577R
Sample Description : 2025 Soil
:
Calibration ID :
Background ID :

Sample Collection Date : 8/19/2025 1:00:00 PM
Count Start Date : 5/16/2026 11:36:59 AM

Sample Aliquot : 2.77500E-01
Aliquot Unc. : 0.00000E+00
Aliquot Unit : kg

Live Time (sec) : 172800
Real Time (sec) : 172824

Energy Calibration Used Done On : 10/1/2024
Efficiency Calibration Used Done On : 7/16/2024
Efficiency ID : DET03_soilEff_24

%Random Unc. : 0.0

%Systematic Unc. : 0.0

Nuclide	Energy	Eff%	UncEff%	Abun%	UncAbn%	HL(d)	UncHL(d)	Conc(Bq/unit)	Unc2sigma	MDC
K-40	1460.81	0.432	0.009	10.6700	0.1100	4.66412E+11	2.92192E+09	5.45396E+02	1.34548E+01	9.21068E+00
MN-54	834.82	0.700	0.010	99.9750	0.0000	3.12700E+02	0.00000E+00	3.53355E-01	3.04296E-01	1.00526E+00
CO-57	122.06	2.551	0.064	85.5100	0.1800	2.70900E+02	6.00000E-01	-7.61881E-02	2.10145E-01	6.97662E-01
CO-57	136.47	2.566	0.061	10.6000	0.1800	2.70900E+02	6.00000E-01	-5.04350E-01	2.33382E+00	7.72507E+00
CO-60	1173.22	0.524	0.008	100.0000	0.0000	1.92518E+03	3.65240E-01	1.32278E-01	2.20947E-01	7.34418E-01
CO-60	1332.49	0.469	0.008	100.0000	0.0000	1.92518E+03	3.65240E-01	-1.55955E-02	1.40989E-01	4.77997E-01
ZN-65	1115.52	0.548	0.008	50.7500	0.0000	2.44400E+02	0.00000E+00	8.99197E-01	1.09274E+00	3.61667E+00
CS-134	604.69	0.919	0.014	97.6000	0.0000	7.53125E+02	0.00000E+00	-1.60552E+00	4.21080E-01	1.40981E+00
CS-134	795.84	0.728	0.011	85.4000	0.0000	7.53125E+02	0.00000E+00	2.21585E+00	2.94825E-01	9.20714E-01
CS-137	661.65	0.851	0.013	85.1200	0.2300	1.10193E+04	1.09572E+01	3.75944E+00	2.75425E-01	8.25132E-01
RA-226	186.21	2.351	0.060	3.2800	0.0000	5.84384E+05				

```
1.82620E+02  7.39485E+01  5.60998E+00  1.68160E+01
RA-228   911.07   0.650  0.009  27.7000  1.0000  2.10013E+03
0.00000E+00  3.96207E+01  1.95038E+00  3.21244E+00
AM-241    59.54   1.575  0.000  36.3000  0.0000  1.58153E+05
0.00000E+00 -5.29648E-01  6.58317E-01  0.00000E+00


  13 nuclide lines identified

****************************************************************
******
*****           P E A K    A N A L Y S I S    R E P O R T
*****
****************************************************************
******

     Detector Name:  DET03
     Sample Title:   56577R
     Peak Analysis Performed on:  8/21/2026  12:15:13 PM
               Peak Analysis From Channel:     50
               Peak Analysis To Channel:     8190

   Peak  ROI  ROI    Peak    Energy   FWHM  Net Peak  Net Area
Continuum
    No. start end  centroid   (keV)   (keV)  Area     Uncert.
Counts

    1   234-  252   245.28    59.54   0.24 -1.451E+02  180.22
1.380E+04
```

2	494-	507	501.75	122.06	0.24	-3.984E+01	109.88	6.037E+03
3	555-	575	560.86	136.47	0.25	-3.288E+01	152.15	9.257E+03
4	749-	780	764.90	186.21	2.61	2.733E+03	195.21	1.178E+04
5	2468-	2499	2481.60	604.69	2.28	-5.389E+02	141.10	7.127E+03
6	2697-	2729	2715.26	661.65	2.26	1.284E+03	92.11	2.538E+03
7	3247-	3275	3265.74	795.84	1.88	5.154E+02	68.17	1.581E+03
8	3416-	3437	3425.65	834.82	0.64	6.500E+01	55.96	1.373E+03
9	3720-	3757	3738.44	911.07	2.63	3.129E+03	94.60	1.871E+03
10	4569-	4596	4577.14	1115.52	0.86	5.557E+01	67.53	1.824E+03
11	4805-	4831	4813.82	1173.22	0.24	3.018E+01	50.42	1.068E+03
12	5459-	5476	5467.18	1332.49	0.32	-3.184E+00	28.79	4.372E+02
13	5972-	6014	5993.59	1460.81	3.11	1.206E+04	125.65	1.192E+03

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet

Environmental Chemistry Group

From July 1st to September 30th, 2026, the Environmental Chemistry (EC) group completed cation and anion analyses on FAS filter samples (stations F and G) and Whatman filter samples (from the 3rd and 4th quarters) collected in 2025. The following tables and figures represent characteristics results.

FAS Filters – Station F

Sample Type: FAS, Station F
Year: 2025
Analysis Performed: Metals in weekly composites

Week	Aluminum ng/m^3	Cadmium ng/m^3	Lead ng/m^3	Magnesium ng/m^3	Silicon ng/m^3	Thorium ng/m^3	Uranium ng/m^3
01/01/25							
01/08/25							
01/15/25							
01/22/25							
02/01/25							
02/08/25							
02/15/25							
02/22/25							
03/01/25							
03/08/25							
03/15/25							
03/22/25							
04/01/25							
04/08/25							
04/15/25							
04/22/25							
05/01/25							
05/08/25							
05/15/25							
05/22/25							
06/01/25							
06/08/25							
06/15/25							
06/22/25							
07/01/25							
07/08/25							
07/15/25	1.36E+03	4.36E-01	1.53E+00	2.08E+02	1.16E+03		
07/22/25	8.87E+02	3.44E-01	2.92E+00	1.96E+02	7.19E+02	3.56E-02	1.61E-02
08/01/25	1.30E+03	2.93E-01	1.43E+00	1.56E+02	6.24E+02	4.11E-02	1.94E-02
08/08/25	1.01E+03	3.40E-01	2.35E+00	1.64E+02	6.32E+02	3.08E-02	1.65E-02
08/15/25	1.32E+03	3.31E-01	5.74E+00	2.06E+02	6.25E+02	2.16E-02	1.19E-02
08/22/25	1.46E+03	3.30E-01	2.52E+00	2.99E+02	7.30E+02	1.87E-02	1.35E-02
09/01/25	1.17E+03	3.10E-01	1.26E+00	2.28E+02	4.21E+02	8.69E-03	4.83E-03
09/08/25	1.61E+03	3.55E-01	2.75E+00	1.90E+02	5.25E+02	1.73E-02	1.25E-02
09/15/25	1.04E+03	3.30E-01	2.67E+00	2.52E+02	5.49E+02	1.19E-02	7.88E-03
09/22/25	9.75E+02	3.48E-01	7.46E+00	2.26E+02	5.38E+02	1.27E-02	1.75E-02
10/01/25	1.302E+03	3.18E-01	7.89E+00	4.08E+02	6.12E+02	<MDL	1.02E-02
10/08/25	9.328E+02	2.94E-01	3.39E+00	1.27E+02	3.82E+02	<MDL	<MDL
10/15/25	9.246E+02	3.12E-01	2.21E+00	3.62E+02	5.78E+02	<MDL	<MDL
10/22/25	1.412E+03	3.83E-01	2.19E+00	6.06E+02	7.10E+02	<MDL	<MDL
11/01/25	1.058E+03	3.263E-01		6.984E+02	7.297E+02	3.427E-02	2.053E-02
11/08/25	1.106E+03	2.707E-01	2.374E+00	1.018E+03	9.603E+02	4.091E-02	2.301E-02
11/15/25	9.697E+02	2.916E-01	1.142E+00	1.034E+03	5.811E+02	2.398E-02	4.095E-02
11/22/25	8.732E+02	2.953E-01	6.660E-01	4.905E+02	3.569E+02	7.595E-03	1.419E-02
12/01/25	1.270E+03	4.863E-01	1.930E+00	1.172E+03	7.919E+02		2.644E-02
12/08/25	1.247E+03	3.612E-01	2.492E+00	1.214E+03	1.067E+03	5.777E-02	3.999E-02
12/15/25							
12/22/25	1.013E+03	3.366E-01	1.361E+00	2.667E+02	5.247E+02	1.917E-02	9.728E-03

NOTE: Filters were not received for the following time frames: January, February, March, April, May, June, July 1st and 2nd week. December 2nd and 3rd weeks were collected as one weekly composite.

Sample Type: FAS, Station F
Year: 2025
Analysis Performed: Anions in weekly composites

Week	Chloride ng/m^3	Nitrate ng/m^3	Phosphate ng/m^3	Sulfate ng/m^3
01/01/25				
01/08/25				
01/15/25				
01/22/25				
02/01/25				
02/08/25				
02/15/25				
02/22/25				
03/01/25				
03/08/25				
03/15/25				
03/22/25				
04/01/25				
04/08/25				
04/15/25				
04/22/25				
05/01/25				
05/08/25				
05/15/25				
05/22/25				
06/01/25				
06/08/25				
06/15/25				
06/22/25				
07/01/25				
07/08/25				
07/15/25	2.54E+03	<MDL	<MDL	2.92E+03
07/22/25	2.88E+03	<MDL	<MDL	2.00E+03
08/01/25	1.89E+03	<MDL	<MDL	1.66E+03
08/08/25	1.98E+03	<MDL	<MDL	1.92E+03
08/15/25	3.15E+03	6.97E+01	<MDL	1.61E+03
08/22/25	1.37E+04	<MDL	<MDL	2.50E+03
09/01/25	2.69E+03	2.09E+02	<MDL	1.30E+03
09/08/25	7.93E+03	2.59E+02	<MDL	2.08E+03
09/15/25	1.73E+04	2.45E+02	<MDL	2.07E+03
09/22/25	8.12E+03	<MDL	3.74E+02	2.15E+03
10/01/25	6.10E+03	<MDL	<MDL	2.48E+03
10/08/25	2.85E+03	<MDL	<MDL	1.80E+03
10/15/25	1.32E+04	<MDL	<MDL	2.10E+03
10/22/25	3.31E+04	<MDL	<MDL	3.17E+03
11/01/25	3.89E+04	<MDL	<MDL	3.63E+03
11/08/25	5.44E+04	<MDL	<MDL	4.18E+03
11/15/25	1.80E+04	1.12E+02	<MDL	1.72E+04
11/22/25	5.99E+03	<MDL	<MDL	6.26E+03
12/01/25	4.19E+04	1.10E+02	<MDL	9.79E+03
12/08/25	3.71E+04	<MDL	<MDL	8.64E+03
12/15/25				
12/21/25	7.78E+03	<MDL	<MDL	1.64E+03

NOTE: Filters were not received for the following time frames: January, February, March, April, May, June, July 1st and 2nd week. December 2nd and 3rd weeks were collected as one weekly composite.

Sample Type: FAS, Station F
Year: 2025
Analysis Performed: Cations in weekly composites

Week	Sodium ng/m^3	Ammonium ng/m^3	Magnesium ng/m^3	Potassium ng/m^3	Calcium ng/m^3
01/01/25					
01/08/25					
01/15/25					
01/22/25					
02/01/25					
02/08/25					
02/15/25					
02/22/25					
03/01/25					
03/08/25					
03/15/25					
03/22/25					
04/01/25					
04/08/25					
04/15/25					
04/22/25					
05/01/25					
05/08/25					
05/15/25					
05/22/25					
06/01/25					
06/08/25					
06/15/25					
06/22/25					
07/01/25					
07/08/25					
07/15/25	1.27E+03	3.87E+02	<MDL	3.73E+02	2.37E+02
07/22/25	1.69E+03	2.32E+02	<MDL	4.38E+02	2.16E+02
08/01/25	8.26E+02	1.86E+02	<MDL	1.84E+02	2.84E+02
08/08/25	1.00E+03	1.57E+02	<MDL	2.24E+02	4.00E+02
08/15/25	1.73E+03	2.03E+02	<MDL	3.03E+02	1.50E+02
08/22/25	1.00E+04	1.20E+02	<MDL	2.72E+02	5.36E+02
09/01/25	1.36E+03	3.55E+02	<MDL	1.13E+02	5.99E+02
09/08/25	5.62E+03	2.22E+02	<MDL	2.55E+02	1.18E+03
09/15/25	1.26E+04	3.32E+02	<MDL	2.63E+02	1.00E+03
09/22/25	5.87E+03	<MDL	<MDL	2.37E+02	9.45E+02
10/01/25	4.57E+03	3.17E+02	5.90E+01	2.91E+02	1.75E+03
10/08/25	2.13E+03	2.93E+02	<MDL	1.75E+02	9.61E+02
10/21/25	9.95E+03	2.37E+02	7.31E+01	3.78E+02	1.61E+03
10/22/25	2.39E+04	<MDL	8.60E+01	4.00E+02	1.54E+03
11/01/25	2.74E+04	4.77E+02	1.78E+02	5.16E+02	2.22E+03
11/08/25	3.79E+04	<MDL	3.05E+02	5.51E+02	2.86E+03
11/15/25	1.24E+04	3.65E+02	3.73E+02	1.41E+03	7.45E+03
11/22/25	4.00E+03	2.12E+02	<MDL	5.47E+02	3.00E+03
12/01/25	2.99E+04	6.91E+02	4.89E+02	9.99E+02	4.24E+03
12/08/25	2.69E+04	6.15E+02	5.51E+02	1.01E+03	4.49E+03
12/15/25					
12/21/25	5.60E+03	3.24E+02	<MDL	2.79E+02	8.70E+02

NOTE: Filters were not received for the following time frames: January, February, March, April, May, June, July 1st and 2nd week.
December 2nd and 3rd weeks were collected as one weekly composite

FAS Filters – Station B & G

Sample Type: FAS, Station B & G
Year: 2025
Analysis Performed: Metals in monthly composites

Month	Aluminum ng/m³	Cadmium ng/m³	Lead ng/m³	Magnesium ng/m³	Silicon ng/m³	Thorium ng/m³	Uranium ng/m³
January	4.08E+01	2.66E-01	1.18E-01	2.54E+01	2.75E+02	<MDC	<MDC
February	1.14E+02	2.54E-01	2.38E-01	7.93E+01	4.54E+02	5.64E-03	<MDC
March	2.10E+02	2.57E-01	1.93E-01	7.66E+01	6.78E+02	3.07E-02	6.89E-03
April	2.01E+02	2.59E-01	2.37E-01	6.62E+01	6.64E+02	3.01E-02	6.81E-03
May	8.17E+01	<MDC	2.08E-01	4.76E+01	4.41E+02	<MDC	<MDC
June							
July	2.57E+02	2.48E-01	5.23E-02	<MDC	<MDC	<MDC	<MDC
August	1.36E+02	2.77E-01	9.29E-02	<MDC	<MDC	<MDC	<MDC
September	1.63E+02	2.76E-01	8.55E-02	<MDC	<MDC	7.29E-03	5.40E-03
October	1.01E+02	2.72E-01	5.45E-02	<MDC	<MDC	<MDC	<MDC
November	4.08E+02	2.51E-01	6.32E-02	<MDC	<MDC	<MDC	<MDC
December	8.66E+01	2.80E-01	6.99E-02	<MDC	<MDC	<MDC	<MDC

NOTE: The filters were collected from Station B (skid B-1) in January, February, March, April, May, July 1st and 2nd week. Starting from July 3rd week and after, the filters were collected from station G (skid G-1). No filter for June.

Sample Type: FAS, Station B & G
Year: 2025
Analysis Performed: Anions in monthly composites

Month	Chloride ng/m³	Nitrate ng/m³	Phosphate ng/m³	Sulfate ng/m³
January	6.22E+02	<MDL	<MDL	1.22E+02
February	6.94E+02	<MDL	<MDL	2.14E+02
March	9.31E+02	<MDL	<MDL	2.09E+02
April	7.36E+02	<MDL	<MDL	1.88E+02
May	<MDL	<MDL	<MDL	<MDL
June				
July	6.06E+02	<MDL	<MDL	1.18E+02
August	5.90E+02	<MDL	<MDL	9.70E+01
September	5.91E+02	<MDL	<MDL	1.03E+02
October	5.74E+02	<MDL	<MDL	9.90E+01
November	6.76E+02	<MDL	<MDL	1.11E+02
December	5.63E+02	<MDL	<MDL	1.02E+02

Sample Type: FAS, Station B & G
Year: 2025
Analysis Performed: Cations in monthly composites

Month	Sodium ng/m³	Ammonium ng/m³	Magnesium ng/m³	Potassium ng/m³	Calcium ng/m³
January	4.12E+01	<MDL	<MDL	<MDL	<MDL
February	5.44E+01	<MDL	<MDL	<MDL	4.46E+02
March	8.86E+01	<MDL	<MDL	<MDL	5.02E+02
April	1.11E+02	<MDL	<MDL	<MDL	2.42E+02
May	1.75E+02	<MDL	<MDL	<MDL	1.16E+02
June					
July	3.39E+01	<MDL	<MDL	<MDL	<MDL
August	3.46E+01	<MDL	<MDL	<MDL	<MDL
September	3.43E+01	<MDL	<MDL	<MDL	<MDL
October	3.14E+01	<MDL	<MDL	<MDL	<MDL
November	3.25E+01	<MDL	<MDL	<MDL	<MDL
December	3.33E+01	<MDL	<MDL	<MDL	<MDL

NOTE: The filters were collected from Station B (skid B-1) in January, February, March, April, May, July 1st and 2nd week. Starting from July 3rd week and after, the filters were collected from station G (skid G-1). No filter for June.

Whatman Filters

Sample Type: Near Field (107), ambient air
Year: 2025
Analysis Performed: Metals

Start Date	Aluminum µg/m³	Cadmium µg/m³	Lead µg/m³	Thorium µg/m³	Uranium µg/m³
01/08/25	7.14E-01	1.28E-04	4.98E-04	<MDL	1.22E-03
01/29/25	2.09E+00	5.62E-04	9.16E-04	<MDL	<MDL
03/05/25	6.35E+00	3.55E-04	<MDL	3.02E-03	<MDL
03/21/25	2.73E+00	2.20E-04	6.56E-04	6.02E-04	<MDL
04/09/25	4.88E+00	1.93E-03	3.60E-03	2.36E-03	<MDL
04/25/25	2.57E+00	3.05E-04	1.14E-03	8.33E-04	<MDL
05/16/25	9.75E-01	1.45E-04	7.59E-04	<MDL	<MDL
06/11/25	8.11E-01	1.87E-04	8.43E-04	<MDL	<MDL
07/18/25	4.63E-01	1.21E-04	5.73E-04	<MDL	3.61E-04
09/11/25	5.03E-01	9.27E-05	7.97E-04	<MDL	1.99E-04
11/14/25	7.20E-01	1.20E-04	7.94E-04	<MDL	3.36E-04

Sample Type: Cactus Flats (108), ambient air
Year: 2025
Analysis Performed: Metals

Start Date	Aluminum µg/m³	Cadmium µg/m³	Lead µg/m³	Thorium µg/m³	Uranium µg/m³
01/08/25	9.12E-01	2.37E-04	9.48E-04	<MDL	7.42E-04
01/29/25	2.22E+00	2.25E-04	6.23E-04	7.77E-04	<MDL
03/05/25	6.43E+00	3.87E-04	<MDL	2.62E-03	<MDL
03/21/25	2.79E+00	2.24E-04	<MDL	7.08E-04	<MDL
04/09/25	3.11E+00	9.27E-04	4.14E-03	1.24E-03	<MDL
04/25/25	3.33E+00	5.44E-04	7.21E-04	1.26E-03	<MDL
05/16/25	1.33E+01	1.61E-03	7.56E-03	4.73E-03	<MDL
06/11/25	6.72E-01	1.56E-04	6.16E-04	<MDL	<MDL
07/18/25	4.77E-01	8.44E-05	4.17E-04	<MDL	2.86E-04
09/11/25	7.57E-01	1.10E-04	7.43E-04	<MDL	<MDL
11/14/25	1.14E+00	1.49E-04	8.03E-04	<MDL	<MDL

Sample Type: Near Field (107), ambient air
Year: 2025
Analysis Performed: Anions

Start Date	Chloride µg/m³	Nitrate µg/m³	Phosphate µg/m³	Sulfate µg/m³
01/08/2025	9.20E-01	3.31E+00	2.73E-03	1.61E+00
01/29/2025	1.19E+00	3.77E+00	3.52E-03	5.16E+00
03/05/2025	7.49E-01	2.33E+00	3.15E-03	3.46E+00
03/21/2025	6.57E-01	3.83E+00	<MDL	3.38E+00
04/09/2025	4.48E-01	3.48E+00	3.67E-03	3.49E+00
04/25/2025	6.32E-01	4.35E+00	<MDL	4.34E+00
05/16/2025	2.00E-01	2.43E+00	<MDL	2.38E+00
06/11/2025	1.88E-01	2.06E+00	3.01E-03	2.40E+00
07/18/2025	7.48E-02	1.79E+00	5.11E-03	1.96E+00
09/11/2025	2.37E-01	1.86E+00	7.65E-03	1.48E+00
11/14/2025	3.86E-01	3.12E+00	2.54E-03	1.98E+00

Sample Type: Cactus Flats (108), ambient air
Year: 2025
Analysis Performed: Anions

Start Date	Chloride µg/m³	Nitrate µg/m³	Phosphate µg/m³	Sulfate µg/m³
01/08/2025	3.24E-01	2.56E+00	1.94E-03	1.57E+00
01/29/2025	5.94E-01	3.23E+00	4.08E-03	4.07E+00
03/05/2025	5.29E-01	2.11E+00	<MDL	3.08E+00
03/21/2025	4.99E-01	2.52E+00	<MDL	2.51E+00
04/09/2025	4.20E-01	2.81E+00	<MDL	3.14E+00
04/25/2025	6.02E-01	3.81E+00	<MDL	4.12E+00
05/16/2025	1.82E-01	2.76E+00	<MDL	2.98E+00
06/11/2025	1.73E-01	1.73E+00	6.34E-03	2.27E+00
07/18/2025	6.75E-02	1.59E+00	5.02E-03	2.04E+00
09/11/2025	1.78E-01	1.75E+00	4.58E-03	1.59E+00
11/14/2025	3.97E-01	3.19E+00	1.20E-03	2.28E+00

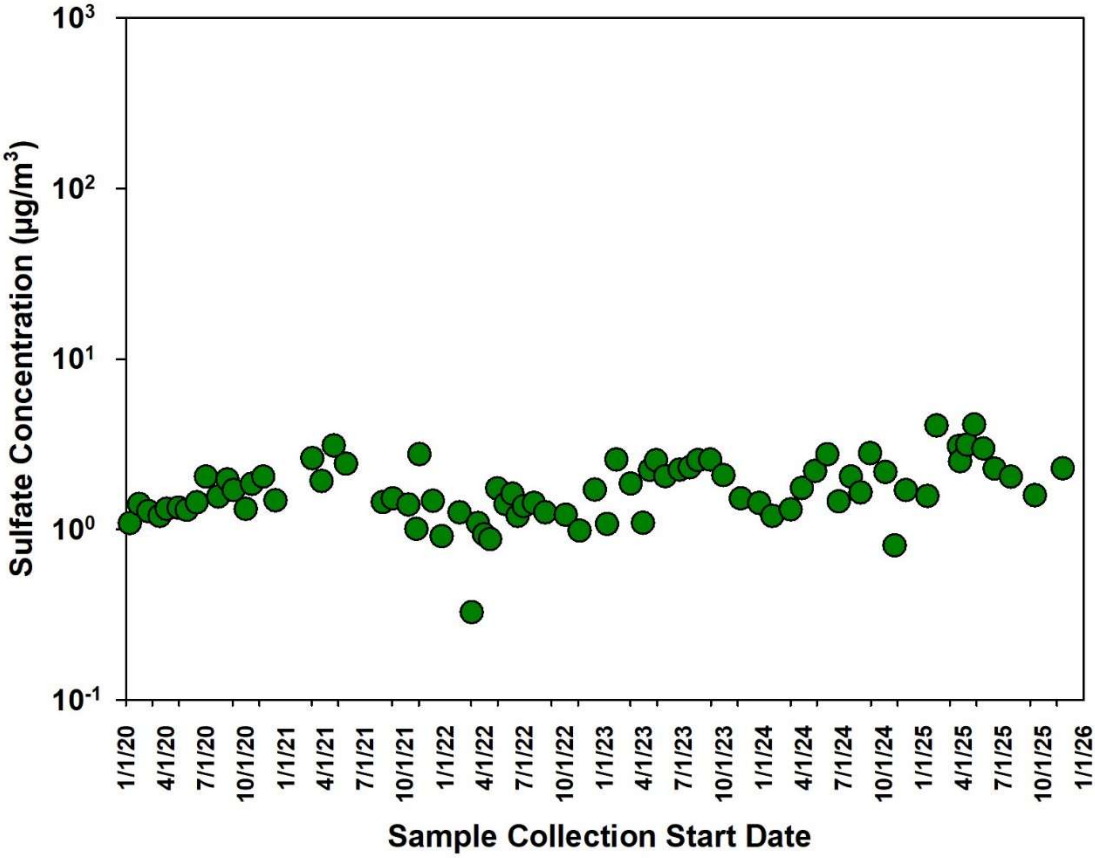


Figure 1: Historical Concentrations of Sulfate at Cactus Flats

Sample Type: Near Field (107), ambient air
Year: 2025
Analysis Performed: Cations

Start Date	Sodium µg/m³	Magnesium µg/m³	Potassium µg/m³	Calcium µg/m³
01/08/2025	4.56E-01	7.96E-02	1.72E-01	1.32E+00
01/29/2025	6.85E-01	1.66E-01	2.88E-01	1.84E+00
03/05/2025	7.20E-01	1.64E-01	2.39E-01	1.60E+00
03/21/2025	4.95E-01	1.47E-01	1.97E-01	1.56E+00
04/09/2025	6.95E-01	1.42E-01	2.10E-01	2.13E+00
04/25/2025	6.07E-01	1.42E-01	1.89E-01	1.78E+00
05/16/2025	3.70E-01	1.18E-01	2.36E-01	2.02E+00
06/11/2025	3.77E-01	9.76E-02	1.82E-01	1.79E+00
07/18/2025	2.27E-01	6.50E-02	9.00E-02	2.00E+00
09/11/2025	3.03E-01	6.82E-02	6.86E-02	1.43E+00
11/14/2025	1.60E-01	5.90E-02	9.18E-02	9.43E-01

Sample Type: Cactus Flats (108), ambient air
Year: 2025
Analysis Performed: Cations

Start Date	Sodium µg/m³	Magnesium µg/m³	Potassium µg/m³	Calcium µg/m³
01/08/2025	2.49E-01	5.54E-02	9.71E-02	1.57E+00
01/29/2025	3.35E-01	9.99E-02	1.64E-01	1.86E+00
03/05/2025	5.17E-01	1.22E-01	1.69E-01	1.53E+00
03/21/2025	4.67E-01	1.02E-01	1.42E-01	1.73E+00
04/09/2025	5.56E-01	1.12E-01	1.50E-01	2.16E+00
04/25/2025	5.01E-01	1.01E-01	1.06E-01	1.73E+00
05/16/2025	4.63E-01	1.48E-01	2.43E-01	2.92E+00
06/11/2025	2.84E-01	7.76E-02	1.59E-01	1.64E+00
07/18/2025	2.13E-01	5.66E-02	7.61E-02	1.91E+00
09/11/2025	2.20E-01	5.56E-02	5.13E-02	1.28E+00
11/14/2025	2.41E-01	6.89E-02	8.95E-02	1.65E+00

Drinking Water

Sample Type: Drinking Water
Year: 2025
Analysis Performed: Anions

Sample Location	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
Carlsbad (Sheep draw)	3.72E+01	4.49E+00	<MDL	8.96E+01
Hobbs	1.27E+02	2.29E+01	<MDL	1.55E+02
Double Eagle PRV4	3.00E+01	1.30E+01	<MDL	3.97E+01
Loving	3.14E+01	2.06E+01	<MDL	1.16E+02
Otis	2.83E+02	1.60E+01	<MDL	6.32E+02
Malaga	6.50E+02	1.54E+01	<MDL	1.01E+03

Sample Type: Drinking Water
Year: 2025
Analysis Performed: Cations

Sample Location	Sodium mg/L	Magnesium mg/L	Potassium mg/L	Calcium mg/L
Carlsbad (Sheep draw)	2.82E+01	3.25E+01	<MDL	7.25E+01
Hobbs	6.14E+01	2.56E+01	<MDL	1.14E+02
Double Eagle PRV4	3.18E+01	1.02E+01	<MDL	5.03E+01
Loving	2.24E+01	3.64E+01	<MDL	8.65E+01
Otis	9.93E+01	7.65E+01	<MDL	2.81E+02
Malaga	2.14E+02	1.29E+02	<MDL	4.54E+02

Sample Type: Drinking Water
Year: 2025
Analysis Performed: pH

Sample Location	pH @ 26.77°C
Carlsbad (Sheep draw)	8.34
Hobbs	8.16
Double Eagle PRV4	8.19
Loving	8.11
Otis	7.84
Malaga	7.59

Sample Type: Drinking Water
Year: 2025
Analysis Performed: Total Organic Carbon

Sample Location	TOC mg/L
Carlsbad (Sheep draw)	
Hobbs	0.9056
Double Eagle PRV-4	0.4016
Loving	
Otis	0.4839
Malaga	1.25

Sample Type: Drinking Water

Year: 2025
Analysis Performed: Conductivity

Sample Location	Conductivity mS/cm	Temperature °C
Carlsbad (Sheep draw)	0.729	27.9
Loving	0.792	27.8
Otis	2.24	28.1
Malaga	3.65	27.8
Hobbs	1.073	27.7
PRV4 (Double Eagle)	0.500	27.6

Sample Type: Drinking Water
Year: 2025
Analysis Performed: Specific gravity

Sample Location	Specific Gravity
Carlsbad (Sheep draw)	0.991
Loving	0.990
Otis	0.993
Malaga	0.995
Hobbs	0.992
PRV4 (Double Eagle)	0.992

Sample Type: Drinking Water
Year: 2025
Analysis Performed: TDS/TSS

Sample Location	TDS mg/L	TSS mg/L
Carlsbad (Sheep draw)	440.0	N.D.
Loving	560.0	20.0
Otis	1820.0	N.D.
Malaga	3260.0	N.D.
Hobbs	720.0	20.0
PRV4 (Double Eagle)	260.0	N.D.
N.D. = non-detect.		

Sample Type: Drinking Water
Year: 2025
Analysis Performed: Metals

Metal	Carlsbad Conc µg/L	Loving Conc µg/L	Otis Conc µg/L	Malaga Conc µg/L	Hobbs Conc µg/L	Double Eagle (PRV4) Conc µg/L
Ag	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Al	3.02E+00	4.54E+00	3.00E+01	9.67E+00	4.31E+00	6.98E+00
As	7.13E-01	1.77E+00	1.88E+00	2.03E+00	6.54E+00	7.34E+00
Ba	7.05E+01	3.29E+01	1.33E+01	1.20E+01	5.50E+01	8.79E+01
Be	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Ca	7.23E+04	8.52E+04	2.64E+05	4.31E+05	1.12E+05	5.01E+04
Cd	4.51E-03	4.98E-02	<MDC	<MDC	7.41E-03	<MDC
Ce	<MDC	<MDC	4.35E-02	<MDC	<MDC	<MDC

Co	8.90E-02	1.01E-01	3.56E-01	5.19E-01	1.51E-01	6.10E-02
Cr	2.00E+00	2.63E+00	2.92E+00	2.77E+00	2.32E+00	1.80E+00
Cu	4.10E+00	5.40E+00	<MDC	<MDC	8.94E+00	<MDC
Dy	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Er	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Eu	1.30E-02	5.95E-03	<MDC	<MDC	8.91E-03	1.54E-02
Fe	2.26E+02	2.69E+02	1.02E+03	1.45E+03	3.56E+02	2.34E+02
Gd	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Hg	<MDL	<MDL	0.167	<MDL	<MDL	<MDL
K	1.27E+03	1.80E+03	2.71E+03	3.83E+03	2.61E+03	2.46E+03
La	<MDC	<MDC	2.05E-02	<MDC	<MDC	<MDC
Li	7.16E+00	1.92E+01	4.41E+01	6.05E+01	3.72E+01	1.82E+01
Mg	3.35E+04	3.64E+04	8.01E+04	1.32E+05	2.66E+04	9.83E+03
Mn	4.35E-01	5.67E-01	1.02E+00	<MDC	1.27E+00	3.49E+00
Mo	1.36E+00	1.67E+00	3.93E+00	4.06E+00	2.70E+00	1.77E+00
Na	2.62E+04	2.06E+04	9.35E+04	2.01E+05	5.54E+04	2.94E+04
Nd	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Ni	2.69E+00	2.95E+00	1.93E+01	1.37E+01	3.96E+00	1.72E+00
P	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Pb	2.55E-01	4.16E+00	<MDC	<MDC	5.10E-01	1.12E+00
Pr	<MDC	<MDC	5.47E-03	<MDC	<MDC	<MDC
Sb	3.05E-02	4.28E-02	3.51E-02	3.79E-02	6.08E-02	2.66E-02
Sc	1.37E+00	2.19E+00	2.40E+00	2.52E+00	5.41E+00	3.39E+00
Se	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Si	6.10E+03	9.49E+03	9.66E+03	9.97E+03	2.55E+04	1.52E+04
Sr	3.08E+02	7.08E+02	2.87E+03	5.11E+03	1.13E+03	4.70E+02
Th	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Tl	7.50E-02	3.53E-03	<MDC	<MDC	<MDC	<MDC
U	8.12E-01	1.92E+00	4.07E+00	5.69E+00	3.80E+00	1.41E+00
V	3.96E+00	1.22E+01	9.40E+00	8.05E+00	3.04E+01	2.81E+01
Zn	5.60E+00	2.51E+02	2.29E+01	<MDC	1.10E+01	8.76E+00

Surface Water

Sample Type: Surface Water
Year: 2025
Analysis Performed: Anions

Sample Location	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
Hill Tank	2.73E+00	1.03E+00	4.66E-01	7.63E+00
Noya Tank	1.09E+00	1.71E+00	6.77E-01	1.82E+00
Pierce Canyon	1.41E+03	3.14E+00	<MDL	1.47E+03
Lake Carlsbad (Shore)	7.04E+02	1.48E+00	<MDL	1.16E+03
Lake Carlsbad (Shallow)	7.10E+02	4.03E+00	<MDL	1.13E+03
Lake Carlsbad (Deep)	7.97E+02	4.60E+00	<MDL	1.24E+03
Brantley Lake (shore)	1.33E+03	<MDL	<MDL	1.42E+03
Brantley Lake (shallow)	9.98E+02	<MDL	<MDL	1.15E+03
Brantley Lake (deep)	1.01E+03	<MDL	<MDL	1.15E+03
Pecos River (Shore)	4.94E+02	2.33E+00	<MDL	1.11E+03
Red Bluff (Shallow)	3.16E+03	<MDL	<MDL	3.27E+03
Red Bluff (Deep)	3.19E+03	<MDL	<MDL	3.29E+03

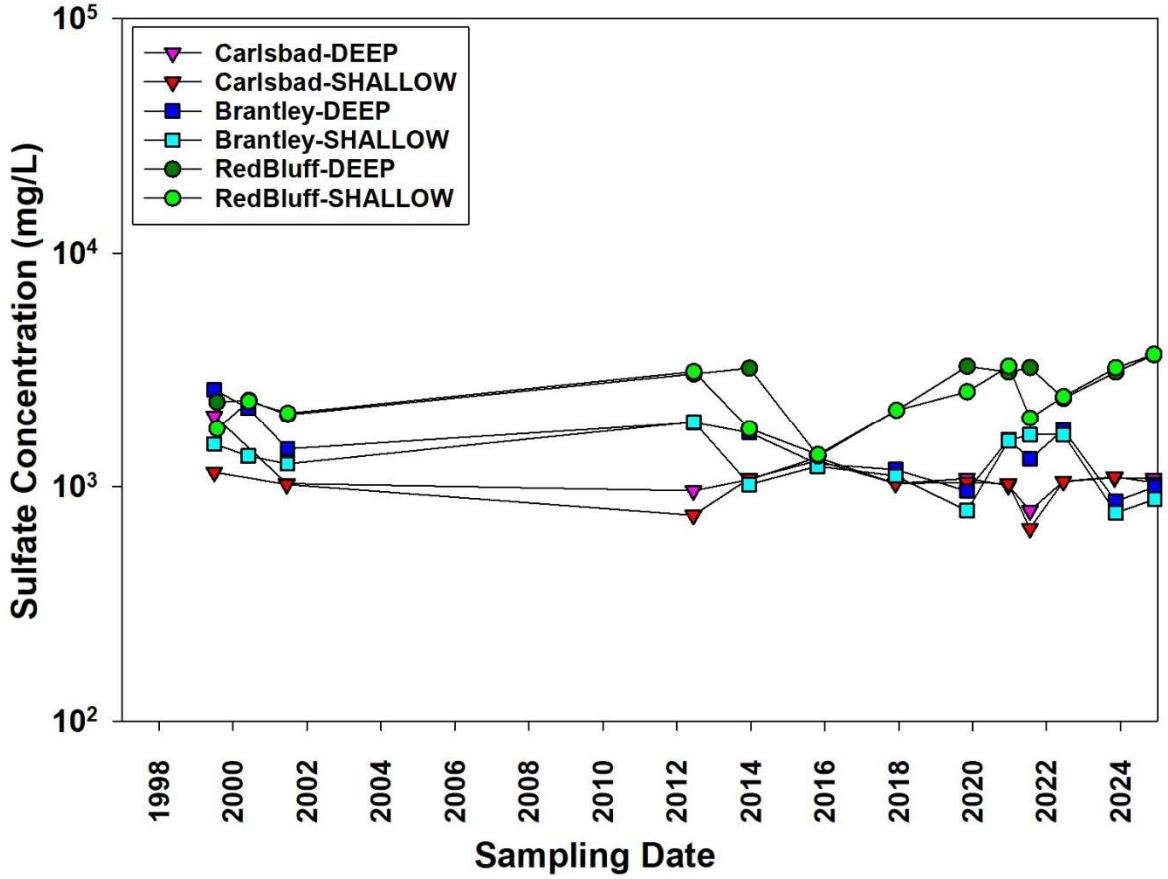


Figure 2: Historical Concentrations of Sulfate in Surface Water

Sample Type: Surface Water
Year: 2025
Analysis Performed: Cations

Sample Location	Sodium mg/L	Magnesium mg/L	Potassium mg/L	Calcium mg/L
Hill Tank	1.38E+00	3.61E+00	7.59E+00	4.93E+01
Noya Tank	3.40E-01	2.05E+00	5.38E+00	4.26E+01
Pierce Canyon	8.30E+02	1.86E+02	3.91E+01	4.98E+02
Lake Carlsbad (Shore)	4.47E+02	1.19E+02	9.52E+00	3.88E+02
Lake Carlsbad (Shallow)	4.83E+02	1.46E+02	<MDL	4.09E+02
Lake Carlsbad (Deep)	5.00E+02	1.54E+02	<MDL	4.19E+02
Brantley Lake (Shore)	8.42E+02	1.47E+02	1.50E+01	4.96E+02
Brantley Lake (shallow)	6.47E+02	1.07E+02	1.30E+01	4.01E+02
Brantley Lake (deep)	6.54E+02	1.01E+02	<MDL	4.03E+02
Pecos River (Shore)	4.07E+02	9.58E+01	8.08E+00	4.95E+02
Red Bluff (Shallow)	1.97E+03	4.38E+02	7.42E+01	9.83E+02
Red Bluff (Deep)	1.97E+03	4.40E+02	8.50E+01	9.77E+02

Sample Type: Surface Water
Year: 2025
Analysis Performed: pH

Sample Location	pH @ 25°C
Hill Tank	8.33

Noya Tank	8.41
Pierce Canyon	8.07
Lake Carlsbad (Shore)	8.21
Lake Carlsbad (Shallow)	8.13
Lake Carlsbad (Deep)	8.44
Brantley Lake (Shore)	8.29
Brantley Lake (shallow)	8.12
Brantley Lake (deep)	7.95
Pecos River (Shore)	7.58
Red Bluff (Shallow)	8.22
Red Bluff (Deep)	8.32

Sample Type: Surface Water
Year: 2025
Analysis Performed: Conductivity

Sample Location	Conductivity mS/cm	Temperature °C
Hill Tank	0.1764	19.8
Noya Tank	0.1537	19.8
Pierce Canyon	6.49	19.6
Lake Carlsbad (Shore)	4.26	19.6
Lake Carlsbad (Shallow)	4.27	19.6
Lake Carlsbad (Deep)	4.37	19.6
Brantley Lake (Shore)	6.44	19.4
Brantley Lake (shallow)	4.92	21.1
Brantley Lake (deep)	4.98	21.1
Pecos River (Shore)	3.91	19.9
Red Bluff (Shallow)	12.48	19.6
Red Bluff (Deep)	12.43	19.6

Sample Type: Surface Water
Year: 2025
Analysis Performed: Specific gravity

Sample Location	SG $_{T/4^{\circ}C}$
Hill Tank	0.995
Noya Tank	0.996
Pierce Canyon	1.001
Lake Carlsbad (Shore)	0.999
Lake Carlsbad (Shallow)	0.993
Lake Carlsbad (Deep)	0.995
Brantley Lake (Shore)	1.000
Brantley Lake (Shallow)	0.993
Brantley Lake (Deep)	0.997
Pecos River (Shore)	1.000
Red Bluff (Shallow)	0.998
Red Bluff (Deep)	0.998

Sample Type: Surface Water
Year: 2025

Analysis Performed: TOC

Sample Location	TOC mg/L
Hill Tank	16.01
Noya Tank	16.10
Pierce Canyon	17.91
Lake Carlsbad (Shore)	17.73
Lake Carlsbad (Shallow)	0.980
Lake Carlsbad (Deep)	0.989
Brantley Lake (Shore)	18.33
Brantley Lake (Shallow)	3.792
Brantley Lake (Deep)	3.752
Pecos River (Shore)	12.11
Red Bluff (Shallow)	7.993
Red Bluff (Deep)	8.174

Sample Type: Surface Water
Year: 2025
Analysis Performed: TDS/TSS

Sample Location	TDS mg/L	TSS mg/L
Hill Tank	160.00	N.D.
Noya Tank	200.00	N.D.
Pierce Canyon	4760.00	N.D.
Lake Carlsbad (Shore)	2960.00	N.D.
Lake Carlsbad (Shallow)	3210.00	80.00
Lake Carlsbad (Deep)	3200.00	80.00
Brantley Lake (Shore)	4680.00	N.D.
Brantley Lake (Shallow)	3800.00	40.00
Brantley Lake (Deep)	3680.00	N.D.
Pecos River (Shore)	2720.00	2120.00
Red Bluff (Shallow)	10520.00	160.00
Red Bluff (Deep)	10320.00	N.D.

Sample Type: Surface Water
Year: 2025
Analysis Performed: Metals

Metal	Hill Tank Conc µg/L	Noya Tank Conc µg/L	Pierce Canyon Conc µg/L
Ag	<MDC	<MDC	<MDC
Al	6.54E+03	7.12E+03	1.78E+03
As	2.68E+00	2.60E+00	<MDC
Ba	2.60E+02	2.55E+02	1.37E+02
Be	4.83E-01	5.26E-01	<MDC
Ca	4.51E+04	3.96E+04	4.16E+05
Cd	1.14E-01	1.16E-01	<MDC
Ce	1.27E+01	1.37E+01	2.58E+00
Co	4.22E+00	4.59E+00	2.17E+00
Cr	4.51E+00	4.23E+00	<MDC
Cu	<MDC	1.89E+01	<MDC
Dy	9.61E-01	1.08E+00	2.22E-01
Er	4.42E-01	4.95E-01	1.01E-01
Eu	3.70E-01	4.21E-01	9.55E-02
Fe	3.28E+03	3.49E+03	2.33E+03
Gd	1.50E+00	1.69E+00	3.28E-01
Hg	<MDL	<MDL	<MDC

K	7.03E+03	6.94E+03	1.53E+04
La	5.53E+00	5.96E+00	1.07E+00
Li	7.55E+00	9.43E+00	7.70E+01
Mg	7.34E+03	7.60E+03	1.80E+05
Mn	1.71E+02	1.93E+02	1.69E+02
Mo	1.39E-01	3.00E-01	2.91E+00
Na	1.56E+03	7.99E+02	7.10E+05
Nd	6.68E+00	7.06E+00	1.40E+00
Ni	8.94E+00	8.94E+00	1.81E+01
P	4.48E+02	5.71E+02	1.15E+02
Pb	6.48E+00	8.88E+00	<MDC
Pr	1.55E+00	1.64E+00	3.20E-01
Sb	1.11E-01	1.30E-01	2.07E-01
Sc	2.94E+00	3.30E+00	2.12E+00
Se	<MDC	<MDC	<MDC
Si	1.56E+04	1.74E+04	7.44E+03
Sr	1.39E+02	1.16E+02	6.87E+03
Th	1.60E-01	2.10E-01	<MDC
Tl	3.34E-02	4.14E-02	<MDC
U	2.33E-01	2.06E-01	6.07E+00
V	1.64E+01	1.92E+01	8.11E+00
Zn	<MDC	<MDC	<MDC

	Brantley Lake		**Lake Carlsbad**		**Red Bluff**		**Brantley Lake**	**Lake Carlsbad**	**Pecos River**
Metal	**Shallow Conc µg/L**	**Deep Conc µg/L**	**Shallow Conc µg/L**	**Deep Conc µg/L**	**Shallow Conc µg/L**	**Deep Conc µg/L**	**Shore Conc µg/L**	**Shore Conc µg/L**	**Shore Conc µg/L**
Ag	<MDC	<MDC	<MDC	<MDC	1.16E+01	<MDC	<MDC	<MDC	<MDC
Al	5.01E+01	1.53E+02	<MDC	4.15E+01	<MDC	<MDC	1.95E+02	1.71E+02	1.88E+04
As	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	7.17E+00
Ba	9.29E+01	1.14E+02	1.51E+01	1.54E+01	8.65E+01	8.87E+01	9.10E+01	2.14E+01	1.53E+02
Be	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	1.93E+00
Ca	3.74E+05	3.76E+05	3.98E+05	4.01E+05	9.26E+05	9.50E+05	4.60E+05	3.48E+05	4.73E+05
Cd	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	4.16E-01
Ce	<MDC	2.14E-01	<MDC	<MDC	<MDC	<MDC	3.09E-01	3.09E-01	4.13E+01
Co	5.76E-01	7.03E-01	1.05E+00	1.11E+00	1.56E+00	1.69E+00	9.79E-01	7.04E-01	1.18E+01
Cr	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	1.19E+01
Cu	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Dy	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	4.05E+00
Er	<MDC	<MDC	<MDC	<MDC	2.37E-01	<MDC	<MDC	<MDC	1.80E+00
Eu	<MDC	<MDC	<MDC	<MDC	3.16E-01	<MDC	<MDC	<MDC	1.39E+00
Fe	1.16E+03	1.59E+03	1.26E+03	1.83E+03	3.86E+03	5.20E+03	1.39E+03	1.40E+03	1.38E+04
Gd	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	6.03E+00
Hg	<MDC	<MDC	<MDL	<MDL	<MDC	<MDC	<MDC	<MDC	<MDC
K	8.67E+03	8.78E+03	6.14E+03	6.85E+03	3.79E+04	3.89E+04	9.44E+03	5.21E+03	8.08E+03
La	<MDC	1.01E-01	<MDC	<MDC	<MDC	<MDC	1.42E-01	1.55E-01	1.77E+01
Li	4.07E+01	4.24E+01	4.81E+01	5.49E+01	1.60E+02	1.61E+02	5.53E+01	4.60E+01	6.58E+01
Mg	1.04E+05	1.05E+05	1.23E+05	1.34E+05	3.90E+05	3.96E+05	1.42E+05	1.16E+05	1.06E+05
Mn	4.05E+01	1.33E+02	4.12E+00	4.84E+00	8.10E+01	8.52E+01	3.71E+01	9.89E+00	1.76E+03
Mo	4.64E+00	3.59E+00	2.89E+00	2.67E+00	9.18E+00	<MDC	3.82E+00	2.91E+00	2.20E+00
Na	5.74E+05	5.86E+05	4.33E+05	4.48E+05	2.00E+06	2.04E+06	7.81E+05	4.12E+05	3.72E+05
Nd	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	2.42E+01
Ni	1.35E+01	1.48E+01	1.54E+01	1.64E+01	3.19E+01	3.68E+01	1.56E+01	1.31E+01	3.71E+01
P	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	8.84E+02
Pb	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Pr	3.22E-02	2.65E-02	<MDC	<MDC	2.61E-01	<MDC	3.76E-02	3.68E-02	5.41E+00
Sb	2.32E-01	1.46E-01	<MDC	<MDC	8.55E-01	7.39E-01	2.06E-01	9.32E-02	1.80E-01
Sc	1.05E+00	1.45E+00	1.56E+00	2.13E+00	1.91E+00	1.76E+00	1.19E+00	1.63E+00	8.19E+00
Se	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Si	5.86E+03	6.14E+03	7.68E+03	7.86E+03	5.05E+03	4.44E+03	4.53E+03	5.79E+03	4.07E+04
Sr	5.84E+03	5.77E+03	4.92E+03	5.02E+03	1.26E+04	1.33E+04	7.34E+03	5.10E+03	6.32E+03
Th	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	2.54E+00
Tl	<MDC	<MDC	1.23E-01	1.27E-01	<MDC	<MDC	<MDC	<MDC	7.39E-02
U	3.69E+00	3.71E+00	4.12E+00	4.68E+00	1.01E+01	1.00E+01	4.51E+00	3.42E+00	6.12E+00
V	5.44E+00	6.00E+00	6.96E+00	8.39E+00	1.51E+01	1.60E+01	4.01E+00	5.86E+00	4.44E+01

Zn	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC

Groundwater

Sample Type: Ground Water
Year: 2025
Analysis Performed: Anions

Sample Location	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
WQSP-1	3.56E+04	<MDL	<MDL	4.85E+03
WQSP-2	3.59E+04	<MDL	<MDL	5.28E+03
WQSP-3	1.36E+05	<MDL	<MDL	7.95E+03
WQSP-4	5.94E+04	<MDL	<MDL	6.75E+03
WQSP-5	1.66E+04	<MDL	<MDL	4.88E+03
WQSP-6	5.32E+03	<MDL	<MDL	4.51E+03

Sample Type: Ground Water
Year: 2025
Analysis Performed: Cations

Sample Location	Sodium mg/L	Magnesium mg/L	Potassium mg/L	Calcium mg/L
WQSP-1	2.31E+04	1.01E+03	4.12E+02	1.79E+03
WQSP-2	2.16E+04	9.74E+02	4.36E+02	1.58E+03
WQSP-3	8.39E+04	2.29E+03	1.47E+03	1.44E+03
WQSP-4	4.02E+04	1.24E+03	9.81E+02	1.80E+03
WQSP-5	1.13E+04	5.95E+02	3.76E+02	1.12E+03
WQSP-6	4.69E+03	2.01E+02	1.63E+02	7.14E+02

Sample Type: Ground Water
Year: 2025
Analysis Performed: pH

Sample Location	pH @ 23°C
WQSP-1	6.86
WQSP-2	7.05
WQSP-3	7.32
WQSP-4	7.42
WQSP-5	7.62
WQSP-6	8.02

Sample Type: Ground Water
Year: 2025
Analysis Performed: Conductivity

Sample Location	Conductivity mS/cm	Temperature °C
WQSP-1	85.4	21.7
WQSP-2	83.6	21.7
WQSP-3	198.8	18.6
WQSP-4	128.9	20.4
WQSP-5	46.8	22.6
WQSP-6	21.0	18.6

Sample Type: Ground Water
Year: 2025
Analysis Performed: Specific gravity

Sample Location	SG $_{T/4^{o}C}$
WQSP-1	1.041
WQSP-2	1.044
WQSP-3	1.129
WQSP-4	1.069
WQSP-5	1.024
WQSP-6	1.007

Sample Type: Ground Water
Year: 2025
Analysis Performed: TOC

Sample Location	TOC mg/L
WQSP-1	1.440
WQSP-2	1.322
WQSP-3	0.969
WQSP-4	3.497
WQSP-5	4.130
WQSP-6	1.384

Sample Type: Ground Water
Year: 2025
Analysis Performed: TDS/TSS

Sample Location	TDS mg/L	TSS mg/L
WQSP-1	66480.00	N.D.
WQSP-2	66440.00	N.D.
WQSP-3	229580.00	60.00
WQSP-4	111260.00	20.00
WQSP-5	35020.00	40.00
WQSP-6	15440.00	180.00

Sample Type: Ground Water
Year: 2025
Analysis Performed: Metals

Metals	WQSP-1 µg/L	WQSP-2 µg/L	WQSP-3 µg/L	WQSP-4 µg/L	WQSP-5 µg/L	WQSP-6 µg/L
Cd	1.60E-01	<MDC	<MDC	<MDC	<MDC	2.27E+00
Co	6.47E-01	5.60E-01	6.56E-01	4.81E-01	1.76E-01	1.51E+00
Cr	<MDC	<MDC	1.58E+01	<MDC	<MDC	<MDC
Cu	<MDC	<MDC		<MDC	<MDC	<MDC
Eu	3.21E-01	<MDC	<MDC	<MDC	<MDC	<MDC
La	5.53E-01	<MDC	<MDC	<MDC	2.23E-01	5.71E+00
Ni	3.64E+00	3.15E+00	5.63E+00	7.88E+00	<MDC	<MDC
Pb	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
Th	<MDC	<MDC	<MDC	<MDC	<MDC	<MDC
U	1.10E+01	9.30E+00	1.49E+00	5.14E+00	3.89E+00	3.49E+00
Zn		<MDC			<MDC	<MDC

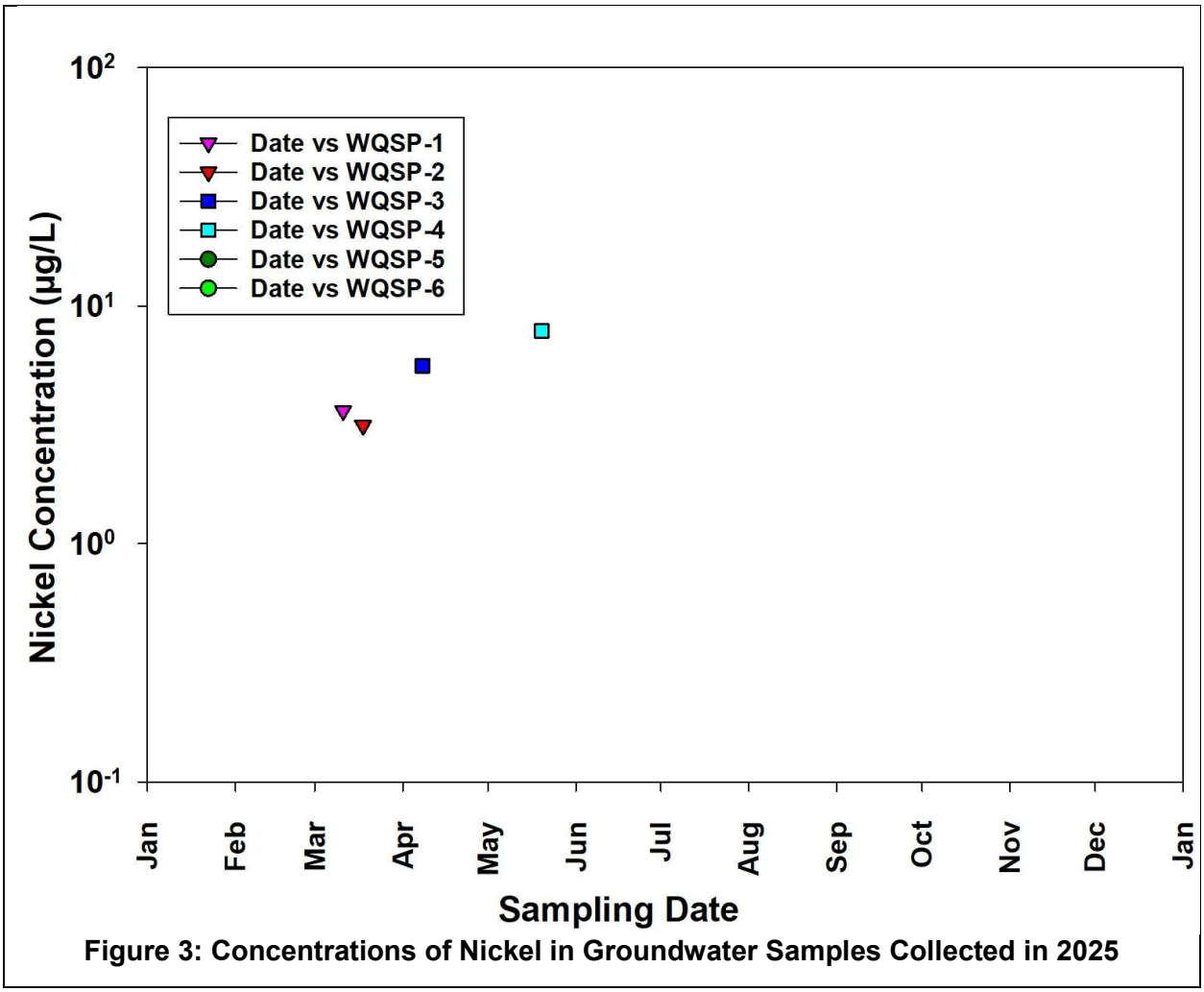


Figure 3: Concentrations of Nickel in Groundwater Samples Collected in 2025

FAS Filters – Station F

Sample Type: FAS, Station F
Year: 2026
Analysis Performed: Metals in weekly composites

Week	Aluminum ng/m³	Cadmium ng/m³	Lead ng/m³	Magnesium ng/m³	Silicon ng/m³	Thorium ng/m³	Uranium ng/m³
01/01/25	7.156E+02	2.109E-01	1.071E+00	1.736E+02	2.833E+02	<MDL	4.324E-03
01/08/25	1.151E+03	3.874E-01	1.637E+00	1.293E+03	9.936E+02	3.033E-02	2.770E-02
01/15/25	1.557E+03	3.266E-01	2.932E+00	1.917E+03	1.692E+03	7.004E-02	4.786E-02
01/22/25	1.456E+03	3.596E-01	2.055E+00	1.139E+03	9.423E+02	2.653E-02	2.294E-02
02/01/25							
02/08/25							
02/15/25							
02/22/25							
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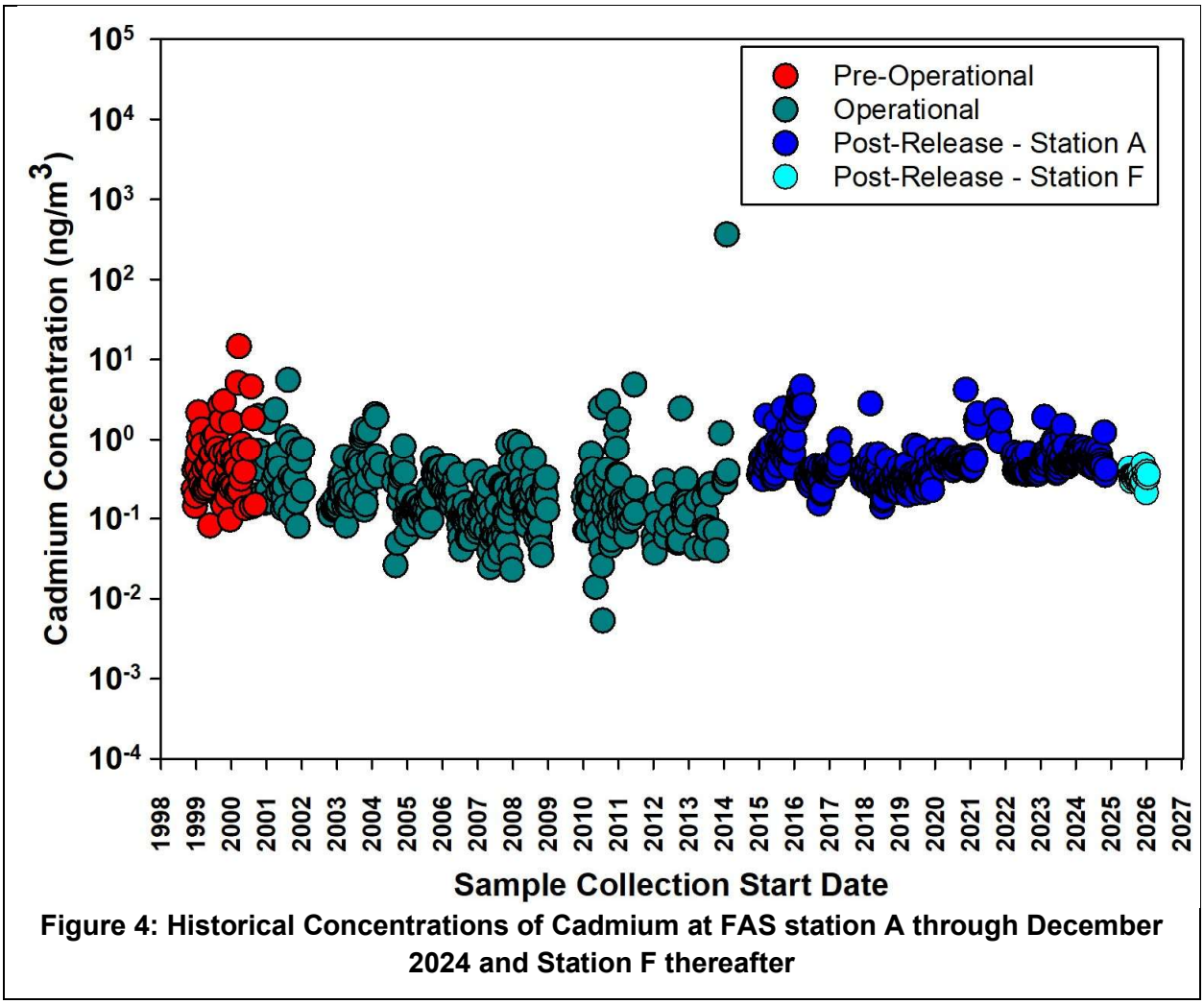


Figure 4: Historical Concentrations of Cadmium at FAS station A through December 2024 and Station F thereafter

Surface Water

Sample Type: Surface Water
Year: 2026
Analysis Performed: Anions

Sample Location	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
Red Tank	1.57E+02	<MDL	<MDL	2.32E+02
Red Lake	8.69E+01	4.46E+00	<MDL	9.51E+01
Noya Tank	4.65E+00	3.03E-01	4.66E-01	6.54E+00
Lake Carlsbad (Shore)				
Lake Carlsbad (Shallow)				
Lake Carlsbad (Deep)				
Brantley Lake (shore)				
Brantley Lake (shallow)				
Brantley Lake (deep)				
Pecos River (Shore)				
Red Bluff (Shallow)				
Red Bluff (Deep)				

Sample Type: Surface Water
Year: 2026
Analysis Performed: Cations

Sample Location	Sodium mg/L	Magnesium mg/L	Potassium mg/L	Calcium mg/L
Red Tank	1.12E+02	3.53E+01	2.10E+01	5.82E+01
Red Lake	1.54E+01	1.78E+01	1.05E+02	1.74E+02
Noya Tank	9.00E-01	7.63E+00	3.37E+01	6.01E+01
Lake Carlsbad (Shore)				
Lake Carlsbad (Shallow)				
Lake Carlsbad (Deep)				
Brantley Lake (Shore)				
Brantley Lake (shallow)				
Brantley Lake (deep)				
Pecos River (Shore)				
Red Bluff (Shallow)				
Red Bluff (Deep)				

Sample Type: Surface Water
Year: 2026
Analysis Performed: pH

Sample Location	pH @ 25°C
Red Tank	8.5
Red Lake	7.7
Noya Tank	7.8
Lake Carlsbad (Shore)	
Lake Carlsbad (Shallow)	
Lake Carlsbad (Deep)	
Brantley Lake (Shore)	
Brantley Lake (shallow)	
Brantley Lake (deep)	
Pecos River (Shore)	
Red Bluff (Shallow)	
Red Bluff (Deep)	

Sample Type: Surface Water
Year: 2026
Analysis Performed: Conductivity

Sample Location	Conductivity mS/cm	Temperature °C
Red Tank	1.084	20.6
Red Lake	0.944	21.6
Noya Tank	0.385	20.0
Lake Carlsbad (Shore)		
Lake Carlsbad (Shallow)		
Lake Carlsbad (Deep)		
Brantley Lake (Shore)		
Brantley Lake (shallow)		
Brantley Lake (deep)		
Pecos River (Shore)		
Red Bluff (Shallow)		
Red Bluff (Deep)		

Sample Type: Surface Water
Year: 2026
Analysis Performed: Specific gravity

Sample Location	SG $_{T/4°C}$
Red Tank	0.996
Red Lake	0.997
Noya Tank	0.990
Lake Carlsbad (Shore)	
Lake Carlsbad (Shallow)	
Lake Carlsbad (Deep)	
Brantley Lake (Shore)	
Brantley Lake (Shallow)	
Brantley Lake (Deep)	
Pecos River (Shore)	
Red Bluff (Shallow)	
Red Bluff (Deep)	

Sample Type: Surface Water
Year: 2026
Analysis Performed: TOC

Sample Location	TOC mg/L
Red Tank	
Red Lake	
Noya Tank	
Lake Carlsbad (Shore)	
Brantley Lake (Shore)	
Pecos River (Shore)	

Sample Type: Surface Water
Year: 2026
Analysis Performed: Metals

Metal	Red Tank Conc µg/L	Red Lake Conc µg/L	Noya Tank Conc µg/L
Ag	9.59E-01	<MDC	<MDC
Al	1.42E+03	2.35E+04	2.39E+03
As	8.68E+00	2.37E+01	8.70E+00
Ba	6.26E+02	1.94E+03	4.45E+02
Be	1.69E-01	1.59E+00	2.21E-01
Ca	6.14E+04	1.38E+05	5.86E+04
Co	1.28E+00	1.89E+01	3.34E+00
Cr	<MDC	1.80E+01	2.58E+00
Cu	<MDC	2.70E+01	5.70E+00
Fe	9.02E+02	1.76E+04	1.69E+03
Hg		<MDL	<MDL
K	1.73E+04	1.21E+05	2.77E+04
Li	5.82E+01	9.57E+01	7.83E+00
Mg	3.74E+04	7.34E+04	1.09E+04
Mn	3.28E+01	1.62E+03	3.56E+02
Mo	3.86E+00	6.27E+00	1.72E+00
Na	1.05E+05	1.60E+04	1.44E+03
Ni	6.82E+00	5.08E+01	8.08E+00
P	8.77E+01	2.65E+03	4.35E+02
Pb	8.12E-01	4.48E+01	3.93E+00
Sb	1.04E+00	1.72E+00	4.39E-01
Sc	9.99E-01	1.21E+01	2.35E+00
Se	<MDC	<MDC	<MDC
Si	4.00E+03	5.82E+04	1.23E+04
Sr	1.05E+03	1.69E+03	2.90E+02
Th	3.33E-01	4.60E-01	1.90E-01
Tl	1.34E-01	1.54E-01	3.80E-02
U	1.01E+00	2.91E+00	5.23E-01
V	8.01E+00	6.08E+01	1.85E+01
Zn	<MDC	9.96E+01	<MDC

Groundwater

Sample Type: Groundwater
Year: 2026
Analysis Performed: Anions

Sample Location	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
WQSP-1	3.53E+04	<MDL	<MDL	4.50E+03
WQSP-2	3.64E+04	<MDL	<MDL	5.50E+03
WQSP-3	1.33E+05	<MDL	<MDL	7.64E+03
WQSP-4	6.07E+04	<MDL	<MDL	7.05E+03
WQSP-5	1.61E+04	<MDL	<MDL	4.81E+03
WQSP-6	5.55E+03	<MDL	<MDL	4.61E+03

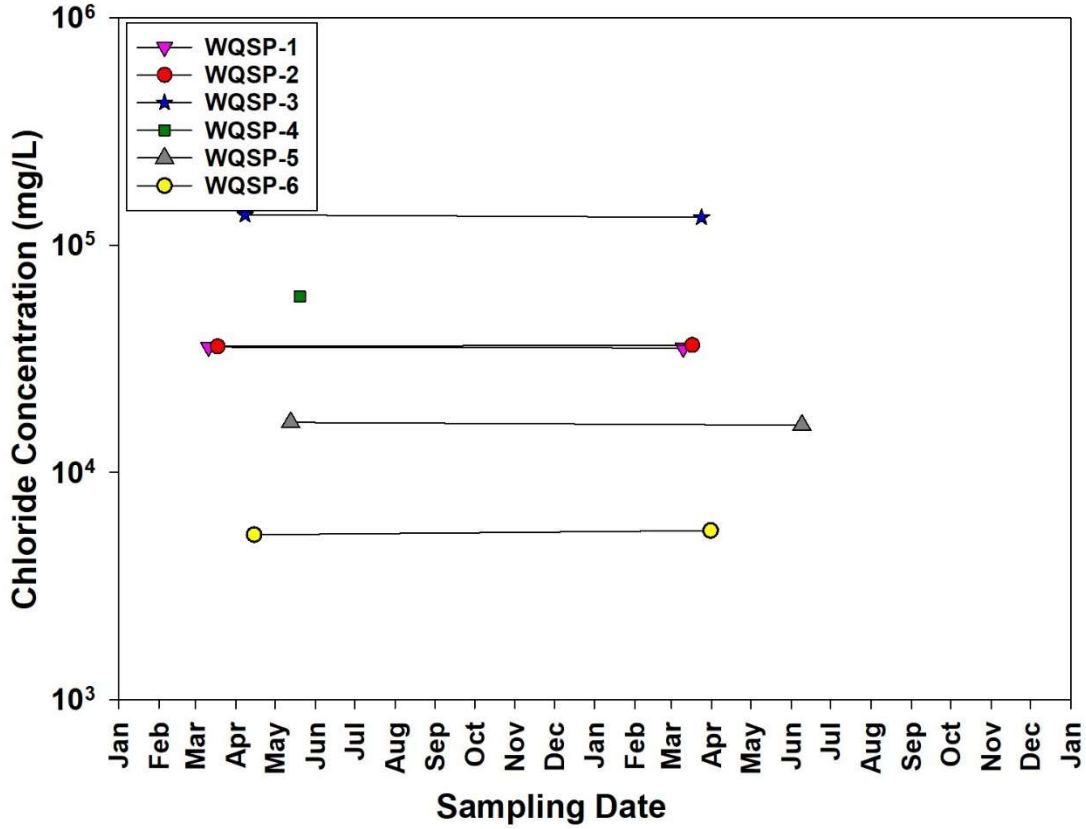


Figure 5: Historical Concentrations of Chloride in Groundwater

Sample Type: Groundwater
Year: 2026
Analysis Performed: Cations

Sample Location	Sodium mg/L	Magnesium mg/L	Potassium mg/L	Calcium mg/L
WQSP-1	2.26E+04	1.17E+03	6.79E+02	1.79E+03
WQSP-2	2.26E+04	1.10E+03	6.53E+02	1.60E+03
WQSP-3	8.16E+04	2.31E+03	1.74E+03	1.37E+03
WQSP-4				
WQSP-5	1.16E+04	5.44E+02	4.28E+02	1.09E+03
WQSP-6	4.54E+03	1.63E+02	1.51E+02	7.23E+02

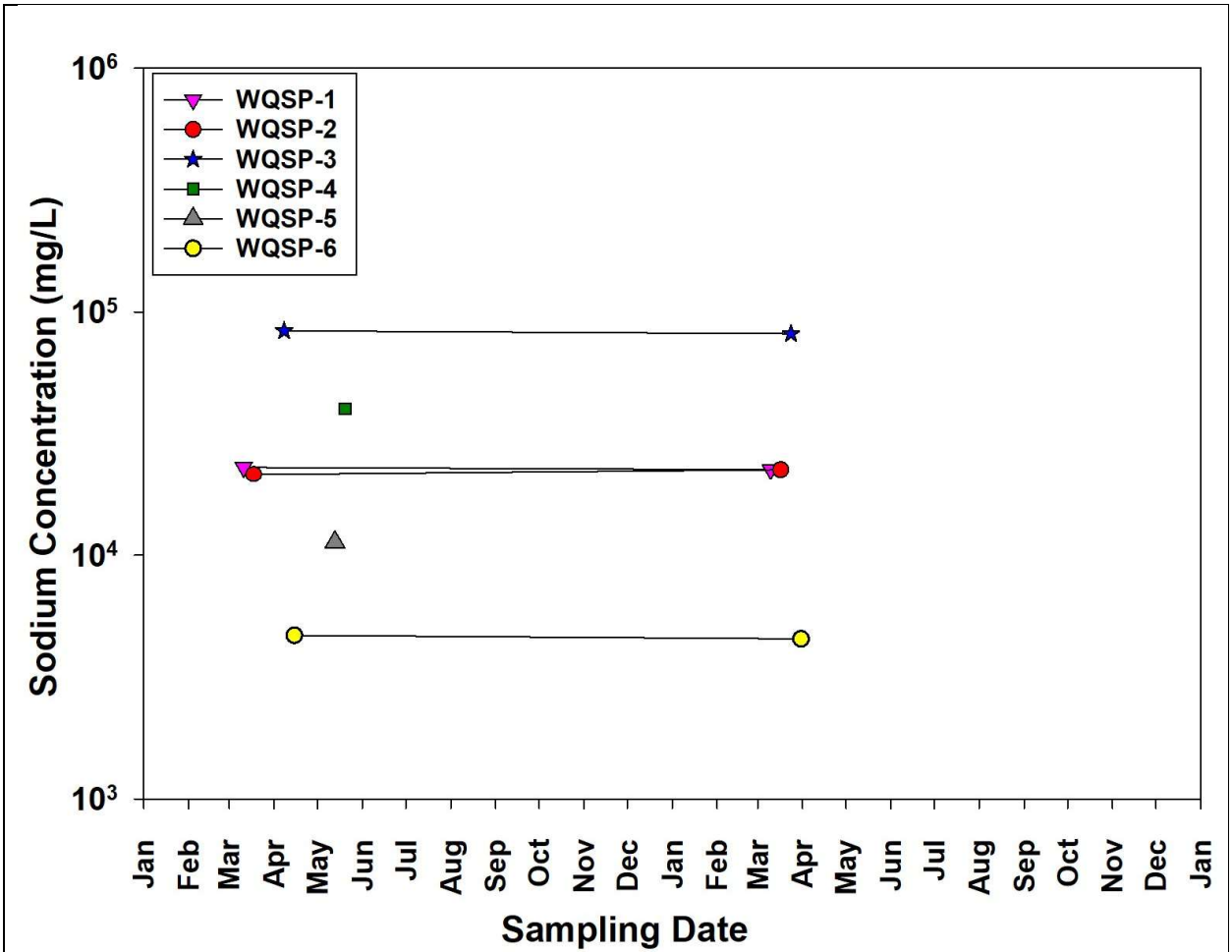


Figure 6: Historical Concentrations of Sodium in Groundwater

Sample Type: Groundwater
Year: 2026
Analysis Performed: pH

Sample Location	pH @ 23°C
WQSP-1	7.7
WQSP-2	7.7
WQSP-3	7.4
WQSP-4	7.4
WQSP-5	7.2
WQSP-6	8.0

Sample Type: Groundwater
Year: 2026
Analysis Performed: Conductivity

Sample Location	Conductivity mS/cm	Temperature °C
WQSP-1	89.5	21.8
WQSP-2	88.3	21.3
WQSP-3	210.0	21.5
WQSP-4	208.0	18.3

WQSP-5	46.3	20.0
WQSP-6	21.4	21.6

Sample Type: Groundwater
Year: 2026
Analysis Performed: Specific gravity

Sample Location	SG $_{T/4°C}$
WQSP-1	1.043
WQSP-2	1.048
WQSP-3	1.133
WQSP-4	1.071
WQSP-5	1.013
WQSP-6	1.011

Sample Type: Groundwater
Year: 2026
Analysis Performed: TDS/TSS

Sample Location	TDS mg/L	TSS mg/L
WQSP-1	66460.00	40.00
WQSP-2	66160.00	20.00
WQSP-3	220540.00	60.00
WQSP-4		
WQSP-5		
WQSP-6		

Sample Type: Groundwater
Year: 2026
Analysis Performed: Metals

Metals	WQSP-1 µg/L	WQSP-2 µg/L	WQSP-3 µg/L	WQSP-4 µg/L	WQSP-5 µg/L	WQSP-6 µg/L
Cd	1.03E+00	<MDC	<MDC		<MDC	<MDC
Co	6.22E-01	<MDC	<MDC		<MDC	<MDC
Cr	<MDC	<MDC	1.38E+01		<MDC	<MDC
Cu	<MDC	<MDC			<MDC	<MDC
Eu	1.30E+00	9.76E-02	<MDC		<MDC	<MDC
La	2.10E+00	2.45E-01	<MDC		<MDC	<MDC
Ni	3.30E+00	8.94E+00	1.24E+01		1.71E+00	1.75E+00
Pb	7.09E-01	<MDC	9.37E-01		<MDC	<MDC
Th	1.75E+00	<MDC	<MDC		<MDC	<MDC
U	1.09E+01	1.22E+01	1.49E+00		2.48E+00	2.81E+00
Zn	<MDC	<MDC	<MDC		<MDC	<MDC

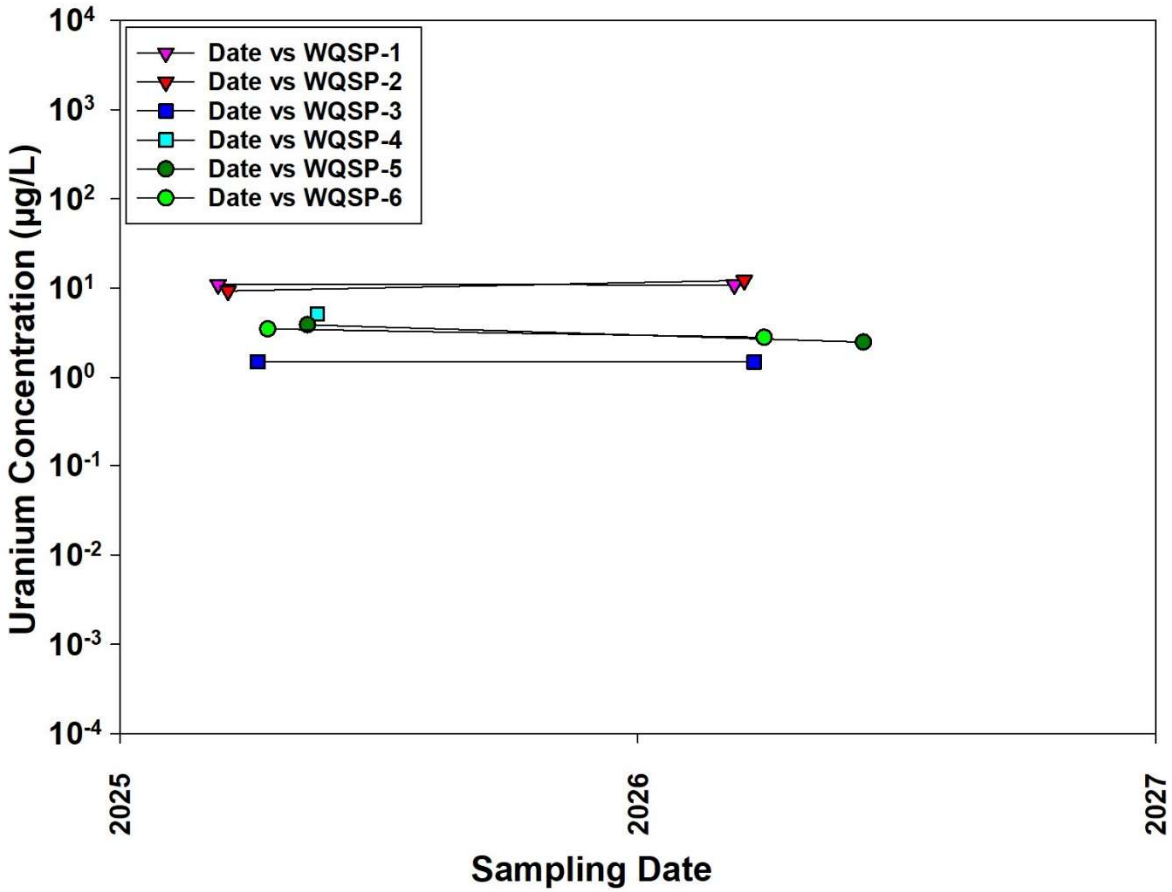


Figure 7: Historical Concentrations of Uranium in Groundwater

Surface Water (Monthly) – Laguna Grande de la Sal

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: Anions

Month	Chloride mg/L	Nitrate mg/L	Phosphate mg/L	Sulfate mg/L
September	1.48E+05	<MDL	<MDL	4.01E+03
October				
November				
December				

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: Cations

Month	Sodium mg/L	Magnesium mg/L	Potassium mg/L	Calcium mg/L
September				
October				
November				
December				

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: pH

Month	pH @ 18°C
September	7.7
October	
November	
December	

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: Total Organic Carbon

Month	TOC mg/L
September	
October	
November	
December	

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: Conductivity

Month	Conductivity mS/cm	Temperature °C
September	411	18.3
October		
November		
December		

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: Specific gravity

Month	Specific Gravity
September	1.135
October	
November	
December	

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: TDS/TSS

Month	TDS mg/L	TSS mg/L
September	292000	
October		
November		
December		
N.D. = non-detect.		

Sample Type: Surface Water – Laguna Grande de la Sal
Year: 2026
Analysis Performed: Metals

Metal	September µg/L	October µg/L	November µg/L	December µg/L
Cd				
Co				
Cr				
Cu				
Eu				
La				
Ni				
Pb				
Th				
U				
Zn				

Internal Dosimetry Group and Public Outreach

In vivo radiobioassay measurements performed during the reporting period

The total number of radiobioassay measurements performed during this reporting period is nine. One for WIPP personnel, eight for the contract radiological personnel and those working in the laboratories located at CEMRC, and none for the public participants.

MDA (false negative) and Lc (false positive) testing:

Successfully performed and submitted the MDA (false negative) and Lc (false positive) testing for CEMRC Lung and Whole-Body APEX In-vivo radiobioassay measurement system during July and August of 2026 using Lung set and BOMAB phantoms provided by the Department of Energy's Radiological and Environmental Sciences Laboratory.

Outreach activities:

CEMRC personnel continue to interact with the public to encourage the Lie Down and Be Counted (LDBC) project's lung and whole body in-vivo radiobioassay measurements at CEMRC. CEMRC also promotes awareness of environmental monitoring and research to the public.

During this reporting period:

- 07/25/2026 – Mayor Lopez's Read-A-Thon at Halagueno Arts Park from 8 am to 12 pm; Explained CEMRC's roles and laboratory activities, handed out brochures to encourage participating in the LDBC program to around 100 community members and visitors of all ages.

- 08/13/2026 – The CEMRC Director gave a presentation to the New Mexico Senate Radioactive and Hazardous Materials Committee meeting at the University of New Mexico Los Alamos campus. The presentation focused on a brief history of CEMRC as well as the current scope of environmental and monitoring work as it relates to WIPP. The LDBC program was also discussed.