



**Paula Gerfen**  
Site Vice President  
Nuclear Generation

Diablo Canyon Power Plant  
P.O. Box 56  
Avila Beach, CA 93424

805.545.4596  
E-Mail: Paula.Gerfen@pge.com

April 16, 2020

PG&E Letter DCL-20-010

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

10 CFR 50, Appendix I

Docket No. 50-275, OL-DPR-80  
Docket No. 50-323, OL-DPR-82  
Diablo Canyon Power Plant, Units 1 and 2  
2019 Annual Radiological Environmental Operating Report

Dear Commissioners and Staff:

In accordance with Diablo Canyon Power Plant, Units 1 and 2, Technical Specification 5.6.2, Pacific Gas and Electric Company hereby submits the 2019 Annual Radiological Environmental Operating Report (AREOR). The AREOR, provided in the enclosure, covers the operation of Units 1 and 2 for the period of January 1 through December 31, 2019. This report contains material consistent with the objectives of the Offsite Dose Calculation Manual, and 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

There are no new or revised regulatory commitments in this report (as defined by NEI 99-04).

If you have any questions regarding this submittal, please contact Mr. Craig Sutton, Radiation Protection Manager, at (805) 545-4208.

Sincerely,

Paula Gerfen

Enclosure

armb/4743/50942685-6

cc:       Diablo Distribution

cc/enc: Dr. Penny E. Borenstein, San Luis Obispo County Health Officer  
Gonzalo L. Perez, Branch Chief, California Department of Public Health  
Scott A. Morris, NRC Region IV Administrator

Christopher W. Newport, NRC Senior Resident Inspector

John M. Robertson, Executive Officer, Central Coast Regional Water  
Quality Control Board

Balwant K. Singal, NRC Senior Project Manager

Gary E. Willey, Air Pollution Control Officer, San Luis Obispo County Air  
Pollution Control District

Enclosure  
PG&E Letter DCL-20-010

2019 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT



# **2019 Annual Radiological Environmental Operating Report Diablo Canyon Power Plant**

**January 1, 2019 - December 31, 2019**



This page intentionally left blank.

# 2019 Diablo Canyon Power Plant

## ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

(AREOR)

January 1, 2019 - December 31, 2019

Prepared By

Pacific Gas & Electric Company  
Diablo Canyon Power Plant

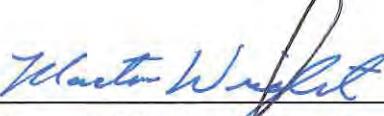
Prepared:



Date: 3/10/2020

Tom Hook, DCPP RP Engineer

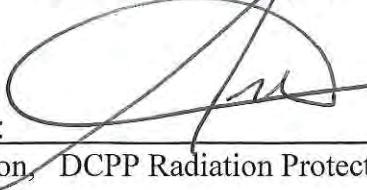
Independent Tech Review:



Date: 3/10/2020

Martin Wright, DCPP RP Principal Engineer

Reviewed and Approved:



Date: 3/11/2020

Craig Sutton, DCPP Radiation Protection Manager

PG&E Submittal Letter DCL-20-010

This page intentionally left blank.

## EXECUTIVE SUMMARY

This report contains results from the operational Radiological Environmental Monitoring Program REMP for Diablo Canyon Power Plant DCPP compiled for the period January 1, 201 through December 1, 201 .

The purpose of the REMP was to assess the levels of radiation or radioactivity in the environment and to verify that DCPP was operating within its design parameters.

Approximately 2 environmental samples, air samples, and 10 thermo-luminescent dosimeter TLD phosphors were collected over the course of the 201 REMP monitoring period. Approximately 1 radionuclide analyses were performed on the environmental samples.

The REMP was conducted in accordance with DCPP Program Directive C 2, Radiological Monitoring and Controls Program, and RP1.ID11, Environmental Radiological Monitoring Procedure. This report was submitted per DCPP License Technical Specification . .2.

The types of samples matrix ID collected for this monitoring period were as follows:

Air Particulate AP	Air Cartridge for I-11 monitoring AC	Air Carbon-1 AC1	
Direct Radiation TLD	Milk M	Meat MT	Vegetation G
Drinking Water DW	Groundwater GW	Monitor Well GW	Surface Water SW
Aquatic vegetation A	Fish H	Mussels IM	Sediment SD

The annual offsite radiological dose received by the general public from plant operations was less than one millirem mrem which is insignificant when compared to the 20 millirem average annual radiation exposure to people in the United States from natural and man-made background radiation sources e.g. cosmic, terrestrial, radon, medical, etc .

The ambient direct radiation levels in the DCPP offsite environs did not change and were within the pre-operational background range. An evaluation of direct radiation measurements indicated all federal EPA OC R10 criteria were conservatively met.

Operation of DCPP continued to have no detectable offsite radiological impact. Samples analyzed from the offsite sampling stations continued to show no radiological contribution from plant operations.

The ambient onsite direct radiation levels within the DCPP plant site boundary near the Independent Spent Fuel Storage Installation IS SI were elevated due to dry cask spent fuel storage. The remaining onsite REMP environmental TLD locations were not affected by the IS SI due to IS SI topographical elevation and placement within an onsite hillside which provided shielding to the rest of the site. An evaluation of direct radiation measurements and member-of-public occupancy times within the site boundary indicated all federal criteria for member-of-public dose limits 10C R20.1 01 were conservatively met.

Groundwater isotopic monitoring was conducted in accordance with the Nuclear Energy Institute EI 0 -0 Rev 1 Groundwater Protection Initiative GPI . Concentrations of tritium were detected in two shallow monitoring wells stations D 1 and W1 near the power block. This tritium was evaluated and attributed to rain-washout of gaseous tritium exiting the plant vent system via an approved isotopic-effluents discharge path. No groundwater tritium was attributed to DCPP system leaks or spills. It should also be noted that studies of the DCPP site groundwater gradient indicated that any subsurface groundwater flow beneath the DCPP power block was not used as a source of drinking water. Due to topography and site characteristics, this groundwater gradient flow discharged into the Pacific Ocean which is approximately 100 yards from the power block.

An Old Steam Generator Storage facility SGS long term storage vault was constructed within the DCPP site boundary in 200 for storage of eight retired DCPP steam generators and two retired DCPP reactor heads. This SGS did not cause any changes to the ambient direct radiation levels within the DCPP environs during 201 . The SGS in-building sumps were inspected quarterly by REMP personnel. One SGS sump was found to contain approximately gallons of rain water during 1 1 . This SGS sump water was analyzed and found to contain approximately 1,010 pCi L of tritium with no other isotopes identified. The gallons of sump water were removed and processed via the site's liquid radwaste system.

The results of the 201 REMP showed no unusual environmental isotopic findings from DCPP site operations. These results were compared to DCPP preoperational isotopic data and showed no unusual trends.

Diablo Canyon site operations had no significant impact on the health and safety of the public or the environment.



Southern PG&E property, Station C2



Diablo Canyon Power Plant and Morro Bay Rock in distance



Humpback whale near DCPP coastline



Montana de Oro State Park sand-spit looking north towards Morro Bay

## **TABLE OF CONTENTS**

	<b>Page</b>
<b>Executive Summary</b>	5
<b>1.0 Introduction</b>	13
<b>2.0 Program Design</b>	17
2.1 Monitoring Zones	19
2.2 Pathways Monitored	19
2.3 Descriptions of REMP Monitoring	
2.3.1 Direct Radiation	19
2.3.2 Airborne Radioactivity	20
2.3.3 Airborne Carbon-14	22
2.3.4 Waterborne	23
2.3.5 Marine Biological, Beach Sand, and Ocean Sediment	24
2.3.6 Food Crops	27
2.3.7 Milk	28
2.3.8 Meat	29
<b>3.0 Radiological Data Summary of Tables</b>	57
<b>4.0 Analysis of Environmental Results</b>	
4.1 REMP Sampling Variance / Deviations	75
4.2 Comparison of Achieved LLDs with Requirements	79
4.3 Comparison of Results against NRC Reporting Levels	80
4.4 Data Analysis by Media Type	
4.4.1 Direct Radiation	81
4.4.2 Airborne Radioactivity	91
4.4.3 Waterborne	92
4.4.4 Marine Biological, Beach Sand, and Ocean Sediment	93
4.4.5 Food Crops	96
4.4.6 Milk	97
4.4.7 Meat	98
<b>5.0 Groundwater Monitoring</b>	99
<b>6.0 Old Steam Generator Storage Facility</b>	105
<b>7.0 Lab Cross Check Program</b>	109
<b>8.0 DCPP Annual Land Use Census</b>	163
<b>9.0 DCPP Wind Rose</b>	169
<b>10.0 References</b>	175
<b>Appendix A 2019 DCPP REMP Analysis Results</b>	177

Photo credits: Josh Ernstrom, Tom Hook, John Lindsey, Steven Pengilley, Patty and Martin Wright

This page intentionally left blank.

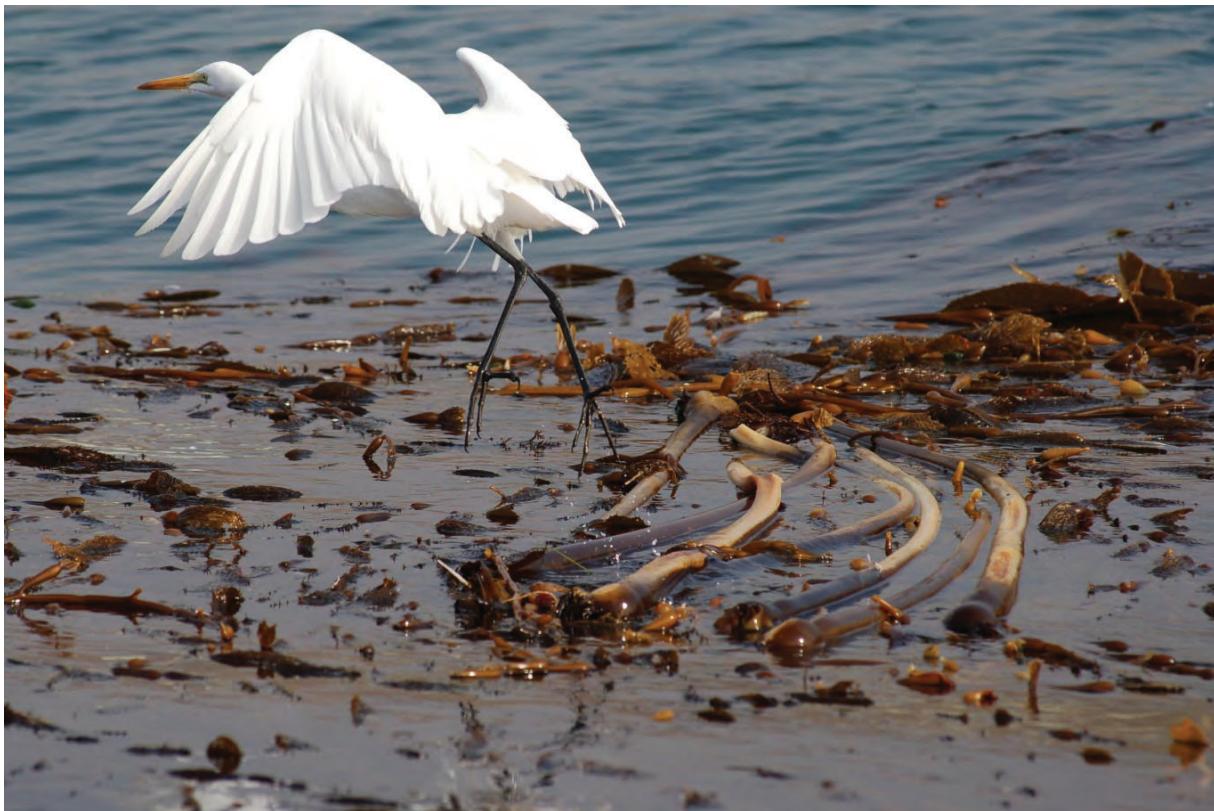
## **LIST OF TABLES**

<u>Table</u>	<u>Title</u>	<u>Page</u>
2.1	Radiological Environmental Monitoring Program	31
2.2	Distances and Directions to Environmental Monitoring Stations	37
2.3	Detection Capabilities, Environmental Lower Limit of Detection (LLD)	41
2.4	Reporting Levels for Radioactivity in Environmental Samples	43
3.1	Direct Radiation Summary Table	59
3.2	REMP Airborne Summary Table	60
3.3	Surface Water Summary Table	61
3.4	Drinking Water Summary Table	62
3.5	Mussel Summary Table	63
3.6	Fish Summary Table	64
3.7	Algae Summary Table	65
3.8	Kelp Summary Table	66
3.9	Vegetative Crops Summary Table	67
3.10	Milk Summary Table	68
3.11	Meat Summary Table	69
3.12	Ocean Sediment Summary Table	70
3.13	Beach Sand Summary Table	71
3.14	Groundwater Summary Table	72
3.15	Monitoring Well Summary Table	73
8	DCPP Land Use Census	161

## **LIST OF FIGURES**

<u>Figure</u>	<u>Title</u>	
2.1	Diablo Canyon Off-site REMP Locations	47
2.2	Diablo Canyon On-site REMP Locations	51
2.3	Diablo Canyon REMP Stations	55
8	DCPP Land Use Census Map	168

This page intentionally left blank.



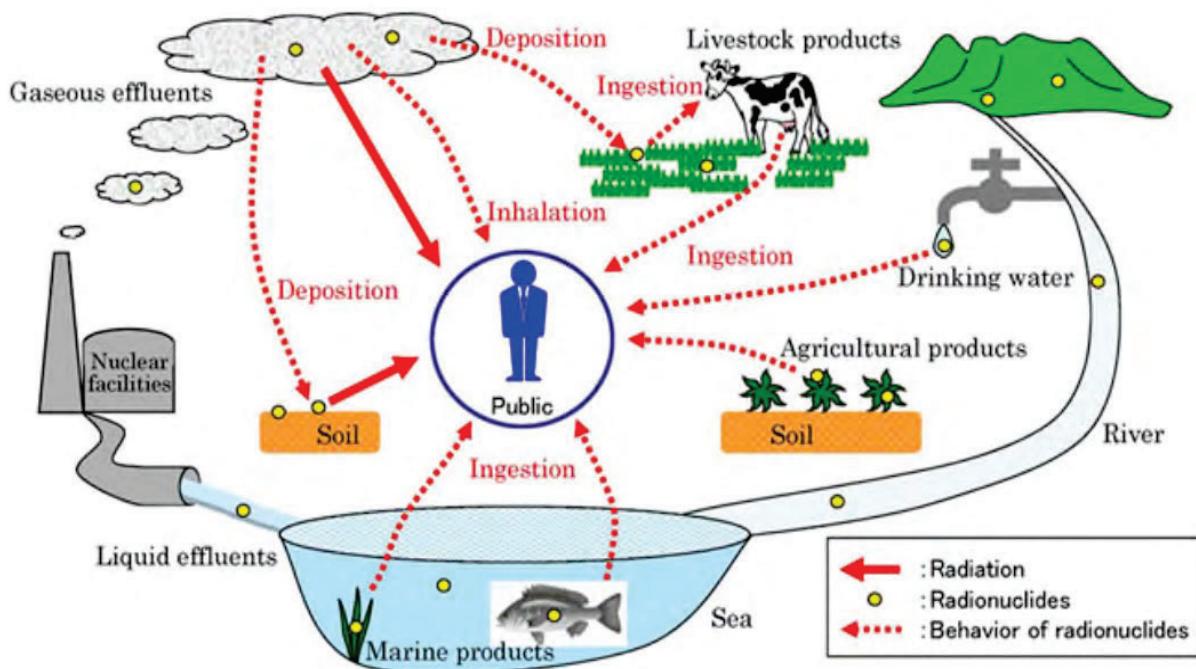
Great Egret wading on DCPP coastline kelp bed

## 1.0 INTRODUCTION

natural background radiation is all around us, all the time. Naturally occurring sources of background radiation include cosmic radiation from space, terrestrial radiation from radioactive isotopes in the earth, naturally occurring radioactive isotopes in the food we eat, and naturally occurring isotopes in the air we breathe. The human body each of us contains natural radioactive isotopes such as radioactive carbon C<sub>14</sub> and radioactive potassium K<sub>40</sub>. As a result, humans have been exposed to radiation since the dawn of man. Over the last 100 years, man has developed new radioactive materials and new machines that create additional sources of background radiation. These additional man-made background sources include radioactive materials used in medical diagnosis, medical treatment, consumer products, industrial processes, security devices, educational tools, research activities, warfare, and worker occupations. The National Council on Radiation Protection and Measurements (NCRP) estimates that the average person in the United States receives about 20 millirem (mrem) of radiation exposure each year from natural and man-made background radiation sources. For comparison, public exposure

from nuclear power plant radioactive effluents is less than 1 mrem. This exposure is equivalent to approximately 1 to 2 hours of cosmic radiation exposure or 0.1 mrem per hour during a cross country airline flight.

The Radiological Environmental Monitoring Program (REMP) provides data on measurable levels of radiation and radioactive materials in the site environs. This program also evaluates the relationship between quantities of radioactive materials released from the plant and resultant doses to individuals from principal pathways of exposure. In this capacity, REMP provides a check on the effluent release program and dispersion modeling to ensure that concentrations in the environment radioactive effluents conform to the As Low As Reasonably Achievable (ALARA) design objectives of 10 C.R.O., Appendix I.



#### Monitored Potential Exposure Pathways

The Annual Radiological Environmental Operating Report (ARE) provides summaries of the environmental data from exposure pathways, interpretations of the data, and analyses of trend results. Routinely monitored pathways include ingestion, inhalation, and direct radiation. Routes of exposure are based on site specific information such as receptor locations, receptor ages, distance and direction to release locations, and water usage around the plant. The site specific REMP program has been developed and maintained in accordance with REG-1-01.

Diablo Canyon Power Plant DCPP consists of two Westinghouse pressurized water reactors PWR each producing approximately 1,100 megawatts electrical MWe . Unit 1 began commercial operation on May 1 , and Unit 2 began commercial operation on March 1 , 1 .

Operation of DCPP continues to have no detectable radiological impact offsite. Samples analyzed from the offsite sampling stations continue to show no radiological contribution from plant operations.

This ARE R summarized the findings of the DCPP REMP and was organized as follows:

Section 2: Provided a description of the overall REMP design. Included was a summary of the requirements for REMP sampling, tables listing station routine sampling parameters, TLD monitoring locations, station directions and distances from the plant, and maps of station locations. Tables listing Lower Limit of Detection LLD requirements and RC Reporting Levels were also included.

Section : Consisted of the summarized data as required by the Radiological Environmental Monitoring Program. The summaries were provided as specified by the RC ranch Technical Position on Environmental Monitoring.

Section : Provided an interpretation and analysis of environmental sampling results along with deviations. Also included was environmental TLD data trending.

Section : Provided a summary of groundwater monitoring in accordance with the EI 0 -0 Rev 1 Groundwater Protection Initiative.

Section : Provided a summary of SGS monitoring.

Section : Provided an overview of the lab interlaboratory cross-check program.

Section : Provided an overview of the current Landuse Census

Section : Provided the one-year and five-year site wind-rose charts.

Section 10: Provided ARE R references

Appendix A: Provided individual analytical sample results.

This report and previous DCPP ARE Rs can be found on the RC website at:

[www.nrc.gov/reactors/operating/reactorsafety/topics/effluent-and-environmental-reports/diablo-canyon-unit-1-and-2-environmental-reports](http://www.nrc.gov/reactors/operating/reactorsafety/topics/effluent-and-environmental-reports/diablo-canyon-unit-1-and-2-environmental-reports)

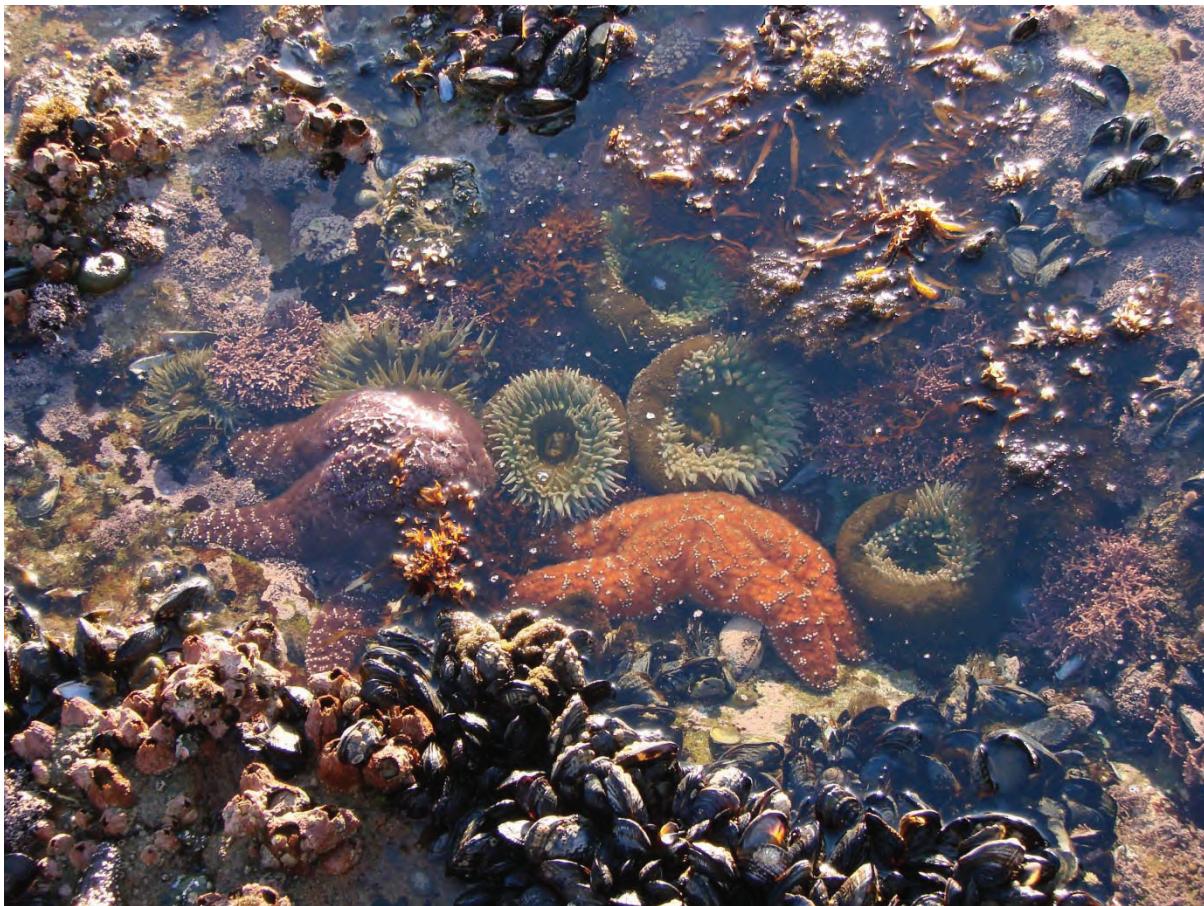
DCPP REMP sent replicate split samples of stations G1 vegetation quarterly , 2 milk monthly , S2 drinking water monthly , DW1 drinking water monthly , T seawater monthly , DCM kelp quarterly , DCM perch quarterly , DCM rockfish quarterly , and DCM ocean sediment annually to the California Department of Public Health - Radiologic Health ranch CDPH-RH Laboratory as part of a California State split sampling program. These split samples were independently analyzed by the CDPH-RH .

Other pathways independently monitored by the CDPH-RH were quarterly direct radiation environmental TLD stations MT1, 1A1, 1C1, D1, , S1, D1, C1, 1, and S2 and weekly air sampling particulate and I-131 at stations 1 and D1 .

The public can request access to these CDPH-RH split sampling data results by emailing the CDPH at [environmental.radiation\\_cdpb.ca.gov](mailto:environmental.radiation_cdpb.ca.gov).



South Ranch tide pool



DCPP coastline intertidal sea life

## 2.0 PROGRAM DESIGN

The Radiological Environmental Monitoring Program REMP for the Diablo Canyon Power Plant DCPP was designed with the following specific objectives in mind. These objectives continue to be in force, to varying degrees, throughout facility operation:

- To provide an early indication of the appearance or accumulation of any radioactive material in the environment caused by facility operation. Preoperational data was also used in this comparison.
- To provide assurance to regulatory agencies and the public that the station's environmental impact was known and within anticipated limits.
- To provide standby monitoring capability for rapid assessment of risk to the general public in the event of unanticipated or accidental releases of radioactive material from DCPP.

The environmental media selected were based on the critical dose pathways of the radionuclides from the environment to man. They included the following: direct radiation, air, water, fish,

ocean sediment, and invertebrates. Supplemental samples such as algae, kelp, local agricultural crops, recreational beach sand, groundwater, meat, and milk were also collected. The sampling locations were determined by land use, site meteorology, and local demographics. Guidance for this monitoring program was provided by the Radiological Assessment ranch Technical Position on Radiological Environmental Monitoring, Revision 1, ovember 1 REG-1 01 .

REMP samples were collected by DCPP REMP personnel and sent to General Engineering Labs GEL in Charleston, South Carolina for isotopic analysis.

ish e cept market fish and ocean sediment samples were collected by contract divers of Tenera Environmental and given to DCPP REMP personnel for shipment to GEL.

Market fish samples were collected by local commercial fishermen and then purchased by DCPP REMP personnel in one of two local fish markets for shipment to GEL.

Environmental direct radiation analyses were conducted using thermo-luminescent dosimeters TLD . Environmental TLD analysis was conducted by Mirion Technologies in Irvine California.

The detailed sampling re uirements of the REMP were given in Table 2.1 of this report.

Data summary tables of REMP sampling for the period were shown in section of this report.

Any deviations from the REMP sampling schedule or re uirements were documented in section of this report.

Direct dose environmental TLD results were shown in section of this report.

Individual REMP sample isotopic analysis results were shown in Appendix A of this report.

Isotopic analysis results were classified as detected if the a-posteriori analysis result was greater than the Minimum Detectable Concentration MDC value for that specific analysis.

Detected concentrations MDC of nuclear power plant related isotopes have been highlighted with yellow-fill cell background in Appendix A for quick identification by the ARE R audience. naturally occurring radioactive materials RM were not highlighted e.g. gross beta, e- , - O, thorium, radium, radon, lead, etc .

## **2.1 MONITORING ZONES**

The REMP was designed to allow comparison of levels of radioactivity in samples from the areas possibly influenced by DCPP to levels found in areas not influenced by the facility operations. Areas with the potential to be influenced by facility operations were called indicator stations. Areas with sufficient distance from the plant that were not likely to be influenced by facility operations were called control stations. The distinction between the two ones was based on distance and relative direction from the site. Analysis of survey data from the two ones aided in determination of site environmental influence. Analysis from the two ones assisted in differentiation between radioactive releases and seasonal variations in the natural environmental background radioactivity.

## **2.2 PATHWAYS MONITORED**

Direct Radiation

Airborne Radioactivity

Waterborne Pathways

Marine Biological, Beach Sand, and Ocean Sediment

Food Crops

Milk

Meat

## **2.3 DESCRIPTIONS OF REMP MONITORING**

### **2.3.1 Direct Radiation**

Environmental TLD badge packets were distributed and collected from field stations by DCPP REMP personnel and then shipped to Mirion Technologies for processing on a quarterly basis. Control badges accompanied the field badges during shipment and deployment to measure any non-station dose received during transit time periods.

Direct ambient radiation was measured at 2 stations near DCPP and at stations near the DCPP IS SI using Panasonic D 1 TLD type badges. The TLD badges had valid element correction factors EC , were

calibrated using a IST-traceable caesium-137 source, were annealed prior to placement, and were sealed in watertight packaging. Three TLD badges were placed at each station and each badge contained calcium sulfate phosphors for a total of calcium sulfate phosphors at each station. The phosphors were analyzed and then averaged to provide a single quarterly station reading. Transit process exposure was subtracted, and that single reading was converted into a microrem per hour rem hour dose rate dependent on the in-field exposure time period. Then the rem hour dose rate was converted into millirem mrem per standard 1 day quarter. This millirem result was reported as Standard Quarter TLD Results for each station in the Section . .1 Env TLD Analysis spreadsheets.

DCPP Environmental TLD Standard Quarter TLD Results were measurements of all environmental gamma radiation sources cosmic, terrestrial, radon, man-made, etc at each station during the in-field deployment period. These all-inclusive exposure values were used to create the trend graphs in Section . .1.

A SI HPS 1 . -201 methodology was used to report quarterly Annual Investigation Level Dose to quantify DCPP facility related exposure.

### **2.3.2 Airborne Radioactivity**

Air particulate and radioiodine sampling were performed weekly at six indicator stations: MT1, OS2, 1S1, D1, S1 and S2. Air particulate and radioiodine sampling were performed weekly at one control station: C1.

Constant-flow air samplers & model D -1 were used to draw air through paper filters to collect air particulates station matrix AP Air Particulate and through triethylenediamine TEDA impregnated charcoal cartridges to collect radioiodine station matrix AC Air Cartridge . The air sampling flow rate was conducted at approximately 2. cubic meters per hour. The air sampling collection filters were located approximately

seven feet above the ground. The sample volumes were determined by & Corporation model D -1 flow meters corrected to standard temperature and pressure, STP which were installed downstream of the sample filters. At the end of the weekly sampling period, the particulate filter and TEDA charcoal cartridge were collected. All necessary data regarding the air volume readings, flow rate, sampler time on off, date of collection, and sampler station location were recorded and submitted to GEL along with the filter samples for isotopic analysis.

Approximately 2 hours after sampling to allow for radon and thoron daughter decay , the particulate filter papers collected from the field were placed on individual planchets and counted for gross beta activity in a low background, thin window gas proportional counter.

Quarterly gamma spectroscopy isotopic analysis was performed on station composites of the approximate 1 filters to determine the activity concentration of gamma emitting isotopes. The quarterly composite sample time is reported at the midpoint of the quarter monitored.

Due to the short half-life of Iodine-131, each station weekly TEDA impregnated charcoal cartridge was counted for gamma spectroscopy isotopic analysis to determine the radioiodine concentration.



DCPP air sampling station equipment

### **2.3.3 Airborne Carbon-14**

Supplemental air Carbon-1 station matri AC1 sampling was performed weekly at stations 0S2 northwest sector , S1 southeast sector , and 1 control station in San Luis bispo throughout 201 .

GEL and DCPP REMP worked together to develop a method for sampling environmental airborne inorganic C-1 . Inorganic C-1 as C<sub>2</sub> is the primary exposure pathway to man via photosynthesis in plants. A constant flow air sampler was used to draw air through a solid phase carbon sensitive sorbent cartridge. The air sampler was set at a flow rate of 1 standard liter-per-minute. The air sample filter cartridge head was located approximately seven feet above the ground. At the end of the weekly sampling period, the filter cartridge was collected. All necessary data regarding the air volume, flow rate, sampler time on off, date of collection, and sampler station location were recorded and submitted to GEL along with the sample filter for C-1 analysis. At GEL, a suitable portion of the solid sorbent material was processed through a method utilizing wet oxidation to remove volatile C<sub>2</sub> from the media in a closed distillation system. Once removed from the media, C-1 as carbon dioxide was sparged through a dilute acid solution for trapping any tritium water present in the sample. After sparging through dilute acid, the C<sub>2</sub> was trapped in a sorbent solution which was added to liquid scintillation cocktail and finally counted in a liquid scintillation counter. It should be noted that C-1 results in Appendix A are reported in microcuries Ci per cubic meter. This method met the following specifications:

- Validated to retain .% of inorganic C-1 in air
- Validated at collection rates of approximately 1 liter-per-minute
- Validated for a one-week total collection capacity
- Accurate analysis of C-1 over a wide range of concentrations
- Methodology free from interference by other radionuclides
- Detection capability of approximately E- Ci per cubic meter

### **2.3.4 Waterborne**

Water samples drinking water, surface water, monitor wells, and groundwater were collected at the frequencies shown in Table 2.1.

Ocean surface water samples were collected at Diablo Cove station DCM , Rattlesnake Canyon station C2 , and at the plant outfall station T .

Drinking water samples were collected from Diablo Creek Weir station S2 , Diablo Creek outlet station W 2 , Ranchard Spring station 1A2 , and from the DCPP drinking water system station DW1 . San Luis Obispo city drinking water was also collected from a control station located at 2 South Higuera Street, offsite Emergency Lab station EL in SL .

Supplemental groundwater samples were collected from Water Well 02 WW2 and DCS -1 S .

Supplemental onsite monitoring well samples were collected from french-drain systems labeled Observation Well 01 W1 and Observation Well 02 W2 . These shallow trench drain well systems were in close proximity to the facility power block structures and within the protected area.

Two onsite monitoring wells were installed in December 2011 as part of the industry Groundwater Protection Initiative GPI . Isotopic sampling of these wells was initiated in 2012. These two onsite wells were downgradient of the power block and located along the west side of the power block. These two monitoring wells were labeled Groundwater 1 GW1 and Groundwater 2 GW2 .

After collection, the samples were securely sealed and labeled with sample type, station ID, date, time of collection, person performing the collection and sent to GEL for analysis.



REMP personnel conducting sea water sampling

### 2.3.5 Marine Biological, Beach Sand, and Ocean Sediment

The REMP required sampling of rockfish genus *Sebastodes*, perch family *Embiotocidae*, intertidal mussels genus *Mytilus*, and ocean sediment from indicator station DCM and control station C2.

All other marine samples collected were considered supplemental. These supplemental marine samples included the following: intertidal algae, intertidal mussels, kelp, rockfish, perch, beach sand, and market fish. The intertidal samples were collected by DCPP personnel during low tidal conditions. Kelp was collected quarterly by DCPP personnel from the offshore kelp bed near the site.

Beach sand was collected by DCPP personnel between the high tide and low tide boundaries at nearby recreational beaches.

In-shell mussels were sent to GEL where GEL personnel removed the meat & internal organs for analysis.

Quarterly samples of fish and annual samples of ocean sediments were collected from the site environs by contracted divers TE ERA Environmental. The Tenera divers fillet the fish and leave a small portion of skin for identification. Only edible portions of fish fillets of the fish were analyzed.

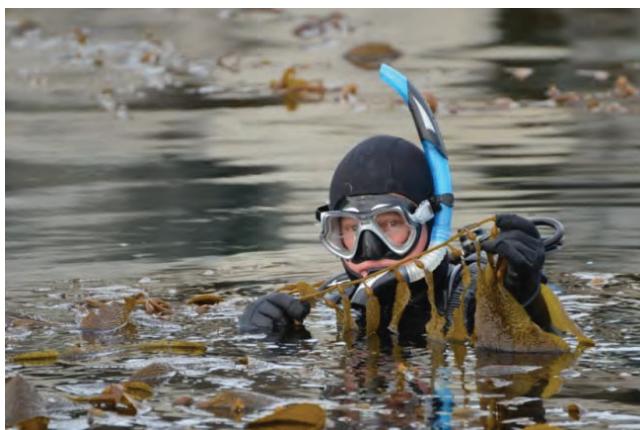
Market fish caught locally by commercial fishermen were purchased from two local fish markets Avila Beach Pier- D and Morro Bay-2 1 .

All samples were subject to unavailability due to seasonal fluctuations or unfavorable sampling conditions.

The above samples were immediately sealed in plastic containers upon collection. The samples were labeled with sample type, station ID, date, time of collection, and the individual who performed collection. Most samples were routinely frozen to prevent spoilage odor before they were shipped to GEL for analysis.



REMP mussel sampling



### **2.3.6 Food Crops**

The REMP required broadleaf food vegetation collected at the nearest off-site locations of the highest calculated annual average ground level D deposition coefficient within miles. There was no broadleaf food vegetation available that satisfied this requirement. Because these food products were unavailable, the DCPP REMP conducted additional weekly air sampling in the SE station S2 and W station 1S1 sectors.

Additional representative samples of food crops in season were collected monthly from supplemental stations: Cal Poly arm 2,awaoka arm in Arroyo Grande G1 , Mello arm C1 along the DCPP site access road, and quarterly from local gardens C1, C1, and E1 .

The vegetation samples at 2, G1, C1, C1, and E1 were collected by DCPP personnel and immediately sealed in plastic bags. The quarterly garden vegetation sample at C1 was provided by the land occupant due to difficulty of property access and occupant requested privacy to DCPP personnel.

The samples were labeled with sample type, station ID, collection date, collection time, and the individual who performed collection. The samples were routinely frozen to prevent spoilage odor before they were shipped to GEL for analysis.



vegetation sampling at Cal Poly Station 2

### 2.3.7 Milk

There were no animals within the -mile vicinity of the site utilized for milk consumption by humans. However, supplemental samples of cow milk were collected monthly from the Cal Poly farm 2 which was approximately 1 miles from DCPP.

Three 1-gallon plastic containers of milk were collected each sampling period by DCPP personnel. Forty grams of sodium bisulfite preservative were added to each gallon of milk sample. The containers were sealed and shaken thoroughly to distribute the preservative. The containers were labeled with sample type, station ID, collection date, collection time, and the individual who performed collection. The samples were then express-shipped due to the short half-life of I-131 to GEL for analysis.



Milk sampling at Cal Poly Station 2

### **2.3.8 Meat**

A rancher routinely grazed free range, grass fed cattle within three miles of the site boundary between the northwest clockwise to east sectors. This livestock meat would then be offered at local farmer's markets and private distribution. Because it was possible for this vendor to provide an individual's sole-source of annual meat consumption, this meat sampling was included in the REMP. REMP personnel obtained commercially packaged meat samples directly from the vendor. Gamma spec and total strontium-87 analyses were performed on the meat. The REMP station codes were CM, GM, and SM.

Control station free range, grass fed meat sampling was conducted of ranches outside the influence of DCPP. This meat was purchased by REMP personnel from the Whole Foods Market in SL . The control station meat consisted of Hearst Ranch ground beef which is located approximately miles north of the DCPP site. The REMP station code was CCM Control Cow Meat .

The meat was packaged by the livestock owners or commercial processes. The unopened packages were then separated by species and placed into large over-pack zip-lock bags. Each bag was labeled with sample type, station ID, collection date, collection time, and the individual who performed the collection. The samples were then frozen and shipped to GEL for isotopic analysis.

This page intentionally left blank.

**TABLE 2.1:**  
**Radiological Environmental Monitoring Program**

Exposure Pathway and/or Sample Type	Number of Representative Samples and Sample Locations <sup>1</sup>	Sampling Stations	Collection Frequency	Type of Analysis	Required or Supplemental
1. Direct Radiation <sup>2</sup>	Thirty-two routine monitoring stations containing thermo luminescent dosimeters (TLDs) such that at least two (2) phosphors are present at each station, placed as follows:				
	An inner ring of stations, one in each terrestrial meteorological sector in the general area of the SITE BOUNDARY;	0S1, 0S2, WN1, 1S1, 2S1, 3S1, 4S1, 5S1, 6S1, 7S1, 8S1, 9S1, 8S2, 5S3, and MT1	Quarterly	Gamma Dose	Required
	An outer ring of stations, one in each terrestrial meteorological sector in the 2.5 to 14 km range from the site; and	0B1, 1A1, 1C1, 2D1, 3D1, 4C1, 5C1, 6D1, and 7C1	Quarterly	Gamma Dose	Required
	One or two areas to serve as control stations; and	2F2, 4D1, 5F1	Quarterly	Gamma Dose	Required
	The balance of the stations to be placed in special interest areas such as population centers, nearby residences, or schools.	5F3, 7D1, 7D2, 7F1, and 7G2	Quarterly	Gamma Dose	Required
	A minimum of four stations around the ISFSI	IS1, IS2, IS3, IS4, IS5, IS6, IS7, IS8	Quarterly	Gamma Dose	Required
2. Airborne Radioiodine	Samples from $\geq$ 4 stations:				
	Three samples from close to the three SITE BOUNDARY locations ( 0S2, 8S1, & MT1 ) in different sectors.	0S2, 8S1, and MT1	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	I-131 analysis	Required
	One sample from the vicinity of a community having the highest calculated annual average ground level D/Q.	7D1	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	I-131 analysis	Required
	If food products are unavailable, additional air sampling will be done in the NNW (station 1S1) and SE (Station 8S2) sectors.	1S1 & 8S2	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	I-131 analysis	Required
	One sample from a control location.	5F1	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	I-131 analysis	Required

Table 2.1 continued

Exposure Pathway and/or Sample Type	Number of Representative Samples and Sample Locations <sup>1</sup>	Sampling Stations	Collection Frequency	Type of Analysis	Required or Supplemental
3. Airborne Particulate	Samples from $\geq$ 4 stations:				
	Three samples from close to the three SITE BOUNDARY locations ( 0S2, 8S1, & MT1 ) in different sectors.	0S2, 8S1, and MT1	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	Weekly gross beta radioactivity analysis following filter change <sup>3</sup> . Quarterly gamma isotopic analysis <sup>4</sup> of composite consisting of approx. 12 filters (by location).	Required
	One sample from the vicinity of a community having the highest calculated annual average ground level D/Q.	7D1	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	Weekly gross beta radioactivity analysis following filter change <sup>3</sup> . Quarterly gamma isotopic analysis <sup>4</sup> of composite consisting of approx. 12 filters (by location).	Required
	If food products are unavailable, additional air sampling will be done in the NNW (station 1S1) and SE (Station 8S2) sectors.	1S1 & 8S2	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	Weekly gross beta radioactivity analysis following filter change <sup>3</sup> . Quarterly gamma isotopic analysis <sup>4</sup> of composite consisting of approx. 12 filters (by location).	Required
	One sample from a control location.	5F1	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	Weekly gross beta radioactivity analysis following filter change <sup>3</sup> . Quarterly gamma isotopic analysis <sup>4</sup> of composite consisting of approx. 12 filters (by location).	Required
4. Airborne Carbon-14					
	Samples from 3 stations: One sample from each of the NW and SE sectors close to the site (0S2 and 8S1). One sample used as a control station (5F1).	0S2,8S1 5F1 (control)	Continuous sampler operation with sample collection weekly, or more frequently if required by dust loading.	C-14 analysis	Supplemental

Table 2.1 continued

Exposure Pathway and/or Sample Type	Number of Representative Samples and Sample Locations <sup>1</sup>	Sampling Stations	Collection Frequency	Type of Analysis	Required or Supplemental
5. Waterborne					
a. Surface Ocean Water	One sample from the plant Outfall, Diablo Cove, and an area not influenced by plant discharge.	OUT, DCM, and 7C2	Monthly (grab sample)	Gamma isotopic <sup>4</sup> and tritium analysis.	Required
	One sample from the plant Outfall, Diablo Cove, and an area not influenced by plant discharge.	OUT, DCM, and 7C2	Quarterly (grab sample)	Gross Beta, Total Sr 89/90, Fe-55, and Ni-63	Supplemental
b. Drinking Water	One sample from the plant drinking water, one sample from Diablo Creek (upstream of plant), and one control sample.	DW1 and 5S2 OEL (control)	Monthly (grab sample)	Gamma isotopic <sup>4</sup> , I-131, and tritium analysis.	Required
	One sample from the plant drinking water, one sample from Diablo Creek (upstream of plant), and one control sample.	DW1 and 5S2 OEL (control)	Quarterly (grab sample)	Gross Beta, Total Sr 89/90, Fe-55, and Ni-63	Supplemental
	One sample from Diablo Creek (downstream of plant) and one sample from Blanchard Spring.	WN2 and 1A2	Quarterly (grab sample)	Gamma isotopic <sup>4</sup> , tritium, I-131, gross beta, Total Sr 89/90, Fe-55, and Ni-63	Supplemental
c. Groundwater	One sample from wells located under or downgradient from the plant power block.	OW1, OW2, GW1 and GW2	Quarterly (grab sample, when available)	Gamma isotopic <sup>4</sup> , tritium, gross beta, Total Sr 89/90, Fe-55, and Ni-63	Supplemental
	One sample from a well located outside the plant power block (control sample).	WW2, 8S3	Quarterly (grab sample, when available)	Gamma isotopic <sup>4</sup> , tritium, gross beta, Total Sr 89/90, Fe-55, and Ni-63	Supplemental
d. Sediment	One sample of offshore ocean sediment from Diablo Cove and Rattlesnake Canyon.	DCM and 7C2	Annual (grab sample)	Gamma isotopic <sup>4</sup>	Required
	One sample of offshore ocean sediment from Diablo Cove and Rattlesnake Canyon.	DCM and 7C2	Annual (grab sample)	Total Sr 89/90, Fe-55, and Ni-63	Supplemental
	One sample from each of five local recreational beaches.	AVA, MDO, PMO, CYA, and CBA	Semi- Annual (grab sample)	Gamma isotopic <sup>4</sup> , Total Sr 89/90, Fe-55, and Ni-63	Supplemental
e. Marine Flora	One sample of kelp	DCM, PON, POS, and 7C2	Quarterly (when available)	Gamma isotopic <sup>4</sup>	Supplemental
	One sample of intertidal algae	DCM and 7C2	Quarterly (when available)	Gamma isotopic <sup>4</sup>	Supplemental

Table 2.1 continued

Exposure Pathway and/or Sample Type	Number of Representative Samples and Sample Locations <sup>1</sup>	Sampling Stations	Collection Frequency	Type of Analysis	Required or Supplemental
6. Ingestion					
a. Milk	Samples from milking animals in three locations within 5 km distance having the highest dose potential. If there are none, then one sample from milking animals in each of three areas between 5 to 8 km distance where doses are calculated to be greater than 1 mrem per year. One sample from milking animals at a control location 15 to 30 km distant and in the least prevalent wind direction. <b>NOTE:</b> The sample (5F2) should be taken monthly even if there are no indicator samples available.	5F2	Semimonthly when animals are on pasture; monthly at other times.	Gamma isotopic <sup>4</sup> and I-131 analysis.	Supplemental
b. Fish and Invertebrates	One sample of rock fish (family Sebastes) and one sample of perch (family Embiotocidae)	DCM and 7C2	Quarterly (grab sample)	Gamma isotopic <sup>4</sup> analysis on edible portions of each sample.	Required
	One sample of rock fish (family Sebastes) and one sample of perch (family Embiotocidae)	PON and POS	Quarterly (grab sample)	Gamma isotopic <sup>4</sup> analysis on edible portions of each sample.	Supplemental
	One sample of mussel (family Mytilus)	DCM and 7C2	Quarterly (grab sample)	Gamma isotopic <sup>4</sup> analysis on edible portions of each sample.	Required
	One sample of mussel (family Mytilus)	PON	Annual (grab sample)	Gamma isotopic <sup>4</sup> analysis on edible portions of each sample.	Supplemental
	One sample of mussel (family Mytilus)	POS	Quarterly (grab sample)	Gamma isotopic <sup>4</sup> analysis on edible portions of each sample.	Supplemental
	One sample of locally harvested market fish.	7D3 OR 2F1 (should alternate between locations)	Quarterly (grab sample)	Gamma isotopic <sup>4</sup> analysis on edible portions of each sample.	Supplemental

Table 2.1 continued

Exposure Pathway and/or Sample Type	Number of Representative Samples and Sample Locations <sup>1</sup>	Sampling Stations	Collection Frequency	Type of Analysis	Required or Supplemental
c. Broadleaf Vegetation <sup>5</sup>	Three samples of broadleaf vegetation grown nearest off-site locations of highest calculated annual average ground level D/Q IF milk sampling is not performed.		Monthly (when available)	Gamma isotopic <sup>4</sup> analysis (that includes I-131) on edible portion.	Required (see notation #5)
	One sample of each of the similar broadleaf vegetation grown 15 to 30 km distant in the least prevalent wind direction IF milk sampling is not performed.		Monthly (when available)	Gamma isotopic <sup>4</sup> analysis (that includes I-131) on edible portion.	Required (see notation #5)
d. Vegetative Crops	One sample of broadleaf vegetation or vegetables or fruit	5F2, 7C1, and 7G1	Monthly (when available)	Gamma isotopic <sup>4</sup> analysis on edible portion.	Supplemental
	One sample of broadleaf vegetation or vegetables or fruit.	3C1, 6C1, 7E1	Quarterly (as provided by land owner)	Gamma isotopic <sup>4</sup> analysis on edible portion.	Supplemental
e. Meat sample	One sample of each species (cow, goat, sheep, deer, or pig) of edible meat portion slaughtered for personal consumption (not mass market).	BCM, BGM, BSM, JDM, JPM, ACM, ADM, APM, CCM	Quarterly (as available and provided by land owners within 8 km of plant site)	Gamma isotopic <sup>4</sup> analysis, and Total Sr 89/90 on edible portion.	Supplemental

### Table Notations

- Deviations are permitted from the required sampling schedule if specimens are unobtainable due to circumstances such as hazardous conditions, seasonal unavailability, malfunction of automatic sampling equipment and other legitimate reasons. If specimens are unobtainable due to sampling equipment malfunction, effort shall be made to complete corrective action prior to the end of the next sampling period. All deviations from the sampling schedule shall be documented in the Annual Radiological Environmental Operating Report. It is recognized that, at times, it may not be possible or practicable to continue to obtain samples of the media of choice at the most desired location or time. In these instances, suitable specific alternative media and locations may be chosen for the particular pathway in question and appropriate substitutions made within 0 days in the Radiological Environmental Monitoring Program, and submitted in the next Annual Radioactive Effluent Release Report, including a revised figure s and table for the ERMP reflecting the new location s with supporting information identifying the cause of the unavailability of samples for that pathway and justifying the section of the new location s for obtaining samples.
- For the purposes of this table, a thermoluminescent dosimeter TLD is considered to be one phosphor. There are normally three calcium sulfate phosphors in an environmental TLD ADGE. Film badges shall not be used as dosimeters for measuring direct radiation.
  - Airborne particulate sample filters shall be analyzed for gross beta radioactivity 2 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than 10 times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.
  - Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.
- If broadleaf vegetation food products are unavailable, additional air sampling as specified in Table 2.1, Parts 2 & will be done in the W station 1S1 and SE Station S2 sectors.
- The ranch Technical Position now states, Any location from which milk can no longer be obtained may be dropped from the surveillance program after notifying the RC in writing that they are no longer obtainable at that location . Although milk sampling performed at 2 is outside the -mile radius and is supplemental to the REMP, this notification should take place if 2 milk sampling ceases.

This page intentionally left blank.

**TABLE 2.2**  
**Distances and Directions to Environmental Monitoring Stations**

Station Code <sup>a</sup>	Station Name	Radial Direction** (True Heading)	Radial Distance** From Plant	
		Degrees	km	Miles
0S1	E clusion ence- orthwest Corner	20	0.1	0.1
0S2	orth Gate	20	0.	0.
1S1	Wastewater Pond	0	0.	0.
2S1	ack Road- 00 m orth of Plant	0	0. 2	0.2
S1	Road W of 2 0 k Switchyard	2	0.	0.
S1	ack Road etween Switchyards		0.	0.
S1	00 k Switchyard		0.	0.
S2	Diablo Creek Weir		0.	0.
S	Microwave Tower Road	0	1.02	0.
S1	Microwave Tower		0.	0.
S1	verlook Road	112	0.	0.
S1	Target Range	12	0.	0.
S2	Southwest Site oundary	12	1.	1.1
S	DCS -1 monitor well	1 0	0.	0.
S1	South Cove	1	0.	0.
MT1	Meteorological Tower	1	0. 2	0.2
DCM	Diablo Cove Marine	2	0.	0.2
W 1	orthwest Guard Shack	2 0	0. 2	0.2
W 2	Diablo Creek utlet	2	0.2	0.1
1A1	Crowbar Canyon	2	2.	1.
1A2	Ianchard Spring	1	2.	1.
0 1	Point uchon	2	.	.
1C1	Montana de ro Campground		. 2	.
C1	Ranch egation	20	.1	.
C1	Clark alley Gravel Pit		.2	.
C1	unction Prefumo See Canyon Roads		. 2	.
C1	Household Garden		.2	.
C1	Pecho Creek Ruins Mello arm	120	.	.1
C2	Rattlesnake Canyon	12	. 2	.
2D1	Sunnyside School	10	11.0	.
D1	Clark alley	2	. 2	.2
D1	Los sos alley Road		12.1	.
D1	unction See Davis Canyon Roads		1 .	.
D1	Avila Gate	11	10.	.
D2	Avila each	110	12.1	.
D	Avila Pier	120	11.0	.
E1	Avila alley arn	10	1 .	.
2 1	Morro ay Commercial Landing	0	1 .	10.
2 2	Morro ay Power Plant		1 .	11.2
1	SL EL		1 . 1	10.2
2	Cal Poly arm	0	20.1	12.
	SL County Health Department	0	20. 2	12.

Table 2.2 continued

Station Code <sup>a</sup>	Station Name	Radial Direction** (True Heading) Degrees	Radial Distance** From Plant	
			km	Miles
1	Shell each	110	1 .2	10.
G1	Arroyo Grande awaoka arm	11	2 .	1 .
G2	ceano Substation	11	2 .	1 .
A A	Avila each near pier	10	11.	.
C A	Cambria Moonstone each	0	. .	2 .
C A	Cayucos each near pier	0	2 .	1 .
D 1	Drywell 11		0.0 1	0.02
DW1	Drinking Water Plant Potable Water Sys	1 1	0.	0.
GW1	Groundwater Monitoring Well 1	2 1	0.1	0.0
GW2	Groundwater Monitoring Well 2	1	0.21	0.1
IS1-IS	IS SI		0.	0.2
MD	Montana de ro Spooners Cove		. .	.
W1	bservation Well 01		0.0	0.0
W2	bservation Well 02	1	0.0	0.0
EL	ffsite Emergency Lab		1 . 1	10.2
T	Plant utfall	22	0.1	0.01
PM	Pismo each near pier	11	20.	12.
P	Pacific cean orth of Diablo Cove	2	0.	0.
P S	Pacific cean South of Diablo Cove	1	0.	0.
WW2	Water Well 02	0	1.02	0.
CM	lanchard arm Cow Meat	20	1.	1.2
GM	lanchard arm Goat Meat	20	1.	1.2
SM	lanchard arm Sheep Meat	20	1.	1.2
CCM	Control Cow Meat	2	. .	.
DM	ohe Property Deer Meat	21	.2	.2

The reference point used is the dome of unit 1 containment.

Station Code :

- first number 0- represents the radial sector in which the station is located:

0	- orthwest	- East-northeast
1	- orth-northwest	- East
2	- orth	- East-southeast
	- orth-northeast	- Southeast
	- ortheast	- South-southeast

- Letter S, A-H represents the distance from the plant:

S	- n-site
A	- 0-2 miles from plant but off-site
	- 2- miles from plant
C	- - miles from plant
D	- - miles from plant
E	- -10 miles from plant
	- 10-1 miles from plant
G	- 1 -20 miles from plant
H	- Greater than 20 miles from plant

- Second number represents the station number within the one.

Table 2.2 continued

Station Codes exceptions:

The following stations do not follow the coding system:

- Diablo Cove Marine DCM
- Meteorological Tower MT1
- northwest guard shack W 1
- Diablo Creek outlet W 2
- Pacific oceanorth P
- Pacific oceanSouth P S
- ffsite Emergency Lab EL
- Plant outfall T
- Drinking water DW1
- Water Well 02 WW2
- bservation Well 01 W1
- bservation Well 02 W2
- Drywell 11 D 1
- Avila each A A
- Groundwater Monitoring Well 1 GW1
- Groundwater Monitoring Well 2 GW2
- Montana de ro MD
- Pismo each PM
- Cayucos each C A
- Cambria Moonstone each C A
- lanchard Cow Meat CM
- lanchard Goat Meat GM
- lanchard Sheep Meat SM
- Control Cow Meat CCM
- ohe Deer Meat DM
- ohe Pig Meat PM
- Andre Cow Meat ACM
- Andre Deer Meat ADM
- Andre Pig Meat APM
- IS SI TLDs IS1 IS

This page intentionally left blank.

**TABLE 2.3:**  
**Detection Capabilities for Environmental Sample Analysis<sup>(a)</sup>**  
**Lower Limits of Detection (LLD)<sup>(b)</sup>**

<b>Analysis</b>	<b>Water (pCi/L)</b>	<b>Airborne Particulate or Gases (pCi/m<sup>3</sup>)</b>	<b>Fish (pCi/kg, wet)</b>	<b>Milk (pCi/L)</b>	<b>Food Products (pCi/kg, wet)</b>	<b>Soil/Sediment (pCi/kg, dry)<sup>e</sup></b>
Gross beta		0.01				
H-	00 <sup>c</sup>					11,000
Mn-	1		1 0			1 0
e-	0		2 0			00
Co-	1		1 0			1 0
Co- 0	1		1 0			1 0
n-	0		2 0			00
r-	0					00
b-	1					1 0
I-1 1	1 <sup>d</sup>	0.0		1	0	
Cs-1	1	0.0	1 0	1	0	1 0
Cs-1	1	0.0	1 0	1	0	1 0
a-1 0	0			0		00
La-1 0	1			1		1 0

#### **Table Notations**

- a The gamma emitters and corresponding LLD values listed are derived from standard DCM guidance for environmental samples as found in REG-1 01, Table .12-1. This list does not mean that only these nuclides are to be considered. Other peaks that are identifiable, together with those of the above nuclides, are also analyzed and reported in the Annual Radiological Environmental Operating Report.
- b The LLD is defined, for purposes of these specifications, as the a-priori analysis process that will yield a net count, above system background, that will be detected with percent probability with only percent probability of falsely concluding that a blank observation represents a real signal for the above concentration of radioactive material in a sample.
- c If no drinking water pathway exists, a value of ,000 pCi L may be used for tritium. All groundwater wells should use the 00 pCi L tritium value regardless of drinking water use.
- d The LLD value of 1 pCi L for I-1 1 is applicable only to sources used as drinking water. If no drinking water pathway exists, a value of 1 pCi L may be used for I-1 1.
- e The gamma emitters LLD values listed for soil sediment are derived from the Cs-1 1 10:1 ratio established in the environmental LLDs in REG-1 01, Table .12-1.

**TABLE 2.3** Continued

**Table Notations**

or a particular measurement system, which may include radiochemical separation:

$$\text{LLD} \quad \frac{4.66S_b}{E \times V \times 2.22 \times Y \times \exp(-\lambda t)}$$

Where:

LLD	the <i>a priori</i> the lower limit of detection as defined above as pCi per unit mass or volume
$S_b$	the standard deviation of the background counting rate or of the counting rate of a blank sample as appropriate as counts per minute
E	the counting efficiency as counts per transformation
the sample size in units of mass or volume	
2.22	the number of transformations per minute per pico-curie
$\lambda$	the fractional radiochemical yield when applicable
t	the radioactive decay constant for the particular radionuclide
	the elapsed time between sample collection or end of the sample collection period and time of counting

The value of  $S_b$  used in the calculation of the LLD for a detection system will be based on the actual observed variance of the background counting rate or of the counting rate of the blank samples as appropriate rather than on an unverified theoretically predicted variance. In calculating the LLD for a radionuclide determined by gamma-ray spectrometry, the background will include the typical contributions of other radionuclides normally present in the samples e.g., potassium- 40 in milk samples .

Analyses will be performed in such a manner that the stated LLDs will be achieved under routine conditions. Occasionally background fluctuations, unavoidably small sample sizes, the presence of interfering nuclides, or other uncontrollable circumstances may render these LLDs unachievable. In such cases, the contributing factors will be identified and described in the Annual Environmental Radiological Operating Report.

Typical values of E,  $\lambda$ , and t should be used in the calculation. It should be recognized that the LLD is defined as *a-priori* before the fact limit representing the capability of a measurement system and not as *a-posteriori* after the fact limit for a particular measurement.

**TABLE 2.4: Reporting Levels for Radioactivity Concentrations in Environmental Samples**

Analysis	Water (pCi/L)	Airborne Particulate or Gases (pCi/m <sup>3</sup> )	Fish (pCi/kg, wet)	Milk (pCi/L)	Food Products (pCi/kg, wet)
H-	20,000				
Mn-	1,000		0,000		
e-	00		10,000		
Co-	1,000		0,000		
Co- 0	00		10,000		
n-	00		20,000		
r- b-	00				
I-1 1	2	0.			100
Cs-1	0	10	1,000	0	1,000
Cs-1	0	20	2,000	0	2,000
a-La-1 0	200			00	

or drinking water samples. This is the 0 C R 1 1 value. If no drinking water pathway exists, a value of 0,000 pCi L may be used.

If no drinking water pathway exists, a value of 20 pCi L may be used

This page intentionally left blank.

## **Figure 2.1- Diablo Canyon Off-site Stations**

This page intentionally left blank.

To Monterey

Cayucos

Morro Bay

NNE

NW

NNW

NE

ENE

E

ESE

Pismo Beach #

227

101

Grover Beach #

7G1

7G2

Pacific  
Ocean

5 Mile Radius

N

0

5 miles

**LEGEND**

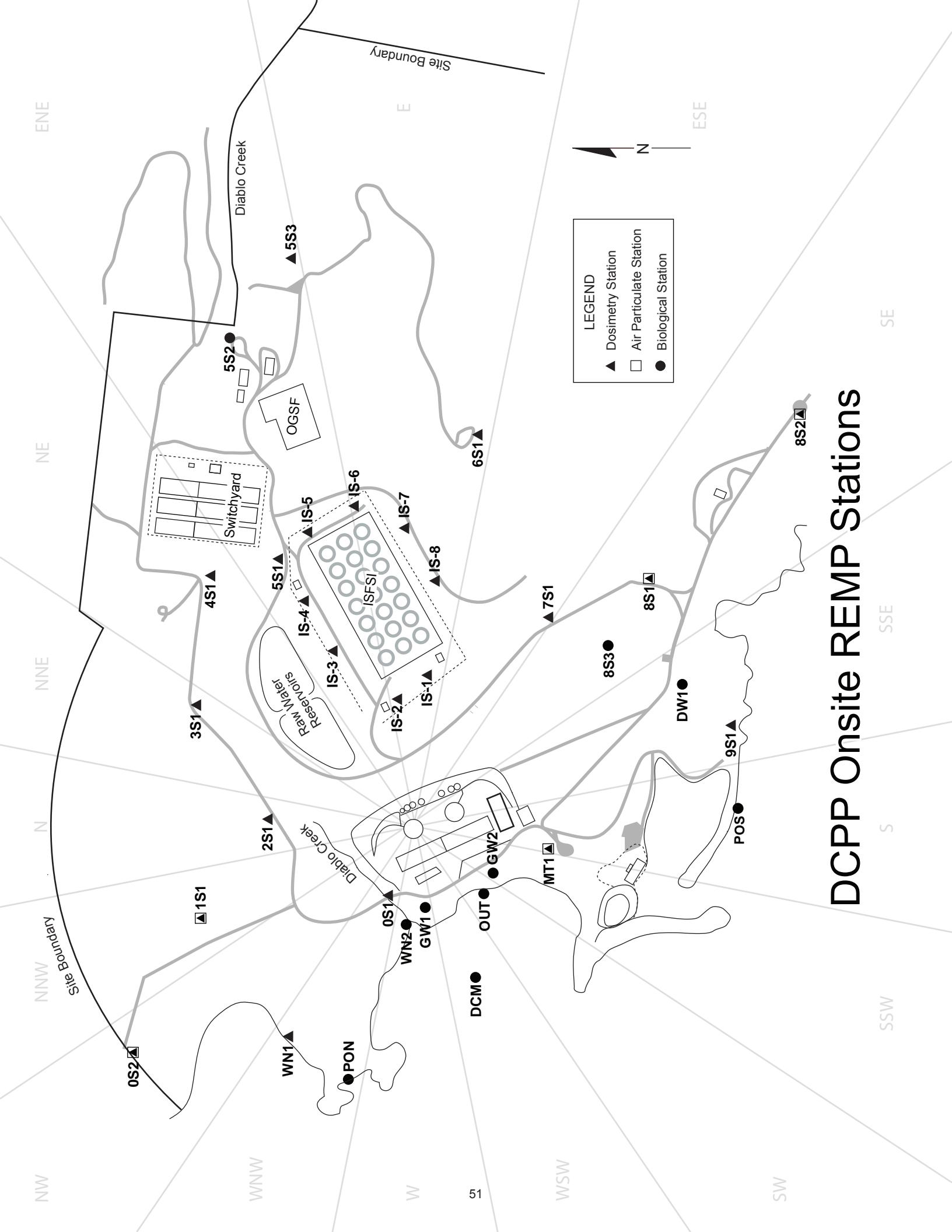
- ▲ Dosimetry Station
- Air Particulate Station
- Biological Sampling Station
- ★ Diablo Canyon Power Plant

This page intentionally left blank.

## **Figure 2.2- Diablo Canyon On-site Stations**

This page intentionally left blank.

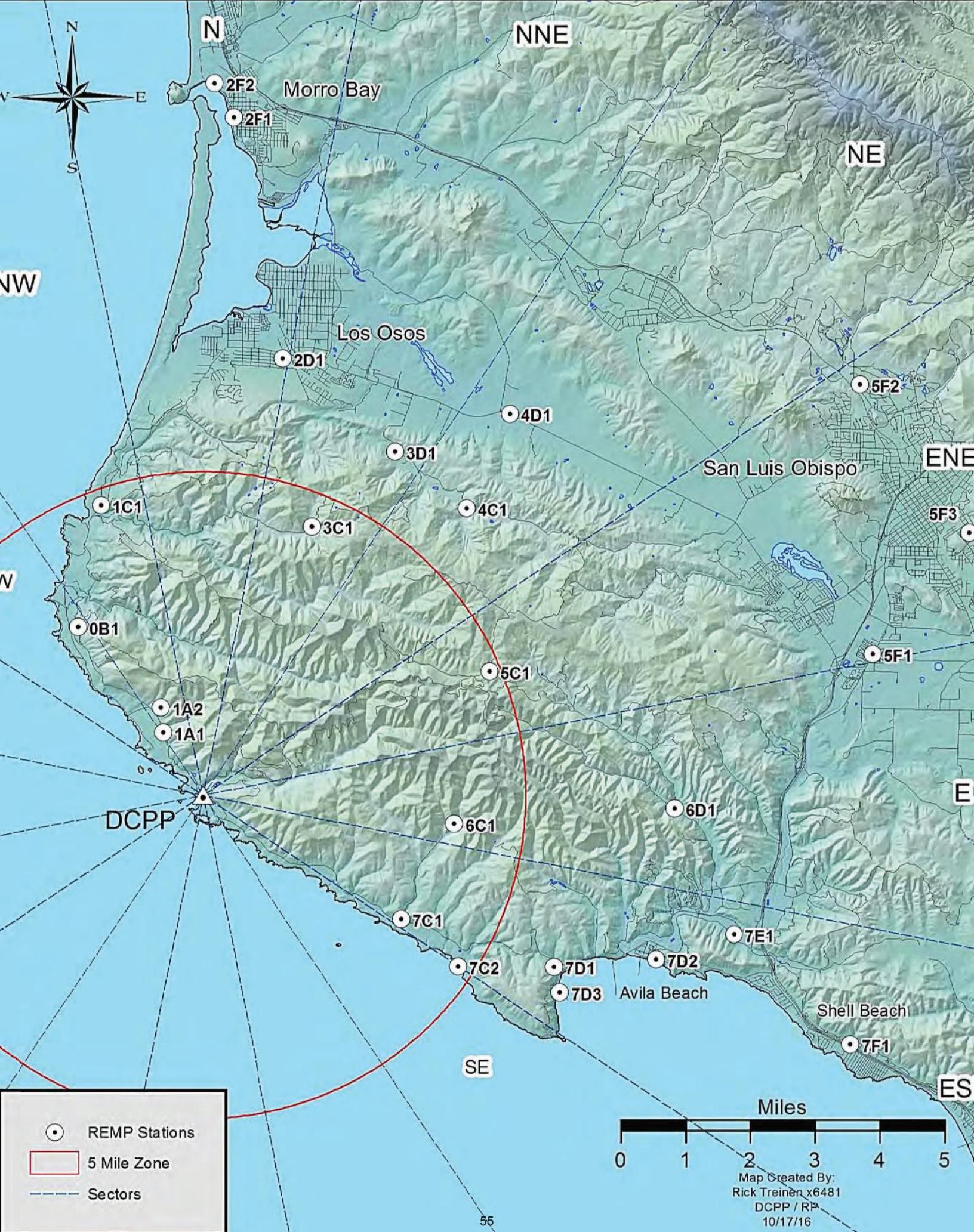
# DCPP Onsite REMP Stations



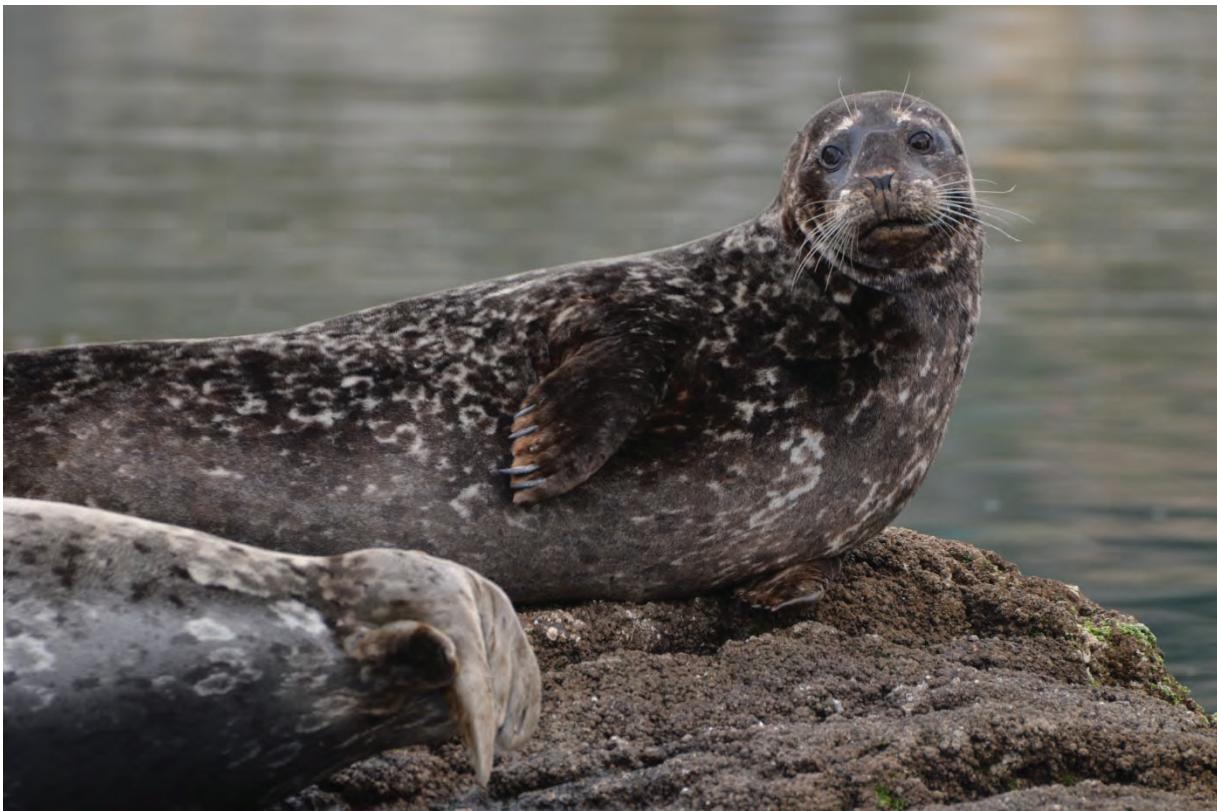
This page intentionally left blank.

## **Figure 2.3- Diablo Canyon Station Locations**

This page intentionally left blank.



This page intentionally left blank



Pacific Harbor Seal at Diablo Canyon intake cove

### 3.0 RADIOLOGICAL DATA-SUMMARY OF TABLES

This section summarized the analytical results of the environmental samples collected during the monitoring period. The results were presented in a format similar to that prescribed in the NRC's Radiological Assessment Branch Technical Position on Environmental Monitoring, Revision 1, November 1979 (NUREG-1301).

Each table was nuclide specific and the total numbers of analyses for that radionuclide were provided. Additionally, the number of measurements which exceeded the NRC Notification Reporting Levels found in Table 2.4 of this report were provided. The first column listed the matrix or pathway sampled during the period. The second column listed the nuclides analyzed and number of samples performed. The third column provided the a-priori Lower Limit of Detection (LLD) for radionuclides that have detection capability requirements as specified in Table 2.3 of this report. The fourth, fifth, and sixth columns contained the mean and range of results for locations. The seventh column contained the number of NRC Reportable occurrences for the location

pathway. Occasionally, the required LLD may not be met. An example of this occurrence might be due to hold times between sampling and analysis. Such cases, if any, were addressed in Section 4.2 of this report.

The a-posteriori Minimum Detectable Concentration (MDC) listed for each analysis in Appendix A was used as the detection evaluation point for each sample collected. Therefore, a sample was considered to yield a "detectable measurement" when the "result" concentration exceeded the associated MDC value for that analysis. The MDC was calculated by the laboratory with each analysis (a-posteriori) and incorporated conditions observed at the laboratory during the analysis. Note that the a-posteriori MDC equation used by the environmental lab was the same as the a-priori Lower Limit of Detection (LLD) equation specified in NUREG-1301.

Additionally, the tables provided the mean of all detectable sample results analyzed for the specified radionuclide/ media type, the range, and the total number of detectable samples of all the samples counted:

- The mean value consisted of the average of detectable concentrations
- The lowest and highest detected concentration values were listed as the range
- The number of detectable measurements and the total number of measurements were listed. For example, (4/20) would indicate that 4 of the 20 samples collected (for that sample type and that radionuclide) contained detectable radioactivity.

The radionuclides reported in this section represented those that:

- had an LLD requirement in Table 2.3, or a Reporting Level listed in Table 2.4
- were of specific interest for any other reason

The radionuclides routinely analyzed and reported (if detected) within a gamma spectroscopy analysis were:

Ac-228, Ag-108m, Ag-110m, Am-241, Ba-140, Be-7, Bi-212, Bi-214, Ce-141, Ce-144, Co-57, Co-58, Co-60, Cr-51, Cs-134, Cs-137, Fe-59, I-131, K-40, La-140, Mn-54, Nb-95, Pb-210, Pb-212, Pb-214, Ra-224, Ra-226, Ru-103, Ru-106, Sb-124, Sb-125, Th-234, Tl-208, Zn-65, and Zr-95.

Name of Facility:	Diablo Canyon Power Plant			Location of Facility:	San Luis Obispo, CA (County , State)		
E	R	M	S				
	R	-	3				
Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>		Number of Reportable Occurrences
Direct Radiation ( mrem/std quarter )	Env TLD Badges <sup>(C)</sup> ( 384 )	6 mrem/qrtr	5S1, 0.4 mi, 58 Not Detected ( 0 / 12 )	See Table 2.2 Not Detected ( 0 / 348 )	2F2, 4D1, 5F1 Not Detected ( 0 / 36 )		0
ISFSI TLDs <sup>(D)</sup> ( 96 )	6 mrem/qrtr	88.1	IS4, 0.3 mi, 65 80.5 - 95.7 ( 12 / 12 )	38.4	16.9 - 95.7 ( 60 / 96 )		0
						IS1 - IS8	

Table Notation:

- (A) Sensitivity of TLD system using ANSI/HPS N13.37-2014 methodology

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed exposure above historical background and the TLD sensitivity.

(C) 96 Env TLD badges are distributed quarterly at 32 locations (29 indicator stations and 3 control stations). Each quarter there are 3 badges exposed per station.

(D) 24 ISFSI Env TLD badges distributed quarterly at 8 locations surrounding the ISFSI protected area and within the site boundary. Each quarter 3 badges exposed per station.

E                    R                    M                    S  
                      R                    -                    3

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA (County, State)						
Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Highest Annual Mean Name, Distance, and Direction Range <sup>(B)</sup> Mean <sup>(B)</sup>	All Indicator Locations Range <sup>(B)</sup> Mean <sup>(B)</sup>	All Control Locations Range <sup>(B)</sup> Mean <sup>(B)</sup>	Number of Reportable Occurrences
Airborne (pCi/meter <sup>3</sup> )	Iodine (364)	0.07	9.92E-3	9.92E-3 (1/52)	9.92E-3 (1/312)	0
Airborne (pCi/meter <sup>3</sup> )	Air Particulates (364)	0.01	1.75E-2	2.54E-3 to 1.02E-1 (52/52)	1.71E-2	2.50E-3 to 1.02E-1 (312/312)
<hr/>						
Airborne (uCi/meter <sup>3</sup> )	Air Carbon-14 (156)	8S2, 1.1 mi, 128	0S2, 1S1, 7D1, 8S1, 8S2, MT1	0S2, 1S1, 7D1, 8S1, 8S2, MT1	5F1, 10.2 mi, 79	5F1, 10.2 mi, 79
<hr/>						
Gamma Isotopic <sup>(C)</sup> (28)						
Cs-134						
Cs-137						
<hr/>						
Airborne (uCi/meter <sup>3</sup> )	Carbon-14	8S1, 0.5 mi, 125	0S2, 8S1	5F1, 10.2 mi, 79		
<hr/>						

#### Table Notation:

- (A) Unless specified, all required LLDs were met in accordance with Table 2.3
- (B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

- (C) These gamma isotopic samples are quarterly composite samples of all weekly particulate air sample filters. Approximately 13 particulate filters for each REMP location. Plant related radionuclides, not naturally occurring isotopes.

E	R	T	3.3
	R	M	-
		R	3

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA

(County, State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction			All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
			Mean <sup>(B)</sup>	Range <sup>(B)</sup>	Mean <sup>(B)</sup>			
Surface water (pCi/Liter)	Gamma Isotopic (36)	DCM, 0.27 mi, 249	DCM, OUT	7C2, 4.7 mi, 124				
Mn-54	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Fe-59	30	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Co-58	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Co-60	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Zn-65	30	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Zr-95	30	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Nb-95	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
I-131	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Cs-134	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Cs-137	18	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Ba-140	60	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
La-140	15	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Additional Analysis								
Gross Beta (36)	100	320	176-828 (12/12)	314	169-828 (24/24)	317	150-603 (12/12)	0
Fe-55 (36)	200	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Ni-63 (36)	50	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Tritium H-3 (36)	400	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0
Total Sr-89/90 (36)	10	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 24)	none detected (0 / 12)	none detected (0 / 12)	0

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

E	R	T	3.
	R	M	-
		3	S

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations			Number of Reportable Occurrences (County, State)
				Mean <sup>(B)</sup>	Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	
Drinking water (pCi/Liter)	Gamma Isotopic (44)		1A2, 1.5 mi, 331	1A2, 5S2, D	1, N2	OEL, 10.2 mi, 79	
<b>Additional Analysis</b>							
Gross Beta (44)	4	4.02	4.02 (1/4)	3.52	1.03 - 6.97 (14/32)	2.96	1.78 - 5.89 (5/12)
Fe-55 (44)	200	none detected	(0 / 4)	none detected	(0 / 32)	none detected	(0 / 12)
Ni-63 (44)	50	none detected	(0 / 4)	none detected	(0 / 32)	none detected	(0 / 12)
Tritium H-3 (44)	400	none detected	(0 / 4)	none detected	(0 / 32)	none detected	(0 / 12)
Total Sr 89/90 (44)	2	none detected	(0 / 4)	none detected	(0 / 32)	none detected	(0 / 12)

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

E      R      T      M      -      S  
          R      3      -      3

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA  
(County, State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
<b>Mussels</b>						
Gamma Isotopic (14)		DCM, 0.27 mi, 249	DCM, PON, POS	7C2, 4.7 mi, 124		
Mn-54	130	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Fe-59	260	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Co-58	130	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Co-60	130	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Zn-65	260	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Zr-95		none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Nb-95		none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
I-131		none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Cs-134	130	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Cs-137	150	none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
Ba-140		none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0
La-140		none detected (0 / 4)	none detected (0 / 10)	none detected (0 / 4)	none detected (0 / 4)	0

#### Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

S  
3  
-  
3  
T M  
R R

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA  
(County, State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction			All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
			Mean <sup>(B)</sup>	Range <sup>(B)</sup>	Mean <sup>(B)</sup>			
<b>Fish</b> (pCi/kg)								
Gamma Isotopic (39)								
7D3, 6.9 mi, 120								
Mn-54	130	none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Fe-59	260	none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Co-58	130	none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Co-60	130	none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Zn-65	260	none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Zr-95		none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Nb-95		none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
I-131		none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Cs-134	130	none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
Cs-137	150	9.20	7.62 - 11.1 (4/4)		9.20	7.62 - 11.1 (4/31)	none detected (0 / 8)	0
Ba-140		none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0
La-140		none detected	(0 / 4)		none detected	(0 / 31)	none detected (0 / 8)	0

### Table Notation:

(A) Unless specified all required IIDs were met in accordance with Table 23.

(10/12) means *A*) mean and range based upon detectable measurements at specified locations indicated in parenthesis e.g. (10/12) means *A*) mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations indicated in parenthesis e.g. (10/12) means *A*) mean and range based upon undetectable measurements only.

S  
T 3.  
M  
R  
B  
E

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA  
(County State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>		Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>		All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>		Number of Reportable Occurrences
<b>Algae</b> ( pCi/kg )									
Gamma Isotopic ( 4 )	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249	DCM, 0.27 miles, 249
Mn-54			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Fe-59			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Co-58	80		no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Co-60	80		no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Zn-65			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Zr-95			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Nb-95			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
I-131			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Cs-134	60		no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Cs-137	80		no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
Ba-140			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )
La-140			no algae available to sample		no algae available to sample		no algae available to sample		none detected ( 0 / 4 )

### Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3  
 (B) Mean and range based upon detectable measurements only. Fraction of detectable

10 samples out of 12 collected showed activity.

These samples are supplemental samples.

Name of Facility:		Diablo Canyon Power Plant		Location of Facility:		San Luis Obispo, CA (County, State)	
E	R	T	M	S	-	3.	
	R						
Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>		Number of Reportable Occurrences
Kelp (pCi/kg)	Gamma Isotopic (17)	DCM, 0.27 mi, 249	DCM, PON, POS	7C2, 4.7 mi, 124			
Mn-54		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Fe-59		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Co-58	80	none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Co-60	80	none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Zn-65		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Zr-95		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Nb-95		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
I-131		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Cs-134	60	none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Cs-137	80	none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
Ba-140		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	
La-140		none detected (0 / 4 )	none detected (0 / 12 )	none detected (0 / 5 )	none detected (0 / 5 )	0	

### Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means

E      R      T      S  
R      M      -      3.

Name of Facility: Diablo Canyon Power Plant

				Location of Facility: San Luis Obispo, CA (County, State)			
Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations		All Control Locations	
				Mean <sup>(B)</sup>	Range <sup>(B)</sup>	Mean <sup>(B)</sup>	Range <sup>(B)</sup>
Vegetative Crops (pCi/kg)	6C1, 4.5 mi, 98	3C1, 5F2, 6C1, 7C1, 7E1	7G1, 16.8 mi, 115				
Gamma Isotopic (53)							
Mn-54		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Fe-59		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Co-58		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Co-60		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Zn-65		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Zr-95		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Nb-95		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
I-131	60	None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Cs-134	60	None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Cs-137	80	None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
Ba-140		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0
La-140		None Detected (0 / 4)	None Detected (0 / 41)	None Detected (0 / 12)	0	None Detected (0 / 12)	0

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

E	R	T	3.	0
	M	-		S
	R			

Name of Facility: Diablo Canyon Power Plant

Location of Facility:  
(County , State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
Milk ( $\mu\text{Ci/Liter}$ )	Iodine extraction (12) 1-131	1	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Gamma Isotopic (12)						
Mn-54	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Fe-59	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Co-58	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Co-60	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Zn-65	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Zr-95	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Nb-95	Not Applicable	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Cs-134	15	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Cs-137	18	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Ba-140	60	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
La-140	15	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0
Total Sr 89/90 (12)	2	Not Applicable	Not Applicable	Not Applicable	None Detected (0 / 12)	0

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

E            R            M            T            3.  
              R            -            3            S

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA  
(County, State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations			All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
				Mean <sup>(B)</sup>	Range <sup>(B)</sup>	Mean <sup>(B)</sup>		
<b>Meat (pCi/kg)</b>								
				BCM, 1.5 mi, 331		BCM	CCM, 37 mi, 328	
<b>Gamma Isotopic (9)</b>								
Mn-54			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Fe-59			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Co-58			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Co-60			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Zn-65			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Zr-95			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Nb-95			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
I-131	60		none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Cs-134	60		none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Cs-137	80		none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
Ba-140			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
La-140			none detected (0 / 4)		none detected (0 / 4)		none detected (0 / 5)	0
<b>Total Sr 89/90 (9)</b>	<b>500</b>		<b>none detected (0 / 4)</b>		<b>none detected (0 / 4)</b>		<b>none detected (0 / 5)</b>	<b>0</b>

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis,  
e.g. (10/12) means 10 samples out of 12 collected showed activity.

E            R            M            -            S  
                R

T      3.

Name of Facility:		Diablo Canyon Power Plant		Location of Facility:		San Luis Obispo, CA (County, State)	
Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences	
Ocean Sediment (pCi/kg dry)	Gamma Isotopic <sup>(5)</sup>	DCM, 0.27 mi, 249	DCM	DCM	7C2, 4.7 mi, 124		
Mn-54	150	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Fe-59	300	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Co-58	150	114 (1 / 4)	114 (1 / 4)	114 (1 / 4)	none detected (0 / 1)	0	
Co-60	150	102 (1 / 4)	102 (1 / 4)	102 (1 / 4)	none detected (0 / 1)	0	
Zn-65	300	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Zr-95	300	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Nb-95	150	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
I-131		none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Cs-134	150	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Cs-137	180	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Ba-140	600	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
La-140	150	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Fe-55 (5)	20,000	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Ni-63 (5)	4,000	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	
Total Sr 89/90 (5)	2,000	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 1)	0	

#### Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

E	R	M	T	3	3
	R	-			S

Name of Facility: Diablo Canyon Power Plant

Location of Facility:  
(County, State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
Beach Sand (pCi/kg dry)	A A, 7.3 mi, 109	A A, MDO, PMO, C A	CBA, 28.5 mi, 330			
Gamma Isotopic (10)						
Mn-54	150	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Fe-59	300	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Co-58	150	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Co-60	150	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Zn-65	300	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Zr-95	300	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Nb-95	150	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
T-131	1	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Cs-134	150	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Cs-137	180	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Ba-140	600	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
La-140	150	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Fe-55 (10)	20,000	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Ni-63 (10)	4,000	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0
Total Sr 89/90 (10)	2,000	none detected (0 / 2)	none detected (0 / 8)	none detected (0 / 2)	none detected (0 / 2)	0

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

S  
3  
-  
3  
T M  
R R  
E

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA  
(County State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
Groundwater (pCi/Liter)	Gamma Isotopic (8)		8S3, 0.4 mi, 140	8S3, 0.4 mi, 140	2, 0.63 mi, 70	
	Mn-54	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Fe-59	30	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Co-58	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Co-60	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Zn-65	30	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Zr-95	30	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Nb-95	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	I-131	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Cs-134	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Cs-137	18	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Ba-140	60	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	La-140	15	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Gross Beta (8)	4	5	4.37 - 6.13 (4 / 4)	5	4.37 - 6.13 (4 / 4)
	Fe-55 (8)	200	none detected (0 / 4)	none detected (0 / 4)	3.62	2.24 - 5.74 (3 / 4)
	Ni-63 (8)	50	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Total Sr-89/90 (8)	2	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0
	Tritium H-3 (8)	400	none detected (0 / 4)	none detected (0 / 4)	none detected (0 / 4)	0

## Table Notation:

(A) Unless specified, all required ILIDs were met in accordance with Table 2-3.

(1) Unspecified, unquantified were met in economic contexts (10/19).  
 (2) Measured were based upon detectable movements only. Functions of detectable movements at specified locations indicated in seconds (10/19).

Mean and range based upon detectable measure  
110 samples out of 12 collected showed activity.

E      R      M      -      S  
R      R      -      3

Name of Facility: Diablo Canyon Power Plant

Location of Facility: San Luis Obispo, CA  
(County, State)

Medium or Pathway Sampled (Unit of Measure)	Type and Total Number of Analyses Performed	Lower Limit of Detection <sup>(A)</sup> (LLD)	Indicator with Highest Annual Mean Name, Distance, and Direction Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Indicator Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	All Control Locations Mean <sup>(B)</sup> Range <sup>(B)</sup>	Number of Reportable Occurrences
<b>Monitoring wells</b>						
	Gamma Isotopic (16)	O 1, 0.05 mi, 36	G 1, G 2, O 1, O 2			
Mn-54	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Fe-59	30	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Co-58	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Co-60	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Zn-65	30	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Zr-95	30	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Nb-95	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
I-131	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Cs-134	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Cs-137	18	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Ba-140	60	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
La-140	15	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
<b>Gross Beta (16)</b>						
Fe-55 (16)	200	9.08	7.07 - 12.7 (3 / 4)	15.3	7.07 - 31.6 (8 / 12)	3.62
Ni-63 (16)	50	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Total Sr 89/90 (16)	2	none detected (0 / 4)	none detected (0 / 12)	none detected (0 / 12)	none detected (0 / 4)	0
Tritium H-3 (16)	400	491	281 - 718 (4 / 4)	491	281 - 718 (4 / 12)	none detected (0 / 4)

Table Notation:

(A) Unless specified, all required LLDs were met in accordance with Table 2.3

(B) Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis e.g., (10/12) means 10 samples out of 12 collected showed activity.

Note : Monitoring well tritium concentrations due to rain washout of an approved airborne discharge pathway from plant vents.

This page intentionally left blank.



Northern DCPP property near station 1C1

## .0 A ALYSIS OF E IRO ME TAL RESULTS

### . REM SAM LI G ARIA CE DE IATIO S

The DCPP Radiological Environmental Monitoring Program (REMP) allowed for deviations in the REMP sampling schedule "if samples were unobtainable due to hazardous conditions, seasonal unavailability, or malfunction of sampling equipment." Such deviations did not compromise the program's effectiveness and were normally anticipated for any radiological environmental monitoring program. The DCPP REMP included both required and supplemental samples. This section described the variances/deviations with sampling.

### . . DIRECT RADIATIO

The ISFSI projects team loaded an additional 9 spent fuel dry casks onto the DCPP ISFSI pad during the third quarter of 2018 (3 18). This contributed to the increased station IS-3 through IS-7 exposures in 2019.

## . . AIRBORNE RADIOACTIVITY

The 2019 mean percent availability for on-site and off-site particulate and iodine (P/I) air samplers was 99.9 percent. In other words, P/I air samplers were running 99.9 percent of the time. Less than 0.1 percent of run time could be attributed to equipment problems, filter exchange, or calibration processes.

There were no REMP air sampler loss run times in 2019.

Actual 2019 percent availabilities for each station were as follows:

0S2	100
1S1	100
5F1	100
7D1	99.8
8S1	100
8S2	100
MT1	100

Airborne C-14 supplemental sampling was performed weekly at stations 8S1 (SE Sector), 0S2 (N Sector), and 5F1 (control station in San Luis Obispo) in 2019.

General Engineering Labs and DCPP REMP personnel worked together to develop a method for sampling inorganic environmental airborne C-14 (as CO<sub>2</sub>). It should be noted that C-14 lab data were reported in units of Ci/m<sup>3</sup> (not pCi/m<sup>3</sup>) within Appendix A.

GEL has monitored C-14 samples from various locations around the US. In some instances, a very slight negative bias has been observed in annual data sets. The bias was not enough to mask any true positive detection of C-14. GEL believes this bias may be the result of the sorbent picking up other chemical species in the field during the week-long collection. These chemical species (possibly SO<sub>2</sub> or NO<sub>2</sub>) could cause some quenching effects in the liquid scintillation analysis and varies by site location. This chemical interference created a net effect where some field cartridges were slightly lower in activity than laboratory blanks. The bias was less than the average two sigma method uncertainty and significantly less than the method average detection limit.

### . .3 MARI E SAM LES

DCM supplemental quarterly intertidal algae samples were unavailable during all of 2019.

All remaining 2019 marine samples were collected as scheduled (including allowable variation).

The California Department of Fish and Game issued regulations prohibiting the collection of abalone along the central and southern coast of California. PG E considers it unlikely that future collection of abalone will be allowed within the DCPP environs. The REMP has therefore ceased routine abalone sampling. Note that the sampling of abalone was previously performed and was supplemental to the REMP.

### . . TERRESTRIAL SAM LES

All 2019 terrestrial samples were collected as scheduled (including allowable variation) with the following exceptions:

- Supplemental Blanchard Sheep Meat (BSM) and Blanchard Goat Meat (BGM) were not available and were not provided by the rancher during all of 2019. Blanchard sheep and goats were not within 5 miles of the DCPP site in 2019.

### . . SURFACE ATER DRI I G ATER A D GROU D ATER

Shallow French drain D 1 quarterly sampling was removed from the ODCM in 2019 due to known collection of rain washout tritium which was discussed in RIS2008-003. Going forward, station D 1 will be pumped down annually after the rainy season and sampled during pump down. The D 1 sample results were reported in Appendix A.

Observation ell 02 (O 2) was dry and not collected during all four quarters of 2019.

All remaining 2019 water samples were collected as scheduled (including allowable variation).

## . . REPLICATE SAMPLES

Replicate sampling was conducted within the REMP for program strength and quality.

A replicate sample is an additional sample (same matrix type and station) taken independently from the original scheduled REMP sample. The replicate sample collection is performed by a different person and shipped to GEL to ensure independent analysis result correlation and method consistency.

Replicate samples were taken from:

- 2F1 Market Fish (2/20/19)
- 7D3 Market Fish (7/8/19)
- CCM Cow Meat (7/23/19)
- 7E1 vegetation (9/19/19)
- 2F1 Market Fish (10/16/19)
- POS Intertidal Mussels (11/13/19)

The results of the replicate analyses were within expected correlation of routine sampling.



Intertidal mussel sampling



California sea lion colony directly off DCPP coastline

. COM ARISO OF AC IE ED LLDS IT RE UIREME TS

For each analysis having a Lower Limit of Detection (LLD) requirement, criteria and process procedures were in place to achieve the calculated *a-priori*" (before the fact) LLD. Meeting those criteria satisfies the *a-priori* LLD requirements. The *a-posteriori*" (after the fact) Minimum Detectable Concentration (MDC) for that analysis was also compared with the required *a-priori*" LLD.

Table 2.3 of this report lists the required *a-priori* LLDs for environmental sample analyses required by the DCPP Radiological Environmental Monitoring Program. Occasionally an LLD may have been unachievable due to sampling process situations, such as hold times between sampling and analysis.

The LLDs were not met for O 1, G 1, and G 2 during the second quarter of 2019 due to small sample size.

All other REMP samples met the specified *a-priori* LLD requirements in 2019.

### .3 COMPARISON OF RESULTS AGAINST REPORTING LEVELS

NRC notification was required whenever a Reporting Level listed in Table 2.4 of this report was exceeded. Reporting Levels were the environmental concentrations that relate to the ALARA design dose objectives of 10 CFR 50, Appendix I.

It should be noted that environmental isotopic concentrations were averaged over the calendar quarter for the purposes of this comparison, and that Reporting Levels applied only to DCPP plant related effluent radioactivity.

No REMP NRC Reporting Levels were exceeded during the 2019 monitoring period.



Intertidal algae sampling at 7C2



DCPP site coastline looking south

#### DATA ANALYSIS BY MEDIA TYPE

The REMP data for each media type is discussed below. A sample was considered to yield a detectable measurement when the resultant concentration exceeded the MDC for that analysis.

. . . D R E TLD

Direct radiation was continuously measured at 32 locations surrounding DCPP using Panasonic UD-814 type thermo-luminescent dosimeters (TLDs). These 32 locations were made up of 29 indicator stations 3 control stations. These Environmental (Env) TLD station dosimeters were distributed and collected every calendar quarter for processing. Methodology from ANSI/HPS N13.37-2014 "Environmental Dosimetry - Criteria for System Design and Implementation" was used to evaluate and report the Env TLD data. Historical background baseline values for each station were established using 2004 to 2014 Env TLD data.

DCPP "Standard Quarter TLD Results" were measurements of all environmental gamma radiation sources (cosmic, terrestrial, radon, and man-made) at each station during the deployment period. Transient and lab storage background dose contributions were subtracted prior to reporting the "Standard (Std) Quarter (tr) TLD Results". Technically, these TLDs read out in units of milliroentgen. Because gamma radiation has a quality factor of approximately 1 for conversion from milliroentgen to millirem, the environmental TLD unit of reporting was converted to millirem (mrem) for consistency of unit reporting and ease of exposure communications.

An evaluation of direct radiation measurements and member of public occupancy times within the site boundary indicated all federal criteria for member-of-public dose limits (10CFR20.1301) were conservatively met. An evaluation of direct radiation measurements indicated all federal EPA 40CFR190 criteria were conservatively met.

Comparing data from the 2019 DCPP Annual Radiological Effluent Release Report (ARERR), dose to a member-of-public resulting from gaseous effluent releases at DCPP was an extremely small fraction of annual Env TLD background dose. Therefore, it was concluded that gaseous effluents from DCPP had negligible impact on site related measured Env TLD values.

The following chart reports the 2019 Env "Standard Quarter TLD Results" for each individual station. These individual station results were compared to their "Historical quarterly Baseline" values which were calculated using individual station data from 2004 to 2014.

Chart column reporting methodology was as follows:

- D Not Detected
- I L D Std tr TLD result - Historical quarterly Baseline If  $\leq$  6, report "ND". If  $>$  6, report value (mrem).
- A TLD R tr 1 tr 2 tr 3 tr 4 Std tr TLD Results
- A I L D Annual TLD Result - Historical Annual Baseline If  $\leq$  12, report "ND". If  $>$  12, report value (mrem).

If quarterly or Annual Investigation Level Dose was detected, an evaluation of DCPP facility contribution was conducted and explained within this report.

2019 quarterly REMP Env TLD Analysis		2019 Annual REMP Env TLD Analysis													
S	ID	DC	D	B	0 S TLD R	3	0 L TLD R	1	0 I TLD R	A	B	0 A TLD R	1	0 A TLD R	L
MT1	0.2	21.5	18.2	18.7	20.4	19.0	ND	ND	ND	ND	ND	86.0	76.3	ND	
N1	0.2	12.7	11.0	10.9	11.6	9.7	ND	ND	ND	ND	ND	50.8	43.2	ND	
0S1	0.1	20.7	18.3	19.2	21.8	20.3	ND	ND	ND	ND	ND	82.8	79.6	ND	
5S1	0.4	23.1	20.0	20.5	22.9	22.0	ND	ND	ND	ND	ND	92.4	85.4	ND	
6S1	0.5	14.0	13.1	11.1	13.8	13.2	ND	ND	ND	ND	ND	56.0	51.2	ND	
8S1	0.5	17.1	15.2	14.9	16.2	16.0	ND	ND	ND	ND	ND	68.4	62.3	ND	
8S2	1.1	21.0	19.2	18.8	19.9	19.5	ND	ND	ND	ND	ND	84.0	77.4	ND	
5S3	0.7	19.2	16.7	17.4	18.9	18.4	ND	ND	ND	ND	ND	76.8	71.4	ND	
2F2	11.2	14.1	12.1	12.2	14.9	12.3	ND	ND	ND	ND	ND	56.4	51.5	ND	
2D1	6.9	12.8	11.6	12.7	14.1	13.0	ND	ND	ND	ND	ND	51.6	51.4	ND	
4D1	7.6	11.9	9.1	9.3	12.3	11.0	ND	ND	ND	ND	ND	47.6	41.7	ND	
5F1	10.2	17.5	14.9	13.1	18.0	17.0	ND	ND	ND	ND	ND	70.0	63.0	ND	
1A1	1.6	12.0	10.5	11.0	13.1	11.8	ND	ND	ND	ND	ND	48.0	46.4	ND	
7D2	7.6	16.6	13.5	14.4	16.1	15.3	ND	ND	ND	ND	ND	66.4	59.3	ND	
7G2	17.3	17.6	15.8	16.3	17.9	17.9	ND	ND	ND	ND	ND	70.4	67.9	ND	
7C1	4.1	18.1	16.4	15.5	18.0	17.6	ND	ND	ND	ND	ND	72.4	67.5	ND	
7F1	10.8	17.1	15.4	16.0	16.8	16.3	ND	ND	ND	ND	ND	68.4	64.5	ND	
0B1	3.6	10.2	8.8	8.8	11.4	9.7	ND	ND	ND	ND	ND	40.8	38.7	ND	
7D1	6.6	11.2	9.6	10.3	10.3	10.6	ND	ND	ND	ND	ND	44.8	40.8	ND	
4C1	5.8	10.6	10.0	8.4	11.5	10.4	ND	ND	ND	ND	ND	42.4	40.3	ND	
0S2	0.5	17.7	14.9	16.3	18.6	15.6	ND	ND	ND	ND	ND	70.8	65.4	ND	
1S1	0.4	17.4	14.9	16.1	19.5	16.6	ND	ND	ND	ND	ND	69.6	67.1	ND	
2S1	0.2	16.8	13.9	14.6	18.6	15.5	ND	ND	ND	ND	ND	67.2	62.6	ND	
3S1	0.4	20.9	16.6	19.6	20.9	19.1	ND	ND	ND	ND	ND	83.6	76.2	ND	
4S1	0.5	19.5	17.1	16.6	18.9	18.9	ND	ND	ND	ND	ND	78.0	71.5	ND	
7S1	0.3	18.5	16.6	18.7	19.4	18.0	ND	ND	ND	ND	ND	74.0	72.7	ND	
9S1	0.4	22.6	18.9	20.0	18.9	21.1	ND	ND	ND	ND	ND	90.4	78.9	ND	
1C1	4.7	13.2	11.4	12.3	15.3	13.0	ND	ND	ND	ND	ND	52.8	52.0	ND	
5C1	4.7	16.4	14.7	14.2	18.7	16.3	ND	ND	ND	ND	ND	65.6	63.9	ND	
3D1	6.2	12.8	11.1	12.5	13.5	12.1	ND	ND	ND	ND	ND	51.2	49.2	ND	
6D1	8.3	14.1	12.0	12.9	13.3	14.4	ND	ND	ND	ND	ND	56.4	52.6	ND	
5F3	12.7	17.2	15.1	14.4	15.1	14.5	ND	ND	ND	ND	ND	68.8	59.1	ND	

ND Not Detected

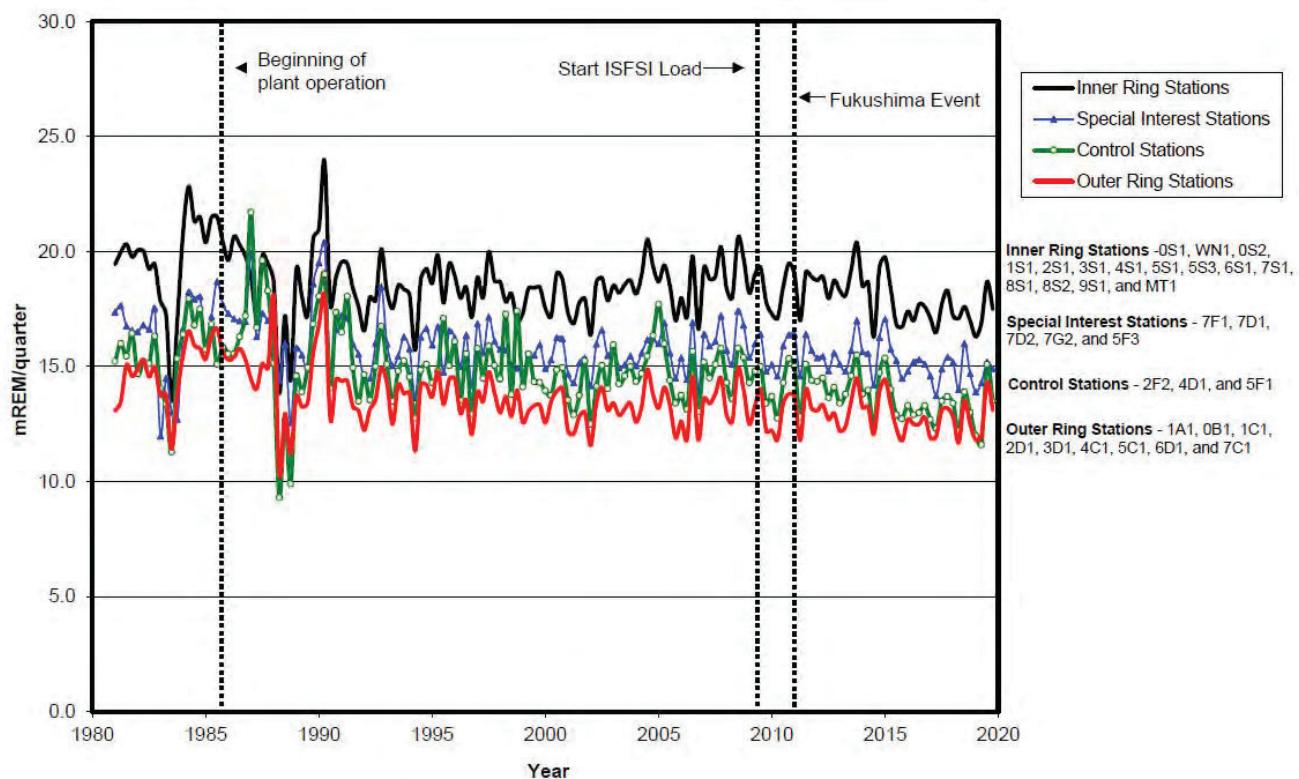
The 2019 AREOR historical baselines have been determined using ANSI/HPS N13.37-2014 methodology and Env TLD station results from approximately 2004 to 2014.  
 quarterly Investigation Level Dose Standard quarter TLD result - Historical quarterly Baseline. If = 6, report "ND". If = 6, report value (mrem).  
 Annual TLD Result tr 1 tr 2 tr 3 tr 4 Standard quarter TLD Results  
 Annual Investigation Level Dose Annual TLD Result - Historical Annual Baseline. If = 12, report "ND". If = 12, report value (mrem).

See DCPP Station ID Maps in Figure 2.1 and Figure 2.2

The following graph illustrated overall trending of Env TLDs with regard to distance from the DCPP plant site. The Env TLD results were measurements of all environmental gamma radiation sources (cosmic, terrestrial, radon, and man-made) during the deployment period to allow for trending.

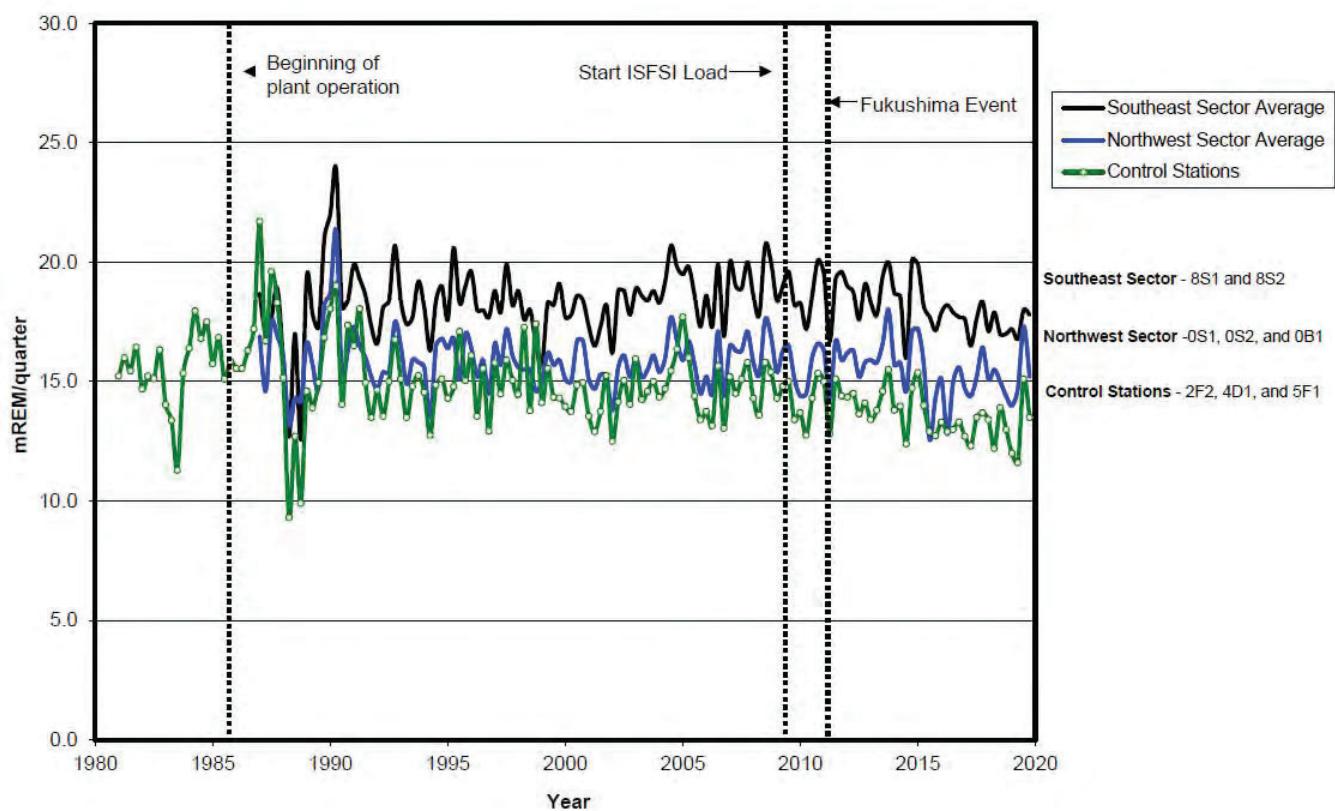
Inner ring, outer ring, special interest, and control stations were combined and averaged to obtain a single standard quarter value for each represented plot line.

Inner ring, outer ring, special interest, and control stations Env TLD averages remained within and trended with pre-operational Env TLD ranges. DCPP operations did not affect Env TLD results.



The following graph illustrated averaged Env TLD results from the southeast sector (stations 8S1, 8S2) and northwest sector (stations 0S1, 0S2, 0B1). The Env TLD results were measurements of all environmental gamma radiation sources (cosmic, terrestrial, radon, and man-made) during the deployment period to allow for trending. These sectors were chosen for graphical trending due to their historically high averaged wind rose directions and would therefore indicate the most gaseous effluent impact on Env TLD results.

The southeast and northwest sectors Env TLD averages trended with pre-operational Env TLD ranges. DCPP operations did not affect Env TLD results within these sectors. Averaged control stations (2F2, 4D1, 5F1) were provided for reference.



DCPP was licensed with an exclusion area boundary (i.e. site boundary) as an approximate 880-yard radius from U-1 Containment center. No permanent public access was permitted within the exclusion area. The unrestricted area (i.e. outside the site boundary) surrounding DCPP was sparsely inhabited out to five miles from the site (ref. 2019 Land Use Census within Section 8).

The direct radiation levels within a very small area surrounding the onsite ISFSI were elevated due to dry cask spent fuel storage. ISFSI pad TLD stations IS-1 through IS-8 were located adjacent to the ISFSI pad fencing (see map in Figure 2.2 of this report). The remaining onsite areas were not affected with exposure due to the ISFSI topographical elevation and placement within an onsite hillside which provided radiation shielding to the rest of the site. There was a total of 58 loaded dry casks stored within the onsite ISFSI in 2019.

- The first spent fuel dry cask canister was loaded onto the ISFSI pad in June 2009. The small increase in radiation levels at the ISFSI pad prior to the first spent fuel canister load was due to storage of Radioactive Material (RAM) equipment in seatrains at the ISFSI pad prior to an outage. These seatrains of RAM were removed prior to the first load of spent fuel dry cask canisters.
- Dry cask loading Campaign 2 occurred in May 2010.
- Dry cask loading Campaign 3 occurred during the first quarter of 2012 and ended on 3/17/2012.
- Dry cask loading Campaign 4 occurred from August to October of 2013.
- Dry cask loading Campaign 5 occurred from 5/1/15 to 7/3/15 with the addition of 8 dry casks onto the onsite ISFSI.
- Dry cask loading Campaign 6 occurred from 8/8/16 to 11/12/16 with the addition of 12 dry casks onto the onsite ISFSI.
- Dry cask loading Campaign 7 occurred from 6/9/18 to 8/18/18 with the addition of 9 dry casks onto the onsite ISFSI.

The following chart reports the 2019 ISFSI Env "Standard Quarter TLD Results" for each individual station. These individual ISFSI station results were compared using the 2004 to 2014 "Historical quarterly Baseline" and "Historical Annual Baseline" value at station 5S1.

Station 5S1 was used for historical baseline purposes due to 5S1 close proximity to the ISFSI pad and 5S1 pre-ISFSI historical data.

Chart column reporting methodology was as follows:

- D Not Detected
- I L D Std tr TLD result - Historical quarterly Baseline If < 6, report "ND". If ≥ 6, report value (mrem).
- A TLD R tr 1 tr 2 tr 3 tr 4 Std tr TLD Results
- A I L D Annual TLD Result - Historical Annual Baseline If < 12, report "ND". If ≥ 12, report value (mrem).

2019 quarterly ISFSI Env TLD Analysis				2019 Annual ISFSI Env TLD Analysis			
S	ID	D	B	0 S TLD R	0 L TLD R	0 I TLD R	0 A TLD R
IS-1	0.3		23.1	22.3	22.5	24.0	92.4
IS-2	0.3		23.1	23.0	24.1	24.5	92.4
IS-3	0.3		23.1	54.4	61.8	63.2	92.4
IS-4	0.3		23.1	103.6	116.4	118.8	33.2
IS-5	0.3		23.1	43.1	48.3	51.3	80.5
IS-6	0.3		23.1	40.0	44.1	46.8	95.7
IS-7	0.3		23.1	44.0	47.8	51.2	82.7
IS-8	0.3		23.1	21.7	24.4	27.5	21.4
							20.0
							25.2
							28.2
							21.4
							16.9
							21.0
							23.7
							20.5
							92.4
							92.4
							174.5
							82.1
							187.2
							94.8
							444.6
							352.2
							235.7
							143.3
							ND
							ND
							96.3
							ND

ND Not Detected

The 2019 AREOR historical baselines have been determined using ANSI/HPS N13.37-2014 methodology and Env TLD station 5S1 results from approximately 2004 to 2014. The historical baseline from REMP Station 5S1 was used for the ISFSI stations due to it's onsite close proximity to ISFSI.

quarterly Investigation Level Dose Standard quarterly Baseline. If \_ 6, report "ND". If \_ 6, report value (mrem).  
Annual TLD Result tr 1 tr 2 tr 3 tr 4 Standard quarterly TLD Results

Annual Investigation Level Dose Annual TLD Result - Historical Annual Baseline. If \_ 12, report "ND". If \_ 12, report value (mrem).

See DCPP Station ID Map in Figure 2.2

The quarterly Investigation Level and Annual Investigation Level doses were due to spent fuel dry casks stored on the ISFSI pad.

The DCPP ISFSI Pad is located conservatively within the DCPP site boundary and is not located within the unrestricted area.

The DCPP ISFSI Pad is topographically elevated above most of the site and is built into a hillside. These characteristics shield onsite locations from ISFSI related radiation.

No permanent public access is permitted onsite within the DCPP site boundary. Access occupancy surrounding the onsite ISFSI is restricted and controlled by DCPP Security. The above reported annual exposures are  $24 \times 365$  occupancy exposure at that location.

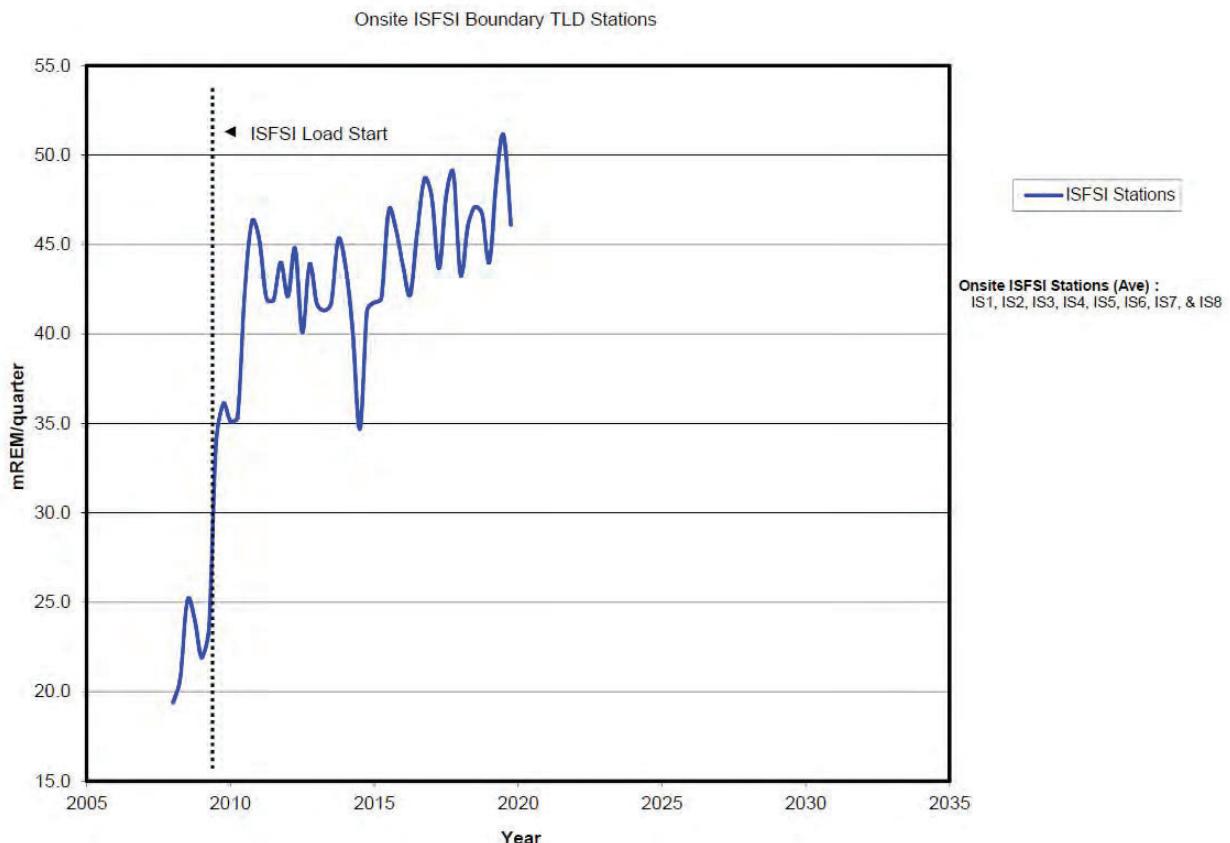
If someone was to reside in a low occupancy condition (about 2.5 hrs per week) at ISFSI location IS-4 all year, their resulting exposure would be about 5.2 mrem/year above background. 10CFR20.1301 onsite member of public exposure and 40CFR190 unrestricted area exposure were evaluated. Dose limits were not exceeded and were conservatively met.

" quarterly and Annual Investigation Level Dose" was detected at ISFSI Env TLD stations IS-3 through IS-7 due to DCPP spent fuel dry casks stored on the ISFSI pad.

The DCPP ISFSI Pad was not located within the unrestricted area and therefore uncontrolled member-of-public access to PG E property did not result in any unrestricted area exposure. An evaluation of direct radiation measurements within the unrestricted area indicated all federal EPA 40CFR190 criteria for public dose limits were conservatively met.

Uncontrolled public access was not permitted within the DCPP site boundary. The DCPP ISFSI Pad was located conservatively within the DCPP site boundary. The DCPP ISFSI Pad was topographically elevated above most of the site and was built into a hillside. These characteristics shielded most onsite locations from ISFSI related radiation. Personnel access surrounding the onsite ISFSI was restricted and controlled by DCPP security to a low occupancy condition of less than 2.5 hours per week. The reported ISFSI Env TLD annual exposures were for an occupancy condition of 24 hours per day and 365 days per year surrounding the ISFSI pad. Therefore, if someone was to reside in a low occupancy condition at ISFSI location IS-4 all year, their resulting annual exposure would have been approximately 5.2 millirem above annual background radiation exposure. This total 5.2 millirem annual exposure would have been approximately equivalent to exposure from a ten-hour airline flight. An evaluation of direct radiation measurements and member-of-public occupancy times within the site boundary indicated all federal criteria for member-of-public dose limits (10CFR20.1301) were conservatively met.

The following page contains a trend graph of the onsite ISFSI pad averaged TLD results (IS-1 through IS-8) and a picture of the ISFSI pad. The Env TLD results were measurements of all environmental gamma radiation sources (cosmic, terrestrial, radon, and man-made) during the deployment period to allow for trending.



DCPP ISFSI Pad within hillside, on south side of the make-up water reservoirs

. . A

Air particulate and radioiodine samples were collected weekly from six indicator stations (MT1, 0S2, 1S1, 7D1, 8S1, and 8S2) in the DCPP environs and at one control station (5F1). A total of 364 air particulate filters and 364 iodine cartridges were collected and analyzed as part of the normal REMP.

Natural occurring gross beta activity was detected in every weekly air particulate sample collected from all indicator and control stations. Comparison of the data showed that the mean values of gross beta activities for the indicator stations were consistent with those obtained for the control station and historical trending. Normal background gross beta values ranged from 2.50E-3 to 1.02E-1 pCi/m<sup>3</sup>.

Gamma isotopic analyses were performed on quarterly composites of the 13 air particulate filters from each of the REMP air stations. The midpoint date of the quarter was used to label the composite. There were no gamma isotopic detections in 2019.

A total of 364 REMP weekly TEDA air cartridges were analyzed for I-131 in 2019. One air sample at station 0S2 during the week of 5/4/19 indicated a positive result for I-131 at 9.92E-3 pCi/m<sup>3</sup>. This result was attributed to facility operations. All remaining TEDA air cartridge results were non-detectable.

Airborne Carbon-14 samples were collected weekly from two indicator stations (8S1, 0S2) in the DCPP environs and at one control station (5F1). A total of 156 Carbon-14 cartridges were collected and analyzed as part of the REMP. Carbon-14 was detected at station 8S1 from 12/7/19 to 12/14/19 due to facility operations. Carbon-14 was detected at station 0S2 during the week of 12/14/19 due to facility operations. Exposure results were negligible and actual exposure results can be referenced in the 2019 DCPP ARERR found on the NRC website. All other Carbon-14 air cartridge results were non-detectable. Appendix A contains the individual air sampling station data results.



18 foot Great White Shark in Diablo Cove

. .3 D

O S

D

Drinking water samples were collected from indicator stations 1A2, 5S2, D 1, N2, and control station OEL. The samples were analyzed for gamma emitters, gross beta, tritium, total strontium 89/90, Iron-55, and Nickel-63. No DCPP related radionuclides were detected in any of the 2019 drinking water samples.

The results of the drinking water samples were individually listed in Appendix A.

O S

Ocean surface water samples were collected monthly from indicator stations DCM, OUT, and control station 7C2. The samples were analyzed for gamma emitters, gross beta, tritium, total strontium 89/90, Iron-55, and Nickel-63. No DCPP related radionuclides were detected in any of the 2019 ocean surface water samples.

The results of the surface water samples were individually listed in Appendix A.



Kelp forest directly off the DCPP site coastline

. . . I  
M      B      S

Mussels were collected quarterly from stations DCM, POS, and 7C2. Mussels were collected annually from station PON (due to availability at station PON). No DCPP related radionuclides were detected in any of the 2019 mussel samples.

Fish samples were collected quarterly from stations DCM, PON, POS, 7C2 (control), and a local fish market (2F1 or 7D3). Market fish samples were locally caught rock fish. Cs-137 was detected in fish at the following stations, dates, and concentrations:

- |                |          |             |
|----------------|----------|-------------|
| • 7D3 Rockfish | 1/28/19  | 8.66 pCi/kg |
| • 7D3 Rockfish | 4/22/19  | 11.1 pCi/kg |
| • 7D3 Rockfish | 7/8/19   | 7.62 pCi/kg |
| • 7D3 Rockfish | 10/16/19 | 9.45 pCi/kg |

Pre-operational (pre-1985) DCPP REMP sampling observed measurable Cs-137 in fish and sediment due to atmospheric nuclear weapons testing fallout from the 1960's and 1970's. Finding Cs-137 in fish or sediment has been historically common in SLO County and the DCPP environs due to atomic weapons testing fallout. The historical fish Cs-137 concentrations have ranged from 3 to 14 pCi/kg. The 2019 concentrations of Cs-137 detected in fish were within this range.

This Cs-137 activity was also in agreement with the 1981 California Dept of Health Services Radiological Health Branch report and was considered part of SLO County background radioactivity. The preoperational 1981 ranges of Cs-137 observed in the Diablo cove (DCM) fish were 0 to 26 pCi/kg (decay corrected 0 to 11 pCi/kg in 2019). The 1981 ranges of Cs-137 observed in market fish were 0 to 38 pCi/kg (decay corrected 0 to 15 pCi/kg in 2019). The 1981 ranges of Cs-137 observed in ocean sediment were 0 to 93 pCi/kg (decay corrected 0 to 38 pCi/kg in 2019). The 1981 ranges of Cs-137 observed in soil were 0 to 298 pCi/kg (decay corrected 0 to 121 pCi/kg in 2019). Another recent background source of Cs-137 into California environs was due to the March 2011 Fukushima Event and subsequent ocean stream isotopic dispersion to the United States.

Because Cs-137 has an isotopic half-life of approximately 30 years, this contaminant should be detected in the California environs for the next 10 to 40 years depending on initial concentration and the detection sensitivity of the REMP analyses. Cs-137 has a longer environmental half-life in coastal seawaters than in open oceans due to input sources like rain watershed runoff and storm condition sediment re-suspension.

There were also no Cs-134 found in these fish samples. Cs-134 has a shorter isotopic half-life (approximately 2 years), would be indicative of nuclear reactor fission products, and would not be attributed to atomic weapons testing. Because Cs-134 was absent in the REMP fish analyses fish Cs-137 concentrations were attributed to either pre-1980's nuclear weapons testing or Fukushima related fallout with sediment re-suspension into watershed/storm runoff.

All marine fish and mussel samples did not detect any DCPP related radionuclides in 2019. The results of marine biological samples were individually listed in Appendix A.



Station PON



Station MDO beach sampling

M      A

Supplemental marine aquatic kelp sampling was performed quarterly at REMP sample indicator stations DCM, PON, POS, and 7C2 (control).

Supplemental intertidal algae sampling was performed quarterly at REMP sample station 7C2. Station DCM algae was unavailable in 2019.

Each sample was analyzed for gamma emitting radionuclides. No DCPP related isotopes were detected in 2019. The results of the marine aquatic vegetation sampling were individually listed in Appendix A.

O      S            R            B      S

Ocean sediment samples were collected annually from stations DCM and 7C2.

Supplemental recreational beach sand samples were collected semi-annually from stations A A, MDO, PMO, C A, and CBA. Each sample was analyzed for gamma emitting radionuclides, total strontium 89/90, Iron-55, and Nickle-63.

Co-58 and Co-60 was detected at station DCM ocean sediment on 3/8/19 due to a monitored liquid radwaste discharge from facility operations on 3/7/19. DCM ocean sediment was sampled the remaining three quarters of 2019 with no detections.

Only natural occurring isotopes where detected in the remaining ocean sediment and recreational beach sand samples collected for 2019. The results of ocean sediment and recreational beach sand sampling were individually listed in Appendix A.



Station 7G1 vegetation in Arroyo Grande CA

. . . F C

Samples of broad leaf vegetation were collected monthly (when available) from two indicator stations (5F2 and 7C1), and one control location (7G1).

Supplemental samples were also collected quarterly from residence or commercial gardens at stations 3C1, 6C1, and 7E1. The samples were analyzed for gamma emitting radionuclides.

No DCPP related isotopes were detected in 2019 vegetation.

The analysis results of vegetation sampling were individually listed in Appendix A.



Cal Poly Station 5F2

. . M

There are no milking animals (for human consumption) within 5 miles of the plant site.

In substitution, the DCPP REMP required additional air sampling at stations 1S1 and 8S2.

Supplemental samples of milk were collected monthly from Cal Poly Farm (station 5F2) due to the Cal Poly dairy being the closest milk producer relative to the DCPP site and regardless of the availability of milk stations within 5 miles of the plant.

The milk samples were analyzed for gamma emitting radionuclides, Iodine-131, and total strontium 89/90. No DCPP related radionuclides were detected in station 5F2 milk samples during 2019.

The results of the milk samples were individually listed in Appendix A.



Ranchers near Station 7C1

. . . M

Meat products were collected quarterly when available or provided from landowners.

Blanchard cattle were allowed to graze on the northern DCPP lands during 2019.

Blanchard Cow Meat (BCM) was sampled quarterly for gamma emitting radionuclides and total strontium 89/90.

Supplemental Blanchard Sheep Meat (BSM) and Blanchard Goat Meat (BGM) were not available and were not provided by the rancher during all of 2019. Blanchard sheep and goats were not within 5 miles of the DCPP site in 2019.

Station CCM, free range, grass fed beef sampling was conducted outside the influence of DCPP. Quarterly CCM meat was purchased by REMP personnel from the Whole Foods Market in SLO and consisted of Hearst Ranch ground beef.

No DCPP related isotopes were detected in meat during 2019. The results of the meat samples were individually listed in Appendix A.



Station G 2 groundwater sampling

## .0 GROU D ATER MO ITORI G

Diablo Canyon is committed to improving management of situations involving inadvertent radiological releases that get into onsite groundwater. This commitment reflects the nuclear industry's high standard of public radiation safety and protection of the environment. Trust and confidence on the part of local communities, California State, the NRC, and the public is paramount to this commitment.

Groundwater gradient studies of the DCPP ISFSI site and a general assessment of sub-regional hydro-geologic conditions indicates that groundwater (subsurface) flow beneath the Diablo Canyon power block is west to northwest toward the Pacific Ocean. Any groundwater present beneath the DCPP power block was not used as a source of drinking water.

· EI 0 -0 GROU D ATER ROTECTIO I ITIATI E - RE ORTI G  
.. EI 0 -0 O . A R D AREOR  
- REM  
DC O D C M ODCM .

Onsite groundwater monitoring points are described in the REMP and reported in this 2019 Annual Radiological Environmental Operating Report (AREOR) as follows:

Observation well 01 (O 1), Observation well 02 (O 2), DCSF96-1 (8S3), later well 02 ( 2), Groundwater well 1 (G 1), Groundwater well 2 (G 2), and Diablo Creek Outlet ( N2) were used for Groundwater Protection Initiative (GPI) data reporting and were described in 2019 DCPP AREOR Table 2.1.

#### · GROU D ATER SAM LI G O ER IE

As part of the nuclear industry NEI 07-07 Groundwater Protection Initiative (GPI), DCPP began sampling various ground water sources in 2006. These sources included onsite power block french-drain monitoring wells (O 1 O 2), an aquifer well ( 2), Diablo Canyon creek (5S2 N2), up-gradient shallow well (8S3), and a groundwater spring (1A2). Two additional downgradient groundwater monitoring wells (stations G 1 and G 2) were installed along the western side of the DCPP site on December 14, 2011. REMP began sampling these two new wells during the first quarter of 2012.

One groundwater aquifer well ( 2) was available within the plant site boundary. This well was located about 250 feet above and to the east of the power block. 2 was sampled quarterly for gamma emitters, gross beta, tritium, total strontium 89/90, Iron-55, and Nickle-63. No plant related radionuclides were detected in 2019.

One shallow (approximately 70 feet deep) up-gradient monitoring well (8S3) was located southeast at approximately 0.4 miles from the power block. 8S3 was sampled quarterly for gamma emitters, gross beta, tritium, total strontium 89/90, Iron-55, and Nickle-63.

No plant related radionuclides were detected in 2019.

Two shallow (approximately 37 to 73 feet deep) french-drain systems discharge into two monitoring wells located within the plant protected area and in close proximity to the containment structures, spent fuel pools, and radiologically controlled area auxiliary

building. These french-drain system monitoring wells were stations Observation ell 01 (O 1) and Observation ell 02 (O 2).

O 2 was not sampled in 2019 due to no water present in the well during the entire 2019 timeframe. There has been an ongoing severe drought in San Luis Obispo County which contributed to this dry well.

Station O 1 contained low levels of tritium throughout 2019 due to rainwater washout of gaseous tritium exiting the plant vent system. This tritium was evaluated and attributed to the rain-washout of gaseous tritium exiting the plant vent system via an approved monitored radioactive effluent discharge path. DCPP conducted rain-washout studies to document this phenomenon. Rain-washout tritium communicated with these french-drain systems via building structure to ground interfaces. Once rain water entered the monitoring wells, the water remained stagnant until another rain event caused transport. Subsequent quarterly sampling routinely indicated consistent tritium values due to monitoring well stagnation. These tritium concentrations were evaluated and were not due to a plant system leak or spill.

O 1 was connected to subsurface groundwater flow fissures and routinely trends with rain fall.

The specific ranges of tritium detected in these power block monitoring wells for 2019 were as follows:

- O 1 - Observation ell 01 ( 281 to 718 pCi/L ) 4 of 4 sample tritium analysis.
- O 2 - Observation ell 02 no samples collected (well dry).

No other DCPP related isotopes were detected in O 1 or O 2 during 2019.

As mentioned previously, two down-gradient monitoring wells were added to the REMP in 2012.

Groundwater ell 1 (G 1) was located between the DCPP protected area and the Pacific Ocean cliff boundary. This well opening was located at approximately 85' above sea level on the same plane as the power block and was approximately 85' deep.

Groundwater ell 2 (G 2) was located between the DCPP protected area and the Pacific Ocean cliff boundary. This well opening was located at approximately 85' above sea level on the same plane as the power block and was approximately 85' deep.

The specific ranges of tritium detected in G 1/G 2 monitoring wells for 2019 were as follows:

- G 1 - Groundwater ell 1 no tritium detected
- G 2 - Groundwater ell 2 no tritium detected

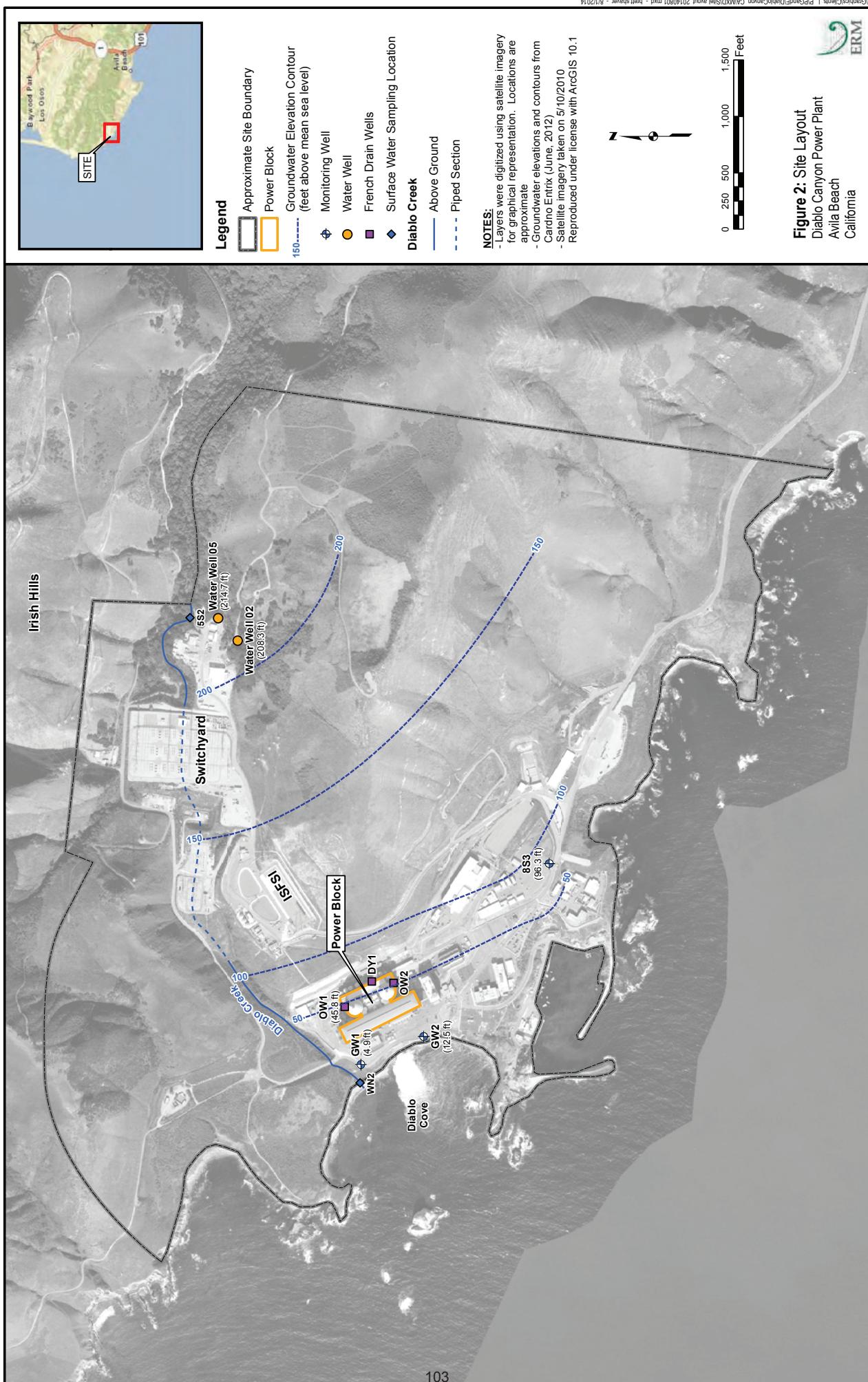
No other DCPP related isotopes were detected in G 1 or G 2 in 2019.

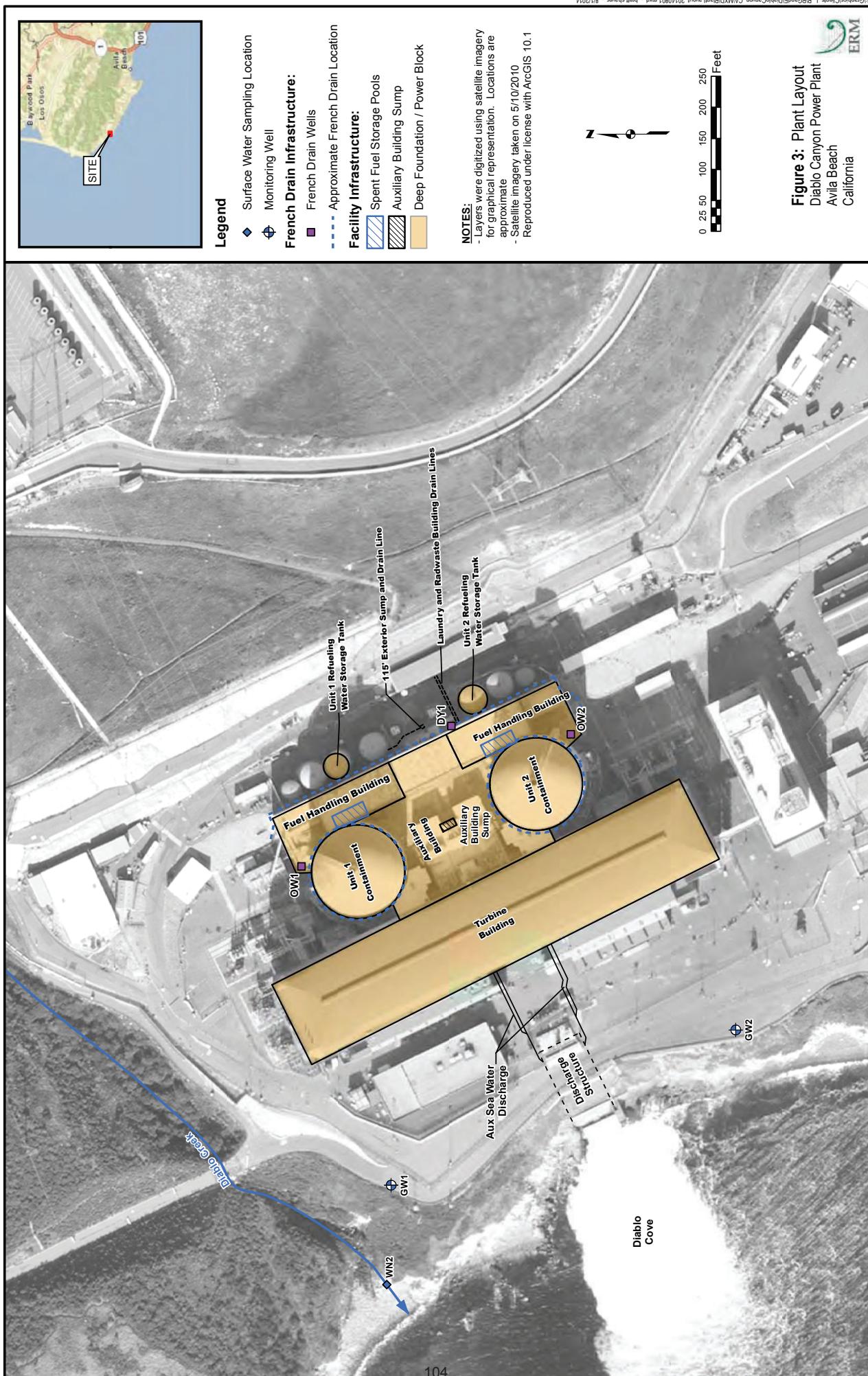
All other samples of groundwater at 1A2, 5S2, 8S3, and N2 did not indicate the presence of tritium or any other DCPP related isotopes (only NORM isotopes were observed) in 2019.

The results of groundwater sampling were individually listed in Appendix A.

Rain washout of tritium is discussed within NRC Regulatory Issue Summary (RIS) 2008-003, "Return/Re-use of Previously Discharged Radioactive Effluents".

The following pages show the site structures, monitoring well locations, elevations, and groundwater gradient patterns on the site.







Old Steam Generator Storage Facility looking northwest

## .0 OSGSF MO ITORI G

An Old Steam Generator Storage Facility (OSGSF) long term storage vault was constructed within the DCPP site boundary in 2007 for storage of eight retired DCPP steam generators and two retired DCPP reactor heads. This OSGSF did not cause any changes to the ambient direct radiation levels within the DCPP environs during 2019. The OSGSF in-building sumps were inspected quarterly by REMP personnel. One OSGSF sump was found to contain approximately 8 gallons of rain water during 2 19. This OSGSF sump water was analyzed and found to contain approximately 1,010 pCi/L of tritium with no other isotopes identified. The 8 gallons of sump water were removed and processed via the site's liquid radwaste system.

For reference, the following equipment was placed into the OSGSF on the following dates:

- 3/2/08 (outage 2R14), four DCPP Unit Two (U-2) Steam Generators
- 2/14/09 (outage 1R15), four DCPP Unit One (U-1) Steam Generators
- 11/6/09 (outage 2R15), one DCPP Unit Two (U-2) Reactor (Rx) Head
- 10/23/10 (outage 1R16), one DCPP Unit One (U-1) Rx Head

This page intentionally left blank.

## **7.0 CROSS CHECK PROGRAM**

This page intentionally left blank.

**2019 ANNUAL QUALITY ASSURANCE REPORT  
FOR THE  
RADIOLOGICAL ENVIRONMENTAL  
MONITORING PROGRAM (REMP)**

**2019 ANNUAL QUALITY ASSURANCE REPORT**

**FOR THE**

**RADIOLOGICAL ENVIRONMENTAL**

**MONITORING PROGRAM (REMP)**

Approved By



Robert L. Pullano  
Director, Quality Systems

February 28, 2020

Date

## TABLE OF CONTENTS

1. INTRODUCTION .....	5
2. QUALITY ASSURANCE PROGRAMS FOR INTER-LABORATORY, INTRA-LABORATORY AND THIRD PARTY CROSS-CHECK.....	5
3. QUALITY ASSURANCE PROGRAM FOR INTERNAL AND EXTERNAL AUDITS .....	7
4. PERFORMANCE EVALUATION ACCEPTANCE CRITERIA FOR ENVIRONMENTAL SAMPLE ANALYSIS .....	7
5. PERFORMANCE EVALUATION SAMPLES .....	7
6. QUALITY CONTROL PROGRAM FOR ENVIRONMENTAL SAMPLE ANALYSIS .....	8
7. SUMMARY OF DATA RESULTS.....	9
8. SUMMARY OF PARTICIPATION IN THE ECKERT & ZIEGLER ANALYTICS ENVIRONMENTAL CROSS-CHECK PROGRAM .....	9
9. SUMMARY OF PARTICIPATION IN THE MAPEP MONITORING PROGRAM .....	9
10. SUMMARY OF PARTICIPATION IN THE ERA MRAD PT PROGRAM.....	9
11. SUMMARY OF PARTICIPATION IN THE ERA PT PROGRAM.....	9
12. CORRECTIVE ACTION REQUEST AND REPORT (CARR) .....	9
13. REFERENCES.....	11

## TABLES

Table 1 2019 Radiological Proficiency Testing Results and Acceptance Criteria .....	12
Table 2 2019 Eckert & Ziegler Analytics Performance Evaluation Results .....	23
Table 3 2019 DOE Mixed Analyte Performance Evaluation Program (MAPEP) Results .....	23
Table 4 2019 ERA Program Performance Evaluation Results .....	26
Table 5 2019 ERA Program (MRAD) Performance Evaluation Results .....	27
Table 6 REMP Intra-Laboratory Data Summary: Bias and Precision By Matrix.....	40
Table 7 All Radiological Intra-Laboratory Data Summary: Bias and Precision By Matrix.....	42
Table 8 2019 Corrective Action Report Summary.....	48

## TABLE OF CONTENTS (CONTINUED)

### **FIGURES**

Figure 1	Cobalt-60 Performance Evaluation Results and % Bias .....	31
Figure 2	Cesium-137 Performance Evaluation Results and % Bias .....	32
Figure 3	Tritium Performance Evaluation Results and % Bias .....	33
Figure 4	Strontium-90 Performance Evaluation Results and % Bias .....	34
Figure 5	Gross Alpha Performance Evaluation Results and % Bias .....	35
Figure 6	Gross Beta Performance Evaluation Results and % Bias .....	36
Figure 7	Iodine-131 Performance Evaluation Results and % Bias .....	37
Figure 8	Americium-241 Performance Evaluation Results and % Bias .....	38
Figure 9	Plutonium-238 Performance Evaluation Results and % Bias .....	39

## **2019 ANNUAL QUALITY ASSURANCE REPORT FOR THE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM (REMP)**

### **1. Introduction**

GEL Laboratories, LLC (GEL) is a privately owned environmental laboratory dedicated to providing personalized client services of the highest quality. GEL was established as an analytical testing laboratory in 1981. Now a full service lab, our analytical divisions use state of the art equipment and methods to provide a comprehensive array of organic, inorganic, and radiochemical analyses to meet the needs of our clients.

At GEL, quality is emphasized at every level of personnel throughout the company. Management's ongoing commitment to good professional practice and to the quality of our testing services to our customers is demonstrated by their dedication of personnel and resources to develop, implement, assess, and improve our technical and management operations.

The purpose of GEL's quality assurance program is to establish policies, procedures, and processes to meet or exceed the expectations of our clients. To achieve this, all personnel that support these services to our clients are introduced to the program and policies during their initial orientation, and annually thereafter during company-wide training sessions.

GEL's primary goals are to ensure that all measurement data generated are scientifically and legally defensible, of known and acceptable quality per the data quality objectives (DQOs), and thoroughly documented to provide sound support for environmental decisions. In addition, GEL continues to ensure compliance with all contractual requirements, environmental standards, and regulations established by local, state and federal authorities.

GEL administers the QA program in accordance with the Quality Assurance Plan, GL-QS-B-001. Our Quality Systems include all quality assurance (QA) policies and quality control (QC) procedures necessary to plan, implement, and assess the work we perform. GEL's QA Program establishes a quality management system (QMS) that governs all of the activities of our organization.

This report entails the quality assurance program for the proficiency testing and environmental monitoring aspects of GEL for 2019. GEL's QA Program is designed to monitor the quality of analytical processing associated with environmental, radiobioassay, effluent (10 CFR Part 50), and waste (10 CFR Part 61) sample analysis.

This report covers the category of Radiological Environmental Monitoring Program (REMP) and includes:

- Intra-laboratory QC results analyzed during 2019.
- Inter-laboratory QC results analyzed during 2019 where known values are available.

### **2. Quality Assurance Programs for Inter-laboratory, Intra-laboratory and Third Party Cross-Check**

In addition to internal and client audits, our laboratory participates in annual performance evaluation studies conducted by independent providers. We routinely participate in the following types of performance audits:

- Proficiency testing and other inter-laboratory comparisons

- Performance requirements necessary to retain Certifications
- Evaluation of recoveries of certified reference and in-house secondary reference materials using statistical process control data.
- Evaluation of relative percent difference between measurements through SPC data.

We also participate in a number of proficiency testing programs for federal and state agencies and as required by contracts. It is our policy that no proficiency evaluation samples be analyzed in any special manner. Our annual performance evaluation participation generally includes a combination of studies that support the following:

- US Environmental Protection Agency Discharge Monitoring Report, Quality Assurance Program (DMR-QA). Annual national program sponsored by EPA for laboratories engaged in the analysis of samples associated with the NPDES monitoring program. Participation is mandatory for all holders of NPDES permits. The permit holder must analyze for all of the parameters listed on the discharge permit. Parameters include general chemistry, metals, BOD/COD, oil and grease, ammonia, nitrates, etc.
- Department of Energy Mixed Analyte Performance Evaluation Program (MAPEP). A semiannual program developed by DOE in support of DOE contractors performing waste analyses. Participation is required for all laboratories that perform environmental analytical measurements in support of environmental management activities. This program includes radioactive isotopes in water, soil, vegetation and air filters.
- ERA's MRAD-Multimedia Radiochemistry Proficiency test program. This program is for labs seeking certification for radionuclides in wastewater and solid waste. The program is conducted in strict compliance with USEPA National Standards for Water Proficiency study.
- ERA's InterLaB RadCheM Proficiency Testing Program for radiological analyses. This program completes the process of replacing the USEPA EMSL-LV Nuclear Radiation Assessment Division program discontinued in 1998. Laboratories seeking certification for radionuclide analysis in drinking water also use the study. This program is conducted in strict compliance with the USEPA National Standards for Water Proficiency Testing Studies. This program encompasses Uranium by EPA method 200.8 (for drinking water certification in Utah/Primary NELAP), gamma emitters, Gross Alpha/Beta, Iodine-131, naturally occurring radioactive isotopes, Strontium-89/90, and Tritium.
- ERA's Water Pollution (WP) biannual program for waste methodologies includes parameters for both organic and inorganic analytes.
- ERA's Water Supply (WS) biannual program for drinking water methodologies includes parameters for organic and inorganic analytes.
- Environmental Cross-Check Program administered by Eckert & Ziegler Analytics, Inc. This program encompasses radionuclides in water, soil, milk, naturally occurring radioactive isotopes in soil and air filters.

GEL procures single-blind performance evaluation samples from Eckert & Ziegler Analytics to verify the analysis of sample matrices processed at GEL. Samples are received on a quarterly basis. GEL's Third-Party Cross-Check Program provides environmental matrices encountered in a typical nuclear utility REMP. The Third-Party Cross-Check Program is intended to meet or exceed the inter-laboratory comparison program requirements discussed in NRC Regulatory Guide 4.15. Once performance evaluation samples have been prepared in accordance with the instructions provided by the PT provider, samples are managed and analyzed in the same manner as environmental samples from GEL's clients.

### **3. Quality Assurance Program for Internal and External Audits**

During each annual reporting period, at least one internal assessment of each area of the laboratory is conducted in accordance with the pre-established schedule from Standard Operating Procedure for the Conduct of Quality Audits, GL-QS-E-001. The annual internal audit plan is reviewed for adequacy and includes the scheduled frequency and scope of quality control actions necessary to GEL's QA program. Internal audits are conducted at least annually in accordance with a schedule approved by the Quality Systems Director. Supplier audits are contingent upon the categorization of the supplier, and may or may not be conducted prior to the use of a supplier or subcontractor. Type I suppliers and subcontractors, regardless of how they were initially qualified, are re-evaluated at least once every three years.

In addition, prospective customers audit GEL during pre-contract audits. GEL hosts several external audits each year for both our clients and other programs. These programs include environmental monitoring, waste characterization, and radiobioassay. The following list of programs may audit GEL at least annually or up to every three years depending on the program.

- TNI, The NELAC Institute, National Environmental Laboratory Accreditation Program
- DOECAP, U.S. Department of Energy Consolidated Audit Program
- DOELAP, U.S. Department of Energy Laboratory Accreditation Program
- DOE QSAS, U.S. Department of Energy, Quality Systems for Analytical Services
- ISO/IEC 17025:2005
- A2LA, American Association for Laboratory Accreditation
- DoD ELAP, US Department of Defense Environmental Accreditation Program
- NUPIC, Nuclear Procurement Issues Committee
- South Carolina Department of Health and Environmental Control (SC DHEC)

The annual radiochemistry laboratory internal audit (19-RAD-001) was conducted in July and August, 2019. There were no findings or observations and four noteworthy improvements from this assessment.

### **4. Performance Evaluation Acceptance Criteria for Environmental Sample Analysis**

GEL utilized an acceptance protocol based upon two performance models. For those inter-laboratory programs that already have established performance criteria for bias (i.e., MAPEP, and ERA/ELAP), GEL will utilize the criteria for the specific program. For intra-laboratory or third party quality control programs that do not have a specific acceptance criteria (i.e. the Eckert-Ziegler Analytics Environmental Cross-check Program), results will be evaluated in accordance with GEL's internal acceptance criteria.

### **5. Performance Evaluation Samples**

Performance Evaluation (PE) results and internal quality control sample results are evaluated in accordance with GEL acceptance criteria. The first criterion concerns bias, which is defined as the deviation of any one result from the known value. The second criterion concerns precision, which deals with the ability of the measurement to be replicated by comparison of an individual result with the mean of all results for a given sample set.

At GEL, we also evaluate our analytical performance on a regular basis through statistical process control (SPC) acceptance criteria. Where feasible, this criterion is applied to both measures of precision and accuracy and is specific to sample matrix. We establish environmental process control limits at least annually.

For Radiochemistry analysis, quality control evaluation is based on static limits rather than those that are statistically derived. Our current process control limits are maintained in GEL's AlphaLIMS. We also measure precision with matrix duplicates and/or matrix spike duplicates. The upper and lower control limits (UCL and LCL respectively) for precision are plus or minus three times the standard deviation from the mean of a series of relative percent differences. The static precision criteria for radiochemical analyses are 0 - 20%, for activity levels exceeding the contract required detection limit (CRDL).

## 6. Quality Control Program for Environmental Sample Analysis

GEL's internal QA Program is designed to include QC functions such as instrumentation calibration checks (to insure proper instrument response), blank samples, instrumentation backgrounds, duplicates, as well as overall staff qualification analyses and statistical process controls. Both quality control and qualification analyses samples are used to be as similar as the matrix type of those samples submitted for analysis by the various laboratory clients. These performance test samples (or performance evaluation samples) are either actual sample submitted in duplicate in order to evaluate the precision of laboratory measurements, or fortified blank samples, which have been given a known quantity of a radioisotope that is in the interest to GEL's clients.

Accuracy (or Bias) is measured through laboratory control samples and/or matrix spikes, as well as surrogates and internal standards. The UCLs and LCLs for accuracy are plus or minus three times the standard deviation from the mean of a series of recoveries. The static limit for most radiochemical analyses is 75 - 125%. Specific instructions for out-of-control situations are provided in the applicable analytical SOP.

GEL's Laboratory Control Standard (LCS) is an aliquot of reagent water or other blank matrix to which known quantities of the method analytes are added in the laboratory. The LCS is analyzed exactly like a sample, and its purpose is to determine whether the methodology is in control, and whether the laboratory is capable of making accurate and precise measurements. Some methods may refer to these samples as Laboratory Fortified Blanks (LFB). The requirement for recovery is between 75% and 125% for radiological analyses excluding drinking water matrix.

$$\text{Bias (\%)} = \frac{(\text{observed concentration}) - (\text{known concentration})}{(\text{known concentration})} * 100 \%$$

Precision is a data quality indicator of the agreement between measurements of the same property, obtained under similar conditions, and how well they conform to themselves. Precision is usually expressed as standard deviation, variance or range in either absolute or relative (percentage) terms.

GEL's laboratory duplicate (DUP or LCSD) is an aliquot of a sample taken from the same container and processed in the same manner under identical laboratory conditions. The aliquot is analyzed independently from the parent sample and the results are compared to measure precision and accuracy.

If a sample duplicate is analyzed, it will be reported as Relative Percent Difference (RPD). The RPD must be 20 percent or less, if both samples are greater than 5 times the MDC. If both results are less than 5 times MDC, then the RPD must be equal to or less than 100%. If one result is above the MDC and the other is below the MDC, then the RPD can be calculated using the MDC for the result of the one below the MDC. The RPD must be 100% or less. In the situation where both results are above the MDC but one result is greater than 5 times the MDC and the other is less than 5 times the MDC, the RPD must be less than or equal to 20%. If both results are below MDC, then the limits on % RPD are not applicable.

$$\text{Difference (\%)} = \frac{(\text{high duplicate result} - \text{low duplicate result})}{(\text{average of results})} * 100 \%$$

## **7. Summary of Data Results**

During 2019, forty-five (45) radioisotopes associated with seven (7) matrix types were analyzed under GEL's Performance Evaluation program in participation with ERA, MAPEP, and Eckert & Ziegler Analytics. Matrix types were representative of client analyses performed during 2019. Of the four hundred twenty-five (425) total results, 97.2% (413 of 425) were found to be acceptable within the PT providers three sigma or other statistical criteria. The list below contains the type of matrix evaluated by GEL.

- Air Filter
- Cartridge
- Water
- Milk
- Soil
- Liquid
- Vegetation

Graphs are provided in Figures 1-9 of this report to allow for the evaluation of trends or biases. These graphs include radioisotopes Cobalt-60, Cesium-137, Tritium, Strontium-90, Gross Alpha, Gross Beta, Iodine-131, Americium-241, and Plutonium-238.

## **8. Summary of Participation in the Eckert & Ziegler Analytics Environmental Cross-Check Program**

Eckert & Ziegler Analytics provided samples for eighty-nine (89) individual environmental analyses. The accuracy of each result reported to Eckert & Ziegler Analytics, Inc. is measured by the ratio of GEL's result to the known value. All results fell within GEL's acceptance criteria (100% within acceptance).

## **9. Summary of Participation in the MAPEP Monitoring Program**

MAPEP Series 40 and 41 were analyzed by the laboratory. Of the one hundred twenty-eight (128) analyses, 98% (126 out of 128) fell within the PT provider's acceptance criteria.

## **10. Summary of Participation in the ERA MRaD PT Program**

The ERA MRad program provided samples (MRAD-30 and MRAD-31) for one hundred sixty-six (166) individual environmental analyses. Of the 166 analyses, 96% (160 out of 166) fell within the PT provider's acceptance criteria.

## **11. Summary of Participation in the ERA PT Program**

The ERA program provided samples (RAD-116, RAD-117, RAD-118, and 9116) for forty-two (42) individual environmental analyses. Of the 42 analyses, 90% (38 out of 42) fell within the PT provider's acceptance criteria.

All corrective actions are summarized in Table 8.

## **12. Corrective Action Request and Report (CARR)**

There are two categories of corrective action at GEL. One is corrective action implemented at the analytical and data review level in accordance with the analytical SOP. The other is formal corrective action documented by the Quality Systems Team in accordance with GL-QS-E-002. A formal corrective action is initiated when a nonconformance reoccurs or is so significant that permanent elimination or prevention of the problem is required. Formal corrective action investigations include root cause analysis.

GEL includes quality requirements in most analytical standard operating procedures to ensure that data are reported only if the quality control criteria are met or the quality control measures that did not meet the acceptance criteria are documented. A formal corrective action is implemented according to GL-QS-E-002 for Conducting Corrective/Preventive Action and Identifying Opportunities for Improvement. Recording and documentation is performed following guidelines stated in GL-QS-E-012 for Client NCR Database Operation.

Any employee at GEL can identify and report a nonconformance and request that corrective action be taken. Any GEL employee can participate on a corrective action team as requested by the QS team or Group Leaders. The steps for conducting corrective action are detailed in GL-QS-E-002. In the event that correctness or validity of the laboratory's test results in doubt, the laboratory will take corrective action. If investigations show that the results have been impacted, affected clients will be informed of the issue in writing within five (5) calendar days of the discovery.

- CARR190225-1192 documents the unacceptable result of Strontium-89 of ERA Study 116
- CARR190530-1211 documents the unacceptable results of Uranium-238, Uranium-238, Uranium-Mass and Plutonium-238 in vegetation and Uranium-238 in soil of ERA MRAD-30
- CARR 190603-1212 documents the unacceptable result of Iron-55 in soil of MAPEP-40, CARR 190826-1250 documents the unacceptable result of Strontium-89 and Gross Alpha of RAD-118
- CARR 191212-1262 documents the unacceptable result of Lead-212 of MRAD-31
- CARR 191213-1265 documents the unacceptable result of Radium-226 of MAPEP-41

Table 8 provides the status of CARRs for radiological performance testing during 2019. **It has been determined that causes of the unacceptable results did not impact any data reported to our clients.**

### **13. References**

1. GEL Quality Assurance Plan, GL-QS-B-001
2. GEL Standard Operating Procedure for the Conduct of Quality Audits, GL-QS-E-001
3. GEL Standard Operating Procedure for Conducting Corrective/Preventive Action and Identifying Opportunities for Improvement, GL-QS-E-002
4. GEL Standard Operating Procedure for AlphaLIMS Documentation of Nonconformance Reporting and Dispositioning and Control of Nonconforming Items, GL-QS-E-004
5. GEL Standard Operating Procedure for Handling Proficiency Evaluation Samples, GL-QS-E-013
6. GEL Standard Operating Procedure for Quality Assurance Measurement Calculations and Processes, GL-QS-E-014
7. 40 CFR Part 136 Guidelines Establishing Test Procedures for the Analysis of Pollutants
8. ISO/IEC 17025-2017, General Requirements for the Competence of Testing and Calibration Laboratories
9. ANSI/ASQC E4-1994, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs, American National Standard
10. 2003 NELAC Standard, National Environmental Laboratory Accreditation Program
11. 2009 TNI Standard, The NELAC Institute, National Environmental Accreditation Program
12. MARLAP, Multi-Agency Radiological Laboratory Analytical Protocols
13. 10 CFR Part 21, Reporting of Defects and Noncompliance
14. 10 CFR Part 50 Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants
15. 10 CFR Part 61, Licensing Requirements for Land Disposal and Radioactive Waste
16. NRC REG Guide 4.15 and NRC REG Guide 4.8

**TABLE 1**  
**2019 RADIOLOGICAL PROFICIENCY TESTING RESULTS AND ACCEPTANCE CRITERIA**

PT Provider	Quarter / Year	Report Closing / Received Date	Sample Number	Sample Media	Units	Analyte	Reported Value	Assigned Value	Acceptance Limits	Performance Evaluation
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Barium-133	105	99.5	84.1 - 109	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Cesium-134	48.2	49.1	39.5 - 54.0	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Cesium-137	128	125	112 - 140	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Cobalt-60	104	96.4	86.8 - 108	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Zinc-65	88.1	77.4	69.5 - 93.2	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Gross Alpha	22.3	21.8	10.9 - 29.5	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Gross Alpha	23.5	21.8	10.9 - 29.5	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Gross Beta	43.6	55.7	38.1 - 62.6	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Radium-226	6.47	7.37	5.55 - 8.72	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Radium-228	3.99	4.28	2.48 - 5.89	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Radium-228	4.48	4.28	2.48 - 5.89	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Uranium (Nat)	70	68.2	55.7 - 75.0	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	µg/L	Uranium (Nat) mass	99.3	99.5	81.3 - 109	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Tritium	2160	2110	1740 - 2340	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Tritium	1920	2110	1740 - 2340	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Strontium-89	78.5	66.9	54.4 - 75.0	Not Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Strontium-89	76.5	66.9	54.4 - 75.0	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Strontium-90	40.1	41	30.2 - 47.1	Acceptable
ERA	1st /2019	2/25/19	RAD-116	Water	pCi/L	Strontium-90	42.2	41	30.2 - 47.1	Acceptable
ERA	1st /2019	3/14/19	RAD-9116	Water	pCi/L	Iodine-131	27.4	25.9	21.5 - 30.6	Acceptable
ERA	1st /2019	3/14/19	RAD-9116	Water	pCi/L	Iodine-131	25.1	25.9	21.5 - 30.6	Acceptable
EZA	1st/2019	05/10/19	E12364	Cartridge	pCi	Iodine-131	7.80E+01	7.54E+01	1.03	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cerium-141	1.23E+02	1.17E+02	1.05	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cobalt-58	1.51E+02	1.43E+02	1.05	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cobalt-60	3.12E+02	2.99E+02	1.04	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Chromium-51	3.04E+02	2.93E+02	1.04	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cesium-134	1.53E+02	1.60E+02	0.96	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cesium-137	2.04E+02	1.96E+02	1.04	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Manganese-54	1.55E+02	1.43E+02	1.08	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Iron-59	1.78E+02	1.59E+02	1.12	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Zinc-65	2.42E+02	2.20E+02	1.1	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cerium-141	1.20E+02	1.13E+02	1.06	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cesium-134	1.43E+02	1.55E+02	0.92	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cesium-137	2.09E+02	1.91E+02	1.10	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Chromium-51	3.55E+02	2.84E+02	1.25	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cobalt-58	1.43E+02	1.39E+02	1.03	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cobalt-60	3.18E+02	2.90E+02	1.10	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Iodine-131	8.89E+01	9.65E+01	1.03	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Iron-59	1.76E+02	1.54E+02	1.14	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Manganese-54	1.55E+02	1.39E+02	1.12	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Zinc-65	2.44E+02	2.14E+02	1.14	Acceptable
EZA	2nd/2019	07/29/19	E12360	Cartridge	pCi	Iodine-131	8.40E+01	8.17E+01	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12361	Milk	pCi/L	Strontium-89	1.01E+02	8.29E+01	1.22	Acceptable
EZA	2nd/2019	07/29/19	E12361	Milk	pCi/L	Strontium-90	1.21E+01	1.35E+01	0.90	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cerium-141	1.39E+02	1.33E+02	1.04	Acceptable

EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cobalt-58	1.17E+02	1.12E+02	1.05	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cobalt-60	2.05E+02	1.98E+02	1.04	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Chromium-51	3.41E+02	3.37E+02	1.01	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cesium-134	1.30E+02	1.40E+02	0.93	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cesium-137	1.78E+02	1.68E+02	1.06	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Iron-59	1.66E+02	1.41E+02	1.18	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Iodine-131	8.51E+01	8.14E+01	1.05	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Manganese-54	2.09E+02	1.90E+02	1.10	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Zinc-65	2.82E+02	2.47E+02	1.14	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cerium-141	1.50E+02	1.45E+02	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cobalt-58	1.22E+02	1.22E+02	1.00	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cobalt-60	2.22E+02	2.16E+02	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Chromium-51	3.56E+02	3.68E+02	0.97	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cesium-134	1.37E+02	1.53E+02	0.89	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cesium-137	1.90E+02	1.84E+02	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Iron-59	1.73E+02	1.54E+02	1.12	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Iodine-131	8.92E+01	8.91E+01	1.00	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Manganese-54	2.27E+02	2.70E+00	1.10	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Zinc-65	3.01E+02	2.70E+02	1.11	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrF40	Filter	Bq/sample	Gross alpha	0.540	0.528	0.158-0.898	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrF41	Filter	Bq/sample	Gross beta	0.928	0.948	0.474-1.422	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrW40	Water	Bq/L	Gross alpha	0.819	0.840	0.25-1.43	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrW40	Water	Bq/L	Gross beta	2.390	2.330	1.17-3.50	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Americium-241	52.8	49.9	34.9-64.9	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cesium-134	2.25		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cesium-137	1290.00	1164.0	815-1513	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cobalt-57	0.133		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cobalt-60	853	855	599-1112	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Iron-55	486	344	241-447	Not Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Manganese-54	1130	1027	719-1335	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Nickel-63	524.00	519	363-675	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Plutonium-238	75.2	71.0	49.7-92.3	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Plutonium-239/240	67.3	59.8	41.9-77.7	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Potassium-40	596	585	410-761	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Strontium-90	3.44		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Technetium-99	381	408	286-530	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Uranium-234	54.7	56.0	39-73	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Uranium-238	204	205	144-267	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Zinc-65	751	668	468-868	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Americium-241	0.549	0.582	0.407-0.757	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cesium-134	5.32	5.99	4.19-7.79	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cesium-137	0.0		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cobalt-57	9.840	10	7.0-13.0	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cobalt-60	6.7	6.7	4.7-8.7	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Hydrogen-3	389.00	421	295-547	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Iron-55	0.0173		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Manganese-54	8.80	8.4	5.9-10.9	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Nickel-63	4.62	5.8	4.1-7.5	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Plutonium-238	0.419	0.451	0.316-0.586	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Plutonium-239/240	0.0158	0.0045	Sens. Eval.	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Potassium-40	-0.156		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Radium-226	0.593	0.672	0.470-0.874	Acceptable

MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Strontium-90	5.86	6.350	4.45-8.26	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Technetium-99	3.66	3.3	2.34-4.34	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Uranium-234	0.81	0.8	0.56-1.04	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Uranium-238	0.802	0.81	0.57-1.05	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Zinc-65	-0.0318		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	ug/sample	Uranium-235	0.0566	0.0640	0.0448-0.0832	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	ug/sample	Uranium-238	7.76	8.8	6.2-11.4	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	ug/sample	Uranium-Total	7.72	8.9	6.2-11.6	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Americium-241	0.0284	0.0294	0.0206-0.0382	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cesium-134	0.251	0.216	0.151-0.281	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cesium-137	0.313	0.290	0.203-0.377	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cobalt-57	0.424	0.411	0.288-0.534	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cobalt-60	0.373	0.34	0.238-0.442	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Manganese-54	0.576	0.547	0.383-0.711	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Plutonium-238	0.0551	0.0526	0.0368-0.0684	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Plutonium-239/240	0.0377	0.038	0.0265-0.0493	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Strontium-90	0.616	0.662	0.463-0.861	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Uranium-234	0.108	0.106	0.074-0.138	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Uranium-238	0.118	0.110	0.077-0.143	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Zinc-65	0.0143		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Americium-241	0.000092		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cesium-134	2.25	2.44	1.71-3.17	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cesium-137	2.37	2.30	1.61-2.99	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cobalt-57	2.04	2.07	1.45-2.69	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cobalt-60	-0.0061		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Manganese-54	0.00255		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Plutonium-238	0.0247	0.0339	0.0237-0.0441	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Plutonium-239/240	0.0425	0.0460	0.0322-0.0598	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Strontium-90	0.00951		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Uranium-234	0.20	0.217	0.152-0.282	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Uranium-238	0.216	0.225	0.158-0.293	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Zinc-65	1.85	1.71	1.20-2.22	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-XaW40	Water	Bq/L	Iodine-129	0.64	0.62	0.431-0.801	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Actinium-228	3060	3280	2160 - 4130	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Americium-241	346	474	256 - 671	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Bismuth-212	3200	3400	973 - 5070	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Bismuth-214	1160	1370	658 - 2040	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Cesium-134	6590	9280	6350 - 11100	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Cesium-137	831	1030	779 - 1300	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Cobalt-60	4830	5880	4630 - 7260	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Lead-212	3360	3380	2360 - 4270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Lead-214	1500	1450	609 - 2280	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Manganese-54	<25.4	<1000	<1000	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Plutonium-238	955	1220	608 - 1850	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Plutonium-239	579	829	452 - 1190	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Potassium-40	25800	24300	16700 - 29000	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Strontium-90	1220	1350	420 - 2100	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Thorium-234	1050	1470	555 - 2520	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-234	1170	1050	492 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-234	925	1050	492 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-234	925	1050	492 - 1380	Acceptable

ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-238	437	1030	565 - 1380	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-238	928	1030	565 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-238	880	1030	565 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-Total	2090	2030	1130 - 2620	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-Total	1910	2030	1130 - 2620	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	µg/kg	Uranium-Total (mass)	1360	2420	1090 - 3270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	µg/kg	Uranium-Total (mass)	2780	2420	1090 - 3270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	µg/kg	Uranium-Total (mass)	2630	2420	1090 - 3270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Zinc-65	1300	1460	1170 - 1990	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Americium-241	2090	1680	1040 - 2370	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Cesium-134	1590	1640	1090 - 2180	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Cesium-137	1510	1410	1080 - 1900	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Cobalt-60	1200	1000	785 - 1310	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Curium-244	87.1	87.3	49.2 - 109	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Manganese-54	<35.9	<300	<300	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Plutonium-238	110	76	52.6 - 98.0	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Plutonium-239	1150	941	650 - 1190	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Potassium-40	41500	34500	25900 - 43700	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Strontium-90	4670	3530	1990 - 4600	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Uranium-234	1210	961	675 - 1230	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Uranium-238	1230	953	673 - 1190	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Uranium-Total	2540	1940	1240 - 2620	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	µg/kg	Uranium-Total (mass)	3720	2830	2170 - 3500	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Zinc-65	715	527	393 - 781	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Americium-241	18.7	18.7	13.3 - 24.9	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Cesium-134	639	721	468 - 884	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Cesium-137	627	634	521 - 832	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Cobalt-60	103	93.8	79.7 - 119	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Iron-55	613	718	262 - 1150	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Manganese-54	<3.29	<50.0	<50.0	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Plutonium-238	31.1	33.8	25.5 - 41.5	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Plutonium-239	62	67	50.1 - 80.8	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Strontium-90	169	181	114 - 246	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-234	17.1	18.2	13.5 - 21.3	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-234	16.4	18.2	13.5 - 21.3	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-238	16.9	18.1	13.7 - 21.6	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-238	16	18.1	13.7 - 21.6	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-Total	33.1	37.1	27.1 - 44.0	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-Total	34.7	37.1	27.1 - 44.0	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	µg/Filter	Uranium-Total (mass)	50.9	54.1	43.4 - 63.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	µg/Filter	Uranium-Total (mass)	48	54.1	43.4 - 63.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Zinc-65	1520	1380	1130 - 2110	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Gross Alpha	43	50.3	26.3 - 82.9	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Gross Beta	75.7	78.6	47.7 - 119	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Americium-241	180	168	115 - 215	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Cesium-134	116	123	92.9 - 135	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Cesium-137	126	125	107 - 142	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Cobalt-60	1200	1100	949 - 1260	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Iron-55	1310	1320	776 - 1920	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Manganese-54	<5.6	<100	<100	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Plutonium-238	41.2	42.8	25.7 - 55.5	Acceptable

ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Plutonium-239	117	123	76.1 - 152	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Strontrium-90	365	315	227 - 389	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	56.3	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	56	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	53.7	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	56	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-238	55.3	54.7	42.4 - 64.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-238	51.8	54.7	42.4 - 64.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-238	51	54.7	42.4 - 64.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-Total	107.3	112	87.4 - 128	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-Total	113	112	87.4 - 128	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	µg/L	Uranium-Total (mass)	166	163	132 - 185	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	µg/L	Uranium-Total (mass)	153	163	132 - 185	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Zinc-65	1990	1780	1580 - 2250	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Gross Alpha	79.8	68.5	25.0 - 94.5	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Gross Beta	140	151	75.5 - 208	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Tritium	22200	23700	17900 - 28800	Acceptable
ERA	2nd/2019	05/23/19	RAD-117	Water	pCi/L	Strontrium-89	35.9	33.3	24.5-40.1	Acceptable
ERA	2nd/2019	05/24/19	RAD-117	Water	pCi/L	Strontrium-89	34.4	33.3	24.5-40.2	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Barium-133	68.2	66.9	55.8 - 73.6	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Cesium-134	30.4	32	25.1 - 35.2	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Cesium-137	22.7	21.4	17.6 - 26.7	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Cobalt-60	102	95.1	85.6 - 107	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Zinc-65	49.2	41.2	35.3 - 51.4	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Gross Alpha	88.7	70.6	37.1 - 87.1	Not Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Gross Alpha	80.7	70.6	37.1 - 87.1	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Gross Beta	57.7	63.9	44.2 - 70.5	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Radium-226	18.5	18.5	13.8 - 21.1	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Radium-228	7.97	8.16	5.21 - 10.3	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Radium-228	6.72	8.16	5.21 - 10.3	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Uranium (Nat)	67.8	68.3	55.8 - 75.1	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	µg/L	Uranium (Nat) mass	100.73	99.6	81.4 - 110	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Tritium	14700	16700	14600 - 18400	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Tritium	15000	16700	14600 - 18400	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Strontrium-89	69.4	58.7	47.1 - 66.5	Not Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Strontrium-89	62.1	58.7	47.1 - 66.5	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Strontrium-90	34.3	38.5	28.3 - 44.3	Acceptable
ERA	3rd/2019	08/26/19	RAD - 118	Water	pCi/L	Strontrium-90	33.4	38.5	28.3 - 44.3	Acceptable
EZA	3rd/2019	11/08/19	E12368	Cartridge	pCi	Iodine-131	9.93E+01	9.33E+01	1.06	Acceptable
EZA	3rd/2019	11/08/19	E12369	Milk	pCi/L	Strontrium-89	8.71E+01	9.39E+01	0.93	Acceptable
EZA	3rd/2019	11/08/19	E12369	Milk	pCi/L	Strontrium-90	7.02E+00	1.29E+01	0.54	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cerium-141	1.69E+02	1.67E+02	1.01	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cobalt-58	1.74E+02	1.75E+02	0.99	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cobalt-60	2.08E+02	2.11E+02	0.99	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Chromium-51	3.64E+02	3.31E+02	1.1	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cesium-134	1.93E+02	2.07E+02	0.93	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cesium-137	1.49E+02	1.51E+02	0.99	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Iron-59	1.66E+02	1.48E+02	1.12	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Iodine-131	9.28E+01	9.21E+01	1.01	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Manganese-54	1.69E+02	1.54E+02	1.09	Acceptable
EZA	3rd/2019	11/08/19	E12371	Milk	pCi/L	Zinc-65	3.21E+02	2.93E+02	1.1	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cerium-141	1.41E+02	1.27E+02	1.11	Acceptable

EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cobalt-58	1.36E+02	1.33E+02	1.03	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cobalt-60	1.68E+02	1.60E+02	1.036	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Chromium-51	2.45E+02	2.51E+02	0.98	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cesium-134	1.50E+02	1.57E+02	0.96	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cesium-137	1.22E+02	1.14E+02	1.07	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Iron-59	1.27E+02	1.12E+02	1.13	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Iodine-131	9.34E+01	8.94E+01	1.04	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Manganese-54	1.34E+02	1.17E+02	1.15	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Zinc-65	2.57E+02	2.22E+02	1.16	Acceptable
EZA	4th/2019	02/05/20	E12372	Cartridge	pCi	Iodine-131	9.07E+01	8.88E+01	1.02	Acceptable
EZA	4th/2019	02/05/20	E12373	Milk	pCi/L	Strontium-89	6.60E+01	8.06E+01	0.82	Acceptable
EZA	4th/2019	02/05/20	E12373	Milk	pCi/L	Strontium-90	1.11E+01	1.10E+01	1.00	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cerium-141	7.95E+01	8.30E+01	0.96	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cobalt-58	8.93E+01	8.99E+01	0.99	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cobalt-60	1.17E+02	1.15E+02	1.02	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Chromium-51	2.67E+02	2.41E+02	1.11	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cesium-134	9.79E+01	1.13E+02	0.87	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cesium-137	1.01E+02	1.02E+02	0.99	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Iron-59	1.01E+02	8.71E+01	1.16	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Iodine-131	9.34E+01	9.45E+01	0.99	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Manganese-54	1.34E+02	1.30E+02	1.03	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Zinc-65	1.17E+02	1.59E+02	1.08	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cerium-141	8.92E+01	8.41E+01	1.06	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cobalt-58	9.54E+01	9.11E+01	1.05	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cobalt-60	1.22E+02	1.17E+02	1.05	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Chromium-51	2.64E+02	2.44E+02	1.08	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cesium-134	1.06E+02	1.14E+02	0.93	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cesium-137	1.09E+02	1.03E+02	1.06	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Iron-59	9.32E+01	8.82E+01	1.06	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Iodine-131	1.04E+02	9.45E+01	1.10	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Manganese-54	1.44E+02	1.31E+02	1.10	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Zinc-65	1.91E+02	1.61E+02	1.19	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Americium-241	86.1	74.7	52.3-97.1	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cesium-134	896	1020	714-1326	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cesium-137	865	789	552-1026	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cobalt-57	0.227		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cobalt-60	761	760	532-988	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Iron-55	-48.0		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Manganese-54	816	745	522-969	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Nickel-63	552	629	440-818	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Plutonium-238	55.3	52.1	36.5-67.7	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Plutonium-239/240	59.9	61.4	43.0-79.8	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Potassium-40	604	555	389-722	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Strontium-90	609	572	400-744	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Technetium-99	514	593	415-771	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	U-234/233	125	116	81-151	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Uranium-238	122	117	82-152	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Zinc-65	-0.650		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Americium-241	0.511	0.522	0.365-0.679	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cesium-134	0.0266		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cesium-137	19.70	18.4	12.9-23.9	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cobalt-57	16.2	15.6	10.9-20.3	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cobalt-60	9.01	8.8	6.2-11.4	Acceptable

MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Hydrogen-3	166	175	123-228	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Iron-55	13.80	15.7	11.0-20.4	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Manganese-54	22.6	20.6	14.4-26.8	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Nickel-63	9.26	9.7	6.8-12.6	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Plutonium-238	0.0164	0.0063	Sens. Evaluation	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Plutonium-239/240	0.701	0.727	0.509-0.945	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Potassium-40	-0.121		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Radium-226	0.481	0.307	0.215-0.399	Not Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Strontium-90	9.34	10.60	7.4-13.8	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Technetium-99	0.119		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Uranium-234/233	1.09	1.07	0.75-1.39	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Uranium-238	1.12	1.05	0.74-1.37	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Zinc-65	23.1	20.3	5.27-9.79	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	ug/sample	Uranium-235	0.0565	0.0565	0.0396-0.0735	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	ug/sample	Uranium-238	7.8	7.7	5.4-10.0	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	ug/sample	Uranium-Total	7.9	7.8	5.5-10.1	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Americium-241	0.00106		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cesium-134	0.00080		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cesium-137	1.63	1.58	1.11-2.05	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cobalt-57	1.23	1.16	0.81-1.51	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cobalt-60	0.783	0.815	0.571-1.060	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Manganese-54	1.35	1.37	0.96-1.78	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Plutonium-238	0.0755	0.0761	0.0533-0.0989	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Plutonium-239/240	0.0485	0.0468	0.0328-0.0608	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Strontium-90	0.442	0.498	0.349-0.647	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Uranium-234/233	0.0965	0.093	0.065-0.121	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Uranium-238	0.0935	0.096	0.067-0.125	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Zinc-65	1.09	1.06	0.74-1.38	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Americium-241	0.0958	0.090	0.063-0.117	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cesium-134	0.0190		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cesium-137	3.34	3.28	2.30-4.26	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cobalt-57	4.50	4.57	3.20-5.94	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cobalt-60	5.34	5.30	3.71-6.89	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Manganese-54	4.57	4.49	3.14-5.84	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Plutonium-238	0.0882	0.081	0.057-0.105	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Plutonium-239/240	0.00127		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Strontium-90	0.847	1.00	0.70-1.30	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Uranium-234/233	0.0656	0.0647	0.0453-0.0841	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Uranium-238	0.0660	0.0670	0.0469-0.871	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Zinc-65	2.89	2.85	2.00-3.71	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-XaW41	Alk. Water	Bq/L	Iodine-129	1.69	1.78	1.25-2.31	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Actinium-228	3730	3170	2090 - 3990	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Americium-241	1740	1920	1040 - 2720	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Bismuth-212	4130	3280	939 - 4890	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Bismuth-214	1370	1330	638 - 1980	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Cesium-134	7600	7650	5230 - 9140	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Cesium-137	1350	1230	930 - 1560	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Cobalt-60	3840	3710	2920 - 4580	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Lead-212	4300	3350	2340 - 4240	Not Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Lead-214	1740	1450	609 - 2280	Acceptable

ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Manganese-54	<26.5	<1000	<1000	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Plutonium-238	680	546	272 - 830	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Plutonium-239	1010	1090	594 - 1570	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Potassium-40	26200	24700	17000 - 29500	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Strontium-90	1660	1910	594 - 2980	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Thorium-234	1580	1360	513 - 2330	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-234	1140	1030	483 - 1350	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-234	1290	1030	483 - 1350	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-238	1080	974	534 - 1310	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-238	1070	974	534 - 1310	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-Total	2290	1930	1070 - 2500	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-Total	2409	1930	1070 - 2500	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	µg/kg	Uranium-Total (mass)	3250	2410	1090 - 3250	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	µg/kg	Uranium-Total (mass)	3200	2410	1090 - 3250	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	µg/kg	Zinc-65	3100	2690	2150 - 3670	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Americium-241	2070	2050	1270 - 2900	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Cesium-134	1910	2210	1470 - 2940	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Cesium-137	2500	2480	1910-3340	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Cobalt-60	604	607	476 - 793	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Curium-244	2760	3010	1700 - 3740	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Manganese-54	<35.4	<300	<300	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Plutonium-238	2120	1920	1330 - 2480	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Plutonium-239	2860	2600	1800 - 3290	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Potassium-40	41600	39300	29500 - 49800	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Strontium-90	4010	3940	2220 - 5130	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-234	3510	3320	2330 - 4230	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-238	3620	3290	2320 - 4110	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-Total	7360	6670	4260 - 8990	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-Total (mass)	10900	9730	7470 - 12100	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Zinc-65	1860	1620	1210 - 2400	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Americium-241	34.5	32	22.8 - 42.7	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Cesium-134	55.6	59	38.3 - 72.3	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Cesium-137	443	437	359 - 573	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Cobalt-60	63.7	58.4	49.6 - 74.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Iron-55	150	151	55.1 - 241	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Manganese-54	<1.96	<50.0	<50.0	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Plutonium-238	23.8	21	15.9 - 25.8	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Plutonium-239	19.9	19	14.2 - 22.9	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Strontium-90	34.8	34.5	21.8 - 47.0	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-234	27.1	27.5	20.4 - 32.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-234	30.4	27.5	20.4 - 32.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-238	28.4	27.3	20.6 - 32.6	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-238	25.2	27.3	20.6 - 32.6	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-Total	57.3	56.1	41.0 - 66.5	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-Total	55.6	56.1	41.0 - 66.5	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	µg/Filter	Uranium-Total (mass)	85.4	81.8	65.6 - 95.8	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	µg/Filter	Uranium-Total (mass)	75.6	81.8	65.6 - 95.8	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Zinc-65	412	364	298 - 556	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Gross Alpha	71	59	30.8 - 97.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Gross Beta	54.7	57.6	34.9 - 87.0	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Americium-241	67.6	64.2	44.1 - 82.1	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Cesium-134	1820	1960	1480 - 2160	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Cesium-137	1820	1840	1580 - 2090	Acceptable

ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Cobalt-60	1970	1870	1610 - 2150	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Iron-55	1410	1460	858 - 2120	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Manganese-54	<7.24	<100	<100	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Plutonium-238	41.2	47.8	28.7 - 61.9	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Plutonium-239	36.9	46.8	29.0 - 57.7	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Strontium-90	508	481	346 - 595	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-234	135	139	106 - 159	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-234	138	139	106 - 159	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-238	141	137	106 - 161	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-238	118	137	106 - 161	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-Total	285	282	220 - 321	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-Total	261.3	282	220 - 321	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	µg/L	Uranium-Total (mass)	424	411	333 - 466	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	µg/L	Uranium-Total (mass)	353	411	333 - 466	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Zinc-65	1490	1370	1220 - 1730	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Gross Alpha	147	124	45.3 - 171	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Gross Beta	72.9	68	34.0 - 93.6	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Tritium	20900	22300	16800 - 27100	Acceptable

**TABLE 2**  
**2019 ECKERT & ZIEGLER ANALYTICS PERFORMANCE EVALUATION RESULTS**

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Acceptance Range/ Ratio	Evaluation
EZA	2nd/2019	07/29/19	E12360	Cartridge	pCi	Iodine-131	8.40E+01	8.17E+01	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12361	Milk	pCi/L	Strontium-89	1.01E+02	8.29E+01	1.22	Acceptable
EZA	2nd/2019	07/29/19	E12361	Milk	pCi/L	Strontium-90	1.21E+01	1.35E+01	0.90	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cerium-141	1.39E+02	1.33E+02	1.04	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cobalt-58	1.17E+02	1.12E+02	1.05	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cobalt-60	2.05E+02	1.98E+02	1.04	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Chromium-51	3.41E+02	3.37E+02	1.01	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cesium-134	1.30E+02	1.40E+02	0.93	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Cesium-137	1.78E+02	1.68E+02	1.06	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Iron-59	1.66E+02	1.41E+02	1.18	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Iodine-131	8.51E+01	8.14E+01	1.05	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Manganese-54	2.09E+02	1.90E+02	1.10	Acceptable
EZA	2nd/2019	07/29/19	E12362	Milk	pCi/L	Zinc-65	2.82E+02	2.47E+02	1.14	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cerium-141	1.50E+02	1.45E+02	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cobalt-58	1.22E+02	1.22E+02	1.00	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cobalt-60	2.22E+02	2.16E+02	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Chromium-51	3.56E+02	3.68E+02	0.97	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cesium-134	1.37E+02	1.53E+02	0.89	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Cesium-137	1.90E+02	1.84E+02	1.03	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Iron-59	1.73E+02	1.54E+02	1.12	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Iodine-131	8.92E+01	8.91E+01	1.00	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Manganese-54	2.27E+02	2.70E+00	1.10	Acceptable
EZA	2nd/2019	07/29/19	E12363	Water	pCi/L	Zinc-65	3.01E+02	2.70E+02	1.11	Acceptable
EZA	1st/2019	05/10/19	E12364	Cartridge	pCi	Iodine-131	7.80E+01	7.54E+01	1.03	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cerium-141	1.23E+02	1.17E+02	1.05	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cobalt-58	1.51E+02	1.43E+02	1.05	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cobalt-60	3.12E+02	2.99E+02	1.04	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Chromium-51	3.04E+02	2.93E+02	1.04	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cesium-134	1.53E+02	1.60E+02	0.96	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Cesium-137	2.04E+02	1.96E+02	1.04	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Manganese-54	1.55E+02	1.43E+02	1.08	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Iron-59	1.78E+02	1.59E+02	1.12	Acceptable
EZA	1st/2019	05/10/19	E12366A	Milk	pCi/L	Zinc-65	2.42E+02	2.20E+02	1.1	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cerium-141	1.20E+02	1.13E+02	1.06	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cesium-134	1.43E+02	1.55E+02	0.92	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cesium-137	2.09E+02	1.91E+02	1.10	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Chromium-51	3.55E+02	2.84E+02	1.25	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cobalt-58	1.43E+02	1.39E+02	1.03	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Cobalt-60	3.18E+02	2.90E+02	1.10	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Iodine-131	8.89E+01	9.65E+01	1.03	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Iron-59	1.76E+02	1.54E+02	1.14	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Manganese-54	1.55E+02	1.39E+02	1.12	Acceptable
EZA	1st/2019	05/10/19	E12367	Water	pCi/L	Zinc-65	2.44E+02	2.14E+02	1.14	Acceptable
EZA	3rd/2019	11/08/19	E12368	Cartridge	pCi	Iodine-131	9.93E+01	9.33E+01	1.06	Acceptable

EZA	3rd/2019	11/08/19	E12369	Milk	pCi/L	Strontium-89	8.71E+01	9.39E+01	0.93	Acceptable
EZA	3rd/2019	11/08/19	E12369	Milk	pCi/L	Strontium-90	7.02E+00	1.29E+01	0.54	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cerium-141	1.69E+02	1.67E+02	1.01	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cobalt-58	1.74E+02	1.75E+02	0.99	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cobalt-60	2.08E+02	2.11E+02	0.99	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Chromium-51	3.64E+02	3.31E+02	1.1	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cesium-134	1.93E+02	2.07E+02	0.93	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Cesium-137	1.49E+02	1.51E+02	0.99	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Iron-59	1.66E+02	1.48E+02	1.12	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Iodine-131	9.28E+01	9.21E+01	1.01	Acceptable
EZA	3rd/2019	11/08/19	E12370	Milk	pCi/L	Manganese-54	1.69E+02	1.54E+02	1.09	Acceptable
EZA	3rd/2019	11/08/19	E12371	Milk	pCi/L	Zinc-65	3.21E+02	2.93E+02	1.1	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cerium-141	1.41E+02	1.27E+02	1.11	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cobalt-58	1.36E+02	1.33E+02	1.03	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cobalt-60	1.68E+02	1.60E+02	1.036	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Chromium-51	2.45E+02	2.51E+02	0.98	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cesium-134	1.50E+02	1.57E+02	0.96	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Cesium-137	1.22E+02	1.14E+02	1.07	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Iron-59	1.27E+02	1.12E+02	1.13	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Iodine-131	9.34E+01	8.94E+01	1.04	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Manganese-54	1.34E+02	1.17E+02	1.15	Acceptable
EZA	3rd/2019	11/08/19	E12371	Water	pCi/L	Zinc-65	2.57E+02	2.22E+02	1.16	Acceptable
EZA	4th/2019	02/05/20	E12372	Cartridge	pCi	Iodine-131	9.07E+01	8.88E+01	1.02	Acceptable
EZA	4th/2019	02/05/20	E12373	Milk	pCi/L	Strontium-89	6.60E+01	8.06E+01	0.82	Acceptable
EZA	4th/2019	02/05/20	E12373	Milk	pCi/L	Strontium-90	1.11E+01	1.10E+01	1.00	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cerium-141	7.95E+01	8.30E+01	0.96	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cobalt-58	8.93E+01	8.99E+01	0.99	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cobalt-60	1.17E+02	1.15E+02	1.02	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Chromium-51	2.67E+02	2.41E+02	1.11	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cesium-134	9.79E+01	1.13E+02	0.87	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Cesium-137	1.01E+02	1.02E+02	0.99	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Iron-59	1.01E+02	8.71E+01	1.16	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Iodine-131	9.34E+01	9.45E+01	0.99	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Manganese-54	1.34E+02	1.30E+02	1.03	Acceptable
EZA	4th/2019	02/05/20	E12374	Milk	pCi/L	Zinc-65	1.17E+02	1.59E+02	1.08	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cerium-141	8.92E+01	8.41E+01	1.06	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cobalt-58	9.54E+01	9.11E+01	1.05	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cobalt-60	1.22E+02	1.17E+02	1.05	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Chromium-51	2.64E+02	2.44E+02	1.08	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cesium-134	1.06E+02	1.14E+02	0.93	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Cesium-137	1.09E+02	1.03E+02	1.06	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Iron-59	9.32E+01	8.82E+01	1.06	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Iodine-131	1.04E+02	9.45E+01	1.10	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Manganese-54	1.44E+02	1.31E+02	1.10	Acceptable
EZA	4th/2019	02/05/20	E12375	Water	pCi/L	Zinc-65	1.91E+02	1.61E+02	1.19	Acceptable

**TABLE 3**  
**2019 DEPARTMENT OF ENERGY MIXED ANALYTE PERFORMANCE EVALUATION PROGRAM**  
**(MAPEP) RESULTS**

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Acceptance Range/ Ratio	Evaluation
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrF40	Filter	Bq/sample	Gross alpha	0.540	0.528	0.158-0.898	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrF41	Filter	Bq/sample	Gross beta	0.928	0.948	0.474-1.422	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrW40	Water	Bq/L	Gross alpha	0.819	0.840	0.25-1.43	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-GrW40	Water	Bq/L	Gross beta	2.390	2.330	1.17-3.50	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Americium-241	52.8	49.9	34.9-64.9	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cesium-134	2.25		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cesium-137	1290.00	1164.0	815-1513	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cobalt-57	0.133		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Cobalt-60	853	855	599-1112	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Iron-55	486	344	241-447	Not Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Manganese-54	1130	1027	719-1335	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Nickel-63	524.00	519	363-675	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Plutonium-238	75.2	71.0	49.7-92.3	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Plutonium-239/240	67.3	59.8	41.9-77.7	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Potassium-40	596	585	410-761	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Strontium-90	3.44		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Technetium-99	381	408	286-530	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Uranium 234	54.7	56.0	39-73	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Uranium-238	204	205	144-267	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaS40	Soil	Bq/Kg	Zinc-65	751	668	468-868	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Americium-241	0.549	0.582	0.407-0.757	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cesium-134	5.32	5.99	4.19-7.79	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cesium-137	0.0		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cobalt-57	9.840	10	7.0-13.0	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Cobalt-60	6.7	6.7	4.7-8.7	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Hydrogen-3	389.00	421	295-547	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Iron-55	0.0173		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Manganese-54	8.80	8.4	5.9-10.9	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Nickel-63	4.62	5.8	4.1-7.5	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Plutonium-238	0.419	0.451	0.316-0.586	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Plutonium-239/240	0.0158	0.0045	Sens. Eval.	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Potassium-40	-0.156		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Radium-226	0.593	0.672	0.470-0.874	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Strontium-90	5.86	6.350	4.45-8.26	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Technetium-99	3.66	3.3	2.34-4.34	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Uranium-234	0.81	0.8	0.56-1.04	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Uranium-238	0.802	0.81	0.57-1.05	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-MaW40	Water	Bq/L	Zinc-65	-0.0318		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	ug/sample	Uranium-235	0.0566	0.0640	0.0448-0.0832	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	ug/sample	Uranium-238	7.76	8.8	6.2-11.4	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	ug/sample	Uranium-Total	7.72	8.9	6.2-11.6	Acceptable

MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Americium-241	0.0284	0.0294	0.0206-0.0382	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cesium-134	0.251	0.216	0.151-0.281	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cesium-137	0.313	0.290	0.203-0.377	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cobalt-57	0.424	0.411	0.288-0.534	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Cobalt-60	0.373	0.34	0.238-0.442	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Manganese-54	0.576	0.547	0.383-0.711	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Plutonium-238	0.0551	0.0526	0.0368-0.0684	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Plutonium-239/240	0.0377	0.038	0.0265-0.0493	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Strontium-90	0.616	0.662	0.463-0.861	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Uranium-234	0.108	0.106	0.074-0.138	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Uranium-238	0.118	0.110	0.077-0.143	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdF40	Filter	Bq/sample	Zinc-65	0.0143		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Americium-241	0.000092		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cesium-134	2.25	2.44	1.71-3.17	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cesium-137	2.37	2.30	1.61-2.99	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cobalt-57	2.04	2.07	1.45-2.69	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Cobalt-60	-0.0061		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Manganese-54	0.00255		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Plutonium-238	0.0247	0.0339	0.0237-0.0441	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Plutonium-239/240	0.0425	0.0460	0.0322-0.0598	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Strontium-90	0.00951		False Pos Test	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Uranium-234	0.20	0.217	0.152-0.282	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Uranium-238	0.216	0.225	0.158-0.293	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-RdV40	Vegetation	Bq/sample	Zinc-65	1.85	1.71	1.20-2.22	Acceptable
MAPEP	2nd/2019	05/31/19	MAPEP-19-XaW40	Water	Bq/L	Iodine-129	0.64	0.62	0.431-0.801	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Americium-241	86.1	74.7	52.3-97.1	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cesium-134	896	1020	714-1326	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cesium-137	865	789	552-1026	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cobalt-57	0.227		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Cobalt-60	761	760	532-988	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Iron-55	-48.0		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Manganese-54	816	745	522-969	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Nickel-63	552	629	440-818	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Plutonium-238	55.3	52.1	36.5-67.7	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Plutonium-239/240	59.9	61.4	43.0-79.8	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Potassium-40	604	555	389-722	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Strontium-90	609	572	400-744	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Technetium-99	514	593	415-771	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	U-234/233	125	116	81-151	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Uranium-238	122	117	82-152	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaS41	Soil	Bq/Kg	Zinc-65	-0.650		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Americium-241	0.511	0.522	0.365-0.679	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cesium-134	0.0266		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cesium-137	19.70	18.4	12.9-23.9	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cobalt-57	16.2	15.6	10.9-20.3	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Cobalt-60	9.01	8.8	6.2-11.4	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Hydrogen-3	166	175	123-228	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Iron-55	13.80	15.7	11.0-20.4	Acceptable

MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Manganese-54	22.6	20.6	14.4-26.8	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Nickel-63	9.26	9.7	6.8-12.6	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Plutonium-238	0.0164	0.0063	Sens. Evaluation	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Plutonium-239/240	0.701	0.727	0.509-0.945	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Potassium-40	-0.121		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Radium-226	0.481	0.307	0.215-0.399	Not Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Strontium-90	9.34	10.60	7.4-13.8	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Technetium-99	0.119		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Uranium-234/233	1.09	1.07	0.75-1.39	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Uranium-238	1.12	1.05	0.74-1.37	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-MaW41	Water	Bq/L	Zinc-65	23.1	20.3	5.27-9.79	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	ug/sample	Uranium-235	0.0565	0.0565	0.0396-0.0735	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	ug/sample	Uranium-238	7.8	7.7	5.4-10.0	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	ug/sample	Uranium-Total	7.9	7.8	5.5-10.1	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Americium-241	0.00106		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cesium-134	0.00080		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cesium-137	1.63	1.58	1.11-2.05	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cobalt-57	1.23	1.16	0.81-1.51	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Cobalt-60	0.783	0.815	0.571-1.060	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Manganese-54	1.35	1.37	0.96-1.78	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Plutonium-238	0.0755	0.0761	0.0533-0.0989	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Plutonium-239/240	0.0485	0.0468	0.0328-0.0608	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Strontium-90	0.442	0.498	0.349-0.647	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Uranium-234/233	0.0965	0.093	0.065-0.121	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Uranium-238	0.0935	0.096	0.067-0.125	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdF41	Filter	Bq/sample	Zinc-65	1.09	1.06	0.74-1.38	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Americium-241	0.0958	0.090	0.063-0.117	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cesium-134	0.0190		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cesium-137	3.34	3.28	2.30-4.26	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cobalt-57	4.50	4.57	3.20-5.94	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Cobalt-60	5.34	5.30	3.71-6.89	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Manganese-54	4.57	4.49	3.14-5.84	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Plutonium-238	0.0882	0.081	0.057-0.105	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Plutonium-239/240	0.00127		False Pos Test	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Strontium-90	0.847	1.00	0.70-1.30	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Uranium-234/233	0.0656	0.0647	0.0453-0.0841	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Uranium-238	0.0660	0.0670	0.0469-0.871	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-RdV41	Vegetation	Bq/sample	Zinc-65	2.89	2.85	2.00-3.71	Acceptable
MAPEP	4th/2019	12/13/19	MAPEP-19-XaW41	Alk. Water	Bq/L	Iodine-129	1.69	1.78	1.25-2.31	Acceptable

**TABLE 4**  
**2019 ERA PROGRAM PERFORMANCE EVALUATION RESULTS**

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Acceptance Range	Evaluation
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Barium-133	105	99.5	84.1 - 109	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Cesium-134	48.2	49.1	39.5 - 54.0	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Cesium-137	128	125	112 - 140	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Cobalt-60	104	96.4	86.8 - 108	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Zinc-65	88.1	77.4	69.5 - 93.2	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Gross Alpha	22.3	21.8	10.9 - 29.5	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Gross Alpha	23.5	21.8	10.9 - 29.5	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Gross Beta	43.6	55.7	38.1 - 62.6	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Radium-226	6.47	7.37	5.55 - 8.72	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Radium-228	3.99	4.28	2.48 - 5.89	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Radium-228	4.48	4.28	2.48 - 5.89	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Uranium (Nat)	70	68.2	55.7 - 75.0	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	µg/L	Uranium (Nat) mass	99.3	99.5	81.3 - 109	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Tritium	2160	2110	1740 - 2340	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Tritium	1920	2110	1740 - 2340	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Strontium-89	78.5	66.9	54.4 - 75.0	Not Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Strontium-89	76.5	66.9	54.4 - 75.0	Not Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Strontium-90	40.1	41	30.2 - 47.1	Acceptable
ERA	2nd/2019	2/25/19	RAD-116	Water	pCi/L	Strontium-90	42.2	41	30.2 - 47.1	Acceptable
ERA	2nd/2019	3/14/19	RAD-9116	Water	pCi/L	Iodine-131	27.4	25.9	21.5 - 30.6	Acceptable
ERA	2nd/2019	3/14/19	RAD-9116	Water	pCi/L	Iodine-131	25.1	25.9	21.5 - 30.6	Acceptable
ERA	2nd/2019	05/23/19	RAD-117	Water	pCi/L	Strontium-89	35.9	33.3	24.5-40.1	Acceptable
ERA	2nd/2019	05/24/19	RAD-117	Water	pCi/L	Strontium-89	34.4	33.3	24.5-40.2	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Barium-133	68.2	66.9	55.8 - 73.6	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Cesium-134	30.4	32	25.1 - 35.2	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Cesium-137	22.7	21.4	17.6 - 26.7	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Cobalt-60	102	95.1	85.6 - 107	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Zinc-65	49.2	41.2	35.3 - 51.4	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Gross Alpha	88.7	70.6	37.1 - 87.1	Not Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Gross Alpha	80.7	70.6	37.1 - 87.1	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Gross Beta	57.7	63.9	44.2 - 70.5	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Radium-226	18.5	18.5	13.8 - 21.1	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Radium-228	7.97	8.16	5.21 - 10.3	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Radium-228	6.72	8.16	5.21 - 10.3	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Uranium (Nat)	67.8	68.3	55.8 - 75.1	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	µg/L	Uranium (Nat) mass	100.73	99.6	81.4 - 110	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Tritium	14700	16700	14600 - 18400	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Tritium	15000	16700	14600 - 18400	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Strontium-89	69.4	58.7	47.1 - 66.5	Not Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Strontium-89	62.1	58.7	47.1 - 66.5	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Strontium-90	34.3	38.5	28.3 - 44.3	Acceptable
ERA	3rd/2019	08/26/19	RAD-118	Water	pCi/L	Strontium-90	33.4	38.5	28.3 - 44.3	Acceptable

**TABLE 5**  
**2019 ERA PROGRAM (MRAD) PERFORMANCE EVALUATION RESULTS**

PT Provider	Quarter / Year	Report Received Date	Sample Number	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Acceptance Range/ Ratio	Evaluation
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Actinium-228	3060	3280	2160 - 4130	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Americium-241	346	474	256 - 671	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Bismuth-212	3200	3400	973 - 5070	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Bismuth-214	1160	1370	658 - 2040	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Cesium-134	6590	9280	6350 - 11100	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Cesium-137	831	1030	779 - 1300	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Cobalt-60	4830	5880	4630 - 7260	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Lead-212	3360	3380	2360 - 4270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Lead-214	1500	1450	609 - 2280	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Manganese-54	<25.4	<1000	<1000	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Plutonium-238	955	1220	608 - 1850	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Plutonium-239	579	829	452 - 1190	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Potassium-40	25800	24300	16700 - 29000	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Strontium-90	1220	1350	420 - 2100	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Thorium-234	1050	1470	555 - 2520	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-234	1170	1050	492 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-234	925	1050	492 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-234	925	1050	492 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-238	437	1030	565 - 1380	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-238	928	1030	565 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-238	880	1030	565 - 1380	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-Total	2090	2030	1130 - 2620	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Uranium-Total	1910	2030	1130 - 2620	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	µg/kg	Uranium-Total (mass)	1360	2420	1090 - 3270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	µg/kg	Uranium-Total (mass)	2780	2420	1090 - 3270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	µg/kg	Uranium-Total (mass)	2630	2420	1090 - 3270	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Soil	pCi/kg	Zinc-65	1300	1460	1170 - 1990	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Americium-241	2090	1680	1040 - 2370	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Cesium-134	1590	1640	1090 - 2180	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Cesium-137	1510	1410	1080 - 1900	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Cobalt-60	1200	1000	785 - 1310	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Curium-244	87.1	87.3	49.2 - 109	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Manganese-54	<35.9	<300	<300	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Plutonium-238	110	76	52.6 - 98.0	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Plutonium-239	1150	941	650 - 1190	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Potassium-40	41500	34500	25900 - 43700	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Strontium-90	4670	3530	1990 - 4600	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Uranium-234	1210	961	675 - 1230	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Uranium-238	1230	953	673 - 1190	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Uranium-Total	2540	1940	1240 - 2620	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	µg/kg	Uranium-Total (mass)	3720	2830	2170 - 3500	Not Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Vegetation	pCi/kg	Zinc-65	715	527	393 - 781	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Americium-241	18.7	18.7	13.3 - 24.9	Acceptable

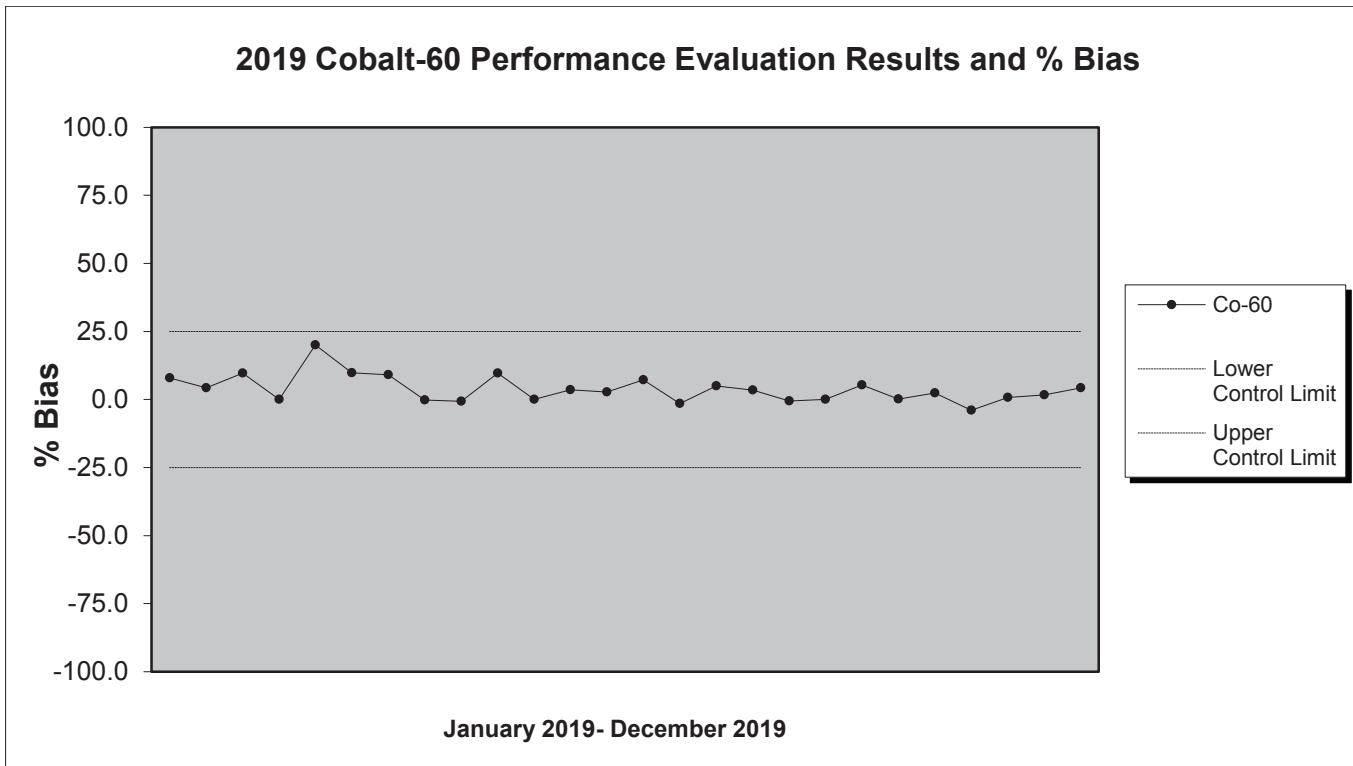
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Cesium-134	639	721	468 - 884	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Cesium-137	627	634	521 - 832	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Cobalt-60	103	93.8	79.7 - 119	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Iron-55	613	718	262 - 1150	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Manganese-54	<3.29	<50.0	<50.0	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Plutonium-238	31.1	33.8	25.5 - 41.5	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Plutonium-239	62	67	50.1 - 80.8	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Strontium-90	169	181	114 - 246	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-234	17.1	18.2	13.5 - 21.3	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-234	16.4	18.2	13.5 - 21.3	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-238	16.9	18.1	13.7 - 21.6	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-238	16	18.1	13.7 - 21.6	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-Total	33.1	37.1	27.1 - 44.0	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Uranium-Total	34.7	37.1	27.1 - 44.0	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	µg/Filter	Uranium-Total (mass)	50.9	54.1	43.4 - 63.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	µg/Filter	Uranium-Total (mass)	48	54.1	43.4 - 63.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Zinc-65	1520	1380	1130 - 2110	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Gross Alpha	43	50.3	26.3 - 82.9	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Filter	pCi/Filter	Gross Beta	75.7	78.6	47.7 - 119	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Americium-241	180	168	115 - 215	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Cesium-134	116	123	92.9 - 135	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Cesium-137	126	125	107 - 142	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Cobalt-60	1200	1100	949 - 1260	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Iron-55	1310	1320	776 - 1920	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Manganese-54	<5.6	<100	<100	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Plutonium-238	41.2	42.8	25.7 - 55.5	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Plutonium-239	117	123	76.1 - 152	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Strontium-90	365	315	227 - 389	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	56.3	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	56	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	53.7	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-234	56	55.2	42.0 - 63.1	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-238	55.3	54.7	42.4 - 64.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-238	51.8	54.7	42.4 - 64.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-238	51	54.7	42.4 - 64.4	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-Total	107.3	112	87.4 - 128	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Uranium-Total	113	112	87.4 - 128	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	µg/L	Uranium-Total (mass)	166	163	132 - 185	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	µg/L	Uranium-Total (mass)	153	163	132 - 185	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Zinc-65	1990	1780	1580 - 2250	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Gross Alpha	79.8	68.5	25.0 - 94.5	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Gross Beta	140	151	75.5 - 208	Acceptable
ERA	2nd/2019	05/21/19	MRAD-30	Water	pCi/L	Tritium	22200	23700	17900 - 28800	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Actinium-228	3730	3170	2090 - 3990	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Americium-241	1740	1920	1040 - 2720	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Bismuth-212	4130	3280	939 - 4890	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Bismuth-214	1370	1330	638 - 1980	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Cesium-134	7600	7650	5230 - 9140	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Cesium-137	1350	1230	930 - 1560	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Cobalt-60	3840	3710	2920 - 4580	Acceptable

ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Lead-212	4300	3350	2340 - 4240	Not Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Lead-214	1740	1450	609 - 2280	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Manganese-54	<26.5	<1000	<1000	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Plutonium-238	680	546	272 - 830	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Plutonium-239	1010	1090	594 - 1570	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Potassium-40	26200	24700	17000 - 29500	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Strontium-90	1660	1910	594 - 2980	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Thorium-234	1580	1360	513 - 2330	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-234	1140	1030	483 - 1350	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-234	1290	1030	483 - 1350	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-238	1080	974	534 - 1310	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-238	1070	974	534 - 1310	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-Total	2290	1930	1070 - 2500	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	pCi/kg	Uranium-Total	2409	1930	1070 - 2500	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	µg/kg	Uranium-Total (mass)	3250	2410	1090 - 3250	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	µg/kg	Uranium-Total (mass)	3200	2410	1090 - 3250	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Soil	µg/kg	Zinc-65	3100	2690	2150 - 3670	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Americium-241	2070	2050	1270 - 2900	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Cesium-134	1910	2210	1470 - 2940	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Cesium-137	2500	2480	1910-3340	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Cobalt-60	604	607	476 - 793	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Curium-244	2760	3010	1700 - 3740	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Manganese-54	<35.4	<300	<300	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Plutonium-238	2120	1920	1330 - 2480	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Plutonium-239	2860	2600	1800 - 3290	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Potassium-40	41600	39300	29500 - 49800	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Strontium-90	4010	3940	2220 - 5130	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-234	3510	3320	2330 - 4230	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-238	3620	3290	2320 - 4110	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-Total	7360	6670	4260 - 8990	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Uranium-Total (mass)	10900	9730	7470 - 12100	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Vegetation	pCi/kg	Zinc-65	1860	1620	1210 - 2400	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Americium-241	34.5	32	22.8 - 42.7	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Cesium-134	55.6	59	38.3 - 72.3	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Cesium-137	443	437	359 - 573	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Cobalt-60	63.7	58.4	49.6 - 74.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Iron-55	150	151	55.1 - 241	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Manganese-54	<1.96	<50.0	<50.0	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Plutonium-238	23.8	21	15.9 - 25.8	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Plutonium-239	19.9	19	14.2 - 22.9	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Strontium-90	34.8	34.5	21.8 - 47.0	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-234	27.1	27.5	20.4 - 32.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-234	30.4	27.5	20.4 - 32.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-238	28.4	27.3	20.6 - 32.6	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-238	25.2	27.3	20.6 - 32.6	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-Total	57.3	56.1	41.0 - 66.5	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Uranium-Total	55.6	56.1	41.0 - 66.5	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	µg/Filter	Uranium-Total (mass)	85.4	81.8	65.6 - 95.8	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	µg/Filter	Uranium-Total (mass)	75.6	81.8	65.6 - 95.8	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Zinc-65	412	364	298 - 556	Acceptable

ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Gross Alpha	71	59	30.8 - 97.2	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Filter	pCi/Filter	Gross Beta	54.7	57.6	34.9 - 87.0	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Americium-241	67.6	64.2	44.1 - 82.1	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Cesium-134	1820	1960	1480 - 2160	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Cesium-137	1820	1840	1580 - 2090	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Cobalt-60	1970	1870	1610 - 2150	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Iron-55	1410	1460	858 - 2120	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Manganese-54	<7.24	<100	<100	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Plutonium-238	41.2	47.8	28.7 - 61.9	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Plutonium-239	36.9	46.8	29.0 - 57.7	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Strontium-90	508	481	346 - 595	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-234	135	139	106 - 159	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-234	138	139	106 - 159	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-238	141	137	106 - 161	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-238	118	137	106 - 161	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-Total	285	282	220 - 321	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Uranium-Total	261.3	282	220 - 321	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	µg/L	Uranium-Total (mass)	424	411	333 - 466	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	µg/L	Uranium-Total (mass)	353	411	333 - 466	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Zinc-65	1490	1370	1220 - 1730	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Gross Alpha	147	124	45.3 - 171	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Gross Beta	72.9	68	34.0 - 93.6	Acceptable
ERA	4th/2019	11/19/19	MRAD-31	Water	pCi/L	Tritium	20900	22300	16800 - 27100	Acceptable

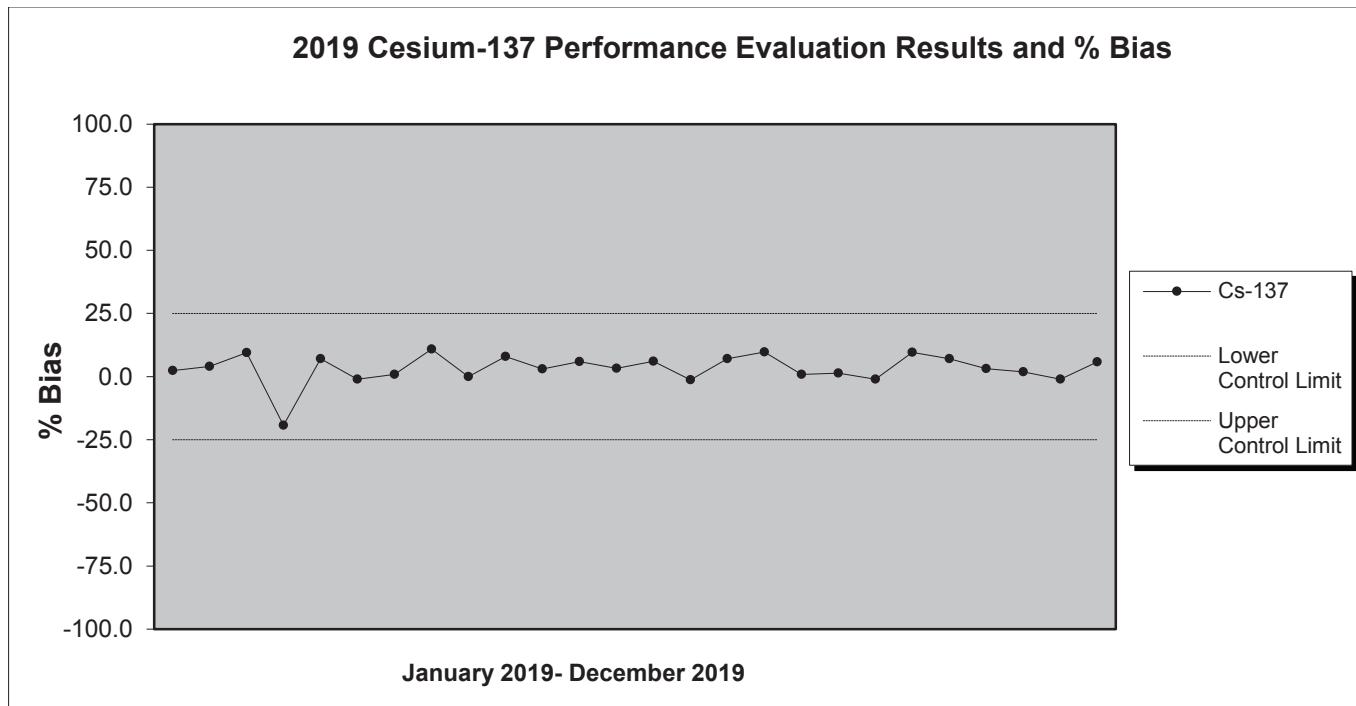
**FIGURE 1**

**COBALT-60 PERFORMANCE EVALUATION RESULTS AND % BIAS**



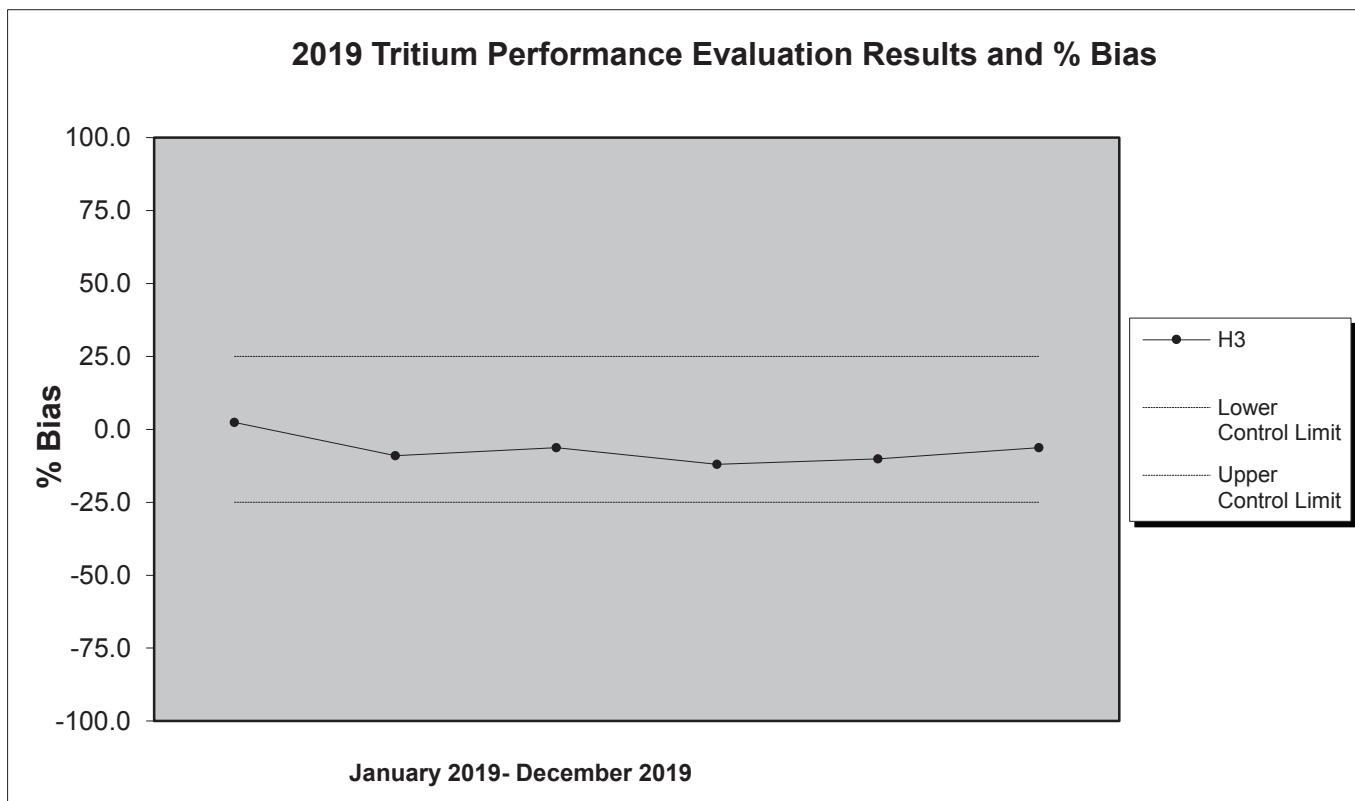
**FIGURE 2**

**CESIUM-137 PERFORMANCE EVALUATION RESULTS AND % BIAS**



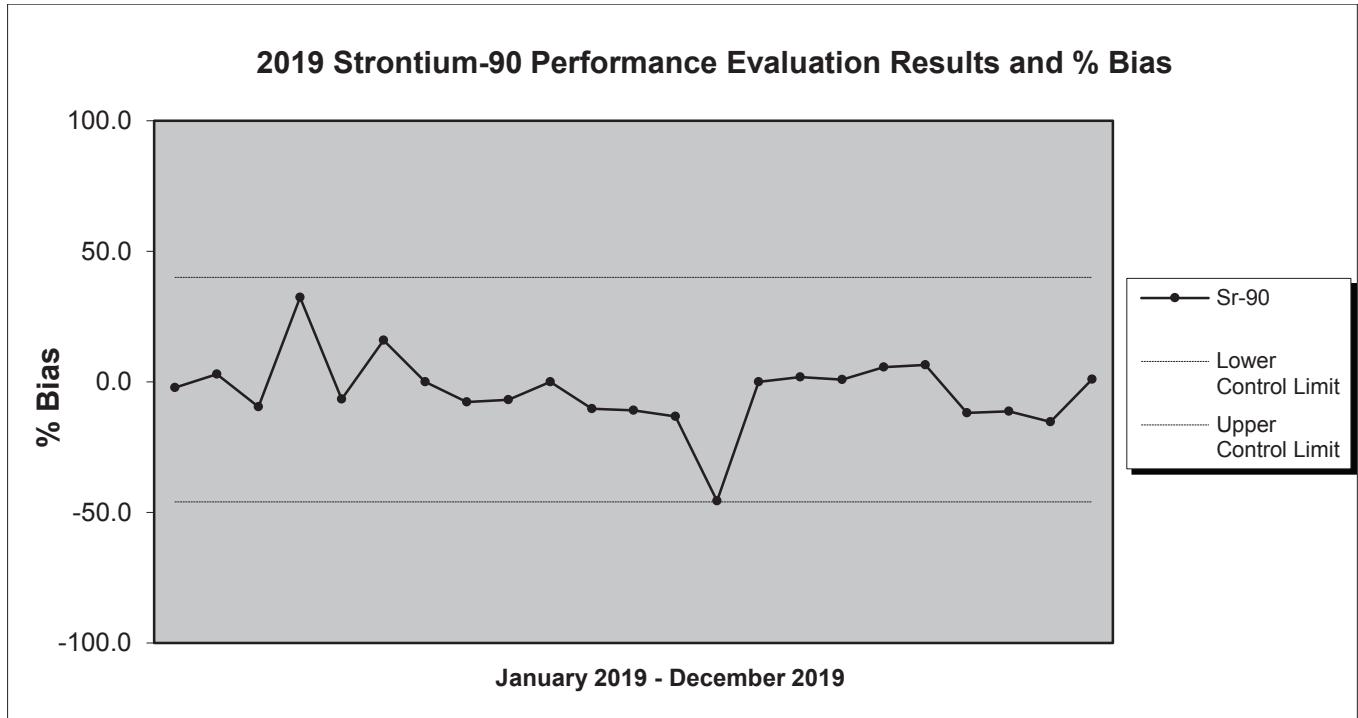
**FIGURE 3**

**TRITIUM PERFORMANCE EVALUATION RESULTS AND % BIAS**



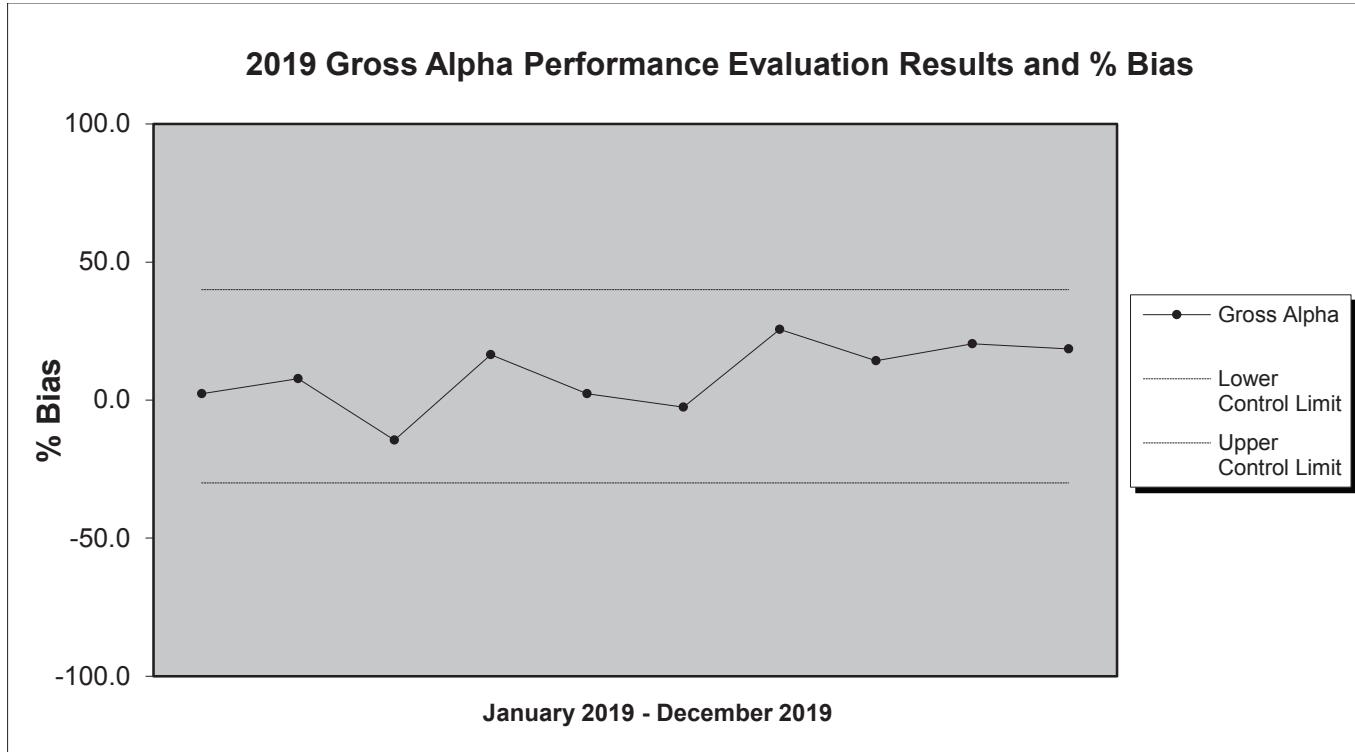
**FIGURE 4**

**STRONTIUM-90 PERFORMANCE EVALUATION RESULTS AND % BIAS**



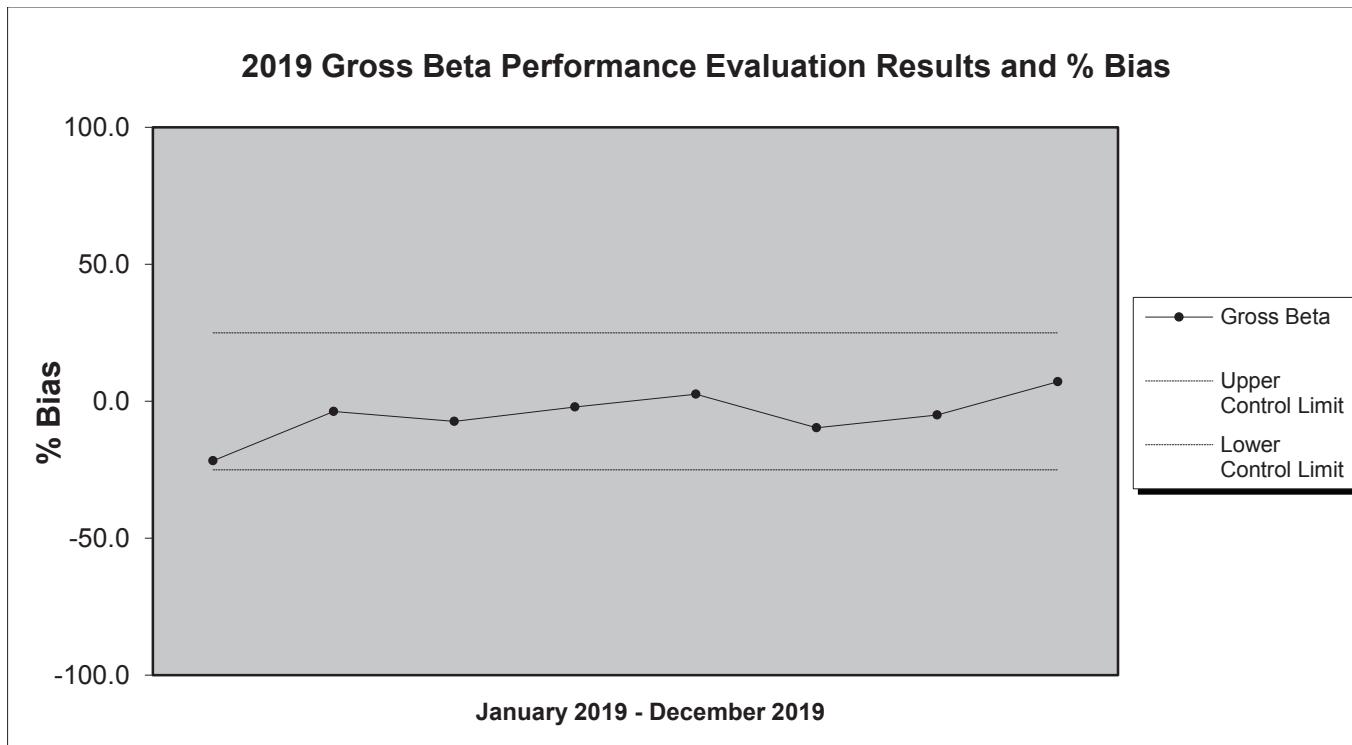
**FIGURE 5**

**GROSS ALPHA PERFORMANCE EVALUATION RESULTS AND % BIAS**



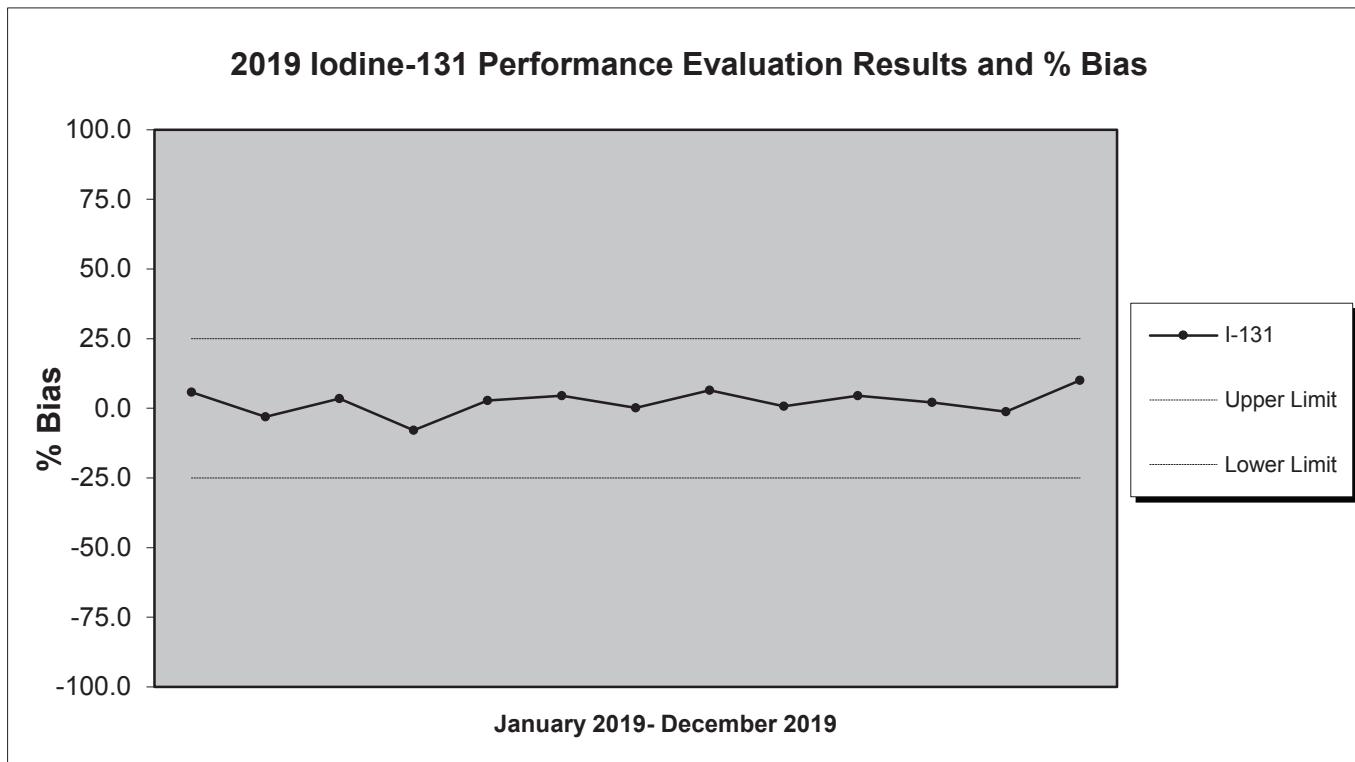
**FIGURE 6**

**GROSS BETA PERFORMANCE EVALUATION RESULTS AND % BIAS**



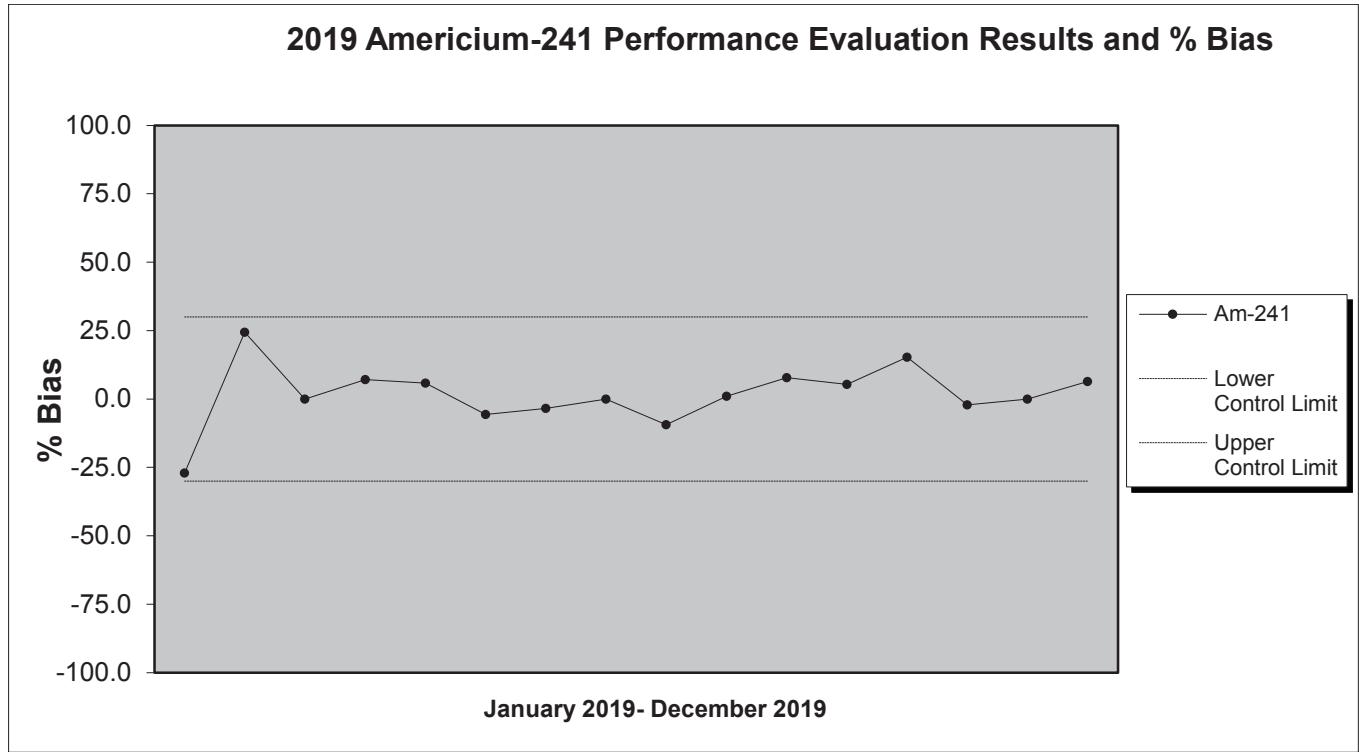
**FIGURE 7**

**IODINE-131 PERFORMANCE EVALUATION RESULTS AND % BIAS**



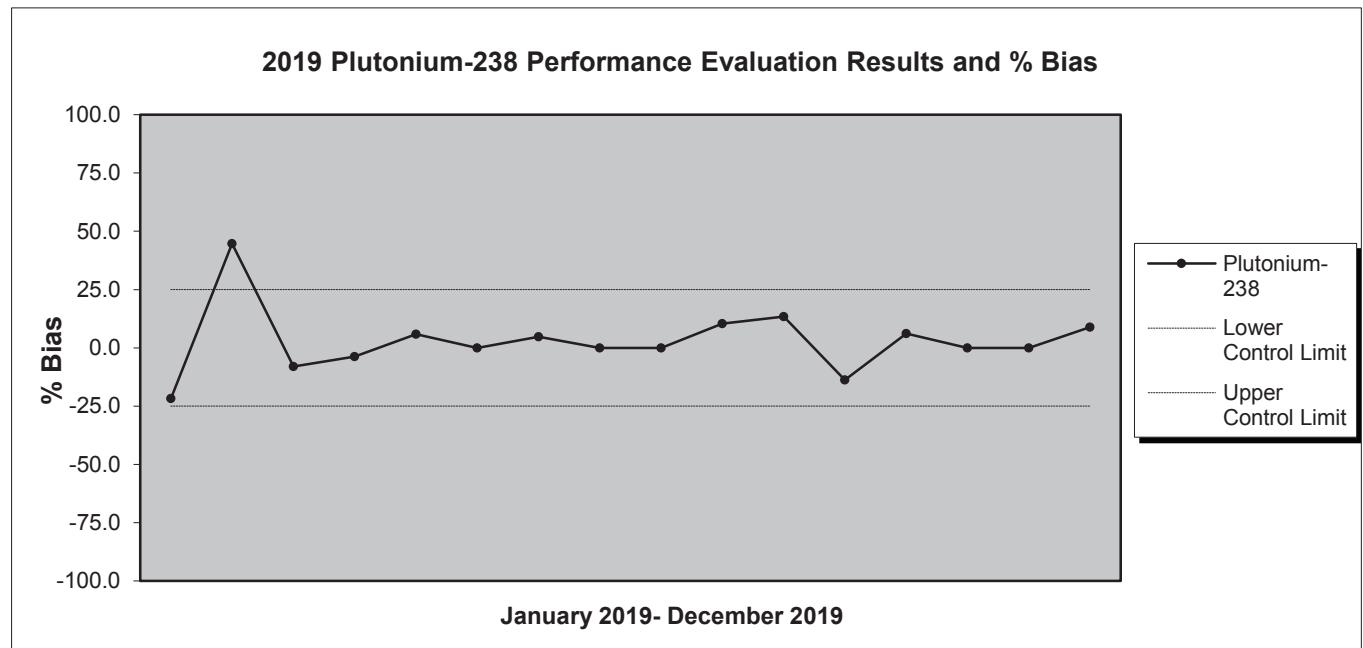
**FIGURE 8**

**AMERICIUM-241 PERFORMANCE EVALUATION RESULTS AND % BIAS**



**FIGURE 9**

**PLUTONIUM-238 PERFORMANCE EVALUATION RESULTS AND % BIAS**



**TABLE 6**  
**REMP INTRA-LABORATORY DATA SUMMARY: BIAS AND PRECISION BY MATRIX**

2019 Total All REMP Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN CRITERIA	OUTSIDE CRITERIA	WITHIN CRITERIA	OUTSIDE CRITERIA
<b>MILK</b>				
Gas Flow Sr 2nd count	34	0	39	0
Gas Flow Total Strontium	20	0	21	0
Gamma Spec Liquid RAD A-013 with Ba, La	21	0	71	0
<b>SOLID</b>				
Gamma Spec Solid RAD A-013	9	0	13	0
LSC Nickel 63	5	0	5	0
Gas Flow Sr 2nd count	4	0	7	0
Gas Flow Total Strontium	4	0	4	0
Gamma Spec Solid RAD A-013 with Iodine	16	0	37	0
<b>FILTER</b>				
Gas Flow Sr 2nd Count	5	0	5	0
Gross A & B	462	0	333	0
Gas Flow Sr-90	1	0	1	0
Gamma Spec Filter	34	0	76	0
<b>LIQUID</b>				
Alpha Spec Uranium	7	0	10	0
Tritium	169	0	225	0
LSC Iron-55	17	0	15	0
LSC Nickel 63	18	0	16	0
Gamma Iodine-131	19	0	19	0
Alpha Spec Plutonium	9	0	9	0
Gas Flow Sr 2nd count	6	0	5	0
Alpha Spec Am241 Curium	9	0	9	0
Gas Flow Total Strontium	11	0	9	0
Gross Alpha Non Vol Beta	28	0	55	0
Gamma Spec Liquid RAD A-013 with Ba, La	51	0	116	0
Gamma Spec Liquid RAD A-013 with Iodine	25	0	98	0
<b>TISSUE</b>				
Gamma Spec Solid RAD A-013	31	0	37	0
Gas Flow Sr 2nd count	7	0	7	0
Gas Flow Total Strontium	10	0	10	0
Gamma Spec Solid RAD A-013 with Iodine	13	0	14	0
<b>VEGETATION</b>				
Gamma Spec Solid RAD A-013	14	0	13	0
Gas Flow Sr 2nd count	8	0	8	0
Gamma Spec Solid RAD A-013 with Iodine	63	0	79	0
<b>AIR CHARCOAL</b>				
Carbon-14 (Ascarite/Soda Lime Filter per Liter)	25	0	25	0
<b>DRINKING WATER</b>				
Tritium	20	0	24	0
LSC Iron-55	14	0	16	0
LSC Nickel 63	14	0	16	0
Gamma Iodine-131	24	0	16	0
Gas Flow Sr 2nd count	10	0	11	0
Gas Flow Total Strontium	13	0	15	0

Gross Alpha Non Vol Beta	52	0	61	0
Gamma Spec Liquid RAD A-013 with Ba, La	21	0	53	0
Gamma Spec Liquid RAD A-013 with Iodine	0	0	6	0
<b>Total</b>	<b>1323</b>		<b>1609</b>	

Note 1: The RPD must be 20 percent or less, if both samples are greater than 5 times the MDC. If both results are less than 5 times MDC, then the RPD must be equal to or less than 100%. If one result is above the MDC and the other is below the MDC, then the RPD can be calculated using the MDC for the result of the one below the MDC. The RPD must be 100% or less. In the situation where both results are above the MDC but one result is greater than 5 times the MDC and the other is less than 5 times the MDC, the RPD must be less than or equal to 20%. If both results are below MDC, then the limits on % RPD are not applicable.

**TABLE 7**  
**ALL RADIOLOGICAL INTRA-LABORATORY DATA SUMMARY:**  
**BIAS AND PRECISION BY MATRIX:**

2019 Total All Intra-Laboratory Data	Bias Criteria (+ / - 25%)		Precision Criteria (Note 1)	
	WITHIN	OUTSIDE	WITHIN	OUTSIDE
	CRITERIA	CRITERIA	CRITERIA	CRITERIA
<b>MILK</b>				
Gamma Spec Liquid RAD A-013	4	0	5	0
Gamma Iodine-129	4	0	4	0
Gamma Iodine-131	5	0	93	0
Gas Flow Sr 2nd count	34	0	39	0
Gas Flow Strontium 90	6	0	7	0
Gas Flow Total Strontium	20	0	21	0
Gamma Spec Liquid RAD A-013 with Ba, La	21	0	71	0
Gamma Spec Liquid RAD A-013 with Iodine	4	0	4	0
<b>SOLID</b>				
Gamma Percent Leach	2	0	0	0
Gas Flow Radium 228	72	0	76	0
Tritium	315	0	367	0
Tritium by Pyrolysis	2	0	3	0
Carbon-14	229	0	261	0
Carbon-14 by Pyrolysis	3	0	3	0
LSC Iron-55	132	0	145	0
Alpha Spec Polonium Solid	66	0	83	0
Gamma Nickel 59 RAD A-022	116	0	127	0
LSC Chlorine-36 in Solids	1	0	1	0
Gamma Spec Ra226 RAD A-013	15	0	17	0
Gamma Spec Solid RAD A-013	946	0	1312	0
LSC Nickel 63	226	0	239	0
LSC Plutonium	209	0	216	0
Technetium-99	526	0	561	0
Gross Alpha Beta Soil Leach	24	0	29	0
ICP-MS Technetium-99 in Soil	7	0	6	0
LSC Selenium 79	10	0	12	0
Total Activity,	9	0	10	0
Tritium	29	0	29	0
Alpha Spec Am243	87	0	94	0
Gamma Iodine-129	142	0	164	0
Gas Flow Lead 210	13	0	14	0
Alpha Spec Uranium	551	0	628	0
LSC Promethium 147	4	0	4	0
LSC, Rapid Strontium 89 and 90	51	0	58	0
Alpha Spec Thorium	429	0	491	0
ICP-MS Uranium-233, 234 in Solid	99	0	100	0
LSC Sulfur 35	5	0	5	0
Alpha Spec Plutonium	510	0	497	0
ICP-MS Technetium-99 Prep in Soil	7	0	6	0
LSC Calcium 45	0	0	2	0
Alpha Spec Neptunium	383	0	392	0
Alpha Spec Plutonium	129	0	145	0
Alpha Spec Radium 226	34	0	43	0

Gas Flow Sr 2nd count	31	0	36	0
Gas Flow Strontium 90	316	0	297	0
Lucas Cell Radium 226	165	0	193	0
Total Activity Screen	1	0	1	0
Alpha Spec Am241 Curium	395	0	400	0
LSC Phosphorus-32	1	0	1	0
Alpha Spec Total Uranium	11	0	12	0
Gas Flow Total Strontium	75	0	76	0
ICP-MS Uranium-233, 234 Prep in Solid	99	0	103	0
ICP-MS Uranium-235, 236, 238 in Solid	84	0	85	0
Alpha Spec Polonium Solid	5	0	5	0
Gamma Spec Solid RAD A-013 with Iodine	16	0	37	0
GFC Chlorine-36 in Solids	29	0	29	0
Gamma Spec Solid RAD A-013 (pCi/Sample)	1	0	4	0
Tritium	5	0	5	0
Calculation for Percent Uranium and Ratios	2	0	0	0
ICP-MS Uranium-234, 235, 236, 238 in Solid	189	0	182	0
ICP-MS Uranium-235, 236, 238 Prep in Solid	81	0	85	0
Gross Alpha/Beta (Am/Cs Calibration) Solid	5	0	6	0
Gross Alpha/Beta	445	0	597	0
Gross Alpha/Beta (Americium Calibration) Solid	3	0	3	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Solid	107	0	106	0
Gross Alpha Beta (F,U)	37	0	45	0
<b>FILTER</b>				
Alpha Spec Uranium	4	0	22	0
Alpha Spec Polonium	3	0	4	0
Gamma I-131, filter	4	0	4	0
LSC Plutonium Filter	59	0	91	0
Tritium	31	0	265	0
Alpha Spec Californium	1	0	1	0
Carbon-14	6	0	70	0
ICP-MS Tc-99 in Filter	0	0	4	0
Nickel-63	1	0	47	0
LSC Iron-55	42	0	68	0
Gamma Nickel 59 RAD A-022	56	0	84	0
Alpha Spec Californium FPL	4	0	14	0
Gamma Iodine 131 RAD A-013	3	0	3	0
LSC Nickel 63	46	0	73	0
Technetium-99	7	0	86	0
Gamma Spec Filter RAD A-013	111	0	181	0
ICP-MS Tc-99 Prep in Filter	0	0	4	0
Alphaspec Np Filter per Liter	16	0	22	0
Alphaspec Pu Filter per Liter	24	0	29	0
Gamma Iodine-129	4	0	54	0
Gross Alpha/Beta	0	0	115	0
Alpha Spec Am243	8	0	15	0
Alpha Spec Uranium	56	0	88	0
LSC Promethium 147	1	0	3	0
LSC, Rapid Strontium 89 and 90	55	0	77	0
Alpha Spec Thorium	34	0	55	0
Gas Flow Radium 228	2	0	4	0
Alpha Spec Plutonium	70	0	123	0
ICP-MS Uranium-233, 234 in Filter	0	0	4	0

Alpha Spec Neptunium	43	0	69	0
Alpha Spec Plutonium	63	0	113	0
Alpha Spec Plutonium	12	0	12	0
Alpha Spec Polonium,(Filter/Liter)	0	0	3	0
Alpha Spec Radium 226	1	0	4	0
Alpha/Beta (Americium Calibration)	0	0	1	0
Carbon-14 (Soda Lime)	0	0	2	0
Gas Flow Sr 2nd Count	31	0	45	0
Gas Flow Strontium 90	67	0	101	0
Gas Flow Total Radium	2	0	2	0
LSC Plutonium 241 Filter per Liter	29	0	42	0
Lucas Cell Radium-226	1	0	1	0
Alpha Spec Am241Curium	100	0	158	0
Gas Flow Total Strontium	3	0	4	0
ICP-MS Uranium-233, 234 Prep in Filter	0	0	3	0
ICP-MS Uranium-235, 236, 238 in Filter	2	0	5	0
Total Activity in Filter,	0	0	6	0
Alphaspec Am241 Curium Filter per Liter	30	0	55	0
Tritium	79	0	105	0
GFC Chlorine-36 in Filters	0	0	3	0
Gamma Spec Filter RAD A-013 Direct Count	2	0	7	0
Carbon-14	24	0	40	0
GFC Chlorine-36 in Filters PL	3	0	3	0
Gross A & B (Americium Calibration) Liquid	5	0	31	0
Direct Count-Gross Alpha/Beta	78	0	0	0
Gross Alpha/Beta	26	0	39	0
ICP-MS Uranium-234, 235, 236, 238 in Filter	4	0	78	0
ICP-MS Uranium-235, 236, 238 Prep in Filter	2	0	7	0
Alpha Spec U	25	0	64	0
Gross A & B	514	0	388	0
LSC Iron-55	6	0	10	0
Technetium-99	24	0	41	0
Gas Flow Sr-90	28	0	47	0
LSC Nickel 63	29	0	37	0
Gamma Spec Charcoal	9	0	11	0
Gas Flow Pb-210	20	0	38	0
Gas Flow Ra-228	22	0	35	0
Gross Alpha Beta (Flame, Unflame)	9	0	9	0
Direct Count- Alpha/Beta (Americium Calibration)	20	0	0	0
Gamma Iodine 129	29	0	29	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Filter	2	0	39	0
Gamma Spec Filter	87	0	142	0
Lucas Cell Ra-226	16	0	25	0
Alpha Spec Thorium	18	0	31	0
<b>LIQUID</b>				
Alpha Spec Uranium	482	0	778	0
Alpha Spec Polonium	27	0	36	0
Tritium	1142	0	1267	0
Carbon-14	167	0	204	0
Plutonium	128	0	147	0
Chlorine-36 in Liquids	3	0	3	0
Iodine-131	2	0	2	0
LSC Iron-55	85	0	135	0

Gamma Nickel 59 RAD A-022	28	0	40	0
Gamma Iodine 131 RAD A-013	2	0	2	0
LSC Nickel 63	144	0	188	0
LSC Radon 222	17	0	16	0
Technetium-99	555	0	657	0
Direct Tritium	1	0	1	0
Gamma Spec Liquid RAD A-013	794	0	899	0
Alpha Spec Total U RAD A-011	17	0	17	0
LSC Selenium 79	31	0	33	0
Total Activity,	3	0	4	0
Alpha Spec Am243	14	0	28	0
Gamma Iodine-129	128	0	169	0
Gamma Iodine-131	19	0	19	0
ICP-MS Technetium-99 in Water	5	0	11	0
Gas Flow Lead 210	14	0	41	0
LSC Promethium 147	18	0	19	0
LSC, Rapid Strontium 89 and 90	8	0	10	0
Alpha Spec Polonium	2	0	2	0
Alpha Spec Thorium	190	0	287	0
Gas Flow Radium 228	387	0	474	0
Gas Flow Radium 228	9	0	9	0
Alpha Spec Plutonium	346	0	508	0
LSC Sulfur 35	11	0	12	0
Alpha Spec Neptunium	135	0	233	0
Alpha Spec Plutonium	25	0	29	0
Alpha Spec Radium 226	28	0	31	0
Gas Flow Sr 2nd count	73	0	108	0
Gas Flow Strontium 90	489	0	550	0
Gas Flow Strontium 90	2	0	2	0
Gas Flow Total Radium	183	0	156	0
ICP-MS Technetium-99 Prep in Water	6	0	12	0
ICP-MS Uranium-233, 234 in Liquid	6	0	21	0
LSC Calcium 45	11	0	12	0
Lucas Cell Radium 226	309	0	450	0
Lucas Cell Radium-226	10	0	10	0
Chlorine-36 in Liquids	17	0	27	0
Alpha Spec Am241 Curium	305	0	433	0
Gas Flow Total Strontium	77	0	88	0
Gross Alpha Non Vol Beta	830	0	1183	0
LSC Phosphorus-32	8	0	10	0
ICP-MS Uranium-233, 234 Prep in Liquid	10	0	24	0
Tritium in Drinking Water by EPA 906.0	5	0	3	0
Gamma Spec Liquid RAD A-013 with Ba, La	51	0	124	0
Gamma Spec Liquid RAD A-013 with Iodine	101	0	188	0
Gas Flow Strontium 89 & 90	5	0	3	0
ICP-MS Uranium-235, 236, 238 in Liquid	13	0	25	0
Gas Flow Total Alpha Radium	10	0	10	0
Gross Alpha Co-precipitation	4	0	7	0
ICP-MS Uranium-235, 236, 238 Prep in Liquid	9	0	24	0
Gross Alpha/Beta (Am/Cs Calibration) Liquid	2	0	2	0
Gross Alpha/Beta	0	0	3	0
ICP-MS Uranium-234, 235, 236, 238 in Liquid	170	0	172	0

Gross Alpha Beta (Flame, Unflame)	195	0	213	0
Gross Alpha Beta (Americium Calibration) Liquid	33	0	72	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Liquid	84	0	85	0
Alpha/Beta (Americium Calibration) Drinking Water	27	0	19	0
ECLS-R-GA NJ 48 Hr Rapid Gross Alpha	4	0	3	0
<b>TISSUE</b>				
Gamma Spec Solid RAD A-013	46	0	62	0
Alpha Spec Uranium	10	0	12	0
Alpha Spec Plutonium	6	0	6	0
Gas Flow Sr 2nd count	7	0	7	0
Gas Flow Strontium 90	9	0	11	0
Alpha Spec Am241 Curium	3	0	3	0
Gas Flow Total Strontium	10	0	10	0
Gamma Spec Solid RAD A-013 with Iodine	13	0	14	0
Gross Alpha/Beta	1	0	2	0
<b>VEGETATION</b>				
Carbon-14	4	0	4	0
Gamma Spec Solid RAD A-013	42	0	30	0
Gas Flow Lead 210	1	0	3	0
Alpha Spec Uranium	29	0	21	0
Alpha Spec Thorium	5	0	6	0
Alpha Spec Plutonium	27	0	14	0
Gas Flow Sr 2nd count	8	0	8	0
Gas Flow Strontium 90	24	0	11	0
Gas Flow Total Radium	1	0	3	0
Lucas Cell Radium 226	1	0	1	0
Alpha Spec Am241 Curium	5	0	8	0
Gamma Spec Solid RAD A-013 with Iodine	63	0	79	0
Gamma Spec Solid RAD A-013 (pCi/Sample)	2	0	2	0
Alpha Spec Am241 (pCi/Sample)	1	0	2	0
Alpha Spec Uranium	1	0	2	0
Gross Alpha/Beta	3	0	3	0
Alpha Spec Plutonium	0	0	2	0
Gas Flow Strontium 90	4	0	2	0
<b>AIR CHARCOAL</b>				
Gamma Iodine-129	25	0	8	0
Carbon-14 (Soda Lime)	0	0	5	0
Carbon-14	12	0	12	0
Carbon-14 (Ascarite/Soda Lime Filter per Liter)	28	0	29	0
Gamma Spec Charcoal	12	0	12	0
Gamma Iodine 129	12	0	12	0
<b>DRINKING WATER</b>				
Alpha Spec Uranium	2	0	2	0
Tritium	21	0	25	0
Iodine-131	0	0	1	0
LSC Iron-55	14	0	16	0
LSC Nickel 63	14	0	16	0
LSC Radon 222	31	0	39	0
Gamma Spec Liquid RAD A-013	7	0	6	0
Gamma Iodine-129	1	0	2	0
Gamma Iodine-131	24	0	16	0

Gas Flow Radium 228	35	0	33	0
Gas Flow Sr 2nd count	10	0	11	0
Gas Flow Strontium 90	17	0	16	0
Gas Flow Total Radium	1	0	1	0
Lucas Cell Radium 226	1	0	0	0
Lucas Cell Radium-226	36	0	37	0
Gamma Spec Drinking Water RAD A-013	29	0	36	0
Gas Flow Total Strontium	13	0	15	0
Gross Alpha Non Vol Beta	142	0	151	0
Tritium in Drinking Water by EPA 906.0	30	0	32	0
Gamma Spec Liquid RAD A-013 with Ba, La	21	0	53	0
Gamma Spec Liquid RAD A-013 with Iodine	0	0	6	0
Gas Flow Strontium 89 & 90	20	0	14	0
Gas Flow Total Alpha Radium	1	0	1	0
ICP-MS Uranium-234, 235, 236, 238 in Liquid	2	0	2	0
ICP-MS Uranium-234, 235, 236, 238 Prep in Liquid	1	0	1	0
Alpha/Beta (Americium Calibration) Drinking Water	10	0	10	0
ECLS-R-GA NJ 48 Hr Rapid Gross Alpha	19	0	16	0
<b>Total</b>	<b>18630</b>		<b>23501</b>	

Note 1: The RPD must be 20 percent or less, if both samples are greater than 5 times the MDC. If both results are less than 5 times MDC, then the RPD must be equal to or less than 100%. If one result is above the MDC and the other is below the MDC, then the RPD can be calculated using the MDC for the result of the one below the MDC. The RPD must be 100% or less. In the situation where both results are above the MDC but one result is greater than 5 times the MDC and the other is less than 5 times the MDC, the RPD must be less than or equal to 20%. If both results are below MDC, then the limits on % RPD are not applicable.

**TABLE 8**  
**2019 CORRECTIVE ACTION REPORT SUMMARY**

CORRECTIVE ACTION ID# & PE FAILURE	DISPOSITION
<b>CARR190225-1192</b>  ISO Documentation of PT Failures in RAD 116 for Strontium-89.	<p><b>Root Cause Analysis</b></p> <p><b>Strontium-89 in Drinking Water by EPA 905.0 and 905.0 Mod.</b></p> <p>A review of the data as well as the preparation processes did not reveal any errors or possible contributors to the high bias. The Laboratory has concluded that this positive bias was an isolated occurrence and that our overall process is within control. In addition, the reported value is 117% of the reference value which is within the laboratory's standard acceptance criteria of +/- 25% for Laboratory Control Samples.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>The laboratory must assume unidentified random errors caused the biases because all quality control criteria were met for the batches. The laboratory will continue to monitor</p>
<b>CARR190530-1211</b>  <b>ISO Documentation of PT Failures in MRAD-30 for:</b> <ul style="list-style-type: none"> <li>• Uranium-238 by 6020 (in soil)</li> <li>• Sr-90 (in vegetation)</li> <li>• Pu-238 (in vegetation)</li> <li>• Uranium-238 (in vegetation)</li> <li>• Uranium-Total (in vegetation)</li> </ul>	<p><b>Root Cause Analysis</b></p> <p>Upon receipt of the report, an investigation was initiated by our Quality Department and a Corrective Action (CARR) team assembled. The team consisted of representatives from the affected areas. The sample preparation and analytical processes were reviewed. This included review of reagents and standards used in the sample preparation steps, calibration records, process control samples, instruments used during analysis and interviews with the analysts.</p> <p>The investigation determined that the laboratory met all quality control criteria specified in the methods. Additionally, all internal procedures and processes were evaluated and found to have been performed as required. These failures were tracked through GEL's internal non-conformance system.</p> <p>Additionally, trending of historical PT samples for these isotope/matrix/methods were conducted. Specific tendencies of failures were not observed.</p> <p><b>Uranium-238 by 6020:</b> Per the method an acid leach is used instead of a more aggressive total dissolution that other methods use. This method is not the laboratory's standard method of choice for the analysis of Uranium-238.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p>

	<p>The laboratory does not use this digestion method for this isotope and therefore will discontinue analyzing and reporting a PT by using this method.</p> <p><b>Sr-90:</b> A reanalysis for Strontium for the Vegetation sample was performed using a larger aliquot. The reanalysis was performed using the same processes as the original reported analysis. The reanalysis result meets the acceptance range with 96% recovery.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>None at this time. A reanalysis was performed and results were within acceptance limits. The laboratory will continue to monitor the recoveries of these parameters to ensure that there are no continued issues in the processes</p> <p><b>Pu-238:</b> A reanalysis for Plutonium for the Vegetation sample was performed using approximately the same size aliquot. Prior to the analysis, the sample was shaken and stirred vigorously to ensure homogenization. Reanalysis values fell within the acceptability range for all Plutonium isotopes. It is noted that the Pu-238 count rate is low (0.05 cpm) which results in an uncertainty of 32% at the 95% confidence interval, even with a long count time of 1000 minutes. The reported Pu-238 result is 116% of the study mean and the Z score is less than 1. Failure was potentially due to high uncertainty due to low count rates for the Pu-238, as well as a possible homogeneity issue</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>None at this time. A reanalysis was performed and results were within acceptance limits. The laboratory will continue to monitor the recoveries of these parameters to ensure that there are no continued issues in the processes</p> <p><b>U-238/Total U mass:</b> A reanalysis for Uranium for the Vegetation sample was performed using approximately the same size aliquot. Prior to the analysis, the sample was shaken and stirred vigorously to ensure homogenization. Reanalysis values fell within the acceptability range for all Uranium isotopes. The original Uranium results were 126% (for U-234) and 129% (for U-238) of the assigned value, yet the Z-scores were both less than 1 and the results were 106% and 108% of the study mean. Additionally, the U-238 value fails, while the Total Uranium value in Activity units (which is simply a calculation) passes, and the Total Uranium in mass units (simply a conversion from the activity results) fails. Failures were potentially due to a possible homogeneity issue.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>None at this time. A reanalysis was performed and results were within acceptance limits. The laboratory will continue to monitor the recoveries of these parameters to ensure that there are no continued issues in the processes.</p>
--	--

CORRECTIVE ACTION ID# & PE FAILURE	DISPOSITION
<b>CARR190603-1212</b>  <b>ISO Documentation of PT Failures in MAPEP-19-MaS40:</b> <ul style="list-style-type: none"> <li>• Fe-55</li> </ul>	<p><b>Root Cause Analysis</b></p> <p>Upon receipt of the report, an investigation was initiated by our Quality Department and a Corrective Action (CARR) team assembled. The team consisted of representatives from the affected areas. The sample preparation and analytical processes were reviewed. This included review of reagents and standards used in the sample preparation steps, calibration records, process control samples, instruments used during analysis and interviews with the analysts.</p> <p>The investigation determined that the laboratory met all quality control criteria specified in the methods. Additionally, all internal procedures and processes were evaluated and found to have been performed as required. These failures were tracked through GEL's internal non-conformance system.</p> <p><b>Iron-55:</b> In reviewing the data, it was found that too small of an aliquot was used in the original analysis resulting in a high uncertainty in the result and variance or results between counts. A larger aliquot was used during reanalysis and the result was within the acceptance range and had a lower uncertainty.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>None at this time. A reanalysis was performed and results were within acceptance limits. The laboratory will continue to monitor the recoveries of these parameters to ensure that there are no continued issues in the processes.</p>
<b>CARR190826-1250</b>  <b>ISO Documentation of PT Failures in RAD-118</b> <ul style="list-style-type: none"> <li>• Sr-89</li> <li>• Gross Alpha</li> </ul>	<p><b>Root Cause Analysis</b></p> <p>Upon receipt of the report, an investigation was initiated by our Quality Department and a Corrective Action (CARR) team assembled. The team consisted of representatives from the affected areas. The sample preparation and analytical processes were reviewed. This included review of reagents and standards used in the sample preparation steps, calibration records, process control samples, instruments used during analysis and interviews with the analysts.</p> <p>The investigation determined that the laboratory met all quality control criteria specified in the methods. Additionally, all internal procedures and processes were evaluated and found to have been performed as required. These failures were tracked through GEL's internal non-conformance system.</p> <p><b>Sr-89:</b> A review of the data as well as the preparation processes did not reveal any errors or possible contributors to the high bias. In addition, the reported value is 118% of the reference</p>

	<p>value which is with the laboratory's standard acceptance criteria of +/- 25% for Laboratory Control Samples.</p> <p>In addition, the Sr-89 was also reported by a method using separation resin and the result was with the acceptance range. The results from the two methods compared with a relative percent difference (RPD) of 11.1% which meets the laboratory's duplicate acceptance criteria.</p> <p><b>Gross Alpha:</b> The analysis data was reviewed and no errors were found. The investigation into the sample preparation did not result in any contributors to the high bias. This analysis was performed by Co-Precipitation.</p> <p>The laboratory also reported the gross alpha analysis by the evaporation method (EPA 900.0) and had an acceptable result. The laboratory's alpha results between the two methods compared with a relative percent difference (RPD) of 9.45% which meets the laboratory's duplicate acceptance criteria.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>The Laboratory has concluded that these positive biases were isolated occurrences and that the overall process is within control. The lab will complete PT studies for these parameters as they become available to verify that these were isolated incidences.</p>
<b>CARR191212-1262</b> <b>ISO Documentation of PT Failures in MRAD-31</b> <ul style="list-style-type: none"> <li>• Pb-212</li> </ul>	<p><b>Root Cause Analysis</b></p> <p>Upon receipt of the report, an investigation was initiated by our Quality Department and a Corrective Action (CARR) team assembled. The team consisted of representatives from the affected areas. The sample preparation and analytical processes were reviewed. This included review of reagents and standards used in the sample preparation steps, calibration records, process control samples, instruments used during analysis and interviews with the analysts.</p> <p>The investigation determined that the laboratory met all quality control criteria specified in the methods. Additionally, all internal procedures and processes were evaluated and found to have been performed as required. These failures were tracked through GEL's internal non-conformance system.</p> <p><b>Lead-212:</b> The data was reviewed and no anomalies noted. The Duplicate result of the original analysis met the acceptance criteria of the study and replication criteria of the laboratory. Laboratory processes were evaluated and no errors were found. The other reported analytes for the method were within the limits of the study. A definitive contributor to the slightly high bias could not be identified concluding that this was an isolated occurrence.</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>None at this time. The laboratory will continue to monitor the recoveries of these parameters to ensure that there are no continued issues in the processes</p>

<b>CARR191212-1265</b>  <b>ISO Documentation of PT Failures in MAPEP-19-MaW41</b> <ul style="list-style-type: none"> <li>• Ra-226</li> </ul>	<p><b>Root Cause Analysis</b></p> <p>Upon receipt of the report, an investigation was initiated by our Quality Department and a Corrective Action (CARR) team assembled. The team consisted of representatives from the affected laboratory areas. The sample preparation and analytical processes were reviewed. This included review of reagents and standards used in the sample preparation steps, calibration records, process control samples, and interviews with the analysts.</p> <p>The investigation determined that the laboratory met all quality control criteria specified in each method. Additionally, all internal procedures and policies were performed as required. These failures were tracked through GEL's internal non-conformance system.</p> <p>The laboratory reviewed the data and no errors were found. The preparation and counting processes were reviewed and no anomalies were noted. It was noted that verification counts of the sample preparations were within limits and met laboratory replication criteria</p> <p><b>Permanent Corrective/Preventive Actions or Improvements</b></p> <p>None at this time. The laboratory will continue to monitor the recoveries of these parameters to ensure that there are no continued issues in the processes</p>

## **8.0 DCPP LAND USE CENSUS**

This page intentionally left blank.

# 0 DC L U C

Diablo Canyon Power Plant (DCPP) was owned and operated by Pacific Gas Electric (PG E) Company. PG E owned and provided environmental stewardship to approximately 14 miles of Pacific Ocean coastline and approximately 13,000 acres surrounding the 1,000 acre DCPP site boundary. The PG E property extended roughly from Avila Beach to Montana de Oro State Park. DCPP was located approximately seven miles N of Avila Beach and approximately four miles SSE of Montana de Oro State Park.

DCPP Radiological Environmental Monitoring Program (REMP) personnel conducted a Land Use Census (LUC) in the vicinity of DCPP for 2019. The LUC was based on Nuclear Regulatory Commission (NRC) Regulatory Guide 4.8, Environmental Technical Specifications for Nuclear Power Plants . The LUC also provided compliance with 10 CFR 50 Appendix I Section I (B)(3) "Identify changes in the use of unrestricted areas (e.g., for agricultural purposes) to permit modifications in monitoring programs for evaluating doses to individuals from principal pathways of exposure".

DCPP Program Directive C 2, Radiological Monitoring and Controls Program required performance of a LUC. DCPP procedure RP1.ID11, Environmental Radiological Monitoring Procedure , required identification of the nearest milk animal, nearest residence, and the nearest broadleaf producing garden greater than 50 square meters (500 square feet) in each of the landward meteorological sectors within a radial distance of 8 kilometers (5 miles) of the Unit One Containment (CTMT) structure. A LUC was conducted at least once per year during the growing season (between Feb 15 and Dec 1) for the Diablo Canyon environs.

The 2019 LUC was conducted via landowner telephone interviews. Telephone interviews were conducted November 18<sup>th</sup> through November 20th, 2019. Ten individual landowners or tenants were contacted. The helicopter over-flight was conducted on March 14<sup>th</sup>, 2019.

## M

No milk animals were identified within the first 8 kilometers (5 miles) of any sector.

## R

The nearest residence, relative to all sectors, was a small trailer located in the NN sector about 2.43 kilometers (1.51 miles) from the plant. One ranch worker occupied this BLANCHARD trailer approximately 5 days per year.

Twenty structures were identified within the 8-kilometer (5-mile) radius of the site, which were confirmed or appear to have been occupied in 2019. Twenty-two abandoned structures were identified within the 8-kilometer (5-mile) radius of the site during the LUC.

The nearest residence in each sector was summarized in Table 8.

## G

The LUC identified two household gardens greater than 50 square meters (500 square feet) that produced broadleaf vegetation. The READ garden (REMP station 3C1) was approximately acre and located in the NNE sector at 7.12 kilometers (4.42 miles). The KOONZE garden (REMP station 6C1) was approximately 500 square feet and located in the E sector at 7.46 kilometers (4.63 miles).

## A L U

It should be noted that the term site-boundary referred to the area within a radius of approximately 1.2 km (0.74 mi) from the Unit One CTMT structure. The area outside the "site-boundary" was also referred to as the "unrestricted area". Much of the area outside the site-boundary was routinely used for rotational cattle grazing by five separate cattle operations. For purposes of this land use census, the five cattle operations were called BLANCHARD, SINSHEIMER, READ, ANDRE, and MELLO.

BLANCHARD allowed cattle to graze within the DCPP environs in 2019. BLANCHARD did not graze any goats or sheep within 8 km (5 miles) of DCPP in 2019 due to drought conditions in San Luis Obispo County.

BLANCHARD's livestock were sold under the "Old Creek Ranch" label at local farmer's markets in 2019. "Old Creek Ranch" labeled meats were sampled quarterly by REMP personnel in 2019. The REMP station codes were BCM, BGM, and BSM (if available).

SINSHEIMER had about 100 cattle outside the site-boundary in the NNE sector. The cows were allowed to breed and about 90 yearling calves were sold to mass market in 2019. SINSHEIMER did not slaughter any cattle in 2019 for personal consumption.

READ had about 92 cows, 4 bulls, and 92 yearling calves outside the site-boundary in the NNE sector. About 92 yearling calves were sold to mass market in 2019. READ did not slaughter any cattle in 2019 for personal consumption.

ANDRE had about 50 cattle outside the site-boundary in the ENE sector. About 50 yearling calves were sold to mass market in 2019. ANDRE did not slaughter any cattle in 2019 for personal consumption.

MELLO managed about 600 cattle outside the site-boundary in the E, ESE, and SE sectors. A commercial cattle corporation owned these cattle and sold all of them to mass market in 2019. MELLO did not slaughter any cattle in 2019 for personal consumption.

Two landowners (OHE and ANDRE) harvested wild game for personal consumption outside the site-boundary in the NNE, NE, and ENE sectors. This wild game consisted of approximately 4 pigs and two deer per landowner.

There was a California State Park Ranger Office in the NN sector at 7.48 kilometers (4.65 miles) from the site. Approximately three State Parks staff personnel occupied this office from 1000 to 1500 each day (365 days per year).

There was a public campground (Islay Creek Campground) located in the NN sector at Montana de Oro State Park at 7.31 kilometers (4.54 miles). This campground was near Spooner's Cove.

Approximately 713,000 people visited Montana de Oro State Park via day-use permit.

Approximately 22,000 people spent the night at Islay Creek Campground.

There was public access to hiking trails at the north and south ends of the PG E property in 2019.

The Point Buchon Trail was located at the north end of PG E property and had about 18,000 visitors in 2019. The trail traversed about 3.4 miles of coastline from Coon Creek to Lion Rock overlook. The trail was open to the public for day hikes Thursday thru Monday from approximately 0800-1700. Two to three people from California Land Management occupied the trail head booth near Coon Creek during operational days from 0700 to 1730. This trail was originally opened to the public on July 13, 2007.

The Pecho Coast Trail was located at the south end of PG E property and had about 3,000 visitors in 2019. The trail was approximately 3.8 miles long and led from the Avila Beach DCPP entrance gate to the Point San Luis Lighthouse property. Pecho Coast Trail hikes were only available on Wednesdays (about 20 people) and Saturdays (about 40 people). An extension of the trail up the coastline to Rattlesnake Canyon made the trail 8 miles roundtrip and was only available on Mondays (about 20 people each trip). This trail extension was improved in October 2017 to allow controlled vehicle access on the trail. Access was controlled (via web-site reservation permission only) and conducted by docents from approximately 0900 to 1500. This trail was just slightly outside the 5 mile radius of the DCPP site. This Pecho Coast Trail has been open for docent-guided hikes since 1993.

Thirty to forty Port San Luis Lighthouse keepers occupied the lighthouse grounds on Tuesdays, Thursdays, and Saturdays from 0800-1600. Special events were also held at the lighthouse throughout the year (e.g. weddings, fundraisers, reunions, etc). The lighthouse property was owned by the Port San Luis Harbor District.

EI 0 -0 G

I G I R

There were no site construction activities or radioactive spills that warranted changes to GPI monitoring frequencies, monitoring locations, lab analytical capabilities, or analytical detection thresholds in 2019.

There were no changes in on-site or near site groundwater usage.

Groundwater beneath the site power block was not used as a source of drinking water.

O   S      G      S      F      OSGSF

The OSGSF vault was located within the site-boundary in the ENE sector (68.3 degrees) at 0.99 km (0.61 mi) from Unit One CTMT.

The following plant equipment was placed into the OSGSF for the duration of the site operating license on the dates indicated below.

Unit One old steam generators (4 total) : 2/14/2009

Unit Two old steam generators (4 total) : 3/2/2008

Unit One old reactor head (1 total) : 10/23/2010

Unit Two old reactor head (1 total) : 11/6/2009

I                S      F      S      I                ISFSI

The on-site dry cask ISFSI pad was located within the site-boundary in the ENE sector (58.47 degrees) at 0.36 km (0.22 mi) from Unit One CTMT.

DCPP loaded its first ISFSI dry cask onto the pad on 6/23/2009.

There were no dry cask loading campaigns in 2019.

At the end of 2019, a total of 58 dry casks occupy the ISFSI pad.

Table 8 summarizes the nearest residence location in each meteorological sector.

The Land Use Figure shows the location of the residences and gardens in the vicinity of DCPP.

T

L U C 0

D

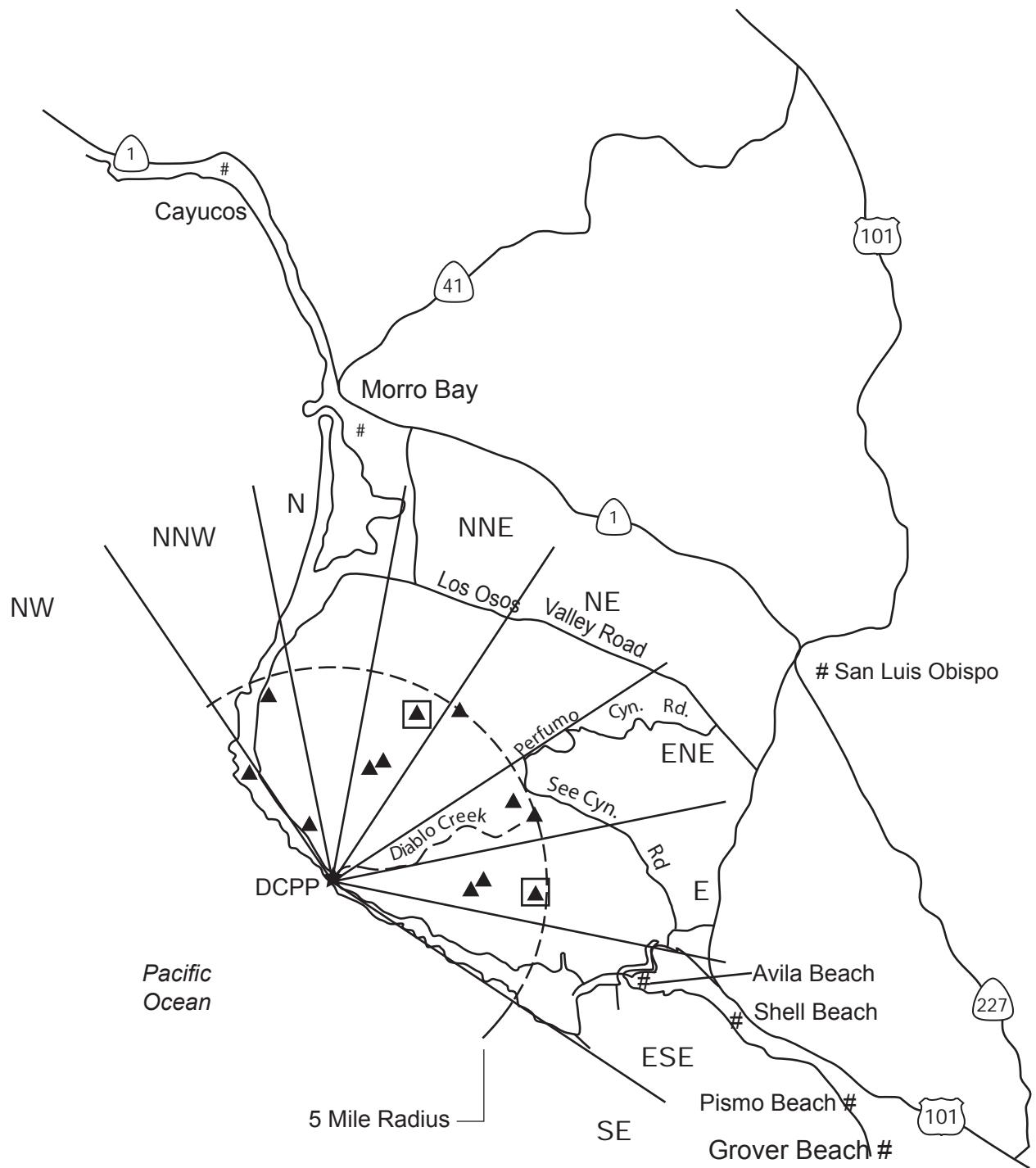
M A R

U- CTMT  
G

R	D	(a) S	M	A	R	R	A	D	G
N		None		5.76 (3.58)		325.18			None
NN		None		2.43 (1.51) <sup>(b)</sup>		332.01			None
N		None		None					None
NNE		None		5.18 (3.22)		21.43		7.12 (4.42) <sup>(c)</sup>	
NE		None		7.94 (4.93)		35.33			None
ENE		None		7.15 (4.45)		63.84			None
E		None		5.96 (3.71)		89.89		7.46 (4.63) <sup>(d)</sup>	
ESE		None		None					None
SE		None		None					None

**Table Notation:**

- (a) Sectors not shown were over water and contained no land (other than islets not used for the purposes indicated in this table) beyond the site-boundary.
- (b) BLANCHARD trailer was the residence used for critical receptor calculations.
- (c) The READ (REMP station 3C1) vegetable garden was located in the NNE sector and the 19.89 azimuth degree. There was also a limited use residence at this location.
- (d) The KOONZE (REMP station 6C1) vegetable garden was located in the E sector and the 97.26 azimuth degree. There was also a full-time residence at this location.



UNITS 1 AND 2  
DIABLO CANYON SITE

- Gardens or Farm
- Residences

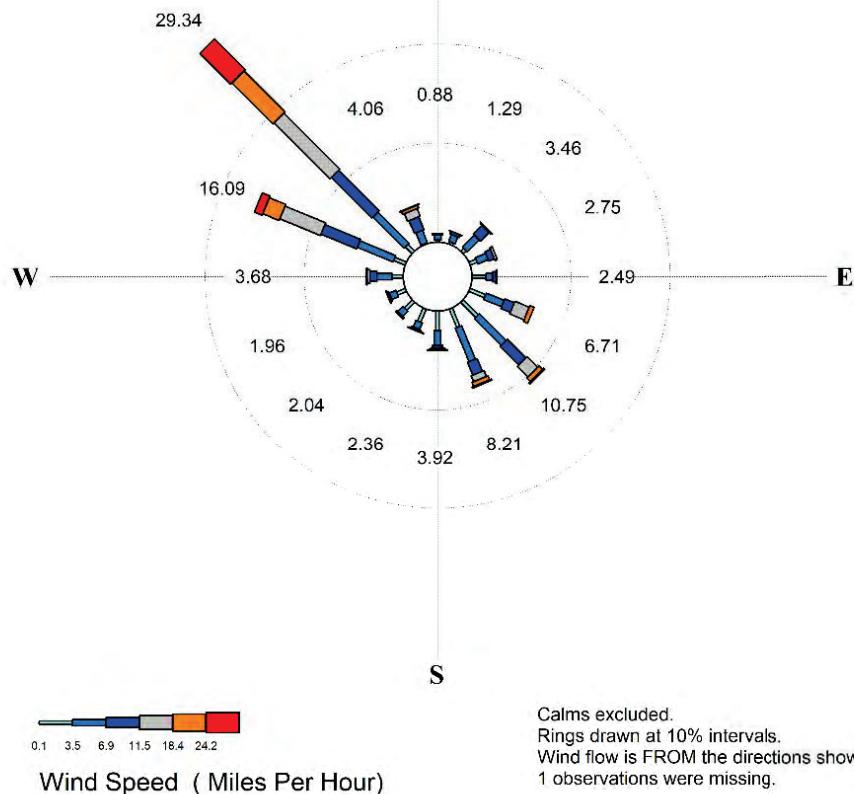
0 1 2 3 4 5  
SCALE IN MILES

## **9.0 DCPP WIND ROSE CHART**

This page intentionally left blank.

**Joint Frequency Distribution  
Wind Speed and Wind Direction  
Diablo Canyon Power Plant  
10 Meter Level 2019**

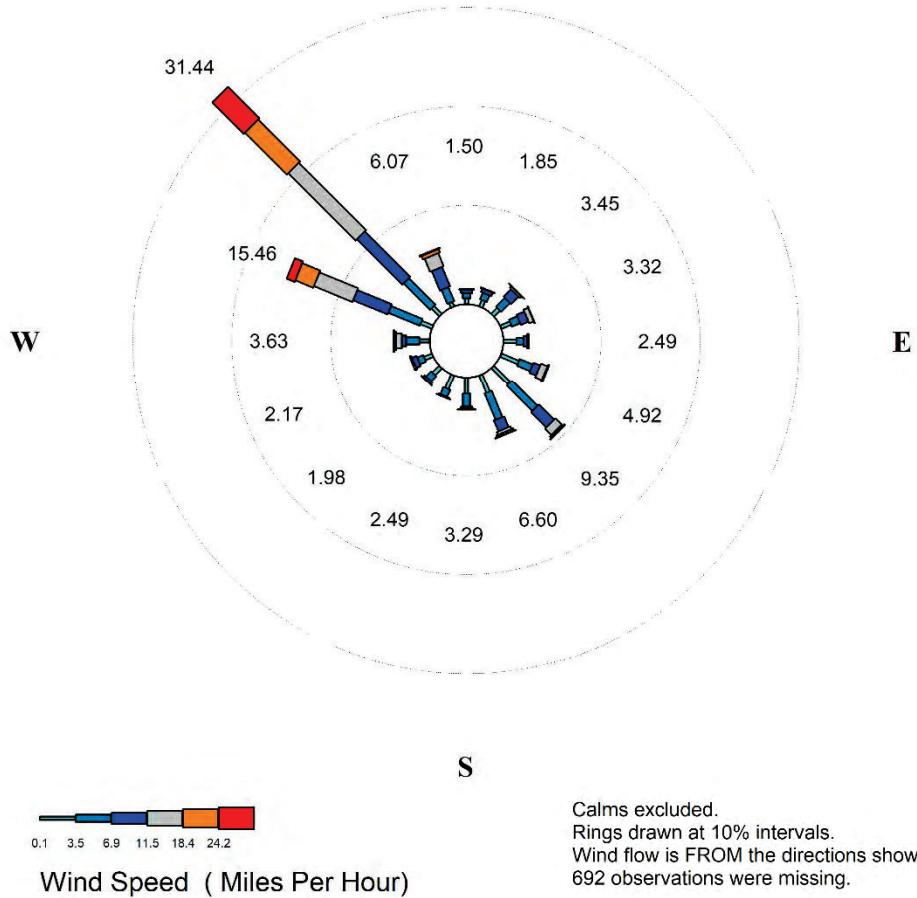
N



PERCENT OCCURRENCE: Wind Speed (Miles Per Hour)							PERCENT OCCURRENCE: Wind Speed (Miles Per Hour)						
LOWER BOUND OF CATEGORY							LOWER BOUND OF CATEGORY						
DIR	0.1	3.5	6.9	11.5	18.4	24.2	DIR	0.1	3.5	6.9	11.5	18.4	24.2
N	0.23	0.50	0.15	0.00	0.00	0.00	S	1.93	1.48	0.27	0.14	0.07	0.02
NNE	0.26	0.75	0.25	0.02	0.00	0.00	SSW	1.42	0.72	0.14	0.07	0.02	0.00
NE	0.43	1.68	1.21	0.11	0.02	0.00	SW	1.13	0.72	0.18	0.01	0.00	0.00
ENE	0.74	1.13	0.62	0.26	0.00	0.00	WSW	0.96	0.73	0.21	0.07	0.00	0.00
E	1.40	0.67	0.34	0.07	0.00	0.00	W	1.13	1.52	0.69	0.29	0.06	0.00
ESE	1.69	1.93	1.04	1.58	0.47	0.01	WNW	1.24	3.92	3.88	4.41	1.79	0.84
SE	2.13	3.80	2.67	1.51	0.46	0.18	NW	0.95	4.43	5.77	7.97	5.83	4.40
SSE	1.99	3.65	1.39	0.64	0.43	0.10	NNW	0.11	1.34	1.38	0.84	0.32	0.07
TOTAL OBS = 8759 MISSING OBS = 1							CALM OBS = 0						

This page intentionally left blank.

**Joint Frequency Distribution  
Wind Speed and Wind Direction  
Diablo Canyon Power Plant  
10 Meter Level 2015-2019**



This page intentionally left blank.

## **0.0 REFERE CES**

1. NRC Radiological Assessment Branch Technical Position on Environmental Monitoring, Revision 1, November 1979
2. NUREG-1301 "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors"
3. REG GUIDE 4.1 (Rev 1) "Programs for Monitoring Radioactivity in the Environs of Nuclear Power Plants"
4. REG GUIDE 4.15 (Rev 1) " Quality Assurance for Radiological Monitoring Programs (Normal Operations) Effluent Streams and the Environment"
5. NRC Regulatory Issue Summary 2008-03, Return/Re-use of Previously Discharged Radioactive Effluents February 13, 2008
6. ANSI/HPS N13.37-2014, "Environmental Dosimetry - Criteria for System Design and Implementation"
7. NEI 07-07, Industry Groundwater Protection Initiative Final Guidance Document, Rev 1 , March 2019
8. DCPP Program Directive, C 2, Radiological Monitoring and Controls Program.
9. DCPP Interdepartmental Administrative Procedure (IDAP), RP1.ID11, Environmental Radiological Monitoring Procedure.
10. DCPP Interdepartmental Administrative Procedure (IDAP), RP1.ID13, DCPP Groundwater Protection Initiative Program.
11. "Groundwater Gradient Analysis", by Entrix Corporation, March 2010
12. "Groundwater Gradient Analysis", by Cardno/Entrix Corporation, June 2012
13. "Diablo Canyon Power Plant Site Conceptual Model Report", by ERM July 30, 2014

**This page intentionally left blank.**

## **APPENDIX A**

### ANALYTICAL SAMPLE RESULTS

This page intentionally left blank.

## 0S2 North Gate - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
0S2 North Gate(468128011) - AC	5-Jan-19	Iodine-131	-1.76E-04	8.41E-03	4.98E-03	pCi/m3
0S2 North Gate(468880008) - AC	12-Jan-19	Iodine-131	6.10E-03	1.64E-02	9.21E-03	pCi/m3
0S2 North Gate(469519013) - AC	19-Jan-19	Iodine-131	2.69E-03	9.81E-03	5.50E-03	pCi/m3
0S2 North Gate(470002012) - AC	26-Jan-19	Iodine-131	1.27E-03	9.01E-03	5.16E-03	pCi/m3
0S2 North Gate(470540013) - AC	2-Feb-19	Iodine-131	2.26E-03	8.33E-03	4.95E-03	pCi/m3
0S2 North Gate(471051008) - AC	9-Feb-19	Iodine-131	2.58E-03	1.27E-02	7.22E-03	pCi/m3
0S2 North Gate(471584013) - AC	16-Feb-19	Iodine-131	1.36E-03	7.44E-03	4.57E-03	pCi/m3
0S2 North Gate(472133001) - AC	23-Feb-19	Iodine-131	-3.42E-04	1.34E-02	8.19E-03	pCi/m3
0S2 North Gate(472647008) - AC	1-Mar-19	Iodine-131	-1.05E-04	6.72E-03	3.88E-03	pCi/m3
0S2 North Gate(473264010) - AC	9-Mar-19	Iodine-131	-2.44E-03	6.95E-03	4.50E-03	pCi/m3
0S2 North Gate(473881015) - AC	16-Mar-19	Iodine-131	7.77E-04	5.97E-03	3.76E-03	pCi/m3
0S2 North Gate(474425015) - AC	23-Mar-19	Iodine-131	6.17E-03	8.94E-03	9.76E-03	pCi/m3
0S2 North Gate(475038010) - AC	29-Mar-19	Iodine-131	7.97E-04	1.10E-02	6.25E-03	pCi/m3
0S2 North Gate(475856013) - AC	6-Apr-19	Iodine-131	4.33E-03	9.22E-03	4.94E-03	pCi/m3
0S2 North Gate(476506008) - AC	13-Apr-19	Iodine-131	4.58E-05	8.47E-03	5.00E-03	pCi/m3
0S2 North Gate(477146015) - AC	20-Apr-19	Iodine-131	2.81E-03	9.45E-03	5.38E-03	pCi/m3
0S2 North Gate(477720013) - AC	27-Apr-19	Iodine-131	-1.91E-03	9.66E-03	6.00E-03	pCi/m3
0S2 North Gate(478343013) - AC	4-May-19	Iodine-131	9.92E-03	6.50E-03	7.64E-03	pCi/m3
0S2 North Gate(479033013) - AC	11-May-19	Iodine-131	-8.33E-04	8.04E-03	4.89E-03	pCi/m3
0S2 North Gate(479683008) - AC	18-May-19	Iodine-131	9.36E-04	8.86E-03	4.96E-03	pCi/m3
0S2 North Gate(480029008) - AC	25-May-19	Iodine-131	-2.28E-03	6.18E-03	4.20E-03	pCi/m3
0S2 North Gate(480734013) - AC	1-Jun-19	Iodine-131	7.58E-03	1.76E-02	9.80E-03	pCi/m3
0S2 North Gate(481436013) - AC	8-Jun-19	Iodine-131	-1.59E-03	8.97E-03	5.62E-03	pCi/m3
0S2 North Gate(482140013) - AC	15-Jun-19	Iodine-131	1.72E-03	8.83E-03	4.97E-03	pCi/m3
0S2 North Gate(482758001) - AC	22-Jun-19	Iodine-131	7.78E-04	7.19E-03	4.12E-03	pCi/m3
0S2 North Gate(483652008) - AC	29-Jun-19	Iodine-131	-4.30E-03	8.94E-03	6.40E-03	pCi/m3
0S2 North Gate(484196013) - AC	6-Jul-19	Iodine-131	-4.54E-03	9.13E-03	6.60E-03	pCi/m3
0S2 North Gate(485085014) - AC	13-Jul-19	Iodine-131	2.67E-04	7.75E-03	4.72E-03	pCi/m3
0S2 North Gate(485356013) - AC	20-Jul-19	Iodine-131	3.32E-03	8.07E-03	5.82E-03	pCi/m3
0S2 North Gate(485943013) - AC	27-Jul-19	Iodine-131	2.46E-03	9.38E-03	5.11E-03	pCi/m3
0S2 North Gate(486790005) - AC	3-Aug-19	Iodine-131	3.19E-03	9.19E-03	4.95E-03	pCi/m3
0S2 North Gate(487347013) - AC	10-Aug-19	Iodine-131	-2.68E-03	1.02E-02	6.49E-03	pCi/m3
0S2 North Gate(488047012) - AC	17-Aug-19	Iodine-131	1.35E-03	8.10E-03	4.66E-03	pCi/m3
0S2 North Gate(488407013) - AC	24-Aug-19	Iodine-131	-2.28E-03	7.14E-03	4.67E-03	pCi/m3
0S2 North Gate(489091013) - AC	1-Sep-19	Iodine-131	1.94E-03	1.32E-02	7.89E-03	pCi/m3
0S2 North Gate(489316013) - AC	8-Sep-19	Iodine-131	4.92E-03	1.41E-02	7.94E-03	pCi/m3

OS2 North Gate(489397013) - AC	14-Sep-19	Iodine-131	7.19E-03	2.07E-02	1.17E-02	pCi/m3
OS2 North Gate(490334015) - AC	21-Sep-19	Iodine-131	4.88E-04	5.91E-03	3.31E-03	pCi/m3
OS2 North Gate(490940010) - AC	29-Sep-19	Iodine-131	-3.85E-03	8.21E-03	5.71E-03	pCi/m3
OS2 North Gate(492206008) - AC	5-Oct-19	Iodine-131	-1.59E-03	6.16E-03	4.02E-03	pCi/m3
OS2 North Gate(492214013) - AC	12-Oct-19	Iodine-131	-5.38E-04	8.65E-03	5.22E-03	pCi/m3
OS2 North Gate(493200013) - AC	19-Oct-19	Iodine-131	-1.55E-03	7.96E-03	4.93E-03	pCi/m3
OS2 North Gate(493690010) - AC	26-Oct-19	Iodine-131	-8.00E-04	8.23E-03	4.89E-03	pCi/m3
OS2 North Gate(494544015) - AC	2-Nov-19	Iodine-131	-1.63E-03	8.96E-03	5.49E-03	pCi/m3
OS2 North Gate(495196008) - AC	9-Nov-19	Iodine-131	8.33E-03	1.04E-02	1.44E-02	pCi/m3
OS2 North Gate(495839013) - AC	16-Nov-19	Iodine-131	2.02E-03	1.18E-02	6.35E-03	pCi/m3
OS2 North Gate(496785013) - AC	23-Nov-19	Iodine-131	2.38E-03	9.36E-03	5.22E-03	pCi/m3
OS2 North Gate(497497013) - AC	30-Nov-19	Iodine-131	7.35E-04	7.92E-03	4.47E-03	pCi/m3
OS2 North Gate(497962015) - AC	7-Dec-19	Iodine-131	-5.85E-03	7.07E-03	5.85E-03	pCi/m3
OS2 North Gate(498469013) - AC	14-Dec-19	Iodine-131	4.03E-04	1.11E-02	6.40E-03	pCi/m3
OS2 North Gate(499079013) - AC	21-Dec-19	Iodine-131	-3.15E-03	7.69E-03	5.32E-03	pCi/m3
OS2 North Gate(499686013) - AC	27-Dec-19	Iodine-131	-1.47E-03	9.92E-03	5.99E-03	pCi/m3

## OS2 North Gate - Air Carbon-14

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
OS2 North Gate(468128016) - AC14	5-Jan-19	Carbon-14	-9.65E-09	2.57E-07	1.53E-07	uCi/m3
OS2 North Gate(468880012) - AC14	12-Jan-19	Carbon-14	-9.32E-08	2.89E-07	1.69E-07	uCi/m3
OS2 North Gate(469519017) - AC14	19-Jan-19	Carbon-14	-6.19E-08	1.03E-07	6.02E-08	uCi/m3
OS2 North Gate(470002016) - AC14	26-Jan-19	Carbon-14	-3.10E-08	1.33E-07	7.86E-08	uCi/m3
OS2 North Gate(470540015) - AC14	2-Feb-19	Carbon-14	-2.40E-08	1.14E-07	6.74E-08	uCi/m3
OS2 North Gate(471051010) - AC14	9-Feb-19	Carbon-14	-8.25E-08	1.35E-07	7.91E-08	uCi/m3
OS2 North Gate(471584015) - AC14	16-Feb-19	Carbon-14	-4.70E-08	1.13E-07	6.66E-08	uCi/m3
OS2 North Gate(472133015) - AC14	23-Feb-19	Carbon-14	-5.43E-08	1.74E-07	1.03E-07	uCi/m3
OS2 North Gate(472647010) - AC14	1-Mar-19	Carbon-14	-6.56E-08	1.22E-07	7.16E-08	uCi/m3
OS2 North Gate(473264012) - AC14	9-Mar-19	Carbon-14	-9.28E-08	1.07E-07	6.21E-08	uCi/m3
OS2 North Gate(473881017) - AC14	16-Mar-19	Carbon-14	3.42E-08	1.09E-07	6.55E-08	uCi/m3
OS2 North Gate(474425017) - AC14	23-Mar-19	Carbon-14	6.05E-08	1.31E-07	7.89E-08	uCi/m3
OS2 North Gate(475038012) - AC14	29-Mar-19	Carbon-14	-5.02E-08	1.19E-07	7.00E-08	uCi/m3
OS2 North Gate(475856015) - AC14	6-Apr-19	Carbon-14	-8.90E-09	1.05E-07	6.22E-08	uCi/m3
OS2 North Gate(476506010) - AC14	13-Apr-19	Carbon-14	2.31E-08	1.32E-07	7.89E-08	uCi/m3
OS2 North Gate(477146017) - AC14	20-Apr-19	Carbon-14	-7.55E-08	1.19E-07	6.96E-08	uCi/m3
OS2 North Gate(477720015) - AC14	27-Apr-19	Carbon-14	4.78E-08	1.24E-07	7.45E-08	uCi/m3
OS2 North Gate(478343015) - AC14	4-May-19	Carbon-14	4.02E-08	1.22E-07	7.33E-08	uCi/m3
OS2 North Gate(479033015) - AC14	11-May-19	Carbon-14	-7.87E-09	1.17E-07	6.93E-08	uCi/m3

OS2 North Gate(479683010) - AC14	18-May-19	Carbon-14	2.97E-08	1.51E-07	9.03E-08	uCi/m3
OS2 North Gate(480029010) - AC14	25-May-19	Carbon-14	-1.34E-08	1.25E-07	7.41E-08	uCi/m3
OS2 North Gate(480734015) - AC14	1-Jun-19	Carbon-14	-1.52E-08	1.40E-07	8.30E-08	uCi/m3
OS2 North Gate(481436015) - AC14	8-Jun-19	Carbon-14	4.27E-08	1.05E-07	6.30E-08	uCi/m3
OS2 North Gate(482140015) - AC14	15-Jun-19	Carbon-14	7.33E-08	1.23E-07	7.47E-08	uCi/m3
OS2 North Gate(482758015) - AC14	22-Jun-19	Carbon-14	3.99E-08	1.33E-07	8.02E-08	uCi/m3
OS2 North Gate(483652015) - AC14	29-Jun-19	Carbon-14	-5.58E-08	1.50E-07	8.84E-08	uCi/m3
OS2 North Gate(484196015) - AC14	6-Jul-19	Carbon-14	7.75E-08	1.07E-07	6.53E-08	uCi/m3
OS2 North Gate(485085017) - AC14	13-Jul-19	Carbon-14	3.23E-08	1.22E-07	7.35E-08	uCi/m3
OS2 North Gate(485356015) - AC14	20-Jul-19	Carbon-14	7.03E-08	1.17E-07	7.10E-08	uCi/m3
OS2 North Gate(485943015) - AC14	27-Jul-19	Carbon-14	1.08E-07	1.40E-07	8.54E-08	uCi/m3
OS2 North Gate(486790007) - AC14	3-Aug-19	Carbon-14	-3.91E-08	1.07E-07	6.29E-08	uCi/m3
OS2 North Gate(487347015) - AC14	10-Aug-19	Carbon-14	-1.12E-07	1.33E-07	7.75E-08	uCi/m3
OS2 North Gate(488047014) - AC14	17-Aug-19	Carbon-14	1.64E-08	1.29E-07	7.73E-08	uCi/m3
OS2 North Gate(488407015) - AC14	24-Aug-19	Carbon-14	4.16E-08	1.19E-07	7.18E-08	uCi/m3
OS2 North Gate(489091015) - AC14	1-Sep-19	Carbon-14	5.68E-08	1.09E-07	6.63E-08	uCi/m3
OS2 North Gate(489316015) - AC14	8-Sep-19	Carbon-14	9.88E-08	1.60E-07	9.72E-08	uCi/m3
OS2 North Gate(489397015) - AC14	14-Sep-19	Carbon-14	5.97E-08	1.46E-07	8.79E-08	uCi/m3
OS2 North Gate(490334017) - AC14	21-Sep-19	Carbon-14	6.28E-08	9.77E-08	5.94E-08	uCi/m3
OS2 North Gate(490940012) - AC14	29-Sep-19	Carbon-14	-1.19E-07	1.51E-07	8.78E-08	uCi/m3
OS2 North Gate(492206010) - AC14	5-Oct-19	Carbon-14	-1.10E-10	1.45E-07	8.61E-08	uCi/m3
OS2 North Gate(492214015) - AC14	12-Oct-19	Carbon-14	2.89E-08	1.30E-07	7.79E-08	uCi/m3
OS2 North Gate(493200015) - AC14	19-Oct-19	Carbon-14	5.30E-08	1.34E-07	8.09E-08	uCi/m3
OS2 North Gate(493690012) - AC14	26-Oct-19	Carbon-14	6.22E-08	1.27E-07	7.66E-08	uCi/m3
OS2 North Gate(494544019) - AC14	2-Nov-19	Carbon-14	7.63E-08	1.62E-07	9.78E-08	uCi/m3
OS2 North Gate(495196010) - AC14	9-Nov-19	Carbon-14	8.80E-08	1.04E-07	6.38E-08	uCi/m3
OS2 North Gate(495839015) - AC14	16-Nov-19	Carbon-14	9.12E-08	1.20E-07	7.34E-08	uCi/m3
OS2 North Gate(496785015) - AC14	23-Nov-19	Carbon-14	1.12E-07	1.45E-07	8.86E-08	uCi/m3
OS2 North Gate(497497015) - AC14	30-Nov-19	Carbon-14	1.01E-07	1.03E-07	6.33E-08	uCi/m3
OS2 North Gate(497962017) - AC14	7-Dec-19	Carbon-14	8.37E-08	1.28E-07	7.80E-08	uCi/m3
OS2 North Gate(498469015) - AC14	14-Dec-19	Carbon-14	<b>1.65E-07</b>	1.16E-07	7.22E-08	uCi/m3
OS2 North Gate(499079015) - AC14	21-Dec-19	Carbon-14	1.38E-07	1.48E-07	9.05E-08	uCi/m3
OS2 North Gate(499686015) - AC14	27-Dec-19	Carbon-14	9.32E-08	1.24E-07	7.57E-08	uCi/m3

## OS2 North Gate - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
OS2 North Gate(468128012) - AP	5-Jan-19	BETA	2.12E-02	2.32E-03	1.13E-02	pCi/m3
OS2 North Gate(468880009) - AP	12-Jan-19	BETA	8.49E-03	2.82E-03	1.49E-02	pCi/m3

0S2 North Gate(469519014) - AP	19-Jan-19	BETA	4.97E-03	1.79E-03	1.05E-02	pCi/m3
0S2 North Gate(470002013) - AP	26-Jan-19	BETA	3.67E-02	2.50E-03	1.15E-02	pCi/m3
0S2 North Gate(470540014) - AP	2-Feb-19	BETA	7.57E-03	2.39E-03	1.11E-02	pCi/m3
0S2 North Gate(471051009) - AP	9-Feb-19	BETA	6.77E-03	2.41E-03	1.32E-02	pCi/m3
0S2 North Gate(471584014) - AP	16-Feb-19	BETA	9.28E-03	1.75E-03	9.37E-03	pCi/m3
0S2 North Gate(472133008) - AP	23-Feb-19	BETA	1.46E-02	2.58E-03	1.20E-02	pCi/m3
0S2 North Gate(472647009) - AP	1-Mar-19	BETA	5.85E-03	2.04E-03	1.00E-02	pCi/m3
0S2 North Gate(473264011) - AP	9-Mar-19	BETA	1.06E-02	2.06E-03	1.04E-02	pCi/m3
0S2 North Gate(473881016) - AP	16-Mar-19	BETA	2.12E-02	2.27E-03	1.03E-02	pCi/m3
0S2 North Gate(474425016) - AP	23-Mar-19	BETA	1.23E-02	2.67E-03	1.31E-02	pCi/m3
0S2 North Gate(475038011) - AP	29-Mar-19	BETA	1.01E-02	2.02E-03	1.05E-02	pCi/m3
0S2 North Gate(475856014) - AP	6-Apr-19	BETA	6.21E-03	2.31E-03	1.13E-02	pCi/m3
0S2 North Gate(476506009) - AP	13-Apr-19	BETA	7.24E-03	2.10E-03	1.09E-02	pCi/m3
0S2 North Gate(477146016) - AP	20-Apr-19	BETA	1.16E-02	2.29E-03	1.05E-02	pCi/m3
0S2 North Gate(477720014) - AP	27-Apr-19	BETA	1.87E-02	2.50E-03	1.23E-02	pCi/m3
0S2 North Gate(478343014) - AP	4-May-19	BETA	1.40E-02	2.24E-03	9.91E-03	pCi/m3
0S2 North Gate(479033014) - AP	11-May-19	BETA	1.49E-02	2.42E-03	1.09E-02	pCi/m3
0S2 North Gate(479683009) - AP	18-May-19	BETA	1.00E-02	2.60E-03	1.29E-02	pCi/m3
0S2 North Gate(480029009) - AP	25-May-19	BETA	6.65E-03	1.88E-03	8.49E-03	pCi/m3
0S2 North Gate(480734014) - AP	1-Jun-19	BETA	4.82E-03	2.80E-03	1.39E-02	pCi/m3
0S2 North Gate(481436014) - AP	8-Jun-19	BETA	1.21E-02	1.94E-03	9.75E-03	pCi/m3
0S2 North Gate(482140014) - AP	15-Jun-19	BETA	1.10E-02	2.10E-03	1.08E-02	pCi/m3
0S2 North Gate(482758008) - AP	22-Jun-19	BETA	7.44E-03	2.37E-03	1.08E-02	pCi/m3
0S2 North Gate(483652001) - AP	29-Jun-19	BETA	8.93E-03	2.76E-03	1.19E-02	pCi/m3
0S2 North Gate(484196014) - AP	6-Jul-19	BETA	4.22E-03	1.98E-03	9.81E-03	pCi/m3
0S2 North Gate(485085007) - AP	13-Jul-19	BETA	2.50E-03	2.38E-03	1.16E-02	pCi/m3
0S2 North Gate(485356014) - AP	20-Jul-19	BETA	1.22E-02	2.22E-03	2.68E-03	pCi/m3
0S2 North Gate(485943014) - AP	27-Jul-19	BETA	4.96E-03	2.41E-03	1.30E-02	pCi/m3
0S2 North Gate(486790006) - AP	3-Aug-19	BETA	6.10E-03	2.06E-03	1.12E-02	pCi/m3
0S2 North Gate(487347014) - AP	10-Aug-19	BETA	1.28E-02	2.16E-03	1.17E-02	pCi/m3
0S2 North Gate(488047013) - AP	17-Aug-19	BETA	6.66E-03	2.21E-03	1.15E-02	pCi/m3
0S2 North Gate(488407014) - AP	24-Aug-19	BETA	7.04E-03	2.09E-03	1.07E-02	pCi/m3
0S2 North Gate(489091014) - AP	1-Sep-19	BETA	1.23E-02	1.91E-03	8.60E-03	pCi/m3
0S2 North Gate(489316014) - AP	8-Sep-19	BETA	1.17E-02	2.62E-03	1.28E-02	pCi/m3
0S2 North Gate(489397014) - AP	14-Sep-19	BETA	2.20E-02	2.93E-03	1.40E-02	pCi/m3
0S2 North Gate(490334016) - AP	21-Sep-19	BETA	1.54E-02	1.97E-03	9.00E-03	pCi/m3
0S2 North Gate(490940011) - AP	29-Sep-19	BETA	2.08E-02	2.49E-03	1.43E-02	pCi/m3
0S2 North Gate(492206009) - AP	5-Oct-19	BETA	3.37E-02	2.34E-03	1.12E-02	pCi/m3

0S2 North Gate(492214014) - AP	12-Oct-19	BETA	2.56E-02	2.06E-03	1.12E-02	pCi/m3
0S2 North Gate(493200014) - AP	19-Oct-19	BETA	3.96E-02	2.58E-03	1.22E-02	pCi/m3
0S2 North Gate(493690011) - AP	26-Oct-19	BETA	3.40E-02	2.10E-03	1.16E-02	pCi/m3
0S2 North Gate(494544016) - AP	2-Nov-19	BETA	6.72E-02	2.67E-03	1.33E-02	pCi/m3
0S2 North Gate(495196009) - AP	9-Nov-19	BETA	8.33E-02	2.15E-03	1.17E-02	pCi/m3
0S2 North Gate(495839014) - AP	16-Nov-19	BETA	4.95E-02	2.28E-03	1.16E-02	pCi/m3
0S2 North Gate(496785014) - AP	23-Nov-19	BETA	3.34E-02	2.60E-03	1.10E-02	pCi/m3
0S2 North Gate(497497014) - AP	30-Nov-19	BETA	1.38E-02	1.85E-03	1.06E-02	pCi/m3
0S2 North Gate(497962016) - AP	7-Dec-19	BETA	5.59E-03	2.09E-03	1.18E-02	pCi/m3
0S2 North Gate(498469014) - AP	14-Dec-19	BETA	8.43E-03	2.05E-03	1.24E-02	pCi/m3
0S2 North Gate(499079014) - AP	21-Dec-19	BETA	1.27E-02	2.52E-03	1.47E-02	pCi/m3
0S2 North Gate(499686014) - AP	27-Dec-19	BETA	2.14E-02	2.18E-03	1.22E-02	pCi/m3
0S2 North Gate(476709007) - AP	9-Feb-19	Cesium-134	4.36E-05	5.28E-04	3.05E-04	pCi/m3
0S2 North Gate(484864001) - AP	11-May-19	Cesium-134	2.59E-05	4.61E-04	2.69E-04	pCi/m3
0S2 North Gate(493791004) - AP	14-Aug-19	Cesium-134	-1.10E-04	3.84E-04	2.46E-04	pCi/m3
0S2 North Gate(501636006) - AP	16-Nov-19	Cesium-134	-2.47E-04	4.43E-04	3.59E-04	pCi/m3
0S2 North Gate(476709007) - AP	9-Feb-19	Cesium-137	-1.96E-05	4.44E-04	2.62E-04	pCi/m3
0S2 North Gate(484864001) - AP	11-May-19	Cesium-137	6.04E-05	4.45E-04	2.52E-04	pCi/m3
0S2 North Gate(493791004) - AP	14-Aug-19	Cesium-137	1.81E-05	2.83E-04	1.71E-04	pCi/m3
0S2 North Gate(501636006) - AP	16-Nov-19	Cesium-137	-1.94E-04	5.34E-04	3.62E-04	pCi/m3

## 1A2 Blanchard Spring - Drinking Water

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	BETA	2.70E+00	3.73E+00	2.36E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	BETA	-4.34E-01	2.52E+00	1.49E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	BETA	4.02E+00	2.55E+00	1.84E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	BETA	-1.09E+00	2.82E+00	1.64E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Barium-140	9.83E-01	9.55E+00	5.66E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Barium-140	-3.53E+00	9.29E+00	6.10E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Barium-140	-5.21E+00	1.16E+01	7.68E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Barium-140	-1.42E+00	8.62E+00	5.93E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Cesium-134	-1.37E-01	1.83E+00	1.15E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Cesium-134	-1.78E-01	1.95E+00	1.16E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Cesium-134	-2.18E-01	1.82E+00	1.15E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Cesium-134	-2.75E-01	1.69E+00	1.08E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Cesium-137	8.44E-01	1.82E+00	1.11E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Cesium-137	6.64E-01	1.87E+00	1.20E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Cesium-137	-2.28E-01	1.63E+00	1.01E+00	pCi/L

1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Cesium-137	1.83E+00	1.92E+00	1.33E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Cobalt-58	4.97E-01	1.88E+00	1.14E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Cobalt-58	5.65E-01	2.03E+00	1.18E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Cobalt-58	-3.32E-01	1.67E+00	1.08E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Cobalt-58	-3.35E-01	1.63E+00	1.19E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Cobalt-60	5.79E-01	1.95E+00	1.14E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Cobalt-60	-3.92E-02	2.11E+00	1.24E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Cobalt-60	-1.29E+00	1.92E+00	2.09E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Cobalt-60	-8.06E-01	1.70E+00	1.35E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Iodine-131	-2.92E-01	4.92E-01	3.70E-01	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Iodine-131	-3.99E-02	5.97E-01	3.48E-01	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Iodine-131	3.26E-02	5.97E-01	3.63E-01	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Iodine-131	1.02E-01	7.40E-01	4.35E-01	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Iron-55	-1.60E+01	7.81E+01	5.53E+01	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Iron-55	1.68E+01	7.50E+01	5.27E+01	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Iron-55	1.22E+01	6.80E+01	5.08E+01	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Iron-55	3.26E+01	6.51E+01	4.79E+01	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Iron-59	3.95E+00	3.95E+00	6.38E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Iron-59	-1.17E-01	4.04E+00	2.46E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Iron-59	1.64E+00	4.16E+00	2.43E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Iron-59	-1.28E+00	3.50E+00	2.26E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Lanthanum-140	-9.98E-03	3.05E+00	1.86E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Lanthanum-140	5.09E-01	3.49E+00	2.04E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Lanthanum-140	-1.30E+00	4.26E+00	2.83E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Lanthanum-140	1.06E+00	3.71E+00	2.20E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Manganese-54	-5.88E-01	1.64E+00	1.02E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Manganese-54	9.01E-01	1.87E+00	1.12E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Manganese-54	1.37E-01	1.56E+00	1.00E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Manganese-54	1.36E-02	1.60E+00	9.19E-01	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Nickel-63	-7.35E+00	3.76E+01	2.20E+01	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Nickel-63	2.38E+00	2.72E+01	1.63E+01	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Nickel-63	-1.81E+01	2.73E+01	1.55E+01	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Nickel-63	-2.64E+00	2.97E+01	1.75E+01	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Niobium-95	1.76E-01	1.79E+00	1.09E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Niobium-95	2.49E-01	2.00E+00	1.31E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Niobium-95	-8.14E-01	1.84E+00	1.26E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Niobium-95	-2.28E-01	1.75E+00	1.24E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Total Strontium	5.90E-01	1.41E+00	8.96E-01	pCi/L

1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Total Strontium	2.03E-02	9.36E-01	5.59E-01	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Total Strontium	1.50E-01	9.52E-01	5.81E-01	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Total Strontium	-2.83E-01	1.01E+00	5.77E-01	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Tritium	1.22E+02	2.31E+02	1.45E+02	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Tritium	-6.41E+01	2.33E+02	1.36E+02	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Tritium	1.85E+01	2.64E+02	1.58E+02	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Tritium	9.58E+01	2.16E+02	1.35E+02	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Zinc-65	-3.55E-01	3.00E+00	2.07E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Zinc-65	6.64E-01	3.74E+00	2.53E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Zinc-65	6.50E-01	3.93E+00	2.86E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Zinc-65	-2.85E+00	3.39E+00	3.47E+00	pCi/L
1A2 Blanchard Spring(469923001) - DW	29-Jan-19	Zirconium-95	-5.73E-01	3.05E+00	1.94E+00	pCi/L
1A2 Blanchard Spring(476511001) - DW	17-Apr-19	Zirconium-95	-4.89E-01	3.14E+00	1.88E+00	pCi/L
1A2 Blanchard Spring(485302004) - DW	23-Jul-19	Zirconium-95	1.25E+00	3.48E+00	2.11E+00	pCi/L
1A2 Blanchard Spring(493267001) - DW	22-Oct-19	Zirconium-95	-4.34E-01	3.05E+00	2.02E+00	pCi/L

## 1S1 Wastewater Pond - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
1S1 Wastewater Pond(468128009) - AC	5-Jan-19	Iodine-131	4.74E-04	7.39E-03	4.68E-03	pCi/m3
1S1 Wastewater Pond(468880006) - AC	12-Jan-19	Iodine-131	1.40E-03	8.89E-03	4.86E-03	pCi/m3
1S1 Wastewater Pond(469519011) - AC	19-Jan-19	Iodine-131	-1.02E-03	7.24E-03	4.51E-03	pCi/m3
1S1 Wastewater Pond(470002010) - AC	26-Jan-19	Iodine-131	-3.77E-03	1.33E-02	8.42E-03	pCi/m3
1S1 Wastewater Pond(470540011) - AC	2-Feb-19	Iodine-131	1.43E-03	1.36E-02	7.68E-03	pCi/m3
1S1 Wastewater Pond(471051006) - AC	9-Feb-19	Iodine-131	3.15E-03	1.18E-02	6.44E-03	pCi/m3
1S1 Wastewater Pond(471584011) - AC	16-Feb-19	Iodine-131	-1.13E-03	7.39E-03	4.48E-03	pCi/m3
1S1 Wastewater Pond(472133006) - AC	23-Feb-19	Iodine-131	-2.58E-03	1.02E-02	7.34E-03	pCi/m3
1S1 Wastewater Pond(472647006) - AC	1-Mar-19	Iodine-131	-3.94E-03	7.21E-03	5.22E-03	pCi/m3
1S1 Wastewater Pond(473264008) - AC	9-Mar-19	Iodine-131	1.11E-03	6.43E-03	3.60E-03	pCi/m3
1S1 Wastewater Pond(473881013) - AC	16-Mar-19	Iodine-131	-4.48E-03	6.84E-03	5.25E-03	pCi/m3
1S1 Wastewater Pond(474425013) - AC	23-Mar-19	Iodine-131	-6.28E-03	1.31E-02	9.18E-03	pCi/m3
1S1 Wastewater Pond(475038008) - AC	29-Mar-19	Iodine-131	-4.74E-03	1.11E-02	8.54E-03	pCi/m3
1S1 Wastewater Pond(475856011) - AC	6-Apr-19	Iodine-131	-1.12E-03	5.10E-03	3.25E-03	pCi/m3
1S1 Wastewater Pond(476506006) - AC	13-Apr-19	Iodine-131	7.34E-04	8.85E-03	5.16E-03	pCi/m3
1S1 Wastewater Pond(477146013) - AC	20-Apr-19	Iodine-131	-8.73E-04	8.60E-03	5.22E-03	pCi/m3
1S1 Wastewater Pond(477720011) - AC	27-Apr-19	Iodine-131	1.82E-03	8.87E-03	5.25E-03	pCi/m3
1S1 Wastewater Pond(478343011) - AC	4-May-19	Iodine-131	2.90E-03	8.04E-03	4.36E-03	pCi/m3
1S1 Wastewater Pond(479033011) - AC	11-May-19	Iodine-131	1.80E-03	8.65E-03	4.77E-03	pCi/m3
1S1 Wastewater Pond(479683006) - AC	18-May-19	Iodine-131	-1.78E-03	1.08E-02	6.89E-03	pCi/m3

Sample ID	Date	Parameter	Value	Unit
1S1 Wastewater Pond(4800290006) - AC	25-May-19	Iodine-131	6.53E-04	pCi/m3
1S1 Wastewater Pond(480734011) - AC	1-Jun-19	Iodine-131	-5.23E-03	pCi/m3
1S1 Wastewater Pond(481436011) - AC	8-Jun-19	Iodine-131	-6.72E-04	pCi/m3
1S1 Wastewater Pond(482140011) - AC	15-Jun-19	Iodine-131	1.34E-03	pCi/m3
1S1 Wastewater Pond(482758002) - AC	22-Jun-19	Iodine-131	-3.58E-04	pCi/m3
1S1 Wastewater Pond(483652009) - AC	29-Jun-19	Iodine-131	5.72E-04	pCi/m3
1S1 Wastewater Pond(484196011) - AC	6-Jul-19	Iodine-131	7.85E-04	pCi/m3
1S1 Wastewater Pond(485085013) - AC	13-Jul-19	Iodine-131	-1.66E-03	pCi/m3
1S1 Wastewater Pond(485356011) - AC	20-Jul-19	Iodine-131	-2.23E-03	pCi/m3
1S1 Wastewater Pond(485943011) - AC	27-Jul-19	Iodine-131	-1.25E-03	pCi/m3
1S1 Wastewater Pond(486790003) - AC	3-Aug-19	Iodine-131	-3.71E-03	pCi/m3
1S1 Wastewater Pond(487347011) - AC	10-Aug-19	Iodine-131	4.91E-03	pCi/m3
1S1 Wastewater Pond(488047010) - AC	17-Aug-19	Iodine-131	-5.24E-04	pCi/m3
1S1 Wastewater Pond(488407011) - AC	24-Aug-19	Iodine-131	-2.38E-03	pCi/m3
1S1 Wastewater Pond(489091011) - AC	1-Sep-19	Iodine-131	-9.24E-04	pCi/m3
1S1 Wastewater Pond(489316011) - AC	8-Sep-19	Iodine-131	-4.68E-03	pCi/m3
1S1 Wastewater Pond(489397011) - AC	14-Sep-19	Iodine-131	-1.02E-03	pCi/m3
1S1 Wastewater Pond(490334013) - AC	21-Sep-19	Iodine-131	2.31E-03	pCi/m3
1S1 Wastewater Pond(490940008) - AC	29-Sep-19	Iodine-131	3.16E-03	pCi/m3
1S1 Wastewater Pond(492206006) - AC	5-Oct-19	Iodine-131	-3.59E-03	pCi/m3
1S1 Wastewater Pond(492214009) - AC	12-Oct-19	Iodine-131	-8.56E-04	pCi/m3
1S1 Wastewater Pond(493200011) - AC	19-Oct-19	Iodine-131	-2.48E-03	pCi/m3
1S1 Wastewater Pond(493690008) - AC	26-Oct-19	Iodine-131	8.07E-04	pCi/m3
1S1 Wastewater Pond(494544013) - AC	2-Nov-19	Iodine-131	3.74E-04	pCi/m3
1S1 Wastewater Pond(495196006) - AC	9-Nov-19	Iodine-131	1.08E-03	pCi/m3
1S1 Wastewater Pond(495839011) - AC	16-Nov-19	Iodine-131	-3.79E-03	pCi/m3
1S1 Wastewater Pond(496785011) - AC	23-Nov-19	Iodine-131	-3.74E-03	pCi/m3
1S1 Wastewater Pond(497497011) - AC	30-Nov-19	Iodine-131	1.04E-03	pCi/m3
1S1 Wastewater Pond(497962013) - AC	7-Dec-19	Iodine-131	-4.25E-03	pCi/m3
1S1 Wastewater Pond(498469011) - AC	14-Dec-19	Iodine-131	-8.68E-05	pCi/m3
1S1 Wastewater Pond(499079011) - AC	21-Dec-19	Iodine-131	3.79E-03	pCi/m3
1S1 Wastewater Pond(499686011) - AC	27-Dec-19	Iodine-131	2.01E-03	pCi/m3

1S1 Wastewater Pond - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
1S1 Wastewater Pond(468128010) - AP	5-Jan-19	BETA	1.88E-02	2.09E-03	1.14E-02	pCi/m3
1S1 Wastewater Pond(468880007) - AP	12-Jan-19	BETA	9.07E-03	2.38E-03	1.41E-02	pCi/m3
1S1 Wastewater Pond(469519012) - AP	19-Jan-19	BETA	7.13E-03	1.98E-03	1.03E-02	pCi/m3

1S1 Wastewater Pond(4700002011) - AP	26-Jan-19	BETA	3.01E-02	2.26E-03	1.11E-02	pCi/m3
1S1 Wastewater Pond(4705400112) - AP	2-Feb-19	BETA	7.26E-03	2.14E-03	1.08E-02	pCi/m3
1S1 Wastewater Pond(471051007) - AP	9-Feb-19	BETA	4.95E-03	2.83E-03	1.40E-02	pCi/m3
1S1 Wastewater Pond(4715840112) - AP	16-Feb-19	BETA	9.06E-03	2.04E-03	9.72E-03	pCi/m3
1S1 Wastewater Pond(472133009) - AP	23-Feb-19	BETA	1.92E-02	2.72E-03	1.25E-02	pCi/m3
1S1 Wastewater Pond(472647007) - AP	1-Mar-19	BETA	7.66E-03	2.38E-03	1.10E-02	pCi/m3
1S1 Wastewater Pond(473264009) - AP	9-Mar-19	BETA	8.20E-03	1.82E-03	9.79E-03	pCi/m3
1S1 Wastewater Pond(473881014) - AP	16-Mar-19	BETA	2.59E-02	2.29E-03	1.08E-02	pCi/m3
1S1 Wastewater Pond(474425014) - AP	23-Mar-19	BETA	1.40E-02	2.65E-03	1.28E-02	pCi/m3
1S1 Wastewater Pond(475038009) - AP	29-Mar-19	BETA	9.56E-03	2.41E-03	1.12E-02	pCi/m3
1S1 Wastewater Pond(475856012) - AP	6-Apr-19	BETA	4.86E-03	2.07E-03	1.03E-02	pCi/m3
1S1 Wastewater Pond(476506007) - AP	13-Apr-19	BETA	7.50E-03	2.12E-03	1.10E-02	pCi/m3
1S1 Wastewater Pond(477146014) - AP	20-Apr-19	BETA	9.70E-03	2.14E-03	1.05E-02	pCi/m3
1S1 Wastewater Pond(477720012) - AP	27-Apr-19	BETA	1.64E-02	2.20E-03	1.06E-02	pCi/m3
1S1 Wastewater Pond(478343012) - AP	4-May-19	BETA	1.41E-02	2.37E-03	9.98E-03	pCi/m3
1S1 Wastewater Pond(479033012) - AP	11-May-19	BETA	1.62E-02	2.48E-03	1.06E-02	pCi/m3
1S1 Wastewater Pond(479683007) - AP	18-May-19	BETA	9.66E-03	2.70E-03	1.21E-02	pCi/m3
1S1 Wastewater Pond(480029007) - AP	25-May-19	BETA	8.37E-03	1.79E-03	8.75E-03	pCi/m3
1S1 Wastewater Pond(480734012) - AP	1-Jun-19	BETA	3.12E-03	2.62E-03	1.28E-02	pCi/m3
1S1 Wastewater Pond(481436012) - AP	8-Jun-19	BETA	1.11E-02	1.90E-03	9.39E-03	pCi/m3
1S1 Wastewater Pond(482140012) - AP	15-Jun-19	BETA	1.08E-02	2.15E-03	1.08E-02	pCi/m3
1S1 Wastewater Pond(482758009) - AP	22-Jun-19	BETA	8.41E-03	2.19E-03	1.09E-02	pCi/m3
1S1 Wastewater Pond(483652002) - AP	29-Jun-19	BETA	1.08E-02	2.47E-03	1.16E-02	pCi/m3
1S1 Wastewater Pond(484196012) - AP	6-Jul-19	BETA	9.01E-03	2.03E-03	1.00E-02	pCi/m3
1S1 Wastewater Pond(485085006) - AP	13-Jul-19	BETA	5.23E-03	2.26E-03	1.18E-02	pCi/m3
1S1 Wastewater Pond(485356012) - AP	20-Jul-19	BETA	1.03E-02	2.19E-03	2.54E-03	pCi/m3
1S1 Wastewater Pond(485943012) - AP	27-Jul-19	BETA	1.02E-02	2.46E-03	1.30E-02	pCi/m3
1S1 Wastewater Pond(486790004) - AP	3-Aug-19	BETA	5.83E-03	2.23E-03	1.11E-02	pCi/m3
1S1 Wastewater Pond(487347012) - AP	10-Aug-19	BETA	9.25E-03	2.24E-03	1.16E-02	pCi/m3
1S1 Wastewater Pond(488047011) - AP	17-Aug-19	BETA	7.51E-03	2.17E-03	1.16E-02	pCi/m3
1S1 Wastewater Pond(488407012) - AP	24-Aug-19	BETA	1.14E-02	2.21E-03	1.07E-02	pCi/m3
1S1 Wastewater Pond(489091012) - AP	1-Sep-19	BETA	1.36E-02	1.99E-03	8.68E-03	pCi/m3
1S1 Wastewater Pond(489316012) - AP	8-Sep-19	BETA	1.21E-02	2.72E-03	1.29E-02	pCi/m3
1S1 Wastewater Pond(489397012) - AP	14-Sep-19	BETA	2.15E-02	2.47E-03	1.41E-02	pCi/m3
1S1 Wastewater Pond(490334014) - AP	21-Sep-19	BETA	1.45E-02	1.61E-03	8.80E-03	pCi/m3
1S1 Wastewater Pond(490940009) - AP	29-Sep-19	BETA	1.94E-02	2.63E-03	1.38E-02	pCi/m3
1S1 Wastewater Pond(492206007) - AP	5-Oct-19	BETA	3.35E-02	2.32E-03	1.12E-02	pCi/m3
1S1 Wastewater Pond(492214010) - AP	12-Oct-19	BETA	2.19E-02	2.25E-03	1.15E-02	pCi/m3

1S1 Wastewater Pond(493200012) - AP	19-Oct-19	BETA	4.21E-02	2.19E-03	1.22E-02	pCi/m3
1S1 Wastewater Pond(493690009) - AP	26-Oct-19	BETA	3.22E-02	2.32E-03	1.17E-02	pCi/m3
1S1 Wastewater Pond(494544014) - AP	2-Nov-19	BETA	6.01E-02	2.50E-03	1.31E-02	pCi/m3
1S1 Wastewater Pond(495196007) - AP	9-Nov-19	BETA	8.80E-02	1.88E-03	1.16E-02	pCi/m3
1S1 Wastewater Pond(495839012) - AP	16-Nov-19	BETA	4.46E-02	2.14E-03	1.13E-02	pCi/m3
1S1 Wastewater Pond(496785012) - AP	23-Nov-19	BETA	3.31E-02	2.33E-03	1.09E-02	pCi/m3
1S1 Wastewater Pond(497497012) - AP	30-Nov-19	BETA	1.23E-02	2.06E-03	1.05E-02	pCi/m3
1S1 Wastewater Pond(497962014) - AP	7-Dec-19	BETA	8.27E-03	2.16E-03	1.18E-02	pCi/m3
1S1 Wastewater Pond(498469012) - AP	14-Dec-19	BETA	9.02E-03	2.28E-03	1.26E-02	pCi/m3
1S1 Wastewater Pond(499079012) - AP	21-Dec-19	BETA	1.60E-02	2.72E-03	1.46E-02	pCi/m3
1S1 Wastewater Pond(499686012) - AP	27-Dec-19	BETA	2.16E-02	2.28E-03	1.21E-02	pCi/m3
1S1 Wastewater Pond(476709006) - AP	9-Feb-19	Cesium-134	1.99E-04	5.71E-04	3.04E-04	pCi/m3
1S1 Wastewater Pond(484864002) - AP	11-May-19	Cesium-134	3.53E-04	6.75E-04	3.55E-04	pCi/m3
1S1 Wastewater Pond(493791003) - AP	14-Aug-19	Cesium-134	-1.43E-04	2.77E-04	2.09E-04	pCi/m3
1S1 Wastewater Pond(501636005) - AP	16-Nov-19	Cesium-134	1.69E-05	5.36E-04	3.23E-04	pCi/m3
1S1 Wastewater Pond(476709006) - AP	9-Feb-19	Cesium-137	1.11E-04	4.00E-04	2.12E-04	pCi/m3
1S1 Wastewater Pond(484864002) - AP	11-May-19	Cesium-137	-3.65E-05	3.85E-04	2.42E-04	pCi/m3
1S1 Wastewater Pond(493791003) - AP	14-Aug-19	Cesium-137	6.09E-05	2.58E-04	2.87E-04	pCi/m3
1S1 Wastewater Pond(501636005) - AP	16-Nov-19	Cesium-137	1.04E-04	6.51E-04	3.76E-04	pCi/m3

## 2F1 Morro Bay - Market Fish

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
2F1 Morro Bay(471594001) - FH Market	20-Feb-19	Cesium-134	-6.77E+00	1.49E+01	1.16E+01	pCi/kg
2F1 Morro Bay(487461001) - FH Market	15-Aug-19	Cesium-134	1.04E+01	2.35E+01	2.27E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Cesium-134	-1.05E+00	4.91E+00	3.12E+00	pCi/kg
2F1 Morro Bay(471594001) - FH Market	20-Feb-19	Cesium-137	5.04E+00	1.65E+01	9.73E+00	pCi/kg
2F1 Morro Bay(487461001) - FH Market	15-Aug-19	Cesium-137	6.98E+00	2.08E+01	1.28E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Cesium-137	3.90E+00	4.13E+00	3.87E+00	pCi/kg
2F1 Morro Bay(471594001) - FH Market	20-Feb-19	Cobalt-58	3.57E+00	1.72E+01	1.08E+01	pCi/kg
2F1 Morro Bay(487461001) - FH Market	15-Aug-19	Cobalt-58	5.99E+00	2.24E+01	1.32E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Cobalt-58	-1.91E+00	4.39E+00	2.98E+00	pCi/kg
2F1 Morro Bay(471594001) - FH Market	20-Feb-19	Cobalt-60	-8.76E+00	1.52E+01	1.10E+01	pCi/kg
2F1 Morro Bay(487461001) - FH Market	15-Aug-19	Cobalt-60	-7.74E+00	1.89E+01	1.23E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Cobalt-60	-1.59E+00	5.22E+00	3.31E+00	pCi/kg
2F1 Morro Bay(471594001) - FH Market	20-Feb-19	Iron-59	1.42E-01	3.11E+01	1.82E+01	pCi/kg
2F1 Morro Bay(487461001) - FH Market	15-Aug-19	Iron-59	-9.66E+00	4.34E+01	2.74E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Iron-59	1.13E+00	1.16E+01	6.68E+00	pCi/kg
2F1 Morro Bay(471594001) - FH Market	20-Feb-19	Manganese-54	-3.46E+00	1.68E+01	1.07E+01	pCi/kg

2F1 Morro Bay(4874610001) - FH Market	15-Aug-19	Manganese-54	-9.99E+00	1.92E+01	1.28E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Manganese-54	4.39E+00	4.39E+00	3.70E+00	pCi/kg
2F1 Morro Bay(4715940001) - FH Market	20-Feb-19	Zinc-65	2.86E+00	3.96E+01	2.29E+01	pCi/kg
2F1 Morro Bay(4874610001) - FH Market	15-Aug-19	Zinc-65	-3.63E+01	4.77E+01	3.55E+01	pCi/kg
2F1 Morro Bay(492892003) - FH Market	16-Oct-19	Zinc-65	-5.98E+00	1.21E+01	7.92E+00	pCi/kg

## 3C1 Household Garden - Vegetation

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
3C1 Household Garden(471556001) - VG Brdleaf	19-Feb-19	Cesium-134	-2.22E+00	5.00E+00	3.42E+00	pCi/kg
3C1 Household Garden(478549001) - VG Brdleaf	9-May-19	Cesium-134	-1.84E-01	6.06E+00	3.76E+00	pCi/kg
3C1 Household Garden(488303001) - VG Brdleaf	22-Aug-19	Cesium-134	-3.46E+00	7.53E+00	4.90E+00	pCi/kg
3C1 Household Garden(493703001) - VG Brdleaf	31-Oct-19	Cesium-134	1.24E+00	1.47E+01	8.49E+00	pCi/kg
3C1 Household Garden(471556001) - VG Brdleaf	19-Feb-19	Cesium-137	2.55E+00	5.13E+00	3.09E+00	pCi/kg
3C1 Household Garden(478549001) - VG Brdleaf	9-May-19	Cesium-137	2.75E-01	5.35E+00	3.61E+00	pCi/kg
3C1 Household Garden(488303001) - VG Brdleaf	22-Aug-19	Cesium-137	3.16E+00	8.27E+00	5.55E+00	pCi/kg
3C1 Household Garden(493703001) - VG Brdleaf	31-Oct-19	Cesium-137	1.33E+01	1.34E+01	9.16E+00	pCi/kg
3C1 Household Garden(471556001) - VG Brdleaf	19-Feb-19	Iodine-131	-3.09E-01	8.71E+00	5.07E+00	pCi/kg
3C1 Household Garden(478549001) - VG Brdleaf	9-May-19	Iodine-131	-4.25E+00	8.84E+00	5.72E+00	pCi/kg
3C1 Household Garden(488303001) - VG Brdleaf	22-Aug-19	Iodine-131	1.52E+00	1.24E+01	7.30E+00	pCi/kg
3C1 Household Garden(493703001) - VG Brdleaf	31-Oct-19	Iodine-131	1.69E+01	2.10E+01	1.67E+01	pCi/kg

## 3C1 Household Garden - Fruit

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
3C1 Household Garden Fruit(471556002) - VG Fruit	19-Feb-19	Cesium-134	-3.00E+00	7.27E+00	5.06E+00	pCi/kg
3C1 Household Garden Fruit(478549002) - VG Fruit	9-May-19	Cesium-134	1.62E+00	4.97E+00	2.87E+00	pCi/kg
3C1 Household Garden Fruit(488303002) - VG Fruit	22-Aug-19	Cesium-134	-1.23E+00	4.07E+00	2.67E+00	pCi/kg
3C1 Household Garden Fruit(493703003) - VG Fruit	31-Oct-19	Cesium-134	-9.42E-01	5.56E+00	3.35E+00	pCi/kg
3C1 Household Garden Fruit(471556002) - VG Fruit	19-Feb-19	Cesium-137	5.05E+00	7.88E+00	4.93E+00	pCi/kg
3C1 Household Garden Fruit(478549002) - VG Fruit	9-May-19	Cesium-137	3.70E-01	4.73E+00	2.71E+00	pCi/kg
3C1 Household Garden Fruit(488303002) - VG Fruit	22-Aug-19	Cesium-137	2.39E-02	4.01E+00	2.43E+00	pCi/kg
3C1 Household Garden Fruit(493703003) - VG Fruit	31-Oct-19	Cesium-137	2.11E+00	4.91E+00	3.25E+00	pCi/kg
3C1 Household Garden Fruit(471556002) - VG Fruit	19-Feb-19	Iodine-131	1.17E+00	1.35E+01	8.78E+00	pCi/kg
3C1 Household Garden Fruit(478549002) - VG Fruit	9-May-19	Iodine-131	9.50E-01	7.52E+00	4.93E+00	pCi/kg
3C1 Household Garden Fruit(488303002) - VG Fruit	22-Aug-19	Iodine-131	4.28E-01	6.03E+00	3.50E+00	pCi/kg
3C1 Household Garden Fruit(493703003) - VG Fruit	31-Oct-19	Iodine-131	1.69E+00	8.82E+00	5.16E+00	pCi/kg

## 5F1 SLO OEL - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
5F1 SLO OEL(468128001) - AC	5-Jan-19	Iodine-131	2.88E-03	1.12E-02	6.40E-03	pCi/m3
5F1 SLO OEL(468880015) - AC	12-Jan-19	Iodine-131	-2.32E-03	8.52E-03	5.42E-03	pCi/m3
5F1 SLO OEL(469519001) - AC	19-Jan-19	Iodine-131	-7.77E-04	5.19E-03	3.16E-03	pCi/m3
5F1 SLO OEL(470002001) - AC	26-Jan-19	Iodine-131	4.79E-04	9.58E-03	5.65E-03	pCi/m3
5F1 SLO OEL(470540001) - AC	2-Feb-19	Iodine-131	-6.72E-04	7.11E-03	4.55E-03	pCi/m3
5F1 SLO OEL(471051015) - AC	9-Feb-19	Iodine-131	1.54E-03	8.84E-03	4.89E-03	pCi/m3
5F1 SLO OEL(471584001) - AC	16-Feb-19	Iodine-131	1.09E-03	5.75E-03	3.44E-03	pCi/m3
5F1 SLO OEL(472133002) - AC	23-Feb-19	Iodine-131	1.74E-03	1.03E-02	5.78E-03	pCi/m3
5F1 SLO OEL(472647015) - AC	1-Mar-19	Iodine-131	-1.65E-03	7.65E-03	4.88E-03	pCi/m3
5F1 SLO OEL(473264001) - AC	9-Mar-19	Iodine-131	-5.17E-03	5.32E-03	5.47E-03	pCi/m3
5F1 SLO OEL(473881001) - AC	16-Mar-19	Iodine-131	-1.51E-03	5.96E-03	4.20E-03	pCi/m3
5F1 SLO OEL(474425001) - AC	23-Mar-19	Iodine-131	-6.21E-04	9.64E-03	5.64E-03	pCi/m3
5F1 SLO OEL(475038015) - AC	29-Mar-19	Iodine-131	-3.17E-04	6.80E-03	4.37E-03	pCi/m3
5F1 SLO OEL(475856001) - AC	6-Apr-19	Iodine-131	1.04E-04	6.30E-03	4.29E-03	pCi/m3
5F1 SLO OEL(476506015) - AC	13-Apr-19	Iodine-131	3.61E-03	8.65E-03	4.64E-03	pCi/m3
5F1 SLO OEL(477146001) - AC	20-Apr-19	Iodine-131	-5.56E-03	7.18E-03	5.97E-03	pCi/m3
5F1 SLO OEL(477720001) - AC	27-Apr-19	Iodine-131	1.59E-03	9.03E-03	5.09E-03	pCi/m3
5F1 SLO OEL(478343001) - AC	4-May-19	Iodine-131	-8.70E-04	7.84E-03	4.76E-03	pCi/m3
5F1 SLO OEL(479033001) - AC	11-May-19	Iodine-131	6.76E-03	8.64E-03	6.65E-03	pCi/m3
5F1 SLO OEL(479683015) - AC	18-May-19	Iodine-131	-4.44E-04	1.32E-02	8.90E-03	pCi/m3
5F1 SLO OEL(480029015) - AC	25-May-19	Iodine-131	4.80E-04	6.66E-03	3.77E-03	pCi/m3
5F1 SLO OEL(480734001) - AC	1-Jun-19	Iodine-131	3.77E-03	1.44E-02	8.10E-03	pCi/m3
5F1 SLO OEL(481436001) - AC	8-Jun-19	Iodine-131	-2.87E-03	6.68E-03	4.63E-03	pCi/m3
5F1 SLO OEL(482140001) - AC	15-Jun-19	Iodine-131	1.53E-03	7.85E-03	4.50E-03	pCi/m3
5F1 SLO OEL(482758003) - AC	22-Jun-19	Iodine-131	4.45E-03	9.36E-03	5.21E-03	pCi/m3
5F1 SLO OEL(483652010) - AC	29-Jun-19	Iodine-131	5.41E-03	1.26E-02	7.22E-03	pCi/m3
5F1 SLO OEL(484196001) - AC	6-Jul-19	Iodine-131	-8.24E-04	6.82E-03	4.41E-03	pCi/m3
5F1 SLO OEL(485085008) - AC	13-Jul-19	Iodine-131	9.84E-04	8.89E-03	4.99E-03	pCi/m3
5F1 SLO OEL(485356001) - AC	20-Jul-19	Iodine-131	1.44E-03	1.11E-02	6.23E-03	pCi/m3
5F1 SLO OEL(485943001) - AC	27-Jul-19	Iodine-131	2.80E-03	1.52E-02	8.49E-03	pCi/m3
5F1 SLO OEL(486790015) - AC	3-Aug-19	Iodine-131	1.33E-03	8.53E-03	4.87E-03	pCi/m3
5F1 SLO OEL(487347001) - AC	10-Aug-19	Iodine-131	-8.33E-03	1.06E-02	8.53E-03	pCi/m3
5F1 SLO OEL(488047017) - AC	17-Aug-19	Iodine-131	-2.12E-03	8.05E-03	5.14E-03	pCi/m3
5F1 SLO OEL(488407001) - AC	24-Aug-19	Iodine-131	2.22E-03	8.97E-03	5.00E-03	pCi/m3
5F1 SLO OEL(489091001) - AC	1-Sep-19	Iodine-131	1.98E-03	1.50E-02	8.51E-03	pCi/m3
5F1 SLO OEL(489316001) - AC	8-Sep-19	Iodine-131	1.76E-03	9.92E-03	5.47E-03	pCi/m3

5F1 SLO OEL(489397001) - AC	14-Sep-19	Iodine-131	1.51E-03	1.60E-02	9.46E-03	pCi/m3
5F1 SLO OEL(490334001) - AC	21-Sep-19	Iodine-131	1.92E-04	6.79E-03	3.94E-03	pCi/m3
5F1 SLO OEL(490940017) - AC	29-Sep-19	Iodine-131	1.32E-03	8.25E-03	4.54E-03	pCi/m3
5F1 SLO OEL(492206015) - AC	5-Oct-19	Iodine-131	-1.58E-03	5.85E-03	4.41E-03	pCi/m3
5F1 SLO OEL(492214001) - AC	12-Oct-19	Iodine-131	-1.43E-03	6.19E-03	4.02E-03	pCi/m3
5F1 SLO OEL(493200001) - AC	19-Oct-19	Iodine-131	2.07E-03	1.11E-02	8.95E-03	pCi/m3
5F1 SLO OEL(493690019) - AC	26-Oct-19	Iodine-131	-2.72E-03	7.52E-03	5.01E-03	pCi/m3
5F1 SLO OEL(494544001) - AC	2-Nov-19	Iodine-131	2.28E-03	1.11E-02	6.11E-03	pCi/m3
5F1 SLO OEL(495196015) - AC	9-Nov-19	Iodine-131	4.47E-03	9.10E-03	5.14E-03	pCi/m3
5F1 SLO OEL(495839001) - AC	16-Nov-19	Iodine-131	7.94E-04	1.08E-02	5.99E-03	pCi/m3
5F1 SLO OEL(496785001) - AC	23-Nov-19	Iodine-131	-1.63E-03	8.29E-03	5.22E-03	pCi/m3
5F1 SLO OEL(497497001) - AC	30-Nov-19	Iodine-131	1.60E-03	7.86E-03	4.39E-03	pCi/m3
5F1 SLO OEL(497962001) - AC	7-Dec-19	Iodine-131	-4.02E-03	8.25E-03	5.84E-03	pCi/m3
5F1 SLO OEL(498469001) - AC	14-Dec-19	Iodine-131	-8.71E-04	1.03E-02	6.29E-03	pCi/m3
5F1 SLO OEL(499079001) - AC	21-Dec-19	Iodine-131	-1.91E-03	1.18E-02	7.37E-03	pCi/m3
5F1 SLO OEL(499686001) - AC	27-Dec-19	Iodine-131	1.66E-03	9.42E-03	6.02E-03	pCi/m3

## 5F1 SLO OEL - Air Carbon-14

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
5F1 SLO OEL(468128003) - AC14	5-Jan-19	Carbon-14	-6.06E-08	2.41E-07	1.42E-07	uCi/m3
5F1 SLO OEL(468880017) - AC14	12-Jan-19	Carbon-14	-3.54E-08	2.75E-07	1.63E-07	uCi/m3
5F1 SLO OEL(469519015) - AC14	19-Jan-19	Carbon-14	-2.79E-08	1.02E-07	6.01E-08	uCi/m3
5F1 SLO OEL(470002003) - AC14	26-Jan-19	Carbon-14	-1.95E-08	1.26E-07	7.48E-08	uCi/m3
5F1 SLO OEL(470540003) - AC14	2-Feb-19	Carbon-14	-4.28E-08	1.15E-07	6.75E-08	uCi/m3
5F1 SLO OEL(471051017) - AC14	9-Feb-19	Carbon-14	-5.86E-08	1.39E-07	8.15E-08	uCi/m3
5F1 SLO OEL(471584003) - AC14	16-Feb-19	Carbon-14	-5.50E-08	1.15E-07	6.75E-08	uCi/m3
5F1 SLO OEL(472133016) - AC14	23-Feb-19	Carbon-14	-1.18E-08	1.44E-07	8.57E-08	uCi/m3
5F1 SLO OEL(472647017) - AC14	1-Mar-19	Carbon-14	-3.35E-08	1.20E-07	7.10E-08	uCi/m3
5F1 SLO OEL(473264003) - AC14	9-Mar-19	Carbon-14	-2.91E-08	1.09E-07	6.44E-08	uCi/m3
5F1 SLO OEL(473881003) - AC14	16-Mar-19	Carbon-14	-1.66E-08	1.10E-07	6.54E-08	uCi/m3
5F1 SLO OEL(474425003) - AC14	23-Mar-19	Carbon-14	8.15E-08	1.29E-07	7.83E-08	uCi/m3
5F1 SLO OEL(475038017) - AC14	29-Mar-19	Carbon-14	-4.91E-08	1.21E-07	7.14E-08	uCi/m3
5F1 SLO OEL(475856003) - AC14	6-Apr-19	Carbon-14	-6.56E-08	1.06E-07	6.21E-08	uCi/m3
5F1 SLO OEL(476506017) - AC14	13-Apr-19	Carbon-14	-1.21E-08	1.18E-07	6.99E-08	uCi/m3
5F1 SLO OEL(477146003) - AC14	20-Apr-19	Carbon-14	1.14E-09	1.39E-07	8.26E-08	uCi/m3
5F1 SLO OEL(477720003) - AC14	27-Apr-19	Carbon-14	-1.00E-08	1.20E-07	7.15E-08	uCi/m3
5F1 SLO OEL(478343003) - AC14	4-May-19	Carbon-14	-2.53E-08	1.23E-07	7.30E-08	uCi/m3
5F1 SLO OEL(479033003) - AC14	11-May-19	Carbon-14	4.54E-08	1.20E-07	7.20E-08	uCi/m3

5F1 SLO OEL(479683017) - AC14	18-May-19	Carbon-14	1.24E-07	1.36E-07	8.34E-08	uCi/m3
5F1 SLO OEL(480029017) - AC14	25-May-19	Carbon-14	-9.89E-08	1.16E-07	6.72E-08	uCi/m3
5F1 SLO OEL(480734003) - AC14	1-Jun-19	Carbon-14	-7.76E-08	1.44E-07	8.45E-08	uCi/m3
5F1 SLO OEL(481436003) - AC14	8-Jun-19	Carbon-14	-1.54E-08	1.19E-07	7.08E-08	uCi/m3
5F1 SLO OEL(482140003) - AC14	15-Jun-19	Carbon-14	4.44E-08	1.38E-07	8.31E-08	uCi/m3
5F1 SLO OEL(482758016) - AC14	22-Jun-19	Carbon-14	-2.08E-08	1.28E-07	7.60E-08	uCi/m3
5F1 SLO OEL(483652016) - AC14	29-Jun-19	Carbon-14	4.00E-08	1.54E-07	9.27E-08	uCi/m3
5F1 SLO OEL(484196003) - AC14	6-Jul-19	Carbon-14	-2.66E-09	1.17E-07	6.97E-08	uCi/m3
5F1 SLO OEL(485085015) - AC14	13-Jul-19	Carbon-14	4.96E-08	1.26E-07	7.58E-08	uCi/m3
5F1 SLO OEL(485356003) - AC14	20-Jul-19	Carbon-14	9.96E-08	1.20E-07	7.34E-08	uCi/m3
5F1 SLO OEL(485943003) - AC14	27-Jul-19	Carbon-14	9.89E-08	1.41E-07	8.60E-08	uCi/m3
5F1 SLO OEL(486790017) - AC14	3-Aug-19	Carbon-14	-6.20E-08	1.10E-07	6.43E-08	uCi/m3
5F1 SLO OEL(487347003) - AC14	10-Aug-19	Carbon-14	-9.43E-08	1.33E-07	7.78E-08	uCi/m3
5F1 SLO OEL(488047002) - AC14	17-Aug-19	Carbon-14	5.94E-08	1.27E-07	7.66E-08	uCi/m3
5F1 SLO OEL(488407003) - AC14	24-Aug-19	Carbon-14	6.82E-08	1.25E-07	7.56E-08	uCi/m3
5F1 SLO OEL(489091003) - AC14	1-Sep-19	Carbon-14	8.71E-08	1.12E-07	6.82E-08	uCi/m3
5F1 SLO OEL(489316003) - AC14	8-Sep-19	Carbon-14	1.09E-07	1.53E-07	9.32E-08	uCi/m3
5F1 SLO OEL(489397003) - AC14	14-Sep-19	Carbon-14	-8.94E-09	1.42E-07	8.43E-08	uCi/m3
5F1 SLO OEL(490334005) - AC14	21-Sep-19	Carbon-14	-7.04E-08	1.00E-07	5.82E-08	uCi/m3
5F1 SLO OEL(490940019) - AC14	29-Sep-19	Carbon-14	-7.40E-08	1.53E-07	9.01E-08	uCi/m3
5F1 SLO OEL(492206017) - AC14	5-Oct-19	Carbon-14	3.87E-08	1.31E-07	7.86E-08	uCi/m3
5F1 SLO OEL(492214016) - AC14	12-Oct-19	Carbon-14	6.88E-09	1.29E-07	7.70E-08	uCi/m3
5F1 SLO OEL(493200003) - AC14	19-Oct-19	Carbon-14	4.51E-08	1.48E-07	8.92E-08	uCi/m3
5F1 SLO OEL(493690021) - AC14	26-Oct-19	Carbon-14	5.31E-08	1.21E-07	7.28E-08	uCi/m3
5F1 SLO OEL(494544003) - AC14	2-Nov-19	Carbon-14	2.61E-08	1.41E-07	8.47E-08	uCi/m3
5F1 SLO OEL(495196019) - AC14	9-Nov-19	Carbon-14	3.79E-08	1.14E-07	6.86E-08	uCi/m3
5F1 SLO OEL(495839003) - AC14	16-Nov-19	Carbon-14	6.29E-08	1.34E-07	8.11E-08	uCi/m3
5F1 SLO OEL(496785003) - AC14	23-Nov-19	Carbon-14	1.06E-07	1.39E-07	8.50E-08	uCi/m3
5F1 SLO OEL(497497003) - AC14	30-Nov-19	Carbon-14	2.41E-08	1.06E-07	6.35E-08	uCi/m3
5F1 SLO OEL(497962005) - AC14	7-Dec-19	Carbon-14	1.11E-07	1.22E-07	7.49E-08	uCi/m3
5F1 SLO OEL(498469003) - AC14	14-Dec-19	Carbon-14	8.51E-08	1.29E-07	7.83E-08	uCi/m3
5F1 SLO OEL(499079003) - AC14	21-Dec-19	Carbon-14	6.17E-08	1.46E-07	8.82E-08	uCi/m3
5F1 SLO OEL(499686003) - AC14	27-Dec-19	Carbon-14	7.86E-08	1.25E-07	7.57E-08	uCi/m3

## 5F1 SLO OEL - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
5F1 SLO OEL(468128002) - AP	5-Jan-19	BETA	2.56E-02	2.36E-03	1.16E-02	pCi/m3
5F1 SLO OEL(468880016) - AP	12-Jan-19	BETA	8.32E-03	2.44E-03	1.43E-02	pCi/m3

5F1 SLO OEL(469519002) - AP	19-Jan-19	BETA	5.58E-03	2.02E-03	1.04E-02	pCi/m3
5F1 SLO OEL(470002002) - AP	26-Jan-19	BETA	4.07E-02	2.33E-03	1.17E-02	pCi/m3
5F1 SLO OEL(470540002) - AP	2-Feb-19	BETA	7.27E-03	2.22E-03	1.12E-02	pCi/m3
5F1 SLO OEL(471051016) - AP	9-Feb-19	BETA	7.67E-03	2.87E-03	1.42E-02	pCi/m3
5F1 SLO OEL(471584002) - AP	16-Feb-19	BETA	9.05E-03	2.05E-03	9.77E-03	pCi/m3
5F1 SLO OEL(472133010) - AP	23-Feb-19	BETA	1.43E-02	2.80E-03	1.21E-02	pCi/m3
5F1 SLO OEL(472133016) - AP	1-Mar-19	BETA	8.26E-03	2.26E-03	1.04E-02	pCi/m3
5F1 SLO OEL(473264002) - AP	9-Mar-19	BETA	7.53E-03	2.02E-03	1.01E-02	pCi/m3
5F1 SLO OEL(473881002) - AP	16-Mar-19	BETA	2.89E-02	2.39E-03	1.14E-02	pCi/m3
5F1 SLO OEL(474425002) - AP	23-Mar-19	BETA	1.50E-02	2.56E-03	1.27E-02	pCi/m3
5F1 SLO OEL(475038016) - AP	29-Mar-19	BETA	1.38E-02	2.27E-03	1.10E-02	pCi/m3
5F1 SLO OEL(475856002) - AP	6-Apr-19	BETA	2.58E-03	2.10E-03	1.04E-02	pCi/m3
5F1 SLO OEL(476506016) - AP	13-Apr-19	BETA	6.77E-03	2.09E-03	1.09E-02	pCi/m3
5F1 SLO OEL(477146002) - AP	20-Apr-19	BETA	9.74E-03	2.31E-03	1.06E-02	pCi/m3
5F1 SLO OEL(477720002) - AP	27-Apr-19	BETA	1.95E-02	2.23E-03	1.08E-02	pCi/m3
5F1 SLO OEL(478343002) - AP	4-May-19	BETA	1.74E-02	2.43E-03	1.03E-02	pCi/m3
5F1 SLO OEL(479033002) - AP	11-May-19	BETA	1.42E-02	2.41E-03	1.03E-02	pCi/m3
5F1 SLO OEL(479683016) - AP	18-May-19	BETA	6.20E-03	2.69E-03	1.20E-02	pCi/m3
5F1 SLO OEL(480029016) - AP	25-May-19	BETA	6.20E-03	1.88E-03	9.13E-03	pCi/m3
5F1 SLO OEL(480734002) - AP	1-Jun-19	BETA	6.15E-03	2.63E-03	1.29E-02	pCi/m3
5F1 SLO OEL(481436002) - AP	8-Jun-19	BETA	1.37E-02	1.94E-03	9.61E-03	pCi/m3
5F1 SLO OEL(482140002) - AP	15-Jun-19	BETA	8.92E-03	2.16E-03	1.08E-02	pCi/m3
5F1 SLO OEL(482758010) - AP	22-Jun-19	BETA	9.45E-03	2.08E-03	1.06E-02	pCi/m3
5F1 SLO OEL(483652003) - AP	29-Jun-19	BETA	1.09E-02	2.51E-03	1.21E-02	pCi/m3
5F1 SLO OEL(484196002) - AP	6-Jul-19	BETA	1.15E-02	1.99E-03	9.86E-03	pCi/m3
5F1 SLO OEL(485085001) - AP	13-Jul-19	BETA	5.84E-03	2.61E-03	1.19E-02	pCi/m3
5F1 SLO OEL(485356002) - AP	20-Jul-19	BETA	1.70E-02	2.18E-03	3.08E-03	pCi/m3
5F1 SLO OEL(485943002) - AP	27-Jul-19	BETA	8.95E-03	2.58E-03	1.36E-02	pCi/m3
5F1 SLO OEL(486790016) - AP	3-Aug-19	BETA	8.01E-03	1.98E-03	1.08E-02	pCi/m3
5F1 SLO OEL(487347002) - AP	10-Aug-19	BETA	1.12E-02	2.28E-03	1.18E-02	pCi/m3
5F1 SLO OEL(488047018) - AP	17-Aug-19	BETA	8.92E-03	2.32E-03	1.18E-02	pCi/m3
5F1 SLO OEL(488407002) - AP	24-Aug-19	BETA	9.56E-03	2.27E-03	1.10E-02	pCi/m3
5F1 SLO OEL(488901002) - AP	1-Sep-19	BETA	1.67E-02	1.99E-03	8.74E-03	pCi/m3
5F1 SLO OEL(489316002) - AP	8-Sep-19	BETA	1.97E-02	2.65E-03	1.27E-02	pCi/m3
5F1 SLO OEL(489397002) - AP	14-Sep-19	BETA	2.40E-02	2.51E-03	1.44E-02	pCi/m3
5F1 SLO OEL(490334002) - AP	21-Sep-19	BETA	1.87E-02	1.64E-03	9.03E-03	pCi/m3
5F1 SLO OEL(490940018) - AP	29-Sep-19	BETA	1.79E-02	2.65E-03	1.39E-02	pCi/m3
5F1 SLO OEL(492206016) - AP	5-Oct-19	BETA	4.00E-02	2.29E-03	1.12E-02	pCi/m3

5F1 SLO OEL(492214002) - AP	12-Oct-19	BETA	2.56E-02	2.24E-03	1.16E-02	pCi/m3
5F1 SLO OEL(493200002) - AP	19-Oct-19	BETA	4.20E-02	2.15E-03	1.20E-02	pCi/m3
5F1 SLO OEL(493690020) - AP	26-Oct-19	BETA	4.07E-02	2.28E-03	1.17E-02	pCi/m3
5F1 SLO OEL(494544002) - AP	2-Nov-19	BETA	6.90E-02	2.59E-03	1.36E-02	pCi/m3
5F1 SLO OEL(495196016) - AP	9-Nov-19	BETA	8.76E-02	1.88E-03	1.16E-02	pCi/m3
5F1 SLO OEL(495839002) - AP	16-Nov-19	BETA	5.95E-02	2.18E-03	1.18E-02	pCi/m3
5F1 SLO OEL(496785002) - AP	23-Nov-19	BETA	3.91E-02	2.40E-03	1.13E-02	pCi/m3
5F1 SLO OEL(497497002) - AP	30-Nov-19	BETA	2.04E-02	2.05E-03	1.07E-02	pCi/m3
5F1 SLO OEL(497962002) - AP	7-Dec-19	BETA	9.91E-03	2.18E-03	1.19E-02	pCi/m3
5F1 SLO OEL(498469002) - AP	14-Dec-19	BETA	1.52E-02	2.31E-03	1.29E-02	pCi/m3
5F1 SLO OEL(499079002) - AP	21-Dec-19	BETA	2.30E-02	2.73E-03	1.48E-02	pCi/m3
5F1 SLO OEL(499686002) - AP	27-Dec-19	BETA	2.36E-02	2.27E-03	1.21E-02	pCi/m3
5F1 SLO OEL(476709001) - AP	9-Feb-19	Cesium-134	-1.71E-05	6.69E-04	4.14E-04	pCi/m3
5F1 SLO OEL(484864003) - AP	11-May-19	Cesium-134	-1.03E-04	4.17E-04	2.84E-04	pCi/m3
5F1 SLO OEL(493791007) - AP	14-Aug-19	Cesium-134	-1.75E-05	3.94E-04	2.47E-04	pCi/m3
5F1 SLO OEL(501636001) - AP	16-Nov-19	Cesium-134	6.96E-05	7.07E-04	4.11E-04	pCi/m3
5F1 SLO OEL(476709001) - AP	9-Feb-19	Cesium-137	-1.46E-05	8.95E-04	5.39E-04	pCi/m3
5F1 SLO OEL(484864003) - AP	11-May-19	Cesium-137	9.12E-05	5.56E-04	3.20E-04	pCi/m3
5F1 SLO OEL(493791007) - AP	14-Aug-19	Cesium-137	-2.26E-05	2.61E-04	1.65E-04	pCi/m3
5F1 SLO OEL(501636001) - AP	16-Nov-19	Cesium-137	-2.37E-05	5.13E-04	3.05E-04	pCi/m3

## 5F2 Cal Poly Farm - Milk

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
5F2 Cal Poly Farm(468586001) - MK	14-Jan-19	Barium-140	-4.01E-01	8.60E+00	5.16E+00	pCi/L
5F2 Cal Poly Farm(470652001) - MK	4-Feb-19	Barium-140	4.96E+00	9.61E+00	5.85E+00	pCi/L
5F2 Cal Poly Farm(472613001) - MK	4-Mar-19	Barium-140	7.54E+00	1.26E+01	1.07E+01	pCi/L
5F2 Cal Poly Farm(476468001) - MK	15-Apr-19	Barium-140	4.63E+00	1.01E+01	6.07E+00	pCi/L
5F2 Cal Poly Farm(478156001) - MK	6-May-19	Barium-140	-2.39E+00	1.13E+01	6.81E+00	pCi/L
5F2 Cal Poly Farm(481367001) - MK	10-Jun-19	Barium-140	-1.96E+00	7.23E+00	4.65E+00	pCi/L
5F2 Cal Poly Farm(484084001) - MK	8-Jul-19	Barium-140	2.72E-01	5.98E+00	5.34E+00	pCi/L
5F2 Cal Poly Farm(486568001) - MK	5-Aug-19	Barium-140	6.98E+00	1.06E+01	9.81E+00	pCi/L
5F2 Cal Poly Farm(489320001) - MK	9-Sep-19	Barium-140	-2.43E+00	1.36E+01	8.40E+00	pCi/L
5F2 Cal Poly Farm(492881001) - MK	14-Oct-19	Barium-140	-2.69E+00	1.17E+01	7.33E+00	pCi/L
5F2 Cal Poly Farm(495061001) - MK	6-Nov-19	Barium-140	-1.59E-01	7.73E+00	4.57E+00	pCi/L
5F2 Cal Poly Farm(497819001) - MK	2-Dec-19	Barium-140	4.46E+00	1.10E+01	6.77E+00	pCi/L
5F2 Cal Poly Farm(468586001) - MK	14-Jan-19	Cesium-134	-5.96E-01	1.70E+00	1.26E+00	pCi/L
5F2 Cal Poly Farm(470652001) - MK	4-Feb-19	Cesium-134	3.51E-01	1.87E+00	1.12E+00	pCi/L
5F2 Cal Poly Farm(472613001) - MK	4-Mar-19	Cesium-134	1.61E+00	2.37E+00	1.49E+00	pCi/L

5F2 Cal Poly Farm(476468001) - MK	15-Apr-19	Cesium-134	5.40E-01	1.96E+00	2.32E+00	pCi/L
5F2 Cal Poly Farm(478156001) - MK	6-May-19	Cesium-134	4.23E-01	1.86E+00	1.11E+00	pCi/L
5F2 Cal Poly Farm(481367001) - MK	10-Jun-19	Cesium-134	-6.67E-02	2.14E+00	1.27E+00	pCi/L
5F2 Cal Poly Farm(484084001) - MK	8-Jul-19	Cesium-134	-1.07E-01	1.69E+00	1.03E+00	pCi/L
5F2 Cal Poly Farm(486568001) - MK	5-Aug-19	Cesium-134	7.52E-01	1.97E+00	1.19E+00	pCi/L
5F2 Cal Poly Farm(489320001) - MK	9-Sep-19	Cesium-134	7.99E-03	1.75E+00	1.01E+00	pCi/L
5F2 Cal Poly Farm(492881001) - MK	14-Oct-19	Cesium-134	4.77E-01	1.98E+00	1.21E+00	pCi/L
5F2 Cal Poly Farm(495061001) - MK	6-Nov-19	Cesium-134	-2.10E-01	1.70E+00	1.05E+00	pCi/L
5F2 Cal Poly Farm(497819001) - MK	2-Dec-19	Cesium-134	4.22E-01	2.19E+00	1.42E+00	pCi/L
5F2 Cal Poly Farm(468586001) - MK	14-Jan-19	Cesium-137	4.80E-01	1.67E+00	1.01E+00	pCi/L
5F2 Cal Poly Farm(470652001) - MK	4-Feb-19	Cesium-137	-7.18E-01	1.61E+00	1.07E+00	pCi/L
5F2 Cal Poly Farm(472613001) - MK	4-Mar-19	Cesium-137	-3.21E-01	2.09E+00	1.71E+00	pCi/L
5F2 Cal Poly Farm(476468001) - MK	15-Apr-19	Cesium-137	1.40E-01	1.81E+00	1.07E+00	pCi/L
5F2 Cal Poly Farm(478156001) - MK	6-May-19	Cesium-137	4.38E-01	1.50E+00	2.11E+00	pCi/L
5F2 Cal Poly Farm(481367001) - MK	10-Jun-19	Cesium-137	6.54E-01	2.12E+00	1.23E+00	pCi/L
5F2 Cal Poly Farm(484084001) - MK	8-Jul-19	Cesium-137	-7.15E-01	2.19E+00	1.80E+00	pCi/L
5F2 Cal Poly Farm(486568001) - MK	5-Aug-19	Cesium-137	5.53E-01	1.71E+00	1.02E+00	pCi/L
5F2 Cal Poly Farm(489320001) - MK	9-Sep-19	Cesium-137	7.77E-01	1.78E+00	1.10E+00	pCi/L
5F2 Cal Poly Farm(492881001) - MK	14-Oct-19	Cesium-137	-2.21E-01	1.88E+00	1.31E+00	pCi/L
5F2 Cal Poly Farm(495061001) - MK	6-Nov-19	Cesium-137	-3.93E-02	1.68E+00	1.01E+00	pCi/L
5F2 Cal Poly Farm(497819001) - MK	2-Dec-19	Cesium-137	3.58E-01	1.92E+00	1.17E+00	pCi/L
5F2 Cal Poly Farm(468586001) - MK	14-Jan-19	Iodine-131	-3.21E-02	5.59E-01	3.34E-01	pCi/L
5F2 Cal Poly Farm(470652001) - MK	4-Feb-19	Iodine-131	3.06E-01	7.15E-01	4.21E-01	pCi/L
5F2 Cal Poly Farm(472613001) - MK	4-Mar-19	Iodine-131	1.45E-01	6.92E-01	4.23E-01	pCi/L
5F2 Cal Poly Farm(476468001) - MK	15-Apr-19	Iodine-131	-5.82E-02	7.15E-01	4.39E-01	pCi/L
5F2 Cal Poly Farm(478156001) - MK	6-May-19	Iodine-131	-1.48E-01	7.75E-01	4.83E-01	pCi/L
5F2 Cal Poly Farm(481367001) - MK	10-Jun-19	Iodine-131	-4.14E-02	5.36E-01	3.18E-01	pCi/L
5F2 Cal Poly Farm(484084001) - MK	8-Jul-19	Iodine-131	2.63E-02	4.49E-01	2.64E-01	pCi/L
5F2 Cal Poly Farm(486568001) - MK	5-Aug-19	Iodine-131	3.91E-01	6.58E-01	4.06E-01	pCi/L
5F2 Cal Poly Farm(489320001) - MK	9-Sep-19	Iodine-131	3.59E-02	8.99E-01	5.27E-01	pCi/L
5F2 Cal Poly Farm(492881001) - MK	14-Oct-19	Iodine-131	1.09E-01	8.23E-01	4.75E-01	pCi/L
5F2 Cal Poly Farm(495061001) - MK	6-Nov-19	Iodine-131	-3.54E-01	8.56E-01	5.32E-01	pCi/L
5F2 Cal Poly Farm(497819001) - MK	2-Dec-19	Iodine-131	-2.80E-01	5.83E-01	3.71E-01	pCi/L
5F2 Cal Poly Farm(468586001) - MK	14-Jan-19	Lanthanum-140	-4.01E-01	2.76E+00	1.71E+00	pCi/L
5F2 Cal Poly Farm(470652001) - MK	4-Feb-19	Lanthanum-140	-2.44E+00	2.97E+00	4.24E+00	pCi/L
5F2 Cal Poly Farm(472613001) - MK	4-Mar-19	Lanthanum-140	7.04E-01	3.70E+00	2.12E+00	pCi/L
5F2 Cal Poly Farm(476468001) - MK	15-Apr-19	Lanthanum-140	-5.54E-01	2.77E+00	1.73E+00	pCi/L
5F2 Cal Poly Farm(478156001) - MK	6-May-19	Lanthanum-140	6.47E-01	3.92E+00	2.29E+00	pCi/L

5F2 Cal Poly Farm(481367001) - MK	10-Jun-19	Lanthanum-140	3.47E-02	2.46E+00	1.47E+00	pCi/L
5F2 Cal Poly Farm(484084001) - MK	8-Jul-19	Lanthanum-140	-6.90E-02	2.04E+00	1.22E+00	pCi/L
5F2 Cal Poly Farm(486568001) - MK	5-Aug-19	Lanthanum-140	-7.27E-01	3.60E+00	2.35E+00	pCi/L
5F2 Cal Poly Farm(489320001) - MK	9-Sep-19	Lanthanum-140	-1.81E+00	3.39E+00	2.43E+00	pCi/L
5F2 Cal Poly Farm(492881001) - MK	14-Oct-19	Lanthanum-140	-9.39E-01	3.60E+00	4.63E+00	pCi/L
5F2 Cal Poly Farm(495061001) - MK	6-Nov-19	Lanthanum-140	-2.80E-01	2.49E+00	1.52E+00	pCi/L
5F2 Cal Poly Farm(497819001) - MK	2-Dec-19	Lanthanum-140	2.03E+00	3.61E+00	2.17E+00	pCi/L
5F2 Cal Poly Farm(468586001) - MK	14-Jan-19	Total Strontium	-5.32E-01	1.07E+00	5.93E-01	pCi/L
5F2 Cal Poly Farm(470652001) - MK	4-Feb-19	Total Strontium	7.19E-01	1.31E+00	8.46E-01	pCi/L
5F2 Cal Poly Farm(472613001) - MK	4-Mar-19	Total Strontium	-1.32E-01	1.40E+00	8.24E-01	pCi/L
5F2 Cal Poly Farm(476468001) - MK	15-Apr-19	Total Strontium	-6.85E-01	1.04E+00	5.56E-01	pCi/L
5F2 Cal Poly Farm(478156001) - MK	6-May-19	Total Strontium	6.69E-02	5.24E-01	3.21E-01	pCi/L
5F2 Cal Poly Farm(481367001) - MK	10-Jun-19	Total Strontium	4.39E-01	1.06E+00	6.80E-01	pCi/L
5F2 Cal Poly Farm(484084001) - MK	8-Jul-19	Total Strontium	-7.63E-02	5.30E-01	3.07E-01	pCi/L
5F2 Cal Poly Farm(486568001) - MK	5-Aug-19	Total Strontium	3.35E-01	1.19E+00	7.36E-01	pCi/L
5F2 Cal Poly Farm(489320001) - MK	9-Sep-19	Total Strontium	-6.95E-01	8.73E-01	4.42E-01	pCi/L
5F2 Cal Poly Farm(492881001) - MK	14-Oct-19	Total Strontium	9.13E-01	1.35E+00	9.13E-01	pCi/L
5F2 Cal Poly Farm(495061001) - MK	6-Nov-19	Total Strontium	6.90E-01	8.08E-01	5.63E-01	pCi/L
5F2 Cal Poly Farm(497819001) - MK	2-Dec-19	Total Strontium	-2.12E-01	1.38E+00	8.07E-01	pCi/L

### 5F2 Cal Poly Farm - Vegetation

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
5F2 Cal Poly Farm(468586002) - VG Brdleaf	14-Jan-19	Cesium-134	3.73E+00	1.65E+01	9.76E+00	pCi/kg
5F2 Cal Poly Farm(470652002) - VG Brdleaf	4-Feb-19	Cesium-134	-1.87E+00	1.10E+01	9.43E+00	pCi/kg
5F2 Cal Poly Farm(472613002) - VG Brdleaf	4-Mar-19	Cesium-134	-6.41E-01	1.47E+01	8.59E+00	pCi/kg
5F2 Cal Poly Farm(476468002) - VG Brdleaf	15-Apr-19	Cesium-134	1.75E+00	1.79E+01	1.04E+01	pCi/kg
5F2 Cal Poly Farm(478156002) - VG Brdleaf	6-May-19	Cesium-134	-4.93E-01	1.41E+01	8.58E+00	pCi/kg
5F2 Cal Poly Farm(481367002) - VG Brdleaf	10-Jun-19	Cesium-134	7.39E+00	2.24E+01	2.36E+01	pCi/kg
5F2 Cal Poly Farm(484084002) - VG Brdleaf	8-Jul-19	Cesium-134	-2.88E+00	1.18E+01	7.59E+00	pCi/kg
5F2 Cal Poly Farm(486568002) - VG Brdleaf	5-Aug-19	Cesium-134	1.81E+00	1.54E+01	8.86E+00	pCi/kg
5F2 Cal Poly Farm(489318001) - VG Brdleaf	9-Sep-19	Cesium-134	1.70E-02	1.16E+01	6.71E+00	pCi/kg
5F2 Cal Poly Farm(492787001) - VG Brdleaf	14-Oct-19	Cesium-134	3.01E+00	1.37E+01	7.86E+00	pCi/kg
5F2 Cal Poly Farm(494746001) - VG Brdleaf	6-Nov-19	Cesium-134	3.58E+00	9.45E+00	5.43E+00	pCi/kg
5F2 Cal Poly Farm(497499001) - VG Brdleaf	2-Dec-19	Cesium-134	8.59E+00	1.62E+01	9.68E+00	pCi/kg
5F2 Cal Poly Farm(468586002) - VG Brdleaf	14-Jan-19	Cesium-137	-1.67E+00	1.45E+01	9.15E+00	pCi/kg
5F2 Cal Poly Farm(470652002) - VG Brdleaf	4-Feb-19	Cesium-137	2.77E+00	1.08E+01	6.51E+00	pCi/kg
5F2 Cal Poly Farm(472613002) - VG Brdleaf	4-Mar-19	Cesium-137	-2.77E+00	1.42E+01	9.66E+00	pCi/kg
5F2 Cal Poly Farm(476468002) - VG Brdleaf	15-Apr-19	Cesium-137	1.43E+00	1.74E+01	9.97E+00	pCi/kg

5F2 Cal Poly Farm(478156002) - VG Brdleaf	6-May-19	Cesium-137	6.92E-01	1.41E+01	8.36E+00	pCi/kg
5F2 Cal Poly Farm(481367002) - VG Brdleaf	10-Jun-19	Cesium-137	5.57E+00	2.55E+01	2.27E+01	pCi/kg
5F2 Cal Poly Farm(484084002) - VG Brdleaf	8-Jul-19	Cesium-137	-3.42E+00	8.99E+00	5.97E+00	pCi/kg
5F2 Cal Poly Farm(486568002) - VG Brdleaf	5-Aug-19	Cesium-137	4.81E+00	1.43E+01	8.74E+00	pCi/kg
5F2 Cal Poly Farm(489318001) - VG Brdleaf	9-Sep-19	Cesium-137	-3.56E+00	1.05E+01	9.69E+00	pCi/kg
5F2 Cal Poly Farm(492787001) - VG Brdleaf	14-Oct-19	Cesium-137	4.84E+00	1.34E+01	8.22E+00	pCi/kg
5F2 Cal Poly Farm(494746001) - VG Brdleaf	6-Nov-19	Cesium-137	1.20E+00	8.73E+00	6.24E+00	pCi/kg
5F2 Cal Poly Farm(497499001) - VG Brdleaf	2-Dec-19	Cesium-137	2.90E+00	1.41E+01	8.18E+00	pCi/kg
5F2 Cal Poly Farm(468586002) - VG Brdleaf	14-Jan-19	Iodine-131	-2.76E+00	1.96E+01	1.19E+01	pCi/kg
5F2 Cal Poly Farm(470652002) - VG Brdleaf	4-Feb-19	Iodine-131	-3.53E+00	1.39E+01	8.64E+00	pCi/kg
5F2 Cal Poly Farm(472613002) - VG Brdleaf	4-Mar-19	Iodine-131	7.27E+00	1.73E+01	1.05E+01	pCi/kg
5F2 Cal Poly Farm(476468002) - VG Brdleaf	15-Apr-19	Iodine-131	-5.42E+00	1.85E+01	1.16E+01	pCi/kg
5F2 Cal Poly Farm(478156002) - VG Brdleaf	6-May-19	Iodine-131	-3.83E-01	1.59E+01	9.20E+00	pCi/kg
5F2 Cal Poly Farm(481367002) - VG Brdleaf	10-Jun-19	Iodine-131	1.44E+01	3.36E+01	2.00E+01	pCi/kg
5F2 Cal Poly Farm(484084002) - VG Brdleaf	8-Jul-19	Iodine-131	-1.05E+00	1.33E+01	7.80E+00	pCi/kg
5F2 Cal Poly Farm(486568002) - VG Brdleaf	5-Aug-19	Iodine-131	-3.25E+00	2.32E+01	1.40E+01	pCi/kg
5F2 Cal Poly Farm(489318001) - VG Brdleaf	9-Sep-19	Iodine-131	-5.25E-01	1.77E+01	1.05E+01	pCi/kg
5F2 Cal Poly Farm(492787001) - VG Brdleaf	14-Oct-19	Iodine-131	-9.97E-01	1.55E+01	9.26E+00	pCi/kg
5F2 Cal Poly Farm(494746001) - VG Brdleaf	6-Nov-19	Iodine-131	-3.04E+00	1.18E+01	7.31E+00	pCi/kg
5F2 Cal Poly Farm(497499001) - VG Brdleaf	2-Dec-19	Iodine-131	-1.42E+00	1.38E+01	8.84E+00	pCi/kg

#### 5S2 Diablo Creek Weir - Drinking Water

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	BETA	1.38E+00	2.94E+00	1.81E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	BETA	3.10E+00	2.96E+00	1.92E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	BETA	2.45E+00	2.49E+00	1.62E+00	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	BETA	6.51E-01	1.34E+00	8.45E-01	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	BETA	4.32E+00	1.91E+00	1.50E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	BETA	4.35E+00	2.90E+00	1.99E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	BETA	2.92E+00	1.66E+00	1.24E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	BETA	6.97E+00	2.29E+00	1.98E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	BETA	3.80E+00	2.71E+00	1.84E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	BETA	3.34E+00	2.45E+00	1.67E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	BETA	1.64E+00	2.58E+00	1.61E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	BETA	2.80E+00	2.61E+00	1.70E+00	pCi/L
5S2 Diablo Creek Weir(498905001) - DW	15-Jan-19	Barium-140	9.06E-01	8.18E+00	4.91E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Barium-140	6.89E+00	6.89E+00	6.93E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Barium-140	2.80E+00	8.91E+00	5.39E+00	pCi/L

5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Barium-140	-2.40E+00	7.10E+00	4.45E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Barium-140	1.31E+00	9.88E+00	5.89E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Barium-140	-4.61E-01	6.90E+00	7.07E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Barium-140	-1.24E+00	1.23E+01	7.41E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Barium-140	5.42E+00	1.08E+01	9.70E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Barium-140	-1.03E+01	1.15E+01	1.31E+01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Barium-140	9.09E+00	1.05E+01	9.21E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Barium-140	-2.02E+00	7.09E+00	4.45E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Barium-140	3.58E+00	8.52E+00	5.18E+00	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Cesium-134	2.63E-02	1.49E+00	8.61E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Cesium-134	-5.22E-01	1.21E+00	8.10E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Cesium-134	-1.73E-01	1.52E+00	8.96E-01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Cesium-134	-2.85E-01	1.41E+00	8.85E-01	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Cesium-134	3.09E-01	1.33E+00	8.43E-01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Cesium-134	-6.58E-02	2.09E+00	1.22E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Cesium-134	-7.76E-01	1.71E+00	1.17E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Cesium-134	1.63E-01	1.52E+00	1.02E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Cesium-134	5.32E-01	1.65E+00	9.89E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Cesium-134	-7.29E-01	1.62E+00	1.05E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Cesium-134	-7.89E-02	1.68E+00	1.03E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Cesium-134	1.70E-01	1.67E+00	1.02E+00	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Cesium-137	8.51E-01	1.56E+00	9.83E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Cesium-137	-5.20E-02	1.29E+00	7.68E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Cesium-137	1.12E-01	1.48E+00	9.07E-01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Cesium-137	-8.74E-01	1.82E+00	1.80E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Cesium-137	-2.19E-01	1.59E+00	9.94E-01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Cesium-137	4.51E-01	1.86E+00	1.13E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Cesium-137	8.82E-01	1.75E+00	1.06E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Cesium-137	5.88E-01	1.40E+00	1.61E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Cesium-137	-1.63E+00	1.49E+00	1.69E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Cesium-137	-8.49E-01	1.62E+00	1.14E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Cesium-137	2.58E-01	1.60E+00	9.56E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Cesium-137	-1.22E-01	1.50E+00	9.30E-01	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	15-Jan-19	Cobalt-58	-2.83E-01	1.33E+00	9.09E-01	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	5-Feb-19	Cobalt-58	-5.14E-01	1.38E+00	1.38E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	11-Mar-19	Cobalt-58	-1.33E-01	1.35E+00	7.98E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	9-Apr-19	Cobalt-58	-9.99E-02	1.26E+00	7.72E-01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	8-May-19	Cobalt-58	1.87E-01	1.49E+00	8.54E-01	pCi/L

5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Cobalt-58	3.56E-01	1.92E+00	1.24E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Cobalt-58	-5.10E-01	1.83E+00	1.18E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Cobalt-58	-6.01E-01	1.38E+00	9.82E-01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Cobalt-58	1.73E-02	1.59E+00	9.69E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Cobalt-58	-3.98E-01	1.57E+00	9.57E-01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Cobalt-58	3.96E-01	1.62E+00	9.79E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Cobalt-58	-6.70E-02	1.52E+00	9.48E-01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Cobalt-60	-2.25E-01	1.31E+00	9.45E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Cobalt-60	7.37E-01	1.41E+00	8.18E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Cobalt-60	3.70E-01	1.53E+00	9.08E-01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Cobalt-60	-2.62E-01	1.29E+00	9.06E-01	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Cobalt-60	-9.43E-02	1.55E+00	9.45E-01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Cobalt-60	-3.40E-01	1.96E+00	1.24E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Cobalt-60	-3.95E-01	1.93E+00	1.19E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Cobalt-60	-5.43E-01	1.38E+00	9.01E-01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Cobalt-60	2.99E-01	1.70E+00	9.80E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Cobalt-60	-1.27E+00	1.62E+00	1.76E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Cobalt-60	3.70E-01	1.71E+00	9.96E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Cobalt-60	-1.63E-02	1.51E+00	8.92E-01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Iodine-131	3.78E-02	6.67E-01	6.24E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Iodine-131	1.60E-01	5.91E-01	3.52E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Iodine-131	1.94E-02	6.34E-01	3.76E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	9-Apr-19	Iodine-131	-9.05E-02	5.21E-01	3.45E-01	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Iodine-131	2.02E-01	7.37E-01	4.33E-01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Iodine-131	1.26E-03	4.79E-01	2.77E-01	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Iodine-131	-2.38E-01	4.63E-01	3.06E-01	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Iodine-131	2.70E-01	8.15E-01	4.84E-01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Iodine-131	8.54E-01	9.01E-01	8.08E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Iodine-131	-2.85E-02	7.55E-01	4.52E-01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Iodine-131	-1.72E-01	9.02E-01	5.38E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Iodine-131	9.12E-02	7.48E-01	4.40E-01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Iron-55	1.36E+01	6.53E+01	5.02E+01	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	5-Feb-19	Iron-55	-3.09E+01	7.19E+01	5.01E+01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	11-Mar-19	Iron-55	-1.41E+01	7.62E+01	5.57E+01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	9-Apr-19	Iron-55	1.77E+01	5.94E+01	4.37E+01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	8-May-19	Iron-55	-3.85E+01	6.62E+01	4.15E+01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Iron-55	-3.03E+01	7.05E+01	4.90E+01	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Iron-55	3.82E+01	6.49E+01	5.02E+01	pCi/L

5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Iron-55	-1.81E+01	7.32E+01	5.38E+01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Iron-55	-2.13E+01	5.70E+01	4.24E+01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Iron-55	3.98E+01	6.62E+01	5.04E+01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Iron-55	-1.18E+01	1.26E+02	8.91E+01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Iron-55	1.87E+01	6.24E+01	4.46E+01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Iron-59	-2.10E-01	3.30E+00	4.74E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Iron-59	5.89E-01	2.88E+00	1.94E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Iron-59	-7.03E-01	2.73E+00	1.72E+00	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Iron-59	1.01E+00	2.99E+00	1.70E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Iron-59	-6.56E-02	3.53E+00	2.10E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Iron-59	3.86E+00	4.36E+00	4.41E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Iron-59	1.37E+00	4.29E+00	2.45E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Iron-59	6.95E-01	3.61E+00	2.06E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Iron-59	-1.09E-01	3.25E+00	1.89E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Iron-59	6.82E-01	3.54E+00	2.05E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Iron-59	-1.83E+00	2.83E+00	2.01E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Iron-59	1.55E-01	2.96E+00	1.72E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	15-Jan-19	Lanthanum-140	6.10E-02	2.73E+00	1.58E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Lanthanum-140	1.09E-01	2.21E+00	1.29E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Lanthanum-140	-1.18E+00	2.77E+00	1.80E+00	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Lanthanum-140	-1.61E+00	2.50E+00	1.83E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Lanthanum-140	-5.20E-01	3.18E+00	3.31E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Lanthanum-140	-9.46E-01	2.01E+00	1.37E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Lanthanum-140	-2.24E+00	4.22E+00	2.98E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Lanthanum-140	-2.98E-01	3.48E+00	2.11E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Lanthanum-140	-1.15E+00	4.04E+00	2.60E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Lanthanum-140	-5.63E-01	3.20E+00	2.01E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Lanthanum-140	-1.47E+00	2.32E+00	1.72E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Lanthanum-140	-7.61E-01	2.33E+00	1.53E+00	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Manganese-54	1.39E-01	1.34E+00	7.72E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Manganese-54	3.10E-01	1.31E+00	7.78E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Manganese-54	7.32E-01	1.43E+00	8.53E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	9-Apr-19	Manganese-54	8.21E-02	1.25E+00	7.52E-01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	8-May-19	Manganese-54	3.96E-02	1.43E+00	8.29E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	11-Jun-19	Manganese-54	-1.16E-01	1.82E+00	1.16E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	23-Jul-19	Manganese-54	5.79E-01	1.82E+00	1.09E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Manganese-54	-1.82E-01	1.44E+00	8.97E-01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Manganese-54	-3.34E-01	1.43E+00	9.18E-01	pCi/L

5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Manganese-54	-1.16E-01	1.65E+00	9.69E-01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Manganese-54	-4.03E-03	1.45E+00	8.90E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Manganese-54	4.52E-01	1.41E+00	9.49E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	15-Jan-19	Nickel-63	1.63E+01	3.51E+01	2.18E+01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	5-Feb-19	Nickel-63	-1.45E+01	4.24E+01	2.46E+01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	11-Mar-19	Nickel-63	-2.38E+00	3.56E+01	2.11E+01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	9-Apr-19	Nickel-63	-5.01E+00	3.50E+01	2.06E+01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	8-May-19	Nickel-63	-3.86E+00	3.16E+01	1.86E+01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Nickel-63	6.89E-01	2.85E+01	1.70E+01	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Nickel-63	-5.79E+00	2.80E+01	1.64E+01	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Nickel-63	6.07E+00	3.60E+01	2.18E+01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Nickel-63	5.06E+00	3.39E+01	2.04E+01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Nickel-63	-8.70E-01	2.94E+01	1.75E+01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Nickel-63	1.44E+01	2.61E+01	1.64E+01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Nickel-63	1.46E+01	2.92E+01	1.82E+01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Niobium-95	8.08E-01	1.57E+00	9.40E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Niobium-95	-6.04E-01	1.15E+00	7.95E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Niobium-95	1.70E-01	1.50E+00	8.62E-01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Niobium-95	4.42E-01	1.54E+00	1.16E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Niobium-95	2.50E-01	1.59E+00	9.04E-01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Niobium-95	3.42E-01	1.98E+00	1.14E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Niobium-95	-2.20E-01	1.96E+00	1.21E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Niobium-95	-1.29E+00	1.73E+00	2.05E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Niobium-95	6.77E-02	1.67E+00	1.01E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Niobium-95	3.84E-01	1.85E+00	1.06E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Niobium-95	4.06E-01	1.59E+00	9.56E-01	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Niobium-95	9.35E-01	1.69E+00	1.06E+00	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Total Strontium	4.40E-02	8.25E-01	4.97E-01	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Total Strontium	-1.14E-02	1.21E+00	7.22E-01	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Total Strontium	-4.97E-01	6.63E-01	3.46E-01	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Total Strontium	-1.92E-01	1.03E+00	5.95E-01	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Total Strontium	2.35E-01	8.89E-01	5.59E-01	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Total Strontium	-4.98E-01	1.09E+00	6.00E-01	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Total Strontium	-2.44E-02	9.03E-01	5.36E-01	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Total Strontium	8.12E-03	9.08E-01	5.42E-01	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Total Strontium	-1.84E-01	6.09E-01	3.46E-01	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Total Strontium	3.91E-01	6.61E-01	4.36E-01	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Total Strontium	-6.97E-02	1.25E+00	7.40E-01	pCi/L

5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Total Strontium	7.02E-01	8.81E-01	6.05E-01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Tritium	4.31E-02	2.61E+02	1.55E+02	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Tritium	7.27E+01	3.05E+02	1.85E+02	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Tritium	-1.35E+02	3.10E+02	1.79E+02	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Tritium	-1.03E+02	2.82E+02	1.62E+02	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Tritium	1.35E+01	1.74E+02	1.05E+02	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Tritium	6.66E+01	2.84E+02	1.73E+02	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Tritium	-1.76E+01	2.64E+02	1.56E+02	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Tritium	-2.45E+01	2.93E+02	1.73E+02	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Tritium	1.84E+02	2.62E+02	1.71E+02	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Tritium	3.32E+01	2.29E+02	1.38E+02	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Tritium	4.45E+01	2.09E+02	1.27E+02	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Tritium	-1.08E+01	1.60E+02	9.43E+01	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Zinc-65	4.33E-01	2.81E+00	1.87E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Zinc-65	2.89E-01	2.66E+00	1.81E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Zinc-65	-3.85E-01	3.16E+00	2.20E+00	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Zinc-65	1.11E+00	2.94E+00	1.68E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Zinc-65	-3.49E-01	2.78E+00	1.94E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Zinc-65	1.81E+00	3.59E+00	2.32E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Zinc-65	-7.07E-02	3.30E+00	2.18E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Zinc-65	-6.95E-01	2.81E+00	1.86E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Zinc-65	-5.16E-01	2.71E+00	1.87E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Zinc-65	9.46E-01	3.68E+00	2.13E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Zinc-65	8.21E-01	3.18E+00	2.04E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Zinc-65	4.56E-01	3.13E+00	1.80E+00	pCi/L
5S2 Diablo Creek Weir(468905001) - DW	15-Jan-19	Zirconium-95	1.44E+00	2.84E+00	1.69E+00	pCi/L
5S2 Diablo Creek Weir(470417001) - DW	5-Feb-19	Zirconium-95	-3.26E-01	2.22E+00	1.37E+00	pCi/L
5S2 Diablo Creek Weir(473236001) - DW	11-Mar-19	Zirconium-95	-1.65E-01	2.67E+00	1.56E+00	pCi/L
5S2 Diablo Creek Weir(475755002) - DW	9-Apr-19	Zirconium-95	-8.64E-01	2.34E+00	1.53E+00	pCi/L
5S2 Diablo Creek Weir(478347002) - DW	8-May-19	Zirconium-95	2.65E-01	2.84E+00	1.63E+00	pCi/L
5S2 Diablo Creek Weir(481376001) - DW	11-Jun-19	Zirconium-95	1.87E+00	3.48E+00	2.07E+00	pCi/L
5S2 Diablo Creek Weir(485302003) - DW	23-Jul-19	Zirconium-95	1.82E+00	3.68E+00	3.06E+00	pCi/L
5S2 Diablo Creek Weir(487332001) - DW	13-Aug-19	Zirconium-95	6.73E-01	2.78E+00	1.65E+00	pCi/L
5S2 Diablo Creek Weir(489317002) - DW	10-Sep-19	Zirconium-95	-7.13E-01	2.86E+00	1.82E+00	pCi/L
5S2 Diablo Creek Weir(492382001) - DW	15-Oct-19	Zirconium-95	5.98E-01	3.17E+00	1.81E+00	pCi/L
5S2 Diablo Creek Weir(494565001) - DW	5-Nov-19	Zirconium-95	-7.43E-01	2.57E+00	1.67E+00	pCi/L
5S2 Diablo Creek Weir(497498001) - DW	3-Dec-19	Zirconium-95	-5.62E-01	2.88E+00	1.84E+00	pCi/L

## 6C1 Household Garden - Vegetation

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
6C1 Household Garden(471018001) - VG Brdleaf	11-Feb-19	Cesium-134	9.37E+00	1.21E+01	8.28E+00	pCi/kg
6C1 Household Garden(475088001) - VG Brdleaf	3-Apr-19	Cesium-134	2.79E+00	8.88E+00	5.34E+00	pCi/kg
6C1 Household Garden(485399002) - VG Brdleaf	24-Jul-19	Cesium-134	5.44E+00	1.75E+01	1.04E+01	pCi/kg
6C1 Household Garden(4927787004) - VG Brdleaf	15-Oct-19	Cesium-134	-1.77E+00	1.21E+01	7.55E+00	pCi/kg
6C1 Household Garden(471018001) - VG Brdleaf	11-Feb-19	Cesium-137	5.07E+00	1.07E+01	6.62E+00	pCi/kg
6C1 Household Garden(475088001) - VG Brdleaf	3-Apr-19	Cesium-137	2.50E+00	9.04E+00	5.40E+00	pCi/kg
6C1 Household Garden(485399002) - VG Brdleaf	24-Jul-19	Cesium-137	4.52E+00	1.49E+01	1.82E+01	pCi/kg
6C1 Household Garden(4927787004) - VG Brdleaf	15-Oct-19	Cesium-137	-5.16E+00	1.04E+01	7.10E+00	pCi/kg
6C1 Household Garden(471018001) - VG Brdleaf	11-Feb-19	Iodine-131	-1.46E+00	1.37E+01	8.25E+00	pCi/kg
6C1 Household Garden(475088001) - VG Brdleaf	3-Apr-19	Iodine-131	8.73E+00	1.34E+01	8.30E+00	pCi/kg
6C1 Household Garden(485399002) - VG Brdleaf	24-Jul-19	Iodine-131	2.90E+00	2.84E+01	1.77E+01	pCi/kg
6C1 Household Garden(4927787004) - VG Brdleaf	15-Oct-19	Iodine-131	9.15E+00	1.80E+01	1.26E+01	pCi/kg

## 7C1 Pecho Creek Ruins - Vegetation

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C1 Pecho Creek Ruins(468586004) - VG Brdleaf	14-Jan-19	Cesium-134	-1.31E+00	1.71E+01	1.06E+01	pCi/kg
7C1 Pecho Creek Ruins(470652003) - VG Brdleaf	4-Feb-19	Cesium-134	-3.39E-01	1.43E+01	1.30E+01	pCi/kg
7C1 Pecho Creek Ruins(472613004) - VG Brdleaf	4-Mar-19	Cesium-134	-1.97E+01	1.74E+01	2.07E+01	pCi/kg
7C1 Pecho Creek Ruins(476468004) - VG Brdleaf	15-Apr-19	Cesium-134	-1.71E+00	2.48E+01	1.46E+01	pCi/kg
7C1 Pecho Creek Ruins(478156004) - VG Brdleaf	6-May-19	Cesium-134	9.49E+00	1.53E+01	1.03E+01	pCi/kg
7C1 Pecho Creek Ruins(481367004) - VG Brdleaf	10-Jun-19	Cesium-134	-4.42E+00	1.93E+01	1.18E+01	pCi/kg
7C1 Pecho Creek Ruins(484084003) - VG Brdleaf	8-Jul-19	Cesium-134	2.30E+00	1.04E+01	5.96E+00	pCi/kg
7C1 Pecho Creek Ruins(486568004) - VG Brdleaf	5-Aug-19	Cesium-134	-6.74E+00	1.75E+01	1.46E+01	pCi/kg
7C1 Pecho Creek Ruins(489318003) - VG Brdleaf	9-Sep-19	Cesium-134	-4.97E-01	1.43E+01	8.42E+00	pCi/kg
7C1 Pecho Creek Ruins(4927787003) - VG Brdleaf	14-Oct-19	Cesium-134	-1.67E+00	1.07E+01	7.93E+00	pCi/kg
7C1 Pecho Creek Ruins(494746003) - VG Brdleaf	6-Nov-19	Cesium-134	-6.41E+00	1.83E+01	1.16E+01	pCi/kg
7C1 Pecho Creek Ruins(497499003) - VG Brdleaf	2-Dec-19	Cesium-134	-1.08E+00	7.79E+00	4.79E+00	pCi/kg
7C1 Pecho Creek Ruins(498156004) - VG Brdleaf	14-Jan-19	Cesium-137	7.18E-01	1.64E+01	9.80E+00	pCi/kg
7C1 Pecho Creek Ruins(470652003) - VG Brdleaf	4-Feb-19	Cesium-137	6.47E+00	1.31E+01	7.83E+00	pCi/kg
7C1 Pecho Creek Ruins(472613004) - VG Brdleaf	4-Mar-19	Cesium-137	1.72E+00	1.81E+01	1.10E+01	pCi/kg
7C1 Pecho Creek Ruins(476468004) - VG Brdleaf	15-Apr-19	Cesium-137	-1.81E+00	2.21E+01	1.38E+01	pCi/kg
7C1 Pecho Creek Ruins(478156004) - VG Brdleaf	6-May-19	Cesium-137	6.40E+00	1.43E+01	8.71E+00	pCi/kg
7C1 Pecho Creek Ruins(481367004) - VG Brdleaf	10-Jun-19	Cesium-137	2.26E+00	1.95E+01	1.18E+01	pCi/kg
7C1 Pecho Creek Ruins(484084003) - VG Brdleaf	8-Jul-19	Cesium-137	3.90E+00	1.01E+01	5.82E+00	pCi/kg
7C1 Pecho Creek Ruins(486568004) - VG Brdleaf	5-Aug-19	Cesium-137	1.02E+01	1.68E+01	1.92E+01	pCi/kg
7C1 Pecho Creek Ruins(489318003) - VG Brdleaf	9-Sep-19	Cesium-137	3.10E-01	1.55E+01	8.93E+00	pCi/kg

7C1 Pecho Creek Ruins(4927787003) - VG Brdleaf	14-Oct-19	Cesium-137	3.90E+00	1.09E+01	7.33E+00	pCi/kg
7C1 Pecho Creek Ruins(494746003) - VG Brdleaf	6-Nov-19	Cesium-137	-5.00E-01	1.94E+01	1.20E+01	pCi/kg
7C1 Pecho Creek Ruins(497499003) - VG Brdleaf	2-Dec-19	Cesium-137	-2.59E+00	7.27E+00	4.66E+00	pCi/kg
7C1 Pecho Creek Ruins(468586004) - VG Brdleaf	14-Jan-19	Iodine-131	1.12E+01	2.22E+01	1.32E+01	pCi/kg
7C1 Pecho Creek Ruins(470652003) - VG Brdleaf	4-Feb-19	Iodine-131	-1.30E+00	1.82E+01	1.06E+01	pCi/kg
7C1 Pecho Creek Ruins(472613004) - VG Brdleaf	4-Mar-19	Iodine-131	4.79E+00	2.06E+01	1.21E+01	pCi/kg
7C1 Pecho Creek Ruins(476468004) - VG Brdleaf	15-Apr-19	Iodine-131	-7.37E+00	2.62E+01	1.64E+01	pCi/kg
7C1 Pecho Creek Ruins(478156004) - VG Brdleaf	6-May-19	Iodine-131	7.94E+00	1.50E+01	1.37E+01	pCi/kg
7C1 Pecho Creek Ruins(481367004) - VG Brdleaf	10-Jun-19	Iodine-131	-5.12E+00	2.23E+01	1.37E+01	pCi/kg
7C1 Pecho Creek Ruins(484084003) - VG Brdleaf	8-Jul-19	Iodine-131	-3.18E+00	1.07E+01	7.49E+00	pCi/kg
7C1 Pecho Creek Ruins(486568004) - VG Brdleaf	5-Aug-19	Iodine-131	-1.39E+01	2.34E+01	1.61E+01	pCi/kg
7C1 Pecho Creek Ruins(489318003) - VG Brdleaf	9-Sep-19	Iodine-131	-3.78E+00	3.18E+01	2.42E+01	pCi/kg
7C1 Pecho Creek Ruins(4927787003) - VG Brdleaf	14-Oct-19	Iodine-131	-4.59E+00	1.13E+01	7.20E+00	pCi/kg
7C1 Pecho Creek Ruins(494746003) - VG Brdleaf	6-Nov-19	Iodine-131	-2.47E+00	2.44E+01	1.63E+01	pCi/kg
7C1 Pecho Creek Ruins(497499003) - VG Brdleaf	2-Dec-19	Iodine-131	8.02E-01	1.03E+01	5.89E+00	pCi/kg

## 7C2 Rattlesnake Canyon - Aquatic Vegetation Algae

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(470053005) - AV Algae	30-Jan-19	Cesium-134	-4.44E+00	1.30E+01	8.28E+00	pCi/kg
7C2 Rattlesnake Canyon(479018004) - AV Algae	14-May-19	Cesium-134	5.80E+00	1.18E+01	6.87E+00	pCi/kg
7C2 Rattlesnake Canyon(487461005) - AV Algae	15-Aug-19	Cesium-134	6.42E+00	1.47E+01	1.02E+01	pCi/kg
7C2 Rattlesnake Canyon(495201001) - AV Algae	13-Nov-19	Cesium-134	5.55E+00	1.11E+01	6.61E+00	pCi/kg
7C2 Rattlesnake Canyon(470053005) - AV Algae	30-Jan-19	Cesium-137	3.74E+00	1.44E+01	9.30E+00	pCi/kg
7C2 Rattlesnake Canyon(479018004) - AV Algae	14-May-19	Cesium-137	-1.37E-01	9.46E+00	5.86E+00	pCi/kg
7C2 Rattlesnake Canyon(487461005) - AV Algae	15-Aug-19	Cesium-137	7.49E+00	1.29E+01	7.76E+00	pCi/kg
7C2 Rattlesnake Canyon(495201001) - AV Algae	13-Nov-19	Cesium-137	7.68E+00	8.57E+00	9.82E+00	pCi/kg
7C2 Rattlesnake Canyon(470053005) - AV Algae	30-Jan-19	Cobalt-58	-1.37E-01	1.13E+01	6.60E+00	pCi/kg
7C2 Rattlesnake Canyon(479018004) - AV Algae	14-May-19	Cobalt-58	6.79E+00	1.11E+01	6.62E+00	pCi/kg
7C2 Rattlesnake Canyon(487461005) - AV Algae	15-Aug-19	Cobalt-58	2.29E+00	1.07E+01	6.34E+00	pCi/kg
7C2 Rattlesnake Canyon(495201001) - AV Algae	13-Nov-19	Cobalt-58	3.74E+00	1.02E+01	5.84E+00	pCi/kg
7C2 Rattlesnake Canyon(470053005) - AV Algae	30-Jan-19	Cobalt-60	-2.48E+00	1.29E+01	8.96E+00	pCi/kg
7C2 Rattlesnake Canyon(479018004) - AV Algae	14-May-19	Cobalt-60	-1.67E-01	1.07E+01	6.56E+00	pCi/kg
7C2 Rattlesnake Canyon(487461005) - AV Algae	15-Aug-19	Cobalt-60	-3.24E+00	1.17E+01	7.74E+00	pCi/kg
7C2 Rattlesnake Canyon(495201001) - AV Algae	13-Nov-19	Cobalt-60	2.31E+00	1.15E+01	6.45E+00	pCi/kg

## 7C2 Rattlesnake Canyon - Aquatic Vegetation Kelp

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(469440004) - AV Kelp	22-Jan-19	Cesium-134	3.39E-02	1.33E+01	7.74E+00	pCi/kg
7C2 Rattlesnake Canyon(476886004) - AV Kelp	23-Apr-19	Cesium-134	2.12E+00	1.03E+01	6.22E+00	pCi/kg
7C2 Rattlesnake Canyon(484091006) - AV Kelp	9-Jul-19	Cesium-134	2.62E+00	1.43E+01	8.50E+00	pCi/kg
7C2 Rattlesnake Canyon(493408001) - AV Kelp	22-Oct-19	Cesium-134	1.67E+00	8.96E+00	5.17E+00	pCi/kg
7C2 Rattlesnake Canyon(498440001) - AV Kelp	10-Dec-19	Cesium-134	-5.20E+00	1.12E+01	8.72E+00	pCi/kg
7C2 Rattlesnake Canyon(469440004) - AV Kelp	22-Jan-19	Cesium-137	5.01E+00	1.24E+01	7.56E+00	pCi/kg
7C2 Rattlesnake Canyon(476886004) - AV Kelp	23-Apr-19	Cesium-137	8.35E+00	8.35E+00	9.63E+00	pCi/kg
7C2 Rattlesnake Canyon(484091006) - AV Kelp	9-Jul-19	Cesium-137	-4.37E+00	1.24E+01	8.21E+00	pCi/kg
7C2 Rattlesnake Canyon(493408001) - AV Kelp	22-Oct-19	Cesium-137	4.33E-01	7.75E+00	4.75E+00	pCi/kg
7C2 Rattlesnake Canyon(498440001) - AV Kelp	10-Dec-19	Cesium-137	-2.09E+00	9.12E+00	6.52E+00	pCi/kg
7C2 Rattlesnake Canyon(469440004) - AV Kelp	22-Jan-19	Cobalt-58	1.64E+00	1.21E+01	6.91E+00	pCi/kg
7C2 Rattlesnake Canyon(476886004) - AV Kelp	23-Apr-19	Cobalt-58	3.99E+00	9.21E+00	5.28E+00	pCi/kg
7C2 Rattlesnake Canyon(484091006) - AV Kelp	9-Jul-19	Cobalt-58	3.59E+00	1.53E+01	9.12E+00	pCi/kg
7C2 Rattlesnake Canyon(493408001) - AV Kelp	22-Oct-19	Cobalt-58	-2.65E+00	7.94E+00	4.98E+00	pCi/kg
7C2 Rattlesnake Canyon(498440001) - AV Kelp	10-Dec-19	Cobalt-58	-3.80E+00	1.08E+01	7.20E+00	pCi/kg
7C2 Rattlesnake Canyon(469440004) - AV Kelp	22-Jan-19	Cobalt-60	-3.58E+00	1.34E+01	8.67E+00	pCi/kg
7C2 Rattlesnake Canyon(476886004) - AV Kelp	23-Apr-19	Cobalt-60	3.61E+00	1.07E+01	6.82E+00	pCi/kg
7C2 Rattlesnake Canyon(484091006) - AV Kelp	9-Jul-19	Cobalt-60	3.27E+00	1.59E+01	9.00E+00	pCi/kg
7C2 Rattlesnake Canyon(493408001) - AV Kelp	22-Oct-19	Cobalt-60	-9.85E-02	8.88E+00	6.24E+00	pCi/kg
7C2 Rattlesnake Canyon(498440001) - AV Kelp	10-Dec-19	Cobalt-60	-1.95E+00	1.46E+01	1.01E+01	pCi/kg

## 7C2 Rattlesnake Canyon - Fish Perch

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Cesium-134	-2.90E-01	1.44E+01	9.26E+00	pCi/kg
7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Cesium-134	6.36E+00	2.08E+01	1.20E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Cesium-134	-1.63E+01	2.53E+01	1.83E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Cesium-134	3.21E+00	4.74E+00	2.93E+00	pCi/kg
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Cesium-137	1.02E+01	1.53E+01	9.54E+00	pCi/kg
7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Cesium-137	3.29E+00	1.90E+01	1.16E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Cesium-137	1.88E+01	2.86E+01	1.92E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Cesium-137	3.97E+00	3.97E+00	7.33E+00	pCi/kg
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Cobalt-58	1.64E+00	1.39E+01	8.82E+00	pCi/kg
7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Cobalt-58	-4.80E+00	1.86E+01	1.15E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Cobalt-58	-1.91E+00	2.59E+01	1.57E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Cobalt-58	-4.34E-01	4.44E+00	2.95E+00	pCi/kg
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Cobalt-60	8.73E-01	1.42E+01	9.50E+00	pCi/kg

7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Cobalt-60	1.25E+01	2.16E+01	1.33E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Cobalt-60	-7.64E-01	2.85E+01	2.05E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Cobalt-60	-3.50E-01	4.70E+00	3.49E+00	pCi/kg
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Iron-59	-1.73E+01	2.76E+01	2.01E+01	pCi/kg
7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Iron-59	9.77E+00	4.58E+01	2.68E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Iron-59	1.55E+01	6.47E+01	3.86E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Iron-59	-5.91E-01	1.21E+01	7.20E+00	pCi/kg
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Manganese-54	-3.04E+00	1.37E+01	8.50E+00	pCi/kg
7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Manganese-54	7.47E+00	1.95E+01	1.13E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Manganese-54	5.90E+00	2.66E+01	1.57E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Manganese-54	5.71E-01	4.04E+00	2.31E+00	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Potassium-40	3.58E+03	3.95E+01	3.41E+02	pCi/kg
7C2 Rattlesnake Canyon(473860002) - FH Perch	15-Mar-19	Zinc-65	5.50E+00	3.28E+01	2.26E+01	pCi/kg
7C2 Rattlesnake Canyon(478372003) - FH Perch	3-May-19	Zinc-65	1.19E+01	4.40E+01	2.58E+01	pCi/kg
7C2 Rattlesnake Canyon(487630008) - FH Perch	15-Aug-19	Zinc-65	2.92E+01	6.28E+01	4.17E+01	pCi/kg
7C2 Rattlesnake Canyon(494425003) - FH Perch	22-Oct-19	Zinc-65	-2.96E+00	9.28E+00	6.70E+00	pCi/kg

## 7C2 Rattlesnake Canyon - Rockfish

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(473860004) - FH Rockfsh	15-Mar-19	Cesium-134	5.25E+00	2.23E+01	1.34E+01	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfsh	3-May-19	Cesium-134	7.27E-02	1.94E+01	1.15E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfsh	15-Aug-19	Cesium-134	-1.17E+01	2.45E+01	2.27E+01	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfsh	22-Oct-19	Cesium-134	-9.59E-01	3.68E+00	2.31E+00	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfsh	15-Mar-19	Cesium-137	1.08E+01	2.07E+01	1.26E+01	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfsh	3-May-19	Cesium-137	7.42E+00	1.98E+01	1.15E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfsh	15-Aug-19	Cesium-137	-5.40E+00	2.55E+01	2.13E+01	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfsh	22-Oct-19	Cesium-137	2.95E+00	3.87E+00	4.96E+00	pCi/kg
7C2 Rattlesnake Canyon(473860004) - FH Rockfsh	15-Mar-19	Cobalt-58	3.84E+00	1.83E+01	1.09E+01	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfsh	3-May-19	Cobalt-58	-1.57E+00	1.96E+01	1.18E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfsh	15-Aug-19	Cobalt-58	-1.91E+01	1.88E+01	1.65E+01	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfsh	22-Oct-19	Cobalt-58	-7.01E-01	4.28E+00	2.54E+00	pCi/kg
7C2 Rattlesnake Canyon(473860004) - FH Rockfsh	15-Mar-19	Cobalt-60	-1.22E+01	2.40E+01	2.00E+01	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfsh	3-May-19	Cobalt-60	7.96E-01	2.10E+01	1.23E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfsh	15-Aug-19	Cobalt-60	1.99E+01	2.85E+01	1.72E+01	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfsh	22-Oct-19	Cobalt-60	1.46E+00	4.13E+00	2.41E+00	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfsh	15-Mar-19	Iron-59	-9.43E+00	4.47E+01	2.72E+01	pCi/kg
7C2 Rattlesnake Canyon(473860004) - FH Rockfsh	3-May-19	Iron-59	4.33E+00	4.62E+01	2.78E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfsh	15-Aug-19	Iron-59	1.67E+01	5.05E+01	3.05E+01	pCi/kg

7C2 Rattlesnake Canyon(494425004) - FH Rockfish	22-Oct-19	Iron-59	-1.55E+00	1.16E+01	6.97E+00	pCi/kg
7C2 Rattlesnake Canyon(473860004) - FH Rockfish	15-Mar-19	Manganese-54	-1.86E+00	2.08E+01	1.30E+01	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfish	3-May-19	Manganese-54	-2.41E+00	1.88E+01	1.15E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfish	15-Aug-19	Manganese-54	2.18E+00	2.29E+01	1.40E+01	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfish	22-Oct-19	Manganese-54	1.34E+00	3.59E+00	2.07E+00	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfish	22-Oct-19	Potassium-40	4.12E+03	3.02E+01	3.81E+02	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfish	15-Mar-19	Zinc-65	7.12E+00	4.55E+01	2.60E+01	pCi/kg
7C2 Rattlesnake Canyon(478372004) - FH Rockfish	3-May-19	Zinc-65	-8.92E+00	4.42E+01	2.84E+01	pCi/kg
7C2 Rattlesnake Canyon(487630006) - FH Rockfish	15-Aug-19	Zinc-65	1.32E+01	4.98E+01	3.01E+01	pCi/kg
7C2 Rattlesnake Canyon(494425004) - FH Rockfish	22-Oct-19	Zinc-65	-1.44E+00	9.35E+00	5.65E+00	pCi/kg

## 7C2 Rattlesnake Canyon - Intertidal Mussel

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Cesium-134	-5.00E+00	1.50E+01	9.94E+00	pCi/kg
7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Cesium-134	4.87E+00	1.61E+01	9.50E+00	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Cesium-134	2.88E+00	2.07E+01	1.40E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Cesium-134	2.46E+01	3.40E+01	2.42E+01	pCi/kg
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Cesium-137	8.60E+00	1.70E+01	1.03E+01	pCi/kg
7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Cesium-137	1.47E+01	1.47E+01	2.03E+01	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Cesium-137	-1.29E+01	1.82E+01	1.59E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Cesium-137	1.63E+01	3.33E+01	2.05E+01	pCi/kg
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Cobalt-58	-2.66E+00	1.44E+01	9.13E+00	pCi/kg
7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Cobalt-58	1.62E+00	1.44E+01	8.51E+00	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Cobalt-58	1.14E+01	2.12E+01	1.30E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Cobalt-58	1.12E+01	3.30E+01	2.00E+01	pCi/kg
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Cobalt-60	2.80E+00	1.79E+01	1.04E+01	pCi/kg
7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Cobalt-60	4.84E+00	1.60E+01	9.29E+00	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Cobalt-60	4.32E+00	2.09E+01	1.21E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Cobalt-60	-8.58E+00	3.70E+01	3.28E+01	pCi/kg
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Iron-59	1.94E+00	3.34E+01	1.93E+01	pCi/kg
7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Iron-59	3.71E+00	3.05E+01	1.85E+01	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Iron-59	1.86E+01	4.39E+01	2.67E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Iron-59	4.87E+01	6.44E+01	4.74E+01	pCi/kg
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Manganese-54	3.18E+00	1.53E+01	9.17E+00	pCi/kg
7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Manganese-54	-3.72E+00	1.54E+01	1.42E+01	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Manganese-54	-1.36E+00	1.79E+01	1.13E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Manganese-54	1.69E+00	3.20E+01	1.95E+01	pCi/kg
7C2 Rattlesnake Canyon(470053002) - IM	30-Jan-19	Zinc-65	-7.61E+00	3.51E+01	2.45E+01	pCi/kg

7C2 Rattlesnake Canyon(479018002) - IM	14-May-19	Zinc-65	7.54E+00	2.90E+01	1.98E+01	pCi/kg
7C2 Rattlesnake Canyon(487461002) - IM	15-Aug-19	Zinc-65	-8.95E-01	4.17E+01	2.55E+01	pCi/kg
7C2 Rattlesnake Canyon(495204001) - IM	13-Nov-19	Zinc-65	-3.72E+01	6.27E+01	4.30E+01	pCi/kg

## 7C2 Rattlesnake Canyon - Ocean Sediment

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Barium-140	-5.12E+01	2.85E+02	1.79E+02	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Cesium-134	1.31E+01	6.90E+01	3.78E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Cesium-137	2.27E+01	5.86E+01	3.28E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Cobalt-58	-1.50E+01	4.07E+01	2.77E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Cobalt-60	-6.42E+00	5.48E+01	3.47E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Iron-55	-6.17E+03	1.61E+04	1.12E+04	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Iron-59	8.39E+01	1.48E+02	8.05E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Lanthanum-140	-5.16E+01	3.59E+01	5.76E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Manganese-54	-3.20E+01	3.43E+01	3.06E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Nickel-63	-7.81E+02	2.50E+03	1.45E+03	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Niobium-95	-1.25E+01	5.60E+01	3.43E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Total Strontium	-3.10E+02	5.71E+02	3.02E+02	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Zinc-65	7.97E+01	7.97E+01	5.97E+01	pCi/kg
7C2 Rattlesnake Canyon(473837005) - SD	15-Mar-19	Zirconium-95	3.34E+01	9.93E+01	5.26E+01	pCi/kg

## 7C2 Rattlesnake Canyon - Seawater

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	BETA	2.55E+02	1.51E+02	1.06E+02	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	BETA	2.46E+02	1.19E+02	8.92E+01	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	BETA	1.50E+02	1.05E+02	7.31E+01	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	BETA	3.52E+02	1.43E+02	1.12E+02	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	BETA	2.61E+02	8.89E+01	7.87E+01	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	BETA	4.46E+02	1.53E+02	1.27E+02	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	BETA	2.78E+02	1.10E+02	8.78E+01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	BETA	6.03E+02	1.21E+02	1.34E+02	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	BETA	1.53E+02	1.07E+02	7.43E+01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	BETA	3.29E+02	1.31E+02	1.04E+02	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	BETA	4.25E+02	1.32E+02	1.14E+02	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	BETA	3.02E+02	1.30E+02	9.97E+01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Jan-19	Barium-140	-3.29E+00	8.90E+00	5.88E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Barium-140	1.57E+00	1.02E+01	6.05E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Barium-140	-8.43E-01	1.33E+01	8.13E+00	pCi/L

7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Barium-140	-4.07E-01	8.08E+00	4.76E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Barium-140	-3.20E+00	8.28E+00	5.44E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Barium-140	-2.42E+00	7.84E+00	4.93E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Barium-140	9.25E-01	7.12E+00	4.12E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Barium-140	-1.93E+00	1.01E+01	6.33E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Barium-140	1.56E+00	1.21E+01	7.25E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Barium-140	-7.66E-01	6.40E+00	3.81E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Barium-140	1.15E+00	8.32E+00	4.89E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Barium-140	2.80E+00	9.71E+00	5.89E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Cesium-134	9.70E-01	1.87E+00	1.17E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Cesium-134	8.11E-01	1.99E+00	1.32E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Cesium-134	8.86E-01	1.95E+00	1.15E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Cesium-134	-5.13E-01	1.42E+00	9.22E-01	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Cesium-134	3.11E-01	2.02E+00	1.16E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Cesium-134	-3.83E-01	1.60E+00	1.02E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Cesium-134	-5.68E-01	1.56E+00	1.46E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Cesium-134	1.44E-01	2.14E+00	1.24E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Cesium-134	9.50E-02	1.54E+00	8.82E-01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Cesium-134	5.28E-01	1.54E+00	9.16E-01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Cesium-134	3.24E-01	1.60E+00	9.58E-01	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Cesium-134	1.03E+00	1.91E+00	1.37E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Cesium-137	-8.35E-01	1.63E+00	1.12E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Cesium-137	-4.17E-01	1.70E+00	1.02E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Cesium-137	7.55E-01	1.33E+00	1.49E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Cesium-137	-5.66E-01	1.53E+00	1.02E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Cesium-137	2.41E-01	1.65E+00	9.80E-01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Cesium-137	8.99E-01	1.35E+00	2.35E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Cesium-137	7.35E-01	2.00E+00	1.22E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Cesium-137	3.56E-01	1.52E+00	1.19E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Cesium-137	8.57E-01	1.51E+00	9.30E-01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Cesium-137	-2.23E-01	1.55E+00	9.53E-01	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Cesium-137	-1.69E-01	1.80E+00	1.05E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Cobalt-58	-6.71E-01	1.59E+00	1.03E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Cobalt-58	7.80E-01	1.87E+00	1.13E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Cobalt-58	7.29E-02	1.85E+00	1.08E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Cobalt-58	-1.95E-01	1.41E+00	8.64E-01	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Cobalt-58	1.49E-01	1.61E+00	1.05E+00	pCi/L

7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Cobalt-58	2.18E-01	1.51E+00	9.03E-01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Cobalt-58	-3.82E-01	1.36E+00	8.69E-01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Cobalt-58	-2.96E-01	1.95E+00	1.17E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Cobalt-58	9.83E-02	1.58E+00	9.07E-01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Cobalt-58	-5.44E-01	1.30E+00	8.60E-01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Cobalt-58	2.87E-01	1.56E+00	9.33E-01	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Cobalt-58	6.86E-01	1.74E+00	1.59E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Cobalt-60	-1.54E-01	1.98E+00	1.41E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Cobalt-60	6.75E-01	1.92E+00	1.10E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Cobalt-60	-4.76E-01	1.95E+00	1.21E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Cobalt-60	5.13E-01	1.51E+00	8.63E-01	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Cobalt-60	-6.14E-01	1.72E+00	1.13E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Cobalt-60	6.21E-01	1.70E+00	9.80E-01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Cobalt-60	-1.68E-01	1.48E+00	8.86E-01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Cobalt-60	2.27E-02	2.10E+00	1.27E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Cobalt-60	6.73E-02	1.56E+00	9.31E-01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Cobalt-60	1.52E-01	1.42E+00	8.11E-01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Cobalt-60	2.84E-01	1.83E+00	1.06E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Cobalt-60	9.92E-01	2.04E+00	1.23E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Iodine-131	-6.15E-02	3.42E+00	2.04E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	12-Feb-19	Iodine-131	3.07E-01	4.00E+00	2.34E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Mar-19	Iodine-131	3.28E+00	6.33E+00	3.84E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	23-Apr-19	Iodine-131	-9.67E-01	3.24E+00	1.96E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Iodine-131	6.79E-01	3.17E+00	1.87E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Iodine-131	-3.33E-01	2.85E+00	1.67E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Iodine-131	2.36E+00	2.63E+00	1.98E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Iodine-131	-9.25E-02	3.76E+00	2.22E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Iodine-131	-1.42E+00	5.44E+00	3.33E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Iodine-131	-1.94E-01	2.42E+00	1.41E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Iodine-131	8.23E-01	3.20E+00	1.86E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Iodine-131	2.42E-01	3.24E+00	1.91E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Iron-55	7.08E+01	7.90E+01	6.38E+01	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Iron-55	3.36E+00	7.73E+01	5.41E+01	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Iron-55	2.83E+00	9.01E+01	6.26E+01	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Iron-55	-1.15E+01	6.68E+01	4.45E+01	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Iron-55	-3.15E+00	8.82E+01	6.67E+01	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Iron-55	-1.95E+01	7.13E+01	5.11E+01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Iron-55	-7.04E+01	7.92E+01	5.32E+01	pCi/L

7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Iron-55	-1.16E+01	7.40E+01	5.43E+01	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Iron-55	5.29E+00	7.93E+01	5.72E+01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Iron-55	1.10E+01	6.38E+01	4.58E+01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Iron-55	4.39E+01	1.36E+02	9.86E+01	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Iron-55	-2.34E+01	5.51E+01	3.61E+01	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Iron-59	-8.51E-01	3.52E+00	2.23E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	12-Feb-19	Iron-59	-3.70E+00	4.14E+00	4.00E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	19-Mar-19	Iron-59	-1.22E+00	4.23E+00	2.74E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	23-Apr-19	Iron-59	-6.92E-01	2.84E+00	1.83E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Iron-59	-8.18E-01	3.33E+00	2.08E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Iron-59	-1.61E+00	2.98E+00	2.28E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Iron-59	-4.33E-02	3.00E+00	1.73E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Iron-59	-5.99E-01	4.17E+00	2.56E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Iron-59	-3.78E-01	3.47E+00	2.08E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Iron-59	7.89E-01	2.75E+00	1.84E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Iron-59	7.37E-01	3.25E+00	1.85E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Iron-59	-1.24E+00	3.68E+00	2.39E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Lanthanum-140	4.15E-01	2.83E+00	1.85E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Lanthanum-140	2.54E-01	3.55E+00	2.06E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Lanthanum-140	1.72E+00	5.52E+00	3.21E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	23-Apr-19	Lanthanum-140	-5.09E-01	2.34E+00	1.44E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Lanthanum-140	-4.93E-01	2.89E+00	1.84E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Lanthanum-140	-2.39E+00	2.47E+00	2.08E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Lanthanum-140	-3.75E-01	2.42E+00	1.50E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Lanthanum-140	-1.37E+00	3.49E+00	2.28E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Lanthanum-140	-6.18E-01	3.78E+00	2.39E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Lanthanum-140	-2.37E-01	2.18E+00	1.30E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Lanthanum-140	-1.55E+00	2.69E+00	1.92E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Lanthanum-140	-4.39E-01	3.15E+00	1.91E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Manganese-54	1.76E-01	1.58E+00	9.21E-01	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Manganese-54	-8.68E-01	1.57E+00	1.11E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Manganese-54	-3.71E-01	1.56E+00	9.67E-01	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Manganese-54	-5.42E-01	1.23E+00	8.20E-01	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Manganese-54	-5.53E-01	1.57E+00	9.84E-01	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Manganese-54	-3.83E-01	1.27E+00	8.31E-01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Manganese-54	1.79E-01	1.45E+00	8.65E-01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Manganese-54	-3.13E-01	1.92E+00	1.16E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Manganese-54	1.03E-02	1.35E+00	7.82E-01	pCi/L

7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Manganese-54	1.90E-01	1.38E+00	8.21E-01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Manganese-54	-2.14E-01	1.54E+00	9.65E-01	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Manganese-54	1.34E+00	1.80E+00	2.78E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Nickel-63	2.01E+01	3.19E+01	2.00E+01	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Nickel-63	5.78E+00	2.89E+01	1.74E+01	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Nickel-63	1.04E+01	3.56E+01	2.18E+01	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Nickel-63	9.65E+00	2.32E+01	1.44E+01	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Nickel-63	-1.61E+01	2.63E+01	1.50E+01	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Nickel-63	-2.57E+00	2.10E+01	1.24E+01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Nickel-63	1.07E+00	2.46E+01	1.47E+01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Nickel-63	2.48E+00	3.13E+01	1.87E+01	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Nickel-63	-3.13E+00	3.57E+01	2.11E+01	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Nickel-63	3.32E+00	2.17E+01	1.31E+01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Nickel-63	3.82E+00	2.41E+01	1.45E+01	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Nickel-63	1.35E+01	3.32E+01	2.02E+01	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Niobium-95	5.08E-01	1.86E+00	1.08E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Niobium-95	6.22E-01	1.93E+00	1.16E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Niobium-95	-2.36E+00	1.76E+00	2.70E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Niobium-95	2.54E-01	1.61E+00	1.73E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Niobium-95	5.18E-01	1.71E+00	9.86E-01	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Niobium-95	2.10E-01	1.59E+00	9.50E-01	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Niobium-95	6.67E-01	1.58E+00	9.50E-01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Niobium-95	1.14E+00	2.04E+00	3.51E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Niobium-95	-1.57E-01	1.63E+00	1.02E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Niobium-95	6.95E-01	1.50E+00	9.10E-01	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Niobium-95	5.65E-01	1.67E+00	1.00E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Niobium-95	-8.12E-01	1.95E+00	2.08E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Total Strontium	-2.44E+00	4.01E+00	2.28E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Total Strontium	1.19E+00	1.60E+00	1.05E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Total Strontium	-3.23E-01	1.49E+00	8.70E-01	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Total Strontium	-1.35E+00	4.39E+00	2.50E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Total Strontium	-1.19E+01	4.34E+00	2.15E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Total Strontium	-4.05E+00	5.33E+00	2.36E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Total Strontium	-1.62E+00	1.78E+00	9.91E-01	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Total Strontium	-7.34E-01	2.28E+00	1.34E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Total Strontium	-4.47E-01	2.98E+00	1.76E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Total Strontium	-2.99E+00	2.65E+00	1.46E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Total Strontium	-1.35E+00	2.86E+00	1.65E+00	pCi/L

			Total Strontium	-1.41E+00	2.58E+00	1.48E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Tritium	1.38E+02	2.29E+02	1.45E+02	1.45E+02	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Tritium	-4.99E+00	2.74E+02	1.63E+02	1.63E+02	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Tritium	-5.07E+00	2.87E+02	1.71E+02	1.71E+02	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Tritium	-4.68E+01	2.58E+02	1.52E+02	1.52E+02	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Tritium	-9.64E+00	2.96E+02	1.76E+02	1.76E+02	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Tritium	-1.56E+02	2.85E+02	1.80E+02	1.80E+02	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Tritium	-3.89E+00	2.50E+02	1.49E+02	1.49E+02	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Tritium	-2.71E+01	2.93E+02	1.73E+02	1.73E+02	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Tritium	-5.31E-01	3.11E+02	1.85E+02	1.85E+02	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Tritium	7.24E+01	2.28E+02	1.40E+02	1.40E+02	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Tritium	-4.26E+01	2.23E+02	1.30E+02	1.30E+02	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Tritium	4.09E+00	2.94E+02	1.75E+02	1.75E+02	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Tritium	-8.87E-01	3.62E+00	2.30E+00	2.30E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Zinc-65	-6.68E-01	4.11E+00	2.52E+00	2.52E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Zinc-65	8.53E-01	4.24E+00	2.53E+00	2.53E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Zinc-65	-4.77E-01	2.94E+00	2.10E+00	2.10E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Zinc-65	1.18E-01	3.64E+00	2.33E+00	2.33E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Zinc-65	1.43E+00	3.46E+00	2.11E+00	2.11E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Zinc-65	-2.41E+00	3.26E+00	3.31E+00	3.31E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Zinc-65	-1.94E-01	4.16E+00	2.86E+00	2.86E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Zinc-65	-5.44E-01	3.00E+00	1.83E+00	1.83E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Zinc-65	-7.50E-01	2.47E+00	1.84E+00	1.84E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Zinc-65	-1.21E-01	3.53E+00	2.06E+00	2.06E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Zinc-65	3.61E-01	4.13E+00	2.46E+00	2.46E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Zinc-65	2.15E+00	3.19E+00	1.97E+00	1.97E+00	pCi/L
7C2 Rattlesnake Canyon(469440001) - SW	22-Jan-19	Zirconium-95	6.65E-01	3.18E+00	1.90E+00	1.90E+00	pCi/L
7C2 Rattlesnake Canyon(471025001) - SW	12-Feb-19	Zirconium-95	-1.42E+00	3.17E+00	2.07E+00	2.07E+00	pCi/L
7C2 Rattlesnake Canyon(473837003) - SW	19-Mar-19	Zirconium-95	2.34E+00	1.83E+00	1.83E+00	1.83E+00	pCi/L
7C2 Rattlesnake Canyon(476886001) - SW	23-Apr-19	Zirconium-95	-2.12E+00	2.34E+00	2.60E+00	2.60E+00	pCi/L
7C2 Rattlesnake Canyon(478549005) - SW	13-May-19	Zirconium-95	-1.70E+00	3.00E+00	1.91E+00	1.91E+00	pCi/L
7C2 Rattlesnake Canyon(480345003) - SW	3-Jun-19	Zirconium-95	2.27E+00	2.95E+00	1.64E+00	1.64E+00	pCi/L
7C2 Rattlesnake Canyon(484091003) - SW	9-Jul-19	Zirconium-95	-1.10E+00	2.46E+00	2.08E+00	2.08E+00	pCi/L
7C2 Rattlesnake Canyon(487046001) - SW	12-Aug-19	Zirconium-95	-4.33E-01	3.51E+00	1.81E+00	1.81E+00	pCi/L
7C2 Rattlesnake Canyon(491015002) - SW	19-Sep-19	Zirconium-95	-4.52E-01	2.86E+00	1.42E+00	1.42E+00	pCi/L
7C2 Rattlesnake Canyon(493409007) - SW	22-Oct-19	Zirconium-95	2.39E-01	2.40E+00	1.60E+00	1.60E+00	pCi/L
7C2 Rattlesnake Canyon(495069002) - SW	4-Nov-19	Zirconium-95	7.19E-01	2.69E+00	1.81E+00	1.81E+00	pCi/L
7C2 Rattlesnake Canyon(498118002) - SW	9-Dec-19	Zirconium-95	6.54E-01	3.14E+00	1.81E+00	1.81E+00	pCi/L

## 7D1 Avila Gate - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7D1 Avila Gate (468128004) - AC	5-Jan-19	Iodine-131	4.17E-03	9.22E-03	5.34E-03	pCi/m3
7D1 Avila Gate (4688880013) - AC	12-Jan-19	Iodine-131	-7.02E-03	5.14E-03	6.16E-03	pCi/m3
7D1 Avila Gate (469519003) - AC	19-Jan-19	Iodine-131	8.45E-05	1.39E-02	7.94E-03	pCi/m3
7D1 Avila Gate (470002004) - AC	26-Jan-19	Iodine-131	-8.87E-04	4.31E-03	2.79E-03	pCi/m3
7D1 Avila Gate (470540004) - AC	2-Feb-19	Iodine-131	-7.75E-04	7.40E-03	4.53E-03	pCi/m3
7D1 Avila Gate (471051013) - AC	9-Feb-19	Iodine-131	5.14E-04	9.82E-03	5.68E-03	pCi/m3
7D1 Avila Gate (471584004) - AC	16-Feb-19	Iodine-131	-1.32E-03	7.09E-03	4.36E-03	pCi/m3
7D1 Avila Gate (472133004) - AC	23-Feb-19	Iodine-131	-4.62E-04	1.38E-02	9.27E-03	pCi/m3
7D1 Avila Gate (472647013) - AC	1-Mar-19	Iodine-131	-6.14E-04	7.85E-03	4.78E-03	pCi/m3
7D1 Avila Gate (473264004) - AC	9-Mar-19	Iodine-131	-1.53E-03	8.52E-03	5.33E-03	pCi/m3
7D1 Avila Gate (473881004) - AC	16-Mar-19	Iodine-131	8.44E-03	1.30E-02	7.66E-03	pCi/m3
7D1 Avila Gate (474425004) - AC	23-Mar-19	Iodine-131	-1.51E-04	9.93E-03	5.93E-03	pCi/m3
7D1 Avila Gate (475038001) - AC	29-Mar-19	Iodine-131	-1.51E-03	1.04E-02	6.50E-03	pCi/m3
7D1 Avila Gate (475856004) - AC	6-Apr-19	Iodine-131	3.69E-03	8.44E-03	4.87E-03	pCi/m3
7D1 Avila Gate (476506013) - AC	13-Apr-19	Iodine-131	-1.45E-03	7.97E-03	5.45E-03	pCi/m3
7D1 Avila Gate (477146004) - AC	20-Apr-19	Iodine-131	-3.94E-04	9.78E-03	5.90E-03	pCi/m3
7D1 Avila Gate (477720004) - AC	27-Apr-19	Iodine-131	-1.40E-03	9.99E-03	6.11E-03	pCi/m3
7D1 Avila Gate (478343004) - AC	4-May-19	Iodine-131	-2.56E-03	5.76E-03	3.97E-03	pCi/m3
7D1 Avila Gate (479033004) - AC	11-May-19	Iodine-131	-9.74E-04	8.46E-03	5.06E-03	pCi/m3
7D1 Avila Gate (479683013) - AC	18-May-19	Iodine-131	1.86E-03	1.11E-02	6.39E-03	pCi/m3
7D1 Avila Gate (480029013) - AC	25-May-19	Iodine-131	-3.02E-03	8.32E-03	6.51E-03	pCi/m3
7D1 Avila Gate (480734004) - AC	1-Jun-19	Iodine-131	6.38E-04	1.23E-02	7.33E-03	pCi/m3
7D1 Avila Gate (481436004) - AC	8-Jun-19	Iodine-131	1.60E-03	7.11E-03	3.84E-03	pCi/m3
7D1 Avila Gate (482140004) - AC	15-Jun-19	Iodine-131	0.00E+00	5.80E-03	0.00E+00	pCi/m3
7D1 Avila Gate (482758004) - AC	22-Jun-19	Iodine-131	2.10E-03	8.12E-03	4.51E-03	pCi/m3
7D1 Avila Gate (483652011) - AC	29-Jun-19	Iodine-131	-2.03E-04	8.63E-03	5.03E-03	pCi/m3
7D1 Avila Gate (484196004) - AC	6-Jul-19	Iodine-131	-1.30E-03	7.51E-03	4.74E-03	pCi/m3
7D1 Avila Gate (485085009) - AC	13-Jul-19	Iodine-131	3.54E-03	7.77E-03	4.45E-03	pCi/m3
7D1 Avila Gate (485356004) - AC	20-Jul-19	Iodine-131	-5.30E-04	8.41E-03	5.09E-03	pCi/m3
7D1 Avila Gate (485943004) - AC	27-Jul-19	Iodine-131	2.18E-03	1.26E-02	7.26E-03	pCi/m3
7D1 Avila Gate (486790013) - AC	3-Aug-19	Iodine-131	-5.69E-03	7.06E-03	5.95E-03	pCi/m3
7D1 Avila Gate (487347004) - AC	10-Aug-19	Iodine-131	-3.27E-03	7.77E-03	5.53E-03	pCi/m3
7D1 Avila Gate (488047003) - AC	17-Aug-19	Iodine-131	3.51E-04	8.29E-03	4.74E-03	pCi/m3
7D1 Avila Gate (488407004) - AC	24-Aug-19	Iodine-131	-1.70E-03	7.37E-03	4.71E-03	pCi/m3
7D1 Avila Gate (489091004) - AC	1-Sep-19	Iodine-131	2.36E-03	1.66E-02	9.51E-03	pCi/m3
7D1 Avila Gate (489316004) - AC	8-Sep-19	Iodine-131	7.48E-03	1.63E-02	9.15E-03	pCi/m3

7D1 Avila Gate(489397004) - AC	14-Sep-19	Iodine-131	-4.68E-04	1.97E-02	1.15E-02	pCi/m3
7D1 Avila Gate(490334006) - AC	21-Sep-19	Iodine-131	6.71E-04	7.11E-03	3.99E-03	pCi/m3
7D1 Avila Gate(490940015) - AC	29-Sep-19	Iodine-131	3.85E-04	9.60E-03	5.65E-03	pCi/m3
7D1 Avila Gate(492206013) - AC	5-Oct-19	Iodine-131	5.10E-04	1.23E-02	7.24E-03	pCi/m3
7D1 Avila Gate(492214003) - AC	12-Oct-19	Iodine-131	2.15E-03	1.16E-02	6.57E-03	pCi/m3
7D1 Avila Gate(493200004) - AC	19-Oct-19	Iodine-131	-2.35E-03	8.68E-03	5.81E-03	pCi/m3
7D1 Avila Gate(493690015) - AC	26-Oct-19	Iodine-131	-2.04E-03	6.23E-03	4.07E-03	pCi/m3
7D1 Avila Gate(494544004) - AC	2-Nov-19	Iodine-131	-8.61E-04	9.95E-03	5.92E-03	pCi/m3
7D1 Avila Gate(495196013) - AC	9-Nov-19	Iodine-131	-2.65E-03	6.71E-03	4.58E-03	pCi/m3
7D1 Avila Gate(495839004) - AC	16-Nov-19	Iodine-131	-6.82E-05	1.19E-02	6.72E-03	pCi/m3
7D1 Avila Gate(496785004) - AC	23-Nov-19	Iodine-131	2.18E-03	7.67E-03	4.28E-03	pCi/m3
7D1 Avila Gate(497497004) - AC	30-Nov-19	Iodine-131	4.41E-03	9.72E-03	5.49E-03	pCi/m3
7D1 Avila Gate(497962006) - AC	7-Dec-19	Iodine-131	3.68E-03	1.26E-02	7.18E-03	pCi/m3
7D1 Avila Gate(498469004) - AC	14-Dec-19	Iodine-131	-1.15E-03	1.07E-02	6.63E-03	pCi/m3
7D1 Avila Gate(499079004) - AC	21-Dec-19	Iodine-131	-1.05E-03	9.89E-03	6.06E-03	pCi/m3
7D1 Avila Gate(499686004) - AC	27-Dec-19	Iodine-131	-4.21E-03	1.00E-02	6.57E-03	pCi/m3

#### 7D1 Avila Gate - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7D1 Avila Gate(468128005) - AP	5-Jan-19	BETA	1.87E-02	2.50E-03	1.15E-02	pCi/m3
7D1 Avila Gate(468880014) - AP	12-Jan-19	BETA	7.14E-03	2.36E-03	1.43E-02	pCi/m3
7D1 Avila Gate(469519004) - AP	19-Jan-19	BETA	4.85E-03	2.17E-03	1.12E-02	pCi/m3
7D1 Avila Gate(470002005) - AP	26-Jan-19	BETA	3.67E-02	2.51E-03	1.16E-02	pCi/m3
7D1 Avila Gate(470540005) - AP	2-Feb-19	BETA	1.07E-02	2.44E-03	1.15E-02	pCi/m3
7D1 Avila Gate(471051014) - AP	9-Feb-19	BETA	4.93E-03	2.85E-03	1.40E-02	pCi/m3
7D1 Avila Gate(471584005) - AP	16-Feb-19	BETA	6.29E-03	1.86E-03	9.89E-03	pCi/m3
7D1 Avila Gate(472133011) - AP	23-Feb-19	BETA	1.39E-02	2.47E-03	1.20E-02	pCi/m3
7D1 Avila Gate(472647014) - AP	1-Mar-19	BETA	1.19E-02	2.32E-03	1.06E-02	pCi/m3
7D1 Avila Gate(473264005) - AP	9-Mar-19	BETA	7.71E-03	2.14E-03	1.03E-02	pCi/m3
7D1 Avila Gate(473881005) - AP	16-Mar-19	BETA	2.74E-02	2.51E-03	1.18E-02	pCi/m3
7D1 Avila Gate(474425005) - AP	23-Mar-19	BETA	1.44E-02	2.63E-03	1.27E-02	pCi/m3
7D1 Avila Gate(475038002) - AP	29-Mar-19	BETA	1.22E-02	2.13E-03	1.11E-02	pCi/m3
7D1 Avila Gate(475856005) - AP	6-Apr-19	BETA	7.51E-03	2.04E-03	1.00E-02	pCi/m3
7D1 Avila Gate(476506014) - AP	13-Apr-19	BETA	7.16E-03	2.24E-03	1.08E-02	pCi/m3
7D1 Avila Gate(477146005) - AP	20-Apr-19	BETA	7.64E-03	2.32E-03	1.07E-02	pCi/m3
7D1 Avila Gate(477720005) - AP	27-Apr-19	BETA	1.40E-02	2.16E-03	1.06E-02	pCi/m3
7D1 Avila Gate(478343005) - AP	4-May-19	BETA	2.43E-02	2.27E-03	1.03E-02	pCi/m3
7D1 Avila Gate(479033005) - AP	11-May-19	BETA	1.35E-02	2.26E-03	1.01E-02	pCi/m3

7D1 Avila Gate(479683014) - AP	18-May-19	BETA	9.19E-03	2.55E-03	1.24E-02	pCi/m3
7D1 Avila Gate(480029014) - AP	25-May-19	BETA	7.17E-03	1.94E-03	9.44E-03	pCi/m3
7D1 Avila Gate(480734005) - AP	1-Jun-19	BETA	8.92E-03	2.61E-03	1.31E-02	pCi/m3
7D1 Avila Gate(481436005) - AP	8-Jun-19	BETA	1.17E-02	1.92E-03	9.65E-03	pCi/m3
7D1 Avila Gate(482140005) - AP	15-Jun-19	BETA	7.46E-03	2.12E-03	1.09E-02	pCi/m3
7D1 Avila Gate(482758011) - AP	22-Jun-19	BETA	5.93E-03	2.22E-03	1.08E-02	pCi/m3
7D1 Avila Gate(483652004) - AP	29-Jun-19	BETA	1.11E-02	2.59E-03	1.19E-02	pCi/m3
7D1 Avila Gate(484196005) - AP	6-Jul-19	BETA	6.70E-03	1.98E-03	9.89E-03	pCi/m3
7D1 Avila Gate(485085002) - AP	13-Jul-19	BETA	2.95E-03	2.26E-03	1.17E-02	pCi/m3
7D1 Avila Gate(485356005) - AP	20-Jul-19	BETA	1.15E-02	2.23E-03	2.62E-03	pCi/m3
7D1 Avila Gate(485943005) - AP	27-Jul-19	BETA	6.17E-03	2.51E-03	1.36E-02	pCi/m3
7D1 Avila Gate(486790014) - AP	3-Aug-19	BETA	3.36E-03	2.17E-03	1.08E-02	pCi/m3
7D1 Avila Gate(487347005) - AP	10-Aug-19	BETA	1.23E-02	2.19E-03	1.18E-02	pCi/m3
7D1 Avila Gate(488047004) - AP	17-Aug-19	BETA	9.43E-03	2.26E-03	1.17E-02	pCi/m3
7D1 Avila Gate(488407005) - AP	24-Aug-19	BETA	1.19E-02	2.17E-03	1.12E-02	pCi/m3
7D1 Avila Gate(489091005) - AP	1-Sep-19	BETA	1.40E-02	1.93E-03	8.70E-03	pCi/m3
7D1 Avila Gate(489316005) - AP	8-Sep-19	BETA	1.34E-02	2.59E-03	1.27E-02	pCi/m3
7D1 Avila Gate(489397005) - AP	14-Sep-19	BETA	2.02E-02	2.96E-03	1.41E-02	pCi/m3
7D1 Avila Gate(490334007) - AP	21-Sep-19	BETA	1.38E-02	1.97E-03	9.00E-03	pCi/m3
7D1 Avila Gate(490940016) - AP	29-Sep-19	BETA	1.48E-02	2.65E-03	1.13E-02	pCi/m3
7D1 Avila Gate(492206014) - AP	5-Oct-19	BETA	3.27E-02	2.54E-03	1.13E-02	pCi/m3
7D1 Avila Gate(492214004) - AP	12-Oct-19	BETA	2.39E-02	2.27E-03	1.17E-02	pCi/m3
7D1 Avila Gate(493200005) - AP	19-Oct-19	BETA	4.41E-02	2.58E-03	1.23E-02	pCi/m3
7D1 Avila Gate(493690016) - AP	26-Oct-19	BETA	4.30E-02	2.54E-03	1.19E-02	pCi/m3
7D1 Avila Gate(494544005) - AP	2-Nov-19	BETA	5.90E-02	2.68E-03	1.32E-02	pCi/m3
7D1 Avila Gate(495196014) - AP	9-Nov-19	BETA	9.34E-02	2.06E-03	1.18E-02	pCi/m3
7D1 Avila Gate(495839005) - AP	16-Nov-19	BETA	5.50E-02	2.28E-03	1.17E-02	pCi/m3
7D1 Avila Gate(496785005) - AP	23-Nov-19	BETA	3.62E-02	2.63E-03	1.13E-02	pCi/m3
7D1 Avila Gate(497497005) - AP	30-Nov-19	BETA	1.31E-02	1.82E-03	1.04E-02	pCi/m3
7D1 Avila Gate(497962007) - AP	7-Dec-19	BETA	7.60E-03	2.12E-03	1.20E-02	pCi/m3
7D1 Avila Gate(498469005) - AP	14-Dec-19	BETA	1.08E-02	2.10E-03	1.27E-02	pCi/m3
7D1 Avila Gate(499079005) - AP	21-Dec-19	BETA	1.70E-02	2.54E-03	1.49E-02	pCi/m3
7D1 Avila Gate(499686005) - AP	27-Dec-19	BETA	1.77E-02	2.20E-03	1.23E-02	pCi/m3
7D1 Avila Gate(499791006) - AP	9-Feb-19	Cesium-134	-3.75E-04	3.90E-04	4.03E-04	pCi/m3
7D1 Avila Gate(484864004) - AP	11-May-19	Cesium-134	-2.43E-04	4.16E-04	3.36E-04	pCi/m3
7D1 Avila Gate(493791006) - AP	14-Aug-19	Cesium-134	-1.38E-04	2.48E-04	1.92E-04	pCi/m3
7D1 Avila Gate(501636002) - AP	16-Nov-19	Cesium-134	-3.37E-05	6.13E-04	3.83E-04	pCi/m3
7D1 Avila Gate(476709002) - AP	9-Feb-19	Cesium-137	2.59E-05	5.64E-04	3.41E-04	pCi/m3

7D1 Avila Gate(484864004) - AP	11-May-19	Cesium-137	1.16E-06	4.31E-04	2.55E-04	pCi/m3
7D1 Avila Gate(493791006) - AP	14-Aug-19	Cesium-137	1.15E-04	3.09E-04	1.74E-04	pCi/m3
7D1 Avila Gate(501636002) - AP	16-Nov-19	Cesium-137	-2.36E-05	4.34E-04	2.68E-04	pCi/m3

## 7D3 Avila Pier - Market Fish

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Cesium-134	2.80E-01	5.08E+00	2.96E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Cesium-134	5.58E-01	4.87E+00	2.81E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Cesium-134	-1.17E+00	5.50E+00	3.57E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Cesium-134	2.63E+00	4.87E+00	2.97E+00	pCi/kg
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Cesium-137	8.66E+00	4.15E+00	4.75E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Cesium-137	1.11E+01	4.27E+00	4.75E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Cesium-137	7.62E+00	5.11E+00	5.91E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Cesium-137	9.45E+00	4.01E+00	4.57E+00	pCi/kg
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Cobalt-58	-7.46E-02	4.39E+00	2.58E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Cobalt-58	7.01E-01	4.58E+00	2.64E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Cobalt-58	-7.08E-01	4.84E+00	2.88E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Cobalt-58	1.35E+00	4.84E+00	2.90E+00	pCi/kg
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Cobalt-60	8.40E-01	5.38E+00	3.22E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Cobalt-60	7.77E-01	4.56E+00	2.68E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Cobalt-60	2.76E+00	5.84E+00	3.50E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Cobalt-60	-8.15E-01	4.86E+00	2.98E+00	pCi/kg
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Iron-59	-1.50E+00	1.05E+01	6.44E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Iron-59	-3.04E+00	9.96E+00	6.30E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Iron-59	-3.31E+00	1.07E+01	6.79E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Iron-59	-1.84E+00	1.13E+01	6.75E+00	pCi/kg
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Manganese-54	-9.77E-01	4.42E+00	2.71E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Manganese-54	6.52E-01	4.69E+00	3.06E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Manganese-54	-1.99E+00	4.47E+00	2.89E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Manganese-54	-1.13E-01	4.21E+00	2.58E+00	pCi/kg
7D3 Avila Pier(469936002) - FH Market	28-Jan-19	Zinc-65	5.82E+00	1.15E+01	6.99E+00	pCi/kg
7D3 Avila Pier(476886008) - FH Market	22-Apr-19	Zinc-65	2.18E+00	1.15E+01	8.28E+00	pCi/kg
7D3 Avila Pier(484187001) - FH Market	8-Jul-19	Zinc-65	2.35E+00	1.19E+01	7.51E+00	pCi/kg
7D3 Avila Pier(492892002) - FH Market	16-Oct-19	Zinc-65	-1.03E+00	1.20E+01	7.05E+00	pCi/kg

## 7E1 Avila Valley Barn - Vegetation

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7E1 Avila Valley Barn(469936004) - VG Brdleaf	28-Jan-19	Cesium-134	-5.35E+00	1.55E+01	1.04E+01	pCi/kg
7E1 Avila Valley Barn(476886009) - VG Brdleaf	22-Apr-19	Cesium-134	-5.08E+00	6.41E+00	5.06E+00	pCi/kg
7E1 Avila Valley Barn(484187002) - VG Brdleaf	8-Jul-19	Cesium-134	2.94E-01	5.89E+00	3.38E+00	pCi/kg
7E1 Avila Valley Barn(490292001) - VG Brdleaf	19-Sep-19	Cesium-134	1.67E+00	4.50E+00	2.59E+00	pCi/kg
7E1 Avila Valley Barn(492892001) - VG Brdleaf	16-Oct-19	Cesium-134	1.21E+00	8.60E+00	4.89E+00	pCi/kg
7E1 Avila Valley Barn(469936004) - VG Brdleaf	28-Jan-19	Cesium-134	1.51E+00	1.41E+01	8.41E+00	pCi/kg
7E1 Avila Valley Barn(476886009) - VG Brdleaf	22-Apr-19	Cesium-137	-1.60E+00	5.48E+00	3.57E+00	pCi/kg
7E1 Avila Valley Barn(484187002) - VG Brdleaf	8-Jul-19	Cesium-137	2.07E+00	6.38E+00	3.86E+00	pCi/kg
7E1 Avila Valley Barn(490292001) - VG Brdleaf	19-Sep-19	Cesium-137	9.39E-01	4.36E+00	2.63E+00	pCi/kg
7E1 Avila Valley Barn(492892001) - VG Brdleaf	16-Oct-19	Cesium-137	-3.96E+00	8.43E+00	8.00E+00	pCi/kg
7E1 Avila Valley Barn(469936004) - VG Brdleaf	28-Jan-19	Iodine-131	-4.80E+00	1.51E+01	9.31E+00	pCi/kg
7E1 Avila Valley Barn(476886009) - VG Brdleaf	22-Apr-19	Iodine-131	3.60E+00	1.18E+01	6.78E+00	pCi/kg
7E1 Avila Valley Barn(484187002) - VG Brdleaf	8-Jul-19	Iodine-131	4.50E+00	9.07E+00	9.83E+00	pCi/kg
7E1 Avila Valley Barn(490292001) - VG Brdleaf	19-Sep-19	Iodine-131	-1.03E+00	6.55E+00	3.98E+00	pCi/kg
7E1 Avila Valley Barn(492892001) - VG Brdleaf	16-Oct-19	Iodine-131	1.77E+00	1.25E+01	7.33E+00	pCi/kg

## 7G1 Arroyo Grande - Vegetation

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
7G1 Arroyo Grande(468586003) - VG Brdleaf	14-Jan-19	Cesium-134	-9.55E+00	1.28E+01	9.96E+00	pCi/kg
7G1 Arroyo Grande(470652004) - VG Brdleaf	4-Feb-19	Cesium-134	-3.45E+00	8.91E+00	7.82E+00	pCi/kg
7G1 Arroyo Grande(472613003) - VG Brdleaf	4-Mar-19	Cesium-134	-2.91E+00	1.36E+01	9.78E+00	pCi/kg
7G1 Arroyo Grande(476468003) - VG Brdleaf	15-Apr-19	Cesium-134	-5.73E+00	1.54E+01	1.24E+01	pCi/kg
7G1 Arroyo Grande(478156003) - VG Brdleaf	6-May-19	Cesium-134	-5.00E+00	9.91E+00	7.01E+00	pCi/kg
7G1 Arroyo Grande(481367003) - VG Brdleaf	10-Jun-19	Cesium-134	6.07E+00	1.09E+01	8.06E+00	pCi/kg
7G1 Arroyo Grande(484084004) - VG Brdleaf	8-Jul-19	Cesium-134	2.10E+00	6.64E+00	3.93E+00	pCi/kg
7G1 Arroyo Grande(486568003) - VG Brdleaf	5-Aug-19	Cesium-134	3.73E+00	1.22E+01	7.33E+00	pCi/kg
7G1 Arroyo Grande(489318002) - VG Brdleaf	9-Sep-19	Cesium-134	8.74E-01	1.29E+01	7.47E+00	pCi/kg
7G1 Arroyo Grande(492787002) - VG Brdleaf	14-Oct-19	Cesium-134	2.43E+00	8.53E+00	4.86E+00	pCi/kg
7G1 Arroyo Grande(494746002) - VG Brdleaf	6-Nov-19	Cesium-134	-1.23E+00	1.17E+01	6.95E+00	pCi/kg
7G1 Arroyo Grande(497499002) - VG Brdleaf	2-Dec-19	Cesium-134	1.56E+00	8.95E+00	5.09E+00	pCi/kg
7G1 Arroyo Grande(468586003) - VG Brdleaf	14-Jan-19	Cesium-137	4.80E+00	1.35E+01	1.18E+01	pCi/kg
7G1 Arroyo Grande(470652004) - VG Brdleaf	4-Feb-19	Cesium-137	-4.57E+00	6.95E+00	5.05E+00	pCi/kg
7G1 Arroyo Grande(472613003) - VG Brdleaf	4-Mar-19	Cesium-137	8.92E+00	1.36E+01	8.62E+00	pCi/kg
7G1 Arroyo Grande(476468003) - VG Brdleaf	15-Apr-19	Cesium-137	-3.15E+00	1.30E+01	8.20E+00	pCi/kg
7G1 Arroyo Grande(478156003) - VG Brdleaf	6-May-19	Cesium-137	-8.99E-01	9.76E+00	6.06E+00	pCi/kg
7G1 Arroyo Grande(481367003) - VG Brdleaf	10-Jun-19	Cesium-137	2.31E+00	9.29E+00	5.47E+00	pCi/kg

7G1 Arroyo Grande(484084004) - VG Brdleaf	8-Jul-19	Cesium-137	-8.11E-01	6.03E+00	3.72E+00	pCi/kg
7G1 Arroyo Grande(486568003) - VG Brdleaf	5-Aug-19	Cesium-137	1.05E+01	1.05E+01	9.41E+00	pCi/kg
7G1 Arroyo Grande(489318002) - VG Brdleaf	9-Sep-19	Cesium-137	1.68E+00	1.26E+01	7.43E+00	pCi/kg
7G1 Arroyo Grande(492787002) - VG Brdleaf	14-Oct-19	Cesium-137	5.05E+00	7.01E+00	6.84E+00	pCi/kg
7G1 Arroyo Grande(494746002) - VG Brdleaf	6-Nov-19	Cesium-137	2.24E+00	1.14E+01	6.96E+00	pCi/kg
7G1 Arroyo Grande(497499002) - VG Brdleaf	2-Dec-19	Cesium-137	7.39E-01	8.73E+00	5.29E+00	pCi/kg
7G1 Arroyo Grande(468586003) - VG Brdleaf	14-Jan-19	Iodine-131	4.92E+00	1.57E+01	1.02E+01	pCi/kg
7G1 Arroyo Grande(470652004) - VG Brdleaf	4-Feb-19	Iodine-131	4.88E-01	1.10E+01	6.28E+00	pCi/kg
7G1 Arroyo Grande(472613003) - VG Brdleaf	4-Mar-19	Iodine-131	6.00E+00	1.61E+01	1.02E+01	pCi/kg
7G1 Arroyo Grande(476468003) - VG Brdleaf	15-Apr-19	Iodine-131	3.57E-01	1.56E+01	8.99E+00	pCi/kg
7G1 Arroyo Grande(478156003) - VG Brdleaf	6-May-19	Iodine-131	-2.62E+00	1.09E+01	6.76E+00	pCi/kg
7G1 Arroyo Grande(481367003) - VG Brdleaf	10-Jun-19	Iodine-131	3.69E+00	1.27E+01	7.28E+00	pCi/kg
7G1 Arroyo Grande(484084004) - VG Brdleaf	8-Jul-19	Iodine-131	-1.40E+00	7.30E+00	4.37E+00	pCi/kg
7G1 Arroyo Grande(486568003) - VG Brdleaf	5-Aug-19	Iodine-131	-5.20E+00	1.73E+01	1.06E+01	pCi/kg
7G1 Arroyo Grande(489318002) - VG Brdleaf	9-Sep-19	Iodine-131	-7.98E+00	2.27E+01	1.45E+01	pCi/kg
7G1 Arroyo Grande(492787002) - VG Brdleaf	14-Oct-19	Iodine-131	-5.08E+00	8.04E+00	5.60E+00	pCi/kg
7G1 Arroyo Grande(494746002) - VG Brdleaf	6-Nov-19	Iodine-131	3.60E+00	1.68E+01	9.83E+00	pCi/kg
7G1 Arroyo Grande(497499002) - VG Brdleaf	2-Dec-19	Iodine-131	-9.42E+00	9.55E+00	9.71E+00	pCi/kg

## 8S1 Target Range - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
8S1 Target Range(468128013) - AC	5-Jan-19	Iodine-131	9.13E-04	7.75E-03	4.75E-03	pCi/m3
8S1 Target Range(468880003) - AC	12-Jan-19	Iodine-131	-2.94E-04	1.40E-02	8.40E-03	pCi/m3
8S1 Target Range(469519007) - AC	19-Jan-19	Iodine-131	-7.97E-04	6.34E-03	3.85E-03	pCi/m3
8S1 Target Range(470002008) - AC	26-Jan-19	Iodine-131	1.19E-03	8.52E-03	4.76E-03	pCi/m3
8S1 Target Range(470540008) - AC	2-Feb-19	Iodine-131	5.36E-03	5.85E-03	6.65E-03	pCi/m3
8S1 Target Range(471051003) - AC	9-Feb-19	Iodine-131	-1.60E-03	7.24E-03	4.65E-03	pCi/m3
8S1 Target Range(471584008) - AC	16-Feb-19	Iodine-131	-2.11E-03	4.82E-03	3.34E-03	pCi/m3
8S1 Target Range(472133003) - AC	23-Feb-19	Iodine-131	7.53E-04	1.04E-02	6.10E-03	pCi/m3
8S1 Target Range(472647003) - AC	1-Mar-19	Iodine-131	-2.78E-03	5.58E-03	4.03E-03	pCi/m3
8S1 Target Range(473264013) - AC	9-Mar-19	Iodine-131	3.64E-03	7.56E-03	4.13E-03	pCi/m3
8S1 Target Range(473881010) - AC	16-Mar-19	Iodine-131	1.80E-03	8.69E-03	4.81E-03	pCi/m3
8S1 Target Range(474425010) - AC	23-Mar-19	Iodine-131	-6.87E-04	1.05E-02	6.18E-03	pCi/m3
8S1 Target Range(475038005) - AC	29-Mar-19	Iodine-131	3.02E-03	1.03E-02	5.64E-03	pCi/m3
8S1 Target Range(475856008) - AC	6-Apr-19	Iodine-131	2.46E-03	8.54E-03	4.80E-03	pCi/m3
8S1 Target Range(47656003) - AC	13-Apr-19	Iodine-131	1.15E-03	1.31E-02	7.53E-03	pCi/m3
8S1 Target Range(477146010) - AC	20-Apr-19	Iodine-131	-2.19E-03	7.09E-03	4.68E-03	pCi/m3
8S1 Target Range(477720008) - AC	27-Apr-19	Iodine-131	-2.67E-03	1.01E-02	6.68E-03	pCi/m3

8S1 Target Range(478343008) - AC	4-May-19	Iodine-131	3.44E-04	9.75E-03	5.77E-03	pCi/m3
8S1 Target Range(479033008) - AC	11-May-19	Iodine-131	-4.38E-04	9.04E-03	5.52E-03	pCi/m3
8S1 Target Range(479683003) - AC	18-May-19	Iodine-131	-3.65E-03	9.26E-03	6.83E-03	pCi/m3
8S1 Target Range(480029003) - AC	25-May-19	Iodine-131	-2.93E-03	7.64E-03	5.33E-03	pCi/m3
8S1 Target Range(480734008) - AC	1-Jun-19	Iodine-131	-7.44E-03	1.04E-02	8.13E-03	pCi/m3
8S1 Target Range(481436008) - AC	8-Jun-19	Iodine-131	-2.61E-03	9.48E-03	5.99E-03	pCi/m3
8S1 Target Range(482140008) - AC	15-Jun-19	Iodine-131	2.56E-03	1.06E-02	5.96E-03	pCi/m3
8S1 Target Range(482758005) - AC	22-Jun-19	Iodine-131	7.24E-04	9.31E-03	5.27E-03	pCi/m3
8S1 Target Range(483652012) - AC	29-Jun-19	Iodine-131	4.75E-04	8.56E-03	4.93E-03	pCi/m3
8S1 Target Range(484196008) - AC	6-Jul-19	Iodine-131	-1.35E-03	8.28E-03	5.23E-03	pCi/m3
8S1 Target Range(485085011) - AC	13-Jul-19	Iodine-131	1.84E-03	7.00E-03	3.82E-03	pCi/m3
8S1 Target Range(485356008) - AC	20-Jul-19	Iodine-131	-5.76E-03	1.16E-02	8.17E-03	pCi/m3
8S1 Target Range(485943008) - AC	27-Jul-19	Iodine-131	-5.46E-03	8.13E-03	6.46E-03	pCi/m3
8S1 Target Range(486790010) - AC	3-Aug-19	Iodine-131	-1.93E-03	6.65E-03	4.44E-03	pCi/m3
8S1 Target Range(487347008) - AC	10-Aug-19	Iodine-131	3.15E-03	3.15E-03	5.58E-03	pCi/m3
8S1 Target Range(488047007) - AC	17-Aug-19	Iodine-131	-4.71E-03	7.19E-03	6.67E-03	pCi/m3
8S1 Target Range(488407008) - AC	24-Aug-19	Iodine-131	7.20E-03	7.20E-03	8.17E-03	pCi/m3
8S1 Target Range(489091008) - AC	1-Sep-19	Iodine-131	-8.81E-04	1.18E-02	7.03E-03	pCi/m3
8S1 Target Range(489316008) - AC	8-Sep-19	Iodine-131	-3.35E-04	1.17E-02	6.85E-03	pCi/m3
8S1 Target Range(489397008) - AC	14-Sep-19	Iodine-131	7.85E-03	1.90E-02	1.08E-02	pCi/m3
8S1 Target Range(490334010) - AC	21-Sep-19	Iodine-131	1.19E-03	7.55E-03	4.21E-03	pCi/m3
8S1 Target Range(490940005) - AC	29-Sep-19	Iodine-131	2.07E-03	8.00E-03	4.39E-03	pCi/m3
8S1 Target Range(492206003) - AC	5-Oct-19	Iodine-131	1.56E-03	8.45E-03	4.68E-03	pCi/m3
8S1 Target Range(492214007) - AC	12-Oct-19	Iodine-131	1.06E-03	1.00E-02	5.84E-03	pCi/m3
8S1 Target Range(493200008) - AC	19-Oct-19	Iodine-131	-5.68E-03	9.37E-03	7.61E-03	pCi/m3
8S1 Target Range(493690005) - AC	26-Oct-19	Iodine-131	2.09E-03	7.20E-03	3.95E-03	pCi/m3
8S1 Target Range(494544008) - AC	2-Nov-19	Iodine-131	-2.25E-03	9.57E-03	6.12E-03	pCi/m3
8S1 Target Range(495196003) - AC	9-Nov-19	Iodine-131	1.14E-03	8.29E-03	5.00E-03	pCi/m3
8S1 Target Range(495839008) - AC	16-Nov-19	Iodine-131	-3.53E-05	1.12E-02	6.63E-03	pCi/m3
8S1 Target Range(496785008) - AC	23-Nov-19	Iodine-131	3.35E-03	8.76E-03	4.78E-03	pCi/m3
8S1 Target Range(497497008) - AC	30-Nov-19	Iodine-131	-2.17E-03	7.20E-03	4.69E-03	pCi/m3
8S1 Target Range(497962010) - AC	7-Dec-19	Iodine-131	2.14E-04	1.06E-02	6.11E-03	pCi/m3
8S1 Target Range(498469008) - AC	14-Dec-19	Iodine-131	4.99E-03	8.00E-03	3.67E-03	pCi/m3
8S1 Target Range(499079008) - AC	21-Dec-19	Iodine-131	5.21E-03	1.18E-02	6.35E-03	pCi/m3
8S1 Target Range(499686008) - AC	27-Dec-19	Iodine-131	1.56E-03	1.10E-02	6.80E-03	pCi/m3

## 8S1 Target Range - Air Carbon-14

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
8S1 Target Range(468128008) - AC14	5-Jan-19	Carbon-14	5.15E-09	2.48E-07	1.48E-07	uCi/m3
8S1 Target Range(4688880005) - AC14	12-Jan-19	Carbon-14	-1.11E-07	2.95E-07	1.72E-07	uCi/m3
8S1 Target Range(469519016) - AC14	19-Jan-19	Carbon-14	-3.09E-08	1.00E-07	5.93E-08	uCi/m3
8S1 Target Range(470002017) - AC14	26-Jan-19	Carbon-14	-2.06E-08	1.20E-07	7.10E-08	uCi/m3
8S1 Target Range(470540010) - AC14	2-Feb-19	Carbon-14	-4.28E-08	1.14E-07	6.72E-08	uCi/m3
8S1 Target Range(471051005) - AC14	9-Feb-19	Carbon-14	-3.83E-08	1.41E-07	8.32E-08	uCi/m3
8S1 Target Range(471584010) - AC14	16-Feb-19	Carbon-14	1.75E-08	1.14E-07	6.85E-08	uCi/m3
8S1 Target Range(472133017) - AC14	23-Feb-19	Carbon-14	9.74E-08	1.39E-07	8.45E-08	uCi/m3
8S1 Target Range(472647005) - AC14	1-Mar-19	Carbon-14	-6.66E-08	1.24E-07	7.28E-08	uCi/m3
8S1 Target Range(473264015) - AC14	9-Mar-19	Carbon-14	-3.82E-08	1.03E-07	6.05E-08	uCi/m3
8S1 Target Range(473881012) - AC14	16-Mar-19	Carbon-14	5.56E-08	1.10E-07	6.64E-08	uCi/m3
8S1 Target Range(474425012) - AC14	23-Mar-19	Carbon-14	1.22E-07	1.30E-07	7.98E-08	uCi/m3
8S1 Target Range(475038007) - AC14	29-Mar-19	Carbon-14	-6.45E-08	1.17E-07	6.88E-08	uCi/m3
8S1 Target Range(475856010) - AC14	6-Apr-19	Carbon-14	3.18E-08	1.07E-07	6.42E-08	uCi/m3
8S1 Target Range(476506005) - AC14	13-Apr-19	Carbon-14	-3.23E-08	1.16E-07	6.83E-08	uCi/m3
8S1 Target Range(477146012) - AC14	20-Apr-19	Carbon-14	-3.28E-08	1.40E-07	8.27E-08	uCi/m3
8S1 Target Range(477720010) - AC14	27-Apr-19	Carbon-14	3.79E-09	1.17E-07	6.99E-08	uCi/m3
8S1 Target Range(478343010) - AC14	4-May-19	Carbon-14	-2.31E-08	1.33E-07	7.89E-08	uCi/m3
8S1 Target Range(479033010) - AC14	11-May-19	Carbon-14	1.21E-07	7.30E-08	uCi/m3	
8S1 Target Range(479683005) - AC14	18-May-19	Carbon-14	1.35E-07	1.54E-07	9.42E-08	uCi/m3
8S1 Target Range(480029005) - AC14	25-May-19	Carbon-14	-4.13E-08	1.07E-07	6.33E-08	uCi/m3
8S1 Target Range(480734010) - AC14	1-Jun-19	Carbon-14	-3.16E-08	1.37E-07	8.12E-08	uCi/m3
8S1 Target Range(481436010) - AC14	8-Jun-19	Carbon-14	2.90E-08	1.11E-07	6.69E-08	uCi/m3
8S1 Target Range(482140010) - AC14	15-Jun-19	Carbon-14	1.15E-07	1.20E-07	7.35E-08	uCi/m3
8S1 Target Range(482758017) - AC14	22-Jun-19	Carbon-14	2.97E-09	1.23E-07	7.35E-08	uCi/m3
8S1 Target Range(483652017) - AC14	29-Jun-19	Carbon-14	-6.55E-09	1.44E-07	8.55E-08	uCi/m3
8S1 Target Range(484196010) - AC14	6-Jul-19	Carbon-14	-3.05E-08	1.05E-07	6.21E-08	uCi/m3
8S1 Target Range(485035016) - AC14	13-Jul-19	Carbon-14	3.77E-08	1.22E-07	7.32E-08	uCi/m3
8S1 Target Range(485356010) - AC14	20-Jul-19	Carbon-14	1.20E-07	1.25E-07	7.64E-08	uCi/m3
8S1 Target Range(485943010) - AC14	27-Jul-19	Carbon-14	9.06E-08	1.56E-07	9.45E-08	uCi/m3
8S1 Target Range(486790012) - AC14	3-Aug-19	Carbon-14	-2.06E-08	1.10E-07	6.54E-08	uCi/m3
8S1 Target Range(487347010) - AC14	10-Aug-19	Carbon-14	-6.24E-08	1.32E-07	7.76E-08	uCi/m3
8S1 Target Range(488047019) - AC14	17-Aug-19	Carbon-14	6.19E-08	1.31E-07	7.94E-08	uCi/m3
8S1 Target Range(488407010) - AC14	24-Aug-19	Carbon-14	1.50E-07	1.51E-07	9.29E-08	uCi/m3
8S1 Target Range(489091010) - AC14	1-Sep-19	Carbon-14	5.21E-08	1.17E-07	7.04E-08	uCi/m3
8S1 Target Range(489316010) - AC14	8-Sep-19	Carbon-14	1.80E-08	1.76E-07	1.05E-07	uCi/m3

8S1 Target Range(489397010) - AC14	14-Sep-19	Carbon-14	-3.20E-08	1.53E-07	9.05E-08	uCi/m3
8S1 Target Range(490334012) - AC14	21-Sep-19	Carbon-14	4.00E-08	1.12E-07	6.74E-08	uCi/m3
8S1 Target Range(490940007) - AC14	29-Sep-19	Carbon-14	4.39E-08	1.56E-07	9.34E-08	uCi/m3
8S1 Target Range(492206005) - AC14	5-Oct-19	Carbon-14	1.02E-07	1.34E-07	8.14E-08	uCi/m3
8S1 Target Range(492214017) - AC14	12-Oct-19	Carbon-14	1.15E-07	1.25E-07	7.66E-08	uCi/m3
8S1 Target Range(493200010) - AC14	19-Oct-19	Carbon-14	6.37E-08	1.32E-07	7.99E-08	uCi/m3
8S1 Target Range(493690007) - AC14	26-Oct-19	Carbon-14	-2.32E-08	1.48E-07	8.78E-08	uCi/m3
8S1 Target Range(494544012) - AC14	2-Nov-19	Carbon-14	2.69E-08	1.48E-07	8.85E-08	uCi/m3
8S1 Target Range(495196005) - AC14	9-Nov-19	Carbon-14	9.16E-08	1.08E-07	6.60E-08	uCi/m3
8S1 Target Range(495839010) - AC14	16-Nov-19	Carbon-14	1.01E-08	1.20E-07	7.16E-08	uCi/m3
8S1 Target Range(496785010) - AC14	23-Nov-19	Carbon-14	1.01E-07	1.42E-07	8.64E-08	uCi/m3
8S1 Target Range(497497010) - AC14	30-Nov-19	Carbon-14	6.01E-08	1.13E-07	6.82E-08	uCi/m3
8S1 Target Range(497962012) - AC14	7-Dec-19	Carbon-14	1.82E-07	1.17E-07	7.34E-08	uCi/m3
8S1 Target Range(498469010) - AC14	14-Dec-19	Carbon-14	2.10E-07	1.15E-07	7.28E-08	uCi/m3
8S1 Target Range(499079010) - AC14	21-Dec-19	Carbon-14	-6.53E-08	1.61E-07	9.49E-08	uCi/m3
8S1 Target Range(499686010) - AC14	27-Dec-19	Carbon-14	-9.65E-09	1.36E-07	8.06E-08	uCi/m3

## 8S1 Target Range - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
8S1 Target Range(468128014) - AP	5-Jan-19	BETA	1.89E-02	2.40E-03	1.10E-02	pCi/m3
8S1 Target Range(468880004) - AP	12-Jan-19	BETA	4.77E-03	2.47E-03	1.49E-02	pCi/m3
8S1 Target Range(469519008) - AP	19-Jan-19	BETA	7.05E-03	2.30E-03	1.09E-02	pCi/m3
8S1 Target Range(470002009) - AP	26-Jan-19	BETA	2.54E-02	2.29E-03	1.15E-02	pCi/m3
8S1 Target Range(470540009) - AP	2-Feb-19	BETA	7.70E-03	2.16E-03	1.13E-02	pCi/m3
8S1 Target Range(471051004) - AP	9-Feb-19	BETA	5.33E-03	2.95E-03	1.45E-02	pCi/m3
8S1 Target Range(471584009) - AP	16-Feb-19	BETA	9.58E-03	2.03E-03	9.84E-03	pCi/m3
8S1 Target Range(472133012) - AP	23-Feb-19	BETA	1.62E-02	2.60E-03	1.20E-02	pCi/m3
8S1 Target Range(472647004) - AP	1-Mar-19	BETA	1.01E-02	2.35E-03	1.07E-02	pCi/m3
8S1 Target Range(473264014) - AP	9-Mar-19	BETA	7.96E-03	2.11E-03	1.02E-02	pCi/m3
8S1 Target Range(473381011) - AP	16-Mar-19	BETA	2.36E-02	2.40E-03	1.13E-02	pCi/m3
8S1 Target Range(474425011) - AP	23-Mar-19	BETA	1.48E-02	2.59E-03	1.29E-02	pCi/m3
8S1 Target Range(475038006) - AP	29-Mar-19	BETA	7.99E-03	2.37E-03	1.13E-02	pCi/m3
8S1 Target Range(475856009) - AP	6-Apr-19	BETA	5.23E-03	1.93E-03	1.03E-02	pCi/m3
8S1 Target Range(476506004) - AP	13-Apr-19	BETA	3.87E-03	2.29E-03	1.10E-02	pCi/m3
8S1 Target Range(477146011) - AP	20-Apr-19	BETA	1.03E-02	2.30E-03	1.06E-02	pCi/m3
8S1 Target Range(477720009) - AP	27-Apr-19	BETA	1.35E-02	2.31E-03	1.08E-02	pCi/m3
8S1 Target Range(478343009) - AP	4-May-19	BETA	1.62E-02	2.21E-03	1.02E-02	pCi/m3
8S1 Target Range(479033009) - AP	11-May-19	BETA	1.51E-02	2.23E-03	1.05E-02	pCi/m3

8S1 Target Range(4796833004) - AP	18-May-19	BETA	5.92E-03	2.56E-03	1.23E-02	pCi/m3
8S1 Target Range(480029004) - AP	25-May-19	BETA	6.87E-03	1.95E-03	9.49E-03	pCi/m3
8S1 Target Range(480734009) - AP	1-Jun-19	BETA	4.30E-03	2.68E-03	1.30E-02	pCi/m3
8S1 Target Range(481436009) - AP	8-Jun-19	BETA	1.16E-02	2.11E-03	1.04E-02	pCi/m3
8S1 Target Range(482140009) - AP	15-Jun-19	BETA	7.89E-03	2.35E-03	1.08E-02	pCi/m3
8S1 Target Range(482758012) - AP	22-Jun-19	BETA	7.79E-03	2.39E-03	1.09E-02	pCi/m3
8S1 Target Range(483652005) - AP	29-Jun-19	BETA	6.33E-03	2.79E-03	1.20E-02	pCi/m3
8S1 Target Range(484196009) - AP	6-Jul-19	BETA	7.81E-03	1.98E-03	1.01E-02	pCi/m3
8S1 Target Range(485035004) - AP	13-Jul-19	BETA	4.97E-03	2.17E-03	1.16E-02	pCi/m3
8S1 Target Range(485356009) - AP	20-Jul-19	BETA	8.65E-03	2.34E-03	2.41E-03	pCi/m3
8S1 Target Range(485943009) - AP	27-Jul-19	BETA	7.97E-03	2.54E-03	1.34E-02	pCi/m3
8S1 Target Range(486790011) - AP	3-Aug-19	BETA	6.70E-03	2.00E-03	1.10E-02	pCi/m3
8S1 Target Range(487347009) - AP	10-Aug-19	BETA	9.89E-03	2.57E-03	1.25E-02	pCi/m3
8S1 Target Range(488047008) - AP	17-Aug-19	BETA	6.87E-03	2.37E-03	1.20E-02	pCi/m3
8S1 Target Range(488407009) - AP	24-Aug-19	BETA	1.17E-02	2.30E-03	1.15E-02	pCi/m3
8S1 Target Range(489091009) - AP	1-Sep-19	BETA	1.08E-02	1.85E-03	8.68E-03	pCi/m3
8S1 Target Range(489316009) - AP	8-Sep-19	BETA	1.29E-02	2.51E-03	1.29E-02	pCi/m3
8S1 Target Range(489397009) - AP	14-Sep-19	BETA	1.91E-02	2.58E-03	1.37E-02	pCi/m3
8S1 Target Range(490334011) - AP	21-Sep-19	BETA	1.52E-02	1.77E-03	8.99E-03	pCi/m3
8S1 Target Range(490940006) - AP	5-Oct-19	BETA	3.24E-02	2.63E-03	1.40E-02	pCi/m3
8S1 Target Range(492206004) - AP	12-Oct-19	BETA	2.05E-02	2.59E-03	1.15E-02	pCi/m3
8S1 Target Range(492214008) - AP	19-Oct-19	BETA	4.67E-02	2.65E-03	1.40E-02	pCi/m3
8S1 Target Range(493200009) - AP	26-Oct-19	BETA	5.10E-02	2.60E-03	1.23E-02	pCi/m3
8S1 Target Range(493690006) - AP	2-Nov-19	BETA	6.82E-02	2.92E-03	1.33E-02	pCi/m3
8S1 Target Range(494544009) - AP	9-Nov-19	BETA	8.87E-02	2.21E-03	1.24E-02	pCi/m3
8S1 Target Range(495839009) - AP	16-Nov-19	BETA	4.93E-02	2.53E-03	1.18E-02	pCi/m3
8S1 Target Range(496785009) - AP	23-Nov-19	BETA	3.07E-02	2.72E-03	1.14E-02	pCi/m3
8S1 Target Range(497497009) - AP	30-Nov-19	BETA	1.32E-02	2.22E-03	1.04E-02	pCi/m3
8S1 Target Range(497962011) - AP	7-Dec-19	BETA	9.00E-03	2.76E-03	1.25E-02	pCi/m3
8S1 Target Range(498469009) - AP	14-Dec-19	BETA	1.18E-02	2.53E-03	1.26E-02	pCi/m3
8S1 Target Range(499079009) - AP	21-Dec-19	BETA	2.72E-02	3.04E-03	1.48E-02	pCi/m3
8S1 Target Range(499686009) - AP	27-Dec-19	BETA	2.46E-02	2.74E-03	1.24E-02	pCi/m3
8S1 Target Range(476709005) - AP	9-Feb-19	Cesium-134	-3.98E-04	3.33E-04	3.75E-04	pCi/m3
8S1 Target Range(484864005) - AP	11-May-19	Cesium-134	2.41E-05	7.28E-04	4.26E-04	pCi/m3
8S1 Target Range(493791002) - AP	14-Aug-19	Cesium-134	1.32E-04	3.57E-04	2.48E-04	pCi/m3
8S1 Target Range(501636004) - AP	16-Nov-19	Cesium-134	-1.07E-04	4.33E-04	3.05E-04	pCi/m3
8S1 Target Range(476709005) - AP	9-Feb-19	Cesium-137	8.79E-05	4.81E-04	2.73E-04	pCi/m3

8S1 Target Range(484864005) - AP	11-May-19	Cesium-137	1.39E-04	4.60E-04	2.41E-04	pCi/m3
8S1 Target Range(493791002) - AP	14-Aug-19	Cesium-137	4.59E-05	4.00E-04	2.25E-04	pCi/m3
8S1 Target Range(501636004) - AP	16-Nov-19	Cesium-137	4.03E-05	5.40E-04	3.16E-04	pCi/m3

## 8S2 SW Site Boundary - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
8S2 SW Site Boundary(468128006) - AC	5-Jan-19	Iodine-131	-3.16E-03	7.75E-03	5.35E-03	pCi/m3
8S2 SW Site Boundary(468880010) - AC	12-Jan-19	Iodine-131	3.48E-03	1.20E-02	6.53E-03	pCi/m3
8S2 SW Site Boundary(469519005) - AC	19-Jan-19	Iodine-131	-3.73E-04	6.08E-03	3.68E-03	pCi/m3
8S2 SW Site Boundary(470002006) - AC	26-Jan-19	Iodine-131	-2.75E-04	7.76E-03	5.10E-03	pCi/m3
8S2 SW Site Boundary(470540006) - AC	2-Feb-19	Iodine-131	-9.17E-05	8.04E-03	4.67E-03	pCi/m3
8S2 SW Site Boundary(471051011) - AC	9-Feb-19	Iodine-131	-6.16E-04	7.87E-03	4.68E-03	pCi/m3
8S2 SW Site Boundary(471584006) - AC	16-Feb-19	Iodine-131	-1.93E-03	5.03E-03	3.50E-03	pCi/m3
8S2 SW Site Boundary(472133005) - AC	23-Feb-19	Iodine-131	5.80E-03	1.28E-02	6.98E-03	pCi/m3
8S2 SW Site Boundary(472647011) - AC	1-Mar-19	Iodine-131	3.99E-04	1.37E-02	7.76E-03	pCi/m3
8S2 SW Site Boundary(473264016) - AC	9-Mar-19	Iodine-131	2.74E-03	8.25E-03	4.46E-03	pCi/m3
8S2 SW Site Boundary(473881006) - AC	16-Mar-19	Iodine-131	9.39E-04	8.58E-03	4.86E-03	pCi/m3
8S2 SW Site Boundary(474425006) - AC	23-Mar-19	Iodine-131	-2.66E-03	1.04E-02	6.77E-03	pCi/m3
8S2 SW Site Boundary(475038003) - AC	29-Mar-19	Iodine-131	1.55E-03	8.00E-03	4.42E-03	pCi/m3
8S2 SW Site Boundary(475856006) - AC	6-Apr-19	Iodine-131	-9.35E-04	5.10E-03	3.25E-03	pCi/m3
8S2 SW Site Boundary(476506011) - AC	13-Apr-19	Iodine-131	2.50E-03	9.41E-03	5.25E-03	pCi/m3
8S2 SW Site Boundary(477146006) - AC	20-Apr-19	Iodine-131	1.17E-03	9.02E-03	5.45E-03	pCi/m3
8S2 SW Site Boundary(477720006) - AC	27-Apr-19	Iodine-131	1.31E-03	9.87E-03	5.73E-03	pCi/m3
8S2 SW Site Boundary(478343006) - AC	4-May-19	Iodine-131	-1.47E-03	6.12E-03	3.96E-03	pCi/m3
8S2 SW Site Boundary(479033006) - AC	11-May-19	Iodine-131	-2.02E-03	6.31E-03	4.57E-03	pCi/m3
8S2 SW Site Boundary(479683011) - AC	18-May-19	Iodine-131	-3.34E-03	8.91E-03	6.05E-03	pCi/m3
8S2 SW Site Boundary(480029011) - AC	25-May-19	Iodine-131	3.64E-03	9.68E-03	5.28E-03	pCi/m3
8S2 SW Site Boundary(480734006) - AC	1-Jun-19	Iodine-131	-1.83E-03	1.19E-02	8.10E-03	pCi/m3
8S2 SW Site Boundary(481436006) - AC	8-Jun-19	Iodine-131	-4.44E-03	1.01E-02	7.07E-03	pCi/m3
8S2 SW Site Boundary(482140006) - AC	15-Jun-19	Iodine-131	4.67E-03	9.72E-03	5.31E-03	pCi/m3
8S2 SW Site Boundary(4822758006) - AC	22-Jun-19	Iodine-131	1.04E-03	7.58E-03	4.21E-03	pCi/m3
8S2 SW Site Boundary(483652013) - AC	29-Jun-19	Iodine-131	-3.47E-04	8.96E-03	5.32E-03	pCi/m3
8S2 SW Site Boundary(484196006) - AC	6-Jul-19	Iodine-131	-3.91E-03	9.96E-03	6.69E-03	pCi/m3
8S2 SW Site Boundary(485085010) - AC	13-Jul-19	Iodine-131	-6.58E-04	5.89E-03	3.71E-03	pCi/m3
8S2 SW Site Boundary(485356006) - AC	20-Jul-19	Iodine-131	8.18E-04	7.85E-03	4.39E-03	pCi/m3
8S2 SW Site Boundary(485943006) - AC	27-Jul-19	Iodine-131	1.10E-03	1.24E-02	7.24E-03	pCi/m3
8S2 SW Site Boundary(486790008) - AC	3-Aug-19	Iodine-131	2.35E-03	8.83E-03	5.26E-03	pCi/m3
8S2 SW Site Boundary(487347006) - AC	10-Aug-19	Iodine-131	-6.48E-04	7.35E-03	4.48E-03	pCi/m3

8S2 SW Site Boundary(488047005) - AC	17-Aug-19	Iodine-131	-3.10E-03	7.74E-03	5.29E-03	pCi/m3
8S2 SW Site Boundary(488407006) - AC	24-Aug-19	Iodine-131	2.29E-03	8.21E-03	4.61E-03	pCi/m3
8S2 SW Site Boundary(489091006) - AC	1-Sep-19	Iodine-131	3.86E-03	1.59E-02	8.71E-03	pCi/m3
8S2 SW Site Boundary(489316006) - AC	8-Sep-19	Iodine-131	-2.88E-03	8.34E-03	6.09E-03	pCi/m3
8S2 SW Site Boundary(489397006) - AC	14-Sep-19	Iodine-131	9.31E-04	1.35E-02	7.96E-03	pCi/m3
8S2 SW Site Boundary(490334008) - AC	21-Sep-19	Iodine-131	2.97E-05	9.67E-03	5.70E-03	pCi/m3
8S2 SW Site Boundary(490940013) - AC	29-Sep-19	Iodine-131	5.47E-03	8.00E-03	6.83E-03	pCi/m3
8S2 SW Site Boundary(492206011) - AC	5-Oct-19	Iodine-131	1.60E-03	7.08E-03	4.00E-03	pCi/m3
8S2 SW Site Boundary(492214005) - AC	12-Oct-19	Iodine-131	1.05E-03	7.33E-03	4.38E-03	pCi/m3
8S2 SW Site Boundary(493200006) - AC	19-Oct-19	Iodine-131	-2.96E-03	1.09E-02	6.76E-03	pCi/m3
8S2 SW Site Boundary(493690013) - AC	26-Oct-19	Iodine-131	-9.26E-04	7.03E-03	4.22E-03	pCi/m3
8S2 SW Site Boundary(494544006) - AC	2-Nov-19	Iodine-131	1.83E-03	9.19E-03	5.69E-03	pCi/m3
8S2 SW Site Boundary(495196011) - AC	9-Nov-19	Iodine-131	4.00E-03	9.22E-03	5.19E-03	pCi/m3
8S2 SW Site Boundary(495839006) - AC	16-Nov-19	Iodine-131	-2.49E-03	1.19E-02	7.59E-03	pCi/m3
8S2 SW Site Boundary(496785006) - AC	23-Nov-19	Iodine-131	1.96E-03	1.15E-02	6.59E-03	pCi/m3
8S2 SW Site Boundary(497497006) - AC	30-Nov-19	Iodine-131	1.85E-03	7.07E-03	4.07E-03	pCi/m3
8S2 SW Site Boundary(497962008) - AC	7-Dec-19	Iodine-131	-4.34E-03	7.56E-03	5.67E-03	pCi/m3
8S2 SW Site Boundary(498469006) - AC	14-Dec-19	Iodine-131	-8.79E-04	7.78E-03	4.72E-03	pCi/m3
8S2 SW Site Boundary(499079006) - AC	21-Dec-19	Iodine-131	6.56E-03	1.35E-02	7.74E-03	pCi/m3
8S2 SW Site Boundary(499686006) - AC	27-Dec-19	Iodine-131	2.90E-03	8.75E-03	4.87E-03	pCi/m3

## 8S2 SW Site Boundary - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
8S2 SW Site Boundary(468128007) - AP	5-Jan-19	BETA	1.48E-02	2.15E-03	1.10E-02	pCi/m3
8S2 SW Site Boundary(468880011) - AP	12-Jan-19	BETA	6.43E-03	3.54E-03	1.80E-02	pCi/m3
8S2 SW Site Boundary(469519006) - AP	19-Jan-19	BETA	7.19E-03	1.72E-03	1.01E-02	pCi/m3
8S2 SW Site Boundary(470002007) - AP	26-Jan-19	BETA	3.25E-02	2.55E-03	1.17E-02	pCi/m3
8S2 SW Site Boundary(470540007) - AP	2-Feb-19	BETA	6.08E-03	2.43E-03	1.13E-02	pCi/m3
8S2 SW Site Boundary(471051012) - AP	9-Feb-19	BETA	6.04E-03	2.63E-03	1.41E-02	pCi/m3
8S2 SW Site Boundary(471584007) - AP	16-Feb-19	BETA	6.17E-03	2.04E-03	9.94E-03	pCi/m3
8S2 SW Site Boundary(472133013) - AP	23-Feb-19	BETA	1.73E-02	2.62E-03	1.21E-02	pCi/m3
8S2 SW Site Boundary(472647012) - AP	1-Mar-19	BETA	8.94E-03	2.14E-03	1.04E-02	pCi/m3
8S2 SW Site Boundary(473264017) - AP	9-Mar-19	BETA	7.63E-03	2.12E-03	1.00E-02	pCi/m3
8S2 SW Site Boundary(473881007) - AP	16-Mar-19	BETA	2.04E-02	2.54E-03	1.14E-02	pCi/m3
8S2 SW Site Boundary(474425007) - AP	23-Mar-19	BETA	9.99E-03	2.57E-03	1.26E-02	pCi/m3
8S2 SW Site Boundary(475038004) - AP	29-Mar-19	BETA	9.07E-03	2.25E-03	1.09E-02	pCi/m3
8S2 SW Site Boundary(475856007) - AP	6-Apr-19	BETA	4.74E-03	2.10E-03	1.00E-02	pCi/m3
8S2 SW Site Boundary(476506012) - AP	13-Apr-19	BETA	9.48E-03	2.31E-03	1.11E-02	pCi/m3

8S2 SW Site Boundary(477146007) - AP	20-Apr-19	BETA	8.87E-03	2.17E-03	1.06E-02	pCi/m3
8S2 SW Site Boundary(477720007) - AP	27-Apr-19	BETA	1.60E-02	2.39E-03	1.07E-02	pCi/m3
8S2 SW Site Boundary(478343007) - AP	4-May-19	BETA	1.58E-02	2.20E-03	1.01E-02	pCi/m3
8S2 SW Site Boundary(479033007) - AP	11-May-19	BETA	1.35E-02	2.19E-03	1.01E-02	pCi/m3
8S2 SW Site Boundary(479683012) - AP	18-May-19	BETA	1.08E-02	2.46E-03	1.20E-02	pCi/m3
8S2 SW Site Boundary(480029012) - AP	25-May-19	BETA	6.43E-03	1.86E-03	9.25E-03	pCi/m3
8S2 SW Site Boundary(480734007) - AP	1-Jun-19	BETA	7.74E-03	2.70E-03	1.28E-02	pCi/m3
8S2 SW Site Boundary(481436007) - AP	8-Jun-19	BETA	1.28E-02	1.98E-03	9.50E-03	pCi/m3
8S2 SW Site Boundary(482140007) - AP	15-Jun-19	BETA	9.79E-03	2.13E-03	1.05E-02	pCi/m3
8S2 SW Site Boundary(482758013) - AP	22-Jun-19	BETA	9.49E-03	2.11E-03	1.05E-02	pCi/m3
8S2 SW Site Boundary(483652006) - AP	29-Jun-19	BETA	8.27E-03	2.49E-03	1.17E-02	pCi/m3
8S2 SW Site Boundary(484196007) - AP	6-Jul-19	BETA	7.47E-03	2.05E-03	9.79E-03	pCi/m3
8S2 SW Site Boundary(485085003) - AP	13-Jul-19	BETA	2.54E-03	2.32E-03	1.14E-02	pCi/m3
8S2 SW Site Boundary(485356007) - AP	20-Jul-19	BETA	9.72E-03	2.32E-03	2.51E-03	pCi/m3
8S2 SW Site Boundary(485943007) - AP	27-Jul-19	BETA	7.32E-03	2.68E-03	1.33E-02	pCi/m3
8S2 SW Site Boundary(486790009) - AP	3-Aug-19	BETA	5.65E-03	2.13E-03	1.10E-02	pCi/m3
8S2 SW Site Boundary(487347007) - AP	10-Aug-19	BETA	1.32E-02	2.41E-03	1.18E-02	pCi/m3
8S2 SW Site Boundary(488047006) - AP	17-Aug-19	BETA	9.40E-03	2.10E-03	1.16E-02	pCi/m3
8S2 SW Site Boundary(488407007) - AP	24-Aug-19	BETA	8.14E-03	2.31E-03	1.09E-02	pCi/m3
8S2 SW Site Boundary(489091007) - AP	1-Sep-19	BETA	1.33E-02	1.99E-03	8.76E-03	pCi/m3
8S2 SW Site Boundary(489316007) - AP	8-Sep-19	BETA	1.14E-02	2.66E-03	1.27E-02	pCi/m3
8S2 SW Site Boundary(489397007) - AP	14-Sep-19	BETA	2.28E-02	2.67E-03	1.44E-02	pCi/m3
8S2 SW Site Boundary(490334009) - AP	21-Sep-19	BETA	1.46E-02	1.78E-03	9.18E-03	pCi/m3
8S2 SW Site Boundary(490940014) - AP	29-Sep-19	BETA	1.81E-02	2.91E-03	1.41E-02	pCi/m3
8S2 SW Site Boundary(492206012) - AP	5-Oct-19	BETA	3.04E-02	2.18E-03	1.13E-02	pCi/m3
8S2 SW Site Boundary(492214006) - AP	12-Oct-19	BETA	1.94E-02	2.19E-03	1.18E-02	pCi/m3
8S2 SW Site Boundary(493200007) - AP	19-Oct-19	BETA	4.22E-02	2.31E-03	1.22E-02	pCi/m3
8S2 SW Site Boundary(493690014) - AP	26-Oct-19	BETA	3.93E-02	2.26E-03	1.18E-02	pCi/m3
8S2 SW Site Boundary(494544007) - AP	2-Nov-19	BETA	8.79E-02	2.95E-03	1.41E-02	pCi/m3
8S2 SW Site Boundary(495196012) - AP	9-Nov-19	BETA	1.02E-01	2.27E-03	1.23E-02	pCi/m3
8S2 SW Site Boundary(495839007) - AP	16-Nov-19	BETA	5.85E-02	2.53E-03	1.20E-02	pCi/m3
8S2 SW Site Boundary(496785007) - AP	23-Nov-19	BETA	3.89E-02	2.95E-03	1.16E-02	pCi/m3
8S2 SW Site Boundary(497497007) - AP	30-Nov-19	BETA	1.31E-02	2.03E-03	1.06E-02	pCi/m3
8S2 SW Site Boundary(497962009) - AP	7-Dec-19	BETA	6.37E-03	2.31E-03	1.20E-02	pCi/m3
8S2 SW Site Boundary(498469007) - AP	14-Dec-19	BETA	5.76E-03	2.20E-03	1.25E-02	pCi/m3
8S2 SW Site Boundary(499079007) - AP	21-Dec-19	BETA	1.80E-02	2.66E-03	1.47E-02	pCi/m3
8S2 SW Site Boundary(499686007) - AP	27-Dec-19	BETA	1.65E-02	2.21E-03	1.20E-02	pCi/m3
8S2 SW Site Boundary(476709003) - AP	9-Feb-19	Cesium-134	4.72E-04	8.61E-04	4.69E-04	pCi/m3

8S2 SW Site Boundary(484864006) - AP	11-May-19	Cesium-134	-3.44E-05	4.25E-04	2.70E-04	pCi/m3
8S2 SW Site Boundary(493791005) - AP	14-Aug-19	Cesium-134	4.64E-06	3.31E-04	1.98E-04	pCi/m3
8S2 SW Site Boundary(501636003) - AP	16-Nov-19	Cesium-134	4.10E-05	5.56E-04	3.10E-04	pCi/m3
8S2 SW Site Boundary(476709003) - AP	9-Feb-19	Cesium-137	3.83E-04	3.83E-04	2.95E-04	pCi/m3
8S2 SW Site Boundary(484864006) - AP	11-May-19	Cesium-137	-1.41E-04	3.47E-04	2.57E-04	pCi/m3
8S2 SW Site Boundary(493791005) - AP	14-Aug-19	Cesium-137	5.62E-05	2.44E-04	1.57E-04	pCi/m3
8S2 SW Site Boundary(501636003) - AP	16-Nov-19	Cesium-137	3.16E-05	5.18E-04	3.07E-04	pCi/m3

## 8S3 DCSF96-1 - Groundwater

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
8S3 DCSF96-1(469647001) - GW	24-Jan-19	BETA	4.37E+00	1.59E+00	1.29E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	BETA	5.01E+00	1.46E+00	1.31E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	BETA	4.48E+00	8.99E-01	1.07E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	BETA	6.13E+00	1.63E+00	1.57E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Barium-140	3.55E+00	8.94E+00	5.44E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Barium-140	4.05E-01	1.02E+01	6.01E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Barium-140	-2.44E+00	8.48E+00	5.47E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Barium-140	1.45E+00	7.35E+00	4.37E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Cesium-134	-1.45E-01	1.46E+00	8.61E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Cesium-134	1.47E+00	1.62E+00	1.53E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Cesium-134	4.58E-01	1.91E+00	1.10E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Cesium-134	9.41E-01	1.63E+00	9.71E-01	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Cesium-137	-1.57E-01	1.33E+00	9.38E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Cesium-137	-1.22E-01	1.48E+00	9.00E-01	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Cesium-137	7.45E-01	1.75E+00	1.08E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Cesium-137	-9.38E-01	1.47E+00	1.06E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Cobalt-58	-1.38E+00	1.42E+00	1.26E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Cobalt-58	-6.12E-01	1.54E+00	1.34E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Cobalt-58	-8.15E-02	1.67E+00	9.73E-01	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Cobalt-58	-2.25E-02	1.39E+00	8.02E-01	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Cobalt-60	9.52E-01	1.49E+00	9.99E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Cobalt-60	-7.06E-01	1.69E+00	1.78E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	29-Jul-19	Cobalt-60	5.42E-01	1.85E+00	1.08E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	21-Oct-19	Cobalt-60	6.50E-01	1.60E+00	9.41E-01	pCi/L
8S3 DCSF96-1(485902001) - GW	24-Jan-19	Iodine-131	-1.49E+00	3.69E+00	2.34E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	16-Apr-19	Iodine-131	2.39E-01	4.25E+00	2.45E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Iodine-131	4.03E-01	3.29E+00	1.96E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Iodine-131	-1.05E+00	2.60E+00	1.65E+00	pCi/L

8S3 DCSF96-1(469647001) - GW	24-Jan-19	Iron-55	4.57E+00	7.55E+01	5.46E+01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Iron-55	-4.95E+00	6.80E+01	4.56E+01	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Iron-55	1.51E+01	7.71E+01	5.65E+01	pCi/L
8S3 DCSF96-1(485902005) - GW	21-Oct-19	Iron-55	-1.52E+01	5.88E+01	4.13E+01	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Iron-59	-8.70E-01	2.72E+00	1.74E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Iron-59	-4.63E-01	3.12E+00	1.86E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Iron-59	-1.05E+00	3.36E+00	2.12E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Iron-59	1.37E+00	3.10E+00	1.82E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Lanthanum-140	-1.13E+00	3.13E+00	1.98E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Lanthanum-140	8.48E-02	3.38E+00	2.28E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Lanthanum-140	-1.49E+00	2.67E+00	1.90E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Lanthanum-140	1.93E+00	2.50E+00	2.17E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Manganese-54	9.45E-01	1.50E+00	9.27E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Manganese-54	-1.84E+00	1.51E+00	1.60E+00	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Manganese-54	-5.48E-01	1.59E+00	9.93E-01	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Manganese-54	-6.84E-02	1.35E+00	7.84E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	24-Jan-19	Nickel-63	-7.51E+00	3.36E+01	1.97E+01	pCi/L
8S3 DCSF96-1(485902001) - GW	16-Apr-19	Nickel-63	2.01E+01	3.22E+01	2.04E+01	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Nickel-63	-2.32E+01	3.40E+01	1.93E+01	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Nickel-63	4.36E+00	2.90E+01	1.75E+01	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Niobium-95	-6.71E-01	1.37E+00	8.90E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Niobium-95	9.20E-02	1.52E+00	9.17E-01	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Niobium-95	-2.32E-01	1.90E+00	1.72E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Niobium-95	-1.75E+00	1.41E+00	1.63E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Total Strontium	-5.48E-01	9.82E-01	5.17E-01	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Total Strontium	-2.03E-01	5.89E-01	3.45E-01	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Total Strontium	-1.15E+00	8.74E-01	4.33E-01	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Total Strontium	6.86E-02	5.00E-01	3.01E-01	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Tritium	9.40E+01	2.32E+02	1.44E+02	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Tritium	1.30E+02	2.60E+02	1.63E+02	pCi/L
8S3 DCSF96-1(485902001) - GW	29-Jul-19	Tritium	-3.82E+00	2.81E+02	1.67E+02	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Tritium	1.75E+02	2.26E+02	1.47E+02	pCi/L
8S3 DCSF96-1(485902001) - GW	24-Jan-19	Zinc-65	-4.27E-01	2.69E+00	1.65E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Zinc-65	1.85E+00	3.18E+00	2.03E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	29-Jul-19	Zinc-65	3.61E-01	3.35E+00	1.95E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Zinc-65	-2.73E-01	3.07E+00	1.85E+00	pCi/L
8S3 DCSF96-1(469647001) - GW	24-Jan-19	Zirconium-95	9.15E-01	2.57E+00	1.66E+00	pCi/L
8S3 DCSF96-1(476505001) - GW	16-Apr-19	Zirconium-95	1.75E+00	2.89E+00	2.69E+00	pCi/L

8S3 DCSF96-1(485902001) - GW	29-Jul-19	Zirconium-95	-3.26E-01	3.14E+00	1.84E+00	pCi/L
8S3 DCSF96-1(493409005) - GW	21-Oct-19	Zirconium-95	2.42E+00	2.42E+00	2.59E+00	pCi/L

## AVA Avila Beach Sand

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
AVA Avila Beach(473342002) - SD	14-Mar-19	Barium-140	-5.00E+01	1.96E+02	1.24E+02	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Barium-140	2.28E+01	3.01E+02	1.68E+02	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Cesium-134	3.30E+01	5.71E+01	3.16E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Cesium-134	2.56E+01	5.29E+01	2.87E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Cesium-137	3.05E+01	3.05E+01	3.39E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Cesium-137	1.38E+01	5.24E+01	2.89E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Cobalt-58	-1.45E+01	3.92E+01	2.73E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Cobalt-58	-1.17E+01	4.55E+01	2.98E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Cobalt-60	-1.68E+00	2.56E+01	1.57E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Cobalt-60	-1.05E+01	4.39E+01	2.73E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Iron-55	-6.02E+03	1.93E+04	1.36E+04	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Iron-55	-4.11E+03	1.54E+04	1.10E+04	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Iron-59	6.85E+00	9.25E+01	5.14E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Iron-59	1.61E+01	1.12E+02	6.50E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Lanthanum-140	-5.26E+01	5.52E+01	5.84E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Lanthanum-140	3.06E+01	1.20E+02	6.34E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Manganese-54	2.98E+00	4.05E+01	2.35E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Manganese-54	-7.66E-01	4.70E+01	3.16E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Nickel-63	-3.57E+02	2.34E+03	1.38E+03	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Nickel-63	-2.22E+02	2.79E+03	1.65E+03	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Niobium-95	-1.42E+01	4.19E+01	2.74E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Niobium-95	-2.96E+01	4.18E+01	3.36E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Total Strontium	-8.32E+01	9.23E+02	5.40E+02	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Total Strontium	1.23E+02	4.89E+02	3.09E+02	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Zinc-65	-1.51E+01	8.13E+01	5.79E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Zinc-65	-3.45E+01	1.07E+02	8.36E+01	pCi/kg
AVA Avila Beach(473342002) - SD	14-Mar-19	Zirconium-95	-5.73E+00	7.47E+01	4.52E+01	pCi/kg
AVA Avila Beach(488682002) - SD	15-Aug-19	Zirconium-95	-1.27E+01	8.72E+01	5.39E+01	pCi/kg

## BCM Blanchard Cow Meat

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
BCM Blanchard Cow Meat(471740001) - MT	19-Feb-19	Cesium-134	-7.93E-01	3.54E+00	2.30E+00	pCi/kg
BCM Blanchard Cow Meat(478549003) - MT	9-May-19	Cesium-134	7.82E-01	4.33E+00	2.59E+00	pCi/kg

BCM Blanchard Cow Meat(489321001) - MT	10-Sep-19	Cesium-134	1.50E+00	4.23E+00	2.54E+00	pCi/kg
BCM Blanchard Cow Meat(494382001) - MT	31-Oct-19	Cesium-134	2.82E-01	4.57E+00	2.99E+00	pCi/kg
BCM Blanchard Cow Meat(471740001) - MT	19-Feb-19	Cesium-137	1.30E+00	3.34E+00	2.02E+00	pCi/kg
BCM Blanchard Cow Meat(478549003) - MT	9-May-19	Cesium-137	1.36E+00	3.97E+00	2.36E+00	pCi/kg
BCM Blanchard Cow Meat(489321001) - MT	10-Sep-19	Cesium-137	1.63E+00	3.67E+00	2.20E+00	pCi/kg
BCM Blanchard Cow Meat(494382001) - MT	31-Oct-19	Cesium-137	-6.49E-01	3.67E+00	2.34E+00	pCi/kg
BCM Blanchard Cow Meat(471740001) - MT	19-Feb-19	Cobalt-58	1.62E+00	3.67E+00	2.13E+00	pCi/kg
BCM Blanchard Cow Meat(478549003) - MT	9-May-19	Cobalt-58	5.06E-01	3.72E+00	2.23E+00	pCi/kg
BCM Blanchard Cow Meat(489321001) - MT	10-Sep-19	Cobalt-58	4.19E-02	3.73E+00	2.28E+00	pCi/kg
BCM Blanchard Cow Meat(494382001) - MT	31-Oct-19	Cobalt-58	3.01E-01	3.97E+00	2.29E+00	pCi/kg
BCM Blanchard Cow Meat(471740001) - MT	19-Feb-19	Cobalt-60	-5.66E-01	3.86E+00	2.37E+00	pCi/kg
BCM Blanchard Cow Meat(478549003) - MT	9-May-19	Cobalt-60	-3.24E-01	4.72E+00	2.81E+00	pCi/kg
BCM Blanchard Cow Meat(489321001) - MT	10-Sep-19	Cobalt-60	-7.40E-01	4.19E+00	2.95E+00	pCi/kg
BCM Blanchard Cow Meat(494382001) - MT	31-Oct-19	Cobalt-60	9.62E-01	4.69E+00	2.77E+00	pCi/kg
BCM Blanchard Cow Meat(471740001) - MT	19-Feb-19	Iodine-131	4.09E+00	5.85E+00	3.74E+00	pCi/kg
BCM Blanchard Cow Meat(478549003) - MT	9-May-19	Iodine-131	1.31E+00	6.32E+00	3.63E+00	pCi/kg
BCM Blanchard Cow Meat(489321001) - MT	10-Sep-19	Iodine-131	-8.80E-01	6.16E+00	3.80E+00	pCi/kg
BCM Blanchard Cow Meat(471740001) - MT	31-Oct-19	Iodine-131	-2.05E+00	5.51E+00	3.51E+00	pCi/kg
BCM Blanchard Cow Meat(478549003) - MT	19-Feb-19	Total Strontium	4.30E+00	4.41E+01	2.68E+01	pCi/kg
BCM Blanchard Cow Meat(489321001) - MT	9-May-19	Total Strontium	-7.26E+00	9.86E+01	5.81E+01	pCi/kg
BCM Blanchard Cow Meat(471740001) - MT	10-Sep-19	Total Strontium	-8.32E+01	7.75E+01	3.73E+01	pCi/kg
BCM Blanchard Cow Meat(494382001) - MT	31-Oct-19	Total Strontium	-1.13E+02	1.03E+02	4.90E+01	pCi/kg

## CBA Cambria Moonstone Beach Sand

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Barium-140	9.39E+01	3.30E+02	1.69E+02	pCi/kg
CBA Cambria Moonstone Beach(4886682005) - SD	15-Aug-19	Barium-140	-8.44E+01	2.18E+02	1.70E+02	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Cesium-134	-1.93E-01	7.51E+01	4.40E+01	pCi/kg
CBA Cambria Moonstone Beach(4886682005) - SD	15-Aug-19	Cesium-134	7.07E+01	7.07E+01	6.17E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Cesium-137	5.93E+01	5.93E+01	6.81E+01	pCi/kg
CBA Cambria Moonstone Beach(4886682005) - SD	15-Aug-19	Cesium-137	3.25E+01	4.21E+01	4.87E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Cobalt-58	1.11E+01	5.60E+01	3.31E+01	pCi/kg
CBA Cambria Moonstone Beach(4886682005) - SD	15-Aug-19	Cobalt-58	1.60E+01	4.97E+01	2.58E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Cobalt-60	-2.21E+01	2.70E+01	2.87E+01	pCi/kg
CBA Cambria Moonstone Beach(4886682005) - SD	15-Aug-19	Cobalt-60	-1.00E+00	3.80E+01	2.29E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Iron-55	9.41E+03	1.77E+04	1.36E+04	pCi/kg
CBA Cambria Moonstone Beach(4886682005) - SD	15-Aug-19	Iron-55	4.06E+03	1.47E+04	1.08E+04	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Iron-59	-1.75E+01	1.08E+02	6.68E+01	pCi/kg

CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Iron-59	2.75E+01	1.09E+02	5.82E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Lanthanum-140	-9.60E+00	1.01E+02	6.46E+01	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Lanthanum-140	-5.09E+00	1.05E+02	6.20E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Manganese-54	8.87E+00	6.88E+01	3.89E+01	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Manganese-54	4.82E+00	4.89E+01	2.67E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Nickel-63	7.30E+02	2.54E+03	1.55E+03	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Nickel-63	-1.39E+02	3.09E+03	1.83E+03	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Niobium-95	5.56E+01	5.56E+01	6.51E+01	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Niobium-95	-1.55E+01	3.97E+01	2.67E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Total Strontium	-1.60E+02	7.52E+02	4.21E+02	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Total Strontium	3.29E+02	6.09E+02	4.06E+02	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Zinc-65	-1.05E+02	9.72E+01	9.54E+01	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Zinc-65	6.97E+00	1.15E+02	7.55E+01	pCi/kg
CBA Cambria Moonstone Beach(473342005) - SD	14-Mar-19	Zirconium-95	4.60E+00	1.01E+02	5.78E+01	pCi/kg
CBA Cambria Moonstone Beach(488682005) - SD	15-Aug-19	Zirconium-95	-4.47E+01	5.97E+01	4.77E+01	pCi/kg

## CCM Control Cow Meat

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
CCM Control Cow Meat(469936003) - MT	28-Jan-19	Cesium-134	-1.63E+00	3.93E+00	2.86E+00	pCi/kg
CCM Control Cow Meat(476886007) - MT	22-Apr-19	Cesium-134	7.31E-01	4.82E+00	2.77E+00	pCi/kg
CCM Control Cow Meat(481367005) - MT	10-Jun-19	Cesium-134	-1.03E+00	4.79E+00	2.90E+00	pCi/kg
CCM Control Cow Meat(485399001) - MT	23-Jul-19	Cesium-134	6.59E-01	4.92E+00	2.83E+00	pCi/kg
CCM Control Cow Meat(492893001) - MT	16-Oct-19	Cesium-134	2.31E+00	3.44E+00	2.66E+00	pCi/kg
CCM Control Cow Meat(469936003) - MT	28-Jan-19	Cesium-137	-1.32E+00	3.75E+00	2.49E+00	pCi/kg
CCM Control Cow Meat(476886007) - MT	22-Apr-19	Cesium-137	-1.43E+00	3.81E+00	2.88E+00	pCi/kg
CCM Control Cow Meat(481367005) - MT	10-Jun-19	Cesium-137	-2.31E+00	4.02E+00	4.57E+00	pCi/kg
CCM Control Cow Meat(485399001) - MT	23-Jul-19	Cesium-137	1.79E+00	4.69E+00	2.88E+00	pCi/kg
CCM Control Cow Meat(492893001) - MT	16-Oct-19	Cesium-137	-7.52E-01	4.89E+00	3.43E+00	pCi/kg
CCM Control Cow Meat(469936003) - MT	28-Jan-19	Cobalt-58	9.01E-01	3.92E+00	2.25E+00	pCi/kg
CCM Control Cow Meat(476886007) - MT	22-Apr-19	Cobalt-58	1.05E+00	4.42E+00	2.55E+00	pCi/kg
CCM Control Cow Meat(481367005) - MT	10-Jun-19	Cobalt-58	-1.14E-01	4.00E+00	2.33E+00	pCi/kg
CCM Control Cow Meat(485399001) - MT	23-Jul-19	Cobalt-58	-6.11E-01	4.53E+00	2.69E+00	pCi/kg
CCM Control Cow Meat(492893001) - MT	16-Oct-19	Cobalt-58	-3.25E-01	3.22E+00	1.98E+00	pCi/kg
CCM Control Cow Meat(469936003) - MT	28-Jan-19	Cobalt-60	3.91E-01	4.32E+00	2.57E+00	pCi/kg
CCM Control Cow Meat(476886007) - MT	22-Apr-19	Cobalt-60	1.16E+00	4.79E+00	2.81E+00	pCi/kg
CCM Control Cow Meat(481367005) - MT	10-Jun-19	Cobalt-60	1.71E+00	5.08E+00	2.98E+00	pCi/kg
CCM Control Cow Meat(485399001) - MT	23-Jul-19	Cobalt-60	2.13E+00	5.12E+00	3.04E+00	pCi/kg
CCM Control Cow Meat(492893001) - MT	16-Oct-19	Cobalt-60	9.44E-01	4.23E+00	2.43E+00	pCi/kg

CCM Control Cow Meat(469936003) - MT	28-Jan-19	Iodine-131	-7.14E-01	3.76E+00	2.29E+00	pCi/kg
CCM Control Cow Meat(476886007) - MT	22-Apr-19	Iodine-131	-1.80E+00	7.00E+00	4.35E+00	pCi/kg
CCM Control Cow Meat(481367005) - MT	10-Jun-19	Iodine-131	-7.67E-01	5.21E+00	3.15E+00	pCi/kg
CCM Control Cow Meat(485399001) - MT	23-Jul-19	Iodine-131	-1.89E+00	7.28E+00	4.51E+00	pCi/kg
CCM Control Cow Meat(492893001) - MT	16-Oct-19	Iodine-131	-1.26E+00	5.05E+00	3.32E+00	pCi/kg
CCM Control Cow Meat(469936003) - MT	28-Jan-19	Total Strontium	-2.64E+00	5.16E+01	3.04E+01	pCi/kg
CCM Control Cow Meat(476886007) - MT	22-Apr-19	Total Strontium	-3.00E+01	3.44E+01	1.95E+01	pCi/kg
CCM Control Cow Meat(481367005) - MT	10-Jun-19	Total Strontium	-1.42E+01	4.35E+01	2.48E+01	pCi/kg
CCM Control Cow Meat(485399001) - MT	23-Jul-19	Total Strontium	2.74E+01	5.64E+01	3.63E+01	pCi/kg
CCM Control Cow Meat(492893001) - MT	16-Oct-19	Total Strontium	-5.64E+01	1.00E+02	5.46E+01	pCi/kg

## CYA Cayucos Beach Sand

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Barium-140	4.16E+01	2.34E+02	1.25E+02	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Barium-140	-7.35E+00	2.23E+02	1.30E+02	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Cesium-134	2.72E+01	4.52E+01	3.19E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Cesium-134	-5.43E+00	3.98E+01	2.54E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Cesium-137	3.63E+01	4.98E+01	2.93E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Cesium-137	1.31E+01	5.27E+01	3.21E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Cobalt-58	-1.10E+01	3.41E+01	2.29E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Cobalt-58	6.02E+00	5.08E+01	2.93E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Cobalt-60	5.68E+00	4.70E+01	2.60E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Cobalt-60	-4.01E+00	3.89E+01	2.43E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Iron-55	9.57E+02	1.64E+04	1.22E+04	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Iron-55	-4.29E+02	1.47E+04	1.06E+04	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Iron-59	-5.43E+00	7.45E+01	4.64E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Iron-59	5.15E+00	1.14E+02	6.48E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Lanthanum-140	-6.48E+00	6.35E+01	3.95E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Lanthanum-140	1.64E+01	9.45E+01	5.07E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Manganese-54	7.08E+00	4.20E+01	2.59E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Manganese-54	-2.34E+01	3.63E+01	2.85E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Nickel-63	4.47E+02	2.56E+03	1.55E+03	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Nickel-63	1.46E+03	2.98E+03	1.85E+03	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Niobium-95	5.20E+00	4.48E+01	2.51E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Niobium-95	1.12E+01	4.89E+01	2.98E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Total Strontium	5.89E+02	1.15E+03	7.59E+02	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Total Strontium	1.97E+02	5.63E+02	3.62E+02	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Zinc-65	-4.04E+01	5.94E+01	5.90E+01	pCi/kg

CYA Cayucos Beach(488682004) - SD	15-Aug-19	Zinc-65	3.28E+01	1.03E+02	5.84E+01	pCi/kg
CYA Cayucos Beach(473342004) - SD	14-Mar-19	Zirconium-95	-7.73E+00	5.02E+01	3.13E+01	pCi/kg
CYA Cayucos Beach(488682004) - SD	15-Aug-19	Zirconium-95	4.97E+01	1.12E+02	6.19E+01	pCi/kg

## DCM Diablo Cove Marine - Aquatic Vegetation Kelp

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DCM Diablo Cove Marine(473984001) - AV Kelp	19-Mar-19	Cesium-134	-1.91E+00	1.55E+01	1.10E+01	pCi/kg
DCM Diablo Cove Marine(479646001) - AV Kelp	18-May-19	Cesium-134	2.94E+00	9.84E+00	5.75E+00	pCi/kg
DCM Diablo Cove Marine(484091007) - AV Kelp	9-Jul-19	Cesium-134	-1.41E+00	9.62E+00	5.76E+00	pCi/kg
DCM Diablo Cove Marine(493646001) - AV Kelp	16-Oct-19	Cesium-134	3.99E+00	9.99E+00	5.85E+00	pCi/kg
DCM Diablo Cove Marine(473984001) - AV Kelp	19-Mar-19	Cesium-137	7.06E+00	1.38E+01	1.49E+01	pCi/kg
DCM Diablo Cove Marine(479646001) - AV Kelp	18-May-19	Cesium-137	3.12E+00	9.55E+00	5.57E+00	pCi/kg
DCM Diablo Cove Marine(484091007) - AV Kelp	9-Jul-19	Cesium-137	3.50E+00	9.19E+00	5.61E+00	pCi/kg
DCM Diablo Cove Marine(493646001) - AV Kelp	16-Oct-19	Cesium-137	4.77E+00	8.74E+00	5.47E+00	pCi/kg
DCM Diablo Cove Marine(473984001) - AV Kelp	19-Mar-19	Cobalt-58	3.89E+00	1.59E+01	9.50E+00	pCi/kg
DCM Diablo Cove Marine(479646001) - AV Kelp	18-May-19	Cobalt-58	1.95E+00	1.02E+01	6.02E+00	pCi/kg
DCM Diablo Cove Marine(484091007) - AV Kelp	9-Jul-19	Cobalt-58	4.95E+00	9.23E+00	5.49E+00	pCi/kg
DCM Diablo Cove Marine(493646001) - AV Kelp	16-Oct-19	Cobalt-58	-2.64E-01	9.40E+00	5.51E+00	pCi/kg
DCM Diablo Cove Marine(473984001) - AV Kelp	19-Mar-19	Cobalt-60	1.08E+00	1.85E+01	1.09E+01	pCi/kg
DCM Diablo Cove Marine(479646001) - AV Kelp	18-May-19	Cobalt-60	1.91E+00	1.27E+01	8.00E+00	pCi/kg
DCM Diablo Cove Marine(484091007) - AV Kelp	9-Jul-19	Cobalt-60	-6.79E-01	1.11E+01	6.85E+00	pCi/kg
DCM Diablo Cove Marine(493646001) - AV Kelp	16-Oct-19	Cobalt-60	-1.51E+00	9.69E+00	6.12E+00	pCi/kg

## DCM Diablo Cove Marine - Fish Perch

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Cesium-134	-2.46E+00	2.13E+01	1.35E+01	pCi/kg
DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Cesium-134	1.05E+01	2.42E+01	1.48E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Cesium-134	-1.66E+01	2.12E+01	2.42E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Cesium-134	6.63E-01	1.09E+01	6.52E+00	pCi/kg
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Cesium-137	3.37E+00	2.07E+01	1.24E+01	pCi/kg
DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Cesium-137	1.38E+01	2.17E+01	1.79E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Cesium-137	1.16E+01	2.32E+01	1.43E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Cesium-137	3.47E+00	1.02E+01	5.97E+00	pCi/kg
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Cobalt-58	6.25E+00	2.24E+01	1.50E+01	pCi/kg
DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Cobalt-58	1.02E+00	2.24E+01	1.38E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Cobalt-58	8.49E+00	2.09E+01	1.40E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Cobalt-58	2.04E+00	1.04E+01	6.16E+00	pCi/kg
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Cobalt-60	6.97E-01	2.28E+01	1.37E+01	pCi/kg

DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Cobalt-60	-3.93E+00	2.11E+01	1.34E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Cobalt-60	5.55E+00	2.42E+01	1.42E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Cobalt-60	-3.55E+00	9.33E+00	6.17E+00	pCi/kg
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Iron-59	2.97E+01	5.14E+01	2.87E+01	pCi/kg
DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Iron-59	1.04E+00	4.88E+01	2.88E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Iron-59	1.30E+01	4.57E+01	2.65E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Iron-59	-8.06E+00	2.04E+01	1.32E+01	pCi/kg
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Manganese-54	1.85E+01	1.85E+01	2.18E+01	pCi/kg
DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Manganese-54	7.52E+00	2.22E+01	1.36E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Manganese-54	2.20E+00	2.08E+01	1.20E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Manganese-54	7.41E-01	9.44E+00	5.67E+00	pCi/kg
DCM Diablo Cove Marine(473860001) - FH Perch	8-Mar-19	Zinc-65	-9.41E+00	4.82E+01	2.98E+01	pCi/kg
DCM Diablo Cove Marine(478372001) - FH Perch	2-May-19	Zinc-65	-1.47E+01	4.88E+01	3.12E+01	pCi/kg
DCM Diablo Cove Marine(487630004) - FH Perch	15-Aug-19	Zinc-65	-2.48E+01	4.43E+01	3.56E+01	pCi/kg
DCM Diablo Cove Marine(494425001) - FH Perch	23-Oct-19	Zinc-65	-7.90E+00	2.11E+01	1.35E+01	pCi/kg

## DCM Diablo Cove Marine - Rockfish

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Cesium-134	-7.07E+00	2.91E+01	1.88E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Cesium-134	3.52E+00	3.49E+01	2.12E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Cesium-134	-6.59E-01	1.72E+01	1.05E+01	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Cesium-134	-1.21E+00	8.69E+00	5.43E+00	pCi/kg
DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Cesium-137	2.16E+01	3.36E+01	2.10E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Cesium-137	2.61E+01	3.41E+01	1.96E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Cesium-137	1.53E+01	1.93E+01	1.25E+01	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Cesium-137	9.44E+00	9.44E+00	1.21E+01	pCi/kg
DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Cobalt-58	-3.56E+00	2.97E+01	1.86E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Cobalt-58	6.05E+00	3.49E+01	2.11E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Cobalt-58	6.68E+00	1.87E+01	1.12E+01	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Cobalt-58	4.37E+00	1.14E+01	6.64E+00	pCi/kg
DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Cobalt-60	3.21E+00	3.29E+01	1.93E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Cobalt-60	3.39E+01	3.51E+01	5.05E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Cobalt-60	7.11E+00	1.91E+01	1.09E+01	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Cobalt-60	5.41E+00	1.29E+01	7.95E+00	pCi/kg
DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Iron-59	1.43E+01	7.41E+01	4.26E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Iron-59	5.30E+01	7.45E+01	6.43E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Iron-59	5.81E+00	3.97E+01	2.42E+01	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Iron-59	8.52E+00	2.86E+01	1.61E+01	pCi/kg

DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Manganese-54	-1.03E+01	2.61E+01	1.78E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Manganese-54	-1.44E+01	3.03E+01	2.11E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Manganese-54	2.61E+00	1.58E+01	9.47E+00	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Manganese-54	1.40E+00	9.88E+00	5.81E+00	pCi/kg
DCM Diablo Cove Marine(473860003) - FH Rockfish	8-Mar-19	Zinc-65	2.04E+01	6.96E+01	4.46E+01	pCi/kg
DCM Diablo Cove Marine(478372002) - FH Rockfish	2-May-19	Zinc-65	1.20E+01	7.03E+01	4.06E+01	pCi/kg
DCM Diablo Cove Marine(487630002) - FH Rockfish	15-Aug-19	Zinc-65	7.87E+00	4.08E+01	2.48E+01	pCi/kg
DCM Diablo Cove Marine(494425002) - FH Rockfish	23-Oct-19	Zinc-65	-1.34E+01	2.73E+01	2.29E+01	pCi/kg

## DCM Diablo Cove Marine - Intertidal Mussels

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Cesium-134	5.72E+00	1.74E+01	1.04E+01	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Cesium-134	-1.65E+00	2.89E+01	2.01E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Cesium-134	-1.71E+01	2.11E+01	2.32E+01	pCi/kg
DCM Diablo Cove Marine(496779001) - IM	25-Nov-19	Cesium-134	2.40E+00	3.59E+01	2.19E+01	pCi/kg
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Cesium-137	-2.39E+00	1.53E+01	9.47E+00	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Cesium-137	-4.41E+00	2.86E+01	1.77E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Cesium-137	2.19E+00	2.06E+01	1.25E+01	pCi/kg
DCM Diablo Cove Marine(496779001) - IM	25-Nov-19	Cesium-137	-3.49E+00	2.98E+01	1.85E+01	pCi/kg
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Cobalt-58	1.34E+00	1.49E+01	8.95E+00	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Cobalt-58	-3.19E+00	2.69E+01	1.91E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Cobalt-58	-6.55E-01	1.91E+01	1.20E+01	pCi/kg
DCM Diablo Cove Marine(496779001) - IM	25-Nov-19	Cobalt-58	-3.50E+00	3.27E+01	2.06E+01	pCi/kg
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Cobalt-60	-2.44E+00	1.46E+01	1.04E+01	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Cobalt-60	1.18E+01	3.39E+01	1.96E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Cobalt-60	-1.11E+00	2.17E+01	1.38E+01	pCi/kg
DCM Diablo Cove Marine(496779001) - IM	25-Nov-19	Cobalt-60	-5.81E+00	3.70E+01	2.96E+01	pCi/kg
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Iron-59	8.71E+00	3.54E+01	2.02E+01	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Iron-59	-2.20E+01	5.87E+01	3.81E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Iron-59	-2.28E+01	3.78E+01	2.76E+01	pCi/kg
DCM Diablo Cove Marine(496779001) - IM	25-Nov-19	Iron-59	7.90E-01	6.44E+01	4.29E+01	pCi/kg
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Manganese-54	6.49E+00	1.71E+01	1.41E+01	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Manganese-54	-1.51E+01	2.53E+01	1.85E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Manganese-54	8.21E+00	2.23E+01	1.29E+01	pCi/kg
DCM Diablo Cove Marine(496779001) - IM	25-Nov-19	Manganese-54	-4.89E+00	3.33E+01	2.12E+01	pCi/kg
DCM Diablo Cove Marine(470053001) - IM	30-Jan-19	Zinc-65	-9.36E+00	3.25E+01	2.05E+01	pCi/kg
DCM Diablo Cove Marine(479018001) - IM	14-May-19	Zinc-65	3.98E+00	5.67E+01	3.72E+01	pCi/kg
DCM Diablo Cove Marine(487461003) - IM	15-Aug-19	Zinc-65	-2.53E+00	5.03E+01	3.02E+01	pCi/kg

DCM Diablo Cove Marine(4967779001) - IM	25-Nov-19	Zinc-65	1.80E+01	7.30E+01	4.20E+01	4.20E+01	pCi/kg
Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Barium-140	-1.40E+01	4.21E+02	2.54E+02	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Barium-140	-1.49E+02	2.97E+02	2.01E+02	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Barium-140	-5.20E+00	3.90E+02	2.42E+02	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Barium-140	-1.37E+02	2.38E+02	1.73E+02	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Cesium-134	2.11E+01	6.33E+01	3.54E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Cesium-134	7.09E+01	7.09E+01	5.87E+01	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Cesium-134	5.29E+01	8.04E+01	4.71E+01	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Cesium-134	5.55E+01	5.55E+01	5.49E+01	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Cesium-137	2.17E+01	4.94E+01	3.89E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Cesium-137	2.23E+01	6.31E+01	3.62E+01	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Cesium-137	1.84E+01	6.65E+01	3.74E+01	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Cesium-137	1.86E+01	4.98E+01	2.72E+01	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Cobalt-58	<b>1.14E+02</b>	5.80E+01	5.94E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Cobalt-58	8.47E+00	5.69E+01	3.32E+01	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Cobalt-58	-7.17E+00	6.06E+01	3.73E+01	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Cobalt-58	<b>1.02E+02</b>	5.14E+01	4.34E+01	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Cobalt-60	1.79E+01	5.33E+01	2.93E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Cobalt-60	7.34E+00	5.85E+01	3.37E+01	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Cobalt-60	-4.04E+01	6.00E+01	5.03E+01	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Cobalt-60	7.63E-01	4.60E+01	2.66E+01	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Iron-55	7.10E+02	1.72E+04	1.21E+04	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Iron-55	-2.14E+03	1.13E+04	7.53E+03	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Iron-55	-1.91E+03	1.47E+04	1.06E+04	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Iron-55	-5.06E+03	9.55E+03	6.55E+03	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Iron-59	-9.85E-01	1.56E+02	9.31E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Iron-59	1.94E+01	1.18E+02	6.68E+01	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Iron-59	6.28E+01	1.78E+02	1.02E+02	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Iron-59	-1.87E+01	8.83E+01	6.02E+01	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Lanthanum-140	-4.18E+01	1.27E+02	8.63E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Lanthanum-140	-4.02E+01	8.38E+01	7.58E+01	pCi/kg	
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Lanthanum-140	-6.40E+01	1.07E+02	8.74E+01	pCi/kg	
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Lanthanum-140	-6.53E-01	7.11E+01	4.28E+01	pCi/kg	
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Manganese-54	6.77E+00	5.03E+01	3.19E+01	pCi/kg	
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Manganese-54	1.06E+01	5.54E+01	3.22E+01	pCi/kg	

DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Manganese-54	-8.52E+00	5.50E+01	3.43E+01	pCi/kg
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Manganese-54	1.07E+01	4.50E+01	2.50E+01	pCi/kg
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Nickel-63	5.24E+02	2.77E+03	1.67E+03	pCi/kg
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Nickel-63	1.72E+03	2.58E+03	1.65E+03	pCi/kg
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Nickel-63	5.31E+02	2.90E+03	1.75E+03	pCi/kg
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Nickel-63	1.02E+03	2.70E+03	1.67E+03	pCi/kg
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Niobium-95	-1.74E+00	6.80E+01	4.56E+01	pCi/kg
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Niobium-95	-2.13E+00	6.85E+01	4.10E+01	pCi/kg
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Niobium-95	2.48E+01	9.09E+01	5.37E+01	pCi/kg
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Niobium-95	2.01E+01	5.28E+01	3.11E+01	pCi/kg
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Total Strontium	-1.01E+02	5.15E+02	2.93E+02	pCi/kg
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Total Strontium	3.41E+01	3.95E+02	2.41E+02	pCi/kg
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Total Strontium	4.87E+02	5.37E+02	3.97E+02	pCi/kg
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Total Strontium	3.66E+02	5.50E+02	3.70E+02	pCi/kg
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Zinc-65	1.05E+01	1.18E+02	7.82E+01	pCi/kg
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Zinc-65	4.60E+01	1.40E+02	8.87E+01	pCi/kg
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Zinc-65	4.50E+01	1.54E+02	9.77E+01	pCi/kg
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Zinc-65	-9.17E+00	1.01E+02	8.06E+01	pCi/kg
DCM Diablo Cove Marine(473837004) - SD	8-Mar-19	Zirconium-95	-1.09E+01	9.52E+01	5.64E+01	pCi/kg
DCM Diablo Cove Marine(478372009) - SD	2-May-19	Zirconium-95	-3.98E+01	8.86E+01	6.13E+01	pCi/kg
DCM Diablo Cove Marine(488682006) - SD	15-Aug-19	Zirconium-95	2.94E+01	1.24E+02	7.01E+01	pCi/kg
DCM Diablo Cove Marine(494426001) - SD	23-Oct-19	Zirconium-95	-3.98E+01	6.40E+01	5.03E+01	pCi/kg

## DCM Diablo Cove Marine - Seawater

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	BETA	2.49E+02	1.52E+02	1.06E+02	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	BETA	3.20E+02	1.23E+02	9.94E+01	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	BETA	1.91E+02	1.47E+02	9.84E+01	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	BETA	3.04E+02	1.18E+02	9.47E+01	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	BETA	2.78E+02	9.18E+01	8.09E+01	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	BETA	3.22E+02	1.44E+02	1.09E+02	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	BETA	3.39E+02	1.23E+02	1.01E+02	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	BETA	8.28E+02	1.57E+02	1.79E+02	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	BETA	1.76E+02	1.23E+02	8.44E+01	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	BETA	2.49E+02	1.28E+02	9.39E+01	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	BETA	2.29E+02	1.39E+02	9.71E+01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	BETA	3.54E+02	1.38E+02	1.09E+02	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Barium-140	2.92E-01	7.43E+00	4.40E+00	pCi/L

DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Barium-140	-3.16E+00	8.43E+00	5.47E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Barium-140	8.73E+00	1.53E+01	9.58E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Barium-140	-6.32E-01	9.59E+00	5.87E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Barium-140	2.09E+00	9.22E+00	5.52E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Barium-140	1.25E+00	9.36E+00	5.66E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Barium-140	9.93E-02	8.08E+00	5.39E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	12-Aug-19	Barium-140	-5.78E-01	8.25E+00	4.95E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Barium-140	2.47E+00	1.18E+01	9.40E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Barium-140	2.10E-01	9.80E+00	5.97E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Barium-140	-2.51E+00	6.91E+00	4.44E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Barium-140	2.81E+00	7.09E+00	4.16E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Cesium-134	1.42E+00	1.58E+00	1.78E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Cesium-134	-3.48E-01	1.49E+00	1.09E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Cesium-134	2.01E-01	2.09E+00	1.21E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Cesium-134	-2.69E-01	2.00E+00	1.20E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Cesium-134	-4.37E-01	1.83E+00	1.28E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Cesium-134	-3.80E-01	1.84E+00	1.11E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Cesium-134	1.79E-01	1.83E+00	1.12E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Cesium-134	5.40E-01	1.85E+00	1.12E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Cesium-134	2.86E-01	1.65E+00	9.52E-01	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Cesium-134	2.27E-01	2.11E+00	1.23E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Cesium-134	4.73E-01	1.66E+00	9.94E-01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Cesium-134	-1.17E+00	1.39E+00	1.08E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Cesium-137	-9.84E-01	2.08E+00	1.83E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Cesium-137	-8.24E-03	1.49E+00	9.14E-01	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Cesium-137	-8.28E-01	1.80E+00	1.24E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Cesium-137	1.29E+00	1.84E+00	1.14E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Cesium-137	1.83E-01	1.85E+00	1.06E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Cesium-137	3.33E-01	1.88E+00	1.15E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Cesium-137	-5.18E-01	1.62E+00	1.05E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Cesium-137	-3.02E-01	1.45E+00	9.08E-01	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Cesium-137	-2.91E-02	1.51E+00	9.31E-01	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Cesium-137	1.50E+00	1.77E+00	1.35E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Cesium-137	8.05E-01	1.63E+00	9.88E-01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Cesium-137	1.38E+00	1.38E+00	2.53E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Cobalt-58	3.35E-01	1.46E+00	8.79E-01	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Cobalt-58	-1.33E-01	1.47E+00	8.64E-01	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Cobalt-58	9.06E-01	2.30E+00	1.34E+00	pCi/L

DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Cobalt-58	4.40E-01	2.00E+00	1.16E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Cobalt-58	4.97E-01	1.79E+00	1.07E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Cobalt-58	6.09E-01	1.69E+00	2.26E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Cobalt-58	5.16E-01	1.71E+00	1.04E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Cobalt-58	-8.33E-01	1.45E+00	1.16E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Cobalt-58	-8.93E-02	1.61E+00	9.48E-01	pCi/L
DCM Diablo Cove Marine(491015003) - SW	16-Oct-19	Cobalt-58	-1.96E-01	1.84E+00	1.10E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Cobalt-58	4.99E-02	1.48E+00	8.99E-01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Cobalt-58	-4.64E-03	1.50E+00	9.06E-01	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Cobalt-60	-3.63E-01	1.43E+00	9.02E-01	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Cobalt-60	-6.96E-01	1.36E+00	9.47E-01	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Cobalt-60	-5.41E-01	2.09E+00	1.35E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Cobalt-60	5.02E-01	2.10E+00	1.20E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Cobalt-60	9.50E-01	2.27E+00	1.32E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Cobalt-60	3.30E-01	1.94E+00	1.14E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Cobalt-60	-5.04E-01	1.70E+00	1.10E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Cobalt-60	-9.83E-01	1.49E+00	1.09E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Cobalt-60	9.14E-01	1.63E+00	1.00E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Cobalt-60	5.07E-02	1.90E+00	1.16E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	4-Nov-19	Cobalt-60	-2.73E-01	1.64E+00	1.00E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	9-Dec-19	Cobalt-60	-6.51E-01	1.38E+00	9.25E-01	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Iodine-131	9.36E-01	2.78E+00	1.62E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Iodine-131	2.57E-01	3.31E+00	1.94E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Iodine-131	2.30E+00	6.16E+00	3.66E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Iodine-131	1.62E+00	4.09E+00	2.42E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Iodine-131	5.56E-03	3.48E+00	2.03E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Iodine-131	-9.97E-01	3.23E+00	2.04E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Iodine-131	-2.87E-01	2.91E+00	1.71E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Iodine-131	2.72E-01	3.06E+00	1.76E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Iodine-131	-3.67E-01	5.66E+00	3.35E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Iodine-131	3.68E+00	3.68E+00	4.59E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Iodine-131	1.16E+00	3.15E+00	1.85E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Iodine-131	-2.88E-01	2.53E+00	1.61E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	22-Jan-19	Iron-55	4.51E+01	7.84E+01	6.13E+01	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Iron-55	-2.95E+01	7.38E+01	4.97E+01	pCi/L
DCM Diablo Cove Marine(469440002) - SW	19-Mar-19	Iron-55	-1.07E+01	8.17E+01	5.66E+01	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Iron-55	-1.49E+01	6.45E+01	4.30E+01	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Iron-55	1.72E+01	9.01E+01	6.91E+01	pCi/L

DCM Diablo Cove Marine(4803450002) - SW	3-Jun-19	Iron-55	-1.82E+01	6.88E+01	4.97E+01	pCi/L
DCM Diablo Cove Marine(4840910002) - SW	9-Jul-19	Iron-55	-7.50E+01	8.39E+01	5.58E+01	pCi/L
DCM Diablo Cove Marine(4870460002) - SW	12-Aug-19	Iron-55	9.55E-01	7.99E+01	5.93E+01	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Iron-55	-3.41E+01	8.50E+01	5.95E+01	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Iron-55	-3.74E+01	7.10E+01	4.71E+01	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Iron-55	-2.92E+00	1.36E+02	9.62E+01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Iron-55	-1.08E+01	5.77E+01	3.85E+01	pCi/L
DCM Diablo Cove Marine(498440002) - SW	22-Jan-19	Iron-59	-8.20E-01	2.91E+00	1.81E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Iron-59	2.34E-01	3.25E+00	1.92E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Iron-59	2.03E+00	4.94E+00	2.92E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Iron-59	-2.28E+00	3.97E+00	2.82E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Iron-59	-2.39E-01	4.08E+00	2.50E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Iron-59	-2.65E-01	3.76E+00	2.24E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Iron-59	-2.93E-01	3.58E+00	2.14E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Iron-59	-2.08E+00	3.14E+00	2.52E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Iron-59	-2.55E-01	3.42E+00	2.07E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Iron-59	-6.27E-02	4.03E+00	2.43E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Iron-59	-1.30E+00	2.94E+00	1.92E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Iron-59	5.80E-01	3.22E+00	1.83E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	22-Jan-19	Lanthanum-140	4.91E-01	2.50E+00	1.47E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	12-Feb-19	Lanthanum-140	5.91E-01	2.99E+00	1.71E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Mar-19	Lanthanum-140	-1.32E+00	4.45E+00	3.28E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Lanthanum-140	-4.06E-01	4.08E+00	2.49E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Lanthanum-140	-6.99E-01	3.05E+00	1.94E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Lanthanum-140	-4.59E-01	3.00E+00	1.86E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Lanthanum-140	-3.87E-01	2.86E+00	1.81E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Lanthanum-140	-7.58E-01	2.70E+00	1.76E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Lanthanum-140	2.10E-01	4.04E+00	2.36E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Lanthanum-140	-1.18E+00	3.27E+00	2.12E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Lanthanum-140	5.35E-01	2.92E+00	1.69E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Lanthanum-140	7.82E-01	2.75E+00	1.60E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Manganese-54	2.78E-02	1.36E+00	8.35E-01	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Manganese-54	9.12E-02	1.44E+00	8.33E-01	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Manganese-54	-2.87E-01	2.02E+00	1.20E+00	pCi/L
DCM Diablo Cove Marine(492788003) - SW	23-Apr-19	Manganese-54	-6.93E-02	1.79E+00	1.06E+00	pCi/L
DCM Diablo Cove Marine(476886006) - SW	13-May-19	Manganese-54	-4.16E-01	1.78E+00	1.18E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Manganese-54	5.51E-01	1.78E+00	1.03E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Manganese-54	3.28E-01	1.48E+00	1.28E+00	pCi/L

DCM Diablo Cove Marine(4870460002) - SW	12-Aug-19	Manganese-54	-2.74E-02	1.57E+00	1.09E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Manganese-54	1.87E-01	1.43E+00	8.28E-01	pCi/L
DCM Diablo Cove Marine(492738002) - SW	16-Oct-19	Manganese-54	-5.00E-01	1.67E+00	1.19E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Manganese-54	-3.41E-01	1.45E+00	9.29E-01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Manganese-54	-2.26E-01	1.41E+00	8.78E-01	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Nickel-63	6.14E+00	3.07E+01	1.85E+01	pCi/L
DCM Diablo Cove Marine(469440002) - SW	12-Feb-19	Nickel-63	8.14E+00	3.02E+01	1.83E+01	pCi/L
DCM Diablo Cove Marine(471025002) - SW	19-Mar-19	Nickel-63	8.06E+00	3.33E+01	2.03E+01	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Nickel-63	1.30E+01	3.45E+01	2.13E+01	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Nickel-63	-1.46E+01	2.63E+01	1.51E+01	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Nickel-63	5.53E-01	2.13E+01	1.27E+01	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Nickel-63	-7.31E+00	3.96E+01	2.32E+01	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Nickel-63	1.49E+01	3.34E+01	2.07E+01	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Nickel-63	-1.30E+01	3.67E+01	2.12E+01	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Nickel-63	-1.03E+01	3.03E+01	1.76E+01	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Nickel-63	3.28E+00	2.91E+01	1.75E+01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Nickel-63	-8.24E+00	3.09E+01	1.82E+01	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Niobium-95	7.85E-01	1.69E+00	1.04E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Niobium-95	-8.32E-01	1.52E+00	1.51E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Niobium-95	1.09E+00	2.33E+00	1.38E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Niobium-95	-3.35E-02	1.82E+00	1.07E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Niobium-95	1.21E-01	1.86E+00	1.08E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Niobium-95	1.20E-01	1.83E+00	1.05E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Niobium-95	4.39E-01	1.80E+00	1.09E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Niobium-95	9.14E-01	1.71E+00	1.06E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Niobium-95	2.62E-01	1.66E+00	9.56E-01	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Niobium-95	4.85E-01	1.89E+00	1.10E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Niobium-95	2.54E-02	1.58E+00	9.56E-01	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Niobium-95	1.22E+00	1.66E+00	1.07E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Total Strontium	-1.29E+00	3.27E+00	1.91E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Total Strontium	-1.63E+00	2.48E+00	1.43E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Total Strontium	9.37E-01	1.48E+00	9.53E-01	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Total Strontium	-2.10E+00	3.40E+00	1.77E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Total Strontium	4.32E+00	4.64E+00	3.06E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Total Strontium	-1.90E+00	7.86E+00	4.45E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Total Strontium	1.28E+00	2.09E+00	1.33E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Total Strontium	-3.69E+00	2.57E+00	1.42E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Total Strontium	-3.03E+00	2.68E+00	1.51E+00	pCi/L

DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Total Strontium	-2.77E+00	3.29E+00	1.87E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Total Strontium	5.94E-01	4.72E+00	2.83E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Total Strontium	-1.22E+00	3.22E+00	1.87E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Tritium	-2.05E+00	2.30E+02	1.37E+02	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Tritium	2.27E+02	2.90E+02	1.90E+02	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Tritium	-2.07E+01	2.74E+02	1.62E+02	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Tritium	5.00E+01	2.63E+02	1.59E+02	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Tritium	7.18E+01	2.80E+02	1.71E+02	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Tritium	3.02E+00	2.80E+02	1.67E+02	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Tritium	-1.31E+01	2.44E+02	1.44E+02	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Tritium	2.22E+01	2.90E+02	1.74E+02	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Tritium	-6.69E+00	3.11E+02	1.85E+02	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Tritium	3.51E+01	2.85E+02	1.72E+02	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Tritium	5.31E+01	2.11E+02	1.29E+02	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Tritium	-1.84E+01	3.03E+02	1.79E+02	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Zinc-65	-3.73E-01	3.28E+00	1.95E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Zinc-65	5.95E-01	3.23E+00	1.90E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Zinc-65	-1.85E+00	4.27E+00	3.26E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Zinc-65	-1.83E+00	3.88E+00	2.67E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	13-May-19	Zinc-65	-1.03E-01	3.98E+00	2.43E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	3-Jun-19	Zinc-65	7.09E-02	3.78E+00	2.22E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	9-Jul-19	Zinc-65	1.08E+00	4.00E+00	2.33E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	12-Aug-19	Zinc-65	4.64E-02	3.12E+00	2.07E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	19-Sep-19	Zinc-65	-2.42E+00	3.40E+00	2.72E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Zinc-65	3.94E+00	3.94E+00	3.31E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Zinc-65	2.16E-01	3.05E+00	1.75E+00	pCi/L
DCM Diablo Cove Marine(498118003) - SW	9-Dec-19	Zinc-65	9.48E-02	3.38E+00	1.94E+00	pCi/L
DCM Diablo Cove Marine(469440002) - SW	22-Jan-19	Zirconium-95	3.42E-01	2.72E+00	1.64E+00	pCi/L
DCM Diablo Cove Marine(471025002) - SW	12-Feb-19	Zirconium-95	7.02E-03	2.60E+00	1.70E+00	pCi/L
DCM Diablo Cove Marine(473837002) - SW	19-Mar-19	Zirconium-95	-1.07E+00	3.33E+00	2.08E+00	pCi/L
DCM Diablo Cove Marine(476886003) - SW	23-Apr-19	Zirconium-95	2.68E+00	3.35E+00	3.10E+00	pCi/L
DCM Diablo Cove Marine(478549006) - SW	13-May-19	Zirconium-95	-8.45E-01	2.82E+00	1.76E+00	pCi/L
DCM Diablo Cove Marine(480345002) - SW	3-Jun-19	Zirconium-95	1.33E+00	3.50E+00	2.03E+00	pCi/L
DCM Diablo Cove Marine(484091002) - SW	9-Jul-19	Zirconium-95	3.72E-01	3.00E+00	1.82E+00	pCi/L
DCM Diablo Cove Marine(487046002) - SW	12-Aug-19	Zirconium-95	3.06E-01	2.89E+00	1.75E+00	pCi/L
DCM Diablo Cove Marine(491015003) - SW	19-Sep-19	Zirconium-95	-3.66E-01	2.74E+00	1.62E+00	pCi/L
DCM Diablo Cove Marine(492788002) - SW	16-Oct-19	Zirconium-95	-5.09E-01	3.07E+00	1.84E+00	pCi/L
DCM Diablo Cove Marine(495069003) - SW	4-Nov-19	Zirconium-95	-3.42E-01	2.41E+00	1.50E+00	pCi/L

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DW1 Drinking Water(468905002) - DW	15-Jan-19	BETA	2.73E+00	1.83E+00	1.25E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	BETA	-1.71E-01	1.69E+00	9.99E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	BETA	2.92E-01	1.57E+00	9.47E-01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	BETA	1.21E-01	1.10E+00	6.60E-01	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	BETA	3.91E-01	1.24E+00	7.56E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	BETA	-5.53E-02	1.58E+00	9.40E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	BETA	1.03E+00	8.34E-01	5.80E-01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	BETA	9.21E-01	1.32E+00	8.36E-01	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	BETA	-5.36E-01	1.67E+00	9.83E-01	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	BETA	3.01E+00	1.37E+00	1.04E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	BETA	4.07E-01	1.53E+00	9.28E-01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	BETA	1.09E-01	1.56E+00	9.34E-01	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Barium-140	1.13E+00	7.42E+00	4.36E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Barium-140	-3.87E+00	8.75E+00	8.05E+00	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Barium-140	-2.83E-01	8.81E+00	7.95E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Barium-140	4.95E-01	9.83E+00	5.81E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Barium-140	-3.36E+00	9.03E+00	9.10E+00	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Barium-140	-1.60E+00	5.61E+00	4.04E+00	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Barium-140	5.02E-01	1.19E+01	7.26E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Barium-140	2.26E+00	1.22E+01	7.24E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Barium-140	4.59E+00	1.34E+01	8.11E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Barium-140	5.66E+00	9.57E+00	5.88E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Barium-140	6.54E-01	8.76E+00	5.24E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Barium-140	1.88E-01	9.20E+00	5.61E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Cesium-134	1.46E-01	1.47E+00	9.95E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Cesium-134	8.84E-01	1.90E+00	1.12E+00	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Cesium-134	6.61E-01	1.48E+00	1.13E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Cesium-134	1.31E-01	1.92E+00	1.16E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Cesium-134	4.71E-01	1.48E+00	8.53E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Cesium-134	-2.36E-01	1.65E+00	9.79E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Cesium-134	-1.99E-01	1.80E+00	1.08E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Cesium-134	1.37E+00	1.93E+00	2.34E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Cesium-134	6.91E-02	1.88E+00	1.08E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Cesium-134	4.14E-01	1.59E+00	9.48E-01	pCi/L

DW1 Drinking Water(494565002) - DW	5-Nov-19	Cesium-134	1.83E-01	1.84E+00	1.05E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Cesium-134	5.09E-01	1.77E+00	1.21E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Cesium-137	-1.90E-01	1.35E+00	8.31E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Cesium-137	1.20E+00	1.31E+00	9.69E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Cesium-137	3.81E-01	1.41E+00	8.39E-01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Cesium-137	5.36E-01	1.73E+00	1.95E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Cesium-137	4.59E-01	1.45E+00	8.84E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Cesium-137	-7.19E-01	1.69E+00	2.12E+00	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Cesium-137	-2.45E-05	1.66E+00	9.59E-01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Cesium-137	1.34E-01	1.74E+00	1.06E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Cesium-137	9.36E-01	1.79E+00	1.23E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Cesium-137	-5.03E-01	1.46E+00	9.43E-01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Cesium-137	9.60E-01	1.87E+00	1.16E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Cesium-137	-1.39E+00	1.67E+00	1.90E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Cobalt-58	-1.48E-01	1.39E+00	8.67E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Cobalt-58	8.94E-02	1.61E+00	9.60E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Cobalt-58	5.26E-01	1.32E+00	8.77E-01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Cobalt-58	2.61E-01	1.79E+00	1.08E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Cobalt-58	3.63E-01	1.41E+00	8.06E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Cobalt-58	2.12E-02	1.54E+00	8.95E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Cobalt-58	-6.95E-01	1.57E+00	1.03E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Cobalt-58	-2.58E-01	1.72E+00	1.02E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Cobalt-58	-2.21E-01	1.79E+00	1.06E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Cobalt-58	-4.89E-01	1.37E+00	1.02E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Cobalt-58	8.08E-01	1.70E+00	9.95E-01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Cobalt-58	-1.05E-02	1.77E+00	1.04E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Cobalt-60	-1.42E-01	1.35E+00	8.18E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Cobalt-60	5.08E-01	1.69E+00	9.92E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Cobalt-60	2.84E-01	1.68E+00	1.69E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Cobalt-60	5.03E-01	1.92E+00	1.10E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Cobalt-60	5.04E-01	1.51E+00	8.89E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Cobalt-60	-4.22E-01	1.45E+00	9.44E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Cobalt-60	-5.33E-01	1.86E+00	1.41E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Cobalt-60	-5.57E-02	1.90E+00	1.32E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Cobalt-60	5.70E-01	1.91E+00	1.11E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Cobalt-60	-2.24E-01	1.47E+00	8.94E-01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Cobalt-60	-3.41E-02	1.69E+00	1.03E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Cobalt-60	-1.30E-01	1.59E+00	9.93E-01	pCi/L

DW1 Drinking Water(468905002) - DW	15-Jan-19	Iodine-131	1.78E-01	7.63E-01	4.47E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Iodine-131	-7.65E-04	7.14E-01	4.36E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Iodine-131	5.40E-02	7.01E-01	4.07E-01	pCi/L
DW1 Drinking Water(473236001) - DW	9-Apr-19	Iodine-131	1.06E-01	6.20E-01	3.67E-01	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Iodine-131	-3.01E-02	6.14E-01	3.58E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Iodine-131	-1.70E-01	4.54E-01	2.80E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Iodine-131	-1.87E-02	6.23E-01	3.73E-01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Iodine-131	2.54E-01	6.87E-01	4.02E-01	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Iodine-131	-4.91E-01	9.50E-01	8.26E-01	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Iodine-131	-1.62E-01	5.53E-01	3.44E-01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Iodine-131	-3.02E-01	7.17E-01	4.61E-01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Iodine-131	-2.50E-01	6.40E-01	4.17E-01	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Iron-55	1.07E+01	6.74E+01	5.16E+01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Iron-55	-2.00E+01	7.58E+01	5.34E+01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Iron-55	5.05E+01	7.88E+01	6.11E+01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Iron-55	2.89E+01	5.76E+01	4.32E+01	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Iron-55	-2.54E+01	6.44E+01	4.14E+01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Iron-55	8.59E+00	6.67E+01	4.84E+01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Iron-55	-4.09E+01	6.82E+01	4.87E+01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Iron-55	-3.74E+00	7.05E+01	5.03E+01	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Iron-55	-1.05E+01	6.10E+01	4.57E+01	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Iron-55	-1.94E+01	6.63E+01	4.76E+01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Iron-55	7.66E+01	1.24E+02	9.25E+01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Iron-55	-2.11E+01	5.81E+01	3.92E+01	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Iron-59	2.21E+00	3.23E+00	1.99E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Iron-59	-9.45E-01	3.04E+00	1.94E+00	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Iron-59	7.58E-01	3.12E+00	1.79E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Iron-59	-1.04E+00	3.65E+00	2.57E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Iron-59	8.21E-01	3.01E+00	1.75E+00	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Iron-59	-1.17E+00	2.58E+00	1.73E+00	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Iron-59	-1.30E+00	3.59E+00	2.36E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Iron-59	5.77E-01	4.43E+00	2.60E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Iron-59	7.51E-01	3.91E+00	2.27E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Iron-59	-9.39E-01	2.80E+00	1.77E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Iron-59	-1.13E+00	3.43E+00	2.21E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Iron-59	1.05E+00	3.83E+00	2.26E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Lanthanum-140	1.26E+00	3.00E+00	1.77E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Lanthanum-140	1.23E-01	2.51E+00	1.74E+00	pCi/L

DW1 Drinking Water(473236002) - DW	11-Mar-19	Lanthanum-140	1.47E+00	3.22E+00	1.91E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Lanthanum-140	7.48E-01	3.72E+00	2.16E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Lanthanum-140	6.90E-01	3.39E+00	2.01E+00	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Lanthanum-140	-1.01E+00	1.98E+00	1.41E+00	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Lanthanum-140	-2.05E+00	3.59E+00	2.54E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Lanthanum-140	-1.13E+00	4.25E+00	2.64E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Lanthanum-140	5.01E-01	4.63E+00	2.74E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Lanthanum-140	-8.10E-01	3.17E+00	2.02E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Lanthanum-140	-7.84E-01	3.10E+00	1.91E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Lanthanum-140	-1.28E+00	2.80E+00	1.89E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Manganese-54	9.87E-02	1.35E+00	8.20E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Manganese-54	-2.25E-01	1.57E+00	9.38E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Manganese-54	-7.83E-01	1.26E+00	9.13E-01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Manganese-54	5.21E-01	1.85E+00	1.23E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Manganese-54	-1.81E-01	1.35E+00	7.99E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Manganese-54	-2.33E-01	1.42E+00	9.68E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Manganese-54	1.01E-01	1.61E+00	9.43E-01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Manganese-54	-1.06E-01	1.73E+00	1.01E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Manganese-54	-4.35E-01	1.72E+00	1.05E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Manganese-54	5.60E-01	1.49E+00	8.99E-01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Manganese-54	3.11E-01	1.61E+00	9.23E-01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Manganese-54	-1.05E+00	1.45E+00	1.06E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Nickel-63	6.43E+00	3.96E+01	2.39E+01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Nickel-63	-7.92E+00	3.94E+01	2.31E+01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Nickel-63	6.89E+00	3.48E+01	2.10E+01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Nickel-63	-5.57E-01	3.16E+01	1.88E+01	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Nickel-63	-3.40E+00	3.11E+01	1.83E+01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Nickel-63	4.52E+00	2.87E+01	1.73E+01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Nickel-63	-7.14E+00	2.86E+01	1.67E+01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Nickel-63	1.16E+01	3.45E+01	2.11E+01	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Nickel-63	-4.05E+00	3.47E+01	2.05E+01	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Nickel-63	3.73E+00	2.82E+01	1.70E+01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Nickel-63	2.23E+00	2.63E+01	1.57E+01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Nickel-63	2.14E+01	3.00E+01	1.92E+01	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Niobium-95	-1.08E-02	1.48E+00	1.02E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Niobium-95	6.44E-01	1.73E+00	1.11E+00	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Niobium-95	-5.04E-01	1.41E+00	9.25E-01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Niobium-95	1.28E-01	1.78E+00	1.07E+00	pCi/L

DW1 Drinking Water(478347003) - DW	8-May-19	Niobium-95	8.03E-01	1.52E+00	9.93E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Niobium-95	9.79E-01	1.71E+00	1.03E+00	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Niobium-95	-2.48E-01	2.04E+00	1.85E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Niobium-95	-3.84E-01	1.97E+00	1.85E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Niobium-95	-7.42E-01	1.72E+00	1.10E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Niobium-95	1.30E+00	1.71E+00	1.11E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Niobium-95	-3.16E-01	1.71E+00	1.02E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Niobium-95	9.35E-01	1.84E+00	1.10E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Total Strontium	-2.81E-01	8.54E-01	4.74E-01	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Total Strontium	7.41E-01	7.54E-01	5.50E-01	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Total Strontium	-9.11E-02	5.95E-01	3.45E-01	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Total Strontium	-3.70E-01	9.48E-01	5.32E-01	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Total Strontium	-9.15E-02	7.30E-01	4.24E-01	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Total Strontium	-5.54E-01	8.12E-01	3.97E-01	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Total Strontium	1.67E-01	1.12E+00	6.86E-01	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Total Strontium	7.63E-01	8.68E-01	5.97E-01	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Total Strontium	-5.47E-02	7.62E-01	4.49E-01	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Total Strontium	-1.84E-01	5.70E-01	3.20E-01	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Total Strontium	1.28E-01	9.32E-01	5.68E-01	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Total Strontium	-1.01E-01	7.35E-01	4.26E-01	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Tritium	1.72E+01	2.60E+02	1.56E+02	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Tritium	6.21E+01	3.03E+02	1.84E+02	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Tritium	-1.06E+02	2.89E+02	1.68E+02	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Tritium	-7.06E+01	2.83E+02	1.64E+02	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Tritium	8.24E+01	1.66E+02	1.09E+02	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Tritium	1.34E+02	2.78E+02	1.74E+02	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Tritium	-1.04E+02	2.63E+02	1.51E+02	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Tritium	1.64E+01	2.65E+02	1.58E+02	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Tritium	1.48E+02	2.65E+02	1.69E+02	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Tritium	7.95E+01	2.23E+02	1.37E+02	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Tritium	-3.49E+00	2.26E+02	1.35E+02	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Tritium	2.42E+01	1.57E+02	9.59E+01	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Zinc-65	-4.15E-01	3.01E+00	1.86E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Zinc-65	1.10E+00	3.48E+00	2.04E+00	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Zinc-65	-3.12E+00	2.56E+00	2.35E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Zinc-65	1.52E+00	3.96E+00	2.28E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Zinc-65	2.29E+00	2.34E+00	2.57E+00	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Zinc-65	5.81E-01	3.31E+00	1.93E+00	pCi/L

DW1 Drinking Water(485302002) - DW	23-Jul-19	Zinc-65	-7.37E-01	3.50E+00	2.20E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Zinc-65	-7.66E+00	3.74E+00	9.40E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Zinc-65	7.99E-01	3.62E+00	2.17E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Zinc-65	1.04E-01	3.21E+00	1.85E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Zinc-65	1.89E-01	3.64E+00	2.44E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Zinc-65	5.89E-01	3.30E+00	2.06E+00	pCi/L
DW1 Drinking Water(468905002) - DW	15-Jan-19	Zirconium-95	-5.73E-01	2.24E+00	1.44E+00	pCi/L
DW1 Drinking Water(470417002) - DW	5-Feb-19	Zirconium-95	1.49E+00	2.96E+00	1.79E+00	pCi/L
DW1 Drinking Water(473236002) - DW	11-Mar-19	Zirconium-95	-2.06E-01	2.54E+00	1.56E+00	pCi/L
DW1 Drinking Water(475755001) - DW	9-Apr-19	Zirconium-95	-8.88E-01	2.91E+00	1.89E+00	pCi/L
DW1 Drinking Water(478347003) - DW	8-May-19	Zirconium-95	7.27E-01	2.52E+00	1.54E+00	pCi/L
DW1 Drinking Water(481376002) - DW	11-Jun-19	Zirconium-95	6.45E-01	2.60E+00	1.49E+00	pCi/L
DW1 Drinking Water(485302002) - DW	23-Jul-19	Zirconium-95	-3.21E+00	2.90E+00	3.28E+00	pCi/L
DW1 Drinking Water(487371001) - DW	14-Aug-19	Zirconium-95	-4.34E-01	3.23E+00	1.91E+00	pCi/L
DW1 Drinking Water(489317001) - DW	10-Sep-19	Zirconium-95	-4.44E-02	3.49E+00	2.02E+00	pCi/L
DW1 Drinking Water(492382002) - DW	15-Oct-19	Zirconium-95	1.45E+00	2.88E+00	1.75E+00	pCi/L
DW1 Drinking Water(494565002) - DW	5-Nov-19	Zirconium-95	9.71E-01	3.18E+00	1.82E+00	pCi/L
DW1 Drinking Water(497498003) - DW	3-Dec-19	Zirconium-95	9.86E-01	3.20E+00	1.85E+00	pCi/L

## <sup>2</sup>DY1 Drywell 115 - Groundwater

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
DY1 Drywell 115(486789001) - GW	6-Aug-19	Barium-140	7.17E+00	9.76E+00	6.40E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Cesium-134	7.17E-01	1.95E+00	1.14E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Cesium-137	5.65E-01	1.77E+00	1.02E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Cobalt-58	-3.16E-01	1.59E+00	9.70E-01	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Cobalt-60	-6.00E-01	1.70E+00	1.14E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Iodine-131	5.83E-02	3.58E+00	2.13E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Iron-59	3.85E-01	3.78E+00	2.25E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Lanthanum-140	-7.11E-02	3.37E+00	1.99E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Manganese-54	-2.05E-01	1.67E+00	1.00E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Niobium-95	9.34E-01	1.81E+00	1.09E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Tritium	<b>5.02E+03</b>	2.93E+02	1.03E+03	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Zinc-65	-6.82E-01	3.36E+00	2.12E+00	pCi/L
DY1 Drywell 115(486789001) - GW	6-Aug-19	Zirconium-95	-1.65E+00	2.71E+00	1.87E+00	pCi/L

## GW1 Groundwater Monitoring Well 1

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	BETA	3.16E+01	1.92E+01	1.35E+01	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	BETA	2.16E+01	2.20E+01	1.42E+01	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	29-Jul-19	BETA	1.69E+01	1.27E+01	9.02E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	BETA	1.17E+01	1.67E+01	1.06E+01	pCi/L
GW1 Groundwater Monitoring Well 1(493409003) - GW	24-Jan-19	Barium-140	2.36E+00	1.07E+01	6.32E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Barium-140	5.55E+00	1.08E+01	6.56E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Barium-140	2.56E+00	1.02E+01	5.99E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Barium-140	-3.65E+00	1.14E+01	7.36E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Cesium-134	-9.23E-01	1.63E+00	1.14E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Cesium-134	2.15E-01	1.64E+00	9.90E-01	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Cesium-134	8.28E-01	1.93E+00	1.18E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Cesium-134	8.00E-01	2.89E+00	1.70E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Cesium-137	7.83E-01	1.61E+00	1.08E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Cesium-137	4.25E-01	1.53E+00	1.01E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Cesium-137	6.35E-02	1.76E+00	1.18E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Cesium-137	-1.15E+00	2.38E+00	1.74E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Cobalt-58	-7.66E-01	1.66E+00	1.52E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Cobalt-58	-4.58E-02	1.42E+00	9.77E-01	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Cobalt-58	1.19E-01	1.84E+00	1.25E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Cobalt-58	2.90E-01	2.62E+00	1.75E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Cobalt-60	4.89E-01	1.67E+00	1.60E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Cobalt-60	1.21E+00	1.75E+00	1.83E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Cobalt-60	5.43E-01	1.97E+00	1.14E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Cobalt-60	-3.29E-01	2.95E+00	1.77E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Iodine-131	-5.31E+00	4.14E+00	4.88E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Iodine-131	1.10E+00	4.77E+00	2.75E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Iodine-131	7.70E-01	3.82E+00	2.21E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Iodine-131	3.24E-01	3.98E+00	2.34E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Iron-55	-6.81E+00	7.55E+01	5.40E+01	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Iron-55	-1.75E+01	6.71E+01	4.43E+01	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Iron-55	2.68E+01	7.67E+01	5.70E+01	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Iron-55	3.76E+01	6.35E+01	4.73E+01	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GW	24-Jan-19	Iron-59	2.52E-01	3.58E+00	2.07E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GW	16-Apr-19	Iron-59	-2.68E-01	3.45E+00	2.03E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GW	29-Jul-19	Iron-59	-9.55E-01	3.86E+00	2.35E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GW	21-Oct-19	Iron-59	2.33E-01	5.72E+00	3.49E+00	pCi/L

GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Lanthanum-140	-1.17E+00	3.65E+00	2.37E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Lanthanum-140	-7.46E-02	3.90E+00	2.68E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Lanthanum-140	4.69E-01	3.34E+00	1.96E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Lanthanum-140	8.10E-01	4.70E+00	2.79E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Manganese-54	1.05E+00	1.41E+00	5.78E-01	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Manganese-54	-2.24E-01	1.41E+00	9.99E-01	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Manganese-54	-1.92E-01	1.79E+00	1.25E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Manganese-54	-8.66E-01	2.46E+00	1.78E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Nickel-63	-1.26E+01	3.46E+01	2.00E+01	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Nickel-63	8.43E+00	2.82E+01	1.72E+01	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Nickel-63	-1.52E+01	2.94E+01	1.69E+01	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Nickel-63	-9.71E+00	2.78E+01	1.61E+01	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Niobium-95	9.18E-01	2.04E+00	1.67E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Niobium-95	1.97E-01	1.68E+00	1.13E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Niobium-95	1.00E+00	1.95E+00	1.32E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Niobium-95	3.22E+00	3.22E+00	2.59E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Total Strontium	2.82E-01	1.25E+00	7.72E-01	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Total Strontium	1.85E-01	3.91E-01	2.43E-01	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Total Strontium	-5.23E-01	4.98E-01	2.43E-01	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Total Strontium	4.11E-02	3.94E-01	2.37E-01	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Tritium	1.06E+02	2.33E+02	1.46E+02	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Tritium	2.21E+02	2.62E+02	1.72E+02	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Tritium	5.10E+01	2.80E+02	1.69E+02	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Tritium	2.01E+02	2.16E+02	1.43E+02	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Zinc-65	1.34E+00	3.39E+00	2.90E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Zinc-65	7.95E-01	2.99E+00	1.92E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Zinc-65	1.29E-01	3.76E+00	2.46E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Zinc-65	1.06E+00	5.84E+00	4.03E+00	pCi/L
GW1 Groundwater Monitoring Well 1(469647003) - GWV	24-Jan-19	Zirconium-95	-9.11E-01	2.77E+00	1.80E+00	pCi/L
GW1 Groundwater Monitoring Well 1(476505003) - GWV	16-Apr-19	Zirconium-95	1.05E+00	3.00E+00	1.81E+00	pCi/L
GW1 Groundwater Monitoring Well 1(485902002) - GWV	29-Jul-19	Zirconium-95	-6.38E-01	3.22E+00	2.02E+00	pCi/L
GW1 Groundwater Monitoring Well 1(493409002) - GWV	21-Oct-19	Zirconium-95	-2.02E-01	4.71E+00	2.78E+00	pCi/L

## GW2 Groundwater Monitoring Well 2

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	BETA	1.23E+01	7.90E+00	5.42E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	BETA	1.77E+01	6.59E+00	5.35E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	BETA	1.68E+01	6.47E+00	5.20E+00	pCi/L

GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	BETA	4.67E+00	5.76E+00	3.71E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Barium-140	3.42E+00	8.72E+00	5.14E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Barium-140	1.88E+00	1.29E+01	7.75E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Barium-140	4.32E+00	8.75E+00	5.39E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Barium-140	4.90E+00	8.51E+00	5.32E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Cesium-134	-1.19E+00	1.14E+00	1.32E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Cesium-134	-9.84E-01	2.04E+00	2.14E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Cesium-134	-8.08E-01	1.73E+00	1.94E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Cesium-134	-2.04E-01	2.05E+00	1.20E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Cesium-137	3.51E-02	1.32E+00	7.84E-01	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Cesium-137	-7.94E-01	1.90E+00	1.29E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Cesium-137	-3.65E-01	1.45E+00	1.05E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Cesium-137	-8.40E-01	1.88E+00	1.27E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Cobalt-58	-5.63E-01	1.33E+00	8.84E-01	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Cobalt-58	-3.48E-01	2.02E+00	1.21E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Cobalt-58	-5.63E-02	1.41E+00	9.32E-01	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Cobalt-58	-8.65E-01	1.87E+00	1.37E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Cobalt-60	1.52E+00	1.52E+00	1.91E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Cobalt-60	1.17E+00	2.24E+00	1.34E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Cobalt-60	-1.49E-01	1.52E+00	1.08E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Cobalt-60	6.90E-01	2.19E+00	1.30E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Iodine-131	1.25E+00	3.62E+00	2.10E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Iodine-131	-3.43E+00	4.84E+00	3.44E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Iodine-131	5.66E-01	3.33E+00	1.94E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Iodine-131	7.56E-01	2.90E+00	1.70E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Iron-55	1.61E+01	7.31E+01	5.37E+01	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Iron-55	-3.49E+01	6.35E+01	4.07E+01	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Iron-55	2.51E+00	7.13E+01	5.19E+01	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Iron-55	5.13E-01	5.68E+01	4.07E+01	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Iron-59	7.22E-01	3.13E+00	1.89E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Iron-59	-1.17E+00	4.23E+00	2.69E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Iron-59	-6.23E-01	3.16E+00	1.95E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Iron-59	-7.54E-01	3.92E+00	2.42E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Lanthanum-140	-1.68E-02	2.72E+00	1.60E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GWV	16-Apr-19	Lanthanum-140	1.12E+00	4.53E+00	2.56E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GWV	29-Jul-19	Lanthanum-140	-9.92E-01	2.73E+00	1.84E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GWV	21-Oct-19	Lanthanum-140	7.10E-02	3.22E+00	1.87E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GWV	24-Jan-19	Manganese-54	-4.26E-01	1.15E+00	7.60E-01	pCi/L

GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Manganese-54	-3.32E-01	1.83E+00	1.10E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Manganese-54	-7.62E-01	1.40E+00	9.34E-01	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	21-Oct-19	Manganese-54	-3.57E-01	1.89E+00	1.13E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GW	24-Jan-19	Nickel-63	-1.84E+01	3.74E+01	2.14E+01	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Nickel-63	5.89E+00	2.95E+01	1.79E+01	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Nickel-63	-1.80E+01	3.42E+01	1.96E+01	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	21-Oct-19	Nickel-63	-4.65E+00	2.94E+01	1.73E+01	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GW	24-Jan-19	Niobium-95	4.85E-01	1.46E+00	9.60E-01	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Niobium-95	9.65E-01	2.46E+00	1.60E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Niobium-95	7.76E-01	1.66E+00	1.08E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	21-Oct-19	Niobium-95	1.53E+00	2.15E+00	1.46E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GW	24-Jan-19	Total Strontium	2.07E-01	5.20E-01	3.38E-01	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Total Strontium	-1.74E-01	3.15E-01	1.80E-01	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Total Strontium	7.49E-02	9.12E-01	5.49E-01	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	21-Oct-19	Total Strontium	-4.85E-02	5.00E-01	2.96E-01	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GW	24-Jan-19	Tritium	1.04E+01	2.26E+02	1.35E+02	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Tritium	7.79E+01	2.60E+02	1.60E+02	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Tritium	7.16E+01	1.32E+02	8.88E+01	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GW	21-Oct-19	Tritium	-3.42E+00	2.11E+02	1.25E+02	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	24-Jan-19	Zinc-65	6.52E-01	2.59E+00	1.72E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Zinc-65	2.21E-01	4.33E+00	2.93E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Zinc-65	1.28E-02	3.31E+00	2.24E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	21-Oct-19	Zinc-65	-1.68E+00	4.35E+00	3.22E+00	pCi/L
GW2 Groundwater Monitoring Well 2(469647005) - GW	24-Jan-19	Zirconium-95	-4.89E-01	2.31E+00	1.44E+00	pCi/L
GW2 Groundwater Monitoring Well 2(476505004) - GW	16-Apr-19	Zirconium-95	-1.81E+00	3.40E+00	2.27E+00	pCi/L
GW2 Groundwater Monitoring Well 2(485902003) - GW	29-Jul-19	Zirconium-95	1.22E+00	3.11E+00	1.81E+00	pCi/L
GW2 Groundwater Monitoring Well 2(493409004) - GW	21-Oct-19	Zirconium-95	2.12E+00	3.60E+00	2.92E+00	pCi/L

## MDO Montana de Oro Beach Sand

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
MDO Montana de Oro(473342003) - SD	14-Mar-19	Barium-140	-3.21E+01	1.91E+02	1.29E+02	pCi/kg
MDO Montana de Oro(488682003) - SD	15-Aug-19	Barium-140	1.06E+02	5.15E+02	2.90E+02	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Cesium-134	2.78E+01	4.12E+01	2.94E+01	pCi/kg
MDO Montana de Oro(488682003) - SD	15-Aug-19	Cesium-134	-3.46E+01	8.56E+01	6.03E+01	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Cesium-137	4.39E+01	4.41E+01	4.07E+01	pCi/kg
MDO Montana de Oro(488682003) - SD	15-Aug-19	Cesium-137	7.44E+00	9.60E+01	5.76E+01	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Cobalt-58	-5.95E+00	3.35E+01	2.39E+01	pCi/kg
MDO Montana de Oro(488682003) - SD	15-Aug-19	Cobalt-58	7.10E+00	9.21E+01	5.21E+01	pCi/kg

MDO Montana de Oro(473342003) - SD	14-Mar-19	Cobalt-60	5.72E-01	3.85E+01	2.33E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Cobalt-60	8.53E+00	8.33E+01	4.69E+01	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Iron-55	7.89E+03	1.75E+04	1.33E+04	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Iron-55	1.34E+03	1.65E+04	1.18E+04	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Iron-59	-1.82E+01	8.70E+01	5.71E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Iron-59	-5.76E+01	1.24E+02	1.02E+02	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Lanthanum-140	9.30E+00	6.50E+01	3.42E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Lanthanum-140	-4.70E+01	1.24E+02	1.01E+02	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Manganese-54	1.78E+01	2.99E+01	2.11E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Manganese-54	-4.24E+00	9.00E+01	6.10E+01	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Nickel-63	7.45E+02	2.53E+03	1.54E+03	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Nickel-63	-3.87E+02	3.04E+03	1.80E+03	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Niobium-95	5.20E+00	3.50E+01	2.12E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Niobium-95	-1.78E+01	1.14E+02	6.80E+01	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Total Strontium	-3.75E+02	6.43E+02	3.16E+02	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Total Strontium	2.22E+02	5.88E+02	3.79E+02	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Zinc-65	-3.29E+01	4.51E+01	4.88E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Zinc-65	4.42E+01	2.49E+02	1.56E+02	pCi/kg
MDO Montana de Oro(473342003) - SD	14-Mar-19	Zirconium-95	-2.66E+01	5.68E+01	4.08E+01	pCi/kg
MDO Montana de Oro(4886682003) - SD	15-Aug-19	Zirconium-95	3.15E+01	1.55E+02	8.31E+01	pCi/kg

#### MT1 Meteorological Tower - Air Cartridge

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
MT1 Meteorological Tower(468128017) - AC	5-Jan-19	Iodine-131	2.99E-03	8.23E-03	4.74E-03	pCi/m3
MT1 Meteorological Tower(468880001) - AC	12-Jan-19	Iodine-131	2.12E-03	1.45E-02	8.28E-03	pCi/m3
MT1 Meteorological Tower(469519009) - AC	19-Jan-19	Iodine-131	1.92E-03	8.33E-03	4.70E-03	pCi/m3
MT1 Meteorological Tower(470002014) - AC	26-Jan-19	Iodine-131	-1.72E-03	7.08E-03	4.68E-03	pCi/m3
MT1 Meteorological Tower(470540016) - AC	2-Feb-19	Iodine-131	1.46E-03	7.81E-03	4.30E-03	pCi/m3
MT1 Meteorological Tower(471051001) - AC	9-Feb-19	Iodine-131	3.63E-03	8.83E-03	4.99E-03	pCi/m3
MT1 Meteorological Tower(471584016) - AC	16-Feb-19	Iodine-131	3.06E-04	6.19E-03	3.60E-03	pCi/m3
MT1 Meteorological Tower(472133007) - AC	23-Feb-19	Iodine-131	-6.52E-03	1.38E-02	9.69E-03	pCi/m3
MT1 Meteorological Tower(472647001) - AC	1-Mar-19	Iodine-131	-1.51E-03	8.43E-03	5.24E-03	pCi/m3
MT1 Meteorological Tower(473264006) - AC	9-Mar-19	Iodine-131	1.59E-04	7.35E-03	4.64E-03	pCi/m3
MT1 Meteorological Tower(473881008) - AC	16-Mar-19	Iodine-131	-1.84E-03	8.82E-03	6.10E-03	pCi/m3
MT1 Meteorological Tower(474425008) - AC	23-Mar-19	Iodine-131	9.41E-03	9.41E-03	1.70E-02	pCi/m3
MT1 Meteorological Tower(475038013) - AC	29-Mar-19	Iodine-131	-4.69E-05	1.34E-02	7.97E-03	pCi/m3
MT1 Meteorological Tower(475856016) - AC	6-Apr-19	Iodine-131	-1.34E-03	6.48E-03	4.04E-03	pCi/m3
MT1 Meteorological Tower(476506001) - AC	13-Apr-19	Iodine-131	-2.93E-04	8.22E-03	4.82E-03	pCi/m3

MT1 Meteorological Tower(477146008) - AC	20-Apr-19	Iodine-131	2.04E-03	1.07E-02	6.08E-03	pCi/m3
MT1 Meteorological Tower(477720016) - AC	27-Apr-19	Iodine-131	2.84E-04	8.15E-03	4.72E-03	pCi/m3
MT1 Meteorological Tower(478343016) - AC	4-May-19	Iodine-131	1.95E-03	8.23E-03	4.64E-03	pCi/m3
MT1 Meteorological Tower(479033016) - AC	11-May-19	Iodine-131	1.41E-03	1.18E-02	6.85E-03	pCi/m3
MT1 Meteorological Tower(479683001) - AC	18-May-19	Iodine-131	-2.65E-03	1.47E-02	9.00E-03	pCi/m3
MT1 Meteorological Tower(480029001) - AC	25-May-19	Iodine-131	-2.09E-03	9.86E-03	6.24E-03	pCi/m3
MT1 Meteorological Tower(480734016) - AC	1-Jun-19	Iodine-131	5.54E-04	1.04E-02	6.51E-03	pCi/m3
MT1 Meteorological Tower(481436016) - AC	8-Jun-19	Iodine-131	3.99E-04	7.46E-03	4.35E-03	pCi/m3
MT1 Meteorological Tower(482140016) - AC	15-Jun-19	Iodine-131	-4.85E-03	5.73E-03	5.39E-03	pCi/m3
MT1 Meteorological Tower(482758007) - AC	22-Jun-19	Iodine-131	5.02E-03	1.55E-02	8.36E-03	pCi/m3
MT1 Meteorological Tower(483652014) - AC	29-Jun-19	Iodine-131	9.96E-04	9.19E-03	5.17E-03	pCi/m3
MT1 Meteorological Tower(484196016) - AC	6-Jul-19	Iodine-131	3.83E-04	6.96E-03	4.29E-03	pCi/m3
MT1 Meteorological Tower(485085012) - AC	13-Jul-19	Iodine-131	-1.44E-03	7.28E-03	4.59E-03	pCi/m3
MT1 Meteorological Tower(485356016) - AC	20-Jul-19	Iodine-131	1.43E-03	8.62E-03	4.92E-03	pCi/m3
MT1 Meteorological Tower(485943016) - AC	27-Jul-19	Iodine-131	9.54E-04	1.01E-02	5.68E-03	pCi/m3
MT1 Meteorological Tower(486790001) - AC	3-Aug-19	Iodine-131	-3.06E-03	7.67E-03	5.18E-03	pCi/m3
MT1 Meteorological Tower(487347016) - AC	10-Aug-19	Iodine-131	-3.74E-04	6.49E-03	4.18E-03	pCi/m3
MT1 Meteorological Tower(488047015) - AC	17-Aug-19	Iodine-131	3.35E-03	1.18E-02	6.67E-03	pCi/m3
MT1 Meteorological Tower(488407016) - AC	24-Aug-19	Iodine-131	2.39E-03	9.60E-03	5.33E-03	pCi/m3
MT1 Meteorological Tower(489091016) - AC	1-Sep-19	Iodine-131	8.29E-03	1.83E-02	9.89E-03	pCi/m3
MT1 Meteorological Tower(489316016) - AC	8-Sep-19	Iodine-131	-1.95E-03	7.70E-03	5.07E-03	pCi/m3
MT1 Meteorological Tower(489397016) - AC	14-Sep-19	Iodine-131	1.78E-03	2.06E-02	1.15E-02	pCi/m3
MT1 Meteorological Tower(490334018) - AC	21-Sep-19	Iodine-131	-2.87E-03	6.37E-03	4.60E-03	pCi/m3
MT1 Meteorological Tower(490940001) - AC	29-Sep-19	Iodine-131	-3.57E-03	1.03E-02	7.12E-03	pCi/m3
MT1 Meteorological Tower(492206001) - AC	5-Oct-19	Iodine-131	-2.87E-04	6.12E-03	4.30E-03	pCi/m3
MT1 Meteorological Tower(492214011) - AC	12-Oct-19	Iodine-131	-6.45E-04	7.93E-03	4.77E-03	pCi/m3
MT1 Meteorological Tower(493200016) - AC	19-Oct-19	Iodine-131	1.91E-03	9.45E-03	5.18E-03	pCi/m3
MT1 Meteorological Tower(493690001) - AC	26-Oct-19	Iodine-131	-1.25E-03	7.66E-03	4.74E-03	pCi/m3
MT1 Meteorological Tower(494544017) - AC	2-Nov-19	Iodine-131	-2.66E-04	1.19E-02	6.87E-03	pCi/m3
MT1 Meteorological Tower(495196001) - AC	9-Nov-19	Iodine-131	-1.09E-03	8.44E-03	5.27E-03	pCi/m3
MT1 Meteorological Tower(495839016) - AC	16-Nov-19	Iodine-131	-5.93E-04	1.03E-02	6.19E-03	pCi/m3
MT1 Meteorological Tower(496785016) - AC	23-Nov-19	Iodine-131	-1.75E-03	8.05E-03	5.10E-03	pCi/m3
MT1 Meteorological Tower(497497016) - AC	30-Nov-19	Iodine-131	-1.89E-03	6.95E-03	4.37E-03	pCi/m3
MT1 Meteorological Tower(497962018) - AC	7-Dec-19	Iodine-131	-5.06E-03	6.01E-03	5.06E-03	pCi/m3
MT1 Meteorological Tower(498469016) - AC	14-Dec-19	Iodine-131	2.59E-03	1.02E-02	5.53E-03	pCi/m3
MT1 Meteorological Tower(499079016) - AC	21-Dec-19	Iodine-131	-7.78E-04	7.93E-03	4.75E-03	pCi/m3
MT1 Meteorological Tower(499686016) - AC	27-Dec-19	Iodine-131	1.89E-03	1.06E-02	5.89E-03	pCi/m3

## MT1 Meteorological Tower - Air Particulate

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
MT1 Meteorological Tower(468128015) - AP	5-Jan-19	BETA	1.58E-02	2.19E-03	1.12E-02	pCi/m3
MT1 Meteorological Tower(468880002) - AP	12-Jan-19	BETA	6.55E-03	2.93E-03	1.49E-02	pCi/m3
MT1 Meteorological Tower(469519010) - AP	19-Jan-19	BETA	7.24E-03	2.08E-03	1.08E-02	pCi/m3
MT1 Meteorological Tower(470002015) - AP	26-Jan-19	BETA	3.19E-02	2.55E-03	1.16E-02	pCi/m3
MT1 Meteorological Tower(470540017) - AP	2-Feb-19	BETA	1.03E-02	2.45E-03	1.15E-02	pCi/m3
MT1 Meteorological Tower(471051002) - AP	9-Feb-19	BETA	6.31E-03	2.68E-03	1.43E-02	pCi/m3
MT1 Meteorological Tower(471584017) - AP	16-Feb-19	BETA	8.75E-03	2.07E-03	1.01E-02	pCi/m3
MT1 Meteorological Tower(472133014) - AP	23-Feb-19	BETA	1.47E-02	2.78E-03	1.20E-02	pCi/m3
MT1 Meteorological Tower(472647002) - AP	1-Mar-19	BETA	9.69E-03	2.20E-03	1.07E-02	pCi/m3
MT1 Meteorological Tower(473264007) - AP	9-Mar-19	BETA	7.98E-03	2.16E-03	1.02E-02	pCi/m3
MT1 Meteorological Tower(473881009) - AP	16-Mar-19	BETA	1.74E-02	2.16E-03	1.13E-02	pCi/m3
MT1 Meteorological Tower(474425009) - AP	23-Mar-19	BETA	8.90E-03	2.57E-03	1.31E-02	pCi/m3
MT1 Meteorological Tower(475038014) - AP	29-Mar-19	BETA	9.21E-03	2.32E-03	1.13E-02	pCi/m3
MT1 Meteorological Tower(475856017) - AP	6-Apr-19	BETA	4.47E-03	2.13E-03	1.01E-02	pCi/m3
MT1 Meteorological Tower(476506002) - AP	13-Apr-19	BETA	8.58E-03	2.42E-03	1.16E-02	pCi/m3
MT1 Meteorological Tower(477146009) - AP	20-Apr-19	BETA	7.67E-03	2.44E-03	1.11E-02	pCi/m3
MT1 Meteorological Tower(477720017) - AP	27-Apr-19	BETA	1.57E-02	2.42E-03	1.08E-02	pCi/m3
MT1 Meteorological Tower(478343017) - AP	4-May-19	BETA	1.98E-02	2.26E-03	1.04E-02	pCi/m3
MT1 Meteorological Tower(479033017) - AP	11-May-19	BETA	1.38E-02	2.26E-03	1.04E-02	pCi/m3
MT1 Meteorological Tower(479683002) - AP	18-May-19	BETA	9.43E-03	2.65E-03	1.28E-02	pCi/m3
MT1 Meteorological Tower(480029002) - AP	25-May-19	BETA	7.14E-03	1.97E-03	9.80E-03	pCi/m3
MT1 Meteorological Tower(480734017) - AP	1-Jun-19	BETA	9.52E-03	2.72E-03	1.30E-02	pCi/m3
MT1 Meteorological Tower(481436017) - AP	8-Jun-19	BETA	7.34E-03	2.07E-03	9.79E-03	pCi/m3
MT1 Meteorological Tower(482140017) - AP	15-Jun-19	BETA	8.57E-03	2.22E-03	1.09E-02	pCi/m3
MT1 Meteorological Tower(482758014) - AP	22-Jun-19	BETA	9.77E-03	2.17E-03	1.11E-02	pCi/m3
MT1 Meteorological Tower(483652007) - AP	29-Jun-19	BETA	1.15E-02	2.57E-03	1.24E-02	pCi/m3
MT1 Meteorological Tower(484196017) - AP	6-Jul-19	BETA	8.38E-03	2.12E-03	1.01E-02	pCi/m3
MT1 Meteorological Tower(485085005) - AP	13-Jul-19	BETA	8.82E-03	2.24E-03	1.20E-02	pCi/m3
MT1 Meteorological Tower(485356017) - AP	20-Jul-19	BETA	1.13E-02	2.38E-03	2.70E-03	pCi/m3
MT1 Meteorological Tower(485943017) - AP	27-Jul-19	BETA	6.21E-03	2.69E-03	1.33E-02	pCi/m3
MT1 Meteorological Tower(486790002) - AP	3-Aug-19	BETA	3.86E-03	2.05E-03	1.12E-02	pCi/m3
MT1 Meteorological Tower(487347017) - AP	10-Aug-19	BETA	1.07E-02	2.43E-03	1.19E-02	pCi/m3
MT1 Meteorological Tower(488047016) - AP	17-Aug-19	BETA	7.94E-03	2.14E-03	1.18E-02	pCi/m3
MT1 Meteorological Tower(488407017) - AP	24-Aug-19	BETA	6.89E-03	2.32E-03	1.10E-02	pCi/m3
MT1 Meteorological Tower(489091017) - AP	1-Sep-19	BETA	1.03E-02	1.99E-03	8.69E-03	pCi/m3
MT1 Meteorological Tower(489316017) - AP	8-Sep-19	BETA	1.10E-02	2.63E-03	1.26E-02	pCi/m3

MT1 Meteorological Tower(489397017) - AP	14-Sep-19	BETA	2.01E-02	2.62E-03	1.41E-02	pCi/m3
MT1 Meteorological Tower(490334019) - AP	21-Sep-19	BETA	9.17E-03	1.77E-03	9.01E-03	pCi/m3
MT1 Meteorological Tower(490940002) - AP	29-Sep-19	BETA	1.92E-02	2.94E-03	1.43E-02	pCi/m3
MT1 Meteorological Tower(492206002) - AP	5-Oct-19	BETA	2.87E-02	2.22E-03	1.14E-02	pCi/m3
MT1 Meteorological Tower(492214012) - AP	12-Oct-19	BETA	2.76E-02	2.28E-03	1.18E-02	pCi/m3
MT1 Meteorological Tower(493200017) - AP	19-Oct-19	BETA	4.50E-02	2.27E-03	1.21E-02	pCi/m3
MT1 Meteorological Tower(493690002) - AP	26-Oct-19	BETA	2.96E-02	2.27E-03	1.17E-02	pCi/m3
MT1 Meteorological Tower(494544018) - AP	2-Nov-19	BETA	7.72E-02	2.92E-03	1.38E-02	pCi/m3
MT1 Meteorological Tower(495196002) - AP	9-Nov-19	BETA	9.29E-02	2.31E-03	1.22E-02	pCi/m3
MT1 Meteorological Tower(495839017) - AP	16-Nov-19	BETA	5.18E-02	2.52E-03	1.18E-02	pCi/m3
MT1 Meteorological Tower(496785017) - AP	23-Nov-19	BETA	4.02E-02	2.91E-03	1.15E-02	pCi/m3
MT1 Meteorological Tower(497497017) - AP	30-Nov-19	BETA	1.41E-02	2.00E-03	1.04E-02	pCi/m3
MT1 Meteorological Tower(497962019) - AP	7-Dec-19	BETA	7.66E-03	2.31E-03	1.21E-02	pCi/m3
MT1 Meteorological Tower(498469017) - AP	14-Dec-19	BETA	7.72E-03	2.27E-03	1.29E-02	pCi/m3
MT1 Meteorological Tower(499079017) - AP	21-Dec-19	BETA	1.40E-02	2.70E-03	1.48E-02	pCi/m3
MT1 Meteorological Tower(499686017) - AP	27-Dec-19	BETA	2.22E-02	2.22E-03	1.21E-02	pCi/m3
MT1 Meteorological Tower(476709004) - AP	9-Feb-19	Cesium-134	-3.01E-04	5.28E-04	3.91E-04	pCi/m3
MT1 Meteorological Tower(484864007) - AP	11-May-19	Cesium-134	-2.64E-05	6.38E-04	4.02E-04	pCi/m3
MT1 Meteorological Tower(493791001) - AP	14-Aug-19	Cesium-134	-7.36E-05	3.01E-04	2.12E-04	pCi/m3
MT1 Meteorological Tower(501636007) - AP	16-Nov-19	Cesium-134	-7.05E-05	2.75E-04	1.78E-04	pCi/m3
MT1 Meteorological Tower(476709004) - AP	9-Feb-19	Cesium-137	8.97E-05	4.10E-04	4.37E-04	pCi/m3
MT1 Meteorological Tower(484864007) - AP	11-May-19	Cesium-137	-1.78E-04	4.22E-04	3.23E-04	pCi/m3
MT1 Meteorological Tower(493791001) - AP	14-Aug-19	Cesium-137	2.93E-05	2.81E-04	1.81E-04	pCi/m3
MT1 Meteorological Tower(501636007) - AP	16-Nov-19	Cesium-137	-1.21E-04	1.96E-04	1.46E-04	pCi/m3

## OEL Offsite Emergency Lab - Drinking Water

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	BETA	1.06E-01	1.78E+00	1.06E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	BETA	1.29E+00	1.81E+00	1.14E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	BETA	1.86E+00	1.48E+00	9.91E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	BETA	5.91E-01	1.02E+00	6.43E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	BETA	3.78E-01	1.06E+00	6.51E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	BETA	9.73E-01	1.71E+00	1.06E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	BETA	2.39E+00	1.25E+00	9.22E-01	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	BETA	2.89E+00	1.35E+00	1.03E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	BETA	1.20E+00	1.75E+00	1.09E+00	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	BETA	5.89E+00	1.80E+00	1.57E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	BETA	1.78E+00	1.67E+00	1.09E+00	pCi/L

OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	BETA	8.09E-01	1.69E+00	1.04E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Barium-140	-1.58E+00	7.44E+00	4.50E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Barium-140	3.05E+00	9.51E+00	5.65E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Barium-140	4.83E+00	8.76E+00	5.34E+00	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Barium-140	1.34E+00	8.02E+00	4.78E+00	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Barium-140	-3.73E+00	9.34E+00	6.06E+00	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Barium-140	-6.00E-01	5.92E+00	3.68E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Barium-140	-4.38E-01	1.27E+01	7.65E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Barium-140	3.15E+00	1.20E+01	7.24E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Barium-140	7.21E+00	1.17E+01	7.26E+00	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Barium-140	3.52E+00	1.04E+01	6.29E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Barium-140	1.91E+00	8.12E+00	4.96E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Barium-140	-2.18E+00	7.13E+00	4.42E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Cesium-134	3.00E-01	1.48E+00	8.75E-01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Cesium-134	-2.16E-01	1.78E+00	1.27E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Cesium-134	8.40E-01	1.52E+00	9.33E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Cesium-134	4.82E-01	1.60E+00	9.19E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Cesium-134	-1.97E-01	1.53E+00	9.55E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Cesium-134	4.30E-01	1.81E+00	1.05E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	23-Jul-19	Cesium-134	-5.13E-01	1.70E+00	1.11E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	13-Aug-19	Cesium-134	-1.35E+00	1.66E+00	1.26E+00	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	10-Sep-19	Cesium-134	-2.08E-01	1.44E+00	9.00E-01	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	15-Oct-19	Cesium-134	-1.60E-01	1.83E+00	1.09E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	5-Nov-19	Cesium-134	1.16E-01	1.85E+00	1.08E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Cesium-134	1.79E-01	1.49E+00	8.85E-01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Cesium-137	-4.94E-01	1.35E+00	8.64E-01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Cesium-137	9.63E-01	1.92E+00	1.18E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Cesium-137	9.71E-02	1.35E+00	8.84E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Cesium-137	7.35E-01	1.54E+00	9.49E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Cesium-137	4.21E-01	1.47E+00	8.68E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Cesium-137	4.14E-01	1.69E+00	9.70E-01	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Cesium-137	1.73E+00	1.73E+00	1.90E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Cesium-137	5.47E-01	1.77E+00	1.02E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Cesium-137	-5.61E-02	1.30E+00	7.86E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Cesium-137	8.27E-01	1.75E+00	1.03E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Cesium-137	-5.80E-01	1.69E+00	1.06E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Cesium-137	-1.53E+00	1.85E+00	1.67E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Cobalt-58	-1.34E-01	1.28E+00	7.79E-01	pCi/L

OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Cobalt-58	2.58E-02	1.64E+00	1.14E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Cobalt-58	-1.03E+00	1.17E+00	9.16E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Cobalt-58	-2.99E-01	1.39E+00	8.39E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Cobalt-58	4.23E-01	1.55E+00	9.24E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Cobalt-58	-3.10E-01	1.65E+00	1.01E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Cobalt-58	4.31E-02	1.80E+00	1.09E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Cobalt-58	-5.66E-01	1.66E+00	1.07E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Cobalt-58	-4.89E-01	1.36E+00	9.01E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Cobalt-58	8.15E-01	1.76E+00	1.04E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Cobalt-58	-9.85E-01	1.41E+00	1.02E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Cobalt-58	9.52E-01	1.46E+00	9.14E-01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Cobalt-60	1.15E-01	1.34E+00	8.17E-01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Cobalt-60	-9.14E-02	1.66E+00	1.01E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Cobalt-60	-1.11E+00	1.41E+00	1.91E+00	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Cobalt-60	1.32E+00	1.82E+00	1.14E+00	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Cobalt-60	5.72E-01	1.73E+00	9.91E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Cobalt-60	-1.99E-01	1.83E+00	1.10E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Cobalt-60	9.83E-01	1.99E+00	1.15E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Cobalt-60	-2.39E-02	1.83E+00	1.08E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Cobalt-60	2.33E-01	1.39E+00	8.02E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Cobalt-60	3.52E-01	1.80E+00	1.07E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Cobalt-60	-9.80E-01	1.97E+00	1.73E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Cobalt-60	1.03E+00	1.58E+00	9.51E-01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Iodine-131	2.10E-02	6.34E-01	3.65E-01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Iodine-131	-8.74E-02	5.87E-01	3.49E-01	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Iodine-131	-8.12E-02	7.07E-01	4.22E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Iodine-131	3.00E-01	7.36E-01	4.44E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Iodine-131	9.39E-02	5.75E-01	3.30E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Iodine-131	1.45E-01	5.98E-01	3.50E-01	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Iodine-131	-2.05E-01	6.41E-01	4.02E-01	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Iodine-131	5.01E-01	7.24E-01	6.77E-01	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Iodine-131	4.24E-01	8.22E-01	5.02E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Iodine-131	-1.67E-01	5.49E-01	3.44E-01	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Iodine-131	-9.40E-02	7.07E-01	4.27E-01	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Iodine-131	3.81E-02	5.70E-01	3.27E-01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Iron-55	2.86E+01	6.57E+01	5.15E+01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Iron-55	-1.04E+01	7.34E+01	5.23E+01	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Iron-55	-1.38E+01	7.74E+01	5.64E+01	pCi/L

OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Iron-55	1.12E+01	5.97E+01	4.33E+01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Iron-55	-4.38E+01	7.03E+01	4.38E+01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Iron-55	-1.47E+01	6.64E+01	4.71E+01	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Iron-55	-2.64E+01	6.86E+01	4.96E+01	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Iron-55	1.65E+01	7.09E+01	5.37E+01	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Iron-55	4.70E+00	6.10E+01	4.63E+01	pCi/L
OEL Offsite Emergency Lab(490417003) - DW	15-Oct-19	Iron-55	-2.35E+01	6.71E+01	4.80E+01	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Iron-55	-2.15E+01	1.49E+02	1.04E+02	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Iron-55	1.79E+01	5.78E+01	4.10E+01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Iron-59	-9.67E-01	2.69E+00	1.79E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Iron-59	3.25E-02	3.68E+00	2.16E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Iron-59	-1.90E-01	2.82E+00	1.74E+00	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Iron-59	-1.47E+00	3.20E+00	2.13E+00	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Iron-59	-2.13E+00	2.75E+00	2.06E+00	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Iron-59	4.16E-01	3.70E+00	2.23E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Iron-59	6.06E-01	3.83E+00	2.31E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Iron-59	-1.32E+00	3.68E+00	2.47E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Iron-59	2.08E-01	3.21E+00	1.86E+00	pCi/L
OEL Offsite Emergency Lab(490417003) - DW	15-Oct-19	Iron-59	-8.89E-01	3.49E+00	2.22E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Iron-59	-1.12E-01	3.50E+00	2.13E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Iron-59	8.54E-01	3.09E+00	1.76E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Lanthanum-140	-1.54E+00	2.40E+00	1.94E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Lanthanum-140	-5.50E-01	2.82E+00	1.81E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Lanthanum-140	7.89E-01	2.68E+00	1.53E+00	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Lanthanum-140	-1.79E-01	3.20E+00	1.98E+00	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Lanthanum-140	2.79E-01	3.82E+00	2.25E+00	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Lanthanum-140	2.38E+00	2.72E+00	1.48E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Lanthanum-140	-1.10E+00	4.07E+00	2.55E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Lanthanum-140	4.51E-01	4.69E+00	2.84E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Lanthanum-140	-1.03E+00	3.83E+00	2.46E+00	pCi/L
OEL Offsite Emergency Lab(490417003) - DW	15-Oct-19	Lanthanum-140	1.79E+00	4.05E+00	2.59E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Lanthanum-140	1.43E+00	3.52E+00	2.05E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Lanthanum-140	3.83E-01	2.71E+00	1.58E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Manganese-54	9.17E-02	1.30E+00	7.71E-01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Manganese-54	2.09E-01	1.66E+00	9.43E-01	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Manganese-54	9.16E-02	1.28E+00	7.98E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Manganese-54	-1.63E-01	1.34E+00	9.01E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Manganese-54	-5.08E-01	1.35E+00	9.01E-01	pCi/L

OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Manganese-54	2.75E-01	1.71E+00	1.00E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Manganese-54	-2.07E-01	1.63E+00	1.01E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Manganese-54	-1.48E-01	1.74E+00	1.05E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Manganese-54	-6.46E-02	1.41E+00	8.69E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Manganese-54	4.23E-02	1.64E+00	9.63E-01	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Manganese-54	2.08E-01	1.56E+00	9.11E-01	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Manganese-54	-3.10E-01	1.32E+00	8.35E-01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Nickel-63	2.27E+01	3.65E+01	2.31E+01	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Nickel-63	-3.21E+00	3.76E+01	2.23E+01	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Nickel-63	-2.98E+00	3.58E+01	2.12E+01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Nickel-63	-7.13E+00	3.01E+01	1.76E+01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Nickel-63	-1.08E+01	3.21E+01	1.86E+01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Nickel-63	-5.94E+00	2.79E+01	1.63E+01	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Nickel-63	-1.02E+01	2.76E+01	1.60E+01	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Nickel-63	-1.59E+00	3.23E+01	1.91E+01	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Nickel-63	-5.95E+00	3.55E+01	2.09E+01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Nickel-63	1.46E+00	2.91E+01	1.74E+01	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Nickel-63	1.24E+01	2.60E+01	1.62E+01	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Nickel-63	7.37E+00	3.01E+01	1.83E+01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Niobium-95	-1.27E+00	1.35E+00	1.67E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Niobium-95	9.24E-01	1.89E+00	1.17E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Niobium-95	-2.23E-01	1.41E+00	8.64E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Niobium-95	3.33E-01	1.46E+00	8.35E-01	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Niobium-95	-5.31E-01	1.42E+00	9.42E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Niobium-95	-1.00E-01	1.50E+00	8.94E-01	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Niobium-95	4.16E-01	1.79E+00	2.32E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Niobium-95	-2.39E-01	1.89E+00	1.30E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Niobium-95	-1.49E-01	1.51E+00	9.31E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Niobium-95	6.09E-01	1.84E+00	1.07E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Niobium-95	-2.16E-01	1.85E+00	1.68E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Niobium-95	-1.27E-01	1.48E+00	1.31E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Total Strontium	8.96E-01	1.10E+00	7.61E-01	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	5-Feb-19	Total Strontium	-8.64E-01	1.21E+00	6.50E-01	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	11-Mar-19	Total Strontium	-4.00E-01	4.67E-01	2.25E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	9-Apr-19	Total Strontium	1.17E-01	7.74E-01	4.76E-01	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	8-May-19	Total Strontium	8.07E-01	1.15E+00	7.72E-01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Total Strontium	6.87E-01	9.74E-01	6.74E-01	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Total Strontium	2.83E-01	7.04E-01	4.60E-01	pCi/L

OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Total Strontium	-1.29E+00	9.90E-01	4.92E-01	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Total Strontium	3.56E-02	7.49E-01	4.49E-01	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Total Strontium	-9.64E-01	6.88E-01	3.28E-01	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Total Strontium	-2.04E-02	1.18E+00	7.01E-01	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Total Strontium	-4.71E-01	9.36E-01	5.17E-01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Tritium	9.64E+01	2.63E+02	1.64E+02	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Tritium	6.30E-01	3.09E+02	1.84E+02	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Tritium	-1.48E+02	3.05E+02	1.75E+02	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Tritium	-1.44E+02	2.81E+02	1.59E+02	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	8-May-19	Tritium	-4.01E+01	1.66E+02	9.43E+01	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	11-Jun-19	Tritium	1.01E+02	2.86E+02	1.76E+02	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	23-Jul-19	Tritium	1.19E+01	2.62E+02	1.57E+02	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	13-Aug-19	Tritium	2.53E+01	2.94E+02	1.76E+02	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	10-Sep-19	Tritium	1.92E+02	2.65E+02	1.73E+02	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Tritium	6.58E+01	2.23E+02	1.36E+02	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Tritium	1.34E+01	2.14E+02	1.28E+02	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Tritium	-2.75E+01	1.57E+02	9.08E+01	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	15-Jan-19	Zinc-65	-1.42E-01	2.57E+00	1.59E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	5-Feb-19	Zinc-65	-7.82E-01	3.65E+00	2.25E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	11-Mar-19	Zinc-65	-4.79E-01	2.65E+00	1.68E+00	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	9-Apr-19	Zinc-65	6.58E-01	3.19E+00	1.86E+00	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	8-May-19	Zinc-65	5.18E-01	3.05E+00	1.74E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	11-Jun-19	Zinc-65	2.19E+00	3.84E+00	2.58E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	23-Jul-19	Zinc-65	-6.78E-01	3.52E+00	2.27E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	13-Aug-19	Zinc-65	-1.25E+00	3.59E+00	2.40E+00	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	10-Sep-19	Zinc-65	2.28E+00	3.08E+00	1.92E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	15-Oct-19	Zinc-65	6.35E-02	3.74E+00	2.25E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	5-Nov-19	Zinc-65	-4.59E+00	3.46E+00	4.30E+00	pCi/L
OEL Offsite Emergency Lab(468905003) - DW	3-Dec-19	Zinc-65	7.81E-01	2.94E+00	1.72E+00	pCi/L
OEL Offsite Emergency Lab(470417003) - DW	15-Jan-19	Zirconium-95	-1.17E+00	2.18E+00	1.49E+00	pCi/L
OEL Offsite Emergency Lab(473236003) - DW	5-Feb-19	Zirconium-95	4.87E-01	3.13E+00	1.89E+00	pCi/L
OEL Offsite Emergency Lab(478347001) - DW	11-Mar-19	Zirconium-95	5.89E-01	2.46E+00	1.45E+00	pCi/L
OEL Offsite Emergency Lab(475755003) - DW	9-Apr-19	Zirconium-95	1.12E+00	2.71E+00	1.57E+00	pCi/L
OEL Offsite Emergency Lab(481376003) - DW	8-May-19	Zirconium-95	1.52E-01	2.61E+00	1.57E+00	pCi/L
OEL Offsite Emergency Lab(485302001) - DW	11-Jun-19	Zirconium-95	-8.75E-01	2.81E+00	1.77E+00	pCi/L
OEL Offsite Emergency Lab(487332002) - DW	23-Jul-19	Zirconium-95	-9.74E-01	3.22E+00	2.09E+00	pCi/L
OEL Offsite Emergency Lab(489317003) - DW	13-Aug-19	Zirconium-95	1.40E+00	3.51E+00	2.06E+00	pCi/L
OEL Offsite Emergency Lab(492382003) - DW	10-Sep-19	Zirconium-95	-1.05E+00	2.50E+00	1.68E+00	pCi/L

OEL Offsite Emergency Lab(492382003) - DW	15-Oct-19	Zirconium-95	-2.56E-01	3.10E+00	1.83E+00	pCi/L
OEL Offsite Emergency Lab(494565003) - DW	5-Nov-19	Zirconium-95	1.30E+00	3.04E+00	1.80E+00	pCi/L
OEL Offsite Emergency Lab(497498004) - DW	3-Dec-19	Zirconium-95	7.21E-01	2.44E+00	1.44E+00	pCi/L

## OUT Plant Outfall - Seawater

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
OUT Plant Outfall(469440005) - SW	22-Jan-19	BETA	3.45E+02	1.52E+02	1.15E+02	pCi/L
OUT Plant Outfall(471025003) - SW	12-Feb-19	BETA	3.32E+02	1.26E+02	1.02E+02	pCi/L
OUT Plant Outfall(473837001) - SW	19-Mar-19	BETA	1.69E+02	1.49E+02	9.77E+01	pCi/L
OUT Plant Outfall(476886002) - SW	23-Apr-19	BETA	3.76E+02	1.24E+02	1.06E+02	pCi/L
OUT Plant Outfall(478549004) - SW	13-May-19	BETA	2.89E+02	1.02E+02	8.61E+01	pCi/L
OUT Plant Outfall(480345001) - SW	3-Jun-19	BETA	4.67E+02	1.52E+02	1.29E+02	pCi/L
OUT Plant Outfall(484091001) - SW	9-Jul-19	BETA	1.91E+02	1.24E+02	8.60E+01	pCi/L
OUT Plant Outfall(487046003) - SW	12-Aug-19	BETA	3.63E+02	1.64E+02	1.23E+02	pCi/L
OUT Plant Outfall(491015001) - SW	19-Sep-19	BETA	2.18E+02	1.15E+02	8.43E+01	pCi/L
OUT Plant Outfall(4927788001) - SW	16-Oct-19	BETA	2.31E+02	1.07E+02	8.20E+01	pCi/L
OUT Plant Outfall(495069001) - SW	4-Nov-19	BETA	4.34E+02	1.31E+02	1.15E+02	pCi/L
OUT Plant Outfall(498118001) - SW	9-Dec-19	BETA	2.76E+02	1.40E+02	1.02E+02	pCi/L
OUT Plant Outfall(469440005) - SW	22-Jan-19	Barium-140	1.07E+00	9.17E+00	5.59E+00	pCi/L
OUT Plant Outfall(471025003) - SW	12-Feb-19	Barium-140	9.13E-01	8.50E+00	5.57E+00	pCi/L
OUT Plant Outfall(473837001) - SW	19-Mar-19	Barium-140	4.53E+00	1.24E+01	7.32E+00	pCi/L
OUT Plant Outfall(476886002) - SW	23-Apr-19	Barium-140	-2.62E+00	9.54E+00	6.00E+00	pCi/L
OUT Plant Outfall(478549004) - SW	13-May-19	Barium-140	-6.48E-01	9.26E+00	5.68E+00	pCi/L
OUT Plant Outfall(480345001) - SW	3-Jun-19	Barium-140	2.22E+00	7.60E+00	4.42E+00	pCi/L
OUT Plant Outfall(484091001) - SW	9-Jul-19	Barium-140	4.92E+00	9.51E+00	5.78E+00	pCi/L
OUT Plant Outfall(487046003) - SW	12-Aug-19	Barium-140	-1.27E+00	1.01E+01	6.18E+00	pCi/L
OUT Plant Outfall(491015001) - SW	19-Sep-19	Barium-140	-5.43E-01	1.21E+01	1.33E+01	pCi/L
OUT Plant Outfall(4927788001) - SW	16-Oct-19	Barium-140	-1.31E+00	8.68E+00	5.28E+00	pCi/L
OUT Plant Outfall(495069001) - SW	4-Nov-19	Barium-140	3.84E+00	9.92E+00	5.90E+00	pCi/L
OUT Plant Outfall(498118001) - SW	9-Dec-19	Barium-140	-6.02E-01	7.85E+00	4.71E+00	pCi/L
OUT Plant Outfall(469440005) - SW	22-Jan-19	Cesium-134	-8.32E-01	1.69E+00	1.11E+00	pCi/L
OUT Plant Outfall(471025003) - SW	12-Feb-19	Cesium-134	-3.29E-01	1.51E+00	9.60E-01	pCi/L
OUT Plant Outfall(473837001) - SW	19-Mar-19	Cesium-134	6.17E-01	1.74E+00	1.05E+00	pCi/L
OUT Plant Outfall(476886002) - SW	23-Apr-19	Cesium-134	8.59E-02	1.90E+00	1.16E+00	pCi/L
OUT Plant Outfall(478549004) - SW	13-May-19	Cesium-134	-1.01E-01	2.02E+00	1.35E+00	pCi/L
OUT Plant Outfall(480345001) - SW	3-Jun-19	Cesium-134	1.24E+00	1.75E+00	1.12E+00	pCi/L
OUT Plant Outfall(484091001) - SW	9-Jul-19	Cesium-134	-5.75E-01	1.86E+00	1.22E+00	pCi/L
OUT Plant Outfall(487046003) - SW	12-Aug-19	Cesium-134	-4.60E-01	1.78E+00	1.09E+00	pCi/L

OUT Plant Outfall(491015001) - SWV	19-Sep-19	Cesium-134	2.27E-01	1.68E+00	9.59E-01	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Cesium-134	-1.57E+00	1.58E+00	1.75E+00	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Cesium-134	1.18E+00	2.13E+00	1.32E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Cesium-134	6.08E-01	1.77E+00	1.06E+00	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Cesium-137	-3.24E-01	1.87E+00	1.11E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Cesium-137	1.36E-01	1.43E+00	8.56E-01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Cesium-137	-8.63E-03	1.49E+00	8.91E-01	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Cesium-137	-1.30E-01	1.84E+00	1.13E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Cesium-137	8.30E-01	2.12E+00	1.30E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Cesium-137	6.52E-01	1.29E+00	2.32E+00	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Cesium-137	6.10E-01	1.98E+00	1.18E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Cesium-137	-2.10E-01	1.81E+00	1.13E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Cesium-137	1.22E+00	1.76E+00	1.14E+00	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Cesium-137	-5.25E-01	1.49E+00	9.67E-01	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Cesium-137	3.40E-01	1.92E+00	1.14E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Cesium-137	-3.16E-01	1.53E+00	9.57E-01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Cobalt-58	-6.15E-01	1.85E+00	4.79E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Cobalt-58	-2.78E-01	1.29E+00	8.22E-01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Cobalt-58	-1.15E+00	1.40E+00	1.54E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Cobalt-58	-1.15E-01	1.69E+00	1.05E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Cobalt-58	-4.49E-01	1.77E+00	1.09E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Cobalt-58	2.22E-01	1.53E+00	9.12E-01	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Cobalt-58	-3.02E-02	1.78E+00	1.09E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Cobalt-58	3.54E-01	1.90E+00	1.09E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Cobalt-58	-4.45E-01	1.51E+00	9.26E-01	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Cobalt-58	-2.07E-01	1.51E+00	9.44E-01	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Cobalt-58	-2.59E+00	1.57E+00	2.13E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Cobalt-58	1.53E-01	1.54E+00	9.30E-01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Cobalt-60	-7.64E-01	1.64E+00	1.12E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Cobalt-60	-1.66E-01	1.52E+00	9.21E-01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Cobalt-60	-5.55E-01	1.54E+00	1.36E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Cobalt-60	-2.25E+00	2.17E+00	3.16E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Cobalt-60	-5.69E-01	1.99E+00	1.30E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Cobalt-60	-1.87E-01	1.63E+00	9.79E-01	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Cobalt-60	-3.03E-01	1.87E+00	1.14E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Cobalt-60	5.29E-01	2.08E+00	1.23E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Cobalt-60	1.53E-02	1.73E+00	1.04E+00	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Cobalt-60	2.96E-01	1.64E+00	9.44E-01	pCi/L

OUT Plant Outfall(495069001) - SWV	4-Nov-19	Cobalt-60	-6.22E-01	1.98E+00	1.26E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Cobalt-60	-1.98E-01	1.61E+00	9.73E-01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Iodine-131	3.29E-01	3.35E+00	2.02E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Iodine-131	3.68E-02	3.20E+00	1.85E+00	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Iodine-131	-4.19E+00	5.66E+00	5.63E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Iodine-131	4.67E-01	4.21E+00	2.43E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Iodine-131	6.57E-01	3.38E+00	1.98E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Iodine-131	1.86E+00	2.92E+00	1.92E+00	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Iodine-131	-9.65E-01	3.31E+00	2.02E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Iodine-131	-2.19E-02	3.71E+00	2.18E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Iodine-131	-1.29E+00	5.88E+00	3.55E+00	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Iodine-131	-1.13E+00	3.34E+00	2.06E+00	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Iodine-131	1.75E+00	4.00E+00	2.38E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Iodine-131	8.50E-01	3.00E+00	1.74E+00	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Iron-55	3.82E+01	8.04E+01	6.22E+01	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Iron-55	3.10E+01	7.09E+01	5.20E+01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Iron-55	-8.43E+00	9.06E+01	6.26E+01	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Iron-55	-4.07E+01	6.59E+01	4.22E+01	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Iron-55	8.48E+01	9.17E+01	7.46E+01	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Iron-55	2.79E+00	7.25E+01	5.31E+01	pCi/L
OUT Plant Outfall(487046003) - SWV	9-Jul-19	Iron-55	-8.28E+01	8.83E+01	5.80E+01	pCi/L
OUT Plant Outfall(491015001) - SWV	12-Aug-19	Iron-55	-1.87E+01	7.59E+01	5.55E+01	pCi/L
OUT Plant Outfall(492788001) - SWV	19-Sep-19	Iron-55	7.40E+00	8.19E+01	5.91E+01	pCi/L
OUT Plant Outfall(495069001) - SWV	16-Oct-19	Iron-55	8.86E+00	6.27E+01	4.51E+01	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Iron-55	2.39E+00	1.34E+02	9.47E+01	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Iron-55	-2.20E+00	5.90E+01	3.98E+01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Iron-59	2.27E-01	3.89E+00	2.29E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Iron-59	-9.30E-01	3.11E+00	1.93E+00	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Iron-59	-1.12E+00	3.52E+00	2.18E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Iron-59	4.41E+00	4.42E+00	6.98E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Iron-59	-9.77E-01	3.70E+00	2.70E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Iron-59	-1.21E+00	3.09E+00	1.96E+00	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Iron-59	2.98E-01	3.68E+00	2.11E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Iron-59	9.35E-01	4.56E+00	2.67E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Iron-59	-2.02E+00	3.49E+00	2.42E+00	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Iron-59	1.62E+00	3.55E+00	2.06E+00	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Iron-59	-2.07E-01	3.89E+00	2.27E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Iron-59	-1.78E-01	3.39E+00	1.98E+00	pCi/L

OUT Plant Outfall(469440005) - SWV	22-Jan-19	Lanthanum-140	1.56E-02	3.20E+00	1.93E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Lanthanum-140	-1.63E-01	2.70E+00	1.64E+00	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Lanthanum-140	1.84E+00	3.76E+00	3.04E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Lanthanum-140	-1.45E+00	3.11E+00	2.20E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Lanthanum-140	-7.13E-01	3.09E+00	1.92E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Lanthanum-140	-1.27E+00	2.71E+00	2.11E+00	pCi/L
OUT Plant Outfall(4804091001) - SWV	9-Jul-19	Lanthanum-140	9.90E-01	3.42E+00	1.98E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Lanthanum-140	-4.13E+00	3.51E+00	4.17E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Lanthanum-140	1.84E+00	4.78E+00	2.85E+00	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Lanthanum-140	3.05E-01	2.95E+00	1.73E+00	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Lanthanum-140	-2.71E+00	2.77E+00	2.36E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Lanthanum-140	-1.89E-01	2.81E+00	1.70E+00	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Manganese-54	-2.93E-01	1.68E+00	1.46E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Manganese-54	-3.36E-01	1.30E+00	8.42E-01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Manganese-54	-4.06E-02	1.43E+00	8.74E-01	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Manganese-54	7.10E-02	1.77E+00	1.02E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Manganese-54	1.64E-01	1.88E+00	1.23E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Manganese-54	-5.68E-01	1.28E+00	8.63E-01	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Manganese-54	2.80E-01	1.74E+00	1.04E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Manganese-54	-8.15E-01	1.73E+00	1.13E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Manganese-54	1.41E-02	1.52E+00	8.77E-01	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Manganese-54	-1.35E-01	1.52E+00	9.44E-01	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Manganese-54	6.10E-01	2.05E+00	1.24E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Manganese-54	2.22E-01	1.58E+00	9.50E-01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Nickel-63	6.63E+00	3.21E+01	1.94E+01	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Nickel-63	5.81E+00	2.60E+01	1.57E+01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Nickel-63	1.56E+01	3.43E+01	2.13E+01	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Nickel-63	1.10E+01	2.02E+01	1.26E+01	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Nickel-63	-1.50E+01	2.49E+01	1.42E+01	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Nickel-63	-1.39E+01	3.38E+01	1.95E+01	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Nickel-63	-5.52E+00	2.39E+01	1.40E+01	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Nickel-63	4.42E+00	2.94E+01	1.77E+01	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Nickel-63	-3.76E+00	2.70E+01	1.59E+01	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Nickel-63	6.03E+00	3.15E+01	1.91E+01	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Nickel-63	1.29E+01	2.10E+01	1.32E+01	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Nickel-63	-1.87E+00	2.89E+01	1.72E+01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Niobium-95	5.88E-01	1.93E+00	1.12E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Niobium-95	1.83E-01	1.45E+00	9.79E-01	pCi/L

OUT Plant Outfall(473837001) - SWV	19-Mar-19	Niobium-95	1.68E+00	1.68E+00	1.99E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Niobium-95	1.07E+00	2.02E+00	1.26E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Niobium-95	1.25E+00	2.21E+00	1.33E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Niobium-95	8.92E-01	1.37E+00	1.01E+00	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Niobium-95	-7.19E-01	1.69E+00	1.14E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Niobium-95	5.37E-01	1.86E+00	1.06E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	19-Sep-19	Niobium-95	3.66E-01	1.86E+00	1.13E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	16-Oct-19	Niobium-95	4.23E-01	1.62E+00	9.69E-01	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Niobium-95	-4.37E-01	1.84E+00	1.17E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Niobium-95	7.95E-02	1.51E+00	9.09E-01	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Total Strontium	-7.27E-01	3.26E+00	1.91E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Total Strontium	8.02E-01	1.29E+00	8.30E-01	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Total Strontium	2.09E-01	2.05E+00	1.23E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Total Strontium	4.42E-01	5.22E+00	3.14E+00	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Total Strontium	-3.17E-01	2.88E+00	1.70E+00	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Total Strontium	1.84E+00	7.83E+00	4.89E+00	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Total Strontium	1.86E+00	3.60E+00	2.26E+00	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Total Strontium	1.63E+00	2.40E+00	1.53E+00	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Total Strontium	-1.21E+00	2.43E+00	1.41E+00	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Total Strontium	-8.74E-01	2.77E+00	1.62E+00	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Total Strontium	-9.66E-01	3.82E+00	2.24E+00	pCi/L
OUT Plant Outfall(498118001) - SWV	9-Dec-19	Total Strontium	-7.54E-01	2.11E+00	1.22E+00	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Tritium	3.93E+01	2.30E+02	1.39E+02	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Tritium	3.87E+01	2.89E+02	1.74E+02	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Tritium	-3.07E+01	2.88E+02	1.70E+02	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Tritium	5.44E+01	2.61E+02	1.58E+02	pCi/L
OUT Plant Outfall(478549004) - SWV	13-May-19	Tritium	6.55E+01	2.70E+02	1.65E+02	pCi/L
OUT Plant Outfall(480345001) - SWV	3-Jun-19	Tritium	1.30E+02	2.75E+02	1.72E+02	pCi/L
OUT Plant Outfall(484091001) - SWV	9-Jul-19	Tritium	2.61E+01	2.30E+02	1.38E+02	pCi/L
OUT Plant Outfall(487046003) - SWV	12-Aug-19	Tritium	1.28E+02	2.95E+02	1.84E+02	pCi/L
OUT Plant Outfall(491015001) - SWV	19-Sep-19	Tritium	4.52E+01	3.12E+02	1.89E+02	pCi/L
OUT Plant Outfall(492788001) - SWV	16-Oct-19	Tritium	6.00E+01	2.87E+02	1.75E+02	pCi/L
OUT Plant Outfall(495069001) - SWV	4-Nov-19	Tritium	6.21E+01	2.26E+02	1.39E+02	pCi/L
OUT Plant Outfall(487046003) - SWV	9-Dec-19	Tritium	-1.84E+01	2.92E+02	1.73E+02	pCi/L
OUT Plant Outfall(469440005) - SWV	22-Jan-19	Zinc-65	2.22E+00	3.61E+00	2.39E+00	pCi/L
OUT Plant Outfall(471025003) - SWV	12-Feb-19	Zinc-65	-2.87E-01	3.04E+00	1.80E+00	pCi/L
OUT Plant Outfall(473837001) - SWV	19-Mar-19	Zinc-65	-5.59E-01	3.14E+00	1.88E+00	pCi/L
OUT Plant Outfall(476886002) - SWV	23-Apr-19	Zinc-65	-7.09E-01	4.00E+00	2.44E+00	pCi/L

OUT Plant Outfall(478549004) - SW	13-May-19	Zinc-65	-2.55E+00	3.77E+00	2.76E+00	pCi/L
OUT Plant Outfall(480345001) - SW	3-Jun-19	Zinc-65	1.11E+00	3.19E+00	1.83E+00	pCi/L
OUT Plant Outfall(484091001) - SW	9-Jul-19	Zinc-65	9.21E-01	4.16E+00	2.38E+00	pCi/L
OUT Plant Outfall(487046003) - SW	12-Aug-19	Zinc-65	4.32E-01	3.89E+00	2.29E+00	pCi/L
OUT Plant Outfall(491015001) - SW	19-Sep-19	Zinc-65	2.20E+00	3.30E+00	2.89E+00	pCi/L
OUT Plant Outfall(492788001) - SW	16-Oct-19	Zinc-65	5.47E-01	3.22E+00	1.94E+00	pCi/L
OUT Plant Outfall(495069001) - SW	4-Nov-19	Zinc-65	-8.53E-01	3.62E+00	2.39E+00	pCi/L
OUT Plant Outfall(498118001) - SW	9-Dec-19	Zinc-65	1.55E+00	3.77E+00	2.19E+00	pCi/L
OUT Plant Outfall(469440005) - SW	22-Jan-19	Zirconium-95	-6.97E-01	3.36E+00	2.02E+00	pCi/L
OUT Plant Outfall(471025003) - SW	12-Feb-19	Zirconium-95	1.88E-01	2.60E+00	1.57E+00	pCi/L
OUT Plant Outfall(473837001) - SW	19-Mar-19	Zirconium-95	-4.74E-01	2.84E+00	1.77E+00	pCi/L
OUT Plant Outfall(476886002) - SW	23-Apr-19	Zirconium-95	-2.68E-01	3.26E+00	2.03E+00	pCi/L
OUT Plant Outfall(478549004) - SW	13-May-19	Zirconium-95	-1.66E+00	3.28E+00	2.17E+00	pCi/L
OUT Plant Outfall(480345001) - SW	3-Jun-19	Zirconium-95	-8.47E-03	2.50E+00	1.50E+00	pCi/L
OUT Plant Outfall(484091001) - SW	9-Jul-19	Zirconium-95	1.40E+00	3.20E+00	1.93E+00	pCi/L
OUT Plant Outfall(487046003) - SW	12-Aug-19	Zirconium-95	-2.68E-01	3.23E+00	1.88E+00	pCi/L
OUT Plant Outfall(491015001) - SW	19-Sep-19	Zirconium-95	1.87E+00	3.36E+00	2.11E+00	pCi/L
OUT Plant Outfall(492788001) - SW	16-Oct-19	Zirconium-95	-7.38E-01	2.78E+00	1.78E+00	pCi/L
OUT Plant Outfall(495069001) - SW	4-Nov-19	Zirconium-95	1.72E+00	3.42E+00	2.28E+00	pCi/L
OUT Plant Outfall(498118001) - SW	9-Dec-19	Zirconium-95	-8.43E-01	2.87E+00	1.85E+00	pCi/L

## OW1 Observation Well 01 - Groundwater

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
OW1 Observation Well 01(469647004) - GW	24-Jan-19	BETA	7.07E+00	5.65E+00	3.79E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	BETA	5.47E+00	6.16E+00	3.94E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	BETA	1.27E+01	4.00E+00	3.64E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	BETA	7.47E+00	5.64E+00	3.82E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Barium-140	-2.37E+00	9.08E+00	6.20E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Barium-140	2.34E+00	1.17E+01	6.99E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Barium-140	4.82E+00	1.27E+01	7.77E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Barium-140	-9.21E-01	7.06E+00	4.33E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Cesium-134	-1.81E-01	1.60E+00	1.61E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Cesium-134	8.63E-01	1.80E+00	1.06E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Cesium-134	1.86E-01	2.49E+00	1.44E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Cesium-134	1.93E-01	1.51E+00	8.65E-01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Cesium-137	-3.66E-01	1.41E+00	9.80E-01	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Cesium-137	-3.11E-02	1.67E+00	1.02E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Cesium-137	9.63E-01	2.37E+00	1.46E+00	pCi/L

OW1 Observation Well 01(493409006) - GW	21-Oct-19	Cesium-137	8.14E-02	1.44E+00	8.74E-01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Cobalt-58	5.48E-03	1.57E+00	9.37E-01	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Cobalt-58	-2.85E-01	1.58E+00	9.41E-01	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Cobalt-58	-4.35E-01	2.21E+00	1.33E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Cobalt-58	-7.53E-01	1.37E+00	9.07E-01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Cobalt-60	3.34E-03	1.35E+00	8.37E-01	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Cobalt-60	2.80E-01	1.79E+00	1.06E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Cobalt-60	5.45E-01	2.42E+00	1.60E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Cobalt-60	2.05E-01	1.52E+00	8.97E-01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Iodine-131	1.00E+00	4.37E+00	2.51E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Iodine-131	5.61E-01	5.17E+00	3.02E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Iodine-131	1.71E+00	4.02E+00	2.44E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Iodine-131	8.80E-02	2.56E+00	1.50E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Iron-55	2.08E+01	7.24E+01	5.34E+01	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Iron-55	-4.66E+01	6.92E+01	4.40E+01	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Iron-55	5.96E+00	7.20E+01	5.26E+01	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Iron-55	1.25E+01	6.29E+01	4.53E+01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Iron-59	5.94E-01	3.03E+00	1.82E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Iron-59	-7.02E-01	3.70E+00	2.27E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Iron-59	2.81E+00	4.89E+00	5.53E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Lanthanum-140	-3.20E-02	2.82E+00	1.90E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Lanthanum-140	-7.05E-01	3.13E+00	1.92E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Lanthanum-140	3.38E+00	4.73E+00	3.01E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Lanthanum-140	-4.18E-01	3.81E+00	2.38E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Lanthanum-140	1.89E-01	2.51E+00	1.51E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Manganese-54	-5.36E-01	1.34E+00	8.80E-01	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Manganese-54	-5.13E-02	1.60E+00	9.32E-01	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Manganese-54	-3.30E-01	2.11E+00	1.26E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Manganese-54	-3.76E-01	1.28E+00	7.83E-01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Nickel-63	-1.12E+01	3.71E+01	2.16E+01	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Nickel-63	1.21E+01	2.83E+01	1.76E+01	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Nickel-63	-1.41E+01	3.22E+01	1.86E+01	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Nickel-63	-6.62E+00	2.85E+01	1.67E+01	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Niobium-95	9.88E-01	1.80E+00	1.11E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Niobium-95	6.57E-02	1.96E+00	1.88E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Niobium-95	-8.71E-01	2.05E+00	1.49E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Niobium-95	1.43E+00	1.43E+00	2.45E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Total Strontium	6.34E-01	7.58E-01	5.52E-01	pCi/L

OW1 Observation Well 01(476505002) - GW	16-Apr-19	Total Strontium	-2.99E-01	3.39E-01	1.89E-01	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Total Strontium	-1.07E-01	1.01E+00	5.91E-01	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Total Strontium	8.17E-02	4.36E-01	2.63E-01	pCi/L
OW1 Observation Well 01(493409006) - GW	24-Jan-19	Tritium	<b>7.18E+02</b>	2.30E+02	2.19E+02	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Tritium	<b>2.81E+02</b>	2.67E+02	1.80E+02	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Tritium	<b>5.26E+02</b>	1.33E+02	1.65E+02	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Tritium	<b>4.42E+02</b>	2.14E+02	1.70E+02	pCi/L
OW1 Observation Well 01(493409006) - GW	24-Jan-19	Zinc-65	-7.62E-01	2.68E+00	1.97E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Zinc-65	6.11E-01	3.41E+00	2.25E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Zinc-65	4.27E-02	4.45E+00	3.01E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Zinc-65	-4.40E-02	2.82E+00	2.63E+00	pCi/L
OW1 Observation Well 01(469647004) - GW	24-Jan-19	Zirconium-95	2.64E-01	2.78E+00	1.65E+00	pCi/L
OW1 Observation Well 01(476505002) - GW	16-Apr-19	Zirconium-95	1.08E+00	3.02E+00	1.75E+00	pCi/L
OW1 Observation Well 01(485902004) - GW	29-Jul-19	Zirconium-95	1.64E-01	3.81E+00	2.20E+00	pCi/L
OW1 Observation Well 01(493409006) - GW	21-Oct-19	Zirconium-95	1.06E+00	2.64E+00	1.62E+00	pCi/L

## PMO Pismo Beach Sand

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
PMO Pismo Beach(473342001) - SD	14-Mar-19	Barium-140	0.00E+00	2.63E+02	0.00E+00	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Barium-140	-7.31E+01	2.41E+02	1.53E+02	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Cesium-134	-1.29E+01	5.10E+01	3.48E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Cesium-134	8.12E+00	5.56E+01	3.49E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Cesium-137	2.72E+00	5.54E+01	3.67E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Cesium-137	2.77E+00	4.83E+01	2.75E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Cobalt-58	-1.04E+00	5.12E+01	2.91E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Cobalt-58	3.38E+01	5.38E+01	3.12E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Cobalt-60	-3.92E+00	5.00E+01	3.08E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Cobalt-60	1.57E+01	6.04E+01	3.22E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Iron-55	-1.74E+03	1.74E+04	1.27E+04	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Iron-55	-1.44E+03	1.46E+04	1.05E+04	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Iron-59	-8.30E+01	8.11E+01	7.52E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Iron-59	-3.53E+01	1.20E+02	8.04E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Lanthanum-140	3.62E+00	8.26E+01	4.67E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Lanthanum-140	-8.16E+00	9.58E+01	5.81E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Manganese-54	-1.63E+00	4.72E+01	2.71E+01	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Manganese-54	-8.09E+00	4.82E+01	2.99E+01	pCi/kg
PMO Pismo Beach(473342001) - SD	14-Mar-19	Nickel-63	7.37E+02	2.36E+03	1.44E+03	pCi/kg
PMO Pismo Beach(488682001) - SD	15-Aug-19	Nickel-63	-1.08E+02	3.03E+03	1.80E+03	pCi/kg

PNO Pismo Beach(473342001) - SD	14-Mar-19	Niobium-95	-1.18E+00	5.80E+01	3.28E+01	pCi/kg
PNO Pismo Beach(488682001) - SD	15-Aug-19	Niobium-95	-1.62E+01	5.52E+01	3.54E+01	pCi/kg
PNO Pismo Beach(473342001) - SD	14-Mar-19	Total Strontium	2.15E+02	9.49E+02	5.92E+02	pCi/kg
PNO Pismo Beach(488682001) - SD	15-Aug-19	Total Strontium	3.45E+02	4.23E+02	3.12E+02	pCi/kg
PNO Pismo Beach(473342001) - SD	14-Mar-19	Zinc-65	-1.15E+02	1.18E+02	1.14E+02	pCi/kg
PNO Pismo Beach(488682001) - SD	15-Aug-19	Zinc-65	-4.62E+01	1.22E+02	8.44E+01	pCi/kg
PNO Pismo Beach(473342001) - SD	14-Mar-19	Zirconium-95	1.08E+01	9.51E+01	5.23E+01	pCi/kg
PNO Pismo Beach(488682001) - SD	15-Aug-19	Zirconium-95	1.82E+01	1.00E+02	5.70E+01	pCi/kg

## PON Pacific Ocean North of Diablo Cove - Aquatic Vegetation Kelp

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
PON Pacific Ocean North of Diablo Cove(469936001) - AV Kelp	28-Jan-19	Cesium-134	-1.32E+00	1.84E+01	1.15E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(476886006) - AV Kelp	23-Apr-19	Cesium-134	6.61E+00	1.25E+01	7.49E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(484091004) - AV Kelp	9-Jul-19	Cesium-134	2.05E+00	8.88E+00	5.23E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(493646002) - AV Kelp	16-Oct-19	Cesium-134	2.37E+00	1.44E+01	8.59E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(469936001) - AV Kelp	28-Jan-19	Cesium-137	-5.31E+00	1.45E+01	9.73E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(476886006) - AV Kelp	23-Apr-19	Cesium-137	-1.52E+00	1.13E+01	7.40E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(484091004) - AV Kelp	9-Jul-19	Cesium-137	1.18E+00	8.31E+00	4.87E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(493646002) - AV Kelp	16-Oct-19	Cesium-137	3.92E+00	1.45E+01	8.60E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(469936001) - AV Kelp	28-Jan-19	Cobalt-58	1.93E+00	1.61E+01	9.76E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(476886006) - AV Kelp	23-Apr-19	Cobalt-58	2.61E+00	1.20E+01	7.09E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(484091004) - AV Kelp	9-Jul-19	Cobalt-58	2.53E+00	8.46E+00	5.00E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(493646002) - AV Kelp	16-Oct-19	Cobalt-58	7.39E-01	1.27E+01	7.71E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(469936001) - AV Kelp	28-Jan-19	Cobalt-60	5.27E+00	2.07E+01	1.34E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(476886006) - AV Kelp	23-Apr-19	Cobalt-60	1.38E+01	1.58E+01	1.05E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(484091004) - AV Kelp	9-Jul-19	Cobalt-60	1.26E+00	9.50E+00	5.41E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(493646002) - AV Kelp	16-Oct-19	Cobalt-60	5.11E+00	1.50E+01	9.53E+00	pCi/kg

## PON Pacific Ocean North of Diablo Cove - Fish Perch

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Cesium-134	5.55E+00	2.10E+01	1.36E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372005) - FH Perch	30-Apr-19	Cesium-134	1.85E+00	2.12E+01	1.22E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Cesium-134	1.27E+01	2.14E+01	1.68E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Cesium-134	-2.61E-01	4.24E+00	2.47E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Cesium-137	-4.24E+00	2.06E+01	1.25E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487372005) - FH Perch	30-Apr-19	Cesium-137	1.10E+01	2.31E+01	1.42E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Cesium-137	2.95E+00	2.06E+01	1.19E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Cesium-137	3.20E+00	4.78E+00	4.78E+00	pCi/kg

PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Cobalt-58	-3.76E+00	1.82E+01	1.17E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372005) - FH Perch	30-Apr-19	Cobalt-58	-1.88E+01	1.80E+01	1.94E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Cobalt-58	3.29E+00	2.03E+01	1.19E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Cobalt-58	1.48E-01	3.91E+00	2.25E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Cobalt-60	7.62E+00	2.53E+01	1.51E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372005) - FH Perch	30-Apr-19	Cobalt-60	9.98E-01	2.05E+01	1.23E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Cobalt-60	1.03E-01	1.94E+01	1.20E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Cobalt-60	5.29E-01	4.30E+00	2.53E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Iron-59	-1.73E+01	4.04E+01	2.77E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372005) - FH Perch	30-Apr-19	Iron-59	1.16E+01	5.18E+01	3.02E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Iron-59	-1.89E+01	4.92E+01	3.31E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Iron-59	2.79E+00	9.92E+00	5.79E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Manganese-54	-2.33E+00	1.83E+01	1.12E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372005) - FH Perch	30-Apr-19	Manganese-54	-1.59E+00	1.93E+01	1.14E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Manganese-54	6.29E-01	1.96E+01	1.16E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Manganese-54	1.19E-01	3.57E+00	2.06E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860005) - FH Perch	16-Mar-19	Zinc-65	3.83E+01	5.03E+01	6.02E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372005) - FH Perch	30-Apr-19	Zinc-65	-5.99E+00	4.44E+01	2.72E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630007) - FH Perch	12-Aug-19	Zinc-65	-6.83E+00	4.72E+01	2.96E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Perch	28-Oct-19	Zinc-65	2.27E+00	1.02E+01	6.70E+00	pCi/kg

## PON Pacific Ocean North of Diablo Cove - Rockfish

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Cesium-134	-2.79E+00	2.12E+01	1.27E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372006) - FH Rockfish	30-Apr-19	Cesium-134	8.54E+00	2.57E+01	1.55E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630005) - FH Rockfish	12-Aug-19	Cesium-134	-9.84E+00	2.31E+01	1.55E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425006) - FH Rockfish	28-Oct-19	Cesium-134	3.39E+00	4.61E+00	5.75E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Cesium-137	3.88E+00	1.95E+01	1.11E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372006) - FH Rockfish	30-Apr-19	Cesium-137	1.08E+01	2.50E+01	1.51E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630005) - FH Rockfish	12-Aug-19	Cesium-137	1.38E+00	2.43E+01	1.43E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425006) - FH Rockfish	28-Oct-19	Cesium-137	4.69E+00	4.69E+00	4.82E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Cobalt-58	-5.87E+00	1.71E+01	1.10E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372006) - FH Rockfish	30-Apr-19	Cobalt-58	3.31E+00	2.32E+01	1.39E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630005) - FH Rockfish	12-Aug-19	Cobalt-58	6.26E-01	2.09E+01	1.25E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425006) - FH Rockfish	28-Oct-19	Cobalt-58	3.20E-01	4.60E+00	3.11E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Cobalt-60	-1.82E+00	1.96E+01	1.23E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630006) - FH Rockfish	30-Apr-19	Cobalt-60	1.36E+00	1.83E+01	1.06E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425005) - FH Rockfish	12-Aug-19	Cobalt-60	5.55E+00	2.34E+01	1.35E+01	pCi/kg

PON Pacific Ocean North of Diablo Cove(4944250006) - FH Rockfish	28-Oct-19	Cobalt-60	-1.89E+00	4.59E+00	3.04E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Iron-59	1.04E+01	4.28E+01	2.51E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372006) - FH Rockfish	30-Apr-19	Iron-59	-2.89E+00	4.61E+01	2.72E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630005) - FH Rockfish	12-Aug-19	Iron-59	-1.41E+01	5.18E+01	3.45E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425006) - FH Rockfish	28-Oct-19	Iron-59	-1.54E+00	1.14E+01	6.78E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Manganese-54	-1.99E+00	1.62E+01	1.12E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372006) - FH Rockfish	30-Apr-19	Manganese-54	8.73E+00	2.52E+01	1.52E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630005) - FH Rockfish	12-Aug-19	Manganese-54	7.15E+00	2.31E+01	1.37E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425006) - FH Rockfish	28-Oct-19	Manganese-54	2.36E+00	4.63E+00	3.07E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(473860007) - FH Rockfish	16-Mar-19	Zinc-65	1.51E+01	4.31E+01	2.53E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(478372006) - FH Rockfish	30-Apr-19	Zinc-65	-1.90E+01	3.80E+01	2.58E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(487630005) - FH Rockfish	12-Aug-19	Zinc-65	5.56E-01	5.41E+01	3.36E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(494425006) - FH Rockfish	28-Oct-19	Zinc-65	-3.99E+00	1.13E+01	7.10E+00	pCi/kg

## PON Pacific Ocean North of Diablo Cove - Intertidal Mussels

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Cesium-134	9.16E+00	1.60E+01	9.85E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Cesium-137	-7.01E-01	1.56E+01	9.19E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Cobalt-58	2.21E+00	1.61E+01	9.53E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Cobalt-60	1.41E+01	1.59E+01	1.57E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Iron-59	2.03E+00	3.26E+01	1.99E+01	pCi/kg
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Manganese-54	-1.25E+00	1.45E+01	8.80E+00	pCi/kg
PON Pacific Ocean North of Diablo Cove(470053004) - IM	30-Jan-19	Zinc-65	-3.75E+00	3.05E+01	2.21E+01	pCi/kg

## POS Pacific Ocean South of Diablo Cove - Aquatic Vegetation Kelp

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
POS Pacific Ocean South of Diablo Cove(469440003) - AV Kelp	22-Jan-19	Cesium-134	-4.55E+00	1.15E+01	7.78E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(476886005) - AV Kelp	23-Apr-19	Cesium-134	-1.91E-01	1.55E+01	9.42E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(484091005) - AV Kelp	9-Jul-19	Cesium-134	4.39E+00	9.97E+00	5.99E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(493646003) - AV Kelp	16-Oct-19	Cesium-134	8.41E+00	1.36E+01	8.25E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(469440003) - AV Kelp	22-Jan-19	Cesium-137	1.28E+00	1.16E+01	7.18E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(476886005) - AV Kelp	23-Apr-19	Cesium-137	-2.00E-01	1.38E+01	8.25E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(484091005) - AV Kelp	9-Jul-19	Cesium-137	2.61E+00	8.90E+00	5.24E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(493646003) - AV Kelp	16-Oct-19	Cesium-137	9.74E+00	9.74E+00	1.15E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(469440003) - AV Kelp	22-Jan-19	Cobalt-58	1.05E+00	1.14E+01	6.84E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(476886005) - AV Kelp	23-Apr-19	Cobalt-58	7.62E+00	1.52E+01	1.04E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(484091005) - AV Kelp	9-Jul-19	Cobalt-58	5.25E+00	9.32E+00	5.70E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(493646003) - AV Kelp	16-Oct-19	Cobalt-58	4.39E+00	1.16E+01	6.70E+00	pCi/kg

POS Pacific Ocean South of Diablo Cove(469440003) - AV Kelp	22-Jan-19	Cobalt-60	9.39E+00	1.39E+01	1.22E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(476886005) - AV Kelp	23-Apr-19	Cobalt-60	5.89E+00	1.84E+01	1.05E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(484091005) - AV Kelp	9-Jul-19	Cobalt-60	4.54E-01	1.07E+01	6.25E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(493646003) - AV Kelp	16-Oct-19	Cobalt-60	3.19E+00	1.46E+01	8.71E+00	pCi/kg

## POS Pacific Ocean South of Diablo Cove - Fish Perch

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Cesium-134	3.03E+00	2.20E+01	1.33E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Cesium-134	2.63E+00	1.89E+01	1.09E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Cesium-134	-8.99E+00	2.53E+01	1.63E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Cesium-134	3.80E+00	4.26E+00	5.45E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Cesium-137	2.79E+00	1.78E+01	1.06E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Cesium-137	3.42E+00	1.81E+01	1.10E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Cesium-137	1.13E+01	2.50E+01	1.49E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Cesium-137	4.87E+00	4.87E+00	3.52E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Cobalt-58	-8.21E+00	1.69E+01	1.36E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Cobalt-58	-4.03E+00	1.72E+01	1.06E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Cobalt-58	-1.14E+01	2.39E+01	1.86E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Cobalt-58	1.00E+00	4.47E+00	2.90E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Cobalt-60	-9.72E+00	2.03E+01	1.64E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Cobalt-60	-1.87E+00	1.87E+01	1.17E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Cobalt-60	-1.68E+01	2.25E+01	1.70E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Cobalt-60	2.95E-01	4.87E+00	2.95E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Iron-59	1.63E+01	3.90E+01	2.24E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Iron-59	-1.57E+01	4.06E+01	2.70E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Iron-59	-3.03E+00	5.75E+01	3.55E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Iron-59	3.26E+00	1.27E+01	7.78E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Manganese-54	-6.37E+00	1.78E+01	1.21E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Manganese-54	-8.85E+00	1.53E+01	1.06E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Manganese-54	-5.62E+00	2.29E+01	1.44E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Manganese-54	1.71E+00	4.22E+00	2.49E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860006) - FH Perch	15-Mar-19	Zinc-65	-1.64E+01	4.10E+01	2.71E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372008) - FH Perch	1-May-19	Zinc-65	-6.93E+00	3.83E+01	2.39E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630003) - FH Perch	12-Aug-19	Zinc-65	-1.78E+01	5.38E+01	3.55E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425007) - FH Perch	22-Oct-19	Zinc-65	-5.76E+00	1.09E+01	7.44E+00	pCi/kg

## POS Pacific Ocean South of Diablo Cove - Rockfish

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Cesium-134	2.48E+00	1.63E+01	9.67E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Cesium-134	6.62E+00	2.27E+01	1.31E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Cesium-134	1.03E+01	3.06E+01	1.78E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Cesium-134	1.31E+00	4.57E+00	2.71E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Cesium-137	1.16E+01	1.57E+01	2.30E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Cesium-137	1.55E+01	2.17E+01	1.41E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Cesium-137	1.70E+01	3.06E+01	1.93E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Cesium-137	3.87E+00	3.87E+00	7.01E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Cobalt-58	1.44E+00	1.63E+01	9.78E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Cobalt-58	8.75E+00	2.25E+01	1.31E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Cobalt-58	-1.52E+01	2.38E+01	1.71E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Cobalt-58	6.68E-01	4.83E+00	2.88E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Cobalt-60	-5.45E+00	1.73E+01	1.11E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Cobalt-60	6.07E+00	2.12E+01	1.23E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Cobalt-60	-5.96E+00	2.32E+01	1.53E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Cobalt-60	2.60E+00	5.28E+00	3.09E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Iron-59	3.51E+01	3.51E+01	7.02E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Iron-59	1.06E-01	4.65E+01	2.76E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Iron-59	2.31E+01	7.01E+01	4.12E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Iron-59	-1.51E-01	1.24E+01	7.18E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Manganese-54	-4.00E+00	1.58E+01	1.01E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Manganese-54	3.73E-01	2.04E+01	1.19E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Manganese-54	-2.27E+00	2.59E+01	2.08E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Manganese-54	3.05E-01	3.97E+00	2.38E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(473860008) - FH Rockfish	15-Mar-19	Zinc-65	-8.69E+00	3.13E+01	1.96E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(478372007) - FH Rockfish	1-May-19	Zinc-65	1.66E+01	4.00E+01	2.56E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487630001) - FH Rockfish	12-Aug-19	Zinc-65	1.01E+01	6.38E+01	3.76E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(494425008) - FH Rockfish	22-Oct-19	Zinc-65	1.91E+00	1.16E+01	6.64E+00	pCi/kg

## POS Pacific Ocean South of Diablo Cove - Intertidal Mussels

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Cesium-134	5.58E+00	2.27E+01	2.10E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Cesium-134	-5.34E+00	2.06E+01	1.28E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Cesium-134	1.15E+01	2.07E+01	1.32E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Cesium-134	1.24E+01	1.80E+01	2.17E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Cesium-134	-1.09E+00	1.98E+01	1.17E+01	pCi/kg

POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Cesium-137	2.62E+00	1.92E+01	1.15E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Cesium-137	1.48E+01	2.30E+01	1.46E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Cesium-137	-1.42E+00	1.76E+01	1.08E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Cesium-137	4.17E-01	1.65E+01	9.66E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Cesium-137	-2.61E+00	1.78E+01	1.10E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Cobalt-58	-6.88E+00	1.57E+01	1.11E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Cobalt-58	1.04E+00	1.94E+01	1.13E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Cobalt-58	2.57E-01	2.00E+01	1.18E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Cobalt-58	2.24E+00	1.60E+01	9.50E+00	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Cobalt-58	4.06E-01	1.76E+01	1.03E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Cobalt-60	7.82E+00	2.36E+01	1.37E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Cobalt-60	-3.84E+00	1.98E+01	1.29E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Cobalt-60	6.79E-02	2.05E+01	1.21E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Cobalt-60	4.67E-01	1.71E+01	1.01E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Cobalt-60	3.91E+00	1.95E+01	1.14E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Iron-59	-8.66E+00	3.77E+01	2.37E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Iron-59	1.27E+01	4.18E+01	2.43E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Iron-59	-1.52E+00	4.05E+01	2.46E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Iron-59	-1.28E+01	3.06E+01	2.09E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Iron-59	-9.54E-01	4.28E+01	2.60E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Manganese-54	6.33E+00	1.90E+01	1.27E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Manganese-54	-7.13E+00	1.70E+01	1.12E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Manganese-54	2.24E+00	1.90E+01	1.67E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Manganese-54	1.41E+01	1.55E+01	1.45E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Manganese-54	-2.69E-01	1.81E+01	1.07E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(470053003) - IM	30-Jan-19	Zinc-65	-1.11E+00	4.26E+01	2.89E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(479018003) - IM	14-May-19	Zinc-65	-8.39E+00	4.77E+01	3.00E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(487461004) - IM	15-Aug-19	Zinc-65	-3.81E+01	3.94E+01	3.17E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204002) - IM	13-Nov-19	Zinc-65	1.91E+01	3.76E+01	2.60E+01	pCi/kg
POS Pacific Ocean South of Diablo Cove(495204003) - IM	13-Nov-19	Zinc-65	-9.13E+00	4.40E+01	2.75E+01	pCi/kg

## WN2 Diablo Creek Outlet - Drinking Water

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	BETA	1.39E+00	2.77E+00	1.71E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	BETA	1.98E+00	1.61E+00	1.12E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	BETA	5.31E+00	2.80E+00	2.02E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	BETA	2.76E+00	1.90E+00	1.34E+00	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Barium-140	2.74E+00	7.87E+00	4.67E+00	pCi/L

WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Barium-140	-2.34E+00	8.01E+00	5.20E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Barium-140	1.14E+01	1.14E+01	8.06E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Barium-140	-4.08E+00	7.15E+00	4.83E+00	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Cesium-134	-1.72E-01	1.58E+00	9.81E-01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Cesium-134	7.56E-02	1.69E+00	9.88E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Cesium-134	1.56E+00	2.15E+00	1.36E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Cesium-134	4.12E-01	1.53E+00	9.07E-01	pCi/L
WN2 Diablo Creek Outlet(493267003) - DW	29-Jan-19	Cesium-137	1.44E+00	1.44E+00	2.06E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Cesium-137	-6.77E-02	1.54E+00	8.98E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Cesium-137	5.07E-01	1.68E+00	9.60E-01	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Cesium-137	-1.85E+00	1.85E+00	1.98E+00	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Cobalt-58	1.18E-01	1.38E+00	8.38E-01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Cobalt-58	-2.23E-01	1.62E+00	9.74E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Cobalt-58	2.21E-01	1.84E+00	1.07E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Cobalt-58	-6.32E-01	1.43E+00	9.61E-01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Cobalt-60	5.65E-03	1.50E+00	1.01E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Cobalt-60	-3.45E-01	1.66E+00	1.07E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Cobalt-60	1.39E+00	1.95E+00	1.72E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Cobalt-60	3.30E-01	1.50E+00	8.61E-01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Iodine-131	-3.26E-01	6.05E-01	4.58E-01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Iodine-131	1.25E-01	5.33E-01	3.06E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Iodine-131	5.02E-03	4.77E-01	2.83E-01	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Iodine-131	-2.67E-02	5.20E-01	3.11E-01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Iron-55	-1.06E+01	7.91E+01	5.61E+01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Iron-55	-1.39E+01	7.20E+01	4.86E+01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Iron-55	-3.63E+01	6.61E+01	4.75E+01	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Iron-55	-9.70E+00	6.74E+01	4.71E+01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Iron-59	-1.37E+00	2.77E+00	1.85E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Iron-59	8.39E-01	3.57E+00	2.11E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Iron-59	4.51E-01	4.09E+00	2.43E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Iron-59	3.50E-01	3.07E+00	1.75E+00	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Lanthanum-140	-1.18E+00	1.93E+00	1.44E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Lanthanum-140	-3.22E-01	2.89E+00	1.74E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Lanthanum-140	-4.10E-01	4.40E+00	2.63E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Lanthanum-140	-9.62E-01	2.33E+00	1.58E+00	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Manganese-54	3.81E-02	1.41E+00	8.61E-01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Manganese-54	2.85E-01	1.52E+00	8.84E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Manganese-54	-4.88E-01	1.67E+00	1.04E+00	pCi/L

WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Manganese-54	4.81E-01	1.38E+00	8.22E-01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Nickel-63	-5.18E+00	3.80E+01	2.24E+01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Nickel-63	1.30E-01	2.75E+01	1.64E+01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Nickel-63	-2.29E+00	2.82E+01	1.67E+01	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Nickel-63	7.09E+00	3.06E+01	1.86E+01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Niobium-95	-1.38E+00	1.40E+00	1.50E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Niobium-95	2.39E-01	1.71E+00	9.90E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Niobium-95	-7.65E-02	1.84E+00	1.08E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Niobium-95	5.51E-01	1.51E+00	8.98E-01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Total Strontium	-9.57E-02	1.11E+00	6.53E-01	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Total Strontium	-2.41E-01	9.96E-01	5.75E-01	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Total Strontium	-6.56E-01	7.10E-01	3.40E-01	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Total Strontium	8.11E-02	7.40E-01	4.50E-01	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Tritium	1.74E+02	2.30E+02	1.49E+02	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Tritium	4.83E+01	2.34E+02	1.42E+02	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Tritium	5.07E+00	2.61E+02	1.56E+02	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Tritium	6.11E+01	2.24E+02	1.37E+02	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Zinc-65	1.69E+00	2.87E+00	1.85E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Zinc-65	1.34E+00	3.58E+00	2.37E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Zinc-65	-1.67E+00	3.17E+00	2.22E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Zinc-65	5.71E-01	3.03E+00	1.73E+00	pCi/L
WN2 Diablo Creek Outlet(469923003) - DW	29-Jan-19	Zirconium-95	6.56E-01	2.72E+00	1.63E+00	pCi/L
WN2 Diablo Creek Outlet(476511003) - DW	17-Apr-19	Zirconium-95	-1.66E+00	2.75E+00	2.49E+00	pCi/L
WN2 Diablo Creek Outlet(485302006) - DW	23-Jul-19	Zirconium-95	-8.32E-01	3.33E+00	2.04E+00	pCi/L
WN2 Diablo Creek Outlet(493267002) - DW	22-Oct-19	Zirconium-95	3.40E-01	2.48E+00	1.47E+00	pCi/L

## WW2 Water Well 02 - Drinking Water

Sample Name	Date Collected	Nuclide	Result	MDC	2 Sigma TPU	Units
WW2 Water Well 02(469923002) - DW	29-Jan-19	BETA	1.70E+00	3.51E+00	2.16E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	BETA	2.88E+00	2.48E+00	1.68E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	BETA	5.74E+00	2.39E+00	1.92E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	BETA	2.24E+00	2.00E+00	1.36E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Barium-140	-3.66E-01	9.45E+00	5.68E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Barium-140	7.11E+00	1.00E+01	6.41E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Barium-140	1.51E+00	1.15E+01	6.76E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Barium-140	2.45E+00	1.05E+01	6.20E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Cesium-134	3.98E-01	1.97E+00	1.76E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Cesium-134	-2.31E-01	1.82E+00	1.15E+00	pCi/L

WW2 Water Well 02(485302005) - DW	23-Jul-19	Cesium-134	3.57E-01	1.80E+00	1.08E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Cesium-134	1.15E-01	1.72E+00	1.05E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Cesium-137	-9.29E-01	1.74E+00	1.20E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Cesium-137	-1.20E+00	1.98E+00	1.56E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Cesium-137	-1.94E-01	1.41E+00	8.71E-01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Cesium-137	4.19E-01	1.67E+00	1.11E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Cobalt-58	-1.29E-01	1.78E+00	1.10E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Cobalt-58	-3.21E-01	1.84E+00	1.17E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Cobalt-58	-2.32E-01	1.54E+00	9.65E-01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Cobalt-58	1.54E-01	1.71E+00	1.04E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Cobalt-60	6.73E-02	1.85E+00	1.07E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Cobalt-60	-1.14E+00	1.67E+00	1.25E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Cobalt-60	-1.54E-01	1.43E+00	8.62E-01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Cobalt-60	-6.87E-01	1.78E+00	1.33E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Iodine-131	3.14E-01	5.71E-01	3.52E-01	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Iodine-131	-3.45E-01	5.87E-01	3.98E-01	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Iodine-131	3.91E-02	5.68E-01	3.32E-01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Iodine-131	-4.36E-02	9.78E-01	5.82E-01	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Iron-55	9.19E+00	7.04E+01	5.17E+01	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Iron-55	-1.75E+00	7.20E+01	4.95E+01	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Iron-55	5.18E+00	7.11E+01	5.27E+01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Iron-55	-3.44E+00	6.84E+01	4.90E+01	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Iron-59	-1.52E-02	3.64E+00	2.10E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Iron-59	-1.27E+00	3.51E+00	2.26E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Iron-59	-1.18E-01	3.58E+00	2.36E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Iron-59	-1.14E+00	3.55E+00	2.23E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Lanthanum-140	-3.19E+00	3.42E+00	4.06E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Lanthanum-140	-8.38E-02	3.23E+00	1.98E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Lanthanum-140	-3.39E-03	4.01E+00	2.39E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Lanthanum-140	-3.38E-01	3.62E+00	2.23E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Manganese-54	8.50E-01	1.89E+00	1.15E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Manganese-54	1.05E+00	1.86E+00	1.55E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Manganese-54	4.21E-01	1.56E+00	9.38E-01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Manganese-54	3.00E-02	1.67E+00	1.15E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Nickel-63	-2.39E+01	3.68E+01	2.08E+01	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Nickel-63	6.76E-01	2.91E+01	1.74E+01	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Nickel-63	-3.79E+00	2.79E+01	1.65E+01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Nickel-63	6.23E-01	3.07E+01	1.83E+01	pCi/L

201

E

WW2 Water Well 02(469923002) - DW	29-Jan-19	Niobium-95	3.73E-01	1.96E+00	2.51E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Niobium-95	1.78E+00	2.16E+00	1.55E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Niobium-95	-1.87E+00	1.69E+00	1.93E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Niobium-95	9.47E-01	1.90E+00	1.29E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Total Strontium	-1.03E+00	1.41E+00	7.63E-01	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Total Strontium	-3.15E-01	8.11E-01	4.51E-01	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Total Strontium	-5.54E-01	9.55E-01	5.23E-01	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Total Strontium	3.38E-01	9.89E-01	6.28E-01	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Tritium	4.51E+01	2.16E+02	1.31E+02	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Tritium	-7.61E+01	2.35E+02	1.36E+02	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Tritium	-4.45E+01	2.65E+02	1.55E+02	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Tritium	7.99E+01	2.15E+02	1.33E+02	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Zinc-65	2.45E-01	3.63E+00	2.34E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Zinc-65	-1.16E+00	3.58E+00	2.60E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Zinc-65	-2.37E+00	3.27E+00	4.03E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Zinc-65	6.99E-01	3.39E+00	2.19E+00	pCi/L
WW2 Water Well 02(469923002) - DW	29-Jan-19	Zirconium-95	-3.56E-01	3.23E+00	2.00E+00	pCi/L
WW2 Water Well 02(476511002) - DW	17-Apr-19	Zirconium-95	-4.10E-01	3.14E+00	1.97E+00	pCi/L
WW2 Water Well 02(485302005) - DW	23-Jul-19	Zirconium-95	2.57E-01	2.89E+00	1.73E+00	pCi/L
WW2 Water Well 02(494415001) - DW	24-Oct-19	Zirconium-95	-3.29E-01	2.92E+00	1.81E+00	pCi/L