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Mr. Keith I. McConnell, Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
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Rockville, MD 20852-2738

Subject: License Amendment Request for Revised Groundwater Protection Standards
Based on Updated Background Concentrations
Source Materials License SUA-1475
Groundwater Corrective Action Program
United Nuclear Corporation Church Rock Mill and Tailings Site

Dear Mr. McConnell:

United Nuclear Corporation (UNC) requests revision of some of the groundwater protection standards (GWPSs) in Source Materials License SUA-1475, Condition 30.B. UNC proposes to apply updated background concentrations to all three of the site hydrostratigraphic units. These revised GWPSs would apply at the points of compliance. The basis for this proposed amendment is summarized in the enclosed Technical Analysis Report.

The Nuclear Regulatory Commission (NRC) established the site's initial groundwater protection standards in 1989 (NRC [from Gary R. Konwinski], January 3, 1989, Amendment No. 4, Attachment A, *Subject: Establishment of Ground-Water Protection Standards*). All of those GWPSs were in accord with Criterion 5B(5), Appendix A, 10 CFR Part 40, which allows for Commission-approved background concentrations. Background concentrations were determined in two ways: lower limits of detection (assumed to be equivalent to background), and graphical trend analysis methods.

In the attached Technical Analysis Report, UNC presents newly calculated background concentrations based on 95th Percentile Upper Prediction Limits (UPL95s) which are statistical measures of background threshold values. The calculations were based on an extensive background data set that comprises groundwater quality analytical results from July 1989 through October 2007, inclusive.

The site comprises three hydrostratigraphic units (HSUs): the Southwest Alluvium, the Zone 3 sandstone, and the Zone 1 sandstone. Each HSU has different numbers of POC wells, and differing geochemical characteristics, all of which give reason to calculate individual background threshold values for each hydrostratigraphic unit.

Existing Conditions

30.B. Comply with the following groundwater protection standards at point of compliance
Wells GW-1, GW-2, GW-3, 632, EPA-23, EPA-28, and 509-D in the Southwest Alluvium;
614, 604, EPA-4, EPA-5, and EPA-7 in Zone 1; and 517, 613, 708, and 711 in Zone 3:

Arsenic = 0.05 mg/l, beryllium = 0.05 mg/l, cadmium = 0.01 mg/l, total trihalomethanes = 0.08 mg/l, gross alpha = 15.0 pCi/l, lead = 0.05 mg/l, lead-210 = 1.0 pCi/l, nickel = 0.05 mg/l, radium-226 and 228 = 5.0 pCi/l in Zone 3, 5.2 pCi/l in the Southwest Alluvium, and 9.4 pCi/l in Zone 1; selenium = 0.01 mg/l, thorium-230 = 5.0 pCi/l, uranium = 0.3 mg/l and vanadium = 0.1 mg/l.

Justification

A data set of groundwater quality analytical results has been maintained for the site since NRC established the original License GWPSs in 1989. These data provide a more extensive, current, and robust data base for calculating updated background concentrations (UPL95s). The UPL95s, as background threshold values, are appropriate for comparison with compliance samples.

Calculation of UPL95s depends, in part, upon the number of compliance samples and the number of POC wells. A future compliance-sampling schedule was applied to the development of the UPL95s based on discussions with NRC staff. It is based on 6 years of quarterly sampling (for a subtotal of 24 sample sets) followed by an assumed license transfer to the Department of Energy and annual sampling for 30 years (adding 30 sample sets). It is also assumed that the current number of POC wells remain so into the future.

10 CFR Appendix A to Part 40, Criterion 5B(5) states that acceptable, not-to-exceed NRC GWPSs for hazardous constituents may be either:

- a) Commission-approved background concentrations
- b) Maximum concentration limits (NRC Table 5C), or
- c) Alternate concentration limits

The site license regulates a total of 13 chemical constituents. As shown in summary Tables 4, 5, and 6 in the enclosed Technical Analysis Report, the proposed revisions to the GWPSs include newly calculated background concentrations (UPL95s) for six license constituents in the Southwest Alluvium (Table 4); four constituents in Zone 1 (Table 5); and seven constituents in Zone 3 (Table 6). Six constituents have unchanged GWPSs in the Southwest Alluvium; eight constituents in Zone 1; and four constituents in Zone 3.

Some constituents in the HSUs have too few background groundwater detections, over the entire data set time period, to calculate statistically significant UPL95s. In cases where the maximum background concentration exceeds the current GWPS, the proposed GWPS values are the maximum detected background concentrations: this is the case for lead in the Southwest Alluvium (Table 4); nickel in Zone 1 (Table 5); and cadmium and lead in Zone 3 (Table 6).

For uranium concentrations in the Southwest Alluvium, a revision to the current NRC GWPS is not being sought on the basis of information provided in the report: General Electric Company (by Roy S. Blickwedel), March 2006, *Regulatory Significance of the Occurrence and Distribution of Dissolved Uranium in Groundwaters of the Southwest Alluvium, Church Rock Site, New Mexico* (ADAMS Accession Number ML061000082).

Proposed Amendment Text

30.B. Comply with the following groundwater protection standards at point of compliance
Wells GW-1, GW-2, GW-3, 632, EPA-23, EPA-28, and 509-D in the Southwest Alluvium;
614, 604, EPA-4, EPA-5, and EPA-7 in Zone 1; and 517, 613, 708, and 711 in Zone 3:

Arsenic = 0.05 mg/l in the Southwest Alluvium and Zone 1, 0.757 mg/l in Zone 3;
beryllium = 0.05 mg/l; cadmium = 0.025 mg/l in the Southwest Alluvium, 0.01 mg/l in
Zone 1, 0.09 mg/l in Zone 3; total trihalomethanes = 0.08 mg/l; gross alpha = 15.0
pCi/l in the Southwest Alluvium and Zone 1, 39.7 pCi/l in Zone 3; lead = 0.7 mg/l in
the Southwest Alluvium; 0.05 mg/l in Zone 1, 0.08 mg/l in Zone 3; lead-210 = 5.9
pCi/l in the Southwest Alluvium, 4.7 pCi/l in Zone 1, 5.7 pCi/l in Zone 3; nickel =
0.078 mg/l in the Southwest Alluvium, 0.7 mg/l in Zone 1, 0.569 mg/l in Zone 3;
radium-226 and 228 = 8.2 pCi/l in the Southwest Alluvium, 12.1 pCi/l in Zone 1, 35.2
pCi/l in Zone 3; selenium = 0.01 mg/l in Zone 1 and Zone 3, 0.07 mg/l in the
Southwest Alluvium; thorium-230 = 4.5 pCi/l in the Southwest Alluvium, 1.6 pCi/l in
Zone 1, 17.0 pCi/l in Zone 3; uranium = 0.3 mg/l in the Southwest Alluvium, 0.238
mg/l in Zone 1, 0.395 pCi/l in Zone 3; and vanadium = 0.1 mg/l.

Please contact me if you have any questions.

Sincerely,



Roy S. Blickwedel, P.G.
Remedial Project Manager
Corporate Environmental Programs

Attachment: Technical Analysis Report (2 copies)

cc: Yolande J.C. Norman, NRC (with enclosure)
Larry Bush, UNC (with enclosure)
Katrina Higgins-Coltrain, EPA (pdf copy)
Eugene Esplain, NNEPA (pdf copy)
Earle Dixon, NMED (pdf copy)

United Nuclear Corporation

Gallup, New Mexico

**Technical Analysis Report in Support of
License Amendment Request for Revised
Background Standards Based on Updated
Background Concentrations**

Source Materials License SUA-1475

Groundwater Corrective Action Program

**United Nuclear Corporation Church Rock Mill
and Tailings Site, New Mexico**

April 2012



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Standards Based on Updated Background Concentrations
Source Materials License SUA-1475
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United Nuclear Corporation Church Rock Mill and
Tailings Site, New Mexico**

April 2012

Prepared by: Mark D. Jancin, Ph.D., P.G.

Approved by: Robert B. Warren, Jr.

Project No.: 12-6209-SC-122

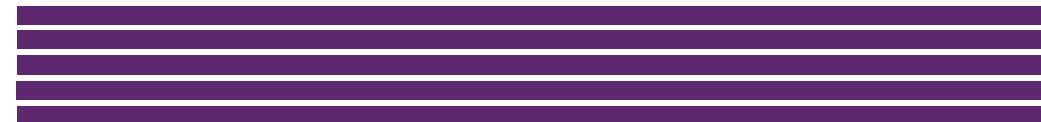


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Section 1

Introduction

This Technical Analysis Report describes the process used to calculate Background Threshold Values (BTVs) for current License groundwater monitoring parameters for United Nuclear Corporation's (UNC's) Church Rock tailings site. The BTVs are proposed as new groundwater protection standards (GWPSSs) in the License amendment request that accompanies this report. Separate estimates of BTVs were made for the site's three hydrostratigraphic units (HSUs): the Southwest Alluvium; the Zone 1 sandstone; and the Zone 3 sandstone. This was done because each HSU has different geochemical characteristics, including background water quality characteristics, which are discussed in the most recent annual report: *Chester Engineers, January 2012, Annual Review Report – 2011 – Groundwater Corrective Action, Church Rock Site, Church Rock, New Mexico.*

Section 2

Identification of Samples Representative of Background Water Quality

Figure 1 is a map showing the site layout and performance monitoring wells in 2011. The process used to identify wells having samples representative of background water quality was identical, with one exception discussed below, to that which was established previously in:

- ❖ The License amendment request for changing the site GWPS for radium: N.A. Water Systems, Revised February 2006, *Technical Analysis Report in Support of License Amendment Request for Changing the Method of Determining Exceedances of the Combined Radium Groundwater Protection Standard in Source Materials License SUA-1375 (TAC LU0092), Groundwater Corrective Action Program, Church Rock Site, Church Rock, New Mexico*. This report addressed the selection of wells having samples representative of background water quality (in time and space) in the Southwest Alluvium and Zone 1 – see Table 1 of this present Technical Analysis Report.
- ❖ N.A. Water Systems, 2008a, *Revised Submittal – Calculation of Background Statistics with Comparison Values, UNC Church Rock Mill & Tailings Site, Church Rock, New Mexico*. This report included the selection of wells having samples representative of background water quality (in time and space) in Zone 3 – see Table 2 of this present Technical Analysis Report.

Sample data from Southwest Alluvium well GW-4 were excluded from the analyses presented in the February 2006 license amendment request, but are included here. The decision to exclude these data from the 2006 license amendment request was intended as a conservative measure, because the data set included the highest single combined-radium concentration among all Southwest Alluvium groundwater samples, and the request was specific to radium. Data from well GW-4 were similarly excluded from the 2008 calculation of background statistics, to retain the same background data sets as used in the 2006 license amendment request. Neither decision was based on an outlier analysis. Sample data from GW-4 were included in the calculations made for this report because the sample data met all of the previously established criteria established for background groundwater in the Southwest Alluvium.

Section 3

Development of Background Threshold Values (BTVs)

The Nuclear Regulatory Commission (NRC) established the site's initial groundwater protection standards in 1989 (NRC [from Gary R. Konwinski], January 3, 1989, *Amendment No. 4, Attachment A, Subject: Establishment of Ground-Water Protection Standards*). All of those GWPSs were in accord with Criterion 5B(5), Appendix A, 10 CFR Part 40, which allows for Commission-approved background concentrations. Those background concentrations were determined in two ways: lower limits of detection (assumed to be equivalent to background), and graphical trend analysis methods.

UNC is not seeking to revise the GWPS for chloroform in any hydrostratigraphic unit. The current NRC GWPS for chloroform is a special case. NRC revised the chloroform GWPS to 0.08 mg/L as Amendment 37 to the License (August 9, 2006, letter from NRC's Gary S. Janosko attached to NRC's Technical Evaluation Report of August 2, 2006, *Issue: Request to Revise Chloroform and Combined Radium-226 and -229 Ground-Water Protection Standards*). It is equivalent to the Environmental Protection Agency's (EPA's) Maximum Contaminant Level (MCL) of 0.08 mg/l (for total trihalomethanes, of which only chloroform is present in site groundwater in very limited areas).

UNC is also not seeking to revise the GWPS for uranium in the Southwest Alluvium on the basis of information provided in the following report: General Electric Company (by Roy S. Blickwedel), March 2006, *Regulatory Significance of the Occurrence and Distribution of Dissolved Uranium in Groundwaters of the Southwest Alluvium, Church Rock Site, New Mexico* (ADAMS Accession Number ML061000082).

UNC calculation of background water quality statistics used the EPA's software package ProUCL (Singh et al., May 2010, *ProUCL Version 4.1 User Guide [Draft]*, EPA/600/R-07/041). ProUCL output summaries are provided as Appendix A (for the Southwest Alluvium), Appendix B (for Zone 1), and Appendix C (for Zone 3). The data sets used to calculate the BTVs are from the period July 1989 to October 2007, inclusive. These data sets are provided as Appendix D (for Southwest Alluvium background water), Appendix E (for Zone 1 background water), and Appendix F (for Zone 3 background water). Appendices A through F are provided on the attached CD.

N.A. Water Systems' (2008a) previous calculation of updated background water statistics included the development of UCL95 values (upper confidence limit on the mean at the 95% confidence level) to calculate Exposure Point Concentrations under CERCLA (N.A. Water Systems, 2008b, *Revised Submittal – Estimated UCL95 Statistics and EPCs in Impacted Groundwater, UNC Church Rock Mill & Tailings Site, Church Rock, New Mexico*). In contrast, the BTVs presented here are UPL95 values (95th percentile upper prediction limits), which represent not-to-exceed values that are appropriate for compliance monitoring on a point-by-point (i.e., well-by-well) basis.

The calculation of UPL95s requires specific numeric input on the relevant number of point-of-compliance wells and the future compliance sampling schedule. The reason for this is that the number of future comparisons of sample results to the statistically derived GWPSs affects the confidence with which inferences of exceedance can be drawn. The following future compliance-sampling plan was applied to the development of the UPL95s based on discussions with NRC staff: 6 years of quarterly sampling (for a subtotal of 24 sample sets) followed by an assumed License transfer to the Department of Energy (DOE) and annual sampling for 30 years (adding 30 sample sets).

The compliance-sampling schedule comprises a specific number of future comparisons of UPL95s (referred to as **k**). The probability of making a Type I error (incorrectly accepting a hypothesis that a sample concentration is too high to have been drawn from a background population) increases with the number (**k**) of comparisons. The following table summarizes the consequences of failing to control for Type I errors (based on 95% confidence, ProUCL guidance, May 2010):

Sample Size	Probability of Drawing Incorrect Inference of Exceedance
1	0.05
2	0.10
5	0.23
8	0.34
10	0.40
12	0.46
64	0.96

To control the probability of making a Type I error, the UPL95 values (or other types of background threshold values) are increased with increased sample sizes (increased **k** values).

The specific **k** values employed here have been established using an anticipated future sampling scenario comprising six years of quarterly point of compliance (POC) well monitoring (i.e., 24 samples collected at each POC over the estimated future sampling period until it is demonstrated that the site License may be transferred to the DOE for long-term care) plus a period of 30 years of annual DOE compliance monitoring after transfer (i.e., a total of 54 samples per POC well). The **k** value for each HSU was then calculated by multiplying the samples per POC well times the number of POC wells in the HSU:

- ❖ For the Southwest Alluvium, which currently has seven POC wells, the **k** value = (54 future compliance samples per well) x (7 wells) = 378.
- ❖ For Zone 1, which currently has five POC wells, the **k** value = (54 future compliance samples per well) x (5 wells) = 270.
- ❖ For Zone 3, which currently has four POC wells, the **k** value = (54 future compliance samples per well) x (4 wells) = 216.

This projection is based on a simplifying assumption that the numbers of POC wells in each HSU will remain constant over time, even though there may be changes in the locations of POC wells.

Table 3 shows all site constituents that are regulated by the NRC License. This table includes all current site groundwater standards under NRC regulation.

Section 4

BTV Results and Identification of Potential Revisions to NRC Site GWPS

The BTV (UPL95) results are summarized in Table 4 (Southwest Alluvium), Table 5 (Zone 1), and Table 6 (Zone 3). For additional context, these tables include the EPA MCLs from the National Primary Drinking Water Standards (40 CFR Part 141). Background UPL95 values could not be calculated for several parameters due to the lack of detected concentrations in background samples. Additionally, the calculated UPL95 values for several parameters were considered to be statistically unreliable because there are insufficient numbers of detected concentrations. In the latter case, the maximum detected background value is proposed as the potential BTV (see footnotes in Tables 4, 5, and 6).

The process to develop GWPSs is shown graphically in the series of decision trees identified as Trees 1 through 4 in Appendix G. Tree 1 was used to guide the process to the latter three decision trees, which are based on whether the constituent: (a) has an NRC Table 5C value (Tree 2); (b) lacks an NRC Table 5C value but has an EPA MCL (Tree 3); or (c) lacks both an NRC Table 5C value and an EPA MCL (Tree 4). Trees 2, 3, and 4 show five main outcomes that are identified as Cases 1 through 5.

UNC is proposing revised NRC GWPSs in the third column from the right in Tables 4 through 6. Excluding the previously discussed cases for chloroform in all three hydrostratigraphic units, and uranium in the Southwest Alluvium, the selection process for the revised background-derived NRC GWPSs can be summarized as follows:

- ❖ If there are no detected background concentrations for a constituent, then the current NRC GWPS is selected. This outcome is called Case 4 in Trees 2 through 4. (For example, the beryllium potential NRC GWPS is left unchanged as the current NRC GWPS in all three hydrostratigraphic units.)
- ❖ If there are detected background concentrations for a parameter, the calculated BTV (based on either a statistically reliable UPL95 or a maximum detected value) is selected as the potential NRC GWPS if it is higher than the NRC Table 5C value, or if there is no NRC Table 5C value. The new BTV was proposed regardless of whether it is higher or lower than the current NRC GWPS. This may lead to an increase or decrease with respect to the current NRC GWPS. These outcomes are called Cases 1 or 3 in Trees 2 through 4. (For example, for thorium-230, the selection process results in a decrease in the NRC GWPS in the Southwest Alluvium and Zone 1, but an increase in Zone 3.)
- ❖ Otherwise, if a constituent has a NRC Table 5C value, then that value is selected as the potential NRC GWPS. See Case 2 in Tree 2. (For example, arsenic in the Southwest Alluvium.)

The potential NRC GWPS justification is explained in the right-most columns of Tables 4 through 6.

Tables

TABLE 1
Southwest Alluvium and Zone 1 Wells
Having Samples Representative of Background Water Quality

Southwest Alluvium	Zone 1
29 A	619
624 (Jul 89 - Oct 95)	EPA 2
627	EPA 4 (POC)
639	EPA 8
642	
644	
645	
EPA 22 A	
EPA 25 (Jul 89 - Oct 95)	
EPA 27	
EPA 28 (POC)	
GW 4	
SBL 1	

Notes:
POC = Point-of-Compliance Well.

TABLE 2

Zone 3 Wells Having Samples Representative of Background Water Quality

Well	Sampled Time Period
411	Jul 89 - Jan 98
504 B	Jul 89 - Apr 92
517 (POC)	Jul 89 - Apr 91
EPA 01	Jul 89 - Oct 97
EPA 03	Jul 89 - Oct 91
EPA 11	Jul 89 - Apr 90
EPA 12	Jul 89 - Apr 92
EPA 14	Jul 89 - Apr 95
EPA 15	Jul 89 - Apr 95
EPA 17	Jul 89 - Apr 92
NBL-01	Aug 01 - Jan 04

Note: POC = Point-of-Compliance well.

TABLE 3
 Constituents Having Groundwater Protection Standards in the
 NRC Source Materials License
 United Nuclear Corporation, Church Rock Site
 Church Rock, New Mexico

Source	Standards Used for 3rd 5-Year Review (September 2008, Table 3-1) and ROD (September 1988)				NRC Source Materials License Compliance Standards	NRC Appendix List*	
	Contaminant	New Mexico WQCC Standards	Health-based	Maximum Concentration Limit (MCL)	Background Level		
Arsenic				0.05		0.05	0.05
Beryllium		0.017				0.05	
Cadmium	0.01			0.01		0.01	0.01
Lead	0.05			0.05		0.05	0.05
Nickel	0.2					0.05	
Selenium				0.01		0.01	0.01
Vanadium		0.7				0.1	
TTHMs**						0.08	
Uranium	5					0.3	
Radium 226 and 228				5 pCi/l		***	5 pCi/l
Lead-210						1 pCi/l	
Thorium-230				15 pCi/l		5 pCi/L	
Gross Alpha				15 pCi/l		15 pCi/l	15 pCi/l

Notes:

Units = mg/L unless otherwise noted

* 10 CFR Appendix A to Part 40

** TTHMs (total trihalomethanes) include chloroform; TTHMs MCL = 0.08 mg/L

*** Combined radium NRC Site Groundwater Protection Standards are 5.0 pCi/L for Zone 3;
5.2 pCi/L for Southwest Alluvium (background); and 9.4 pCi/L for Zone 1 (background)

TABLE 4
Summary Comparisons of Upper Prediction Limits ($k = \text{SWA POC samples } X ((4 \text{ qtrs } X 6 \text{ yrs}) + 30 \text{ yrs}) = 378$) for Parameter Concentrations in Southwest Alluvium Background Groundwater to Site Nuclear Regulatory Commission Groundwater Protection Standards (NRC GWPS)

Parameter	Units	Current NRC GWPS	Max RL ²	UPL95 ($k=378$)	UPL95>GWPS?	NRC TABLE 5C	EPA MCL	Percent < RL	Potential Background Threshold Value (BTB)	Potential NRC GWPS	Increase/Decrease With Respect To Current NRC GWPS	Potential NRC GWPS Justification
As	mg/L	0.05	0.001	0.0039	NO	0.05	0.01	93%	0.004	0.05	Same	NRC Table 5C and Current NRC GWPS
Be	mg/L	0.05	0.1	N/A	N/A	N/A	0.004	100%	N/A	0.05	Same	Current NRC GWPS
Cd	mg/L	0.01	0.01	0.0251	YES	0.01	0.005	97%	0.025	0.025	Increase	UPL95
Pb	mg/L	0.05	0.05	0.0536 ³	N/A	0.05	0.015	99%	0.07 ³	0.07	Increase	Maximum Background Value
Ni	mg/L	0.05	0.05	0.0781	YES	N/A	N/A	96%	0.078	0.078	Increase	UPL95
Se	mg/L	0.01	0.001	0.0699	YES	0.01	0.05	51%	0.07	0.07	Increase	UPL95
V	mg/L	0.1	0.1	N/A	N/A	N/A	N/A	100%	N/A	0.1	Same	Current NRC GWPS
U ⁴	mg/L	0.3	0.0003	0.2050	NO	N/A	0.03	0%	0.205	0.3	Same	2006 GE Study
Chloroform	mg/L	0.08	0.01	N/A	N/A	N/A	0.08	100%	N/A	0.08	Same	Current NRC GWPS and EPA MCL
Rad_totl	pCi/L	5.2	0.2	8.188	YES	5	5	25%	8.2	8.2	Increase	UPL95
Th-230	pCi/L	5	0.2	4.518	NO	N/A	N/A	92%	4.5	4.5	Decrease	UPL95
Pb-210	pCi/L	1	1	5.940	YES	N/A	N/A	78%	5.9	5.9	Increase	UPL95
Gross_Alpha ⁵	pCi/L	15	1	9.768	NO	15	15	71%	9.8	15	Same	NRC Table 5C and Current NRC GPS

Notes:

1. See Table 3 for sources of Site Groundwater Protection Standards (GWPS)
2. RL is an abbreviation of reporting limit
3. Only two detections, UPL95 considered statistically unreliable, maximum detected 0.07 mg/L proposed BTB
4. The primary source of uranium loading to the Southwest Alluvium was the infiltration of permitted mine water discharges, which had uranium concentrations up to 2 mg/L. The uranium concentration in post-mining/pre-tailings water has attenuated to a typical concentration range of 0.01 to 0.3 mg/L. (General Electric Company (from Roy S. Blickwedel), March 2006, Regulatory Significance of the Occurrence and Distribution of Dissolved Uranium in Groundwaters of the Southwest Alluvium, Church Rock Site, New Mexico.)
5. NRC Table 5C standard for gross alpha-particle activity excludes radon and uranium when producing uranium byproduct material or radon and thorium when producing thorium byproduct material. EPA MCL for gross alpha-particle activity excludes radon and uranium.

TABLE 5
Summary Comparisons of Upper Prediction Limits ($k=$ Zone 1 POC samples X ((4 qtrs X 6 yrs) + 30 yrs) = 270) for Parameter Concentrations in Zone 1 Background Groundwater to Site Nuclear Regulatory Commission Groundwater Protection Standards (NRC GWPS)

Parameter	Units	Current NRC GWPS	Max RL ²	UPL95 ($k=270$)	UPL95>GWPS?	NRC TABLE 5C	EPA MCL	Percent < RL	Potential Background Threshold Value (BTv)	Potential NRC GWPS	Increase/Decrease With Respect To Current NRC GWPS	Potential NRC GWPS Justification
As	mg/L	0.05	0.001	0.00259 ³	NO	0.05	0.01	84%	0.004 ³	0.05	Same	NRC Table 5C and Current NRC GWPS
Be	mg/L	0.05	0.05	N/A	N/A	N/A	0.004	100%	N/A	0.05	Same	Current NRC GWPS
Cd	mg/L	0.01	0.01	0.00642 ⁴	N/A	0.01	0.005	99%	0.01 ⁴	0.01	Same	NRC Table 5C and Maximum Background Value
Pb	mg/L	0.05	0.05	N/A	N/A	0.05	0.015	100%	0.05 ⁵	0.05	Same	NRC Table 5C and Maximum Background Value
Ni	mg/L	0.05	0.05	0.0634 ⁶	N/A	N/A	N/A	99%	0.07 ⁶	0.07	Increase	Maximum Background Value
Se	mg/L	0.01	0.001	0.00206 ⁷	N/A	0.01	0.05	96%	0.004 ⁷	0.01	Same	NRC Table 5C and current NRC GWPS
V	mg/L	0.1	0.1	N/A	N/A	N/A	N/A	100%	N/A	0.1	Same	Current NRC GWPS
U	mg/L	0.3	0.0004	0.238	NO	N/A	0.03	17%	0.238	0.238	Decrease	UPL95
Chloroform	mg/L	0.08	1	N/A	N/A	N/A	0.08	100%	N/A	0.08	Same	Current NRC GWPS and EPA MCL
Rad_totl	pCi/L	9.4	0.2	12.06	YES	5	5	1%	12.1	12.1	Increase	UPL95
Th-230	pCi/L	5	0.2	1.619	NO	N/A	N/A	92%	1.6	1.6	Decrease	UPL95
Pb-210	pCi/L	1	1	4.659	YES	N/A	N/A	81%	4.7	4.7	Increase	UPL95
Gross_Alpha⁸	pCi/L	15	1	8.984	NO	15	15	35%	9.0	15	Same	NRC Table 5C and Current NRC GWPS

Notes:

1. See Table 3 for sources of Site Groundwater Protection Standards (GWPS)
2. RL is an abbreviation of reporting limit
3. Only 4 distinct detections, UPL95 considered statistically unreliable. Maximum detection 0.004 mg/L proposed BTv
4. Only 3 distinct detections, UPL95 considered statistically unreliable. Maximum detection 0.01 mg/L proposed BTv
5. Only 1 detection, UPL95 considered statistically unreliable. Maximum detection 0.05 mg/L proposed BTv
6. Only 2 distinct detections, UPL95 considered statistically unreliable. Maximum detection 0.07 mg/L proposed BTv
7. Only 4 distinct detections, UPL95 considered statistically unreliable. Maximum detection 0.004 mg/L proposed BTv
8. NRC Table 5C standard for gross alpha-particle activity excludes radon and uranium when producing uranium byproduct material. EPA MCL for gross alpha-particle activity excludes radon and uranium.

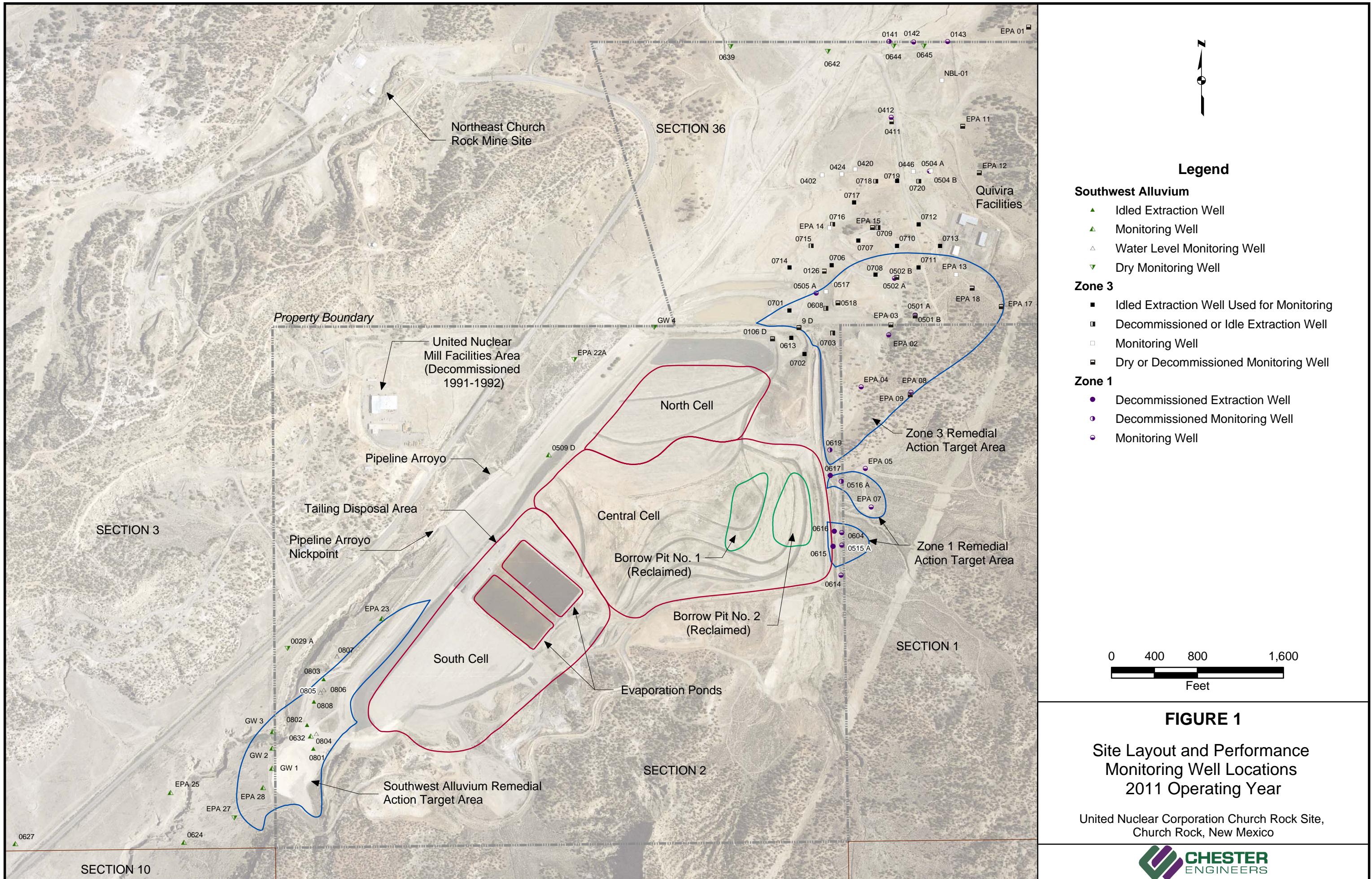
TABLE 6
Summary Comparisons of Upper Prediction Limits ($k=$ Zone 3 POC samples X ((4 qtrs X 6 yrs) + 30 yrs) = 216) for Parameter Concentrations in Zone 3 Background Groundwater to to Site Nuclear Regulatory Commission Groundwater Protection Standards (NRC GWPS)

Parameter	Units	Current NRC GWPS	Max RL ²	UPL95 ($k=216$)	UPL95>GWPS?	NRC TABLE 5C	EPA MCL	Percent < RL	Potential Background Threshold Value (BTv)	Potential NRC GWPS	Increase/Decrease With Respect To Current NRC GWPS	Potential NRC GWPS Justification
As	mg/L	0.05	0.001	0.757	YES	0.05	0.01	27%	0.757	0.757	Increase	UPL95
Be	mg/L	0.05	0.05	N/A	N/A	N/A	0.004	100%	N/A	0.05	Same	Current NRC GWPS
Cd	mg/L	0.01	0.01	0.0315 ³	N/A	0.01	0.005	95%	0.09 ³	0.09	Increase	Maximum Background Value
Pb	mg/L	0.05	0.05	0.0601 ⁴	N/A	0.05	0.015	98%	0.08 ⁴	0.08	Increase	Maximum Background Value
Ni	mg/L	0.05	0.05	0.569	YES	N/A	N/A	39%	0.569	0.569	Increase	UPL95
Se	mg/L	0.01	0.001	0.00744	NO	0.01	0.05	77%	0.007	0.01	Same	NRC Table 5C and current NRC GWPS
V	mg/L	0.1	0.1	N/A	N/A	N/A	N/A	100%	N/A	0.1	Same	Current NRC GWPS
U	mg/L	0.3	0.0003	0.395	YES	N/A	0.03	1%	0.395	0.395	Increase	UPL95
Chloroform	mg/L	0.08	1	N/A	N/A	N/A	0.08	99%	N/A	0.08	Same	Current NRC GWPS and EPA MCL
Rad_totl	pCi/L	5	0.2	35.18	YES	5	5	10%	35.2	35.2	Increase	UPL95
Th-230	pCi/L	5	0.2	16.99	YES	N/A	N/A	90%	17.0	17.0	Increase	UPL95
Pb-210	pCi/L	1	1	5.674	YES	N/A	N/A	69%	5.7	5.7	Increase	UPL95
Gross_Alpha ⁵	pCi/L	15	1	39.73	YES	15	15	16%	39.7	39.7	Increase	UPL95

Notes:

1. See Table 3 for sources of Site Groundwater Protection Standards (GWPSs)
2. RL is an abbreviation of reporting limit
3. Only 3 distinct detections, UPL95 considered statistically unreliable. Maximum detected 0.09 mg/L proposed BTv
4. Only 4 distinct detections and UPL95 is less than UCL95 (see Table 5). UPL95 considered statistically unreliable. Maximum detected 0.08 mg/L proposed BTv
5. NRC Table 5C standard for gross alpha-particle activity excludes radon and uranium when producing uranium byproduct material or radon and thorium when producing thorium byproduct material. EPA MCL for gross alpha-particle activity excludes radon and uranium.

Figure



Appendices

Appendix G is provided here in report hard copies. Appendices A, B, C, D, E, and F are on the CD attached to this report. All appendices are provided here in the full-report pdf.

Appendix A

APPENDIX A

Southwest Alluvium ProUCL Summary Output

Nonparametric Background Statistics for Data Sets with Non-Detects

User Selected Options

From File	SWA_back_rev.wst
Full Precision	OFF
Confidence Coefficient	95%
Coverage	90%
Different or Future K Values	378

Chloroform (background)

Total Number of Data	429
Number of Non-Detect Data	429
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	5.00E-04
Maximum Non-detect	1

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Chloroform (background) was not processed!

As (background)

Total Number of Data	429
Number of Non-Detect Data	393
Number of Detected Data	36
Minimum Detected	0.001

Maximum Detected	0.01
Percent Non-Detects	91.61%
Minimum Non-detect	0.001
Maximum Non-detect	0.001
Mean of Detected Data	0.00222
SD of Detected Data	0.00233
Mean of Log-Transformed Detected Data	-6.432
SD of Log-Transformed Detected Data	0.717

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957
UTL	0.001
Largest Non-detect at Order	393
95% UPL	
95% UPL	0.001

Kaplan-Meier (KM) Method

Mean	0.0011
SD	7.47E-04
Standard Error of Mean	3.66E-05
95% UTL 90% Coverage	0.00214
95% KM Chebyshev UPL	0.00436
95% KM UPL (t)	0.00234
95% KM UPL for Next 378 Observations	0.00385
95% KM UPL for Mean of Next 378 Observations	0.00119
90% KM Percentile (z)	0.00206
95% KM Percentile (z)	0.00233
99% KM Percentile (z)	0.00284

Be (background)

Total Number of Data	427
Number of Non-Detect Data	427
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	0.005
Maximum Non-detect	0.1

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Be (background) was not processed!

Cd (background)

Total Number of Data	429
Number of Non-Detect Data	417
Number of Detected Data	12
Minimum Detected	0.006
Maximum Detected	0.07
Percent Non-Detects	97.20%
Minimum Non-detect	0.005
Maximum Non-detect	0.01
Mean of Detected Data	0.0255
SD of Detected Data	0.0242
Mean of Log-Transformed Detected Data	-4.04
SD of Log-Transformed Detected Data	0.868

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957
UTL	0.01
Warning: Largest Non-detect at Order	418
95% UPL	
95% UPL	0.01

Kaplan-Meier (KM) Method

Mean	0.00655
SD	0.00503
Standard Error of Mean	2.54E-04
95% UTL 90% Coverage	0.0136
95% KM Chebyshev UPL	0.0285
95% KM UPL (t)	0.0149
95% KM UPL for Next 378 Observations	0.0251
95% KM UPL for Mean of Next 378 Observations	0.00713
90% KM Percentile (z)	0.013
95% KM Percentile (z)	0.0148
99% KM Percentile (z)	0.0183

Pb (background)

Total Number of Data	426
Number of Non-Detect Data	424
Number of Detected Data	2
Minimum Detected	0.05
Maximum Detected	0.07
Percent Non-Detects	99.53%
Minimum Non-detect	0.05
Maximum Non-detect	0.05

Mean of Detected Data	0.06
SD of Detected Data	0.0141
Mean of Log-Transformed Detected Data	-2.827
SD of Log-Transformed Detected Data	0.238

Warning: Data set has only 2 Distinct Detected Values.

This may not be adequate enough to compute meaningful and reliable test statistics and estimates.

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.

The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.

Those methods will return a 'N/A' value on your output display!

It is necessary to have 4 or more Distinct Values for bootstrap methods.

However, results obtained using 4 to 9 distinct values may not be reliable.

It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	393
Achieved CC	0.953
UTL	0.05
Warning: Largest Non-detect at Order	424
95% UPL	
95% UPL	0.05

Kaplan-Meier (KM) Method

Mean	0.05
SD	9.68E-04
Standard Error of Mean	6.63E-05

95% UTL 90% Coverage	0.0514
95% KM Chebyshev UPL	0.0543
95% KM UPL (t)	0.0516
95% KM UPL for Next 378 Observations	0.0536
95% KM UPL for Mean of Next 378 Observations	0.0502
90% KM Percentile (z)	0.0513
95% KM Percentile (z)	0.0516
99% KM Percentile (z)	0.0523

Ni (background)

Total Number of Data	429
Number of Non-Detect Data	415
Number of Detected Data	14
Minimum Detected	0.05
Maximum Detected	0.17
Percent Non-Detects	96.74%
Minimum Non-detect	0.05
Maximum Non-detect	0.05
Mean of Detected Data	0.08
SD of Detected Data	0.0291
Mean of Log-Transformed Detected Data	-2.572
SD of Log-Transformed Detected Data	0.299

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957
UTL	0.05
Warning: Largest Non-detect at Order	415

95% UPL	
95% UPL	0.05
Kaplan-Meier (KM) Method	
Mean	0.051
SD	0.00735
Standard Error of Mean	3.68E-04
95% UTL 90% Coverage	0.0612
95% KM Chebyshev UPL	0.0831
95% KM UPL (t)	0.0631
95% KM UPL for Next 378 Observations	0.0781
95% KM UPL for Mean of Next 378 Observations	0.0518
90% KM Percentile (z)	0.0604
95% KM Percentile (z)	0.0631
99% KM Percentile (z)	0.0681

Se (background)

Total Number of Data	428
Number of Non-Detect Data	200
Number of Detected Data	228
Minimum Detected	0.001
Maximum Detected	0.274
Percent Non-Detects	46.73%
Minimum Non-detect	0.001
Maximum Non-detect	0.001
Mean of Detected Data	0.00855
SD of Detected Data	0.0236
Mean of Log-Transformed Detected Data	-5.569
SD of Log-Transformed Detected Data	1.087

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	395
Achieved CC	0.956
UTL	0.012
Largest Non-detect at Order	200
95% UPL	
95% UPL	0.018

Kaplan-Meier (KM) Method	
Mean	0.00502
SD	0.0176
Standard Error of Mean	8.53E-04
95% UTL 90% Coverage	0.0296
95% KM Chebyshev UPL	0.0819
95% KM UPL (t)	0.0341
95% KM UPL for Next 378 Observations	0.0699
95% KM UPL for Mean of Next 378 Observations	0.00707
90% KM Percentile (z)	0.0276
95% KM Percentile (z)	0.034
99% KM Percentile (z)	0.046

V (background)

Total Number of Data	429
Number of Non-Detect Data	429
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	0.1
Maximum Non-detect	0.1

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable V (background) was not processed!

U (background)

Total Number of Data	428
Number of Non-Detect Data	1
Number of Detected Data	427
Minimum Detected	0.001
Maximum Detected	0.367
Percent Non-Detects	0.23%
Minimum Non-detect	3.00E-04
Maximum Non-detect	3.00E-04
Mean of Detected Data	0.0444
SD of Detected Data	0.0438
Mean of Log-Transformed Detected Data	-3.365
SD of Log-Transformed Detected Data	0.667

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	395
Achieved CC	0.956
UTL	0.08
Largest Non-detect at Order	1
95% UPL	
95% UPL	0.109

Kaplan-Meier (KM) Method

Mean	0.0443
SD	0.0437
Standard Error of Mean	0.00212
95% UTL 90% Coverage	0.105
95% KM Chebyshev UPL	0.235
95% KM UPL (t)	0.116
95% KM UPL for Next 378 Observations	0.205
95% KM UPL for Mean of Next 378 Observations	0.0494
90% KM Percentile (z)	0.1
95% KM Percentile (z)	0.116
99% KM Percentile (z)	0.146

Rad_totl (background)

Total Number of Data	429
Number of Non-Detect Data	106
Number of Detected Data	323
Minimum Detected	0.2
Maximum Detected	15.3
Percent Non-Detects	24.71%
Minimum Non-detect	0.2
Maximum Non-detect	0.2
Mean of Detected Data	1.905
SD of Detected Data	1.922
Mean of Log-Transformed Detected Data	0.214
SD of Log-Transformed Detected Data	0.943

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957

UTL	4.3
Largest Non-detect at Order	106
95% UPL	
95% UPL	5.15
Kaplan-Meier (KM) Method	
Mean	1.484
SD	1.82
Standard Error of Mean	0.088
95% UTL 90% Coverage	4.02
95% KM Chebyshev UPL	9.428
95% KM UPL (t)	4.488
95% KM UPL for Next 378 Observations	8.188
95% KM UPL for Mean of Next 378 Observations	1.696
90% KM Percentile (z)	3.817
95% KM Percentile (z)	4.478
99% KM Percentile (z)	5.719

Th-230 (background)

Total Number of Data	429
Number of Non-Detect Data	393
Number of Detected Data	36
Minimum Detected	0.2
Maximum Detected	14.3
Percent Non-Detects	91.61%
Minimum Non-detect	0.2
Maximum Non-detect	0.2
Mean of Detected Data	2.8
SD of Detected Data	2.97
Mean of Log-Transformed Detected Data	0.517
SD of Log-Transformed Detected Data	1.063

Data Follow Appr. Gamma Distribution at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957
UTL	0.4
Largest Non-detect at Order	393
95% UPL	
95% UPL	1.2
Kaplan-Meier (KM) Method	
Mean	0.418
SD	1.113
Standard Error of Mean	0.0545
95% UTL 90% Coverage	1.969
95% KM Chebyshev UPL	5.276
95% KM UPL (t)	2.255
95% KM UPL for Next 378 Observations	4.518
95% KM UPL for Mean of Next 378 Observations	0.548
90% KM Percentile (z)	1.845
95% KM Percentile (z)	2.249
99% KM Percentile (z)	3.008

Pb-210 (background)

Total Number of Data	429
Number of Non-Detect Data	336
Number of Detected Data	93
Minimum Detected	1
Maximum Detected	14.2
Percent Non-Detects	78.32%
Minimum Non-detect	1

Maximum Non-detect	1
Mean of Detected Data	2.871
SD of Detected Data	2.073
Mean of Log-Transformed Detected Data	0.877
SD of Log-Transformed Detected Data	0.566

Data appear Lognormal at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957
UTL	2.8
Largest Non-detect at Order	336
95% UPL	
95% UPL	3.45

Kaplan-Meier (KM) Method	
Mean	1.406
SD	1.231
Standard Error of Mean	0.0598
95% UTL 90% Coverage	3.121
95% KM Chebyshev UPL	6.778
95% KM UPL (t)	3.437
95% KM UPL for Next 378 Observations	5.94
95% KM UPL for Mean of Next 378 Observations	1.549
90% KM Percentile (z)	2.983
95% KM Percentile (z)	3.431
99% KM Percentile (z)	4.27

Gross_Alpha (background)

Total Number of Data	429
Number of Non-Detect Data	302
Number of Detected Data	127
Minimum Detected	0.4
Maximum Detected	22.9
Percent Non-Detects	70.40%
Minimum Non-detect	1
Maximum Non-detect	1
Mean of Detected Data	3.502
SD of Detected Data	3.376
Mean of Log-Transformed Detected Data	0.932
SD of Log-Transformed Detected Data	0.772

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.393
95% UTL with 90% Coverage	
Order Statistic	396
Achieved CC	0.957
UTL	4.3
Largest Non-detect at Order	307
95% UPL	
95% UPL	6.1

Kaplan-Meier (KM) Method

Mean	1.544
SD	2.233
Standard Error of Mean	0.125
95% UTL 90% Coverage	4.655
95% KM Chebyshev UPL	11.29
95% KM UPL (t)	5.229
95% KM UPL for Next 378 Observations	9.768
95% KM UPL for Mean of Next 378 Observations	1.803
90% KM Percentile (z)	4.406

95% KM Percentile (z)	5.217
99% KM Percentile (z)	6.739

Appendix B

APPENDIX B

Zone 1 ProUCL Summary Output

Nonparametric Background Statistics for Data Sets with Non-Detects

User Selected Options	
From File	Zone 1_back_rev.wst
Full Precision	OFF
Confidence Coefficient	95%
Coverage	90%
Different or Future K Values	270

Chloroform (background)

Total Number of Data	234
Number of Non-Detect Data	233
Number of Detected Data	1
Minimum Detected	0.91
Maximum Detected	0.91
Percent Non-Detects	99.57%
Minimum Non-detect	0.5
Maximum Non-detect	1

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Chloroform (background) was not processed!

As (background)

Total Number of Data	234
Number of Non-Detect Data	196
Number of Detected Data	38
Minimum Detected	0.001
Maximum Detected	0.004

Percent Non-Detects	83.76%
Minimum Non-detect	0.001
Maximum Non-detect	0.001
Mean of Detected Data	0.00174
SD of Detected Data	7.60E-04
Mean of Log-Transformed Detected Data	-6.446
SD of Log-Transformed Detected Data	0.429

Warning: There are only 4 Distinct Detected Values in this data

Note: It should be noted that even though bootstrap may be performed on this data set
the resulting calculations may not be reliable enough to draw conclusions

It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.435
95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.939
UTL	0.002
Largest Non-detect at Order	196
95% UPL	
95% UPL	0.002

Kaplan-Meier (KM) Method	
Mean	0.00112
SD	4.06E-04
Standard Error of Mean	2.69E-05
95% UTL 90% Coverage	0.0017
95% KM Chebyshev UPL	0.00289
95% KM UPL (t)	0.00179
95% KM UPL for Next 270 Observations	0.00259

95% KM UPL for Mean of Next 270 Observations	0.00118
90% KM Percentile (z)	0.00164
95% KM Percentile (z)	0.00179
99% KM Percentile (z)	0.00207

Be (background)

Total Number of Data	234
Number of Non-Detect Data	234
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	0.01
Maximum Non-detect	0.05

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Be (background) was not processed!

Cd (background)

Total Number of Data	234
Number of Non-Detect Data	231
Number of Detected Data	3
Minimum Detected	0.005
Maximum Detected	0.01
Percent Non-Detects	98.72%
Minimum Non-detect	0.005
Maximum Non-detect	0.01
Mean of Detected Data	0.00733

SD of Detected Data	0.00252
Mean of Log-Transformed Detected Data	-4.955
SD of Log-Transformed Detected Data	0.347

Warning: There are only 3 Distinct Detected Values in this data set

The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.
Those methods will return a 'N/A' value on your output display!

It is necessary to have 4 or more Distinct Values for bootstrap methods.

However, results obtained using 4 to 9 distinct values may not be reliable.

It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.

Data appear Normal at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.435
95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.939
UTL	0.01
Warning: Largest Non-detect at Order	233
95% UPL	
95% UPL	0.01

Kaplan-Meier (KM) Method

Mean	0.00504
SD	3.82E-04
Standard Error of Mean	3.59E-05
95% UTL 90% Coverage	0.00559
95% KM Chebyshev UPL	0.00671
95% KM UPL (t)	0.00567
95% KM UPL for Next 270 Observations	0.00642
95% KM UPL for Mean of Next 270 Observations	0.0051
90% KM Percentile (z)	0.00553

95% KM Percentile (z)	0.00567
99% KM Percentile (z)	0.00593

Pb (background)

Total Number of Data	234
Number of Non-Detect Data	233
Number of Detected Data	1
Minimum Detected	0.05
Maximum Detected	0.05
Percent Non-Detects	99.57%
Minimum Non-detect	0.05
Maximum Non-detect	0.05

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Pb (background) was not processed!

Ni (background)

Total Number of Data	230
Number of Non-Detect Data	227
Number of Detected Data	3
Minimum Detected	0.06
Maximum Detected	0.07
Percent Non-Detects	98.70%
Minimum Non-detect	0.05
Maximum Non-detect	0.05
Mean of Detected Data	0.0667
SD of Detected Data	0.00577
Mean of Log-Transformed Detected Data	-2.711
SD of Log-Transformed Detected Data	0.089

Warning: Data set has only 2 Distinct Detected Values.

This may not be adequate enough to compute meaningful and reliable test statistics and estimates.

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.

The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.

Those methods will return a 'N/A' value on your output display!

It is necessary to have 4 or more Distinct Values for bootstrap methods.

However, results obtained using 4 to 9 distinct values may not be reliable.

It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K 1.436

95% UTL with 90% Coverage

Order Statistic 214

Achieved CC 0.956

UTL 0.05

Warning: Largest Non-detect at Order 227

95% UPL

95% UPL 0.05

Kaplan-Meier (KM) Method

Mean 0.0601

SD 9.28E-04

Standard Error of Mean 7.50E-05

95% UTL 90% Coverage 0.0614

95% KM Chebyshev UPL 0.0641

95% KM UPL (t) 0.0616

95% KM UPL for Next 270 Observations 0.0634

95% KM UPL for Mean of Next 270 Observations	0.0602
90% KM Percentile (z)	0.0613
95% KM Percentile (z)	0.0616
99% KM Percentile (z)	0.0622

Se (background)

Total Number of Data	234
Number of Non-Detect Data	224
Number of Detected Data	10
Minimum Detected	0.001
Maximum Detected	0.004
Percent Non-Detects	95.73%
Minimum Non-detect	0.001
Maximum Non-detect	0.001
Mean of Detected Data	0.0019
SD of Detected Data	0.0011
Mean of Log-Transformed Detected Data	-6.411
SD of Log-Transformed Detected Data	0.56

Warning: There are only 4 Distinct Detected Values in this data

Note: It should be noted that even though bootstrap may be performed on this data set
the resulting calculations may not be reliable enough to draw conclusions

It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.435
95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.939

UTL	0.001
Warning: Largest Non-detect at Order	224
95% UPL	
95% UPL	0.001
Kaplan-Meier (KM) Method	
Mean	0.00104
SD	2.82E-04
Standard Error of Mean	1.95E-05
95% UTL 90% Coverage	0.00144
95% KM Chebyshev UPL	0.00227
95% KM UPL (t)	0.00151
95% KM UPL for Next 270 Observations	0.00206
95% KM UPL for Mean of Next 270 Observations	0.00108
90% KM Percentile (z)	0.0014
95% KM Percentile (z)	0.0015
99% KM Percentile (z)	0.0017

V (background)

Total Number of Data	234
Number of Non-Detect Data	234
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	0.1
Maximum Non-detect	0.1

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
 Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
 The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable V (background) was not processed!

U (background)

Total Number of Data	233
Number of Non-Detect Data	39
Number of Detected Data	194
Minimum Detected	4.00E-04
Maximum Detected	0.975
Percent Non-Detects	16.74%
Minimum Non-detect	3.00E-04
Maximum Non-detect	4.00E-04
Mean of Detected Data	0.00862
SD of Detected Data	0.0701
Mean of Log-Transformed Detected Data	-6.263
SD of Log-Transformed Detected Data	1.142

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.435
95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.962
UTL	0.009
Largest Non-detect at Order	39
95% UPL	
95% UPL	0.01

Kaplan-Meier (KM) Method	
Mean	0.00724
SD	0.0638
Standard Error of Mean	0.00419
95% UTL 90% Coverage	0.0989

95% KM Chebyshev UPL	0.286
95% KM UPL (t)	0.113
95% KM UPL for Next 270 Observations	0.238
95% KM UPL for Mean of Next 270 Observations	0.0167
90% KM Percentile (z)	0.0891
95% KM Percentile (z)	0.112
99% KM Percentile (z)	0.156

Rad_totl (background)

Total Number of Data	234
Number of Non-Detect Data	2
Number of Detected Data	232
Minimum Detected	0.2
Maximum Detected	14.8
Percent Non-Detects	0.85%
Minimum Non-detect	0.2
Maximum Non-detect	0.2
Mean of Detected Data	3.618
SD of Detected Data	2.332
Mean of Log-Transformed Detected Data	1.044
SD of Log-Transformed Detected Data	0.76

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.435
95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.939
UTL	6.9
Largest Non-detect at Order	2

95% UPL

95% UPL	7.9
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Kaplan-Meier (KM) Method	
Mean	3.589
SD	2.338
Standard Error of Mean	0.153
95% UTL 90% Coverage	6.944
95% KM Chebyshev UPL	13.8
95% KM UPL (t)	7.458
95% KM UPL for Next 270 Observations	12.06
95% KM UPL for Mean of Next 270 Observations	3.934
90% KM Percentile (z)	6.585
95% KM Percentile (z)	7.435
99% KM Percentile (z)	9.028

Th-230 (background)

Total Number of Data	234
Number of Non-Detect Data	215
Number of Detected Data	19
Minimum Detected	0.2
Maximum Detected	4.9
Percent Non-Detects	91.88%
Minimum Non-detect	0.02
Maximum Non-detect	0.2
Mean of Detected Data	0.974
SD of Detected Data	1.114
Mean of Log-Transformed Detected Data	-0.388
SD of Log-Transformed Detected Data	0.801

Data appear Lognormal at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.435
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95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.939
UTL	0.2
Largest Non-detect at Order	215
95% UPL	
95% UPL	0.525
Kaplan-Meier (KM) Method	
Mean	0.263
SD	0.374
Standard Error of Mean	0.0251
95% UTL 90% Coverage	0.8
95% KM Chebyshev UPL	1.898
95% KM UPL (t)	0.882
95% KM UPL for Next 270 Observations	1.619
95% KM UPL for Mean of Next 270 Observations	0.318
90% KM Percentile (z)	0.743
95% KM Percentile (z)	0.879
99% KM Percentile (z)	1.134

Pb-210 (background)

Total Number of Data	234
Number of Non-Detect Data	189
Number of Detected Data	45
Minimum Detected	1.1
Maximum Detected	9.1
Percent Non-Detects	80.77%
Minimum Non-detect	1
Maximum Non-detect	1
Mean of Detected Data	2.58
SD of Detected Data	1.594
Mean of Log-Transformed Detected Data	0.822

SD of Log-Transformed Detected Data 0.472

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K 1.435

95% UTL with 90% Coverage

Order Statistic 217

Achieved CC 0.939

UTL 2.4

Largest Non-detect at Order 189

95% UPL

95% UPL 2.85

Kaplan-Meier (KM) Method

Mean 1.385

SD 0.904

Standard Error of Mean 0.0598

95% UTL 90% Coverage 2.682

95% KM Chebyshev UPL 5.335

95% KM UPL (t) 2.881

95% KM UPL for Next 270 Observations 4.659

95% KM UPL for Mean of Next 270 Observations 1.518

90% KM Percentile (z) 2.544

95% KM Percentile (z) 2.872

99% KM Percentile (z) 3.488

Gross_Alpha (background)

Total Number of Data 234

Number of Non-Detect Data 82

Number of Detected Data 152

Minimum Detected 0.9

Maximum Detected	14
Percent Non-Detects	35.04%
Minimum Non-detect	1
Maximum Non-detect	1
Mean of Detected Data	2.757
SD of Detected Data	2.092
Mean of Log-Transformed Detected Data	0.82
SD of Log-Transformed Detected Data	0.579

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.435
95% UTL with 90% Coverage	
Order Statistic	217
Achieved CC	0.939
UTL	5.3
Largest Non-detect at Order	83
95% UPL	
95% UPL	6.625

Kaplan-Meier (KM) Method	
Mean	2.106
SD	1.9
Standard Error of Mean	0.125
95% UTL 90% Coverage	4.832
95% KM Chebyshev UPL	10.4
95% KM UPL (t)	5.25
95% KM UPL for Next 270 Observations	8.984
95% KM UPL for Mean of Next 270 Observations	2.386
90% KM Percentile (z)	4.54
95% KM Percentile (z)	5.23
99% KM Percentile (z)	6.525

Appendix C

APPENDIX C

Zone 3 ProUCL Summary Output

Nonparametric Background Statistics for Data Sets with Non-Detects

User Selected Options	
From File	Zone 3_back_rev2.wst
Full Precision	OFF
Confidence Coefficient	95%
Coverage	90%
Different or Future K Values	216

Chloroform (background)

Total Number of Data	186
Number of Non-Detect Data	185
Number of Detected Data	1
Minimum Detected	0.0011
Maximum Detected	0.0011
Percent Non-Detects	99.46%
Minimum Non-detect	0.001
Maximum Non-detect	0.001

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!
It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Chloroform (background) was not processed!

As (background)

Total Number of Data	186
Number of Non-Detect Data	50
Number of Detected Data	136
Minimum Detected	0.001
Maximum Detected	1.01

Percent Non-Detects	26.88%
Minimum Non-detect	0.001
Maximum Non-detect	0.001
Mean of Detected Data	0.121
SD of Detected Data	0.211
Mean of Log-Transformed Detected Data	-3.512
SD of Log-Transformed Detected Data	1.816

Data appear Lognormal at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	0.481
Largest Non-detect at Order	50
95% UPL	
95% UPL	0.593

Kaplan-Meier (KM) Method	
Mean	0.0886
SD	0.187
Standard Error of Mean	0.0138
95% UTL 90% Coverage	0.361
95% KM Chebyshev UPL	0.906
95% KM UPL (t)	0.399
95% KM UPL for Next 216 Observations	0.757
95% KM UPL for Mean of Next 216 Observations	0.119
90% KM Percentile (z)	0.328
95% KM Percentile (z)	0.396
99% KM Percentile (z)	0.524

Be (background)

Total Number of Data	186
Number of Non-Detect Data	186
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	0.001
Maximum Non-detect	0.05

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable Be (background) was not processed!

Cd (background)

Total Number of Data	186
Number of Non-Detect Data	177
Number of Detected Data	9
Minimum Detected	0.01
Maximum Detected	0.09
Percent Non-Detects	95.16%
Minimum Non-detect	0.005
Maximum Non-detect	0.01
Mean of Detected Data	0.02
SD of Detected Data	0.0265
Mean of Log-Transformed Detected Data	-4.284
SD of Log-Transformed Detected Data	0.74

Warning: There are only 3 Distinct Detected Values in this data set

The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.

Those methods will return a 'N/A' value on your output display!

It is necessary to have 4 or more Distinct Values for bootstrap methods.

However, results obtained using 4 to 9 distinct values may not be reliable.

It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K 1.455

95% UTL with 90% Coverage

Order Statistic 173

Achieved CC 0.938

UTL 0.01

Warning: Largest Non-detect at Order 177

95% UPL

95% UPL 0.01

Kaplan-Meier (KM) Method

Mean 0.0105

SD 0.00589

Standard Error of Mean 4.58E-04

95% UTL 90% Coverage 0.0191

95% KM Chebyshev UPL 0.0362

95% KM UPL (t) 0.0202

95% KM UPL for Next 216 Observations 0.0315

95% KM UPL for Mean of Next 216 Observations 0.0115

90% KM Percentile (z) 0.018

95% KM Percentile (z) 0.0202

99% KM Percentile (z) 0.0242

Pb (background)

Total Number of Data	185
Number of Non-Detect Data	181
Number of Detected Data	4
Minimum Detected	0.05
Maximum Detected	0.08
Percent Non-Detects	97.84%
Minimum Non-detect	0.05
Maximum Non-detect	0.05
Mean of Detected Data	0.065
SD of Detected Data	0.0129
Mean of Log-Transformed Detected Data	-2.749
SD of Log-Transformed Detected Data	0.202

Warning: There are only 4 Distinct Detected Values in this data

Note: It should be noted that even though bootstrap may be performed on this data set
the resulting calculations may not be reliable enough to draw conclusions

It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.

Data appear Normal at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.964
UTL	0.05
Warning: Largest Non-detect at Order	181
95% UPL	
95% UPL	0.05

Kaplan-Meier (KM) Method

Mean	0.0503
SD	0.00273

Standard Error of Mean	2.32E-04
95% UTL 90% Coverage	0.0543
95% KM Chebyshev UPL	0.0623
95% KM UPL (t)	0.0549
95% KM UPL for Next 216 Observations	0.0601
95% KM UPL for Mean of Next 216 Observations	0.0508
90% KM Percentile (z)	0.0538
95% KM Percentile (z)	0.0548
99% KM Percentile (z)	0.0567

Ni (background)

Total Number of Data	186
Number of Non-Detect Data	73
Number of Detected Data	113
Minimum Detected	0.05
Maximum Detected	0.67
Percent Non-Detects	39.25%
Minimum Non-detect	0.05
Maximum Non-detect	0.05
Mean of Detected Data	0.173
SD of Detected Data	0.141
Mean of Log-Transformed Detected Data	-2.013
SD of Log-Transformed Detected Data	0.692

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	0.3
Largest Non-detect at Order	73

95% UPL	
95% UPL	0.46

Kaplan-Meier (KM) Method

Mean	0.125
SD	0.124
Standard Error of Mean	0.00916
95% UTL 90% Coverage	0.306
95% KM Chebyshev UPL	0.668
95% KM UPL (t)	0.331
95% KM UPL for Next 216 Observations	0.569
95% KM UPL for Mean of Next 216 Observations	0.145
90% KM Percentile (z)	0.284
95% KM Percentile (z)	0.329
99% KM Percentile (z)	0.414

Se (background)

Total Number of Data	186
Number of Non-Detect Data	144
Number of Detected Data	42
Minimum Detected	0.001
Maximum Detected	0.015
Percent Non-Detects	77.42%
Minimum Non-detect	0.001
Maximum Non-detect	0.001
Mean of Detected Data	0.0026
SD of Detected Data	0.00334
Mean of Log-Transformed Detected Data	-6.38
SD of Log-Transformed Detected Data	0.798

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	0.002
Largest Non-detect at Order	144
95% UPL	
95% UPL	0.00265
Kaplan-Meier (KM) Method	
Mean	0.00136
SD	0.0017
Standard Error of Mean	1.26E-04
95% UTL 90% Coverage	0.00384
95% KM Chebyshev UPL	0.0088
95% KM UPL (t)	0.00418
95% KM UPL for Next 216 Observations	0.00744
95% KM UPL for Mean of Next 216 Observations	0.00164
90% KM Percentile (z)	0.00354
95% KM Percentile (z)	0.00416
99% KM Percentile (z)	0.00532

V (background)

Total Number of Data	186
Number of Non-Detect Data	186
Number of Detected Data	0
Minimum Detected	N/A
Maximum Detected	N/A
Percent Non-Detects	100.00%
Minimum Non-detect	0.01
Maximum Non-detect	0.1

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable V (background) was not processed!

U (background)

Total Number of Data	186
Number of Non-Detect Data	2
Number of Detected Data	184
Minimum Detected	7.00E-04
Maximum Detected	0.38
Percent Non-Detects	1.08%
Minimum Non-detect	3.00E-04
Maximum Non-detect	3.00E-04
Mean of Detected Data	0.0791
SD of Detected Data	0.089
Mean of Log-Transformed Detected Data	-3.329
SD of Log-Transformed Detected Data	1.416

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	0.252
Largest Non-detect at Order	2
95% UPL	
95% UPL	0.273

Kaplan-Meier (KM) Method

Mean	0.0782
SD	0.0886
Standard Error of Mean	0.00652
95% UTL 90% Coverage	0.207
95% KM Chebyshev UPL	0.466
95% KM UPL (t)	0.225
95% KM UPL for Next 216 Observations	0.395
95% KM UPL for Mean of Next 216 Observations	0.0929
90% KM Percentile (z)	0.192
95% KM Percentile (z)	0.224
99% KM Percentile (z)	0.284

Rad_totl (background)

Total Number of Data	185
Number of Non-Detect Data	18
Number of Detected Data	167
Minimum Detected	0.2
Maximum Detected	40.9
Percent Non-Detects	9.73%
Minimum Non-detect	0.2
Maximum Non-detect	0.2
Mean of Detected Data	9.099
SD of Detected Data	7.455
Mean of Log-Transformed Detected Data	1.835
SD of Log-Transformed Detected Data	1.001

Data do not follow a Discernable Distribution (0.05)

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173

Achieved CC	0.964
UTL	20.1
Largest Non-detect at Order	18
95% UPL	
95% UPL	25.96
Kaplan-Meier (KM) Method	
Mean	8.234
SD	7.538
Standard Error of Mean	0.556
95% UTL 90% Coverage	19.2
95% KM Chebyshev UPL	41.18
95% KM UPL (t)	20.73
95% KM UPL for Next 216 Observations	35.18
95% KM UPL for Mean of Next 216 Observations	9.482
90% KM Percentile (z)	17.89
95% KM Percentile (z)	20.63
99% KM Percentile (z)	25.77

Th-230 (background)

Total Number of Data	186
Number of Non-Detect Data	167
Number of Detected Data	19
Minimum Detected	0.2
Maximum Detected	57
Percent Non-Detects	89.78%
Minimum Non-detect	0.2
Maximum Non-detect	0.2
Mean of Detected Data	6.705
SD of Detected Data	13.05
Mean of Log-Transformed Detected Data	0.85
SD of Log-Transformed Detected Data	1.465

Data Follow Appr. Gamma Distribution at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	0.7
Largest Non-detect at Order	167
95% UPL	
95% UPL	2.69

Kaplan-Meier (KM) Method

Mean	0.865
SD	4.512
Standard Error of Mean	0.34
95% UTL 90% Coverage	7.428
95% KM Chebyshev UPL	20.58
95% KM UPL (t)	8.343
95% KM UPL for Next 216 Observations	16.99
95% KM UPL for Mean of Next 216 Observations	1.611
90% KM Percentile (z)	6.646
95% KM Percentile (z)	8.285
99% KM Percentile (z)	11.36

Pb-210 (background)

Total Number of Data	186
Number of Non-Detect Data	129
Number of Detected Data	57
Minimum Detected	1
Maximum Detected	11
Percent Non-Detects	69.35%

Minimum Non-detect	1
Maximum Non-detect	1
Mean of Detected Data	2.549
SD of Detected Data	1.7
Mean of Log-Transformed Detected Data	0.784
SD of Log-Transformed Detected Data	0.525

Data Follow Appr. Gamma Distribution at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	3.2
Largest Non-detect at Order	129
95% UPL	
95% UPL	3.63

Kaplan-Meier (KM) Method

Mean	1.475
SD	1.175
Standard Error of Mean	0.0869
95% UTL 90% Coverage	3.184
95% KM Chebyshev UPL	6.609
95% KM UPL (t)	3.422
95% KM UPL for Next 216 Observations	5.674
95% KM UPL for Mean of Next 216 Observations	1.669
90% KM Percentile (z)	2.98
95% KM Percentile (z)	3.407
99% KM Percentile (z)	4.207

Gross_Alpha (background)

Total Number of Data	186
Number of Non-Detect Data	29
Number of Detected Data	157
Minimum Detected	1
Maximum Detected	69
Percent Non-Detects	15.59%
Minimum Non-detect	1
Maximum Non-detect	1
Mean of Detected Data	8.191
SD of Detected Data	9.56
Mean of Log-Transformed Detected Data	1.712
SD of Log-Transformed Detected Data	0.851

Data appear Lognormal at 5% Significance Level

Nonparametric Background Statistics

Tolerance Factor K	1.455
95% UTL with 90% Coverage	
Order Statistic	173
Achieved CC	0.938
UTL	18.1
Largest Non-detect at Order	29
95% UPL	
95% UPL	22.08

Kaplan-Meier (KM) Method

Mean	7.07
SD	9.136
Standard Error of Mean	0.672
95% UTL 90% Coverage	20.36
95% KM Chebyshev UPL	47
95% KM UPL (t)	22.21
95% KM UPL for Next 216 Observations	39.73
95% KM UPL for Mean of Next 216 Observations	8.581

90% KM Percentile (z)	18.78
95% KM Percentile (z)	22.1
99% KM Percentile (z)	28.32

Appendix D

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
1	Location ID	Lab_TDS	D_Lab_TDS	SO4	D_SO4	Chl	D_Chл	NO3_as_N	D_NO3_as_N	Chloroform	D_Chloroform	Al	D_Al	As	D_As	Be	D_Be	Cd	D_Cd	Co	D_Co	Pb	D_Pb	Mn	D_Mn	Mo	D_Mo
2	0029 A	4870	1	2362	1	38.3	1	183	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.02	1	0.05	0	0.08	1	0.1	0
3	0029 A	5144	1	2176	1	30.4	1	189	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	no data	0	0.1	0
4	0029 A	5080	1	2333	1	42.5	1	190	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.05	1	0.1	0
5	0029 A	4981	1	2244	1	41.9	1	147	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
6	0029 A	5000	1	2268	1	38	1	172	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
7	0029 A	4778	1	2367	1	39.1	1	118	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.02	1	0.05	0	0.03	1	0.1	0
8	0029 A	4825	1	2474	1	42.8	1	166	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
9	0029 A	4775	1	2368	1	39.6	1	160	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
10	0029 A	4595	1	2487	1	37.2	1	147	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
11	0029 A	4672	1	2197	1	45.2	1	111	1	0.001	0	0.1	0	0.001	1	0.01	0	0.02	1	0.02	1	0.05	0	0.02	1	0.1	0
12	0029 A	4512	1	2110	1	36.4	1	125	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
13	0029 A	4656	1	2421	1	39	1	70.2	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
14	0029 A	4599	1	2358	1	37.7	1	129	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
15	0029 A	4147	1	2568	1	36.5	1	105	1	0.001	0	0.1	1	0.001	0	0.01	0	0.01	1	0.01	1	0.05	0	0.01	1	0.1	0
16	0029 A	4274	1	2520	1	36.7	1	91.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.03	1	0.03	1	0.05	0	0.01	0	0.1	0
17	0029 A	4349	1	2349	1	39.8	1	96.6	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
18	0029 A	4135	1	2195	1	37.1	1	81.6	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
19	0029 A	4425	1	2120	1	35.9	1	120	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.04	1	0.1	0
20	0029 A	4264	1	2376	1	35.8	1	51.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
21	0029 A	4070	1	2339	1	36	1	72.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
22	0029 A	4233	1	2625	1	33	1	70.5	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.03	1	0.1	0
23	0029 A	4347	1	2365	1	36.2	1	86	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.03	1	0.1	0
24	624	4637	1	2479	1	108	1	116	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
25	624	4760	1	2182	1	110	1	108	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
26	624	4642	1	2370	1	110	1	118	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
27	624	4722	1	2311	1	115	1	130	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.03	1	0.1	0
28	624	4839	1	2306	1	113	1	127	1	0.001	0	0.1	1	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
29	624	4783	1	2311	1	117	1	82	1	0.001	0	0.1	0	0.001	1	0.05	0	0.01	0	0.02	1	0.05	0	0.02	1	0.1	0
30	624	4686	1	2468	1	120	1	117	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.01	1	0.1	0
31	624	4832	1	2428	1	130	1	132	1	0.001	0	0.13	1	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	0.01	0	0.1	0
32	624	4689	1	2602	1	132	1	159	1	0.001	0	0.1	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
33	624	4640	1	2327	1	118	1	93.9	1	0.001	0	0.1	1	0.001	1	0.01	0	0.01	0	0.01	1	0.05	0	0.01	1	0.1	0

	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
1	Ni	D_Ni	Se	D_Se	V	D_V	U	D_U	Rad-226	D_Rad-226	Rad-228	D_Rad-228	Rad_totl	D_Rad_totl	Th-230	D_Th-230	Pb-210	D_Pb-210	Gross_Alpha	D_Gross_Alpha	well_type	
2	0.05	0	0.002	1	0.1	0	0.0556	1	0.4	1	1	0	0.4	1	5.9	1	1	0	0.6	1	background	
3	0.05	0	0.003	1	0.1	0	0.0396	1	0.3	1	1	0	0.3	1	1.1	1	1	0	1.5	1	background	
4	0.05	0	0.001	0	0.1	0	0.039	1	0.2	0	1	0	0.2	0	0.2	0	1.9	1	1	0	background	
5	0.05	0	0.002	1	0.1	0	0.036	1	0.3	1	1	0	0.3	1	0.2	0	1.9	1	0.9	1	background	
6	0.05	0	0.001	0	0.1	0	0.0302	1	0.3	1	1.4	1	1.7	1	0.6	1	1	0	1	1	background	
7	0.05	0	0.001	0	0.1	0	0.031	1	0.2	0	2.5	1	2.5	1	0.2	0	1	0	1	0	background	
8	0.05	0	0.001	0	0.1	0	0.0416	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
9	0.05	0	0.002	1	0.1	0	0.0459	1	0.2	0	1.2	1	1.2	1	0.2	0	1	0	1	0	background	
10	0.05	0	no data	0	0.1	0	0.037	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
11	0.05	0	0.001	1	0.1	0	0.05	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
12	0.05	1	0.001	1	0.1	0	0.032	1	0.2	0	1	0	0.2	0	0.2	0	1.8	1	1	0	background	
13	0.05	0	0.021	1	0.1	0	0.039	1	2.1	1	4.7	1	6.8	1	0.2	0	1.5	1	2.4	1	background	
14	0.05	0	0.002	1	0.1	0	0.04	1	9.4	1	1.5	1	1.9	1	0.2	0	1	0	9.5	1	background	
15	0.05	0	0.001	0	0.1	0	0.027	1	3.1	1	1	0	3.1	1	0.2	0	1	0	1	0	background	
16	0.05	0	0.011	1	0.1	0	0.034	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
17	0.05	0	0.001	0	0.1	0	0.053	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background	
18	0.05	0	0.001	0	0.1	0	0.158	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background	
19	0.05	0	0.001	0	0.1	0	0.04	1	0.8	1	2.9	1	3.7	1	0.2	0	1	0	1	0	background	
20	0.05	0	0.001	0	0.1	0	0.035	1	0.6	1	1	0	0.6	1	0.2	0	1.4	1	1	0	background	
21	0.05	0	0.001	0	0.1	0	0.043	1	1	1	1.5	1	2.5	1	0.2	0	1	0	3.4	1	background	
22	0.05	0	0.002	1	0.1	0	0.043	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
23	0.05	0	0.001	0	0.1	0	0.04	1	0.2	0	3.9	1	3.9	1	0.2	0	1.9	1	6.2	1	background	
24	0.05	0	0.003	1	0.1	0	0.0217	1	0.6	1	1	0	0.6	1	6.9	1	1	0	6	1	background	
25	0.05	0	0.003	1	0.1	0	0.021	1	1.6	1	1	0	1.6	1	0.5	1	1	0	1.8	1	background	
26	0.05	0	0.002	1	0.1	0	0.022	1	0.2	1	1.2	1	1.4	1	0.2	0	1	0	0.8	1	background	
27	0.05	0	0.003	1	0.1	0	0.02	1	0.4	1	1	0	0.4	1	0.2	0	1.1	1	0.9	1	background	
28	0.05	0	0.001	1	0.1	0	0.0242	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background	
29	0.05	0	0.001	0	0.1	0	0.022	1	0.2	0	1.8	1	1.8	1	0.2	0	1	0	1	0	background	
30	0.05	0	0.001	1	0.1	0	0.0268	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background	
31	0.05	0	0.001	1	0.1	0	0.038	1	0.4	1	1.5	1	1.9	1	0.2	0	1	0	1	0	background	
32	0.05	0	0.002	1	0.1	0	0.034	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
33	0.05	0	0.002	1	0.1	0	0.034	1	0.4	1	1.8	1	2.2	1	0.2	0	1	0	1	0	background	
34	0.05	0	0.002	1	0.1	0	0.029	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
35	0.05	0	0.002	1	0.1	0	0.034	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
36	0.05	0	0.002	1	0.1	0	0.03	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
37	0.05	0	0.006	1	0.1	0	0.048	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
38	0.05	0	0.008	1	0.1	0	0.043	1	0.2	0	4.2	1	4.2	1	0.2	0	1	0	1	0	background	
39	0.05	0	0.002	1	0.1	0	0.033	1	4.6	1	1	0	4.6	1	0.2	0	1.4	1	4.8	1	background	
40	0.05	0	0.003	1	0.1	0	0.019	1	0.2	0	1	0	0.2	0	0.2	0	2.8	1	1	0	background	
41	0.05	0	0.003	1	0.1	0	0.023	1	0.6	1	1	0	0.6	1	0.2	0	4.8	1	1	0	background	
42	0.05	0	0.001	0	0.1	0	0.027	1	1.3	1	5.1	1	6.4	1	0.2	0	1	0	9.9	1	background	
43	0.05	0	0.001	1	0.1	0	0.043	1	7.5	1	2.4	1	9.9	1	0.2	0	1	0	11.3	1	background	
44	0.05	0	0.001	0	0.1	0	0.029	1	0.2	0	1.1	1	1.1	1	0.2	0	1	0	1.8	1	background	
45	0.05	0	0.001	0	0.1	0	0.035	1	0.2	0	1	0	0.2									

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
67	627	5187	1	2548	1	62.4	1	133	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	0.08	1	0.1	0
68	627	4941	1	2693	1	63.1	1	61	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
69	627	4787	1	2428	1	58.5	1	107	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
70	627	4899	1	2908	1	54.6	1	108	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
71	627	5024	1	2719	1	62.6	1	137	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
72	627	5292	1	2650	1	58.9	1	105	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
73	627	5324	1	2682	1	66	1	125	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
74	627	5112	1	2555	1	61	1	90.5	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
75	627	5241	1	2760	1	58	1	126	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
76	627	5293	1	2995	1	60	1	131	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
77	627	5230	1	2740	1	65.1	1	129	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
78	627	5403	1	2725	1	64	1	113	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.13	1	0.1	0
79	627	4980	1	2468	1	54	1	119	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
80	627	5020	1	2673	1	63.3	1	121	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
81	627	5240	1	2524	1	56.6	1	153	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.1	1	0.1	0
82	627	5600	1	2570	1	64.1	1	190	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
83	627	4960	1	2440	1	66	1	122	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
84	627	5260	1	2850	1	70.6	1	107	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	1.47	1	0.1	0
85	627	5200	1	2400	1	54.6	1	141	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
86	627	5210	1	2500	1	59.6	1	133	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
87	627	5380	1	2670	1	61.5	1	109	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.14	1	0.1	0
88	627	5340	1	2740	1	60	1	142	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	1	0.01	0	0.05	0	0.22	1	0.1	0
89	627	5650	1	2660	1	68	1	131	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.18	1	0.1	0
90	627	5320	1	2620	1	67.7	1	126	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	0.08	1	0.1	0
91	627	5320	1	2320	1	58.5	1	127	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.73	1	0.1	0
92	627	5150	1	2430	1	57.2	1	144	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.06	1	0.05	0	0.86	1	0.1	0
93	627	5200	1	2370	1	55.3	1	144	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
94	627	5320	1	2390	1	53.3	1	149	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
95	627	5100	1	2160	1	44.8	1	150	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
96	627	5170	1	2460	1	57.9	1	160	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
97	627	5040	1	2780	1	52.5	1	158	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
98	627	4770	1	2680	1	53	1	156	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
99	627	5020	1	2840	1	57.3	1	149	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.14	1	0.1	0
100	627	5190	1	2320	1	60.2	1	154	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.13	1	0.1	0
101	627																										

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
67	0.05	0	0.009	1	0.1	0	0.012	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
68	0.05	0	0.003	1	0.1	0	0.015	1	0.9	1	1	0	0.9	1	0.2	0	1	0	1	0	background
69	0.05	0	0.002	1	0.1	0	0.015	1	0.8	1	1	0	0.8	1	0.2	0	3.2	1	1	0	background
70	0.05	0	0.003	1	0.1	0	0.017	1	0.8	1	2.4	1	3.2	1	0.2	0	1	0	4.6	1	background
71	0.05	0	0.001	1	0.1	0	0.016	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
72	0.05	0	0.001	0	0.1	0	0.016	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
73	0.05	0	0.001	0	0.1	0	0.016	1	1.2	1	1	0	1.2	1	0.2	0	1.4	1	1.4	1	background
74	0.05	0	0.003	1	0.1	0	0.0205	1	0.8	1	1	0	0.8	1	0.3	1	1	0	1.4	1	background
75	0.05	0	0.019	1	0.1	0	0.0168	1	0.2	0	1	0	0.2	0	0.2	0	1.7	1	2	1	background
76	0.05	0	0.001	1	0.1	0	0.018	1	0.7	1	1	0	0.7	1	1.2	1	2.4	1	1.2	1	background
77	0.05	0	0.001	0	0.1	0	0.019	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
78	0.05	0	0.001	0	0.1	0	0.024	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
79	0.05	0	0.002	1	0.1	0	0.024	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
80	0.05	0	0.001	0	0.1	0	0.018	1	1	1	1	0	1	1	0.2	0	1	0	1	0	background
81	0.05	0	0.195	1	0.1	0	0.02	1	0.9	1	1	0	0.9	1	0.2	0	1	0	1	0	background
82	0.05	0	0.001	0	0.1	0	0.02	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
83	0.05	0	0.001	0	0.1	0	0.023	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
84	0.05	0	0.001	0	0.1	0	0.0222	1	0.9	1	1	0	0.9	1	0.2	0	1	0	1	0	background
85	0.05	0	0.001	0	0.1	0	0.0221	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
86	0.05	0	0.001	0	0.1	0	0.0233	1	1.6	1	2.6	1	4.2	1	0.2	0	1	0	1	0	background
87	0.05	0	0.001	0	0.1	0	0.0345	1	1.2	1	1	0	1.2	1	0.2	0	1	0	1	0	background
88	0.05	0	0.001	0	0.1	0	0.0239	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
89	0.05	0	0.002	1	0.1	0	0.0233	1	1	1	2.5	1	3.5	1	0.2	0	1	0	1	0	background
90	0.05	0	0.001	0	0.1	0	0.002	1	0.8	1	1	0	0.8	1	0.2	0	3	1	2.9	1	background
91	0.05	0	0.002	1	0.1	0	0.0247	1	1.3	1	1	0	1.3	1	0.2	0	1	0	1	0	background
92	0.05	0	0.003	1	0.1	0	0.0233	1	4.1	1	2	1	6.1	1	0.2	0	1	0	5.5	1	background
93	0.05	0	0.001	0	0.1	0	0.0259	1	0.4	1	6.3	1	6.7	1	0.2	0	5.7	1	1	0	background
94	0.05	0	0.001	0	0.1	0	0.0003	0	0.6	1	2.5	1	3.1	1	0.2	0	1	0	1	0	background
95	0.05	0	0.001	0	0.1	0	0.024	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
96	0.05	0	0.001	1	0.1	0	0.023	1	0.4	1	2.5	1	2.9	1	0.2	0	1	0	1	0	background
97	0.05	0	0.002	1	0.1	0	0.0239	1	0.5	1	1.5	1	2	1	0.2	0	1	0	1	0	background
98	0.05	0	0.001	1	0.1	0	0.024	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
99	0.05	0	0.001	1	0.1	0	0.03	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
100	0.05	0	0.001	1	0.1	0	0.024	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
101	0.05	0	0.003	1	0.1	0	0.024	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
102	0.05	0	0.001	1	0.1	0	0.024	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
103	0.05	0	0.001	0	0.1	0	0.025	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
104	0.05	0	0.001	1	0.1	0	0.023	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
105	0.05	0	0.001	1	0.1	0	0.0235	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
106	0.05	0	0.002	1	0.1	0	0.0224	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
107	0.05	0	0.001	0	0.1	0	0.0223	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
108	0.05	0	0.001	0	0.1	0	0.0228	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
109	0.05	0	0.001	0	0.1	0	0.014	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
110	0.05	0	0.001	0	0.1	0	0.0251	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
111	0.05	0	0.001	0	0.1	0	0.0244	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
112	0.05	0	0.001	1	0.1	0	0.0249	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
113	0.05</td																				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
133	627	4740	1	2430	1	45	1	115	1	0.0005	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.01	0	0.1	0
134	627	4590	1	2590	1	41	1	117	1	0.0005	0	0.1	0	0.001	1	0.01	0	0.005	0	0.01	0	0.05	0	0.01	0	0.1	0
135	627	4710	1	2270	1	63	1	107	1	0.0005	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.01	0	0.1	0
136	639	3752	1	2319	1	33.9	1	3.6	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	1	0.05	0	0.01	0	0.1	0
137	639	4076	1	2508	1	34.2	1	4	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.27	1	0.1	0
138	639	4734	1	2830	1	37.5	1	3.4	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.04	1	0.05	0	0.41	1	0.1	0
139	639	5351	1	3153	1	40.1	1	3.3	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.56	1	0.1	0
140	639	5461	1	3265	1	39	1	3	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.89	1	0.1	0
141	639	4043	1	2452	1	27.1	1	2.05	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.02	1	0.05	0	0.99	1	0.1	0
142	639	4672	1	2944	1	32	1	2	1	0.001	0	0.12	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.34	1	0.1	0
143	639	4523	1	2690	1	29.2	1	4.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.14	1	0.1	0
144	639	4877	1	3046	1	27.6	1	3.3	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	1.47	1	0.1	0
145	639	4899	1	2803	1	40.8	1	4.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.48	1	0.1	0
146	639	4330	1	2792	1	29.4	1	2.93	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.27	1	0.1	0
147	639	5005	1	2922	1	33.5	1	3.31	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.59	1	0.1	0
148	639	4857	1	2845	1	28	1	3.74	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.41	1	0.1	0
149	639	4661	1	2801	1	27	1	2.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.51	1	0.1	0
150	639	3924	1	2359	1	23.3	1	2	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
151	639	3417	1	1988	1	18.6	1	2	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.67	1	0.1	0
152	639	3046	1	1959	1	19.2	1	1.63	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.44	1	0.1	0
153	639	3060	1	1862	1	16.8	1	2.3	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.15	1	0.1	0
154	639	3018	1	1781	1	17	1	1.38	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.71	1	0.1	0
155	639	3058	1	1862	1	15.8	1	1.31	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.18	1	0.1	0
156	639	3396	1	2142	1	16.3	1	1.61	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.8	1	0.1	0
157	642	4083	1	2209	1	37.1	1	80	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
158	642	4140	1	2182	1	37.9	1	93	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
159	642	4080	1	2176	1	26.5	1	85	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
160	642	4161	1	2129	1	35.7	1	75	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	1	0.05	0	0.1	1	0.1	0
161	642	4232	1	2209	1	34	1	83.4	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.02	1	0.05	0	0.01	0	0.1	0
162	642	4168	1	2319	1	34.4	1	66.9	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.02	1	0.05	0	0.02	1	0.1	0
163	642	4131	1	2323	1	35.1	1	61.5	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
164	642	4110	1	2216	1	34.1	1	87	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.01	0	0.1	0
165	642	4089	1	2309	1	33.1	1	68.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	0.01	0	0.1	0
166	642	4093	1	2229	1	34.5	1	55.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	no data			

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
133	0.05	0	0.001	0	0.1	0	0.0252	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
134	0.05	0	0.001	0	0.1	0	0.0246	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
135	0.05	0	0.001	0	0.1	0	0.0243	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
136	0.05	0	0.001	1	0.1	0	0.174	1	0.3	1	1	0	0.3	1	0.2	0	1	0	2.5	1	background
137	0.05	0	0.001	1	0.1	0	0.291	1	1.8	1	1	0	1.8	1	14.3	1	1	0	17.8	1	background
138	0.05	0	0.001	0	0.1	0	0.276	1	0.2	0	1	0	0.2	0	3.4	1	10.3	1	4	1	background
139	0.05	0	0.002	1	0.1	0	0.096	1	1.3	1	1.2	1	2.5	1	0.2	0	1	0	1.7	1	background
140	0.05	0	0.001	1	0.1	0	0.2416	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
141	0.05	0	0.001	0	0.1	0	0.2623	1	0.2	0	1.3	1	1.3	1	0.2	0	1.9	1	1	0	background
142	0.05	0	0.002	1	0.1	0	0.1984	1	1.4	1	1	0	1.4	1	0.2	0	1	0	1.9	1	background
143	0.05	0	0.002	1	0.1	0	0.196	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
144	0.05	0	0.035	1	0.1	0	0.2739	1	1	1	1	0	1	1	0.2	0	1	0	1	1	background
145	0.05	0	0.002	1	0.1	0	0.272	1	0.2	1	1	0	0.2	1	0.2	0	1	0	1	0	background
146	0.05	0	0.002	1	0.1	0	0.17	1	0.7	1	1.8	1	2.5	1	0.2	0	2.2	1	1	0	background
147	0.05	0	0.006	1	0.1	0	0.367	1	2.1	1	2.8	1	4.9	1	0.2	0	3.3	1	2.2	1	background
148	0.05	0	0.002	1	0.1	0	0.245	1	0.3	1	1.6	1	1.9	1	0.2	0	1.9	1	1	0	background
149	0.05	0	0.003	1	0.1	0	0.223	1	0.8	1	3.5	1	4.3	1	0.2	0	1	0	1	0	background
150	0.05	0	0.002	1	0.1	0	0.094	1	0.2	0	4.1	1	4.1	1	0.2	0	3.9	1	1	0	background
151	0.05	0	0.003	1	0.1	0	0.08	1	6	1	6	1	12	1	0.2	0	1	0	6.4	1	background
152	0.05	0	0.009	1	0.1	0	0.109	1	0.2	1	1	0	0.2	1	0.2	0	1	0	1	0	background
153	0.05	0	0.003	1	0.1	0	0.071	1	3	1	1.9	1	4.9	1	0.2	0	2	1	5.8	1	background
154	0.05	0	0.001	0	0.1	0	0.107	1	3.8	1	1	0	3.8	1	0.2	0	3.2	1	4.8	1	background
155	0.05	0	0.002	1	0.1	0	0.11	1	0.3	1	1	0	0.3	1	0.2	0	7.2	1	1	0	background
156	0.05	0	0.001	0	0.1	0	0.07	1	0.2	0	7	1	7	1	0.2	0	1	0	10.8	1	background
157	0.05	0	0.002	1	0.1	0	0.0356	1	0.7	1	1	0	0.7	1	5.4	1	1	0	4.3	1	background
158	0.05	0	0.002	1	0.1	0	0.083	1	2.8	1	1.2	1	4	1	3.6	1	1	0	6.4	1	background
159	0.05	0	0.001	1	0.1	0	0.001	1	0.2	0	1	0	0.2	0	0.2	1	1	0	1	1	background
160	0.05	0	0.002	1	0.1	0	0.036	1	4.7	1	1	0	4.7	1	4.3	1	1	0	0.4	1	background
161	0.05	0	0.002	1	0.1	0	0.055	1	0.02	0	1	0	0.2	0	0.2	0	1	0	1	0	background
162	0.05	0	0.001	0	0.1	0	0.0446	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
163	0.05	0	0.001	0	0.1	0	0.0357	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
164	0.05	0	0.001	1	0.1	0	0.0363	1	0.2	0	1	0	0.2	0	0.2	0	3	1	1	0	background
165	0.05	0	0.004	1	0.1	0	0.0557	1	0.8	1	1	0	0.8	1	0.2	0	3.2	1	1	0	background
166	0.05	0	0.002	1	0.1	0	0.04	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
167	0.05	0	0.002	1	0.1	0	0.029	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
168	0.05	0	0.002	1	0.1	0	0.108	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
169	0.05	0	0.003	1	0.1	0	0.05	1	0.4	1	1.1	1	1.5	1	0.2	0	1	0	1	0	background
170	0.05	0	0.001	1	0.1	0	0.055	1	0.3	1	3	1	3.3	1	0.2	0	1	0	1	0	background
171	0.05	0	0.003	1	0.1	0	0.046	1	0.4	1	1	0	0.4	1	0.2	0	2.7	1	1.3	1	background
172	0.05	0	0.001	1	0.1	0	0.06	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
173	0.05	0	0.003	1	0.1	0	0.051	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
174	0.05	0	0.001	0	0.1	0	0.036	1	0.5	1	1.3	1	1.8	1	0.2	0	1	0	1	0	background
175	0.05	0	0.001	0	0.1	0	0.046	1	0.4	1	1	0	0.4	1	0.2	0	3.1	1	1	0	background
176	0.05	0	0.003	1	0.1	0	0.043	1	0.9	1	1	0	0.9	1	0.2	0	2.7	1	1	0	background
177	0.05	0	0.006	1	0.1	0	0.038	1	0.8	1	4.6	1	5.4	1	0.2	0	3.5	1	5.3	1	background
178	0.05	0	0.001	0	0.1	0	0.039	1	0.7	1	1.7	1	2.4	1</td							

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA		
199	645	10530		1	2728	1	157	1	1225	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.72	1	0.1	0
200	645	9343		1	2674	1	150	1	800	1	0.001	0	0.1	0	0.001	0	0.05	0	0.07	1	0.01	1	0.05	0	0.54	1	0.1	0
201	EPA 22A	1384		1	646	1	10.7	1	0.2	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
202	EPA 22A	1310		1	605	1	11.4	1	0.26	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
203	EPA 22A	1478		1	677	1	11.7	1	0.25	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
204	EPA 22A	1448		1	845	1	11.5	1	0.21	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
205	EPA 22A	1505		1	681	1	11.6	1	0.12	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
206	EPA 22A	1536		1	704	1	10.9	1	0.2	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.03	1	0.05	0	0.11	1	0.1	0
207	EPA 22A	1551		1	754	1	16.7	1	0.21	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.1	1	0.1	0
208	EPA 22A	1494		1	720	1	10.2	1	0.21	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
209	EPA 22A	1532		1	663	1	11.5	1	0.09	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.1	1	0.1	0
210	EPA 22A	1430		1	685	1	16.2	1	0.01	0	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
211	EPA 22A	1416		1	676	1	11.4	1	0.01	0	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
212	EPA 22A	1453		1	727	1	11	1	0.1	0	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
213	EPA 22A	1456		1	714	1	12.2	1	0.7	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
214	EPA 22A	1603		1	744	1	11.4	1	0.1	0	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
215	EPA 22A	1497		1	746	1	15.9	1	0.1	0	0.001	0	0.1	0	0.001	0	no data	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
216	EPA 22A	1631		1	777	1	12.5	1	0.6	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	0.12	1	0.1	0
217	EPA 22A	1635		1	859	1	11.8	1	0.33	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.11	1	0.1	0
218	EPA 22A	1699		1	847	1	11.2	1	0.33	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
219	EPA 22A	1748		1	938	1	11.4	1	0.91	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.13	1	0.1	0
220	EPA 22A	1595		1	815	1	11.8	1	0.68	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
221	EPA 22A	1548		1	877	1	9.8	1	0.46	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
222	EPA 22A	1611		1	829	1	11	1	0.99	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
223	EPA 22A	1726		1	828	1	12.3	1	0.92	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.13	1	0.1	0
224	EPA 22A	1585		1	751	1	10.5	1	1.09	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
225	EPA 22A	1820		1	974	1	14.3	1	1.92	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.15	1	0.1	0
226	EPA 22A	1553		1	724	1	12	1	1.12	1	0.001	0	0.1	0	0.003	1	0.01	0	0.01	0	0.01	0	0.05	0	0.11	1	0.1	0
227	EPA 22A	1724		1	824	1	11.5	1	1.73	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
228	EPA 22A	1782		1	881	1	12.4	1	1.85	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
229	EPA 22A	1815		1	816	1	12.1	1	1.29	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.15	1	0.1	0
230	EPA 22A	2040		1	1041	1	16.7	1	1.44	1	0.001	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	0.17	1	0.1	0
231	EPA 22A	2070		1	1178	1	20.4	1	4.07	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.15	1	0.1	0

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	
199	0.05	0	0.018	1	0.1	0	0.052	1	0.2	0	1	0	0.2	0	1.1	1	1	0	1	1	background	
200	0.05	0	0.016	1	0.1	0	no data	0	0.2	0	1.6	1	1.6	1	0.2	0	1	0	1	0	background	
201	0.05	0	0.001	0	0.1	0	0.0276	1	0.5	1	1	0	0.5	1	1.3	1	1	0	1	0	background	
202	0.05	0	0.001	0	0.1	0	0.029	1	0.9	1	1	0	0.9	1	5.9	1	4.1	1	7.8	1	background	
203	0.05	0	0.001	1	0.1	0	0.028	1	0.2	1	1.9	1	2.1	1	3.1	1	1	0	3.5	1	background	
204	0.05	0	0.001	1	0.1	0	0.027	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background	
205	0.05	0	0.001	0	0.1	0	0.0359	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
206	0.05	0	0.001	0	0.1	0	0.0254	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
207	0.05	0	0.001	0	0.1	0	0.0241	1	0.7	1	1	0	0.7	1	0.2	0	1.7	1	1.1	1	background	
208	0.05	0	0.001	0	0.1	0	0.021	1	0.2	0	1.7	1	1.7	1	0.2	0	1	0	1	0	background	
209	0.05	0	0.001	0	0.1	0	0.0338	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background	
210	0.05	0	0.001	0	0.1	0	0.013	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background	
211	0.05	0	0.001	1	0.1	0	0.036	1	2	1	2.3	1	4.3	1	0.2	0	3.4	1	2	1	background	
212	0.05	0	0.001	0	0.1	0	0.01	1	0.3	1	1.5	1	1.8	1	0.2	0	1	0	1	0	background	
213	0.05	0	0.001	1	0.1	0	0.028	1	0.5	1	1.4	1	1.9	1	0.2	0	1	0	1	0	background	
214	0.05	0	0.001	0	0.1	0	0.009	1	0.9	1	2.8	1	3.7	1	0.2	0	2.2	1	1	1	0	background
215	0.05	0	0.001	0	0.1	0	0.041	1	0.2	0	2.6	1	2.6	1	0.2	0	1	0	1	0	background	
216	0.05	0	0.001	0	0.1	0	0.039	1	1	1	1	0	1	1	0.2	0	1	0	1.5	1	background	
217	0.05	0	0.001	0	0.1	0	0.039	1	0.6	1	1	0	0.6	1	0.2	0	1.6	1	1	0	background	
218	0.05	0	0.001	0	0.1	0	0.045	1	0.6	1	1	0	0.6	1	0.2	0	2	1	1	0	background	
219	0.05	0	0.001	0	0.1	0	0.045	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
220	0.05	0	0.001	0	0.1	0	0.034	1	0.5	1	1.4	1	1.9	1	0.2	0	1.1	1	2.8	1	background	
221	0.05	0	0.001	0	0.1	0	0.035	1	4.4	1	6.1	1	1.5	1	0.2	0	1	0	13.7	1	background	
222	0.05	0	0.001	0	0.1	0	0.036	1	0.8	1	1	0	0.8	1	0.2	0	5.4	1	1	0	background	
223	0.05	0	0.001	0	0.1	0	0.051	1	0.8	1	2.3	1	3.1	1	0.2	0	1	0	4.4	1	background	
224	0.05	0	0.001	0	0.1	0	0.031	1	0.3	1	1.6	1	1.9	1	0.2	0	1	0	2.7	1	background	
225	0.05	0	0.001	0	0.1	0	0.042	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1.5	1	background	
226	0.05	0	0.001	0	0.1	0	0.036	1	1.3	1	3.8	1	5.1	1	0.2	0	1	0	2.3	1	background	
227	0.05	0	0.001	0	0.1	0	0.038	1	0.4	1	1	0	0.4	1	0.8	1	1	0	1	0	background	
228	0.05	0	0.001	0	0.1	0	0.048	1	0.5	1	2	1	2.5	1	0.2	0	1	0	1.4	1	background	
229	0.05	0	0.001	0	0.1	0	0.048	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background	
230	0.05	0	0.001	0	0.1	0	0.051	1	2.1	1	1	0	2.1	1	0.2	0	1	0	2.2	1	background	
231	0.05	0	0.001	0	0.1	0	0.032	1	1.1	1	1	0	1.1	1	0.2	0	1	0	1.2	1	background	
232	0.05	0	0.001	0	0.1	0	0.043	1	1.5	1	1	0	1.5	1	0.2	0	1	0	3.7	1	background	
233	0.05	0	0.003	1	0.1	0	0.032	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background	
234	0.05	0	0.001	1	0.1	0	0.0184	1	0.6	1	1	0	0.6	1	0.2	0	1	1	1.8	1	background	
235	0.05	0	0.001	1	0.1	0	0.022	1	1	1	1	0	1	1	0.2	0	1.2	1	1.1	1	background	
236	0.05	0	0.001	0	0.1	0	0.019	1	0.2	1	2	1	2.2	1	0.7	1	1	0	1	1	background	
237	0.05	0	0.001	1	0.1	0	0.019	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1.4	1	background	
238	0.05	0	0.001	0	0.1	0	0.0194	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
239	0.05	0	0.001	0	0.1	0	0.0206	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
240	0.05	0	0.001	0	0.1	0	0.0277	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background	
241	0.05	0	0.001	0	0.1	0	0.017	1	0.2	0	1	0	0.2	0	0.2	0	1.5	1	1	0	background	
242	0.05	0	0.001	0	0.1	0	0.0231	1	0.2	0	1	1	1	1	0.2	0	1.7	1	1	0	background	
243	0.05	0	0.001	0	0.1	0	0.049	1	0.2	0	3.5	1	3.5	1	0.2	0	1	0	1	0	background	
244	0.05	0	0.001	1	0.1	0	0.027	1	0.7	1	1	0	0.7</td									

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
265	EPA 27	4786	1	2324	1	89.4	1	196	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.04	1	0.05	0	0.01	0	0.1	0
266	EPA 27	4274	1	2074	1	83.8	1	171	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	0.01	1	0.1	0
267	EPA 27	4727	1	2296	1	85.3	1	256	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
268	EPA 27	4925	1	2420	1	81.3	1	200	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
269	EPA 27	4461	1	2229	1	98	1	141	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	no data	0	0.01	1	0.1	0
270	EPA 27	4570	1	2103	1	92.1	1	125	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
271	EPA 27	4087	1	2443	1	82.5	1	194	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
272	EPA 27	4239	1	2224	1	99	1	150	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
273	EPA 27	4534	1	2302	1	99.1	1	147	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
274	EPA 27	4496	1	2386	1	98.9	1	195	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
275	EPA 27	4612	1	2260	1	111	1	150	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
276	EPA 27	4408	1	2195	1	104	1	141	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	1	0.05	0	0.02	1	0.1	0
277	EPA 27	3844	1	2175	1	101	1	92.5	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
278	EPA 27	4266	1	2181	1	97.8	1	122	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
279	EPA 27	4020	1	2073	1	107	1	143	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
280	EPA 27	3954	1	2060	1	108	1	148	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
281	EPA 27	4264	1	2245	1	108	1	141	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
282	EPA 27	4030	1	2066	1	113	1	190	1	0.001	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
283	EPA 27	4125	1	2054	1	118	1	149	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
284	EPA 27	3897	1	1872	1	118	1	129	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
285	EPA 27	3760	1	1796	1	108	1	121	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
286	EPA 27	3743	1	1929	1	116	1	132	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
287	EPA 27	3875	1	2080	1	126	1	123	1	0.001	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	0.01	1	0.1	0
288	EPA 27	3730	1	2009	1	124	1	143	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
289	EPA 27	3720	1	1865	1	112	1	121	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
290	EPA 27	3720	1	1910	1	156	1	113	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
291	EPA 27	3660	1	1876	1	120	1	139	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
292	EPA 27	3710	1	1790	1	123	1	116	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
293	EPA 28	4825	1	2622	1	110	1	74	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.2	1	0.1	0
294	EPA 28	4989	1	2720	1	107	1	113	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.19	1	0.1	0
295	EPA 28	4904	1	2434	1	116	1	75	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	1	0.05	0	0.18	1	0.1	0
296	EPA 28	4977	1	2330	1	117	1	69	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.17	1	0.1	0
297	EPA 28	5037	1	2210	1	126	1	74.2	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	0.17	1	0.1	0
298	EPA 28	5306	1	3005	1	111	1	62.5	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	1						

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
265	0.05	0	0.003	1	0.1	0	0.0282	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
266	0.05	0	0.006	1	0.1	0	0.0286	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1.2	1	background
267	0.05	0	0.004	1	0.1	0	0.024	1	0.2	0	1	0	0.2	0	0.2	0	1.3	1	1	0	background
268	0.05	0	0.005	1	0.1	0	0.0347	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
269	0.05	0	0.006	1	0.1	0	0.032	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
270	0.05	0	0.001	1	0.1	0	0.039	1	0.5	1	1	1	1.5	1	0.2	0	1.6	1	1	0	background
271	0.05	0	0.096	1	0.1	0	0.014	1	0.2	0	1	0	0.2	0	0.2	0	2.4	1	1	0	background
272	0.05	0	0.006	1	0.1	0	0.024	1	0.6	1	2.5	1	3.1	1	0.2	0	1	0	1	0	background
273	0.05	0	0.007	1	0.1	0	0.029	1	0.9	1	5.1	1	6	1	0.2	0	2.2	1	1	0	background
274	0.05	0	0.031	1	0.1	0	0.011	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
275	0.05	0	0.011	1	0.1	0	0.023	1	0.2	0	1	0	0.2	0	0.2	0	1.9	1	1	0	background
276	0.05	0	0.015	1	0.1	0	0.018	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
277	0.05	0	0.011	1	0.1	0	0.019	1	0.5	1	1	0	0.5	1	0.2	0	1.9	1	1	0	background
278	0.05	0	0.01	1	0.1	0	0.023	1	0.2	0	1.7	1	1.7	1	0.2	0	1	0	3.5	1	background
279	0.05	0	0.009	1	0.1	0	0.019	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
280	0.05	0	0.007	1	0.1	0	0.014	1	0.9	1	3.8	1	4.7	1	0.2	0	1.9	1	6.8	1	background
281	0.05	0	0.008	1	0.1	0	0.021	1	0.3	1	1	0	0.3	1	0.2	0	1	1	1	0	background
282	0.05	0	0.011	1	0.1	0	0.017	1	0.2	0	2.6	1	2.6	1	0.2	0	3	1	4.3	1	background
283	0.05	0	0.011	1	0.1	0	0.014	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
284	0.05	0	0.012	1	0.1	0	0.011	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
285	0.05	0	0.035	1	0.1	0	0.0094	1	0.2	1	1.5	1	1.7	1	0.2	0	1	0	1	0	background
286	0.05	0	0.038	1	0.1	0	0.011	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
287	0.05	0	0.009	1	0.1	0	0.013	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
288	0.05	0	0.001	0	0.1	0	0.01	1	2.1	1	1	0	2.1	1	0.2	0	1	0	1	0	background
289	0.05	0	0.009	1	0.1	0	0.012	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
290	0.05	0	0.015	1	0.1	0	0.006	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
291	0.05	0	0.042	1	0.1	0	0.003	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
292	0.05	0	0.019	1	0.1	0	0.006	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
293	0.05	0	0.002	1	0.1	0	0.0313	1	0.9	1	1.8	1	2.7	1	6.9	1	2.6	1	1	0	background
294	0.05	0	0.002	1	0.1	0	0.041	1	2.7	1	1	0	2.7	1	4.6	1	1	0	8.4	1	background
295	0.05	0	0.002	1	0.1	0	0.045	1	0.4	1	3	1	3.4	1	1.8	1	1.3	1	3.2	1	background
296	0.05	0	0.001	1	0.1	0	0.26	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1.3	1	background
297	0.05	0	0.001	0	0.1	0	0.0378	1	0.2	0	1.2	1	1.2	1	0.2	0	1	0	1	0	background
298	0.05	0	0.001	0	0.1	0	0.0206	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
299	0.05	0	0.002	1	0.1	0	0.0268	1	2.4	1	1	0	2.4	1	0.2	0	6.3	1	3.1	1	background
300	0.05	0	0.001	0	0.1	0	0.027	1	0.9	1	3.1	1	4	1	0.2	0	1	0	1	0	background
301	0.05	0	0.001	0	0.1	0	0.0302	1	1.4	1	1.1	1	2.5	1	0.2	0	1	0	2	1	background
302	0.05	0	0.001	0	0.1	0	0.05	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
303	0.05	0	0.001	1	0.1	0	0.024	1	0.8	1	3.5	1	4.3	1	0.2	0	2.7	1	1	0	background
304	0.05	0	0.008	1	0.1	0	0.019	1	0.2	1	1.4	1	1.6	1	0.2	0	1	0	1	0	background
305	0.05	0	0.001	1	0.1	0	0.023	1	1.7	1	1	0	1.7	1	0.2	0	1	0	1.9	1	background
306	0.05	0	0.001	0	0.1	0	0.029	1	0.9	1	1	0	0.9	1	0.2	0	2.6	1	1	0	background
307	0.05	0	0.016	1	0.1	0	0.026	1	0.4	1	3.3	1	3.7	1	0.2	0	1	0	1	0	background
308	0.05	0	0.001	0	0.1	0	0.028	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
309	0.05	0	0.001	0	0.1	0	0.029	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
310	0.05	0	0.001	1	0.1	0	0.038	1	1	1	1	0	1	1	0.2	0					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
331	EPA 28	5380	1	3100	1	101	1	43.7	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.3	1	0.1	0
332	EPA 28	5360	1	2930	1	106	1	45.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.32	1	0.1	0
333	EPA 28	5390	1	3010	1	106	1	40	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.26	1	0.1	0
334	EPA 28	5210	1	2930	1	108	1	40.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.17	1	0.1	0
335	EPA 28	5280	1	2820	1	99.6	1	39.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.31	1	0.1	0
336	EPA 28	5080	1	2600	1	115	1	49.5	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.5	1	0.1	0
337	EPA 28	5190	1	2570	1	119	1	46.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.39	1	0.1	0
338	EPA 28	5110	1	2500	1	110	1	52.3	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.37	1	0.1	0
339	EPA 28	5110	1	2850	1	116	1	51	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.42	1	0.1	0
340	EPA 28	5090	1	3060	1	107	1	47.6	1	0.001	0	0.6	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.42	1	0.1	0
341	EPA 28	4670	1	2910	1	103	1	49.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.45	1	0.1	0
342	EPA 28	4950	1	3010	1	117	1	50.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.43	1	0.1	0
343	EPA 28	5120	1	2480	1	118	1	53.6	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.47	1	0.1	0
344	EPA 28	4510	1	2870	1	113	1	42.3	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.47	1	0.1	0
345	EPA 28	5220	1	2690	1	97	1	48.3	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.48	1	0.1	0
346	EPA 28	5220	1	2600	1	120	1	42	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.48	1	0.1	0
347	EPA 28	5100	1	2600	1	143	1	55	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.42	1	0.1	0
348	EPA 28	5210	1	2500	1	148	1	48.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.4	1	0.1	0
349	EPA 28	5190	1	2820	1	143	1	50	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.44	1	0.1	0
350	EPA 28	5190	1	2560	1	123	1	48	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.42	1	0.1	0
351	EPA 28	5170	1	3010	1	150	1	44.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.43	1	0.1	0
352	EPA 28	5230	1	2830	1	136	1	43.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.44	1	0.1	0
353	EPA 28	5160	1	2870	1	137	1	45.9	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.59	1	0.1	0
354	EPA 28	5140	1	2960	1	134	1	42.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.46	1	0.1	0
355	EPA 28	5200	1	2780	1	119	1	43.9	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.47	1	0.1	0
356	EPA 28	5150	1	2660	1	116	1	44.9	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.5	1	0.1	0
357	EPA 28	5250	1	2850	1	120	1	43.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.41	1	0.1	0
358	EPA 28	5190	1	2680	1	113	1	45.3	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.44	1	0.1	0
359	EPA 28	5130	1	2900	1	135	1	41.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.5	1	0.1	0
360	EPA 28	5230	1	2500	1	131	1	46	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.48	1	0.1	0
361	EPA 28	5090	1	2690	1	121	1	42	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.49	1	0.1	0
362	EPA 28	5270	1	3730	1	127	1	38.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.47	1	0.1	0
363	EPA 28	5170	1	2860	1	129	1	42.8	1	0.001	0	0.2	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.55	1	0.1	0
364	EPA 28	5220	1	2800	1	116	1	41.5	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01</							

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
331	0.05	0	0.001	0	0.1	0	0.0324	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
332	0.05	0	0.001	0	0.1	0	0.0251	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
333	0.05	0	0.001	1	0.1	0	0.0282	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1.6	1	background
334	0.05	0	0.001	0	0.1	0	0.03	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
335	0.05	0	0.001	1	0.1	0	0.0256	1	1.8	1	3.4	1	5.2	1	0.2	0	1	0	3	1	background
336	0.05	0	0.001	0	0.1	0	0.0445	1	0.5	1	2	1	2.5	1	0.2	0	14.2	1	1	0	background
337	0.05	0	0.001	0	0.1	0	0.0375	1	0.2	0	1.8	1	1.8	1	0.2	0	1	0	1	0	background
338	0.05	0	0.001	0	0.1	0	0.042	1	0.2	0	1.3	1	1.3	1	0.2	0	1	0	1	0	background
339	0.05	0	0.001	0	0.1	0	0.039	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
340	0.05	0	0.001	0	0.1	0	0.042	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
341	0.05	0	0.001	0	0.1	0	0.0398	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
342	0.05	0	0.001	0	0.1	0	0.037	1	0.5	1	2	1	2.5	1	0.2	0	1	0	1	0	background
343	0.05	0	0.001	0	0.1	0	0.042	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
344	0.05	0	0.001	1	0.1	0	0.038	1	0.4	1	1	0	0.4	1	0.2	0	1	0	1	0	background
345	0.05	0	0.001	0	0.1	0	0.0403	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
346	0.05	0	0.001	0	0.1	0	0.043	1	0.4	1	2.4	1	2.8	1	0.2	0	1	0	1	0	background
347	0.05	0	0.001	0	0.1	0	0.037	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
348	0.05	0	0.001	0	0.1	0	0.0374	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
349	0.05	0	0.001	0	0.1	0	0.0354	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
350	0.05	0	0.001	0	0.1	0	0.0358	1	0.2	1	1	0	0.2	1	0.2	0	1	0	1	0	background
351	0.05	0	0.001	0	0.1	0	0.036	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
352	0.05	0	0.001	0	0.1	0	0.0291	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
353	0.05	0	0.001	0	0.1	0	0.0519	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
354	0.05	0	0.001	0	0.1	0	0.0397	1	0.7	1	2.2	1	2.9	1	0.2	0	1	0	1	0	background
355	0.05	0	0.001	0	0.1	0	0.0388	1	0.9	1	1	0	0.9	1	0.2	0	1	0	1	0	background
356	0.05	0	0.001	0	0.1	0	0.0378	1	0.2	0	2.5	1	2.5	1	0.2	0	1	0	1	0	background
357	0.05	0	0.001	0	0.1	0	0.0464	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
358	0.05	0	0.001	0	0.1	0	0.0329	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
359	0.05	0	0.001	0	0.1	0	0.0503	1	0.8	1	3.7	1	4.5	1	0.2	0	1	0	1	0	background
360	0.05	0	0.001	0	0.1	0	0.0464	1	0.2	0	5.3	1	5.3	1	0.2	0	1	0	1	0	background
361	0.05	0	0.001	0	0.1	0	0.0401	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
362	0.05	0	0.001	0	0.1	0	0.0386	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
363	0.05	0	0.001	0	0.1	0	0.0394	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
364	0.05	0	0.001	0	0.1	0	0.0421	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
365	0.05	0	0.001	0	0.1	0	0.0403	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
366	0.05	0	0.001	0	0.1	0	0.0368	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1.2	1	background
367	0.05	0	0.001	0	0.1	0	0.0445	1	0.6	1	1	0	0.6	1	0.2	0	1	0	2.1	1	background
368	0.05	0	0.001	0	0.1	0	0.0459	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
369	0.05	0	0.001	0	0.1	0	0.0418	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1.2	1	background
370	0.05	0	0.001	0	0.1	0	0.0408	1	0.4	1	1.4	1	1.8	1	0.2	0	1	0	1.4	1	background
371	0.05	0	0.001	0	0.1	0	0.0476	1	0.2	0	1.5	1	1.5	1	0.2	0	1	0	1	0	background
372	0.05	0	0.001	0	0.1	0	0.042	1	0.6	1	2.4	1	3	1	0.2	0	1	0	1	0	background
373	0.05	0	0.001	0	0.1	0	0.0435	1	0.8	1	3	1	3.8	1	0.2	0	1	0	1.3	1	background
374	0.05	0	0.001	0	0.1	0	0.0437	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
375	0.05	0	0.001	0	0.1	0	0.0459	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
376	0.05	0	0.001	0	0.1	0	0.043	1	0.2	0	1	0	0.2	0	0.2						

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
397	GW 4	4326	1	1651	1	54.7	1	176	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.02	1	0.1	0
398	GW 4	4135	1	1610	1	56.2	1	116	1	1	0	0.1	0	0.001	1	0.05	0	0.01	0	0.02	1	0.05	0	0.11	1	0.1	0
399	GW 4	4064	1	1678	1	54.6	1	176	1	1	0	0.24	1	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.04	1	0.1	0
400	GW 4	3990	1	1660	1	46.3	1	162	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
401	GW 4	3981	1	1703	1	41.2	1	132	1	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.14	1	0.1	0
402	GW 4	3880	1	1826	1	43.8	1	67.6	1	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.14	1	0.1	0
403	GW 4	3779	1	1803	1	38.7	1	77.4	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
404	GW 4	3334	1	1621	1	38.7	1	78.2	1	1	0	0.1	0	0.004	1	0.01	0	0.01	0	0.01	0	0.05	0	0.06	1	0.1	0
405	GW 4	3505	1	1663	1	40.7	1	108	1	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.05	1	0.1	0
406	GW 4	3857	1	1727	1	42	1	162	1	1	0	0.1	1	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	0.05	1	0.1	1
407	GW 4	3595	1	1454	1	49.1	1	138	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.06	1	0.1	0
408	GW 4	3898	1	1694	1	51.2	1	137	1	1	0	0.1	0	0.001	1	0.005	0	0.01	0	0.01	1	0.05	0	0.05	1	0.1	0
409	GW 4	4181	1	1820	1	47	1	125	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.04	1	0.1	0
410	GW 4	4081	1	1700	1	42.1	1	124	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.05	1	0.1	0
411	GW 4	3798	1	1689	1	40.2	1	82.4	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
412	GW 4	3682	1	1688	1	39.1	1	109	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.04	1	0.1	0
413	GW 4	3676	1	1729	1	40.1	1	110	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
414	GW 4	3849	1	1796	1	45.6	1	119	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.01	0	0.1	0
415	GW 4	3937	1	1697	1	45.6	1	122	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
416	GW 4	3989	1	1844	1	49	1	141	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.04	1	0.1	0
417	GW 4	3957	1	1740	1	58	1	141	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
418	GW 4	4277	1	1692	1	51	1	165	1	1	0	0.1	0	0.004	1	0.01	0	0.01	0	0.01	0	0.05	0	0.09	1	0.1	0
419	GW 4	4092	1	1688	1	46.6	1	146	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.02	1	0.1	0
420	GW 4	3900	1	1671	1	44	1	126	1	1	0	0.19	1	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	0.08	1	0.1	0
421	GW 4	3490	1	1739	1	48	1	116	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.07	1	0.1	0
422	GW 4	3840	1	1734	1	46	1	119	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.1	1	0.1	0
423	GW 4	3890	1	1710	1	46.2	1	111	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.12	1	0.1	0
424	GW 4	3950	1	1610	1	44	1	106	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.16	1	0.1	0
425	GW 4	3880	1	1800	1	44.2	1	105	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	0.04	1	0.1	0
426	GW 4	3890	1	1600	1	35	1	95.6	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.1	1	0.1	0
427	GW 4	3870	1	1600	1	38.7	1	86.9	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.09	1	0.1	0
428	GW 4	3840	1	1780	1	42.4	1	105	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.21	1	0.1	0
429	GW 4	3810	1	1620	1	41.4	1	75.7	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.11	1	0.1	0
430	GW 4	3810	1	1620	1	50.1	1	100	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	0.1	1	0.1	0

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
397	0.05	0	0.004	1	0.1	0	0.0756	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
398	0.05	0	0.001	0	0.1	0	0.059	1	0.2	0	2.7	1	2.7	1	0.2	0	1	0	1	0	background
399	0.05	0	0.004	1	0.1	0	0.0647	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1.2	1	background
400	0.05	0	0.005	1	0.1	0	0.048	1	0.2	0	1	0	0.2	0	0.2	0	2.2	1	1	0	background
401	0.05	0	0.008	1	0.1	0	0.044	1	0.2	1	1	0	0.2	1	0.2	0	1	0	1	0	background
402	0.05	0	0.008	1	0.1	0	0.044	1	1.2	1	1	0	1.2	1	0.2	0	1	0	1	0	background
403	0.05	0	0.006	1	0.1	0	0.124	1	0.2	0	1.9	1	1.9	1	0.2	0	1	0	1	0	background
404	0.05	0	0.019	1	0.1	0	0.07	1	0.2	0	7.1	1	7.1	1	0.2	0	6.3	1	1	0	background
405	0.05	0	0.004	1	0.1	0	0.047	1	0.2	0	2.6	1	2.6	1	0.2	0	1	0	1	0	background
406	0.05	0	0.016	1	0.1	0	0.086	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
407	0.05	0	0.015	1	0.1	0	0.111	1	2.3	1	1	0	2.3	1	0.2	0	1	0	5.1	1	background
408	0.05	0	0.01	1	0.1	0	0.081	1	0.3	1	1	0	0.3	1	0.2	0	2.8	1	1	0	background
409	0.05	0	0.016	1	0.1	0	0.064	1	0.2	1	1	0	0.2	1	0.2	0	3.2	1	1	0	background
410	0.05	0	0.007	1	0.1	0	0.073	1	0.2	0	1.3	1	1.3	1	0.2	0	1.2	1	1.9	1	background
411	0.05	0	0.007	1	0.1	0	0.052	1	3.3	1	3.3	1	6.6	1	0.2	0	1.6	1	10.6	1	background
412	0.05	0	0.004	1	0.1	0	0.067	1	0.9	1	1	0	0.9	1	0.2	0	6.8	1	1	0	background
413	0.05	0	0.007	1	0.1	0	0.067	1	0.5	1	14.8	1	15.3	1	0.2	0	1	0	22.9	1	background
414	0.05	0	0.004	1	0.1	0	0.087	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
415	0.05	0	0.002	1	0.1	0	0.062	1	1.1	1	1	0	1.1	1	0.2	0	1	0	1.3	1	background
416	0.05	0	0.005	1	0.1	0	0.072	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
417	0.05	0	0.012	1	0.1	0	0.0374	1	0.9	1	1	0	0.9	1	0.4	1	1	0	1	0	background
418	0.05	0	0.019	1	0.1	0	0.0711	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1.3	1	background
419	0.05	0	0.001	0	0.1	0	0.065	1	0.3	1	1	0	0.3	1	0.2	0	1	0	1	0	background
420	0.05	0	0.007	1	0.1	0	0.063	1	0.8	1	1	0	0.8	1	0.8	1	1	0	1	0	background
421	0.05	0	0.003	1	0.1	0	0.06	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
422	0.05	0	0.274	1	0.1	0	0.066	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
423	0.05	0	0.001	0	0.1	0	0.063	1	2.6	1	1	0	2.6	1	0.2	0	1	0	2.9	1	background
424	0.05	0	0.004	1	0.1	0	0.066	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
425	0.05	0	0.005	1	0.1	0	0.0714	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
426	0.05	0	0.037	1	0.1	0	0.0729	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
427	0.05	0	0.024	1	0.1	0	0.0734	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
428	0.05	0	0.005	1	0.1	0	0.0782	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
429	0.05	0	0.009	1	0.1	0	0.0744	1	1.2	1	1	0	1.2	1	0.2	0	1	0	1	0	background
430	0.05	0	0.007	1	0.1	0	0.0715	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background

Appendix E

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
1	Location ID	Lab_TDS	D_Lab_TDS	SO4	D_SO4	Chl	D_Chл	NO3_as_N	D_NO3_as_N	Chloroform	D_Chloroform	Al	D_Al	As	D_As	Be	D_Be	Cd	D_Cd	Co	D_Co	Pb	D_Pb	Mn	D_Mn	Mo	D_Mo
2	619	5513	1	3852	1	35	1	0.34	1	1	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	2	1	0.1	0
3	619	5086	1	3251	1	36.6	1	1.56	1	1	0	0.1	0	0.001	0	0.05	0	0.01	0	0.02	1	0.05	0	1.3	1	0.1	0
4	619	5278	1	3360	1	40.5	1	1.01	1	1	0	0.1	0	0.001	0	0.05	0	0.01	0	0.03	1	0.05	0	1.4	1	0.1	0
5	619	4840	1	2966	1	38.5	1	0.22	1	1	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	1	1	0.1	0
6	619	5020	1	3160	1	34.2	1	0.09	1	1	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	1	0.05	0	1.23	1	0.1	0
7	619	4526	1	2738	1	36.6	1	0.01	0	1	0	0.1	0	0.001	0	0.05	0	0.01	0	0.03	1	0.05	0	0.89	1	0.1	0
8	619	5538	1	3616	1	41.4	1	0.18	1	1	0	0.1	0	0.001	0	0.01	0	0.01	1	0.01	0	0.05	0	2.5	1	0.1	0
9	619	5610	1	3589	1	43.1	1	1	1	1	0	0.12	1	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	2.01	1	0.1	0
10	619	5446	1	3882	1	43.7	1	0.17	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	0.01	0	0.1	0
11	619	5399	1	3520	1	44.8	1	0.17	1	1	0	0.27	1	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	2.22	1	0.1	0
12	619	5182	1	3398	1	53.5	1	0.87	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.82	1	0.1	0
13	619	5323	1	3504	1	41.8	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	1.92	1	0.1	0
14	619	5017	1	3863	1	41.7	1	3.7	1	1	0	0.14	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.91	1	0.1	0
15	619	5257	1	3427	1	39.5	1	5.2	1	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	2.04	1	0.1	0
16	619	5176	1	3487	1	252	1	51.8	1	1	0	0.1	0	0.003	1	0.01	0	0.01	0	0.01	1	0.05	0	0.66	1	0.1	0
17	619	5314	1	3359	1	46.6	1	0.6	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.9	1	0.1	0
18	619	5057	1	3310	1	46.2	1	0.29	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.8	1	0.1	0
19	619	4615	1	3207	1	43.5	1	0.1	0	1	0	0.32	1	0.002	1	0.01	0	0.01	0	0.01	1	0.05	0	1.75	1	0.1	0
20	619	5111	1	3192	1	50.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.8	1	0.1	0
21	619	4764	1	3035	1	45.8	1	39.8	1	1	0	0.21	1	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	1.75	1	0.1	0
22	619	5111	1	3424	1	45.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.57	1	0.1	0
23	619	5045	1	3658	1	46	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.85	1	0.1	0
24	619	5078	1	3349	1	44.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.45	1	0.1	0
25	619	5148	1	3405	1	47	1	0.13	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.78	1	0.1	0
26	619	4288	1	2963	1	40	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.65	1	0.1	0
27	619	4677	1	3255	1	41	1	0.17	1	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	1.79	1	0.1	0
28	619	4731	1	3260	1	39.5	1	0.12	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.78	1	0.1	0
29	619	5039	1	3395	1	47	1	0.11	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.71	1	0.1	0
30	619	5207	1	3195	1	50	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.9	1	0.1	0
31	619	5140	1	3232	1	47.1	1	0.1	0	1	0	0.1	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.86	1	0.1	0
32	619	5060	1	3350	1	44	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.84	1	0.1	0
33	619	5110	1	3370	1	45	1	0.17	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.87	1	0.1	0
34	619	5130	1	3510	1	49.2	1	0.21	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.0					

	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
1	Ni	D_Ni	Se	D_Se	V	D_V	U	D_U	Rad-226	D_Rad-226	Rad-228	D_Rad-228	Rad_totl	D_Rad_totl	Th-230	D_Th-230	Pb-210	D_Pb-210	Gross_Alpha	D_Gross_Alpha	well_type	
2	0.05	0	0.001	0	0.1	0	0.0034	1	2.5	1	3.7	1	6.2	1	4.9	1	1	0	9.1	1	background	
3	0.05	0	0.001	0	0.1	0	0.011	1	1.3	1	2	1	3.3	1	0.2	0	1	0	1.7	1	background	
4	0.05	0	0.001	0	0.1	0	0.009	1	1.1	1	2	1	3.1	1	0.2	0	1	0	1.5	1	background	
5	0.05	0	0.001	1	0.1	0	0.009	1	1.7	1	2	1	3.7	1	0.2	0	1	0	2.5	1	background	
6	0.05	0	0.001	0	0.1	0	0.0068	1	1.7	1	1	0	1.7	1	0.5	1	1	0	2	1	background	
7	0.05	0	0.001	0	0.1	0	0.008	1	0.9	1	3.1	1	4	1	0.2	0	1	0	1	0	background	
8	0.05	0	0.001	0	0.1	0	0.005	1	3	1	4.3	1	7.3	1	0.2	0	2.5	1	3.1	1	background	
9	0.05	0	0.001	0	0.1	0	0.005	1	2.3	1	2.7	1	5	1	0.2	0	1	0	2	1	background	
10	0.05	0	0.001	0	0.1	0	0.004	1	1.1	1	1	1	2.1	1	0.2	1	1.6	1	1	1	1	background
11	0.05	0	0.001	0	0.1	0	0.009	1	0.6	1	4.6	1	5.2	1	0.2	0	1	0	1	0	0	background
12	0.05	0	0.003	1	0.1	0	0.007	1	1.2	1	1.2	1	2.4	1	0.2	0	1	0	1	1	1	background
13	0.05	0	0.001	0	0.1	0	0.006	1	0.7	1	1.8	1	2.5	1	0.2	0	1	0	1	0	0	background
14	0.05	0	0.001	1	0.1	0	0.003	1	1	1	5.2	1	6.2	1	0.2	0	1.1	1	1.5	1	background	
15	0.05	0	0.001	0	0.1	0	0.0003	0	1.7	1	3.2	1	4.9	1	0.02	0	1	0	1.9	1	background	
16	0.05	0	0.003	1	0.1	0	0.975	1	0.5	1	1.6	1	2.1	1	0.2	0	1	0	1	0	0	background
17	0.05	0	0.001	0	0.1	0	0.007	1	0.8	1	7.1	1	7.9	1	0.2	0	1.9	1	1	0	0	background
18	0.05	0	0.001	0	0.1	0	0.006	1	1.4	1	3.5	1	4.9	1	0.2	0	2.7	1	1.8	1	background	
19	0.05	0	0.002	1	0.1	0	0.005	1	1.3	1	9	1	1.3	1	0.2	0	1	0	1.4	1	background	
20	0.05	0	0.001	0	0.1	0	0.004	1	2.1	1	2.9	1	5	1	0.2	0	1.4	1	7.4	1	background	
21	0.05	0	0.001	0	0.1	0	0.005	1	2	1	7.9	1	9.9	1	0.2	0	5.8	1	14	1	background	
22	0.05	0	0.001	0	0.1	0	0.01	1	1.5	1	1.3	1	2.8	1	0.2	0	1	0	3.6	1	background	
23	0.05	0	0.001	0	0.1	0	0.012	1	1.3	1	1.9	1	3.2	1	0.2	0	2.5	1	4.3	1	background	
24	0.07	1	0.001	0	0.1	0	0.01	1	1.3	1	3.9	1	5.2	1	0.2	0	1	0	7.3	1	background	
25	0.05	0	0.001	0	0.1	0	0.008	1	1.6	1	2.8	1	4.4	1	0.2	0	3.7	1	5.9	1	background	
26	0.05	0	0.001	0	0.1	0	0.0065	1	1.1	1	3.1	1	4.2	1	0.6	1	1	0	2.7	1	background	
27	0.05	0	0.001	0	0.1	0	0.0101	1	1.3	1	1	0	1.3	1	0.2	0	1	0	3.1	1	background	
28	0.05	0	0.001	0	0.1	0	0.0067	1	1.5	1	1	0	1.5	1	1	1	1	0	2.5	1	background	
29	0.05	0	0.001	0	0.1	0	0.018	1	1.7	1	4.8	1	6.5	1	0.2	0	4.1	1	3.5	1	background	
30	0.05	0	0.001	0	0.1	0	0.008	1	1.7	1	1	0	1.7	1	0.2	0	1	0	1.1	1	background	
31	0.05	0	0.001	1	0.1	0	0.0036	1	1.5	1	1	0	1.5	1	0.2	0	1	0	2	1	background	
32	0.05	0	0.001	0	0.1	0	0.008	1	1.3	1	1	0	1.3	1	0.2	0	1	0	1	0	background	
33	0.05	0	0.004	1	0.1	0	0.0056	1	2	1	4.2	1	6.2	1	0.2	0	1	0	4.7	1	background	
34	0.05	0	0.001	0	0.1	0	0.005	1	1.6	1	4.2	1	5.8	1	0.2	0	1	0	1	0	background	
35	0.05	0	0.001	0	0.1	0	0.007	1	2	1	1	0	2	1	0.2	0	1	0	1	0	background	
36	0.05	0	0.001	0	0.1	0	0.0099	1	4.3	1	3.6	1	7.9	1	0.2	0	1	0	7.5	1	background	
37	0.05	0	0.001	0	0.1	0	0.0062	1	3.6	1	4.7	1	8.3	1	0.2	0	1	0	2.3	1	background	
38	0.05	0	0.001	0	0.1	0	0.0051	1	1.2	1	3.6	1	4.8	1	0.2	0	1	0	1	0	background	
39	0.05	0	0.001	0	0.1	0	0.016	1	1.4	1	3.2	1	4.6	1	0.2	0	1	0	1	0	background	
40	0.05	0	0.001	0	0.1	0	0.0072	1	1.3	1	4.1	1	5.4	1	0.2	0	2.4	1	2.4	1	background	
41	0.05	0	0.001	0	0.1	0	0.0053	1	2.5	1	4.8	1	7.3	1	0.2	0	2	1	2	1	background	
42	0.05	0	0.001	0	0.1	0	0.0072	1	1.4	1	3	1	4.4	1	0.2	0	1	0	1	0	background	
43	0.05	0	0.001	0	0.1	0	0.0066	1	1.7	1	3	1	4.7	1	0.2	0	1	0	3.9	1	background	
44	0.05	0	0.001	0	0.1	0	0.0067	1	1.4	1	1.8	1	3.2	1	0.2	0	1	0	1.5	1	background	
45	0.07</td																					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
67	EPA 02	3316	1	2057	1	27.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.82	1	0.1	0
68	EPA 02	3267	1	2070	1	26.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.59	1	0.1	0
69	EPA 02	2674	1	1705	1	25.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.47	1	0.1	0
70	EPA 02	2782	1	1741	1	24.2	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	1.48	1	0.1	0
71	EPA 02	2801	1	1791	1	24.7	1	0.1	0	1	0	0.1	0	0.003	1	0.01	0	0.01	0	0.01	0	0.05	0	1.48	1	0.1	0
72	EPA 02	3018	1	1831	1	22.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.52	1	0.1	0
73	EPA 02	3042	1	1746	1	29	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.58	1	0.1	0
74	EPA 02	3150	1	1866	1	24.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.53	1	0.1	0
75	EPA 02	3000	1	1883	1	29.9	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.46	1	0.1	0
76	EPA 02	2970	1	1775	1	26.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.49	1	0.1	0
77	EPA 02	3090	1	1780	1	27.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.42	1	0.1	0
78	EPA 02	2920	1	1740	1	31.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	1.49	1	0.1	0
79	EPA 02	3060	1	2000	1	26.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.75	1	0.1	0
80	EPA 02	3130	1	1830	1	26.2	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.6	1	0.1	0
81	EPA 02	3120	1	1700	1	22.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.5	1	0.1	0
82	EPA 02	3390	1	2150	1	28.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.94	1	0.1	0
83	EPA 02	3060	1	1740	1	27.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.44	1	0.1	0
84	EPA 02	3110	1	1800	1	31.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.64	1	0.1	0
85	EPA 02	3080	1	1650	1	29	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.35	1	0.1	0
86	EPA 02	3640	1	1970	1	45.7	1	no data	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.21	1	0.1	0
87	EPA 02	3090	1	1700	1	28.9	1	0.1	0	1	0	0.12	1	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.58	1	0.1	0
88	EPA 02	2800	1	1490	1	20.2	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.29	1	0.1	0
89	EPA 02	2740	1	1540	1	20.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.27	1	0.1	0
90	EPA 02	2670	1	1740	1	21.2	1	0.1	0	1	0	0.1	0	0.004	1	0.01	0	0.005	0	0.01	0	0.05	0	1.07	1	0.1	0
91	EPA 02	2680	1	1690	1	25.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.21	1	0.1	0
92	EPA 02	2730	1	1600	1	23.7	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.005	0	0.01	0	0.05	0	1.14	1	0.1	0
93	EPA 02	2770	1	1630	1	28.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.2	1	0.1	0
94	EPA 02	2760	1	1420	1	25.1	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.005	0	0.01	0	0.05	0	1.08	1	0.1	0
95	EPA 02	2730	1	1550	1	24.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.34	1	0.1	0
96	EPA 02	2760	1	1570	1	25.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.28	1	0.1	0
97	EPA 02	2760	1	1510	1	24.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.28	1	0.1	0
98	EPA 02	2630	1	1700	1	21	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.005	0	0.01	0	0.05	0	1.12	1	0.1	0
99	EPA 02	2700	1	1410	1	19.6	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.005	0	0.01	0	0.05	0	1.23	1	0.1	0
100	EPA 02	2740	1	1550	1	23.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	1.28	1	0.1	0
101	EPA 02	2750	1	1460	1	25.2	1	0.1	0	1</																	

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
67	0.05	0	0.001	0	0.1	0	0.002	1	1.1	1	1	0	1.1	1	0.2	0	1	0	2.8	1	background
68	0.05	0	0.001	0	0.1	0	0.002	1	0.6	1	2.4	1	3	1	0.2	0	1	0	3.8	1	background
69	0.05	0	0.001	0	0.1	0	0.0012	1	1	1	1	0	1	1	0.2	0	1	0	3.4	1	background
70	0.05	0	0.001	0	0.1	0	0.0011	1	1.2	1	1	0	1.2	1	0.2	0	1	0	1.1	1	background
71	0.05	0	0.001	0	0.1	0	0.0026	1	1	1	1	0	1	1	0.2	0	1	0	1	0	background
72	0.05	0	0.001	0	0.1	0	0.0008	1	0.7	1	1	0	0.7	1	0.7	1	1	0	1	0	background
73	0.05	0	0.001	0	0.1	0	0.0011	1	0.9	1	1	0	0.9	1	0.9	1	1	0	1	0	background
74	0.05	0	0.001	0	0.1	0	0.0003	0	0.8	1	1	0	0.8	1	0.2	0	1	0	1.7	1	background
75	0.05	0	0.001	0	0.1	0	0.0003	0	1.8	1	1	0	1.8	1	0.2	0	1	0	1	0	background
76	0.05	0	0.001	0	0.1	0	0.0003	0	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
77	0.05	0	0.001	0	0.1	0	0.0003	0	0.9	1	2.5	1	3.4	1	0.2	0	1	0	1	0	background
78	0.05	0	0.001	0	0.1	0	0.0003	0	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
79	0.05	0	0.001	0	0.1	0	0.0009	1	1	1	1	0	1	1	0.2	0	1	0	1	0	background
80	0.05	0	0.001	0	0.1	0	0.0008	1	1.1	1	1	0	1.1	1	0.2	0	1	0	1	0	background
81	0.05	0	0.001	0	0.1	0	0.0009	1	0.9	1	1	0	0.9	1	0.2	0	7.5	1	1	0	background
82	0.05	0	0.001	0	0.1	0	0.0007	1	1	1	2.5	1	3.5	1	0.2	0	1	0	1	0	background
83	0.05	0	0.001	0	0.1	0	0.0028	1	0.9	1	2.5	1	3.4	1	0.2	0	1	0	1	0	background
84	0.05	0	0.001	0	0.1	0	0.0009	1	1.1	1	1	0	1.1	1	0.2	0	1.8	1	1.8	1	background
85	0.05	0	0.001	0	0.1	0	0.0012	1	1.2	1	2.1	1	3.3	1	0.2	0	2.1	1	2.1	1	background
86	0.05	0	0.001	0	0.1	0	0.0003	0	0.6	1	2.2	1	2.8	1	0.2	0	1	0	1.8	1	background
87	0.05	0	0.001	1	0.1	0	0.0015	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
88	0.05	0	0.001	0	0.1	0	0.0016	1	1.7	1	1	0	1.7	1	0.2	0	1	0	2.2	1	background
89	0.05	0	0.001	0	0.1	0	0.0011	1	1.5	1	3.9	1	5.4	1	0.2	0	1	0	1.4	1	background
90	0.05	0	0.001	0	0.1	0	0.0011	1	1.8	1	1	0	1.8	1	0.2	0	1	0	2.6	1	background
91	0.05	0	0.001	0	0.1	0	0.0015	1	1.2	1	2.8	1	4	1	0.2	0	1	0	1.2	1	background
92	0.05	0	0.001	0	0.1	0	0.0005	1	1.4	1	1	0	1.4	1	0.2	0	1	0	2.1	1	background
93	0.05	0	0.001	0	0.1	0	0.0004	1	1.4	1	4.3	1	5.7	1	0.2	0	1	0	1.6	1	background
94	0.05	0	0.001	0	0.1	0	0.0005	1	1.3	1	2.6	1	3.9	1	0.2	0	1	0	1	0	background
95	0.05	0	0.001	0	0.1	0	0.001	1	1.3	1	3.3	1	4.6	1	0.2	0	1	0	1.3	1	background
96	0.05	0	0.001	0	0.1	0	0.0008	1	1.1	1	1.7	1	2.8	1	0.2	0	1	0	1.8	1	background
97	0.05	0	0.001	0	0.1	0	0.0003	0	1.7	1	1	0	1.7	1	0.2	0	1	0	1.7	1	background
98	0.05	0	0.001	0	0.1	0	0.0009	1	1.7	1	3	1	4.7	1	0.2	0	1	0	1	0	background
99	0.05	0	0.001	0	0.1	0	0.0014	1	3	1	1	0	3	1	0.2	0	1	0	2.2	1	background
100	0.05	0	0.001	0	0.1	0	0.001	1	1.8	1	10.1	1	11.9	1	0.2	0	1	0	2.1	1	background
101	0.05	0	0.001	0	0.1	0	0.0004	1	1.6	1	8.7	1	13	1	0.2	0	1	0	1	0	background
102	0.05	0	0.001	0	0.1	0	0.0013	1	0.8	1	8.7	1	9.5	1	0.2	0	1	0	1.4	1	background
103	0.05	0	0.001	0	0.1	0	0.0012	1	1.5	1	1	0	1.5	1	0.2	0	1	0	1.4	1	background
104	0.05	0	0.001	0	0.1	0	0.0014	1	1.1	1	1	0	1.1	1	0.2	0	1	0	2	1	background
105	0.05	0	0.001	0	0.1	0	0.001	1	1.5	1	3.1	1	4.6	1	0.2	0	1	0	2.3	1	background
106	0.05	0	0.001	0	0.1	0	0.001	1	1	1	2.3	1	3.3	1	0.2	0	1	0	2.6	1	background
107	no data	0	0.001	0	0.1	0	0.0018	1	0.8	1	2.2	1	3	1	0.2	0	1	0	2.7	1	background
108	no data	0	0.001	0	0.1	0	0.0012	1	0.7	1	1.4	1	2.1	1	0.2	0	1	0	1.5	1	background
109	no data	0	0.001	0	0.1	0	0.0011	1	1.1	1	1.8	1	2.9	1	0.2	0	1	0	1	0	background
110	no data	0	0.001	0	0.1	0	0.0011	1	1.6	1	3.7	1	5.3	1	0.2	0	1	0	1.1	1	background
111	0.05	0	0.001	0	0.1	0	0.0013	1	1.4	1	2	1	3.4	1	0.2	0	1	0	1.9	1	background
112	0.05	0	0.001	0	0.1	0	0.0017	1	1	1	4.3	1	5.3	1							

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
133	EPA 04	4631	1	3107	1	38.8	1	0.1	0	1	0	0.1	1	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	3.47	1	0.1	0
134	EPA 04	4684	1	3006	1	39.4	1	0.1	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.55	1	0.1	0
135	EPA 04	4351	1	3081	1	37.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.81	1	0.1	0
136	EPA 04	4585	1	2962	1	34.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	3.08	1	0.1	0
137	EPA 04	4530	1	3119	1	35.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.59	1	0.1	0
138	EPA 04	4612	1	3065	1	37.9	1	0.1	0	1	0	0.15	1	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	2.77	1	0.1	0
139	EPA 04	4420	1	2863	1	35.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.4	1	0.1	0
140	EPA 04	4528	1	3133	1	37.9	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.95	1	0.1	0
141	EPA 04	4598	1	3090	1	38.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.42	1	0.1	0
142	EPA 04	4715	1	3268	1	39.3	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	3.25	1	0.1	0
143	EPA 04	3894	1	2490	1	35.1	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.76	1	0.1	0
144	EPA 04	4004	1	2641	1	33.1	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	2.89	1	0.1	0
145	EPA 04	4093	1	2637	1	34.4	1	0.1	0	1	0	0.1	0	0.003	1	0.01	0	0.01	0	0.01	0	0.05	0	2.83	1	0.1	0
146	EPA 04	4412	1	3002	1	36.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.2	1	0.1	0
147	EPA 04	4161	1	2580	1	38	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.85	1	0.1	0
148	EPA 04	4390	1	2721	1	35.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.89	1	0.1	0
149	EPA 04	4290	1	2895	1	44	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.82	1	0.1	0
150	EPA 04	4390	1	2829	1	39.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.97	1	0.1	0
151	EPA 04	4320	1	2800	1	38.9	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.58	1	0.1	0
152	EPA 04	4480	1	2900	1	49.1	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.06	1	0.1	0
153	EPA 04	4480	1	3100	1	41.9	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3.25	1	0.1	0
154	EPA 04	4480	1	3010	1	35.1	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.88	1	0.1	0
155	EPA 04	4620	1	3000	1	36.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.98	1	0.1	0
156	EPA 04	4520	1	3000	1	36.1	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.87	1	0.1	0
157	EPA 04	4590	1	3000	1	37.2	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.78	1	0.1	0
158	EPA 04	4590	1	2860	1	43.8	1	0.11	1	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3	1	0.1	0
159	EPA 04	4790	1	2550	1	40	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.33	1	0.1	0
160	EPA 04	4830	1	2780	1	39	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.005	0	0.01	0	0.05	0	2.93	1	0.1	0
161	EPA 04	4680	1	2730	1	36.2	1	0.1	0	1	0	0.1	1	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3.1	1	0.1	0
162	EPA 04	4810	1	3000	1	37.5	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.005	0	0.01	0	0.05	0	4.15	1	0.1	0
163	EPA 04	4790	1	2910	1	38.8	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.007	1	0.01	0	0.05	0	3.37	1	0.1	0
164	EPA 04	4740	1	2770	1	36.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.66	1	0.1	0
165	EPA 04	4680	1	2890	1	43.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3.28	1	0.1	0
166	EPA 04	4620	1	3230	1	42.1	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3.37	1	0.1	0
167	EPA 04	4780	1	2690	1	48.3																					

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
133	0.05	0	0.001	0	0.1	0	0.0003	0	1	13.8	1	14.8	1	0.2	0	1	0	1.1	1	background	
134	0.05	0	0.001	0	0.1	0	0.0003	0	1	1.1	1	2.1	1	0.2	0	1	0	1.2	1	background	
135	0.05	0	0.001	0	0.1	0	0.0003	0	1.1	1	3.5	1	4.6	1	0.2	0	1	0	1.5	1	background
136	0.05	0	0.001	0	0.1	0	0.003	1	1.2	1	2.7	1	3.9	1	0.2	0	1.3	1	5.2	1	background
137	0.05	0	0.001	0	0.1	0	0.001	1	1.1	1	3	1	4.1	1	0.2	0	1	0	6.6	1	background
138	0.05	0	0.001	0	0.1	0	0.001	1	2	1	3	1	5	1	0.2	0	1.8	1	6.7	1	background
139	0.05	0	0.001	0	0.1	0	0.002	1	1.9	1	5.1	1	7	1	0.2	0	1	0	9.7	1	background
140	0.05	0	0.001	0	0.1	0	0.001	1	1.6	1	2.3	1	3.9	1	0.2	0	1	0	5.2	1	background
141	0.05	0	0.001	0	0.1	0	0.001	1	1.7	1	2.5	1	4.2	1	0.2	1	3	1	5.6	1	background
142	0.05	0	0.001	0	0.1	0	0.001	1	1.4	1	3	1	4.4	1	0.2	0	1	0	6.1	1	background
143	0.05	0	0.001	0	0.1	0	0.0003	0	0.7	1	3.1	1	3.8	1	0.4	1	1	0	5	1	background
144	0.05	0	0.001	0	0.1	0	0.0008	1	1.5	1	4.2	1	5.7	1	0.4	1	1	0	2.2	1	background
145	0.05	0	0.001	0	0.1	0	0.001	1	1.1	1	2.4	1	3.5	1	0.2	0	2.6	1	1	0	background
146	0.05	0	0.001	0	0.1	0	0.0003	0	1.2	1	3.3	1	4.5	1	0.2	0	1	0	1	0	background
147	0.05	0	0.001	0	0.1	0	0.0009	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
148	0.05	0	0.001	0	0.1	0	0.0003	0	1.2	1	1	0	1.2	1	0.2	0	1	0	1	0	background
149	0.05	0	0.001	0	0.1	0	0.0003	0	1.5	1	1	0	1.5	1	0.2	0	1	0	2.1	1	background
150	0.05	0	0.001	0	0.1	0	0.001	1	0.9	1	1.2	1	2.1	1	0.2	0	1	0	2.3	1	background
151	0.05	0	0.001	0	0.1	0	0.0009	1	1	1	4.1	1	5.1	1	0.2	0	1	0	1	0	background
152	0.05	0	0.001	0	0.1	0	0.0003	0	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
153	0.05	0	0.001	0	0.1	0	0.0011	1	1	1	1	0	1	1	0.2	0	1	0	1	0	background
154	0.05	0	0.001	0	0.1	0	0.0011	1	1.5	1	1	0	1.5	1	0.2	0	1	0	1	0	background
155	0.05	0	0.001	0	0.1	0	0.0009	1	0.6	1	3.7	1	4.3	1	0.2	0	1	0	1	0	background
156	0.05	0	0.001	0	0.1	0	0.001	1	1.2	1	3.9	1	5.1	1	0.2	0	1	0	1	0	background
157	0.05	0	0.001	0	0.1	0	0.0033	1	1.5	1	4.2	1	5.7	1	0.2	0	1	0	1	0	background
158	0.05	0	0.001	0	0.1	0	0.0017	1	2.2	1	3.5	1	5.7	1	0.2	0	2.2	1	2.2	1	background
159	0.05	0	0.001	0	0.1	0	0.0013	1	0.9	1	1.5	1	2.4	1	0.2	0	1.5	1	1.5	1	background
160	0.05	0	0.001	0	0.1	0	0.0003	0	1.2	1	3.3	1	4.5	1	0.2	0	1	0	1.4	1	background
161	0.06	1	0.001	0	0.1	0	0.0021	1	1	1	1	0	1	1	0.2	0	1	0	1	0	background
162	0.05	0	0.001	0	0.1	0	0.0006	1	1.9	1	3.8	1	5.7	1	0.2	0	1	0	1.3	1	background
163	0.05	0	0.001	0	0.1	0	0.0006	1	no data	0	2.4	1	2.4	1	0.2	0	1	0	1.8	1	background
164	0.05	0	0.001	0	0.1	0	0.0005	1	1.3	1	3.5	1	4.8	1	0.2	0	1	0	1.4	1	background
165	0.05	0	0.001	0	0.1	0	0.0004	1	1.5	1	5	1	6.5	1	0.2	0	1	0	2.2	1	background
166	0.05	0	0.001	0	0.1	0	0.0003	0	1.2	1	3.8	1	5	1	0.2	0	1	0	1.8	1	background
167	0.05	0	0.001	0	0.1	0	0.0003	0	1.1	1	5.8	1	6.9	1	0.2	0	1	0	2.2	1	background
168	0.05	0	0.001	0	0.1	0	0.0003	0	1.5	1	3.7	1	5.2	1	0.2	0	1	0	1	0	background
169	0.05	0	0.001	0	0.1	0	0.0003	0	1.5	1	5.4	1	6.9	1	0.2	0	1	0	1	0	background
170	0.05	0	0.001	0	0.1	0	0.0003	0	1.3	1	2	1	3.3	1	0.2	0	1	0	1.3	1	background
171	0.05	0	0.001	0	0.1	0	0.0003	0	1.4	1	1	0	1.4	1	0.2	0	1	0	1	0	background
172	0.05	0	0.001	0	0.1	0	0.0005	1	1.7	1	1	0	1.7	1	0.2	0	1	0	1	0	background
173	0.05	0	0.001	0	0.1	0	0.0005	1	1.9	1	1	0	1.9	1	0.2	0	1	0	2	1	background
174	0.05	0	0.001	0	0.1	0	0.0004	1	1.7	1	7.9	1	9.6	1	0.2	0	1	0	3	1	background
175	0.05	0	0.001	0	0.1	0	0.0003	0	1.5	1	3.1	1	4.6	1	0.2	0	1	0	1	0	background
176	0.05	0	0.001	0	0.1	0	0.0004	1	0.5	1	5.6	1	6.1	1	0.2	0	1	0	1.5	1	background
177	0.05	0	0.001	0	0.1	0	0.0004	1	1.1	1	1	0	1.1	1	0.2	0	1	0	2.1	1	background
178	0.05	0	0.001	0	0.1	0	0.0004														

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
199	EPA 08	4648	1	2959	1	39.4	1	0.04	1	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.32	1	0.1	0
200	EPA 08	4833	1	3164	1	45.4	1	3.3	1	1	0	0.16	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.82	1	0.1	0
201	EPA 08	4711	1	3242	1	22.1	1	0.06	1	1	0	0.6	1	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	2.93	1	0.1	0
202	EPA 08	4612	1	2998	1	39.6	1	0.23	1	1	0	0.24	1	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	3.22	1	0.1	0
203	EPA 08	4311	1	3014	1	73.4	1	0.01	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	1	2.88	1	0.1	0
204	EPA 08	4704	1	3034	1	36.4	1	0.01	0	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	3.43	1	0.1	0
205	EPA 08	4809	1	3120	1	39.6	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	3.17	1	0.1	0
206	EPA 08	4762	1	3158	1	39.3	1	0.1	0	1	0	0.21	1	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	3.09	1	0.1	0
207	EPA 08	4739	1	3159	1	37.7	1	0.1	0	1	0	0.2	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.46	1	0.1	0
208	EPA 08	4910	1	3019	1	40.8	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	3.05	1	0.1	0
209	EPA 08	4144	1	2956	1	39.6	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	2.78	1	0.1	0
210	EPA 08	4366	1	3110	1	36.9	1	0.1	0	1	0	0.16	1	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	2.8	1	0.1	0
211	EPA 08	4765	1	3197	1	39.4	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.07	1	0.1	0
212	EPA 08	4532	1	3154	1	39.6	1	0.1	0	1	0	0.1	1	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	2.49	1	0.1	0
213	EPA 08	4389	1	3049	1	38.7	1	0.1	0	1	0	0.12	1	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.12	1	0.1	0
214	EPA 08	4809	1	3367	1	41.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.46	1	0.1	0
215	EPA 08	4848	1	3277	1	42	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.95	1	0.1	0
216	EPA 08	4867	1	3364	1	40.2	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.15	1	0.1	0
217	EPA 08	4212	1	2906	1	42	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.92	1	0.27	1
218	EPA 08	4348	1	2965	1	38.4	1	0.1	0	1	0	0.1	0	0.002	1	0.01	0	0.01	0	0.01	0	0.05	0	2.99	1	0.1	0
219	EPA 08	4185	1	2863	1	37.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.8	1	0.13	1
220	EPA 08	4857	1	3460	1	41.8	1	0.1	0	1	0	0.1	0	0.001	1	0.01	0	0.01	0	0.01	0	0.05	0	2.96	1	0.14	1
221	EPA 08	4876	1	3085	1	37.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.21	1	0.1	0
222	EPA 08	4880	1	3061	1	39	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3	1	0.1	0
223	EPA 08	4870	1	3130	1	51	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.07	1	0.1	0
224	EPA 08	4890	1	3330	1	42	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.01	1	0.1	0
225	EPA 08	4860	1	3200	1	45.2	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.82	1	0.1	0
226	EPA 08	4850	1	3190	1	53.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.24	1	0.1	0
227	EPA 08	4840	1	3400	1	45.3	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3.42	1	0.1	0
228	EPA 08	4850	1	3300	1	39.6	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.99	1	0.1	0
229	EPA 08	4820	1	3000	1	39.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.84	1	0.1	0
230	EPA 08	4780	1	3150	1	38.5	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	3.05	1	0.1	0
231	EPA 08	4840	1	3200	1	41	1	0.1	0	1	0	0.1	0	0.003	1	0.01	0	0.005	0	0.01	0	0.05	0	2.98	1	0.1	0
232	EPA 08	4630	1	3000	1	45.7	1	0.1	0	1	0	0.1	0	0.001	0	0.01	0	0.005	0	0.01	0	0.05	0	2.98	1	0.1	0
233	EPA 08	4780	1	2710	1	47	1</																				

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
199	0.05	0	0.001	0	0.1	0	0.0027	1	2.3	1	1.2	1	3.5	1	0.2	0	1	0	2	1	background
200	0.05	0	0.001	0	0.1	0	0.002	1	2.1	1	4.5	1	6.6	1	0.2	0	1	0	2	1	background
201	0.05	0	0.001	0	0.1	0	0.0015	1	0.9	1	2	1	2.9	1	0.2	0	1	0	1	0	background
202	0.05	0	0.001	0	0.1	0	0.0436	1	0.8	1	2	1	2.8	1	0.2	0	1	0	1	0	background
203	0.05	0	0.001	0	0.1	0	0.001	1	5.4	1	1	0	5.4	1	0.2	0	1.3	1	5	1	background
204	0.05	0	0.001	0	0.1	0	0.001	1	0.5	1	3.8	1	4.3	1	0.2	0	1	0	1	0	background
205	0.05	0	0.001	0	0.1	0	0.003	1	1.2	1	5.6	1	6.8	1	0.2	0	1	0	1.5	1	background
206	0.05	0	0.001	0	0.1	0	0.0003	0	1.7	1	1.7	1	3.4	1	0.2	0	1	0	1.9	1	background
207	0.05	0	0.001	0	0.1	0	0.0003	0	0.4	1	10.7	1	11.1	1	0.2	0	1	0	1	0	background
208	0.05	0	0.001	0	0.1	0	0.006	1	0.5	1	3.8	1	4.3	1	0.2	0	1	0	1	0	background
209	0.05	0	0.001	0	0.1	0	no data	0	1	1	3.4	1	4.4	1	0.2	0	1	0	1.4	1	background
210	0.05	0	0.001	0	0.1	0	0.002	1	1.5	1	5.5	1	7	1	0.2	0	1	0	2	1	background
211	0.05	0	0.001	0	0.1	0	0.006	1	1.1	1	5	1	6.1	1	0.2	0	1	0	9.6	1	background
212	0.05	0	0.001	0	0.1	0	0.001	1	1.3	1	3.5	1	4.8	1	0.2	0	1.3	1	6.7	1	background
213	0.05	0	0.001	0	0.1	0	0.0003	0	1.9	1	3.4	1	5.3	1	0.2	0	1	0	7.2	1	background
214	0.05	0	0.001	0	0.1	0	0.001	1	1.2	1	1.8	1	3	1	0.2	0	1	0	4.1	1	background
215	0.05	0	0.001	0	0.1	0	0.001	1	2.3	1	2.6	1	4.9	1	0.2	0	1	0	6.4	1	background
216	0.05	0	0.001	0	0.1	0	0.001	1	1.1	1	2.7	1	3.8	1	0.2	0	1	0	5.3	1	background
217	0.05	0	0.001	0	0.1	0	0.0016	1	0.7	1	2.2	1	2.9	1	0.5	1	4.9	1	6.6	1	background
218	0.05	0	0.001	0	0.1	0	0.0017	1	1.7	1	2.2	1	3.9	1	0.2	0	1	0	1.8	1	background
219	0.05	0	0.001	0	0.1	0	0.001	1	1	1	1.5	1	2.5	1	0.2	0	3.8	1	1	0	background
220	0.05	0	0.001	0	0.1	0	0.0006	1	1.2	1	1.3	1	2.5	1	0.7	1	1	0	1.2	1	background
221	0.05	0	0.002	1	0.1	0	0.0016	1	0.7	1	1	0	0.7	1	0.8	1	1	0	1	0	background
222	0.05	0	0.001	0	0.1	0	0.0005	1	0.9	1	1	0	0.9	1	0.2	0	1	0	1	0	background
223	0.05	0	0.001	0	0.1	0	0.001	1	1.1	1	1	0	1.1	1	0.2	0	1	0	1.1	1	background
224	0.05	0	0.001	0	0.1	0	0.0003	0	1.1	1	1	0	1.1	1	0.2	0	1	0	1	0	background
225	0.05	0	0.001	0	0.1	0	0.0003	0	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
226	0.05	0	0.001	0	0.1	0	0.001	1	0.7	1	1	0	0.7	1	0.2	0	1	0	1	0	background
227	0.05	0	0.001	0	0.1	0	0.001	1	1.1	1	1	0	1.1	1	0.2	0	1	0	1	0	background
228	0.05	0	0.001	0	0.1	0	0.0009	1	1	1	1	0	1	1	0.2	0	1	0	1	0	background
229	0.05	0	0.001	0	0.1	0	0.0009	1	0.9	1	1	0	0.9	1	0.2	0	1	0	1	0	background
230	0.05	0	0.001	0	0.1	0	0.001	1	1.4	1	3.8	1	5.2	1	0.2	0	2.3	1	2.3	1	background
231	0.05	0	0.001	0	0.1	0	0.0038	1	1	1	2.3	1	3.3	1	0.2	0	1	0	1	0	background
232	0.05	0	0.001	0	0.1	0	0.0011	1	2	1	3.4	1	5.4	1	0.2	0	3	1	3	1	background
233	0.05	0	0.001	0	0.1	0	0.0016	1	1.4	1	1.5	1	2.9	1	0.2	0	1.8	1	1.8	1	background
234	0.05	0	0.001	0	0.1	0	0.0003	0	0.9	1	4.2	1	5.1	1	0.2	0	1	0	1.6	1	background
235	0.05	0	0.001	0	0.1	0	0.0016	1	0.9	1	2.6	1	3.5	1	0.2	0	1	0	1	0	background

Appendix F

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
1	Location ID	Lab_TDS	D_Lab_TDS	SO4	D_SO4	Cl	D_Cl	NO3_as_N	D_NO3_as_N	Chloroform	D_Chloroform	Al	D_Al	As	D_As	Be	D_Be	Cd	D_Cd	Co	D_Co	Pb	D_Pb	Mn	D_Mn	Mo	D_Mo
2	411	2458	1	1563	1	17.9	1	0.04	1	0.001	0	0.1	0	0.02	1	0.05	0	0.01	0	0.05	1	0.05	0	2.7	1	2	1
3	411	2628	1	1688	1	20	1	0.09	1	0.001	0	0.1	0	0.031	1	0.05	0	0.01	0	0.06	1	0.05	0	3	1	2.5	1
4	411	2534	1	1509	1	19.8	1	0.08	1	0.001	0	0.1	0	0.018	1	0.05	0	0.01	0	0.03	1	0.05	0	2.3	1	1.8	1
5	411	2545	1	1444	1	19.7	1	0.08	1	0.001	0	0.1	0	0.018	1	0.05	0	0.01	0	0.05	1	0.05	0	2.5	1	2.4	1
6	411	2602	1	1483	1	19	1	0.08	1	0.001	0	0.1	0	0.009	1	0.05	0	0.01	0	0.04	1	0.05	0	2.44	1	1.77	1
7	411	2527	1	1607	1	20.1	1	0.05	1	0.001	0	0.1	0	0.018	1	0.05	0	0.01	0	0.06	1	0.05	0	2.42	1	1.93	1
8	411	2746	1	1492	1	19.4	1	0.23	1	0.001	0	0.1	0	0.029	1	0.01	0	0.01	0	0.06	1	0.05	0	2.72	1	1.95	1
9	411	2600	1	1453	1	22.3	1	0.05	1	0.001	0	0.1	0	0.029	1	0.01	0	0.01	0	0.05	1	0.05	0	2.01	1	1.34	1
10	411	2705	1	1742	1	22.3	1	0.02	1	0.001	0	0.1	0	0.035	1	0.01	0	0.01	0	0.04	1	0.05	0	2.37	1	1.89	1
11	411	2851	1	1640	1	28.6	1	0.02	1	0.001	0	0.23	1	0.062	1	0.01	0	0.01	0	0.06	1	0.05	0	2.92	1	2.96	1
12	411	2939	1	1765	1	23.1	1	0.01	0	0.001	0	0.1	0	0.088	1	0.01	0	0.01	0	0.06	1	0.05	0	2.96	1	2.73	1
13	411	3064	1	1847	1	26.1	1	0.1	0	0.001	0	0.1	0	0.087	1	0.01	0	0.01	0	0.06	1	0.05	0	3.95	1	3.5	1
14	411	3340	1	2034	1	28.7	1	0.1	1	0.001	0	0.1	0	0.044	1	0.01	0	0.01	0	0.08	1	0.05	0	3.62	1	4.11	1
15	411	3860	1	2352	1	27.4	1	6.05	1	0.001	0	0.2	1	0.022	1	0.01	0	0.01	0	0.09	1	0.05	0	4.41	1	6.6	1
16	411	3091	1	2137	1	30.4	1	4.1	1	0.001	0	0.1	0	0.022	1	0.01	0	0.01	0	0.09	1	0.05	0	4.65	1	5.38	1
17	411	3306	1	2257	1	35.1	1	1.8	1	0.001	0	0.1	0	0.011	1	0.01	0	0.01	0	0.1	1	0.05	0	5.5	1	6.41	1
18	411	3412	1	2420	1	39.6	1	4.4	1	0.001	0	0.14	1	0.017	1	0.01	0	0.01	0	0.12	1	0.05	0	4.48	1	8.5	1
19	411	4026	1	2591	1	41.3	1	14.3	1	0.001	0	0.1	0	0.013	1	0.01	0	0.01	0	0.1	1	0.05	0	4	1	8.38	1
20	411	4298	1	2540	1	45.8	1	12.5	1	0.001	0	0.1	0	0.011	1	0.01	0	0.01	0	0.08	1	0.05	0	4.07	1	6.9	1
21	411	4006	1	2634	1	42.1	1	8.8	1	0.001	0	0.1	0	0.01	1	0.01	0	0.01	0	0.1	1	0.05	0	4.07	1	7.96	1
22	411	4253	1	2883	1	38.1	1	10.8	1	0.001	0	0.1	0	0.008	1	0.01	0	0.01	0	0.13	1	0.05	0	4.68	1	9.23	1
23	411	4280	1	2906	1	43.5	1	17.3	1	0.001	0	0.12	1	0.009	1	0.01	0	0.01	0	0.08	1	0.05	0	3.87	1	8.49	1
24	411	4053	1	2509	1	36.9	1	5.17	1	0.001	0	0.1	0	0.009	1	0.01	0	0.01	0	0.08	1	0.05	0	4.42	1	6.59	1
25	411	4404	1	2760	1	47.2	1	24.7	1	0.001	0	0.1	0	0.008	1	0.01	0	0.01	0	0.09	1	0.05	0	3.64	1	8.87	1
26	411	4276	1	2754	1	40.5	1	5.55	1	0.001	0	0.1	0	0.009	1	0.01	0	0.01	0	0.13	1	0.05	0	3.68	1	11.5	1
27	411	4320	1	2862	1	50	1	5.86	1	0.001	0	0.1	0	0.004	1	0.01	0	0.01	0	0.08	1	0.05	0	4.38	1	8.74	1
28	411	4038	1	2471	1	49.4	1	26.4	1	0.001	0	0.1	0	0.012	1	0.01	0	0.01	0	0.086	1	0.05	0	3.48	1	9.6	1
29	411	4526	1	2684	1	47	1	27.3	1	0.001	0	0.1	0	0.014	1	0.01	0	0.01	0	0.09	1	0.05	0	0.01	0	9.91	1
30	411	4445	1	2655	1	45.3	1	29.2	1	0.001	0	0.1	0	0.006	1	0.01	0	0.01	0	0.09	1	0.05	0	3.18	1	10.6	1
31	411	4338	1	2666	1	40	1	8.92	1	0.001	0	0.1	0	0.014	1	0.01	0	0.01	0	0.08	1	0.05	0	3.8	1	8.8	1
32	411	4459	1	2730	1	52.1	1	28.1	1	0.001	0	0.1	0	0.007	1	0.01	0	0.01	0	0.09	1	0.05	0	3.39	1	10	1
33	411	4370	1	2542	1	45.6	1	45.4	1	0.001	0	0.1	0	0.012	1	0.01	0	0.01	0	0.07	1	0.05	0	3.38	1	9.97	1
34	4																										

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
1	Ni	D_Ni	Se	D_Se	V	D_V	U	D_U	Rad-226	D_Rad-226	Rad-228	D_Rad-228	Rad_totl	D_Rad_totl	Th-230	D_Th-230	Pb-210	D_Pb-210	Gross_Alpha	D_Gross_Alpha	well_type
2	0.08	1	0.001	1	0.1	0	0.0543	1	6.7	1	6.3	1	13	1	10.2	1	1	0	14.6	1	background
3	0.09	1	0.001	0	0.1	0	0.081	1	5.4	1	1	0	5.4	1	0.2	0	1	0	6	1	background
4	0.07	1	0.001	0	0.1	0	0.055	1	6	1	3.1	1	9.1	1	0.2	0	1	0	8.2	1	background
5	0.08	1	0.001	0	0.1	0	0.05	1	4.7	1	2.4	1	7.1	1	0.2	0	1	0	5.3	1	background
6	0.07	1	0.001	0	0.1	0	0.0592	1	5.1	1	5.2	1	10.3	1	0.4	1	1	0	5	1	background
7	0.06	1	0.001	0	0.1	0	0.049	1	6.3	1	1	0	6.3	1	0.2	0	1.8	1	7.5	1	background
8	0.11	1	0.001	0	0.1	0	0.1131	1	6.9	1	3.7	1	10.6	1	0.2	0	1	0	7	1	background
9	0.06	1	0.001	0	0.1	0	0.0549	1	5.8	1	7.2	1	13	1	0.2	0	2.6	1	6	1	background
10	0.05	0	0.001	0	0.1	0	0.04	1	4.6	1	3.6	1	8.2	1	0.2	0	2	1	5	1	background
11	0.09	1	0.001	0	0.1	0	0.059	1	5.5	1	1	0	5.5	1	0.2	0	1	0	6	1	background
12	0.09	1	0.002	1	0.1	0	0.039	1	5.4	1	4.7	1	10.1	1	0.2	0	3.5	1	5	1	background
13	0.05	1	0.001	0	0.1	0	0.065	1	4.9	1	4.3	1	9.2	1	0.2	0	2.8	1	4.9	1	background
14	0.08	1	0.003	1	0.1	0	0.02	1	5.9	1	3.6	1	9.5	1	0.2	0	1	0	6.5	1	background
15	0.11	1	0.003	1	0.1	0	0.154	1	5.2	1	8.4	1	13.6	1	0.2	0	1	0	5.3	1	background
16	0.14	1	0.004	1	0.1	0	0.129	1	6.8	1	5.8	1	12.6	1	0.2	0	2.3	1	6.9	1	background
17	0.13	1	0.001	0	0.1	0	0.205	1	6.7	1	9.6	1	16.3	1	0.2	0	1	0	6.9	1	background
18	0.14	1	0.001	0	0.1	0	0.127	1	4.8	1	3.5	1	8.3	1	0.2	0	1.2	1	5.2	1	background
19	0.13	1	0.001	0	0.1	0	0.145	1	3.8	1	6.3	1	10.1	1	0.2	0	2.2	1	4	1	background
20	0.08	1	0.001	0	0.1	0	0.182	1	6.6	1	2.8	1	9.4	1	0.2	0	2.7	1	11.8	1	background
21	0.1	1	0.001	0	0.1	0	0.187	1	7.4	1	7.8	1	15.2	1	0.2	0	3.7	1	19.3	1	background
22	0.17	1	0.001	0	0.1	0	0.186	1	6.7	1	10.9	1	17.6	1	0.2	0	4.4	1	23.2	1	background
23	0.13	1	0.001	1	0.1	0	0.234	1	9.4	1	4.7	1	14.1	1	0.2	0	1.2	1	16.6	1	background
24	0.13	1	0.004	1	0.1	0	0.156	1	6.7	1	13.1	1	19.8	1	0.2	0	1	0	26.5	1	background
25	0.11	1	0.006	1	0.1	0	0.258	1	4.8	1	22.3	1	27.1	1	0.2	0	1	0	38.4	1	background
26	0.12	1	0.001	0	0.1	0	0.246	1	9.7	1	5.6	1	15.3	1	0.2	0	2.8	1	18.3	1	background
27	0.08	1	0.001	0	0.1	0	0.238	1	6.4	1	6.6	1	13	1	0.2	0	1	0	16.3	1	background
28	0.08	1	0.001	0	0.1	0	0.215	1	5.1	1	2.5	1	7.6	1	0.2	0	1	0	10.7	1	background
29	0.05	0	0.002	1	0.1	0	0.2669	1	8.4	1	1	0	8.4	1	0.2	0	1.5	1	14.7	1	background
30	0.07	1	0.001	0	0.1	0	0.287	1	5	1	4.6	1	9.6	1	0.2	0	2.6	1	5.7	1	background
31	0.07	1	0.001	0	0.1	0	0.306	1	4.5	1	3.1	1	7.6	1	0.2	0	1	0	4.8	1	background
32	0.06	1	0.001	0	0.1	0	0.281	1	5	1	4.7	1	9.7	1	0.2	0	1	0	8.2	1	background
33	0.06	1	0.001	0	0.1	0	0.164	1	3.5	1	7.8	1	11.3	1	0.2	0	1	0	2.4	1	background
34	0.05	0	0.002	1	0.1	0	0.145	1	3.6	1	1	0	3.6	1	0.5	1	1	0	4.5	1	background
35	0.05	0	0.001	0	0.1	0	0.235	1	4.7	1	2.5	1	7.2	1	0.2	0	1	0	5.8	1	background
36	0.05	1	0.002	1	0.1	0	0.212	1	4.5	1	2.2	1	6.7	1	0.2	0	1	0	3.9	1	background
37	0.06	1	0.002	1	0.1	0	0.25	1	2.9	1	6.4	1	9.3	1	0.2	0	1	0	4.2	1	background
38	0.05	1	0.001	0	0.1	0	0.244	1	4.4	1	3.5	1	7.9	1	0.2	0	1	0	3.1	1	background
39	0.24	1	0.001	1	0.1	0	0.1	1	19.6	1	12.8	1	32.4	1	0.2	0	1	0	66.1	1	background
40	0.37	1	0.001	0	0.1	0	0.122	1	14	1	9.3	1	23.3	1	11.1	1	2.7	1	27.5	1	background
41	0.25	1	0.001	1	0.1	0	0.286	1	15.8	1	12.4	1	28.2	1	1.6	1	5.7	1	18.1	1	background
42	0.52	1	0.001	1	0.1	0	0.101	1	10.6	1	18.6	1	29.2	1	0.2	0	1.6	1	12.5	1	background
43	0.45	1	0.001	1	0.1	0	0.1468	1	17.7	1	18.5	1	36.2	1	0.2	0	3.3	1	20	1	background
44	0.46	1	0.001	0	0.1	0	0.13	1	19.2	1	12	1	31.2	1	0.2	0	1</				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
67	EPA 01	4824	1	2905	1	36.2	1	0.01	0	0.001	0	0.1	0	0.21	1	0.01	0	0.01	0	0.03	1	0.05	0	4.43	1	42.1	1
68	EPA 01	4238	1	2813	1	34.5	1	0.01	0	0.001	0	0.1	0	0.175	1	0.01	0	0.01	1	0.03	1	0.05	0	4.76	1	41.3	1
69	EPA 01	4765	1	2868	1	36.1	1	0.1	0	0.001	0	0.1	0	0.176	1	0.01	0	0.01	1	0.03	1	0.05	0	4.68	1	36.9	1
70	EPA 01	4708	1	3104	1	35.5	1	0.1	0	0.001	0	0.12	1	0.303	1	0.01	0	0.01	0	0.02	1	0.05	0	4.45	1	35	1
71	EPA 01	4557	1	2834	1	36	1	0.1	0	0.001	0	0.1	0	0.059	1	0.01	0	0.01	1	0.01	0	0.05	0	4.07	1	31.2	1
72	EPA 01	4149	1	2836	1	31.2	1	0.6	1	0.001	0	0.1	0	0.06	1	0.01	0	0.01	0	0.01	0	0.05	0	4.31	1	35.3	1
73	EPA 01	4178	1	2769	1	33	1	0.1	0	0.001	0	0.1	0	0.047	1	0.01	0	0.01	0	0.01	0	0.05	0	4.31	1	31.9	1
74	EPA 01	4118	1	2815	1	30.2	1	0.1	0	0.001	0	0.1	0	0.107	1	0.01	0	0.01	1	0.02	1	0.05	0	3.47	1	35.5	1
75	EPA 01	4656	1	3005	1	28.4	1	0.6	1	0.001	0	0.1	0	0.05	1	0.01	0	0.01	0	0.02	1	0.05	0	3.84	1	39.7	1
76	EPA 01	4260	1	2874	1	27.6	1	0.16	1	0.001	0	0.1	0	0.071	1	0.01	0	0.01	0	0.01	0	0.05	0	3.02	1	28.1	1
77	EPA 01	4000	1	2726	1	27.6	1	0.14	1	0.001	0	0.1	0	0.055	1	0.01	0	0.01	0	0.05	1	0.05	0	4.13	1	30	1
78	EPA 01	4596	1	3145	1	26.6	1	0.58	1	0.001	0	0.1	0	0.05	1	0.01	0	0.01	0	0.05	1	0.05	0	3.47	1	31.5	1
79	EPA 01	4626	1	2941	1	28.9	1	0.44	1	0.001	0	0.1	0	0.069	1	0.01	0	0.01	0	0.05	1	0.05	0	3.6	1	34.1	1
80	EPA 01	4431	1	2885	1	31.9	1	0.12	1	0.001	0	0.1	0	0.036	1	0.01	0	0.01	0	0.03	1	0.05	0	3.58	1	26.4	1
81	EPA 01	4039	1	2673	1	28.7	1	0.52	1	0.001	0	0.1	0	0.043	1	0.01	0	0.01	0	0.01	0	0.05	0	3.59	1	28.1	1
82	EPA 01	4065	1	2730	1	24.5	1	0.24	1	0.001	0	0.1	0	0.037	1	0.01	0	0.01	0	0.04	1	0.05	0	3.6	1	28.1	1
83	EPA 01	4572	1	2935	1	33	1	0.31	1	0.001	0	0.1	0	0.016	1	0.01	0	0.01	0	0.04	1	0.05	0	3.48	1	26.9	1
84	EPA 01	4540	1	3000	1	26.1	1	0.22	1	0.001	0	0.1	0	0.017	1	0.01	0	0.01	0	0.05	1	0.05	0	3.21	1	28.5	1
85	EPA 01	4458	1	2925	1	25.2	1	0.1	0	0.001	0	0.1	0	0.015	1	0.01	0	0.01	0	0.1	1	0.05	0	3.54	1	24.6	1
86	EPA 01	4440	1	2926	1	24.1	1	0.1	0	0.001	0	0.1	0	0.019	1	0.01	0	0.01	0	0.11	1	0.05	0	3.34	1	23.8	1
87	EPA 01	4630	1	3000	1	25.2	1	0.14	1	0.001	0	0.1	0	0.009	1	0.01	0	0.01	0	0.18	1	0.05	0	4.04	1	11.5	1
88	EPA 01	4600	1	3050	1	31.4	1	0.24	1	0.001	0	0.1	0	0.01	1	0.01	0	0.01	0	0.28	1	0.05	0	4.73	1	10.4	1
89	EPA 03	4839	1	3358	1	25.1	1	0.02	1	0.001	0	0.1	0	0.003	1	0.05	0	0.01	0	0.03	1	0.07	1	5.6	1	0.1	0
90	EPA 03	4742	1	3131	1	24.6	1	0.09	1	0.001	0	0.1	0	0.017	1	0.05	0	0.01	0	0.02	1	0.05	0	4.8	1	0.05	1
91	EPA 03	5594	1	3620	1	26.3	1	0.1	1	0.001	0	0.1	0	0.003	1	0.05	0	0.01	0	0.11	1	0.05	0	6.1	1	0.29	1
92	EPA 03	5639	1	3653	1	28.9	1	0.04	1	0.001	0	0.1	0	0.024	1	0.05	0	0.01	0	0.07	1	0.05	0	7.2	1	0.1	0
93	EPA 03	5385	1	3368	1	23.6	1	0.04	1	0.001	0	0.1	0	0.016	1	0.05	0	0.01	0	0.04	1	0.05	0	6.78	1	0.1	0
94	EPA 03	4846	1	3253	1	29.7	1	0.02	1	0.001	0	0.1	0	0.001	1	0.05	0	0.01	0	0.03	1	0.05	0	5.9	1	0.1	1
95	EPA 03	4646	1	3002	1	27.3	1	0.07	1	0.001	0	0.2	1	0.006	1	0.01	0	0.01	0	0.05	1	0.05	0	6.07	1	0.16	1
96	EPA 03	4392	1	2888	1	25.6	1	0.02	1	0.001	0	0.25	1	0.008	1	0.01	0	0.01	0	0.03	1	0.05	0	4.24	1	0.17	1
97	EPA 03	3939	1	2885	1	31.2	1	0.03	1	0.001	0	0.2	1	0.008	1	0.01	0	0.01	0	0.03	1	0.05	0	3.96	1	0.25	1
98	EPA 03	3752	1	2485	1	24.2	1	0.02	1	0.001	0	0.22	1	0.001	1	0.01	0	0.01	0	0.02	1	0.05	0	2.87	1	0.24	1
99	EPA 11	4245	1	2757	1	29.9	1	0.02	1	0.001	0	0.42	1	0.137	1	0.05	0	0.01	0	0.24	1	0.05	0	3.3	1	68	1
100	EPA 11	4392	1	2826	1	28.3	1	0.01	1	0.001	0	0.49	1	0.604	1	0.05	0										

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
67	0.05	0	0.001	0	0.1	0	0.007	1	1	1	0	1	1	0.2	0	1	0	1	1	1	background
68	0.05	0	0.001	0	0.1	0	0.092	1	0.2	0	1	0	0.2	1	0.2	0	1.3	1	1	0	background
69	0.05	0	0.001	0	0.1	0	0.007	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
70	0.05	0	0.001	0	0.1	0	0.011	1	0.5	1	1	0	0.5	1	0.2	0	1	0	1	0	background
71	0.05	0	0.001	0	0.1	0	0.004	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
72	0.06	1	0.001	0	0.1	0	0.016	1	0.2	0	3.1	1	3.1	1	0.2	0	1	0	1	0	background
73	0.05	0	0.001	0	0.1	0	0.021	1	0.2	0	2	1	2	1	0.2	0	4.7	1	1	0	background
74	0.05	0	0.001	0	0.1	0	0.009	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
75	0.19	1	0.001	0	0.1	0	0.017	1	0.2	0	5.4	1	5.4	1	0.2	0	1.8	1	9.1	1	background
76	0.05	0	0.001	0	0.1	0	0.008	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
77	0.14	1	0.001	0	0.1	0	0.008	1	0.8	1	2.6	1	3.4	1	0.2	0	1.4	1	4.9	1	background
78	0.12	1	0.001	0	0.1	0	0.01	1	0.2	0	1	0	0.2	0	0.2	0	3.5	1	1	0	background
79	0.2	1	0.001	0	0.1	0	0.009	1	0.3	1	1.3	1	1.6	1	0.2	0	1.1	1	2.4	1	background
80	0.05	1	0.001	0	0.1	0	0.005	1	0.2	1	1	0	0.2	1	0.2	0	1	0	1	0	background
81	0.05	0	0.001	0	0.1	0	0.006	1	0.2	0	1	0	0.2	0	0.2	0	11	1	1.1	1	background
82	0.07	1	0.001	0	0.1	0	0.012	1	0.2	0	1	0	0.2	0	0.2	0	2.7	1	1.3	1	background
83	0.08	1	0.001	0	0.1	0	0.0098	1	0.6	1	1	0	0.6	1	0.2	0	1	0	1	0	background
84	0.09	1	0.001	0	0.1	0	0.012	1	0.3	1	1.7	1	2	1	0.2	0	1	0	1	0	background
85	0.18	1	0.001	0	0.1	0	0.0087	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
86	0.2	1	0.001	0	0.1	0	0.0078	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
87	0.18	1	0.001	0	0.1	0	0.008	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
88	0.21	1	0.001	0	0.1	0	0.01	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
89	0.05	0	0.001	0	0.1	0	0.0103	1	1.5	1	1	0	1.5	1	2.3	1	1	0	4.3	1	background
90	0.05	0	0.001	0	0.1	0	0.016	1	1.5	1	1	0	1.5	1	0.2	0	1	0	1	0	background
91	0.05	1	0.001	0	0.1	0	0.049	1	1.5	1	1	0	1.5	1	4.7	1	1	0	6.1	1	background
92	0.05	0	0.001	0	0.1	0	0.026	1	1	1	1	0	1	1	0.2	0	1.9	1	1.6	1	background
93	0.05	0	0.001	0	0.1	0	0.033	1	0.2	0	1	0	0.2	0	3.2	1	1	0	3	1	background
94	0.05	0	0.001	0	0.1	0	0.0192	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
95	0.05	1	0.001	0	0.1	0	0.024	1	1.1	1	1	0	1.1	1	0.2	0	1	0	1	1	background
96	0.05	0	0.001	0	0.1	0	0.025	1	0.6	1	1	0	0.6	1	0.2	0	1	0	3	1	background
97	0.05	0	0.001	0	0.1	0	0.0226	1	0.8	1	1	0	0.8	1	0.2	0	1	0	1	0	background
98	0.05	0	0.001	0	0.1	0	0.0145	1	0.2	0	1	0	0.2	0	0.2	0	1	0	1	0	background
99	0.45	1	0.001	0	0.01	0	0.0103	1	5.4	1	2.2	1	7.6	1	5.8	1	1	0	5.3	1	background
100	0.46	1	0.001	0	0.1	0	0.014	1	5.3	1	2.8	1	8.1	1	0.5	1	1	0	6.1	1	background
101	0.49	1	0.001	0	0.1	0	0.008	1	5.6	1	3.6	1	9.2	1	0.7	1	1	0	7.1	1	background
102	0.48	1	0.001	0	0.1	0	0.01	1	6.8	1	1	1	7.8	1	0.2	0	1	0	6.8	1	background
103	0.3	1	0.001	0	0.1	0	0.0017	1	5.7	1	2.6	1	8.3	1	3.4	1	1	0	7.1	1	background
104	0.27	1	0.001	0	0.1	0	0.004	1	5.9	1	3.1	1	9	1	2.2	1	2	1	13	1	background
105	0.24	1	0.001	0	0.1	0	0.004	1	5	1	3.6	1	8.6	1	0.2	0	1	0	5.5	1	background
106	0.2	1	0.001	0	0.1	0	0.003	1	6.3	1	5.8	1	12.1	1	0.2	0	1	0	6.5	1	background
107	0.19	1	0.001	0	0.1	0	0.0029	1	6.8	1	6.5	1	13.3	1	0.2	0	2.4	1	1	0	background
108	0.19	1	0.001	0	0.1	0	0.0007	1	5.2	1	9.2	1	14.4	1	0.2	0	1	0	5	1	background
109	0.21	1	0.001	1	0.1	0	0.0036	1	4.2	1	1	1	5.2	1	0.2	0	1	0	4	1	background
110	0.21	1	0.001	0	0.1	0	0.001	1	8.3	1	8.4	1	16.7	1	0.2	0	2	1	8	1	background
111	0.17	1	0.001	0	0.1	0	0.001	1	4.9	1	3.8	1	8.7	1	0.2	0	1	0	5	1	background
112	0.17	1	0.001	0	0.1	0	0.0003	0	4.8	1	1	0	4.8	1	0.2	0	1	0	5		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
133	EPA 14	3409	1	2285	1	37.9	1	31.9	1	0.001	0	0.88	1	0.001	0	0.01	0	0.01	0	0.03	1	0.05	0	1.18	1	0.1	0
134	EPA 14	2743	1	1654	1	27.3	1	16.9	1	0.001	0	0.36	1	0.001	0	0.01	0	0.01	0	0.06	1	0.05	0	0.92	1	0.16	1
135	EPA 14	2710	1	1732	1	25.6	1	9.94	1	0.001	0	0.31	1	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	1.1	1	0.21	1
136	EPA 14	3074	1	1776	1	26.9	1	23.5	1	0.001	0	0.53	1	0.001	0	0.01	0	0.01	0	0.05	1	0.05	0	1.26	1	0.11	1
137	EPA 14	3516	1	2309	1	35.8	1	33	1	0.001	0	1.25	1	0.001	0	0.01	0	0.01	0	0.06	1	0.05	0	2.34	1	0.1	0
138	EPA 14	4051	1	2570	1	43.7	1	40	1	0.001	0	1.68	1	0.001	0	0.01	0	0.01	0	0.07	1	0.05	0	2.59	1	0.1	0
139	EPA 15	2567	1	1487	1	18.4	1	13.2	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	1.3	1	0.5	1
140	EPA 15	2244	1	1319	1	15	1	7.4	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	0	0.05	0	1	1	no data	0
141	EPA 15	2524	1	1499	1	18.3	1	5.9	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.01	1	0.05	0	1.6	1	0.37	1
142	EPA 15	2532	1	1419	1	17.6	1	7.8	1	0.001	0	0.1	0	0.001	1	0.05	0	0.01	0	0.01	0	0.08	1	1.5	1	0.42	1
143	EPA 15	2586	1	1475	1	18.6	1	8.92	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.04	1	0.05	0	1.39	1	0.34	1
144	EPA 15	2548	1	1412	1	18.5	1	9.55	1	0.001	0	0.1	0	0.001	0	0.05	0	0.01	0	0.03	1	0.05	0	1.45	1	0.3	1
145	EPA 15	2359	1	1347	1	19.1	1	10.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	1.19	1	0.33	1
146	EPA 15	2429	1	1360	1	18.8	1	16.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	1.15	1	0.43	1
147	EPA 15	2548	1	1565	1	21.9	1	15.6	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.03	1	0.05	0	1.55	1	0.42	1
148	EPA 15	2873	1	1789	1	31.6	1	24.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	2.06	1	0.34	1
149	EPA 15	2603	1	1588	1	21.2	1	11.1	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	2.39	1	no data	0
150	EPA 15	2809	1	1753	1	23.7	1	15	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	1	0.05	0	2.24	1	0.58	1
151	EPA 15	3214	1	2206	1	32.5	1	12.7	1	0.001	0	0.1	0	0.002	1	0.01	0	0.01	0	0.02	1	0.05	0	2.98	1	0.35	1
152	EPA 15	4002	1	2451	1	32.6	1	17.3	1	0.001	0	0.1	0	0.003	1	0.01	0	0.01	0	0.02	1	0.05	0	3.68	1	0.59	1
153	EPA 15	2950	1	1748	1	26.8	1	11	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	2.56	1	0.72	1
154	EPA 15	2816	1	1666	1	23.6	1	13.3	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.03	1	0.05	0	1.97	1	0.62	1
155	EPA 15	3326	1	2133	1	30.8	1	27.5	1	0.001	0	0.1	0	0.001	1	0.01	0	0.01	0	0.02	1	0.05	0	2.62	1	1.13	1
156	EPA 15	4110	1	2766	1	41.3	1	17	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	4.18	1	0.1	0
157	EPA 15	3001	1	1774	1	28.5	1	12.8	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.21	1	1.21	1
158	EPA 15	2537	1	1537	1	22.6	1	9.5	1	0.001	0	0.1	0	0.002	1	0.01	0	0.01	0	0.05	1	0.05	0	1.16	1	1.2	1
159	EPA 15	4123	1	2390	1	31	1	33.2	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	2.82	1	0.93	1
160	EPA 15	4502	1	3049	1	39	1	31.5	1	0.001	0	0.3	1	0.001	0	0.01	0	0.01	0	0.07	1	0.05	0	4.42	1	0.75	1
161	EPA 15	4144	1	2567	1	36.5	1	37.2	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.02	1	0.05	0	3.08	1	0.81	1
162	EPA 15	4187	1	2542	1	19.9	1	44.4	1	0.001	0	0.1	0	0.001	0	0.01	0	0.01	0	0.01	0	0.05	0	3.08	1	0.67	1
163	EPA 17	6709	1	4674	1	35.6	1	0.13	1	0.001	0	0.18	1	0.224	1	0.05	0	0.01	0	0.08	1	0.05	0	6.9	1	1.2	1
164	EPA 17	6714	1	4526	1	35.3	1	0.06	1	0.001	0	0.1	0	0.253	1	0.05	0	0.01	0	0.07	1	0.05	0	6.7	1	0.83	1
165	EPA 17	6822	1	4440	1	34.3	1	0.14	1	0.001	0	0.16	1	0.133	1	0.05	0	0.01	0	0.12	1	0.05	0	5.9	1	0.46	1
166	EPA 17	6855	1	4333	1	33.9	1	0.21	1	0.001	0	0.1	0</td														

AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
133	0.05	0	0.001	0	0.1	0	0.014	1	2.7	1	5.8	1	8.5	1	0.2	0	1	0	12.4	1	background
134	0.05	0	0.001	0	0.1	0	0.037	1	2.9	1	3	1	5.9	1	0.2	0	1	0	7.6	1	background
135	0.05	0	0.011	1	0.1	0	0.036	1	3.1	1	1	0	3.1	1	0.2	0	1	0	7.3	1	background
136	0.05	0	0.001	0	0.1	0	0.033	1	2.3	1	1	1	3.3	1	0.2	0	1.7	1	3.9	1	background
137	0.05	0	0.001	0	0.1	0	0.008	1	4.1	1	4	1	8.1	1	0.2	0	1.1	1	10.3	1	background
138	0.05	0	0.001	0	0.1	0	0.005	1	2.6	1	5.2	1	7.8	1	0.2	0	1	0	10.4	1	background
139	0.05	0	0.001	1	0.1	0	0.0408	1	2.8	1	4.6	1	7.4	1	0.2	0	1.3	1	2.2	1	background
140	0.05	0	0.001	0	0.1	0	0.066	1	6.6	1	1	0	6.6	1	57	1	1.1	1	69	1	background
141	0.05	0	0.001	0	0.1	0	0.037	1	1.7	1	3.2	1	4.9	1	0.2	1	1	0	1.7	1	background
142	0.05	0	0.001	0	0.1	0	0.039	1	2.1	1	4.3	1	6.4	1	0.2	0	1	0	2.9	1	background
143	0.05	0	0.001	0	0.1	0	0.074	1	2.3	1	2.1	1	4.4	1	0.2	0	1	0	2.8	1	background
144	0.05	0	0.001	0	0.1	0	0.0618	1	2.1	1	1.1	1	3.2	1	0.2	0	1	0	2	1	background
145	0.05	0	0.001	1	0.1	0	0.0554	1	1.8	1	1.7	1	3.5	1	0.2	0	1	0	2.1	1	background
146	0.05	0	0.001	0	0.1	0	0.078	1	2.9	1	1	0	2.9	1	0.2	0	1	0	3	1	background
147	0.05	0	0.001	1	0.1	0	0.128	1	2.1	1	3.9	1	6	1	0.2	0	1	0	2	1	background
148	0.07	1	0.001	0	0.1	0	0.1015	1	2.1	1	6.3	1	8.4	1	0.2	0	1	0	1	0	background
149	0.05	0	0.001	1	0.1	0	0.065	1	1.6	1	1.8	1	3.4	1	0.2	0	1.4	1	2	1	background
150	0.05	0	0.001	1	0.1	0	0.066	1	2	1	4.1	1	6.1	1	0.2	0	1	0	2.1	1	background
151	0.05	0	0.001	0	0.1	0	0.034	1	4.6	1	8.8	1	13.4	1	0.2	0	1	0	4.9	1	background
152	0.06	1	0.001	0	0.1	0	0.014	1	4.9	1	3.9	1	8.8	1	0.2	0	1	0	5.2	1	background
153	0.05	0	0.001	0	0.1	0	0.064	1	2	1	4.5	1	6.5	1	0.2	0	1	0	2.7	1	background
154	0.05	0	0.001	0	0.1	0	0.099	1	1.8	1	4.3	1	6.1	1	0.2	0	1	0	2	1	background
155	0.05	0	0.002	1	0.1	0	0.061	1	3	1	4.9	1	7.9	1	0.2	0	1	0	3.6	1	background
156	0.05	0	0.001	1	0.1	0	0.03	1	6.4	1	5.5	1	11.9	1	0.2	0	1.4	1	8	1	background
157	0.05	0	0.001	0	0.1	0	0.074	1	3.3	1	5.2	1	8.5	1	0.2	0	1	0	12.1	1	background
158	0.05	0	0.001	1	0.1	0	0.121	1	3.1	1	5	1	8.1	1	0.2	0	1	0	10.8	1	background
159	0.05	0	0.009	1	0.1	0	0.05	1	4.6	1	8.2	1	12.8	1	0.2	0	1.8	1	17.1	1	background
160	0.05	0	0.001	0	0.1	0	0.029	1	7.7	1	4.5	1	12.2	1	0.2	0	3.8	1	14.7	1	background
161	0.05	0	0.001	0	0.1	0	0.045	1	6	1	3.8	1	9.8	1	0.2	0	1	0	11.9	1	background
162	0.05	0	0.001	0	0.1	0	0.038	1	4.3	1	5.6	1	9.9	1	0.2	0	1	0	12.7	1	background
163	0.24	1	0.001	0	0.1	0	0.053	1	3.4	1	3.4	1	6.8	1	18.4	1	1.2	1	14.4	1	background
164	0.21	1	0.001	0	0.1	0	0.076	1	1.1	1	2.7	1	3.8	1	0.2	0	1	0	3	1	background
165	0.24	1	0.001	0	0.1	0	0.046	1	1.9	1	3.1	1	5	1	0.2	0	1	0	2.3	1	background
166	0.17	1	0.001	0	0.1	0	0.048	1	2.4	1	3.5	1	5.9	1	0.2	0	1	0	3.4	1	background
167	0.25	1	0.001	0	0.1	0	0.045	1	2.5	1	3.7	1	6.2	1	0.2	0	1	0	2.9	1	background
168	0.23	1	0.001	0	0.1	0	0.0332	1	2.2	1	7.6	1	9.8	1	0.2	0	1	0	2	1	background
169	0.29	1	0.001	0	0.1	0	0.0134	1	3.4	1	3.9	1	7.3	1	0.2	0	1	0	3.8	1	background
170	0.29	1	0.001	0	0.1	0	0.0147	1	3.2	1	1	0	3.2	1	0.2	0	1	0	3	1	background
171	0.17	1	0.001	0	0.1	0	0.0151	1	1.8	1	no data	0	no data	0	0.2	0	1	0	2	1	background
172	0.22	1	0.001	0	0.1	0	0.0132	1	2	1	1	0	2	1	0.2	0	1	0	2	1	background
173	0.17	1	0.001	1	0.1	0	0.023	1	1.3	1	1	0	1.3	1	0.2	0	1.2	1	1	1	background
174	0.15	1	0.002	1	0.1	0	0.041	1	1.2	1	8.3	1	9.5	1	0.2	0	1	0	1.2	1	background
175	0.19	1	0.001	0	0.1	0	0.294	1	7.3	1	7	1	14.3	1	0.2	0	1	0	8.1	1	background
176	0.08	1	0.001	0	0.1	0	0.276	1	7	1	5.2	1	12.2	1	0.2	0	1	0	6.3	1	background
177	0.11	1	0.001	0	0.1	0	0.245	1	6	1	4.5	1	10.5	1	0.2	0	1	0	5.8	1	background
178	0.09	1	0.001</td																		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
199	0517	5130	1	3390	1	47	1	0.2	1	0.00676	1	4.7	1	0.001	0	0.01	0	0.007	1	0.8	1	0.05	0	8.98	1	0.1	0
200	0517	5080	1	3190	1	45	1	0.2	1	0.00624	1	5.1	1	0.003	1	0.01	0	0.009	1	0.79	1	0.05	0	8.8	1	0.1	0
201	0517	4880	1	3810	1	40	1	0.1	0	0.00398	1	5.1	1	0.001	0	0.01	0	0.008	1	0.85	1	0.05	0	9.04	1	0.1	0
202	0613	12600	1	9170	1	173	1	10.4	1	0.108	1	710	1	0.001	0	0.16	1	0.032	1	1.82	1	0.07	1	54.8	1	0.1	0
203	0613	12900	1	8790	1	138	1	9.5	1	0.118	1	511	1	0.001	0	0.18	1	0.032	1	2	1	0.05	0	58.1	1	0.1	0
204	0613	13100	1	8550	1	136	1	9	1	0.123	1	679	1	0.001	0	0.19	1	0.032	1	2.02	1	0.05	0	61.7	1	0.1	0
205	0613	12900	1	9040	1	147	1	9.5	1	0.114	1	611	1	0.001	0	0.19	1	0.032	1	1.21	1	0.05	0	54.9	1	0.1	0
206	0613	13100	1	9260	1	146	1	9.2	1	0.121	1	688	1	0.02	1	0.16	1	0.032	1	1.88	1	0.05	0	53.6	1	0.1	0
207	0613	12700	1	8300	1	146	1	10.6	1	0.118	1	641	1	0.001	1	0.16	1	0.029	1	1.79	1	0.05	0	50.6	1	0.1	0
208	0613	12200	1	8380	1	196	1	9.1	1	0.144	1	733	1	0.001	0	0.17	1	0.037	1	1.82	1	0.05	0	51.7	1	0.1	0
209	0613	12500	1	9430	1	183	1	9.6	1	0.0976	1	500	1	0.002	1	0.2	1	0.036	1	2.11	1	0.05	0	62.6	1	0.1	0
210	0708	5670	1	3680	1	26	1	0.1	0	0.001	0	2.9	1	0.001	0	0.01	0	0.005	0	0.35	1	0.05	0	11.1	1	0.1	0
211	0708	5920	1	3740	1	24	1	0.1	0	0.0005	0	2.9	1	0.002	1	0.01	0	0.005	0	0.35	1	0.05	0	11.2	1	0.1	0
212	0708	5960	1	3570	1	24	1	0.1	0	0.001	0	2.6	1	0.001	1	0.01	0	0.005	0	0.29	1	0.05	0	10.8	1	0.1	0
213	0708	5900	1	3910	1	27	1	0.1	0	0.0005	0	2.8	1	0.001	0	0.01	0	0.005	0	0.36	1	0.05	0	11.1	1	0.1	0
214	0708	5770	1	4040	1	26	1	0.1	0	0.0005	0	3.3	1	0.02	1	0.01	0	0.005	0	0.37	1	0.05	0	10.1	1	0.1	0
215	0708	5910	1	4040	1	28	1	0.1	0	0.0005	0	4.1	1	0.002	1	0.01	0	0.005	0	0.37	1	0.05	0	11.4	1	0.1	0
216	0708	5680	1	3630	1	37	1	0.1	1	0.0005	0	4.2	1	0.003	1	0.01	0	0.005	0	0.37	1	0.05	0	11.4	1	0.1	0
217	0708	5610	1	4370	1	25	1	0.1	0	0.0005	0	6.4	1	0.001	0	0.01	1	0.005	0	0.34	1	0.05	0	11.1	1	0.1	0
218	0711	4970	1	3380	1	18	1	0.1	0	0.001	0	0.6	1	0.02	1	0.01	0	0.005	0	0.43	1	0.05	0	7.48	1	0.1	1
219	0711	4960	1	3410	1	16	1	0.1	0	0.0005	0	0.6	1	0.1	1	0.01	0	0.005	0	0.41	1	0.05	0	7.18	1	0.4	1
220	0711	5160	1	2880	1	14	1	0.1	0	0.0005	0	0.4	1	0.04	1	0.01	0	0.005	0	0.31	1	0.05	0	5.61	1	0.2	1
221	0711	5110	1	3500	1	18	1	0.1	0	0.0005	0	0.5	1	0.03	1	0.01	0	0.005	0	0.4	1	0.05	0	6.96	1	0.1	1
222	0711	4980	1	3510	1	16	1	0.1	0	0.0005	0	0.5	1	0.05	1	0.01	0	0.005	0	0.39	1	0.05	0	6.07	1	0.1	1
223	0711	5140	1	3470	1	18	1	0.1	0	0.0005	0	0.4	1	0.03	1	0.01	0	0.005	0	0.4	1	0.05	0	7.09	1	0.1	1
224	0711	5030	1	3220	1	23	1	0.1	1	0.0005	0	0.4	1	0.045	1	0.01	0	0.005	0	0.38	1	0.05	0	6.34	1	0.2	1
225	0711	4770	1	3510	1	15	1	0.1	0	0.0005	0	0.5	1	0.01	1	0.01	0	0.005	0	0.38	1	0.05	0	6.76	1	0.2	1
226	0717	5260	1	3540	1	80	1	25.4	1	0.001	0	1.3	1	0.001	0	0.01	0	0.005	0	0.42	1	0.05	0	19.8	1	0.1	0
227	0717	5230	1	3040	1	74	1	26.2	1	0.0005	0	0.2	1	0.001	1	0.01	0	0.005	0	0.42	1	0.05	0	18.3	1	0.1	0
228	0717	5410	1	3270	1	79	1	29.1	1	0.0005	0	0.9	1	0.001	0	0.01	0	0.005	0	0.3	1	0.05	0	19.1	1	0.1	0
229	0717	5110	1	3410	1	80	1	29.1	1	0.0005	0	1.3	1	0.001	0	0.01	0	0.005	0	0.36	1	0.05	0	16.8	1	0.1	0
230	0717	4980	1	3550	1	74	1	35	1	0.0005	0	1.9	1	0.005	1	0.01	0	0.005	0	0.4	1	0.05	0	16.3	1	0.1	0
231	0717	5420	1	3440	1	79	1	31.1	1	0.0005	0	3.2	1	0.001	1	0.01	0	0.005	0	0.5	1	0.05	0	17.2	1	0.1	0
232	0717	5050	1	3390	1	94	1	37.2	1	0.0005	0	3.9	1	0.002	1	0.01	0	0.005									

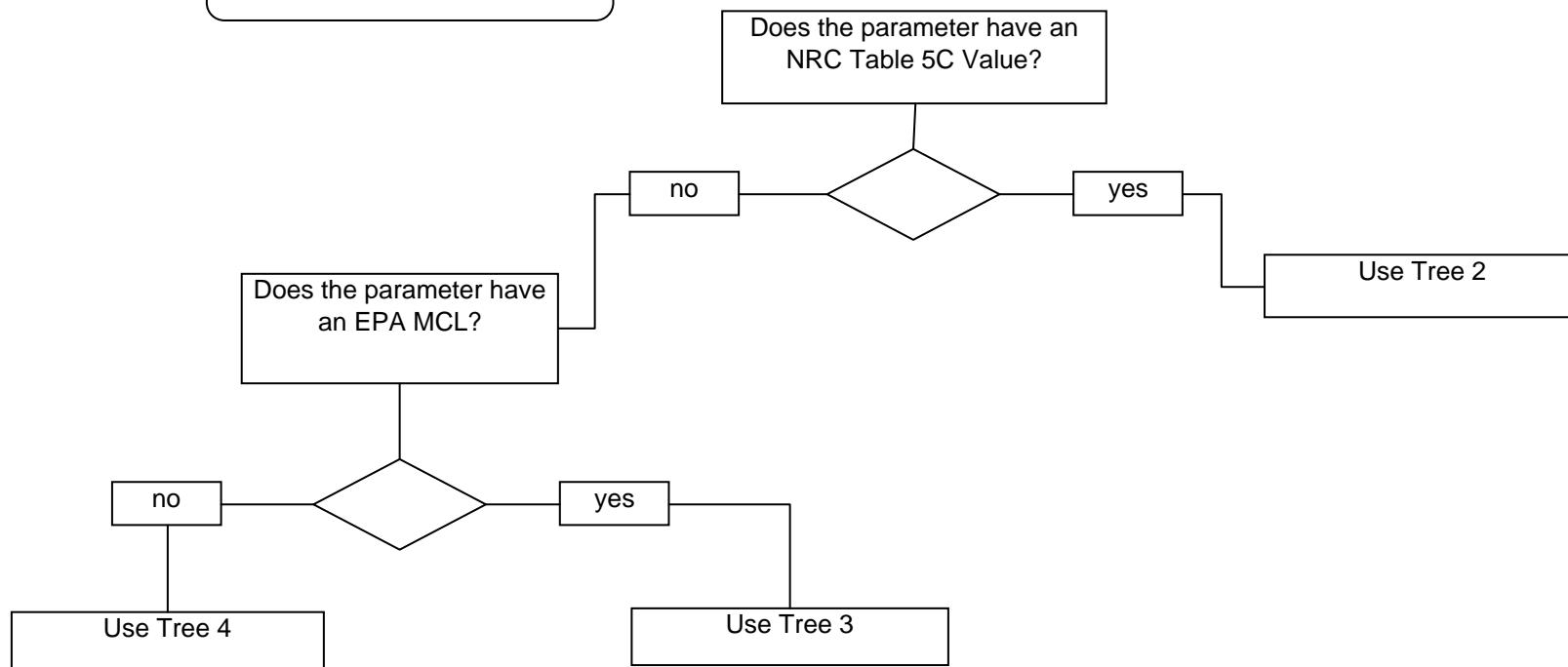
AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
199	0.76	1	0.001	0	0.1	0	0.0518	1	5.6	1	14.1	1	19.7	1	0.2	0	1.8	1	11.2	1	impacted
200	0.84	1	0.001	1	0.1	0	0.0561	1	11.8	1	17.4	1	29.2	1	0.2	0	1	0	13	1	impacted
201	0.84	1	0.001	0	0.2	1	0.0525	1	6.6	1	20.3	1	26.9	1	1.3	1	1	0	11.3	1	impacted
202	1.87	1	0.001	0	2.5	1	0.992	1	14	1	1	0	14	1	327	1	1	0	52.2	1	impacted
203	1.81	1	0.001	0	2.6	1	1.35	1	8.3	1	1	0	8.3	1	398	1	1	0	36.6	1	impacted
204	1.84	1	0.001	0	2.7	1	1.22	1	7.4	1	1	0	7.4	1	467	1	1	0	19.1	1	impacted
205	1.75	1	0.001	0	1.6	1	1.27	1	7.5	1	1	0	7.5	1	681	1	1	0	46	1	impacted
206	1.9	1	0.001	0	2.3	1	1.31	1	14.6	1	1	0	14.6	1	448	1	1	0	18.3	1	impacted
207	1.82	1	0.001	0	2.3	1	1.36	1	17.2	1	1	0	17.2	1	706	1	1.6	1	40	1	impacted
208	1.88	1	0.001	0	2.3	1	1.21	1	15.3	1	1.8	1	17.1	1	750	1	6	1	52.5	1	impacted
209	2.05	1	0.001	0	2.4	1	1.44	1	7.9	1	0.5	1	8.4	1	798	1	1	0	53.6	1	impacted
210	0.29	1	0.001	0	0.1	0	0.0221	1	7.1	1	6.4	1	13.5	1	0.2	0	1	0	7.7	1	impacted
211	0.33	1	0.001	0	0.1	0	0.0201	1	7.9	1	5.1	1	13	1	0.2	0	1	0	7.9	1	impacted
212	0.29	1	0.001	0	0.1	0	0.0194	1	7.7	1	5.1	1	12.8	1	0.2	0	1	0	12	1	impacted
213	0.32	1	0.001	0	0.1	0	0.0196	1	6.6	1	5.9	1	12.5	1	0.2	0	1	0	8.8	1	impacted
214	0.35	1	0.001	0	0.1	0	0.0217	1	8	1	7	1	15	1	0.2	0	1	0	8.6	1	impacted
215	0.34	1	0.001	0	0.1	0	0.0226	1	5.6	1	6.9	1	12.5	1	0.2	0	1	0	10.4	1	impacted
216	0.37	1	0.002	1	0.1	0	0.0246	1	7.9	1	4.5	1	12.4	1	0.2	0	5	1	11.6	1	impacted
217	0.33	1	0.001	0	0.2	1	0.0321	1	6.5	1	9.2	1	15.7	1	0.2	0	1	0	11.6	1	impacted
218	0.35	1	0.001	0	0.1	0	0.0306	1	5.4	1	13.9	1	19.3	1	0.2	0	1	0	10.2	1	impacted
219	0.39	1	0.001	0	0.1	0	0.0295	1	6.3	1	13.2	1	19.5	1	0.2	0	1	0	6.8	1	impacted
220	0.3	1	0.001	0	0.1	0	0.0237	1	6.8	1	9.9	1	16.7	1	0.2	0	1	0	9.3	1	impacted
221	0.36	1	0.001	0	0.1	0	0.0327	1	5.6	1	15.5	1	21.1	1	0.2	0	1	0	7.3	1	impacted
222	0.37	1	0.001	0	0.1	0	0.0268	1	5.3	1	16.4	1	21.7	1	0.2	0	1	0	6.8	1	impacted
223	0.34	1	0.001	0	0.1	0	0.024	1	3.9	1	15.6	1	19.5	1	0.2	0	1	0	7.7	1	impacted
224	0.35	1	0.001	0	0.1	0	0.0241	1	7.4	1	15.3	1	22.7	1	0.2	0	1	0	9.1	1	impacted
225	0.35	1	0.001	0	0.1	0	0.0248	1	4	1	18.4	1	22.4	1	0.4	1	1	0	8.4	1	impacted
226	0.26	1	0.001	0	0.1	0	0.012	1	17.7	1	22.4	1	40.1	1	0.2	0	1	0	20.7	1	impacted
227	0.29	1	0.001	0	0.1	0	0.0102	1	20.5	1	26.1	1	46.6	1	0.2	0	1	0	19	1	impacted
228	0.27	1	0.001	0	0.1	0	0.0105	1	18.3	1	21.7	1	40	1	0.2	0	1	0	23.3	1	impacted
229	0.26	1	0.001	0	0.1	0	0.0063	1	19.6	1	25.9	1	45.5	1	0.2	0	1	0	30.6	1	impacted
230	0.27	1	0.001	0	0.1	0	0.0033	1	20.4	1	28.7	1	49.1	1	0.2	0	1	0	19.3	1	impacted
231	0.34	1	0.001	0	0.1	0	0.0036	1	14.3	1	25.2	1	39.5	1	0.2	0	1	0	20.9	1	impacted
232	0.43	1	0.001	0	0.1	0	0.0017	1	25.3	1	29.7	1	55	1	0.2	0	5.3	1	26.4	1	impacted
233	0.55	1	0.001	0	0.1	0	0.0011	1	18.6	1	22.8	1	41.4	1	0.6	1	1	0	22.1	1	impacted
234	0.18	1	0.001	0	0.1	0	0.022	1	2.5	1	5.1	1	7.6	1	0.2	0	1	0	2.4	1	impacted
235	0.18	1	0.001	0	0.1	0	0.0162	1	3.1	1	4.2	1	7.3	1	0.2	0	1	0	2.5	1	impacted
236	0.16	1	0.001	0	0.1	0	0.0074	1	2	1	4.8	1	6.8	1	0.2	0	1	0	3.5	1	impacted
237	0.14	1	0.001	0	0.1	0	0.0013	1	2.8	1	9.7	1	12.5	1	0.2	0	1	0	3.2	1	impacted
238	0.16	1	0.001	0	0.1	0	0.0092	1	2.7	1	9.3	1	12	1	0.2	0	1	0	4.3	1	impacted
239	0.22	1	0.001	0	0.1	0	0.0103	1	2	1	8.7	1	10.7	1	0.2	0	1	0	4.2	1	impacted
240	0.56	1	0.001	0	0.1	0	0.0221	1	4.8	1	12.6	1	17.4	1	0.2	0	8.1	1	5.3	1	impacted
241	0.6	1	0.001	0	0.1	0	0.0184	1	2.5	1	11.7	1	14.2	1	0.4	1	1	0	5.1	1	impacted
242	0.14	1	0.001	0	0.1	0	0.0137	1	4.5	1	5.6	1	10.1	1	0.2	0	1	0	5.3	1	impacted
243	0.15	1	0.001	0	0.																

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA
265	NBL-01	4030	1	2760	1	48	1	0.1	0	0.0005	0	2.5	1	0.18	1	0.01	0	0.005	0	0.15	1	0.05	0	6.45	1	1	1

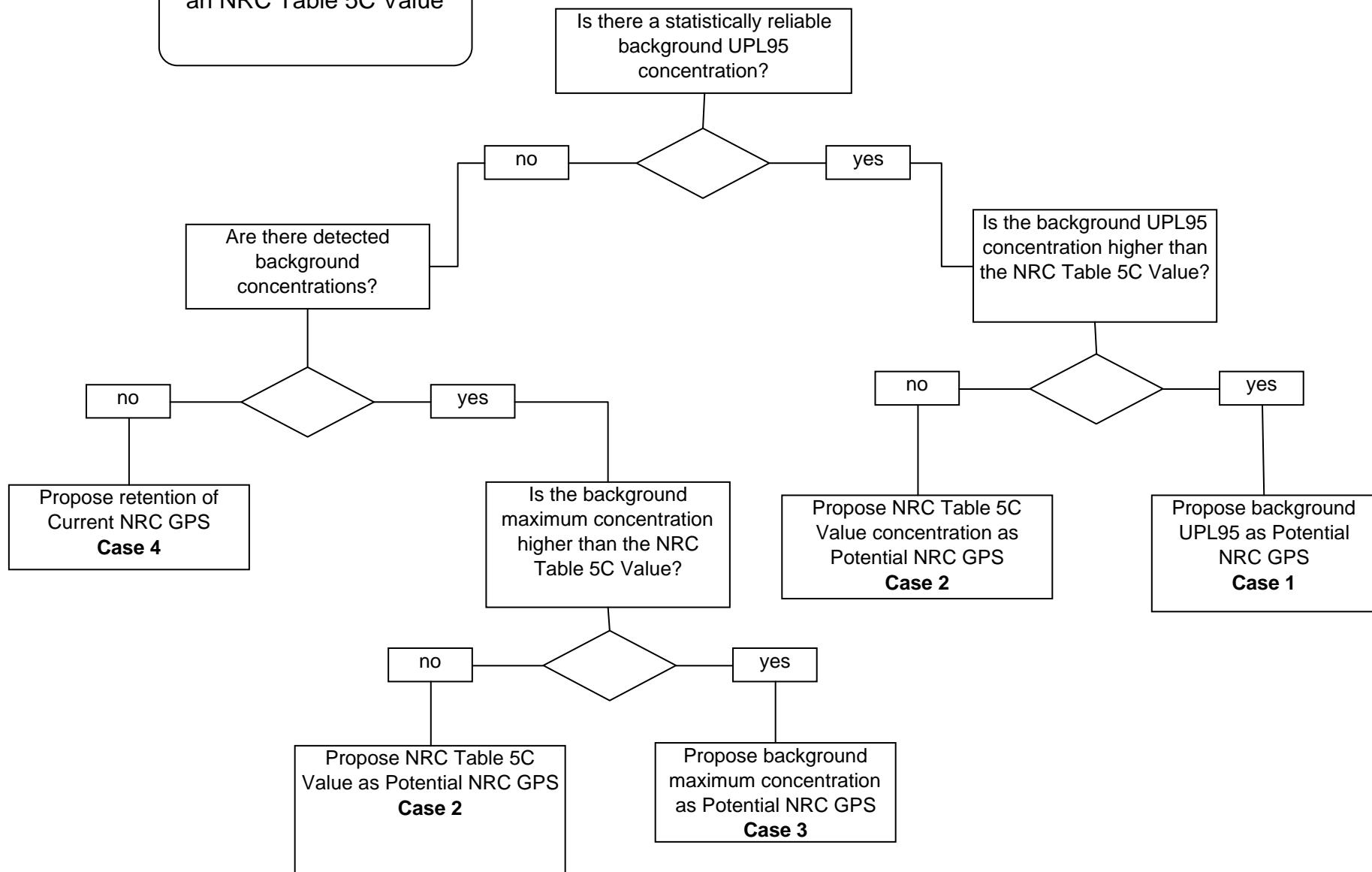
	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW
265	0.21	1	0.001	0	0.1	1	0.134	1	7.9	1	12.9	1	20.8	1	0.2	0	1	0	10	1	impacted	

Appendix G

TREE 1
Initial Decision Tree

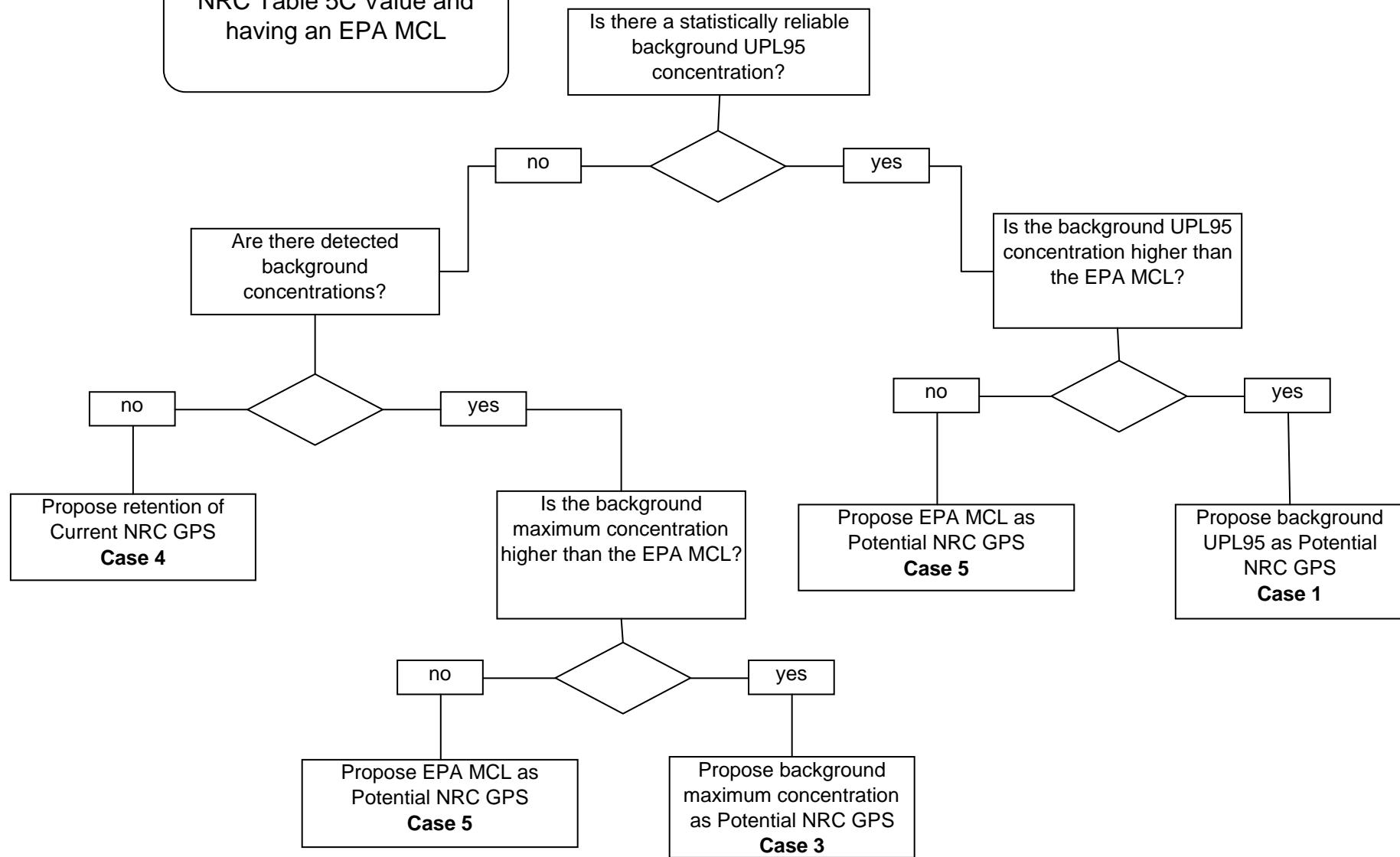


TREE 2
Case of parameter having
an NRC Table 5C Value



TREE 3

Case of parameter lacking an
NRC Table 5C Value and
having an EPA MCL



TREE 4

Case of parameter lacking
both an NRC Table 5C Value
and an EPA MCL

