

**From:** "Maher, William D." <william.maher@exeloncorp.com>  
**To:** "Duke Wheeler (E-mail)" <dxw@nrc.gov>, "McDowell Bruce (E-mail)" <mcdowell5@llnl.gov>, "eva.hickey@pnl.gov" <eva.hickey@pnl.gov>  
**Date:** 7/8/03 2:41PM  
**Subject:** FW: IDNS Environmental Data in support of Dresden/Quad Cities License Extension

Per our discussions to day, here is the data that IDNS has forwarded to me.

If you should have any questions, please feel free to contact me at any time.

Bill

-----Original Message-----

From: Parker, Mike [mailto:Parker@idns.state.il.us]  
Sent: Wednesday, June 25, 2003 3:35 PM  
To: 'william.maher@exeloncorp.com'  
Cc: Parker, Mike  
Subject: IDNS Environmental Data in support of Dresden/Quad Cities License Extension

Bill,

Enclosed is our environmental report transmittal letter and data requested by NRC and Exelon at the Dresden/Quad Cities License Extension briefing. The Department agreed to provide the data in order to facilitate the License Extension process. The Department can provide TLD location maps at your request. I will be happy to help with any questions you may have.

Mike Parker

<<DR QC 00-03 Data Cover.DOC>> <<dr qc 00 - 03 rev2.xls>>

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**TO:** Mike Parker, Manager  
Office of Nuclear Facility Safety

**THRU:** Rich Allen, Manager  
Office of Environmental Safety

**FROM:** Larry Haskell  
Office of Environmental Safety

**DATE:** June 23, 2003

**RE:** Dresden, Quad Cities Environmental Data 2000 - 2003

Attached to this is an MS-Excel file that details the results of IDNS analyses of environmental samples collected around the Dresden and Quad Cities Nuclear Power Stations between 2000 and 2003. All of the samples were splits of samples that Exelon collected as part of its Radiological Environmental Monitoring Program (REMP). All samples were collected under contract with Environmental Incorporated Midwest Laboratory, Inc. and analyzed by the Illinois Department of Nuclear Safety Division of Radiochemistry.

The data tables list concentrations of selected radionuclides, both reactor-produced and naturally occurring. Reactor produced radionuclides were selected because of their likelihood of being found in reactor coolant and because their half-life would permit detection several weeks after production. Uncertainties are given at the 95% confidence level. Because the concentrations in question are so close to (if not equal to) zero, random fluctuations in background may result in negative values for concentrations. While physically impossible, these negative values, when presented along with a confidence interval, are valuable for assessing method performance over the long-term. The reader will note that in most cases the confidence interval intersects the zero concentration axis. In such cases the concentration may be interpreted as being not significantly different from zero.

### *Water Samples*

Water samples were collected either weekly and composited for quarterly analysis or collected quarterly. Water samples were submitted for gross  $\alpha/\beta$ , tritium and gamma spectroscopy analyses.

### *Milk Samples*

Prior to FY02, IDNS received one milk sample per quarter, where Exelon collected two samples each month at each location. Beginning in July 2002, IDNS began to receive one sample each month from each participating dairy. Milk samples were submitted for gamma spectroscopy analysis.

### *Sediment Samples*

Samples were collected twice a year, in May and October. No Quad Cities sample was collected in May 2001 because of flooding on the Mississippi River. Sediment samples were submitted for gamma spectroscopy analysis.

### *Fish Samples*

Two species of fish were collected each May and October. Samples were prepared by technicians at Midwest Incorporated Laboratory and were taken from only the edible portions of the fish. Fish samples were analyzed for reactor-produced radionuclides using gamma spectroscopy. Because of the delay between collection and analysis, occasionally it is not possible to perform adequate measurements on the shorter-lived radionuclides (Co-58, Fe-59, Zr-95). In such instances, no data is given for those nuclides.

### *Vegetable Samples*

Two varieties of vegetables were collected annually, generally one root vegetable and one leafy green. Vegetable samples were analyzed for reactor-produced radionuclides using gamma spectroscopy.

### *TLD Results*

Results from TLD monitoring are given for the IDNS Braidwood, Dresden and Quad Cities networks. Data from the Braidwood network is included here because it overlaps with the Dresden network – many TLDs in the Braidwood network lie within the ten-mile EPZ of Dresden station. TLDs are generally exchanged quarterly. Maps of these routes are attached to the hard copy of this memo.



Water pg 2 of 4

		Jan-01	0.5	3.1	2.7	3.2	41.2	57.0	-1.4	8.6	-0.2	2.1	0.4	2.3	-1.2
		Apr-01	-3.4	3.2	1.9	2.8	-21.4	68.2	-2.9	3.9	-0.1	2.0	-0.1	2.9	0.7
		Jul-01	0.6	2.7	2.1	3.2	-101.0	86.6	-2.1	4.0	1.1	2.0	1.0	2.1	-1.6
		Oct-01	2.0	3.0	2.8	3.3	-29.9	87.9	-3.4	7.0	1.5	2.5	1.5	2.6	0.4
		Jan-02	0.5	2.7	3.6	3.3	-93.5	85.0	-0.3	2.4	1.4	1.9	0.2	1.9	0.0
		Apr-02	0.2	2.5	3.8	3.6	-77.2	83.0	-0.5	3.7	-0.8	1.9	-0.8	2.4	-1.4
		Jul-02	1.5	2.5	2.8	3.6	8.0	87.9	-4.2	8.2	-1.1	2.4	1.7	2.6	0.9
		Oct-02	0.7	2.6	4.0	3.7	-33.2	88.0	2.9	3.6	0.6	2.0	-1.4	2.2	0.3
020215	Q-33 Miss Riv @ Cordova, sector K, 3.3mi SSW Weekly collection for Quarterly Composite	Mar-00	-2.0	2.8	3.4	2.6	100.0	72.5	-9.6	11.7	-1.1	1.9	2.0	2.4	0.6
		Jun-00	1.7	2.8	4.1	2.7	-34.1	92.6	1.9	6.4	-0.2	2.0	0.6	0.2	0.0
		Sep-00	-0.1	6.8	2.2	15.2	-165.0	84.3	-0.7	4.6	1.6	1.7	-0.1	1.9	-1.3
		Dec-00	-0.6	2.0	3.7	3.2	-1.6	76.2	-12.8	15.6	0.5	2.0	1.4	2.2	0.7
		Mar-01	-0.2	2.2	3.0	3.2	-34.6	57.7	1.0	28.4	-5.8	6.6	-0.2	11.7	-8.1
		Jun-01	2.0	2.1	6.1	3.1	-24.9	68.1	-0.3	3.5	-0.1	1.8	-0.3	1.9	-1.0
		Sep-01	0.8	2.4	7.5	3.5	-40.7	88.0	-2.8	3.8	-1.6	2.0	2.3	2.1	0.7
		Dec-01	0.0	2.5	2.7	3.4	165.0	93.0	-3.9	6.4	0.1	2.0	1.0	2.3	0.3
		Mar-02	1.3	3.4	4.7	3.5	58.1	100.0	1.5	0.3	0.5	2.1	1.4	2.5	-2.7
		Jun-02	3.6	2.7	7.5	3.8	19.9	85.8	2.5	4.2	0.2	2.1	2.3	2.6	-0.3
		Sep-02	2.6	2.4	6.5	3.6	34.9	88.6	-1.9	6.2	-0.6	1.7	0.2	1.9	0.7
		Dec-02	5.6	3.0	3.1	3.5	-28.1	88.1	0.2	3.9	0.7	2.1	-1.0	2.3	1.7
020216	Q-34 Miss Riv @ Comanche, sector C, 4.4 mi N Weekly collection for Quarterly Composite	Mar-00	-0.7	3.2	5.1	2.6	134	66.6	-2.8	12.1	-2.0	2.4	-0.3	2.6	0.9
		Jun-00	0.4	2.5	1.4	2.5	-14.9	93.0	-3.3	6.8	-0.4	2.3	0.3	2.0	-0.7
		Sep-00	0.9	7.1	-0.6	15.1	-240.0	82.4	2.8	5.1	1.2	2.1	0.7	2.1	-0.4
		Dec-00	1.1	2.1	4.9	3.1	4.9	75.4	11.9	19.0	0.8	2.2	1.8	2.4	-0.2
		Mar-01	1.0	2.5	3.0	3.2	26.7	67.4	-12.9	30.6	3.5	11.4	-1.7	12.3	-4.6
		Jun-01	3.2	2.3	6.0	3.1	-52.7	67.4	1.1	3.8	0.2	2.0	0.5	2.1	-1.9
		Sep-01	0.9	2.4	4.8	3.3	-63.2	87.6	1.6	3.5	-1.6	2.2	-0.3	2.1	-0.8
		Dec-01	2.7	3.1	4.6	3.5	59.9	90.3	-3.0	6.7	1.6	1.7	1.0	2.2	1.4
		Mar-02	0.6	3.4	1.9	3.3	200.0	104.0	-0.3	6.8	-2.5	1.7	-1.0	1.7	0.3
		Jun-02	1.8	2.3	6.5	3.7	29.9	86.1	-2.4	3.1	-0.7	1.4	0.1	1.4	-0.6
		Sep-02	3.2	2.6	4.7	3.5	29.7	88.5	-3.0	8.2	-0.8	2.0	1.8	2.5	-0.6
		Dec-02	-1.1	1.8	6.5	3.6	-30.6	88.0	-1.6	3.4	1.8	1.9	0.1	2.3	-0.7
020217	Q-35; McMillan Well Quarterly Grab	Jul-01	-0.3	2.2	2.7	3.2	-99.2	86.7	-0.3	3.9	-0.8	2.0	1.3	2.1	1.0
		Oct-01	1.0	3.3	-0.9	2.9	-79.8	86.5	1.1	7.4	-1.2	2.7	1.6	2.4	0.9
		Jan-02	-1.2	2.7	-2.2	2.8	0.0	87.6	0.2	2.7	1.5	1.9	-1.4	1.9	-0.7
		Apr-02	-0.2	2.2	5.5	3.7	2.5	85.3	-0.8	2.9	0.9	1.4	-0.1	1.6	0.9
		Jul-02	3.0	2.6	1.7	3.4	-1.3	87.6	1.5	7.9	-1.1	2.0	2.4	2.2	-1.0
		Oct-02	-0.8	1.8	-2.0	3.2	-7.7	88.7	-1.1	4.1	1.9	2.3	0.9	2.1	-1.5



*Water pg 4*

1.8	-18.8	45.2	-11.4	27.3	0.3	2.6	-1.0	7.3	18.8	18.3
1.8	6.1	13.3	-19.1	32.3	-0.1	2.1	-6.7	5.3	-0.7	7.2
1.8	7.3	12.6	13.8	33.0	-1.0	2.1	-1.2	5.7	-3.6	7.3
2.1	23.4	33.7	16.2	41.3	-0.3	2.7	-0.5	5.9	7.6	15.3
1.7	-6.1	6.9	5.7	26.6	1.4	1.9	-0.1	3.0	2.4	5.1
1.8	4.6	11.4	-18.8	24.1	-0.6	2.4	-1.1	4.7	-5.6	7.1
2.1	10.2	43.3	17.7	32.0	-0.8	2.9	-2.9	6.6	14.9	19.2
1.9	-6.3	11.4	-13.7	26.9	-0.5	2.1	-0.2	4.9	-2.1	7.2
1.8	20.3	71.6	-40.2	30.4	2.2	2.8	-0.2	7.1	-2.8	25.1
1.9	17.1	28.0	37.5	41.2	-2.0	2.4	0.3	6.1	7.3	12.4
1.7	8.8	19.7	1.7	40.3	-2.1	2.1	-0.5	6.6	4.4	8.3
1.8	-43.7	143.6	-24.2	32.5	-1.7	2.7	-6.9	7.4	-20.0	36.8
0.5	44.1	113.6	33.0	213.9	-0.1	11.7	-25.7	28.5	-10.4	54.6
1.7	-2.3	11.4	-26.8	31.6	0.4	1.9	-7.4	4.9	-3.2	6.5
1.8	-1.2	12.1	-41.8	28.9	0.8	2.2	-6.3	5.3	-0.1	7.0
1.9	18.9	25.5	11.6	41.2	0.1	2.4	-3.7	5.7	5.6	12.3
2.0	6.7	44.6	6.4	38.6	-0.3	2.7	-1.4	6.3	1.4	18.1
2.0	0.5	12.3	-13.8	30.0	0.9	2.3	-0.2	4.9	-6.3	7.7
1.5	-0.7	30.4	-24.7	23.7	-1.4	2.1	2.7	5.1	-8.5	12.9
2.0	-4.7	13.2	-30.4	30.8	0.5	2.2	1.2	4.9	-0.8	7.7
2.0	76.3	81.1	21.8	38.5	0.4	2.9	-8.0	6.7	7.0	27.6
1.8	-2.3	24.7	-36.3	32.0	-0.7	2.2	-3.2	5.2	4.1	10.8
1.7	-5.9	20.9	4.8	23.8	0.9	2.3	-3.6	5.3	3.4	10.7
1.8	-27.8	163.9	-48.1	31.5	-0.6	3.1	1.0	8.8	37.9	43.8
0.0	125.8	113.4	85.3	173.5	-5.7	12.9	-38.8	30.8	30.8	62.0
1.8	-4.6	11.1	-20.7	25.4	-1.9	2.0	-3.4	4.8	5.1	7.1
1.8	7.5	11.4	15.8	42.2	0.0	1.9	-3.4	4.7	0.3	6.4
1.9	8.0	23.7	-10.3	30.9	-0.2	2.2	-0.4	5.8	3.2	11.0
1.4	-5.2	33.8	-9.2	18.8	-0.9	1.9	0.0	4.7	-4.2	13.3
1.4	11.4	8.7	-7.1	19.4	-0.7	1.8	0.9	3.8	-2.3	5.6
2.0	-13.5	41.1	36.8	38.0	-1.1	2.7	-7.7	6.2	1.3	17.3
1.8	17.9	11.7	-31.9	30.7	-1.1	2.0	0.2	4.7	6.3	6.7
1.9	-3.3	12.6	9.5	31.8	-1.0	2.1	-3.2	5.3	0.6	7.2
2.1	31.3	32.4	-15.5	32.5	0.2	3.2	-3.0	6.4	-7.5	15.3
1.8	1.2	7.1	18.7	29.5	-0.7	1.9	3.0	4.2	0.6	4.8
1.3	5.7	9.5	10.8	18.5	-1.4	1.6	0.6	3.4	1.8	5.9
1.8	-3.6	34.1	-10.4	25.4	-0.7	2.6	-1.2	5.7	2.3	16.2
2.1	8.7	12.6	24.7	39.9	-1.2	2.3	-4.2	5.1	2.0	7.7



*Sediment*

IDNS Code	Exelon Code & Description	Date	Co-60		Cs-134		Cs-137		Mn-54		K-40	
			10e-2 pCi/g	95% CI	10e-2 pCi/g	95% CI	10e-2 pCi/g	95% CI	10e-2 pCi/g	95% CI	10e-2 pCi/g	95% CI
010901	D-27 Dresden Lock & Dam (Sector Q)	19-May-00	-0.3	0.7	0.6	0.7	0.5	0.6	0.1	0.7	764.0	79.0
		06-Oct-00	-0.1	0.8	1.4	1.0	2.8	1.6	0.0	1.0	1178.0	120.0
		11-May-01	2.5	1.8	2.6	1.6	8.6	1.9	-0.3	1.2	1536.0	156.5
		05-Oct-01	0.5	1.0	2.6	2.3	1.5	1.3	0.6	1.7	1128.0	107.0
		10-May-02	0.3	0.9	1.6	1.4	3.1	1.2	0.5	1.1	1110.0	104.0
		04-Oct-02	0.4	0.8	2.0	0.9	2.7	0.9	0.1	0.6	1060.0	97.3
020905	Q-39, Cordova, D.S. on Miss. River	12-May-00	0.4	1.2	4.4	2.0	3.9	2.3	1.7	1.6	1460.0	150.0
		21-Oct-00	0.0	1.0	3.9	1.6	4.1	1.5	1.4	1.1	1450.0	147.0
		01-May-01	No Sample Received									
		13-Oct-01	-0.7	1.2	5.8	2.5	4.1	2.0	-1.2	2.4	1240.0	120.0
		24-May-02	0.0	1.0	4.2	1.6	6.8	1.8	-1.1	1.2	1280.0	122.0
		12-Oct-02	0.0	0.9	1.6	1.2	2.8	1.3	-0.3	0.9	1150.0	107.0

*Fish*

IDNS Code	Exelon Code & Description										
		Date	Species	Co-58		Co-60		Co-134		Co-137	
				10e-2 pCi/g	95% CI						
010602	D-28 IL River, Dresden Pool (Sector Q)	08-May-00	Carp	0.0	5.6	-0.4	1.3	-0.4	1.5	-0.1	1.2
			Gizzard Shad	0.1	4.9	1.5	1.6	0.8	1.5	0.3	1.1
		19-Oct-00	Buffalo	-0.7	3.4	0.2	1.1	0.4	1.2	0.1	1.0
			Carp	0.5	3.3	0.1	1.1	0.4	1.1	-0.2	1.0
		03-May-01	Buffalo	0.5	6.8	0.2	1.4	0.6	1.6	0.3	1.2
			Catfish	0.6	4.8	0.0	1.0	0.1	1.2	1.2	1.0
		16-Oct-01	Bass			-1.3	1.3	0.0	1.7	-0.1	1.0
			Drum			-1.2	1.2	-0.4	1.7	0.3	0.9
		02-May-02	Bass	16.6	28.5	0.0	1.3	-0.9	1.6	-0.7	1.1
			Drum	13.4	24.9	-0.3	1.4	-0.5	1.8	-0.5	1.2
020601	Q-24 Miss. River, Pool #14 (Sector L)	01-Oct-02	Buffalo	1.3	2.3	1.8	1.0	0.6	1.0	-0.3	0.8
			Carp	-1.4	2.2	0.2	0.9	0.2	1.0	0.2	0.8
		02-May-00	Drum	3.8	6.3	-0.5	1.2	0.6	1.5	0.2	1.1
			Quillback	2.5	5.4	-1.1	1.1	-0.8	1.2	0.7	1.0
		24-Oct-00	Carp	-3.0	2.8	0.4	1.1	0.5	1.0	0.2	0.8
			Catfish	-0.8	3.7	-0.6	1.3	-0.3	1.5	-0.6	1.2
		23-May-01	Drum	-2.2	4.9	-0.7	1.5	-0.4	1.5	0.3	1.2
020601	Q-24 Miss. River, Pool #14 (Sector L)		No Sample							13.8	25.7
		17-Oct-01	Carp			0.7	1.2	-0.2	1.8	-0.1	1.0
			Quillback			-0.3	1.5	1.4	2.0	-0.3	1.2
		02-May-02	Drum	-16.3	20.9	0.9	1.0	0.2	1.4	-0.3	0.9
			Perch	-15.2	26.1	0.1	1.2	0.1	1.7	-0.8	1.1
		02-Oct-02	Carp	1.0	3.2	-0.3	1.4	0.3	1.5	0.2	1.2
			Catfish	0.8	2.7	0.7	1.2	-0.2	1.3	0.1	1.1

Vegetation pg 1 of 2

IDNS Code	Exelon Code & Description	Date	Variety	Co-60		Ce-134		Ce-137		Mn-54		K-40	
				pCi/kg	95% CI								
010705	DR Quad #1 Farm in Sector A	25-Aug-00	Beet	-0.4	1.2	0.0	1.2	-0.4	1.1	-0.4	1.2	230	31
			Beet Green	0.4	0.8	-0.5	0.8	0.1	0.7	36.5	0.8	593	36
		31-Aug-01	Cabbage	2.1	1.7	0.5	1.9	-0.3	1.7	-0.2	1.8	308	49
			Potato	-0.2	1.3	0.5	1.4	0.2	1.2	-0.8	1.4	652	48
010706	DR Quad #2 Farm in Sector G	14-Sep-02	Potato	0.2	1.4	-0.3	1.7	-0.6	1.2	-1.3	1.5	615	49
			No sample										
		25-Aug-00	Cabbage	-0.8	1.5	-1.0	1.4	-0.1	1.3	-0.9	1.5	357	38
			Potato	-0.3	1.4	0.3	1.2	-0.3	1.1	-0.7	1.2	400	43
010703	DR Quad #3 Farm in Sector K	31-Aug-01	Beet	-0.4	1.4	-0.4	1.5	0.1	1.2	0.2	1.6	465	44
			Cabbage	0.2	1.4	-0.3	1.5	-0.8	1.3	-1.2	1.6	553	46
		14-Sep-02	Beet	-0.3	1.3	1.7	1.4	0.2	1.2	-0.8	1.5	301	38
			Cabbage	0.9	1.5	-0.1	1.8	-0.9	1.4	-0.8	1.8	648	55
010704	DR Quad #4 Farm in Sector N	25-Aug-00	Cabbage	-0.8	1.8	-0.3	1.5	0.1	1.5	0.7	1.6	264	40
			Potato	0.7	1.2	0.4	1.2	-0.9	1.0	-1.1	1.3	525	44
		31-Aug-01	Beet	0.4	1.6	0.6	1.3	-0.5	1.1	0.3	1.4	420	52
			Cabbage	-1.4	1.2	1.1	1.1	-0.3	1.1	-0.3	1.1	388	36
020701	QC Quad #1 (Ziegler Farm)	14-Sep-02	Cabbage	-0.2	1.2	-2.2	1.7	-0.5	1.2	0.0	1.6	311	38
			Onion	0.0	1.3	1.4	1.4	-0.6	1.2	0.1	1.3	164	30
		25-Aug-00	Cabbage	-0.2	0.9	0.0	0.9	0.2	0.8	-0.1	1.0	191	25
			Carrot	1.1	1.1	-0.4	1.2	0.9	1.0	0.7	1.2	416	39
020702	QC Quad #2 (Schipper Farm)	31-Aug-01	Beet	0.1	1.0	1.1	1.1	-0.4	1.0	-0.1	1.2	208	30
			Chard	-0.4	1.2	0.7	1.2	-0.4	1.0	-0.2	1.3	324	34
		14-Sep-02	Beet Green	1.2	1.3	-0.8	1.5	-0.5	1.3	-1.7	1.6	417	41
			Carrot	0.3	1.3	-0.5	1.3	0.7	1.1	0.1	1.3	550	45
020703	QC Quad #3 (Johnson Farm)	01-Aug-00	Onion	0.3	0.9	0.2	0.9	0.6	0.8	0.8	1.0	153	22
			Rhubarb	0.0	0.9	0.4	0.9	0.7	0.8	0.1	0.9	446	29
		21-Aug-01	Rhubarb	-0.4	0.8	1.2	0.9	0.0	0.8	-0.7	0.9	172	23
			No Sample										
020704	QC Quad #4	01-Aug-02	Onion	0.3	0.7	0.2	0.8	0.1	0.6	-0.1	0.8	196	19
			Rhubarb	0.9	1.6	0.2	1.8	-0.8	1.6	-0.1	2.0	315	44
		01-Aug-00	Potato	-0.5	0.9	0.6	1.0	0.0	0.9	-0.8	1.0	498	35
			Rhubarb	-0.6	1.9	0.5	1.8	1.1	1.7	0.9	2.2	387	49
020701	QC Quad #1 (Ziegler Farm)	21-Aug-01	Okra	0.1	1.6	0.3	1.7	-0.2	1.3	-0.2	1.6	331	41
			Rhubarb	-0.6	0.9	-0.3	0.9	-0.2	0.8	0.6	0.9	237	24
		01-Aug-02	Potato	0.0	0.7	-0.7	0.7	-0.5	0.7	-0.7	0.9	267	25
			Rhubarb	-0.4	0.5	-0.1	0.5	0.3	0.4	0.2	0.6	401	23
020702	QC Quad #2 (Schipper Farm)	01-Aug-00	Potato	0.7	1.4	1.1	1.4	0.5	1.2	-0.2	1.5	561	47
			Rhubarb	-0.1	1.3	0.0	1.1	0.0	1.1	-1.3	1.2	316	39
		21-Aug-01	Beet	0.4	1.3	1.1	1.4	0.5	1.1	0.2	1.4	600	50
			Cabbage	0.3	1.0	0.2	1.0	-0.8	0.9	0.3	1.1	378	34
020703	QC Quad #3 (Johnson Farm)	01-Aug-02	Beet	-0.1	1.4	-0.6	1.6	0.4	1.4	0.2	1.7	582	51
			Broccoli	0.1	1.4	-0.7	1.8	0.4	1.5	-0.5	2.0	756	57
		01-Aug-00	Cabbage	2.0	1.5	0.3	1.6	-1.0	1.3	1.2	1.7	335	40
			No sample										
020704	QC Quad #4	22-Aug-01	Cabbage	-0.4	1.2	0.8	1.3	-0.5	1.1	0.1	1.4	257	33
			Potato	0.4	1.3	0.3	1.3	0.0	1.1	0.1	1.4	554	46
		01-Aug-02	Cabbage	0.8	1.2	0.3	1.3	0.6	1.1	-0.1	1.6	285	38
			Onion	0.1	1.2	-0.8	1.5	0.5	1.2	-1.3	1.6	213	32

*Vegetation pg 282*

Mn-54 10e-2 pCi/g		Zn-65 10e-2 pCi/g		Zr-95 10e-2 pCi/g		K-40 10e-2 pCi/g	
	95% CI		95% CI		95% CI		95% CI
-0.5	1.5	-2.5	4.2	2.7	11.6	397	36
-0.4	1.5	2.9	4.0	2.5	10.3	297	34
0.8	1.3	-2.4	3.1	-2.4	3.1	319	31
0.1	1.3	2.1	3.2	-0.2	6.6	350	34
0.5	1.8	1.2	4.4	-3.6	11.6	360	39
-0.9	1.4	-0.2	3.4	0.1	9.2	312	35
0.3	3.1	1.6	10.4	0.0	0.0	344	32
-1.3	3.0	8.3	9.5	0.0	0.0	324	31
-0.3	2.3	-6.2	6.0	-14.7	67.3	329	34
-0.3	2.4	-8.0	6.9	80.7	66.9	393	40
0.7	1.1	1.3	2.8	3.8	4.4	379	32
-0.5	1.0	1.5	2.7	-0.1	4.2	351	30
-0.7	1.6	-2.7	4.0	-0.9	12.0	295	31
-0.3	1.5	2.0	4.2	0.2	11.0	319	30
0.1	1.1	-0.2	3.2	2.3	5.5	358	31
-0.1	1.5	-2.5	3.8	5.5	7.2	403	43
2.1	1.7	-2.9	4.4	7.0	10.6	391	43
2.2	3.2	-7.2	10.1	0.0	0.0	346	33
0.9	3.8	-9.0	12.1	0.0	0.0	299	41
0.0	1.7	-0.5	4.9	70.0	50.8	256	30
0.3	2.0	-4.5	6.5	-9.2	66.2	375	37
0.9	1.6	0.7	3.8	-1.8	6.3	469	39
0.9	0.1	1.8	3.7	-1.4	5.3	383	36









Dresden TDS  
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Location_ID	Range	Direction	Sec	1999Q1			1999Q2			1999Q3			1999Q4			:
				90 Days			93 Days			84 Days			98 Days			
				mR/day	Unc	Comment	mR/day									
DR001	10	SSW	K	0.07	0.01		0.05	0.01		0.07	0.01		0.08	0.01		0.06
DR002	9	SSW	L	0.08	0.01		0.07	0.01		0.08	0.01		0.09	0.01		0.07
DR003	5	SW	L	0.08	0.01		0.06	0.01		0.08	0.01		0.09	0.01		
DR004	3	S	J	0.11	0.02				missing	0.11	0.02		0.12	0.02		
DR007	7	S	J	0.09	0.02		0.08	0.01		0.10	0.01		0.10	0.01		
DR009	8	S	J	0.08	0.01		0.06	0.01		0.08	0.01		0.09	0.01		
DR013	7	SSW	K	0.09	0.02		0.08	0.02		0.10	0.01		0.11	0.02		0.08
DR020	8	S	J	0.10	0.02		0.08	0.01		0.11	0.02		0.11	0.02		0.09
DR021	10	S	J			missing	0.06	0.01		0.07	0.01		0.07	0.01		0.06
DR022	10	SSE	H	0.07	0.01		0.06	0.01				missing	0.09	0.01		
DR023	10	SSE	H	0.08	0.01		0.05	0.01		0.07	0.01		0.08	0.01		0.05
DR025	8	SSE	H	0.07	0.01		0.05	0.01				missing	0.08	0.01		0.05
DR026	8	SSE	H	0.08	0.01		0.06	0.01		0.08	0.01		0.08	0.01		0.06
DR027	8	SE	G	0.08	0.01		0.06	0.01		0.07	0.01		0.08	0.01		0.07
DR031	9	SE	G	0.08	0.01		0.08	0.01		0.09	0.01		0.09	0.01		0.07
DR033	9	SE	D	0.07	0.01		0.05	0.01		0.07	0.01		0.07	0.01		
DR036	10	ESE	F	0.11	0.02		0.09	0.02				missing	0.13	0.02		0.09
DR039	9	E	E	0.14	0.02		0.11	0.02		0.14	0.02		0.15	0.02		
DR040	9	ENE	D	0.11	0.02		0.09	0.02		0.12	0.02		0.13	0.02		
DR041	9	ENE	D	0.10	0.02		0.08	0.02		0.11	0.02		0.12	0.02		0.09
DR043	13	NE	C	0.12	0.02		0.09	0.02				missing			missing	
DR046	16	NE	C	0.06	0.01		0.05	0.01		0.07	0.01		0.08	0.01		0.05
DR048	12	NE	C	0.08	0.01		0.06	0.01		0.08	0.01		0.09	0.01		
DR050	14	NE	C	0.09	0.02		0.07	0.01		0.09	0.01		0.10	0.01		0.07
DR052	11	NE	C	0.10	0.02		0.08	0.01		0.11	0.02		0.11	0.02		0.09
DR053	10	NNE	B	0.07	0.01		0.05	0.01		0.07	0.01		0.07	0.01		
DR056	10	N	A	0.12	0.02		0.10	0.02		0.13	0.02		0.13	0.02		0.11
DR060	8	NNE	B	0.09	0.02		0.07	0.01		0.10	0.01		0.11	0.02		0.08
DR062	6	NNE	B	0.10	0.02		0.09	0.01		0.11	0.02				missing	0.08
DR065	8	N	A	0.13	0.02		0.12	0.02		0.13	0.02		0.14	0.02		0.12
DR066	6	N	A	0.10	0.02		0.09	0.02		0.11	0.02		0.11	0.02		0.10
DR068	5	N	A			missing	0.07	0.01				missing	0.09	0.01		0.08
DR070	5	NNE	C	0.10	0.02		0.09	0.02		0.11	0.02		0.11	0.02		0.08
DR073	3	NE	C			missing	0.10	0.02		0.11	0.02		0.12	0.02		0.10
DR074	3	NNE	B	0.14	0.02		0.10	0.02		0.12	0.02		0.13	0.02		0.11
DR075	2	NW	Q	0.11	0.02		0.10	0.02		0.12	0.02		0.12	0.02		0.10
DR076	4	W	N			missing	0.05	0.01		0.07	0.01		0.07	0.01		0.05

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DR077	5 NNW	R	0.10	0.02	0.09	0.02	0.11	0.02	0.11	0.02	0.09
DR078	9 NNW	R	0.12	0.02	0.10	0.02	0.12	0.02	0.13	0.02	0.10
DR080	9 NW	Q	0.12	0.02	0.11	0.02	0.13	0.02	0.14	0.02	0.12
DR081	8 WNW	P	0.11	0.02	0.10	0.02	0.13	0.02	0.13	0.02	0.10
DR082	9 WNW	P	0.13	0.02	0.09	0.02	0.12	0.02		missing	0.06
DR083	10 W	N	0.10	0.02	0.08	0.01	0.11	0.02	0.11	0.02	0.09
DR084	9 W	N	0.10	0.02	0.09	0.02	0.11	0.02	0.12	0.02	0.10
DR087	9 WSW	M	0.10	0.02	0.09	0.01	0.10	0.01		missing	0.09
DR089	9 W	N	0.09	0.01	0.08	0.01	0.09	0.01	0.10	0.01	0.08
DR091	8 WSW	M	0.08	0.01	0.06	0.01	0.08	0.01	0.09	0.01	0.08
DR093	10 WSW	M		missing	0.06	0.01		missing	0.10	0.01	0.07
DR095	7 WSW	M	0.10	0.02	0.09	0.01	0.11	0.02	0.11	0.02	0.09
DR096	9 SW	L	0.09	0.02	0.08	0.01	0.11	0.02	0.11	0.02	0.07
DR097	7.5 E	E	0.12	0.02	0.10	0.02	0.14	0.02	0.13	0.02	0.11
DR098	5 ENE	D	0.09	0.01	0.07	0.01	0.09	0.01	0.10	0.01	0.08
DR099	7.6 N	A	0.12	0.02	0.11	0.02	0.14	0.02	0.14	0.02	0.12
DR100	4.5 NE	C	0.08	0.01	0.06	0.01	0.09	0.01	0.09	0.01	0.07
DR101	1.7 ENE	D	0.13	0.02	0.13	0.02	0.15	0.02	0.15	0.02	0.15
DR102	1.6 E	E	0.10	0.02	0.09	0.01	0.11	0.02	0.11	0.02	0.10
DR103	0.8 NE	C		missing	0.11	0.02	0.14	0.02	0.14	0.02	0.14
DR104	0.9 NNW	R	0.12	0.02	0.11	0.02	0.12	0.02	0.13	0.02	0.12
DR105	2.2 WNW	P		missing	0.07	0.01	0.09	0.01	0.09	0.01	
DR106	4.2 W	N	0.06	0.01	0.05	0.01	0.07	0.01	0.07	0.01	0.05
DR107	3.2 NW	Q	0.09	0.02	0.08	0.01	0.10	0.01	0.11	0.02	0.08
DR108	5.5 NW	Q	0.11	0.02	0.10	0.02	0.13	0.02	0.13	0.02	0.11
DR109	5.9 WNW	P	0.12	0.02	0.12	0.02	0.13	0.02	0.14	0.02	0.11
DR110	4 SSW	K	0.08	0.01	0.06	0.01	0.08	0.01	0.08	0.01	0.06
DR111	0.5 SSE	H	0.07	0.01	0.06	0.01	0.08	0.01	0.09	0.01	0.07
DR112	0.4 SSW	K	0.10	0.02	0.10	0.01	0.12	0.02	0.13	0.02	0.10
DR113	0.6 WSW	M	0.15	0.02	0.13	0.02	0.17	0.02	0.16	0.02	0.11
DR114	0.8 W	N	0.12	0.02	0.10	0.02	0.14	0.02	0.14	0.02	0.11
DR115	1.6 WSW	M	0.11	0.02	0.09	0.01	0.12	0.02	0.15	0.02	0.10
DR116	1.5 SE	G	0.08	0.01	0.07	0.01	0.09	0.01	0.10	0.01	0.08
DR117	3.3 ESE	F	0.09	0.01	0.07	0.01	0.10	0.01	0.11	0.02	0.08
DR118	4.2 SE	G	0.08	0.01	0.07	0.01	0.09	0.01	0.09	0.01	0.07

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2000Q1-Q2		2000Q3-Q3		2001Q1			2001Q2			2001Q3			2001Q4					
176 Days		189 Days		117 Days			85 Days			71 Days			98 Days					
Unc	Comment	mR/day	Unc	Comment	mR/day	Unc	Comment	mR/day	Unc	Comment	mR/day	Unc	Comment	mR/day	Unc	Comment	mR/day	
0.01		0.08	0.01		0.07	0.01		0.08	0.01		0.07	0.01		0.08	0.01		0.07	
0.01				missing	0.07	0.01		0.08	0.01		0.08	0.01		0.08	0.01		0.08	
	missing	0.08	0.01		0.08	0.01		0.09	0.01		0.09	0.01		0.09	0.01		0.09	
	missing	0.10	0.01		0.08	0.01		0.10	0.02		0.10	0.01					0.10	
	missing	0.09	0.01		0.08	0.01		0.10	0.02		0.09	0.01		0.09	0.01		0.09	
	missing	0.07	0.01		0.06	0.01		0.07	0.01		0.08	0.01		0.08	0.01		0.07	
0.01		0.09	0.01		0.09	0.01		0.08	0.01		0.10	0.01		0.10	0.01		0.09	
0.01		0.10	0.01		0.10	0.02		0.11	0.02		0.11	0.02		0.10	0.01		0.09	
0.01		0.07	0.01		0.06	0.01		0.07	0.01		0.08	0.01		0.08	0.01		0.07	
	missing			missing	0.07	0.01		0.07	0.01		0.07	0.01		0.08	0.01		0.07	
0.01		0.07	0.01				missing			missing	0.07	0.01		0.07	0.01		0.06	
0.01		0.07	0.01		0.08	0.01				missing	0.07	0.01		0.07	0.01		0.06	
0.01		0.08	0.01		0.07	0.01		0.07	0.01		0.08	0.01		0.08	0.01		0.07	
0.01		0.07	0.01		0.08	0.01		0.08	0.01		0.08	0.01		0.08	0.01		0.07	
0.01		0.08	0.01		0.08	0.01		0.09	0.01		0.08	0.01		0.09	0.01		0.08	
	missing	0.06	0.01				missing			missing	0.07	0.01		0.06	0.01		0.06	
0.01		0.13	0.02		0.12	0.02		0.14	0.02		0.13	0.02		0.13	0.02		0.12	
	missing	0.13	0.02		0.12	0.02		0.12	0.02		0.13	0.02		0.13	0.02		0.12	
	missing	0.11	0.02		0.11	0.02		0.12	0.02		0.11	0.02		0.11	0.02		0.11	
0.01		0.10	0.01		0.09	0.01		0.10	0.02		0.10	0.01		0.11	0.02		0.10	
	missing			missing	* 0.07	0.01	mail			missing			missing				0.10	
0.01		0.07	0.01		0.06	0.01		0.05	0.01		0.06	0.01		0.07	0.01		0.06	
	missing			missing	* 0.07	0.01	mail			missing			missing			missing	0.08	
0.01				missing	0.07	0.01		0.07	0.01				missing		missing		0.08	
0.01	* 0.09	0.01	mail				missing		0.09	0.01		0.10	0.01		0.10	0.01		0.10
	missing	0.07	0.01		0.05	0.01		0.60	0.01		0.08	0.01		0.07	0.01		0.08	
0.02		0.12	0.02		0.12	0.02		0.13	0.02		0.12	0.02		0.13	0.02		0.12	
0.01		0.10	0.01				missing		0.07	0.01		0.08	0.01				missing	0.09
0.01		0.10	0.01		0.09	0.01		0.10	0.02		0.10	0.01		0.11	0.02		0.09	
0.02		0.12	0.02		0.12	0.02		0.13	0.02		0.13	0.02		0.13	0.02		0.12	
0.01		0.10	0.01		0.09	0.01		0.10	0.02		0.10	0.01		0.11	0.02		0.10	
0.01		0.09	0.01		0.08	0.01		0.08	0.01		0.09	0.01		0.09	0.01		0.08	
0.01		0.10	0.01		0.09	0.01		0.09	0.01		0.10	0.01		0.11	0.02		0.09	
0.01		0.11	0.02		0.12	0.02		0.11	0.02		0.12	0.02		0.12	0.02		0.11	
0.02		0.13	0.02		0.11	0.02		0.11	0.02		0.13	0.02		0.13	0.02		0.12	
0.01		0.11	0.02		0.11	0.02		0.12	0.02		0.12	0.02		0.12	0.02		0.11	
0.01		0.07	0.01		0.05	0.01		0.05	0.01		0.07	0.01		0.06	0.01		0.06	

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0.01	0.10	0.01	0.08	0.01	0.10	0.02	0.11	0.02		missing	0.10
0.01	0.12	0.02	0.12	0.02	0.12	0.02	0.12	0.02	0.12	0.02	0.11
0.02	0.13	0.02	0.11	0.02	0.13	0.02	0.13	0.02	0.12	0.02	0.10
0.01	0.12	0.02	0.10	0.02	0.12	0.02	0.12	0.02	0.11	0.02	0.10
0.01	0.10	0.01	0.09	0.01	0.11	0.02	0.11	0.02	0.11	0.02	0.10
0.01	0.10	0.01	0.09	0.01	0.10	0.02	0.10	0.01	0.11	0.02	0.10
0.01	0.11	0.02	0.09	0.01	0.11	0.02	0.10	0.01		missing	0.11
0.01	0.10	0.01	0.09	0.01	0.10	0.02	0.10	0.01	0.10	0.01	0.10
0.01	0.10	0.01	0.09	0.01	0.09	0.01	0.09	0.01	0.10	0.01	0.08
0.01	0.08	0.01	0.07	0.01	0.08	0.01	0.09	0.01	0.08	0.01	0.08
0.01	0.08	0.01	0.08	0.01	0.08	0.01	0.08	0.01	0.09	0.01	0.08
0.01	0.13	0.02	0.10	0.02	0.10	0.02	0.10	0.01	0.10	0.01	0.10
0.01	0.10	0.01	0.09	0.01	0.10	0.02	0.10	0.01	0.10	0.01	0.09
0.02	0.13	0.02	0.12	0.02	0.12	0.02	0.12	0.02	0.12	0.02	0.12
0.01	0.09	0.01	0.09	0.01	0.09	0.01	0.09	0.01	0.10	0.01	0.09
0.02	0.13	0.02	0.12	0.02	0.13	0.02	0.13	0.02	0.13	0.02	0.12
0.01	0.08	0.01	0.07	0.01		missing	0.08	0.01	0.09	0.10	0.07
0.02	0.14	0.02		missing	0.14	0.02		missing	0.13	0.02	0.12
0.01	0.11	0.02	0.10	0.02	0.10	0.02	0.11	0.02	0.12	0.02	0.10
0.02	0.13	0.02	0.11	0.02	0.12	0.02	0.12	0.02	0.13	0.02	0.12
0.02		missing	0.12	0.02	0.13	0.02	0.13	0.02	0.13	0.02	0.12
missing	0.08	0.01	* 0.07	0.01	mail	0.07	0.01	0.08	0.01	0.08	0.01
0.01	0.07	0.01	0.07	0.01		0.06	0.01	0.06	0.01	0.07	0.01
0.01	0.09	0.01	0.09	0.01		0.09	0.01	0.10	0.01	0.10	0.01
0.02	0.11	0.02	0.11	0.02		0.11	0.02	0.12	0.02	0.12	0.02
0.02	0.13	0.02	0.12	0.02		0.12	0.02	0.12	0.02	0.12	0.02
0.01	0.08	0.01	0.07	0.01		0.06	0.01	0.07	0.01		missing
0.01	0.08	0.01	* 0.08	0.01	mail	0.07	0.01	0.08	0.01	0.08	0.01
0.01	0.11	0.02	0.10	0.02		0.11	0.02	0.11	0.02	0.11	0.02
0.02	0.13	0.02	0.12	0.02		0.12	0.02	0.13	0.02	0.12	0.02
0.02	0.13	0.02	0.12	0.02		0.12	0.02	0.13	0.02	0.12	0.02
0.01	0.11	0.02	0.10	0.02		0.10	0.02	0.11	0.02	0.14	0.02
0.01	0.08	0.01	0.07	0.01		0.07	0.01	0.08	0.01	0.08	0.01
0.01	0.09	0.01	0.08	0.01		0.09	0.01	0.10	0.01	0.10	0.01
0.01	0.08	0.01	0.07	0.01		0.07	0.01	0.08	0.01	0.08	0.01
0.01	0.09	0.01	0.08	0.01		0.09	0.01	0.10	0.01	0.10	0.01
0.01	0.08	0.01	0.07	0.01		0.07	0.01	0.08	0.01	0.08	0.01

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2002Q1		2002Q2		2002Q3		2002Q4		Mean	Median	StdDev	DR001	K
83 Days		112 Days		85 Days		84 Days						
Unc	Comment	mR/day	Unc	Comment	mR/day	Unc	Comment	mR/day	Unc	Comment		
0.01		0.07	0.01		0.06	0.01		0.07	0.01		0.07	0.07
0.01		0.07	0.01		0.06	0.01		0.07	0.01		0.08	0.08
0.01		0.08	0.01		0.07	0.01		0.09	0.01		0.08	0.08
0.01		0.10	0.01		0.08	0.01		0.10	0.01		0.10	0.10
0.01		0.09	0.01		0.07	0.01		0.09	0.01		0.09	0.09
0.01	missing			0.04	0.01		0.07	0.01		0.07	0.07	0.01
0.01		0.09	0.01		0.07	0.01		0.10	0.01		0.09	0.09
0.01		0.10	0.01		0.09	0.01		0.11	0.01		0.10	0.10
0.01		0.07	0.01		0.06	0.01		0.07	0.01		0.07	0.07
0.01		0.07	0.01		0.06	0.01		0.08	0.01		0.07	0.07
0.01		0.06	0.01		0.05	0.01		0.07	0.01		0.07	0.07
0.01	missing			0.06	0.01		0.07	0.01		0.06	0.07	0.01
0.01		0.07	0.01		0.06	0.01		0.08	0.01		0.07	0.08
0.01		0.07	0.01		0.06	0.01		0.08	0.01		0.07	0.08
0.01		0.07	0.01		0.06	0.01		0.09	0.01		0.08	0.08
0.01		0.06	0.01		0.05	0.01		0.07	0.01		0.06	0.06
0.01	missing			0.06	0.01		0.07	0.01		0.06	0.06	0.01
0.02		0.12	0.01		0.12	0.01		0.12	0.01		0.12	0.12
0.02		0.13	0.02		0.11	0.01		0.12	0.01		0.13	0.13
0.02		0.11	0.01		0.10	0.01		0.12	0.01		0.11	0.11
0.01		0.09	0.01		0.09	0.01		0.10	0.01		0.10	0.10
0.01	missing			0.09	0.01		0.10	0.01		0.10	0.10	0.01
0.01		0.06	0.01		0.05	0.01		0.06	0.01		0.06	0.06
0.01	missing			0.09	0.01		0.10	0.01		0.09	0.09	0.01
0.01		0.08	0.01		0.11	0.01		0.09	0.01		0.08	0.08
0.01		0.10	0.01		0.10	0.01		0.10	0.01		0.10	0.10
0.01		0.06	0.01		0.05	0.01		0.06	0.01		0.10	0.07
0.02		0.12	0.01		0.14	0.02		0.12	0.01		0.12	0.12
0.01		0.09	0.01		0.09	0.01		0.09	0.01		0.09	0.09
0.01		0.10	0.01		0.09	0.01		0.11	0.01		0.10	0.10
0.02		0.13	0.02		0.14	0.02		0.13	0.02		0.13	0.13
0.01		0.09	0.01		0.09	0.01		0.10	0.01		0.10	0.10
0.01		0.08	0.01		0.09	0.01		0.09	0.01		0.08	0.09
0.01		0.09	0.01		0.11	0.01		0.10	0.01		0.10	0.10
0.02		0.10	0.01		0.12	0.01		0.11	0.01		0.11	0.11
0.02		0.12	0.01		0.10	0.01		0.12	0.01		0.12	0.12
0.02		0.11	0.01		0.11	0.01		0.11	0.01		0.11	0.11
0.01		0.06	0.01		0.07	0.01		0.07	0.01		0.06	0.06

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0.01	0.10	0.01	0.10	0.01	0.09	0.01	0.10	0.10	0.01	DR077	R
0.02	0.13	0.02	0.13	0.02	0.12	0.01	0.12	0.12	0.01	DR078	R
0.01	0.12	0.01	0.14	0.02	0.13	0.02	0.12	0.13	0.01	DR080	Q
0.01	0.10	0.01	0.09	0.01	missing		0.11	0.11	0.01	DR081	P
0.01	0.10	0.01	0.10	0.01	0.10	0.01	0.10	0.10	0.02	DR082	P
0.01	0.10	0.01	0.10	0.01	* 0.09	0.01	mail		0.10	0.10	0.01
0.02	0.10	0.01	0.08	0.01	0.10	0.01	0.10	0.10	0.01	DR084	N
0.01	0.09	0.01	0.08	0.01	0.10	0.01	0.10	0.10	0.01	DR087	M
0.01	0.08	0.01	0.08	0.01	0.09	0.01	0.09	0.09	0.01	DR089	N
0.01	0.08	0.01	0.07	0.01	0.08	0.01	0.08	0.08	0.01	DR091	M
0.01	0.10	0.01	missing		0.08	0.01	0.08	0.08	0.01	DR093	M
0.01	0.09	0.01	0.10	0.01	0.10	0.01	0.10	0.10	0.01	DR095	M
0.01	0.09	0.01	0.09	0.01	0.09	0.01	0.09	0.09	0.01	DR096	L
0.02	0.09	0.01	missing		0.12	0.01	0.12	0.12	0.01	DR097	E
0.01	0.09	0.01	0.08	0.01	0.09	0.01	0.09	0.09	0.01	DR098	D
0.02	0.13	0.02	0.14	0.02	0.13	0.02	0.13	0.13	0.01	DR099	A
0.01	0.07	0.01	0.07	0.01	0.07	0.01	0.08	0.07	0.01	DR100	C
0.02	0.12	0.01	0.12	0.01	0.12	0.01	0.13	0.13	0.01	DR101	D
0.01	0.10	0.01	0.12	0.01	0.11	0.01	0.11	0.11	0.01	DR102	E
0.02	0.12	0.01	0.10	0.01	0.13	0.02	0.12	0.12	0.01	DR103	C
0.02	0.12	0.01	0.11	0.01	0.13	0.02	0.12	0.12	0.01	DR104	R
0.01	0.08	0.01	0.07	0.01	0.08	0.01	0.08	0.08	0.01	DR105	P
0.01	0.06	0.01	0.05	0.01	0.07	0.01	0.06	0.07	0.01	DR106	N
0.01	0.09	0.01	0.09	0.01	0.10	0.01	0.09	0.09	0.01	DR107	Q
0.02	0.11	0.01	0.11	0.01	0.12	0.01	0.11	0.11	0.01	DR108	Q
0.02	0.13	0.02	0.12	0.01	0.12	0.01	0.12	0.12	0.01	DR109	P
0.01	0.07	0.01	0.05	0.01	0.07	0.01	0.07	0.07	0.01	DR110	K
0.01	0.07	0.01	0.08	0.01	0.08	0.01	0.08	0.08	0.01	DR111	H
0.01	0.11	0.01	0.09	0.01	0.11	0.01	0.11	0.11	0.01	DR112	K
0.02	0.12	0.01	0.14	0.02	0.12	0.01	0.13	0.13	0.02	DR113	M
0.02	0.12	0.01	0.16	0.02	0.12	0.01	0.13	0.12	0.01	DR114	N
0.02	0.10	0.01	0.10	0.01	0.11	0.01	0.11	0.11	0.02	DR115	M
0.01	0.07	0.01	0.08	0.01	0.08	0.01	0.08	0.08	0.01	DR116	G
0.01	0.08	0.01	0.10	0.01	0.10	0.01	0.09	0.09	0.01	DR117	F
0.01	0.07	0.01	0.06	0.01	0.08	0.01	0.08	0.08	0.01	DR118	G