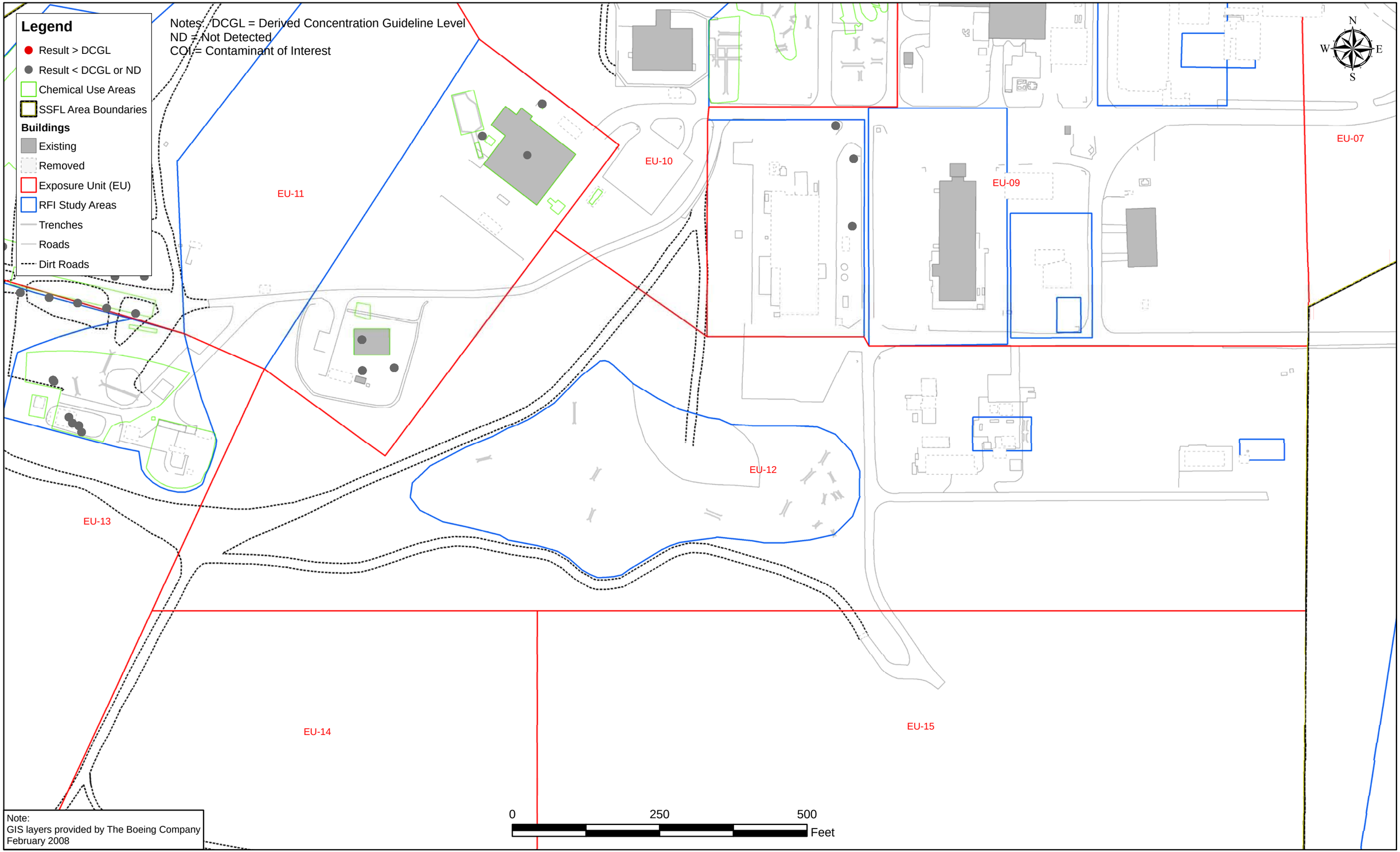
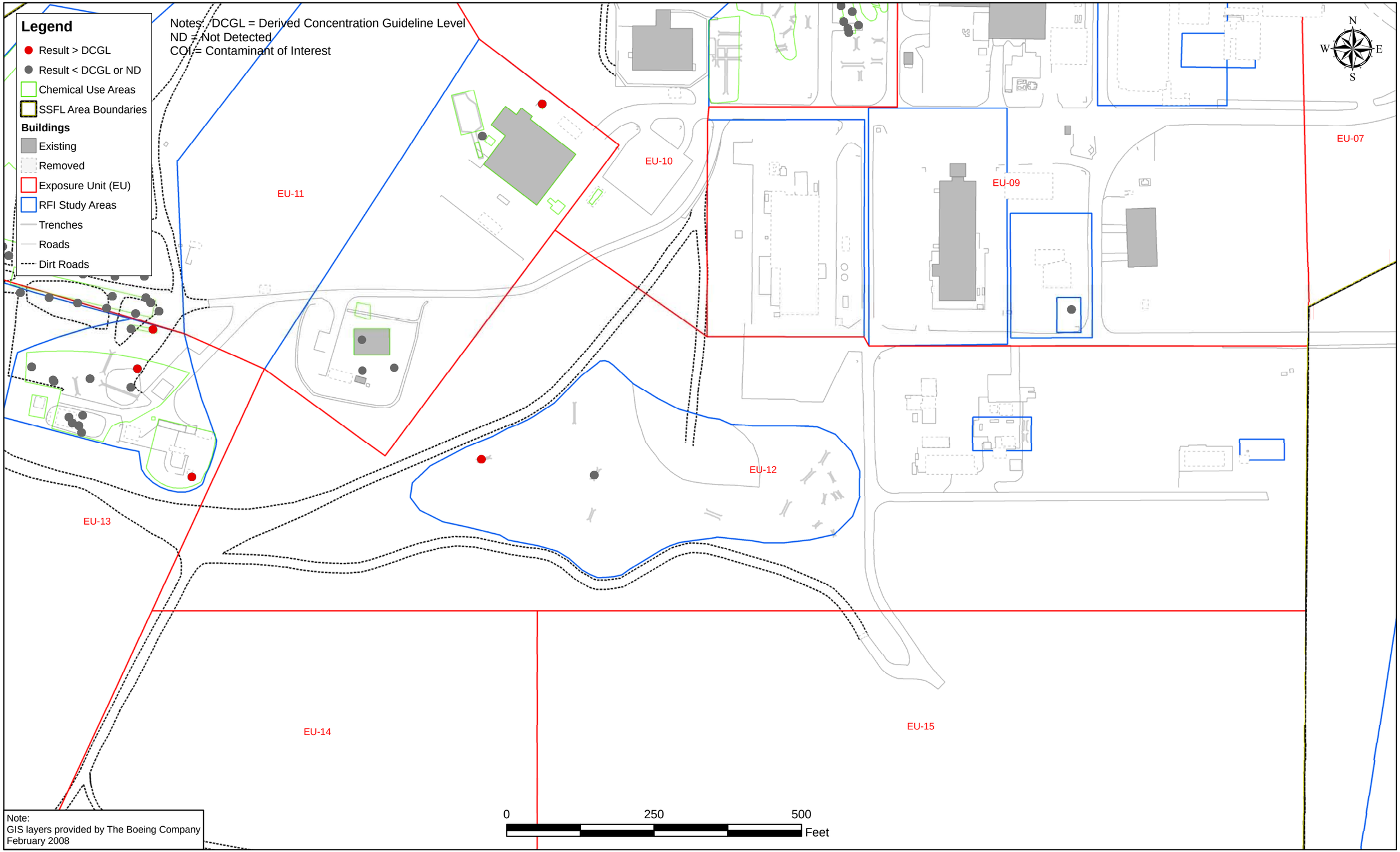


CDM

Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-1
VOC COIs in Soils - EU-12
(0-2 ft bgs)



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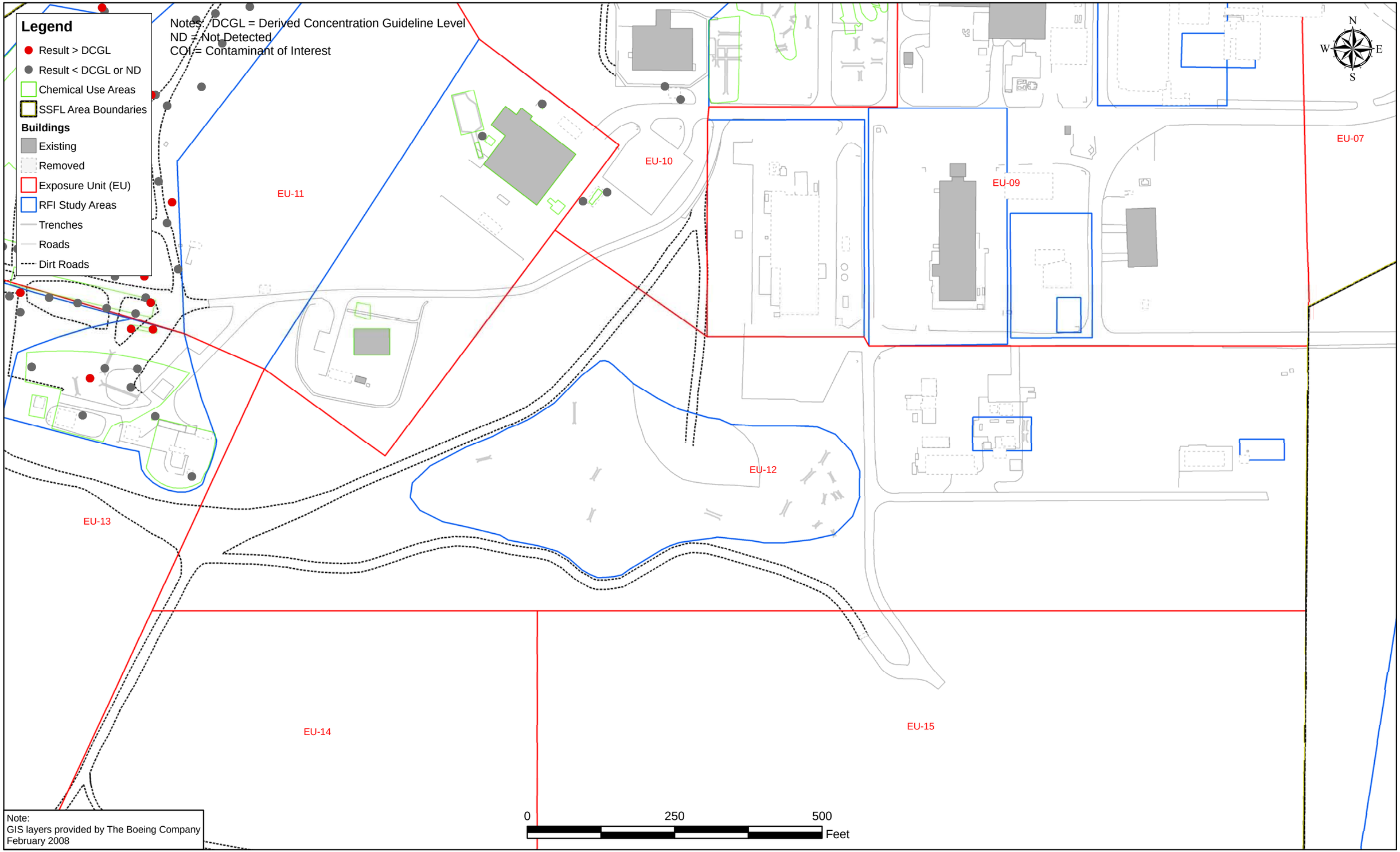
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-2
SVOC COIs in Soils - EU-12
(0-2 ft bgs)



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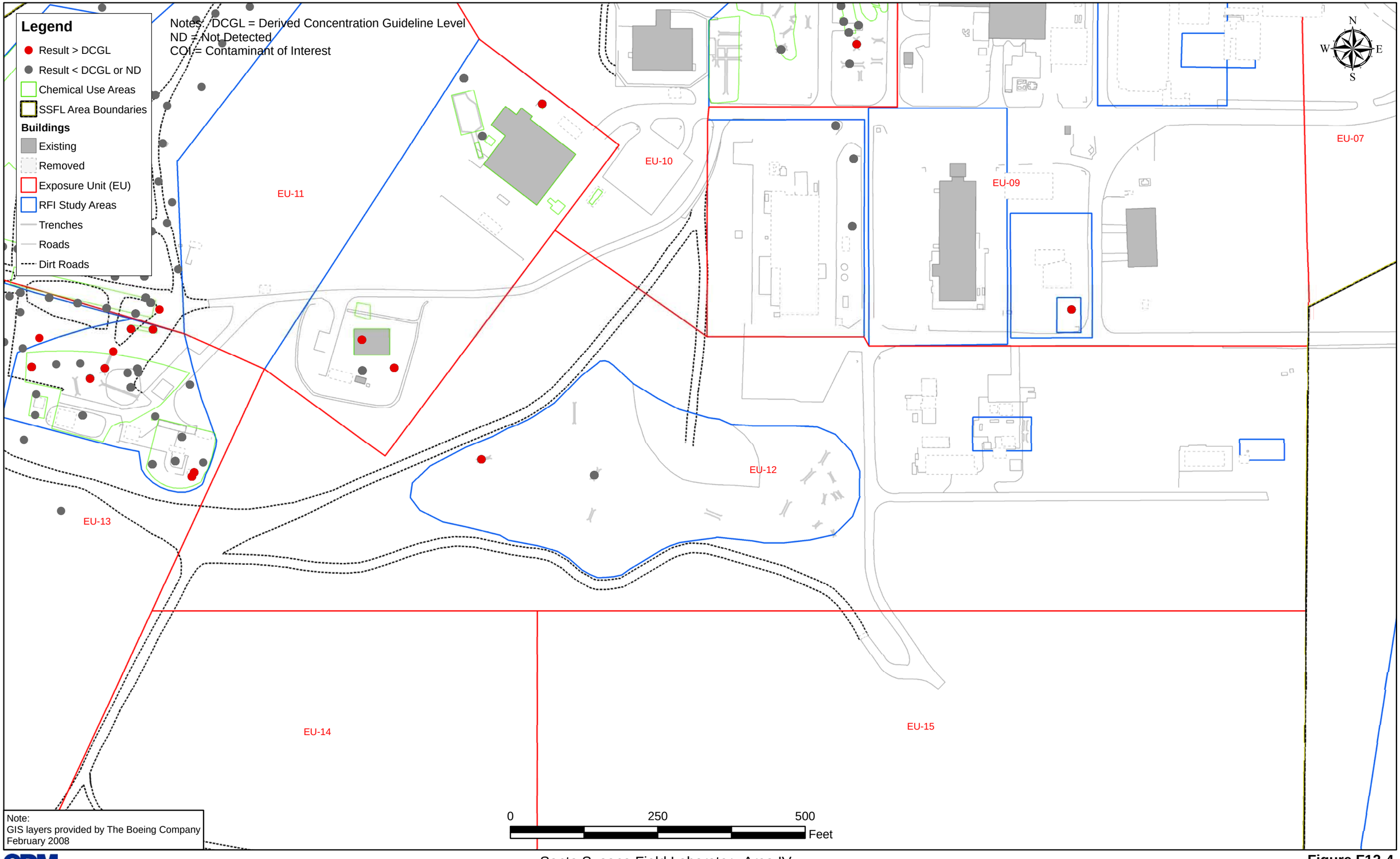
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-3
PCB COIs in Soils - EU-12
(0-2 ft bgs)



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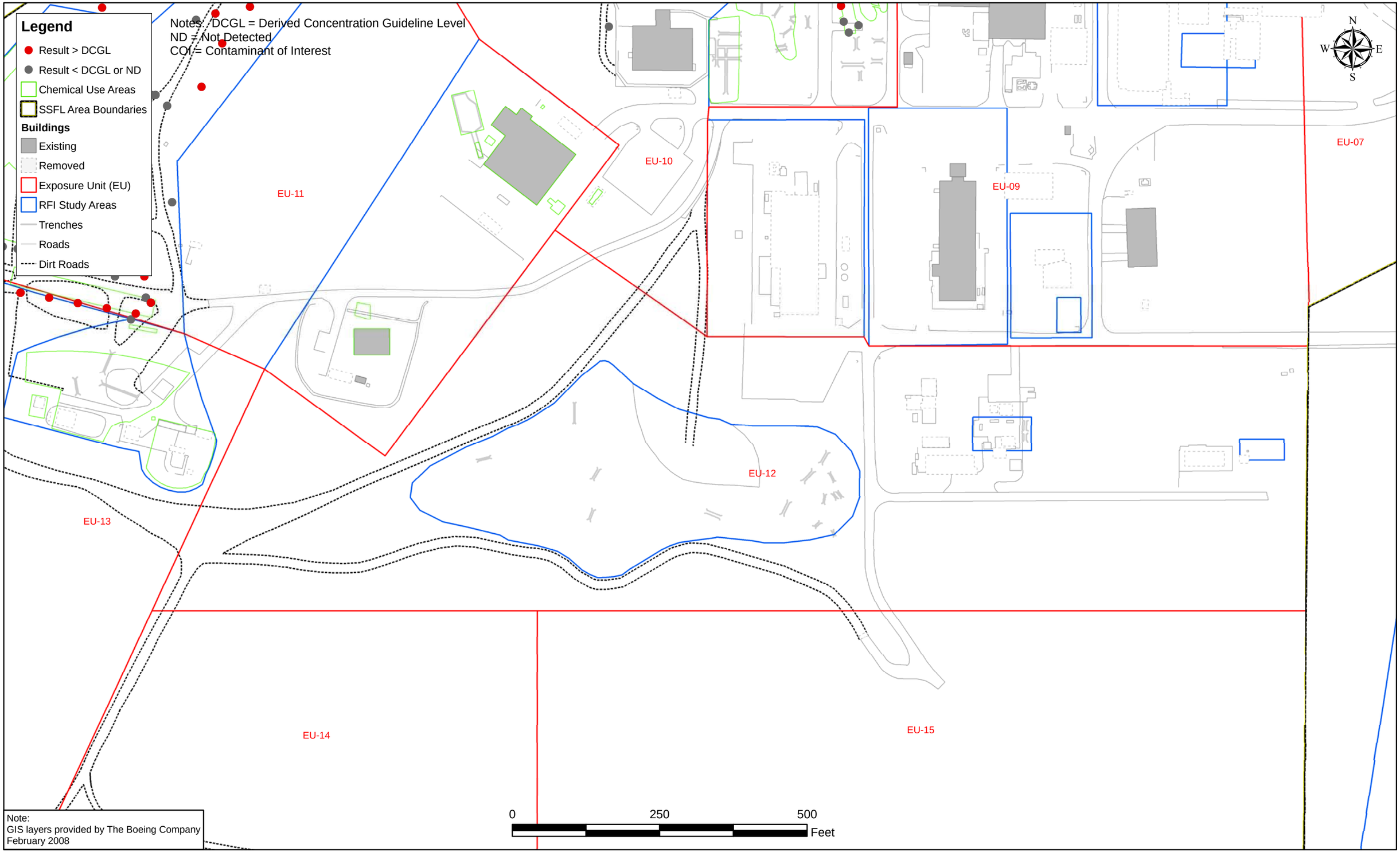
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-4
Inorganic COIs in Soils - EU-12
(0-2 ft bgs)



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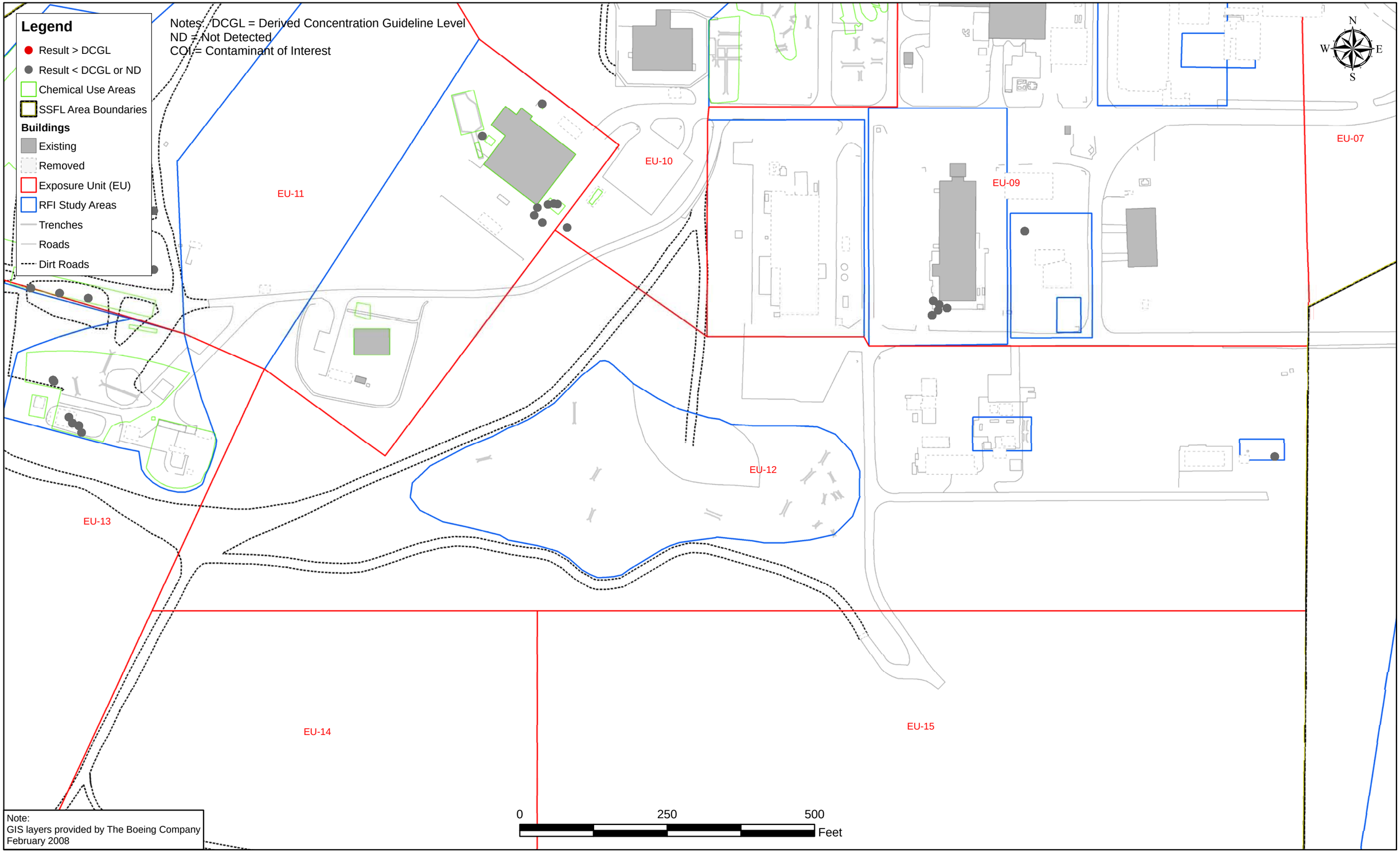
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-5
Dioxin COIs in Soils - EU-12
(0-2 ft bgs)



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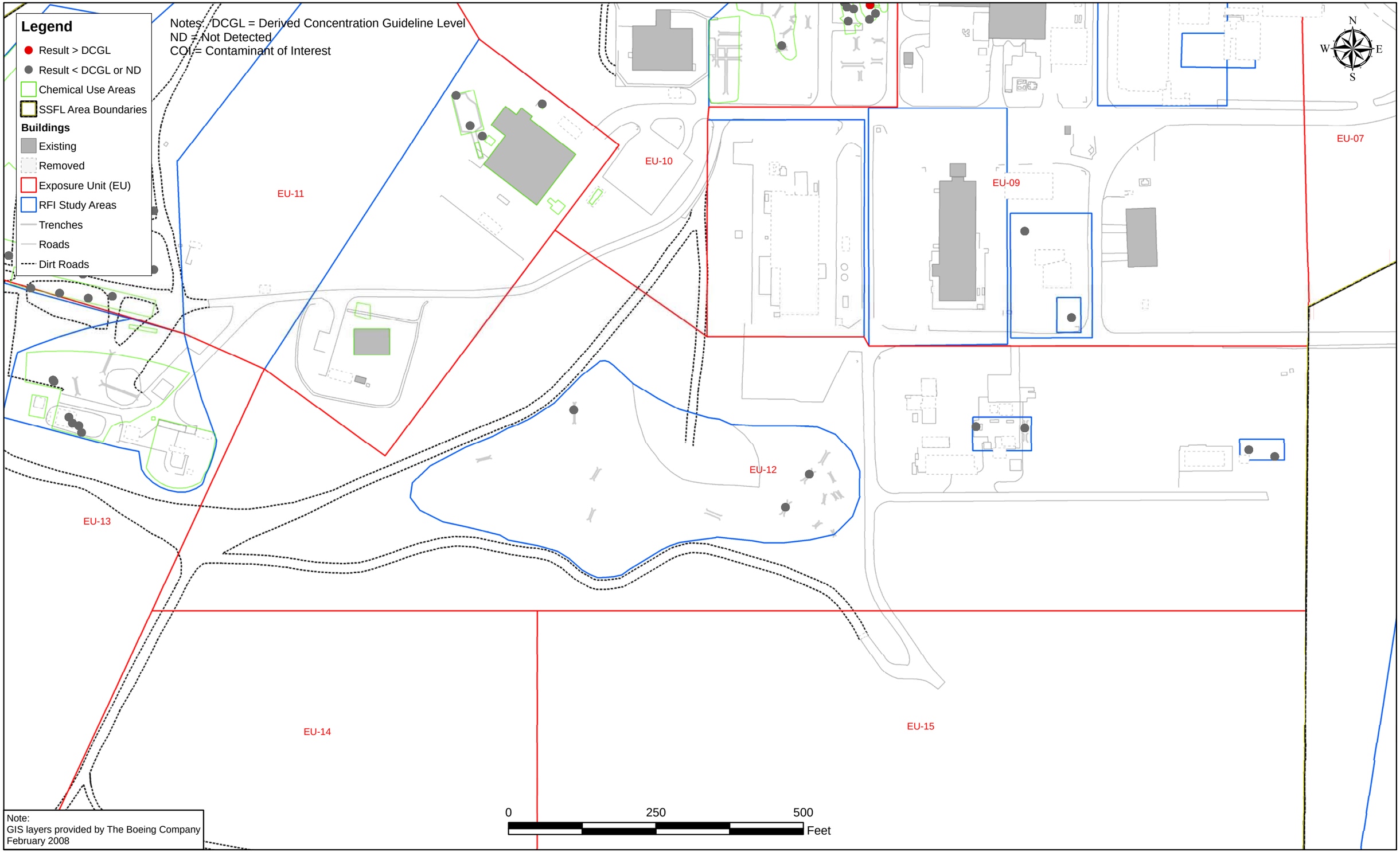
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-6
VOC COIs in Soils - EU-12
(2-10 ft bgs)



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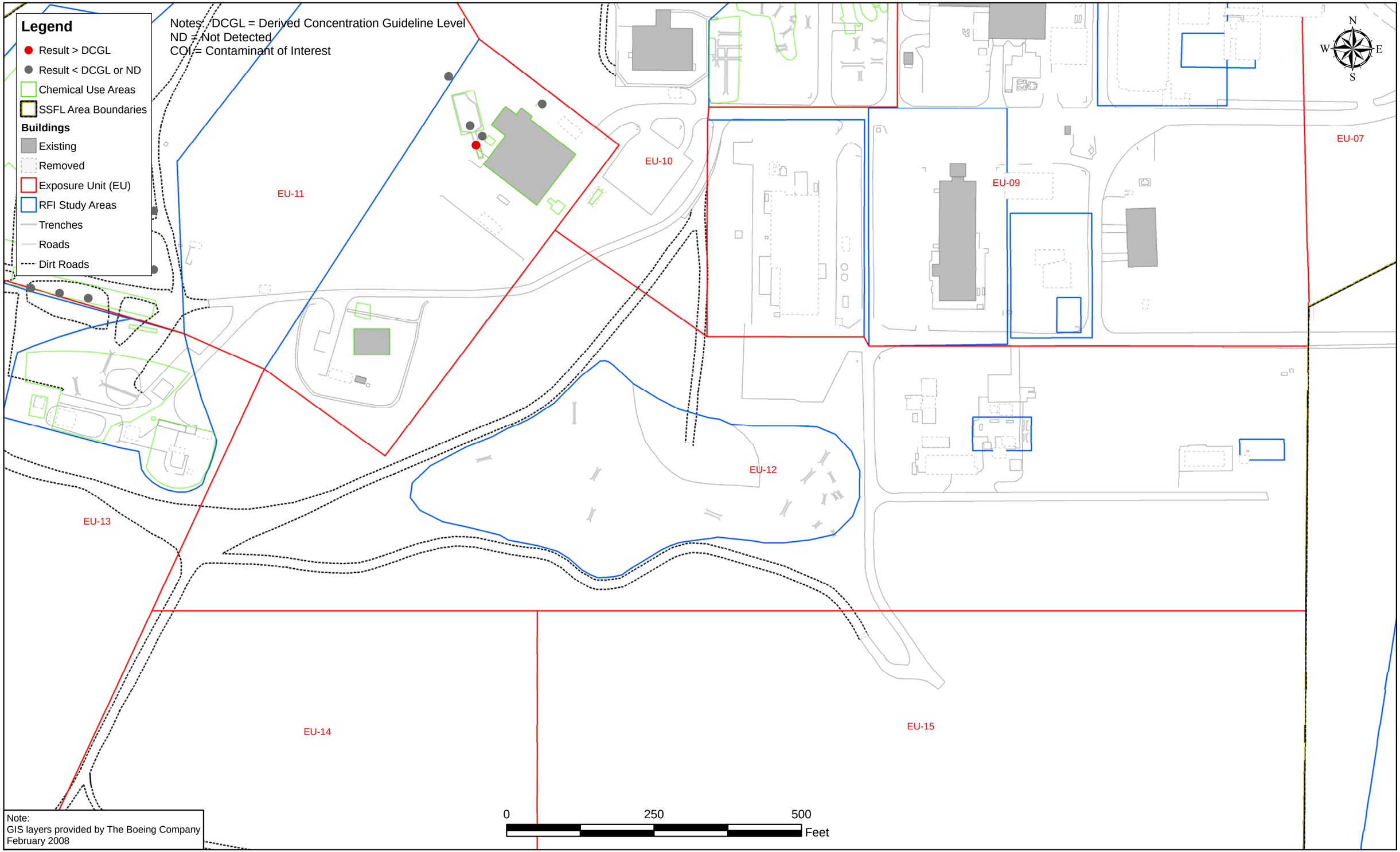
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-7
SVOC COIs in Soils - EU-12
(2-10 ft bgs)



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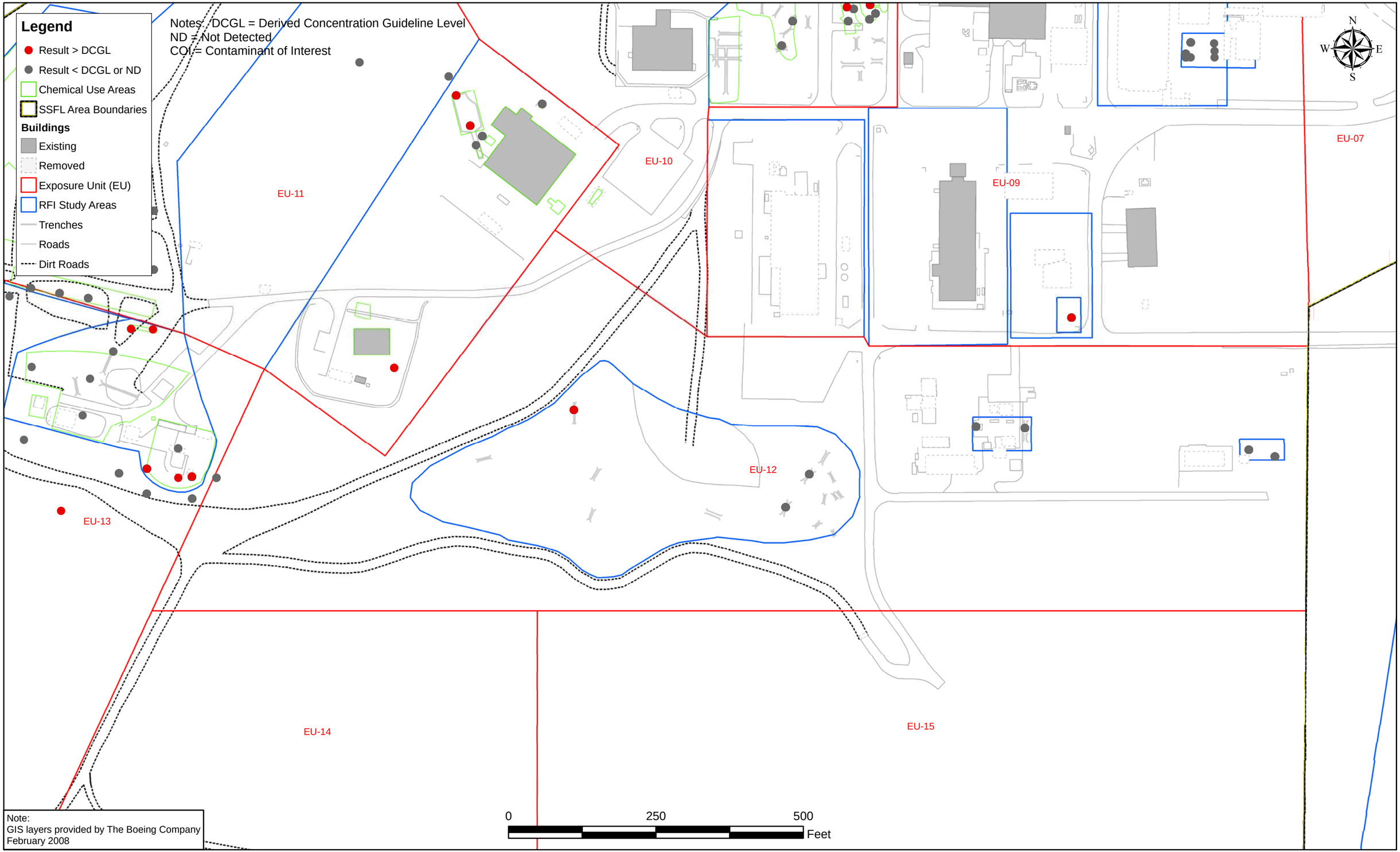
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-8
PCB COIs in Soils - EU-12
(2-10 ft bgs)



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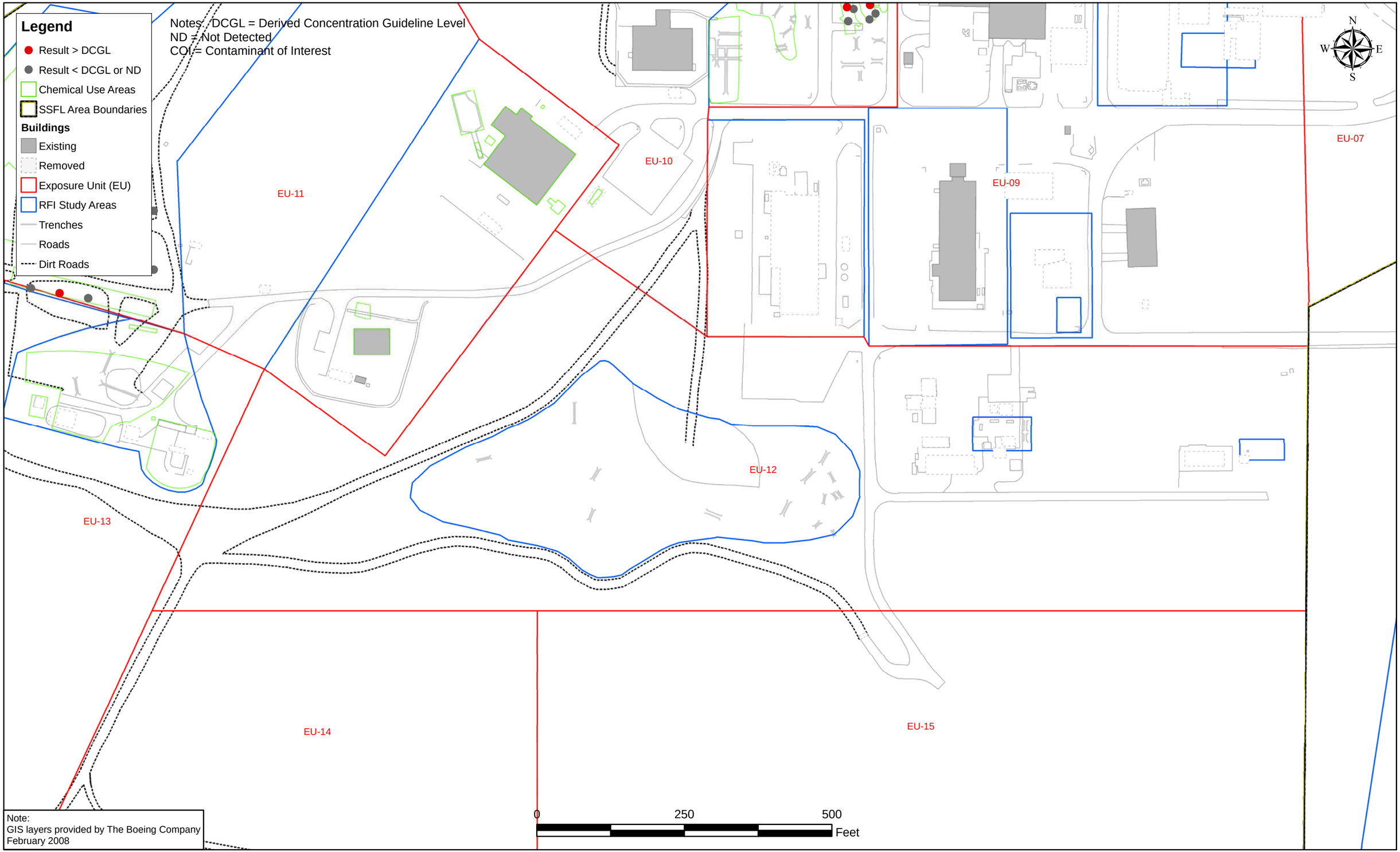
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-9
Inorganic COIs in Soils - EU-12
(2-10 ft bgs)



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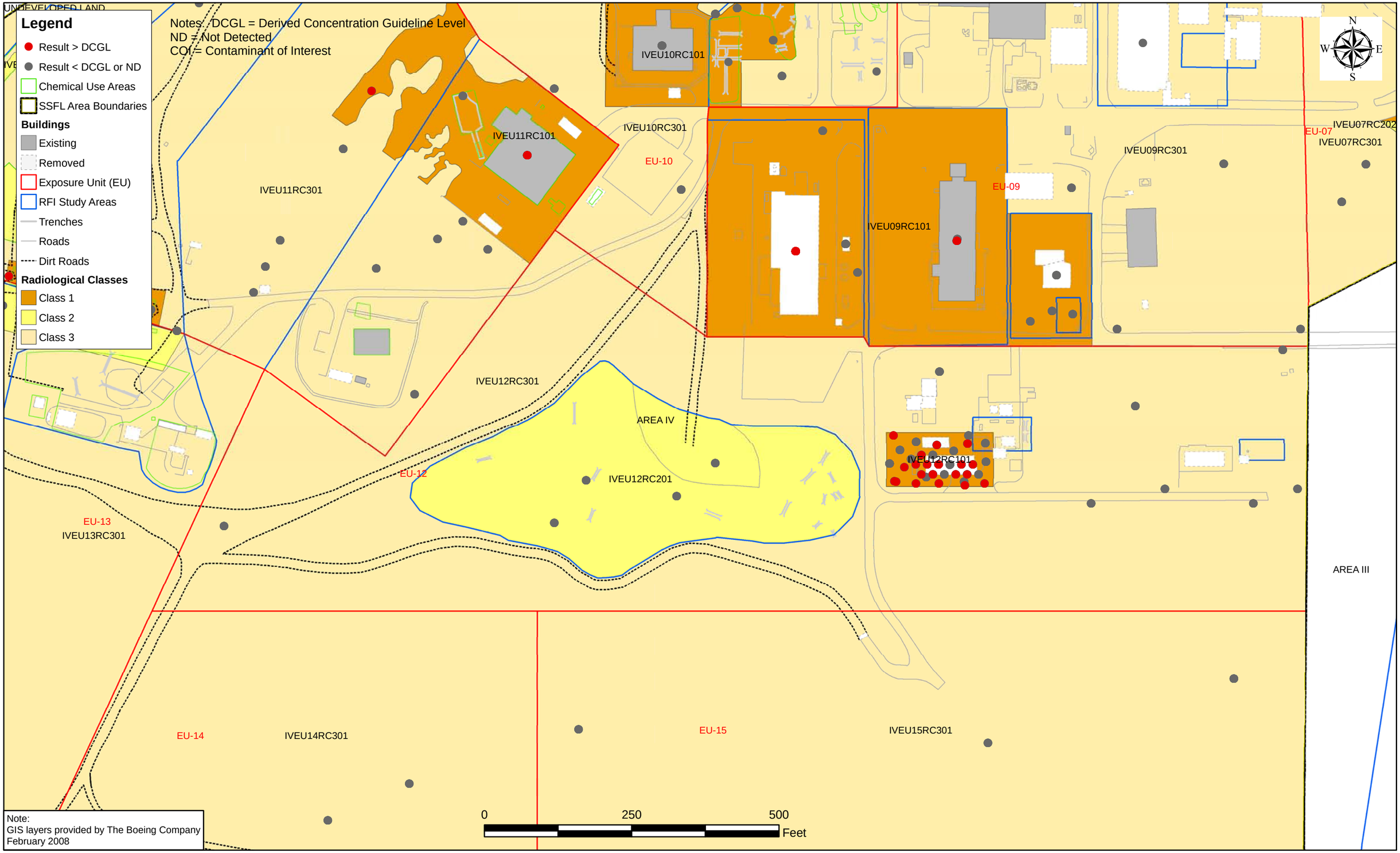
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-10
Dioxin COIs in Soils - EU-12
(2-10 ft bgs)



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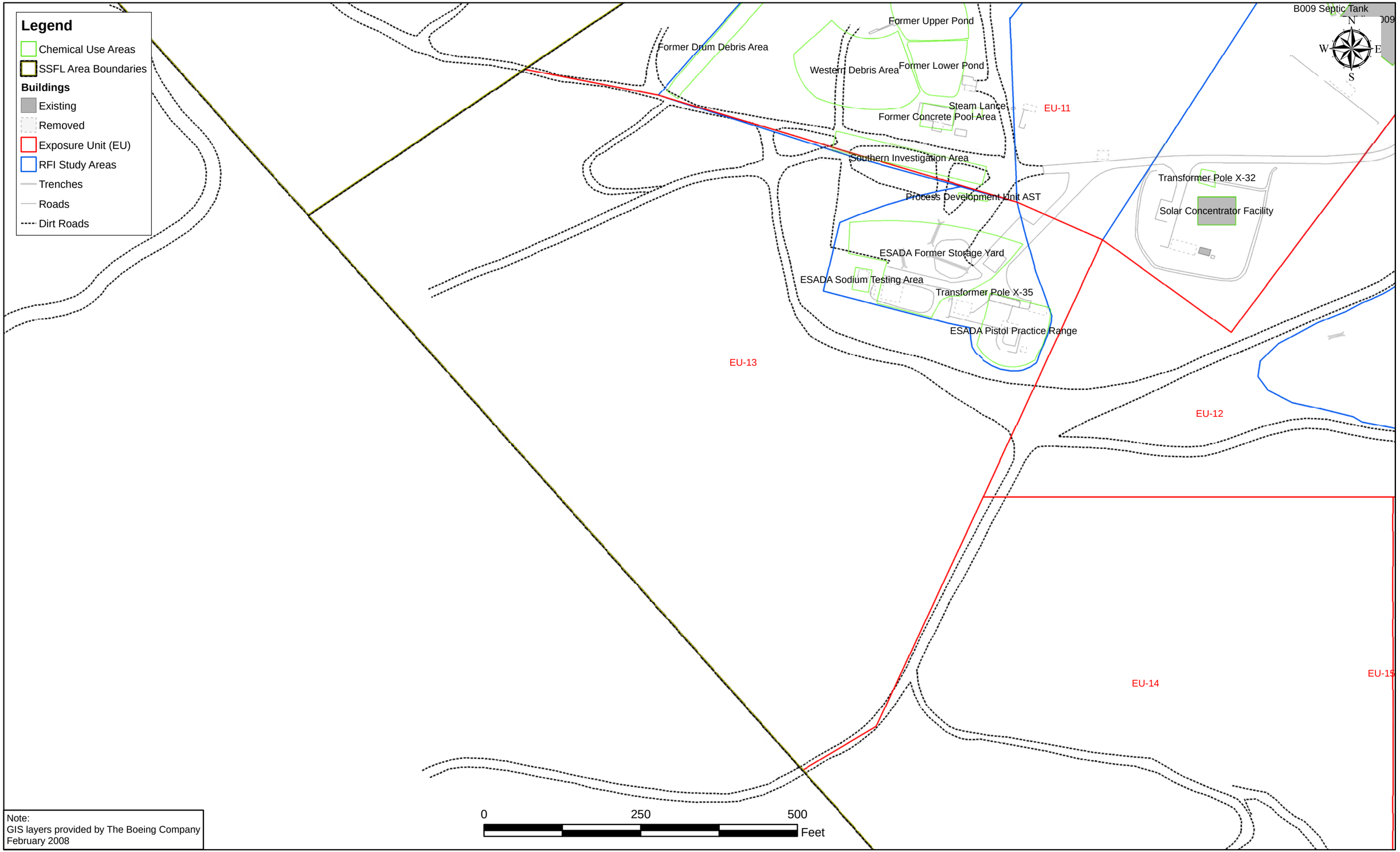
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F12-11
Radiological COIs in Soils - EU-12
(0-6 in bgs)



Note:
GIS layers provided by The Boeing Company
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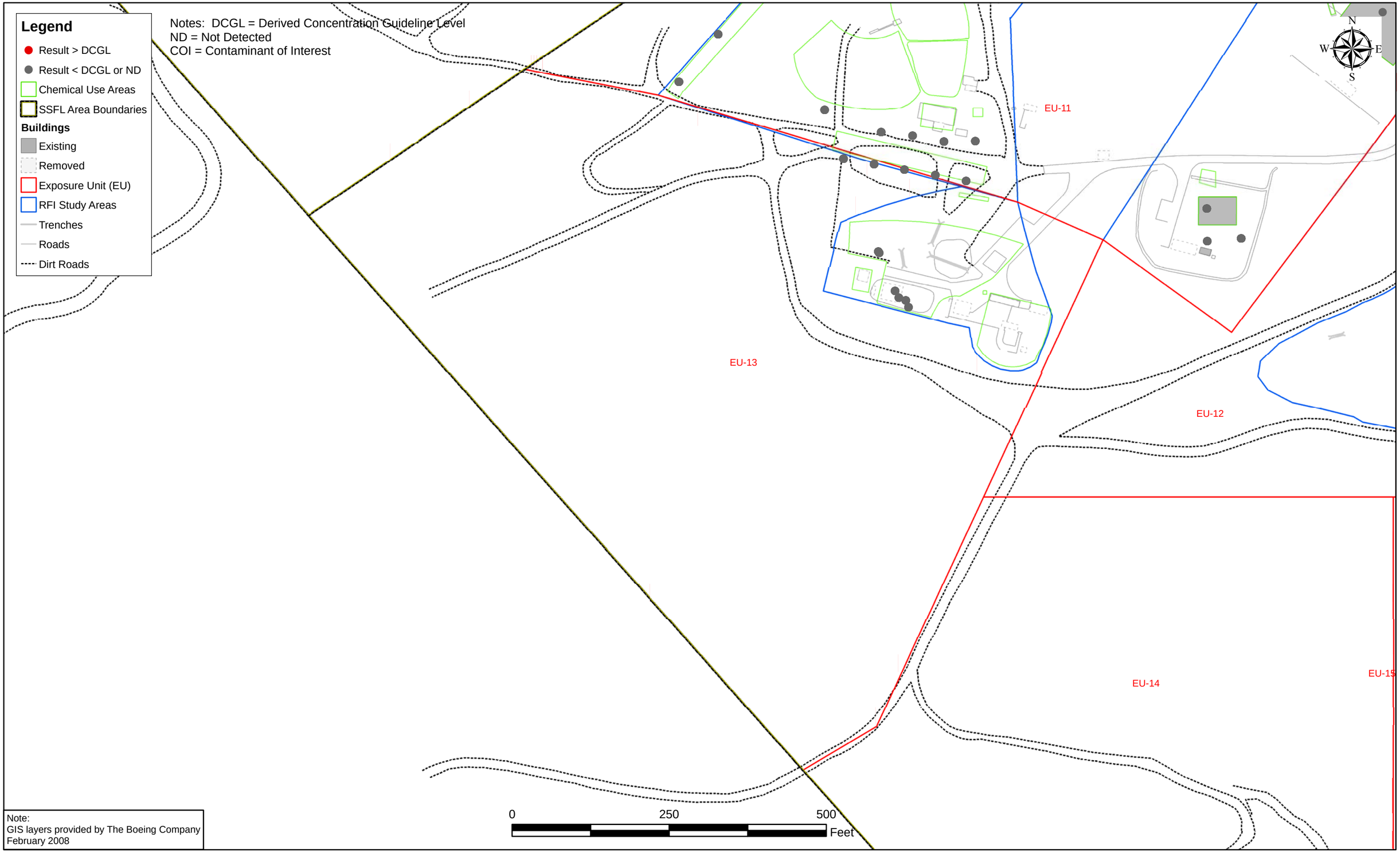
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-0
EU-13 Chemical Use Areas



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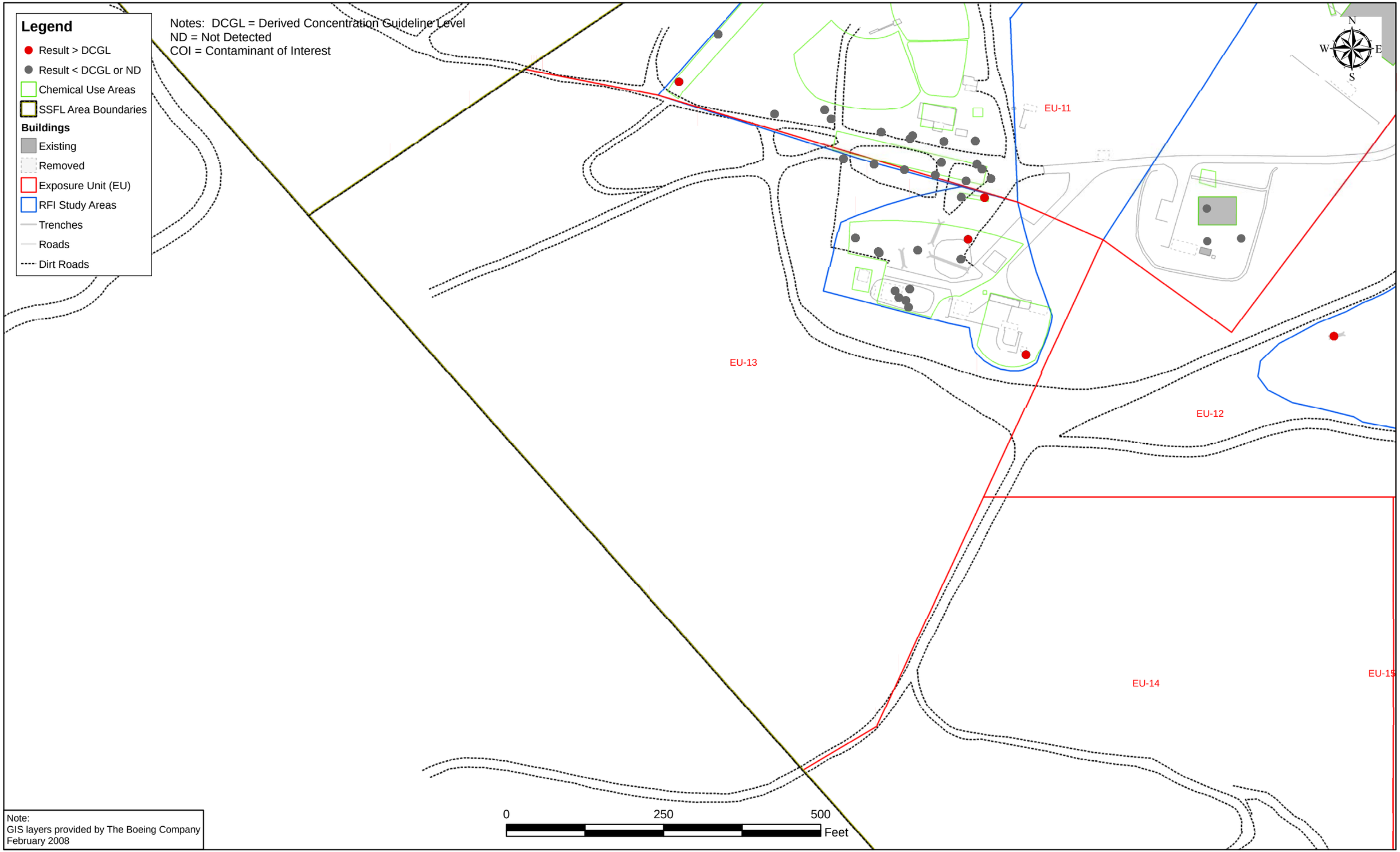
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-1
VOC COIs in Soils - EU-13
(0-2 ft bgs)



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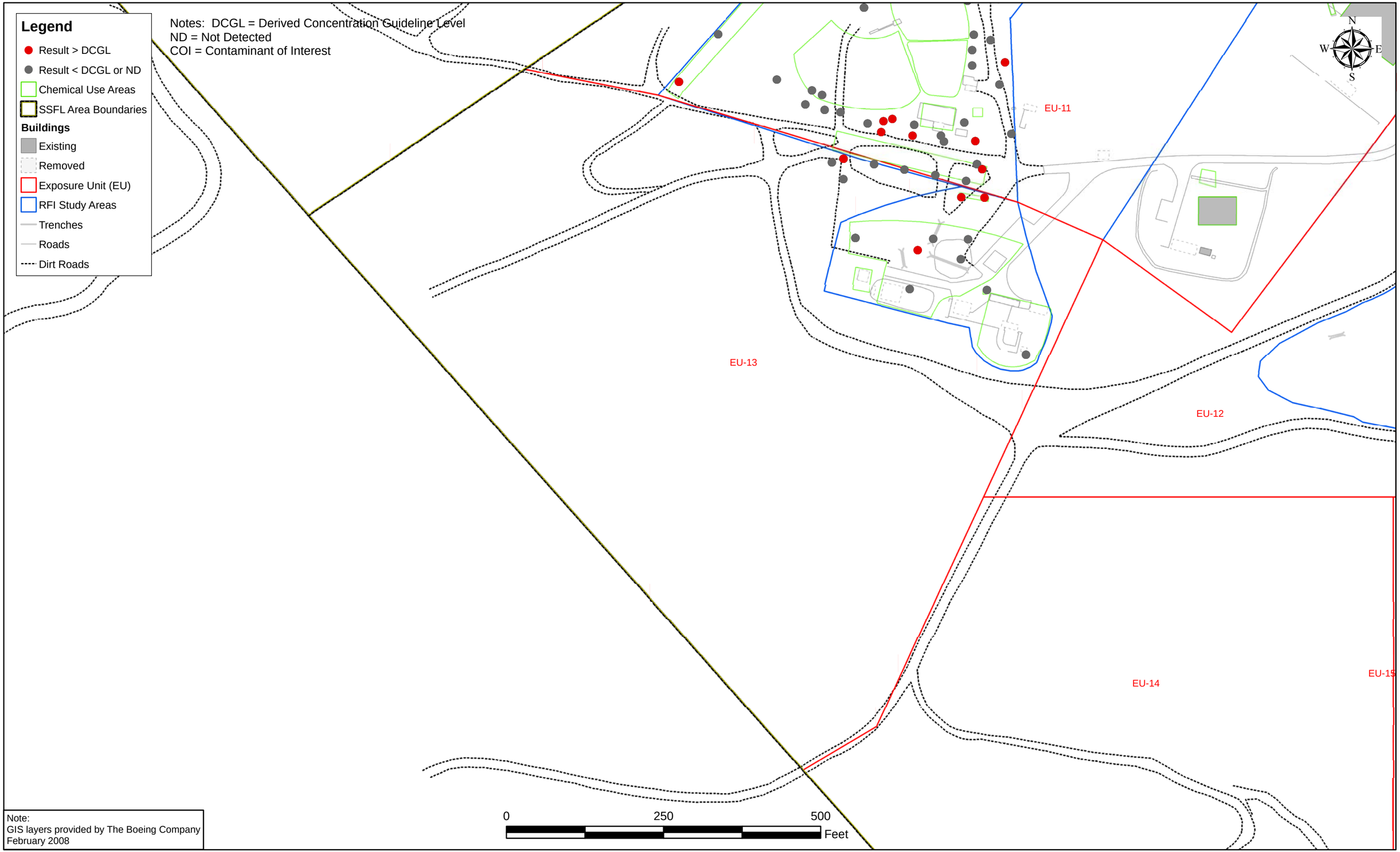
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-2
SVOC COIs in Soils - EU-13
(0-2 ft bgs)



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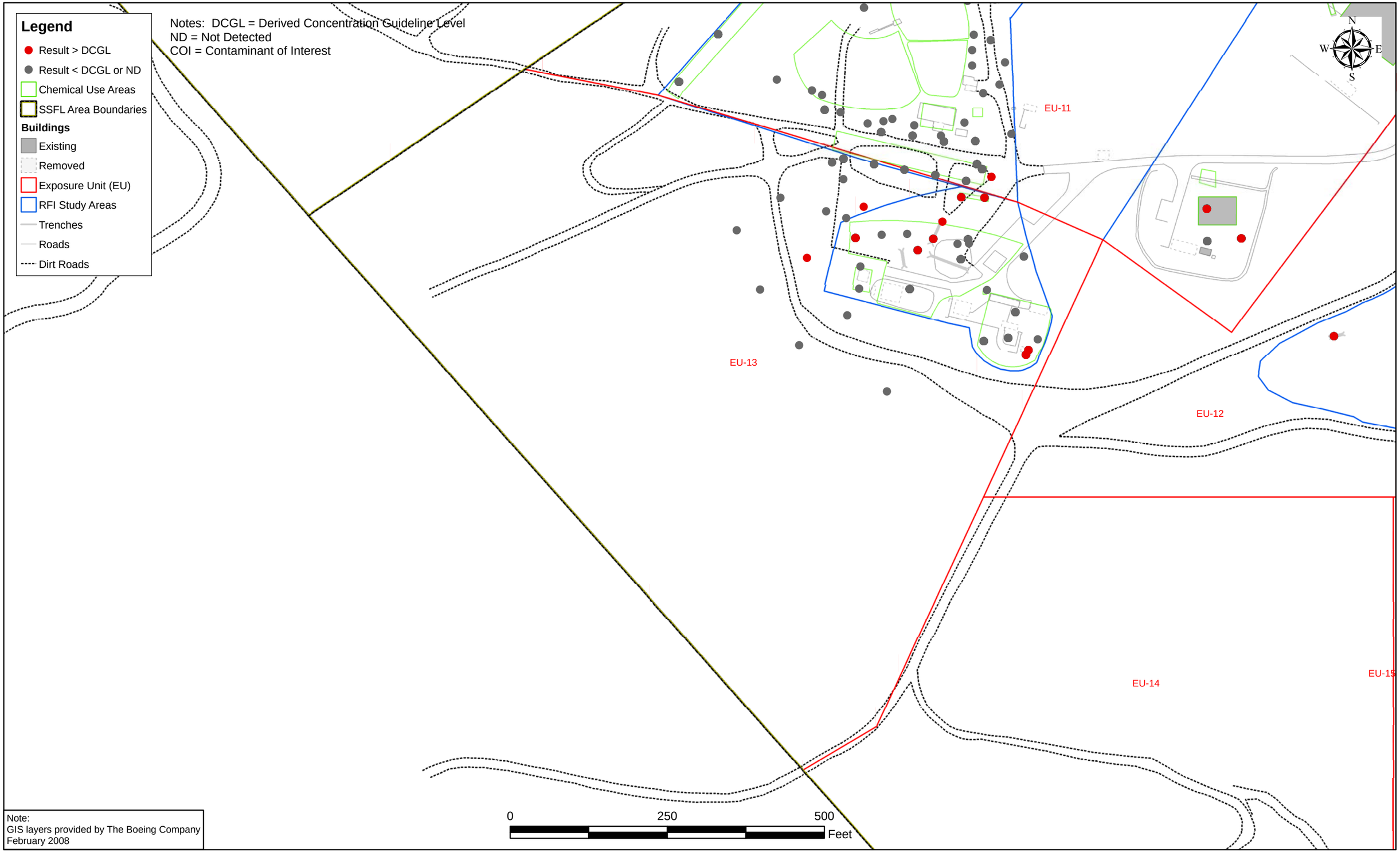
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-3
PCB COIs in Soils - EU-13
(0-2 ft bgs)



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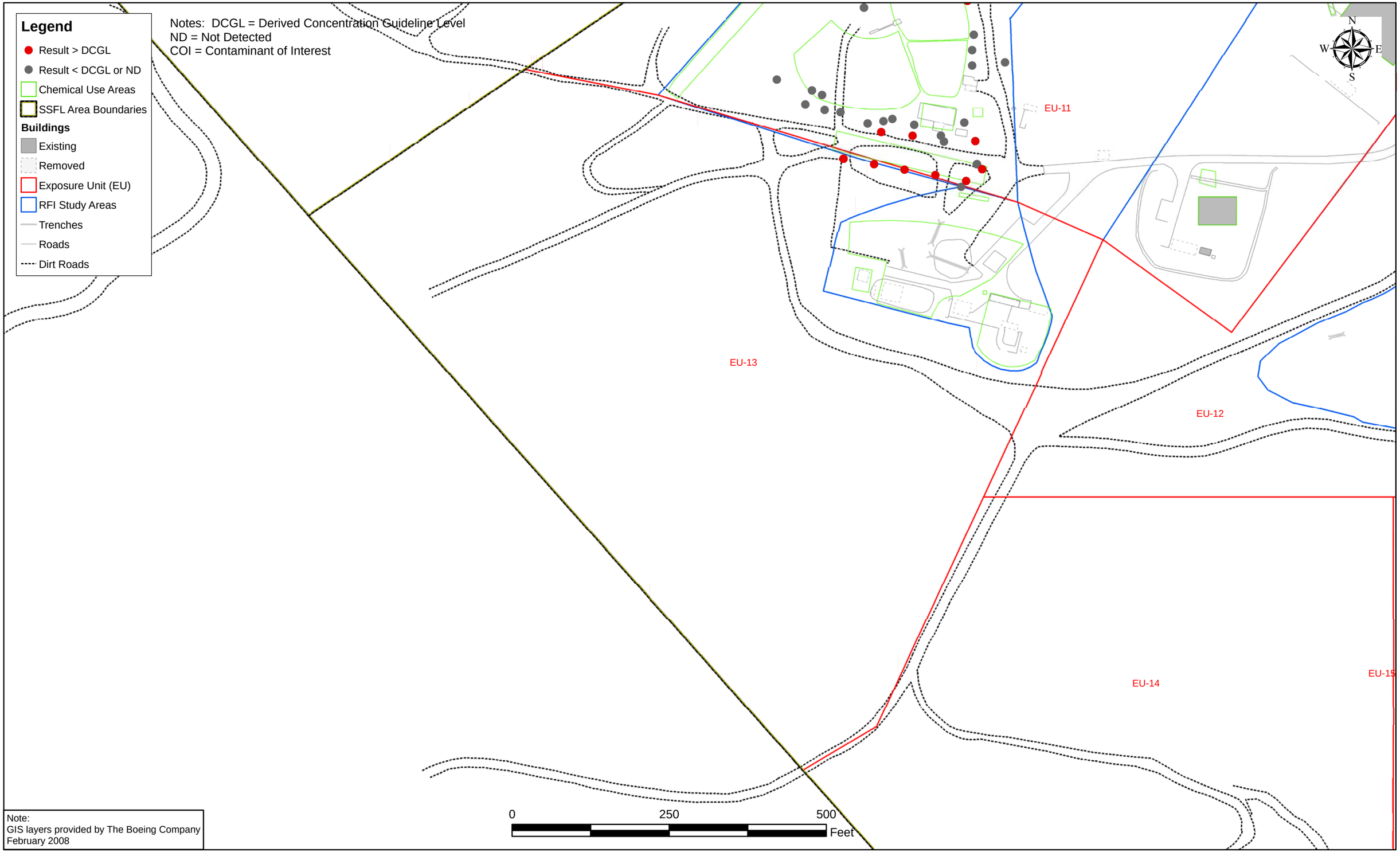
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-4
Inorganic COIs in Soils - EU-13
(0-2 ft bgs)



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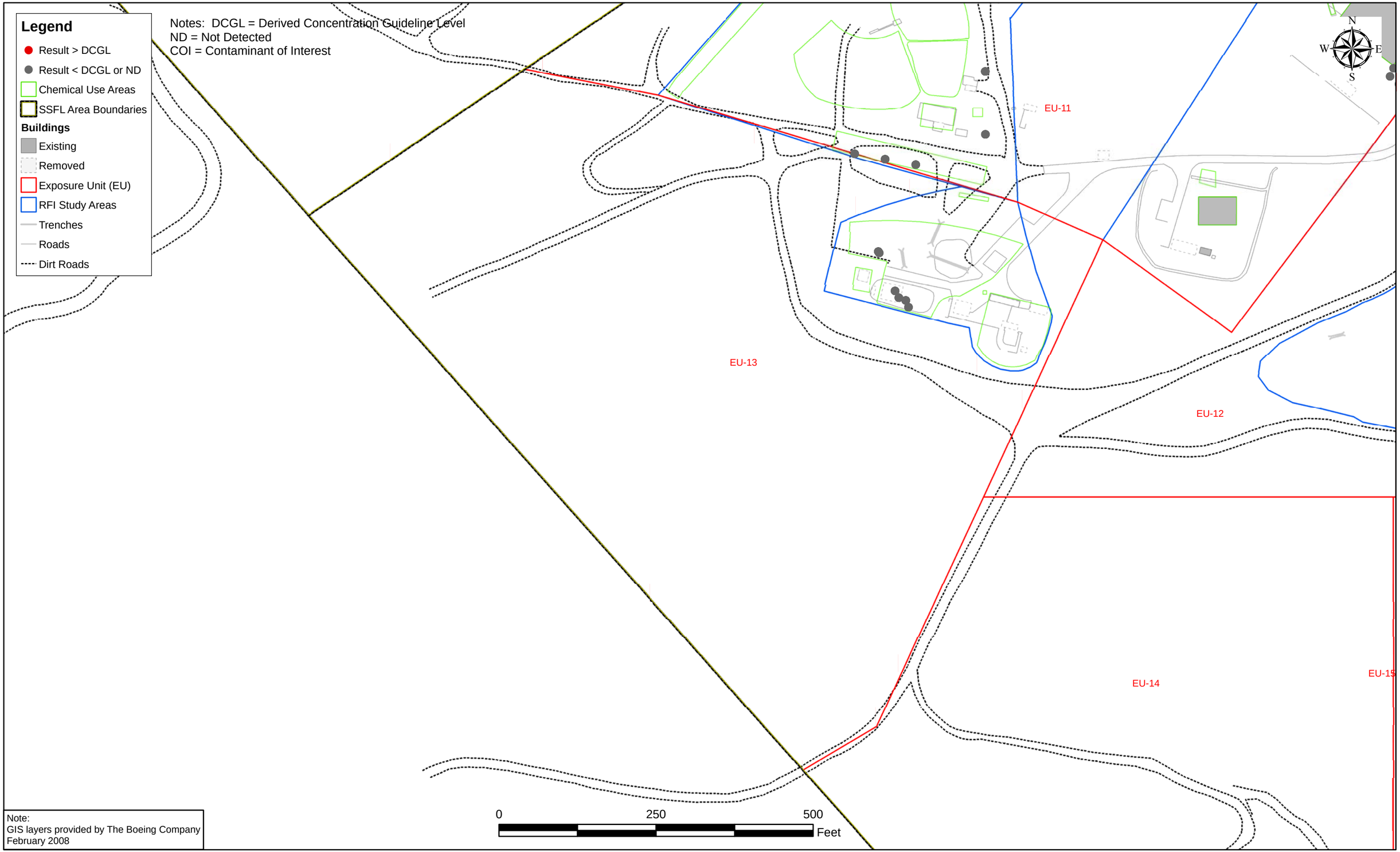
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-5
Dioxin COIs in Soils - EU-13
(0-2 ft bgs)



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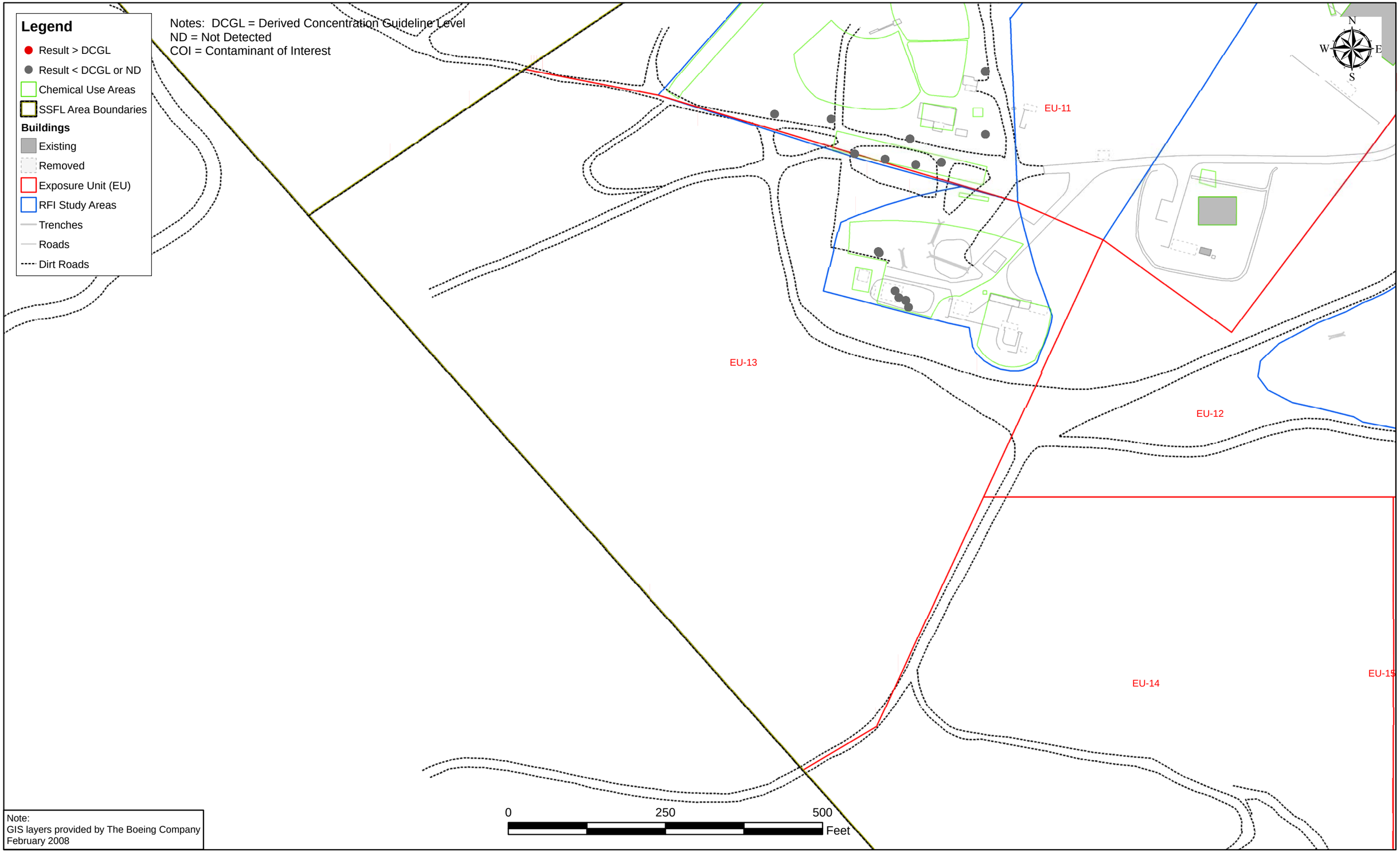
Ventura County, California

Figure F13-6
VOC COIs in Soils - EU-13
(2-10 ft bgs)



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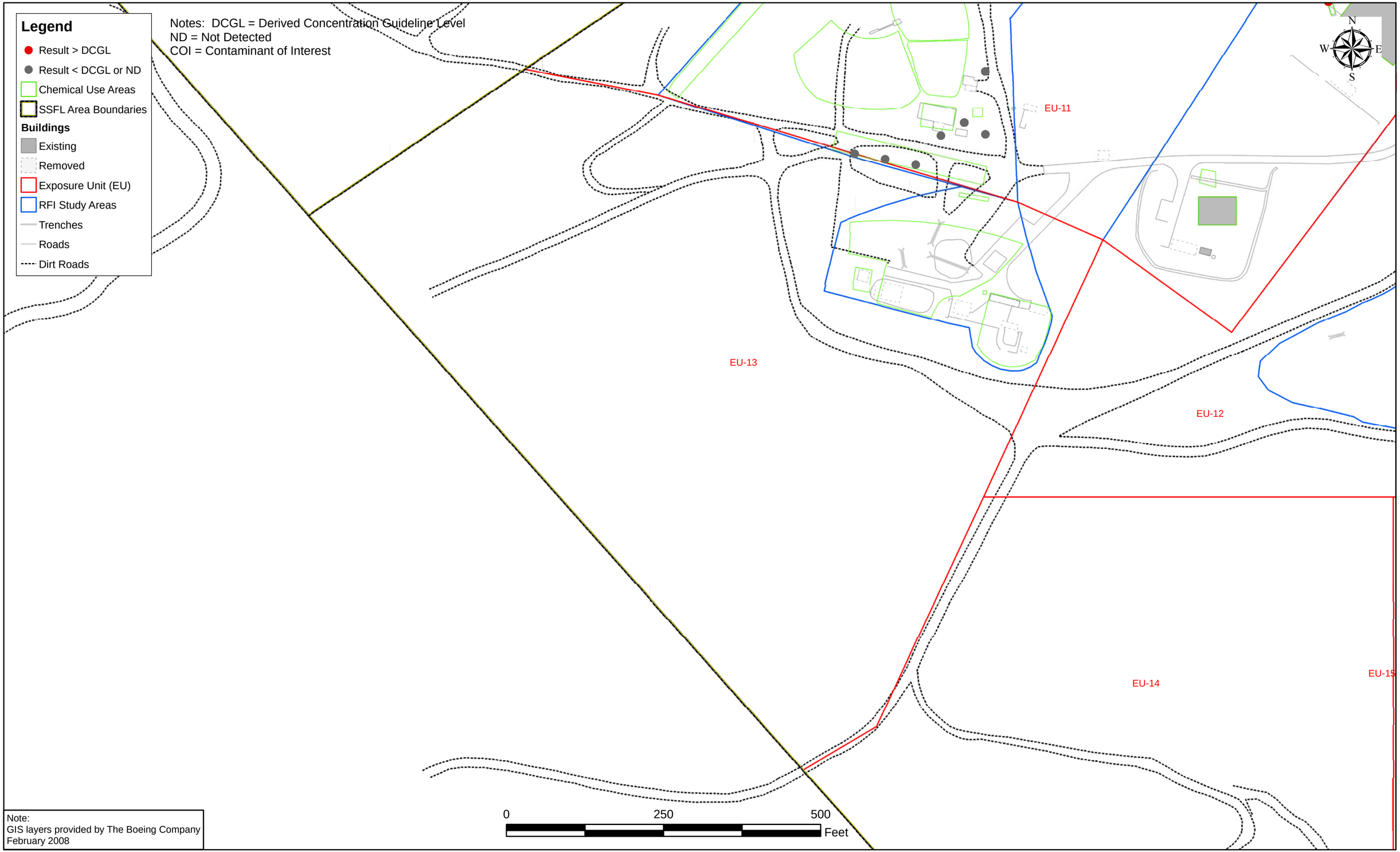
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-7
SVOC COIs in Soils - EU-13
(2-10 ft bgs)



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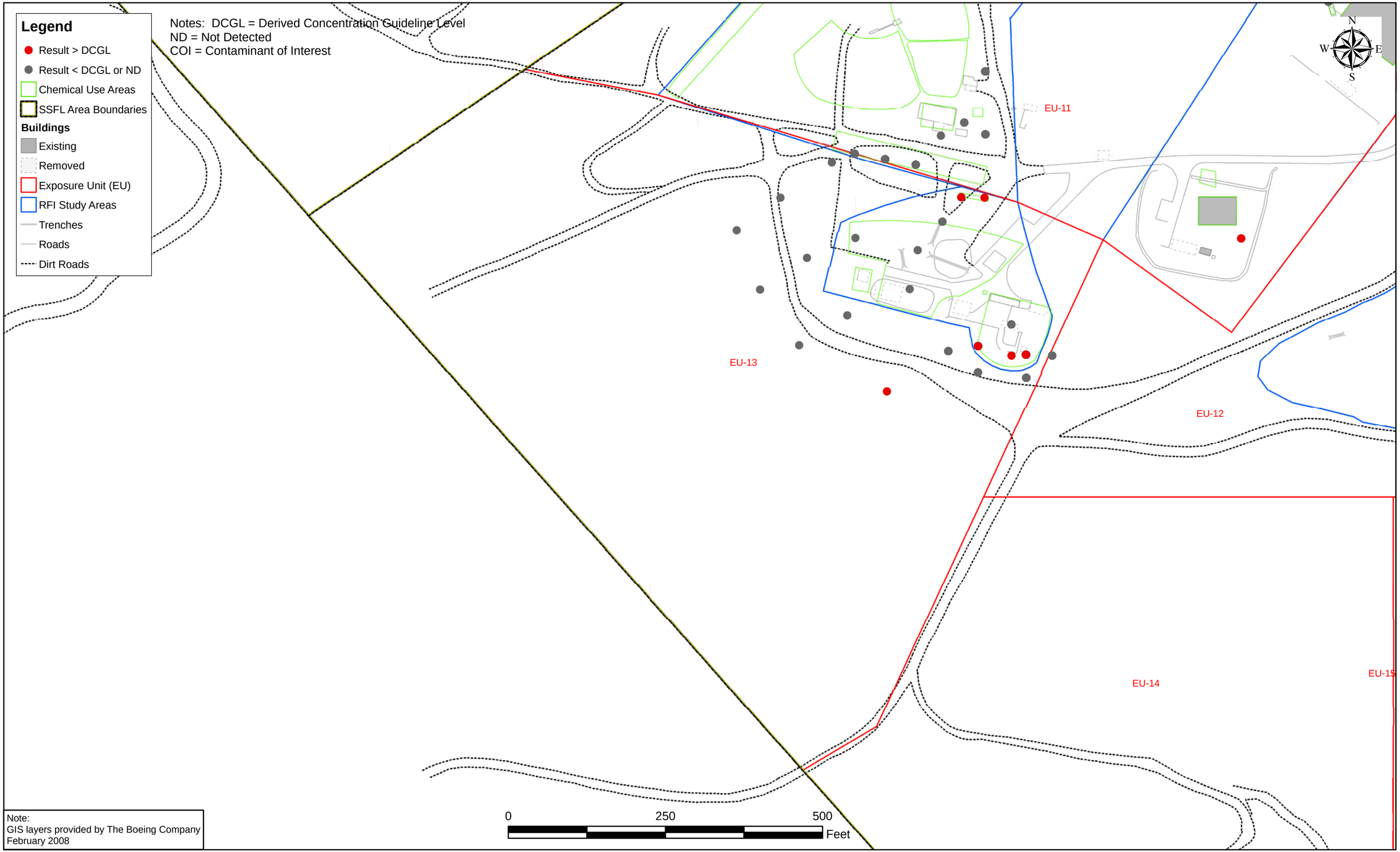
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-8
PCB COIs in Soils - EU-13
(2-10 ft bgs)



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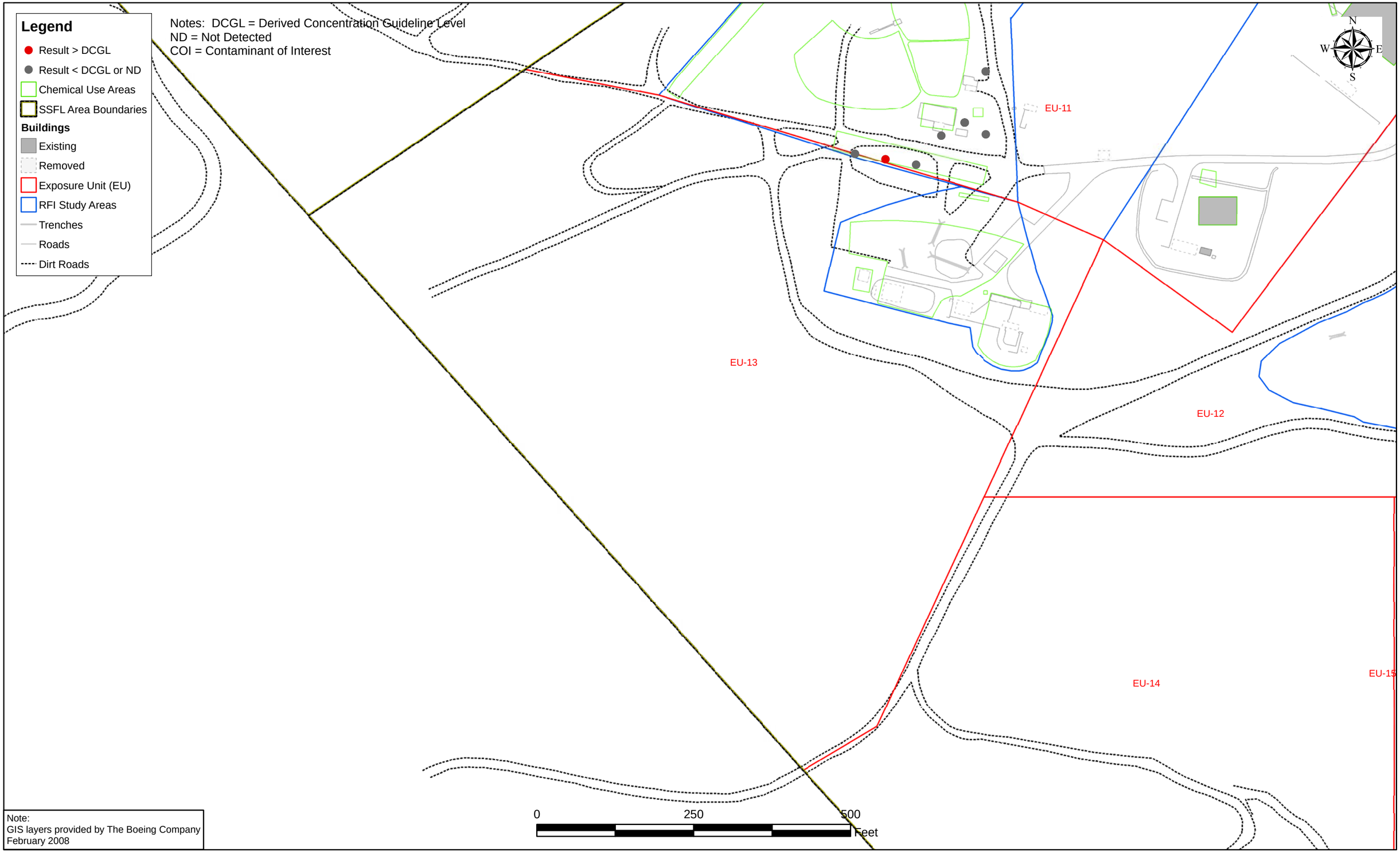
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-9
Inorganic COIs in Soils - EU-13
(2-10 ft bgs)



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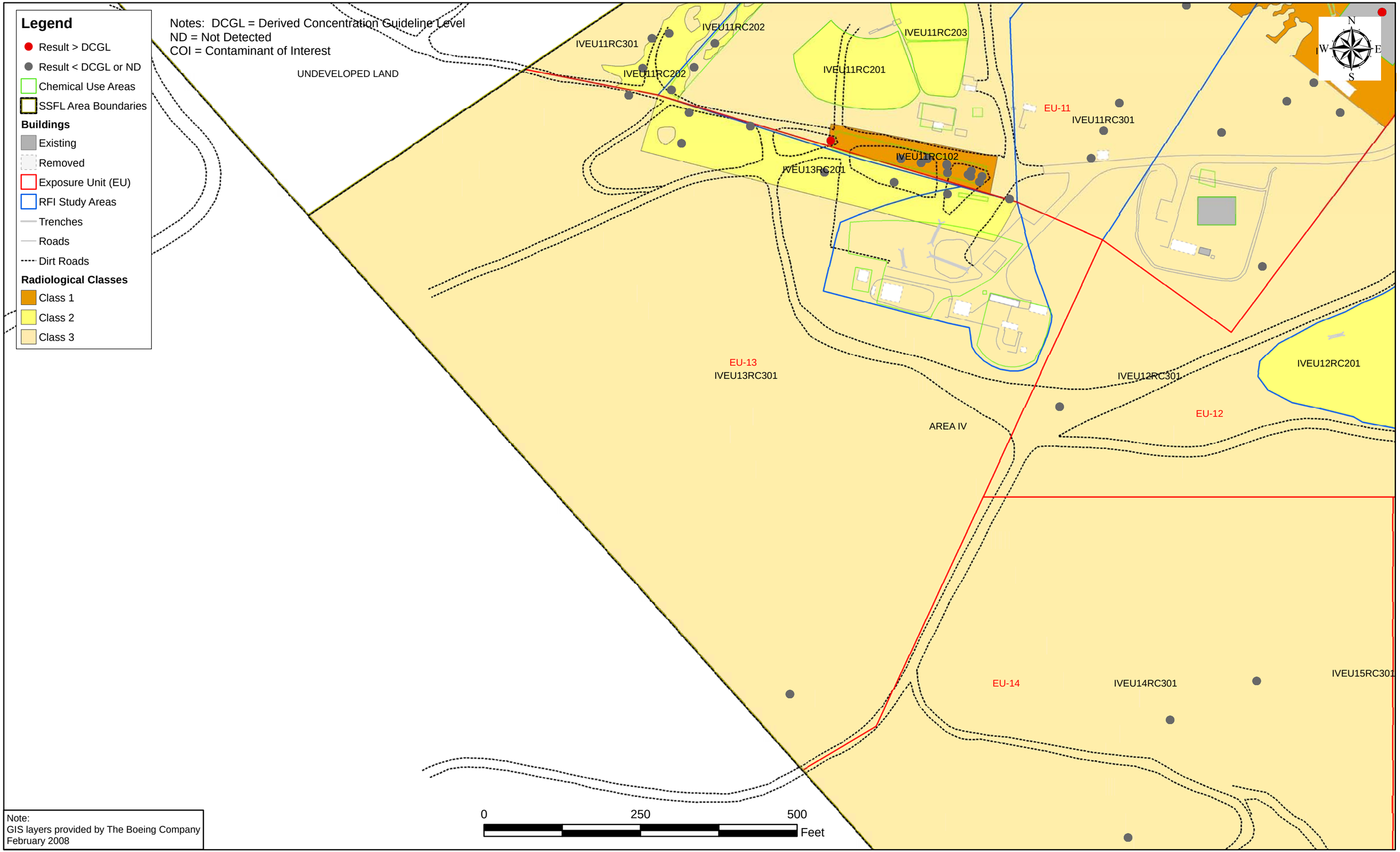
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-10
Dioxin COIs in Soils - EU-13
(2-10 ft bgs)



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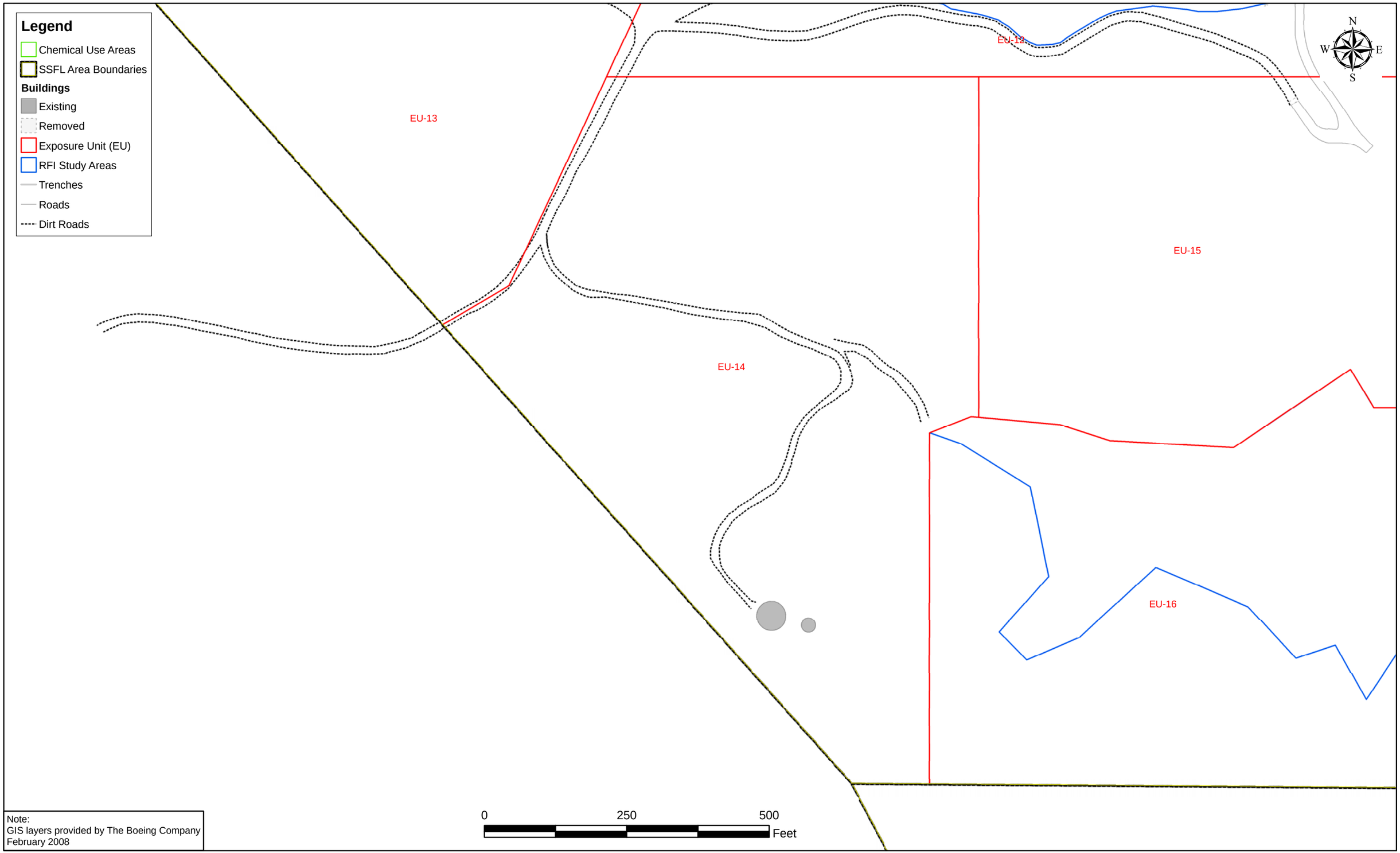
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F13-11
Radiological COIs in Soils - EU-13
(0-6 in bgs)


Legend
Chemical Use Areas
SSFL Area Boundaries
Buildings
Existing
Removed
Exposure Unit (EU)
RFI Study Areas
Trenches
Roads
Dirt Roads
EU-12
EU-13
EU-14
EU-15
EU-16
N
W
E
S
0
250
500
Feet
Note:
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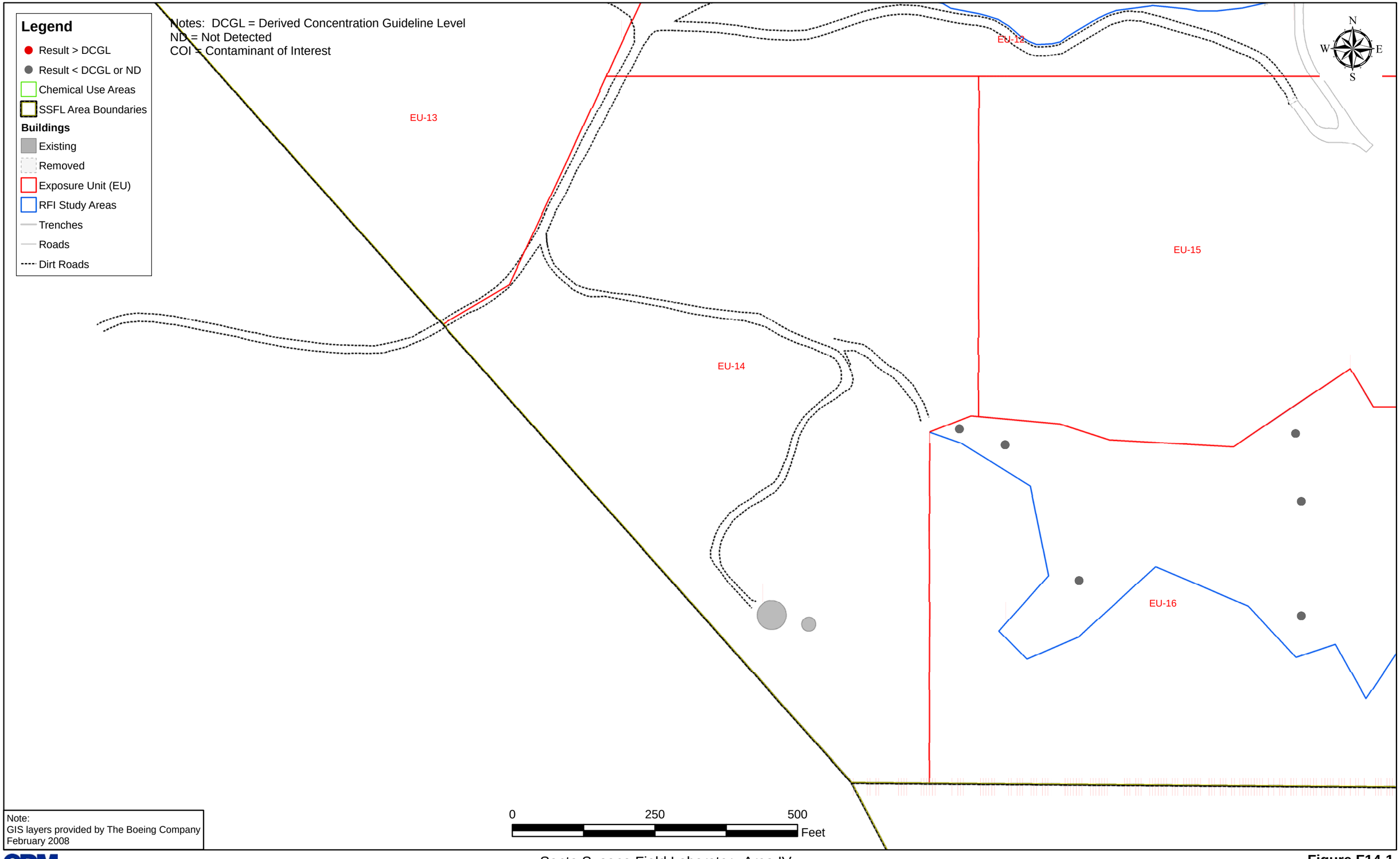

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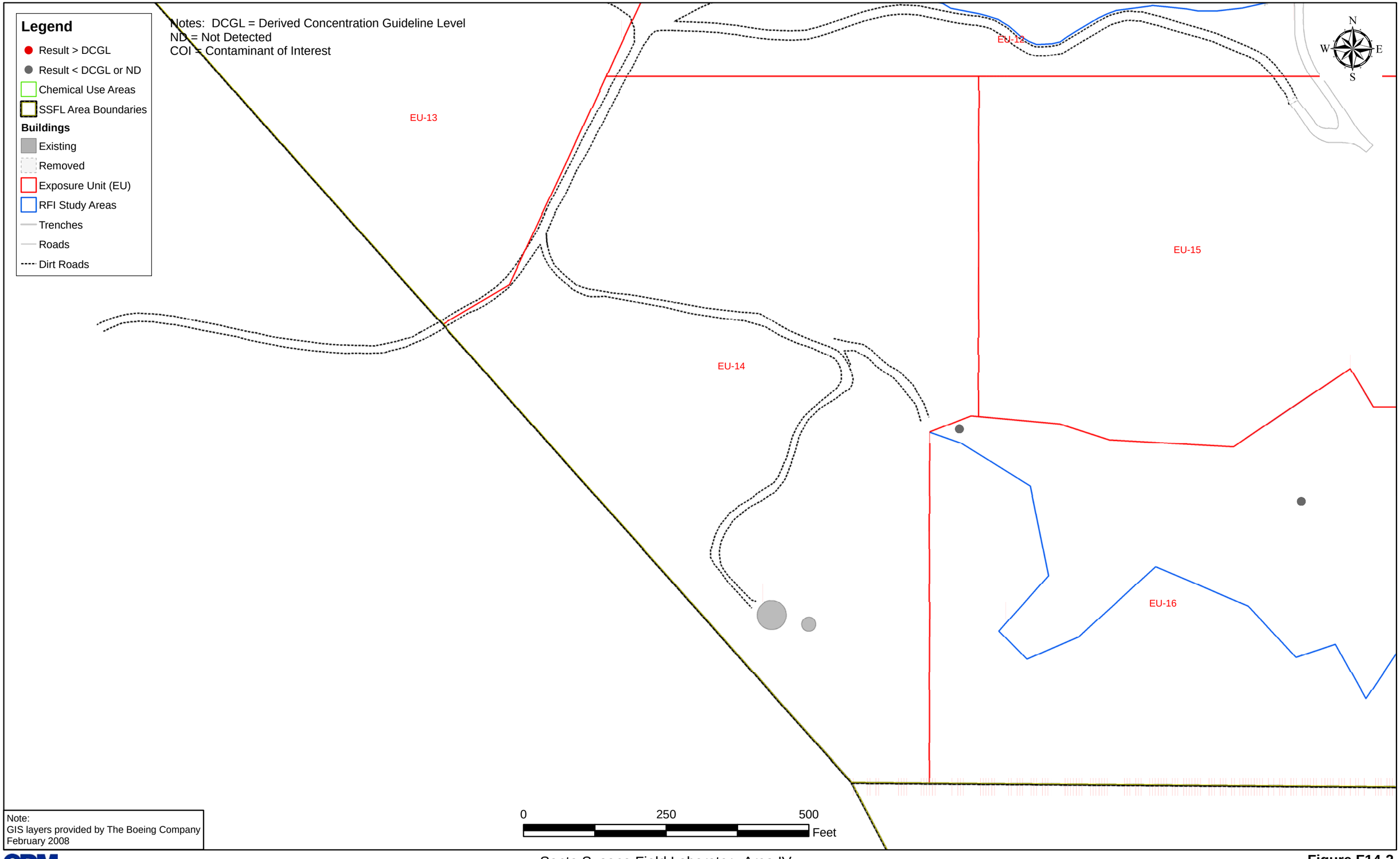
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-1
VOC COIs in Soils - EU-14
(0-2 ft bgs)



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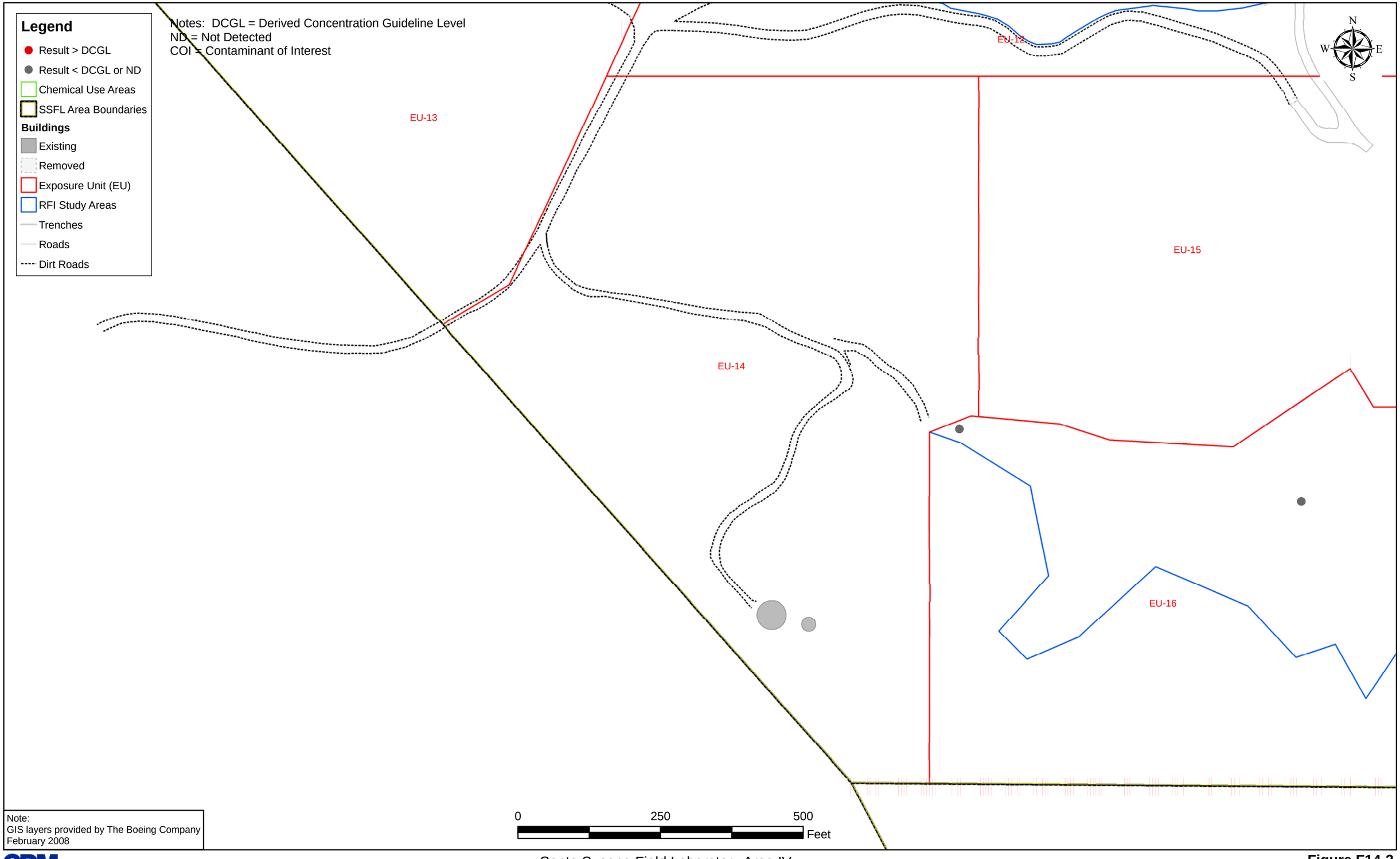
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-2
SVOC COIs in Soils - EU-14
(0-2 ft bgs)



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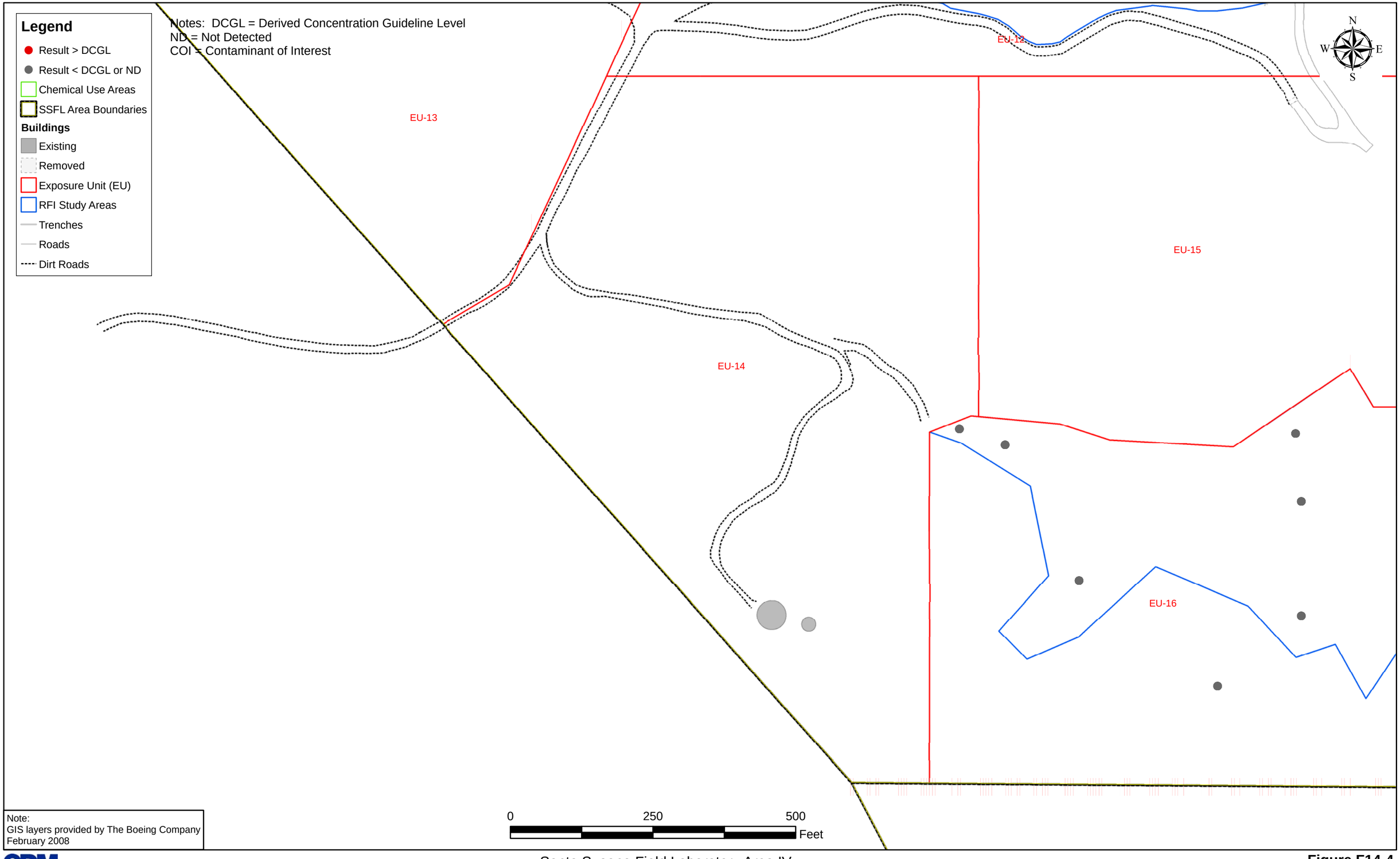
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-3
PCB COIs in Soils - EU-14
(0-2 ft bgs)



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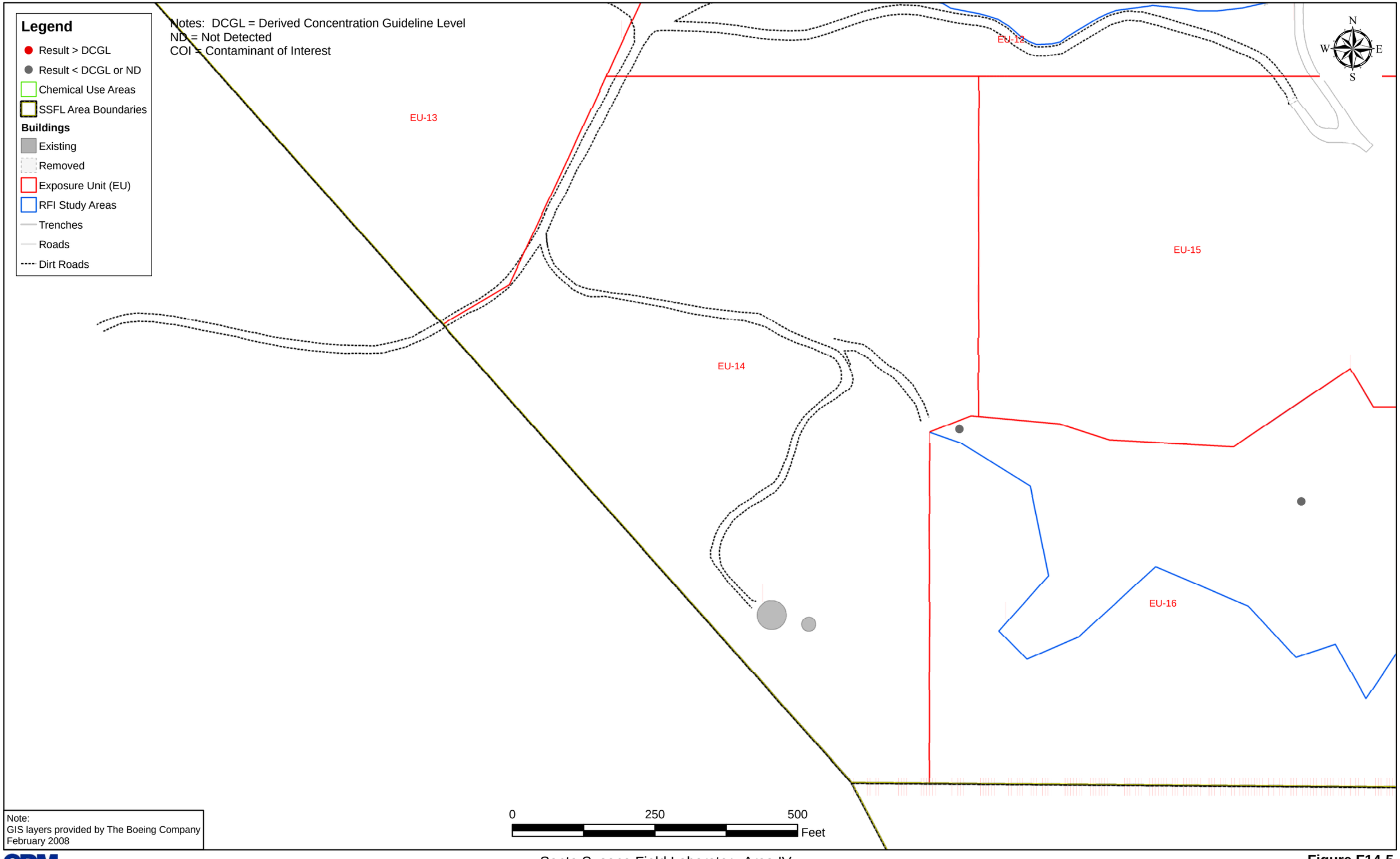
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-4
Inorganic COIs in Soils - EU-14
(0-2 ft bgs)



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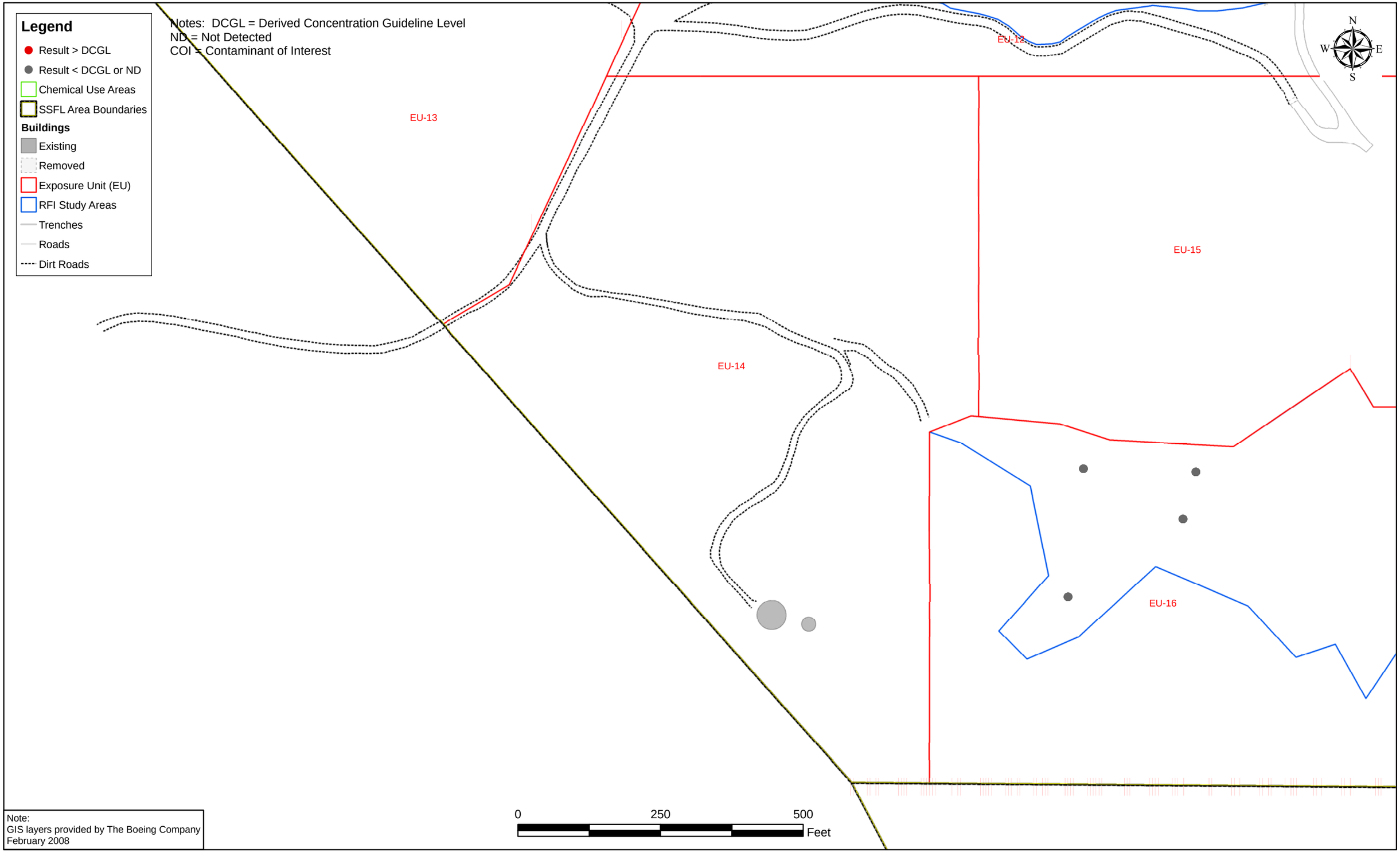
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-5
Dioxin COIs in Soils - EU-14
(0-2 ft bgs)



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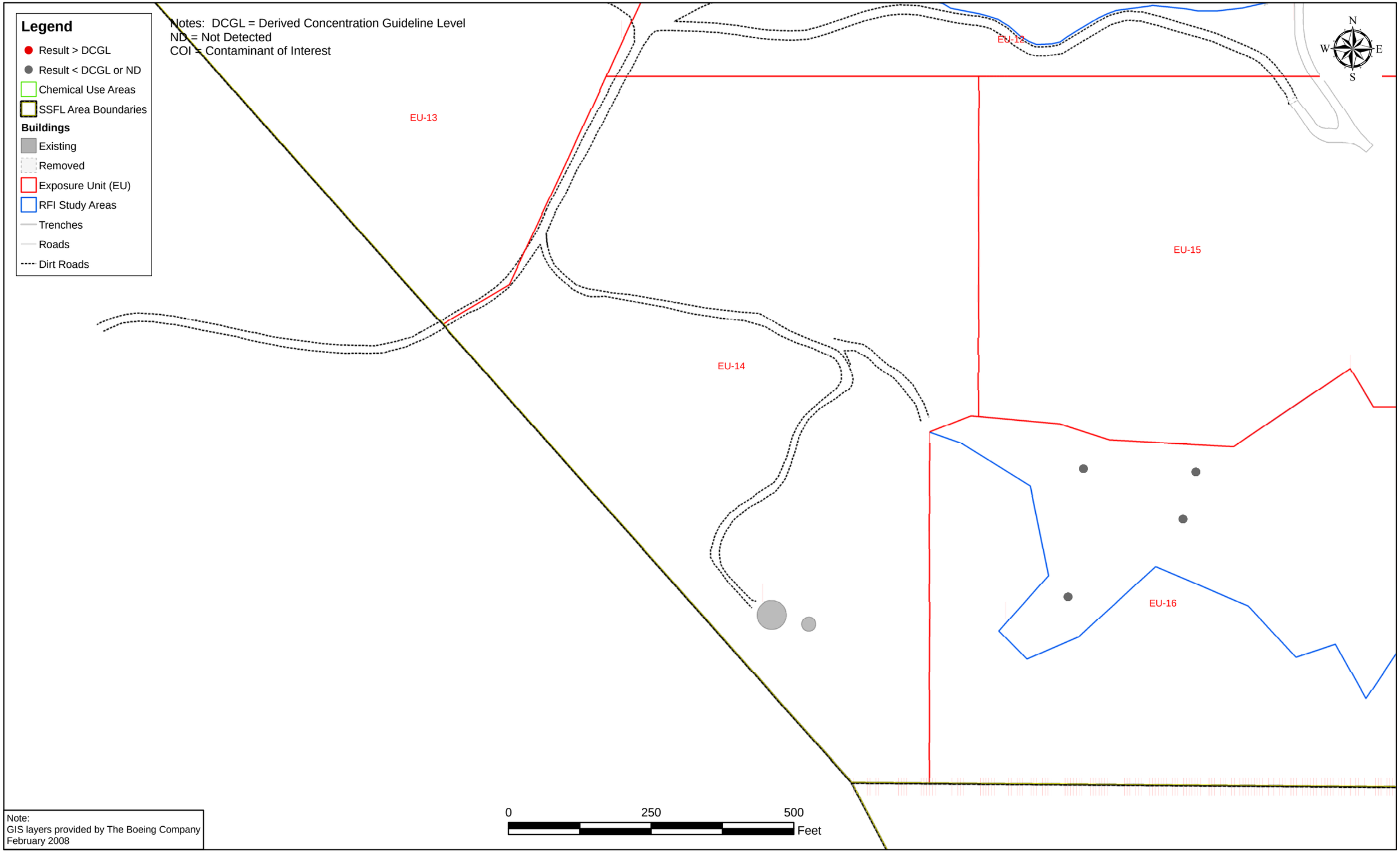
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-6
VOC COIs in Soils - EU-14
(2-10 ft bgs)



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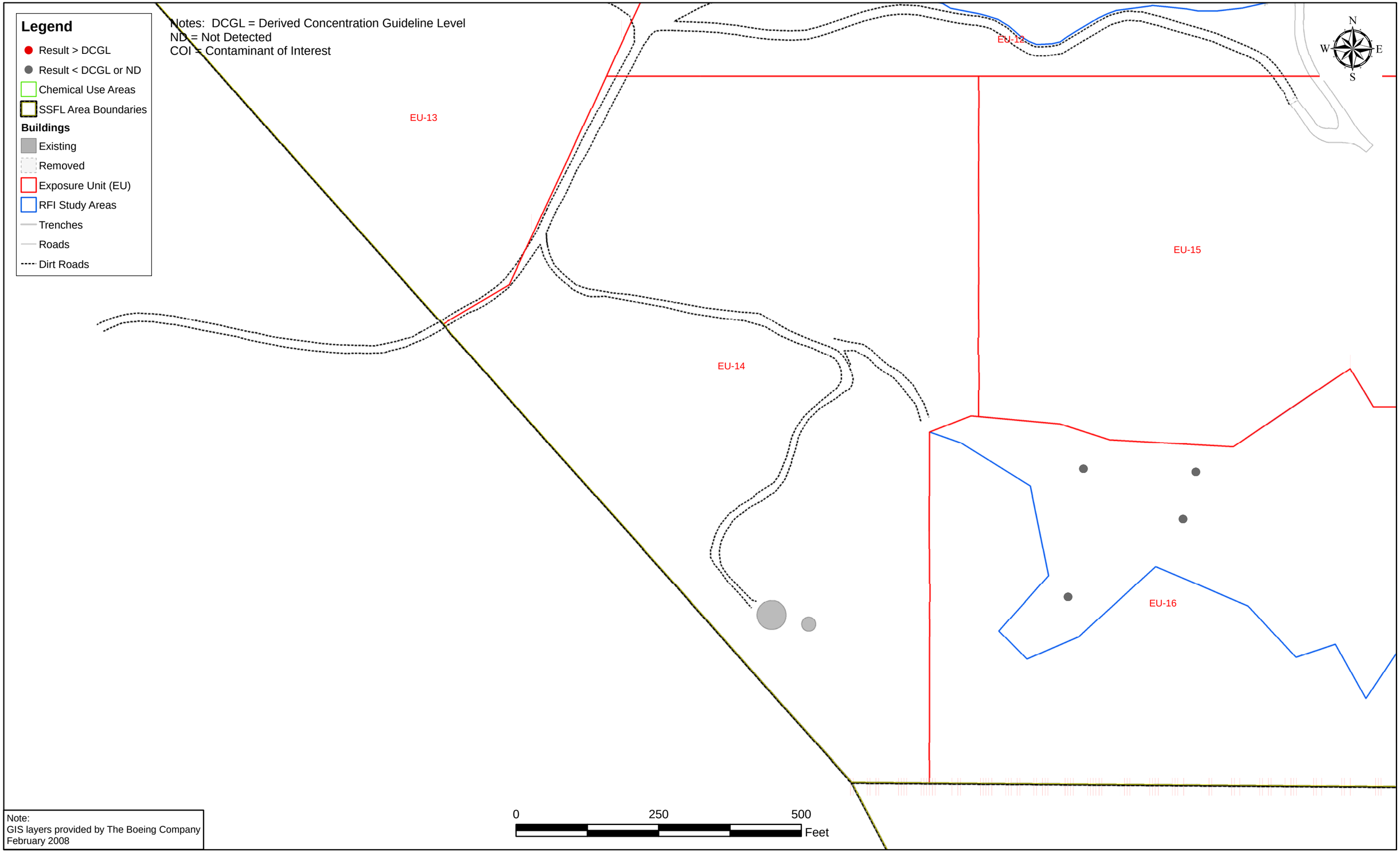
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-7
SVOC COIs in Soils - EU-14
(2-10 ft bgs)



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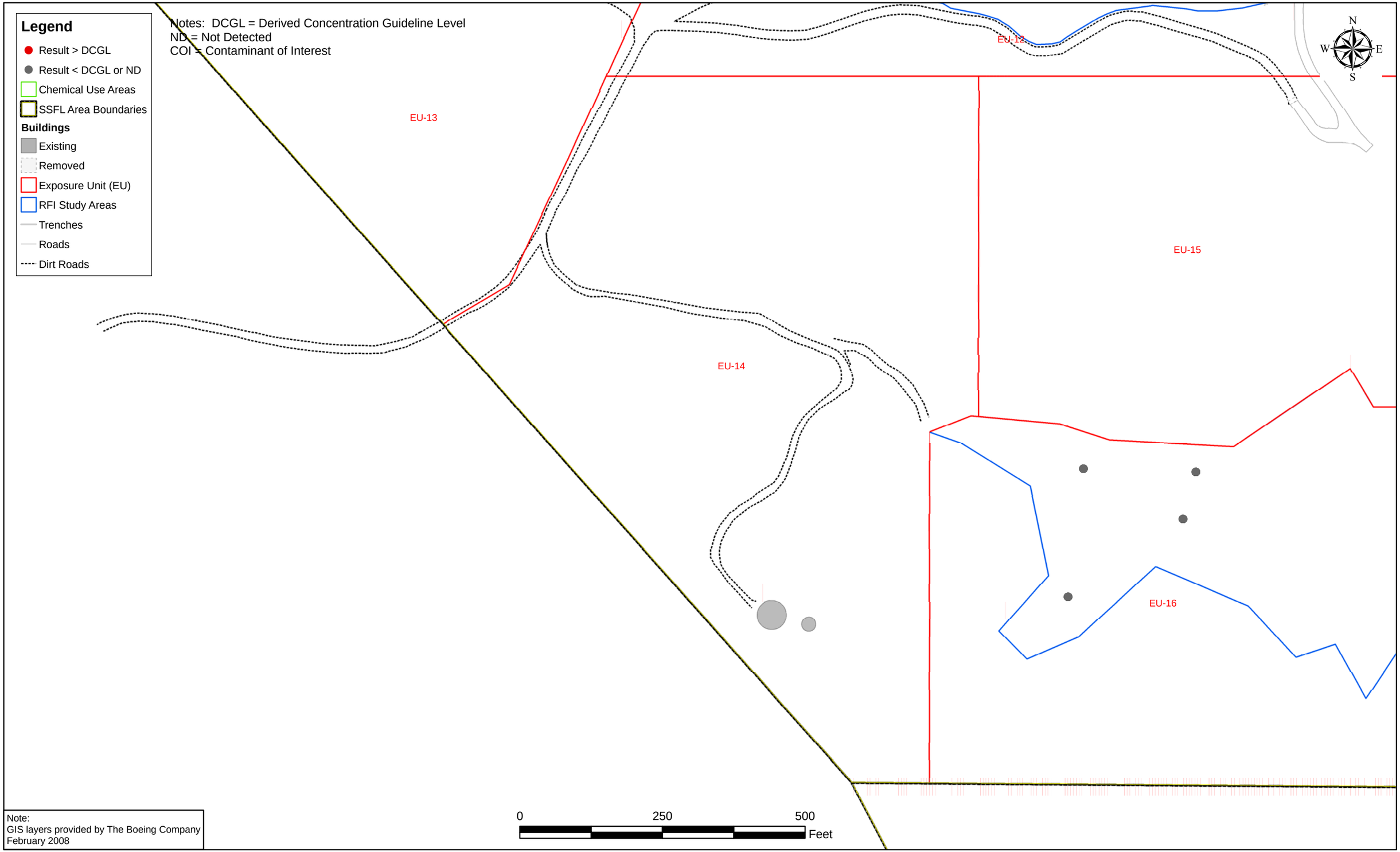
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-8
PCB COIs in Soils - EU-14
(2-10 ft bgs)



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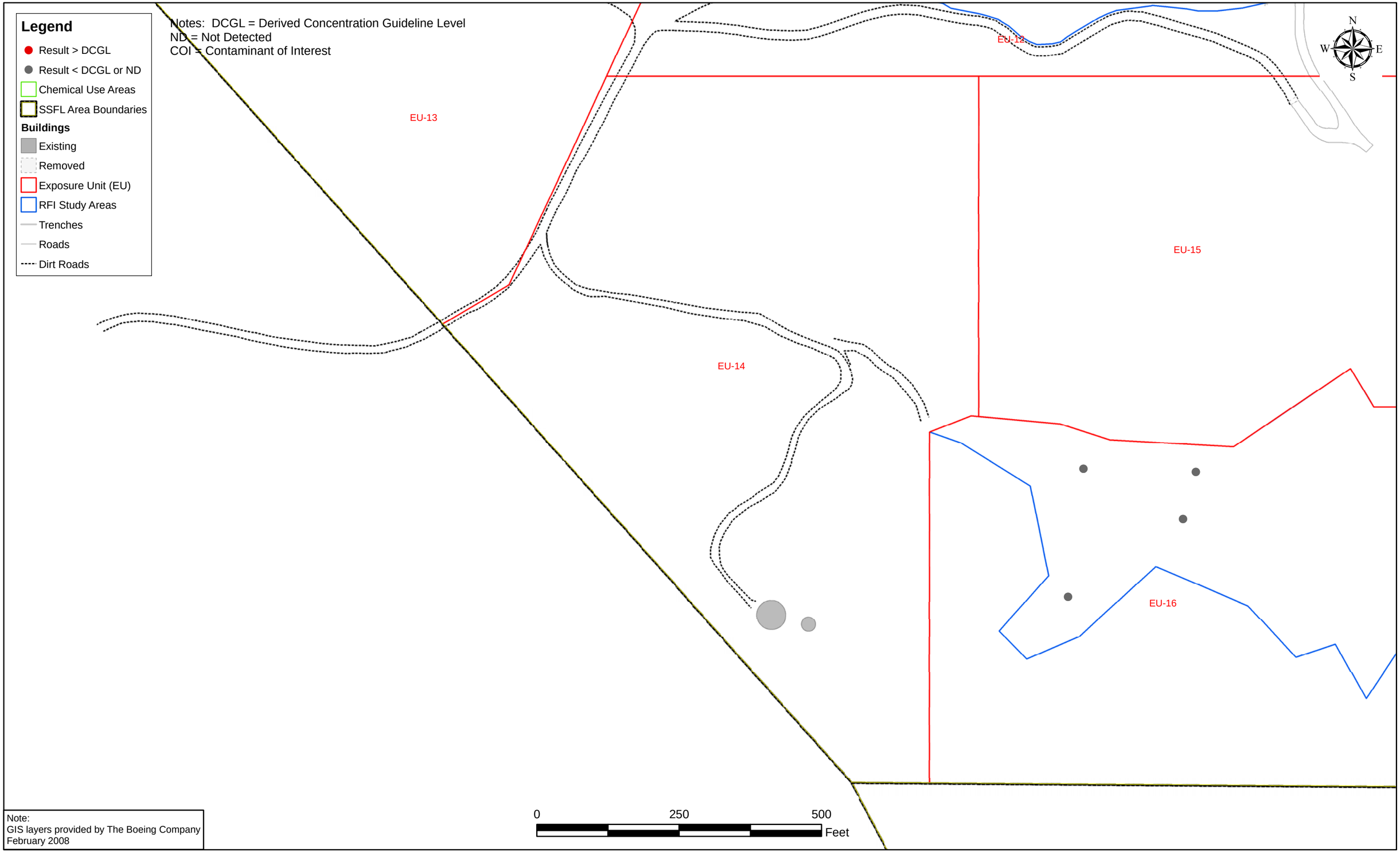
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-9
Inorganic COIs in Soils - EU-14
(2-10 ft bgs)



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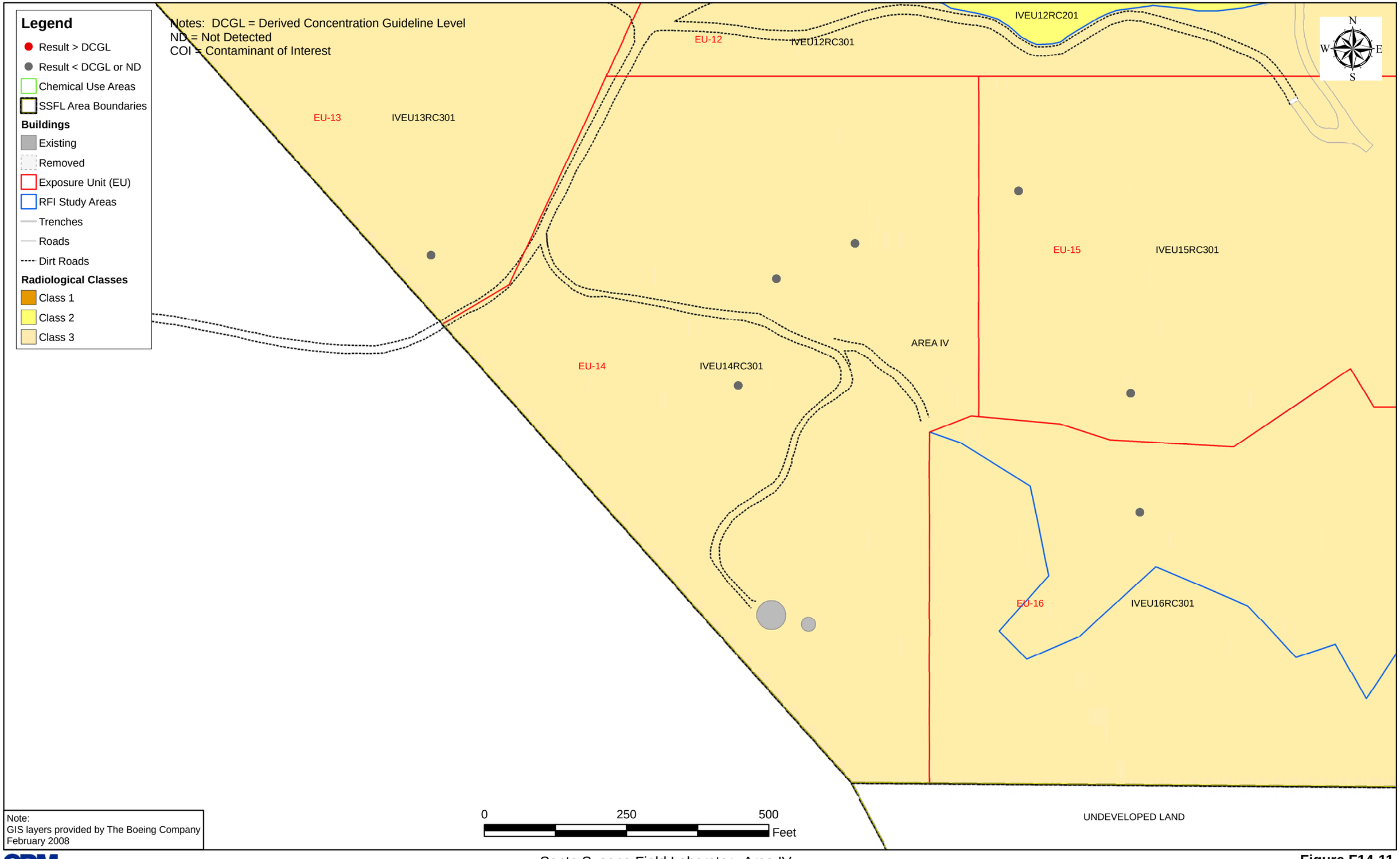
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-10
Dioxin COIs in Soils - EU-14
(2-10 ft bgs)



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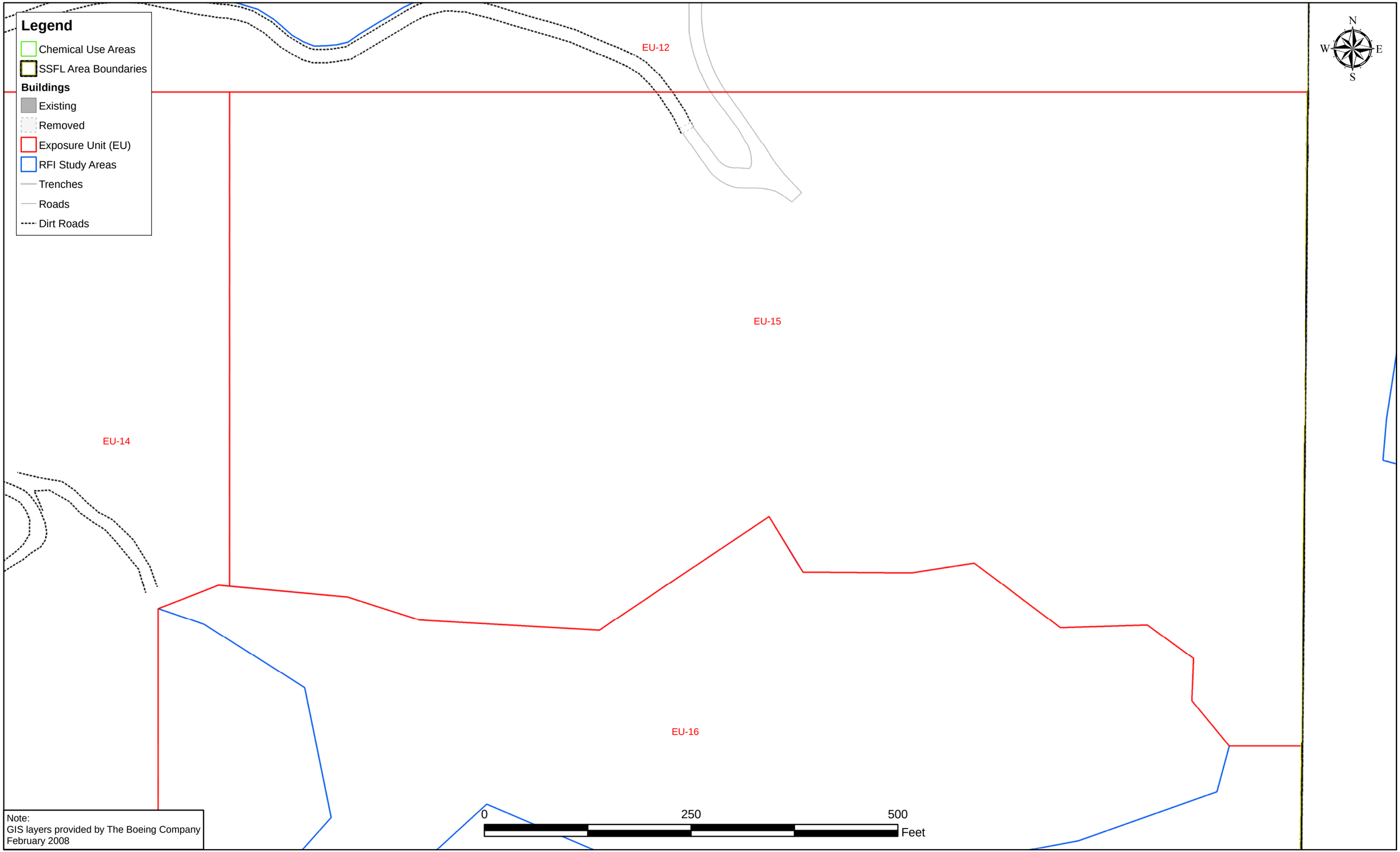
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F14-11
Radiological COIs in Soils - EU-14
(0-6 in bgs)



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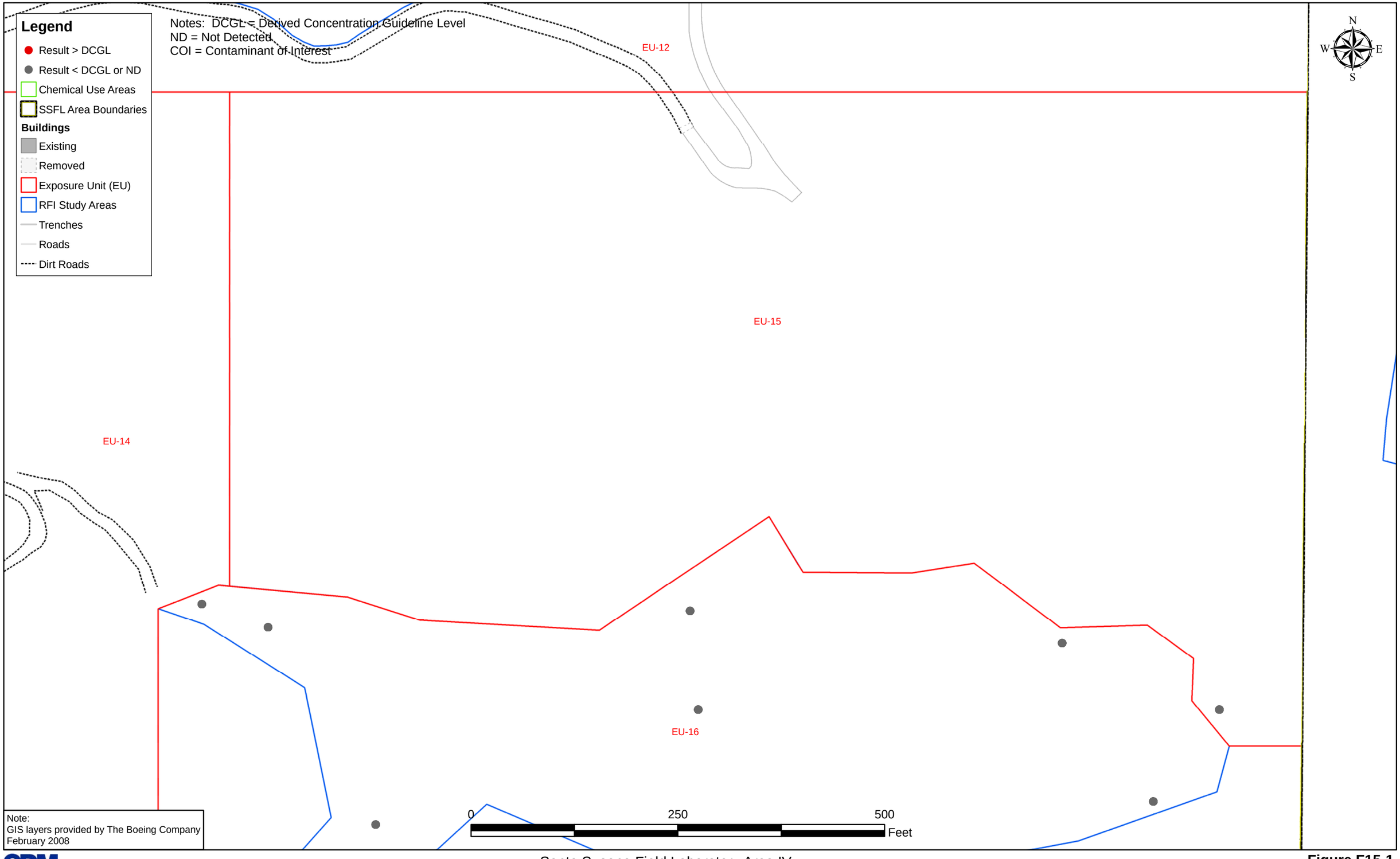
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-0
EU-15 Chemical Use Areas



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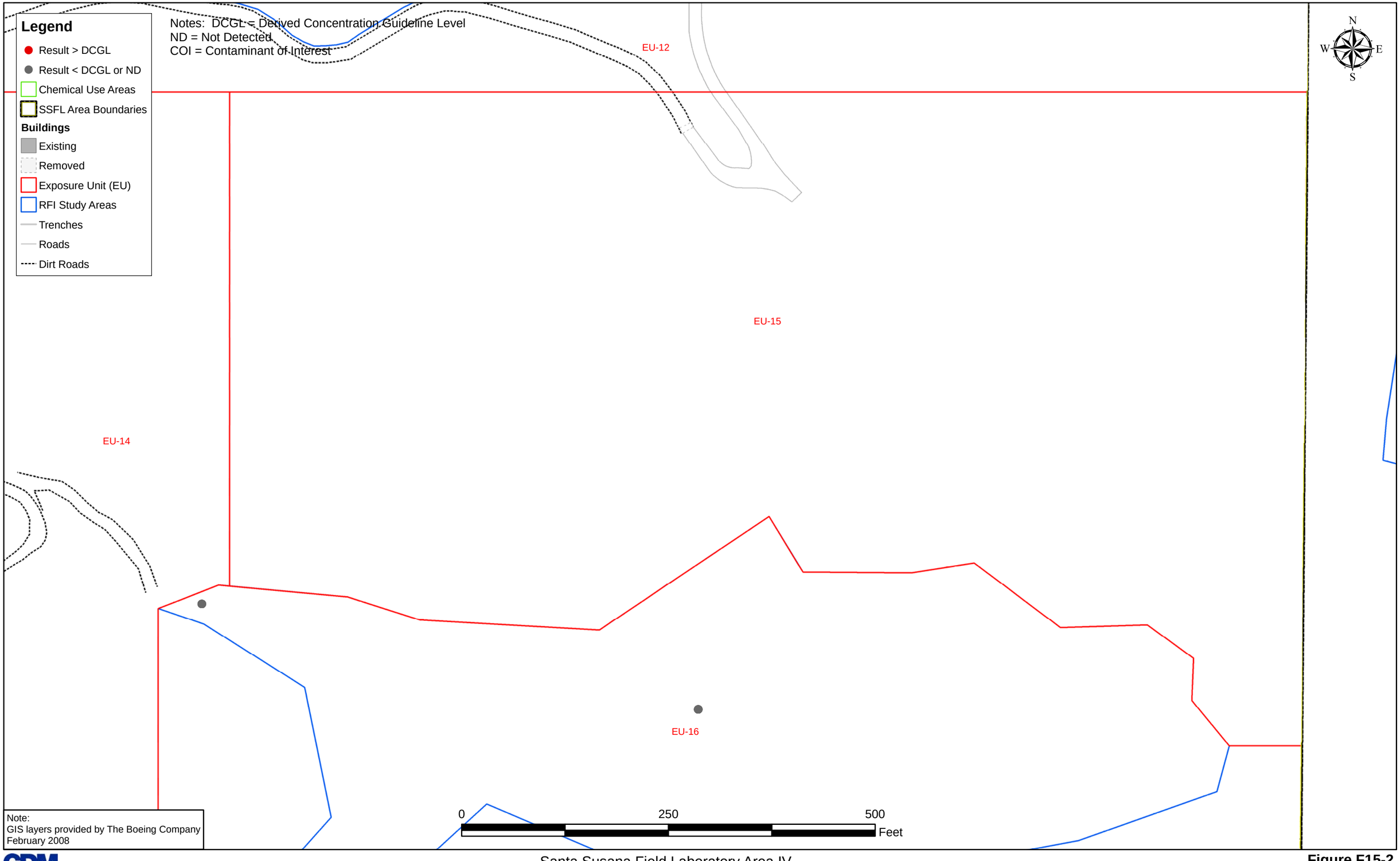
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-1
VOC COIs in Soils - EU-15
(0-2 ft bgs)



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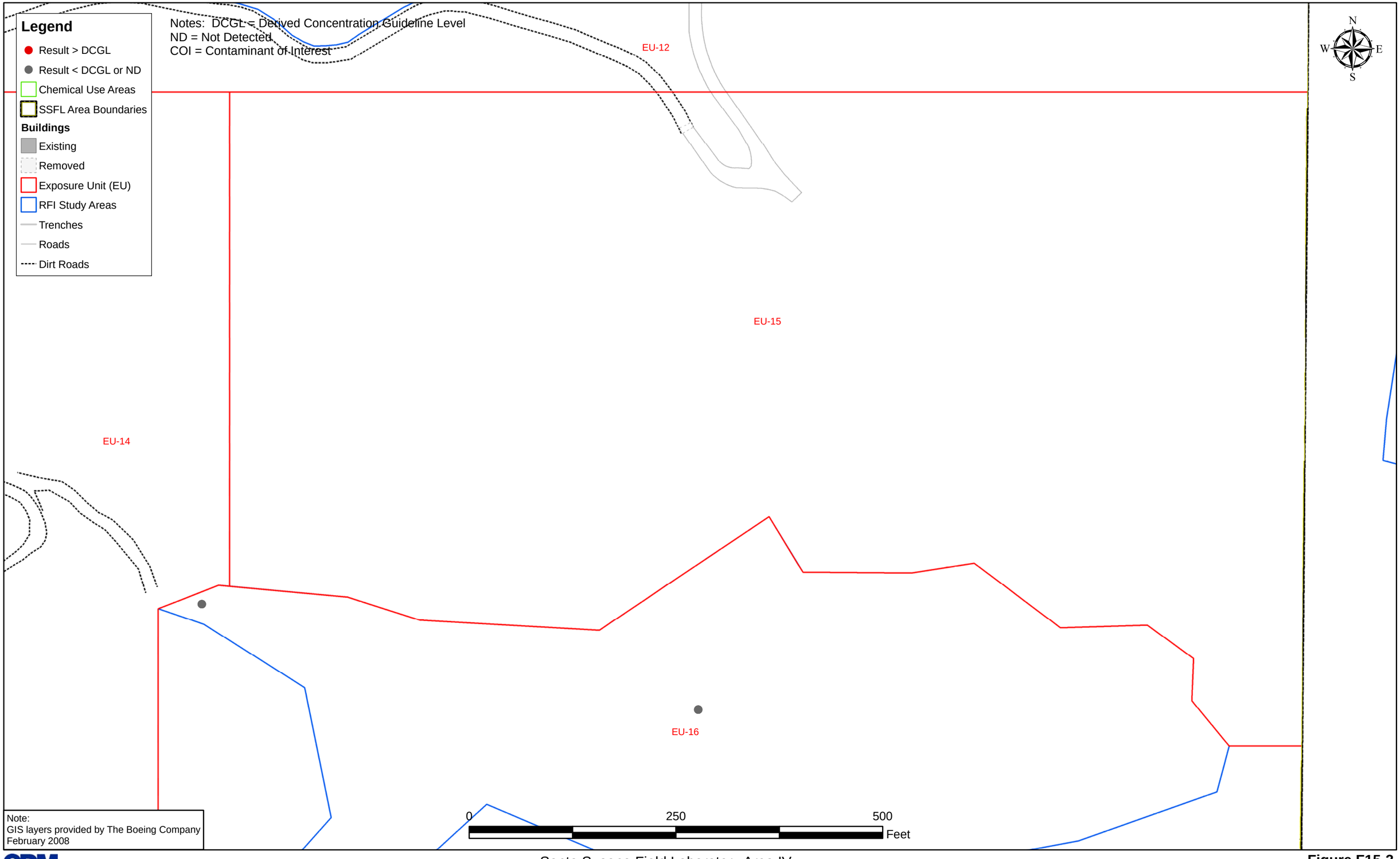
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-2
SVOC COIs in Soils - EU-15
(0-2 ft bgs)



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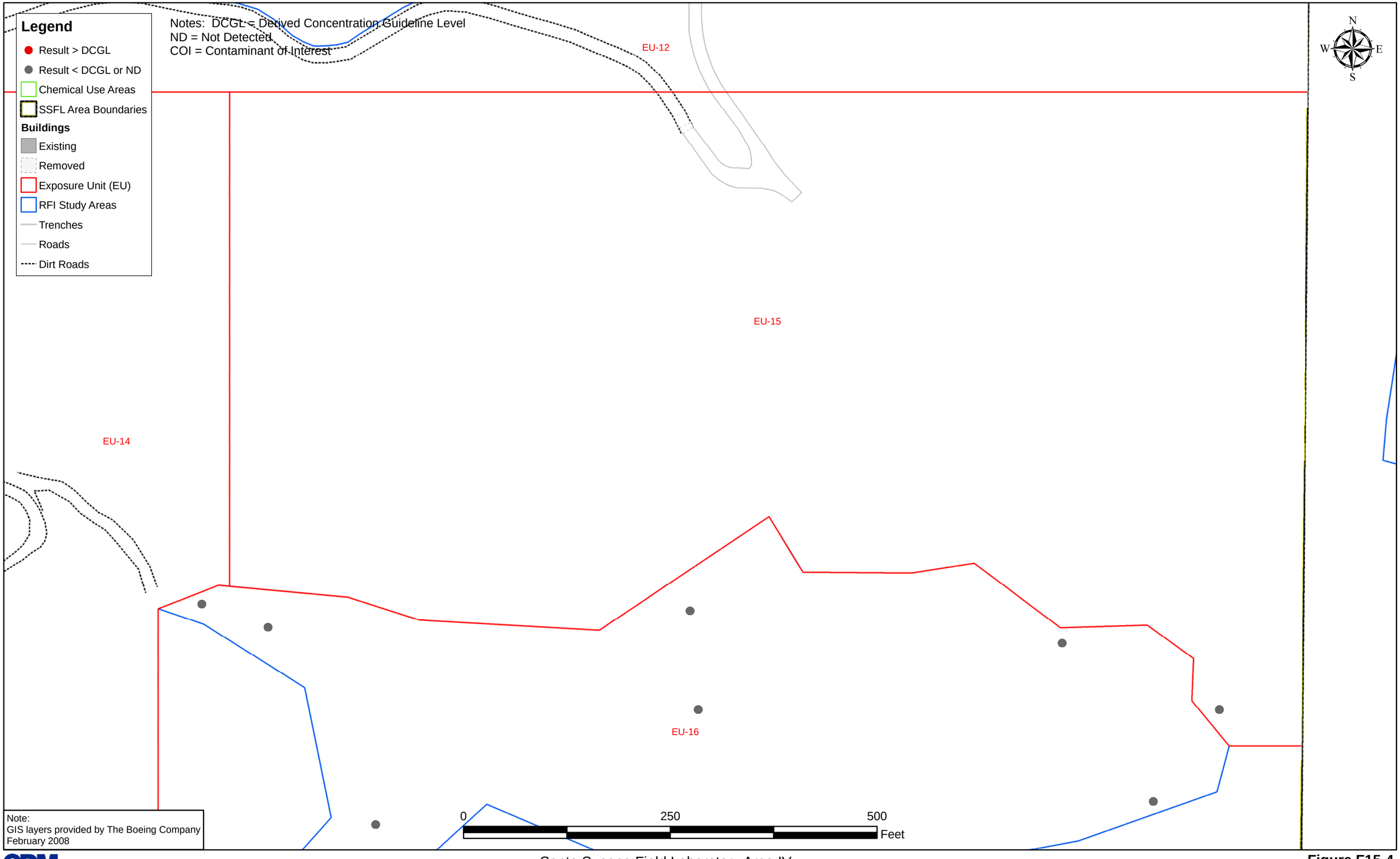
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-3
PCB COIs in Soils - EU-15
(0-2 ft bgs)



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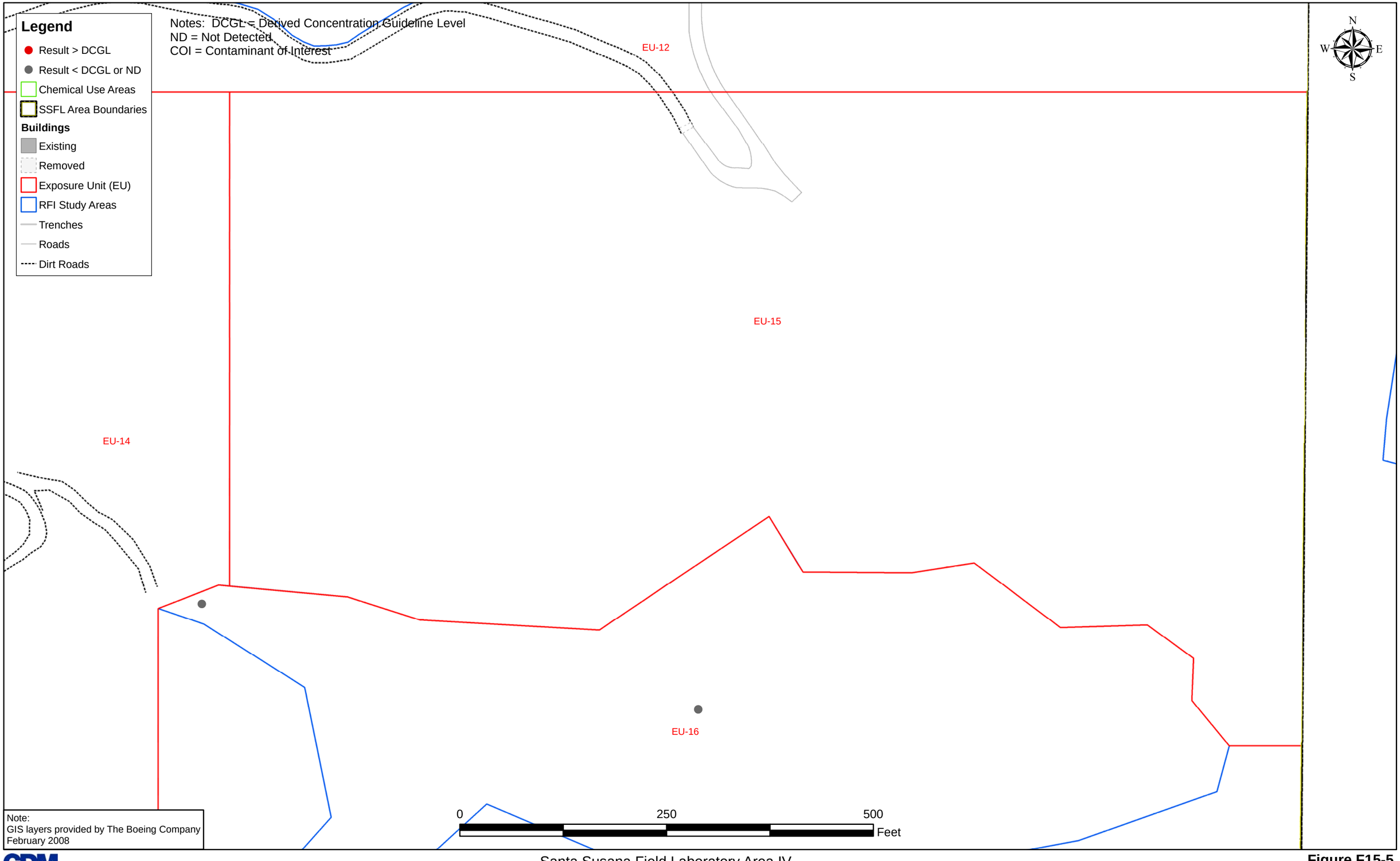
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-4
Inorganic COIs in Soils - EU-15
(0-2 ft bgs)



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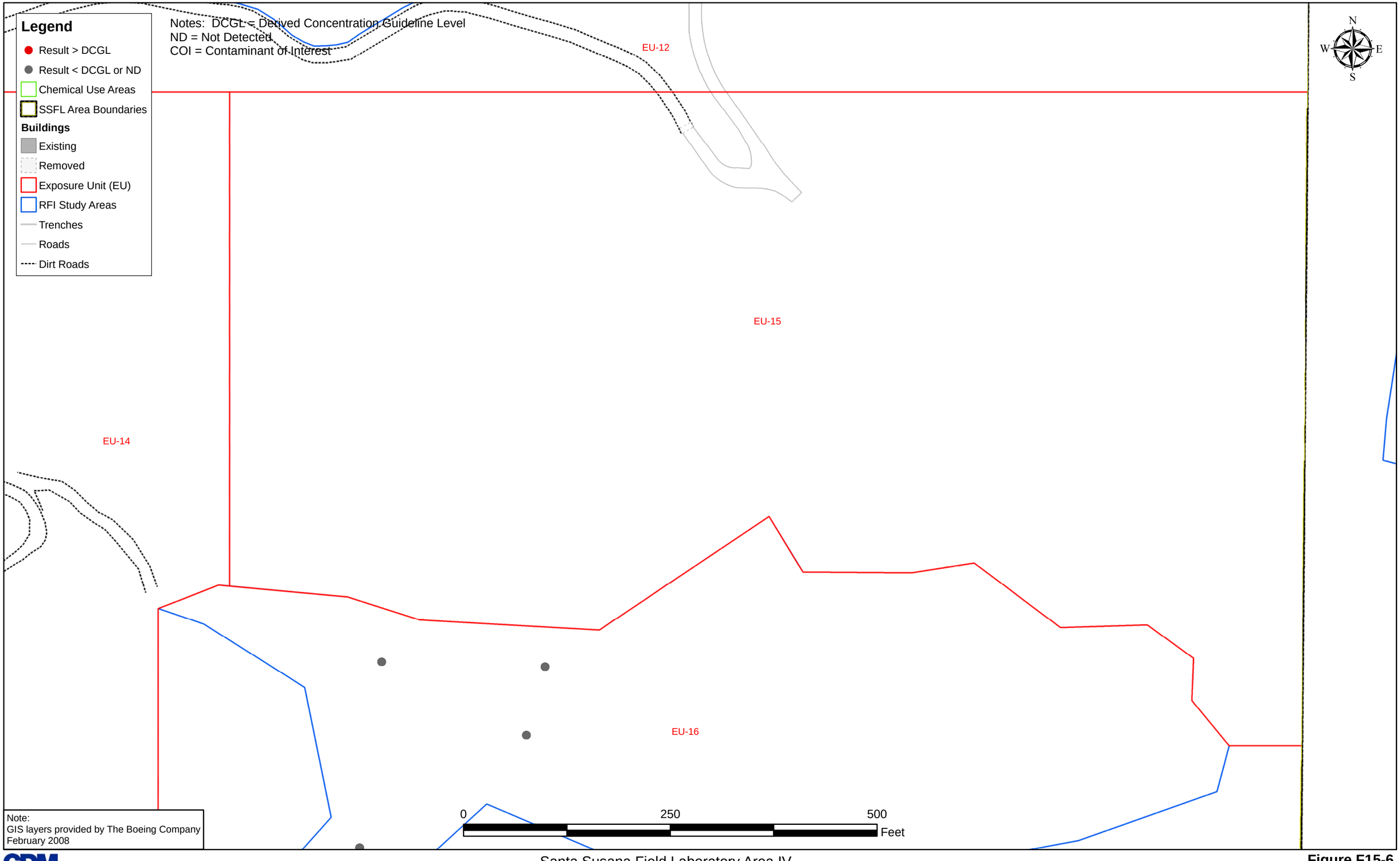
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-5
Dioxin COIs in Soils - EU-15
(0-2 ft bgs)



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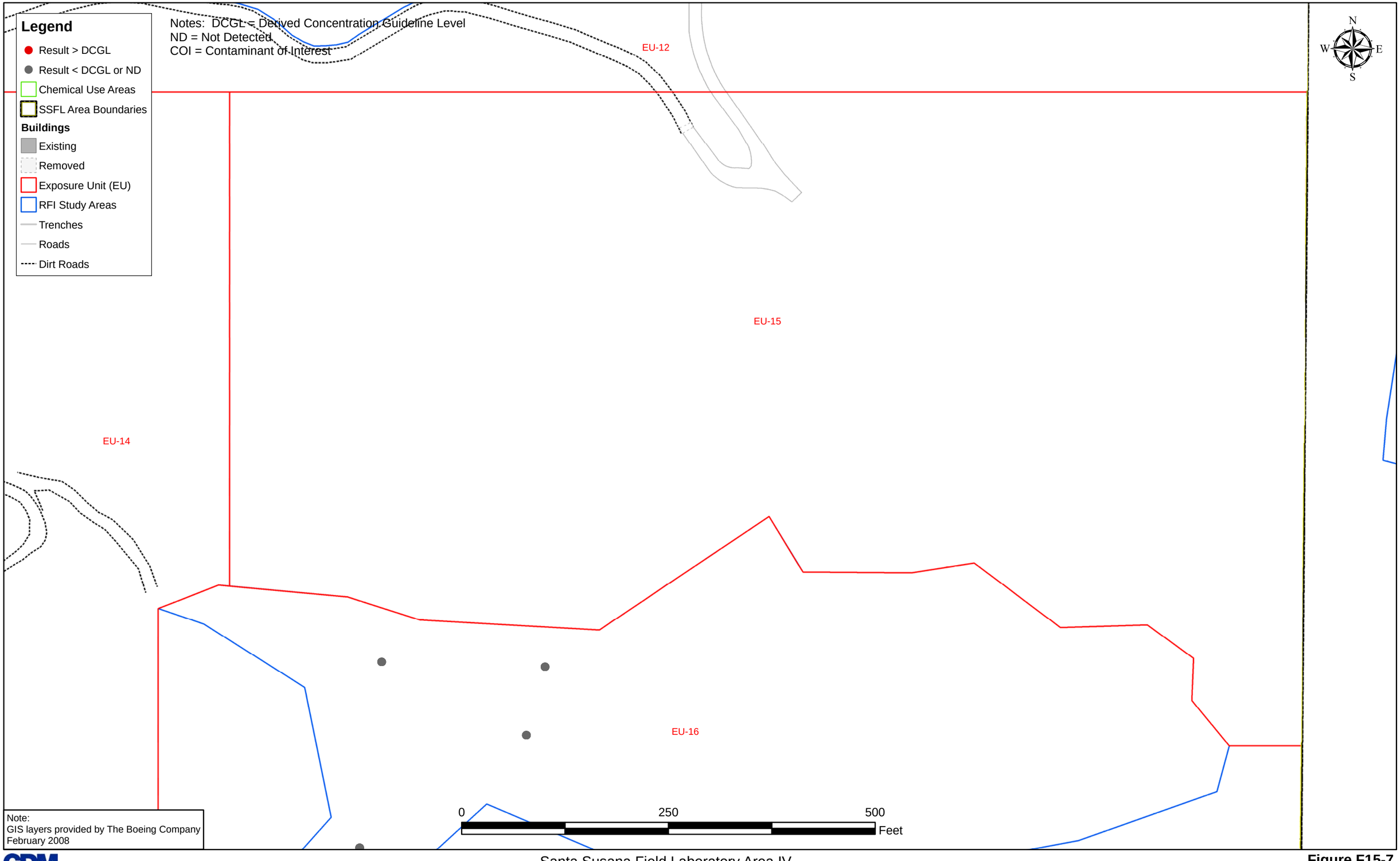
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-6
VOC COIs in Soils - EU-15
(2-10 ft bgs)



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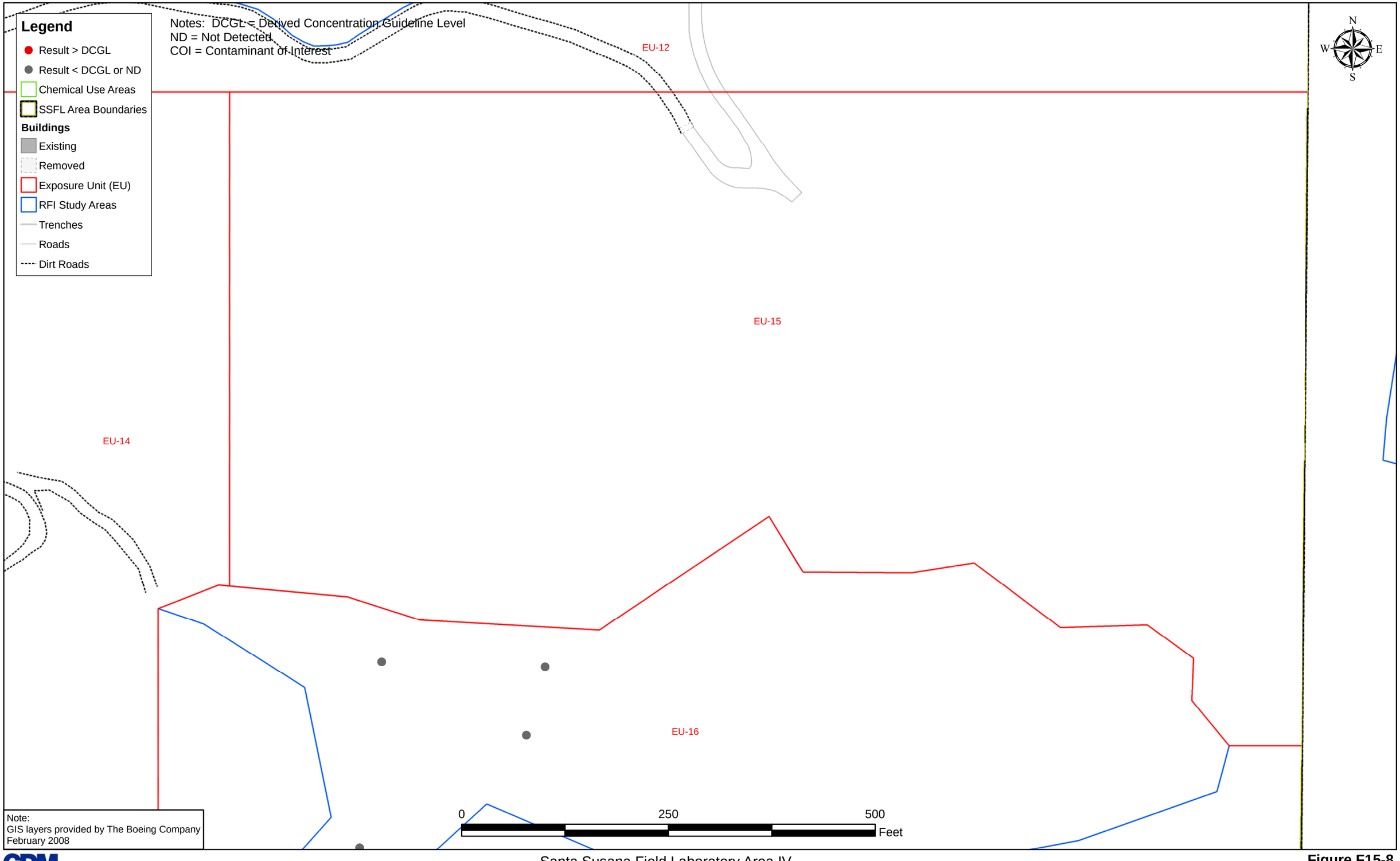
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-7
SVOC COIs in Soils - EU-15
(2-10 ft bgs)



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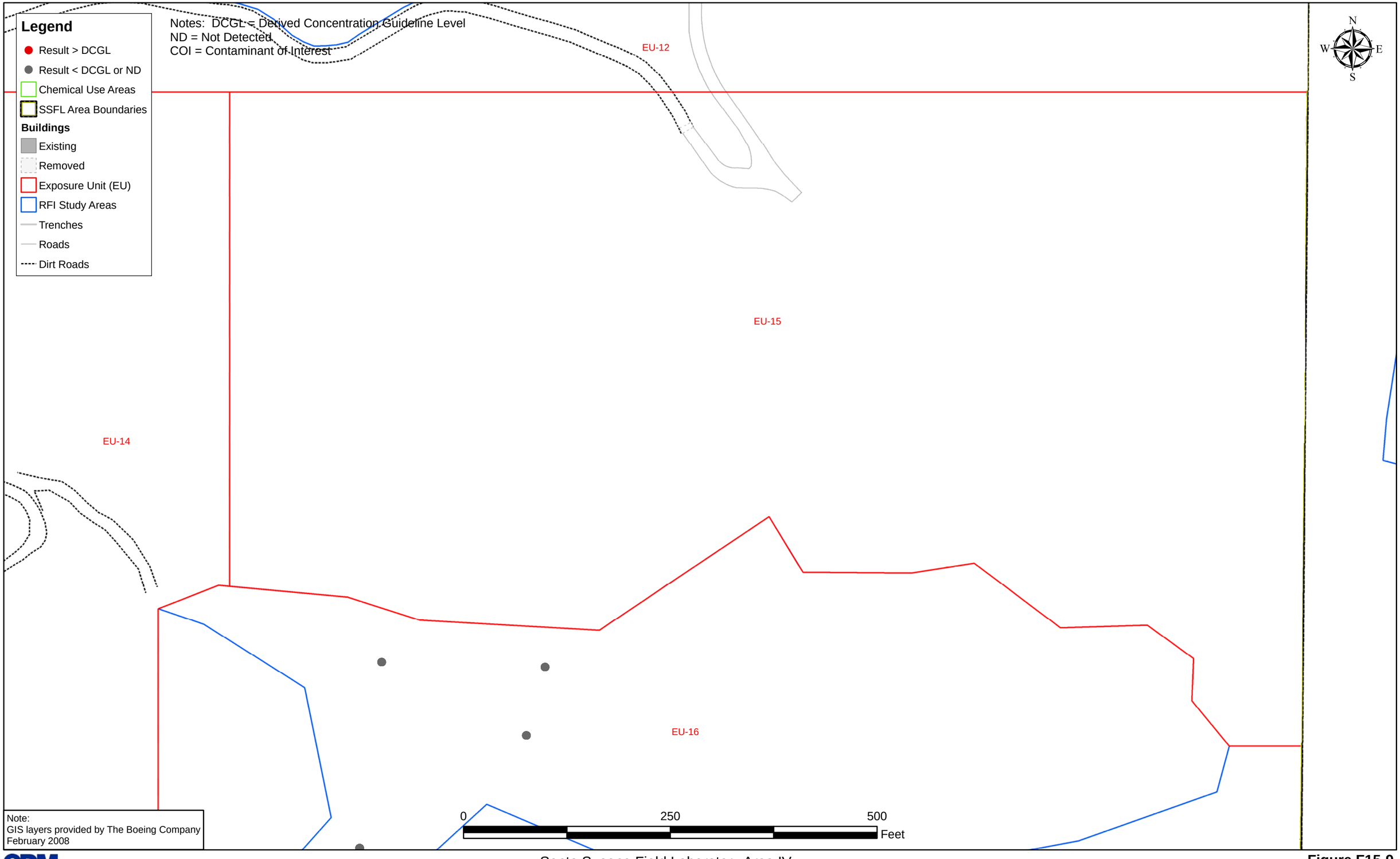
Santa Susana Field Laboratory Area IV
Ventura County, California

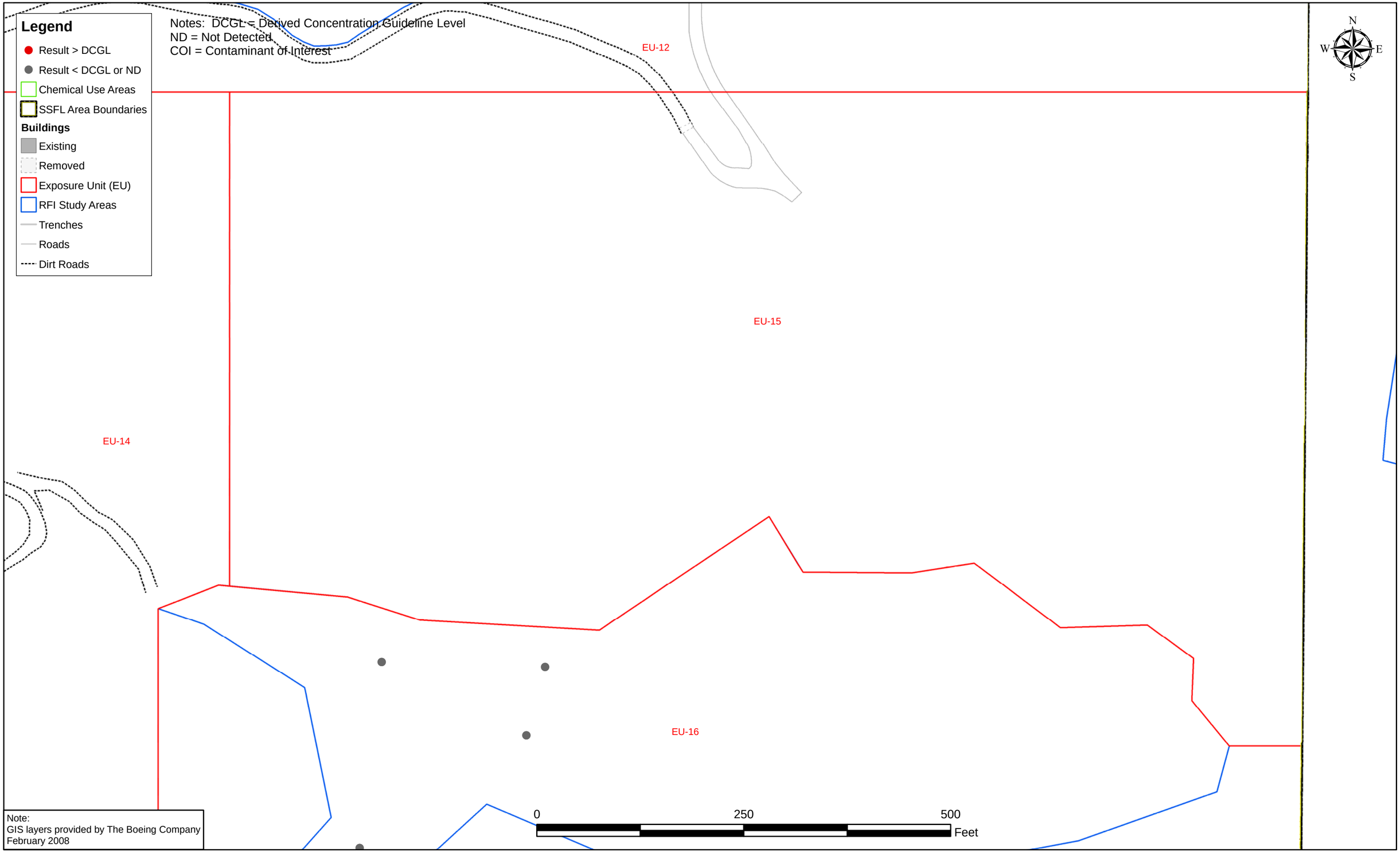
Figure F15-8
PCB COIs in Soils - EU-15
(2-10 ft bgs)



CDM

Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-9
Inorganic COIs in Soils - EU-15
(2-10 ft bgs)



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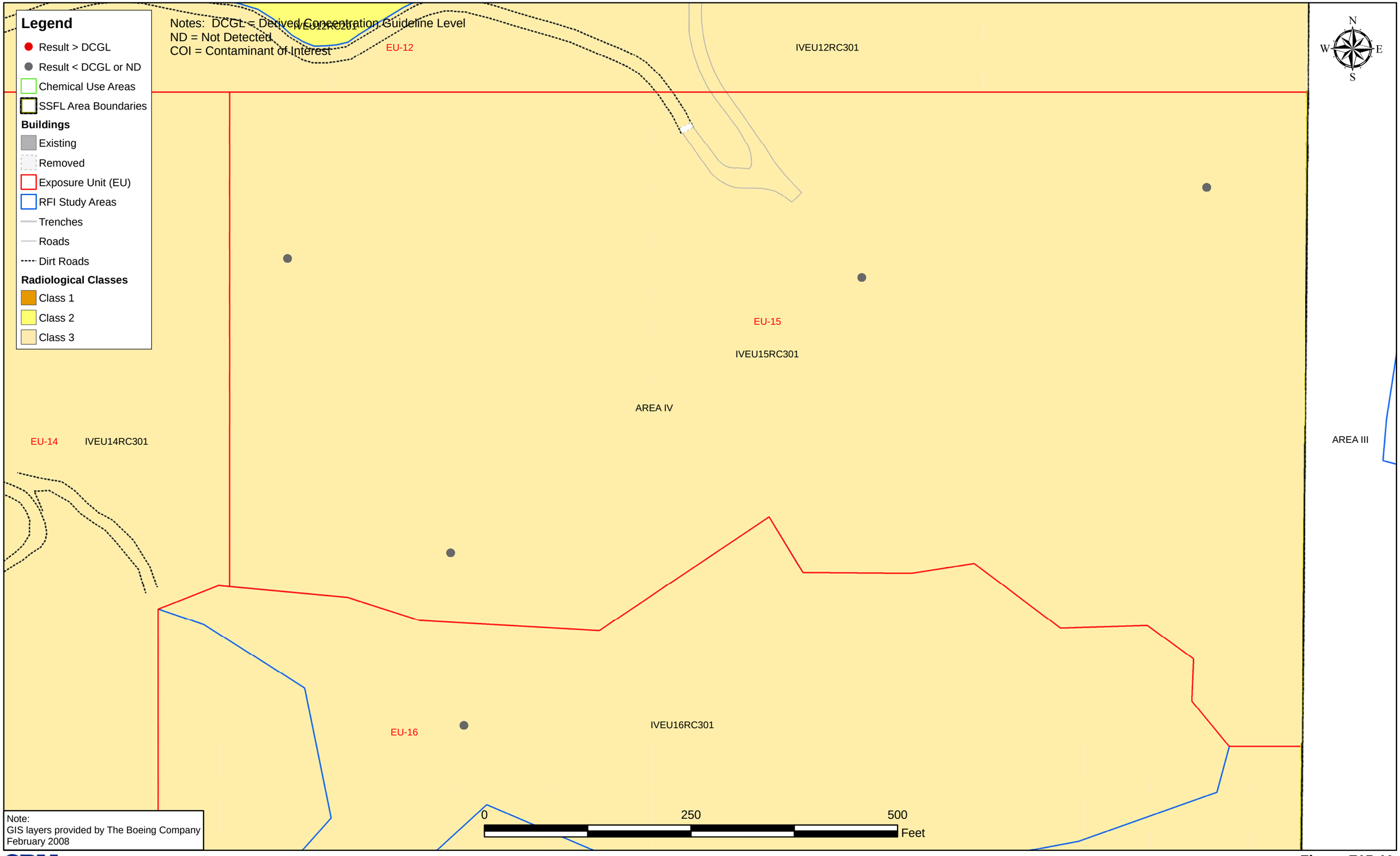
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-10
Dioxin COIs in Soils - EU-15
(2-10 ft bgs)



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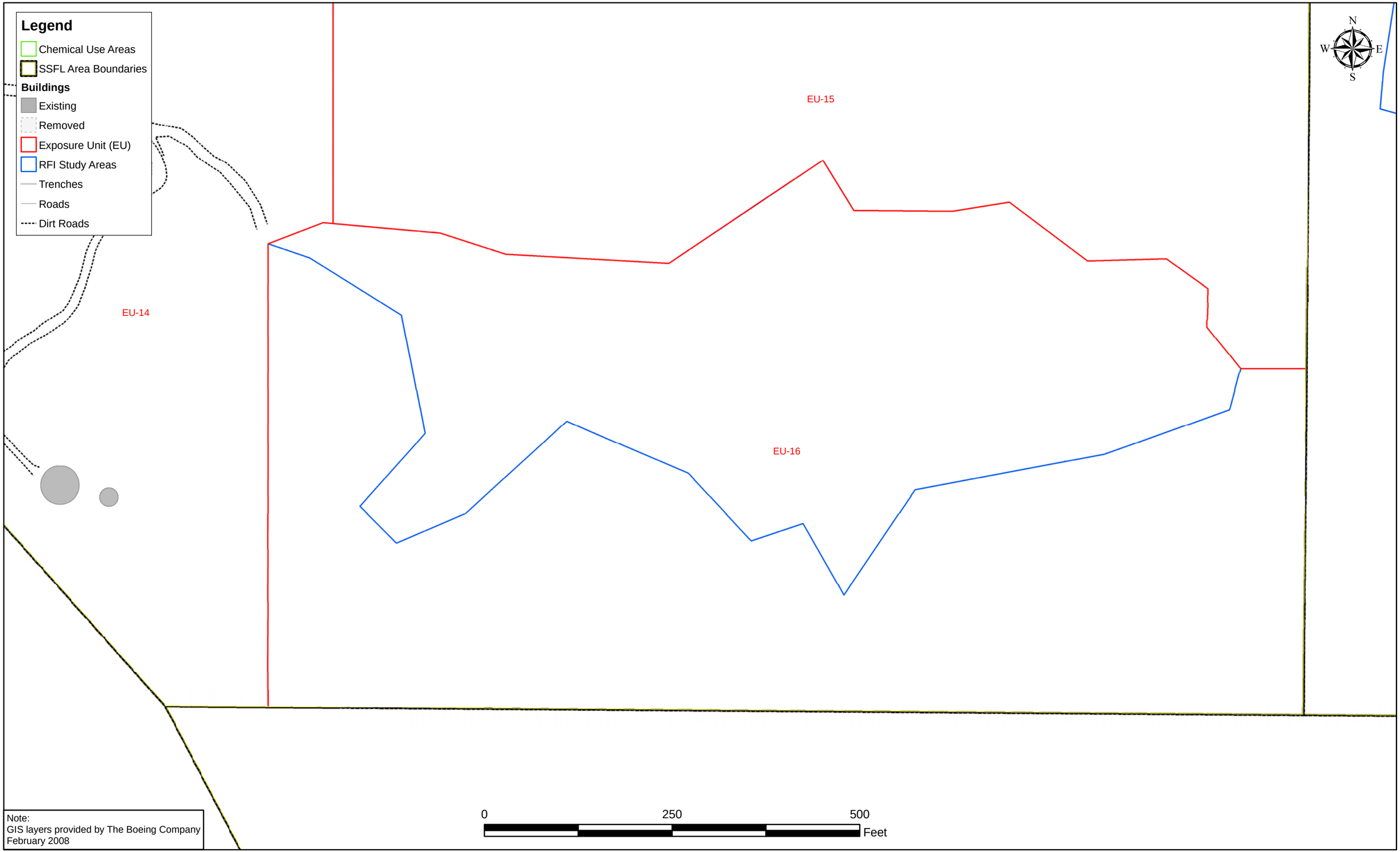
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F15-11
Radiological COIs in Soils - EU-15
(0-6 in bgs)



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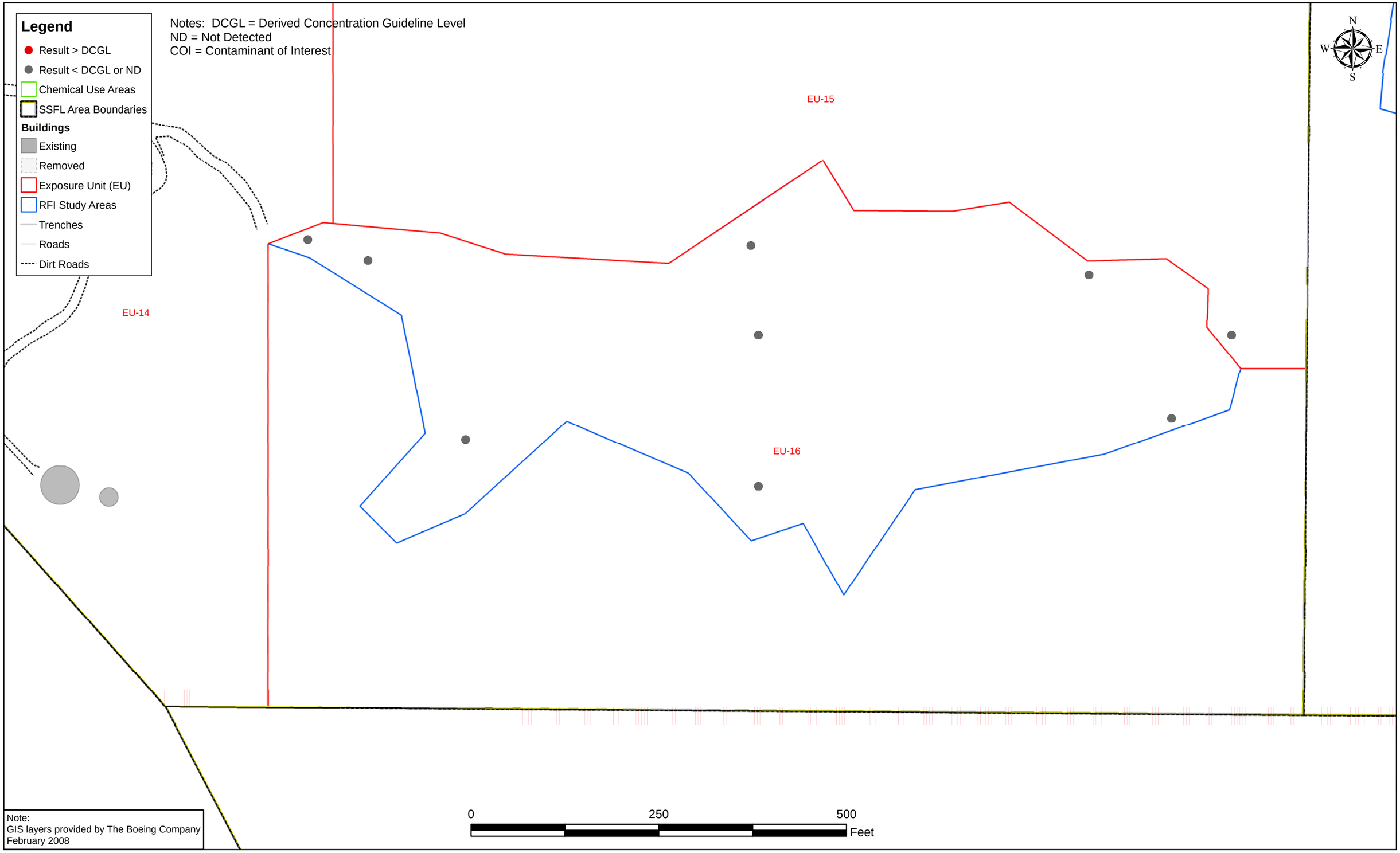
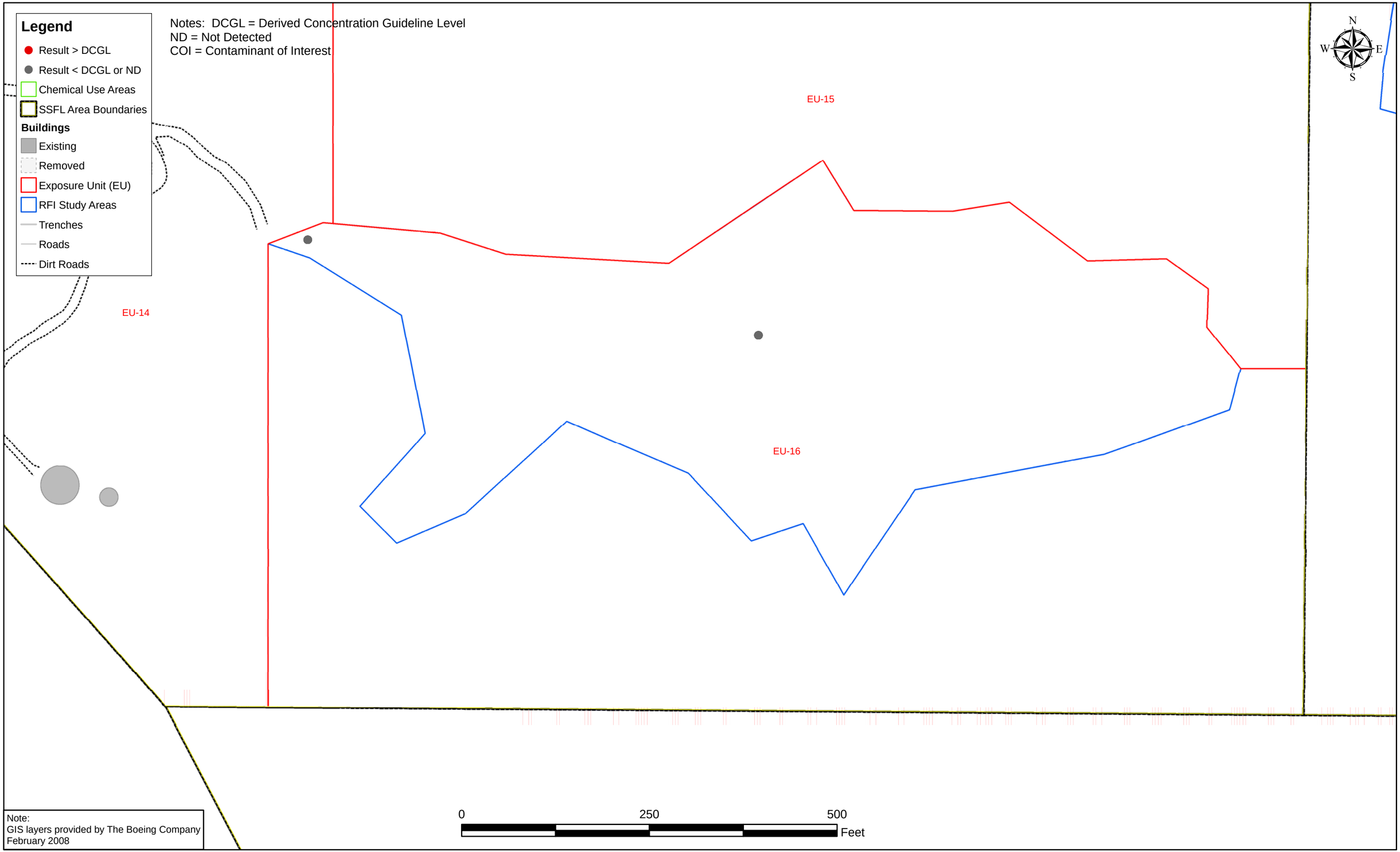
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-0
EU-16 Chemical Use Areas



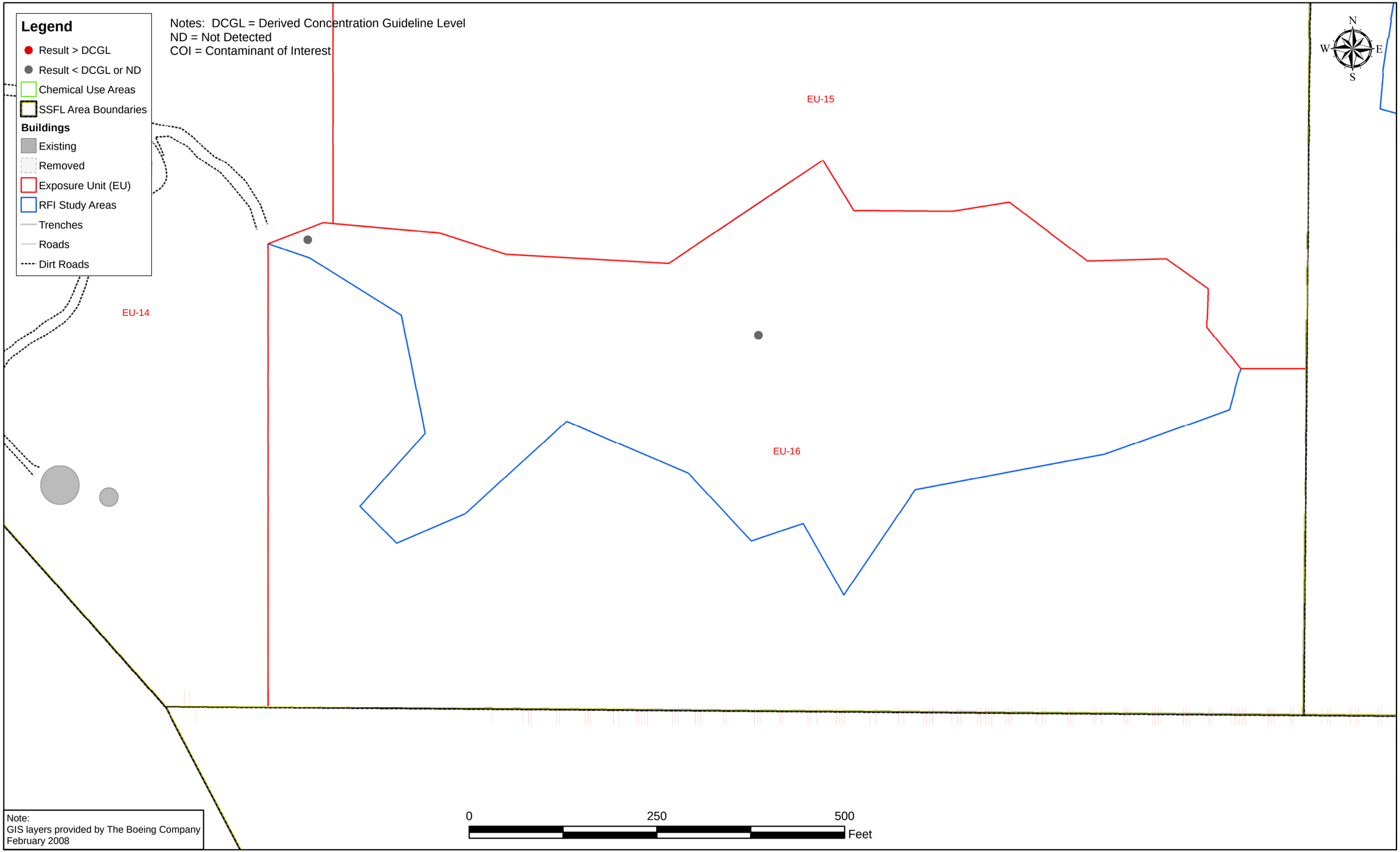
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-1
VOC COIs in Soils - EU-16
(0-2 ft bgs)



Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-2
SVOC COIs in Soils - EU-16
(0-2 ft bgs)



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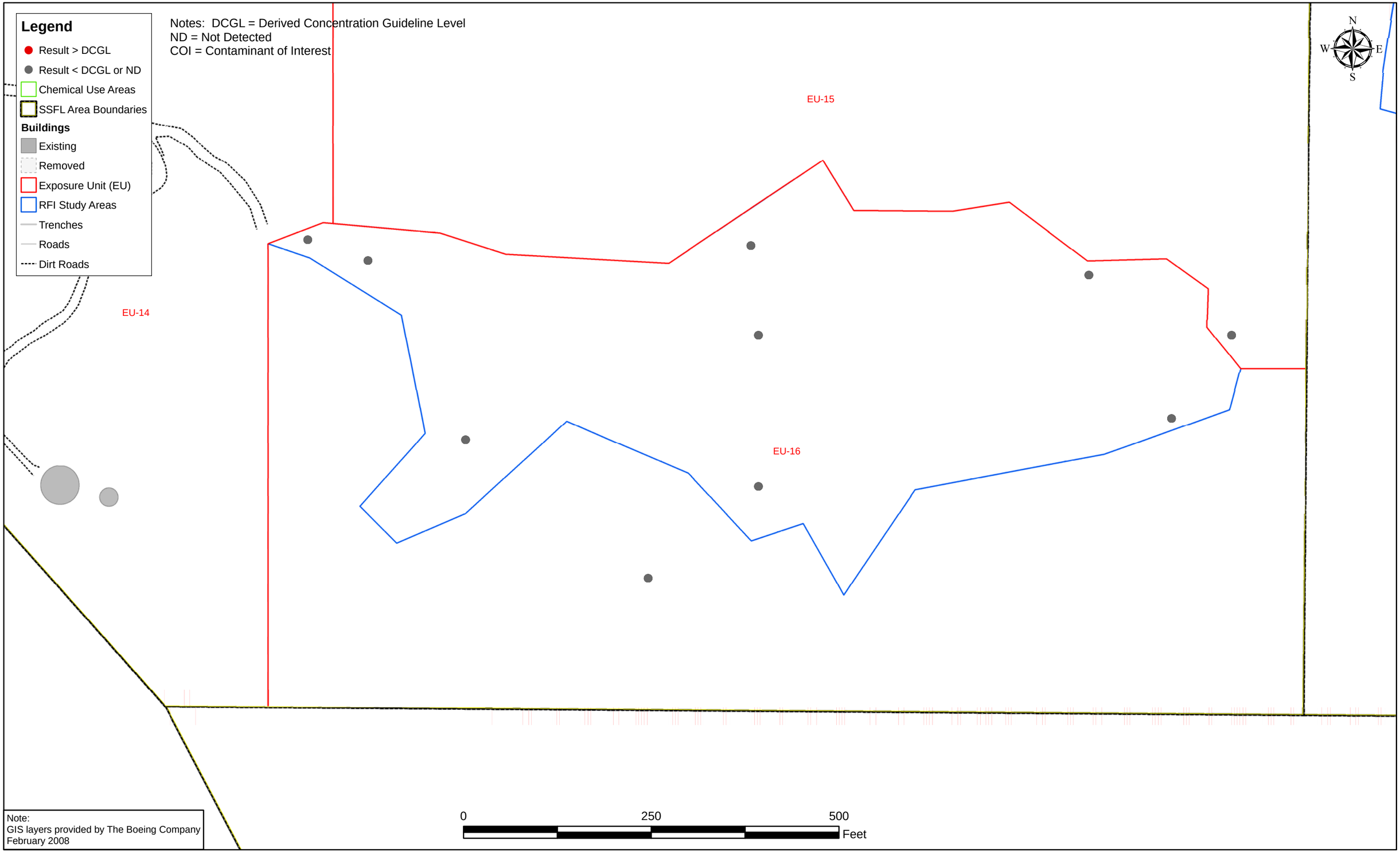
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-3
PCB COIs in Soils - EU-16
(0-2 ft bgs)



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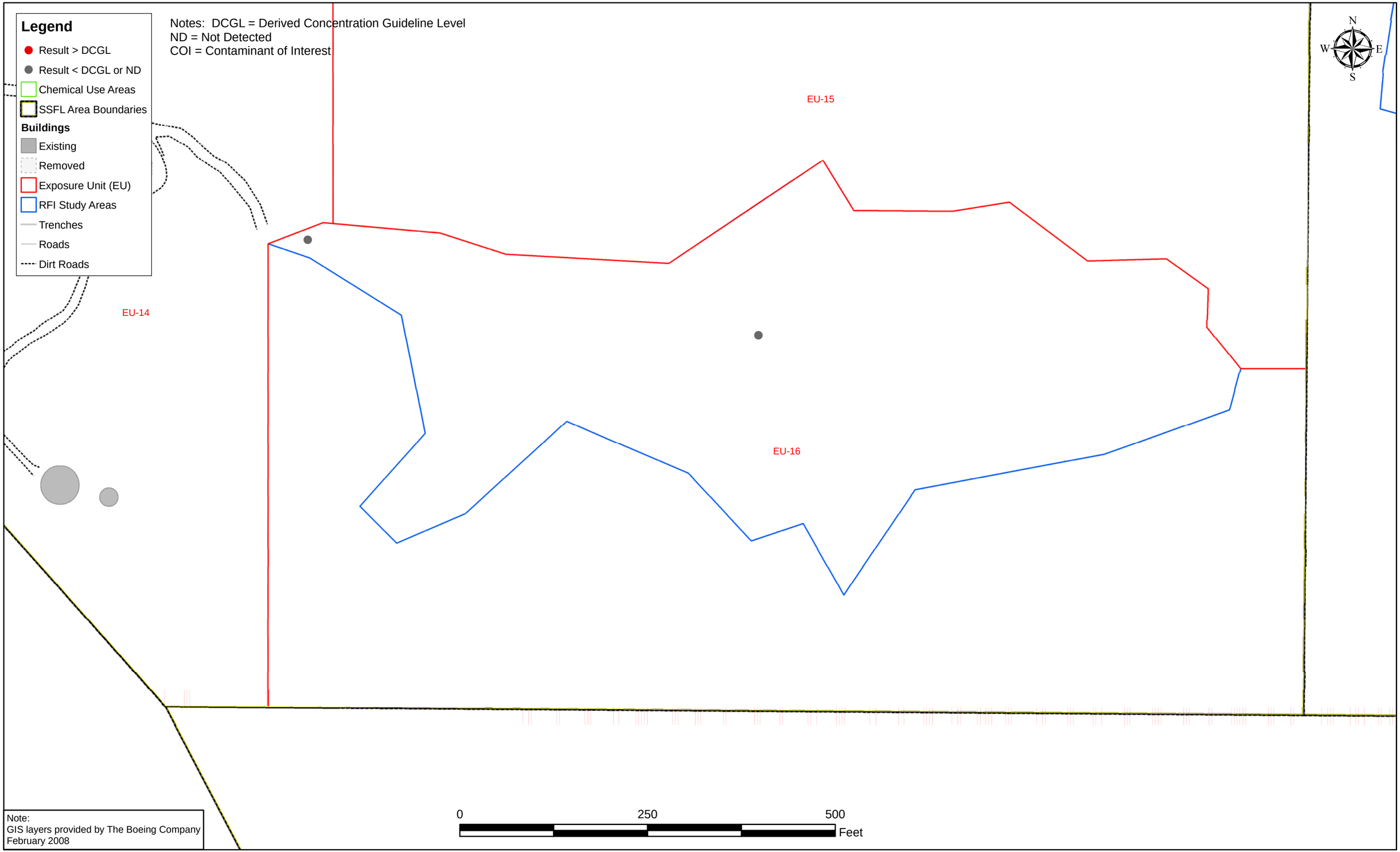
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-4
Inorganic COIs in Soils - EU-16
(0-2 ft bgs)



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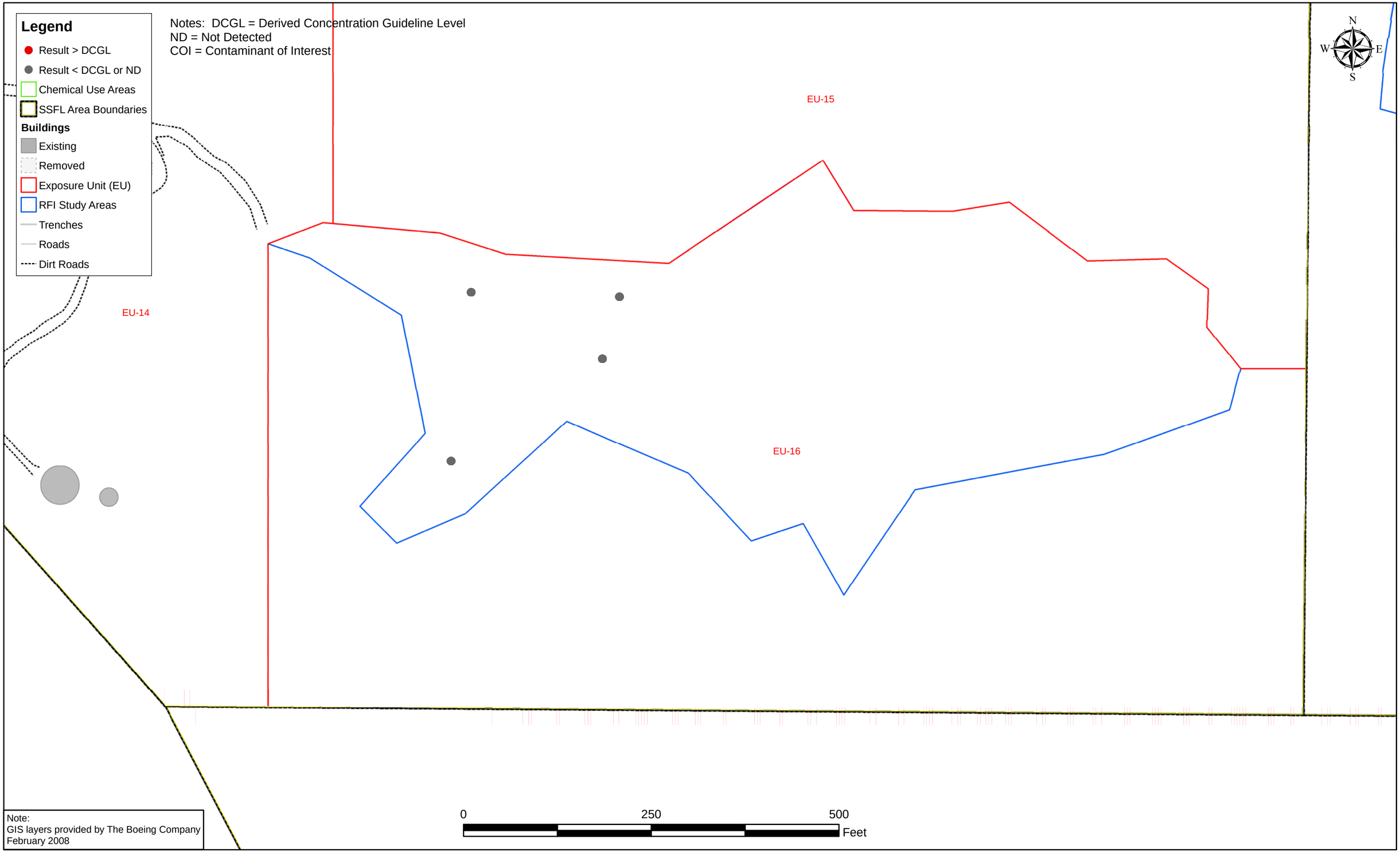
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-5
Dioxin COIs in Soils - EU-16
(0-2 ft bgs)



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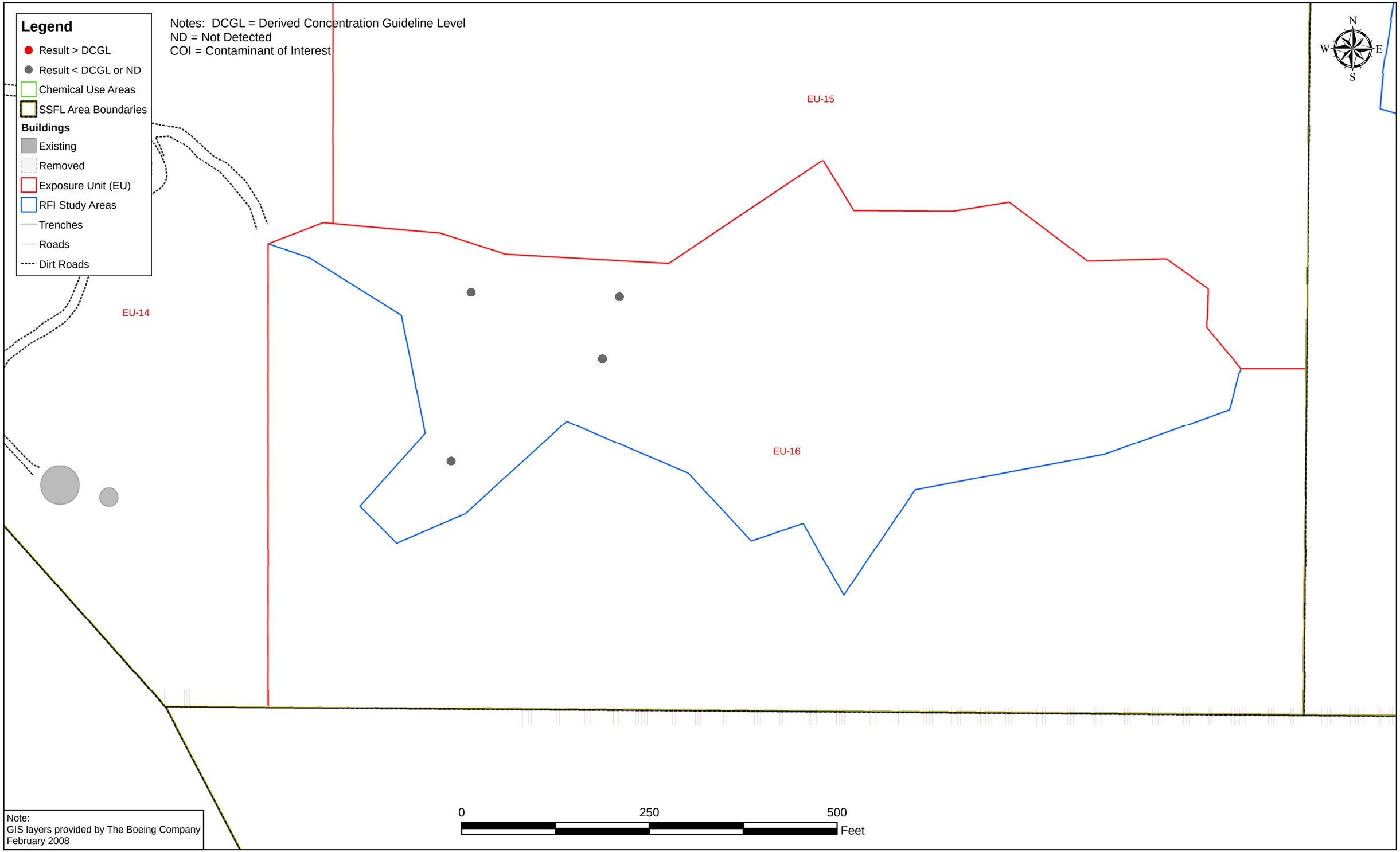
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-6
VOC COIs in Soils - EU-16
(2-10 ft bgs)



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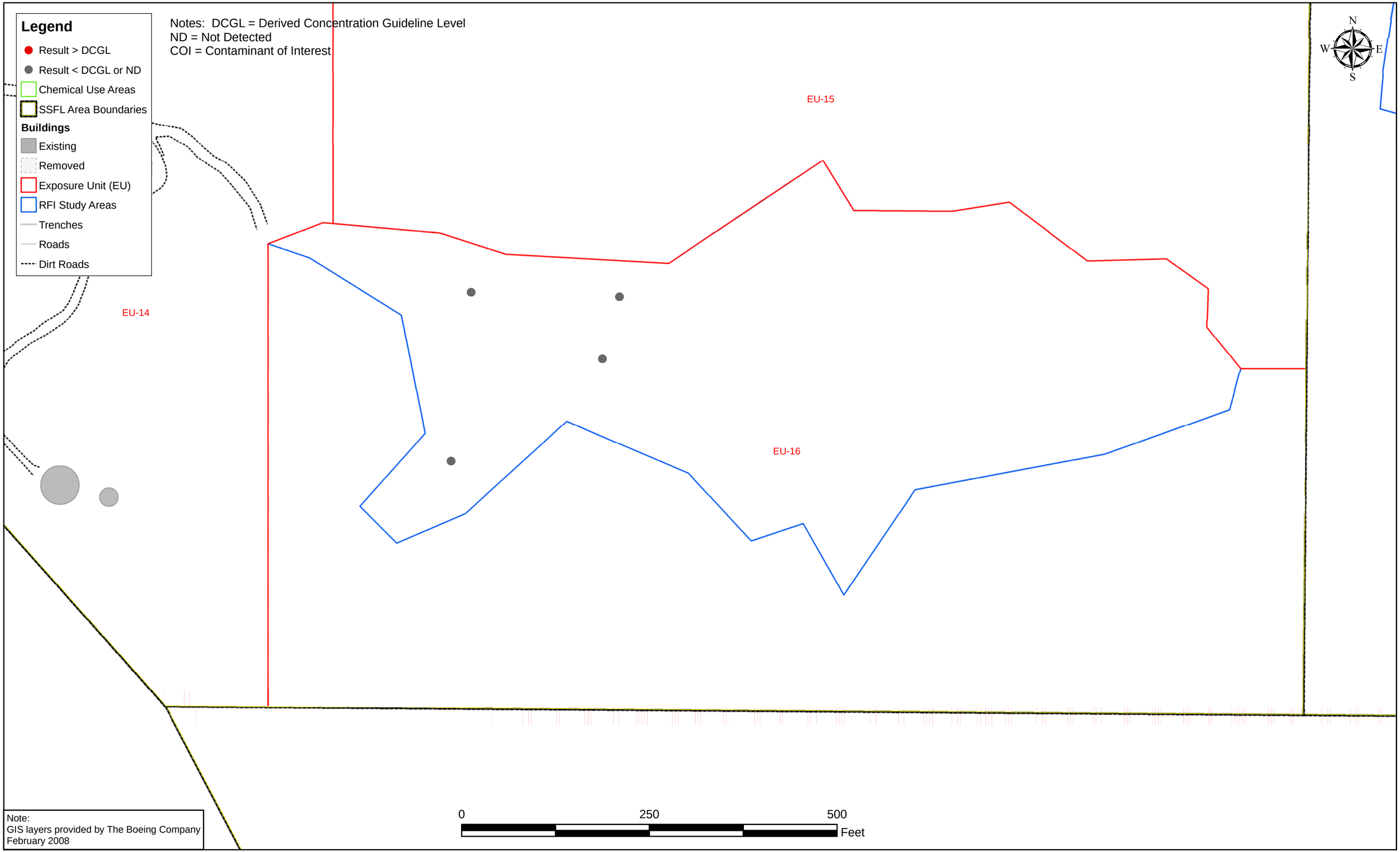
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-7
SVOC COIs in Soils - EU-16
(2-10 ft bgs)



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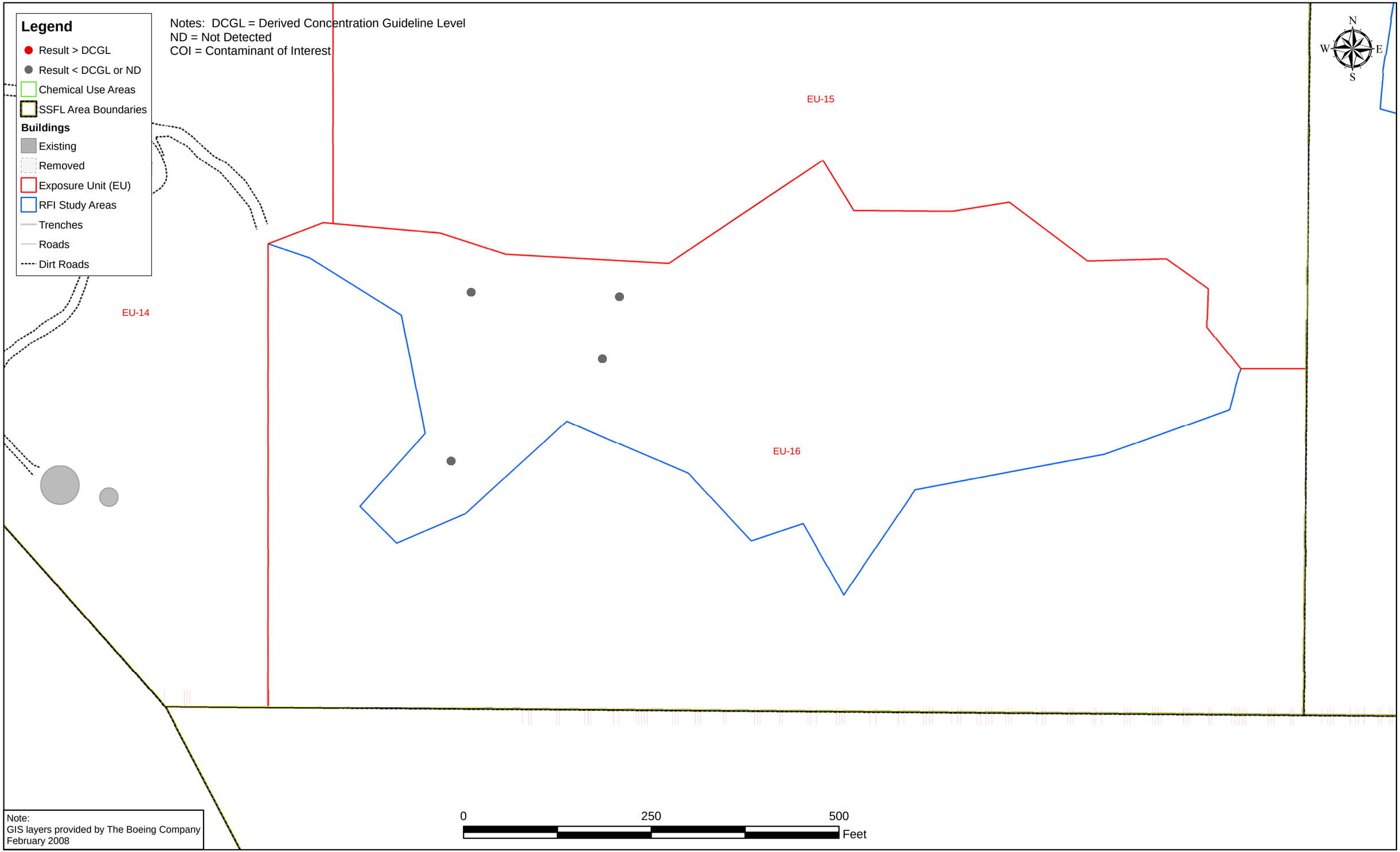
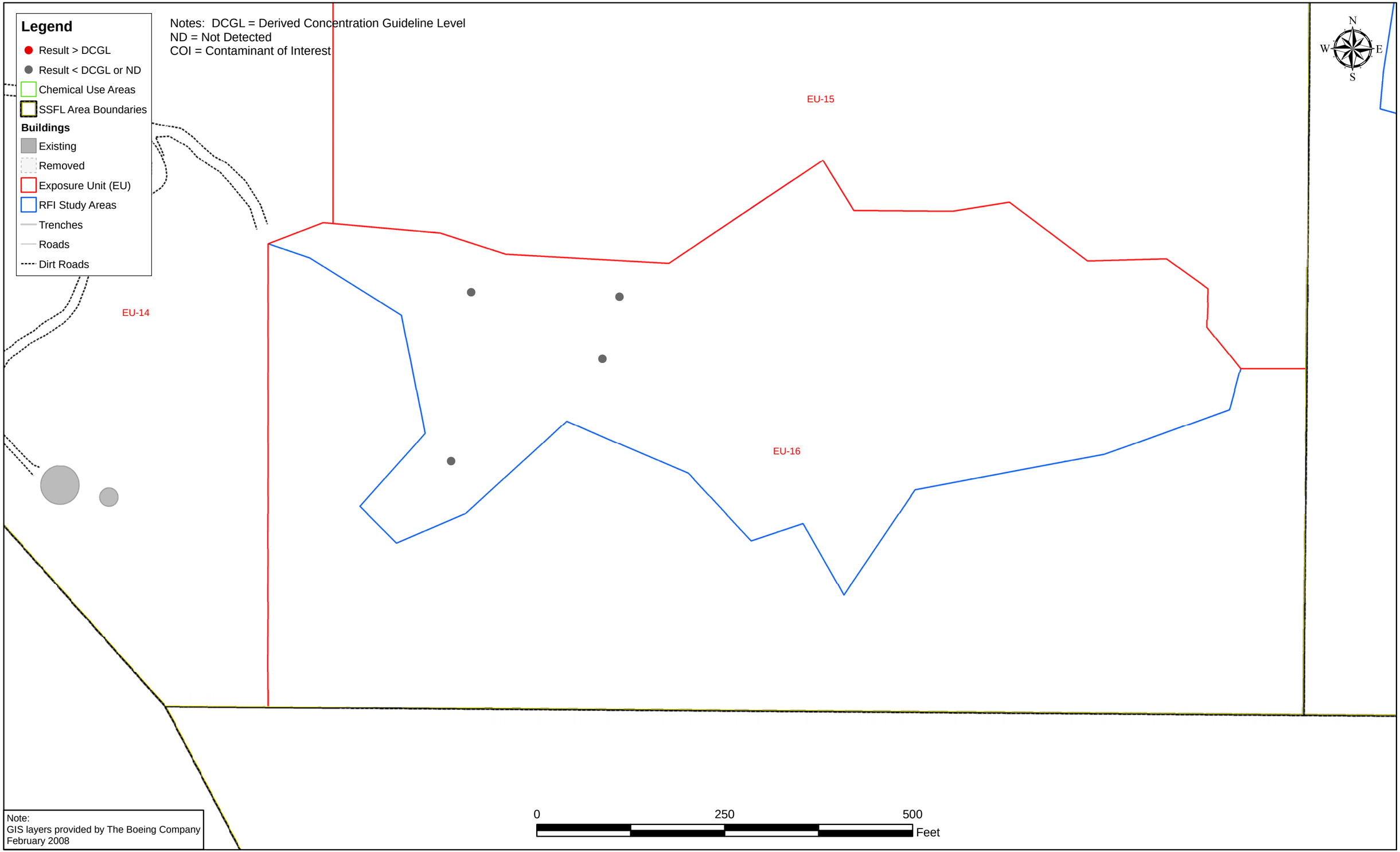
Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-8
PCB COIs in Soils - EU-16
(2-10 ft bgs)



Santa Susana Field Laboratory Area IV
Ventura County, California

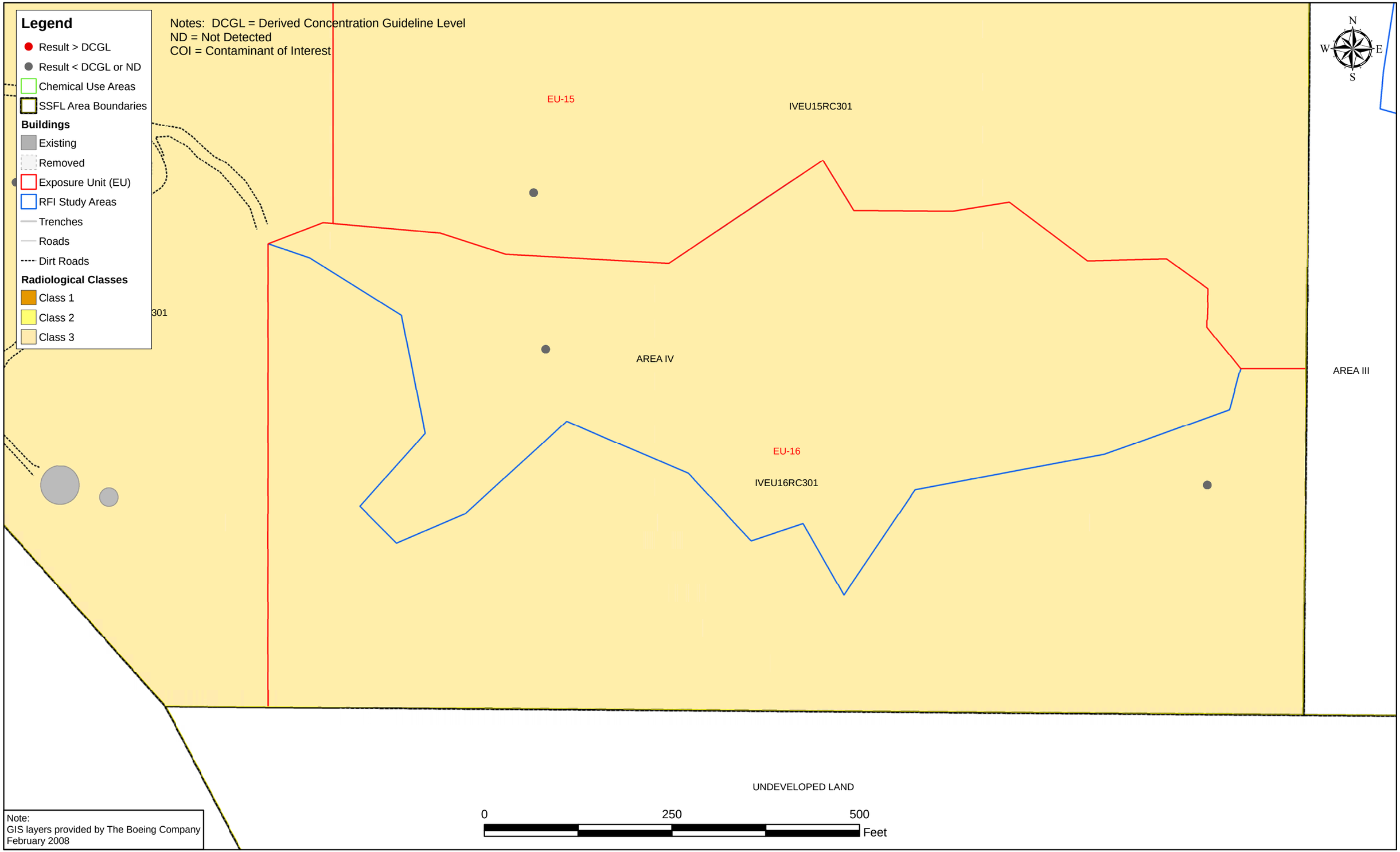
Figure F16-9
Inorganic COIs in Soils - EU-16
(2-10 ft bgs)



CDM

Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-10
Dioxin COIs in Soils - EU-16
(2-10 ft bgs)



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Santa Susana Field Laboratory Area IV
Ventura County, California

Figure F16-11
Radiological COIs in Soils - EU-16
(0-6 in bgs)

Appendix G

Radionuclide Surface Soil Data Gaps Detail

Appendix G
Radionuclide Surface Soil Data Gaps Detail

Details of the calculation of the data gap for surface soils are shown for each radiological COI and each SU in the tables in this appendix. Table G-1 shows the detail for the rural residential scenario and Table G-2 shows the detail for the residential scenario. The total number of valid samples and average, maximum, and standard deviation of the results for each radionuclide are shown for each SU. In addition, the tables show the relative shift, the calculated number of samples to meet the statistical objectives for risk assessment, and the data gap by radionuclide and SU.

Under both the rural residential and residential scenarios, there are 17 Class 1 SUs with average results for at least one constituent with at least eight valid sample results that exceed the DCGL or have a standard deviation greater than one-half the DCGL. Collection of the statistical number of samples required to have confidence that these areas do not exceed the DCGL, will not be required. These SUs are denoted with a 1 in the remediation test column for each analyte that exceeds a DCGL. The number of samples required to further define the nature and extent of contamination in these areas was calculated assuming a relative shift of 1.5 and the SU size.

The analysis was performed on an individual radionuclide basis for each SU. Not every previously-collected sample was analyzed for the same suite of analytes. Therefore the data gap is driven by the largest number for any constituent in the SU. However, radionuclides that are being investigated as COIs but have never been detected above background levels in Area IV were not used to drive the data gap since it is uncertain if they will become COCs until further sampling and analysis is performed.

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC101	Ac-228	3.2	20	20			1.53	1.224	0.158027	1.6	10.124832	3.00	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Am-241	1.87	20	20			0.07	-0.016335	0.051836	0.935	18.037516	3	11	3.39	1	0	19	0	
EU-01	IVEU01RC101	Ba-133	0.175								0.0875		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	C-14	0.456								0.228		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Cm-243/244	0.349								0.1745		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Co-60	0.0361	20	20		2	0.063	0.0044	0.030287	0.01805	0.5959643	0.5959643	71	3.39	1	1	121	101	
EU-01	IVEU01RC101	Cs-134	0.157	22	20			0.05	0.0124545	0.034323	0.0785	2.2870952	2.2870952	12	3.39	1	0	21	0	
EU-01	IVEU01RC101	Cs-137	0.48	24	21	1		1.16	0.1087833	0.326352	0.24	0.735402	0.735402	48	3.39	1	1	82	58	
EU-01	IVEU01RC101	Eu-152	0.0416	20	20			0.12	-0.00885	0.046726	0.0208	0.4451511	0.4451511	107	3.39	1	1	182	162	
EU-01	IVEU01RC101	Eu-154	0.0499	20	19			0.37	0.00665	0.198921	0.02495	0.1254268	0.1254268	1620	3.39	1	1	2749	2729	
EU-01	IVEU01RC101	Eu-155	3.8								1.9		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Fe-55	2690								1345		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	I-129	0.596								0.298		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	K-40	60	24	24	4		25.5	20.330417	2.84717	30	10.536778	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Na-22	0.0865								0.04325		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Ni-59	208								104		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Ni-63	94.8								47.4		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Np-237	0.13								0.065		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Pb-210	5								2.5		1.5	14	3.39	1	0	24	24	
EU-01	IVEU01RC101	Pu-238	2.97	22	22			0.012	-0.000773	0.008874	1.485	167.33479	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Pu-239	2.59								1.295		1.5	14	3.39	1	0	24	24	
EU-01	IVEU01RC101	Pu-240	2.6								1.3		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Pu-241	406	20	20			1.2	-0.724	0.965573	203	210.23794	3	11	3.39	1	0	19	0	
EU-01	IVEU01RC101	Ra-226	5	2	2	2		0.95	0.9	0.070711	2.5	35.355339	1.5	14	3.39	1	0	24	22	
EU-01	IVEU01RC101	Ra-228	3.2								1.6		1.5	14	3.39	1	0	24	24	
EU-01	IVEU01RC101	Sb-125	0.462								0.231		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Sr-90	0.231	20	20			0.45	0.08745	0.139362	0.1155	0.8287753	0.8287753	38	3.39	1	1	65	45	
EU-01	IVEU01RC101	Tc-99	0.25								0.125		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Th-228	3.2	2	2			1.3	0.905	0.558614	1.6	2.86423	1.5	14	3.39	1	0	24	22	
EU-01	IVEU01RC101	Th-230	3.49	2	2			1	0.715	0.403051	1.745	4.3294784	1.5	14	3.39	1	0	24	22	
EU-01	IVEU01RC101	Th-232	3.1	24	24	2		1.53	1.1791667	0.211185	1.55	7.3395223	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Tritium (H-3)	2.28	1	1			-0.048	-0.048		1.14		1.5	14	3.39	1	0	24	23	
EU-01	IVEU01RC101	U-234	4.01	22	22			1.12	0.8518182	0.139817	2.005	14.340128	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	U-235	0.195	24	24			0.053	0.0339583	0.010861	0.0975	8.9773255	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	U-238	2.6	26	26	2		1.15	0.8315385	0.176968	1.3	7.3459766	3	8	3.39	1	0	14	0	26
EU-01	IVEU01RC102	Ac-228	3.2								1.6		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Am-241	1.87								0.935		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ba-133	0.175								0.0875		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	C-14	0.456								0.228		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Cm-243/244	0.349								0.1745		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Co-60	0.0361								0.01805		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Cs-134	0.157								0.0785		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Cs-137	0.48	46	31			2.702	0.4565741	0.641098	0.24	0.3743579	0.3743579	243	1.14	1	1	139	93	
EU-01	IVEU01RC102	Eu-152	0.0416								0.0208		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Eu-154	0.0499								0.02495		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Eu-155	3.8								1.9		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Fe-55	2690								1345		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	I-129	0.596								0.298		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	K-40	60								30		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Na-22	0.0865								0.04325		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ni-59	208								104		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ni-63	94.8								47.4		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Np-237	0.13								0.065		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Pb-210	5								2.5		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Pu-238	2.97								1.485		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Pu-239	2.59								1.295		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Pu-240	2.6								1.3		1.5	15	1.14	1	0	9	9	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC102	Pu-241	406								203		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ra-226	5								2.5		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Ra-228	3.2								1.6		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Sb-125	0.462								0.231		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Sr-90	0.231								0.1155		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Tc-99	0.25								0.125		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Th-228	3.2								1.6		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Th-230	3.49								1.745		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Th-232	3.1								1.55		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Tritium (H-3)	2.28								1.14		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	U-234	4.01								2.005		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	U-235	0.195								0.0975		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	U-238	2.6								1.3		1.5	14	1.14	1	0	8	8	9
EU-01	IVEU01RC201	Ac-228	3.2								1.6		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Am-241	1.87								0.935		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ba-133	0.175								0.0875		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	C-14	0.456								0.228		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Cm-243/244	0.349								0.1745		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Co-60	0.0361								0.01805		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Cs-134	0.157								0.0785		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Cs-137	0.48								0.24		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Eu-152	0.0416								0.0208		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Eu-154	0.0499								0.02495		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Eu-155	3.8								1.9		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Fe-55	2690								1345		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	I-129	0.596								0.298		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	K-40	60								30		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Na-22	0.0865								0.04325		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ni-59	208								104		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ni-63	94.8								47.4		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Np-237	0.13								0.065		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pb-210	5								2.5		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-238	2.97								1.485		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-239	2.59								1.295		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-240	2.6								1.3		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-241	406								203		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ra-226	5								2.5		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ra-228	3.2								1.6		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Sb-125	0.462								0.231		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Sr-90	0.231								0.1155		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Tc-99	0.25								0.125		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Th-228	3.2								1.6		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Th-230	3.49								1.745		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Th-232	3.1								1.55		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Tritium (H-3)	2.28								1.14		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	U-234	4.01								2.005		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	U-235	0.195								0.0975		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	U-238	2.6								1.3		1.5	14	0.53	2	0	1	1	1
EU-01	IVEU01RC202	Ac-228	3.2								1.6		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Am-241	1.87								0.935		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ba-133	0.175								0.0875		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	C-14	0.456								0.228		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Cm-243/244	0.349								0.1745		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Co-60	0.0361								0.01805		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Cs-134	0.157								0.0785		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Cs-137	0.48	1	1	1		0.12	0.12		0.24		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Eu-152	0.0416								0.0208		1.5	15	0.37	2	0	1	1	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC202	Eu-154	0.0499								0.02495		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Eu-155	3.8								1.9		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Fe-55	2690								1345		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	I-129	0.596								0.298		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	K-40	60	1	1	1		19	19		30		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Na-22	0.0865								0.04325		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ni-59	208								104		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ni-63	94.8								47.4		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Np-237	0.13								0.065		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pb-210	5								2.5		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pu-238	2.97	1	1			0.003	0.003		1.485		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Pu-239	2.59								1.295		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pu-240	2.6								1.3		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pu-241	406								203		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ra-226	5	1	1	1		0.74	0.74		2.5		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Ra-228	3.2								1.6		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Sb-125	0.462								0.231		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Sr-90	0.231	1	1			0.032	0.032		0.1155		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Tc-99	0.25								0.125		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Th-228	3.2	1	1			0.7	0.7		1.6		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Th-230	3.49	1	1			0.5	0.5		1.745		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Th-232	3.1	1	1			0.71	0.71		1.55		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Tritium (H-3)	2.28	1	1			-0.036	-0.036		1.14		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	U-234	4.01								2.005		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	U-235	0.195	1	1			0.04	0.04		0.0975		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	U-238	2.6	1	1			0.59	0.59		1.3		1.5	14	0.37	2	0	1	0	1
EU-01	IVEU01RC203	Ac-228	3.2								1.6		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Am-241	1.87								0.935		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ba-133	0.175								0.0875		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	C-14	0.456								0.228		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Cm-243/244	0.349								0.1745		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Co-60	0.0361								0.01805		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Cs-134	0.157								0.0785		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Cs-137	0.48								0.24		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Eu-152	0.0416								0.0208		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Eu-154	0.0499								0.02495		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Eu-155	3.8								1.9		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Fe-55	2690								1345		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	I-129	0.596								0.298		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	K-40	60								30		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Na-22	0.0865								0.04325		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ni-59	208								104		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ni-63	94.8								47.4		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Np-237	0.13								0.065		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pb-210	5								2.5		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-238	2.97								1.485		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-239	2.59								1.295		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-240	2.6								1.3		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-241	406								203		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ra-226	5								2.5		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ra-228	3.2								1.6		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Sb-125	0.462								0.231		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Sr-90	0.231								0.1155		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Tc-99	0.25								0.125		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Th-228	3.2								1.6		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Th-230	3.49								1.745		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Th-232	3.1								1.55		1.5	14	0.08	2	0	1	1	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC203	Tritium (H-3)	2.28								1.14		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	U-234	4.01								2.005		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	U-235	0.195								0.0975		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	U-238	2.6								1.3		1.5	14	0.08	2	0	1	1	1
EU-01	IVEU01RC204	Ac-228	3.2								1.6		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Am-241	1.87								0.935		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Ba-133	0.175								0.0875		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	C-14	0.456								0.228		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Cm-243/244	0.349								0.1745		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Co-60	0.0361								0.01805		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Cs-134	0.157								0.0785		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Cs-137	0.48								0.24		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Eu-152	0.0416								0.0208		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Eu-154	0.0499								0.02495		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Eu-155	3.8								1.9		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Fe-55	2690								1345		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	I-129	0.596								0.298		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	K-40	60								30		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Na-22	0.0865								0.04325		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Ni-59	208								104		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Ni-63	94.8								47.4		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Np-237	0.13								0.065		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Pb-210	5								2.5		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Pu-238	2.97								1.485		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Pu-239	2.59								1.295		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Pu-240	2.6								1.3		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Pu-241	406								203		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Ra-226	5								2.5		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Ra-228	3.2								1.6		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Sb-125	0.462								0.231		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Sr-90	0.231								0.1155		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Tc-99	0.25								0.125		1.5	15	0.17	2	0	1	1	
EU-01	IVEU01RC204	Th-228	3.2								1.6		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Th-230	3.49								1.745		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Th-232	3.1								1.55		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	Tritium (H-3)	2.28								1.14		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	U-234	4.01								2.005		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	U-235	0.195								0.0975		1.5	14	0.17	2	0	1	1	
EU-01	IVEU01RC204	U-238	2.6								1.3		1.5	14	0.17	2	0	1	1	1
EU-01	IVEU01RC301	Ac-228	3.2								1.6		1.5	14	13.13	3	0	11	11	
EU-01	IVEU01RC301	Am-241	1.87								0.935		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Ba-133	0.175								0.0875		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	C-14	0.456								0.228		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Cm-243/244	0.349								0.1745		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Co-60	0.0361								0.01805		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Cs-134	0.157								0.0785		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Cs-137	0.48	7	2	2		0.17	0.0496429	0.059488	0.24	4.0344538	1.5	14	13.13	3	0	11	4	
EU-01	IVEU01RC301	Eu-152	0.0416				2				0.0208		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Eu-154	0.0499								0.02495		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Eu-155	3.8								1.9		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Fe-55	2690								1345		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	I-129	0.596								0.298		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	K-40	60	5	5	5		22	20.6	1.67332	30	17.928429	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Na-22	0.0865								0.04325		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Ni-59	208								104		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Ni-63	94.8								47.4		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Np-237	0.13								0.065		1.5	15	13.13	3	0	12	12	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC301	Pb-210	5								2.5		1.5	14	13.13	3	0	11	11	
EU-01	IVEU01RC301	Pu-238	2.97	5	5			0.007	0.0028	0.00295	1.485	503.46215	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Pu-239	2.59								1.295		1.5	14	13.13	3	0	11	11	
EU-01	IVEU01RC301	Pu-240	2.6								1.3		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Pu-241	406								203		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Ra-226	5	5	5	5		1.1	0.84	0.237592	2.5	10.522236	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Ra-228	3.2								1.6		1.5	14	13.13	3	0	11	11	
EU-01	IVEU01RC301	Sb-125	0.462								0.231		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Sr-90	0.231	5	5			0.041	0.0248	0.01167	0.1155	9.8967689	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Tc-99	0.25								0.125		1.5	15	13.13	3	0	12	12	
EU-01	IVEU01RC301	Th-228	3.2	5	5			1.5	0.938	0.384734	1.6	4.158721	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Th-230	3.49	5	5			1.8	0.946	0.560785	1.745	3.1117086	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Th-232	3.1	5	5			1.6	1	0.475973	1.55	3.2564894	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	Tritium (H-3)	2.28	5	5			0.067	-0.0092	0.04651	1.14	24.510745	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	U-234	4.01								2.005		1.5	14	13.13	3	0	11	11	
EU-01	IVEU01RC301	U-235	0.195	5	5			0.057	0.0406	0.014993	0.0975	6.5028908	1.5	14	13.13	3	0	11	6	
EU-01	IVEU01RC301	U-238	2.6	5	5			1.4	0.816	0.383184	1.3	3.3926257	1.5	14	13.13	3	0	11	6	12
EU-02	IVEU02RC201	Ac-228	3.2								1.6		1.5	14	2.68	2	0	4	4	
EU-02	IVEU02RC201	Am-241	1.87								0.935		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Ba-133	0.175								0.0875		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	C-14	0.456								0.228		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Cm-243/244	0.349								0.1745		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Co-60	0.0361								0.01805		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Cs-134	0.157								0.0785		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Cs-137	0.48	8	8	6		0.45	0.3	0.159553	0.24	1.5042029	1.5042029	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Eu-152	0.0416				2				0.0208		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Eu-154	0.0499								0.02495		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Eu-155	3.8								1.9		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Fe-55	2690								1345		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	I-129	0.596								0.298		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	K-40	60	6	6	6		22	20.5	1.378405	30	21.764288	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Na-22	0.0865								0.04325		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Ni-59	208								104		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Ni-63	94.8								47.4		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Np-237	0.13								0.065		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Pb-210	5								2.5		1.5	14	2.68	2	0	4	4	
EU-02	IVEU02RC201	Pu-238	2.97	6	6			0.006	0.0005	0.002811	1.485	528.33929	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Pu-239	2.59								1.295		1.5	14	2.68	2	0	4	4	
EU-02	IVEU02RC201	Pu-240	2.6								1.3		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Pu-241	406								203		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Ra-226	5	6	6	6		0.84	0.7466667	0.162193	2.5	15.413707	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Ra-228	3.2								1.6		1.5	14	2.68	2	0	4	4	
EU-02	IVEU02RC201	Sb-125	0.462								0.231		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Sr-90	0.231	6	6			0.099	0.0553333	0.039993	0.1155	2.8879814	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Tc-99	0.25								0.125		1.5	15	2.68	2	0	5	5	
EU-02	IVEU02RC201	Th-228	3.2	6	6			0.89	0.6666667	0.127698	1.6	12.529605	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Th-230	3.49	6	6			0.69	0.5533333	0.097297	1.745	17.934814	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Th-232	3.1	6	6			0.82	0.6916667	0.087958	1.55	17.621982	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	Tritium (H-3)	2.28	5	5			-0.008	-0.0208	0.014342	1.14	79.485462	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	U-234	4.01								2.005		1.5	14	2.68	2	0	4	4	
EU-02	IVEU02RC201	U-235	0.195	6	6			0.038	0.0318333	0.006432	0.0975	15.159307	1.5	14	2.68	2	0	4	0	
EU-02	IVEU02RC201	U-238	2.6	6	6			0.71	0.595	0.110589	1.3	11.755203	1.5	14	2.68	2	0	4	0	5
EU-02	IVEU02RC301	Ac-228	3.2								1.6		1.5	14	14.96	3	0	13	13	
EU-02	IVEU02RC301	Am-241	1.87								0.935		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Ba-133	0.175								0.0875		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	C-14	0.456								0.228		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Cm-243/244	0.349								0.1745		1.5	15	14.96	3	0	14	14	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-02	IVEU02RC301	Co-60	0.0361								0.01805		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Cs-134	0.157								0.0785		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Cs-137	0.48	5	4	3		0.15	0.0775	0.068007	0.24	3.5290302	1.5	14	14.96	3	0	13	8	
EU-02	IVEU02RC301	Eu-152	0.0416								0.0208		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Eu-154	0.0499								0.02495		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Eu-155	3.8								1.9		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Fe-55	2690								1345		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	I-129	0.596								0.298		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	K-40	60	5	5	5		21	18.906	4.145984	30	7.2359186	1.5	14	14.96	3	0	13	8	
EU-02	IVEU02RC301	Na-22	0.0865								0.04325		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Ni-59	208								104		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Ni-63	94.8								47.4		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Np-237	0.13								0.065		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Pb-210	5								2.5		1.5	14	14.96	3	0	13	13	
EU-02	IVEU02RC301	Pu-238	2.97	4	4			0.001	0.00025	0.0005	1.485	2970	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	Pu-239	2.59								1.295		1.5	14	14.96	3	0	13	13	
EU-02	IVEU02RC301	Pu-240	2.6								1.3		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Pu-241	406								203		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Ra-226	5	4	4	4		0.97	0.8725	0.082614	2.5	30.261377	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	Ra-228	3.2								1.6		1.5	14	14.96	3	0	13	13	
EU-02	IVEU02RC301	Sb-125	0.462								0.231		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Sr-90	0.231	4	4			0.053	0.0345	0.021502	0.1155	5.3716089	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	Tc-99	0.25								0.125		1.5	15	14.96	3	0	14	14	
EU-02	IVEU02RC301	Th-228	3.2	4	4			1.1	0.985	0.136748	1.6	11.700359	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	Th-230	3.49	4	4			1	0.875	0.117898	1.745	14.800897	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	Th-232	3.1	4	4			1	0.875	0.123423	1.55	12.558398	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	Tritium (H-3)	2.28	1	1			0.042	0.042		1.14		1.5	14	14.96	3	0	13	12	
EU-02	IVEU02RC301	U-234	4.01								2.005		1.5	14	14.96	3	0	13	13	
EU-02	IVEU02RC301	U-235	0.195	4	4			0.053	0.0485	0.004655	0.0975	20.94636	1.5	14	14.96	3	0	13	9	
EU-02	IVEU02RC301	U-238	2.6	4	4			1.1	0.9275	0.122848	1.3	10.58217	1.5	14	14.96	3	0	13	9	14
EU-03	IVEU03RC101	Ac-228	3.2								1.6		1.5	14	3.76	1	0	27	27	
EU-03	IVEU03RC101	Am-241	1.87	1	1			-0.0149	-0.0149		0.935		1.5	15			0	0	0	
EU-03	IVEU03RC101	Ba-133	0.175								0.0875		1.5	15			0	0	0	
EU-03	IVEU03RC101	C-14	0.456								0.228		1.5	15			0	0	0	
EU-03	IVEU03RC101	Cm-243/244	0.349								0.1745		1.5	15			0	0	0	
EU-03	IVEU03RC101	Co-60	0.0361	1	1			0.511	0.511		0.01805		1.5	15			0	0	0	
EU-03	IVEU03RC101	Cs-134	0.157								0.0785		1.5	15			0	0	0	
EU-03	IVEU03RC101	Cs-137	0.48	38	15	10		0.329	0.066777	0.077424	0.24	3.0998135	3	8			0	0	0	
EU-03	IVEU03RC101	Eu-152	0.0416				8				0.0208		1.5	15			0	0	0	
EU-03	IVEU03RC101	Eu-154	0.0499								0.02495		1.5	15			0	0	0	
EU-03	IVEU03RC101	Eu-155	3.8								1.9		1.5	15			0	0	0	
EU-03	IVEU03RC101	Fe-55	2690								1345		1.5	15			0	0	0	
EU-03	IVEU03RC101	I-129	0.596								0.298		1.5	15			0	0	0	
EU-03	IVEU03RC101	K-40	60	11	11	11		22.9	22.363636	0.54456	30	55.090361	3	8			0	0	0	
EU-03	IVEU03RC101	Na-22	0.0865								0.04325		1.5	15			0	0	0	
EU-03	IVEU03RC101	Ni-59	208								104		1.5	15			0	0	0	
EU-03	IVEU03RC101	Ni-63	94.8								47.4		1.5	15			0	0	0	
EU-03	IVEU03RC101	Np-237	0.13								0.065		1.5	15			0	0	0	
EU-03	IVEU03RC101	Pb-210	5								2.5		1.5	14			0	0	0	
EU-03	IVEU03RC101	Pu-238	2.97	2	2			0.0304	0.0147	0.022203	1.485	66.882393	1.5	14			0	0	0	
EU-03	IVEU03RC101	Pu-239	2.59								1.295		1.5	14			0	0	0	
EU-03	IVEU03RC101	Pu-240	2.6								1.3		1.5	15			0	0	0	
EU-03	IVEU03RC101	Pu-241	406	1	1			5.87	5.87		203		1.5	15			0	0	0	
EU-03	IVEU03RC101	Ra-226	5	22	22	22		1.79	1.1235455	0.326421	2.5	7.6588288	3	8			0	0	0	
EU-03	IVEU03RC101	Ra-228	3.2								1.6		1.5	14			0	0	0	
EU-03	IVEU03RC101	Sb-125	0.462								0.231		1.5	15			0	0	0	
EU-03	IVEU03RC101	Sr-90	0.231	2	2			-0.008	-0.298	0.410122	0.1155	0.2816236	1.5	14			0	0	0	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-03	IVEU03RC101	Tc-99	0.25								0.125		1.5	15			0	0	0	
EU-03	IVEU03RC101	Th-228	3.2	17	17	15		1.54	1.2853529	0.19613	1.6	8.1578396	3	8			0	0	0	
EU-03	IVEU03RC101	Th-230	3.49	12	12	10		1.72	1.048	0.342178	1.745	5.0996921	3	8			0	0	0	
EU-03	IVEU03RC101	Th-232	3.1	28	28	26		2.63	1.4016786	0.437967	1.55	3.5390765	3	8			0	0	0	
EU-03	IVEU03RC101	Tritium (H-3)	2.28								1.14		1.5	14			0	0	0	
EU-03	IVEU03RC101	U-234	4.01	11	11	10		1.43	0.9696364	0.244678	2.005	8.1944344	3	8			0	0	0	
EU-03	IVEU03RC101	U-235	0.195	11	11	9		0.095	0.0469091	0.019496	0.0975	5.0010463	3	8			0	0	0	
EU-03	IVEU03RC101	U-238	2.6	12	12	10		1.44	0.9631667	0.240221	1.3	5.4116738	3	8	3.76	1	0	16	4	27
EU-03	IVEU03RC102	Ac-228	3.2								1.6		1.5	14	0.83	1	0	6	6	
EU-03	IVEU03RC102	Am-241	1.87								0.935		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Ba-133	0.175								0.0875		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	C-14	0.456								0.228		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Cm-243/244	0.349								0.1745		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Co-60	0.0361	1	1	1		0.13	0.13		0.01805		1.5	15	0.83	1	0	7	6	
EU-03	IVEU03RC102	Cs-134	0.157								0.0785		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Cs-137	0.48	15	12	4		2.4	0.7649786	0.870294	0.24	0.275769	1.5	14	0.83	1	1	6	0	
EU-03	IVEU03RC102	Eu-152	0.0416								0.0208		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Eu-154	0.0499								0.02495		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Eu-155	3.8								1.9		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Fe-55	2690								1345		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	I-129	0.596								0.298		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	K-40	60	6	6	6		21	18.516667	2.08846	30	14.364649	1.5	14	0.83	1	0	6	0	
EU-03	IVEU03RC102	Na-22	0.0865								0.04325		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Ni-59	208								104		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Ni-63	94.8								47.4		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Np-237	0.13								0.065		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Pb-210	5								2.5		1.5	14	0.83	1	0	6	6	
EU-03	IVEU03RC102	Pu-238	2.97	5	5			0.006	0.0014	0.00305	1.485	486.95068	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	Pu-239	2.59								1.295		1.5	14	0.83	1	0	6	6	
EU-03	IVEU03RC102	Pu-240	2.6								1.3		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Pu-241	406								203		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Ra-226	5	5	5	5		1.3	1.002	0.205475	2.5	12.166927	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	Ra-228	3.2								1.6		1.5	14	0.83	1	0	6	6	
EU-03	IVEU03RC102	Sb-125	0.462								0.231		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Sr-90	0.231	5	5			0.21	0.0976	0.083032	0.1155	1.3910313	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	Tc-99	0.25								0.125		1.5	15	0.83	1	0	7	7	
EU-03	IVEU03RC102	Th-228	3.2	5	5			2.5	1.188	0.799231	1.6	2.0019246	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	Th-230	3.49	5	5			2.3	1.076	0.731116	1.745	2.3867635	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	Th-232	3.1	5	5			2.1	1.102	0.618078	1.55	2.5077755	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	Tritium (H-3)	2.28	2	2			-0.038	-0.0385	0.000707	1.14	1612.2035	1.5	14	0.83	1	0	6	4	
EU-03	IVEU03RC102	U-234	4.01								2.005		1.5	14	0.83	1	0	6	6	
EU-03	IVEU03RC102	U-235	0.195	5	5			0.1	0.056	0.029095	0.0975	3.3511289	1.5	14	0.83	1	0	6	1	
EU-03	IVEU03RC102	U-238	2.6	5	5			2	1.056	0.57622	1.3	2.256081	1.5	14	0.83	1	0	6	1	7
EU-03	IVEU03RC201	Ac-228	3.2								1.6		1.5	14	4.48	2	0	7	7	
EU-03	IVEU03RC201	Am-241	1.87								0.935		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Ba-133	0.175								0.0875		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	C-14	0.456								0.228		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Cm-243/244	0.349								0.1745		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Co-60	0.0361								0.01805		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Cs-134	0.157								0.0785		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Cs-137	0.48	14	14	11		0.44	0.2045455	0.157292	0.24	1.5258277	1.5258277	14	4.48	2	0	7	0	
EU-03	IVEU03RC201	Eu-152	0.0416								0.0208		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Eu-154	0.0499								0.02495		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Eu-155	3.8								1.9		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Fe-55	2690								1345		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	I-129	0.596								0.298		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	K-40	60	14	14	14		25.9	23.262857	1.704268	30	17.602865	3	8	4.48	2	0	4	0	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-03	IVEU03RC201	Na-22	0.0865								0.04325		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Ni-59	208								104		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Ni-63	94.8								47.4		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Np-237	0.13								0.065		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Pb-210	5								2.5		1.5	14	4.48	2	0	7	7	
EU-03	IVEU03RC201	Pu-238	2.97	5	5			0.001	0.0002	0.000447	1.485	3320.5609	1.5	14	4.48	2	0	7	2	
EU-03	IVEU03RC201	Pu-239	2.59								1.295		1.5	14	4.48	2	0	7	7	
EU-03	IVEU03RC201	Pu-240	2.6								1.3		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Pu-241	406								203		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Ra-226	5	11	11	11		0.989	0.8558182	0.086838	2.5	28.789382	3	8	4.48	2	0	4	0	
EU-03	IVEU03RC201	Ra-228	3.2								1.6		1.5	14	4.48	2	0	7	7	
EU-03	IVEU03RC201	Sb-125	0.462								0.231		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Sr-90	0.231	5	5			0.053	0.0356	0.009839	0.1155	11.739357	1.5	14	4.48	2	0	7	2	
EU-03	IVEU03RC201	Tc-99	0.25								0.125		1.5	15	4.48	2	0	7	7	
EU-03	IVEU03RC201	Th-228	3.2	14	14	9		1.53	1.3135714	0.139041	1.6	11.507392	3	8	4.48	2	0	4	0	
EU-03	IVEU03RC201	Th-230	3.49	11	11	6		1.01	0.8790909	0.117555	1.745	14.844162	3	8	4.48	2	0	4	0	
EU-03	IVEU03RC201	Th-232	3.1	14	14	9		1.51	1.1758571	0.189071	1.55	8.1979807	3	8	4.48	2	0	4	0	
EU-03	IVEU03RC201	Tritium (H-3)	2.28								1.14		1.5	14	4.48	2	0	7	7	
EU-03	IVEU03RC201	U-234	4.01	6	6	6		0.864	0.823	0.054487	2.005	36.797974	1.5	14	4.48	2	0	7	1	
EU-03	IVEU03RC201	U-235	0.195	11	11	6		0.061	0.0452727	0.010743	0.0975	9.0754361	3	8	4.48	2	0	4	0	
EU-03	IVEU03RC201	U-238	2.6	11	11	6		0.96	0.806	0.081901	1.3	15.872791	3	8	4.48	2	0	4	0	7
EU-03	IVEU03RC202	Ac-228	3.2								1.6		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Am-241	1.87								0.935		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Ba-133	0.175								0.0875		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	C-14	0.456								0.228		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Cm-243/244	0.349								0.1745		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Co-60	0.0361								0.01805		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Cs-134	0.157								0.0785		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Cs-137	0.48								0.24		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Eu-152	0.0416								0.0208		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Eu-154	0.0499								0.02495		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Eu-155	3.8								1.9		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Fe-55	2690								1345		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	I-129	0.596								0.298		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	K-40	60								30		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Na-22	0.0865								0.04325		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Ni-59	208								104		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Ni-63	94.8								47.4		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Np-237	0.13								0.065		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Pb-210	5								2.5		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Pu-238	2.97								1.485		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Pu-239	2.59								1.295		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Pu-240	2.6								1.3		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Pu-241	406								203		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Ra-226	5								2.5		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Ra-228	3.2								1.6		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Sb-125	0.462								0.231		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Sr-90	0.231								0.1155		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Tc-99	0.25								0.125		1.5	15	0.26	2	0	1	1	
EU-03	IVEU03RC202	Th-228	3.2								1.6		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Th-230	3.49								1.745		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Th-232	3.1								1.55		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	Tritium (H-3)	2.28								1.14		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	U-234	4.01								2.005		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	U-235	0.195								0.0975		1.5	14	0.26	2	0	1	1	
EU-03	IVEU03RC202	U-238	2.6								1.3		1.5	14	0.26	2	0	1	1	1
EU-03	IVEU03RC301	Ac-228	3.2								1.6		1.5	14	8.80	3	0	8	8	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-03	IVEU03RC301	Am-241	1.87								0.935		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Ba-133	0.175								0.0875		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	C-14	0.456								0.228		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Cm-243/244	0.349								0.1745		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Co-60	0.0361								0.01805		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Cs-134	0.157								0.0785		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Cs-137	0.48	1					0.0495		0.24		1.5	14	8.80	3	0	8	7	
EU-03	IVEU03RC301	Eu-152	0.0416								0.0208		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Eu-154	0.0499								0.02495		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Eu-155	3.8								1.9		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Fe-55	2690								1345		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	I-129	0.596								0.298		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	K-40	60								30		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Na-22	0.0865								0.04325		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Ni-59	208								104		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Ni-63	94.8								47.4		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Np-237	0.13								0.065		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Pb-210	5								2.5		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Pu-238	2.97								1.485		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Pu-239	2.59								1.295		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Pu-240	2.6								1.3		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Pu-241	406								203		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Ra-226	5								2.5		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Ra-228	3.2								1.6		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Sb-125	0.462								0.231		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Sr-90	0.231								0.1155		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Tc-99	0.25								0.125		1.5	15	8.80	3	0	8	8	
EU-03	IVEU03RC301	Th-228	3.2								1.6		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Th-230	3.49								1.745		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Th-232	3.1								1.55		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	Tritium (H-3)	2.28								1.14		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	U-234	4.01								2.005		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	U-235	0.195								0.0975		1.5	14	8.80	3	0	8	8	
EU-03	IVEU03RC301	U-238	2.6								1.3		1.5	14	8.80	3	0	8	8	8
EU-04	IVEU04RC101	Ac-228	3.2								1.6		1.5	14	2.53	1	0	18	18	
EU-04	IVEU04RC101	Am-241	1.87	33	21			0.204	0.0591874	0.048819	0.935	19.152383	3	11	2.53	1	0	14	0	
EU-04	IVEU04RC101	Ba-133	0.175								0.0875		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	C-14	0.456								0.228		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Cm-243/244	0.349								0.1745		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Co-60	0.0361	99	25	1	13	0.095	0.0114768	0.017986	0.01805	1.0035507	1.0035507	23	2.53	1	0	30	0	
EU-04	IVEU04RC101	Cs-134	0.157								0.0785		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Cs-137	0.48	155	131	85		4.886	0.3919071	0.734989	0.24	0.3265355	0.3265355	243	2.53	1	1	308	153	
EU-04	IVEU04RC101	Eu-152	0.0416				12				0.0208		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Eu-154	0.0499								0.02495		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Eu-155	3.8								1.9		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Fe-55	2690								1345		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	I-129	0.596								0.298		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	K-40	60	81	81	80		22	19.68284	1.141495	30	26.281327	3	8	2.53	1	0	11	0	
EU-04	IVEU04RC101	Na-22	0.0865								0.04325		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Ni-59	208								104		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Ni-63	94.8								47.4		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Np-237	0.13								0.065		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Pb-210	5								2.5		1.5	14	2.53	1	0	18	18	
EU-04	IVEU04RC101	Pu-238	2.97	26	26	3		0.0614	0.02055	0.020013	1.485	74.203201	3	8	2.53	1	0	11	0	
EU-04	IVEU04RC101	Pu-239	2.59								1.295		1.5	14	2.53	1	0	18	18	
EU-04	IVEU04RC101	Pu-240	2.6								1.3		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Pu-241	406	21	21			6.56	2.8249524	1.587545	203	127.87038	3	11	2.53	1	0	14	0	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-04	IVEU04RC101	Ra-226	5	94	91	91		1.63	0.7744681	0.228305	2.5	10.950243	3	8	2.53	1	0	11	0	
EU-04	IVEU04RC101	Ra-228	3.2								1.6		1.5	14	2.53	1	0	18	18	
EU-04	IVEU04RC101	Sb-125	0.462								0.231		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Sr-90	0.231	23	23			0.947	0.2794957	0.422943	0.1155	0.2730862	1.5	14	2.53	1	1	18	0	
EU-04	IVEU04RC101	Tc-99	0.25								0.125		1.5	15	2.53	1	0	19	19	
EU-04	IVEU04RC101	Th-228	3.2	23	23			13.7	1.6556957	2.632156	1.6	0.6078666	0.6078666	64	2.53	1	1	81	58	
EU-04	IVEU04RC101	Th-230	3.49	23	23			1.77	1.0396087	0.278322	1.745	6.2697228	3	8	2.53	1	0	11	0	
EU-04	IVEU04RC101	Th-232	3.1	35	35	12		1.94	1.0928286	0.255768	1.55	6.0601744	3	8	2.53	1	0	11	0	
EU-04	IVEU04RC101	Tritium (H-3)	2.28								1.14		1.5	14	2.53	1	0	18	18	
EU-04	IVEU04RC101	U-234	4.01	21	21			1.26	0.8575238	0.187675	2.005	10.683338	3	8	2.53	1	0	11	0	
EU-04	IVEU04RC101	U-235	0.195	113	105	82	3	0.68	0.0628823	0.071187	0.0975	1.3696403	1.3696403	17	2.53	1	0	22	0	
EU-04	IVEU04RC101	U-238	2.6	114	110	87		1.95	0.8202982	0.291045	1.3	4.4666597	3	8	2.53	1	0	11	0	19
EU-04	IVEU04RC102	Ac-228	3.2	41	41			1.4	1.1358537	0.123268	1.6	12.979901	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	Am-241	1.87	41	41			0.105	-0.002	0.044612	0.935	20.958647	3	11	0.64	1	0	4	0	
EU-04	IVEU04RC102	Ba-133	0.175								0.0875		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	C-14	0.456								0.228		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Cm-243/244	0.349								0.1745		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Co-60	0.0361	41	41			0.055	0.0010237	0.024158	0.01805	0.7471536	0.7471536	40	0.64	1	1	13	0	
EU-04	IVEU04RC102	Cs-134	0.157	41	41			0.066	0.0004902	0.023172	0.0785	3.3876862	3	11	0.64	1	0	4	0	
EU-04	IVEU04RC102	Cs-137	0.48	47	40			0.068	0.0082309	0.025306	0.24	9.4840592	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	Eu-152	0.0416	41	41		6	0.09	-0.014244	0.047061	0.0208	0.4419794	0.4419794	107	0.64	1	1	35	0	
EU-04	IVEU04RC102	Eu-154	0.0499	40	40		1	0.31	0.026525	0.165593	0.02495	0.1506709	0.1506709	1620	0.64	1	1	516	476	
EU-04	IVEU04RC102	Eu-155	3.8								1.9		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Fe-55	2690								1345		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	I-129	0.596								0.298		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	K-40	60	41	41			23.5	20.519512	1.534148	30	19.554829	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	Na-22	0.0865								0.04325		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Ni-59	208								104		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Ni-63	94.8								47.4		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Np-237	0.13								0.065		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Pb-210	5	1	1			1.39	1.39		2.5		1.5	14	0.64	1	0	5	4	
EU-04	IVEU04RC102	Pu-238	2.97	41	41			0.049	-0.000149	0.015319	1.485	96.938277	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	Pu-239	2.59								1.295		1.5	14	0.64	1	0	5	5	
EU-04	IVEU04RC102	Pu-240	2.6								1.3		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Pu-241	406	41	35			4	1.2934146	1.117581	203	181.64226	3	11	0.64	1	0	4	0	
EU-04	IVEU04RC102	Ra-226	5								2.5		1.5	14	0.64	1	0	5	5	
EU-04	IVEU04RC102	Ra-228	3.2								1.6		1.5	14	0.64	1	0	5	5	
EU-04	IVEU04RC102	Sb-125	0.462								0.231		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Sr-90	0.231	41	40			0.28	0.058561	0.118019	0.1155	0.9786571	0.9786571	31	0.64	1	1	10	0	
EU-04	IVEU04RC102	Tc-99	0.25								0.125		1.5	15	0.64	1	0	5	5	
EU-04	IVEU04RC102	Th-228	3.2								1.6		1.5	14	0.64	1	0	5	5	
EU-04	IVEU04RC102	Th-230	3.49								1.745		1.5	14	0.64	1	0	5	5	
EU-04	IVEU04RC102	Th-232	3.1	41	41			1.4	1.1358537	0.123268	1.55	12.574279	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	Tritium (H-3)	2.28	41	40			1.4	0.2437317	0.432301	1.14	2.6370494	2.6370494	9	0.64	1	0	3	0	
EU-04	IVEU04RC102	U-234	4.01	47	47			1.22	0.9004255	0.144146	2.005	13.909506	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	U-235	0.195	47	47			0.089	0.042	0.020632	0.0975	4.7255788	3	8	0.64	1	0	3	0	
EU-04	IVEU04RC102	U-238	2.6	47	47			1.31	0.9655319	0.162986	1.3	7.9761529	3	8	0.64	1	0	3	0	5
EU-04	IVEU04RC103	Ac-228	3.2								1.6		1.5	14	1.15	1	0	9	9	
EU-04	IVEU04RC103	Am-241	1.87								0.935		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Ba-133	0.175								0.0875		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	C-14	0.456								0.228		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Cm-243/244	0.349								0.1745		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Co-60	0.0361								0.01805		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Cs-134	0.157								0.0785		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Cs-137	0.48	14	12	9		2.93	0.4292857	0.746205	0.24	0.3216273	0.3216273	243	1.15	1	1	140	126	
EU-04	IVEU04RC103	Eu-152	0.0416								0.0208		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Eu-154	0.0499								0.02495		1.5	15	1.15	1	0	9	9	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-04	IVEU04RC103	Eu-155	3.8	1	1	1		0.06	0.06		1.9		1.5	15	1.15	1	0	9	8	
EU-04	IVEU04RC103	Fe-55	2690								1345		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	I-129	0.596								0.298		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	K-40	60	6	6	3		22	20.381667	2.939132	30	10.207095	1.5	14	1.15	1	0	9	3	
EU-04	IVEU04RC103	Na-22	0.0865								0.04325		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Ni-59	208								104		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Ni-63	94.8								47.4		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Np-237	0.13								0.065		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Pb-210	5								2.5		1.5	14	1.15	1	0	9	9	
EU-04	IVEU04RC103	Pu-238	2.97	3	2			0.002	0.0013333	0.001155	1.485	1286.0477	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	Pu-239	2.59								1.295		1.5	14	1.15	1	0	9	9	
EU-04	IVEU04RC103	Pu-240	2.6								1.3		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Pu-241	406								203		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Ra-226	5	3	3	3		1.1	0.9133333	0.176163	2.5	14.191418	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	Ra-228	3.2								1.6		1.5	14	1.15	1	0	9	9	
EU-04	IVEU04RC103	Sb-125	0.462								0.231		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Sr-90	0.231	3	3			0.095	0.071	0.02506	0.1155	4.6089518	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	Tc-99	0.25								0.125		1.5	15	1.15	1	0	9	9	
EU-04	IVEU04RC103	Th-228	3.2	3	3			1.3	0.9866667	0.289194	1.6	5.5326128	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	Th-230	3.49	3	3			1.2	0.8366667	0.325935	1.745	5.3538355	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	Th-232	3.1	3	3			1.4	1.0233333	0.365559	1.55	4.2400824	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	Tritium (H-3)	2.28	3	3			0.02	0.007	0.014107	1.14	80.812457	1.5	14	1.15	1	0	9	6	
EU-04	IVEU04RC103	U-234	4.01								2.005		1.5	14	1.15	1	0	9	9	
EU-04	IVEU04RC103	U-235	0.195	6	6			0.06	0.0493333	0.010073	0.0975	9.679277	1.5	14	1.15	1	0	9	3	
EU-04	IVEU04RC103	U-238	2.6	3	3			0.86	0.78	0.13	1.3	10	1.5	14	1.15	1	0	9	6	9
EU-04	IVEU04RC104	Ac-228	3.2								1.6		1.5	14	1.98	1	0	14	14	
EU-04	IVEU04RC104	Am-241	1.87								0.935		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Ba-133	0.175								0.0875		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	C-14	0.456								0.228		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Cm-243/244	0.349								0.1745		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Co-60	0.0361								0.01805		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Cs-134	0.157								0.0785		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Cs-137	0.48	14	5	2		0.23	0.0386821	0.060684	0.24	3.9549077	3	8	1.98	1	0	8	0	
EU-04	IVEU04RC104	Eu-152	0.0416								0.0208		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Eu-154	0.0499								0.02495		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Eu-155	3.8								1.9		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Fe-55	2690								1345		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	I-129	0.596								0.298		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	K-40	60	4	4	4		21	20.5	1	30	30	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Na-22	0.0865								0.04325		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Ni-59	208								104		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Ni-63	94.8								47.4		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Np-237	0.13								0.065		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Pb-210	5								2.5		1.5	14	1.98	1	0	14	14	
EU-04	IVEU04RC104	Pu-238	2.97	4	4			0.007	0	0.00483	1.485	307.42421	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Pu-239	2.59								1.295		1.5	14	1.98	1	0	14	14	
EU-04	IVEU04RC104	Pu-240	2.6								1.3		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Pu-241	406								203		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Ra-226	5	4	4	4		0.83	0.755	0.050662	2.5	49.346377	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Ra-228	3.2								1.6		1.5	14	1.98	1	0	14	14	
EU-04	IVEU04RC104	Sb-125	0.462								0.231		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Sr-90	0.231	4	4			0.042	0.01275	0.023514	0.1155	4.9119297	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Tc-99	0.25								0.125		1.5	15	1.98	1	0	15	15	
EU-04	IVEU04RC104	Th-228	3.2	4	4			1.3	1.1	0.270801	1.6	5.9083916	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Th-230	3.49	4	4			1.3	0.96	0.313794	1.745	5.5609733	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Th-232	3.1	4	4			1.1	0.985	0.23	1.55	6.7391304	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	Tritium (H-3)	2.28	1	1			0.008	0.008		1.14		1.5	14	1.98	1	0	14	13	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-04	IVEU04RC104	U-234	4.01								2.005		1.5	14	1.98	1	0	14	14	
EU-04	IVEU04RC104	U-235	0.195	4	4			0.07	0.05325	0.012366	0.0975	7.8845553	1.5	14	1.98	1	0	14	10	
EU-04	IVEU04RC104	U-238	2.6	4	4			1.3	0.94	0.277609	1.3	4.682848	1.5	14	1.98	1	0	14	10	15
EU-04	IVEU04RC301	Ac-228	3.2								1.6		1.5	14	11.97	3	0	10	10	
EU-04	IVEU04RC301	Am-241	1.87								0.935		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Ba-133	0.175								0.0875		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	C-14	0.456								0.228		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Cm-243/244	0.349								0.1745		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Co-60	0.0361								0.01805		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Cs-134	0.157								0.0785		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Cs-137	0.48	2	2	2		0.13	0.11	0.028284	0.24	8.4852814	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Eu-152	0.0416								0.0208		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Eu-154	0.0499								0.02495		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Eu-155	3.8								1.9		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Fe-55	2690								1345		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	I-129	0.596								0.298		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	K-40	60	2	2	2		23	21.5	2.12132	30	14.142136	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Na-22	0.0865								0.04325		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Ni-59	208								104		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Ni-63	94.8								47.4		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Np-237	0.13								0.065		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Pb-210	5								2.5		1.5	14	11.97	3	0	10	10	
EU-04	IVEU04RC301	Pu-238	2.97	2	2			0.001	0	0.001414	1.485	1050.0536	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Pu-239	2.59								1.295		1.5	14	11.97	3	0	10	10	
EU-04	IVEU04RC301	Pu-240	2.6								1.3		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Pu-241	406								203		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Ra-226	5	2	2	2		0.87	0.825	0.06364	2.5	39.28371	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Ra-228	3.2								1.6		1.5	14	11.97	3	0	10	10	
EU-04	IVEU04RC301	Sb-125	0.462								0.231		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Sr-90	0.231	2	2			0.049	0.036	0.018385	0.1155	6.2823718	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Tc-99	0.25								0.125		1.5	15	11.97	3	0	11	11	
EU-04	IVEU04RC301	Th-228	3.2	2	2			0.82	0.705	0.162635	1.6	9.8380074	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Th-230	3.49	2	2			0.65	0.64	0.014142	1.745	123.39013	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Th-232	3.1	2	2			0.9	0.805	0.13435	1.55	11.537005	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	Tritium (H-3)	2.28	2	2			0.027	0.0215	0.007778	1.14	146.56395	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	U-234	4.01								2.005		1.5	14	11.97	3	0	10	10	
EU-04	IVEU04RC301	U-235	0.195	2	2			0.04	0.036	0.005657	0.0975	17.235728	1.5	14	11.97	3	0	10	8	
EU-04	IVEU04RC301	U-238	2.6	2	2			0.72	0.71	0.014142	1.3	91.923882	1.5	14	11.97	3	0	10	8	11
EU-05	IVEU05RC101	Ac-228	3.2								1.6		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Am-241	1.87								0.935		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Ba-133	0.175								0.0875		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	C-14	0.456								0.228		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Cm-243/244	0.349								0.1745		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Co-60	0.0361								0.01805		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Cs-134	0.157								0.0785		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Cs-137	0.48	2	2						0.24		1.5	14	0.10	1	0	1	0	
EU-05	IVEU05RC101	Eu-152	0.0416								0.0208		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Eu-154	0.0499								0.02495		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Eu-155	3.8								1.9		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Fe-55	2690								1345		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	I-129	0.596								0.298		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	K-40	60	2	2	2		23.6	22.9	0.989949	30	30.304576	1.5	14	0.10	1	0	1	0	
EU-05	IVEU05RC101	Na-22	0.0865								0.04325		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Ni-59	208								104		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Ni-63	94.8								47.4		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Np-237	0.13								0.065		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Pb-210	5								2.5		1.5	14	0.10	1	0	1	1	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-05	IVEU05RC101	Pu-238	2.97								1.485		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Pu-239	2.59								1.295		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Pu-240	2.6								1.3		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Pu-241	406								203		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Ra-226	5	2	2	1		0.82	0.82		2.5		1.5	14	0.10	1	0	1	0	
EU-05	IVEU05RC101	Ra-228	3.2								1.6		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Sb-125	0.462								0.231		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Sr-90	0.231								0.1155		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Tc-99	0.25								0.125		1.5	15	0.10	1	0	1	1	
EU-05	IVEU05RC101	Th-228	3.2								1.6		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Th-230	3.49								1.745		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Th-232	3.1								1.55		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	Tritium (H-3)	2.28								1.14		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	U-234	4.01								2.005		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	U-235	0.195								0.0975		1.5	14	0.10	1	0	1	1	
EU-05	IVEU05RC101	U-238	2.6								1.3		1.5	14	0.10	1	0	1	1	1
EU-05	IVEU05RC102	Ac-228	3.2								1.6		1.5	14	0.92	1	0	7	7	
EU-05	IVEU05RC102	Am-241	1.87								0.935		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Ba-133	0.175								0.0875		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	C-14	0.456								0.228		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Cm-243/244	0.349								0.1745		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Co-60	0.0361	1	1	1		0.04	0.04		0.01805		1.5	15	0.92	1	0	7	6	
EU-05	IVEU05RC102	Cs-134	0.157								0.0785		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Cs-137	0.48	1	1	1		0.53	0.53		0.24		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Eu-152	0.0416								0.0208		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Eu-154	0.0499								0.02495		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Eu-155	3.8								1.9		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Fe-55	2690								1345		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	I-129	0.596								0.298		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	K-40	60	1	1	1		20	20		30		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Na-22	0.0865								0.04325		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Ni-59	208								104		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Ni-63	94.8								47.4		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Np-237	0.13								0.065		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Pb-210	5								2.5		1.5	14	0.92	1	0	7	7	
EU-05	IVEU05RC102	Pu-238	2.97	1	1			0	0		1.485		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Pu-239	2.59								1.295		1.5	14	0.92	1	0	7	7	
EU-05	IVEU05RC102	Pu-240	2.6								1.3		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Pu-241	406								203		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Ra-226	5	1	1	1		0.88	0.88		2.5		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Ra-228	3.2								1.6		1.5	14	0.92	1	0	7	7	
EU-05	IVEU05RC102	Sb-125	0.462								0.231		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Sr-90	0.231	1	1			0.056	0.056		0.1155		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Tc-99	0.25								0.125		1.5	15	0.92	1	0	7	7	
EU-05	IVEU05RC102	Th-228	3.2	1	1			1.1	1.1		1.6		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Th-230	3.49	1	1			0.79	0.79		1.745		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Th-232	3.1	1	1			1.1	1.1		1.55		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	Tritium (H-3)	2.28								1.14		1.5	14	0.92	1	0	7	7	
EU-05	IVEU05RC102	U-234	4.01								2.005		1.5	14	0.92	1	0	7	7	
EU-05	IVEU05RC102	U-235	0.195	1	1			0.045	0.045		0.0975		1.5	14	0.92	1	0	7	6	
EU-05	IVEU05RC102	U-238	2.6	1	1			0.76	0.76		1.3		1.5	14	0.92	1	0	7	6	7
EU-05	IVEU05RC201	Ac-228	3.2								1.6		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Am-241	1.87								0.935		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Ba-133	0.175								0.0875		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	C-14	0.456								0.228		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Cm-243/244	0.349								0.1745		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Co-60	0.0361								0.01805		1.5	15	0.20	2	0	1	1	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-05	IVEU05RC201	Cs-134	0.157								0.0785		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Cs-137	0.48								0.24		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Eu-152	0.0416								0.0208		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Eu-154	0.0499								0.02495		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Eu-155	3.8								1.9		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Fe-55	2690								1345		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	I-129	0.596								0.298		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	K-40	60								30		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Na-22	0.0865								0.04325		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Ni-59	208								104		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Ni-63	94.8								47.4		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Np-237	0.13								0.065		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Pb-210	5								2.5		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Pu-238	2.97								1.485		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Pu-239	2.59								1.295		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Pu-240	2.6								1.3		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Pu-241	406								203		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Ra-226	5								2.5		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Ra-228	3.2								1.6		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Sb-125	0.462								0.231		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Sr-90	0.231								0.1155		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Tc-99	0.25								0.125		1.5	15	0.20	2	0	1	1	
EU-05	IVEU05RC201	Th-228	3.2								1.6		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Th-230	3.49								1.745		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Th-232	3.1								1.55		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	Tritium (H-3)	2.28								1.14		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	U-234	4.01								2.005		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	U-235	0.195								0.0975		1.5	14	0.20	2	0	1	1	
EU-05	IVEU05RC201	U-238	2.6								1.3		1.5	14	0.20	2	0	1	1	1
EU-05	IVEU05RC301	Ac-228	3.2								1.6		1.5	14	17.66	3	0	15	15	
EU-05	IVEU05RC301	Am-241	1.87								0.935		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Ba-133	0.175								0.0875		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	C-14	0.456								0.228		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Cm-243/244	0.349								0.1745		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Co-60	0.0361								0.01805		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Cs-134	0.157								0.0785		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Cs-137	0.48	4	4	4		0.13	0.0975	0.045735	0.24	5.2476517	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Eu-152	0.0416								0.0208		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Eu-154	0.0499								0.02495		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Eu-155	3.8	2	2	2		0.11	0.075	0.049497	1.9	38.385797	1.5	15	17.66	3	0	16	14	
EU-05	IVEU05RC301	Fe-55	2690								1345		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	I-129	0.596								0.298		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	K-40	60	4	4	4		23	20.5	1.732051	30	17.320508	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Na-22	0.0865								0.04325		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Ni-59	208								104		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Ni-63	94.8								47.4		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Np-237	0.13								0.065		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Pb-210	5								2.5		1.5	14	17.66	3	0	15	15	
EU-05	IVEU05RC301	Pu-238	2.97	4	2			-0.001	0.00125	0.002872	1.485	517.01064	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Pu-239	2.59								1.295		1.5	14	17.66	3	0	15	15	
EU-05	IVEU05RC301	Pu-240	2.6								1.3		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Pu-241	406								203		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Ra-226	5	4	4	4		1.4	1.0025	0.277654	2.5	9.0040167	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Ra-228	3.2								1.6		1.5	14	17.66	3	0	15	15	
EU-05	IVEU05RC301	Sb-125	0.462								0.231		1.5	15	17.66	3	0	16	16	
EU-05	IVEU05RC301	Sr-90	0.231	4	4			0.059	0.0365	0.018157	0.1155	6.3612793	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Tc-99	0.25								0.125		1.5	15	17.66	3	0	16	16	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-05	IVEU05RC301	Th-228	3.2	4	4			1.2	0.7775	0.332202	1.6	4.8163431	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Th-230	3.49	4	4			0.96	0.71	0.173013	1.745	10.085975	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Th-232	3.1	4	4			1.1	0.765	0.287228	1.55	5.3964073	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	Tritium (H-3)	2.28	2	2			0.057	0.027	0.042426	1.14	26.870058	1.5	14	17.66	3	0	15	13	
EU-05	IVEU05RC301	U-234	4.01								2.005		1.5	14	17.66	3	0	15	15	
EU-05	IVEU05RC301	U-235	0.195	4	4			0.082	0.0455	0.024906	0.0975	3.914642	1.5	14	17.66	3	0	15	11	
EU-05	IVEU05RC301	U-238	2.6	4	4			1.4	0.94	0.332165	1.3	3.9137221	1.5	14	17.66	3	0	15	11	16
EU-06	IVEU06RC101	Ac-228	3.2	222	222			2.09	1.1898649	0.226357	1.6	7.0684771	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Am-241	1.87	233	231			0.14	0.0103588	0.032569	0.935	28.708554	3	11	4.99	1	0	28	0	
EU-06	IVEU06RC101	Ba-133	0.175								0.0875		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	C-14	0.456								0.228		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Cm-243/244	0.349								0.1745		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Co-60	0.0361	233	233		12	0.076	0.0011923	0.027993	0.01805	0.6448024	0.6448024	52	4.99	1	1	130	0	
EU-06	IVEU06RC101	Cs-134	0.157	245	232			0.11	0.0035922	0.035645	0.0785	2.202299	2.202299	12	4.99	1	0	30	0	
EU-06	IVEU06RC101	Cs-137	0.48	280	267	7		5.84	0.3643613	0.705579	0.24	0.3401461	0.3401461	243	4.99	1	1	607	327	
EU-06	IVEU06RC101	Eu-152	0.0416	230	230		3	0.62	-0.02671	0.216895	0.0208	0.0958989	0.0958989	#N/A	4.99	1	1	#N/A	#N/A	
EU-06	IVEU06RC101	Eu-154	0.0499	231	231		2	0.63	0.006174	0.204947	0.02495	0.1217385	0.1217385	1620	4.99	1	1	4041	3810	
EU-06	IVEU06RC101	Eu-155	3.8								1.9		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Fe-55	2690								1345		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	I-129	0.596								0.298		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	K-40	60	253	253	20		27.2	20.836482	2.429071	30	12.350398	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Na-22	0.0865	136	136			0.087	-7.35E-06	0.037355	0.04325	1.1577984	1.1577984	21	4.99	1	0	53	0	
EU-06	IVEU06RC101	Ni-59	208								104		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Ni-63	94.8								47.4		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Np-237	0.13								0.065		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Pb-210	5								2.5		1.5	14	4.99	1	0	35	35	
EU-06	IVEU06RC101	Pu-238	2.97	238	238	1		0.077	0.0030391	0.012638	1.485	117.50371	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Pu-239	2.59								1.295		1.5	14	4.99	1	0	35	35	
EU-06	IVEU06RC101	Pu-240	2.6								1.3		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Pu-241	406	233	232			4.9	-0.209206	1.329399	203	152.70054	3	11	4.99	1	0	28	0	
EU-06	IVEU06RC101	Ra-226	5	140	134	4		7.1	1.7916429	1.195381	2.5	2.0913842	2.0913842	10	4.99	1	0	25	0	
EU-06	IVEU06RC101	Ra-228	3.2	125	125			2.09	1.20816	0.270237	1.6	5.9207287	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Sb-125	0.462								0.231		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Sr-90	0.231	236	234		1	28.1	0.3781949	1.84745	0.1155	0.0625186	1.5	14	4.99	1	1	35	0	
EU-06	IVEU06RC101	Tc-99	0.25								0.125		1.5	15	4.99	1	0	38	38	
EU-06	IVEU06RC101	Th-228	3.2	140	140			2.53	1.2400714	0.273229	1.6	5.8558991	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Th-230	3.49	140	140			1.64	0.9690714	0.237735	1.745	7.3401117	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Th-232	3.1	374	374	12		2.36	1.1851337	0.252278	1.55	6.1440079	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	Tritium (H-3)	2.28								1.14		1.5	14	4.99	1	0	35	35	
EU-06	IVEU06RC101	U-234	4.01	233	233			9.6	0.9987897	0.664471	2.005	3.017437	3	8	4.99	1	0	20	0	
EU-06	IVEU06RC101	U-235	0.195	237	236			0.73	0.0546793	0.057508	0.0975	1.6954299	1.6954299	13	4.99	1	0	33	0	
EU-06	IVEU06RC101	U-238	2.6	252	252	12		8.6	0.9189603	0.60733	1.3	2.1405184	2.1405184	10	4.99	1	0	25	0	38
EU-06	IVEU06RC102	Ac-228	3.2								1.6		1.5	14	3.00	1	0	22	22	
EU-06	IVEU06RC102	Am-241	1.87								0.935		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Ba-133	0.175								0.0875		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	C-14	0.456								0.228		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Cm-243/244	0.349								0.1745		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Co-60	0.0361								0.01805		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Cs-134	0.157	1	1	1		0.03	0.03		0.0785		1.5	15	3.00	1	0	23	22	
EU-06	IVEU06RC102	Cs-137	0.48	25	2	2		0.09	0.045036	0.013549	0.24	17.713569	3	8	3.00	1	0	13	0	
EU-06	IVEU06RC102	Eu-152	0.0416	8	8		14	2.84	1.31375	0.645909	0.0208	0.0322027	1.5	15	3.00	1	1	23	15	
EU-06	IVEU06RC102	Eu-154	0.0499								0.02495		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Eu-155	3.8								1.9		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Fe-55	2690								1345		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	I-129	0.596								0.298		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	K-40	60	3	3	3		23	21	2	30	15	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Na-22	0.0865								0.04325		1.5	15	3.00	1	0	23	23	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-06	IVEU06RC102	Ni-59	208								104		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Ni-63	94.8								47.4		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Np-237	0.13								0.065		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Pb-210	5								2.5		1.5	14	3.00	1	0	22	22	
EU-06	IVEU06RC102	Pu-238	2.97	3	3			0	0	0	1.485		1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Pu-239	2.59								1.295		1.5	14	3.00	1	0	22	22	
EU-06	IVEU06RC102	Pu-240	2.6								1.3		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Pu-241	406								203		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Ra-226	5	3	3	3		0.91	0.8766667	0.057735	2.5	43.30127	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Ra-228	3.2								1.6		1.5	14	3.00	1	0	22	22	
EU-06	IVEU06RC102	Sb-125	0.462								0.231		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Sr-90	0.231	3	3			0.028	0.0196667	0.009074	0.1155	12.728996	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Tc-99	0.25								0.125		1.5	15	3.00	1	0	23	23	
EU-06	IVEU06RC102	Th-228	3.2	3	3			1.4	1.2233333	0.225019	1.6	7.1105259	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Th-230	3.49	3	3			1.3	1.0233333	0.24379	1.745	7.1578136	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Th-232	3.1	3	3			1.2	1.1266667	0.127017	1.55	12.203085	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	Tritium (H-3)	2.28								1.14		1.5	14	3.00	1	0	22	22	
EU-06	IVEU06RC102	U-234	4.01								2.005		1.5	14	3.00	1	0	22	22	
EU-06	IVEU06RC102	U-235	0.195	3	3			0.052	0.0446667	0.011846	0.0975	8.2304616	1.5	14	3.00	1	0	22	19	
EU-06	IVEU06RC102	U-238	2.6	3	3			0.98	0.93	0.043589	1.3	29.824045	1.5	14	3.00	1	0	22	19	23
EU-06	IVEU06RC103	Ac-228	3.2								1.6		1.5	14	3.46	1	0	25	25	
EU-06	IVEU06RC103	Am-241	1.87	19	19			0.018	-0.001263	0.007915	0.935	118.12834	3	11	3.46	1	0	20	1	
EU-06	IVEU06RC103	Ba-133	0.175								0.0875		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	C-14	0.456								0.228		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	Cm-243/244	0.349	19	19			0.026	0.0022653	0.006958	0.1745	25.077939	3	11	3.46	1	0	20	1	
EU-06	IVEU06RC103	Co-60	0.0361	37	37			0.0071	0.0004649	0.003572	0.01805	5.0528961	3	11	3.46	1	0	20	0	
EU-06	IVEU06RC103	Cs-134	0.157	37	37			0.007	-0.020032	0.021073	0.0785	3.7251187	3	11	3.46	1	0	20	0	
EU-06	IVEU06RC103	Cs-137	0.48	40	40	1		0.746	0.04685	0.140849	0.24	1.7039481	1.7039481	12	3.46	1	0	21	0	
EU-06	IVEU06RC103	Eu-152	0.0416	37	37			0.024	-0.004838	0.014739	0.0208	1.4111809	1.4111809	16	3.46	1	0	28	0	
EU-06	IVEU06RC103	Eu-154	0.0499	37	37			0.03	0.0010541	0.017602	0.02495	1.4174527	1.4174527	16	3.46	1	0	28	0	
EU-06	IVEU06RC103	Eu-155	3.8								1.9		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	Fe-55	2690	19	19			6	-2.463158	2.640962	1345	509.28419	3	11	3.46	1	0	20	1	
EU-06	IVEU06RC103	I-129	0.596								0.298		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	K-40	60	39	39	2		27.72	22.066667	1.685452	30	17.799378	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	Na-22	0.0865	37	37			0.014	0.0004189	0.006723	0.04325	6.4328583	3	11	3.46	1	0	20	0	
EU-06	IVEU06RC103	Ni-59	208	19	19			720	-254.7368	480.0274	104	0.2166543	0.2166543	410	3.46	1	1	711	692	
EU-06	IVEU06RC103	Ni-63	94.8	19	19			2.1	0.1736842	0.910337	47.4	52.06863	3	11	3.46	1	0	20	1	
EU-06	IVEU06RC103	Np-237	0.13								0.065		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	Pb-210	5								2.5		1.5	14	3.46	1	0	25	25	
EU-06	IVEU06RC103	Pu-238	2.97	20	20			0.012	-0.000615	0.003267	1.485	454.53088	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	Pu-239	2.59								1.295		1.5	14	3.46	1	0	25	25	
EU-06	IVEU06RC103	Pu-240	2.6								1.3		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	Pu-241	406	19	19			3.2	-1.083684	2.534419	203	80.09725	3	11	3.46	1	0	20	1	
EU-06	IVEU06RC103	Ra-226	5	1	1	1		0.62	0.62		2.5		1.5	14	3.46	1	0	25	24	
EU-06	IVEU06RC103	Ra-228	3.2								1.6		1.5	14	3.46	1	0	25	25	
EU-06	IVEU06RC103	Sb-125	0.462								0.231		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	Sr-90	0.231	20	20			0.039	-0.0012	0.026704	0.1155	4.3251578	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	Tc-99	0.25								0.125		1.5	15	3.46	1	0	26	26	
EU-06	IVEU06RC103	Th-228	3.2	20	19			0.98	0.106	0.323458	1.6	4.946542	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	Th-230	3.49	20	20			0.85	0.199	0.200604	1.745	8.6987147	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	Th-232	3.1	20	20			1.08	0.2169	0.253824	1.55	6.1066036	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	Tritium (H-3)	2.28	19	19			1	0.0736842	0.409393	1.14	2.7846128	2.7846128	9	3.46	1	0	16	0	
EU-06	IVEU06RC103	U-234	4.01	19	19			0.91	0.5684737	0.152542	2.005	13.143896	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	U-235	0.195	20	20			0.101	0.05625	0.023697	0.0975	4.114379	3	8	3.46	1	0	14	0	
EU-06	IVEU06RC103	U-238	2.6	20	20			0.87	0.5534	0.161954	1.3	8.0269711	3	8	3.46	1	0	14	0	26
EU-06	IVEU06RC104	Ac-228	3.2	39	39			1.34	1.0411026	0.204488	1.6	7.8244235	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	Am-241	1.87	39	39			0.86	0.0195256	0.147325	0.935	6.3465222	3	11	0.77	1	0	5	0	

Table G-1
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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-06	IVEU06RC104	Ba-133	0.175								0.0875		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	C-14	0.456								0.228		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Cm-243/244	0.349								0.1745		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Co-60	0.0361	39	39			0.045	0.0028718	0.023998	0.01805	0.7521459	0.7521459	40	0.77	1	1	16	0	
EU-06	IVEU06RC104	Cs-134	0.157	39	39			0.027	0.0012154	0.014679	0.0785	5.3479341	3	11	0.77	1	0	5	0	
EU-06	IVEU06RC104	Cs-137	0.48	39	39			0.05	-0.000657	0.019644	0.24	12.217762	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	Eu-152	0.0416	39	39			0.091	-0.016597	0.046932	0.0208	0.4431943	0.4431943	107	0.77	1	1	42	3	
EU-06	IVEU06RC104	Eu-154	0.0499	39	39			0.23	-0.000462	0.141473	0.02495	0.1763589	0.1763589	1620	0.77	1	1	626	587	
EU-06	IVEU06RC104	Eu-155	3.8								1.9		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Fe-55	2690								1345		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	I-129	0.596								0.298		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	K-40	60	39	39			23.4	20.279487	1.423705	30	21.071778	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	Na-22	0.0865								0.04325		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Ni-59	208								104		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Ni-63	94.8								47.4		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Np-237	0.13								0.065		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Pb-210	5								2.5		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	Pu-238	2.97	39	39			0.025	0.0018538	0.010836	1.485	137.04474	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	Pu-239	2.59								1.295		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	Pu-240	2.6								1.3		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Pu-241	406	39	38			1.2	0.3594872	0.601533	203	337.47115	3	11	0.77	1	0	5	0	
EU-06	IVEU06RC104	Ra-226	5								2.5		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	Ra-228	3.2								1.6		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	Sb-125	0.462								0.231		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Sr-90	0.231	39	39			0.38	0.0688974	0.176257	0.1155	0.6552949	0.6552949	64	0.77	1	1	25	0	
EU-06	IVEU06RC104	Tc-99	0.25								0.125		1.5	15	0.77	1	0	6	6	
EU-06	IVEU06RC104	Th-228	3.2								1.6		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	Th-230	3.49								1.745		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	Th-232	3.1	39	39			1.4	1.0766667	0.126851	1.55	12.21904	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	Tritium (H-3)	2.28								1.14		1.5	14	0.77	1	0	6	6	
EU-06	IVEU06RC104	U-234	4.01	39	39			1.81	0.8305128	0.222509	2.005	9.0108713	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	U-235	0.195	39	39			0.08	0.0342564	0.020997	0.0975	4.6434895	3	8	0.77	1	0	4	0	
EU-06	IVEU06RC104	U-238	2.6	39	39			1.51	0.8361538	0.182376	1.3	7.1281172	3	8	0.77	1	0	4	0	6
EU-06	IVEU06RC301	Ac-228	3.2								1.6		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Am-241	1.87								0.935		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Ba-133	0.175								0.0875		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	C-14	0.456								0.228		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Cm-243/244	0.349								0.1745		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Co-60	0.0361								0.01805		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Cs-134	0.157								0.0785		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Cs-137	0.48								0.24		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Eu-152	0.0416								0.0208		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Eu-154	0.0499								0.02495		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Eu-155	3.8								1.9		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Fe-55	2690								1345		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	I-129	0.596								0.298		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	K-40	60								30		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Na-22	0.0865								0.04325		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Ni-59	208								104		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Ni-63	94.8								47.4		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Np-237	0.13								0.065		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Pb-210	5								2.5		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Pu-238	2.97								1.485		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Pu-239	2.59								1.295		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Pu-240	2.6								1.3		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Pu-241	406								203		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Ra-226	5								2.5		1.5	14	5.86	3	0	5	5	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-06	IVEU06RC301	Ra-228	3.2								1.6		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Sb-125	0.462								0.231		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Sr-90	0.231								0.1155		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Tc-99	0.25								0.125		1.5	15	5.86	3	0	6	6	
EU-06	IVEU06RC301	Th-228	3.2								1.6		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Th-230	3.49								1.745		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Th-232	3.1								1.55		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	Tritium (H-3)	2.28								1.14		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	U-234	4.01								2.005		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	U-235	0.195								0.0975		1.5	14	5.86	3	0	5	5	
EU-06	IVEU06RC301	U-238	2.6								1.3		1.5	14	5.86	3	0	5	5	6
EU-07	IVEU07RC101	Ac-228	3.2								1.6		1.5	14	4.77	1	0	34	34	
EU-07	IVEU07RC101	Am-241	1.87	22	21			0.18	0.0509545	0.124486	0.935	7.5108974	3	11	4.77	1	0	27	5	
EU-07	IVEU07RC101	Ba-133	0.175								0.0875		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	C-14	0.456								0.228		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Cm-243/244	0.349								0.1745		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Co-60	0.0361	1	1	1	12	0.04	0.04		0.01805		1.5	15	4.77	1	0	36	35	
EU-07	IVEU07RC101	Cs-134	0.157	13	1	1		0.04	0.0723077	0.009707	0.0785	8.0867364	3	11	4.77	1	0	27	14	
EU-07	IVEU07RC101	Cs-137	0.48	58	43	22		2.93	0.4364224	0.615021	0.24	0.3902307	0.3902307	243	4.77	1	1	580	522	
EU-07	IVEU07RC101	Eu-152	0.0416								0.0208		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Eu-154	0.0499								0.02495		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Eu-155	3.8								1.9		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Fe-55	2690								1345		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	I-129	0.596								0.298		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	K-40	60	34	34	34		24.27	18.385	2.864011	30	10.47482	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	Na-22	0.0865								0.04325		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Ni-59	208								104		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Ni-63	94.8								47.4		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Np-237	0.13								0.065		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Pb-210	5								2.5		1.5	14	4.77	1	0	34	34	
EU-07	IVEU07RC101	Pu-238	2.97	42	41	8		0.16	0.0143483	0.032277	1.485	46.008173	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	Pu-239	2.59								1.295		1.5	14	4.77	1	0	34	34	
EU-07	IVEU07RC101	Pu-240	2.6								1.3		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Pu-241	406								203		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Ra-226	5	22	22	22		2.16	0.9695	0.392234	2.5	6.3737544	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	Ra-228	3.2	11	11	11		2.87	1.56	0.561818	1.6	2.8478949	2.8478949	8	4.77	1	0	20	9	
EU-07	IVEU07RC101	Sb-125	0.462								0.231		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Sr-90	0.231	33	33			3.08	0.2340303	0.570281	0.1155	0.2025316	1.5	14	4.77	1	1	34	1	
EU-07	IVEU07RC101	Tc-99	0.25								0.125		1.5	15	4.77	1	0	36	36	
EU-07	IVEU07RC101	Th-228	3.2	44	44	11		2.69	1.3488409	0.459015	1.6	3.4857236	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	Th-230	3.49	33	33			2.7	1.1875758	0.544025	1.745	3.207576	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	Th-232	3.1	56	56	23		2.87	1.1242857	0.41125	1.55	3.7689948	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	Tritium (H-3)	2.28	4	4			-0.031	-0.049	0.02953	1.14	38.605271	1.5	14	4.77	1	0	34	30	
EU-07	IVEU07RC101	U-234	4.01	22	22			1.71	1.1054545	0.338452	2.005	5.9240299	3	8	4.77	1	0	20	0	
EU-07	IVEU07RC101	U-235	0.195	22	22	4		0.167	0.0646667	0.046168	0.0975	2.1118328	2.1118328	10	4.77	1	0	24	2	
EU-07	IVEU07RC101	U-238	2.6	56	56	21		3.56	1.0551852	0.618052	1.3	2.1033845	2.1033845	10	4.77	1	0	24	0	36
EU-07	IVEU07RC201	Ac-228	3.2								1.6		1.5	14	1.24	2	0	2	2	
EU-07	IVEU07RC201	Am-241	1.87								0.935		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Ba-133	0.175								0.0875		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	C-14	0.456								0.228		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Cm-243/244	0.349								0.1745		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Co-60	0.0361								0.01805		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Cs-134	0.157								0.0785		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Cs-137	0.48	6	2	2		0.53	0.12975	0.196714	0.24	1.2200473	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Eu-152	0.0416				4				0.0208		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Eu-154	0.0499								0.02495		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Eu-155	3.8								1.9		1.5	15	1.24	2	0	2	2	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-07	IVEU07RC201	Fe-55	2690								1345		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	I-129	0.596								0.298		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	K-40	60	2	2	2		20	19.5	0.707107	30	42.426407	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Na-22	0.0865								0.04325		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Ni-59	208								104		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Ni-63	94.8								47.4		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Np-237	0.13								0.065		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Pb-210	5								2.5		1.5	14	1.24	2	0	2	2	
EU-07	IVEU07RC201	Pu-238	2.97	2	2			0	-0.0005	0.000707	1.485	2100.1071	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Pu-239	2.59								1.295		1.5	14	1.24	2	0	2	2	
EU-07	IVEU07RC201	Pu-240	2.6								1.3		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Pu-241	406								203		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Ra-226	5	2	2	2		0.86	0.84	0.028284	2.5	88.388348	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Ra-228	3.2								1.6		1.5	14	1.24	2	0	2	2	
EU-07	IVEU07RC201	Sb-125	0.462								0.231		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Sr-90	0.231	2	2			0.076	0.046	0.042426	0.1155	2.7223611	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Tc-99	0.25								0.125		1.5	15	1.24	2	0	2	2	
EU-07	IVEU07RC201	Th-228	3.2	2	2			0.71	0.69	0.028284	1.6	56.568542	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Th-230	3.49	2	2			0.59	0.59	0	1.745		1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Th-232	3.1	2	2			0.76	0.75	0.014142	1.55	109.60155	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	Tritium (H-3)	2.28	2	2			0.024	0.024	0	1.14		1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	U-234	4.01								2.005		1.5	14	1.24	2	0	2	2	
EU-07	IVEU07RC201	U-235	0.195	2	2			0.043	0.0395	0.00495	0.0975	19.697975	1.5	14	1.24	2	0	2	0	
EU-07	IVEU07RC201	U-238	2.6	2	2			0.78	0.7	0.113137	1.3	11.490485	1.5	14	1.24	2	0	2	0	2
EU-07	IVEU07RC202	Ac-228	3.2								1.6		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Am-241	1.87								0.935		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Ba-133	0.175								0.0875		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	C-14	0.456								0.228		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Cm-243/244	0.349								0.1745		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Co-60	0.0361								0.01805		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Cs-134	0.157								0.0785		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Cs-137	0.48								0.24		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Eu-152	0.0416								0.0208		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Eu-154	0.0499								0.02495		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Eu-155	3.8								1.9		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Fe-55	2690								1345		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	I-129	0.596								0.298		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	K-40	60								30		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Na-22	0.0865								0.04325		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Ni-59	208								104		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Ni-63	94.8								47.4		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Np-237	0.13								0.065		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Pb-210	5								2.5		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Pu-238	2.97								1.485		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Pu-239	2.59								1.295		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Pu-240	2.6								1.3		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Pu-241	406								203		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Ra-226	5								2.5		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Ra-228	3.2								1.6		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Sb-125	0.462								0.231		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Sr-90	0.231								0.1155		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Tc-99	0.25								0.125		1.5	15	3.66	2	0	6	6	
EU-07	IVEU07RC202	Th-228	3.2								1.6		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Th-230	3.49								1.745		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Th-232	3.1								1.55		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	Tritium (H-3)	2.28								1.14		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	U-234	4.01								2.005		1.5	14	3.66	2	0	6	6	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-07	IVEU07RC202	U-235	0.195								0.0975		1.5	14	3.66	2	0	6	6	
EU-07	IVEU07RC202	U-238	2.6								1.3		1.5	14	3.66	2	0	6	6	6
EU-07	IVEU07RC301	Ac-228	3.2								1.6		1.5	14	6.45	3	0	6	6	
EU-07	IVEU07RC301	Am-241	1.87								0.935		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Ba-133	0.175								0.0875		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	C-14	0.456								0.228		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Cm-243/244	0.349								0.1745		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Co-60	0.0361								0.01805		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Cs-134	0.157								0.0785		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Cs-137	0.48	2	1	1		0.19	0.1	0.127279	0.24	1.8856181	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Eu-152	0.0416								0.0208		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Eu-154	0.0499								0.02495		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Eu-155	3.8								1.9		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Fe-55	2690								1345		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	I-129	0.596								0.298		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	K-40	60	2	2	2		19	17.5	2.12132	30	14.142136	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Na-22	0.0865								0.04325		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Ni-59	208								104		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Ni-63	94.8								47.4		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Np-237	0.13								0.065		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Pb-210	5								2.5		1.5	14	6.45	3	0	6	6	
EU-07	IVEU07RC301	Pu-238	2.97	2	2			0.005	0.002	0.004243	1.485	350.01786	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Pu-239	2.59								1.295		1.5	14	6.45	3	0	6	6	
EU-07	IVEU07RC301	Pu-240	2.6								1.3		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Pu-241	406								203		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Ra-226	5	2	2	2		0.91	0.775	0.190919	2.5	13.09457	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Ra-228	3.2								1.6		1.5	14	6.45	3	0	6	6	
EU-07	IVEU07RC301	Sb-125	0.462								0.231		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Sr-90	0.231	2	2			0.088	0.072	0.022627	0.1155	5.1044271	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Tc-99	0.25								0.125		1.5	15	6.45	3	0	6	6	
EU-07	IVEU07RC301	Th-228	3.2	2	2			1.2	1.08	0.169706	1.6	9.4280904	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Th-230	3.49	2	2			1	0.875	0.176777	1.745	9.8712107	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Th-232	3.1	2	2			1	0.96	0.056569	1.55	27.400388	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	Tritium (H-3)	2.28	1	1			-0.018	-0.018		1.14		1.5	14	6.45	3	0	6	5	
EU-07	IVEU07RC301	U-234	4.01								2.005		1.5	14	6.45	3	0	6	6	
EU-07	IVEU07RC301	U-235	0.195	2	2			0.039	0.037	0.002828	0.0975	34.471456	1.5	14	6.45	3	0	6	4	
EU-07	IVEU07RC301	U-238	2.6	2	2			0.92	0.795	0.176777	1.3	7.3539105	1.5	14	6.45	3	0	6	4	6
EU-08	IVEU08RC101	Ac-228	3.2	1	1			1.13	1.13		1.6		1.5	14	2.54	1	0	18	17	
EU-08	IVEU08RC101	Am-241	1.87	13	13			0.0451	0.0192877	0.017205	0.935	54.345105	3	11	2.54	1	0	14	1	
EU-08	IVEU08RC101	Ba-133	0.175								0.0875		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	C-14	0.456								0.228		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Cm-243/244	0.349								0.1745		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Co-60	0.0361	13	13			0.0497	-0.002933	0.023157	0.01805	0.7794484	0.7794484	40	2.54	1	1	51	38	
EU-08	IVEU08RC101	Cs-134	0.157								0.0785		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Cs-137	0.48	49	48	2		0.18	0.0291519	0.046143	0.24	5.2012332	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	Eu-152	0.0416	13	13			0.122	0.0395231	0.062748	0.0208	0.3314831	0.3314831	185	2.54	1	1	235	222	
EU-08	IVEU08RC101	Eu-154	0.0499	13	13			0.166	-0.086533	0.174489	0.02495	0.1429893	0.1429893	1620	2.54	1	1	2057	2044	
EU-08	IVEU08RC101	Eu-155	3.8								1.9		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Fe-55	2690	13	13			1.72	0.0807077	0.621047	1345	2165.698	3	11	2.54	1	0	14	1	
EU-08	IVEU08RC101	I-129	0.596								0.298		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	K-40	60	46	46	6		30.5	18.502276	6.414922	30	4.6765962	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	Na-22	0.0865								0.04325		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Ni-59	208	13	13			58.1	12.372385	20.62087	104	5.0434336	3	11	2.54	1	0	14	1	
EU-08	IVEU08RC101	Ni-63	94.8	13	13			0.626	-2.415308	3.310067	47.4	14.319951	3	11	2.54	1	0	14	1	
EU-08	IVEU08RC101	Np-237	0.13								0.065		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Pb-210	5								2.5		1.5	14	2.54	1	0	18	18	
EU-08	IVEU08RC101	Pu-238	2.97	16	16			0.102	0.0333276	0.032055	1.485	46.326536	3	8	2.54	1	0	11	0	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-08	IVEU08RC101	Pu-239	2.59								1.295		1.5	14	2.54	1	0	18	18	
EU-08	IVEU08RC101	Pu-240	2.6								1.3		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Pu-241	406	13	13			8.61	2.3617692	2.187107	203	92.816674	3	11	2.54	1	0	14	1	
EU-08	IVEU08RC101	Ra-226	5	3	3	3		0.81	0.7766667	0.035119	2.5	71.18685	1.5	14	2.54	1	0	18	15	
EU-08	IVEU08RC101	Ra-228	3.2								1.6		1.5	14	2.54	1	0	18	18	
EU-08	IVEU08RC101	Sb-125	0.462								0.231		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Sr-90	0.231	16	16			0.423	0.1582813	0.200209	0.1155	0.5768973	0.5768973	90	2.54	1	1	115	99	
EU-08	IVEU08RC101	Tc-99	0.25								0.125		1.5	15	2.54	1	0	20	20	
EU-08	IVEU08RC101	Th-228	3.2	16	16			1.72	1.32875	0.242429	1.6	6.5998791	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	Th-230	3.49	16	16			1.84	1.33375	0.326657	1.745	5.3419897	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	Th-232	3.1	16	16			1.71	1.39125	0.241575	1.55	6.4162349	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	Tritium (H-3)	2.28	13	13			1.79	-1.503846	1.422366	1.14	0.8014814	0.8014814	38	2.54	1	1	49	36	
EU-08	IVEU08RC101	U-234	4.01	13	13			1.1	0.9078462	0.119634	2.005	16.759442	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	U-235	0.195	16	16			0.123	0.0634813	0.029996	0.0975	3.2504594	3	8	2.54	1	0	11	0	
EU-08	IVEU08RC101	U-238	2.6	16	16			1.08	0.848	0.170354	1.3	7.6311793	3	8	2.54	1	0	11	0	20
EU-08	IVEU08RC102	Ac-228	3.2								1.6		1.5	14	1.44	1	0	11	11	
EU-08	IVEU08RC102	Am-241	1.87	58	58			0.118	0.0210341	0.023519	0.935	39.754841	3	11	1.44	1	0	8	0	
EU-08	IVEU08RC102	Ba-133	0.175	55	55	12		0.401	0.0322502	0.084397	0.0875	1.0367685	1.0367685	23	1.44	1	0	17	0	
EU-08	IVEU08RC102	C-14	0.456								0.228		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Cm-243/244	0.349								0.1745		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Co-60	0.0361	69	69	12		0.09558	0.0046294	0.031462	0.01805	0.573708	0.573708	71	1.44	1	1	52	0	
EU-08	IVEU08RC102	Cs-134	0.157								0.0785		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Cs-137	0.48	103	86	13		0.436	0.0150407	0.057538	0.24	4.1711809	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Eu-152	0.0416	68	68	12		0.844	0.0470391	0.252363	0.0208	0.0824211	1.5	15	1.44	1	1	11	0	
EU-08	IVEU08RC102	Eu-154	0.0499	68	68	12		0.404	-0.041944	0.190007	0.02495	0.1313107	0.1313107	1620	1.44	1	1	1168	1100	
EU-08	IVEU08RC102	Eu-155	3.8								1.9		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Fe-55	2690	58	53			30	5.3380183	8.072759	1345	166.60971	3	11	1.44	1	0	8	0	
EU-08	IVEU08RC102	I-129	0.596								0.298		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	K-40	60	31	31	1		39.34	22.93469	8.570045	30	3.5005652	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Na-22	0.0865								0.04325		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Ni-59	208								104		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Ni-63	94.8	58	58			48.5	4.6868858	6.85763	47.4	6.9120087	3	11	1.44	1	0	8	0	
EU-08	IVEU08RC102	Np-237	0.13								0.065		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Pb-210	5								2.5		1.5	14	1.44	1	0	11	11	
EU-08	IVEU08RC102	Pu-238	2.97	59	59			0.115	0.0160848	0.025564	1.485	58.089016	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Pu-239	2.59	43	43			0.0302	0.0033621	0.007488	1.295	172.9384	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Pu-240	2.6	43	43			0.0178	0.0019763	0.004403	1.3	295.22779	3	11	1.44	1	0	8	0	
EU-08	IVEU08RC102	Pu-241	406	58	57			3.34	-0.528699	1.412299	203	143.73729	3	11	1.44	1	0	8	0	
EU-08	IVEU08RC102	Ra-226	5	1	1	1		0.77	0.77		2.5		1.5	14	1.44	1	0	11	10	
EU-08	IVEU08RC102	Ra-228	3.2								1.6		1.5	14	1.44	1	0	11	11	
EU-08	IVEU08RC102	Sb-125	0.462								0.231		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Sr-90	0.231	60	60			1.25054372	0.1007929	0.232405	0.1155	0.4969777	0.4969777	139	1.44	1	1	101	41	
EU-08	IVEU08RC102	Tc-99	0.25								0.125		1.5	15	1.44	1	0	11	11	
EU-08	IVEU08RC102	Th-228	3.2	59	59			1.865	1.1458983	0.246954	1.6	6.4789291	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Th-230	3.49	59	59			2.39	1.0059661	0.353918	1.745	4.9305197	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Th-232	3.1	59	59			1.842	1.107339	0.273214	1.55	5.673218	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	Tritium (H-3)	2.28	69	69		1	11.8	-0.449799	3.509829	1.14	0.3248022	0.3248022	243	1.44	1	1	176	107	
EU-08	IVEU08RC102	U-234	4.01	58	58			1.503	0.7142207	0.287676	2.005	6.9696391	3	8	1.44	1	0	6	0	
EU-08	IVEU08RC102	U-235	0.195	59	59			0.3399	0.0568914	0.063236	0.0975	1.5418409	1.5418409	14	1.44	1	0	11	0	
EU-08	IVEU08RC102	U-238	2.6	59	59			1.297	0.6860797	0.267405	1.3	4.8615353	3	8	1.44	1	0	6	0	11
EU-08	IVEU08RC103	Ac-228	3.2								1.6		1.5	14	1.23	1	0	9	9	
EU-08	IVEU08RC103	Am-241	1.87	4	4			0.0302	0.0171625	0.008825	0.935	105.94828	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Ba-133	0.175	4	4			0.35	0.20525	0.161898	0.0875	0.5404642	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	C-14	0.456								0.228		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Cm-243/244	0.349								0.1745		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Co-60	0.0361	4	4			0.06106	0.0033278	0.039764	0.01805	0.4539254	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Cs-134	0.157								0.0785		1.5	15	1.23	1	0	10	10	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-08	IVEU08RC103	Cs-137	0.48	4	4			0.1435	0.0262678	0.079395	0.24	3.0228507	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Eu-152	0.0416	4	4			0.231	0.1365525	0.110647	0.0208	0.1879855	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Eu-154	0.0499	4	4			0.1822	0.03322	0.124283	0.02495	0.2007515	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Eu-155	3.8								1.9		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Fe-55	2690	4	4			0.6198	-0.2126	0.669833	1345	2007.9628	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	I-129	0.596								0.298		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	K-40	60								30		1.5	14	1.23	1	0	9	9	
EU-08	IVEU08RC103	Na-22	0.0865								0.04325		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Ni-59	208								104		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Ni-63	94.8	4	4			2.14367812	1.6075668	0.554202	47.4	85.528419	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Np-237	0.13								0.065		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Pb-210	5								2.5		1.5	14	1.23	1	0	9	9	
EU-08	IVEU08RC103	Pu-238	2.97	4	4			0.05504	0.036752	0.021637	1.485	68.63378	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Pu-239	2.59	4	4			0.0191835	0.006449	0.01002	1.295	129.24486	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Pu-240	2.6	4	4			0.0112665	0.0037875	0.005885	1.3	220.91524	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Pu-241	406	4	4			-0.2519858	-2.386284	2.056629	203	98.705198	1.5	15	1.23	1	0	10	6	
EU-08	IVEU08RC103	Ra-226	5								2.5		1.5	14	1.23	1	0	9	9	
EU-08	IVEU08RC103	Ra-228	3.2								1.6		1.5	14	1.23	1	0	9	9	
EU-08	IVEU08RC103	Sb-125	0.462								0.231		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Sr-90	0.231	4	4			0.25757262	-0.045164	0.244915	0.1155	0.4715918	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Tc-99	0.25								0.125		1.5	15	1.23	1	0	10	10	
EU-08	IVEU08RC103	Th-228	3.2	4	4			1.681	1.22595	0.380144	1.6	4.2089337	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Th-230	3.49	4	4			1.781	1.389	0.370033	1.745	4.7157914	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Th-232	3.1	4	4			1.796	1.377075	0.369405	1.55	4.1959423	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	Tritium (H-3)	2.28	4	4			0	-1.066357	1.231549	1.14	0.9256632	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	U-234	4.01	4	4			1.518	1.217675	0.26776	2.005	7.4880627	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	U-235	0.195	4	4			0.1885	0.130945	0.067157	0.0975	1.4518245	1.5	14	1.23	1	0	9	5	
EU-08	IVEU08RC103	U-238	2.6	4	4			1.355	1.0269	0.24165	1.3	5.3796806	1.5	14	1.23	1	0	9	5	10
EU-08	IVEU08RC301	Ac-228	3.2								1.6		1.5	14	14.64	3	0	13	13	
EU-08	IVEU08RC301	Am-241	1.87								0.935		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Ba-133	0.175								0.0875		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	C-14	0.456								0.228		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Cm-243/244	0.349								0.1745		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Co-60	0.0361				2				0.01805		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Cs-134	0.157	2					0.075	0	0.0785		1.5	15	14.64	3	0	13	11	
EU-08	IVEU08RC301	Cs-137	0.48	10	8	4		0.11	0.0614286	0.02897	0.24	8.2843097	3	8	14.64	3	0	7	0	
EU-08	IVEU08RC301	Eu-152	0.0416								0.0208		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Eu-154	0.0499								0.02495		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Eu-155	3.8								1.9		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Fe-55	2690								1345		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	I-129	0.596								0.298		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	K-40	60	10	10	6		21.08	18.387	2.613253	30	11.479946	3	8	14.64	3	0	7	0	
EU-08	IVEU08RC301	Na-22	0.0865								0.04325		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Ni-59	208								104		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Ni-63	94.8								47.4		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Np-237	0.13								0.065		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Pb-210	5								2.5		1.5	14	14.64	3	0	13	13	
EU-08	IVEU08RC301	Pu-238	2.97	4	4			0.003	0.00125	0.001258	1.485	1180.1583	1.5	14	14.64	3	0	13	9	
EU-08	IVEU08RC301	Pu-239	2.59								1.295		1.5	14	14.64	3	0	13	13	
EU-08	IVEU08RC301	Pu-240	2.6								1.3		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Pu-241	406								203		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Ra-226	5	4	4	4		0.85	0.7475	0.076322	2.5	32.756089	1.5	14	14.64	3	0	13	9	
EU-08	IVEU08RC301	Ra-228	3.2								1.6		1.5	14	14.64	3	0	13	13	
EU-08	IVEU08RC301	Sb-125	0.462								0.231		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Sr-90	0.231	4	4			0.022	0.0195	0.003786	0.1155	30.507624	1.5	14	14.64	3	0	13	9	
EU-08	IVEU08RC301	Tc-99	0.25								0.125		1.5	15	14.64	3	0	13	13	
EU-08	IVEU08RC301	Th-228	3.2	4	4			1.3	1.175	0.15	1.6	10.666667	1.5	14	14.64	3	0	13	9	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-08	IVEU08RC301	Th-230	3.49	4	4			1.1	0.9475	0.135984	1.745	12.832386	1.5	14	14.64	3	0	13	9	
EU-08	IVEU08RC301	Th-232	3.1	6	6	2		1.2	1.1333333	0.064083	1.55	24.187277	1.5	14	14.64	3	0	13	7	
EU-08	IVEU08RC301	Tritium (H-3)	2.28								1.14		1.5	14	14.64	3	0	13	13	
EU-08	IVEU08RC301	U-234	4.01								2.005		1.5	14	14.64	3	0	13	13	
EU-08	IVEU08RC301	U-235	0.195	5	5			0.06	0.0458	0.008729	0.0975	11.16933	1.5	14	14.64	3	0	13	8	
EU-08	IVEU08RC301	U-238	2.6	6	6	2		0.9	0.75	0.101587	1.3	12.796863	1.5	14	14.64	3	0	13	7	13
EU-09	IVEU09RC101	Ac-228	3.2								1.6		1.5	14	5.36	1	0	38	38	
EU-09	IVEU09RC101	Am-241	1.87	812	74			0.19	0.0609729	0.02512	0.935	37.221893	3	11	5.36	1	0	30	0	
EU-09	IVEU09RC101	Ba-133	0.175								0.0875		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	C-14	0.456								0.228		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Cm-243/244	0.349								0.1745		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Co-60	0.0361				728				0.01805		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Cs-134	0.157	1					0.075		0.0785		1.5	15	5.36	1	0	41	40	
EU-09	IVEU09RC101	Cs-137	0.48	1056	408	246		5.864	0.1176001	0.338692	0.24	0.7086092	0.7086092	48	5.36	1	1	129	0	
EU-09	IVEU09RC101	Eu-152	0.0416				728				0.0208		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Eu-154	0.0499								0.02495		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Eu-155	3.8	2	2	2		0.06	0.06	0	1.9		1.5	15	5.36	1	0	41	39	
EU-09	IVEU09RC101	Fe-55	2690								1345		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	I-129	0.596								0.298		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	K-40	60	15	15	10		19	16.349286	2.518743	30	11.910701	3	8	5.36	1	0	22	7	
EU-09	IVEU09RC101	Na-22	0.0865								0.04325		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Ni-59	208								104		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Ni-63	94.8								47.4		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Np-237	0.13								0.065		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Pb-210	5								2.5		1.5	14	5.36	1	0	38	38	
EU-09	IVEU09RC101	Pu-238	2.97	212	109	45		0.14	0.0176533	0.02169	1.485	68.464814	3	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	Pu-239	2.59	96					0.0125	0.002513	1.295	515.29502	3	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	Pu-240	2.6								1.3		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Pu-241	406								203		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Ra-226	5	732	708	708		1.2	0.7481557	0.164928	2.5	15.158168	3	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	Ra-228	3.2								1.6		1.5	14	5.36	1	0	38	38	
EU-09	IVEU09RC101	Sb-125	0.462								0.231		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Sr-90	0.231	65	65		482	1.05	0.2216154	0.206651	0.1155	0.5589139	0.5589139	90	5.36	1	1	242	177	
EU-09	IVEU09RC101	Tc-99	0.25								0.125		1.5	15	5.36	1	0	41	41	
EU-09	IVEU09RC101	Th-228	3.2	49	49			2.86	1.6204082	0.523975	1.6	3.0535806	3	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	Th-230	3.49	47	47			2.09	1.173617	0.38883	1.745	4.4878219	3	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	Th-232	3.1	774	582	536		2.76	1.1194186	0.541827	1.55	2.8606891	2.8606891	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	Tritium (H-3)	2.28	5	5			0.043	0.02	0.02429	1.14	46.933057	1.5	14	5.36	1	0	38	33	
EU-09	IVEU09RC101	U-234	4.01	43	43			1.3	0.6216279	0.194139	2.005	10.327625	3	8	5.36	1	0	22	0	
EU-09	IVEU09RC101	U-235	0.195	575	58	1	219	0.2	0.1187635	0.042073	0.0975	2.3174201	2.3174201	9	5.36	1	0	25	0	
EU-09	IVEU09RC101	U-238	2.6	806	539	471		5.07	0.9322829	0.381194	1.3	3.4103397	3	8	5.36	1	0	22	0	41
EU-09	IVEU09RC301	Ac-228	3.2								1.6		1.5	14	11.82	3	0	10	10	
EU-09	IVEU09RC301	Am-241	1.87								0.935		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Ba-133	0.175								0.0875		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	C-14	0.456								0.228		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Cm-243/244	0.349								0.1745		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Co-60	0.0361								0.01805		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Cs-134	0.157								0.0785		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Cs-137	0.48	7	3	1		0.07	0.0233333	0.026394	0.24	9.0928228	1.5	14	11.82	3	0	10	3	
EU-09	IVEU09RC301	Eu-152	0.0416								0.0208		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Eu-154	0.0499								0.02495		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Eu-155	3.8								1.9		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Fe-55	2690								1345		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	I-129	0.596								0.298		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	K-40	60	7	7	6		26.23	18.36	3.645769	30	8.2287161	1.5	14	11.82	3	0	10	3	
EU-09	IVEU09RC301	Na-22	0.0865								0.04325		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Ni-59	208								104		1.5	15	11.82	3	0	11	11	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-09	IVEU09RC301	Ni-63	94.8								47.4		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Np-237	0.13								0.065		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Pb-210	5								2.5		1.5	14	11.82	3	0	10	10	
EU-09	IVEU09RC301	Pu-238	2.97	5	5			0.001	0	0.000707	1.485	2100.1071	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	Pu-239	2.59								1.295		1.5	14	11.82	3	0	10	10	
EU-09	IVEU09RC301	Pu-240	2.6								1.3		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Pu-241	406								203		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Ra-226	5	5	5	5		1	0.82	0.147648	2.5	16.932137	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	Ra-228	3.2								1.6		1.5	14	11.82	3	0	10	10	
EU-09	IVEU09RC301	Sb-125	0.462								0.231		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Sr-90	0.231	5	5			0.12	0.0572	0.048515	0.1155	2.3807096	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	Tc-99	0.25								0.125		1.5	15	11.82	3	0	11	11	
EU-09	IVEU09RC301	Th-228	3.2	5	5			1.4	1.2	0.234521	1.6	6.8224229	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	Th-230	3.49	5	5			1.3	0.998	0.283408	1.745	6.1572045	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	Th-232	3.1	5	5			1.5	1.164	0.288929	1.55	5.3646387	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	Tritium (H-3)	2.28	5	5			0.055	0.0078	0.028261	1.14	40.337874	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	U-234	4.01								2.005		1.5	14	11.82	3	0	10	10	
EU-09	IVEU09RC301	U-235	0.195	5	5			0.051	0.042	0.00755	0.0975	12.91419	1.5	14	11.82	3	0	10	5	
EU-09	IVEU09RC301	U-238	2.6	5	5			1	0.842	0.098336	1.3	13.219959	1.5	14	11.82	3	0	10	5	11
EU-10	IVEU10RC101	Ac-228	3.2								1.6		1.5	14	1.30	1	0	10	10	
EU-10	IVEU10RC101	Am-241	1.87								0.935		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Ba-133	0.175								0.0875		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	C-14	0.456								0.228		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Cm-243/244	0.349								0.1745		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Co-60	0.0361								0.01805		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Cs-134	0.157								0.0785		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Cs-137	0.48	41	13	2		0.438	0.0843732	0.091757	0.24	2.6156185	2.6156185	9	1.30	1	0	6	0	
EU-10	IVEU10RC101	Eu-152	0.0416				4				0.0208		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Eu-154	0.0499								0.02495		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Eu-155	3.8								1.9		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Fe-55	2690								1345		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	I-129	0.596								0.298		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	K-40	60	2	2	2		19	19	0	30		1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Na-22	0.0865								0.04325		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Ni-59	208								104		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Ni-63	94.8								47.4		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Np-237	0.13								0.065		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Pb-210	5								2.5		1.5	14	1.30	1	0	10	10	
EU-10	IVEU10RC101	Pu-238	2.97	2	2			0.001	0.0005	0.000707	1.485	2100.1071	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Pu-239	2.59								1.295		1.5	14	1.30	1	0	10	10	
EU-10	IVEU10RC101	Pu-240	2.6								1.3		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Pu-241	406								203		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Ra-226	5	2	2	2		0.77	0.725	0.06364	2.5	39.28371	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Ra-228	3.2								1.6		1.5	14	1.30	1	0	10	10	
EU-10	IVEU10RC101	Sb-125	0.462								0.231		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Sr-90	0.231	2	2			0.05	0.047	0.004243	0.1155	27.223611	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Tc-99	0.25								0.125		1.5	15	1.30	1	0	10	10	
EU-10	IVEU10RC101	Th-228	3.2	2	2			0.84	0.73	0.155563	1.6	10.28519	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Th-230	3.49	2	2			0.62	0.56	0.084853	1.745	20.565022	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Th-232	3.1	2	2			0.85	0.705	0.205061	1.55	7.5587277	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	Tritium (H-3)	2.28	2	2			0.055	0.0325	0.03182	1.14	35.826744	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	U-234	4.01								2.005		1.5	14	1.30	1	0	10	10	
EU-10	IVEU10RC101	U-235	0.195	2	2			0.042	0.03	0.016971	0.0975	5.7452426	1.5	14	1.30	1	0	10	8	
EU-10	IVEU10RC101	U-238	2.6	2	2			0.62	0.56	0.084853	1.3	15.320647	1.5	14	1.30	1	0	10	8	10
EU-10	IVEU10RC201	Ac-228	3.2								1.6		1.5	14	3.20	2	0	5	5	
EU-10	IVEU10RC201	Am-241	1.87	1	1			0.004	0.004		0.935		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Ba-133	0.175	1	1			0.043	0.043		0.0875		1.5	15	3.20	2	0	5	4	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-10	IVEU10RC201	C-14	0.456								0.228		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Cm-243/244	0.349								0.1745		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Co-60	0.0361	1	1		5	0.002	0.002		0.01805		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Cs-134	0.157	5					0.075	0	0.0785		1.5	15	3.20	2	0	5	0	
EU-10	IVEU10RC201	Cs-137	0.48	10	4	1		0.17	0.0874444	0.048449	0.24	4.953692	3	8	3.20	2	0	3	0	
EU-10	IVEU10RC201	Eu-152	0.0416	1	1			-0.25	-0.25		0.0208		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Eu-154	0.0499	1	1			-0.15	-0.15		0.02495		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Eu-155	3.8								1.9		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Fe-55	2690	1	1			9	9		1345		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	I-129	0.596								0.298		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	K-40	60	7	7	6		18	14.647143	2.403565	30	12.481461	1.5	14	3.20	2	0	5	0	
EU-10	IVEU10RC201	Na-22	0.0865								0.04325		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Ni-59	208								104		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Ni-63	94.8	1	1			5.9	5.9		47.4		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Np-237	0.13								0.065		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Pb-210	5								2.5		1.5	14	3.20	2	0	5	5	
EU-10	IVEU10RC201	Pu-238	2.97	2	2			0.003	0.0015	0.002121	1.485	700.03571	1.5	14	3.20	2	0	5	3	
EU-10	IVEU10RC201	Pu-239	2.59	1	1			0.00485	0.00485		1.295		1.5	14	3.20	2	0	5	4	
EU-10	IVEU10RC201	Pu-240	2.6	1	1			0.00285	0.00285		1.3		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Pu-241	406	1	1			0.34	0.34		203		1.5	15	3.20	2	0	5	4	
EU-10	IVEU10RC201	Ra-226	5	1	1	1		0.65	0.65		2.5		1.5	14	3.20	2	0	5	4	
EU-10	IVEU10RC201	Ra-228	3.2								1.6		1.5	14	3.20	2	0	5	5	
EU-10	IVEU10RC201	Sb-125	0.462								0.231		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Sr-90	0.231	2	2			0.06	0.048	0.016971	0.1155	6.8059028	1.5	14	3.20	2	0	5	3	
EU-10	IVEU10RC201	Tc-99	0.25								0.125		1.5	15	3.20	2	0	5	5	
EU-10	IVEU10RC201	Th-228	3.2	2	2			1.3	1.09	0.296985	1.6	5.3874802	1.5	14	3.20	2	0	5	3	
EU-10	IVEU10RC201	Th-230	3.49	2	2			0.99	0.867	0.173948	1.745	10.031718	1.5	14	3.20	2	0	5	3	
EU-10	IVEU10RC201	Th-232	3.1	7	7	5		1.3	0.8914286	0.18452	1.55	8.4001748	1.5	14	3.20	2	0	5	0	
EU-10	IVEU10RC201	Tritium (H-3)	2.28	1	1			0.03	0.03		1.14		1.5	14	3.20	2	0	5	4	
EU-10	IVEU10RC201	U-234	4.01	1	1			0.584	0.584		2.005		1.5	14	3.20	2	0	5	4	
EU-10	IVEU10RC201	U-235	0.195	2	2			0.076	0.053	0.032527	0.0975	2.9975179	1.5	14	3.20	2	0	5	3	
EU-10	IVEU10RC201	U-238	2.6	7	7	5		0.82	0.6655714	0.121589	1.3	10.691732	1.5	14	3.20	2	0	5	0	5
EU-10	IVEU10RC301	Ac-228	3.2								1.6		1.5	14	12.89	3	0	11	11	
EU-10	IVEU10RC301	Am-241	1.87								0.935		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Ba-133	0.175								0.0875		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	C-14	0.456								0.228		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Cm-243/244	0.349								0.1745		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Co-60	0.0361								0.01805		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Cs-134	0.157								0.0785		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Cs-137	0.48	32	5	5		0.2	0.0438313	0.053011	0.24	4.5273909	3	8	12.89	3	0	7	0	
EU-10	IVEU10RC301	Eu-152	0.0416								0.0208		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Eu-154	0.0499								0.02495		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Eu-155	3.8								1.9		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Fe-55	2690								1345		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	I-129	0.596								0.298		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	K-40	60	5	5	5		21	18.8	1.788854	30	16.77051	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Na-22	0.0865								0.04325		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Ni-59	208								104		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Ni-63	94.8								47.4		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Np-237	0.13								0.065		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Pb-210	5								2.5		1.5	14	12.89	3	0	11	11	
EU-10	IVEU10RC301	Pu-238	2.97	5	5			0.003	0.0008	0.001483	1.485	1001.1868	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Pu-239	2.59								1.295		1.5	14	12.89	3	0	11	11	
EU-10	IVEU10RC301	Pu-240	2.6								1.3		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Pu-241	406								203		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Ra-226	5	5	5	5		0.96	0.76	0.146116	2.5	17.109648	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Ra-228	3.2								1.6		1.5	14	12.89	3	0	11	11	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-10	IVEU10RC301	Sb-125	0.462								0.231		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Sr-90	0.231	5	5			0.071	0.0296	0.027052	0.1155	4.2695862	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Tc-99	0.25								0.125		1.5	15	12.89	3	0	12	12	
EU-10	IVEU10RC301	Th-228	3.2	5	5			1.5	1.096	0.34217	1.6	4.6760444	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Th-230	3.49	5	5			1.1	0.86	0.228145	1.745	7.6486549	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Th-232	3.1	5	5			1.4	1.044	0.285009	1.55	5.4384291	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	Tritium (H-3)	2.28	2	2			0.023	0.0095	0.019092	1.14	59.711239	1.5	14	12.89	3	0	11	9	
EU-10	IVEU10RC301	U-234	4.01								2.005		1.5	14	12.89	3	0	11	11	
EU-10	IVEU10RC301	U-235	0.195	5	5			0.057	0.042	0.009823	0.0975	9.9252387	1.5	14	12.89	3	0	11	6	
EU-10	IVEU10RC301	U-238	2.6	5	5			1.1	0.862	0.219249	1.3	5.9293391	1.5	14	12.89	3	0	11	6	12
EU-11	IVEU11RC101	Ac-228	3.2	1	1			1.33	1.33		1.6		1.5	14	1.97	1	0	14	13	
EU-11	IVEU11RC101	Am-241	1.87	3	2			0.011	0.0236667	0.027301	0.935	34.248089	1.5	15	1.97	1	0	15	12	
EU-11	IVEU11RC101	Ba-133	0.175								0.0875		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	C-14	0.456								0.228		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Cm-243/244	0.349								0.1745		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Co-60	0.0361	2	2		187	-0.001	-0.008	0.009899	0.01805	1.8233253	1.5	15	1.97	1	0	15	13	
EU-11	IVEU11RC101	Cs-134	0.157	188	2			0.044	0.0743564	0.006931	0.0785	11.326006	3	11	1.97	1	0	11	0	
EU-11	IVEU11RC101	Cs-137	0.48	195	3	1		1.2	0.0866333	0.106823	0.24	2.246703	2.246703	10	1.97	1	0	10	0	
EU-11	IVEU11RC101	Eu-152	0.0416	2	2			-0.009	-0.0545	0.064347	0.0208	0.3232488	1.5	15	1.97	1	0	15	13	
EU-11	IVEU11RC101	Eu-154	0.0499	2	2			0.33	0.161	0.239002	0.02495	0.1043924	1.5	15	1.97	1	0	15	13	
EU-11	IVEU11RC101	Eu-155	3.8								1.9		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Fe-55	2690								1345		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	I-129	0.596								0.298		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	K-40	60	191	191	189		21.8	14.84356	1.846787	30	16.244429	3	8	1.97	1	0	8	0	
EU-11	IVEU11RC101	Na-22	0.0865	2	2			0.023	-0.0155	0.054447	0.04325	0.7943472	1.5	15	1.97	1	0	15	13	
EU-11	IVEU11RC101	Ni-59	208								104		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Ni-63	94.8								47.4		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Np-237	0.13								0.065		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Pb-210	5								2.5		1.5	14	1.97	1	0	14	14	
EU-11	IVEU11RC101	Pu-238	2.97	5	5	1		0.01	0.0028	0.005848	1.485	253.92964	1.5	14	1.97	1	0	14	9	
EU-11	IVEU11RC101	Pu-239	2.59								1.295		1.5	14	1.97	1	0	14	14	
EU-11	IVEU11RC101	Pu-240	2.6								1.3		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Pu-241	406	2	2			1.1	0.645	0.643467	203	315.47841	1.5	15	1.97	1	0	15	13	
EU-11	IVEU11RC101	Ra-226	5	4	4	2		4	2.03	1.573997	2.5	1.588313	1.5	14	1.97	1	0	14	10	
EU-11	IVEU11RC101	Ra-228	3.2	1	1			1.33	1.33		1.6		1.5	14	1.97	1	0	14	13	
EU-11	IVEU11RC101	Sb-125	0.462								0.231		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Sr-90	0.231	4	4			0.1	0.03075	0.047675	0.1155	2.4226475	1.5	14	1.97	1	0	14	10	
EU-11	IVEU11RC101	Tc-99	0.25								0.125		1.5	15	1.97	1	0	15	15	
EU-11	IVEU11RC101	Th-228	3.2	4	4			1.1	0.855	0.29149	1.6	5.4890311	1.5	14	1.97	1	0	14	10	
EU-11	IVEU11RC101	Th-230	3.49	4	4			0.92	0.615	0.228108	1.745	7.6498797	1.5	14	1.97	1	0	14	10	
EU-11	IVEU11RC101	Th-232	3.1	192	192	187		1.36	0.8613542	0.155308	1.55	9.9801488	3	8	1.97	1	0	8	0	
EU-11	IVEU11RC101	Tritium (H-3)	2.28								1.14		1.5	14	1.97	1	0	14	14	
EU-11	IVEU11RC101	U-234	4.01	2	2			1.52	1.15	0.523259	2.005	3.8317543	1.5	14	1.97	1	0	14	12	
EU-11	IVEU11RC101	U-235	0.195	5	4			0.131	0.094	0.064896	0.0975	1.5024022	1.5	14	1.97	1	0	14	9	
EU-11	IVEU11RC101	U-238	2.6	192	192	188		1.68	0.6388542	0.133553	1.3	9.7339707	3	8	1.97	1	0	8	0	15
EU-11	IVEU11RC102	Ac-228	3.2								1.6		1.5	14	0.30	1	0	3	3	
EU-11	IVEU11RC102	Am-241	1.87								0.935		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Ba-133	0.175								0.0875		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	C-14	0.456								0.228		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Cm-243/244	0.349								0.1745		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Co-60	0.0361								0.01805		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Cs-134	0.157								0.0785		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Cs-137	0.48	12	1	1		0.06	0.02875	0.010687	0.24	22.457921	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	Eu-152	0.0416								0.0208		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Eu-154	0.0499								0.02495		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Eu-155	3.8								1.9		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Fe-55	2690								1345		1.5	15	0.30	1	0	3	3	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-11	IVEU11RC102	I-129	0.596								0.298		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	K-40	60	12	12	12		20	16.916667	1.378954	30	21.755615	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	Na-22	0.0865								0.04325		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Ni-59	208								104		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Ni-63	94.8								47.4		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Np-237	0.13								0.065		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Pb-210	5								2.5		1.5	14	0.30	1	0	3	3	
EU-11	IVEU11RC102	Pu-238	2.97	12	12			0.005	-0.000167	0.004469	1.485	332.30794	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	Pu-239	2.59								1.295		1.5	14	0.30	1	0	3	3	
EU-11	IVEU11RC102	Pu-240	2.6								1.3		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Pu-241	406								203		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Ra-226	5	12	12	12		0.85	0.7525	0.077122	2.5	32.416378	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	Ra-228	3.2								1.6		1.5	14	0.30	1	0	3	3	
EU-11	IVEU11RC102	Sb-125	0.462								0.231		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Sr-90	0.231	13	13			1.9	0.2188462	0.508414	0.1155	0.227177	0.227177	542	0.30	1	1	81	68	
EU-11	IVEU11RC102	Tc-99	0.25								0.125		1.5	15	0.30	1	0	3	3	
EU-11	IVEU11RC102	Th-228	3.2								1.6		1.5	14	0.30	1	0	3	3	
EU-11	IVEU11RC102	Th-230	3.49	12	12			1	0.8858333	0.084149	1.745	20.737017	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	Th-232	3.1	12	12	2		1.4	1.1991667	0.149573	1.55	10.362859	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	Tritium (H-3)	2.28	12	12			0.11	0.0139167	0.054906	1.14	20.762896	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	U-234	4.01								2.005		1.5	14	0.30	1	0	3	3	
EU-11	IVEU11RC102	U-235	0.195	12	12			0.052	0.04125	0.008572	0.0975	11.37439	3	8	0.30	1	0	2	0	
EU-11	IVEU11RC102	U-238	2.6	12	12			0.94	0.8141667	0.051779	1.3	25.106723	3	8	0.30	1	0	2	0	3
EU-11	IVEU11RC201	Ac-228	3.2								1.6		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Am-241	1.87								0.935		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Ba-133	0.175								0.0875		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	C-14	0.456								0.228		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Cm-243/244	0.349								0.1745		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Co-60	0.0361								0.01805		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Cs-134	0.157								0.0785		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Cs-137	0.48								0.24		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Eu-152	0.0416								0.0208		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Eu-154	0.0499								0.02495		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Eu-155	3.8								1.9		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Fe-55	2690								1345		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	I-129	0.596								0.298		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	K-40	60								30		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Na-22	0.0865								0.04325		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Ni-59	208								104		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Ni-63	94.8								47.4		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Np-237	0.13								0.065		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Pb-210	5								2.5		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Pu-238	2.97								1.485		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Pu-239	2.59								1.295		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Pu-240	2.6								1.3		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Pu-241	406								203		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Ra-226	5								2.5		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Ra-228	3.2								1.6		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Sb-125	0.462								0.231		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Sr-90	0.231								0.1155		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Tc-99	0.25								0.125		1.5	15	0.46	2	0	1	1	
EU-11	IVEU11RC201	Th-228	3.2								1.6		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Th-230	3.49								1.745		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Th-232	3.1								1.55		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	Tritium (H-3)	2.28								1.14		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	U-234	4.01								2.005		1.5	14	0.46	2	0	1	1	
EU-11	IVEU11RC201	U-235	0.195								0.0975		1.5	14	0.46	2	0	1	1	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-11	IVEU11RC201	U-238	2.6								1.3		1.5	14	0.46	2	0	1	1	1
EU-11	IVEU11RC202	Ac-228	3.2								1.6		1.5	14	0.51	2	0	1	1	
EU-11	IVEU11RC202	Am-241	1.87								0.935		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Ba-133	0.175								0.0875		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	C-14	0.456								0.228		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Cm-243/244	0.349								0.1745		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Co-60	0.0361								0.01805		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Cs-134	0.157								0.0785		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Cs-137	0.48	4	4	4		0.12	0.089425	0.022331	0.24	10.747583	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Eu-152	0.0416								0.0208		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Eu-154	0.0499								0.02495		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Eu-155	3.8								1.9		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Fe-55	2690								1345		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	I-129	0.596								0.298		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	K-40	60	3	3	3		26.5	22.166667	3.883727	30	7.7245394	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Na-22	0.0865								0.04325		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Ni-59	208								104		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Ni-63	94.8								47.4		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Np-237	0.13								0.065		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Pb-210	5	1	1	1		1.31	1.31		2.5		1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Pu-238	2.97	3	3			0.001	-0.002333	0.004933	1.485	301.041	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Pu-239	2.59								1.295		1.5	14	0.51	2	0	1	1	
EU-11	IVEU11RC202	Pu-240	2.6								1.3		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Pu-241	406								203		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Ra-226	5	4	4	4		0.97	0.87175	0.096327	2.5	25.953227	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Ra-228	3.2	1	1	1		0.809	0.809		1.6		1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Sb-125	0.462								0.231		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Sr-90	0.231	3	3			0.12	0.064	0.053254	0.1155	2.1688468	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Tc-99	0.25								0.125		1.5	15	0.51	2	0	1	1	
EU-11	IVEU11RC202	Th-228	3.2	2	2	1		1.42	1.26	0.226274	1.6	7.0710678	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Th-230	3.49	4	4	1		1.45	1.08	0.2502	1.745	6.9744227	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Th-232	3.1	4	4	3		1.4	1.25	0.129099	1.55	12.006248	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	Tritium (H-3)	2.28	2	2			-0.05	-0.0665	0.023335	1.14	48.85465	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	U-234	4.01	1	1	1		1.53	1.53		2.005		1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	U-235	0.195	4	4	1		0.0662	0.05055	0.011989	0.0975	8.1322507	1.5	14	0.51	2	0	1	0	
EU-11	IVEU11RC202	U-238	2.6	4	4	1		1.53	0.93	0.409634	1.3	3.1735648	1.5	14	0.51	2	0	1	0	1
EU-11	IVEU11RC203	Ac-228	3.2								1.6		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Am-241	1.87								0.935		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Ba-133	0.175								0.0875		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	C-14	0.456								0.228		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Cm-243/244	0.349								0.1745		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Co-60	0.0361								0.01805		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Cs-134	0.157								0.0785		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Cs-137	0.48								0.24		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Eu-152	0.0416								0.0208		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Eu-154	0.0499								0.02495		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Eu-155	3.8								1.9		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Fe-55	2690								1345		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	I-129	0.596								0.298		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	K-40	60								30		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Na-22	0.0865								0.04325		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Ni-59	208								104		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Ni-63	94.8								47.4		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Np-237	0.13								0.065		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Pb-210	5								2.5		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Pu-238	2.97								1.485		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Pu-239	2.59								1.295		1.5	14	0.45	2	0	1	1	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-11	IVEU11RC203	Pu-240	2.6								1.3		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Pu-241	406								203		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Ra-226	5								2.5		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Ra-228	3.2								1.6		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Sb-125	0.462								0.231		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Sr-90	0.231								0.1155		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Tc-99	0.25								0.125		1.5	15	0.45	2	0	1	1	
EU-11	IVEU11RC203	Th-228	3.2								1.6		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Th-230	3.49								1.745		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Th-232	3.1								1.55		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	Tritium (H-3)	2.28								1.14		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	U-234	4.01								2.005		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	U-235	0.195								0.0975		1.5	14	0.45	2	0	1	1	
EU-11	IVEU11RC203	U-238	2.6								1.3		1.5	14	0.45	2	0	1	1	1
EU-11	IVEU11RC301	Ac-228	3.2								1.6		1.5	14	14.05	3	0	12	12	
EU-11	IVEU11RC301	Am-241	1.87								0.935		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Ba-133	0.175								0.0875		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	C-14	0.456								0.228		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Cm-243/244	0.349								0.1745		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Co-60	0.0361				5				0.01805		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Cs-134	0.157	5					0.075	0	0.0785		1.5	15	14.05	3	0	13	8	
EU-11	IVEU11RC301	Cs-137	0.48	20	12	10		0.24	0.0810526	0.056877	0.24	4.2196655	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Eu-152	0.0416								0.0208		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Eu-154	0.0499								0.02495		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Eu-155	3.8								1.9		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Fe-55	2690								1345		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	I-129	0.596								0.298		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	K-40	60	20	20	19		21	17.486	2.564639	30	11.697553	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Na-22	0.0865								0.04325		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Ni-59	208								104		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Ni-63	94.8								47.4		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Np-237	0.13								0.065		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Pb-210	5								2.5		1.5	14	14.05	3	0	12	12	
EU-11	IVEU11RC301	Pu-238	2.97	13	13			0.009	0.0012308	0.003295	1.485	450.6424	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Pu-239	2.59								1.295		1.5	14	14.05	3	0	12	12	
EU-11	IVEU11RC301	Pu-240	2.6								1.3		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Pu-241	406								203		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Ra-226	5	13	13	13		0.89	0.7576923	0.064956	2.5	38.487825	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Ra-228	3.2								1.6		1.5	14	14.05	3	0	12	12	
EU-11	IVEU11RC301	Sb-125	0.462								0.231		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Sr-90	0.231	13	13			0.092	0.0236154	0.032958	0.1155	3.5044172	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Tc-99	0.25								0.125		1.5	15	14.05	3	0	13	13	
EU-11	IVEU11RC301	Th-228	3.2	13	13			1.6	1.25	0.247857	1.6	6.4553225	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Th-230	3.49	13	13			1.2	0.9946154	0.205208	1.745	8.5035739	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Th-232	3.1	18	18	5		1.5	1.0855556	0.300983	1.55	5.1497901	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	Tritium (H-3)	2.28	8	8			0.073	0.049875	0.021122	1.14	53.973002	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	U-234	4.01								2.005		1.5	14	14.05	3	0	12	12	
EU-11	IVEU11RC301	U-235	0.195	14	14			0.069	0.0392143	0.012565	0.0975	7.7597874	3	8	14.05	3	0	7	0	
EU-11	IVEU11RC301	U-238	2.6	18	18	5		0.86	0.6972222	0.103969	1.3	12.503771	3	8	14.05	3	0	7	0	13
EU-12	IVEU12RC101	Ac-228	3.2	40	40			1.69	1.31375	0.146807	1.6	10.898676	3	8	0.38	1	0	2	0	
EU-12	IVEU12RC101	Am-241	1.87	40	40			0.12	-0.005325	0.05005	0.935	18.681158	3	11	0.38	1	0	3	0	
EU-12	IVEU12RC101	Ba-133	0.175								0.0875		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	C-14	0.456								0.228		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Cm-243/244	0.349								0.1745		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Co-60	0.0361	40	40			0.095	0.002925	0.028613	0.01805	0.6308388	0.6308388	52	0.38	1	1	10	0	
EU-12	IVEU12RC101	Cs-134	0.157	40	40			0.052	0.001	0.023668	0.0785	3.3167749	3	11	0.38	1	0	3	0	
EU-12	IVEU12RC101	Cs-137	0.48	46	40	2		0.078	0.0125652	0.030304	0.24	7.9196655	3	8	0.38	1	0	2	0	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-12	IVEU12RC101	Eu-152	0.0416	40	40			0.09	0.0051175	0.050554	0.0208	0.4114405	0.4114405	107	0.38	1	1	21	0	
EU-12	IVEU12RC101	Eu-154	0.0499	40	40			0.4	-0.005575	0.180312	0.02495	0.1383716	0.1383716	1620	0.38	1	1	309	269	
EU-12	IVEU12RC101	Eu-155	3.8								1.9		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Fe-55	2690								1345		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	I-129	0.596								0.298		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	K-40	60	43	43	3		23.3	20.676744	1.380448	30	21.732075	3	8	0.38	1	0	2	0	
EU-12	IVEU12RC101	Na-22	0.0865								0.04325		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Ni-59	208								104		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Ni-63	94.8								47.4		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Np-237	0.13								0.065		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Pb-210	5								2.5		1.5	14	0.38	1	0	3	3	
EU-12	IVEU12RC101	Pu-238	2.97	46	46			0.08	0.0062609	0.020268	1.485	73.269717	3	8	0.38	1	0	2	0	
EU-12	IVEU12RC101	Pu-239	2.59								1.295		1.5	14	0.38	1	0	3	3	
EU-12	IVEU12RC101	Pu-240	2.6								1.3		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Pu-241	406	42	42			4.4	-0.022362	1.504178	203	134.95742	3	11	0.38	1	0	3	0	
EU-12	IVEU12RC101	Ra-226	5	3	3	3		0.87	0.7966667	0.102144	2.5	24.475325	1.5	14	0.38	1	0	3	0	
EU-12	IVEU12RC101	Ra-228	3.2								1.6		1.5	14	0.38	1	0	3	3	
EU-12	IVEU12RC101	Sb-125	0.462								0.231		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Sr-90	0.231	41	40			0.48	0.1407073	0.112415	0.1155	1.0274397	1.0274397	26	0.38	1	0	5	0	
EU-12	IVEU12RC101	Tc-99	0.25								0.125		1.5	15	0.38	1	0	3	3	
EU-12	IVEU12RC101	Th-228	3.2	3	3			1	0.8733333	0.111505	1.6	14.349151	1.5	14	0.38	1	0	3	0	
EU-12	IVEU12RC101	Th-230	3.49	3	3			0.8	0.7066667	0.086217	1.745	20.239679	1.5	14	0.38	1	0	3	0	
EU-12	IVEU12RC101	Th-232	3.1	43	43			1.69	1.28	0.189297	1.55	8.1881934	3	8	0.38	1	0	2	0	
EU-12	IVEU12RC101	Tritium (H-3)	2.28	2	2			-0.002	-0.013	0.015556	1.14	73.281976	1.5	14	0.38	1	0	3	1	
EU-12	IVEU12RC101	U-234	4.01	44	44			1.15	0.8181818	0.130085	2.005	15.412958	3	8	0.38	1	0	2	0	
EU-12	IVEU12RC101	U-235	0.195	47	45			0.086	0.0385106	0.018367	0.0975	5.3084683	3	8	0.38	1	0	2	0	
EU-12	IVEU12RC101	U-238	2.6	47	47			1.06	0.8246809	0.110922	1.3	11.719942	3	8	0.38	1	0	2	0	3
EU-12	IVEU12RC201	Ac-228	3.2								1.6		1.5	14	3.64	2	0	6	6	
EU-12	IVEU12RC201	Am-241	1.87								0.935		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Ba-133	0.175								0.0875		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	C-14	0.456								0.228		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Cm-243/244	0.349								0.1745		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Co-60	0.0361				7				0.01805		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Cs-134	0.157	7					0.075	1.15E-09	0.0785	68281678	1.5	15	3.64	2	0	6	0	
EU-12	IVEU12RC201	Cs-137	0.48	11	4	4		0.13	0.0820727	0.020051	0.24	11.969246	3	8	3.64	2	0	3	0	
EU-12	IVEU12RC201	Eu-152	0.0416								0.0208		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Eu-154	0.0499								0.02495		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Eu-155	3.8								1.9		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Fe-55	2690								1345		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	I-129	0.596								0.298		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	K-40	60	11	11	11		21.1	15.830909	3.068161	30	9.7778456	3	8	3.64	2	0	3	0	
EU-12	IVEU12RC201	Na-22	0.0865								0.04325		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Ni-59	208								104		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Ni-63	94.8								47.4		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Np-237	0.13								0.065		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Pb-210	5	1	1	1		0.818	0.818		2.5		1.5	14	3.64	2	0	6	5	
EU-12	IVEU12RC201	Pu-238	2.97	3	3			0.001	0	0.001	1.485	1485	1.5	14	3.64	2	0	6	3	
EU-12	IVEU12RC201	Pu-239	2.59								1.295		1.5	14	3.64	2	0	6	6	
EU-12	IVEU12RC201	Pu-240	2.6								1.3		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Pu-241	406								203		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Ra-226	5	4	4	4		0.81	0.75225	0.065271	2.5	38.302089	1.5	14	3.64	2	0	6	2	
EU-12	IVEU12RC201	Ra-228	3.2	1	1	1		1.32	1.32		1.6		1.5	14	3.64	2	0	6	5	
EU-12	IVEU12RC201	Sb-125	0.462								0.231		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Sr-90	0.231	3	3			0.061	0.031	0.029052	0.1155	3.975674	1.5	14	3.64	2	0	6	3	
EU-12	IVEU12RC201	Tc-99	0.25								0.125		1.5	15	3.64	2	0	6	6	
EU-12	IVEU12RC201	Th-228	3.2	4	4	1		1.72	1.04	0.469965	1.6	3.4045122	1.5	14	3.64	2	0	6	2	
EU-12	IVEU12RC201	Th-230	3.49	4	4	1		1.14	0.86	0.237206	1.745	7.3564763	1.5	14	3.64	2	0	6	2	

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-12	IVEU12RC201	Th-232	3.1	11	11	8		1.5	0.9636364	0.242375	1.55	6.3950591	3	8	3.64	2	0	3	0	
EU-12	IVEU12RC201	Tritium (H-3)	2.28								1.14		1.5	14	3.64	2	0	6	6	
EU-12	IVEU12RC201	U-234	4.01	1	1	1		0.688	0.688		2.005		1.5	14	3.64	2	0	6	5	
EU-12	IVEU12RC201	U-235	0.195	4	4	1		0.045	0.037725	0.006322	0.0975	15.422049	1.5	14	3.64	2	0	6	2	
EU-12	IVEU12RC201	U-238	2.6	11	11	8		0.87	0.7119091	0.125012	1.3	10.398971	3	8	3.64	2	0	3	0	6
EU-12	IVEU12RC301	Ac-228	3.2								1.6		1.5	14	15.29	3	0	13	13	
EU-12	IVEU12RC301	Am-241	1.87								0.935		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Ba-133	0.175								0.0875		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	C-14	0.456								0.228		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Cm-243/244	0.349								0.1745		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Co-60	0.0361								0.01805		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Cs-134	0.157								0.0785		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Cs-137	0.48	9	3	3		0.17	0.0483333	0.061745	0.24	3.8869264	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Eu-152	0.0416								0.0208		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Eu-154	0.0499								0.02495		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Eu-155	3.8								1.9		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Fe-55	2690								1345		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	I-129	0.596								0.298		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	K-40	60	9	9	9		24	19.777778	2.279132	30	13.162904	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Na-22	0.0865								0.04325		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Ni-59	208								104		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Ni-63	94.8								47.4		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Np-237	0.13								0.065		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Pb-210	5								2.5		1.5	14	15.29	3	0	13	13	
EU-12	IVEU12RC301	Pu-238	2.97	9	8			0.003	0.0006667	0.001936	1.485	766.8507	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Pu-239	2.59								1.295		1.5	14	15.29	3	0	13	13	
EU-12	IVEU12RC301	Pu-240	2.6								1.3		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Pu-241	406								203		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Ra-226	5	9	9	9		0.93	0.7733333	0.119269	2.5	20.96109	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Ra-228	3.2								1.6		1.5	14	15.29	3	0	13	13	
EU-12	IVEU12RC301	Sb-125	0.462								0.231		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Sr-90	0.231	9	9			0.11	0.0364444	0.046033	0.1155	2.5090751	2.5090751	9	15.29	3	0	9	0	
EU-12	IVEU12RC301	Tc-99	0.25								0.125		1.5	15	15.29	3	0	14	14	
EU-12	IVEU12RC301	Th-228	3.2	9	9			1.4	0.9477778	0.32085	1.6	4.9867607	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Th-230	3.49	9	9			1.2	0.79	0.271708	1.745	6.4223461	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Th-232	3.1	9	9			1.3	0.9233333	0.349929	1.55	4.4294755	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	Tritium (H-3)	2.28	8	8			0.053	0.004	0.030687	1.14	37.148841	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	U-234	4.01								2.005		1.5	14	15.29	3	0	13	13	
EU-12	IVEU12RC301	U-235	0.195	9	9			0.051	0.0413333	0.008322	0.0975	11.716414	3	8	15.29	3	0	8	0	
EU-12	IVEU12RC301	U-238	2.6	9	9			0.96	0.7566667	0.136198	1.3	9.5449003	3	8	15.29	3	0	8	0	14
EU-13	IVEU13RC201	Ac-228	3.2								1.6		1.5	14	1.09	2	0	2	2	
EU-13	IVEU13RC201	Am-241	1.87								0.935		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Ba-133	0.175								0.0875		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	C-14	0.456								0.228		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Cm-243/244	0.349								0.1745		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Co-60	0.0361								0.01805		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Cs-134	0.157								0.0785		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Cs-137	0.48	6	3	3		0.16	0.0658333	0.050241	0.24	4.7769669	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Eu-152	0.0416								0.0208		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Eu-154	0.0499								0.02495		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Eu-155	3.8								1.9		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Fe-55	2690								1345		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	I-129	0.596								0.298		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	K-40	60	6	6	6		20	18.5	1.516575	30	19.781414	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Na-22	0.0865								0.04325		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Ni-59	208								104		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Ni-63	94.8								47.4		1.5	15	1.09	2	0	2	2	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-13	IVEU13RC201	Np-237	0.13								0.065		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Pb-210	5								2.5		1.5	14	1.09	2	0	2	2	
EU-13	IVEU13RC201	Pu-238	2.97	6	6			0.003	-0.000333	0.003077	1.485	482.64511	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Pu-239	2.59								1.295		1.5	14	1.09	2	0	2	2	
EU-13	IVEU13RC201	Pu-240	2.6								1.3		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Pu-241	406								203		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Ra-226	5	6	6	6		1	0.8366667	0.102892	2.5	24.297433	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Ra-228	3.2								1.6		1.5	14	1.09	2	0	2	2	
EU-13	IVEU13RC201	Sb-125	0.462								0.231		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Sr-90	0.231	6	6			0.22	0.0681667	0.080948	0.1155	1.4268432	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Tc-99	0.25								0.125		1.5	15	1.09	2	0	2	2	
EU-13	IVEU13RC201	Th-228	3.2								1.6		1.5	14	1.09	2	0	2	2	
EU-13	IVEU13RC201	Th-230	3.49	6	6			0.94	0.7883333	0.089759	1.745	19.440961	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Th-232	3.1	6	6	6		1.6	1.2666667	0.196638	1.55	7.8824882	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	Tritium (H-3)	2.28	6	6			-0.011	-0.047167	0.032283	1.14	35.313134	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	U-234	4.01								2.005		1.5	14	1.09	2	0	2	2	
EU-13	IVEU13RC201	U-235	0.195	6	6			0.052	0.0415	0.008408	0.0975	11.595645	1.5	14	1.09	2	0	2	0	
EU-13	IVEU13RC201	U-238	2.6	6	6			0.78	0.7383333	0.031252	1.3	41.597782	1.5	14	1.09	2	0	2	0	2
EU-13	IVEU13RC301	Ac-228	3.2								1.6		1.5	14	16.03	3	0	14	14	
EU-13	IVEU13RC301	Am-241	1.87								0.935		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Ba-133	0.175								0.0875		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	C-14	0.456								0.228		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Cm-243/244	0.349								0.1745		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Co-60	0.0361								0.01805		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Cs-134	0.157								0.0785		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Cs-137	0.48	2	1	1		0.17	0.105	0.091924	0.24	2.6108558	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Eu-152	0.0416								0.0208		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Eu-154	0.0499								0.02495		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Eu-155	3.8								1.9		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Fe-55	2690								1345		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	I-129	0.596								0.298		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	K-40	60	2	2	2		18	16.5	2.12132	30	14.142136	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Na-22	0.0865								0.04325		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Ni-59	208								104		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Ni-63	94.8								47.4		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Np-237	0.13								0.065		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Pb-210	5								2.5		1.5	14	16.03	3	0	14	14	
EU-13	IVEU13RC301	Pu-238	2.97	2	1			0	0.001	0.001414	1.485	1050.0536	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Pu-239	2.59								1.295		1.5	14	16.03	3	0	14	14	
EU-13	IVEU13RC301	Pu-240	2.6								1.3		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Pu-241	406								203		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Ra-226	5	2	2	2		0.87	0.71	0.226274	2.5	11.048543	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Ra-228	3.2								1.6		1.5	14	16.03	3	0	14	14	
EU-13	IVEU13RC301	Sb-125	0.462								0.231		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Sr-90	0.231	2	2			0.13	0.087	0.060811	0.1155	1.8993217	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Tc-99	0.25								0.125		1.5	15	16.03	3	0	15	15	
EU-13	IVEU13RC301	Th-228	3.2	1	1			0.89	0.89		1.6		1.5	14	16.03	3	0	14	13	
EU-13	IVEU13RC301	Th-230	3.49	2	2			1	0.82	0.254558	1.745	6.8550074	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Th-232	3.1	2	2	1		1.2	1.075	0.176777	1.55	8.7681241	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	Tritium (H-3)	2.28	1	1			-0.045	-0.045		1.14		1.5	14	16.03	3	0	14	13	
EU-13	IVEU13RC301	U-234	4.01								2.005		1.5	14	16.03	3	0	14	14	
EU-13	IVEU13RC301	U-235	0.195	2	2			0.054	0.042	0.016971	0.0975	5.7452426	1.5	14	16.03	3	0	14	12	
EU-13	IVEU13RC301	U-238	2.6	2	2			0.72	0.69	0.042426	1.3	30.641294	1.5	14	16.03	3	0	14	12	15
EU-14	IVEU14RC301	Ac-228	3.2								1.6		1.5	14	17.08	3	0	15	15	
EU-14	IVEU14RC301	Am-241	1.87								0.935		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Ba-133	0.175								0.0875		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	C-14	0.456								0.228		1.5	15	17.08	3	0	16	16	

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Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-14	IVEU14RC301	Cm-243/244	0.349								0.1745		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Co-60	0.0361								0.01805		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Cs-134	0.157								0.0785		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Cs-137	0.48	3	3	3		0.29	0.1333333	0.136504	0.24	1.7581906	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Eu-152	0.0416								0.0208		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Eu-154	0.0499								0.02495		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Eu-155	3.8								1.9		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Fe-55	2690								1345		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	I-129	0.596								0.298		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	K-40	60	3	3	3		17	12.433333	4.045162	30	7.4162672	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Na-22	0.0865								0.04325		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Ni-59	208								104		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Ni-63	94.8								47.4		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Np-237	0.13								0.065		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Pb-210	5								2.5		1.5	14	17.08	3	0	15	15	
EU-14	IVEU14RC301	Pu-238	2.97	3	2			-0.001	0	0.001732	1.485	857.36515	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Pu-239	2.59								1.295		1.5	14	17.08	3	0	15	15	
EU-14	IVEU14RC301	Pu-240	2.6								1.3		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Pu-241	406								203		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Ra-226	5	3	3	3		0.7	0.5466667	0.150111	2.5	16.654335	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Ra-228	3.2								1.6		1.5	14	17.08	3	0	15	15	
EU-14	IVEU14RC301	Sb-125	0.462								0.231		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Sr-90	0.231	3	3			0.11	0.064	0.041073	0.1155	2.8120591	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Tc-99	0.25								0.125		1.5	15	17.08	3	0	16	16	
EU-14	IVEU14RC301	Th-228	3.2	3	3			1	0.9	0.1	1.6	16	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Th-230	3.49	3	3			0.61	0.57	0.060828	1.745	28.687623	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Th-232	3.1	3	3			1	0.8666667	0.119304	1.55	12.992071	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	Tritium (H-3)	2.28								1.14		1.5	14	17.08	3	0	15	15	
EU-14	IVEU14RC301	U-234	4.01								2.005		1.5	14	17.08	3	0	15	15	
EU-14	IVEU14RC301	U-235	0.195	3	3			0.032	0.027	0.004359	0.0975	22.368034	1.5	14	17.08	3	0	15	12	
EU-14	IVEU14RC301	U-238	2.6	3	3			0.79	0.6533333	0.140119	1.3	9.2778283	1.5	14	17.08	3	0	15	12	16
EU-15	IVEU15RC301	Ac-228	3.2								1.6		1.5	14	18.68	3	0	16	16	
EU-15	IVEU15RC301	Am-241	1.87								0.935		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Ba-133	0.175								0.0875		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	C-14	0.456								0.228		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Cm-243/244	0.349								0.1745		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Co-60	0.0361								0.01805		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Cs-134	0.157								0.0785		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Cs-137	0.48	5	5	5		0.38	0.16	0.132098	0.24	1.8168268	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Eu-152	0.0416								0.0208		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Eu-154	0.0499								0.02495		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Eu-155	3.8								1.9		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Fe-55	2690								1345		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	I-129	0.596								0.298		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	K-40	60	5	5	5		19	16.8	2.167948	30	13.837968	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Na-22	0.0865								0.04325		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Ni-59	208								104		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Ni-63	94.8								47.4		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Np-237	0.13								0.065		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Pb-210	5								2.5		1.5	14	18.68	3	0	16	16	
EU-15	IVEU15RC301	Pu-238	2.97	5	5			0.001	0	0.000707	1.485	2100.1071	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Pu-239	2.59								1.295		1.5	14	18.68	3	0	16	16	
EU-15	IVEU15RC301	Pu-240	2.6								1.3		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Pu-241	406								203		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Ra-226	5	5	5	5		1.4	0.832	0.327063	2.5	7.6437946	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Ra-228	3.2								1.6		1.5	14	18.68	3	0	16	16	
EU-15	IVEU15RC301	Sb-125	0.462								0.231		1.5	15	18.68	3	0	17	17	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-15	IVEU15RC301	Sr-90	0.231	5	5			0.12	0.0752	0.030589	0.1155	3.7758408	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Tc-99	0.25								0.125		1.5	15	18.68	3	0	17	17	
EU-15	IVEU15RC301	Th-228	3.2	5	5			2.1	1.252	0.528697	1.6	3.0263109	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Th-230	3.49	5	5			1.3	0.858	0.280927	1.745	6.2115773	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Th-232	3.1	5	5			1.9	1.1	0.468668	1.55	3.3072429	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	Tritium (H-3)	2.28								1.14		1.5	14	18.68	3	0	16	16	
EU-15	IVEU15RC301	U-234	4.01								2.005		1.5	14	18.68	3	0	16	16	
EU-15	IVEU15RC301	U-235	0.195	5	5			0.069	0.0464	0.013107	0.0975	7.4386313	1.5	14	18.68	3	0	16	11	
EU-15	IVEU15RC301	U-238	2.6	5	5			1.2	0.868	0.201792	1.3	6.4422781	1.5	14	18.68	3	0	16	11	17
EU-16	IVEU16RC301	Ac-228	3.2								1.6		1.5	14	19.65	3	0	17	17	
EU-16	IVEU16RC301	Am-241	1.87								0.935		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Ba-133	0.175								0.0875		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	C-14	0.456								0.228		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Cm-243/244	0.349								0.1745		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Co-60	0.0361								0.01805		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Cs-134	0.157								0.0785		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Cs-137	0.48	2	2	2		0.09	0.09	0	0.24		1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Eu-152	0.0416								0.0208		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Eu-154	0.0499								0.02495		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Eu-155	3.8								1.9		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Fe-55	2690								1345		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	I-129	0.596								0.298		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	K-40	60	2	2	2		16	15.5	0.707107	30	42.426407	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Na-22	0.0865								0.04325		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Ni-59	208								104		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Ni-63	94.8								47.4		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Np-237	0.13								0.065		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Pb-210	5								2.5		1.5	14	19.65	3	0	17	17	
EU-16	IVEU16RC301	Pu-238	2.97	2	2			0	-0.0015	0.002121	1.485	700.03571	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Pu-239	2.59								1.295		1.5	14	19.65	3	0	17	17	
EU-16	IVEU16RC301	Pu-240	2.6								1.3		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Pu-241	406								203		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Ra-226	5	2	2	2		1.6	1.15	0.636396	2.5	3.928371	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Ra-228	3.2								1.6		1.5	14	19.65	3	0	17	17	
EU-16	IVEU16RC301	Sb-125	0.462								0.231		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Sr-90	0.231	2	2			0.08	0.0665	0.019092	0.1155	6.0496914	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Tc-99	0.25								0.125		1.5	15	19.65	3	0	18	18	
EU-16	IVEU16RC301	Th-228	3.2	2	2			1.1	1.035	0.091924	1.6	17.405705	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Th-230	3.49	2	2			0.81	0.75	0.084853	1.745	20.565022	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Th-232	3.1	2	2			1	0.87	0.183848	1.55	8.4308885	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	Tritium (H-3)	2.28								1.14		1.5	14	19.65	3	0	17	17	
EU-16	IVEU16RC301	U-234	4.01								2.005		1.5	14	19.65	3	0	17	17	
EU-16	IVEU16RC301	U-235	0.195	2	2			0.072	0.0565	0.02192	0.0975	4.4479298	1.5	14	19.65	3	0	17	15	
EU-16	IVEU16RC301	U-238	2.6	2	2			1.3	1.01	0.410122	1.3	3.169789	1.5	14	19.65	3	0	17	15	18
NA-01	NEBNA01RC201	Ac-228	3.2								1.6		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Am-241	1.87								0.935		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Ba-133	0.175								0.0875		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	C-14	0.456								0.228		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Cm-243/244	0.349								0.1745		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Co-60	0.0361								0.01805		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Cs-134	0.157								0.0785		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Cs-137	0.48								0.24		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Eu-152	0.0416								0.0208		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Eu-154	0.0499								0.02495		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Eu-155	3.8								1.9		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Fe-55	2690								1345		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	I-129	0.596								0.298		1.5	15	0.10	2	0	1	1	

Table G-1
Radionuclide Data Gaps Calculation Summary
(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
NA-01	NEBNA01RC201	K-40	60								30		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Na-22	0.0865								0.04325		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Ni-59	208								104		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Ni-63	94.8								47.4		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Np-237	0.13								0.065		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Pb-210	5								2.5		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Pu-238	2.97								1.485		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Pu-239	2.59								1.295		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Pu-240	2.6								1.3		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Pu-241	406								203		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Ra-226	5								2.5		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Ra-228	3.2								1.6		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Sb-125	0.462								0.231		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Sr-90	0.231								0.1155		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Tc-99	0.25								0.125		1.5	15	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Th-228	3.2								1.6		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Th-230	3.49								1.745		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Th-232	3.1								1.55		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	Tritium (H-3)	2.28								1.14		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	U-234	4.01								2.005		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	U-235	0.195								0.0975		1.5	14	0.10	2	0	1	1	
NA-01	NEBNA01RC201	U-238	2.6								1.3		1.5	14	0.10	2	0	1	1	1
NA-02	IIINA02RC201	Ac-228	3.2								1.6		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Am-241	1.87								0.935		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Ba-133	0.175								0.0875		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	C-14	0.456								0.228		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Cm-243/244	0.349								0.1745		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Co-60	0.0361								0.01805		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Cs-134	0.157								0.0785		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Cs-137	0.48								0.24		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Eu-152	0.0416								0.0208		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Eu-154	0.0499								0.02495		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Eu-155	3.8								1.9		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Fe-55	2690								1345		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	I-129	0.596								0.298		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	K-40	60								30		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Na-22	0.0865								0.04325		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Ni-59	208								104		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Ni-63	94.8								47.4		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Np-237	0.13								0.065		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Pb-210	5								2.5		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Pu-238	2.97								1.485		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Pu-239	2.59								1.295		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Pu-240	2.6								1.3		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Pu-241	406								203		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Ra-226	5								2.5		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Ra-228	3.2								1.6		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Sb-125	0.462								0.231		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Sr-90	0.231								0.1155		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Tc-99	0.25								0.125		1.5	15	0.68	2	0	2	2	
NA-02	IIINA02RC201	Th-228	3.2								1.6		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Th-230	3.49								1.745		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Th-232	3.1								1.55		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	Tritium (H-3)	2.28								1.14		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	U-234	4.01								2.005		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	U-235	0.195								0.0975		1.5	14	0.68	2	0	1	1	
NA-02	IIINA02RC201	U-238	2.6								1.3		1.5	14	0.68	2	0	1	1	2

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(Rural Residential)

EU	SU	Analyte	Rural Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Rural Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
WBNA-01	WBNA01RC101	Ac-228	3.2	12	12			1.4	1.1691667	0.138134	1.6	11.582938	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Am-241	1.87	13	13			0.032	0.0109231	0.011679	0.935	80.054933	3	11	0.21	1	0	2	0	
WBNA-01	WBNA01RC101	Ba-133	0.175								0.0875		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	C-14	0.456								0.228		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Cm-243/244	0.349								0.1745		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Co-60	0.0361	13	13			0.061	0.0101769	0.032131	0.01805	0.5617567	0.5617567	71	0.21	1	1	8	0	
WBNA-01	WBNA01RC101	Cs-134	0.157	13	13			0.041	-0.002923	0.032413	0.0785	2.4218973	2.4218973	12	0.21	1	0	2	0	
WBNA-01	WBNA01RC101	Cs-137	0.48	15	14			0.27	0.0673929	0.083804	0.24	2.8638305	2.8638305	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Eu-152	0.0416	13	13		1	0.47	0.0492308	0.343207	0.0208	0.0606048	1.5	15	0.21	1	1	2	0	
WBNA-01	WBNA01RC101	Eu-154	0.0499	13	13			0.2	-0.010769	0.195766	0.02495	0.127448	0.127448	1620	0.21	1	1	173	160	
WBNA-01	WBNA01RC101	Eu-155	3.8								1.9		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Fe-55	2690								1345		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	I-129	0.596								0.298		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	K-40	60	13	13			23.9	20.853846	2.982341	30	10.059211	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Na-22	0.0865	13	13			0.062	-0.000385	0.043659	0.04325	0.9906368	0.9906368	27	0.21	1	1	3	0	
WBNA-01	WBNA01RC101	Ni-59	208								104		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Ni-63	94.8								47.4		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Np-237	0.13								0.065		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Pb-210	5								2.5		1.5	14	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Pu-238	2.97	13	13			0.103	0.0153846	0.028111	1.485	52.825357	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Pu-239	2.59								1.295		1.5	14	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Pu-240	2.6								1.3		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Pu-241	406	13	13			4.1	0.8292308	1.579844	203	128.49368	3	11	0.21	1	0	2	0	
WBNA-01	WBNA01RC101	Ra-226	5	13	10			2.5	1.3515385	0.736205	2.5	3.3957944	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Ra-228	3.2	12	12			1.4	1.1691667	0.138134	1.6	11.582938	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Sb-125	0.462								0.231		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Sr-90	0.231	13	13			0.63	0.2230769	0.147048	0.1155	0.7854585	0.7854585	48	0.21	1	1	6	0	
WBNA-01	WBNA01RC101	Tc-99	0.25								0.125		1.5	15	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	Th-228	3.2	13	13			1.81	1.0823077	0.360166	1.6	4.4424014	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Th-230	3.49	13	13			1.44	0.9892308	0.222877	1.745	7.8294147	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Th-232	3.1	25	25			1.7	1.1084	0.252003	1.55	6.1507129	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	Tritium (H-3)	2.28								1.14		1.5	14	0.21	1	0	2	2	
WBNA-01	WBNA01RC101	U-234	4.01	13	13			1.72	0.8153846	0.337284	2.005	5.9445515	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	U-235	0.195	13	13			0.083	0.0372308	0.025378	0.0975	3.8419617	3	8	0.21	1	0	1	0	
WBNA-01	WBNA01RC101	U-238	2.6	13	13			1.55	0.7792308	0.292873	1.3	4.4387901	3	8	0.21	1	0	1	0	2
																			Total Samples	616

[a] A "1" in this column means the average for this analyte exceeds the DCGL or the standard deviation exceeds the LBGR and it is assumed this SU will require remediation. The number of samples for these SUs is based only on those required for deliniation of nature and extent of contamination.

Table G-2
Radionuclide Data Gaps Calculation Summary
(Residential)

EU	SU	Analyte	Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC101	Ac-228	3.2	20	20			1.53	1.224	0.158027	1.6	10.124832	3.00	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Am-241	1.87	20	20			0.07	-0.016335	0.051836	0.983259209	18.968507	3	11	3.39	1	0	19	0	
EU-01	IVEU01RC101	Ba-133	0.175								0.087668644		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	C-14	0.456								139.7005115		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Cm-243/244	0.349								0.175489416		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Co-60	0.0361	20	20		2	0.063	0.0044	0.030287	0.018119848	0.5982705	0.5982705	71	3.39	1	1	121	101	
EU-01	IVEU01RC101	Cs-134	0.157	22	20			0.05	0.0124545	0.034323	0.07919429	2.3073233	2.3073233	12	3.39	1	0	21	0	
EU-01	IVEU01RC101	Cs-137	0.48	24	21			1.16	0.1087833	0.326352	0.24	0.735402	0.735402	48	3.39	1	1	82	58	
EU-01	IVEU01RC101	Eu-152	0.0416	20	20			0.12	-0.00885	0.046726	0.020814406	0.4454594	0.4454594	107	3.39	1	1	182	162	
EU-01	IVEU01RC101	Eu-154	0.0499	19	19		0	0.37	0.0022632	0.203375	0.024950155	0.1226803	0.1226803	1620	3.39	1	1	2749	2730	
EU-01	IVEU01RC101	Eu-155	3.8								1.903322648		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Fe-55	2690								1461.911262		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	I-129	0.596								1.262193866		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	K-40	60	24	24			25.5	20.330417	2.84717	30	10.536778	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Na-22	0.0865								0.043308929		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Ni-59	208								541.446433		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Ni-63	94.8								246.5901147		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Np-237	0.13								0.068047461		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Pb-210	5								2.5		1.5	14	3.39	1	0	24	24	
EU-01	IVEU01RC101	Pu-238	2.97	22	22			0.012	-0.000773	0.008874	1.635548449	184.2991	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Pu-239	2.59								1.430938981		1.5	14	3.39	1	0	24	24	
EU-01	IVEU01RC101	Pu-240	2.6								1.432213109		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Pu-241	406	20	20			1.2	-0.724	0.965573	225.8293531	233.88127	3	11	3.39	1	0	19	0	
EU-01	IVEU01RC101	Ra-226	5	2	2			0.95	0.9	0.070711	2.5	35.355339	1.5	14	3.39	1	0	24	22	
EU-01	IVEU01RC101	Ra-228	3.2								1.6		1.5	14	3.39	1	0	24	24	
EU-01	IVEU01RC101	Sb-125	0.462								0.231442714		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Sr-90	0.231	20	20			0.45	0.08745	0.139362	1.960528741	14.06786	3	8	3.39	1	1	14	0	
EU-01	IVEU01RC101	Tc-99	0.25								48.16625994		1.5	15	3.39	1	0	26	26	
EU-01	IVEU01RC101	Th-228	3.2	2	2			1.3	0.905	0.558614	1.6	2.86423	1.5	14	3.39	1	0	24	22	
EU-01	IVEU01RC101	Th-230	3.49	2	2			1	0.715	0.403051	1.909550267	4.7377402	1.5	14	3.39	1	0	24	22	
EU-01	IVEU01RC101	Th-232	3.1	24	24			1.53	1.1791667	0.211185	1.699812707	8.0489118	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	Tritium (H-3)	2.28	1	1			-0.048	-0.048		1.345023403		1.5	14	3.39	1	0	24	23	
EU-01	IVEU01RC101	U-234	4.01	22	22			1.12	0.8518182	0.139817	2.483402446	17.76175	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	U-235	0.195	24	24			0.053	0.0339583	0.010861	0.098571969	9.0760272	3	8	3.39	1	0	14	0	
EU-01	IVEU01RC101	U-238	2.6	26	26			1.15	0.8315385	0.176968	1.3	7.3459766	3	8	3.39	1	0	14	0	26
EU-01	IVEU01RC102	Ac-228	3.2								1.6		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Am-241	1.87								0.983259209		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ba-133	0.175								0.087668644		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	C-14	0.456								139.7005115		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Cm-243/244	0.349								0.175489416		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Co-60	0.0361								0.018119848		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Cs-134	0.157								0.07919429		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Cs-137	0.48	46	31			2.702	0.4565741	0.641098	0.24	0.3743579	0.3743579	243	1.14	1	1	139	93	
EU-01	IVEU01RC102	Eu-152	0.0416								0.020814406		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Eu-154	0.0499								0.024950155		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Eu-155	3.8								1.903322648		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Fe-55	2690								1461.911262		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	I-129	0.596								1.262193866		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	K-40	60								30		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Na-22	0.0865								0.043308929		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ni-59	208								541.446433		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ni-63	94.8								246.5901147		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Np-237	0.13								0.068047461		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Pb-210	5								2.5		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Pu-238	2.97								1.635548449		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Pu-239	2.59								1.430938981		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Pu-240	2.6								1.432213109		1.5	15	1.14	1	0	9	9	

Table G-2
Radionuclide Data Gaps Calculation Summary
(Residential)

EU	SU	Analyte	Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC102	Pu-241	406								225.8293531		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Ra-226	5								2.5		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Ra-228	3.2								1.6		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Sb-125	0.462								0.231442714		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Sr-90	0.231								1.960528741		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Tc-99	0.25								48.16625994		1.5	15	1.14	1	0	9	9	
EU-01	IVEU01RC102	Th-228	3.2								1.6		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Th-230	3.49								1.909550267		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Th-232	3.1								1.699812707		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	Tritium (H-3)	2.28								1.345023403		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	U-234	4.01								2.483402446		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	U-235	0.195								0.098571969		1.5	14	1.14	1	0	8	8	
EU-01	IVEU01RC102	U-238	2.6								1.3		1.5	14	1.14	1	0	8	8	9
EU-01	IVEU01RC201	Ac-228	3.2								1.6		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Am-241	1.87								0.983259209		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ba-133	0.175								0.087668644		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	C-14	0.456								139.7005115		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Cm-243/244	0.349								0.175489416		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Co-60	0.0361								0.018119848		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Cs-134	0.157								0.07919429		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Cs-137	0.48								0.24		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Eu-152	0.0416								0.020814406		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Eu-154	0.0499								0.024950155		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Eu-155	3.8								1.903322648		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Fe-55	2690								1461.911262		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	I-129	0.596								1.262193866		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	K-40	60								30		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Na-22	0.0865								0.043308929		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ni-59	208								541.446433		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ni-63	94.8								246.5901147		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Np-237	0.13								0.068047461		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pb-210	5								2.5		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-238	2.97								1.635548449		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-239	2.59								1.430938981		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-240	2.6								1.432213109		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Pu-241	406								225.8293531		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ra-226	5								2.5		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Ra-228	3.2								1.6		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Sb-125	0.462								0.231442714		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Sr-90	0.231								1.960528741		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Tc-99	0.25								48.16625994		1.5	15	0.53	2	0	1	1	
EU-01	IVEU01RC201	Th-228	3.2								1.6		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Th-230	3.49								1.909550267		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Th-232	3.1								1.699812707		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	Tritium (H-3)	2.28								1.345023403		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	U-234	4.01								2.483402446		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	U-235	0.195								0.098571969		1.5	14	0.53	2	0	1	1	
EU-01	IVEU01RC201	U-238	2.6								1.3		1.5	14	0.53	2	0	1	1	1
EU-01	IVEU01RC202	Ac-228	3.2								1.6		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Am-241	1.87								0.983259209		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ba-133	0.175								0.087668644		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	C-14	0.456								139.7005115		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Cm-243/244	0.349								0.175489416		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Co-60	0.0361								0.018119848		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Cs-134	0.157								0.07919429		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Cs-137	0.48	1	1			0.12	0.12		0.24		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Eu-152	0.0416								0.020814406		1.5	15	0.37	2	0	1	1	

Table G-2
Radionuclide Data Gaps Calculation Summary
(Residential)

EU	SU	Analyte	Residential DCGL (piC/g)	Number of Valid Samples	Number of Detects	Number of Detection Uncertain	Number of Rejected Samples	Max Detected Result (piC/g)	Average (piC/g)	Std. Dev. (piC/g)	Delta Residential	Relative Shift	Test Shift	Statistically Required Number of Samples per Area Size	SU Acreage	SU Class	Remediation Test[a]	Risk Assessment Required Samples per SU	Risk Assessment Data Gap Rural Residential	Risk Assessment Radiological Samples per SU required
EU-01	IVEU01RC202	Eu-154	0.0499								0.024950155		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Eu-155	3.8								1.903322648		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Fe-55	2690								1461.911262		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	I-129	0.596								1.262193866		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	K-40	60	1	1			19	19		30		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Na-22	0.0865								0.043308929		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ni-59	208								541.446433		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ni-63	94.8								246.5901147		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Np-237	0.13								0.068047461		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pb-210	5								2.5		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pu-238	2.97	1	1			0.003	0.003		1.635548449		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Pu-239	2.59								1.430938981		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pu-240	2.6								1.432213109		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Pu-241	406								225.8293531		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Ra-226	5	1	1			0.74	0.74		2.5		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Ra-228	3.2								1.6		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	Sb-125	0.462								0.231442714		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Sr-90	0.231	1	1			0.032	0.032		1.960528741		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Tc-99	0.25								48.16625994		1.5	15	0.37	2	0	1	1	
EU-01	IVEU01RC202	Th-228	3.2	1	1			0.7	0.7		1.6		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Th-230	3.49	1	1			0.5	0.5		1.909550267		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Th-232	3.1	1	1			0.71	0.71		1.699812707		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	Tritium (H-3)	2.28	1	1			-0.036	-0.036		1.345023403		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	U-234	4.01								2.483402446		1.5	14	0.37	2	0	1	1	
EU-01	IVEU01RC202	U-235	0.195	1	1			0.04	0.04		0.098571969		1.5	14	0.37	2	0	1	0	
EU-01	IVEU01RC202	U-238	2.6	1	1			0.59	0.59		1.3		1.5	14	0.37	2	0	1	0	1
EU-01	IVEU01RC203	Ac-228	3.2								1.6		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Am-241	1.87								0.983259209		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ba-133	0.175								0.087668644		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	C-14	0.456								139.7005115		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Cm-243/244	0.349								0.175489416		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Co-60	0.0361								0.018119848		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Cs-134	0.157								0.07919429		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Cs-137	0.48								0.24		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Eu-152	0.0416								0.020814406		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Eu-154	0.0499								0.024950155		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Eu-155	3.8								1.903322648		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Fe-55	2690								1461.911262		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	I-129	0.596								1.262193866		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	K-40	60								30		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Na-22	0.0865								0.043308929		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ni-59	208								541.446433		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ni-63	94.8								246.5901147		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Np-237	0.13								0.068047461		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pb-210	5								2.5		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-238	2.97								1.635548449		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-239	2.59								1.430938981		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-240	2.6								1.432213109		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Pu-241	406								225.8293531		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ra-226	5								2.5		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Ra-228	3.2								1.6		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Sb-125	0.462								0.231442714		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Sr-90	0.231								1.960528741		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Tc-99	0.25								48.16625994		1.5	15	0.08	2	0	1	1	
EU-01	IVEU01RC203	Th-228	3.2								1.6		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Th-230	3.49								1.909550267		1.5	14	0.08	2	0	1	1	
EU-01	IVEU01RC203	Th-232	3.1								1.699812707		1.5	14	0.08	2	0	1	1	