Table 1.2-1
Summary of Samples Collected for Analyses at the Area of Elevated Radioactivity, Consolidated Unit 21-018(a)-99

Location ID	Sample ID	Sample Collection Date	Media	Depth (ft bgs)	Field QC Type	Anions	Metals	Asbestos	Cyanide	Nitrates	Perchlorate	pH	Dioxins/ Furans
Preexcavation Samples													
21-27005	MD21-06-73535	9/19/06	Fill	0.5–1.0	n/a[a]	NA[b]	NA	NA	NA	NA	NA	NA	NA
21-27005	MD21-06-73536	9/19/06	Soil	2.0–2.5	n/a	NA	NA	NA	NA	NA	NA	NA	NA
21-27005	MD21-06-73537	9/19/06	QBT3	3.0–3.0	n/a	NA	NA	NA	NA	NA	NA	NA	NA
21-27005	RE21-07-6040	9/10/07	QBT3	5.0–5.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-27005	RE21-07-6053	9/10/07	QBT3	5.0–5.5	FD[c]	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-27005	RE21-07-6057	9/10/07	ALLH	—[d]	FTB[e]	NA	NA	NA	NA	NA	NA	NA	NA
21-27005	RE21-07-6059	9/10/07	n/a	—	FR[f]	NA	SW-846 6020/7470A	NA	SW-846 9012A	EPA 353.1	SW-846 6850	NA	NA
21-27006	MD21-06-73538	9/20/06	Soil	2.0–2.5	n/a	NA	NA	NA	NA	NA	NA	NA	NA
21-600105	RE21-07-601	5/17/07	ALLH	2.0–2.5	n/a	NA	NA	NA	NA	NA	NA	NA	NA
21-600105	RE21-07-6042	8/22/07	ALLH	2.0–2.5	n/a	EPA 300.0/314.0	SW-846 6010B/6020/7471A	NA	SW-846 9012A	NA	NA	SW-846 9045C	NA
Postexcavation Samples													
21-24534	RE21-07-6043	9/10/07	QBT3	2.0–2.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-24534	RE21-07-6044	9/10/07	QBT3	3.0–3.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-27005	RE21-07-6041	9/10/07	QBT3	7.0–7.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-600106	RE21-07-603	5/29/07	Soil	2.0–2.5	n/a	NA	SW-846 6010B/6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	NA	SW-846 8290
21-600106	RE21-07-6055	9/10/07	Soil	2.0–2.5	n/a	EPA 300.0	SW-846 6020/7471A	NA	SW-846 9012A	NA	SW-846 6850	NA	NA
21-600106	RE21-07-604	5/29/07	QBT3	3.0–3.5	n/a	NA	SW-846 6010B/6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	NA	SW-846 8290
21-600106	RE21-07-6056	9/10/07	QBT3	3.0–3.5	n/a	EPA 300.0	SW-846 6020/7471A	NA	SW-846 9012A	NA	SW-846 6850	NA	NA
21-601264	RE21-07-6045	9/10/07	QBT3	2.0–2.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601264	RE21-07-6046	9/10/07	QBT3	3.0–3.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601265	RE21-07-6047	9/10/07	QBT3	5.0–5.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601265	RE21-07-6048	9/10/07	QBT3	7.0–7.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601266	RE21-07-6049	9/10/07	QBT3	5.0–5.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601266	RE21-07-6050	9/10/07	QBT3	7.0–7.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601267	RE21-07-6051	9/7/07	QBT3	5.0–5.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA
21-601268	RE21-07-6052	9/10/07	QBT3	5.0–5.5	n/a	EPA 300.0	SW-846 6020/7471A	EPA 600M4	SW-846 9012A	NA	SW-846 6850	SW-846 9045C	NA

Table 1.2-1 (continued)

Location ID	Sample ID	Sample Collection Date	Media	Depth (ft bgs)	Field QC Type	PCBs	SVOCs	VOCs	Gamma Spectroscopy[g]	Tritium	Isotopic Plutonium	Isotopic Uranium	Americium-241	Strontium-90
Preexcavation Samples														
21-27005	MD21-06-73535	9/19/06	Fill	0.5–1.0	n/a	NA	NA	NA	EPA 901.1	NA	HASL-300	HASL-300	HASL-300	NA
21-27005	MD21-06-73536	9/19/06	Soil	2.0–2.5	n/a	NA	NA	NA	EPA 901.1	NA	HASL-300	HASL-300	HASL-300	NA
21-27005	MD21-06-73537	9/19/06	QBT3	3.0–3.0	n/a	NA	NA	NA	EPA 901.1	NA	HASL-300	HASL-300	HASL-300	NA
21-27005	RE21-07-6040	9/10/07	QBT3	5.0–5.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-27005	RE21-07-6053	9/10/07	QBT3	5.0–5.5	FD	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-27005	RE21-07-6057	9/10/07	ALLH	—	FTB	NA	NA	SW-846 8260B	NA	NA	NA	NA	NA	NA
21-27005	RE21-07-6059	9/10/07	n/a	—	FR	NA	NA	NA	NA	NA	NA	NA	NA	NA
21-27006	MD21-06-73538	9/20/06	Soil	2.0–2.5	n/a	NA	NA	NA	EPA 901.1	NA	HASL-300	HASL-300	HASL-300	NA
21-600105	RE21-07-601	5/17/07	ALLH	2.0–2.5	n/a	NA	NA	NA	EPA 901.1	NA	HASL-300	HASL-300	NA	EPA 905.0
21-600105	RE21-07-6042	8/22/07	ALLH	2.0–2.5	n/a	NA	SW-846 8270C	SW-846 8260B	NA	NA	NA	NA	NA	NA
Postexcavation Samples														
21-24534	RE21-07-6043	9/10/07	QBT3	2.0–2.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-24534	RE21-07-6044	9/10/07	QBT3	3.0–3.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-27005	RE21-07-6041	9/10/07	QBT3	7.0–7.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-600106	RE21-07-603	5/29/07	Soil	2.0–2.5	n/a	SW-846 8082	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	NA	EPA 905.0
21-600106	RE21-07-6055	9/10/07	Soil	2.0–2.5	n/a	NA	NA	NA	NA	NA	NA	NA	NA	NA
21-600106	RE21-07-604	5/29/07	QBT3	3.0–3.5	n/a	SW-846 8082	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	NA	EPA 905.0
21-600106	RE21-07-6056	9/10/07	QBT3	3.0–3.5	n/a	NA	NA	NA	NA	NA	NA	NA	NA	NA
21-601264	RE21-07-6045	9/10/07	QBT3	2.0–2.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601264	RE21-07-6046	9/10/07	QBT3	3.0–3.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601265	RE21-07-6047	9/10/07	QBT3	5.0–5.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601265	RE21-07-6048	9/10/07	QBT3	7.0–7.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601266	RE21-07-6049	9/10/07	QBT3	5.0–5.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601266	RE21-07-6050	9/10/07	QBT3	7.0–7.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601267	RE21-07-6051	9/7/07	QBT3	5.0–5.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0
21-601268	RE21-07-6052	9/10/07	QBT3	5.0–5.5	n/a	NA	SW-846 8270C	SW-846 8260B	EPA 901.1	EPA 906.0	HASL-300	HASL-300	HASL-300	EPA 905.0

[a] n/a = Not applicable.

[b] NA = Not analyzed.

[c] FD = Field duplicate.

[d] — = Field trip blank or rinsate; sample interval not applicable.

[e] FTB = Field trip blank.

[f] FR = Field rinsate.

[g] Thorium-228 was not analyzed for in the postexcavation samples.

Table 5.1-1
Field-Screening Results from the Area of Elevated Radioactivity, Consolidated Unit 21-018(a)-99

Location ID	Sample ID	Sample Collection Date	Media	Depth (ft bgs)	Field QC Type	Alpha (dpm)	Beta (dpm)	PID (ppm)
Preexcavation Samples								
21-27005	MD21-06-73535	9/19/06	Fill	0.5–1.0	n/a[a]	320	2320	4.0
21-27005	MD21-06-73536	9/19/06	Soil	2.0–2.5	n/a	105	1998	0.9
21-27005	MD21-06-73537	9/19/06	QBT3	3.0–3.0	n/a	124	2120	0.8
21-27005	RE21-07-6040	9/10/07	QBT3	5.0–5.5	n/a	60	1000	0.0
21-27005	RE21-07-6057	9/10/07	ALLH	—[b]	FTB[c]	NA[d]	NA	NA
21-27005	RE21-07-6059	9/10/07	n/a	—	FR[e]	NA	NA	NA
21-27006	MD21-06-73538	9/20/06	Soil	2.0–2.5	n/a	301	2900	1.6
21-600105	RE21-07-601	5/15/07	ALLH	2.0–2.5	n/a	1000	30000	5.3
21-600105	RE21-07-6042	8/22/07	ALLH	2.0–2.5	n/a	0.87	14.3	0.0
Postexcavation Samples								
21-24534	RE21-07-6043	9/10/07	QBT3	2.0–2.5	n/a	50	1100	0.1
21-24534	RE21-07-6044	9/10/07	QBT3	3.0–3.5	n/a	50	1000	0.0
21-27005	RE21-07-6041	9/10/07	QBT3	7.0–7.5	n/a	20	970	0.1
21-600106	RE21-07-603	5/29/07	Soil	2.0–2.5	n/a	0.0	395	7.9
21-600106	RE21-07-6055	9/10/07	Soil	2.0–2.5	n/a	80	1000	73.2
21-600106	RE21-07-604	5/29/07	QBT3	3.0–3.5	n/a	12	557	2.7
21-600106	RE21-07-6056	9/10/07	QBT3	3.0–3.5	n/a	10	800	3.5
21-601264	RE21-07-6045	9/10/07	QBT3	2.0–2.5	n/a	30	1000	0.3
21-601264	RE21-07-6046	9/10/07	QBT3	3.0–3.5	n/a	30	1000	0.5
21-601265	RE21-07-6047	9/10/07	QBT3	5.0–5.5	n/a	10	92	0.1
21-601265	RE21-07-6048	9/10/07	QBT3	7.0–7.5	n/a	2	1200	0.0
21-601266	RE21-07-6049	9/10/07	QBT3	5.0–5.5	n/a	40	1100	0.0
21-601266	RE21-07-6050	9/10/07	QBT3	7.0–7.5	n/a	50	930	0.1
21-601267	RE21-07-6051	9/7/07	QBT3	5.0–5.5	n/a	0.05	2.4	0.6
21-601268	RE21-07-6052	9/10/07	QBT3	5.0–5.5	n/a	5	1100	0.0

[a] n/a = Not applicable.
[b] — = Field trip blank or rinsate; sample interval not applicable.
[c] FTB = Field trip blank.
[d] NA = Not analyzed.
[e] FR = Field rinsate.

Table 5.2-1
Results of Inorganic Chemicals above BVs at the Area of Elevated Radioactivity, Consolidated Unit 21-018(a)-99

Location ID	Sample ID	Media	Depth (ft bgs)	Asbestos	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper
Soil BV				**na**[a]	**29200**	**0.83**	**8.17**	**295**	**1.83**	**0.4**	**6120**	**19.3**	**8.64**	**14.7**
QBT3 BV				**na**	**7340**	**0.5**	**2.79**	**46**	**1.21**	**1.63**	**2200**	**7.14**	**3.14**	**4.66**
SSL Residential				**na**	**77800**	**31.3**	**3.9**	**15600**	**156**	**39**	**na**	**2100**[b]	**1520**	**3130**
Preexcavation Samples														
21-27005	MD21-06-73535	Fill	0.5–1.0	—[c]	—	—	—	—	—	—	—	—	—	—
21-27005	MD21-06-73536	Soil	2.0–2.5	—	—	—	—	—	—	—	—	—	—	—
21-27005	MD21-06-73537	QBT3	3.0–3.0	—	—	—	—	—	—	—	—	—	—	—
21-27005	RE21-07-6040	QBT3	5.0–5.5	—	—	—	—	—	—	—	3270 (U)	10.8	—	5 (U)
21-27006	MD21-06-73538	Soil	2.0–2.5	—	—	—	—	—	—	—	—	—	—	—
21-600105	RE21-07-601	ALLH	2.0–2.5	—	—	—	—	—	—	—	—	—	—	—
21-600105	RE21-07-6042	ALLH	2.0–2.5	—	—	21 (J)	27 (J)	830 (J)	—	51 (J)	6200 (J)	980 (J)	18 (J)	690 (J)
Postexcavation Samples														
21-24534	RE21-07-6043	QBT3	2.0–2.5	—	—	—	—	—	—	—	—	—	—	—
21-24534	RE21-07-6044	QBT3	3.0–3.5	—	—	—	—	51.6 (J)	—	—	—	10.3	—	—
21-27005	RE21-07-6041	QBT3	7.0–7.5	—	—	0.58 (UJ)	—	—	—	—	—	11.6	—	—
21-600106	RE21-07-603	Soil	2.0–2.5	—	—	—	—	—	—	0.553 (U)	—	21.4	—	—
21-600106	RE21-07-6055	Soil	2.0–2.5	—	—	—	—	—	—	—	—	—	—	—
21-600106	RE21-07-604	QBT3	3.0–3.5	—	—	—	—	49.4	—	—	—	26	—	—
21-600106	RE21-07-6056	QBT3	3.0–3.5	—	—	—	—	57.7 (J)	—	—	—	—	—	—
21-601264	RE21-07-6045	QBT3	2.0–2.5	—	—	—	—	—	—	—	—	—	—	—
21-601264	RE21-07-6046	QBT3	3.0–3.5	—	—	—	—	—	—	—	—	—	—	—
21-601265	RE21-07-6047	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	9.9	—	17.2 (U)
21-601265	RE21-07-6048	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	—	—
21-601266	RE21-07-6049	QBT3	5.0–5.5	—	—	—	—	86.4 (J)	—	—	4870 (U)	—	—	5.5 (U)
21-601266	RE21-07-6050	QBT3	7.0–7.5	—	—	0.55 (UJ)	—	—	—	—	—	15.2	—	—
21-601267	RE21-07-6051	QBT3	5.0–5.5	—	8550	—	—	54.3 (J-)	1.3 (J-)	—	—	—	—	—
21-601268	RE21-07-6052	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	8.3	—	—

Table 5.2-1 (continued)

Location ID	Sample ID	Media	Depth (ft bgs)	Lead	Magnesium	Mercury	Nickel	Nitrate	Selenium	Silver	Uranium	Vanadium	Zinc
Soil BV				**22.3**	**4610**	**0.1**	**15.4**	**na**	**1.52**	**1**	**1.82**	**39.6**	**48.8**
QBT3 BV				**11.2**	**1690**	**0.1**	**6.58**	**na**	**0.3**	**1**	**2.40**	**17.0**	**63.5**
SSL Residential				**400**	**na**	**23**[d]	**1560**	**100000**	**391**	**391**	**16**[e]	**78.2**	**23500**
Preexcavation Samples													
21-27005	MD21-06-73535	Fill	0.5–1.0	—	—	—	—	—	—	—	—	—	—
21-27005	MD21-06-73536	Soil	2.0–2.5	—	—	—	—	—	—	—	—	—	—
21-27005	MD21-06-73537	QBT3	3.0–3.0	—	—	—	—	—	—	—	—	—	—
21-27005	RE21-07-6040	QBT3	5.0–5.5	—	—	0.722 (J)	—	0.11 (J)	0.56 (U)	—	9.9	—	—
21-27006	MD21-06-73538	Soil	2.0–2.5	—	—	—	—	—	—	—	—	—	—
21-600105	RE21-07-601	ALLH	2.0–2.5	—	—	—	—	—	—	—	—	—	—
21-600105	RE21-07-6042	ALLH	2.0–2.5	770 (J)	—	80 (J)	100 (J)	—	3.8 (J)	26 (J)	3100 (J)	170 (J)	2100 (J)
Postexcavation Samples													
21-24534	RE21-07-6043	QBT3	2.0–2.5	—	—	—	—	2.2	0.53 (U)	—	—	—	—
21-24534	RE21-07-6044	QBT3	3.0–3.5	14.3 (U)	—	—	7 (U)	1.3	0.53 (U)	—	—	—	—
21-27005	RE21-07-6041	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	—
21-600106	RE21-07-603	Soil	2.0–2.5	—	—	—	—	—	—	—	—	—	—
21-600106	RE21-07-6055	Soil	2.0–2.5	—	—	—	—	0.19 (J)	—	—	—	—	—
21-600106	RE21-07-604	QBT3	3.0–3.5	—	—	—	6.71	—	0.849 (J)	—	—	—	—
21-600106	RE21-07-6056	QBT3	3.0–3.5	—	—	—	—	0.22	0.53 (U)	—	—	—	—
21-601264	RE21-07-6045	QBT3	2.0–2.5	—	—	—	—	0.8	0.55 (U)	—	—	—	—
21-601264	RE21-07-6046	QBT3	3.0–3.5	—	—	—	—	—	0.54 (U)	—	—	—	—
21-601265	RE21-07-6047	QBT3	5.0–5.5	—	—	—	11.3 (U)	0.92	0.53 (U)	—	—	—	—
21-601265	RE21-07-6048	QBT3	7.0–7.5	—	—	—	—	0.27	—	—	—	—	—
21-601266	RE21-07-6049	QBT3	5.0–5.5	14.4 (J)	—	—	—	1.3	0.55 (U)	—	4.2 (U)	—	—
21-601266	RE21-07-6050	QBT3	7.0–7.5	—	—	—	8.1 (U)	—	—	—	—	—	—
21-601267	RE21-07-6051	QBT3	5.0–5.5	—	2310 (J-)	—	—	0.54 (J)	0.32 (J)	—	—	—	—
21-601268	RE21-07-6052	QBT3	5.0–5.5	—	—	—	—	0.24	—	—	—	—	—

Sources: BVs from LANL (1998 059730). SSLs from NMED (2006 092513).

Notes: Units are mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] SSL from Region 6 EPA (2007, 095866) and is corrected to 10^{-5} cancer risk.

[c] — = If analyzed, sample result is less than BV. If no BV is available, analyte was not detected.

[d] SSL from Region 6 EPA (2007, 095866).

[e] SSL from Region 9 EPA 2004 (http://www.epa.gov/region09/waste/sfund/prg/).

Table 5.2-2
Results of Radionuclides Detected or Detected above BVs/FVs at the Area of Elevated Radioactivity, Consolidated Unit 21-018(a)-99

Location ID	Sample ID	Media	Depth (ft bgs)	Americium-241	Cesium-137	Cobalt-60	Plutonium-238	Plutonium-239	Strontium-90	Thorium-228	Tritium	Uranium-234	Uranium-235	Uranium-238
Soil BV/FV[a]				**0.013**	**1.65**	**na[b]**	**0.023**	**0.054**	**1.31**	**2.28**	**na**	**2.59**	**0.2**	**2.29**
QBT3 BV/FV				**na**	**na**	**na**	**na**	**na**	**na**	**2.52**	**na**	**1.98**	**0.09**	**1.93**
SAL Residential				**30**	**5.6**	**1.3**	**37**	**33**	**5.7**	**2.3**	**750**	**170**	**17**	**86**
Preexcavation Samples														
21-27005	MD21-06-73535	Fill	0.5–1.0	17.5[c]	1.41	—[d]	0.729	115	—	—	—	18.6	1.09[c]	10.1
21-27005	MD21-06-73536	Soil	2.0–2.5	6.92[c]	0.438	—	0.328	62.0	—	—	—	16.5	0.998[c]	7.93
21-27005	MD21-06-73537	QBT3	3.0–3.0	4.62[c]	0.504	—	0.596	51.2	—	—	—	9.49	0.523[c]	4.99
21-27005	RE21-07-6040	QBT3	5.0–5.5	2.62[c]	0.141	—	0.480 (J)	37.6 (J)	—	—	—	7.79	0.308[c]	4.72
21-27006	MD21-06-73538	Soil	2.0–2.5	40.8[c]	2.05	—	2.08	322	—	—	—	140	8.67[c]	71.5
21-600105	RE21-07-601	ALLH	2.0–2.5	712 (J)	38.9 (J)	0.090 (J)	28.2 (J+)	3723 (J+)	43.0 (J)	3.32 (J)	—	2332 (J)	121 (J)[c]	1181 (J)
Postexcavation Samples														
21-24534	RE21-07-6043	QBT3	2.0–2.5	—	—	—	—	—	—	~~NA~~[e] —	—	—	—	—
21-24534	RE21-07-6044	QBT3	3.0–3.5	—	—	—	—	—	—	~~NA~~ —	—	—	—	—
21-27005	RE21-07-6041	QBT3	7.0–7.5	—	—	—	—	0.928	—	~~NA~~ —	—	—	—	—
21-600106	RE21-07-603	Soil	2.0–2.5	—	—	—	—	—	—	~~NA~~ —	0.131	—	—	—
21-600106	RE21-07-604	QBT3	3.0–3.5	—	—	—	—	0.0908	—	~~NA~~ —	0.033	—	—	—
21-601264	RE21-07-6045	QBT3	2.0–2.5	—	—	—	—	0.097	—	~~NA~~ —	—	—	—	—
21-601264	RE21-07-6046	QBT3	3.0–3.5	—	—	—	—	—	—	~~NA~~ —	—	—	—	—
21-601265	RE21-07-6047	QBT3	5.0–5.5	0.356 (J-)	—	—	—	6.76	1.12	~~NA~~ —	0.700	—	—	—
21-601265	RE21-07-6048	QBT3	7.0–7.5	—	—	—	—	1.08	—	~~NA~~ —	0.680	—	—	—
21-601266	RE21-07-6049	QBT3	5.0–5.5	—	—	—	—	2.91	—	~~NA~~ —	—	—	—	—
21-601266	RE21-07-6050	QBT3	7.0–7.5	—	—	—	—	0.073 (J)	—	~~NA~~ —	—	—	—	—
21-601267	RE21-07-6051	QBT3	5.0–5.5	—	—	—	—	0.364	—	~~NA~~ —	—	—	—	—
21-601268	RE21-07-6052	QBT3	5.0–5.5	—	0.096	—	0.095	2.99	—	~~NA~~ —	—	—	—	—

Sources: BVs/FVs from LANL (1998 059730). SALs from LANL (2005 088493).
Notes: Units are pCi/g. Data qualifiers are defined in Appendix A.
[a] Applies only to samples from 0 to 0.5 ft bgs.
[b] na = Not available.
[c] Detected above BV by either EPA Method 901.1 or HASL-300. Most conservative (higher or detected) value shown.
[d] — = If analyzed, sample result is below the detection limit or is less than BV. If no BV is available, analyte was not detected.
[e] ~~NA = Not analyzed; see the Summary of Samples Collected table.~~

Table 5.2-3
Results of Organic Chemicals Detected at the Area of Elevated Radioactivity, Consolidated Unit 21-018(a)-99

Location ID	Sample ID	Media	Depth (ft bgs)	Di-n-butylphthalate	Dichlorobenzene[1,3-]	Dichlorobenzene[1,4-]	Bis(2-ethylhexyl)phthalate	Fluoranthene	Heptachlorodibenzodioxin [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,6,7,8-]	Heptachlorodibenzofuran [1,2,3,4,6,7,9-]	Hexachlorodibenzodioxin [1,2,3,4,7,8-]	Hexachlorodibenzodioxin [1,2,3,6,7,8-]
SSL Residential				**6110**	**32.6**	**39.5**	**347**	**2290**	**na**[a]	**na**	**na**	**na**	
Preexcavation Samples													
21-27005	RE21-07-6040	QBT3	5.0–5.5	0.12 (J)	—[b]	—	—	—	—	—	—	—	
21-600105	RE21-07-6042	ALLH	2.0–2.5	6 (J-)	—	—	1.8 (J-)	—	—	—	—	—	
Postexcavation Samples													
21-24534	RE21-07-6043	QBT3	2.0–2.5	—	—	—	—	—	—	—	—	—	
21-24534	RE21-07-6044	QBT3	3.0–3.5	—	—	—	—	—	—	—	—	—	
21-27005	RE21-07-6041	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	
21-600106	RE21-07-603	Soil	2.0–2.5	—	—	—	—	—	0.00000321	—	—	—	
21-600106	RE21-07-604	QBT3	3.0–3.5	—	—	—	—	—	0.00000579	0.00000106 (J)	0.000000175 (J)	0.000000334 (J)	0.00000149
21-601264	RE21-07-6045	QBT3	2.0–2.5	—	—	—	—	—	—	—	—	—	
21-601264	RE21-07-6046	QBT3	3.0–3.5	—	—	—	—	—	—	—	—	—	
21-601265	RE21-07-6047	QBT3	5.0–5.5	—	0.00016 (J-)	0.00019 (J-)	—	—	—	—	—	—	
21-601265	RE21-07-6048	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	
21-601266	RE21-07-6049	QBT3	5.0–5.5	—	—	—	—	0.037 (J)	—	—	—	—	
21-601266	RE21-07-6050	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	
21-601267	RE21-07-6051	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	—	
21-601268	RE21-07-6052	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	—	

Table 5.2-3 (continued)

Location ID	Sample ID	Media	Depth (ft bgs)	Hexachlorodibenzodioxin [1,2,3,7,8,9-]	Hexachlorodibenzofuran [1,2,3,4,7,8-]	Hexachlorodibenzofuran [1,2,3,6,7,8-]	Hexachlorodibenzofuran [2,3,4,6,7,8-]	Methylene chloride	Octachlorodibenzodioxin [1,2,3,4,6,7,8,9-]	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	Pentachlorodibenzodioxin [1,2,3,7,8-]	Pentachlorodibenzofuran [1,2,3,7,8-]	Toluene
SSL Residential				**na**	**na**	**na**	**na**	**182**	**na**	**na**	**na**	**na**	**252**
Preexcavation Samples													
21-27005	RE21-07-6040	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	—	—
21-600105	RE21-07-6042	ALLH	2.0–2.5	—	—	—	—	—	—	—	—	—	—
Postexcavation Samples													
21-24534	RE21-07-6043	QBT3	2.0–2.5	—	—	—	—	0.0029 (J)	—	—	—	—	—
21-24534	RE21-07-6044	QBT3	3.0–3.5	—	—	—	—	0.011	—	—	—	—	—
21-27005	RE21-07-6041	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	—
21-600106	RE21-07-603	Soil	2.0–2.5	—	—	—	—	—	0.0000278	0.00000139 (J)	—	—	—
21-600106	RE21-07-604	QBT3	3.0–3.5	0.00000114 (J)	0.000000338 (J)	0.00000017 (J)	0.000000219 (J)	—	0.0000298	0.00000302 (J)	0.000000327 (J)	0.0000003 (J)	—
21-601264	RE21-07-6045	QBT3	2.0–2.5	—	—	—	—	0.0029 (J)	—	—	—	—	—
21-601264	RE21-07-6046	QBT3	3.0–3.5	—	—	—	—	0.015	—	—	—	—	0.00018 (J)
21-601265	RE21-07-6047	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	—	0.00017 (J-)
21-601265	RE21-07-6048	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	—
21-601266	RE21-07-6049	QBT3	5.0–5.5	—	—	—	—	0.0044 (J)	—	—	—	—	—
21-601266	RE21-07-6050	QBT3	7.0–7.5	—	—	—	—	—	—	—	—	—	—
21-601267	RE21-07-6051	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	—	—
21-601268	RE21-07-6052	QBT3	5.0–5.5	—	—	—	—	—	—	—	—	—	—

Source: SSLs from NMED (2006 092513).

Notes: Units are mg/kg. Data qualifiers are defined in Appendix A.

[a] na = Not available.

[b] — = If analyzed, sample result is below the detection limit.

Table 6.4-1
Comparison of 2006–2007 COPC Analytical Results for Area of Elevated Radioactivity, Consolidated Unit 21-018(a)-99, with 2005–2006 Data

COPC	Postexcavation 2006–2007 Range of Concentrations (mg/kg)	Postexcavation 2006–2007 Maximum Detected Concentration 0–10 ft bgs (mg/kg)	2005–2006 Range of Concentrations 0–10 ft bgs[a] (mg/kg)	Postexcavation 2006–2007 Maximum Detected Concentration 0–5 ft bgs (mg/kg)	2005–2006 Range of Concentrations 0–5 ft bgs[b] (mg/kg)
Inorganic Chemicals					
Aluminum	[279]–8670	8670	329–28400	8670	4.8–28400
Antimony	ND[c]	0.15	0.111–[5.30]	ND	ND
Barium	[3.1]–286	286	3.42–364	286	3.04–364
Beryllium	0.19–1.3	1.3	0.249–1.4	0.961	[0.2]–1.55
Cadmium	ND	0.05	[0.05]–0.456	ND	[0.05]–2.5
Chromium	1.6–26	26	0.35–20.6	26	[0.571]–48.1
Cobalt	[0.29]–2.5	2.5	0.221–9.78	2.3	0.2–9.78
Copper	ND	6.94	0.685–13.7	6.94	[0.81]–22.6
Cyanide	0.12–[0.58]	0.12	[0.24]–0.317	0.12	[0.232]–5.28
Lead	ND	10	0.551–23.8	9.07	[1.06]–97.4
Mercury	0.0121–0.0503	0.0503	0.003–1.06	0.0503	0.003–1.06
Nickel	ND	6.71	0.692–19.2	6.71	[0.63]–19.2
Nitrate	0.19–2.2	2.2	0.231–10.6	2.2	0.231–15.5
Selenium	0.19–0.897	0.897	ND	0.897	ND
Silver	0.029–[0.23]	0.15	ND	0.087	[0.07]–24.5
Uranium	ND	0.57	[0]–132	ND	7.52–132
Radionuclides[d]					
Americium-241	[-0.0965]–0.356	0.356	[0.002]–0.046	ND	[0.001]–44.4
Cesium-137	[-0.00764]–0.096	0.096	[0.002]–0.143	ND	[0.001]–2.65
Plutonium-238	[-0.009]–0.095	0.095	[-0.0232]–0.997	ND	[0.001]–0.997
Plutonium-239	[0.0142]–6.76	6.76	[0.001]–0.735	0.097	[0.001]–28.9
Strontium-90	[-0.09]–1.12	1.12	ND	ND	[0.001]–0.53
Tritium	[-0.078]–0.7	0.7	ND	0.131	[0.003]–1.31
Organic Chemicals					
Dichlorobenzene[1,3-]	0.00016–[0.38]	0.00016	ND	ND	ND
Dichlorobenzene[1,4-]	0.00019–[0.38]	0.00019	ND	ND	ND
Fluoranthene	ND	0.037	0.013–[0.36]	ND	[0.016]–0.925
Methylene chloride	0.0029–0.015	0.015	ND	0.015	ND
Toluene	0.00017–[0.0057]	0.00018	ND	0.00018	ND

Table 6.4-1 (continued)

COPC	Postexcavation 2006–2007 Range of Concentrations (mg/kg)	Postexcavation 2006–2007 Maximum Detected Concentration 0–10 ft bgs (mg/kg)	2005–2006 Range of Concentrations 0–10 ft bgs[a] (mg/kg)	Postexcavation 2006–2007 Maximum Detected Concentration 0–5 ft bgs (mg/kg)	2005–2006 Range of Concentrations 0–5 ft bgs[b] (mg/kg)
Dioxins/Furans[e]					
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	3.21E-08–5.79E-08	5.79E-08	1.58E-05[f]	5.79E-08	1.58E-05[f]
Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	1.06E-08	1.06E-08	8.16E-07[g]	1.06E-08	8.16E-07[g]
Heptachlorodibenzofuran[1,2,3,4,7,8,9-]	1.75E-09	1.75E-09	1.13E-07[g]	1.75E-09	1.13E-07[g]
Hexachlorodibenzodioxin[1,2,3,4,7,8-]	3.34E-08	3.34E-08	4.01E-07[g]	3.34E-08	4.01E-07[g]
Hexachlorodibenzodioxin[1,2,3,6,7,8-]	1.49E-07	1.49E-07	7.18E-07[g]	1.49E-07	7.18E-07[g]
Hexachlorodibenzodioxin[1,2,3,7,8,9-]	1.14E-07	1.14E-07	5.19E-07[g]	1.14E-07	5.19E-07[g]
Hexachlorodibenzofuran[1,2,3,4,7,8-]	3.38E-08	3.38E-08	2.27E-06[g]	3.38E-08	2.27E-06[g]
Hexachlorodibenzofuran[1,2,3,6,7,8-]	1.70E-08	1.70E-08	6.77E-07[g]	1.70E-08	6.77E-07[g]
Hexachlorodibenzofuran[2,3,4,6,7,8-]	2.19E-08	2.19E-08	4.95E-07[g]	2.19E-08	4.95E-07[g]
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-]	8.34E-09–8.94E-09	8.94E-09	2.99E-06[f]	8.94E-09	2.99E-06[f]
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	4.17E-10–9.06E-10	9.06E-10	1.06E-07[g]	9.06E-10	1.06E-07[g]
Pentachlorodibenzodioxin[1,2,3,7,8-]	3.27E-07	3.27E-07	9.83E-06[g]	3.27E-07	9.83E-06[g]
Pentachlorodibenzofuran[1,2,3,7,8-]	9.00E-09	9.00E-09	3.93E-07[g]	9.00E-09	3.93E-07[g]

Source: 2005–2006 ranges from LANL (2007 099175).

Note: Brackets indicate that analyte was not detected.

[a] SWMUs 21-018(a) and 21-018(b) data (0–10 ft bgs) from LANL (2007 098943).

[b] Combined data (0–5 ft bgs) for entire site from LANL (2007 098943).

[c] ND = Not detected.

[d] Units are pCi/g.

[e] Dioxin/furan data are adjusted for 2,3,7,8-tetrachlorodibenzo-p-dioxin toxicity equivalency quotient in Appendix H (Table H.2.0-3).

[f] TA-21 maximum detected concentration [from Consolidated Unit 21-026(a)-99].

[g] TA-21 maximum detected concentration [from SWMU 21-024(c)].