

GENERAL/EFFLUENT AIRBORNE CONCENTRATION LOG (Rev 7)

Counting Instrument:			Ludlum 2929		Detector:	Ludlum 43-10-1		Cal. Date:		12/16/2017											
Serial #:			200051		Serial #:	PR 215948		Cal. Due Date OK?		OK											
Radiation Type	Counting Efficiency (fraction)	Source Nuclide	Source Number	Original Source Activity (DPM)	Source Creation Date	T _{1/2} (yr)	Source Decayed Activity	Sample Count time (min)	Background Count time (min)		Limiting Alpha Isotope of Concern		Limiting Beta Isotope of Concern								
Alpha	0.3678	Th-230	5648-06	15,900	9/24/2012	7.54E+04	15899	60	10		Isotope	10CFR20 Occupational DAC /Effluent		Isotope	10CFR20 Occupational DAC /Effluent						
Beta	0.2011	Tc-99	5634-05	9,860	2/25/2013	2.11E+05	9860	60	10		U-235	2.00E-11		U-235	2.00E-11						
Area Monitored and Air Mover Serial #/Bar Code			Air Sample Start Date/Time	Air Sample End Date/Time	Count Date	Run Time (min)	Flow Rate (lpm)	Sample Gross Alpha (Counts)	Sample Gross Beta (Counts)	Alpha Bkg (cpm)	Beta Bkg (cpm)	Filter Efficiency (fraction)	Sample Alpha Activity (dpm)	Sample Beta Activity (dpm)	Alpha Count Concn. (uCi/cc)	Beta Count Concn. (uCi/cc)	Fraction Occup or Effluent Limit Alpha	Fraction Occup or Effluent Limit Beta	Alpha MDA (uCi/cc)	Beta MDA (uCi/cc)	
General area LV-1			3/8/17 7:00	3/9/17 7:00	04/14/17	1440	70.0	26	2490	0.40	40.20	1.00	0	6	1.98E-15	2.89E-14	0.00	0.00	9.18E-15	1.59E-13	
General area LV-1			3/20/17 8:00	3/20/17 17:25	04/14/17	565	70.0	24	2278	0.40	40.20	1.00	0	-11	3.72E-15	-1.26E-13	0.00	-0.01	2.34E-14	4.06E-13	
General area LV-2			4/1/17 7:15	4/7/17 15:15	04/14/17	2400	70.0	20	2483	0.40	40.20	1.00	0	6	2.43E-16	1.58E-14	0.00	0.00	5.51E-15	9.56E-14	
General area LV-3			4/10/17 7:15	4/10/17 15:00	04/14/17	465	70.0	31	2498	0.40	40.20	1.00	1	7	1.02E-14	9.86E-14	0.00	0.00	2.84E-14	4.93E-13	
General area LV-4			4/11/17 7:15	4/11/17 15:00	04/17/17	465	70.0	17	2587	0.60	39.80	1.00	-1	16	-8.72E-15	2.28E-13	0.00	0.01	3.45E-14	4.91E-13	
General area LV-5			4/12/17 7:15	4/12/17 15:00	04/17/17	465	70.0	14	2388	0.60	39.80	1.00	-1	0	-1.12E-14	0.00E+00	0.00	0.00	3.45E-14	4.91E-13	
General area LV-6			4/13/17 7:15	4/13/17 15:00	04/17/17	465	70.0	18	2595	0.60	39.80	1.00	-1	17	-7.90E-15	2.37E-13	0.00	0.01	3.45E-14	4.91E-13	
General area LV-7			4/14/17 7:15	4/14/17 15:00	04/17/17	465	70.0	23	2488	0.60	39.80	1.00	0	8	-3.83E-15	1.15E-13	0.00	0.01	3.45E-14	4.91E-13	
General area LV-8			4/17/17 7:15	4/17/17 15:00	04/20/17	465	70.0	33	2561	0.30	37.10	1.00	1	28	1.56E-14	3.84E-13	0.00	0.02	2.49E-14	4.74E-13	
General area LV-9			4/17/17 7:15	4/17/17 15:00	04/21/17	465	70.0	18	2439	0.70	38.10	1.00	-1	13	-1.17E-14	1.75E-13	0.00	0.01	3.71E-14	4.80E-13	
General area LV-10			4/18/17 7:15	4/18/17 15:00	04/24/17	465	70.0	19	2510	0.20	39.50	1.00	1	12	7.96E-15	1.61E-13	0.00	0.01	2.06E-14	4.89E-13	
General area LV-11			4/19/17 7:15	4/19/17 15:00	04/24/17	465	70.0	19	2412	0.20	39.50	1.00	1	3	7.96E-15	4.82E-14	0.00	0.00	2.06E-14	4.89E-13	
General area LV-12			4/20/17 7:15	4/20/17 15:00	04/24/17	465	70.0	23	2469	0.20	39.50	1.00	1	8	1.12E-14	1.14E-13	0.00	0.01	2.06E-14	4.89E-13	
General area LV-13			4/21/17 7:15	4/21/17 15:00	04/25/17	465	70.0	19	2617	0.60	39.60	1.00	-1	20	-7.09E-15	2.76E-13	0.00	0.01	3.45E-14	4.90E-13	
General area LV-14			4/24/17 7:15	4/24/17 15:00	05/01/17	465	70.0	21	2400	0.40	35.50	1.00	0	22	2.07E-15	3.10E-13	0.00	0.02	2.84E-14	4.64E-13	
General area LV-15			4/25/17 7:15	4/25/17 15:00	05/01/17	465	70.0	19	2477	0.40	35.50	1.00	0	29	4.39E-16	3.98E-13	0.00	0.02	2.84E-14	4.64E-13	
General area LV-16			4/26/17 7:15	4/26/17 15:00	05/03/17	465	70.0	13	2536	0.00	42.70	1.00	1	-2	1.06E-14	-2.98E-14	0.00	0.00	1.70E-15	5.08E-13	
General area LV-17			4/27/17 7:15	4/27/17 15:00	05/04/17	465	70.0	19	2449	0.00	38.50	1.00	1	12	1.55E-14	1.59E-13	0.00	0.01	1.70E-15	4.83E-13	
General area LV-18			5/1/17 7:15	5/1/17 15:00	05/09/17	465	70.0	14	2523	0.20	38.50	1.00	0	18	3.89E-15	2.44E-13	0.00	0.01	2.06E-14	4.83E-13	
General area LV-19			5/2/17 7:15	5/2/17 15:00	05/10/17	465	70.0	16	2495	0.10	42.70	1.00	1	-6	9.28E-15	-7.68E-14	0.00	0.00	1.51E-14	5.08E-13	
General area LV-20			5/3/17 7:15	5/3/17 15:00	05/10/17	465	70.0	18	2411	0.10	42.70	1.00	1	-13	1.09E-14	-1.73E-13	0.00	-0.01	1.51E-14	5.08E-13	
General area LV-21			5/4/17 7:15	5/4/17 15:00	05/10/17	465	70.0	34	2435	0.10	42.70	1.00	2	-11	2.40E-14	-1.46E-13	0.00	-0.01	1.51E-14	5.08E-13	
General area LV-21			5/4/17 7:15	5/4/17 15:00	05/12/17	465	70.0	17	2467	0.60	38.30	1.00	-1	14	-8.72E-15	1.94E-13	0.00	0.01	3.45E-14	4.82E-13	
General area LV-22			5/5/17 7:15	5/5/17 15:00	05/19/17	465	70.0	13	2470	0.20	38.20	1.00	0	15	3.07E-15	2.04E-13	0.00	0.01	2.06E-14	4.81E-13	
General area LV-23			5/8/17 7:15	5/8/17 15:00	05/19/17	465	70.0	18	2442	0.20	38.20	1.00	1	12	7.15E-15	1.72E-13	0.00	0.01	2.06E-14	4.81E-13	
General area LV-24			5/9/17 7:15	5/10/17 15:00	05/22/17	930	70.0	17	2483	0.00	36.80	1.00	1	23	6.93E-15	1.58E-13	0.00	0.01	8.50E-16	2.36E-13	
General area LV-25			5/15/17 7:15	5/16/17 15:00	05/30/17	930	70.0	17	2413	0.30	37.50	1.00	0	14	1.29E-15	9.35E-14	0.00	0.00	1.24E-14	2.38E-13	
General area LV-26			5/17/17 7:15	5/17/17 15:00	05/30/17	465	70.0	44	2511	0.30	37.50	1.00	2	22	2.46E-14	2.99E-13	0.00	0.01	2.49E-14	4.77E-13	
General area LV-27			5/18/17 7:15	5/18/17 15:00	05/30/17	465	70.0	146	2343	0.30	37.50	1.00	8	8	1.08E-13	1.07E-13	0.01	0.01	2.49E-14	4.77E-13	
General area LV-28			5/19/17 7:15	5/19/17 15:00	05/30/17	465	70.0	87	2428	0.30	37.50	1.00	4	15	5.96E-14	2.04E-13	0.00	0.01	2.49E-14	4.77E-13	
General area LV-29			5/22/17 7:15	5/22/17 15:00	05/31/17	465	70.0	32	2543	0.40	36.80	1.00	1	28	1.10E-14	3.84E-13	0.00	0.02	2.84E-14	4.72E-13	
General area LV-30			5/23/17 7:15	5/23/17 15:00	06/07/17	465	70.0	36	2477	0.30	38.00	1.00	1	16	1.81E-14	2.26E-13	0.00	0.01	2.49E-14	4.80E-13	
General area LV-31			5/24/17 7:15	5/24/17 15:00	06/07/17	465	70.0	17	2514	0.30	38.00	1.00	0	19	2.57E-15	2.68E-13	0.00	0.01	2.49E-14	4.80E-13	
General area LV-32			5/25/17 7:15	5/25/17 15:00	06/07/17	465	70.0	10	2419	0.30	38.00	1.00	0	12	-3.14E-15	1.59E-13	0.00	0.01	2.49E-14	4.80E-13	
General area LV-33			5/26/17 7:15	5/26/17 15:00	06/07/17	465	70.0	23	2472	0.30	38.00	1.00	1	16	7.46E-15	2.20E-13	0.00	0.01	2.49E-14	4.80E-13	
General area LV-34			5/30/17 7:15	5/30/17 15:00	06/07/17	465	70.0	18	2451	0.30	38.00	1.00	0	14	3.39E-15	1.96E-13	0.00	0.01	2.49E-14	4.80E-13	
General area LV-35			5/31/17 7:15	5/31/17 15:00	06/08/17	465	70.0	15	2448	0.20	37.00	1.00	0	19	4.70E-15	2.61E-13	0.00	0.01	2.06E-14	4.73E-13	