

SEABROOK BIO-SOLIDS 2022 REPORT

	FACILITY	HAULER	DATE	TICKET	MANIFEST	BOX-TON	YARDS	CAKE-SOL	Dry WEIGHT	DRYTON
BSR-426	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-04	88166664	145385	15.15	21	14	4,242.00	2.121
BSR-427	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-11	88166724	145387	9.28	13	14.7	2,728.32	1.36416
BSR-428	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-13	88166750	145388	16.66	23	15.3	5,097.96	2.54898
BSR-429	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-17	88166775	145389	16.3	22	13.9	4,531.40	2.2657
BSR-430	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-19	88166796	145390	15.53	21	14.6	4,534.76	2.2674
BSR-431	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-20	88166806	145392	16.22	22	13.8	4,476.72	2.2384
BSR-432	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-21	88166817	145379	16.12	22	14.1	4,545.84	2.2729
BSR-433	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-25	88166849	145380	15.86	22	13.6	4,313.92	2.1570
BSR-434	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-27	88166883	145381	15.76	22	13.1	4,129.12	2.0646
BSR-435	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-01-31	18166904	14538	15.52	21	14.1	4,376.64	2.1883
BSR-437	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-02	88166946	145383	18.23	25	13.6	4,958.56	2.4793
BSR-438	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-08	88166992	145393	15.97	22	15.3	4,886.82	2.4434
BSR-439	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-10	88167024	295	15.37	21	13.7	4,211.38	2.1057
BSR-440	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-16	88167077	145396	14.8	20	14	4,144.00	2.0720
BSR-441	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-18	88167107	145398	15.34	21	13.7	4,203.16	2.1016
BSR-442	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-24	88167165	145399	15.67	22	11.4	3,572.76	1.7864
BSR-443	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-02-28	88167206	145400	14.47	20	13.8	3,993.72	1.9969
BSR-445	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-02	88167241	149701	15.7	22	12.3	3,862.20	1.9311
BSR-446	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-04	88167268	149703	14.5	20	13.6	3,944.00	1.9720
BSR-447	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-08	88167298	149704	14.57	20	12	3,496.80	1.7484
BSR-448	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-09	88167313	149705	16.31	22	12	3,914.40	1.9572
BSR-449	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-10	88167320	149706	15.6	22	11.8	3,681.60	1.8408
BSR-450	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-15	88167361	149707	14.13	19	9.8	2,769.48	1.3847
BSR-451	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-16	88167375	149708	17.2	24	12.4	4,265.60	2.133
BSR-452	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-18	88167401	149710	15.57	21	12.3	3,830.22	1.915
BSR-453	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-22	88167426	149711	15.06	21	12.5	3,765.00	1.883
BSR-454	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-28	88167474	149712	15.38	21	11	3,383.60	1.692
BSR-455	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-03-30	88167485	149713	15.94	22	11.3	3,602.44	1.801
BSR-457	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-01	88167511	149715	16.01	22	11	3,522.20	1.761
BSR-458	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-05	88167534	149716	15.33	21	10.9	3,341.94	1.671
BSR-459	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-07	149717	14142006	15.65	22	11.1	3,474.30	1.737
BSR-460	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-11	88167591	149718	15.59	22	11.2	3,492.16	1.746
BSR-461	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-13	88167611	149719	16.71	23	10.3	3,442.26	1.721
BSR-462	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-15	88167641	149721	15.62	22	11.9	3,717.56	1.859

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	FACILITY	HAULER	DATE	TICKET	MANIFEST	BOX-TON	YARDS	CAKE-SOL	Dry WEIGHT	DRYTON
BSR-464	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-19	88167664	149722	17.4	24	12.2	4,245.60	2.123
BSR-465	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-21	88167692	149723	16.11	22	12	3,866.40	1.933
BSR-467	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-25	88167718	149724	11.68	16	11.8	2,756.48	1.378
BSR-468	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-27	88167746	149725	16.08	22	10.5	3,376.80	1.688
BSR-469	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-04-29	88167770	249727	16.15	22	12.3	3,972.90	1.986
BSR-472	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-03	88167791	149728	15.6	22	10	3,120.00	1.560
BSR-473	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-05	88167824	149729	15.96	22	12.1	3,862.32	1.931
BSR-475	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-09	88167851	1	15.6	22	10.9	3,400.80	1.700
BSR-476	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-11	88167877	149731	17.43	24	11.7	4,078.62	2.039
BSR-477	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-13	88167909	1	16.65	23	11.8	3,929.40	1.965
BSR-478	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-17	88167935	149734	15.73	22	11.8	3,712.28	1.856
BSR-479	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-19	88167964	1	16.17	22	11.9	3,848.46	1.924
BSR-480	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-23	88167995	1	15.57	21	12.8	3,985.92	1.993
BSR-481	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-25	88168024	1	16.32	23	11.8	3,851.52	1.926
BSR-482	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-26	88168051	1459738	15.82	22	15.7	4,967.48	2.484
BSR-483	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-27	88168060	149740	16.22	22	10	3,244.00	1.622
BSR-484	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-05-31	88168073	149741	13.74	19	12.3	3,380.04	1.690
BSR-486	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-02	88168099	149742	15.67	22	11.7	3,666.78	1.833
BSR-487	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-06	88168134		15.71	22	11.3	3,550.46	1.775
BSR-488	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-08	88168163	149744	16.21	22	11.8	3,825.56	1.913
BSR-489	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-10	88168192	149746	15.68	22	11.8	3,700.48	1.850
BSR-490	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-14	88168216	149747	17.83	25	12.7	4,528.82	2.264
BSR-491	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-16	88168250	149748	15.77	22	12.6	3,974.04	1.987
BSR-492	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-20	88168279	149749	12.05	17	15.5	3,735.50	1.868
BSR-493	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-24	88168329	149750	15.61	22	13	4,058.60	2.029
BSR-494	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-28	88168352	149752	15.42	21	13.2	4,070.88	2.035
BSR-495	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-06-30	88168387	149753	16	22	15.7	5,024.00	2.512
BSR-500	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-01	88168402	149754	16.27	22	14.3	4,653.22	2.327
BSR-501	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-06	88168428	149755	16.11	22	14.3	4,607.46	2.304
BSR-502	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-08	88168460	149757	15.24	21	14.3	4,358.64	2.179
BSR-503	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-12	88168499	149758	15.43	21	14.3	4,412.98	2.206
BSR-504	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-14	88168546	149759	15.71	22	13.8	4,335.96	2.168
BSR-505	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-18	88168591		15.7	22	11.7	3,673.80	1.837
BSR-506	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-20	88168640	149763	14.62	20	17.4	5,087.76	2.544

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BSR-507	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-26	88168690	149765	15.44	21	14.6	4,508.48	2.254
BSR-508	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-07-28	88168725	15766	16.35	23	14.1	4,610.70	2.305
BSR-511	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-01	88168763	141767	15.29	21	15.2	4,648.16	2.324
BSR-512	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-02	88168774	149768	15.37	21	15.1	4,641.74	2.321
BSR-513	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-03	88168792	149769	14.8	20	14.7	4,351.20	2.176
BSR-514	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-09	88168832	149771	14.38	20	17	4,889.20	2.445
BSR-516	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-17	88168895	149772	13.66	19	15.2	4,152.64	2.076
BSR-517	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-19	88168910	149774	10.1	14	15.2	3,070.40	1.535
BSR-519	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-23	88168930		14.73	20	15.2	4,477.92	2.239
BSR-520	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-29	88168972	153723	15.42	21	15.2	4,687.68	2.344
BSR-521	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-08-31	88168996	152735	15.44	21	14.3	4,415.84	2.208
BSR-523	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-02	88169019	153728	15.54	21	14.1	4,382.28	2.191
BSR-524	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-06	88169027	149776	9.55	13	14.3	2,731.30	1.366
BSR-525	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-08	88169051	148778	16.75	23	13.2	4,422.00	2.211
BSR-526	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-12	88169073	149780	16.12	22	14	4,513.60	2.257
BSR-527	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-14	88169092	149782	15.03	21	15	4,509.00	2.254
BSR-528	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-20	88169141	149784	15.29	21	14.5	4,434.10	2.217
BSR-529	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-22	88169159	149786	15.36	21	14	4,300.80	2.150
BSR-531	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-28	88169204	149789	15.17	21	14	4,247.60	2.124
BSR-532	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-09-30	88169226	149791	14.7	20	14.1	4,145.40	2.073
BSR-534	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-04	88169244	149792	13.12	18	15.3	4,014.72	2.007
BSR-535	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-06	88169273	149794	5.59	8	16.2	1,811.16	0.906
BSR-536	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-12	88169324	173802	13.79	19	14.5	3,999.10	2.000
BSR-537	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-14	88169345	153803	14.57	20	13.6	3,963.04	1.982
BSR-538	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-18	88169374		14.7	20	14.4	4,233.60	2.117
BSR-539	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-20	88169406	153806	14.59	20	14.8	4,318.64	2.159
BSR-540	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-24	88169444	153808	13.26	18	12.1	3,208.92	1.604
BSR-542	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-10-28	88169484	153810	15.21	21	14.2	4,319.64	2.160
BSR-545	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-01	88169509	153811	15.6	22	13.1	4,087.20	2.044
BSR-546	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-03	88169535	153813	14.35	20	14.3	4,104.10	2.052
BSR-547	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-09	88169589	153816	12.68	17	12.6	3,195.36	1.598
BSR-548	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-11	88169617	153138	13.21	18	13.1	3,461.02	1.731
BSR-549	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-15	88169638	153819	14.77	20	12.7	3,751.58	1.876
BSR-550	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-17	88169659	153820	14.13	19	13.1	3,702.06	1.851

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BSR-551	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-22	88169688	153823	14.64	20	13.1	3,835.68	1.918
BSR-552	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-28	88169719	153824	10.67	15	12.8	2,731.52	1.366
BSR-553	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-11-30	88169741	153825	14.32	20	12.9	3,694.56	1.847
BSR-554	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-02	88169759	153826	14.15	20	12.5	3,537.50	1.769
BSR-555	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-06	88169784	153287	13.72	19	12.5	3,430.00	1.715
BSR-556	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-08	88169807	153829	17.14	24	13.9	4,764.92	2.382
BSR-557	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-14	88169853	153830	13.06	18	12.5	3,265.00	1.633
BSR-558	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-15	88169863	153831	13.85	19	11.3	3,130.10	1.565
BSR-560	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-16	88169873	153832	15.46	21	12.5	3,865.00	1.933
BSR-562	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-20	88169900	142361	14.8	20	12.6	3,729.60	1.865
BSR-563	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-22	88169924	142364	14.94	21	12.8	3,824.64	1.912
BSR-564	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-28	88169962	142367	14.93	21	12	3,583.20	1.792
BSR-565	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-29	88169975	142368	16.09	22	12.6	4,054.68	2.027
BSR-566	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2022-12-30	88169990	153787	14.53	20	12.5	3,632.50	1.816

	Wet Tons	Yards	AvgSolid	Dry Weight lbs	Dry Ton
TOTALS	1,746.74	2,407	13.18	458,705.88	229.35294

Dry Metric To

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BSR-568	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-04	88170017	142366	15.11	21	11.5	3,475.3	1.74
BSR-569	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-06	88170031		16.10	22	11.6	3,735.2	1.87
BSR-570	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-10	88170055	142371	14.86	20	12.2	3,625.8	1.81
BSR-571	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-12	88170070	142373	15.86	22	12.9	4,091.9	2.05
BSR-572	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-16	88170095	142375	15.22	21	13.2	4,018.1	2.01
BSR-573	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-20	88170133	142377	16.81	23	13.8	4,639.6	2.32
BSR-574	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-26	88170171	142379	16.59	23	13.1	4,346.6	2.17
BSR-575	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-01-30	88170191	153794	17.22	24	12.8	4,408.3	2.20
BSR-581	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-01	88170217		14.80	20	12.7	3,759.2	1.88
BSR-582	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-03	88170237	142382	15.63	22	12.3	3,845.0	1.92
BSR-583	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-07	88170260	142385	13.95	19	14.4	4,017.6	2.01
BSR-584	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-09	88170274	142391	16.16	22	12.6	4,072.3	2.04
BSR-585	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-14	88170336		17.38	24	13.1	4,553.6	2.28
BSR-587	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-15	88170349	142386	12.79	18	10.5	2,685.9	1.34
BSR-588	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-21	88170395		10.66	15	13.1	2,792.9	1.40
BSR-589	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-23	88170419	153741	14.30	20	12.9	3,689.4	1.84
BSR-590	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-02-27	88170446	149801	15.85	22	13	4,121.0	2.06
BSR-592	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-01	88170480	142396	17.83	25	11.8	4,207.9	2.10
BSR-593	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-02	88170500	157344	14.11	19	13	3,668.6	1.83
BSR-594	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-03	88170516		16.00	22	12.2	3,904.0	1.95
BSR-595	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-07	88170546	153746	15.04	21	12.3	3,699.8	1.85
BSR-596	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-09	88170580	153748	15.73	22	13.1	4,121.3	2.06
BSR-597	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-13	88170617	153790	16.27	22	8.8	2,863.5	1.43
BSR-599	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-15	88170638	153800	17.20	24	12.7	4,368.8	2.18
BSR-600	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-17	88170674	153755	14.95	21	11.8	3,528.2	1.76
BSR-601	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-21	88170699	149802	13.69	19	12.7	3,477.3	1.74
BSR-602	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-23	88170722	142399	18.21	25	11.8	4,297.6	2.15
BSR-603	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-27	88170764	153753	18.77	26	11.9	4,467.3	2.23
BSR-605	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-29	88170790	157738	16.39	23	11.9	3,900.8	1.95
BSR-606	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-30	88170802	179818	15.13	21	12.6	3,812.8	1.91
BSR-607	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-03-31	88170836	153737	16.93	23	11.1	3,758.5	1.88
BSR-609	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-04	88170866	149820	17.36	24	12.5	4,340.0	2.17
BSR-610	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-06	88170896		13.89	19	12	3,333.6	1.67

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ID	FACILITY	HAULER	DATE	TICKET	MANIFEST	BOX TON	YDS	CAKE-S	WEIGHT	DRYTONS
BSR-611	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-10	88170926	149823	15.57	21	12.8	3,985.9	1.99
BSR-612	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-12	88170955	149803	17.55	24	13.2	4,633.2	2.32
BSR-613	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-13	88170982	149826	17.19	24	14.2	4,882.0	2.44
BSR-614	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-18	88171037	149828	16.12	22	14.1	4,545.8	2.27
BSR-615	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-19	88171053	149829	12.04	17	14.9	3,587.9	1.79
BSR-616	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-20	88171070		15.32	21	14.5	4,442.8	2.22
BSR-617	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-26	88171152	149805	16.30	22	13.5	4,401.0	2.20
BSR-618	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-04-27	88171179	149833	16.87	23	13.5	4,554.9	2.28
BSR-620	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-01	88171224	142388	15.64	22	13.8	4,316.6	2.16
BSR-621	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-03	88171263	149835	16.55	23	11.4	3,773.4	1.89
BSR-622	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-05	88171291	149836	17.47	24	13.3	4,647.0	2.32
BSR-623	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-08	88171317	149837	16.11	22	12.6	4,059.7	2.03
BSR-700	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-10	88171361		16.41	23	12.8	4,201.0	2.10
BSR-624	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-12	88171395	149841	16.66	23	12.9	4,298.3	2.15
BSR-625	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-16	88171440	149842	18.26	25	10.3	3,761.6	1.88
BSR-626	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-18	88171477	149844	16.57	23	12.8	4,241.9	2.12
BSR-628	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-22	88171510	149862	15.48	21	12.6	3,901.0	1.95
BSR-629	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-24	88171545	149850	16.71	23	12.2	4,077.2	2.04
BSR-630	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-26	88171582	149852	18.60	26	12.1	4,501.2	2.25
BSR-631	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-05-30	88171598	149865	15.85	22	12.4	3,930.8	1.97
BSR-633	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-01	88171630	149867	15.98	22	12	3,835.2	1.92
BSR-634	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-05	88171657	149853	15.28	21	11	3,361.6	1.68
BSR-635	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-07	88171693	149855	16.10	22	14.9	4,797.8	2.40
BSR-636	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-08	88171709	149856	16.08	22	12	3,859.2	1.93
BSR-637	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-09	88171719		16.59	23	13	4,313.4	2.16
BSR-638	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-13	88171755	149859	16.79	23	12.6	4,231.1	2.12
BSR-639	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-15	88171784	159878	16.86	23	12.6	4,248.7	2.12
BSR-640	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-19	88171819	149869	17.66	24	12.6	4,450.3	2.23
BSR-641	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-21	88171855	149879	18.22	25	12.6	4,591.4	2.30
BSR-642	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-23	88171894	159876	15.79	22	12.6	3,979.1	1.99
BSR-643	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-27	88171930	159877	15.64	22	12.6	3,941.3	1.97
BSR-644	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-06-29	88171972	153834	16.44	23	12.6	4,142.9	2.07
BSR-646	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-03	88172000	153836	14.82	20	14	4,149.6	2.07

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ID	FACILITY	HAULER	DATE	TICKET	MANIFEST	BOX TON	YDS	CAKE-S	WEIGHT	DRYTONS
BSR-647	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-05	88172018	153837	18.00	25	15.3	5,508.0	2.75
BSR-648	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-07	88172058	153839	16.88	23	14.4	4,861.4	2.43
BSR-649	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-11	88172082	1	16.37	23	13.3	4,354.4	2.18
BSR-650	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-17	88172124	153843	16.51	23	14.9	4,920.0	2.46
BSR-653	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-20	88172156	153847	16.35	23	13.6	4,447.2	2.22
BSR-655	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-21	88172162	149885	15.65	22	14.3	4,475.9	2.24
BSR-656	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-25	88172187	1887	15.75	22	14.2	4,473.0	2.24
BSR-657	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-07-27	88172205	149889	12.65	17	13.9	3,516.7	1.76
BSR-660	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-02	88172246	149895	15.36	21	12.2	3,747.8	1.87
BSR-661	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-04	88172273	1	15.98	22	14.6	4,666.2	2.33
BSR-662	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-08	88172292	149898	16.74	23	12.3	4,118.0	2.06
BSR-663	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-10	88172308	161301	17.37	24	18.5	6,426.9	3.21
BSR-664	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-16	88172343	161303	17.79	25	16.5	5,870.7	2.94
BSR-665	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-23	88172395	161309	17.15	24	15	5,145.0	2.57
BSR-666	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-28	88172425	161312	17.61	24	13.4	4,719.5	2.36
BSR-667	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-08-30	88172447	161335	18.09	25	13.4	4,848.1	2.42
BSR-669	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-09-01	88172463	161317	16.19	22	14.6	4,727.5	2.36
BSR-670	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-09-07	88172496	61321	15.41	21	15.2	4,684.6	2.34
BSR-671	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-09-13	88172553	161325	15.82	22	13.4	4,239.8	2.12
BSR-672	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-09-19	88172589	161328	18.00	25	14.8	5,328.0	2.66
BSR-673	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-09-25	88172633	161331	18.36	25	15	5,508.0	2.75
BSR-675	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-10-03	88172725	161336	21.07	29	14.2	5,983.9	2.99
BSR-676	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-10-11	88172795	161342	19.39	27	13	5,041.4	2.52
BSR-677	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-10-13	88172814	161344	20.21	28	14.2	5,739.6	2.87
BSR-678	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-10-17	88172846	161347	19.18	26	14.8	5,677.3	2.84
BSR-679	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-10-25	88172904	161352	22.73	31	15.9	7,228.1	3.61
BSR-680	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-10-31	88172936	161357	21.30	29	13.2	5,623.2	2.81
BSR-683	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-11-06	88172978	161361	19.37	27	14	5,423.6	2.71
BSR-684	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-11-08	88172997	161364	14.07	19	17	4,783.8	2.39
BSR-685	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-11-14	88173046	161367	18.43	25	13	4,791.8	2.40
BSR-686	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-11-20	88173094	161372	13.40	18	15	4,020.0	2.01
BSR-687	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-11-22	88173113	161378	16.89	23	15	5,067.0	2.53
BSR-688	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-11-30	88173171	161382	15.98	22	15.8	5,049.7	2.52

SEABROOK BIO-SOLIDS 2023 REPORT

ID	FACILITY	HAULER	DATE	TICKET	MANIFEST	BOX TON	YDS	CAKE-S	WEIGHT	DRYTONS
BSR-690	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-04	88173195	161383	11.41	16	16.1	3,674.0	1.84
BSR-691	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-06	88173208	161386	12.01	17	14.9	3,579.0	1.79
BSR-692	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-08	88173226	161389	15.50	21	15.3	4,743.0	2.37
BSR-693	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-12	88173249	161391	17.24	24	14.2	4,896.2	2.45
BSR-694	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-14	88173265	161393	18.95	26	14	5,306.0	2.65
BSR-695	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-20	88173297	161395	16.27	22	14.9	4,848.5	2.42
BSR-696	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-22	88173310	161398	15.39	21	15	4,617.0	2.31
BSR-697	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2023-12-28	88173328	161376	18.56	26	15	5,568.0	2.78

Wet Tons	Yards	AvgSolid	Dry Weight lbs	Dry Ton

Seabrook, NH 2024 Biosolids Totals

reportid	Facility	Hauler	Date	Ticket	Manifest	W Box Tons	Yards	Cake Solid	Dry Weight	Dry Tons
BSR-704	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-03	88173359	161603	20.5	28.0	14.7	6038.8	3.0
BSR-705	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-05	88173375		18.6	26.0	13.2	4915.7	2.5
BSR-708	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-09	88173393	161607	21.0	29.0	14.3	6017.4	3.0
BSR-709	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-11	88173408	161608	19.0	26.0	12.6	4777.9	2.4
BSR-710	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-17	88173440	161612	17.9	25.0	15.7	5608.0	2.8
BSR-711	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-23	88173474		14.7	20.0	15.2	4456.6	2.2
BSR-712	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-25	88173490	161615	20.5	28.0	14.7	6035.8	3.0
BSR-713	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-01-31	88173530	161169	20.3	28.0	13.8	5597.3	2.8
BSR-715	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-02	88173555	161621	14.8	20.0	13.2	3901.9	2.0
BSR-716	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-08	88173603	162165	15.3	21.0	15.2	4639.0	2.3
BSR-717	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-14	88173654		20.4	28.0	13.5	5494.5	2.7
BSR-718	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-16	88173677	161629	22.3	31.0	13.6	6073.8	3.0
BSR-719	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-21	88173713	161633	11.1	15.0	14.6	3247.0	1.6
BSR-720	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-23	88173736	161653	17.3	24.0	13.6	4702.9	2.4
BSR-721	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-27	88173757	161636	16.7	23.0	13.7	4567.6	2.3
BSR-722	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-02-29	88173777	161638	17.7	24.0	13.2	4659.6	2.3
BSR-724	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-04	88173800	161640	16.3	22.0	9.7	3164.1	1.6
BSR-725	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-06	88173815	161642	18.3	25.0	13.3	4854.5	2.4
BSR-726	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-08	88173832	161645	18.2	25.0	13.4	4880.3	2.4
BSR-727	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-12	88173853	161646	15.2	21.0	13.1	3969.3	2.0
BSR-728	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-15	88173876	161651	16.0	22.0	13.6	4360.2	2.2
BSR-729	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-19	88173898	161653	17.5	24.0	13.5	4733.1	2.4
BSR-730	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-21	88173923	161655	17.1	24.0	13.3	4538.0	2.3
BSR-731	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-25	88173948	161657	15.2	21.0	12.6	3832.9	1.9
BSR-733	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-27	88173968		15.1	21.0	13.6	4107.2	2.1
BSR-734	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-03-29	88173991	161661	15.4	21.0	13.5	4163.4	2.1
BSR-737	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-04	88174030	161664	19.5	27.0	13.4	5218.0	2.6
BSR-738	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-08	88174050	161665	17.3	24.0	11.9	4107.9	2.1
BSR-739	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-10	88174071	161666	17.5	24.0	12.1	4235.0	2.1
BSR-741	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-12	88174088	161669	17.6	24.0	12.0	4216.8	2.1
BSR-742	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-16	88174110	161373	15.3	21.0	12.3	3766.3	1.9
BSR-743	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-18	88174126	161671	11.8	16.0	12.6	2973.6	1.5
BSR-744	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-22	88174155	161675	14.4	20.0	12.8	3673.6	1.8
BSR-745	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-24	88174199	161677	13.1	18.0	13.5	3526.2	1.8
BSR-746	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-26	88174223	161179	16.6	23.0	11.9	3953.2	2.0
BSR-747	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-04-30	88174249	161681	16.3	22.0	12.8	4162.6	2.1
BSR-749	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-02	88174279	161683	13.7	19.0	13.2	3608.9	1.8

BSR-750	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-07	88174313	161686	15.7	22.0	12.8	4022.8	2.0
BSR-751	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-09	88174342	161689	17.1	24.0	12.9	4411.8	2.2
BSR-752	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-13	88174374	161690	16.9	23.0	13.2	4451.0	2.2
BSR-753	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-15	88174398	161691	18.2	25.0	12.3	4469.8	2.2
BSR-754	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-17	88174423	161693	11.9	16.0	13.0	3096.6	1.5
BSR-758	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-21	88174450	161694	13.6	19.0	13.4	3634.1	1.8
BSR-759	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-23	88174488		15.5	21.0	12.9	4004.2	2.0
BSR-760	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-29	88174519	164401	14.6	20.0	13.3	3875.6	1.9
BSR-761	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-05-31	88174549	164404	14.5	20.0	13.7	3984.0	2.0
BSR-763	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-04	88174568	164405.1	13.6	19.0	12.6	3422.2	1.7
BSR-764	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-06	88174584	164409.1	16.1	22.0	12.6	4052.7	2.0
BSR-765	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-10	88174625	164411.1	13.2	18.0	13.2	3490.1	1.7
BSR-766	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-12	88174655	164413.1	16.3	23.0	13.4	4373.8	2.2
BSR-767	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-14	88174689	164416.1	14.1	19.0	13.0	3653.0	1.8
BSR-768	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-18	88174717	16.1	14.3	20.0	13.4	3819.0	1.9
BSR-770	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-20	88174740	46419.1	12.6	17.0	13.6	3427.2	1.7
BSR-771	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-25	88174776	164423.1	14.5	20.0	13.1	3796.4	1.9
BSR-772	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-06-27	88174800	161684.1	15.2	21.0	12.6	3838.0	1.9
BSR-774	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-02	88174831	164425.1	15.7	22.0	12.8	4011.5	2.0
BSR-775	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-05	88174862	164427.1	14.3	20.0	12.4	3551.4	1.8
BSR-776	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-10	88174899	164430.1	18.7	26.0	13.8	5161.2	2.6
BSR-777	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-12	88174924	164432.1	19.6	27.0	11.7	4584.1	2.3
BSR-778	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-16	88174947	164434.1	19.2	26.0	13.1	5019.9	2.5
BSR-779	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-18	88174968	164437.1	12.4	17.0	13.1	3243.6	1.6
BSR-780	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-06	88175010	16444.1	14.0	19.0	13.9	3900.3	2.0
BSR-781	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-07-26	88175032	164442.1	12.4	17.0	12.8	3184.6	1.6
BSR-783	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-01	88175091	1.1	16.3	22.0	13.5	4387.5	2.2
BSR-784	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-05	88175120	164449.1	13.9	19.0	13.1	3631.3	1.8
BSR-785	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-07	88175143	15.31	15.3	21.0	13.4	4103.1	2.1
BSR-786	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-09	88175162	164453.1	12.5	17.0	13.1	3285.5	1.6
BSR-787	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-15	88175217	164457.1	14.8	20.0	13.4	3961.0	2.0
BSR-788	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-19	88175239	164459.1	11.1	15.0	12.4	2760.2	1.4
BSR-789	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-21	88175265	6446.1	13.3	18.0	13.2	3521.8	1.8
BSR-790	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-23	88175287	164464.1	16.5	23.0	13.4	4432.7	2.2
BSR-791	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-28	88175319	164467.1	14.3	20.0	12.5	3562.5	1.8
BSR-792	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-08-30	88175341	164469.1	14.8	20.0	13.3	3923.5	2.0
BSR-796	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-04	88175368	164470.1	13.2	18.0	13.0	3424.2	1.7
BSR-800	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-06	88175388	164473.1	15.5	21.0	11.9	3696.1	1.8
BSR-801	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-10	88175408	164475.1	15.4	21.0	12.6	3868.2	1.9
BSR-802	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-12	88175428	164477.1	16.7	23.0	13.5	4503.6	2.3
BSR-803	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-16	88175448	164478.1	12.5	17.0	12.6	3152.5	1.6

BSR-804	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-18	88175463	16448.1	14.4	20.0	13.5	3896.1	1.9
BSR-805	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-20	88175489	1.12	14.6	20.0	12.9	3766.8	1.9
BSR-806	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-26	88175547	1.13	10.6	15.0	13.0	2743.0	1.4
BSR-808	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-09-24	88175518	164484.1	13.5	19.0	13.1	3531.8	1.8
BSR-809	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-02	88175591	164490.1	13.0	18.0	13.0	3385.2	1.7
BSR-810	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-04	88175611	1.104	15.6	21.0	14.8	4615.2	2.3
BSR-811	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-08	88175636	164494.1	15.6	21.0	14.8	4615.2	2.3
BSR-812	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-10	88175659	1.1010	11.7	16.0	9.8	2293.2	1.1
BSR-813	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-15	88175690	164499.1	12.9	18.0	14.1	3648.4	1.8
BSR-814	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-17	88175708	1.1017	14.0	19.0	15.4	4317.0	2.2
BSR-815	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-22	88175740	164602.1	14.7	20.0	14.7	4318.9	2.2
BSR-816	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-24	88175759	1.1024	14.9	21.0	14.6	4362.7	2.2
BSR-817	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-29	88175788	1.1029	11.9	16.0	14.9	3538.5	1.8
BSR-818	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-10-31	88175804	1.1	12.5	17.0	12.3	3067.5	1.5
BSR-822	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-05	88175850	164612.1	10.8	15.0	12.0	2587.2	1.3
BSR-823	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-07	88175876	1.07	9.8	11.0	13.2	2576.6	1.3
BSR-824	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-11	88175897	1.1124	7.8	11.0	13.2	2059.2	1.0
BSR-825	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-15	88175960	1.1524	11.9	16.0	13.2	3144.2	1.6
BSR-826	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-19	88175982	164623.1	9.4	13.0	13.2	2476.3	1.2
BSR-827	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-21	88176011	1.2124	11.7	16.0	13.2	3086.2	1.5
BSR-828	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-11-25	88176032	164628.1	13.3	18.0	13.2	3516.5	1.8
BSR-830	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-02	88176073	1.12024	13.1	18.0	11.7	3070.1	1.5
BSR-831	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-04	88176095	2.2024	9.9	14.0	13.1	2593.8	1.3
BSR-832	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-06	88176121	164635.1	15.7	22.0	13.1	4108.2	2.1
BSR-833	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-10	88176147	164636.1	15.6	22.0	13.8	4311.1	2.2
BSR-834	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-12	88176168	164639.1	15.5	21.0	13.5	4193.1	2.1
BSR-835	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-16	88176183	164641.1	15.0	21.0	11.1	3332.2	1.7
BSR-836	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-17	88176191	164642.1	15.7	22.0	12.9	4050.6	2.0
BSR-837	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-18	88176204	164644.1	14.7	20.0	12.9	3784.9	1.9
BSR-838	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-20	88176218	164646.1	14.8	20.0	12.9	3828.7	1.9
BSR-839	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-24	88176232	164647.1	14.5	20.0	12.6	3643.9	1.8
BSR-840	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2024-12-30	88176257	164649.1	16.1	22.0	13.0	4183.4	2.1

Total Wet Tons	Total Yards	Avg Solid	Total Weight lbs	Total Dry Tons
1660.1	2281.0	13.2	438116.9	219.1

Dry Metric Tons
198.8

Seabrook, NH 2025 Biosolids Totals

reportid	Facility	Hauler	Date	Ticket	Manifest	W Box Tons	Yards	Cake Solid	Dry Weight	Dry Tons
BSR-873	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-02	88176269	164651.1	14.5	20.0	12.8	3700.1	1.9
BSR-875	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-06	88176284	164653.1	16.9	23.0	12.5	4212.5	2.1
BSR-876	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-08	88176304	164656.1	15.3	21.0	12.5	3817.5	1.9
BSR-877	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-10	88176329		14.2	20.0	12.7	3609.3	1.8
BSR-878	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-14	88176355	164659	15.7	22.0	12.5	3935.0	2.0
BSR-879	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-16	88176373		15.9	22.0	13.2	4187.0	2.1
BSR-880	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-20	88176388	164643	15.5	21.0	12.0	3724.8	1.9
BSR-881	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-22	88176412	164665	15.3	21.0	12.1	3697.8	1.8
BSR-882	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-23	88176423	164666	13.1	18.0	11.9	3125.2	1.6
BSR-883	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-24	88176423	164688	15.8	22.0	12.4	3912.1	2.0
BSR-884	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-28	88176460	164670	16.8	23.0	12.2	4093.4	2.0
BSR-885	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-01-30	88176487	164172	16.9	23.0	12.0	4058.4	2.0
BSR-886	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-03	88176510	164674	15.9	22.0	11.0	3493.6	1.7
BSR-887	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-05	88176527	164675	17.7	24.0	12.1	4288.2	2.1
BSR-888	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-07	88176545	161674	17.8	25.0	11.5	4091.7	2.0
BSR-890	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-11	88176577	164677	15.8	22.0	10.2	3223.2	1.6
BSR-891	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-13	88176600	164679	17.0	23.0	12.7	4312.9	2.2
BSR-892	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-18	88176631	164681	15.4	21.0	12.2	3762.5	1.9
BSR-893	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-20	88176659	164683	14.2	20.0	12.2	3472.1	1.7
BSR-894	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-24	88176685	164684	15.7	22.0	11.9	3712.2	1.9
BSR-895	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-26	88176700		14.5	20.0	11.7	3378.4	1.7
BSR-896	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-02-28	88176721	164690	15.9	22.0	13.5	4295.7	2.1
BSR-897	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-04	88176749	164691	13.3	18.0	12.0	3189.6	1.6
BSR-898	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-06	88176771	164693	14.4	20.0	13.0	3736.2	1.9
BSR-899	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-07	88176783	164694	15.9	22.0	12.7	4031.0	2.0
BSR-900	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-11	88176810	164696	15.5	21.0	12.5	3885.0	1.9
BSR-902	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-13	88176824	164698	16.2	22.0	12.1	3918.0	2.0
BSR-903	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-17	88176849	164699	15.7	22.0	11.9	3716.2	1.9
BSR-904	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-19	88176871	164504	14.6	20.0	11.6	3394.2	1.7
BSR-905	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-21	88176899	164504	15.2	21.0	11.6	3526.4	1.8
BSR-906	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-24	88176913	164505	15.1	21.0	11.9	3600.9	1.8
BSR-907	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-26	88176938	164506	15.4	12.0	11.4	3504.4	1.8
BSR-908	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-27	88176949	164508	14.9	21.0	11.7	3479.6	1.7
BSR-909	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-03-28	88176966	164509	15.0	21.0	11.8	3544.7	1.8
BSR-910	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-01	88176993	164510	14.3	20.0	11.3	3220.5	1.6
BSR-911	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-03	88177017	164513	14.8	20.0	12.0	3547.2	1.8
BSR-912	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-07	88177039	164515	14.9	21.0	12.0	3580.8	1.8
BSR-913	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-08	88177047	1644516	15.1	21.0	11.7	3533.4	1.8
BSR-914	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-09	88177056	164517	14.6	20.0	11.9	3486.5	1.7

BSR-915	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-11	88177078	164518	14.3	20.0	11.0	3140.9	1.6
BSR-916	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-15	88177104	164520	11.8	16.0	13.0	3055.7	1.5
BSR-917	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-18	88177133	644523	15.2	21.0	12.7	3863.3	1.9
BSR-918	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-22	88177163	153851	14.9	21.0	11.0	3279.4	1.6
BSR-919	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-24	88177184	1538	15.1	21.0	11.9	3591.9	1.8
BSR-920	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-28	88177221	153849	15.2	21.0	13.1	3979.8	2.0
BSR-921	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-04-30	88177247	164525	15.0	21.0	12.5	3732.5	1.9
BSR-922	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-02	88177269		15.6	22.0	12.2	3816.2	1.9
BSR-923	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-06	88177288	164530	12.8	18.0	12.2	3133.0	1.6
BSR-924	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-08	88177304		16.1	22.0	11.4	3661.7	1.8
BSR-925	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-12	88177330		16.1	22.0	11.1	3569.8	1.8
BSR-926	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-14	88177345	153854	15.1	21.0	11.6	3503.2	1.8
BSR-927	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-16	88177369	164537	14.9	21.0	11.3	3360.6	1.7
BSR-928	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-20	88177391	164539	13.8	19.0	12.3	3402.2	1.7
BSR-929	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-22	88177413	164547	14.0	19.0	12.6	3515.4	1.8
BSR-930	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-27	88177428	164542	14.8	20.0	11.9	3510.5	1.8
BSR-932	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-05-29	88177451	164544	13.5	19.0	11.6	3141.3	1.6
BSR-933	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-02	88177468	164546	14.5	20.0	11.8	3429.1	1.7
BSR-934	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-03	88177479	164547	14.5	20.0	11.8	3429.1	1.7
BSR-935	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-04	88177492	164549	14.4	20.0	12.0	3444.0	1.7
BSR-936	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-06	88177515	164551	14.2	20.0	11.6	3301.4	1.7
BSR-937	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-10	88177538	164553	14.3	20.0	10.9	3110.9	1.6
BSR-939	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-12	88177561	164556	14.2	20.0	11.4	3244.4	1.6
BSR-940	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-16	88177593	164557	13.8	19.0	11.8	3259.2	1.6
BSR-941	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-18	88177613	164560	14.4	20.0	12.0	3456.0	1.7
BSR-942	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-19	88177624	164561	14.1	19.0	11.5	3245.3	1.6
BSR-943	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-20	88177635	164562	13.5	19.0	11.9	3222.5	1.6
BSR-944	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-24	88177656	164563	14.1	19.0	11.1	3132.4	1.6
BSR-945	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-25	88177673	153856	14.0	19.0	12.0	3348.0	1.7
BSR-946	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-26	88177681	153858	14.3	20.0	12.7	3642.4	1.8
BSR-947	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-06-30	88177709	164563	14.4	20.0	12.1	3475.1	1.7
BSR-948	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-01	88177717	164567	14.0	19.0	12.4	3462.1	1.7
BSR-949	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-02	88177725	164569	14.6	20.0	12.7	3710.9	1.9
BSR-950	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-07	88177747	164570	14.6	20.0	12.8	3742.7	1.9
BSR-951	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-09	88177768	164572	14.8	20.0	12.7	3756.7	1.9
BSR-952	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-10	88177782	164573	12.8	18.0	13.0	3338.4	1.7
BSR-953	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-11	88177790	164575	15.3	21.0	13.4	4111.1	2.1
BSR-954	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-15	88177810	164577	16.1	22.0	13.4	4306.8	2.2
BSR-955	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-16	88177816	164578	14.9	21.0	13.0	3871.4	1.9
BSR-956	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-17	88177827	164579	15.1	21.0	15.0	4523.9	2.3
BSR-957	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-21	88177842	164582	9.7	13.0	12.9	2510.3	1.3
BSR-958	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-23	88177855	164583	14.8	20.0	13.4	3953.0	2.0
BSR-959	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-25	88177872	164585	13.1	18.0	13.2	3447.8	1.7

BSR-960	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-29	88177887		13.8	19.0	13.8	3803.3	1.9
BSR-961	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-07-31	88177905	164589	12.5	17.0	13.4	3352.7	1.7
BSR-962	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-05	88177929	164490	15.5	21.0	9.0	2793.6	1.4
BSR-963	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-07	88177938	164593	14.5	20.0	8.9	2568.3	1.3
BSR-964	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-11	88177954	164592	13.9	19.0	8.7	2416.9	1.2
BSR-965	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-13	88177962	164596	14.5	20.0	13.4	3894.0	1.9
BSR-966	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-15	88177970	164597	15.8	22.0	13.2	4165.9	2.1
BSR-967	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-19	88177977	164599	15.5	21.0	12.4	3839.0	1.9
BSR-968	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-21	88177984	164600	15.3	21.0	14.1	4311.8	2.2
BSR-969	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-25	88177990	164701	14.9	21.0	13.3	3963.4	2.0
BSR-970	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-27	88178011	164704	13.7	19.0	13.2	3619.4	1.8
BSR-971	Hawk Ridge Compost Facility: ME	TROIANO WASTE SERVICES, INC	2025-08-29	88178026	16270	14.3	20.0	12.5	3577.5	1.8
BSR-972	Envirem Organics: NB Canada	Goulet	2025-09-10	232011	247753	15.4	21.0	13.4	4113.8	2.1
BSR-974	Envirem Organics: NB Canada	Goulet	2025-09-11	232016	247755	17.3	24.0	12.3	4265.6	2.1
BSR-975	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	2025-09-15	570783		16.3	22.0	13.5	4390.2	2.2
BSR-976	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	2025-09-17	570919		14.5	20.0	12.9	3731.6	1.9
BSR-977	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	2025-09-18	570969		14.0	19.0	13.7	3822.3	1.9
BSR-978	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	2025-09-19	571037		12.4	17.0	10.6	2630.9	1.3
BSR-979	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	9/25/2025	571286		16.28	22	13.4	4363.0	2.2
BSR-980	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	9/30/2025	571494	164711	13.34	18	14.2	3788.6	1.9
BSR-981	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/2/2025	571617	164711	15.97	22	13.9	4439.7	2.2
BSR-982	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/6/2025	571722		15.84	22	13.5	4276.8	2.1
BSR-983	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/8/2025	571839	164711	12.41	17	14.9	3698.2	1.8
BSR-984	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/14/2025	572064	249139	16.65	23	12.7	4229.1	2.1
BSR-985	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/17/2025	572248		15.52	21	13.5	4190.4	2.1
BSR-986	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/21/2025	572358		10.76	15	13.5	2905.2	1.5
BSR-987	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	10/23/2025			10.97	15	11.5	2523.1	1.3
BSR-988	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	10/28/2025	572630		12.39	17	13.3	3295.7	1.6
BSR-989	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	11/4/2025	572912		14.98	21	13.3	3984.7	2.0
BSR-990	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	11/10/2025	573108		12.6	17	13.1	3301.2	1.7
BSR-991	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	11/19/2025	1804069		16.9	23	13.45	4546.1	2.3
BSR-992	North Country Environmental: NH	TROIANO WASTE SERVICES, INC	11/21/2025	573576		19.27	27	13.45	5183.6	2.6
BSR-993	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	11/24/2025	1805135		15.15	21	13.45	4075.4	2.0
BSR-994	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	11/25/2025	1805943		13.3	18	13.8	3670.8	1.8
BSR-995	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	12/4/2025	1807436		14.99	21	13.9	4167.2	2.1
BSR-996	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	12/9/2025	1808287	249157	17.44	24	14.2	4953.0	2.5
BSR-997	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	12/12/2025	1809252	249158	13.16	18	12.4	3263.7	1.6
BSR-998	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	12/17/2025	1810186	249159	14.11	19	10.8	3047.8	1.5
BSR-999	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	12/23/2025	181121	249160	15.27	21	12.5	3817.5	1.9
BSR-1000	Turnkey Landfill: NH	TROIANO WASTE SERVICES, INC	12/30/2025	1812127	249161	15.88	22	11.4	3620.6	1.8

Total Wet Tons	Total Yards	Avg Solid	Total Weight lbs	Total Dry Tons
1804.4	2479.0	12.4	446331.9	223.2

Dry Metric Tons
202.8

Facility	Location	Wet Tons	Dry Lbs	Dry Tons
N.E. Organics	Unity, ME	1391.4	338036.1	169.0
Envirem Organics Inc	Frederickton, New Brunswick	32.7	8379.4	4.2
North Country Environmental	Bethlehem, NH	233.2	62231.3	31.1
Turnkey Landfill	Rochester, NH	147.17	37685.1	18.8

2022

EAI ID #

245203

254008

Concentration in mg/kg listed by sample date

Analyte	CAS #	RL	6/29/2022	Q #2	RL	12/21/2022	Q #4
Dichlorodifluoromethane	75-71-8	3.0	not tested	bdl	3.0	not tested	
Chloromethane	74-87-3	2.0	<2	bdl	2.0	not tested	
Vinyl chloride	75-01-4	0.3	<0.3	bdl	0.3	not tested	
Bromomethane	74-83-9	2.0	<2	bdl	2.0	not tested	
Chloroethane	75-00-3	2.0	<2	bdl	2.0	not tested	
Trichlorofluoromethane	75-69-4	3.0	not tested	bdl	3.0	not tested	
Diethyl_ether	60-29-7	1.0	not tested	bdl	1.0	not tested	
Acetone	67-64-1	30.0	<30	bdl	30.0	not tested	
1,1-Dichloroethene	75-35-4	0.8	<0.8	bdl	0.8	not tested	
Methylene_chloride	75-09-2	2.0	<2	bdl	2.0	not tested	
Carbon_disulfide	75-15-0	2.0	<2	bdl	2.0	not tested	
Methyl-t-butylether(MTBE)	1634-04-4	3.0	not tested	bdl	3.0	not tested	
trans-1,2-Dichloroethene	156-60-5	0.8	<0.8	bdl	0.8	not tested	
1,1-Dichloroethane	75-34-3	0.8	<0.8	bdl	0.8	not tested	
2-Butanone(MEK)	78-93-3	8.0	<8	bdl	8.0	not tested	
2,2-Dichloropropane	590-20-7	1.0	not tested	bdl	1.0	not tested	
cis-1,2-Dichloroethene	156-59-2	0.8	<0.8	bdl	0.8	not tested	
Chloroform	67-66-3	0.8	<0.8	bdl	0.8	not tested	
Bromochloromethane	74-97-5	1.0	not tested	bdl	1.0	not tested	
Tetrahydrofuran(THF)	109-99-9	10.0	not tested	bdl	10.0	not tested	
1,1,1-Trichloroethane	71-55-6	0.8	<0.8	bdl	0.8	not tested	
1,1-Dichloropropene	563-58-6	1.0	not tested	bdl	1.0	not tested	
Carbon tetrachloride	56-23-5	0.8	<0.8	bdl	0.8	not tested	
1,2-Dichloroethane	107-06-2	0.8	<0.8	bdl	0.8	not tested	
Benzene	71-43-2	0.8	<0.8	bdl	0.8	not tested	
Trichloroethene	79-01-6	0.8	<0.8	bdl	0.8	not tested	
1,2-Dichloropropane	78-87-5	0.8	<0.8	bdl	0.8	not tested	
Bromodichloromethane	75-27-4	0.8	<0.8	bdl	0.8	not tested	
Dibromomethane	74-95-3	1.0	not tested	bdl	1.0	not tested	
4-Methyl-2-pentanone(MIBK)	108-10-1	8.0	<8	bdl	8.0	not tested	
cis-1,3-Dichloropropene	10061-01-5	0.8	<0.8	bdl	0.8	not tested	
Toluene	108-88-3	0.8	<0.8	bdl	0.8	not tested	
trans-1,3-Dichloropropene	10061-02-6	0.8	<0.8	bdl	0.8	not tested	
1,1,2-Trichloroethane	79-00-5	0.8	<0.8	bdl	0.8	not tested	
2-Hexanone	591-78-6	2.0	<2	bdl	2.0	not tested	
1,3-Dichloropropane	142-28-9	1.0	not tested	bdl	1.0	not tested	
Tetrachloroethene	127-18-4	0.8	<0.8	bdl	0.8	not tested	
Dibromochloromethane	124-48-1	0.8	<0.8	bdl	0.8	not tested	
1,2-Dibromoethane	106-93-4	0.5	not tested	bdl	0.5	not tested	
Chlorobenzene	108-90-7	0.8	<0.8	bdl	0.8	not tested	
1,1,1,2-Tetrachloroethane	630-20-6	0.8	<0.8	bdl	0.8	not tested	
Ethylbenzene	100-41-4	0.8	<0.8	bdl	0.8	not tested	
m&p-Xylene	108-38-3/106-42-3	0.8	<0.8	bdl	0.8	not tested	
o-Xylene	95-47-6	0.8	<0.8	bdl	0.8	not tested	
Styrene	100-42-5	0.8	<0.8	bdl	0.8	not tested	
Bromoform	75-25-2	0.8	<0.8	bdl	0.8	not tested	
iso-Propylbenzene	98-82-8	1.0	not tested	bdl	1.0	not tested	
1,1,2,2-Tetrachloroethane	79-34-5	0.8	<0.8	bdl	0.8	not tested	

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Analyte	CAS #	RL	6/29/2022	Q #2	RL	12/21/2022	Q #4	
1,2,3-Trichloropropane	96-18-4	1.0	not tested	bdl	1.0	not tested		
n-Propylbenzene	103-65-1	1.0	not tested	bdl	1.0	not tested		
Bromobenzene	108-86-1	1.0	not tested	bdl	1.0	not tested		
1,3,5-Trimethylbenzene	108-67-8	1.0	not tested	bdl	1.0	not tested		
2-Chlorotoluene	95-49-8	1.0	not tested	bdl	1.0	not tested		
4-Chlorotoluene	106-43-4	1.0	not tested	bdl	1.0	not tested		
tert-Butylbenzene	98-06-6	1.0	not tested	bdl	1.0	not tested		
1,2,4-Trimethylbenzene	95-63-6	1.0	not tested	bdl	1.0	not tested		
sec-Butylbenzene	135-98-8	1.0	not tested	bdl	1.0	not tested		
p-isopropyltoluene	99-87-6	1.0	not tested	bdl	1.0	not tested		
1,3-Dichlorobenzene	541-73-1	20.0	<20	bdl	20.0	not tested		
1,4-Dichlorobenzene	106-46-7	20.0	<20	bdl	20.0	not tested		
n-Butylbenzene	104-51-8	1.0	not tested	bdl	1.0	not tested		
1,2-Dichlorobenzene	95-50-1	20.0	<20	bdl	20.0	not tested		
1,2-Dibromo-3-chloropropane	96-12-8	1.0	not tested	bdl	1.0	not tested		
1,2,4-Trichlorobenzene	102-82-1	20.0	<20	bdl	20.0	not tested		
Hexachlorobutadiene	87-68-3	20.0	<20	bdl	20.0	not tested		
Naphthalene	91-20-3	20.0	<20	bdl	20.0	not tested		
1,2,3-Trichlorobenzene	87-61-6	7.0	not tested	bdl	7.0	not tested		
Azobenzene	122-66-7	20.0	<20	bdl	20.0	not tested		
2,4,5-Trichlorophenol	95-95-4	20.0	<20	bdl	20.0	not tested		
2,4,6-Trichlorophenol	88-06-2	20.0	<20	bdl	20.0	not tested		
2,4-Dichlorophenol	120-83-2	20.0	20	bdl	20.0	not tested		
2,4-Dimethylphenol	105-67-9	80.0	<80	bdl	80.0	not tested		
2,4-Dinitrophenol	51-28-5	200.0	<200	bdl	200.0	not tested		
2,4-Dinitrotoluene	121-14-2	30.0	<30	bdl	30.0	not tested		
2,6-Dinitrotoluene	606-20-2	30.0	<30	bdl	30.0	not tested		
2-Chloronaphthalene	91-59-7	20.0	<20	bdl	20.0	not tested		
2-Chlorophenol	95-57-8	20.0	<20	bdl	20.0	not tested		
2-Methylnaphthalene	91-57-6	20.0	<20	bdl	20.0	not tested		
2-Methylphenol	95-48-7	20.0	<20	bdl	20.0	not tested		
2-Nitroaniline	88-74-4	80.0	<80	bdl	80.0	not tested		
2-Nitrophenol	88-75-5	80.0	<80	bdl	80.0	not tested		
3,3'-Dichlorobenzidine	91-94-1	20.0	<20	bdl	20.0	not tested		
3-Nitroaniline	99-09-2	80.0	<80	bdl	80.0	not tested		
3/4-Methylphenol	106-44-5/106-44-5	20.0	<20	bdl	20.0	not tested		
4,6-Dinitro-2-methylphenol	534-52-1	80.0	<80	bdl	80.0	not tested		
4-Bromophenyl-phenylether	101-55-3	20.0	<20	bdl	20.0	not tested		
4-Chloro-3-methylphenol	59-50-7	20.0	<20	bdl	20.0	not tested		
4-Chloroaniline	106-47-8	20.0	<20	bdl	20.0	not tested		
4-Chlorophenyl-phenylether	7005-72-3	20.0	<20	bdl	20.0	not tested		
4-Nitroaniline	100-01-6	80.0	<80	bdl	80.0	not tested		
4-Nitrophenol	100-02-7	30.0	<30	bdl	30.0	not tested		
Acenaphthene	83-32-9	20.0	<20	bdl	20.0	not tested		
Acenaphthylene	208-96-8	20.0	<20	bdl	20.0	not tested		
Anthracene	120-12-7	20.0	<20	bdl	20.0	not tested		
Benzidine	92-87-5	80.0	<80	bdl	80.0	not tested		
Benzo(a)anthracene	56-55-3	20.0	<20	bdl	20.0	not tested		
Benzo(a)pyrene	50-32-8	20.0	<20	bdl	20.0	not tested		
Benzo(b)fluoranthene	205-99-2	20.0	<20	bdl	20.0	not tested		
Benzo(g,h,i)perylene	191-24-2	20.0	<20	bdl	20.0	not tested		

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Analyte	CAS #	RL	6/29/2022	Q #2	RL	12/21/2022	Q #4
Benzo(k)fluoranthene	207-08-9	20.0	<20	bdl	20.0	not tested	
bis(2-Chloroethoxy)methane	111-91-1	20.0	<20	bdl	20.0	not tested	
bis(2-Chloroethyl)ether	111-44-4	20.0	<20	bdl	20.0	not tested	
bis(2-chloroisopropyl)ether	39638-32-9	20.0	<20	bdl	20.0	not tested	
bis(2-Ethylhexyl)phthalate	117-81-7	80.0	<80	bdl	80.0	not tested	
Butylbenzylphthalate	85-68-7	80.0	<80	bdl	80.0	not tested	
Carbazole	86-74-8	20.0	<20	bdl	20.0	not tested	
Chrysene	218-01-9	20.0	<20	bdl	20.0	not tested	
Di-n-butylphthalate	84-74-2	80.0	<80	bdl	80.0	not tested	
Di-n-octylphthalate	117-84-0	80.0	<80	bdl	80.0	not tested	
Dibenz(a,h)anthracene	53-70-3	20.0	<20	bdl	20.0	not tested	
Dibenzofuran	132-64-9	20.0	<20	bdl	20.0	not tested	
Diethylphthalate	84-66-2	80.0	<80	bdl	80.0	not tested	
Dimethylphthalate	131-11-3	20.0	<20	bdl	20.0	not tested	
Fluoranthene	206-44-0	20.0	<20	bdl	20.0	not tested	
Fluorene	86-73-7	20.0	<20	bdl	20.0	not tested	
Hexachlorobenzene	118-74-1	20.0	<20	bdl	20.0	not tested	
Hexachlorocyclopentadiene	77-47-4	80.0	<80	bdl	80.0	not tested	
Hexachloroethane	67-72-1	20.0	<20	bdl	20.0	not tested	
Indeno(1,2,3-cd)pyrene	193-39-5	20.0	<20	bdl	20.0	not tested	
Isophorone	78-59-1	20.0	<20	bdl	20.0	not tested	
n-Nitroso-di-n-propylamine	621-64-7	9.0	<9	bdl	9.0	not tested	
N-Nitrosodimethylamine	62-75-9	20.0	<20	bdl	20.0	not tested	
n-Nitrosodiphenylamine	86-30-6	20.0	<20	bdl	20.0	not tested	
Nitrobenzene	98-95-3	20.0	<20	bdl	20.0	not tested	
Pentachlorophenol	87-86-5	80.0	<80	bdl	80.0	not tested	
Phenanthrene	85-01-8	20.0	<20	bdl	20.0	not tested	
Phenol	108-95-2	20.0	<20	bdl	20.0	not tested	
Pyrene	129-00-0	20.0	<20	bdl	20.0	not tested	
Arsenic	7440-38-2	0.5	4.4		0.5	4.4	
Cadmium	7440-43-9	0.5	0.68		0.5	0.66	
Chromium	7440-47-3	0.5	68		0.5	22.0	
Copper	7440-50-8	0.5	360		0.5	410.0	
Lead	7439-92-1	0.5	12		0.5	9.5	
Mercury	7439-97-6	0.05	0.26		0.1	0.23	
Molybdenum	7439-98-7	0.5	42		0.5	6.7	
Nickel	7440-02-0	0.5	21		0.5	17.0	
Selenium	7782-49-2	0.5	2.4		0.5	2.6	
Zinc	7440-66-6	0.5	430		5.0	440.0	
Antimony	7440-36-0	0.5	3.7		0.5	not tested	
Beryllium	7440-41-7	0.1	0.14		0.1	not tested	
Silver	7440-22-4	0.5	1.2		0.5	not tested	
Thallium	7440-28-0	0.5	< 0.5	bdl	0.5	not tested	
Aldrin µg/Kg	309-00-2	58	0	bdl	58.0	not tested	
gamma-BHC µg/Kg	58-89-9	23	0	bdl	23.0	not tested	
alpha-BHC µg/Kg	319-84-6	120	0	bdl	120.0	not tested	
delta-BHC µg/Kg	319-86-8	120	0	bdl	120.0	not tested	
beta-BHC µg/Kg	319-85-7	120	0	bdl	120.0	not tested	
Chlordane µg/Kg	57-74-9	580	0	bdl	580.0	not tested	

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Analyte	CAS #	RL	6/29/2022	Q #2	RL	12/21/2022	Q #4	
4,4'-DDT µg/Kg	50-29-3	120	0	bdl	120.0	not tested		
4,4'-DDE µg/Kg	72-55-9	120	0	bdl	120.0	not tested		
4,4'-DDD µg/Kg	72-54-8	120	0	bdl	120.0	not tested		
Endosulfan_I µg/Kg	959-98-8	120	0	bdl	120.0	not tested		
Endosulfan_II µg/Kg	33213-65-9	120	0	bdl	120.0	not tested		
Endosulfan_Sulfate µg/Kg	1031-07-8	120	0	bdl	120.0	not tested		
Endrin µg/Kg	72-20-8	120	0	bdl	120.0	not tested		
Endrin_Aldehyde µg/Kg	7421-93-4	120	0	bdl	120.0	not tested		
Endrin Ketone µg/Kg		120	0	bdl	120.0	not tested		
Heptachlor µg/Kg	76-44-8	120	0	bdl	120.0	not tested		
Heptachlor_Epoxyde µg/Kg	1024-57-3	120	0	bdl	120.0	not tested		
Toxaphene µg/Kg	8001-35-2	2300	0	bdl	2300.0	not tested		
Alachlor µg/Kg		120	0	bdl	120.0	not tested		
Dieldrin µg/Kg		58	0	bdl	58.0	not tested		
Methoxychlor µg/Kg		580	0	bdl	580.0	not tested		
PCB-1242	53469-21-9	2.0	< 2	bdl	2.0	not tested		
PCB-1254	11097-69-1	2.0	< 2	bdl	2.0	not tested		
PCB-1221	11104-28-2	2.0	< 2	bdl	2.0	not tested		
PCB-1232	11141-16-5	2.0	< 2	bdl	2.0	not tested		
PCB-1248	12672-29-6	2.0	< 2	bdl	2.0	not tested		
PCB-1260	11096-82-5	2.0	< 2	bdl	2.0	not tested		
PCB-1016	12674-11-2	2.0	< 2	bdl	2.0	not tested		
PCB-1262			not tested			not tested		
PCB-1268			not tested			not tested		
pH	na	0.1	6.51	SU	0.1	6.38	SU	
Solids_Total	na	1	12.7	%	1.0	12.3	%	
Nitrate-Nitrite	na	100	<100	bdl	50.0	100		
Nitrite-N		100	<100	bdl	100.0	not tested		
NitrateN		100	<100	bdl	100.0	not tested		
TKN	na	3000	87000		2000.0	96000		
Ammonia	na	8	3400		40.0	4100		
Total_Organic_Nitrogen	na	5	83600		40.0	91900		
Potassium	7440-09-7	100	4600		100.0	4800		
Phosphorus	7723-14-0	100	18000		100.0	17000		
2378_TCDD_&_2378_TCDF	1746-01-6	1.85	0	bdl	1.9	not tested		
Remaining_Congeners_of_2378TCDD	1746-01-6	5 ppt	3.74		5 ppt	not tested		
Cyanide_Total	57-12-5	2	2.9		2.0	not tested		
Enteric_Viruses_(if_applicable)	na	PFU/4.21	< 1.0	bdl	PFU/4.2	not tested		
					0.0			
alpha-Terpineol		80	<80	bdl	80.0	not tested		
1,3-Dichlorobenzene		20	<20	bdl	20.0	not tested		
Acetophenone		200	<200	bdl	200.0	not tested		
1,4-Dichlorobenzene		20	<20	bdl	20.0	not tested		
1,2-Dichlorobenzene		20	<20	bdl	20.0	not tested		
1,2,4-Trichlorobenzene		20	<20	bdl	20.0	not tested		
2,3-Dichloroaniline		20	<20	bdl	20.0	not tested		
Aniline		20	<20	bdl	20.0	not tested		
Hexachlorobutadiene		20	<20	bdl	20.0	not tested		
Naphthalene		20	<20	bdl	20.0	not tested		
1-Methylnaphthalene		20	<20	bdl	20.0	not tested		

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Analyte	CAS #	RL	6/29/2022	Q #2	RL	12/21/2022	Q #4	
n-Decane		80	<80	bdl	80.0	not tested		
n-Octadecane		80	<80	bdl	80.0	not tested		
Benzyl alcohol		200.0	<200	bdl	200.0	not tested		
Benzoic acid		800.0	<800	bdl	800.0	not tested		
Pyridine		80.0	<80	bdl	80.0	not tested		
1,4-Dioxane		30.0	not tested	bdl	30.0	not tested		
tert-Butyl Alcohol (TBA)		50.0	not tested		50.0	not tested		
Ethyl-t-butyl ether(ETBE)		3.0	not tested		3.0	not tested		
Isopropyl ether(DIPE)		3.0	not tested		3.0	not tested		
tert-amyl methyl ether(TAME)		3	not tested	bdl	3.0	not tested		
1,3,5-Trichlorobenzene		1	not tested	bdl	1.0	not tested		
Volatile Solids		1.0	85.1	%	1.0	83.6	%	
Chloride		300.0	840		300.0	1200		
Calcium	7440-70-2	100.0	16000		100.0	14000		
Iron	7439-89-6	100.0	5100		100.0	5100		
Sodium	7440-23-5	100.0	1600		100.0	1700		
Magnesium	7439-95-4	100.0	3900		100.0	3200		
Carbon Solid Percent			12			12		
Inorganic Carbon			not tested		0.0	not tested		
Total Organic Carbon		100.0	299000		100.0	281000		
Manganese			not tested		0.0	not tested		
Barium			not tested		0.0	not tested		
Boron			not tested		0.0	not tested		
					0.0			

2023

EAI ID #

261969

269100

Concentration in mg/kg listed by sample date

Analyte	CAS #	RL	6/14/2023	Q #2	RL	10/30/2023	Q #4	
Dichlorodifluoromethane	75-71-8	3.0	not tested	bdl	3.0	not tested		
Chloromethane	74-87-3	2.0	<2	bdl	2.0	not tested		
Vinyl chloride	75-01-4	0.5	<0.5	bdl	0.5	not tested		
Bromomethane	74-83-9	2.0	<2	bdl	2.0	not tested		
Chloroethane	75-00-3	2.0	<2	bdl	2.0	not tested		
Trichlorofluoromethane	75-69-4	3.0	not tested	bdl	3.0	not tested		
Diethyl_ether	60-29-7	1.0	not tested	bdl	1.0	not tested		
Acetone	67-64-1	50.0	<50	bdl	50.0	not tested		
1,1-Dichloroethene	75-35-4	1.0	<1	bdl	1.0	not tested		
Methylene_chloride	75-09-2	2.0	<2	bdl	2.0	not tested		
Carbon_disulfide	75-15-0	2.0	<2	bdl	2.0	not tested		
Methyl-t-butylether(MTBE)	1634-04-4	3.0	not tested	bdl	3.0	not tested		
trans-1,2-Dichloroethene	156-60-5	1.0	<1	bdl	1.0	not tested		
1,1-Dichloroethane	75-34-3	1.0	<1	bdl	1.0	not tested		
2-Butanone(MEK)	78-93-3	10.0	<10	bdl	10.0	not tested		
2,2-Dichloropropane	590-20-7	1.0	not tested	bdl	1.0	not tested		
cis-1,2-Dichloroethene	156-59-2	1.0	<1	bdl	1.0	not tested		
Chloroform	67-66-3	1.0	<1	bdl	1.0	not tested		
Bromochloromethane	74-97-5	1.0	not tested	bdl	1.0	not tested		
Tetrahydrofuran(THF)	109-99-9	10.0	not tested	bdl	10.0	not tested		
1,1,1-Trichloroethane	71-55-6	1.0	<1	bdl	1.0	not tested		
1,1-Dichloropropene	563-58-6	1.0	not tested	bdl	1.0	not tested		
Carbon tetrachloride	56-23-5	1.0	<1	bdl	1.0	not tested		
1,2-Dichloroethane	107-06-2	1.0	>1	bdl	1.0	not tested		
Benzene	71-43-2	1.0	<1	bdl	1.0	not tested		
Trichloroethene	79-01-6	1.0	<1	bdl	1.0	not tested		
1,2-Dichloropropane	78-87-5	1.0	<1	bdl	1.0	not tested		
Bromodichloromethane	75-27-4	1.0	<1	bdl	1.0	not tested		
Dibromomethane	74-95-3	1.0	not tested	bdl	1.0	not tested		
4-Methyl-2-pentanone(MIBK)	108-10-1	10.0	<10	bdl	10.0	not tested		
cis-1,3-Dichloropropene	10061-01-5	1.0	<1	bdl	1.0	not tested		
Toluene	108-88-3	1.0	<1	bdl	1.0	not tested		
trans-1,3-Dichloropropene	10061-02-6	1.0	<1	bdl	1.0	not tested		
1,1,2-Trichloroethane	79-00-5	1.0	<1	bdl	1.0	not tested		
2-Hexanone	591-78-6	2.0	<2	bdl	2.0	not tested		
1,3-Dichloropropane	142-28-9	1.0	not tested	bdl	1.0	not tested		
Tetrachloroethene	127-18-4	1.0	<1	bdl	1.0	not tested		
Dibromochloromethane	124-48-1	1.0	<1	bdl	1.0	not tested		
1,2-Dibromoethane	106-93-4	0.5	not tested	bdl	0.5	not tested		
Chlorobenzene	108-90-7	1.0	<1	bdl	1.0	not tested		
1,1,1,2-Tetrachloroethane	630-20-6	1.0	<1	bdl	1.0	not tested		
Ethylbenzene	100-41-4	1.0	<1	bdl	1.0	not tested		
m&p-Xylene	108-38-3/106-42-3	1.0	<1	bdl	1.0	not tested		
o-Xylene	95-47-6	1.0	<1	bdl	1.0	not tested		
Styrene	100-42-5	1.0	<1	bdl	1.0	not tested		
Bromoform	75-25-2	1.0	<1	bdl	1.0	not tested		
iso-Propylbenzene	98-82-8	1.0	not tested	bdl	1.0	not tested		
1,1,2,2-Tetrachloroethane	79-34-5	1.0	<1	bdl	1.0	not tested		

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Analyte	CAS #	RL	6/14/2023	Q #2	RL	10/30/2023	Q #4
1,2,3-Trichloropropane	96-18-4	1.0	not tested	bdl	1.0	not tested	
n-Propylbenzene	103-65-1	1.0	not tested	bdl	1.0	not tested	
Bromobenzene	108-86-1	1.0	not tested	bdl	1.0	not tested	
1,3,5-Trimethylbenzene	108-67-8	1.0	not tested	bdl	1.0	not tested	
2-Chlorotoluene	95-49-8	1.0	not tested	bdl	1.0	not tested	
4-Chlorotoluene	106-43-4	1.0	not tested	bdl	1.0	not tested	
tert-Butylbenzene	98-06-6	1.0	not tested	bdl	1.0	not tested	
1,2,4-Trimethylbenzene	95-63-6	1.0	not tested	bdl	1.0	not tested	
sec-Butylbenzene	135-98-8	1.0	not tested	bdl	1.0	not tested	
p-isopropyltoluene	99-87-6	1.0	not tested	bdl	1.0	not tested	
1,3-Dichlorobenzene	541-73-1	8.0	<8	bdl	8.0	not tested	
1,4-Dichlorobenzene	106-46-7	8.0	<8	bdl	8.0	not tested	
n-Butylbenzene	104-51-8	1.0	not tested	bdl	1.0	not tested	
1,2-Dichlorobenzene	95-50-1	8.0	<8	bdl	8.0	not tested	
1,2-Dibromo-3-chloropropane	96-12-8	1.0	not tested	bdl	1.0	not tested	
1,2,4-Trichlorobenzene	102-82-1	8.0	<8	bdl	8.0	not tested	
Hexachlorobutadiene	87-68-3	20.0	not tested	bdl	20.0	not tested	
Naphthalene	91-20-3	20.0	not tested	bdl	20.0	not tested	
1,2,3-Trichlorobenzene	87-61-6	7.0	not tested	bdl	7.0	not tested	
Azobenzene	122-66-7	8.0	<8	bdl	8.0	not tested	
2,4,5-Trichlorophenol	95-95-4	8.0	<8	bdl	8.0	not tested	
2,4,6-Trichlorophenol	88-06-2	8.0	<8	bdl	8.0	not tested	
2,4-Dichlorophenol	120-83-2	8.0	<8	bdl	8.0	not tested	
2,4-Dimethylphenol	105-67-9	40.0	<40	bdl	40.0	not tested	
2,4-Dinitrophenol	51-28-5	70.0	<70	bdl	70.0	not tested	
2,4-Dinitrotoluene	121-14-2	20.0	<20	bdl	20.0	not tested	
2,6-Dinitrotoluene	606-20-2	20.0	<20	bdl	20.0	not tested	
2-Chloronaphthalene	91-59-7	8.0	<8	bdl	8.0	not tested	
2-Chlorophenol	95-57-8	8.0	<8	bdl	8.0	not tested	
2-Methylnaphthalene	91-57-6	8.0	<8	bdl	8.0	not tested	
2-Methylphenol	95-48-7	8.0	<8	bdl	8.0	not tested	
2-Nitroaniline	88-74-4	40.0	<40	bdl	40.0	not tested	
2-Nitrophenol	88-75-5	40.0	<40	bdl	40.0	not tested	
3,3'-Dichlorobenzidine	91-94-1	8.0	<8	bdl	8.0	not tested	
3-Nitroaniline	99-09-2	40.0	<40	bdl	40.0	not tested	
3/4-Methylphenol	106-44-5/106-44-5	8.0	<8	bdl	8.0	not tested	
4,6-Dinitro-2-methylphenol	534-52-1	40.0	<40	bdl	40.0	not tested	
4-Bromophenyl-phenylether	101-55-3	8.0	<8	bdl	8.0	not tested	
4-Chloro-3-methylphenol	59-50-7	8.0	<8	bdl	8.0	not tested	
4-Chloroaniline	106-47-8	8.0	<8	bdl	8.0	not tested	
4-Chlorophenyl-phenylether	7005-72-3	8.0	<8	bdl	8.0	not tested	
4-Nitroaniline	100-01-6	40.0	<40	bdl	40.0	not tested	
4-Nitrophenol	100-02-7	40.0	<40	bdl	40.0	not tested	
Acenaphthene	83-32-9	8.0	<8	bdl	8.0	not tested	
Acenaphthylene	208-96-8	8.0	<8	bdl	8.0	not tested	
Anthracene	120-12-7	8.0	<8	bdl	8.0	not tested	
Benzidine	92-87-5	40.0	<40	bdl	40.0	not tested	
Benzo(a)anthracene	56-55-3	8.0	<8	bdl	8.0	not tested	
Benzo(a)pyrene	50-32-8	8.0	<8	bdl	8.0	not tested	
Benzo(b)fluoranthene	205-99-2	8.0	<8	bdl	8.0	not tested	
Benzo(g,h,i)perylene	191-24-2	8.0	<8	bdl	8.0	not tested	

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Analyte	CAS #	RL	6/14/2023	Q #2	RL	10/30/2023	Q #4
Benzo(k)fluoranthene	207-08-9	8.0	<8	bdl	8.0	not tested	
bis(2-Chloroethoxy)methane	111-91-1	8.0	<8	bdl	8.0	not tested	
bis(2-Chloroethyl)ether	111-44-4	8.0	<8	bdl	8.0	not tested	
bis(2-chloroisopropyl)ether	39638-32-9	8.0	<8	bdl	8.0	not tested	
bis(2-Ethylhexyl)phthalate	117-81-7	40.0	<40	bdl	40.0	not tested	
Butylbenzylphthalate	85-68-7	40.0	<40	bdl	40.0	not tested	
Carbazole	86-74-8	8.0	<8	bdl	8.0	not tested	
Chrysene	218-01-9	8.0	<8	bdl	8.0	not tested	
Di-n-butylphthalate	84-74-2	40.0	<40	bdl	40.0	not tested	
Di-n-octylphthalate	117-84-0	40.0	<40	bdl	40.0	not tested	
Dibenz(a,h)anthracene	53-70-3	8.0	<8	bdl	8.0	not tested	
Dibenzofuran	132-64-9	8.0	<8	bdl	8.0	not tested	
Diethylphthalate	84-66-2	40.0	<40	bdl	40.0	not tested	
Dimethylphthalate	131-11-3	8.0	<8	bdl	8.0	not tested	
Fluoranthene	206-44-0	8.0	<8	bdl	8.0	not tested	
Fluorene	86-73-7	8.0	<8	bdl	8.0	not tested	
Hexachlorobenzene	118-74-1	8.0	<8	bdl	8.0	not tested	
Hexachlorocyclopentadiene	77-47-4	40.0	<40	bdl	40.0	not tested	
Hexachloroethane	67-72-1	8.0	<8	bdl	8.0	not tested	
Indeno(1,2,3-cd)pyrene	193-39-5	8.0	<8	bdl	8.0	not tested	
Isophorone	78-59-1	8.0	<8	bdl	8.0	not tested	
n-Nitroso-di-n-propylamine	621-64-7	4.0	<4	bdl	4.0	not tested	
N-Nitrosodimethylamine	62-75-9	8.0	<8	bdl	8.0	not tested	
n-Nitrosodiphenylamine	86-30-6	8.0	<8	bdl	8.0	not tested	
Nitrobenzene	98-95-3	8.0	<8	bdl	8.0	not tested	
Pentachlorophenol	87-86-5	40.0	<40	bdl	40.0	not tested	
Phenanthrene	85-01-8	8.0	<8	bdl	8.0	not tested	
Phenol	108-95-2	8.0	<8	bdl	8.0	not tested	
Pyrene	129-00-0	8.0	<8	bdl	8.0	not tested	
Arsenic	7440-38-2	0.5	4.8		0.5	3.4	
Cadmium	7440-43-9	0.5	0.69		0.5	0.56	
Chromium	7440-47-3	0.5	20		0.5	15.0	
Copper	7440-50-8	0.5	400		0.5	390.0	
Lead	7439-92-1	0.5	8.8		0.5	9.1	
Mercury	7439-97-6	0.05	0.34		0.1	0.37	
Molybdenum	7439-98-7	0.5	6.1		0.5	5.2	
Nickel	7440-02-0	0.5	15		0.5	12.0	
Selenium	7782-49-2	0.5	3		0.5	1.6	
Zinc	7440-66-6	0.5	530		5.0	410.0	
Antimony	7440-36-0	0.5	3.5		0.5	not tested	
Beryllium	7440-41-7	0.1	<0.1		0.1	not tested	
Silver	7440-22-4	0.5	1.1		0.5	not tested	
Thallium	7440-28-0	0.5	< 0.5	bdl	0.5	not tested	
Aldrin mg/Kg	309-00-2	0.5	<0.5	bdl	0.5	not tested	
gamma-BHC mg/Kg	58-89-9	0.5	<0.5	bdl	0.5	not tested	
alpha-BHC mg/Kg	319-84-6	0.5	<0.5	bdl	0.5	not tested	
delta-BHC mg/Kg	319-86-8	0.5	<0.5	bdl	0.5	not tested	
beta-BHC mg/Kg	319-85-7	0.5	<0.5	bdl	0.5	not tested	
Chlordane mg/Kg	57-74-9	0.5	not tested	bdl	0.5	not tested	

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Analyte	CAS #	RL	6/14/2023	Q #2	RL	10/30/2023	Q #4	
4,4'-DDT mg/Kg	50-29-3	0.5	<0.5	bdl	0.5	not tested		
4,4'-DDE mg/Kg	72-55-9	0.5	<0.5	bdl	0.5	not tested		
4,4'-DDD mg/Kg	72-54-8	0.5	<0.5	bdl	0.5	not tested		
Endosulfan_I mg/Kg	959-98-8	0.5	<0.5	bdl	0.5	not tested		
Endosulfan_II mg/Kg	33213-65-9	0.5	<0.5	bdl	0.5	not tested		
Endosulfan_Sulfate mg/Kg	1031-07-8	0.5	<0.5	bdl	0.5	not tested		
Endrin mg/Kg	72-20-8	0.5	<0.5	bdl	0.5	not tested		
Endrin_Aldehyde mg/Kg	7421-93-4	0.5	<0.5	bdl	0.5	not tested		
Endrin Ketone mg/Kg		0.5	<0.5	bdl	0.5	not tested		
Heptachlor mg/Kg	76-44-8	0.5	<0.5	bdl	0.5	not tested		
Heptachlor_Epoxide mg/Kg	1024-57-3	0.5	<0.5	bdl	0.5	not tested		
Toxaphene mg/Kg	8001-35-2	5	<5	bdl	5.0	not tested		
Alachlor mg/Kg		120	not tested	bdl	120.0	not tested		
Dieldrin mg/Kg		0.5	<0.5	bdl	0.5	not tested		
Methoxychlor mg/Kg		0.5	<0.5	bdl	0.5	not tested		
PCB-1242	53469-21-9	2.0	< 2	bdl	2.0	not tested		
PCB-1254	11097-69-1	2.0	< 2	bdl	2.0	not tested		
PCB-1221	11104-28-2	2.0	< 2	bdl	2.0	not tested		
PCB-1232	11141-16-5	2.0	< 2	bdl	2.0	not tested		
PCB-1248	12672-29-6	2.0	< 2	bdl	2.0	not tested		
PCB-1260	11096-82-5	2.0	< 2	bdl	2.0	not tested		
PCB-1016	12674-11-2	2.0	< 2	bdl	2.0	not tested		
PCB-1262			not tested			not tested		
PCB-1268			not tested			not tested		
pH	DEP1003	0.1	6.11	SU	0.1	5.92	SU	
Solids_Total	na	1	14.1	%	1.0	15.2	%	
Nitrate-Nitrite	na	50	82	bdl	40.0	45		
Nitrite-N		50	82	bdl	50.0	not tested		
NitrateN		50	82	bdl	50.0	not tested		
TKN	na	2000	86000		2000.0	84000		
Ammonia	na	20	2800		30.0	2900		
Total_Organic_Nitrogen	na	40	83200		2000.0	81100		
Potassium	7440-09-7	100	7000		100.0	3700		
Phosphorus	7723-14-0	100	19000		100.0	13000		
2378_TCDD_&_2378_TCDF	1746-01-6	2.465	0	bdl	2.5	not tested		
Remaining_Congeners_of_2378TCDD	1746-01-6	11.234	1.3		11.2	not tested		
Cyanide_Total	57-12-5	3.57	<3.57		3.6	not tested		
Enteric_Viruses_(if_applicable)	na	PFU/4.21	<1	bdl	PFU/4.2	not tested		
alpha-Terpineol		40	<40	bdl	40.0	not tested		
Acetophenone		70	<70	bdl	70.0	not tested		
2,3-Dichloroaniline		8	<8	bdl	8.0	not tested		
Aniline		8	<8	bdl	8.0	not tested		
1-Methylnaphthalene		8	<8	bdl	8.0	not tested		
n-Decane		40	<40	bdl	40.0	not tested		
n-Octadecane		40	<40	bdl	40.0	not tested		
Benzyl alcohol		70.0	<70	bdl	70.0	not tested		
Benzoic acid		400.0	<400	bdl	400.0	not tested		
Pyridine		40.0	<40	bdl	40.0	not tested		
1,4-Dioxane		30.0	not tested	bdl	30.0	not tested		

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Analyte	CAS #	RL	6/14/2023	Q #2	RL	10/30/2023	Q #4	
tert-Butyl Alcohol (TBA)		50.0	not tested		50.0	not tested		
Ethyl-t-butyl ether(ETBE)		3.0	not tested		3.0	not tested		
Isopropyl ether(DIPE)		3.0	not tested		3.0	not tested		
tert-amyl methyl ether(TAME)		3	not tested	bdl	3.0	not tested		
1,3,5-Trichlorobenzene		1	not tested	bdl	1.0	not tested		
Volatile Solids		1.0	82.5	%	1.0	83.32	%	
Chloride	16887006	90.0	820		80.0	640		
Calcium	7440-70-2	100.0	14000		100.0	9900		
Iron	7439-89-6	100.0	5000		100.0	4400		
Sodium	7440-23-5	100.0	1600		100.0	930		
Magnesium	7439-95-4	100.0	4300		100.0	2700		
Carbon Solid Percent			not tested			not tested		
Inorganic Carbon			not tested		0.0	not tested		
Total Organic Carbon		100.0	253000		100.0	216000		
Manganese			not tested		0.0	not tested		
Barium			not tested		0.0	not tested		
Boron			not tested		0.0	not tested		
					0.0			

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2024

EAI ID #

282628

288682

Concentration in mg/kg listed by sample date

Analyte	CAS #	RL	7/24/2024	Q #3	RL	10/31/2024	Q #4	
Dichlorodifluoromethane	75-71-8	3.0	not tested		3.0	not tested		
Chloromethane	74-87-3	3.0	<3	bdl	3.0	not tested		
Vinyl chloride	75-01-4	0.5	<0.5	bdl	0.5	not tested		
Bromomethane	74-83-9	3.0	<3	bdl	3.0	not tested		
Chloroethane	75-00-3	3.0	<3	bdl	3.0	not tested		
Trichlorofluoromethane	75-69-4	3.0	not tested		3.0	not tested		
Diethyl_ether	60-29-7	1.0	not tested		1.0	not tested		
Acetone	67-64-1	50.0	<50	bdl	50.0	not tested		
1,1-Dichloroethene	75-35-4	1.0	<1	bdl	1.0	not tested		
Methylene_chloride	75-09-2	3.0	<3	bdl	3.0	not tested		
Carbon_disulfide	75-15-0	3.0	<3	bdl	3.0	not tested		
Methyl-t-butylether(MTBE)	1634-04-4	3.0	not tested		3.0	not tested		
trans-1,2-Dichloroethene	156-60-5	1.0	<1	bdl	1.0	not tested		
1,1-Dichloroethane	75-34-3	1.0	<1	bdl	1.0	not tested		
2-Butanone(MEK)	78-93-3	10.0	<10	bdl	10.0	not tested		
2,2-Dichloropropane	590-20-7	1.0	not tested		1.0	not tested		
cis-1,2-Dichloroethene	156-59-2	1.0	<1	bdl	1.0	not tested		
Chloroform	67-66-3	1.0	<1	bdl	1.0	not tested		
Bromochloromethane	74-97-5	1.0	not tested		1.0	not tested		
Tetrahydrofuran(THF)	109-99-9	10.0	not tested		10.0	not tested		
1,1,1-Trichloroethane	71-55-6	1.0	<1	bdl	1.0	not tested		
1,1-Dichloropropene	563-58-6	1.0	not tested		1.0	not tested		
Carbon tetrachloride	56-23-5	1.0	<1	bdl	1.0	not tested		
1,2-Dichloroethane	107-06-2	1.0	<1	bdl	1.0	not tested		
Benzene	71-43-2	1.0	<1	bdl	1.0	not tested		
Trichloroethene	79-01-6	1.0	<1	bdl	1.0	not tested		
1,2-Dichloropropane	78-87-5	1.0	<1	bdl	1.0	not tested		
Bromodichloromethane	75-27-4	1.0	<1	bdl	1.0	not tested		
Dibromomethane	74-95-3	1.0	not tested		1.0	not tested		
4-Methyl-2-pentanone(MIBK)	108-10-1	10.0	<10	bdl	10.0	not tested		
cis-1,3-Dichloropropene	10061-01-5	1.0	<1	bdl	1.0	not tested		
Toluene	108-88-3	1.0	<1	bdl	1.0	not tested		
trans-1,3-Dichloropropene	10061-02-6	1.0	<1	bdl	1.0	not tested		
1,1,2-Trichloroethane	79-00-5	1.0	<1	bdl	1.0	not tested		
2-Hexanone	591-78-6	3.0	<3	bdl	3.0	not tested		
1,3-Dichloropropane	142-28-9	1.0	not tested		1.0	not tested		
Tetrachloroethene	127-18-4	1.0	<1	bdl	1.0	not tested		
Dibromochloromethane	124-48-1	1.0	<1	bdl	1.0	not tested		
1,2-Dibromoethane	106-93-4	0.5	not tested		0.5	not tested		
Chlorobenzene	108-90-7	1.0	<1	bdl	1.0	not tested		
1,1,1,2-Tetrachloroethane	630-20-6	1.0	<1	bdl	1.0	not tested		
Ethylbenzene	100-41-4	1.0	<1	bdl	1.0	not tested		
m&p-Xylene	108-38-3/106-42-3	1.0	<1	bdl	1.0	not tested		
o-Xylene	95-47-6	1.0	<1	bdl	1.0	not tested		
Styrene	100-42-5	1.0	<1	bdl	1.0	not tested		
Bromoform	75-25-2	1.0	<1	bdl	1.0	not tested		
iso-Propylbenzene	98-82-8	1.0	not tested		1.0	not tested		

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Analyte	CAS #	RL	7/24/2024	Q #3	RL	10/31/2024	Q #4	
1,1,2,2-Tetrachloroethane	79-34-5	1.0	<1	bdl	1.0	not tested		
1,2,3-Trichloropropane	96-18-4	1.0	not tested		1.0	not tested		
n-Propylbenzene	103-65-1	1.0	not tested		1.0	not tested		
Bromobenzene	108-86-1	1.0	not tested		1.0	not tested		
1,3,5-Trimethylbenzene	108-67-8	1.0	not tested		1.0	not tested		
2-Chlorotoluene	95-49-8	1.0	not tested		1.0	not tested		
4-Chlorotoluene	106-43-4	1.0	not tested		1.0	not tested		
tert-Butylbenzene	98-06-6	1.0	not tested		1.0	not tested		
1,2,4-Trimethylbenzene	95-63-6	1.0	not tested		1.0	not tested		
sec-Butylbenzene	135-98-8	1.0	not tested		1.0	not tested		
p-isopropyltoluene	99-87-6	1.0	not tested		1.0	not tested		
1,3-Dichlorobenzene	541-73-1	9.0	<9	bdl	9.0	not tested		
1,4-Dichlorobenzene	106-46-7	9.0	<9	bdl	9.0	not tested		
n-Butylbenzene	104-51-8	1.0	not tested		1.0	not tested		
1,2-Dichlorobenzene	95-50-1	9.0	<9	bdl	9.0	not tested		
1,2-Dibromo-3-chloropropane	96-12-8	1.0	not tested		1.0	not tested		
1,2,4-Trichlorobenzene	102-82-1	9.0	<9	bdl	9.0	not tested		
Hexachlorobutadiene	87-68-3	9.0	<9	bdl	9.0	not tested		
Naphthalene	91-20-3	9.0	<9	bdl	9.0	not tested		
1,2,3-Trichlorobenzene	87-61-6	7.0	not tested		7.0	not tested		
Azobenzene	122-66-7	8.0	not tested		8.0	not tested		
2,4,5-Trichlorophenol	95-95-4	9.0	<9	bdl	9.0	not tested		
2,4,6-Trichlorophenol	88-06-2	9.0	<9	bdl	9.0	not tested		
2,4-Dichlorophenol	120-83-2	9.0	<9	bdl	9.0	not tested		
2,4-Dimethylphenol	105-67-9	40.0	<40	bdl	40.0	not tested		
2,4-Dinitrophenol	51-28-5	80.0	<80	bdl	80.0	not tested		
2,4-Dinitrotoluene	121-14-2	20.0	<20	bdl	20.0	not tested		
2,6-Dinitrotoluene	606-20-2	20.0	<20	bdl	20.0	not tested		
2-Chloronaphthalene	91-59-7	9.0	<9	bdl	9.0	not tested		
2-Chlorophenol	95-57-8	9.0	<9	bdl	9.0	not tested		
2-Methylnaphthalene	91-57-6	9.0	<9	bdl	9.0	not tested		
2-Methylphenol	95-48-7	9.0	<9	bdl	9.0	not tested		
2-Nitroaniline	88-74-4	40.0	<40	bdl	40.0	not tested		
2-Nitrophenol	88-75-5	40.0	<40	bdl	40.0	not tested		
3,3'-Dichlorobenzidine	91-94-1	9.0	<9	bdl	9.0	not tested		
3-Nitroaniline	99-09-2	40.0	<40	bdl	40.0	not tested		
3/4-Methylphenol	106-44-5/106-44-5	9.0	<9	bdl	9.0	not tested		
4,6-Dinitro-2-methylphenol	534-52-1	40.0	<40	bdl	40.0	not tested		
4-Bromophenyl-phenylether	101-55-3	9.0	<9	bdl	9.0	not tested		
4-Chloro-3-methylphenol	59-50-7	9.0	<9	bdl	9.0	not tested		
4-Chloroaniline	106-47-8	9.0	<9	bdl	9.0	not tested		
4-Chlorophenyl-phenylether	7005-72-3	9.0	<9	bdl	9.0	not tested		
4-Nitroaniline	100-01-6	40.0	<40	bdl	40.0	not tested		
4-Nitrophenol	100-02-7	40.0	<40	bdl	40.0	not tested		
Acenaphthene	83-32-9	9.0	<9	bdl	9.0	not tested		
Acenaphthylene	208-96-8	9.0	<9	bdl	9.0	not tested		
Anthracene	120-12-7	9.0	<9	bdl	9.0	not tested		
Benzidine	92-87-5	40.0	not tested		40.0	not tested		
Benzo(a)anthracene	56-55-3	9.0	<9	bdl	9.0	not tested		
Benzo(a)pyrene	50-32-8	9.0	<9	bdl	9.0	not tested		

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Analyte	CAS #	RL	7/24/2024	Q #3	RL	10/31/2024	Q #4	
Benzo(b)fluoranthene	205-99-2	9.0	<9	bdl	9.0	not tested		
Benzo(g,h,i)perylene	191-24-2	9.0	<9	bdl	9.0	not tested		
Benzo(k)fluoranthene	207-08-9	9.0	<9	bdl	9.0	not tested		
bis(2-Chloroethoxy)methane	111-91-1	9.0	<9	bdl	9.0	not tested		
bis(2-Chloroethyl)ether	111-44-4	9.0	<9	bdl	9.0	not tested		
bis(2-chloroisopropyl)ether	39638-32-9	9.0	<9	bdl	9.0	not tested		
bis(2-Ethylhexyl)phthalate	117-81-7	40.0	<40	bdl	40.0	not tested		
Butylbenzylphthalate	85-68-7	40.0	<40	bdl	40.0	not tested		
Carbazole	86-74-8	9.0	<9	bdl	9.0	not tested		
Chrysene	218-01-9	9.0	<9	bdl	9.0	not tested		
Di-n-butylphthalate	84-74-2	40.0	<40	bdl	40.0	not tested		
Di-n-octylphthalate	117-84-0	40.0	<40	bdl	40.0	not tested		
Dibenz(a,h)anthracene	53-70-3	9.0	<9	bdl	9.0	not tested		
Dibenzofuran	132-64-9	9.0	<9	bdl	9.0	not tested		
Diethylphthalate	84-66-2	40.0	<40	bdl	40.0	not tested		
Dimethylphthalate	131-11-3	9.0	<9	bdl	9.0	not tested		
Fluoranthene	206-44-0	9.0	<9	bdl	9.0	not tested		
Fluorene	86-73-7	9.0	<9	bdl	9.0	not tested		
Hexachlorobenzene	118-74-1	9.0	<9	bdl	9.0	not tested		
Hexachlorocyclopentadiene	77-47-4	40.0	<40	bdl	40.0	not tested		
Hexachloroethane	67-72-1	9.0	<9	bdl	9.0	not tested		
Indeno(1,2,3-cd)pyrene	193-39-5	9.0	<9	bdl	9.0	not tested		
Isophorone	78-59-1	9.0	<9	bdl	9.0	not tested		
n-Nitroso-di-n-propylamine	621-64-7	5.0	<5	bdl	5.0	not tested		
n-Nitrosodimethylamine	62-75-9	9.0	<9	bdl	9.0	not tested		
n-Nitrosodiphenylamine	86-30-6	9.0	<9	bdl	9.0	not tested		
Nitrobenzene	98-95-3	9.0	<9	bdl	9.0	not tested		
Pentachlorophenol	87-86-5	40.0	<40	bdl	40.0	not tested		
Phenanthrene	85-01-8	9.0	<9	bdl	9.0	not tested		
Phenol	108-95-2	9.0	<9	bdl	9.0	not tested		
Pyrene	129-00-0	9.0	<9	bdl	9.0	not tested		
Arsenic	7440-38-2	0.5	4.1		0.5	3.8		
Cadmium	7440-43-9	0.5	0.57		0.5	0.55		
Chromium	7440-47-3	0.5	19		0.5	22.0		
Copper	7440-50-8	0.5	450		0.5	520.0		
Lead	7439-92-1	0.5	9.1		0.5	8.8		
Mercury	7439-97-6	0.05	0.17		0.1	0.21		
Molybdenum	7439-98-7	0.5	5.8		0.5	6.5		
Nickel	7440-02-0	0.5	13		0.5	29.0		
Selenium	7782-49-2	0.5	3.4		0.5	3.4		
Zinc	7440-66-6	0.5	560		5.0	540.0		
Antimony	7440-36-0	0.5	2.7		0.5	not tested		
Beryllium	7440-41-7	0.1	<0.1	bdl	0.1	not tested		
Silver	7440-22-4	0.5	1.3		0.5	not tested		
Thallium	7440-28-0	0.5	560		0.5	not tested		
Aldrin mg/Kg	309-00-2	0.5	<0.5	bdl	0.5	not tested		
Lindane gamma-BHC mg/Kg	58-89-9	0.5	<0.5	bdl	0.5	not tested		

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Analyte	CAS #	RL	7/24/2024	Q #3	RL	10/31/2024	Q #4	
alpha-BHC mg/Kg	319-84-6	0.5	<0.5	bdl	0.5	not tested		
delta-BHC mg/Kg	319-86-8	0.5	<0.5	bdl	0.5	not tested		
beta-BHC mg/Kg	319-85-7	0.5	<0.5	bdl	0.5	not tested		
Chlordane mg/Kg	57-74-9	0.5	not tested		0.5	not tested		
4,4'-DDT mg/Kg	50-29-3	0.5	<0.5	bdl	0.5	not tested		
4,4'-DDE mg/Kg	72-55-9	0.5	<0.5	bdl	0.5	not tested		
4,4'-DDD mg/Kg	72-54-8	0.5	<0.5	bdl	0.5	not tested		
Endosulfan_I mg/Kg	959-98-8	0.5	<0.5	bdl	0.5	not tested		
Endosulfan_II mg/Kg	33213-65-9	0.5	<0.5	bdl	0.5	not tested		
Endosulfan_Sulfate mg/Kg	1031-07-8	0.5	<0.5	bdl	0.5	not tested		
Endrin mg/Kg	72-20-8	0.5	<0.5	bdl	0.5	not tested		
Endrin_Aldehyde mg/Kg	7421-93-4	0.5	<0.5	bdl	0.5	not tested		
Endrin Ketone mg/Kg		0.5	<0.5	bdl	0.5	not tested		
Heptachlor mg/Kg	76-44-8	0.5	<0.5	bdl	0.5	not tested		
Heptachlor_Epoxide mg/Kg	1024-57-3	0.5	<0.5	bdl	0.5	not tested		
Toxaphene mg/Kg	8001-35-2	5	<5	bdl	5.0	not tested		
Alachlor mg/Kg		120	not tested		120.0	not tested		
Dieldrin mg/Kg		0.5	<0.5	bdl	0.5	not tested		
Methoxychlor mg/Kg		0.5	<0.5	bdl	0.5	not tested		
PCB-1242	53469-21-9	2.0	< 2	bdl	2.0	not tested		
PCB-1254	11097-69-1	2.0	< 2	bdl	2.0	not tested		
PCB-1221	11104-28-2	2.0	< 2	bdl	2.0	not tested		
PCB-1232	11141-16-5	2.0	< 2	bdl	2.0	not tested		
PCB-1248	12672-29-6	2.0	< 2	bdl	2.0	not tested		
PCB-1260	11096-82-5	2.0	< 2	bdl	2.0	not tested		
PCB-1016	12674-11-2	2.0	< 2	bdl	2.0	not tested		
PCB-1262			not tested			not tested		
PCB-1268			not tested			not tested		
pH	DEP1003	0.1	6.19	SU	0.1	6.31	SU	
Solids_Total	na	1	13.4	%	1.0	14.3	%	
Nitrate-Nitrite	na	40	110		40.0	83		
Nitrite-N		40	not tested		40.0	not tested		
NitrateN		40	not tested		40.0	not tested		
TKN	na	2000	78000		2000.0	89000		
Ammonia	na	70	2600		30.0	3700		
Total_Organic_Nitrogen	na	5	75400		2000.0	85300		
Potassium	7440-09-7	100	4600		100.0	7300		
Phosphorus	7723-14-0	100	1700		100.0	23000		
2378_TCDD_&_2378_TCDF	1746-01-6	2.465	0	bdl	2.5	not tested		
Remaining_Congeners_of_2378TCDD	1746-01-6	11.234	0.246		11.2	not tested		
Cyanide_Total	57-12-5	3.85	<3.85		3.9	not tested		
Enteric_Viruses_(if_applicable)	na	1 PFU/4.21g	not tested		1 PFU/4.21g	not tested		
alpha-Terpineol		40	not tested		40.0	not tested		
Acetophenone		70	not tested		70.0	not tested		
2,3-Dichloroaniline		8	not tested		8.0	not tested		
Aniline		8	not tested		8.0	not tested		
1-Methylnaphthalene		8	not tested		8.0	not tested		
n-Decane		40	not tested		40.0	not tested		

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Analyte	CAS #	RL	7/24/2024	Q #3	RL	10/31/2024	Q #4	
n-Octadecane		40	not tested		40.0	not tested		
Benzyl alcohol		70.0	not tested		70.0	not tested		
Benzoic acid		400.0	not tested		400.0	not tested		
Pyridine		40.0	not tested		40.0	not tested		
1,4-Dioxane		30.0	not tested		30.0	not tested		
tert-Butyl Alcohol (TBA)		50.0	not tested		50.0	not tested		
Ethyl-t-butyl ether(ETBE)		3.0	not tested		3.0	not tested		
Isopropyl ether(DIPE)		3.0	not tested		3.0	not tested		
tert-amyl methyl ether(TAME)		3	not tested		3.0	not tested		
1,3,5-Trichlorobenzene		1	not tested		1.0	not tested		
Volatile Solids		1.0	84.5	%	1.0	91.7	%	
Chloride	16887006	80.0	840		80.0	910		
Calcium	7440-70-2	100.0	15000		100.0	16000		
Iron	7439-89-6	100.0	5800		100.0	5200		
Sodium	7440-23-5	100.0	1500		100.0	1800		
Magnesium	7439-95-4	100.0	3900		100.0	4900		
Carbon Solid Percent			not tested			not tested		
Inorganic Carbon			not tested		0.0	not tested		
Total Organic Carbon		100.0	223000		100.0	409000		
Manganese			not tested		0.0	not tested		
Barium			not tested		0.0	not tested		
Boron			not tested		0.0	not tested		

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2025

Eurofins ID #

475-10519-1

475-11246-1

475-18227-1

Concentration in ug/L listed by sample date

Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
	Dichlorodifluoromethane	75-71-8	3.0	not tested		3.0	not tested		3.0	not tested
	Chloromethane	74-87-3	3.0	not tested		3.0	not tested		3.0	not tested
	Vinyl chloride	75-01-4	20.0	not tested		1.0	<1	bdl	1.0	not tested
	Bromomethane	74-83-9	3.0	not tested		3.0	not tested		3.0	not tested
	Chloroethane	75-00-3	3.0	not tested		3.0	not tested		3.0	not tested
	Trichlorofluoromethane	75-69-4	3.0	not tested		3.0	not tested		3.0	not tested
	Diethyl_ether	60-29-7	1.0	not tested		1.0	not tested		1.0	not tested
	Acetone	67-64-1	50.0	not tested		50.0	not tested		50.0	not tested
	1,1-Dichloroethene	75-35-4	10.0	not tested		10.0	not tested		10.0	not tested
	Methylene_chloride	75-09-2	3.0	not tested		3.0	not tested		3.0	not tested
	Carbon_disulfide	75-15-0	3.0	not tested		3.0	not tested		3.0	not tested
	Methyl-t-butylether(MTBE)	1634-04-4	3.0	not tested		3.0	not tested		3.0	not tested
	trans-1,2-Dichloroethene	156-60-5	1.0	not tested		1.0	not tested		1.0	not tested
	1,1-Dichloroethane	75-34-3	1.0	not tested		1.0	not tested		1.0	not tested
	2-Butanone(MEK)	78-93-3	200.0	not tested		10.0	<10	bdl	10.0	not tested
	2,2-Dichloropropane	590-20-7	1.0	not tested		1.0	not tested		1.0	not tested
	cis-1,2-Dichloroethene	156-59-2	1.0	not tested		1.0	not tested		1.0	not tested
	Chloroform	67-66-3	20.0	not tested		1.0	<1	bdl	1.0	not tested
	Bromochloromethane	74-97-5	1.0	not tested		1.0	not tested		1.0	not tested
	Tetrahydrofuran(THF)	109-99-9	10.0	not tested		10.0	not tested		10.0	not tested
	1,1,1-Trichloroethane	71-55-6	1.0	not tested		1.0	not tested		1.0	not tested
	1,1-Dichloropropene	563-58-6	1.0	not tested		1.0	not tested		1.0	not tested
	Carbon tetrachloride	56-23-5	20.0	not tested		1.0	<1	bdl	1.0	not tested
	1,2-Dichloroethane	107-06-2	20.0	not tested		1.0	<1	bdl	1.0	not tested
	Benzene	71-43-2	20.0	not tested		1.0	<1	bdl	1.0	not tested
	Trichloroethene	79-01-6	20.0	not tested		1.0	<1	bdl	1.0	not tested
	1,2-Dichloropropane	78-87-5	1.0	not tested		1.0	not tested		1.0	not tested
	Bromodichloromethane	75-27-4	1.0	not tested		1.0	not tested		1.0	not tested
	Dibromomethane	74-95-3	1.0	not tested		1.0	not tested		1.0	not tested
	4-Methyl-2-pentanone(MIBK)	108-10-1	10.0	not tested		10.0	not tested		10.0	not tested
	cis-1,3-Dichloropropene	10061-01-5	1.0	not tested		1.0	not tested		1.0	not tested

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Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
	Toluene	108-88-3	1.0	not tested		1.0	not tested		1.0	not tested
	trans-1,3-Dichloropropene	10061-02-6	1.0	not tested		1.0	not tested		1.0	not tested
	1,1,2-Trichloroethane	79-00-5	1.0	not tested		1.0	not tested		1.0	not tested
	2-Hexanone	591-78-6	3.0	not tested		3.0	not tested		3.0	not tested
	1,3-Dichloropropane	142-28-9	1.0	not tested		1.0	not tested		1.0	not tested
	Tetrachloroethene	127-18-4	20.0	not tested		1.0	<1	bdl	1.0	not tested
	Dibromochloromethane	124-48-1	1.0	not tested		1.0	not tested		1.0	not tested
	1,2-Dibromoethane	106-93-4	0.5	not tested		0.5	not tested		0.5	not tested
	Chlorobenzene	108-90-7	20.0	not tested		1.0	<1	bdl	1.0	not tested
	1,1,1,2-Tetrachloroethane	630-20-6	1.0	not tested		1.0	not tested		1.0	not tested
	Ethylbenzene	100-41-4	1.0	not tested		1.0	not tested		1.0	not tested
	m&p-Xylene	108-38-3/106-42-3	1.0	not tested		1.0	not tested		1.0	not tested
	o-Xylene	95-47-6	1.0	not tested		1.0	not tested		1.0	not tested
	Styrene	100-42-5	1.0	not tested		1.0	not tested		1.0	not tested
	Bromoform	75-25-2	1.0	not tested		1.0	not tested		1.0	not tested
	iso-Propylbenzene	98-82-8	1.0	not tested		1.0	not tested		1.0	not tested
	1,1,2,2-Tetrachloroethane	79-34-5	1.0	not tested		1.0	not tested		1.0	not tested
	1,2,3-Trichloropropane	96-18-4	1.0	not tested		1.0	not tested		1.0	not tested
	n-Propylbenzene	103-65-1	1.0	not tested		1.0	not tested		1.0	not tested
	Bromobenzene	108-86-1	1.0	not tested		1.0	not tested		1.0	not tested
	1,3,5-Trimethylbenzene	108-67-8	1.0	not tested		1.0	not tested		1.0	not tested
	2-Chlorotoluene	95-49-8	1.0	not tested		1.0	not tested		1.0	not tested
	4-Chlorotoluene	106-43-4	1.0	not tested		1.0	not tested		1.0	not tested
	tert-Butylbenzene	98-06-6	1.0	not tested		1.0	not tested		1.0	not tested
	1,2,4-Trimethylbenzene	95-63-6	1.0	not tested		1.0	not tested		1.0	not tested
	sec-Butylbenzene	135-98-8	1.0	not tested		1.0	not tested		1.0	not tested
	p-isopropyltoluene	99-87-6	1.0	not tested		1.0	not tested		1.0	not tested
	1,3-Dichlorobenzene	541-73-1	9.0	not tested		9.0	not tested		9.0	not tested
	1,4-Dichlorobenzene	106-46-7	1.0	not tested		1.0	<1	bdl	1.0	not tested
	n-Butylbenzene	104-51-8	1.0	not tested		1.0	not tested		1.0	not tested
	1,2-Dichlorobenzene	95-50-1	9.0	not tested		9.0	not tested		9.0	not tested
	1,2-Dibromo-3-chloropropane	96-12-8	1.0	not tested		1.0	not tested		1.0	not tested
	1,2,4-Trichlorobenzene	102-82-1	9.0	not tested		9.0	not tested		9.0	not tested
	Hexachlorobutadiene	87-68-3	1.0	not tested		1.0	<1	bdl	1.0	not tested

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Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
	Naphthalene	91-20-3	9.0	not tested		9.0	not tested		9.0	not tested
	1,2,3-Trichlorobenzene	87-61-6	7.0	not tested		7.0	not tested		7.0	not tested
	Azobenzene	122-66-7	8.0	not tested		8.0	not tested		8.0	not tested
	2,4,5-Trichlorophenol	95-95-4	1.0	not tested		1.0	<1	bdl	1.0	not tested
	2,4,6-Trichlorophenol	88-06-2	1.0	not tested		1.0	<1	bdl	1.0	not tested
	2,4-Dichlorophenol	120-83-2	9.0	not tested		9.0	not tested		9.0	not tested
	2,4-Dimethylphenol	105-67-9	40.0	not tested		40.0	not tested		40.0	not tested
	2,4-Dinitrophenol	51-28-5	80.0	not tested		80.0	not tested		80.0	not tested
	2,4-Dinitrotoluene	121-14-2	2.0	not tested		2.0	<2	bdl	2.0	not tested
	2,6-Dinitrotoluene	606-20-2	20.0	not tested		20.0	not tested		20.0	not tested
	2-Chloronaphthalene	91-59-7	9.0	not tested		9.0	not tested		9.0	not tested
	2-Chlorophenol	95-57-8	9.0	not tested		9.0	not tested		9.0	not tested
	2-Methylnaphthalene	91-57-6	9.0	not tested		9.0	not tested		9.0	not tested
	2-Methylphenol	95-48-7	1.0	not tested		1.0	<1	bdl	1.0	not tested
	2-Nitroaniline	88-74-4	40.0	not tested		40.0	not tested		40.0	not tested
	2-Nitrophenol	88-75-5	40.0	not tested		40.0	not tested		40.0	not tested
	3,3'-Dichlorobenzidine	91-94-1	9.0	not tested		9.0	not tested		9.0	not tested
	3-Nitroaniline	99-09-2	40.0	not tested		40.0	not tested		40.0	not tested
	3/4-Methylphenol	106-44-5/106-44-5	1.0	not tested		1.0	<1	bdl	1.0	not tested
	4,6-Dinitro-2-methylphenol	534-52-1	40.0	not tested		40.0	not tested		40.0	not tested
	4-Bromophenyl-phenylether	101-55-3	9.0	not tested		9.0	not tested		9.0	not tested
	4-Chloro-3-methylphenol	59-50-7	9.0	not tested		9.0	not tested		9.0	not tested
	4-Chloroaniline	106-47-8	9.0	not tested		9.0	not tested		9.0	not tested
	4-Chlorophenyl-phenylether	7005-72-3	9.0	not tested		9.0	not tested		9.0	not tested
	4-Nitroaniline	100-01-6	40.0	not tested		40.0	not tested		40.0	not tested
	4-Nitrophenol	100-02-7	40.0	not tested		40.0	not tested		40.0	not tested
	Acenaphthene	83-32-9	9.0	not tested		9.0	not tested		9.0	not tested
	Acenaphthylene	208-96-8	9.0	not tested		9.0	not tested		9.0	not tested
	Anthracene	120-12-7	9.0	not tested		9.0	not tested		9.0	not tested
	Benzidine	92-87-5	40.0	not tested		40.0	not tested		40.0	not tested
	Benzo(a)anthracene	56-55-3	9.0	not tested		9.0	not tested		9.0	not tested
	Benzo(a)pyrene	50-32-8	9.0	not tested		9.0	not tested		9.0	not tested
	Benzo(b)fluoranthene	205-99-2	9.0	not tested		9.0	not tested		9.0	not tested
	Benzo(g,h,i)perylene	191-24-2	9.0	not tested		9.0	not tested		9.0	not tested

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Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
	Benzo(k)fluoranthene	207-08-9	9.0	not tested		9.0	not tested		9.0	not tested
	bis(2-Chloroethoxy)methane	111-91-1	9.0	not tested		9.0	not tested		9.0	not tested
	bis(2-Chloroethyl)ether	111-44-4	9.0	not tested		9.0	not tested		9.0	not tested
	bis(2-chloroisopropyl)ether	39638-32-9	9.0	not tested		9.0	not tested		9.0	not tested
	bis(2-Ethylhexyl)phthalate	117-81-7	40.0	not tested		40.0	not tested		40.0	not tested
	Butylbenzylphthalate	85-68-7	40.0	not tested		40.0	not tested		40.0	not tested
	Carbazole	86-74-8	9.0	not tested		9.0	not tested		9.0	not tested
	Chrysene	218-01-9	9.0	not tested		9.0	not tested		9.0	not tested
	Di-n-butylphthalate	84-74-2	40.0	not tested		40.0	not tested		40.0	not tested
	Di-n-octylphthalate	117-84-0	40.0	not tested		40.0	not tested		40.0	not tested
	Dibenz(a,h)anthracene	53-70-3	9.0	not tested		9.0	not tested		9.0	not tested
	Dibenzofuran	132-64-9	9.0	not tested		9.0	not tested		9.0	not tested
	Diethylphthalate	84-66-2	40.0	not tested		40.0	not tested		40.0	not tested
	Dimethylphthalate	131-11-3	9.0	not tested		9.0	not tested		9.0	not tested
	Fluoranthene	206-44-0	9.0	not tested		9.0	not tested		9.0	not tested
	Fluorene	86-73-7	9.0	not tested		9.0	not tested		9.0	not tested
	Hexachlorobenzene	118-74-1	1.0	not tested		1.0	<1	bdl	1.0	not tested
	Hexachlorocyclopentadiene	77-47-4	40.0	not tested		40.0	not tested		40.0	not tested
	Hexachloroethane	67-72-1	1.0	not tested		1.0	<1	bdl	1.0	not tested
	Indeno(1,2,3-cd)pyrene	193-39-5	9.0	not tested		9.0	not tested		9.0	not tested
	Isophorone	78-59-1	9.0	not tested		9.0	not tested		9.0	not tested
	n-Nitroso-di-n-propylamine	621-64-7	5.0	not tested		5.0	not tested		5.0	not tested
	n-Nitrosodimethylamine	62-75-9	9.0	not tested		9.0	not tested		9.0	not tested
	n-Nitrosodiphenylamine	86-30-6	9.0	not tested		9.0	not tested		9.0	not tested
	Nitrobenzene	98-95-3	1.0	not tested		1.0	<1	bdl	1.0	not tested
	Pentachlorophenol	87-86-5	5.0	not tested		5.0	<5	bdl	5.0	not tested
	Phenanthrene	85-01-8	9.0	not tested		9.0	not tested		9.0	not tested
	Phenol	108-95-2	9.0	not tested		9.0	not tested		9.0	not tested
	Pyrene	129-00-0	9.0	not tested		9.0	not tested		9.0	not tested
mg/Kg	Arsenic	7440-38-2	0.51	5.0		0.1	<0.1	mg/L	0.1	not tested
mg/Kg	Cadmium	7440-43-9	0.5	<0.51	bdl	0.1	<0.1	mg/L	0.1	not tested
mg/Kg	Chromium	7440-47-3	0.51	20		0.1	<0.1	mg/L	0.1	not tested
mg/Kg	Copper	7440-50-8	0.51	360		0.1	not tested		0.1	not tested

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Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
mg/Kg	Lead	7439-92-1	0.51	8.3		0.1	<0.1	mg/L	0.1	not tested
mg/Kg	Mercury	7439-97-6	0.1	0.19		0.01	<0.01	mg/L	0.1	not tested
mg/Kg	Molybdenum	7439-98-7	0.51	5.9		0.5	not tested		0.5	not tested
mg/Kg	Nickel	7440-02-0	0.51	18		0.5	not tested		0.5	not tested
mg/Kg	Selenium	7782-49-2	0.51	2.4		0.1	<0.1	mg/L	0.1	not tested
mg/Kg	Zinc	7440-66-6	5.1	530		5.0	not tested		5.0	not tested
	Antimony	7440-36-0	0.5	not tested		0.5	not tested		0.5	not tested
	Beryllium	7440-41-7	0.1	not tested		0.1	not tested		0.1	not tested
mg/L	Silver	7440-22-4	0.1	not tested		0.1	<0.1	bdl	0.1	not tested
	Thallium	7440-28-0	0.5	not tested		0.5	not tested		0.5	not tested
	Aldrin mg/Kg	309-00-2	0.5	not tested		0.5	not tested		0.5	not tested
	Lindane gamma-BHC	58-89-9	5	not tested		5.0	<5	bdl	5.0	not tested
	alpha-BHC mg/Kg	319-84-6	0.5	not tested		0.5	not tested		0.5	not tested
	delta-BHC mg/Kg	319-86-8	0.5	not tested		0.5	not tested		0.5	not tested
	beta-BHC mg/Kg	319-85-7	0.5	not tested		0.5	not tested		0.5	not tested
	Chlordane	57-74-9	10	not tested		10.0	<10	bdl	10.0	not tested
	4,4'-DDT mg/Kg	50-29-3	0.5	not tested		0.5	not tested		0.5	not tested
	4,4'-DDE mg/Kg	72-55-9	0.5	not tested		0.5	not tested		0.5	not tested
	4,4'-DDD mg/Kg	72-54-8	0.5	not tested		0.5	not tested		0.5	not tested
	Endosulfan_I mg/Kg	959-98-8	0.5	not tested		0.5	not tested		0.5	not tested
	Endosulfan_II mg/Kg	33213-65-9	0.5	not tested		0.5	not tested		0.5	not tested
	Endosulfan_Sulfate mg/Kg	1031-07-8	0.5	not tested		0.5	not tested		0.5	not tested
	Endrin	72-20-8	5	not tested		5	<5	bdl	5.0	not tested
	Endrin Aldehyde mg/Kg	7421-93-4	0.5	not tested		0.5	not tested		0.5	not tested
	Endrin Ketone mg/Kg		0.5	not tested		0.5	not tested		0.5	not tested
	Heptachlor	76-44-8	5	not tested		0.05	<0.05	bdl	0.1	not tested
	Heptachlor_Epoxide	1024-57-3	5	not tested		0.05	<0.05	bdl	0.1	not tested
	Toxaphene	8001-35-2	50	not tested		0.5	<0.5	bdl	0.5	not tested
	Alachlor mg/Kg		120	not tested		120.0	not tested		120.0	not tested
	Dieldrin mg/Kg		0.5	not tested		0.5	not tested		0.5	not tested
	Methoxychlor		5	not tested		0.05	<0.05	bdl	0.1	not tested
mg/Kg	PCB-1242	53469-21-9	1.5	<1.5	bdl	0.017	<0.017	bdl	0.0	not tested

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Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
mg/Kg	PCB-1254	11097-69-1	1.5	<1.5	bdl	0.017	<0.018	bdl	0.0	not tested
mg/Kg	PCB-1221	11104-28-2	1.5	<1.5	bdl	0.017	<0.019	bdl	0.0	not tested
mg/Kg	PCB-1232	11141-16-5	1.5	<1.5	bdl	0.017	<0.020	bdl	0.0	not tested
mg/Kg	PCB-1248	12672-29-6	1.5	<1.5	bdl	0.017	<0.021	bdl	0.0	not tested
mg/Kg	PCB-1260	11096-82-5	1.5	<1.5	bdl	0.017	<0.022	bdl	0.0	not tested
mg/Kg	PCB-1016	12674-11-2	1.5	<1.5	bdl	0.017	<0.023	bdl	0.0	not tested
mg/Kg	PCB-1262		1.5	<1.5	bdl	0.017	<0.024	bdl	0.0	not tested
mg/Kg	PCB-1268		1.5	<1.5	bdl	0.017	<0.025	bdl	0.0	not tested
SU	pH	DEP1003	0.1	6.15	SU	0.1	6.97	SU	0.1	6.00
%	Solids_Total	na	1	14	%	1.0	not tested	%	1.0	12
mg/Kg	Nitrate-Nitrite	na	39	<39	bdl	44.0	not tested		44.0	<44
	Nitrite-N		40	not tested		40.0	not tested		40.0	not tested
	NitrateN		40	not tested		40.0	not tested		40.0	not tested
mg/Kg	TKN	na	720	78000		750.0	not tested		750.0	89000
mg/Kg	Ammonia	na	360	1900		370.0	not tested		370.0	5000
	Total_Organic_Nitrogen	na	5	not tested		810.0	not tested		810.0	84000
mg/Kg	Potassium	7440-09-7	100	7300		100.0	not tested		100.0	not tested
mg/Kg	Phosphorus	7723-14-0	100	25000		100.0	not tested		100.0	not tested
	2378_TCDD_ & 2378 TCDF	1746-01-6	2.465	not tested		2.5	not tested		2.5	not tested
	Remaining_Congeners_of_2378TCDD	1746-01-6	11.234	not tested		11.2	not tested		11.2	not tested
mg/Kg	Cyanide_Total	57-12-5	5.8	not tested	bdl	1.0	<1	bdl	1.0	not tested
	Enteric_Viruses_(if_applicable)	na	1 PFU/4.21g	not tested		1 PFU/4.21g	not tested		1 PFU/4.21g	not tested
	alpha-Terpineol		40	not tested		40.0	not tested		40.0	not tested
	Acetophenone		70	not tested		70.0	not tested		70.0	not tested
	2,3-Dichloroaniline		8	not tested		8.0	not tested		8.0	not tested
	Aniline		8	not tested		8.0	not tested		8.0	not tested
	1-Methylnaphthalene		8	not tested		8.0	not tested		8.0	not tested
	n-Decane		40	not tested		40.0	not tested		40.0	not tested
	n-Octadecane		40	not tested		40.0	not tested		40.0	not tested
	Benzyl alcohol		70.0	not tested		70.0	not tested		70.0	not tested
	Benzoic acid		400.0	not tested		400.0	not tested		400.0	not tested
	Pyridine		5.0	not tested		5.0	<5	bdl	5.0	not tested

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Units if other than ug/L	Analyte	CAS #	RL	8/19/2025	Q #3	RL	8/28/2025	Q #3	RL	12/29/2025
	1,4-Dioxane		30.0	not tested		30.0	not tested		30.0	not tested
	tert-Butyl Alcohol (TBA)		50.0	not tested		50.0	not tested		50.0	not tested
	Ethyl-t-butyl ether(ETBE)		3.0	not tested		3.0	not tested		3.0	not tested
	Isopropyl ether(DIPE)		3.0	not tested		3.0	not tested		3.0	not tested
	tert-amyl methyl ether(TAME)		3	not tested		3.0	not tested		3.0	not tested
	1,3,5-Trichlorobenzene		1	not tested		1.0	not tested		1.0	not tested
%	Volatile Solids		1.0	75	%	1.0	not tested	%	1.0	88
mg/Kg	Chloride	16887006	77.0	700		88.0	not tested		88.0	1400
mg/Kg	Calcium	7440-70-2	100.0	15000		100.0	not tested		100.0	not tested
mg/Kg	Iron	7439-89-6	100.0	4600		100.0	not tested		100.0	not tested
mg/Kg	Sodium	7440-23-5	100.0	1600		100.0	not tested		100.0	not tested
	Magnesium	7439-95-4	100.0	not tested		100.0	not tested		100.0	not tested
	Carbon Solid Percent			not tested			not tested			not tested
	Inorganic Carbon			not tested		0.0	not tested		0.0	not tested
mg/Kg	Total Organic Carbon		300.0	66000		300.0	not tested		300.0	not tested
	Manganese			not tested		0.0	not tested		0.0	not tested
mg/L	Barium		0.1	not tested		0.1	<0.1	mg/L	0.1	not tested
	Boron			not tested		0.0	not tested		0.0	not tested
mg/Kg	Sulfide			not tested		58.0	<58	bdl		



Eastern Analytical, Inc.

professional laboratory and drilling services

Curtis Slayton
Seabrook, Town of - Sewer Department
PO Box 456
Seabrook, NH 03874



Laboratory Report for:

Eastern Analytical, Inc. ID: 245203

Client Identification: Biosolids Test | June 2022

Date Received: 6/29/2022

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072), West Virginia (9910C) and Alabama (41620). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992

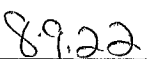
If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,



Lorraine Olashaw, Lab Director



Date



SAMPLE CONDITIONS PAGE

EAI ID#: 245203

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | June 2022

Temperature upon receipt (°C): 2.3

Acceptable temperature range (°C): 0-6

Received on ice or cold packs (Yes/No): Y

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
245203.01	Biosolid	6/29/22	6/29/22 08:50	sludge	12.4	Adheres to Sample Acceptance Policy
245203.02	Trip Blank	6/29/22	6/29/22 00:00	sludge	100.0	Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.



LABORATORY REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Client Sample ID: Biosolid
Lab Sample ID: 245203.01
Matrix: sludge
Date Sampled: 6/29/22
Date Received: 6/29/22

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Chloromethane	< 2	2	16	mg/kg	7/5/22	20:40	8260C	DGM
Vinyl chloride	< 0.3	0.3	16	mg/kg	7/5/22	20:40	8260C	DGM
Bromomethane	< 2	2	16	mg/kg	7/5/22	20:40	8260C	DGM
Chloroethane	< 2	2	16	mg/kg	7/5/22	20:40	8260C	DGM
Acetone	< 30	30	16	mg/kg	7/5/22	20:40	8260C	DGM
1,1-Dichloroethene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Methylene chloride	< 2	2	16	mg/kg	7/5/22	20:40	8260C	DGM
Carbon disulfide	< 2	2	16	mg/kg	7/5/22	20:40	8260C	DGM
trans-1,2-Dichloroethene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
1,1-Dichloroethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
cis-1,2-Dichloroethene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
2-Butanone(MEK)	< 8	8	16	mg/kg	7/5/22	20:40	8260C	DGM
Chloroform	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
1,1,1-Trichloroethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Carbon tetrachloride	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Benzene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
1,2-Dichloroethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Trichloroethene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
1,2-Dichloropropane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Bromodichloromethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
4-Methyl-2-pentanone(MIBK)	< 8	8	16	mg/kg	7/5/22	20:40	8260C	DGM
cis-1,3-Dichloropropene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Toluene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
trans-1,3-Dichloropropene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
1,1,2-Trichloroethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
2-Hexanone	< 2	2	16	mg/kg	7/5/22	20:40	8260C	DGM
Tetrachloroethene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Dibromochloromethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Chlorobenzene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Ethylbenzene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
mp-Xylene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
o-Xylene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Styrene	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
Bromoform	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
1,1,2,2-Tetrachloroethane	< 0.8	0.8	16	mg/kg	7/5/22	20:40	8260C	DGM
4-Bromofluorobenzene (surr)	92 %R			%	7/5/22	20:40	8260C	DGM
1,2-Dichlorobenzene-d4 (surr)	106 %R			%	7/5/22	20:40	8260C	DGM
Toluene-d8 (surr)	92 %R			%	7/5/22	20:40	8260C	DGM
1,2-Dichloroethane-d4 (surr)	114 %R			%	7/5/22	20:40	8260C	DGM

TCL

Reporting limits are elevated due to the % solids content of the sample or the sample mass used for analysis.



LABORATORY REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Client Sample ID: Trip Blank
Lab Sample ID: 245203.02
Matrix: sludge
Date Sampled: 6/29/22
Date Received: 6/29/22

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Chloromethane	< 0.1	0.1	1	mg/kg	7/5/22	19:51	8260C	DGM
Vinyl chloride	< 0.02	0.02	1	mg/kg	7/5/22	19:51	8260C	DGM
Bromomethane	< 0.1	0.1	1	mg/kg	7/5/22	19:51	8260C	DGM
Chloroethane	< 0.1	0.1	1	mg/kg	7/5/22	19:51	8260C	DGM
Acetone	< 2	2	1	mg/kg	7/5/22	19:51	8260C	DGM
1,1-Dichloroethene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Methylene chloride	< 0.1	0.1	1	mg/kg	7/5/22	19:51	8260C	DGM
Carbon disulfide	< 0.1	0.1	1	mg/kg	7/5/22	19:51	8260C	DGM
trans-1,2-Dichloroethene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
1,1-Dichloroethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
cis-1,2-Dichloroethene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
2-Butanone(MEK)	< 0.5	0.5	1	mg/kg	7/5/22	19:51	8260C	DGM
Chloroform	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
1,1,1-Trichloroethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Carbon tetrachloride	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Benzene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
1,2-Dichloroethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Trichloroethene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
1,2-Dichloropropane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Bromodichloromethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
4-Methyl-2-pentanone(MIBK)	< 0.5	0.5	1	mg/kg	7/5/22	19:51	8260C	DGM
cis-1,3-Dichloropropene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Toluene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
trans-1,3-Dichloropropene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
1,1,2-Trichloroethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
2-Hexanone	< 0.1	0.1	1	mg/kg	7/5/22	19:51	8260C	DGM
Tetrachloroethene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Dibromochloromethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Chlorobenzene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Ethylbenzene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
mp-Xylene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
o-Xylene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Styrene	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
Bromoform	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
1,1,2,2-Tetrachloroethane	< 0.05	0.05	1	mg/kg	7/5/22	19:51	8260C	DGM
4-Bromofluorobenzene (surr)	86 %R			%	7/5/22	19:51	8260C	DGM
1,2-Dichlorobenzene-d4 (surr)	109 %R			%	7/5/22	19:51	8260C	DGM
Toluene-d8 (surr)	95 %R			%	7/5/22	19:51	8260C	DGM
1,2-Dichloroethane-d4 (surr)	110 %R			%	7/5/22	19:51	8260C	DGM

TCL



QC REPORT

EAI ID#: 245203

Client: Seabrook, Town of - Sewer Department

Batch ID: 637921-76865/S063022V82601

Client Designation: Biosolids Test | June 2022

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.1	0.69 (69 %R)	0.70 (70 %R) (2 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
Chloromethane	< 0.1	0.88 (88 %R)	0.89 (89 %R) (1 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
Vinyl chloride	< 0.02	0.91 (91 %R)	0.98 (98 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Bromomethane	< 0.1	0.99 (99 %R)	1.1 (106 %R) (7 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
Chloroethane	< 0.1	0.89 (89 %R)	0.92 (92 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Trichlorofluoromethane	< 0.1	1.1 (110 %R)	1.2 (117 %R) (5 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Diethyl Ether	< 0.05	0.80 (80 %R)	0.85 (85 %R) (6 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Acetone	< 2	< 2 (95 %R)	< 2 (98 %R) (4 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
1,1-Dichloroethene	< 0.05	0.93 (93 %R)	0.96 (96 %R) (3 RPD)	7/5/2022	mg/kg	59 - 172	20	8260C
tert-Butyl Alcohol (TBA)	< 2	4.9 (99 %R)	5.1 (101 %R) (3 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
Methylene chloride	< 0.1	0.96 (96 %R)	0.98 (98 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Carbon disulfide	< 0.1	0.82 (82 %R)	0.86 (86 %R) (5 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 0.1	0.91 (91 %R)	0.93 (93 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Ethyl-t-butyl ether(ETBE)	< 0.1	0.88 (88 %R)	0.93 (93 %R) (6 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Isopropyl ether(DIPE)	< 0.1	0.90 (90 %R)	0.91 (91 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
tert-amyl methyl ether(TAME)	< 0.1	0.93 (93 %R)	0.98 (98 %R) (5 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 0.05	0.99 (99 %R)	1.0 (102 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,1-Dichloroethane	< 0.05	0.99 (99 %R)	1.0 (100 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
2,2-Dichloropropane	< 0.05	0.91 (91 %R)	0.93 (93 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 0.05	0.99 (99 %R)	1.0 (103 %R) (4 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
2-Butanone(MEK)	< 0.5	0.81 (81 %R)	0.86 (86 %R) (5 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
Bromochloromethane	< 0.05	0.92 (92 %R)	0.92 (92 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 0.5	0.82 (82 %R)	0.88 (88 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Chloroform	< 0.05	1.0 (102 %R)	1.0 (103 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,1,1-Trichloroethane	< 0.05	1.0 (101 %R)	1.0 (102 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Carbon tetrachloride	< 0.05	0.97 (97 %R)	0.99 (99 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,1-Dichloropropene	< 0.05	0.89 (89 %R)	0.95 (95 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Benzene	< 0.05	1.0 (105 %R)	1.1 (107 %R) (2 RPD)	7/5/2022	mg/kg	66 - 142	20	8260C
1,2-Dichloroethane	< 0.05	0.99 (99 %R)	1.0 (100 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Trichloroethene	< 0.05	1.0 (100 %R)	1.1 (106 %R) (6 RPD)	7/5/2022	mg/kg	62 - 137	20	8260C
1,2-Dichloropropane	< 0.05	0.96 (96 %R)	0.98 (98 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Dibromomethane	< 0.05	0.98 (98 %R)	0.99 (99 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Bromodichloromethane	< 0.05	1.0 (100 %R)	0.89 (89 %R) (11 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,4-Dioxane	< 1	1.1 (106 %R)	1.2 (116 %R) (9 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
4-Methyl-2-pentanone(MIBK)	< 0.5	0.76 (76 %R)	0.81 (81 %R) (6 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.05	0.93 (93 %R)	0.96 (96 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Toluene	< 0.05	1.1 (107 %R)	1.1 (111 %R) (3 RPD)	7/5/2022	mg/kg	59 - 139	20	8260C
trans-1,3-Dichloropropene	< 0.05	0.98 (98 %R)	1.0 (103 %R) (4 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,1,2-Trichloroethane	< 0.05	1.0 (103 %R)	1.0 (105 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
2-Hexanone	< 0.1	0.83 (83 %R)	0.89 (89 %R) (7 RPD)	7/5/2022	mg/kg	40 - 160	20	8260C
Tetrachloroethene	< 0.05	1.1 (105 %R)	1.1 (109 %R) (4 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,3-Dichloropropane	< 0.05	0.99 (99 %R)	1.0 (102 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Dibromochloromethane	< 0.05	0.97 (97 %R)	0.99 (99 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.02	0.98 (98 %R)	1.0 (101 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Chlorobenzene	< 0.05	1.0 (105 %R)	1.1 (109 %R) (4 RPD)	7/5/2022	mg/kg	60 - 133	20	8260C
1,1,1,2-Tetrachloroethane	< 0.05	1.0 (101 %R)	1.0 (103 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C



QC REPORT

EAI ID#: 245203

Client: Seabrook, Town of - Sewer Department

Batch ID: 637921-76865/S063022V82601

Client Designation: Biosolids Test | June 2022

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Ethylbenzene	< 0.05	1.1 (113 %R)	1.2 (117 %R) (4 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
mp-Xylene	< 0.05	2.2 (111 %R)	2.3 (114 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
o-Xylene	< 0.05	1.1 (111 %R)	1.2 (115 %R) (4 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Styrene	< 0.05	1.1 (113 %R)	1.2 (116 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Bromoform	< 0.05	1.0 (101 %R)	1.0 (102 %R) (1 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
IsoPropylbenzene	< 0.05	1.1 (106 %R)	1.1 (110 %R) (4 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Bromobenzene	< 0.05	0.86 (86 %R)	0.92 (92 %R) (6 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 0.05	0.86 (86 %R)	0.89 (89 %R) (3 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.05	0.87 (87 %R)	0.93 (93 %R) (6 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
n-Propylbenzene	< 0.05	0.99 (99 %R)	1.1 (107 %R) (8 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
2-Chlorotoluene	< 0.05	0.99 (99 %R)	1.1 (105 %R) (6 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
4-Chlorotoluene	< 0.05	1.0 (100 %R)	1.1 (106 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 0.05	1.0 (104 %R)	1.1 (112 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
tert-Butylbenzene	< 0.05	0.96 (96 %R)	1.0 (103 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 0.05	1.1 (107 %R)	1.1 (114 %R) (6 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
sec-Butylbenzene	< 0.05	1.0 (102 %R)	1.1 (111 %R) (8 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,3-Dichlorobenzene	< 0.05	0.95 (95 %R)	1.0 (102 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
p-Isopropyltoluene	< 0.05	1.1 (108 %R)	1.1 (106 %R) (2 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,4-Dichlorobenzene	< 0.05	0.96 (96 %R)	1.0 (103 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2-Dichlorobenzene	< 0.05	0.92 (92 %R)	0.99 (99 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
n-Butylbenzene	< 0.05	1.1 (111 %R)	1.1 (111 %R) (0 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.05	0.77 (77 %R)	0.83 (83 %R) (7 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,3,5-Trichlorobenzene	< 0.05	0.92 (92 %R)	1.0 (102 %R) (10 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 0.05	1.0 (100 %R)	1.1 (111 %R) (11 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Hexachlorobutadiene	< 0.05	0.90 (90 %R)	0.98 (98 %R) (9 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
Naphthalene	< 0.1	1.0 (104 %R)	1.1 (112 %R) (8 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.05	1.1 (106 %R)	1.2 (115 %R) (9 RPD)	7/5/2022	mg/kg	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	84 %R	109 %R	108 %R	7/5/2022	% Rec	70 - 130	20	8260C
1,2-Dichlorobenzene-d4 (surr)	111 %R	90 %R	90 %R	7/5/2022	% Rec	70 - 130	20	8260C
Toluene-d8 (surr)	94 %R	104 %R	104 %R	7/5/2022	% Rec	70 - 130	20	8260C

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Client Sample ID: Biosolid
Lab Sample ID: 245203.01
Matrix: sludge
Date Sampled: 6/29/22
Date Received: 6/29/22

Date of Preparation: 6/30/22
Method: 8270D
Analyst: JMR
Units: mg/kg

	Result	Dilution		Date Analyzed		Result	Dilution		Date Analyzed
		RL	Factor				RL	Factor	
alpha-Terpineol	< 80	80	237	7/1/22	2,4-Dinitrotoluene	< 30	30	237	7/1/22
Phenol	< 20	20	237	7/1/22	2,6-Dinitrotoluene	< 30	30	237	7/1/22
2-Chlorophenol	< 20	20	237	7/1/22	Benzidine (estimated)	< 80	80	237	7/1/22
2,4-Dichlorophenol	< 20	20	237	7/1/22	3,3'-Dichlorobenzidine	< 20	20	237	7/1/22
2,4,5-Trichlorophenol	< 20	20	237	7/1/22	Pyridine	< 80	80	237	7/1/22
2,4,6-Trichlorophenol	< 20	20	237	7/1/22	Azobenzene	< 20	20	237	7/1/22
Pentachlorophenol	< 80	80	237	7/1/22	Carbazole	< 20	20	237	7/1/22
2-Nitrophenol	< 80	80	237	7/1/22	Dimethylphthalate	< 20	20	237	7/1/22
4-Nitrophenol	< 80	80	237	7/1/22	Diethylphthalate	< 80	80	237	7/1/22
2,4-Dinitrophenol	< 200	200	237	7/1/22	Di-n-butylphthalate	< 80	80	237	7/1/22
2-Methylphenol	< 20	20	237	7/1/22	Butylbenzylphthalate	< 80	80	237	7/1/22
3/4-Methylphenol	< 20	20	237	7/1/22	bis(2-Ethylhexyl)phthalate	< 80	80	237	7/1/22
2,4-Dimethylphenol	< 80	80	237	7/1/22	Di-n-octylphthalate	< 80	80	237	7/1/22
4-Chloro-3-methylphenol	< 20	20	237	7/1/22	Dibenzofuran	< 20	20	237	7/1/22
4,6-Dinitro-2-methylphenol	< 80	80	237	7/1/22	Naphthalene	< 20	20	237	7/1/22
Benzoic Acid	< 800	800	237	7/1/22	2-Methylnaphthalene	< 20	20	237	7/1/22
N-Nitrosodimethylamine	< 20	20	237	7/1/22	1-Methylnaphthalene	< 20	20	237	7/1/22
n-Nitroso-di-n-propylamine	< 9	9	237	7/1/22	Acenaphthylene	< 20	20	237	7/1/22
n-Nitrosodiphenylamine	< 20	20	237	7/1/22	Acenaphthene	< 20	20	237	7/1/22
bis(2-Chloroethyl)ether	< 20	20	237	7/1/22	Fluorene	< 20	20	237	7/1/22
bis(2-chloroisopropyl)ether	< 20	20	237	7/1/22	Phenanthrene	< 20	20	237	7/1/22
bis(2-Chloroethoxy)methane	< 20	20	237	7/1/22	Anthracene	< 20	20	237	7/1/22
1,3-Dichlorobenzene	< 20	20	237	7/1/22	Fluoranthene	< 20	20	237	7/1/22
Acetophenone	< 200	200	237	7/1/22	Pyrene	< 20	20	237	7/1/22
1,4-Dichlorobenzene	< 20	20	237	7/1/22	Benzo[a]anthracene	< 20	20	237	7/1/22
1,2-Dichlorobenzene	< 20	20	237	7/1/22	Chrysene	< 20	20	237	7/1/22
1,2,4-Trichlorobenzene	< 20	20	237	7/1/22	Benzo[b]fluoranthene	< 20	20	237	7/1/22
2-Chloronaphthalene	< 20	20	237	7/1/22	Benzo[k]fluoranthene	< 20	20	237	7/1/22
4-Chlorophenyl-phenylether	< 20	20	237	7/1/22	Benzo[a]pyrene	< 20	20	237	7/1/22
4-Bromophenyl-phenylether	< 20	20	237	7/1/22	Indeno[1,2,3-cd]pyrene	< 20	20	237	7/1/22
Hexachloroethane	< 20	20	237	7/1/22	Dibenz[a,h]anthracene	< 20	20	237	7/1/22
Hexachlorobutadiene	< 20	20	237	7/1/22	Benzo[g,h,i]perylene	< 20	20	237	7/1/22
Hexachlorocyclopentadiene	< 80	80	237	7/1/22	n-Decane	< 80	80	237	7/1/22
Hexachlorobenzene	< 20	20	237	7/1/22	n-Octadecane	< 80	80	237	7/1/22
4-Chloroaniline	< 20	20	237	7/1/22	2-Fluorophenol (surr)	59 %R			7/1/22
2,3-Dichloroaniline	< 20	20	237	7/1/22	Phenol-d6 (surr)	62 %R			7/1/22
2-Nitroaniline	< 80	80	237	7/1/22	2,4,6-Tribromophenol (surr)	77 %R			7/1/22
3-Nitroaniline	< 80	80	237	7/1/22	Nitrobenzene-D5 (surr)	62 %R			7/1/22
4-Nitroaniline	< 80	80	237	7/1/22	2-Fluorobiphenyl (surr)	69 %R			7/1/22
Aniline	< 20	20	237	7/1/22	p-Terphenyl-D14 (surr)	73 %R			7/1/22
Benzyl alcohol	< 200	200	237	7/1/22					
Nitrobenzene	< 20	20	237	7/1/22					
Isophorone	< 20	20	237	7/1/22					

Detection limits elevated due to low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Batch ID: 637921-74455/S063022ABN1

Client Designation: **Biosolids Test | June 2022**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
alpha-Terpineol	< 0.34	1.2 (70 %R)	1.2 (73 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Phenol	< 0.07	1.9 (58 %R)	2.0 (59 %R) (2 RPD)	7/1/2022	mg/kg	15 - 130	30	8270D
2-Chlorophenol	< 0.07	2.1 (62 %R)	2.1 (64 %R) (3 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
2,4-Dichlorophenol	< 0.07	2.2 (66 %R)	2.3 (68 %R) (2 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
2,4,5-Trichlorophenol	< 0.07	2.4 (72 %R)	2.5 (74 %R) (3 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
2,4,6-Trichlorophenol	< 0.07	2.3 (70 %R)	2.4 (73 %R) (4 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
Pentachlorophenol	< 0.34	2.2 (67 %R)	2.5 (74 %R) (10 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
2-Nitrophenol	< 0.34	2.2 (67 %R)	2.3 (69 %R) (4 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
4-Nitrophenol	< 0.34	2.5 (76 %R)	2.7 (80 %R) (5 RPD)	7/1/2022	mg/kg	15 - 130	30	8270D
2,4-Dinitrophenol	< 0.7	1.2 (37 %R)	1.8 (53 %R) (36 RPD) !	7/1/2022	mg/kg	15 - 130	30	8270D
2-Methylphenol	< 0.07	2.1 (63 %R)	2.1 (64 %R) (2 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
3/4-Methylphenol	< 0.07	2.2 (67 %R)	2.3 (68 %R) (2 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
2,4-Dimethylphenol	< 0.34	2.1 (62 %R)	2.1 (63 %R) (2 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
4-Chloro-3-methylphenol	< 0.07	2.4 (73 %R)	2.5 (76 %R) (4 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
4,6-Dinitro-2-methylphenol	< 0.34	2.6 (77 %R)	2.9 (87 %R) (13 RPD)	7/1/2022	mg/kg	30 - 130	30	8270D
Benzoic Acid	< 3.4	* < 3.4 (12 %R)	< 3.4 (20 %R) (47 RPD) !	7/1/2022	mg/kg	15 - 130	30	8270D
N-Nitrosodimethylamine	< 0.07	1.1 (63 %R)	1.1 (66 %R) (5 RPD)	7/1/2022	mg/kg	15 - 140	30	8270D
n-Nitroso-di-n-propylamine	< 0.04	1.1 (66 %R)	1.2 (69 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
n-Nitrosodiphenylamine	< 0.07	1.3 (80 %R)	1.4 (84 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
bis(2-Chloroethyl)ether	< 0.07	1.0 (62 %R)	1.1 (64 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
bis(2-chloroisopropyl)ether	< 0.07	1.1 (64 %R)	1.1 (66 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
bis(2-Chloroethoxy)methane	< 0.07	1.1 (67 %R)	1.2 (69 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
1,3-Dichlorobenzene	< 0.07	0.97 (58 %R)	1.0 (61 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Acetophenone	< 0.7	0.90 (54 %R)	0.93 (56 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
1,4-Dichlorobenzene	< 0.07	0.96 (57 %R)	1.0 (60 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
1,2-Dichlorobenzene	< 0.07	0.98 (59 %R)	1.0 (61 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
1,2,4-Trichlorobenzene	< 0.07	1.0 (61 %R)	1.0 (63 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
2-Chloronaphthalene	< 0.07	1.1 (68 %R)	1.2 (70 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
4-Chlorophenyl-phenylether	< 0.07	1.2 (74 %R)	1.3 (77 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
4-Bromophenyl-phenylether	< 0.07	1.3 (79 %R)	1.4 (82 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Hexachloroethane	< 0.07	1.0 (60 %R)	1.0 (63 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Hexachlorobutadiene	< 0.07	1.0 (62 %R)	1.1 (64 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Hexachlorocyclopentadiene	< 0.34	0.82 (49 %R)	0.84 (50 %R) (2 RPD)	7/1/2022	mg/kg	15 - 140	30	8270D
Hexachlorobenzene	< 0.07	1.3 (81 %R)	1.4 (85 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
4-Chloroaniline	< 0.07	1.0 (62 %R)	1.1 (64 %R) (3 RPD)	7/1/2022	mg/kg	15 - 140	30	8270D
2,3-Dichloroaniline	< 0.07	1.2 (70 %R)	1.2 (72 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
2-Nitroaniline	< 0.34	1.3 (80 %R)	1.4 (84 %R) (6 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
3-Nitroaniline	< 0.34	1.3 (79 %R)	1.4 (83 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
4-Nitroaniline	< 0.34	1.3 (77 %R)	1.3 (80 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Aniline	< 0.07	0.93 (56 %R)	0.97 (58 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzyl alcohol	< 0.7	1.0 (63 %R)	1.1 (65 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Nitrobenzene	< 0.07	1.1 (64 %R)	1.1 (66 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Isophorone	< 0.07	1.1 (68 %R)	1.2 (72 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
2,4-Dinitrotoluene	< 0.14	1.3 (79 %R)	1.4 (84 %R) (6 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
2,6-Dinitrotoluene	< 0.14	1.3 (79 %R)	1.4 (83 %R) (6 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzidine (estimated)	< 0.34	1.0 (61 %R)	1.1 (66 %R) (7 RPD)	7/1/2022	mg/kg	1 - 200	50	8270D



QC REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Batch ID: 637921-74455/S063022ABN1

Client Designation: **Biosolids Test | June 2022**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
3,3'-Dichlorobenzidine	< 0.07	1.4 (86 %R)	1.5 (90 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Pyridine	< 0.34	0.86 (51 %R)	0.90 (54 %R) (5 RPD)	7/1/2022	mg/kg	15 - 140	30	8270D
Azobenzene	< 0.07	1.4 (82 %R)	1.5 (87 %R) (6 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Carbazole	< 0.07	1.4 (85 %R)	1.5 (89 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Dlmethylphthalate	< 0.07	1.3 (79 %R)	1.4 (84 %R) (6 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Diethylphthalate	< 0.34	1.4 (84 %R)	1.5 (88 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Di-n-butylphthalate	< 0.34	1.5 (91 %R)	1.6 (95 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Butylbenzylphthalate	< 0.34	1.6 (95 %R)	1.7 (100 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
bls(2-Ethylhexyl)phthalate	< 0.34	1.6 (94 %R)	1.6 (99 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Di-n-octylphthalate	< 0.34	1.8 (108 %R)	1.9 (112 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Dibenzofuran	< 0.07	1.2 (73 %R)	1.3 (75 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Naphthalene	< 0.07	1.0 (61 %R)	1.0 (63 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
2-Methylnaphthalene	< 0.07	1.0 (62 %R)	1.1 (65 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
1-Methylnaphthalene	< 0.07	1.1 (64 %R)	1.1 (66 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Acenaphthylene	< 0.07	1.1 (66 %R)	1.1 (67 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Acenaphthene	< 0.07	1.1 (64 %R)	1.1 (67 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Fluorene	< 0.07	1.2 (71 %R)	1.2 (75 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Phenanthrene	< 0.07	1.2 (74 %R)	1.3 (78 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Anthracene	< 0.07	1.3 (76 %R)	1.3 (80 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Fluoranthene	< 0.07	1.3 (75 %R)	1.3 (79 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Pyrene	< 0.07	1.3 (77 %R)	1.3 (81 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzo[a]anthracene	< 0.07	1.2 (74 %R)	1.3 (78 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Chrysene	< 0.07	1.3 (78 %R)	1.3 (81 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzo[b]fluoranthene	< 0.07	1.3 (79 %R)	1.3 (81 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzo[k]fluoranthene	< 0.07	1.3 (81 %R)	1.4 (84 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzo[a]pyrene	< 0.07	1.3 (79 %R)	1.4 (82 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Indeno[1,2,3-cd]pyrene	< 0.07	1.2 (73 %R)	1.3 (75 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Dibenz[a,h]anthracene	< 0.07	1.3 (77 %R)	1.3 (80 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
Benzo[g,h,i]perylene	< 0.07	1.2 (75 %R)	1.3 (77 %R) (3 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
n-Decane	< 0.34	0.96 (58 %R)	1.0 (60 %R) (5 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
n-Octadecane	< 0.34	1.4 (87 %R)	1.5 (91 %R) (4 RPD)	7/1/2022	mg/kg	40 - 140	30	8270D
2-Fluorophenol (surr)	55 %R	58 %R	60 %R	7/1/2022	mg/kg	30 - 130		8270D
Phenol-d6 (surr)	57 %R	61 %R	62 %R	7/1/2022	mg/kg	30 - 130		8270D
2,4,6-Tribromophenol (surr)	65 %R	80 %R	83 %R	7/1/2022	mg/kg	30 - 130		8270D
Nitrobenzene-D5 (surr)	58 %R	65 %R	67 %R	7/1/2022	mg/kg	30 - 130		8270D
2-Fluorobiphenyl (surr)	62 %R	66 %R	67 %R	7/1/2022	mg/kg	30 - 130		8270D
p-Terphenyl-D14 (surr)	73 %R	79 %R	83 %R	7/1/2022	mg/kg	30 - 130		8270D

*If Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Client Sample ID: Biosolid

Lab Sample ID: 245203.01

Matrix: sludge

Date Sampled: 6/29/22

Date Received: 6/29/22

Date Received: 6/29/22

	Result	RL	Dilution	Units	Date / Time		Date	Method		Analyst
			Factor		Analyzed	Prepared	Prep	Analytical		
PCB-1016	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
PCB-1221	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
PCB-1232	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
PCB-1242	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
PCB-1248	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
PCB-1254	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
PCB-1260	< 2	2	110	mg/kg	7/14/22	12:57	7/13/22	3540C	8082A	MB
TMX (surr)	101 %R			%	7/14/22	12:57	7/13/22	3540C	8082A	MB
DCB (surr)	76 %R			%	7/14/22	12:57	7/13/22	3540C	8082A	MB

TCL

Acid clean-up was performed on the samples and associated batch QC.

Detection limits elevated due to sample matrix, a low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: **245203**

Client: **Seabrook, Town of - Sewer Department**

Batch ID: 637933-02001/S071322PCB1

Client Designation: **Biosolids Test | June 2022**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
PCB-1016	< 0.02	0.14 (104 %R)	0.13 (100 %R) (4 RPD)	7/14/2022	mg/kg	40 - 140	30	8082A
PCB-1221	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
PCB-1232	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
PCB-1242	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
PCB-1248	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
PCB-1254	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
PCB-1260	< 0.02	0.12 (91 %R)	0.11 (85 %R) (7 RPD)	7/14/2022	mg/kg	40 - 140	30	8082A
PCB-1262	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
PCB-1268	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	7/14/2022	mg/kg			8082A
TMX (surr)	101 %R	105 %R	101 %R	7/14/2022	% Rec	30 - 150	30	8082A
DCB (surr)	81 %R	85 %R	79 %R	7/14/2022	% Rec	30 - 150	30	8082A

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Sample ID: Biosolid

Lab Sample ID: 245203.01

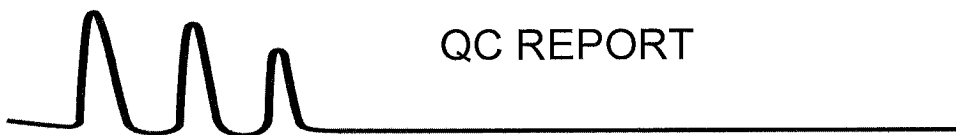
Matrix: sludge

Date Sampled: 6/29/22

Date Received: 6/29/22

		RL	Analytical Matrix	Units	Analysis			
					Date	Time	Method	Analyst
Solids Total	12.7	1	SolAsRec	Percen	7/5/22	16:40	2540G-11	CF
Solids Total Volatile	85.1	1	SolTotDry	Percen	7/5/22	16:40	2540G-11	CF
Chloride	840	300	SolTotDry	mg/kg	7/6/22	0:48	9056A	KEF
Nitrate/Nitrite-N	< 100	100	SolTotDry	mg/kg	7/6/22	0:48	9056A	KEF
Cyanide Total	2.9	2	SolTotDry	mg/kg	7/6/22	13:20	9010/9014	KD
Ammonia-N	3400	8	SolTotDry	mg/kg	7/5/22	10:15	4500NH3D	AMF
Total Organic Nitrogen	83600	5	SolTotDry	mg/kg	7/7/22	16:30	CALC	SEL
TKN	87000	3000	SolTotDry	mg/kg	7/6/22	15:42	4500N _{org} C/	AMF
pH	6.51	0.1	SolAsRec	SU	6/30/22	16:40	9045D	CF

Due to pH sample matrix, the ratio of DI water to sample was increased to 2:1.
The reporting limit for Nitrate/Nitrite has been elevated due to the sample matrix.



QC REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 1.0	NA	NA	Percent	7/5/22			2540G-11
Chloride	< 10	200 (100 %R)	210 (101 %R) (0 RPD)	mg/kg	7/6/22	90 - 110	15	9056A
Nitrate/Nitrite-N	< 5	39 (96 %R)	40 (97 %R) (1 RPD)	mg/kg	7/6/22	90 - 110	15	9056A
Cyanide Total	< 0.5	6.6 (107 %R)	6.3 (104 %R) (2 RPD)	mg/kg	7/6/22	85 - 115	20	9010/9014
Ammonia-N	< 5	42 (104 %R)	42 (105 %R) (0 RPD)	mg/kg	7/5/22	90 - 110	20	4500NH3D-11
TKN	< 100	2000 (103 %R)	2000 (102 %R) (0 RPD)	mg/kg	7/6/22	90 - 110	20	4500N _{org} C/NH3D-11
pH		7.96 (100 %R)	7.97 (100 %R) (0 RPD)	SU	6/30/22	7.91 - 8.09	10	9045D

*(! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



LABORATORY REPORT

EAI ID#: 245203

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2022**

Client Sample ID: Biosolid
Lab Sample ID: 245203.01
Matrix: sludge
Date Sampled: 6/29/22
Date Received: 6/29/22

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time	Method	Analyst
Antimony	3.7	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Arsenic	4.4	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Beryllium	0.14	0.1	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Calcium	16000	100	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Cadmium	0.68	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Chromium	68	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Copper	360	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Iron	5100	100	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Lead	12	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Magnesium	3900	100	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Mercury	0.26	0.05	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Molybdenum	42	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Nickel	21	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Phosphorus	18000	100	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Potassium	4600	100	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Selenium	2.4	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Silver	1.2	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Sodium	1600	100	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Thallium	< 0.5	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS
Zinc	430	0.5	25	SolTotDry	mg/kg	6/30/22	20:09	6020A	DS



QC REPORT

EAI ID#: 245203

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | June 2022

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Antimony	< 0.5	43 (108 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Arsenic	< 0.5	38 (97 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Beryllium	< 0.5	38 (95 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Calcium	< 100	410 (94 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Cadmium	< 0.5	39 (98 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Chromium	< 0.5	37 (94 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Copper	< 0.5	37 (93 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Iron	< 100	410 (93 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Lead	< 0.5	38 (95 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Magnesium	< 100	450 (103 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Mercury	< 0.1	0.36 (91 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Molybdenum	< 0.5	38 (95 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Nickel	< 0.5	38 (94 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Phosphorus	< 100	370 (93 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Potassium	< 100	440 (101 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Selenium	< 0.5	36 (92 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Silver	< 0.5	39 (98 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Sodium	< 100	450 (102 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Thallium	< 0.5	37 (94 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A
Zinc	< 0.5	38 (95 %R)	NA	mg/kg	6/29/22	80 - 120	20	6020A

*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



July 28, 2022

Service Request No:E2200661

Alison Blay
Eastern Analytical, Inc.
51 Antrim Avenue
Concord, NH 03301

Laboratory Results for: 245203

Dear Alison,

Enclosed are the results of the sample(s) submitted to our laboratory July 06, 2022
For your reference, these analyses have been assigned our service request number **E2200661**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental



Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client: Eastern Analytical
Project: 245203
Sample Matrix: Soil

Service Request No.: E2200661
Date Received: 07/06/22

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One sample was received for analysis at ALS Environmental in Houston on 07/06/22.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200289-02/03: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

B flags – Method Blanks

The Method Blank EQ2200289-01 contained low levels of target compounds below the Method Reporting Limit (MRL).

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: Eastern Analytical, Inc.
Project: 245203

Service Request:E2200661

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
E2200661-001	Biosolid	6/29/2022	0850

Service Request Summary

Folder #: E2200661

Client Name: Eastern Analytical, Inc.

Project Name: 245203

Project Number:

Report To: Alison Blay

Eastern Analytical, Inc.
51 Anttrim Avenue
Concord, NH 03301
USA

Phone Number: 800-287-0525

Cell Number:

Fax Number: 603-228-4591

E-mail: alisonb@eallabs.com

Project Chemist: Corey Grandits

Originating Lab: HOUSTON

Logged By: CGRANDITS

Date Received: 07/06/22

Internal Due Date: 7/27/2022

QAP: LAB QAP

Qualifier Set: HRMS Qualifier Set

Formset: Lab Standard

Merged?: Y

Report to MDL?: Y

P.O. Number: 57661

EDD: No EDD Specified

1 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved

Location: EHRMS-W/C 8B

Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON	
E2200661-001	Biosolid	Sludge, Solid	06/29/22 0850	Dioxins Furans/1613B	Total Solids/ALS SOP
				II	II

Service Request Summary

Folder #: E2200661

Client Name: Eastern Analytical, Inc.

Project Name: 245203

Project Number:

Report To: Alison Blay

Eastern Analytical, Inc.

51 Antim Avenue

Concord, NH 03301

USA

Phone Number: 800-287-0525

Cell Number:

Fax Number: 603-228-4591

E-mail: alisonb@eailabs.com

Project Chemist: Corey Grandits

Originating Lab: HOUSTON

Logged By: CGRANDITS

Date Received: 07/06/22

Internal Due Date: 7/27/2022

QAP: LAB QAP

Qualifier Set: HRMS Qualifier Set

Formset: Lab Standard

Merged?: Y

Report to MDL?: Y

P.O. Number: 57661

EDD: No EDD Specified

1 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved

Location: EHRMS-WIC 8B

Pressure Gas:

Data Qualifiers

HRMS Qualifier Set

- B Indicates the associated analyte was found in the method blank at >1/10th the reported value.
- E Estimated value. The reported concentration is above the calibration range of the instrument.
- H Sample extracted and/or analyzed out of suggested holding time.
- J Estimated value. The reported concentration is below the MRL.
- K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits. The concentration of this analyte should be considered as an estimate.
- P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.
- Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.
- S Signal saturated detector. Result reported from dilution.
- U Compound was analyzed for, but was not detected (ND).
- X See Case Narrative.
- Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-nois ratios are greater than 10:1, making the recoveries acceptable.
- i The MDL/MRL have been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCEntration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
Arkansas Department of Environmental Quality	22-041-0	3/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Department of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Conservation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Conservation	04016-2022	4/30/2023
Texas Commission on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID E2200661

DB-5MSUI

SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
07/27/22	LKL	001

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
7/28/22	JR	001



Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
Professional Laboratory and Drilling Services

b31

EAID# 245203

Page 1

Page 28 of 63

Sample ID Date Sampled Matrix aParameters

Biosolid 6/29/2022 08:50 sludge Subcontract - Dioxin/Furans Full Congeners Method 1613A

Sample Notes

EAID# 245203

Project State: NH

Project ID: 848

Results Needed: Preferred Date: Standard

RUSH Due Date:

QC Deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Company ALS Environmental - Houston

Address 10450 Stancilff Road, Suite

Address Houston, TX 77099

Account #

Phone # 1 281-530-5656

PO #: 57661

EAID# 245203

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples collected by:

Relinquished by

Date/Time

Received by

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 51 Anttrim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



Cooler Receipt Form

Project Chemist EA

Client/Project EAI Thermometer ID 11211

Date/Time Received: 7-6-22 Initials: NR Date/Time Logged in: 7-6-22 Initials EA

1. Method of delivery: ☐ US Mail ☐ Fed Ex ☒ UPS ☐ DHL ☐ Courier ☐ Client

2. Samples received in: ☐ Cooler ☒ Box ☐ Envelope ☐ Other

3. Were custody seals on coolers? ☐ Yes ☒ No

If yes, how many and where?

Were they intact? ☐ Yes ☐ No ☒ N/A

Were they signed and dated? ☐ Yes ☐ No ☒ N/A

4. Packing Material: ☐ Inserts ☒ Baggies ☒ Bubble Wrap ☐ Gel Packs ☒ Wet Ice ☐ Sleeves ☐ Other

5. Foreign or Regulated Soil? ☐ Yes ☐ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
12 X46 541 01 9110 9944		7-6-22	0930	SM/NR	3.5	☐
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ☐ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ☐ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ☐ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ☐ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ☐ No

Notes, Discrepancies, & Resolutions:

Service request Label:



10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sample. The COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report



Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402651
Team: Semiova GCMS/TWOODS

Prep Workflow: OrgExts(365)
Prep Method: Method Soxhlet

Status: Prepped
Prep Date/Time: 7/12/22 10:46

#	Lab Code	Client ID	B#	Method / Test	pH	CI	Matrix	Amt Ext.	Sample Description
1	E2200551-001	1187-53 (2) Grab	.01	1613B/Dioxins Furans			Soil	10.304g	
2	E2200551-002	1187-53 (12) Grab	.01	1613B/Dioxins Furans			Soil	10.026g	
3	E2200551-003	1187-53 (16) Grab	.01	1613B/Dioxins Furans			Soil	10.306g	
4	E2200551-004	1187-53 (20) Grab	.01	1613B/Dioxins Furans			Soil	10.324g	
5	E2200551-005	1187-62 (2) Grab	.01	1613B/Dioxins Furans			Soil	10.371g	
6	E2200551-006	1187-62 (6) Grab	.01	1613B/Dioxins Furans			Soil	10.166g	
7	E2200551-007	1187-62 (12) Grab	.01	1613B/Dioxins Furans			Soil	10.006g	
8	E2200551-008	1187-62 (15) Grab	.01	1613B/Dioxins Furans			Soil	10.361g	
9	E2200551-009	1188-1 (2) Grab	.01	1613B/Dioxins Furans			Soil	10.124g	
10	E2200551-010	1188-1 (8) Grab	.01	1613B/Dioxins Furans			Soil	10.176g	
11	E2200551-011	1188-1 (14) Grab	.01	1613B/Dioxins Furans			Soil	10.354g	
12	E2200551-012	1188-1 (18) Grab	.01	1613B/Dioxins Furans			Soil	10.410g	
13	E2200554-001	1187-52 (0-6) Composite	.01	1613B/Dioxins Furans			Soil	10.362g	
14	E2200554-002	1188-2 (0-6) Composite	.01	1613B/Dioxins Furans			Soil	10.215g	
15	E2200554-003	1188-1 (0-6) Composite	.01	1613B/Dioxins Furans			Soil	10.317g	
16	E2200560-001RE	Sludge	.01	1613B/Dioxins Furans			Sludge, Solid	10.317g	
17	E2200605-001	BH-1	.01	1613B/Dioxins Furans			Soil	10.203g	
18	E2200605-002	BH-2	.01	1613B/Dioxins Furans			Soil	10.105g	
19	E2200660-001	Sludge661722	.01	1613B/Dioxins Furans			Sludge, Solid	10.432g	
20	E2200661-001	Biosolid	.01	1613B/Dioxins Furans			Sludge, Solid	10.466g	
21	EQ2200289-01	MB		1613B/Dioxins Furans			Solid	10.121g	
22	EQ2200289-02	LCS		1613B/Dioxins Furans			Solid	10.036g	
23	EQ2200289-03	DLCS		1613B/Dioxins Furans			Solid	10.110g	

Spiking Solutions

Name: 1613B Matrix Working Standard	Inventory ID 223733	Logbook Ref: tw 6/28/22 223733	Expires On: 08/04/2022

EQ2200289-01 100.00µL	EQ2200289-02 100.00µL	EQ2200289-03 100.00µL	
Name: 8290/1613B Cleanup Working Standard	Inventory ID 223968	Logbook Ref: SN 7/12/22	Expires On: 08/04/2022

E2200551-001 100.00µL	E2200551-002 100.00µL	E2200551-003 100.00µL	E2200551-004 100.00µL	E2200551-005 100.00µL	E2200551-006 100.00µL
E2200551-007 100.00µL	E2200551-008 100.00µL	E2200551-009 100.00µL	E2200551-010 100.00µL	E2200551-011 100.00µL	E2200551-012 100.00µL
E2200554-001 100.00µL	E2200554-002 100.00µL	E2200554-003 100.00µL	E2200560-001 100.00µL	E2200605-001 100.00µL	E2200605-002 100.00µL
E2200660-001 100.00µL	E2200661-001 100.00µL	EQ2200289-01 100.00µL	EQ2200289-02 100.00µL	EQ2200289-03 100.00µL	

Preparation Information Benchsheet

Prep Run#: 402651
Team: Semiva GCMS/TWOODS

Prep Workflow: OrgExIS(365)
Prep Method: Method Soxhlet

Status: Prepped
Prep Date/Time: 7/12/22 10:46

Name: 1613B Labeled Working Standard Inventory ID 223974 Logbook Ref: tw 223974 07/12/22 Expires On: 08/04/2022

E2200551-001	1,000.00µL	E2200551-002	1,000.00µL	E2200551-003	1,000.00µL	E2200551-004	1,000.00µL	E2200551-005	1,000.00µL	E2200551-006	1,000.00µL
E2200551-007	1,000.00µL	E2200551-008	1,000.00µL	E2200551-009	1,000.00µL	E2200551-010	1,000.00µL	E2200551-011	1,000.00µL	E2200551-012	1,000.00µL
E2200554-001	1,000.00µL	E2200554-002	1,000.00µL	E2200554-003	1,000.00µL	E2200560-001	1,000.00µL	E2200605-001	1,000.00µL	E2200605-002	1,000.00µL
E2200660-001	1,000.00µL	E2200661-001	1,000.00µL	EQ2200289-01	1,000.00µL	EQ2200289-02	1,000.00µL	EQ2200289-03	1,000.00µL		

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	7/12/22 10:46	Started:	7/18/22 11:00	Started:	7/18/22 13:00	Started:	7/19/22 10:00
Finished:	7/13/22 09:00	Finished:	7/18/22 12:00	Finished:	7/18/22 16:00	Finished:	7/19/22 13:00
By:	TWOODS	By:	TWOODS	By:	TWOODS	By:	TWOODS
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: TW Date: 07/12/22

Chain of Custody

Relinquished By: _____ Date: _____
Received By: _____ Date: _____
Extracts Examined
Yes No



Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2200661-001

Service Request: E2200661
Date Collected: 06/29/22 08:50
Date Received: 07/06/22 09:30
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.466g
Data File Name: P538999
ICAL Date: 01/18/22

Date Analyzed: 07/23/22 01:12
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538986

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	1.85	3.65			1
1,2,3,7,8-PeCDD	ND	U	0.755	18.2			1
1,2,3,4,7,8-HxCDD	ND	U	0.586	18.2			1
1,2,3,6,7,8-HxCDD	ND	U	0.515	18.2			1
1,2,3,7,8,9-HxCDD	ND	U	0.549	18.2			1
1,2,3,4,6,7,8-HpCDD	7.47J		0.699	18.2	0.89	1.000	1
OCDD	44.0		1.65	36.5	0.89	1.000	1
2,3,7,8-TCDF	ND	U	1.19	3.65			1
1,2,3,7,8-PeCDF	ND	U	0.779	18.2			1
2,3,4,7,8-PeCDF	ND	U	0.699	18.2			1
1,2,3,4,7,8-HxCDF	ND	U	0.787	18.2			1
1,2,3,6,7,8-HxCDF	ND	U	0.805	18.2			1
1,2,3,7,8,9-HxCDF	ND	U	1.06	18.2			1
2,3,4,6,7,8-HxCDF	ND	U	0.759	18.2			1
1,2,3,4,6,7,8-HpCDF	1.49BJK		1.11	18.2	2.07	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	1.30	18.2			1
OCDF	10.4J		1.63	36.5	0.81	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: 06/29/22 08:50
Date Received: 07/06/22 09:30

Sample Name: Biosolid
Lab Code: E2200661-001

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.466g

Date Analyzed: 07/23/22 01:12
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538986

Data File Name: P538999
ICAL Date: 01/18/22

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	1.85	3.65			1
Total Penta-Dioxins	ND	U	0.755	18.2			1
Total Hexa-Dioxins	1.07J		0.548	18.2	1.20		1
Total Hepta-Dioxins	15.6J		0.699	18.2	1.17		1
Total Tetra-Furans	ND	U	1.19	3.65			1
Total Penta-Furans	ND	U	0.738	18.2			1
Total Hexa-Furans	ND	U	0.839	18.2			1
Total Hepta-Furans	ND	U	1.21	18.2			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: 06/29/22 08:50
Date Received: 07/06/22 09:30

Sample Name: Biosolid
Lab Code: E2200661-001

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.466g

Date Analyzed: 07/23/22 01:12
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538986

Data File Name: P538999
ICAL Date: 01/18/22

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	672.562	34		25-164	0.78	1.020
13C-1,2,3,7,8-PeCDD	2000	859.881	43		25-181	1.62	1.178
13C-1,2,3,4,7,8-HxCDD	2000	759.880	38		32-141	1.29	0.991
13C-1,2,3,6,7,8-HxCDD	2000	862.633	43		28-130	1.30	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	673.333	34		23-140	1.04	1.066
13C-OCDD	4000	1078.223	27		17-157	0.89	1.140
13C-2,3,7,8-TCDF	2000	558.751	28		24-169	0.80	0.994
13C-1,2,3,7,8-PeCDF	2000	747.992	37		24-185	1.55	1.138
13C-2,3,4,7,8-PeCDF	2000	811.268	41		21-178	1.57	1.169
13C-1,2,3,4,7,8-HxCDF	2000	791.791	40		26-152	0.52	0.972
13C-1,2,3,6,7,8-HxCDF	2000	726.116	36		26-123	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	719.471	36		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	829.606	41		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	570.748	29		28-143	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	650.683	33		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	408.897	51		35-197	NA	1.021

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2200661-001

Service Request: E2200661
Date Collected: 06/29/22 08:50
Date Received: 07/06/22 09:30
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	1.85	3.65	1	1	
1,2,3,7,8-PeCDD	ND	0.755	18.2	1	1	
1,2,3,4,7,8-HxCDD	ND	0.586	18.2	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.515	18.2	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.549	18.2	1	0.1	
1,2,3,4,6,7,8-HpCDD	7.47	0.699	18.2	1	0.01	0.0747
OCDD	44.0	1.65	36.5	1	0.0003	0.0132
2,3,7,8-TCDF	ND	1.19	3.65	1	0.1	
1,2,3,7,8-PeCDF	ND	0.779	18.2	1	0.03	
2,3,4,7,8-PeCDF	ND	0.699	18.2	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.787	18.2	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.805	18.2	1	0.1	
1,2,3,7,8,9-HxCDF	ND	1.06	18.2	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.759	18.2	1	0.1	
1,2,3,4,6,7,8-HpCDF	1.49	1.11	18.2	1	0.01	0.0149
1,2,3,4,7,8,9-HpCDF	ND	1.30	18.2	1	0.01	
OCDF	10.4	1.63	36.5	1	0.0003	0.00312
Total TEQ						0.106

2005 WHO TEFs, ND = 0

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2200661-001

Service Request: E2200661
Date Collected: 06/29/22 08:50
Date Received: 07/06/22 09:30
Units: Percent
Basis: NA

Total Solids

Analysis Method: ALS SOP
5.0875g

Date Analyzed: 07/18/22 10:50
NA
E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	13.1		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2200289-01

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.121g

Date Analyzed: 07/21/22 07:55
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538950
ICAL Date: 01/18/22

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.411	0.494			1
1,2,3,7,8-PeCDD	ND	U	0.148	2.47			1
1,2,3,4,7,8-HxCDD	0.162JK		0.137	2.47	0.72	1.000	1
1,2,3,6,7,8-HxCDD	ND	U	0.125	2.47			1
1,2,3,7,8,9-HxCDD	ND	U	0.131	2.47			1
1,2,3,4,6,7,8-HpCDD	0.213JK		0.141	2.47	0.66	1.000	1
OCDD	ND	U	0.303	4.94			1
2,3,7,8-TCDF	ND	U	0.275	0.494			1
1,2,3,7,8-PeCDF	ND	U	0.154	2.47			1
2,3,4,7,8-PeCDF	ND	U	0.134	2.47			1
1,2,3,4,7,8-HxCDF	ND	U	0.0765	2.47			1
1,2,3,6,7,8-HxCDF	ND	U	0.0816	2.47			1
1,2,3,7,8,9-HxCDF	0.359J		0.114	2.47	1.26	1.001	1
2,3,4,6,7,8-HxCDF	ND	U	0.0761	2.47			1
1,2,3,4,6,7,8-HpCDF	0.163JK		0.0540	2.47	1.49	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0830	2.47			1
OCDF	ND	U	0.289	4.94			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2200289-01

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.121g

Date Analyzed: 07/21/22 07:55
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538950
ICAL Date: 01/18/22

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.411	0.494			1
Total Penta-Dioxins	ND	U	0.148	2.47			1
Total Hexa-Dioxins	ND	U	0.131	2.47			1
Total Hepta-Dioxins	ND	U	0.141	2.47			1
Total Tetra-Furans	ND	U	0.275	0.494			1
Total Penta-Furans	0.153J		0.143	2.47	1.55		1
Total Hexa-Furans	0.359J		0.0847	2.47	1.26		1
Total Hepta-Furans	ND	U	0.0662	2.47			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2200289-01

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.121g

Date Analyzed: 07/21/22 07:55
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538950
ICAL Date: 01/18/22

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	780.603	39		25-164	0.78	1.020
13C-1,2,3,7,8-PeCDD	2000	988.196	49		25-181	1.60	1.178
13C-1,2,3,4,7,8-HxCDD	2000	1093.095	55		32-141	1.30	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1211.482	61		28-130	1.27	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	985.670	49		23-140	1.04	1.065
13C-OCDD	4000	1840.068	46		17-157	0.90	1.139
13C-2,3,7,8-TCDF	2000	639.777	32		24-169	0.77	0.994
13C-1,2,3,7,8-PeCDF	2000	841.988	42		24-185	1.57	1.137
13C-2,3,4,7,8-PeCDF	2000	938.470	47		21-178	1.58	1.168
13C-1,2,3,4,7,8-HxCDF	2000	1107.383	55		26-152	0.50	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1004.794	50		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	919.280	46		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1204.517	60		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	935.461	47		28-143	0.44	1.040
13C-1,2,3,4,7,8,9-HpCDF	2000	784.509	39		26-138	0.42	1.078
37Cl-2,3,7,8-TCDD	800	291.667	36		35-197	NA	1.020



Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Analyzed: 07/21/22
Date Extracted: 07/12/22

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Units: ng/Kg
Basis: Dry
Analysis Lot: 771725

Lab Control Sample
EQ2200289-02

Duplicate Lab Control Sample
EQ2200289-03

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2,3,4,6,7,8-HpCDD	96.9	99.6	97	94.9	98.9	96	70-140	2	50
1,2,3,4,7,8-HxCDD	98.5	99.6	99	97.9	98.9	99	70-164	<1	50
1,2,3,6,7,8-HxCDD	87.3	99.6	88	86.2	98.9	87	76-134	1	50
1,2,3,7,8,9-HxCDD	93.4	99.6	94	96.3	98.9	97	64-162	3	50
1,2,3,7,8-PeCDD	90.3	99.6	91	90.9	98.9	92	70-142	<1	50
2,3,7,8-TCDD	17.1	19.9	86	17.2	19.8	87	67-158	<1	50
OCDD	188	199	95	191	198	97	78-144	1	50
1,2,3,4,6,7,8-HpCDF	96.4	99.6	97	97.6	98.9	99	82-122	1	50
1,2,3,4,7,8,9-HpCDF	94.4	99.6	95	93.5	98.9	95	78-138	<1	50
1,2,3,4,7,8-HxCDF	82.1	99.6	82	87.3	98.9	88	72-134	6	50
1,2,3,6,7,8-HxCDF	92.2	99.6	93	95.5	98.9	97	84-130	3	50
1,2,3,7,8,9-HxCDF	89.4	99.6	90	89.9	98.9	91	78-130	<1	50
1,2,3,7,8-PeCDF	91.3	99.6	92	91.7	98.9	93	80-134	<1	50
2,3,4,6,7,8-HxCDF	81.4	99.6	82	80.8	98.9	82	70-156	<1	50
2,3,4,7,8-PeCDF	86.2	99.6	87	86.9	98.9	88	68-160	<1	50
2,3,7,8-TCDF	17.7	19.9	89	16.9	19.8	86	75-158	5	50
OCDF	179	199	90	177	198	90	63-170	1	50

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2200289-02

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.036g

Date Analyzed: 07/21/22 15:35
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538959
ICAL Date: 01/18/22

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	17.1		0.180	0.498	0.77	1.001	1
1,2,3,7,8-PeCDD	90.3		0.0735	2.49	1.56	1.000	1
1,2,3,4,7,8-HxCDD	98.5		0.0668	2.49	1.25	1.000	1
1,2,3,6,7,8-HxCDD	87.3		0.0584	2.49	1.30	1.000	1
1,2,3,7,8,9-HxCDD	93.4		0.0624	2.49	1.36	1.006	1
1,2,3,4,6,7,8-HpCDD	96.9		0.0508	2.49	1.02	1.000	1
OCDD	188		0.387	4.98	0.89	1.000	1
2,3,7,8-TCDF	17.7		0.0867	0.498	0.71	1.001	1
1,2,3,7,8-PeCDF	91.3		0.0444	2.49	1.46	1.001	1
2,3,4,7,8-PeCDF	86.2		0.0396	2.49	1.44	1.000	1
1,2,3,4,7,8-HxCDF	82.1		0.0346	2.49	1.16	1.001	1
1,2,3,6,7,8-HxCDF	92.2		0.0364	2.49	1.14	1.000	1
1,2,3,7,8,9-HxCDF	89.4		0.0442	2.49	1.12	1.000	1
2,3,4,6,7,8-HxCDF	81.4		0.0314	2.49	1.16	1.000	1
1,2,3,4,6,7,8-HpCDF	96.4		0.136	2.49	0.96	1.000	1
1,2,3,4,7,8,9-HpCDF	94.4		0.185	2.49	0.95	1.000	1
OCDF	179		0.381	4.98	0.86	1.006	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2200289-02

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.036g

Date Analyzed: 07/21/22 15:35
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538959
ICAL Date: 01/18/22

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	17.1		0.180	0.498	0.77		1
Total Penta-Dioxins	90.3		0.0735	2.49	1.56		1
Total Hexa-Dioxins	279		0.0624	2.49	1.25		1
Total Hepta-Dioxins	96.9		0.0508	2.49	1.02		1
Total Tetra-Furans	17.7		0.0867	0.498	0.71		1
Total Penta-Furans	179		0.0419	2.49	1.78		1
Total Hexa-Furans	345		0.0362	2.49	1.16		1
Total Hepta-Furans	191		0.158	2.49	0.96		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2200289-02

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.036g

Date Analyzed: 07/21/22 15:35
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538959
ICAL Date: 01/18/22

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1049.565	52		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1177.037	59		25-181	1.60	1.178
13C-1,2,3,4,7,8-HxCDD	2000	1042.441	52		32-141	1.30	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1156.115	58		28-130	1.29	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1045.316	52		23-140	1.04	1.065
13C-OCDD	4000	2122.191	53		17-157	0.88	1.139
13C-2,3,7,8-TCDF	2000	906.492	45		24-169	0.78	0.993
13C-1,2,3,7,8-PeCDF	2000	1012.223	51		24-185	1.58	1.137
13C-2,3,4,7,8-PeCDF	2000	1112.310	56		21-178	1.57	1.168
13C-1,2,3,4,7,8-HxCDF	2000	1043.722	52		26-152	0.50	0.971
13C-1,2,3,6,7,8-HxCDF	2000	932.198	47		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	985.582	49		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1147.614	57		28-136	0.49	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	947.090	47		28-143	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	923.502	46		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	423.892	53		35-197	NA	1.020

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2200289-03

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.110g

Date Analyzed: 07/21/22 16:23
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538960
ICAL Date: 01/18/22

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	17.2		0.251	0.495	0.73	1.000	1
1,2,3,7,8-PeCDD	90.9		0.0826	2.47	1.58	1.000	1
1,2,3,4,7,8-HxCDD	97.9		0.0615	2.47	1.30	1.000	1
1,2,3,6,7,8-HxCDD	86.2		0.0528	2.47	1.28	1.000	1
1,2,3,7,8,9-HxCDD	96.3		0.0568	2.47	1.23	1.006	1
1,2,3,4,6,7,8-HpCDD	94.9		0.0807	2.47	1.04	1.000	1
OCDD	191		0.455	4.95	0.87	1.000	1
2,3,7,8-TCDF	16.9		0.147	0.495	0.69	1.001	1
1,2,3,7,8-PeCDF	91.7		0.108	2.47	1.52	1.001	1
2,3,4,7,8-PeCDF	86.9		0.0979	2.47	1.49	1.000	1
1,2,3,4,7,8-HxCDF	87.3		0.0490	2.47	1.13	1.000	1
1,2,3,6,7,8-HxCDF	95.5		0.0537	2.47	1.12	1.000	1
1,2,3,7,8,9-HxCDF	89.9		0.0623	2.47	1.17	1.000	1
2,3,4,6,7,8-HxCDF	80.8		0.0456	2.47	1.13	1.000	1
1,2,3,4,6,7,8-HpCDF	97.6		0.125	2.47	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	93.5		0.170	2.47	0.95	1.000	1
OCDF	177		0.487	4.95	0.88	1.006	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.

Project: 245203

Sample Matrix: Sludge, Solid

Service Request: E2200661

Date Collected: NA

Date Received: NA

Sample Name: Duplicate Lab Control Sample

Units: ng/Kg

Lab Code: EQ2200289-03

Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B

Date Analyzed: 07/21/22 16:23

Prep Method: Method Soxhlet

Date Extracted: 7/12/22

Sample Amount: 10.110g

Instrument Name: E-HRMS-07

GC Column: DB-5MSUI

Data File Name: P538960

Blank File Name: P538950

ICAL Date: 01/18/22

Cal Ver. File Name: P538947

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	17.2		0.251	0.495	0.73		1
Total Penta-Dioxins	90.9		0.0826	2.47	1.58		1
Total Hexa-Dioxins	280		0.0568	2.47	1.30		1
Total Hepta-Dioxins	94.9		0.0807	2.47	1.04		1
Total Tetra-Furans	16.9		0.147	0.495	0.69		1
Total Penta-Furans	180		0.103	2.47	1.52		1
Total Hexa-Furans	354		0.0520	2.47	1.13		1
Total Hepta-Furans	191		0.145	2.47	0.97		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 245203
Sample Matrix: Sludge, Solid

Service Request: E2200661
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2200289-03

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.110g

Date Analyzed: 07/21/22 16:23
Date Extracted: 7/12/22
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P538950
Cal Ver. File Name: P538947

Data File Name: P538960
ICAL Date: 01/18/22

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	982.931	49		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1137.216	57		25-181	1.62	1.178
13C-1,2,3,4,7,8-HxCDD	2000	1030.216	52		32-141	1.26	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1159.515	58		28-130	1.26	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1038.405	52		23-140	1.06	1.065
13C-OCDD	4000	2124.354	53		17-157	0.89	1.139
13C-2,3,7,8-TCDF	2000	833.080	42		24-169	0.79	0.994
13C-1,2,3,7,8-PeCDF	2000	986.772	49		24-185	1.57	1.138
13C-2,3,4,7,8-PeCDF	2000	1083.709	54		21-178	1.58	1.169
13C-1,2,3,4,7,8-HxCDF	2000	1028.262	51		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	896.428	45		26-123	0.50	0.975
13C-1,2,3,7,8,9-HxCDF	2000	966.933	48		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1127.210	56		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	942.304	47		28-143	0.43	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	914.800	46		26-138	0.43	1.079
37Cl-2,3,7,8-TCDD	800	395.442	49		35-197	NA	1.020

ANALYTICAL SERVICES, INC. (ASI)
Microbiological Testing, Research and Consulting

130 Allen Brook Ln., Williston, VT 05495 USA
1.800.723.4432 / 802.878.5138 Fax: 802.878.6765
www.analyticalservices.com

August 1, 2022

Jennifer Laramie
Eastern Analytical
51 Antrim Avenue
Concord, NH 03301

Dear Jennifer:

Enclosed please find results of the analyses performed on the one (1) sample received in our laboratory on July 1, 2022.

This report consists of three (3) pages, including this cover page, and the chain of custody (one page). The results reported herein relate only to the samples included in this report. These results were generated under ASI's laboratory quality system. Deviations, if any, are noted. This report shall not be reproduced except in full without the written approval of the laboratory.

Please note: a portion of the sample was frozen upon receipt and thawed later to process for enteric virus. This is allowed per the ASTM D4994-89 Method.

Thank you for using Analytical Services, Inc. for your testing needs. If you have any questions, or if we may be of service in the future, please do not hesitate to contact Client Services at 1-800-723-4432.

Sincerely,

ANALYTICAL SERVICES, INC.



Harry D. Christman, Ph.D. (HDC)
Technical Director

HDC/ab

ANALYTICAL SERVICES, INC.

Microbiological Testing, Research and Consulting

Client:

Eastern Analytical
51 Antim Avenue
Concord, NH 03301

ASI Project ID:

69117

Date Collected:

6/29/2022

Sample Receipt

7/1/2022

130 Allen Brook Lane, Williston, VT 05495 USA
1.800.723.4432 / 802.878.5138 Fax: 802.878.6765
www.analyticalservices.com

Analytical Results

Client Sample ID	ASI Sample ID	Date/Time Collected	Parameter	Amount Analyzed	Result	Date/Time Analyzed	
						Start	End
Biosolid - #246203	69117-01	6/29/2022 8:50	Total Solids	26.20 g Wet Weight	12.49%	7/12/2022 13:05	7/13/2022 8:27
			Enteric Viruses	4.21 g Dry Weight	<1 PFU / 4.21 g Dry Weight	7/12/2022 9:32	7/28/2022 12:06

g = Grams

Methods Used under 40CFR Part 503

Enteric Viruses: ASTM Method D 4994-96, 1996, US EPA Manual of Methods for Virology, EPA/600/4-94/013 (R-10), EPA 625/R-92/013 App. H, Enteric Viruses
Percent Solids: APHA, AWWA, WEF, Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, Washington, DC, Method 2540G.

Exceptions:
None

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 245203

Page 1

Sample ID Date Sampled Matrix aParameters

Biosolid 6/29/2022 08:50 sludge Subcontract - Enteric Virus

Sample Notes

EAI ID# 245203

Project State: NH

Project ID: 848

Results Needed: Preferred Date: Standard

RUSH Due Date: _____

QC Deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Free 6/30/2000

PO #: 57662

EAI ID# 245203

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: _____

Relinquished by: _____ Date/Time _____

Relinquished by: _____ Date/Time _____

Relinquished by: _____ Date/Time _____

Date/Time

Received by

1032

Eastern Analytical, Inc. 51 Antim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



Friday, July 08, 2022

Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Project ID: 245203
SDG ID: GCL68657
Sample ID#s: CL68657

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

July 08, 2022

SDG I.D.: GCL68657

Project ID: 245203

Client Id	Lab Id	Matrix
BIOSOLID	CL68657	SLUDGE



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

July 08, 2022

FOR: Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Sample Information

Matrix: SLUDGE
Location Code: EASTANAL-NH
Rush Request: Standard
P.O.#: 57660

Custody Information

Collected by:
Received by: SW
Analyzed by: see "By" below

Date

06/29/22
07/01/22

Time

8:50
15:12

Laboratory Data

SDG ID: GCL68657
Phoenix ID: CL68657

Project ID: 245203
Client ID: BIOSOLID

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	12		%		07/01/22	K	SW846-%Solid
Tot.Org.Carbon	299000	100	mg/kg	1	07/05/22	MI	L. Kahn
Soil Extraction for Pesticide	Completed				07/05/22	O/MO	SW3545A
Tot.Org.Carbon Preparation	Completed				07/01/22	MI	

Pesticides

4,4' -DDD	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
4,4' -DDE	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
4,4' -DDT	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
a-BHC	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Alachlor	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Aldrin	ND	58	ug/Kg	2	07/06/22	AW	SW8081B
b-BHC	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Chlordane	ND	580	ug/Kg	2	07/06/22	AW	SW8081B
d-BHC	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Dieldrin	ND	58	ug/Kg	2	07/06/22	AW	SW8081B
Endosulfan I	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Endosulfan II	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Endosulfan sulfate	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Endrin	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Endrin aldehyde	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Endrin ketone	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
g-BHC	ND	23	ug/Kg	2	07/06/22	AW	SW8081B
Heptachlor	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Heptachlor epoxide	ND	120	ug/Kg	2	07/06/22	AW	SW8081B
Methoxychlor	ND	580	ug/Kg	2	07/06/22	AW	SW8081B
Toxaphene	ND	2300	ug/Kg	2	07/06/22	AW	SW8081B

Project ID: 245203
Client ID: BIOSOLID

Phoenix I.D.: CL68657

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>QA/QC Surrogates</u>							
% DCBP	34		%	2	07/06/22	AW	30 - 150 %
% DCBP (Confirmation)	48		%	2	07/06/22	AW	30 - 150 %
% TCMX	40		%	2	07/06/22	AW	30 - 150 %
% TCMX (Confirmation)	40		%	2	07/06/22	AW	30 - 150 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

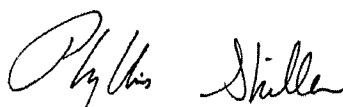
BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

July 08, 2022

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

July 08, 2022

QA/QC Data

SDG I.D.: GCL68657

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 631671 (mg/kg), QC Sample No: CL64365 (CL68657)													
Tot.Org.Carbon	BRL	100	26700	28000	4.80	111						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													



Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

July 08, 2022

QA/QC Data

SDG I.D.: GCL68657

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 631642 (ug/Kg), QC Sample No: CL69748 2X (CL68657)										
<u>Pesticides - Sludge</u>										
4,4'-DDD	ND	1.7	81	75	7.7	85	91	6.8	40 - 140	30
4,4'-DDE	ND	1.7	76	73	4.0	90	93	3.3	40 - 140	30
4,4'-DDT	ND	1.7	81	75	7.7	90	99	9.5	40 - 140	30
a-BHC	ND	1.0	77	75	2.6	76	76	0.0	40 - 140	30
Alachlor	ND	3.3	NA	NA	NC	NA	NA	NC	40 - 140	30
Aldrin	ND	1.0	74	73	1.4	76	77	1.3	40 - 140	30
b-BHC	ND	1.0	74	72	2.7	84	86	2.4	40 - 140	30
Chlordane	ND	33	72	70	2.8	85	88	3.5	40 - 140	30
d-BHC	ND	3.3	55	54	1.8	62	65	4.7	40 - 140	30
Dieldrin	ND	1.0	75	73	2.7	84	85	1.2	40 - 140	30
Endosulfan I	ND	3.3	69	70	1.4	81	78	3.8	40 - 140	30
Endosulfan II	ND	3.3	84	82	2.4	86	97	12.0	40 - 140	30
Endosulfan sulfate	ND	3.3	71	68	4.3	77	80	3.8	40 - 140	30
Endrin	ND	3.3	85	81	4.8	96	99	3.1	40 - 140	30
Endrin aldehyde	ND	3.3	68	67	1.5	77	87	12.2	40 - 140	30
Endrin ketone	ND	3.3	77	73	5.3	80	82	2.5	40 - 140	30
g-BHC	ND	1.0	78	77	1.3	79	80	1.3	40 - 140	30
Heptachlor	ND	3.3	72	72	0.0	74	75	1.3	40 - 140	30
Heptachlor epoxide	ND	3.3	73	71	2.8	79	81	2.5	40 - 140	30
Methoxychlor	ND	3.3	76	73	4.0	81	85	4.8	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	75	%	83	79	4.9	81	85	4.8	30 - 150	30
% DCBP (Confirmation)	78	%	87	82	5.9	86	91	5.6	30 - 150	30
% TCMX	68	%	74	72	2.7	68	69	1.5	30 - 150	30
% TCMX (Confirmation)	65	%	71	69	2.9	64	65	1.6	30 - 150	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director

July 08, 2022

Friday, July 08, 2022

Criteria: None

State: NH

Sample Criteria Exceedances Report

GCL68657 - EASTANAL-NH

SampleNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units
*** No Data to Display ***								

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

July 08, 2022

SDG I.D.: GCL68657

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

PEST Narration

AU-ECD6 07/06/22-1: CL68657

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CL68657

Preceding CC 706B018 - Endrin 26%H (20%)

Succeeding CC 706B031 - Endrin 25%H (20%)

CHAIN-OF-CUSTODY RECORD



2.1001

EAI ID# 245203

Page 1

Sample ID Date Sampled Matrix aParameters

Biosolid 6/29/2022 sludge Subcontract - TOC Lloyd Kahn (PEL)

08:50

086057

Biosolid 6/29/2022 sludge Subcontract - Pesticides EPA Method 8081

08:50

1-402 jar

EAI ID# 245203 Project State: NH

Project ID: 848

Company Phoenix Environmental Labs

Address 587 East Middle Turnpike

Address Manchester, CT 06040

Account #

Phone # (860) 645-1102

Results Needed: Preferred Date: Standard

RUSH Due Date:

QC Deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and

invoice to customerservice@easternanalytical.com.

PO #: 57660

EAI ID# 245203

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Sample Collected by:

Relinquished by

Date/Time

7-1-22

0730

7-1-22

11512

customer service@easternanalytical.com

Received by

7/1/22

Received by

7/1/22

Received by

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense, or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

CHAIN-OF-CUSTODY RECORD

245203
SEAB(SU)

Date/Time

Composites need start
and stop dates/times

Matrix

Parameters and Sample Notes

of containers

Biosolid

6-29-22
08:50 AM

sludge
Grab or Comp

SoT to Dry/V/8260/ABN/ICP Metals, As, Cd, Cr, Cu, K, P, Pb, Mo, Ni, Se, Zn, Sb, Be, Ag, Tl, Hg, Ca, Mg, Fe,
Na/Pest/PCB/NO3/NO2/TKN/NH3/TN/ON/CyanT/DioxFurSoT1613SubALSTX/EntericVirusSubASITOCsoilSubPELTVS/CI
SoilAsRec/pH/TS

8

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL, HNO₃, H₂SO₄, NaOH, MEOH, Na₂S₂O₃, ICE

Dissolved Sample Field Filtered

☐

Trip Blank

sludge
Grab or Comp

SoT to Dry/V/8260

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL, HNO₃, H₂SO₄, NaOH, MEOH, Na₂S₂O₃, ICE

Dissolved Sample Field Filtered

☐

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 848

Project Name Biosolids Test | June 2022

State NH

Client (Pro Mgr) Curtis Slayton

Customer Seabrook, Town of - Sewer

Address PO Box 456

City Seabrook NH 03874

Phone 474-8012 Fax 474-8014

Email: cslayton@seabrooknh.org

Direct 603-474-9921

Results Needed by: Preferred date _____
Notes:

Reporting Options

☒ HC ☐ NO FAX ☐ PO# verbal
☒ EDD PDF ☐ Partial FAX ☐ Quote#:
☒ EDD email ☐ PDF Invoice
☐ PDF prelim, NO FAX ☐ EQUIS
☐ e-mail Login Confirmation

Samples Collected by: Danahie Feil Temp 23°C

Relinquished by: 6/29/2022 Date/Time 8:24 AM Received by: 6/29/2022 Date/Time 8:24 AM

Relinquished by: 6-29-22 Date/Time 8:41 AM Received by: 6-29-22 Date/Time 8:41 AM

QC deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP



Eastern Analytical, Inc.

professional laboratory and drilling services

Daumanic Fucile
Seabrook, Town of - Sewer Department
PO Box 456
Seabrook, NH 03874



Laboratory Report for:

Eastern Analytical, Inc. ID: 254008
Client Identification: Biosolids
Date Received: 12/21/2022

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072), West Virginia (9910C) and Alabama (41620). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

1.6.23
Date



SAMPLE CONDITIONS PAGE

EAI ID#: 254008

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Temperature upon receipt (°C): **3.1**

Received on ice or cold packs (Yes/No): **Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
254008.01	Cake 1	12/21/22	12/20/22 08:30	sludge	12.2	Adheres to Sample Acceptance Policy
254008.02	Cake 2	12/21/22	12/21/22 08:30	sludge		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.



LABORATORY REPORT

EAI ID#: **254008**

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Sample ID: Cake 1

Lab Sample ID: 254008.01

Matrix: sludge

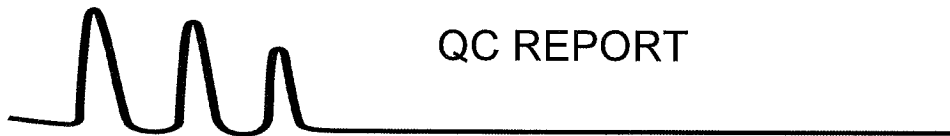
Date Sampled: 12/20/22

Date Received: 12/21/22

Solids Total **12.3**
 Solids Total Volatile **83.6**
 Chloride **1200**
 Nitrate/Nitrite-N **100**
 Ammonia-N **4100**
 Total Organic Nitrogen **91900**
 TKN **96000**
 pH **6.38**
 Paint Filter (Free Liquid) **Absent**

RL	Analytical Matrix	Units	Analysis		Method	Analyst
			Date	Time		
1	SolAsRec	Percen	12/27/22	13:45	2540G-11	APH
1	SolTotDry	Percen	12/27/22	13:45	2540G-11	APH
90	SolTotDry	mg/kg	12/29/22	20:05	9056A	KD
50	SolTotDry	mg/kg	12/29/22	20:05	9056A	KD
40	SolTotDry	mg/kg	12/29/22	10:00	4500NH3D	SEL
40	SolTotDry	mg/kg	1/5/23	12:51	CALC	SEL
2000	SolTotDry	mg/kg	12/28/22	18:09	4500N _{org} C/	GRS
0.1	SolAsRec	SU	12/22/22	14:25	9045D	PMC
	SolAsRec	None	12/28/22	16:08	9095	APH

Cake 1: Due to the pH sample matrix, the ratio of water to sample was increased from 1:1 to 2:1.



QC REPORT

EAI ID#: 254008

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 1	NA	NA	Percent	12/27/22			2540G-11
Solids Total Volatile	< 1	NA	NA	Percent	12/27/22			2540G-11
Chloride	< 10	210 (103 %R)	210 (103 %R) (0 RPD)	mg/kg	12/29/22	90 - 110	15	9056A
Nitrate/Nitrite-N	< 5	39 (95 %R)	39 (95 %R) (0 RPD)	mg/kg	12/29/22	90 - 110	15	9056A
Ammonia-N	< 5	40 (102 %R)	38 (96 %R) (5 RPD)	mg/kg	12/29/22	90 - 110	20	4500NH3D-11
TKN	< 100	2100 (101 %R)	2000 (102 %R) (1 RPD)	mg/kg	12/28/22	90 - 110	20	4500N _{org} C/NH3D-11
pH	NA	7.95 (99 %R)	7.95 (99 %R) (0 RPD)	SU	12/22/22	7.91 - 8.09	10	9045D

*If Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



LABORATORY REPORT

EAI ID#: **254008**

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Sample ID: Cake 1

Lab Sample ID: 254008.01

Matrix: sludge

Date Sampled: 12/20/22

Date Received: 12/21/22

		Analytical			Analysis		
		RL	Matrix	Units	Date	Method	Analyst
Arsenic	4.4	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Calcium	14000	100	SolTotD	mg/kg	12/28/22	6020A	DS
Cadmium	0.66	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Chromium	22	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Copper	410	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Iron	5100	100	SolTotD	mg/kg	12/28/22	6020A	DS
Lead	9.5	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Magnesium	3200	100	SolTotD	mg/kg	12/28/22	6020A	DS
Mercury	0.23	0.05	SolTotD	mg/kg	12/28/22	6020A	DS
Molybdenum	6.7	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Nickel	17	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Phosphorus	17000	100	SolTotD	mg/kg	12/28/22	6020A	DS
Potassium	4800	100	SolTotD	mg/kg	12/28/22	6020A	DS
Selenium	2.6	0.5	SolTotD	mg/kg	12/28/22	6020A	DS
Sodium	1700	100	SolTotD	mg/kg	12/28/22	6020A	DS
Zinc	440	5	SolTotD	mg/kg	12/28/22	6020A	DS



QC REPORT

EAI ID#: 254008

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.5	39 (99 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Calcium	< 100	360 (82 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Cadmium	< 0.5	39 (98 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Chromium	< 0.5	40 (99 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Copper	< 0.5	38 (95 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Iron	< 100	440 (100 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Lead	< 0.5	39 (98 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Magnesium	< 100	450 (102 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Mercury	< 0.1	0.38 (95 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Molybdenum	< 0.5	39 (97 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Nickel	< 0.5	39 (98 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Phosphorus	< 100	390 (98 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Potassium	< 100	430 (97 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Selenium	< 0.5	39 (98 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Sodium	< 100	450 (101 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A
Zinc	< 5	39 (97 %R)	NA	mg/kg	12/28/22	80 - 120	20	6020A

*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



Friday, January 06, 2023

Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Project ID: 254008
SDG ID: GCN14221
Sample ID#s: CN14221

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

January 06, 2023

SDG I.D.: GCN14221

Project ID: 254008

Client Id	Lab Id	Matrix
CAKE 2	CN14221	SLUDGE



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

January 06, 2023

FOR: Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Sample Information

Matrix: SLUDGE
Location Code: EASTANAL-NH
Rush Request: Standard
P.O.#: 58938

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

12/21/22

Time

8:30

12/29/22

16:05

Laboratory Data

SDG ID: GCN14221
Phoenix ID: CN14221

Project ID: 254008
Client ID: CAKE 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	12		%		12/29/22	AL	SW846-%Solid
Tot.Org.Carbon	281000	100	mg/kg	1	01/04/23	MI	L. Kahn
Tot.Org.Carbon Preparation	Completed				01/03/23	MI	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

January 06, 2023

Reviewed and Released by: Anil Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

January 06, 2023

QA/QC Data

SDG I.D.: GCN14221

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits

QA/QC Batch 658551 (mg/kg), QC Sample No: CN14219 (CN14221)

Tot.Org.Carbon	BRL	100	10000	10200	2.00	116						75 - 125	30

Comment:

Additional criteria matrix spike acceptance range is 75-125%.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director
January 06, 2023

Friday, January 06, 2023

Criteria: None

State: NH

SampleNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units

*** No Data to Display ***

Sample Criteria Exceedances Report

GCN14221 - EASTANAL-NH

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

January 06, 2023

SDG I.D.: GCN14221

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
professional laboratory and drilling services

1.510

EAI ID# 254008

Page 1

Sample ID

Date Sampled Matrix

aParameters

Sample Notes

Cake 2

12/21/2022
08:30

sludge

Subcontract - TOC Lloyd Kahn (PEL)

*

14221

* See Soil Jar

EAI ID# 254008

Project State: NH

Project ID: 848

Company

Phoenix Environmental Labs

Address

587 East Middle Turnpike

Address

Manchester, CT 06040

Account #

Phone # (860) 645-1102

Results Needed: Preferred Date: Standard

QC Deliverables

RUSH Due Date: _____

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and
invoice to customerservice@easternanalytical.com.

PO #: 58938

EAI ID# 254008

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

Relinquished by:

Relinquished by

Relinquished by

Relinquished by

Relinquished by

Date/Time

Date/Time

Received by

Received by

Eastern Analytical, Inc. 51 Artrim Ave Concord, NH 03301

Phone: (603) 228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



Eastern Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

254008

SEAB(SD)

Date/Time

Composites need start
and stop dates/times

Matrix

Parameters and Sample Notes

of containers

Cake 1

12/21

0830

sludge
Grab or Comp

SoilTotDry/ICPMeets As, Cd, Cr, Cu, K, P, Pb, Mo, Ni, Se, Zn, Fe, Ca, Mg, Na, Hg, Fe, Na/NO3NO2/TKN/TN/TVS/Cl/NH3
SoilAsRec/pH/TS/PfFtr

2

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL, HNO₃, H₂SO₄, NaOH, MeOH, Na₂S₂O₃, ICE

Dissolved Sample Field Filtered ☐

Cake 2

12/21

0830

sludge
Grab or Comp

SoilTotDry/TOCsoilSubPEL

1

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL, HNO₃, H₂SO₄, NaOH, MeOH, Na₂S₂O₃, ICE

Dissolved Sample Field Filtered ☐

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 848

Project Name Biosolids

State NH

Client (Pro Mgr) Daumanic Fucile

Customer Seabrook, Town of - Sewer

Address PO Box 456

City Seabrook NH 03874

Phone 474-8012 Fax 474-8014

Email: DFucile@seabrooknh.org

Direct (603) 395-6223

Results Needed by: Preferred date _____
Notes:

Reporting Options

☐ HC ☐ NO FAX

☒ EDD PDF ☐ Partial FAX

☒ EDD email ☐ PDF Invoice

☐ PDF prelim, NO FAX

☐ e-mail Login Confirmation

PO# verbal
Quote#: 1013056

Temp 31°C
Ice Y ☒ N ☐

Samples Collected by: Daumanic Fucile

Reinquinshed by: Brandon Flawderis

Date/Time 12/21/22

Date/Time 11:00

Relinquished by: Shelly

Date/Time 12/21/22

Received by: Shelly

Received by: (Signature)

QC deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com

Curtis Slayton
Seabrook, Town of - Sewer Department
PO Box 456
Seabrook, NH 03874



Laboratory Report for:

Eastern Analytical, Inc. ID: 261969
Client Identification: Biosolids Test | June 2023
Date Received: 6/14/2023

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

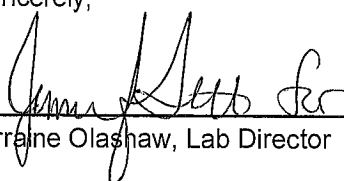
References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olanshaw, Lab Director

8/8/23
Date



SAMPLE CONDITIONS PAGE

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2023**

Temperature upon receipt (°C): **2.9**

Acceptable temperature range (°C): 0-6

Received on ice or cold packs (Yes/No): **Y**

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
261969.01	Biosolid	6/14/23	6/14/23 08:00	sludge	13.1	Adheres to Sample Acceptance Policy
261969.02	Trip Blank	6/14/23	6/14/23 08:00	sludge	100.0	Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.



LABORATORY REPORT

EAI ID#: 261969

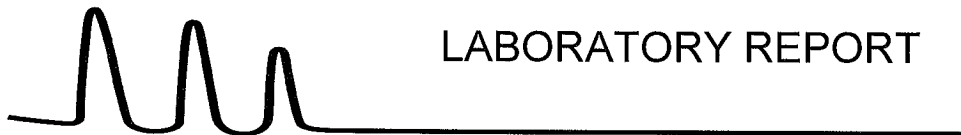
Client: **Seabrook, Town of - Sewer Department**Client Designation: **Biosolids Test | June 2023**

Client Sample ID: Biosolid
Lab Sample ID: 261969.01
Matrix: sludge
Date Sampled: 6/14/23
Date Received: 6/14/23

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Chloromethane	< 2	2	24	mg/kg	6/19/23	15:40	8260C	DGM
Vinyl chloride	< 0.5	0.5	24	mg/kg	6/19/23	15:40	8260C	DGM
Bromomethane	< 2	2	24	mg/kg	6/19/23	15:40	8260C	DGM
Chloroethane	< 2	2	24	mg/kg	6/19/23	15:40	8260C	DGM
Acetone	< 50	50	24	mg/kg	6/19/23	15:40	8260C	DGM
1,1-Dichloroethene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Methylene chloride	< 2	2	24	mg/kg	6/19/23	15:40	8260C	DGM
Carbon disulfide	< 2	2	24	mg/kg	6/19/23	15:40	8260C	DGM
trans-1,2-Dichloroethene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
1,1-Dichloroethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
cis-1,2-Dichloroethene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
2-Butanone(MEK)	< 10	10	24	mg/kg	6/19/23	15:40	8260C	DGM
Chloroform	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
1,1,1-Trichloroethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Carbon tetrachloride	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Benzene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
1,2-Dichloroethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Trichloroethene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
1,2-Dichloropropane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Bromodichloromethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
4-Methyl-2-pentanone(MIBK)	< 10	10	24	mg/kg	6/19/23	15:40	8260C	DGM
cis-1,3-Dichloropropene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Toluene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
trans-1,3-Dichloropropene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
1,1,2-Trichloroethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
2-Hexanone	< 2	2	24	mg/kg	6/19/23	15:40	8260C	DGM
Tetrachloroethene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Dibromochloromethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Chlorobenzene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Ethylbenzene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
mp-Xylene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
o-Xylene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Styrene	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
Bromoform	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
1,1,2,2-Tetrachloroethane	< 1	1	24	mg/kg	6/19/23	15:40	8260C	DGM
4-Bromofluorobenzene (surr)	84 %R			%	6/19/23	15:40	8260C	DGM
1,2-Dichlorobenzene-d4 (surr)	105 %R			%	6/19/23	15:40	8260C	DGM
Toluene-d8 (surr)	93 %R			%	6/19/23	15:40	8260C	DGM
1,2-Dichloroethane-d4 (surr)	114 %R			%	6/19/23	15:40	8260C	DGM

TCL

Reporting limits are elevated due to the % solids content of the sample or the sample mass used for analysis.



LABORATORY REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**
Client Designation: **Biosolids Test | June 2023**

Client Sample ID: Trip Blank
Lab Sample ID: 261969.02
Matrix: sludge
Date Sampled: 6/14/23
Date Received: 6/14/23

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Chloromethane	< 0.1	0.1	1	mg/kg	6/19/23	16:05	8260C	DGM
Vinyl chloride	< 0.02	0.02	1	mg/kg	6/19/23	16:05	8260C	DGM
Bromomethane	< 0.1	0.1	1	mg/kg	6/19/23	16:05	8260C	DGM
Chloroethane	< 0.1	0.1	1	mg/kg	6/19/23	16:05	8260C	DGM
Acetone	< 2	2	1	mg/kg	6/19/23	16:05	8260C	DGM
1,1-Dichloroethene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Methylene chloride	< 0.1	0.1	1	mg/kg	6/19/23	16:05	8260C	DGM
Carbon disulfide	< 0.1	0.1	1	mg/kg	6/19/23	16:05	8260C	DGM
trans-1,2-Dichloroethene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
1,1-Dichloroethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
cis-1,2-Dichloroethene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
2-Butanone(MEK)	< 0.5	0.5	1	mg/kg	6/19/23	16:05	8260C	DGM
Chloroform	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
1,1,1-Trichloroethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Carbon tetrachloride	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Benzene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
1,2-Dichloroethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Trichloroethene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
1,2-Dichloropropane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Bromodichloromethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
4-Methyl-2-pentanone(MIBK)	< 0.5	0.5	1	mg/kg	6/19/23	16:05	8260C	DGM
cis-1,3-Dichloropropene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Toluene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
trans-1,3-Dichloropropene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
1,1,2-Trichloroethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
2-Hexanone	< 0.1	0.1	1	mg/kg	6/19/23	16:05	8260C	DGM
Tetrachloroethene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Dibromochloromethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Chlorobenzene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Ethylbenzene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
mp-Xylene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
o-Xylene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Styrene	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
Bromoform	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
1,1,2,2-Tetrachloroethane	< 0.05	0.05	1	mg/kg	6/19/23	16:05	8260C	DGM
4-Bromofluorobenzene (surr)	77 %R			%	6/19/23	16:05	8260C	DGM
1,2-Dichlorobenzene-d4 (surr)	109 %R			%	6/19/23	16:05	8260C	DGM
Toluene-d8 (surr)	94 %R			%	6/19/23	16:05	8260C	DGM
1,2-Dichloroethane-d4 (surr)	115 %R			%	6/19/23	16:05	8260C	DGM

TCL



QC REPORT

EAI ID#: 261969

Client: Seabrook, Town of - Sewer Department

Batch ID: 638225-02705/S061623V82601

Client Designation: Biosolids Test | June 2023

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.1	1.5 (153 %R)	1.4 (144 %R) (6 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
Chloromethane	< 0.1	1.4 (136 %R)	1.3 (131 %R) (4 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
Vinyl chloride	< 0.02	1.2 (121 %R)	1.2 (117 %R) (4 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Bromomethane	< 0.1	0.98 (98 %R)	0.98 (98 %R) (0 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
Chloroethane	< 0.1	1.1 (110 %R)	1.1 (106 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Trichlorofluoromethane	< 0.1	* 1.3 (132 %R)	1.3 (126 %R) (5 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Diethyl Ether	< 0.05	0.97 (97 %R)	0.92 (92 %R) (5 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Acetone	< 2	< 2 (113 %R)	< 2 (108 %R) (4 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
1,1-Dichloroethene	< 0.05	1.2 (120 %R)	1.2 (117 %R) (2 RPD)	6/16/2023	mg/kg	59 - 172	20	8260C
tert-Butyl Alcohol (TBA)	< 2	5.4 (108 %R)	5.2 (105 %R) (3 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
Methylene chloride	< 0.1	1.2 (116 %R)	1.1 (114 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Carbon disulfide	< 0.1	1.1 (112 %R)	1.1 (111 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 0.1	1.0 (103 %R)	1.0 (100 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Ethyl-t-butyl ether(ETBE)	< 0.1	0.88 (88 %R)	0.88 (88 %R) (0 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Isopropyl ether(DIPE)	< 0.1	1.1 (106 %R)	1.0 (105 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
tert-amyl methyl ether(TAME)	< 0.1	0.82 (82 %R)	0.82 (82 %R) (0 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 0.05	1.2 (123 %R)	1.2 (121 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,1-Dichloroethane	< 0.05	* 1.3 (133 %R)	1.3 (129 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
2,2-Dichloropropane	< 0.05	1.2 (116 %R)	1.1 (113 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 0.05	1.2 (117 %R)	1.2 (115 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
2-Butanone(MEK)	< 0.5	1.1 (110 %R)	1.1 (107 %R) (3 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
Bromochloromethane	< 0.05	1.2 (117 %R)	1.1 (114 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 0.5	0.96 (96 %R)	0.95 (95 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Chloroform	< 0.05	1.2 (124 %R)	1.2 (121 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,1,1-Trichloroethane	< 0.05	1.2 (117 %R)	1.1 (114 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Carbon tetrachloride	< 0.05	1.2 (116 %R)	1.1 (113 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,1-Dichloropropene	< 0.05	1.1 (107 %R)	1.1 (107 %R) (0 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Benzene	< 0.05	1.3 (126 %R)	1.2 (123 %R) (2 RPD)	6/16/2023	mg/kg	66 - 142	20	8260C
1,2-Dichloroethane	< 0.05	1.1 (114 %R)	1.1 (111 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Trichloroethene	< 0.05	1.2 (118 %R)	1.2 (117 %R) (1 RPD)	6/16/2023	mg/kg	62 - 137	20	8260C
1,2-Dichloropropane	< 0.05	1.2 (121 %R)	1.2 (119 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Dibromomethane	< 0.05	1.1 (109 %R)	1.1 (106 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Bromodichloromethane	< 0.05	1.0 (104 %R)	1.0 (101 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,4-Dioxane	< 1	1 (102 %R)	< 1 (98 %R) (4 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
4-Methyl-2-pentanone(MIBK)	< 0.5	0.95 (95 %R)	0.93 (93 %R) (2 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.05	0.99 (99 %R)	0.98 (98 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Toluene	< 0.05	1.1 (115 %R)	1.1 (114 %R) (0 RPD)	6/16/2023	mg/kg	59 - 139	20	8260C
trans-1,3-Dichloropropene	< 0.05	1.0 (105 %R)	1.0 (104 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,1,2-Trichloroethane	< 0.05	1.3 (127 %R)	1.2 (124 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
2-Hexanone	< 0.1	0.98 (98 %R)	0.94 (94 %R) (4 RPD)	6/16/2023	mg/kg	40 - 160	20	8260C
Tetrachloroethene	< 0.05	1.3 (127 %R)	1.2 (125 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,3-Dichloropropane	< 0.05	1.2 (116 %R)	1.1 (114 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Dibromochloromethane	< 0.05	1.1 (110 %R)	1.1 (108 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.02	1.1 (114 %R)	1.1 (112 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Chlorobenzene	< 0.05	1.2 (116 %R)	1.2 (115 %R) (1 RPD)	6/16/2023	mg/kg	60 - 133	20	8260C
1,1,1,2-Tetrachloroethane	< 0.05	1.2 (116 %R)	1.1 (113 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C



QC REPORT

EAI ID#: 261969

Client: Seabrook, Town of - Sewer Department

Batch ID: 638225-02705/S061623V82601

Client Designation: Biosolids Test | June 2023

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Ethylbenzene	< 0.05	1.1 (110 %R)	1.1 (109 %R) (0 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
mp-Xylene	< 0.05	2.3 (117 %R)	2.3 (115 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
o-Xylene	< 0.05	1.1 (107 %R)	1.1 (107 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Styrene	< 0.05	1.1 (115 %R)	1.1 (113 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Bromoform	< 0.05	1.2 (118 %R)	1.2 (116 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
IsoPropylbenzene	< 0.05	1.0 (105 %R)	1.0 (104 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Bromobenzene	< 0.05	1.0 (101 %R)	1.0 (101 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 0.05	1.0 (104 %R)	1.0 (105 %R) (0 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.05	1.0 (102 %R)	1.0 (103 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
n-Propylbenzene	< 0.05	0.95 (95 %R)	0.96 (96 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
2-Chlorotoluene	< 0.05	1.0 (104 %R)	1.0 (104 %R) (0 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
4-Chlorotoluene	< 0.05	0.99 (99 %R)	1.0 (101 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 0.05	0.91 (91 %R)	0.92 (92 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
tert-Butylbenzene	< 0.05	0.90 (90 %R)	0.93 (93 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 0.05	0.99 (99 %R)	1.0 (100 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
sec-Butylbenzene	< 0.05	1.0 (101 %R)	1.0 (103 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,3-Dichlorobenzene	< 0.05	1.0 (105 %R)	1.1 (106 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
p-Isopropyltoluene	< 0.05	0.94 (94 %R)	0.96 (96 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,4-Dichlorobenzene	< 0.05	1.0 (101 %R)	1.0 (102 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2-Dichlorobenzene	< 0.05	1.1 (106 %R)	1.1 (107 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
n-Butylbenzene	< 0.05	0.92 (92 %R)	0.94 (94 %R) (2 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.05	0.90 (90 %R)	0.91 (91 %R) (1 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,3,5-Trichlorobenzene	< 0.05	1.1 (112 %R)	1.2 (115 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 0.05	1.1 (107 %R)	1.1 (111 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Hexachlorobutadiene	< 0.05	1.2 (125 %R)	1.3 (129 %R) (4 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
Naphthalene	< 0.1	1.0 (101 %R)	1.0 (105 %R) (4 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.05	1.2 (116 %R)	1.2 (120 %R) (3 RPD)	6/16/2023	mg/kg	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	86 %R	102 %R	102 %R	6/16/2023	% Rec	70 - 130	20	8260C
1,2-Dichlorobenzene-d4 (surr)	111 %R	97 %R	97 %R	6/16/2023	% Rec	70 - 130	20	8260C
Toluene-d8 (surr)	93 %R	98 %R	99 %R	6/16/2023	% Rec	70 - 130	20	8260C

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2023**

Client Sample ID: Biosolid
Lab Sample ID: 261969.01
Matrix: sludge
Date Sampled: 6/14/23
Date Received: 6/14/23

Date of Preparation: 6/15/23
Method: 8270E
Analyst: JMR
Units: mg/kg

	Result	RL	Dilution Factor	Date Analyzed		Result	RL	Dilution Factor	Date Analyzed
alpha-Terpineol	< 40	40	109	6/16/23	2,4-Dinitrotoluene	< 20	20	109	6/16/23
Phenol	< 8	8	109	6/16/23	2,6-Dinitrotoluene	< 20	20	109	6/16/23
2-Chlorophenol	< 8	8	109	6/16/23	Benzidine (estimated)	< 40	40	109	6/16/23
2,4-Dichlorophenol	< 8	8	109	6/16/23	3,3'-Dichlorobenzidine	< 8	8	109	6/16/23
2,4,5-Trichlorophenol	< 8	8	109	6/16/23	Pyridine	< 40	40	109	6/16/23
2,4,6-Trichlorophenol	< 8	8	109	6/16/23	Azobenzene	< 8	8	109	6/16/23
Pentachlorophenol	< 40	40	109	6/16/23	Carbazole	< 8	8	109	6/16/23
2-Nitrophenol	< 40	40	109	6/16/23	Dimethylphthalate	< 8	8	109	6/16/23
4-Nitrophenol	< 40	40	109	6/16/23	Diethylphthalate	< 40	40	109	6/16/23
2,4-Dinitrophenol	< 70	70	109	6/16/23	Di-n-butylphthalate	< 40	40	109	6/16/23
2-Methylphenol	< 8	8	109	6/16/23	Butylbenzylphthalate	< 40	40	109	6/16/23
3/4-Methylphenol	< 8	8	109	6/16/23	bis(2-Ethylhexyl)phthalate	< 40	40	109	6/16/23
2,4-Dimethylphenol	< 40	40	109	6/16/23	Di-n-octylphthalate	< 40	40	109	6/16/23
4-Chloro-3-methylphenol	< 8	8	109	6/16/23	Dibenzofuran	< 8	8	109	6/16/23
4,6-Dinitro-2-methylphenol	< 40	40	109	6/16/23	Naphthalene	< 8	8	109	6/16/23
Benzoic Acid	< 400	400	109	6/16/23	2-Methylnaphthalene	< 8	8	109	6/16/23
N-Nitrosodimethylamine	< 8	8	109	6/16/23	1-Methylnaphthalene	< 8	8	109	6/16/23
n-Nitroso-di-n-propylamine	< 4	4	109	6/16/23	Acenaphthylene	< 8	8	109	6/16/23
n-Nitrosodiphenylamine	< 8	8	109	6/16/23	Acenaphthene	< 8	8	109	6/16/23
bis(2-Chloroethyl)ether	< 8	8	109	6/16/23	Fluorene	< 8	8	109	6/16/23
bis(2-chloroisopropyl)ether	< 8	8	109	6/16/23	Phenanthrene	< 8	8	109	6/16/23
bis(2-Chloroethoxy)methane	< 8	8	109	6/16/23	Anthracene	< 8	8	109	6/16/23
1,3-Dichlorobenzene	< 8	8	109	6/16/23	Fluoranthene	< 8	8	109	6/16/23
Acetophenone	< 70	70	109	6/16/23	Pyrene	< 8	8	109	6/16/23
1,4-Dichlorobenzene	< 8	8	109	6/16/23	Benzo[a]anthracene	< 8	8	109	6/16/23
1,2-Dichlorobenzene	< 8	8	109	6/16/23	Chrysene	< 8	8	109	6/16/23
1,2,4-Trichlorobenzene	< 8	8	109	6/16/23	Benzo[b]fluoranthene	< 8	8	109	6/16/23
2-Chloronaphthalene	< 8	8	109	6/16/23	Benzo[k]fluoranthene	< 8	8	109	6/16/23
4-Chlorophenyl-phenylether	< 8	8	109	6/16/23	Benzo[a]pyrene	< 8	8	109	6/16/23
4-Bromophenyl-phenylether	< 8	8	109	6/16/23	Indeno[1,2,3-cd]pyrene	< 8	8	109	6/16/23
Hexachloroethane	< 8	8	109	6/16/23	Dibenz[a,h]anthracene	< 8	8	109	6/16/23
Hexachlorobutadiene	< 8	8	109	6/16/23	Benzo[g,h,i]perylene	< 8	8	109	6/16/23
Hexachlorocyclopentadiene	< 40	40	109	6/16/23	n-Decane	< 40	40	109	6/16/23
Hexachlorobenzene	< 8	8	109	6/16/23	n-Octadecane	< 40	40	109	6/16/23
4-Chloroaniline	< 8	8	109	6/16/23	2-Fluorophenol (surr)	74 %R			6/16/23
2,3-Dichloroaniline	< 8	8	109	6/16/23	Phenol-d6 (surr)	80 %R			6/16/23
2-Nitroaniline	< 40	40	109	6/16/23	2,4,6-Tribromophenol (surr)	91 %R			6/16/23
3-Nitroaniline	< 40	40	109	6/16/23	Nitrobenzene-D5 (surr)	82 %R			6/16/23
4-Nitroaniline	< 40	40	109	6/16/23	2-Fluorobiphenyl (surr)	88 %R			6/16/23
Aniline	< 8	8	109	6/16/23	p-Terphenyl-D14 (surr)	88 %R			6/16/23
Benzyl alcohol	< 70	70	109	6/16/23					
Nitrobenzene	< 8	8	109	6/16/23					
Isophorone	< 8	8	109	6/16/23					

Detection limits elevated due to low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 261969

Client: Seabrook, Town of - Sewer Department

Batch ID: 638224-31868/S061523ABN1

Client Designation: Biosolids Test | June 2023

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
alpha-Terpineol	< 0.34	1.6 (97 %R)	1.6 (95 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Phenol	< 0.07	2.5 (76 %R)	2.4 (73 %R) (3 RPD)	6/16/2023	mg/kg	15 - 130	30	8270E
2-Chlorophenol	< 0.07	2.7 (82 %R)	2.6 (79 %R) (4 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
2,4-Dichlorophenol	< 0.07	2.9 (86 %R)	2.7 (82 %R) (4 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
2,4,5-Trichlorophenol	< 0.07	3.1 (93 %R)	3.0 (91 %R) (1 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
2,4,6-Trichlorophenol	< 0.07	3.0 (90 %R)	3.0 (90 %R) (1 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
Pentachlorophenol	< 0.34	3.1 (94 %R)	3.0 (91 %R) (3 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
2-Nitrophenol	< 0.34	2.9 (87 %R)	2.8 (84 %R) (4 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
4-Nitrophenol	< 0.34	3.1 (93 %R)	3.1 (92 %R) (1 RPD)	6/16/2023	mg/kg	15 - 130	30	8270E
2,4-Dinitrophenol	< 0.7	3.0 (91 %R)	3.0 (91 %R) (0 RPD)	6/16/2023	mg/kg	15 - 130	30	8270E
2-Methylphenol	< 0.07	2.8 (84 %R)	2.7 (82 %R) (2 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
3/4-Methylphenol	< 0.07	3.0 (90 %R)	3.0 (89 %R) (1 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
2,4-Dimethylphenol	< 0.34	2.7 (80 %R)	2.6 (78 %R) (3 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
4-Chloro-3-methylphenol	< 0.07	3.0 (89 %R)	2.9 (88 %R) (2 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
4,6-Dinitro-2-methylphenol	< 0.34	3.2 (97 %R)	3.1 (94 %R) (3 RPD)	6/16/2023	mg/kg	30 - 130	30	8270E
Benzolic Acid	< 3.4	< 3.4 (98 %R)	< 3.4 (92 %R) (6 RPD)	6/16/2023	mg/kg	15 - 130	30	8270E
N-Nitrosodimethylamine	< 0.07	1.4 (86 %R)	1.3 (81 %R) (6 RPD)	6/16/2023	mg/kg	15 - 140	30	8270E
n-Nitroso-di-n-propylamine	< 0.04	1.5 (92 %R)	1.5 (91 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
n-Nitrosodiphenylamine	< 0.07	1.6 (94 %R)	1.5 (92 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
bis(2-Chloroethyl)ether	< 0.07	1.4 (87 %R)	1.4 (83 %R) (4 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
bis(2-chloroisopropyl)ether	< 0.07	1.5 (89 %R)	1.4 (87 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
bis(2-Chloroethoxy)methane	< 0.07	1.5 (92 %R)	1.5 (89 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
1,3-Dichlorobenzene	< 0.07	1.4 (84 %R)	1.3 (80 %R) (5 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Acetophenone	< 0.7	1.4 (83 %R)	1.4 (82 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
1,4-Dichlorobenzene	< 0.07	1.4 (83 %R)	1.3 (78 %R) (6 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
1,2-Dichlorobenzene	< 0.07	1.4 (85 %R)	1.3 (81 %R) (5 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
1,2,4-Trichlorobenzene	< 0.07	1.4 (87 %R)	1.4 (84 %R) (4 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
2-Chloronaphthalene	< 0.07	1.5 (92 %R)	1.5 (91 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
4-Chlorophenyl-phenylether	< 0.07	1.6 (95 %R)	1.6 (95 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
4-Bromophenyl-phenylether	< 0.07	1.6 (95 %R)	1.5 (92 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Hexachloroethane	< 0.07	1.4 (83 %R)	1.3 (79 %R) (5 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Hexachlorobutadiene	< 0.07	1.5 (88 %R)	1.4 (84 %R) (5 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Hexachlorocyclopentadiene	< 0.34	0.90 (54 %R)	0.87 (52 %R) (3 RPD)	6/16/2023	mg/kg	15 - 140	30	8270E
Hexachlorobenzene	< 0.07	1.6 (95 %R)	1.5 (93 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
4-Chloroaniline	< 0.07	1.4 (87 %R)	1.4 (84 %R) (3 RPD)	6/16/2023	mg/kg	15 - 140	30	8270E
2,3-Dichloroaniline	< 0.07	1.6 (95 %R)	1.6 (93 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
2-Nitroaniline	< 0.34	1.6 (98 %R)	1.6 (97 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
3-Nitroaniline	< 0.34	1.5 (90 %R)	1.5 (88 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
4-Nitroaniline	< 0.34	1.4 (86 %R)	1.4 (86 %R) (0 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Aniline	< 0.07	1.4 (83 %R)	1.4 (81 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzyl alcohol	< 0.7	1.5 (92 %R)	1.5 (90 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Nitrobenzene	< 0.07	1.5 (90 %R)	1.4 (86 %R) (4 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Isophorone	< 0.07	1.5 (90 %R)	1.5 (89 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
2,4-Dinitrotoluene	< 0.14	1.6 (98 %R)	1.6 (97 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
2,6-Dinitrotoluene	< 0.14	1.6 (96 %R)	1.6 (95 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzidine (estimated)	< 0.34	0.45 (27 %R)	0.53 (32 %R) (17 RPD)	6/16/2023	mg/kg	1 - 200	50	8270E



QC REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Batch ID: 638224-31868/S061523ABN1

Client Designation: **Biosolids Test | June 2023**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
3,3'-Dichlorobenzidine	< 0.07	1.4 (85 %R)	1.4 (84 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Pyridine	< 0.34	1.2 (73 %R)	1.2 (69 %R) (5 RPD)	6/16/2023	mg/kg	15 - 140	30	8270E
Azobenzene	< 0.07	1.6 (98 %R)	1.6 (95 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Carbazole	< 0.07	1.6 (96 %R)	1.6 (95 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Dimethylphthalate	< 0.07	1.6 (95 %R)	1.6 (94 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Diethylphthalate	< 0.34	1.7 (100 %R)	1.7 (99 %R) (0 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Di-n-butylphthalate	< 0.34	1.7 (105 %R)	1.7 (103 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Butylbenzylphthalate	< 0.34	1.7 (103 %R)	1.7 (100 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
bis(2-Ethylhexyl)phthalate	< 0.34	1.8 (107 %R)	1.7 (105 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Di-n-octylphthalate	< 0.34	1.8 (106 %R)	1.7 (105 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Dibenzofuran	< 0.07	1.6 (94 %R)	1.5 (92 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Naphthalene	< 0.07	1.4 (86 %R)	1.4 (84 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
2-Methylnaphthalene	< 0.07	1.5 (87 %R)	1.4 (85 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
1-Methylnaphthalene	< 0.07	1.5 (88 %R)	1.4 (85 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Acenaphthylene	< 0.07	1.4 (86 %R)	1.4 (85 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Acenaphthene	< 0.07	1.5 (93 %R)	1.5 (91 %R) (3 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Fluorene	< 0.07	1.6 (93 %R)	1.5 (92 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Phenanthrene	< 0.07	1.5 (89 %R)	1.5 (87 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Anthracene	< 0.07	1.5 (90 %R)	1.5 (89 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Fluoranthene	< 0.07	1.4 (85 %R)	1.4 (84 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Pyrene	< 0.07	1.5 (90 %R)	1.5 (89 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzo[a]anthracene	< 0.07	1.4 (86 %R)	1.4 (85 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Chrysene	< 0.07	1.5 (91 %R)	1.5 (89 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzo[b]fluoranthene	< 0.07	1.5 (90 %R)	1.5 (88 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzo[k]fluoranthene	< 0.07	1.5 (89 %R)	1.5 (89 %R) (0 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzo[a]pyrene	< 0.07	1.5 (90 %R)	1.5 (88 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Indeno[1,2,3-cd]pyrene	< 0.07	1.4 (84 %R)	1.4 (82 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Dibenz[a,h]anthracene	< 0.07	1.4 (83 %R)	1.4 (82 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
Benzo[g,h,i]perylene	< 0.07	1.4 (86 %R)	1.4 (85 %R) (1 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
n-Decane	< 0.34	1.3 (80 %R)	1.3 (77 %R) (5 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
n-Octadecane	< 0.34	1.7 (101 %R)	1.6 (99 %R) (2 RPD)	6/16/2023	mg/kg	40 - 140	30	8270E
2-Fluorophenol (surr)	78 %R	81 %R	77 %R	6/16/2023	mg/kg	30 - 130		8270E
Phenol-d6 (surr)	82 %R	84 %R	81 %R	6/16/2023	mg/kg	30 - 130		8270E
2,4,6-Tribromophenol (surr)	91 %R	96 %R	93 %R	6/16/2023	mg/kg	30 - 130		8270E
Nitrobenzene-D5 (surr)	88 %R	91 %R	88 %R	6/16/2023	mg/kg	30 - 130		8270E
2-Fluorobiphenyl (surr)	93 %R	93 %R	91 %R	6/16/2023	mg/kg	30 - 130		8270E
p-Terphenyl-D14 (surr)	95 %R	97 %R	97 %R	6/16/2023	mg/kg	30 - 130		8270E

*/! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2023**

Client Sample ID: Biosolid

Lab Sample ID: 261969.01

Matrix: sludge

Date Sampled: 6/14/23

Date Received: 6/14/23

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Date Prepared	Method		
								Prep	Analytical	Analyst
Aldrin	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
alpha-BHC	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
beta-BHC	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Lindane(gamma-BHC)	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
delta-BHC	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
alpha-Chlordane	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
gamma-Chlordane	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
4,4'-DDT	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
4,4'-DDE	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
4,4'-DDD	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Dieldrin	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Endosulfan I	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Endosulfan II	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Endosulfan Sulfate	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Endrin	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Endrin Aldehyde	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Endrin Ketone	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Heptachlor	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Heptachlor Epoxide	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Methoxychlor	< 0.5	0.5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
Toxaphene	< 5	5	109	mg/kg	6/26/23	13:11	6/22/23	3540C	8081B	MB
TMX (surr)	69 %R			%	6/26/23	13:11	6/22/23	3540C	8081B	MB
DCB (surr)	64 %R			%	6/26/23	13:11	6/22/23	3540C	8081B	MB

TCL

Clean-up was performed on the sample and associated batch QC.

Detection limits elevated due to sample matrix, a low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Batch ID: 638230-26789/S062223Pest1

Client Designation: **Biosolids Test | June 2023**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Aldrin	< 0.005	0.020 (61 %R)	0.021 (63 %R) (3 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
alpha-BHC	< 0.005	0.022 (65 %R)	0.022 (67 %R) (4 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
beta-BHC	< 0.005	0.022 (66 %R)	0.023 (69 %R) (5 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Lindane(gamma-BHC)	< 0.005	0.022 (65 %R)	0.022 (67 %R) (3 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
delta-BHC	< 0.005	0.024 (72 %R)	0.025 (75 %R) (4 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Chlordane	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/26/2023	mg/kg		30	8081B
4,4'-DDT	< 0.005	0.023 (70 %R)	0.025 (74 %R) (6 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
4,4'-DDE	< 0.005	0.022 (65 %R)	0.023 (69 %R) (6 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
4,4'-DDD	< 0.005	0.022 (67 %R)	0.024 (71 %R) (6 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Dieldrin	< 0.005	0.022 (67 %R)	0.023 (70 %R) (4 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Endosulfan I	< 0.005	0.022 (65 %R)	0.022 (67 %R) (3 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Endosulfan II	< 0.005	0.019 (58 %R)	0.023 (70 %R) (19 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Endosulfan Sulfate	< 0.005	0.025 (74 %R)	0.025 (75 %R) (2 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Endrin	< 0.005	0.025 (74 %R)	0.025 (75 %R) (2 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Endrin Aldehyde	< 0.005	0.019 (58 %R)	0.021 (62 %R) (7 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Endrin Ketone	< 0.005	0.023 (70 %R)	0.024 (71 %R) (2 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Heptachlor	< 0.005	0.020 (61 %R)	0.022 (66 %R) (7 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Heptachlor Epoxide	< 0.005	0.021 (63 %R)	0.022 (65 %R) (3 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Methoxychlor	< 0.005	0.024 (71 %R)	0.025 (76 %R) (7 RPD)	6/26/2023	mg/kg	40 - 140	30	8081B
Toxaphene	< 0.05	< 0.05 (%R N/A)	< 0.05 (%R N/A) (RPD N/A)	6/26/2023	mg/kg			8081B
TMX (surr)	62 %R	62 %R	66 %R	6/26/2023	mg/kg	30 - 150	30	8081B
DCB (surr)	59 %R	58 %R	59 %R	6/26/2023	mg/kg	30 - 150	30	8081B

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2023**

Client Sample ID: Biosolid

Lab Sample ID: 261969.01

Matrix: sludge

Date Sampled: 6/14/23

Date Received: 6/14/23

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Date Prepared	Method		
								Prep	Analytical	Analyst
PCB-1016	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
PCB-1221	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
PCB-1232	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
PCB-1242	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
PCB-1248	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
PCB-1254	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
PCB-1260	< 2	2	109	mg/kg	6/23/23	12:02	6/22/23	3540C	8082A	MB
TMX (surr)	98 %R			%	6/23/23	12:02	6/22/23	3540C	8082A	MB
DCB (surr)	84 %R			%	6/23/23	12:02	6/22/23	3540C	8082A	MB

TCL

Acid clean-up was performed on the samples and associated batch QC.

Detection limits elevated due to sample matrix, a low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 261969

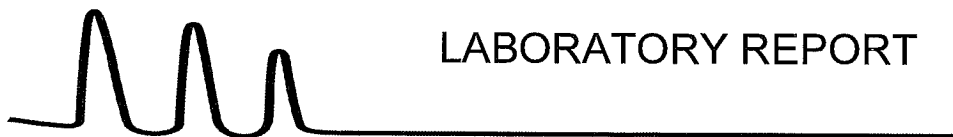
Client: Seabrook, Town of - Sewer Department

Batch ID: 638230-26688/S062223PCB1

Client Designation: Biosolids Test | June 2023

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
PCB-1016	< 0.02	0.12 (93 %R)	0.13 (94 %R) (1 RPD)	6/23/2023	mg/kg	40 - 140	30	8082A
PCB-1221	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
PCB-1232	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
PCB-1242	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
PCB-1248	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
PCB-1254	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
PCB-1260	< 0.02	0.11 (85 %R)	0.11 (85 %R) (1 RPD)	6/23/2023	mg/kg	40 - 140	30	8082A
PCB-1262	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
PCB-1268	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/23/2023	mg/kg			8082A
TMX (surr)	97 %R	98 %R	99 %R	6/23/2023	% Rec	30 - 150	30	8082A
DCB (surr)	87 %R	84 %R	82 %R	6/23/2023	% Rec	30 - 150	30	8082A

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 261969

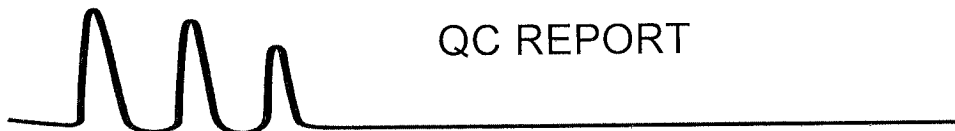
Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2023**

Client Sample ID: Biosolid
Lab Sample ID: 261969.01
Matrix: sludge
Date Sampled: 6/14/23
Date Received: 6/14/23

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time	Method	Analyst
Solids Total	14.1	1	1	SolAsRec	Percent	6/16/23	14:54	2540G-11	HEH
Solids Total Volatile	82.5	1	8	SolTotDry	Percent	6/16/23	14:54	2540G-11	HEH
Chloride	820	90	9	SolTotDry	mg/kg	6/19/23	21:09	9056A	ALM
Nitrate/Nitrite-N	82	50	9	SolTotDry	mg/kg	6/19/23	21:09	9056A	ALM
Ammonia-N	2800	20	4	SolTotDry	mg/kg	6/20/23	10:15	4500NH3D-11	PEN
Total Organic Nitrogen	83200	40	8	SolTotDry	mg/kg	6/23/23	15:05	CALC	HEH
TKN	86000	2000	22	SolTotDry	mg/kg	6/22/23	16:14	4500N _{org} C/NH3D-11	GRS
pH	6.11	0.1	1	SolAsRec	SU	6/15/23	13:45	9045D	PMC

Biosolid: Due to the pH sample matrix, the ratio of reagent water to sample was increased from 1:1 to 2:1.



QC REPORT

EAI ID#: 261969

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | June 2023

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 1			Percent	6/16/23			2540G-11
Solids Total Volatile	< 1			Percent	6/16/23			2540G-11
Chloride	< 10	200 (96 %R)	200 (96 %R) (1 RPD)	mg/kg	6/19/23	90 - 110	15	9056A
Nitrate/Nitrite-N	< 5	39 (95 %R)	39 (94 %R) (0 RPD)	mg/kg	6/19/23	90 - 110	15	9056A
Ammonia-N	< 5	42 (110 %R)	43 (109 %R) (0 RPD)	mg/kg	6/20/23	90 - 110	20	4500NH3D-11
TKN	< 100	2100 (101 %R)	2100 (102 %R) (1 RPD)	mg/kg	6/22/23	90 - 110	20	4500N _{org} C/NH3D-11
pH		7.94 (99 %R)	7.96 (100 %R) (0 RPD)	SU	6/15/23	7.91 - 8.09	10	9045D

*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



LABORATORY REPORT

EAI ID#: 261969

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | June 2023

Sample ID: Biosolid

Lab Sample ID: 261969.01

Matrix: sludge

Date Sampled: 6/14/23

Date Received: 6/14/23

Antimony	3.5
Arsenic	4.8
Beryllium	< 0.1
Calcium	14000
Cadmium	0.69
Chromium	20
Copper	400
Iron	5000
Lead	8.8
Magnesium	4300
Mercury	0.34
Molybdenum	6.1
Nickel	15
Phosphorus	19000
Potassium	7000
Selenium	3.0
Silver	1.1
Sodium	1600
Thallium	< 0.5
Zinc	530

	Analytical			Analysis		
RL	Matrix	Units	Date	Method	Analyst	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.1	SolTotDry	mg/kg	6/15/23	6020A	DS	
100	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
100	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
100	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.05	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
100	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/16/23	6020A	DS	
100	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	
0.5	SolTotDry	mg/kg	6/15/23	6020A	DS	



QC REPORT

EAI ID#: 261969

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | June 2023**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Antimony	< 0.5	46 (113 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Arsenic	< 0.5	39 (98 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Beryllium	< 0.5	40 (100 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Calcium	< 100	420 (95 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Cadmium	< 0.5	39 (96 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Chromium	< 0.5	40 (99 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Copper	< 0.5	40 (99 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Iron	< 100	450 (101 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Lead	< 0.5	39 (97 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Magnesium	< 100	440 (99 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Mercury	< 0.1	0.38 (94 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Molybdenum	< 0.5	38 (95 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Nickel	< 0.5	40 (99 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Phosphorus	< 100	390 (96 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Potassium	< 100	430 (97 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Selenium	< 0.5	38 (95 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Silver	< 0.5	40 (101 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Sodium	< 100	420 (96 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Thallium	< 0.5	39 (96 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A
Zinc	< 5	39 (98 %R)	NA	mg/kg	6/15/23	80 - 120	20	6020A

*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



August 03, 2023

Service Request No:E2300566

Alison Blay
Eastern Analytical, Inc.
51 Antrim Avenue
Concord, NH 03301

Laboratory Results for: 261969

Dear Alison,

Enclosed are the results of the sample(s) submitted to our laboratory June 16, 2023
For your reference, these analyses have been assigned our service request number **E2300566**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental



Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client: Eastern Analytical, Inc
Project: 261969
Sample Matrix: Sludge, Solid

Service Request No.: E2300566
Date Received: 06/16/23

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One sample was received for analysis at ALS Environmental in Houston on 06/16/23.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300333: Laboratory Control Spike/Low Level Laboratory Control Spike (LCS/LL-LCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

B flags – Method Blanks

The Method Blank EQ2300333-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: Eastern Analytical, Inc.
Project: 261969

Service Request:E2300566

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
E2300566-001	Biosolid	6/14/2023	0800

Service Request Summary

Folder #: E2300566

Client Name: Eastern Analytical, Inc.

Project Name: 261969

Project Number:

Report To: Alison Blay

Eastern Analytical, Inc.
51 Antrim Avenue
Concord, NH 03301
USA

Phone Number: 800-287-0525

Cell Number:

Fax Number: 603-228-4591

E-mail: allisonb@eailabs.com

Project Chemist: James Guin

Originating Lab: HOUSTON

Logged By: CGRANDITS

Date Received: 06/16/23

Internal Due Date: 8/28/2023

QAP: LAB QAP

Qualifier Set: HRMS Qualifier Set

Formset: Lab Standard

Merged?: Y

Report to MDL?: Y

P.O. Number: 60087

EDD: No EDD Specified

1 4 oz-Glass Jar VM CLEAR Teflon Liner Unpreserved

Location: EHRMS-WIC 3D

Pressure Gas:

Semiva GCMS

Dioxins Furans/1613B
Total Solids/ALS SOP

Lab Samp No.	Client Samp No	Matrix	Collected		
E2300566-001	Biosolid	Sludge, Solid	06/14/23 0800	II	II

Folder #: E2300566

Client Name: Eastern Analytical, Inc.

Project Name: 261969

Project Number:

Report To: Alison Blay

Eastern Analytical, Inc.
51 Antrim Avenue
Concord, NH 03301
USA

Phone Number: 800-287-0525

Cell Number:

Fax Number: 603-228-4591

E-mail: alisonb@eaiabs.com

Service Request Summary

Project Chemist: James Guin

Originating Lab: HOUSTON

Logged By: CGRANDITS

Date Received: 06/16/23

Internal Due Date: 8/28/2023

QAP: LAB QAP

Qualifier Set: HRMS Qualifier Set

Formset: Lab Standard

Merged?: Y

Report to MDL?: Y

P.O. Number: 60087

EDD: No EDD Specified

1 4 oz-Glass Jar VM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 3D
Pressure Gas:

Data Qualifiers

HRMS Qualifier Set

- * Indicates the samples were extracted outside of the recommended holding time.
- B Indicates the associated analyte was found in the method blank at >1/10th the reported value.
- E Estimated value. The reported concentration is above the calibration range of the instrument.
- J Estimated value. The reported concentration is below the MRL.
- K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits. The concentration of this analyte should be considered as an estimate.
- P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.
- Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.
- S Signal saturated detector. Result reported from dilution.
- U Compound was analyzed for, but was not detected (ND).
- X See Case Narrative.
- Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-nois ratios are greater than 10:1, making the recoveries acceptable.
- i The MDL/MRL have been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCetration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L23-358	5/31/2025
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Department of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Conservation	TN04016-2023	4/30/2024
Texas Commission on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID

E2300564

DB-5MSUI

SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:

08/02/23

Analyst:

jc

Samples:

001

Second Level - Data Review – to be filled by person doing peer review

Date:

08/02/23

Analyst:

SL

Samples:

001



Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 261969

Page 1

Sample Notes

Sample ID

Date Sampled Matrix

aParameters

Biosolid

6/14/2023

sludge

Subcontract - Dioxin/Furans Full Congeners Method 1613A

08:00

EAI ID# 261969

Project State: NH

Project ID: 848

Company

ALS Environmental - Houston

Address

10450 Stancliff Road, Suite

Address

Houston, TX 77099

Account #

Phone # 1 281-530-5656

Results Needed: Preferred Date: Standard

QC Deliverables

RUSH Due Date: _____

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

PO #: 60087

EAI ID# 261969

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

John Johnson 6/15/23 1600 WPS

Relinquished by

Date/Time 6-16-23 10:00

Received by

John Johnson

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 51 Antim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damage arising out of the performance against this chain of custody but only in proportion to and to the extent of liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



10450 Stancil Road, Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Client: Eastern Analytical Date: 6/19/23 WO#: _____

Time Received: 094010 Received by: CS BO#: N/A

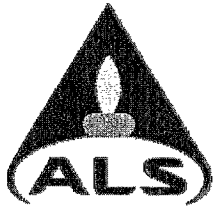
Matrices: Solid (Sludge) Water Oil Wipes Hydrocarbon Liquid Other

Kit ID/Cooler ID	Trip Blank ID	Cooler Temp (C) Observed/Corrected	IR #	Temp BLK Present?
<u>foam</u>	<u>-</u>	<u>4.3 / 21.2</u>	<u>31</u>	<u>Y</u> N
		<u>/</u>		Y N
		<u>/</u>		Y N
		<u>/</u>		Y N
		<u>/</u>		Y N

Delivery Method: ~~FedEx~~ (UPS) Greyhound ALS Client Other _____

Date/Time of Unpacking: 6/19/23 Unpacked by: [Signature]

Shipping container/cooler in good condition? Yes No Not Present
Custody seals intact on shipping container/cooler? Yes No (Not Present)
Custody seals intact on sample bottles? Yes No (Not Present)
Chain of Custody present? Yes No
Chain of Custody signed when relinquished and received? Yes No
Chain of Custody - Sampler's name present? Yes No
Chain of Custody agrees with sample labels? Yes No
Samples in proper container/bottle? Yes No
VOA/TX1005/1006 Solids in hermetically Sealed Vials: Yes No (No VOA/TX1005/1006 Solid)
Sample containers intact? Yes No
Sufficient sample volume for indicated test? Yes No
All samples received within holding time? Yes No
Container/Temp Blank temperature in compliance? Yes No
Water - VOA vials have zero headspace? Yes No (N/A) No VOA submitted
Non-VOA waters preserved with HCl, H₂SO₄, HNO₃ are pH <2? Yes No (N/A)
Waters preserved with NaOH/Ascorbic acid are pH >12? Yes No (N/A)
pH adjusted? Yes* No N/A *See Preservation Logbook
pH adjusted by: _____ pH Paper Lot: _____



10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sample. The COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report



Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 422781
Team: Semiova GCMS/OOLUIMI

Prep Workflow: OrgExts(365)
Prep Method:

Status: Prepped
Prep Date/Time: 7/10/23 10:52

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200808-010	SMS 5 - LOQ 8290A	.02	1613B/Dioxins Furans			Soil	10.000g	
2	E2300479-003	GS-3	.01	1613B/Dioxins Furans			Soil	10.070g	dry brown soil
3	E2300479-004	GS-4	.01	1613B/Dioxins Furans			Soil	10.033g	dry brown soil
4	E2300479-005	GS-5	.01	1613B/Dioxins Furans			Soil	10.024g	dry black soil
5	E2300479-006	GS-6	.01	1613B/Dioxins Furans			Soil	10.020g	dry brown soil
6	E2300511-001	GS-7	.01	1613B/Dioxins Furans			Soil	10.043g	dry brown soil
7	E2300511-002	GS-8	.01	1613B/Dioxins Furans			Soil	10.064g	wet brown soil
8	E2300511-003	GS-9	.01	1613B/Dioxins Furans			Soil	10.059g	dry brown soil
9	E2300511-004	GS-10	.01	1613B/Dioxins Furans			Soil	10.056g	dry gray soil
10	E2300511-005	CLS-11	.01	1613B/Dioxins Furans			Soil	10.039g	wet red soil
11	E2300511-006	CLS-12	.01	1613B/Dioxins Furans			Soil	10.076g	dry black soil
12	E2300511-007	CLS-13	.01	1613B/Dioxins Furans			Soil	10.074g	dry brown soil
13	E2300511-008	CLS-14	.01	1613B/Dioxins Furans			Soil	10.014g	wet brown soil
14	E2300560-001	TRBR-ML-0-2	.01	1613B/Dioxins Furans			Soil	10.040g	wet gray soil
15	E2300560-002	TRBR-6-5-8	.01	1613B/Dioxins Furans			Soil	10.021g	dry yellow soil
16	E2300560-003	TRBR-8-10	.01	1613B/Dioxins Furans			Soil	10.020g	wet gray soil
17	E2300566-001	Biosolid	.01	1613B/Dioxins Furans			Sludge, Solid	10.037g	wet black sludge
18	E2300567-001	Sludge	.01	1613B/Dioxins Furans			Sludge, Solid	10.051g	wet black sludge
19	E02300333-01	MB		1613B/Dioxins Furans			Solid	10.030g	
20	E02300333-02	LCS		1613B/Dioxins Furans			Solid	10.078g	
21	E02300333-03	DLCS		1613B/Dioxins Furans			Solid	10.061g	
22	K2306788-004	Composite	.01	1613B/Dioxins Furans			Paperboard	10.047g	brown paperboard
23	K2306792-001	KL33UHP	.01	1613B/Dioxins Furans			Paperboard	10.030g	SHEUER k-balance-47 / brown paperboard
24	K2306816-001	NMX43E2406	.02	1613B/Dioxins Furans			Paperboard	10.024g	brown paperboard

Spiking Solutions

Name:	8290/1613B Cleanup Working Standard	Inventory ID	230082	Logbook Ref:	DD 6/29/23 CWS @8ng/mL	Expires On:	10/10/2023
E2300479-003	100.00µL	E2300479-004	100.00µL	E2300479-005	100.00µL	E2300511-001	100.00µL
E2300511-003	100.00µL	E2300511-004	100.00µL	E2300511-005	100.00µL	E2300511-007	100.00µL
E2300560-001	100.00µL	E2300560-002	100.00µL	E2300560-003	100.00µL	E2300567-001	100.00µL
E02300333-02	100.00µL	E02300333-03	100.00µL	K2306788-004	100.00µL	K2306816-001	100.00µL
Name:	1613B Matrix Working Standard	Inventory ID	230160	Logbook Ref:	OO/7/6/23@MWS@2-20ng/ml	Expires On:	01/02/2024
E2300479-003	100.00µL	E2300479-004	100.00µL	E2300479-005	100.00µL	E2300511-001	100.00µL
E2300511-003	100.00µL	E2300511-004	100.00µL	E2300511-005	100.00µL	E2300511-007	100.00µL
E2300560-001	100.00µL	E2300560-002	100.00µL	E2300560-003	100.00µL	E2300567-001	100.00µL
E02300333-02	100.00µL	E02300333-03	100.00µL	K2306788-004	100.00µL	K2306816-001	100.00µL

Preparation Information Benchsheet

Prep Run#: 422781

Team: Semiova GCMS/OOLUIMI

E2300511-003	100.00µL	E2300511-004	100.00µL	E2300511-005	100.00µL	E2300511-006	100.00µL	E2300511-007	100.00µL	E2300511-008	100.00µL
E2300560-001	100.00µL	E2300560-002	100.00µL	E2300560-003	100.00µL	E2300566-001	100.00µL	E2300567-001	100.00µL	E2300567-001	100.00µL
EQ2300333-02	100.00µL	EQ2300333-03	100.00µL	K2306788-004	100.00µL	K2306792-001	100.00µL	K2306816-001	100.00µL	EQ2300333-01	100.00µL

Prep Workflow: OrgExts(365)
Prep Method: Method Soxhlet

Status: Prepped
Prep Date/Time: 7/10/23 10:52

Name:	1613B Labeled Working Standard	Inventory ID	230232	Logbook Ref:	OO/7/10/23@LWS@2-4mg/ml	Expires On:	12/21/2023

E2300479-003	1,000.00µL	E2300479-004	1,000.00µL	E2300479-005	1,000.00µL	E2300479-006	1,000.00µL	E2300511-001	1,000.00µL	E2300511-002	1,000.00µL
E2300511-003	1,000.00µL	E2300511-004	1,000.00µL	E2300511-005	1,000.00µL	E2300511-006	1,000.00µL	E2300511-007	1,000.00µL	E2300511-008	1,000.00µL
E2300560-001	1,000.00µL	E2300560-002	1,000.00µL	E2300560-003	1,000.00µL	E2300566-001	1,000.00µL	E2300567-001	1,000.00µL	EQ2300333-01	1,000.00µL
EQ2300333-02	1,000.00µL	EQ2300333-03	1,000.00µL	K2306788-004	1,000.00µL	K2306792-001	1,000.00µL	K2306816-001	1,000.00µL		

Preparation Materials

Carbon, High Purity	cg 6/7/23 (229686)	Ethyl Acetate 99.9% Minimum EtOAc	OO 4/24/23 C4H8O4 (228820)	Glass Wool	bf 12/08/2022 (226936)
Hexanes 95%	OO4/24/23 Hexane (228821)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	OO 4/24/23 CH2Cl2 (228819)	Sodium Hydroxide 1N NaOH	NB 11/12/22 Sodium hydroxide 1 (226259)
Sodium Sulfate Anhydrous Reagent Grade Na2SO4	TW 05/18/23 (229795)	Silica Gel	JS 6/6/2023 (229714)	sulfuric acid	NB 02/02/23 H2SO4 (227458)
Toluene 99.9% Minimum	OO/6/27/23 TOLUENE (230023)				

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	7/10/23 10:52	Started:	7/11/23 09:20	Started:	7/11/23 10:45	Started:	7/12/23 07:30
Finished:	7/11/23 09:00	Finished:	7/11/23 10:25	Finished:	7/11/23 12:50	Finished:	7/12/23 11:30
By:	OOLUIMI	By:	DDO	By:	DDO	By:	DDO
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By:	_____	Date:	_____	Extracts Examined
Received By:	_____	Date:	_____	Yes No



Analytical Results

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: 06/14/23 08:00
Date Received: 06/16/23 10:00

Sample Name: Biosolid
Lab Code: E2300566-001

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.037g

Date Analyzed: 07/31/23 17:39
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543620

Data File Name: P543626
ICAL Date: 07/12/23

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	1.53	3.69			1
1,2,3,7,8-PeCDD	ND	U	0.955	18.5			1
1,2,3,4,7,8-HxCDD	1.01BJK		0.420	18.5	2.26	1.000	1
1,2,3,6,7,8-HxCDD	1.88JK		0.436	18.5	0.91	1.000	1
1,2,3,7,8,9-HxCDD	0.668JK		0.411	18.5	2.15	1.007	1
1,2,3,4,6,7,8-HpCDD	33.4		0.911	0.911	1.12	1.000	1
OCDD	311		1.71	36.9	0.86	1.000	1
2,3,7,8-TCDF	ND	U	0.935	3.69			1
1,2,3,7,8-PeCDF	ND	U	1.10	18.5			1
2,3,4,7,8-PeCDF	ND	U	1.03	18.5			1
1,2,3,4,7,8-HxCDF	0.937J		0.332	18.5	1.19	1.000	1
1,2,3,6,7,8-HxCDF	0.838J		0.375	18.5	1.39	1.000	1
1,2,3,7,8,9-HxCDF	0.742JK		0.484	18.5	0.94	1.000	1
2,3,4,6,7,8-HxCDF	1.35J		0.437	18.5	1.17	1.000	1
1,2,3,4,6,7,8-HpCDF	10.5J		0.637	18.5	0.96	1.000	1
1,2,3,4,7,8,9-HpCDF	1.55JK		0.796	18.5	1.22	1.000	1
OCDF	23.2J		1.20	36.9	0.79	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2300566-001

Service Request: E2300566
Date Collected: 06/14/23 08:00
Date Received: 06/16/23 10:00
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.037g
Data File Name: P543626
ICAL Date: 07/12/23

Date Analyzed: 07/31/23 17:39
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543620

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	1.53	3.69			1
Total Penta-Dioxins	ND	U	0.955	18.5			1
Total Hexa-Dioxins	ND	U	0.422	18.5			1
Total Hepta-Dioxins	66.9		0.911	18.5	1.05		1
Total Tetra-Furans	ND	U	0.935	3.69			1
Total Penta-Furans	ND	U	1.06	1.06			1
Total Hexa-Furans	3.63J		0.401	18.5	1.15		1
Total Hepta-Furans	10.5J		0.712	18.5	0.96		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2300566-001

Service Request: E2300566
Date Collected: 06/14/23 08:00
Date Received: 06/16/23 10:00
Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.037g
Data File Name: P543626
ICAL Date: 07/12/23

Date Analyzed: 07/31/23 17:39
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543620

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1369.569	68		25-164	0.80	1.022
13C-1,2,3,7,8-PeCDD	2000	1583.655	79		25-181	1.61	1.193
13C-1,2,3,4,7,8-HxCDD	2000	1458.501	73		32-141	1.34	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1407.655	70		28-130	1.30	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1078.254	54		23-140	1.09	1.067
13C-OCDD	4000	1553.630	39		17-157	0.90	1.141
13C-2,3,7,8-TCDF	2000	1523.647	76		24-169	0.80	0.993
13C-1,2,3,7,8-PeCDF	2000	1645.396	82		24-185	1.61	1.150
13C-2,3,4,7,8-PeCDF	2000	1708.259	85		21-178	1.58	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1470.865	74		26-152	0.51	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1304.928	65		26-123	0.52	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1174.638	59		29-147	0.51	1.009
13C-2,3,4,6,7,8-HxCDF	2000	1240.451	62		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1051.260	53		28-143	0.44	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1058.943	53		26-138	0.44	1.080
37Cl-2,3,7,8-TCDD	800	646.665	81		35-197	NA	1.023

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2300566-001

Service Request: E2300566
Date Collected: 06/14/23 08:00
Date Received: 06/16/23 10:00
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	1.53	3.69	1	1	
1,2,3,7,8-PeCDD	ND	0.955	18.5	1	1	
1,2,3,4,7,8-HxCDD	1.01	0.420	18.5	1	0.1	0.101
1,2,3,6,7,8-HxCDD	1.88	0.436	18.5	1	0.1	0.188
1,2,3,7,8,9-HxCDD	0.668	0.411	18.5	1	0.1	0.0668
1,2,3,4,6,7,8-HpCDD	33.4	0.911	0.911	1	0.01	0.334
OCDD	311	1.71	36.9	1	0.0003	0.0933
2,3,7,8-TCDF	ND	0.935	3.69	1	0.1	
1,2,3,7,8-PeCDF	ND	1.10	18.5	1	0.03	
2,3,4,7,8-PeCDF	ND	1.03	18.5	1	0.3	
1,2,3,4,7,8-HxCDF	0.937	0.332	18.5	1	0.1	0.0937
1,2,3,6,7,8-HxCDF	0.838	0.375	18.5	1	0.1	0.0838
1,2,3,7,8,9-HxCDF	0.742	0.484	18.5	1	0.1	0.0742
2,3,4,6,7,8-HxCDF	1.35	0.437	18.5	1	0.1	0.135
1,2,3,4,6,7,8-HpCDF	10.5	0.637	18.5	1	0.01	0.105
1,2,3,4,7,8,9-HpCDF	1.55	0.796	18.5	1	0.01	0.0155
OCDF	23.2	1.20	36.9	1	0.0003	0.00696
Total TEQ						1.30

2005 WHO TEFs, ND = 0

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2300566-001

Service Request: E2300566
Date Collected: 06/14/23 08:00
Date Received: 06/16/23 10:00
Units: Percent
Basis: NA

Total Solids

Analysis Method: ALS SOP
5.2692g

Date Analyzed: 06/23/23 14:15
NA
E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	13.5		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2300333-01

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.030g

Date Analyzed: 07/28/23 09:45
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543546

Data File Name: P543550
ICAL Date: 07/12/23

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.207	0.499			1
1,2,3,7,8-PeCDD	ND	U	0.0989	2.49			1
1,2,3,4,7,8-HxCDD	0.174JK		0.0537	2.49	1.58	1.000	1
1,2,3,6,7,8-HxCDD	0.0721JK		0.0544	2.49	1.03	1.000	1
1,2,3,7,8,9-HxCDD	ND	U	0.0519	2.49			1
1,2,3,4,6,7,8-HpCDD	0.114		0.0714	0.0714	1.08	1.001	1
OCDD	0.627JK		0.120	4.99	1.09	1.001	1
2,3,7,8-TCDF	ND	U	0.130	0.499			1
1,2,3,7,8-PeCDF	ND	U	0.0873	2.49			1
2,3,4,7,8-PeCDF	ND	U	0.0917	2.49			1
1,2,3,4,7,8-HxCDF	ND	U	0.0627	2.49			1
1,2,3,6,7,8-HxCDF	ND	U	0.0688	2.49			1
1,2,3,7,8,9-HxCDF	ND	U	0.103	2.49			1
2,3,4,6,7,8-HxCDF	ND	U	0.0833	2.49			1
1,2,3,4,6,7,8-HpCDF	0.327J		0.0553	2.49	1.00	1.001	1
1,2,3,4,7,8,9-HpCDF	0.107JK		0.0509	2.49	1.22	1.000	1
OCDF	2.20J		0.229	4.99	0.76	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid
Sample Name: Method Blank
Lab Code: EQ2300333-01

Service Request: E2300566
Date Collected: NA
Date Received: NA
Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.030g
Data File Name: P543550
ICAL Date: 07/12/23

Date Analyzed: 07/28/23 09:45
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543546

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.207	0.499			1
Total Penta-Dioxins	ND	U	0.0989	2.49			1
Total Hexa-Dioxins	ND	U	0.0533	2.49			1
Total Hepta-Dioxins	0.114J		0.0714	2.49	1.08		1
Total Tetra-Furans	ND	U	0.130	0.499			1
Total Penta-Furans	ND	U	0.0895	0.0895			1
Total Hexa-Furans	ND	U	0.0770	2.49			1
Total Hepta-Furans	0.327J		0.0532	2.49	1.00		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2300333-01

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.030g

Date Analyzed: 07/28/23 09:45
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543546

Data File Name: P543550
ICAL Date: 07/12/23

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1551.154	78		25-164	0.81	1.022
13C-1,2,3,7,8-PeCDD	2000	1653.347	83		25-181	1.64	1.193
13C-1,2,3,4,7,8-HxCDD	2000	1697.876	85		32-141	1.37	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1700.054	85		28-130	1.26	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1325.109	66		23-140	1.07	1.068
13C-OCDD	4000	2048.129	51		17-157	0.91	1.141
13C-2,3,7,8-TCDF	2000	1733.130	87		24-169	0.80	0.993
13C-1,2,3,7,8-PeCDF	2000	1777.353	89		24-185	1.64	1.149
13C-2,3,4,7,8-PeCDF	2000	1765.194	88		21-178	1.60	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1788.380	89		26-152	0.51	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1572.322	79		26-123	0.51	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1260.346	63		29-147	0.53	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1512.682	76		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1369.407	68		28-143	0.44	1.046
13C-1,2,3,4,7,8,9-HpCDF	2000	1382.319	69		26-138	0.44	1.080
37Cl-2,3,7,8-TCDD	800	667.813	83		35-197	NA	1.023



Accuracy & Precision

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Analyzed: 07/28/23
Date Extracted: 07/10/23

Duplicate Lab Control Sample Summary

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Units: ng/Kg
Basis: Dry
Analysis Lot: 812646

**Lab Control Sample
EQ2300333-02**

**Duplicate Lab Control Sample
EQ2300333-03**

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2,3,4,6,7,8-HpCDD	102	99.2	102	99.5	99.4	100	70-140	2	50
1,2,3,4,7,8-HxCDD	90.9	99.2	92	88.5	99.4	89	70-164	3	50
1,2,3,6,7,8-HxCDD	90.3	99.2	91	88.1	99.4	89	76-134	2	50
1,2,3,7,8,9-HxCDD	87.7	99.2	88	86.8	99.4	87	64-162	1	50
1,2,3,7,8-PeCDD	105	99.2	106	101	99.4	102	70-142	4	50
2,3,7,8-TCDD	19.8	19.8	100	19.5	19.9	98	67-158	1	50
OCDD	208	198	105	204	199	103	78-144	2	50
1,2,3,4,6,7,8-HpCDF	97.9	99.2	99	96.8	99.4	97	82-122	1	50
1,2,3,4,7,8,9-HpCDF	94.4	99.2	95	93.9	99.4	94	78-138	<1	50
1,2,3,4,7,8-HxCDF	87.7	99.2	88	84.7	99.4	85	72-134	3	50
1,2,3,6,7,8-HxCDF	99.0	99.2	100	96.2	99.4	97	84-130	3	50
1,2,3,7,8,9-HxCDF	92.9	99.2	94	91.4	99.4	92	78-130	2	50
1,2,3,7,8-PeCDF	103	99.2	103	97.5	99.4	98	80-134	5	50
2,3,4,6,7,8-HxCDF	99.9	99.2	101	93.9	99.4	94	70-156	6	50
2,3,4,7,8-PeCDF	102	99.2	102	99.0	99.4	100	68-160	3	50
2,3,7,8-TCDF	18.4	19.8	93	17.2	19.9	87	75-158	7	50
OCDF	247	198	125	238	199	120	63-170	4	50

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2300333-02

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.078g

Date Analyzed: 07/28/23 16:12
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI

Data File Name: P543558
ICAL Date: 07/12/23

Blank File Name: P543550
Cal Ver. File Name: P543546

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	19.8		0.176	0.496	0.79	1.001	1
1,2,3,7,8-PeCDD	105		0.0412	2.48	1.62	1.001	1
1,2,3,4,7,8-HxCDD	90.9		0.0396	2.48	1.29	1.000	1
1,2,3,6,7,8-HxCDD	90.3		0.0410	2.48	1.27	1.000	1
1,2,3,7,8,9-HxCDD	87.7		0.0387	2.48	1.24	1.007	1
1,2,3,4,6,7,8-HpCDD	102		0.0828	0.0828	1.04	1.000	1
OCDD	208		0.199	4.96	0.89	1.000	1
2,3,7,8-TCDF	18.4		0.0907	0.496	0.68	1.001	1
1,2,3,7,8-PeCDF	103		0.0711	2.48	1.46	1.001	1
2,3,4,7,8-PeCDF	102		0.0661	2.48	1.49	1.000	1
1,2,3,4,7,8-HxCDF	87.7		0.0385	2.48	1.14	1.000	1
1,2,3,6,7,8-HxCDF	99.0		0.0431	2.48	1.16	1.000	1
1,2,3,7,8,9-HxCDF	92.9		0.0559	2.48	1.16	1.000	1
2,3,4,6,7,8-HxCDF	99.9		0.0472	2.48	1.14	1.000	1
1,2,3,4,6,7,8-HpCDF	97.9		0.0769	2.48	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	94.4		0.0891	2.48	1.00	1.000	1
OCDF	247		0.225	4.96	0.87	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2300333-02

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.078g

Date Analyzed: 07/28/23 16:12
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543546

Data File Name: P543558
ICAL Date: 07/12/23

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	19.8		0.176	0.496	0.79		1
Total Penta-Dioxins	105		0.0412	2.48	1.62		1
Total Hexa-Dioxins	269		0.0398	2.48	1.29		1
Total Hepta-Dioxins	102		0.0828	2.48	1.04		1
Total Tetra-Furans	18.5		0.0907	0.496	0.87		1
Total Penta-Furans	204		0.0686	0.0686	1.37		1
Total Hexa-Furans	380		0.0455	2.48	1.14		1
Total Hepta-Furans	192		0.0828	2.48	0.97		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2300333-02

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.078g

Date Analyzed: 07/28/23 16:12
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI

Data File Name: P543558
ICAL Date: 07/12/23

Blank File Name: P543550
Cal Ver. File Name: P543546

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1407.255	70		25-164	0.80	1.022
13C-1,2,3,7,8-PeCDD	2000	1595.540	80		25-181	1.64	1.193
13C-1,2,3,4,7,8-HxCDD	2000	1653.172	83		32-141	1.32	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1627.700	81		28-130	1.29	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1325.739	66		23-140	1.06	1.067
13C-OCDD	4000	1964.570	49		17-157	0.91	1.141
13C-2,3,7,8-TCDF	2000	1586.255	79		24-169	0.79	0.993
13C-1,2,3,7,8-PeCDF	2000	1679.156	84		24-185	1.60	1.149
13C-2,3,4,7,8-PeCDF	2000	1747.009	87		21-178	1.60	1.184
13C-1,2,3,4,7,8-HxCDF	2000	1737.796	87		26-152	0.52	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1531.639	77		26-123	0.52	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1379.555	69		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1478.906	74		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1339.158	67		28-143	0.45	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1473.392	74		26-138	0.45	1.080
37Cl-2,3,7,8-TCDD	800	651.878	81		35-197	NA	1.023

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2300333-03

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.061g

Date Analyzed: 07/28/23 17:00
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI

Data File Name: P543559
ICAL Date: 07/12/23

Blank File Name: P543550
Cal Ver. File Name: P543546

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	19.5		0.260	0.497	0.80	1.001	1
1,2,3,7,8-PeCDD	101		0.128	2.48	1.59	1.001	1
1,2,3,4,7,8-HxCDD	88.5		0.0441	2.48	1.24	1.000	1
1,2,3,6,7,8-HxCDD	88.1		0.0443	2.48	1.29	1.000	1
1,2,3,7,8,9-HxCDD	86.8		0.0425	2.48	1.27	1.007	1
1,2,3,4,6,7,8-HpCDD	99.5		0.0898	0.0898	1.08	1.000	1
OCDD	204		0.381	4.97	0.90	1.000	1
2,3,7,8-TCDF	17.2		0.192	0.497	0.69	1.001	1
1,2,3,7,8-PeCDF	97.5		0.121	2.48	1.52	1.000	1
2,3,4,7,8-PeCDF	99.0		0.115	2.48	1.47	1.000	1
1,2,3,4,7,8-HxCDF	84.7		0.0500	2.48	1.13	1.000	1
1,2,3,6,7,8-HxCDF	96.2		0.0571	2.48	1.12	1.000	1
1,2,3,7,8,9-HxCDF	91.4		0.0721	2.48	1.13	1.000	1
2,3,4,6,7,8-HxCDF	93.9		0.0629	2.48	1.11	1.000	1
1,2,3,4,6,7,8-HpCDF	96.8		0.138	2.48	0.97	1.000	1
1,2,3,4,7,8,9-HpCDF	93.9		0.166	2.48	1.01	1.000	1
OCDF	238		0.371	4.97	0.90	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2300333-03

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.061g

Date Analyzed: 07/28/23 17:00
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543546

Data File Name: P543559
ICAL Date: 07/12/23

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	19.6		0.260	0.497	0.72		1
Total Penta-Dioxins	101		0.128	2.48	1.59		1
Total Hexa-Dioxins	263		0.0436	2.48	1.24		1
Total Hepta-Dioxins	99.5		0.0898	2.48	1.08		1
Total Tetra-Furans	17.2		0.192	0.497	0.69		1
Total Penta-Furans	196		0.118	0.118	1.52		1
Total Hexa-Furans	366		0.0598	2.48	1.13		1
Total Hepta-Furans	191		0.152	2.48	0.97		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: 261969
Sample Matrix: Sludge, Solid

Service Request: E2300566
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2300333-03

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.061g

Date Analyzed: 07/28/23 17:00
Date Extracted: 7/10/23
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P543550
Cal Ver. File Name: P543546

Data File Name: P543559
ICAL Date: 07/12/23

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1405.014	70		25-164	0.80	1.022
13C-1,2,3,7,8-PeCDD	2000	1677.044	84		25-181	1.64	1.193
13C-1,2,3,4,7,8-HxCDD	2000	1606.036	80		32-141	1.33	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1617.576	81		28-130	1.34	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1349.973	67		23-140	1.09	1.067
13C-OCDD	4000	2042.836	51		17-157	0.90	1.141
13C-2,3,7,8-TCDF	2000	1536.195	77		24-169	0.80	0.993
13C-1,2,3,7,8-PeCDF	2000	1757.786	88		24-185	1.57	1.149
13C-2,3,4,7,8-PeCDF	2000	1797.083	90		21-178	1.59	1.183
13C-1,2,3,4,7,8-HxCDF	2000	1686.405	84		26-152	0.52	0.970
13C-1,2,3,6,7,8-HxCDF	2000	1472.411	74		26-123	0.52	0.973
13C-1,2,3,7,8,9-HxCDF	2000	1405.283	70		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1447.205	72		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1366.620	68		28-143	0.45	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1459.089	73		26-138	0.44	1.080
37Cl-2,3,7,8-TCDD	800	653.600	82		35-197	NA	1.023

ANALYTICAL SERVICES, INC.
Microbiological Testing, Research and Consulting

130 Allen Brook Lane, Williston, VT 05495 USA
800.723.4432 / 802.878.5138
www.analyticalservices.com

7/26/2023

Jennifer Laramie
Eastern Analytical
25 Chennell Drive
Concord, NH 03301

Project # 70850

Dear Jennifer,

Enclosed please find the results of the analyses performed on the sample(s) received in our laboratory on June 16, 2023.

This report contains three (3) pages, including this cover page and the Chain of Custody form. The results reported herein apply only to the samples included in this report, as received at Analytical Services, Inc. (ASI). These results were generated under ASI's laboratory quality system; any deviations or nonconformances are noted. This report shall not be reproduced, except in full, without written permission from ASI.

Comments: None

Thank you for using ASI for your testing needs. If you have any questions, or if we may be of further service, please contact us at any time.

Sincerely,
ANALYTICAL SERVICES, INC.


Harry D. Christman, PhD
Technical Director 

HDC/cr

ANALYTICAL SERVICES, INC.
Microbiological Testing, Research and Consulting

130 Allen Brook Lane, Williston, VT 05495 USA
800.723.4432 / 802.878.5138
www.analyticalservices.com

Client: Eastern Analytical
25 Chennell Drive
Concord, NH 03301

ASI Project ID: 70850
Date Collected: 6/14/2023
Sample Receipt: 6/16/2023

Analytical Results						
Client Sample ID	ASI Sample ID	Date/Time Collected	Parameter	Amount Analyzed	Result	Date/Time Analyzed
Sludge EA# 261969	70850-01	6/14/2023 8:00	Enteric Virus	4.38 g Dry Weight	<1 PFU / 4.38 g Dry Weight	06/23/2023 08:30
			Total Solids	26.61 g Wet Weight	15.02%	06/26/23 09:50
						07/26/2023 08:24
						06/27/2023 08:15

g = Grams; MPN = Most Probable Number; PFU = Plaque Forming Units

Methods Used under 40CFR Part 503

Enteric Viruses (Solids): ASTM Method D 4894-96, 1996 US EPA Manual of Methods for Virology, EPA/600/4-94/013 (R-10), EPA 625/R-92/013 App. H, Enteric Viruses
- Freeze Date: 06/14/23 15:30 (Eastern Analytical). Sample aliquots were received frozen at ASI and remained so for up to 14 days from collection while cells were propagated for virus analysis (Ref: US EPA EPA/625/R-92/013, Table S-2).
Percent Solids: APHA, AWWA, WEF, Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998 Washington, DC, Method 2540G, Modified (ASI uses overnight drying prior to dry weight measurement rather than shorter drying times that have to be repeated until a constant dry weight measurement is obtained; ASI is certified for this modification under TUNNELAC by FL-DCH).
Exceptions/Notes:
None

Page 2/3

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
Professional laboratory and drilling services

Sample ID

Date Sampled

Matrix

EAID# 261969

Page 1

Page 55 of 63

Biosolid

6/14/2023
08:00

Sludge

Subcontract - Enteric Virus

Sample Notes

3.10 FZ#2
Foster
6/16/23 1037

EAID# 261969

Project State: NH

Project ID: 848

Results Needed: Preferred Date: Standard

RUSH Due Date:

QC Deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and
invoice to customerservice@easternanalytical.com.

Company Analytical Services Inc.

Address 130 Allen Brook Lane

Address Williston, VT 05495

Account #

Phone # 800-723-4432

PO #: 60083

EAID# 261969

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

Relinquished by

Date/Time

Received by

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 51 Antim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



Tuesday, June 20, 2023

Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Project ID: 261969
SDG ID: GCO29677
Sample ID#s: CO29677

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in cursive script that reads "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

June 20, 2023

SDG I.D.: GCO29677

Project ID: 261969

Client Id	Lab Id	Matrix
BIOSOLID	CO29677	SLUDGE



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

June 20, 2023

FOR: Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Sample Information

Matrix: SLUDGE
Location Code: EASTANAL-NH
Rush Request: Standard
P.O.#: 60086

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

Date Time

06/14/23 8:00
06/15/23 16:27

Laboratory Data

SDG ID: GCO29677
Phoenix ID: CO29677

Project ID: 261969
Client ID: BIOSOLID

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	14		%		06/15/23	CV	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 3.57	3.57	mg/Kg	1	06/19/23	CL/GD	SW9012B
Tot.Org.Carbon	253000	100	mg/kg	1	06/16/23	EG	L. Kahn
Tot.Org.Carbon Preparation	Completed				06/16/23	EG	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 20, 2023

Reviewed and Released by: Anil Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



QA/QC Report

June 20, 2023

QA/QC Data

SDG I.D.: GCO29677

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 682798 (mg/Kg), QC Sample No: CO28687 50X (CO29677)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.53	<0.53	NC	102			100			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 682786 (mg/kg), QC Sample No: CO27219 (CO29677)													
Tot.Org.Carbon	BRL	100	1360	1430	5.00	104						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director

June 20, 2023

Tuesday, June 20, 2023

Criteria: None

State: NH

Sample Criteria Exceedances Report

GCO29677 - EASTANAL-NH

SampleNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units
*** No Data to Display ***								

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

June 20, 2023

SDG I.D.: GCO29677

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 261969

Page 1

Sample ID Date Sampled Matrix aParameters

Biosolid 6/14/2023 sludge Subcontract - Total Cyanide
08:00

29677 1250

Biosolid 6/14/2023 sludge Subcontract - TOC Lloyd Kahn (PEL)
08:00

EAI ID# 261969

Project State: NH

Project ID: 848

Company Phoenix Environmental Labs

Address 587 East Middle Turnpike

Address Manchester, CT 06040

Account #

Phone # (860) 645-1102

Results Needed: Preferred Date: Standard

QC Deliverables

RUSH Due Date: _____

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and
invoice to customerservice@easternanalytical.com.

PO #: 60086

EAI ID# 261969

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

[Signature] 6-15-23 0715 *[Signature]*

Relinquished by

Date/Time

Received by

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 51 Antim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



Eastern Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

261969

SEABROOK

of containers

Date/Time
Composites need start
and stop dates/times

Matrix

Parameters and Sample Notes

Biosolid

6/14/23

sludge
Grab or Comp

SoilToDry/V8260/ABN/ICPMets.As.Cd.Cr.Cu.K.P.Pb.Mo.Ni.Se.Zn.Sb.Be.Ag.Tl.Hg.Ca.Mg.Fe.
Na/Pest/PCB/NO3/NO2/TKN/NH3/TION/CyanT/Diox-FurSol1613SubALSTX/EntericVirusSubSASIT/OCSolSubPELTVS/CI
SoilAsRec/pH/TS

6

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL HNO₃ H₂SO₄ NaOH MEOH Na₂S₂O₃ ICE

Dissolved Sample Field Filtered ☐

Trip Blank

6/14/23

sludge
Grab or Comp

SoilToDry/V8260

1

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL HNO₃ H₂SO₄ NaOH MEOH Na₂S₂O₃ ICE

Dissolved Sample Field Filtered ☐

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 848

Project Name Biosolids Test | June 2023

State NH

Client (Pro Mgr) Curtis Slayton

Customer Seabrook, Town of - Sewer

Address PO Box 456

City Seabrook NH 03874

Phone 474-8012 Fax 474-8014

Email: cslayton@seabrooknh.org

Direct 603-474-9921

Results Needed by: Preferred date _____
Notes:

Reporting Options

☒ HC ☐ NO FAX ☐ PO# verbal

☒ EDD PDF ☐ Partial FAX ☐ Quote#:

☒ EDD email ☐ PDF Invoice

☐ PDF prelim, NO FAX ☐ EQUIS

☐ e-mail Login Confirmation

Samples Collected by: Dan MacFadyen Temp 29°C

Relinquished by: [Signature] Date/Time 6/14/23 12:03 Received by: [Signature] Date/Time 6/14/23 14:37

QC deliverables
☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Relinquished by: [Signature] Date/Time 6/14/23 14:37 Received by: [Signature]

Eastern Analytical, Inc.

www.easternanalytical.com | 800.287.0525 | customerservice@easternanalytical.com



Eastern Analytical, Inc.

professional laboratory and drilling services

Daumanic Fucile
Seabrook, Town of - Sewer Department
PO Box 456
Seabrook, NH 03874



Laboratory Report for:

Eastern Analytical, Inc. ID: 269100
Client Identification: Biosolids
Date Received: 10/30/2023

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

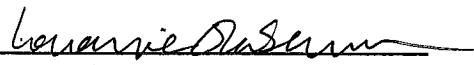
References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

11.13.23
Date



SAMPLE CONDITIONS PAGE

EAI ID#: 269100

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Temperature upon receipt (°C): **3.2**

Acceptable temperature range (°C): 0-6

Received on ice or cold packs (Yes/No): **Y**

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
269100.01	Cake 1	10/30/23	10/30/23 09:00	sludge	15.2	Adheres to Sample Acceptance Policy
269100.02	Cake 2	10/30/23	10/30/23 09:00	sludge		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.



LABORATORY REPORT

EAI ID#: 269100

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Client Sample ID: Cake 1
Lab Sample ID: 269100.01
Matrix: sludge
Date Sampled: 10/30/23
Date Received: 10/30/23

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Solids Total	15.19	1	1	Percent	11/3/23	11:00	2540G-11	ABL
Solids Total Volatile	83.32	1	7	Percent	11/3/23	11:00	2540G-11	ABL
Chloride	640	80	8	mg/kg	11/1/23	11:15	9056A	ALS
Nitrate/Nitrite-N	45	40	8	mg/kg	11/1/23	11:15	9056A	ALS
Ammonia-N	2900	30	6	mg/kg	11/9/23	12:40	4500NH3D-11	PHA
Total Organic Nitrogen	81100	2000	7	mg/kg	11/13/23	11:13	CALC	HEH
TKN	84000	2000	20	mg/kg	11/6/23	18:09	4500N _{nm} C/NH3D-11	GRS
pH	5.92	0.1	1	SU	11/1/23	14:25	9045D	PHA
Paint Filter (Free Liquid)	Absent			None	11/8/23	10:13	9095	MNT

Cake 1: Due to the pH sample matrix, the ratio of reagent water to sample was increased from 1:1 to 2:1.



QC REPORT

EAI ID#: 269100

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 1	NA	NA	Percent	11/3/23			2540G-11
Solids Total Volatile	< 1	NA	NA	Percent	11/3/23			2540G-11
Chloride	< 10	190 (98 %R)	190 (98 %R) (0 RPD)	mg/kg	11/1/23	90 - 110	15	9056A
Nitrate/Nitrite-N	< 5	38 (96 %R)	38 (96 %R) (0 RPD)	mg/kg	11/1/23	90 - 110	15	9056A
Ammonia-N	< 5	41 (103 %R)	42 (106 %R) (3 RPD)	mg/kg	11/9/23	90 - 110	20	4500NH3D-11
TKN	< 100	1500 (101 %R)	1500 (102 %R) (1 RPD)	mg/kg	11/6/23	90 - 110	20	4500N _{org} C/NH3D-11
pH		7.94 (99 %R)	7.94 (99 %R) (0 RPD)	SU	11/1/23	7.91 - 8.09	10	9045D

*// Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



LABORATORY REPORT

EAI ID#: 269100

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Client Sample ID: Cake 1
Lab Sample ID: 269100.01
Matrix: sludge
Date Sampled: 10/30/23
Date Received: 10/30/23

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time Analyzed	Method	Analyst
Arsenic	3.4	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Calcium	9900	100	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Cadmium	0.56	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Chromium	15	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Copper	390	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Iron	4400	100	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Lead	9.1	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Magnesium	2700	100	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Mercury	0.37	0.05	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Molybdenum	5.2	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Nickel	12	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Phosphorus	13000	100	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Potassium	3700	100	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Selenium	1.6	0.5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Sodium	930	100	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS
Zinc	410	5	25	SolTotDry	mg/kg	10/31/23	19:40	6020A	DS



QC REPORT

EAI ID#: 269100

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.5	38 (95 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Calcium	< 100	400 (95 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Cadmium	< 0.5	38 (95 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Chromium	< 0.5	39 (97 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Copper	< 0.5	39 (97 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Iron	< 100	430 (97 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Lead	< 0.5	37 (93 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Magnesium	< 100	420 (95 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Mercury	< 0.05	0.44 (109 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Molybdenum	< 0.5	37 (93 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Nickel	< 0.5	38 (96 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Phosphorus	< 100	370 (93 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Potassium	< 100	400 (90 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Selenium	< 0.5	38 (94 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Sodium	< 100	430 (97 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A
Zinc	< 5	38 (96 %R)	NA	mg/kg	10/31/23	80 - 120	20	6020A

*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



Tuesday, November 07, 2023

Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Project ID: 269100
SDG ID: GCP39742
Sample ID#s: CP39742

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

November 07, 2023

SDG I.D.: GCP39742

Project ID: 269100

Client Id	Lab Id	Matrix
CAKE 2	CP39742	SLUDGE



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

November 07, 2023

FOR: Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Sample Information

Matrix: SLUDGE
Location Code: EASTANAL-NH
Rush Request: Standard
P.O.#: 61089

Custody Information

Collected by:
Received by: SW
Analyzed by: see "By" below

Date Time

10/30/23 9:00
11/02/23 15:28

Laboratory Data

SDG ID: GCP39742
Phoenix ID: CP39742

Project ID: 269100
Client ID: CAKE 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	15		%		11/02/23	CV	SW846-%Solid
Tot.Org.Carbon	216000	100	mg/kg	1	11/06/23	EG	L. Kahn
Tot.Org.Carbon Preparation	Completed				11/03/23	EG	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

November 07, 2023

Reviewed and Released by: Anil Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



QA/QC Report

November 07, 2023

QA/QC Data

SDG I.D.: GCP39742

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 705187 (mg/kg), QC Sample No: CP39321 (CP39742)													
Tot.Org.Carbon	BRL	100	4440	4680	5.30	106						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director
November 07, 2023

Sample Criteria Exceedances Report

GCP39742 - EASTANAL-NH

Criteria: None

State: NH

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

November 07, 2023

SDG I.D.: GCP39742

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

CHAIN-OF-CUSTODY RECORD

1-8' uwf

 **Eastern Analytical, Inc.**
professional laboratory and drilling services

EAI ID# 269100 Page 1

Sample Notes

aParameters

Date Sampled Matrix

Cake 2

10/30/2023

sludge

Subcontract - TOC Lloyd Kahn (PEL)

39742

09:00

EAI ID# 269100

Project State: NH

Project ID: 848

Company Phoenix Environmental Labs

Address 587 East Middle Turnpike

Address Manchester, CT 06040

Account #

Phone # (860) 645-1102

Results Needed: Preferred Date: Standard

QC Deliverables RUSH Due Date:

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and
invoice to customerservice@easternanalytical.com.

PO #: 61089

EAI ID# 269100

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

Shelly 11/2/23 7:36

Relinquished by

Date/Time

Received by

Shelly 11/2/23 10:30

Relinquished by

Date/Time

Received by

Shelly 11/2/23 15:28

Eastern Analytical, Inc. 51 Antrim Ave Concord, NH 03301 Phone: (603) 228-0525 1-800-287-0525

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

Date/Time
Composites need start
and stop dates/times

Matrix

Parameters and Sample Notes

of containers

Sample 1

10/30/23

sludge
Grab or CompSoT to Dry/ICP/Mets. As, Cd, Cr, Cu, K, P, Pb, Mo, Ni, Se, Zn, Fe, Ca, Mg, Na, Hg, Fe, Na/NO3/NO2/TKN/TN/TN/VS/CI/NH3
SoLAsRec/pH/TS/PtFtr

2

☐ Sampler confirms ID and parameters are accurateCircle preservative/s: HCL HNO₃ H₂SO₄ NaOH MEOH Na₂S₂O₃ ICEDissolved Sample Field Filtered ☐

Sample 2

10/30/23

sludge
Grab or Comp

SoT to Dry/TOC/SoLSubPEL

1

☐ Sampler confirms ID and parameters are accurateCircle preservative/s: HCL HNO₃ H₂SO₄ NaOH MEOH Na₂S₂O₃ ICEDissolved Sample Field Filtered ☐

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAL Project ID 848

Project Name Biosolids

State NH

Client (Pro Mgr) Daumanic Fucile

Customer Seabrook, Town of - Sewer

Address PO Box 456

City Seabrook NH 03874

Phone 474-8012

Fax 474-8014

Email: DFucile@seabrooknh.org

Direct (603) 395-6223

Results Needed by: Preferred date 12/31/23
Notes:

QC deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Reporting Options

☐ HC ☐ NO FAX
☒ EDD PDF ☐ Partial FAX
☒ EDD email ☐ PDF Invoice
☐ PDF prelim, NO FAX ☐ EQUIS
☐ e-mail Login ConfirmationPO# verbal
Quote#: 1013056Temp 3.2°C
Ice ☒ ☐ N

Samples Collected by: Daumanic Fucile

Relinquished by

10/30/23 12:11

Date/Time

Received by

10-30-23 13:45

Date/Time

Received by

Relinquished by

Date/Time

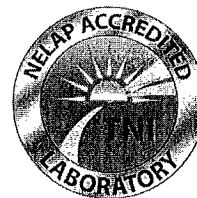
Received by



Eastern Analytical, Inc.

professional laboratory and drilling services

Curtis Slayton
Seabrook, Town of - Sewer Department
PO Box 456
Seabrook, NH 03874



Laboratory Report for:

Eastern Analytical, Inc. ID: 282628

Client Identification: Biosolids Test | July 2024

Date Received: 7/24/2024

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

9.11.24
Date



LABORATORY REPORT

EAI ID#: 282628

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | July 2024**

Client Sample ID: Biosolid
Lab Sample ID: 282628.01
Matrix: sludge
Date Sampled: 7/24/24
Date Received: 7/24/24

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Chloromethane	< 3	3	27	mg/kg	7/26/24	15:34	8260C	DGM
Vinyl chloride	< 0.5	0.5	27	mg/kg	7/26/24	15:34	8260C	DGM
Bromomethane	< 3	3	27	mg/kg	7/26/24	15:34	8260C	DGM
Chloroethane	< 3	3	27	mg/kg	7/26/24	15:34	8260C	DGM
Acetone	< 50	50	27	mg/kg	7/26/24	15:34	8260C	DGM
1,1-Dichloroethene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Methylene chloride	< 3	3	27	mg/kg	7/26/24	15:34	8260C	DGM
Carbon disulfide	< 3	3	27	mg/kg	7/26/24	15:34	8260C	DGM
trans-1,2-Dichloroethene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
1,1-Dichloroethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
cis-1,2-Dichloroethene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
2-Butanone(MEK)	< 10	10	27	mg/kg	7/26/24	15:34	8260C	DGM
Chloroform	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
1,1,1-Trichloroethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Carbon tetrachloride	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Benzene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
1,2-Dichloroethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Trichloroethene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
1,2-Dichloropropane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Bromodichloromethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
4-Methyl-2-pentanone(MIBK)	< 10	10	27	mg/kg	7/26/24	15:34	8260C	DGM
cis-1,3-Dichloropropene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Toluene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
trans-1,3-Dichloropropene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
1,1,2-Trichloroethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
2-Hexanone	< 3	3	27	mg/kg	7/26/24	15:34	8260C	DGM
Tetrachloroethene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Dibromochloromethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Chlorobenzene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Ethylbenzene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
mp-Xylene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
o-Xylene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Styrene	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
Bromoform	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
1,1,2,2-Tetrachloroethane	< 1	1	27	mg/kg	7/26/24	15:34	8260C	DGM
4-Bromofluorobenzene (surr)	93 %R			%	7/26/24	15:34	8260C	DGM
1,2-Dichlorobenzene-d4 (surr)	107 %R			%	7/26/24	15:34	8260C	DGM
Toluene-d8 (surr)	97 %R			%	7/26/24	15:34	8260C	DGM

Biosolid: Reporting limits are elevated due to the % solids content of the sample or the sample mass used for analysis.

TCL



LABORATORY REPORT

EAI ID#: 282628

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | July 2024**

Client Sample ID: Trip Blank
Lab Sample ID: 282628.02
Matrix: sludge
Date Sampled: 7/24/24
Date Received: 7/24/24

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Chloromethane	< 0.1	0.1	1	mg/kg	7/26/24	15:09	8260C	DGM
Vinyl chloride	< 0.02	0.02	1	mg/kg	7/26/24	15:09	8260C	DGM
Bromomethane	< 0.1	0.1	1	mg/kg	7/26/24	15:09	8260C	DGM
Chloroethane	< 0.1	0.1	1	mg/kg	7/26/24	15:09	8260C	DGM
Acetone	< 2	2	1	mg/kg	7/26/24	15:09	8260C	DGM
1,1-Dichloroethene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Methylene chloride	< 0.1	0.1	1	mg/kg	7/26/24	15:09	8260C	DGM
Carbon disulfide	< 0.1	0.1	1	mg/kg	7/26/24	15:09	8260C	DGM
trans-1,2-Dichloroethene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
1,1-Dichloroethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
cis-1,2-Dichloroethene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
2-Butanone(MEK)	< 0.5	0.5	1	mg/kg	7/26/24	15:09	8260C	DGM
Chloroform	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
1,1,1-Trichloroethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Carbon tetrachloride	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Benzene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
1,2-Dichloroethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Trichloroethene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
1,2-Dichloropropane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Bromodichloromethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
4-Methyl-2-pentanone(MIBK)	< 0.5	0.5	1	mg/kg	7/26/24	15:09	8260C	DGM
cis-1,3-Dichloropropene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Toluene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
trans-1,3-Dichloropropene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
1,1,2-Trichloroethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
2-Hexanone	< 0.1	0.1	1	mg/kg	7/26/24	15:09	8260C	DGM
Tetrachloroethene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Dibromochloromethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Chlorobenzene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Ethylbenzene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
mp-Xylene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
o-Xylene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Styrene	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
Bromoform	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
1,1,2,2-Tetrachloroethane	< 0.05	0.05	1	mg/kg	7/26/24	15:09	8260C	DGM
4-Bromofluorobenzene (surr)	91 %R			%	7/26/24	15:09	8260C	DGM
1,2-Dichlorobenzene-d4 (surr)	108 %R			%	7/26/24	15:09	8260C	DGM
Toluene-d8 (surr)	98 %R			%	7/26/24	15:09	8260C	DGM

TCL



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Batch ID: 638575-13626/S072524V82601

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.1	1.2 (124 %R)	1.3 (127 %R) (2 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
Chloromethane	< 0.1	0.9 (95 %R)	1.0 (95 %R) (0 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
Vinyl chloride	< 0.02	1.1 (108 %R)	1.1 (106 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Bromomethane	< 0.1	0.7 (68 %R)	0.7 (74 %R) (8 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
Chloroethane	< 0.1	1.0 (98 %R)	0.9 (94 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Trichlorofluoromethane	< 0.1	1.1 (113 %R)	1.1 (110 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Diethyl Ether	< 0.05	0.88 (88 %R)	0.85 (85 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Acetone	< 2	< 2 (95 %R)	< 2 (92 %R) (3 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
1,1-Dichloroethene	< 0.05	0.98 (98 %R)	1.0 (101 %R) (2 RPD)	7/26/2024	mg/kg	59 - 172	20	8260C
tert-Butyl Alcohol (TBA)	< 2	5 (103 %R)	5 (105 %R) (2 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
Methylene chloride	< 0.1	1.0 (96 %R)	1.0 (98 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Carbon disulfide	< 0.1	0.8 (83 %R)	0.8 (84 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 0.1	0.9 (89 %R)	0.9 (91 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Ethyl-t-butyl ether(ETBE)	< 0.1	1.0 (96 %R)	1.0 (99 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Isopropyl ether(DIPE)	< 0.1	1.0 (97 %R)	1.0 (100 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
tert-amyl methyl ether(TAME)	< 0.1	0.9 (90 %R)	0.9 (93 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 0.05	0.95 (95 %R)	1.2 (123 %R) (26 RPD) !	7/26/2024	mg/kg	70 - 130	20	8260C
1,1-Dichloroethane	< 0.05	1.0 (104 %R)	1.1 (107 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
2,2-Dichloropropane	< 0.05	0.81 (81 %R)	0.82 (82 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 0.05	1.0 (101 %R)	1.0 (104 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
2-Butanone(MEK)	< 0.5	0.9 (89 %R)	0.9 (89 %R) (1 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
Bromochloromethane	< 0.05	1.0 (100 %R)	1.0 (102 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 0.5	0.9 (93 %R)	0.9 (90 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Chloroform	< 0.05	1.0 (103 %R)	1.1 (105 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,1,1-Trichloroethane	< 0.05	0.99 (99 %R)	1.0 (101 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Carbon tetrachloride	< 0.05	0.98 (98 %R)	1.0 (100 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,1-Dichloropropene	< 0.05	1.1 (110 %R)	1.1 (114 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Benzene	< 0.05	1.1 (108 %R)	1.1 (111 %R) (2 RPD)	7/26/2024	mg/kg	66 - 142	20	8260C
1,2-Dichloroethane	< 0.05	1.0 (102 %R)	1.1 (106 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Trichloroethene	< 0.05	1.1 (113 %R)	1.1 (113 %R) (1 RPD)	7/26/2024	mg/kg	62 - 137	20	8260C
1,2-Dichloropropane	< 0.05	1.0 (104 %R)	1.1 (107 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Dibromomethane	< 0.05	1.0 (100 %R)	1.0 (102 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Bromodichloromethane	< 0.05	0.89 (89 %R)	0.91 (91 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,4-Dioxane	< 1	1 (121 %R)	1 (123 %R) (2 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
4-Methyl-2-pentanone(MIBK)	< 0.5	1.0 (96 %R)	0.9 (94 %R) (2 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.05	0.90 (90 %R)	0.92 (92 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Toluene	< 0.05	1.1 (108 %R)	1.1 (111 %R) (3 RPD)	7/26/2024	mg/kg	59 - 139	20	8260C
trans-1,3-Dichloropropene	< 0.05	0.96 (96 %R)	0.99 (99 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,1,2-Trichloroethane	< 0.05	1.0 (103 %R)	1.1 (106 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
2-Hexanone	< 0.1	0.9 (88 %R)	0.9 (87 %R) (2 RPD)	7/26/2024	mg/kg	40 - 160	20	8260C
Tetrachloroethene	< 0.05	1.1 (108 %R)	1.1 (112 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,3-Dichloropropane	< 0.05	1.0 (101 %R)	1.0 (104 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Dibromochloromethane	< 0.05	0.89 (89 %R)	0.90 (90 %R) (1 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.02	1.0 (100 %R)	1.0 (102 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Chlorobenzene	< 0.05	1.1 (109 %R)	1.1 (111 %R) (3 RPD)	7/26/2024	mg/kg	60 - 133	20	8260C
1,1,1,2-Tetrachloroethane	< 0.05	0.98 (98 %R)	1.0 (100 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Batch ID: 638575-13626/S072524V82601

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Ethylbenzene	< 0.05	1.1 (110 %R)	1.1 (113 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
mp-Xylene	< 0.05	2.2 (110 %R)	2.3 (114 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
o-Xylene	< 0.05	1.1 (108 %R)	1.1 (111 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Styrene	< 0.05	1.1 (113 %R)	1.2 (116 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Bromoform	< 0.05	0.99 (99 %R)	0.99 (99 %R) (1 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
IsoPropylbenzene	< 0.05	1.0 (101 %R)	1.0 (104 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Bromobenzene	< 0.05	1.0 (103 %R)	1.1 (106 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 0.05	0.93 (93 %R)	1.0 (101 %R) (8 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.05	0.97 (97 %R)	0.99 (99 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
n-Propylbenzene	< 0.05	1.1 (111 %R)	1.2 (116 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
2-Chlorotoluene	< 0.05	1.1 (106 %R)	1.1 (110 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
4-Chlorotoluene	< 0.05	1.1 (112 %R)	1.1 (115 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 0.05	1.1 (105 %R)	1.1 (110 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
tert-Butylbenzene	< 0.05	1.1 (105 %R)	1.1 (109 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 0.05	1.1 (106 %R)	1.1 (110 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
sec-Butylbenzene	< 0.05	1.2 (117 %R)	1.2 (122 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,3-Dichlorobenzene	< 0.05	1.1 (107 %R)	1.1 (111 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
p-Isopropyltoluene	< 0.05	1.3 (125 %R)	* 1.3 (131 %R) (5 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,4-Dichlorobenzene	< 0.05	1.1 (106 %R)	1.1 (110 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2-Dichlorobenzene	< 0.05	1.0 (104 %R)	1.1 (107 %R) (3 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
n-Butylbenzene	< 0.05	1.2 (121 %R)	1.3 (128 %R) (6 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.05	0.86 (86 %R)	0.88 (88 %R) (2 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,3,5-Trichlorobenzene	< 0.05	1.1 (110 %R)	1.2 (116 %R) (5 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 0.05	1.1 (107 %R)	1.1 (113 %R) (5 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Hexachlorobutadiene	< 0.05	1.1 (110 %R)	1.2 (116 %R) (6 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
Naphthalene	< 0.1	1.0 (102 %R)	1.1 (106 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.05	1.1 (110 %R)	1.1 (115 %R) (4 RPD)	7/26/2024	mg/kg	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	94 %R	102 %R	101 %R	7/26/2024	% Rec	70 - 130		8260C
1,2-Dichlorobenzene-d4 (surr)	104 %R	99 %R	99 %R	7/26/2024	% Rec	70 - 130		8260C
Toluene-d8 (surr)	98 %R	99 %R	99 %R	7/26/2024	% Rec	70 - 130		8260C

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | July 2024

Client Sample ID: Biosolid
Lab Sample ID: 282628.01
Matrix: sludge
Date Sampled: 7/24/24
Date Received: 7/24/24

Date of Preparation: 7/30/24

Method: 8270E

Analyst: JMR

Units: mg/kg

	Result	RL	Dilution Factor	Date Analyzed		Result	RL	Dilution Factor	Date Analyzed
Phenol	< 9	9	122	7/31/24	Butylbenzylphthalate	< 40	40	122	7/31/24
2-Chlorophenol	< 9	9	122	7/31/24	bis(2-Ethylhexyl)phthalate	< 40	40	122	7/31/24
2,4-Dichlorophenol	< 9	9	122	7/31/24	Di-n-octylphthalate	< 40	40	122	7/31/24
2,4,5-Trichlorophenol	< 9	9	122	7/31/24	Dibenzofuran	< 9	9	122	7/31/24
2,4,6-Trichlorophenol	< 9	9	122	7/31/24	Naphthalene	< 9	9	122	7/31/24
Pentachlorophenol	< 40	40	122	7/31/24	2-Methylnaphthalene	< 9	9	122	7/31/24
2-Nitrophenol	< 40	40	122	7/31/24	Acenaphthylene	< 9	9	122	7/31/24
4-Nitrophenol	< 40	40	122	7/31/24	Acenaphthene	< 9	9	122	7/31/24
2,4-Dinitrophenol	< 80	80	122	7/31/24	Fluorene	< 9	9	122	7/31/24
2-Methylphenol	< 9	9	122	7/31/24	Phenanthrene	< 9	9	122	7/31/24
3/4-Methylphenol	< 9	9	122	7/31/24	Anthracene	< 9	9	122	7/31/24
2,4-Dimethylphenol	< 40	40	122	7/31/24	Fluoranthene	< 9	9	122	7/31/24
4-Chloro-3-methylphenol	< 9	9	122	7/31/24	Pyrene	< 9	9	122	7/31/24
4,6-Dinitro-2-methylphenol	< 40	40	122	7/31/24	Benzo[a]anthracene	< 9	9	122	7/31/24
n-Nitroso-di-n-propylamine	< 5	5	122	7/31/24	Chrysene	< 9	9	122	7/31/24
n-Nitrosodiphenylamine	< 9	9	122	7/31/24	Benzo[b]fluoranthene	< 9	9	122	7/31/24
bis(2-Chloroethyl)ether	< 9	9	122	7/31/24	Benzo[k]fluoranthene	< 9	9	122	7/31/24
bis(2-chloroisopropyl)ether	< 9	9	122	7/31/24	Benzo[a]pyrene	< 9	9	122	7/31/24
bis(2-Chloroethoxy)methane	< 9	9	122	7/31/24	Indeno[1,2,3-cd]pyrene	< 9	9	122	7/31/24
1,3-Dichlorobenzene	< 9	9	122	7/31/24	Dibenz[a,h]anthracene	< 9	9	122	7/31/24
1,4-Dichlorobenzene	< 9	9	122	7/31/24	Benzo[g,h,i]perylene	< 9	9	122	7/31/24
1,2-Dichlorobenzene	< 9	9	122	7/31/24	2-Fluorophenol (surr)	55 %R			7/31/24
1,2,4-Trichlorobenzene	< 9	9	122	7/31/24	Phenol-d6 (surr)	63 %R			7/31/24
2-Chloronaphthalene	< 9	9	122	7/31/24	2,4,6-Tribromophenol (surr)	70 %R			7/31/24
4-Chlorophenyl-phenylether	< 9	9	122	7/31/24	Nitrobenzene-D5 (surr)	61 %R			7/31/24
4-Bromophenyl-phenylether	< 9	9	122	7/31/24	2-Fluorobiphenyl (surr)	64 %R			7/31/24
Hexachloroethane	< 9	9	122	7/31/24	p-Terphenyl-D14 (surr)	70 %R			7/31/24
Hexachlorobutadiene	< 9	9	122	7/31/24					
Hexachlorocyclopentadiene	< 40	40	122	7/31/24					
Hexachlorobenzene	< 9	9	122	7/31/24					
4-Chloroaniline	< 9	9	122	7/31/24					
2-Nitroaniline	< 40	40	122	7/31/24					
3-Nitroaniline	< 40	40	122	7/31/24					
4-Nitroaniline	< 40	40	122	7/31/24					
Nitrobenzene	< 9	9	122	7/31/24					
Isophorone	< 9	9	122	7/31/24					
2,4-Dinitrotoluene	< 20	20	122	7/31/24					
2,6-Dinitrotoluene	< 20	20	122	7/31/24					
3,3'-Dichlorobenzidine	< 9	9	122	7/31/24					
Carbazole	< 9	9	122	7/31/24					
Dimethylphthalate	< 9	9	122	7/31/24					
Diethylphthalate	< 40	40	122	7/31/24					
Di-n-butylphthalate	< 40	40	122	7/31/24					

Detection limits elevated due to low solids content and in response to the lower initial mass used for analysis. TCL



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Batch ID: 638579-34681/S073024ABN1

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
alpha-Terpineol	< 0.34	1.4 (86 %R)	1.5 (92 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Phenol	< 0.07	2.4 (72 %R)	2.6 (78 %R) (8 RPD)	7/31/2024	mg/kg	15 - 130	30	8270E
2-Chlorophenol	< 0.07	2.4 (71 %R)	2.6 (77 %R) (8 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
2,4-Dichlorophenol	< 0.07	2.6 (77 %R)	2.7 (82 %R) (6 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
2,4,5-Trichlorophenol	< 0.07	2.7 (80 %R)	2.8 (85 %R) (7 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
2,4,6-Trichlorophenol	< 0.07	2.7 (80 %R)	2.9 (87 %R) (8 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
Pentachlorophenol	< 0.34	2.7 (81 %R)	2.9 (88 %R) (8 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
2-Nitrophenol	< 0.34	2.6 (77 %R)	2.8 (84 %R) (9 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
4-Nitrophenol	< 0.34	2.4 (72 %R)	2.6 (79 %R) (10 RPD)	7/31/2024	mg/kg	15 - 130	30	8270E
2,4-Dinitrophenol	< 0.7	2.5 (74 %R)	2.8 (83 %R) (11 RPD)	7/31/2024	mg/kg	15 - 130	30	8270E
2-Methylphenol	< 0.07	2.5 (75 %R)	2.7 (81 %R) (8 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
3/4-Methylphenol	< 0.07	2.7 (80 %R)	2.9 (86 %R) (7 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
2,4-Dimethylphenol	< 0.34	2.9 (87 %R)	3.1 (93 %R) (7 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
4-Chloro-3-methylphenol	< 0.07	2.7 (81 %R)	2.9 (87 %R) (7 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
4,6-Dinitro-2-methylphenol	< 0.34	2.7 (81 %R)	2.9 (88 %R) (9 RPD)	7/31/2024	mg/kg	30 - 130	30	8270E
Benzoic Acid	< 3.4	< 3.4 (90 %R)	3.4 (102 %R) (13 RPD)	7/31/2024	mg/kg	15 - 130	30	8270E
N-Nitrosodimethylamine	< 0.07	1.1 (67 %R)	1.2 (74 %R) (10 RPD)	7/31/2024	mg/kg	15 - 140	30	8270E
n-Nitroso-di-n-propylamine	< 0.04	1.3 (78 %R)	1.4 (84 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
n-Nitrosodiphenylamine	< 0.07	1.3 (80 %R)	1.4 (87 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
bis(2-Chloroethyl)ether	< 0.07	1.2 (71 %R)	1.3 (77 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
bis(2-chloroisopropyl)ether	< 0.07	1.3 (81 %R)	1.4 (87 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
bis(2-Chloroethoxy)methane	< 0.07	1.3 (80 %R)	1.4 (85 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
1,3-Dichlorobenzene	< 0.07	1.1 (69 %R)	1.3 (76 %R) (10 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Acetophenone	< 0.7	1.3 (78 %R)	1.4 (83 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
1,4-Dichlorobenzene	< 0.07	1.2 (69 %R)	1.3 (77 %R) (10 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
1,2-Dichlorobenzene	< 0.07	1.2 (70 %R)	1.3 (77 %R) (9 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
1,2,4-Trichlorobenzene	< 0.07	1.2 (72 %R)	1.3 (78 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
2-Chloronaphthalene	< 0.07	1.3 (75 %R)	1.3 (81 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
4-Chlorophenyl-phenylether	< 0.07	1.3 (77 %R)	1.4 (82 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
4-Bromophenyl-phenylether	< 0.07	1.3 (78 %R)	1.4 (84 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Hexachloroethane	< 0.07	1.1 (68 %R)	1.2 (75 %R) (10 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Hexachlorobutadiene	< 0.07	1.2 (71 %R)	1.3 (77 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Hexachlorocyclopentadiene	< 0.34	0.75 (45 %R)	0.79 (47 %R) (5 RPD)	7/31/2024	mg/kg	15 - 140	30	8270E
Hexachlorobenzene	< 0.07	1.3 (75 %R)	1.3 (80 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
4-Chloroaniline	< 0.07	1.4 (81 %R)	1.5 (87 %R) (7 RPD)	7/31/2024	mg/kg	15 - 140	30	8270E
2,3-Dichloroaniline	< 0.07	1.3 (76 %R)	1.4 (82 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
2-Nitroaniline	< 0.34	1.4 (82 %R)	1.5 (90 %R) (9 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
3-Nitroaniline	< 0.34	1.4 (81 %R)	1.5 (88 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
4-Nitroaniline	< 0.34	1.3 (80 %R)	1.5 (88 %R) (10 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Aniline	< 0.07	1.2 (74 %R)	1.3 (79 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzyl alcohol	< 0.7	1.4 (82 %R)	1.5 (89 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Nitrobenzene	< 0.07	1.3 (75 %R)	1.4 (82 %R) (9 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Isophorone	< 0.07	1.3 (79 %R)	1.4 (84 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
2,4-Dinitrotoluene	< 0.14	1.3 (80 %R)	1.5 (87 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
2,6-Dinitrotoluene	< 0.14	1.3 (81 %R)	1.4 (87 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzidine (estimated)	< 0.34	1.0 (61 %R)	1.1 (66 %R) (7 RPD)	7/31/2024	mg/kg	1 - 200	50	8270E



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Batch ID: 638579-34681/S073024ABN1

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
3,3'-Dichlorobenzidine	< 0.07	1.3 (80 %R)	1.4 (87 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Pyridine	< 0.34	1.1 (66 %R)	1.2 (73 %R) (10 RPD)	7/31/2024	mg/kg	15 - 140	30	8270E
Azobenzene	< 0.07	1.3 (78 %R)	1.4 (83 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Carbazole	< 0.07	1.4 (81 %R)	1.5 (87 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Dimethylphthalate	< 0.07	1.3 (78 %R)	1.4 (84 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Diethylphthalate	< 0.34	1.4 (83 %R)	1.5 (90 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Di-n-butylphthalate	< 0.34	1.6 (93 %R)	1.6 (94 %R) (1 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Butylbenzylphthalate	< 0.34	1.5 (89 %R)	1.6 (95 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
bis(2-Ethylhexyl)phthalate	< 0.34	1.5 (93 %R)	1.6 (98 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Di-n-octylphthalate	< 0.34	1.6 (94 %R)	1.7 (100 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Dibenzofuran	< 0.07	1.3 (76 %R)	1.4 (82 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Naphthalene	< 0.007	1.3 (76 %R)	1.4 (82 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
2-Methylnaphthalene	< 0.007	1.3 (81 %R)	1.4 (87 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
1-Methylnaphthalene	< 0.007	1.3 (80 %R)	1.4 (86 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Acenaphthylene	< 0.007	1.2 (69 %R)	1.2 (74 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Acenaphthene	< 0.007	1.3 (78 %R)	1.4 (84 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Fluorene	< 0.007	1.3 (77 %R)	1.4 (83 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Phenanthrene	< 0.007	1.3 (77 %R)	1.4 (83 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Anthracene	< 0.007	1.3 (79 %R)	1.4 (85 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Fluoranthene	< 0.007	1.3 (78 %R)	1.4 (83 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Pyrene	< 0.007	1.3 (76 %R)	1.3 (80 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzo[a]anthracene	< 0.007	1.2 (75 %R)	1.3 (79 %R) (6 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Chrysene	< 0.007	1.3 (78 %R)	1.4 (84 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzo[b]fluoranthene	< 0.007	1.3 (80 %R)	1.5 (87 %R) (9 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzo[k]fluoranthene	< 0.007	1.3 (80 %R)	1.4 (84 %R) (5 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzo[a]pyrene	< 0.007	1.4 (83 %R)	1.5 (90 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Indeno[1,2,3-cd]pyrene	< 0.007	1.4 (82 %R)	1.5 (89 %R) (9 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Dibenz[a,h]anthracene	< 0.007	1.3 (81 %R)	1.4 (87 %R) (7 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
Benzo[g,h,i]perylene	< 0.007	1.3 (78 %R)	1.4 (84 %R) (8 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
n-Decane	< 0.34	1.2 (71 %R)	1.3 (78 %R) (10 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
n-Octadecane	< 0.34	1.6 (95 %R)	1.7 (100 %R) (5 RPD)	7/31/2024	mg/kg	40 - 140	30	8270E
2-Fluorophenol (surr)	67 %R	66 %R	73 %R	7/31/2024	mg/kg	30 - 130	30	8270E
Phenol-d6 (surr)	76 %R	72 %R	78 %R	7/31/2024	mg/kg	30 - 130	30	8270E
2,4,6-Tribromophenol (surr)	76 %R	74 %R	81 %R	7/31/2024	mg/kg	30 - 130	30	8270E
Nitrobenzene-D5 (surr)	73 %R	74 %R	80 %R	7/31/2024	mg/kg	30 - 130	30	8270E
2-Fluorobiphenyl (surr)	78 %R	73 %R	79 %R	7/31/2024	mg/kg	30 - 130	30	8270E
p-Terphenyl-D14 (surr)	79 %R	80 %R	86 %R	7/31/2024	mg/kg	30 - 130	30	8270E

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | July 2024

Client Sample ID: Biosolid

Lab Sample ID: 282628.01

Matrix: sludge

Date Sampled: 7/24/24

Date Received: 7/24/24

Date Received.	7/24/24	Dilution			Date / Time		Date	Method		
	Result	RL	Factor	Units	Analyzed		Prepared	Prep	Analytical	Analyst
Aldrin	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
alpha-BHC	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
beta-BHC	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Lindane(gamma-BHC)	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
delta-BHC	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
alpha-Chlordane	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
gamma-Chlordane	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
4,4'-DDT	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
4,4'-DDE	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
4,4'-DDD	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Dieldrin	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Endosulfan I	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Endosulfan II	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Endosulfan Sulfate	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Endrin	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Endrin Aldehyde	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Endrin Ketone	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Heptachlor	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Heptachlor Epoxide	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Methoxychlor	< 0.5	0.5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
Toxaphene	< 5	5	106	mg/kg	8/5/24	17:52	7/30/24	3540C	8081B	MB
TMX (surr)	64 %R			%	8/5/24	17:52	7/30/24	3540C	8081B	MB
DCB (surr)	68 %R			%	8/5/24	17:52	7/30/24	3540C	8081B	MB

TCL

Clean-up was performed on the sample and associated batch QC.

Detection limits elevated due to sample matrix, a low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Batch ID: 638579-40011/S073024Pest1

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Aldrin	< 0.005	0.023 (68 %R)	0.024 (71 %R) (3 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
alpha-BHC	< 0.005	0.022 (67 %R)	0.023 (70 %R) (4 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
beta-BHC	< 0.005	0.022 (65 %R)	0.024 (71 %R) (9 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Lindane(gamma-BHC)	< 0.005	0.022 (67 %R)	0.023 (70 %R) (5 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
delta-BHC	< 0.005	0.025 (75 %R)	0.027 (80 %R) (7 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Chlordane	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/5/2024	mg/kg		30	8081B
4,4'-DDT	< 0.005	0.024 (72 %R)	0.026 (79 %R) (9 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
4,4'-DDE	< 0.005	0.024 (71 %R)	0.026 (77 %R) (8 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
4,4'-DDD	< 0.005	0.024 (72 %R)	0.026 (77 %R) (7 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Dieldrin	< 0.005	0.025 (76 %R)	0.026 (79 %R) (3 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Endosulfan I	< 0.005	0.023 (69 %R)	0.025 (75 %R) (9 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Endosulfan II	< 0.005	0.024 (71 %R)	0.025 (75 %R) (6 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Endosulfan Sulfate	< 0.005	0.027 (80 %R)	0.030 (90 %R) (13 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Endrin	< 0.005	0.024 (72 %R)	0.025 (76 %R) (5 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Endrin Aldehyde	< 0.005	0.023 (68 %R)	0.025 (74 %R) (8 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Endrin Ketone	< 0.005	0.030 (90 %R)	0.033 (98 %R) (8 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Heptachlor	< 0.005	0.021 (62 %R)	0.021 (64 %R) (2 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Heptachlor Epoxide	< 0.005	0.023 (69 %R)	0.025 (76 %R) (9 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Methoxychlor	< 0.005	0.033 (99 %R)	0.027 (82 %R) (19 RPD)	8/5/2024	mg/kg	40 - 140	30	8081B
Toxaphene	< 0.05	< 0.05 (%R N/A)	< 0.05 (%R N/A) (RPD N/A)	8/5/2024	mg/kg			8081B
TMX (surr)	65 %R	64 %R	65 %R	8/5/2024	mg/kg	30 - 150	30	8081B
DCB (surr)	67 %R	49 %R	50 %R	8/5/2024	mg/kg	30 - 150	30	8081B

*If Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | July 2024

Client Sample ID: Biosolid

Lab Sample ID: 282628.01

Matrix: sludge

Date Sampled: 7/24/24

Date Received: 7/24/24

Date Received: 7/24/24

			Dilution		Date / Time		Date	Method		
	Result	RL	Factor	Units	Analyzed		Prepared	Prep	Analytical	Analyst
PCB-1016	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
PCB-1221	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
PCB-1232	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
PCB-1242	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
PCB-1248	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
PCB-1254	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
PCB-1260	< 2	2	106	mg/kg	8/1/24	11:28	7/30/24	3540C	8082A	MB
TMX (surr)	99 %R			%	8/1/24	11:28	7/30/24	3540C	8082A	MB
DCB (surr)	119 %R			%	8/1/24	11:28	7/30/24	3540C	8082A	MB

TCL

Acid clean-up was performed on the sample and associated batch QC.

Detection limits elevated due to sample matrix, a low solids content and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Batch ID: 638579-40164/S073024PCB1

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
PCB-1016	< 0.02	0.12 (87 %R)	0.13 (94 %R) (8 RPD)	8/1/2024	mg/kg	40 - 140	30	8082A
PCB-1221	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
PCB-1232	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
PCB-1242	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
PCB-1248	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
PCB-1254	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
PCB-1260	< 0.02	0.14 (102 %R)	0.14 (107 %R) (5 RPD)	8/1/2024	mg/kg	40 - 140	30	8082A
PCB-1262	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
PCB-1268	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	8/1/2024	mg/kg			8082A
TMX (surr)	86 %R	94 %R	102 %R	8/1/2024	% Rec	30 - 150	30	8082A
DCB (surr)	113 %R	111 %R	118 %R	8/1/2024	% Rec	30 - 150	30	8082A

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.



LABORATORY REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department
Client Designation: Biosolids Test | July 2024

Client Sample ID: Biosolid
Lab Sample ID: 282628.01
Matrix: sludge
Date Sampled: 7/24/24
Date Received: 7/24/24

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Solids Total	13.4	1	1	Percent	7/26/24	16:52	2540G-11	MNT
Solids Total Volatile	84.5	1	7	Percent	7/26/24	16:52	2540G-11	MNT
Chloride	840	80	8	mg/kg	7/30/24	7:39	9056A	MNT
Nitrate/Nitrite-N	110	40	8	mg/kg	7/31/24	13:07	9056A	ALS
Ammonia-N	2600	70	14	mg/kg	8/2/24	12:10	4500NH3D-11	PHA
Total Organic Nitrogen	75400	5	7	mg/kg	8/5/24	11:24	CALC	PEN
TKN	78000	2000	22	mg/kg	7/30/24	19:21	4500N _{org} C/NH3D-11	GRS
pH	6.19	0.1	1	SU	7/26/24	10:50	9045D	PHA

Biosolid: Due to the sample matrix, the pH method was modified to add approximately 10g of sample to 20mL of water.



QC REPORT

EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | July 2024

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 1	NA	NA	Percent				2540G-11
Solids Total Volatile	< 1	NA	NA	Percent				2540G-11
Chloride	< 10	190 (95 %R)	180 (96 %R) (1 RPD)	mg/kg	7/30/24	90 - 110	15	9056A
Nitrate/Nitrite-N	< 5	37 (95 %R)	36 (94 %R) (0 RPD)	mg/kg	7/31/24	90 - 110	15	9056A
Ammonia-N	< 5	39 (100 %R)	37 (95 %R) (6 RPD)	mg/kg	8/2/24	90 - 110	20	4500NH3D-11
TKN	< 100	1500 (105 %R)	1500 (105 %R) (0 RPD)	mg/kg	7/30/24	90 - 110	20	4500N _{org} C/NH3D-11
pH	NA	7.91 (99 %R)	7.89 (99 %R) (0 RPD)	SU	7/26/24	7.91 - 8.09	10	9045D

*// Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



LABORATORY REPORT

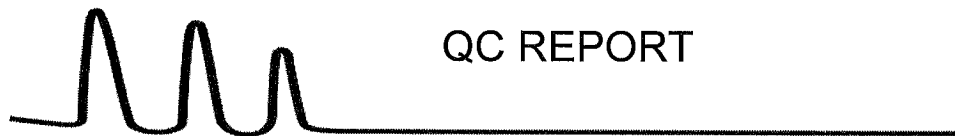
EAI ID#: 282628

Client: Seabrook, Town of - Sewer Department

Client Designation: Biosolids Test | July 2024

Client Sample ID: Biosolid
Lab Sample ID: 282628.01
Matrix: sludge
Date Sampled: 7/24/24
Date Received: 7/24/24

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time	Method	Analyst
Antimony	2.7	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Arsenic	4.1	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Beryllium	< 0.1	0.1	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Calcium	15000	100	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Cadmium	0.57	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Chromium	19	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Copper	450	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Iron	5800	100	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Lead	9.1	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Magnesium	3900	100	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Mercury	0.17	0.05	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Molybdenum	5.8	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Nickel	13	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Phosphorus	17000	100	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Potassium	4600	100	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Selenium	3.4	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Silver	1.3	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Sodium	1500	100	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Thallium	< 0.5	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS
Zinc	560	0.5	25	SolTotDry	mg/kg	7/30/24	19:43	6020B	DS



QC REPORT

EAI ID#: 282628

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids Test | July 2024**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Antimony	< 0.5	39 (98 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Arsenic	< 0.5	35 (89 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Beryllium	< 0.1	39 (98 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Calcium	< 100	380 (86 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Cadmium	< 0.5	36 (91 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Chromium	< 0.5	36 (90 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Copper	< 0.5	37 (93 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Iron	< 100	410 (93 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Lead	< 0.5	36 (91 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Magnesium	< 100	390 (90 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Mercury	< 0.05	0.38 (96 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Molybdenum	< 0.5	36 (91 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Nickel	< 0.5	36 (91 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Phosphorus	< 100	380 (86 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Potassium	< 100	390 (89 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Selenium	< 0.5	35 (88 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Silver	< 0.5	36 (91 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Sodium	< 100	390 (89 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Thallium	< 0.5	36 (91 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B
Zinc	< 5	37 (92 %R)	NA	mg/kg	7/30/24	80 - 120	20	6020B

*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



September 07, 2024

Service Request No:E2400879

Alison Blay
Eastern Analytical, Inc.
51 Antrim Avenue
Concord, NH 03301

Laboratory Results for: EAI ID# 282628

Dear Alison,

Enclosed are the results of the sample(s) submitted to our laboratory July 26, 2024
For your reference, these analyses have been assigned our service request number **E2400879**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Hussam Kelany
Project Manager

ADDRESS 10450 Standcliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental



Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com



Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request No.: E2400879
Date Received: 07/26/24

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One sample was received for analysis at ALS Environmental in Houston on 07/26/24

The sample was received in good condition and are consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2400438: Laboratory Control / Spike Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

B flags – Method Blanks

The Method Blank EQ2400438-01 contained low levels of target compounds below the Method Reporting Limit (MRL). The associated compounds in the samples are flagged with 'B' flags where the sample result is less than ten times the level detected in the method blank.

One compound, OCDD, was above the MRL (CRQL). ALS/Houston follows the *EPA National Functional Guidelines for CDDs and CDFs, September 2005*, which states on page 31, "The concentration of OCDD/OCDF in the method blank must be <3x the CRQL (MRL)."

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ Summary results for each sample have been calculated by ALS/Houston to include:

- WHO-2005 TEFs, The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds (M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- Non-detected compounds are not included in the 'Total'
- The 1:1 and associated dilution have been combined into one TEQ Summary report
- EPA-89 TEFs, "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs)", 1989 EPA Update (EPA/625/3-89/016, March 1989)

- WHO-1998 TEFs, for PCBs, PCDDs, 21 PCDFs for humans and wildlife. (M. Van den Berg, et al., Environ Health Perspect 106: 775-792, 1998)

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur Irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628

Service Request:E2400879

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
E2400879-001	Biosolid	7/24/2024	0840

Service Request Summary

Folder #: E2400879
Client Name: Eastern Analytical, Inc.
Project Name: EAI ID# 282628
Project Number:

Report To: Alison Blay

Eastern Analytical, Inc.
 51 Antrim Avenue
 Concord, NH 03301
 USA

Phone Number: 800-287-0525

Cell Number:

Fax Number: 603-228-4591

E-mail: alisonb@eailabs.com

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: MONICA.SMITH
Date Received: 07/26/24

Internal Due Date: 9/24/2024

QAP: LAB QAP

Qualifier Set: HRMS Qualifier Set

Formset: Lab Standard

Merged?: Y

Report to MDL?: Y

P.O. Number:

EDD: No EDD Specified

1 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 2C
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected
E2400879-001	Biosolid	Sludge, Solid	07/24/24 0840

Sentiva GC/MS	
Dioxins Furans/1613B	II
Total Solids/ALS SOP	II

Service Request Summary

Folder #: E2400879
Client Name: Eastern Analytical, Inc.
Project Name: EAI ID# 282628
Project Number:

Report To: Alison Blay

Eastern Analytical, Inc.
51 Anttrim Avenue
Concord, NH 03301
USA

Phone Number: 800-287-0525

Cell Number:

Fax Number: 603-228-4591

E-mail: alisonb@eailabs.com

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: MONICA.SMITH
Date Received: 07/26/24

Internal Due Date: 9/24/2024

QAP: LAB QAP

Qualifier Set: HRMS Qualifier Set

Formset: Lab Standard

Merged?: Y

Report to MDL?: Y

P. O. Number:

EDD: No EDD Specified

1 4 oz-Glass Jar VM CLEAR Teflon Liner Unpreserved
Location: EHRMS-WIC 2C
Pressure Gas:

Data Qualifiers

HRMS Qualifier Set

- * Indicates the samples were extracted outside of the recommended holding time.
- B Indicates the associated analyte was found in the method blank at >1/10th the reported value.
- E Estimated value. The reported concentration is above the calibration range of the instrument.
- J Estimated value. The reported concentration is below the MRL.
- K The ion abundance ratio between the primary and secondary ions were outside of theoretical acceptance limits. The concentration of this analyte should be considered as an estimate.
- P Chlorodiphenyl ether interference was present at the retention time of the target analyte. Reported result should be considered an estimate.
- Q Monitored lock-mass indicates matrix-interference. Reported result is estimated.
- S Signal saturated detector. Result reported from dilution.
- U Compound was analyzed for, but was not detected (ND).
- X See Case Narrative.
- Y Isotopically Labeled Standard recovery outside of acceptance limits. In all cases, the signal-to-noise ratios are greater than 10:1, making the recoveries acceptable.
- i The MDL/MRL have been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arkansas Department of Environmental Quality	88-00356	3/28/2025
California State Environmental Laboratory Accreditation Program	2919-2024	4/30/2025
Department of Defense	L24-240	4/30/2026
Hawaii Department of Health	2024	4/30/2025
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Minnesota Department of Health	2645386	12/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209424-A	4/24/2025
Oregon Environmental Laboratory Accreditation Program	TX200002-2024	5/15/2025
Tennessee Department of Environment and Conservation	04016-2024	4/30/2025
Texas Commision on Environmental Quality	TX-C24-00130	4/30/2025
Washington Department of Ecology	C819-23	11/14/2024

ALS ENVIRONMENTAL – Houston
Data Processing/Form Production and Peer Review Signatures

SR# Unique ID E2400879

DB-5MSUI

SPB-Octyl

First Level - Data Processing - to be filled by person generating the forms

Date:	Analyst:	Samples:
09/04/24	LKL	001

Second Level - Data Review – to be filled by person doing peer review

Date:	Analyst:	Samples:
09/04/24	SL	001



Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

CHAIN-OF-CUSTODY RECORD



EAI ID# 286628

Page 1

Sample ID

Date Sampled Matrix

aParameters

Biosolid

7/24/2024

sludge

Subcontract - Dioxin/Furans Full Congeners Method 1613A

Sample Notes

282628 (2)

E2400879

5

Eastern Analytical, Inc.
EAI ID# 282628



*UIC 20034
Cobalt Form Temp 2.2 UIC 0.0*

EAI ID# 286628

Project State: NH

Project ID: 848

Results Needed: Preferred Date: Standard

RUSH Due Date:

QC Deliverables

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

PO #:

EAI ID# 286628

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGA

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

Chapman 7/25/24 1600 hrs

Relinquished by

Date/Time 07/26/24 11:00

Received by

8m

Relinquished by

Date/Time

Received by

Phone # 1 281-530-5656

Account #

Address Houston, TX 77099

Address 10450 Stancilff Road, Suite

Company ALS Environmental - Houston

Eastern Analytical, Inc. 51 Anttrim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damage arising out of the performance against this chain of custody but only in proportion to and to the extent of liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

E2400879

5

Eastern Analytical, Inc.
EAI ID# 282628

10450 Stancliff Road, Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Client: Eastern Analytical Date: JUL 26 2024 WO#: _____

Time Received: 11:00 Received by: SM BO#: N/A

Matrices: Solid/Sludge Water Oil Wipes Hydrocarbon Liquid Other

Kit ID/Cooler ID	Trip Blank ID	Cooler Temp (C) Observed/Corrected	IR #	Temp BLK Present?
<u>Foam</u>	_____	<u>2.2 / 2.2</u>	<u>134</u>	Y <u>N</u>
		/		Y N
		/		Y N
		/		Y N
		/		Y N

Delivery Method: FedEx UPS Greyhound ALS Client Other _____

Date/Time of Unpacking: JUL 29 2024 ^{10:25} Unpacked by: SM

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Chain of Custody present? Yes No

Chain of Custody signed when relinquished and received? Yes No

Chain of Custody - Sampler's name present? Yes No

Chain of Custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

VOA/TX1005/1006 Solids in hermetically Sealed Vials: Yes No No VOA/TX1005/1006 Solid

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Container/Temp Blank temperature in compliance? Yes No

Water - VOA vials have zero headspace? Yes No N/A No VOA submitted

Non-VOA waters preserved with HCl, H₂SO₄, HNO₃ are pH <2? Yes No N/A

Waters preserved with NaOH/Ascorbic acid are pH >12? Yes No N/A

pH adjusted? Yes No N/A *See Preservation Logbook

pH adjusted by: _____ pH Paper Lot: _____



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SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sample. The COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C.
- ✓ Air samples are shipped and stored cold, at 0 to 6°C
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report



Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 443085
Team: Semiova GCMS/OOLUIMI

Prep Workflow: OrgExts(365)
Prep Method: Method Soxhlet

Status: Prepped
Prep Date/Time: 8/13/24 12:43

#	Lab Code	Client ID	B#	Method /Test	pH	CI	Matrix	Amt Ext	Sample Description
1	E2400878-001	#3	.01	1613B/Dioxins Furans			Sludge, Solid	10.095g	brown sludge
2	E2400879-001	Biosolid	.01	1613B/Dioxins Furans			Sludge, Solid	10.030g	brown sludge
3	E2400902-001	Composite	.01	1613B/Dioxins Furans			Paperboard	10.281g	white paperboard
4	E2400908-001	MSC-Caro Holdim	.01	1613B/Dioxins Furans			Sludge, Solid	10.039g	white sludge
5	E2400920-001	WMU-003-B	.01	1613B/Dioxins Furans			Soil	10.031g	brown soil
6	E2400920-002	WMU-003-A	.01	1613B/Dioxins Furans			Soil	10.037g	brown soil
7	E2400920-003	WMU-001-C	.01	1613B/Dioxins Furans			Soil	10.030g	brown soil
8	E2400920-004	WMU-001-A	.01	1613B/Dioxins Furans			Soil	10.043g	brown soil
9	E2400920-005	WMU-001-B	.01	1613B/Dioxins Furans			Soil	10.086g	brown soil
10	E2400920-006	WMU-001-D	.01	1613B/Dioxins Furans			Soil	10.125g	brown soil
11	E2400920-007	WMU-002-B	.01	1613B/Dioxins Furans			Soil	10.124g	brown soil
12	E2400920-008	WMU-002-A	.01	1613B/Dioxins Furans			Soil	10.100g	brown soil
13	EQ2400438-01	MB		1613B/Dioxins Furans			Solid	10.012g	
14	EQ2400438-02	LCS		1613B/Dioxins Furans			Solid	10.155g	
15	EQ2400438-03	DLCS		1613B/Dioxins Furans			Solid	10.052g	

Spiking Solutions

Name:	8290/1613B Cleanup Working Standard	Inventory ID	236099	Logbook Ref:	DD 7/5/24 CWS@8ng/ml	Expires On:	09/09/2024
E2400878-001	100.00µL	E2400879-001	100.00µL	E2400902-001	100.00µL	E2400920-001	100.00µL
E2400920-003	100.00µL	E2400920-004	100.00µL	E2400920-005	100.00µL	E2400920-006	100.00µL
EQ2400438-01	100.00µL	EQ2400438-02	100.00µL	EQ2400438-03	100.00µL		
Name:	1613B Matrix Working Standard	Inventory ID	236400	Logbook Ref:	OO 7/22/24@mWS@2-20ng/ml	Expires On:	01/18/2025
EQ2400438-02	100.00µL	EQ2400438-03	100.00µL				
Name:	1613B Labeled Working Standard	Inventory ID	236613	Logbook Ref:	OO/8/5/24@LWS@2-4ng/ml	Expires On:	10/01/2024
E2400878-001	1,000.00µL	E2400879-001	1,000.00µL	E2400902-001	1,000.00µL	E2400920-001	1,000.00µL
E2400920-003	1,000.00µL	E2400920-004	1,000.00µL	E2400920-005	1,000.00µL	E2400920-006	1,000.00µL
EQ2400438-01	1,000.00µL	EQ2400438-02	1,000.00µL	EQ2400438-03	1,000.00µL		

Preparation Information Benchsheet

Prep Run#: 443085
Team: Semivoa GCMS/OOLUJIMI

Prep WorkFlow: OrgExts(365)
Prep Method: Method Soxhlet

Status: Prepped
Prep Date/Time: 8/13/24 12:43

Preparation Materials

Carbon, High Purity	DD071224 (236214)	Ethyl Acetate 99.9% Minimum EtOAc	OO 12/8/23 Ethylacet (232679)	Glass Wool	DD040124 (234357)
Sulfuric Acid Reagent Grade H2SO4	TW 04/28/23 (228939)	Hexanes 95%	DD081224 (236746)	Dichloromethane (Methylene Chloride) 99.9% MeCl2	MD 07/16/2024 (236301)
Sodium Hydroxide 1N NaOH	DD070124 (236029)	Sodium Sulfate Anhydrous Reagent Grade Na2SO4	DD062124 (235888)	Silica Gel	OO 8/6/24@silica gel (236631)
Toluene 99.9% Minimum	OO 7/10/24 @Toluene (236177)				

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	8/13/24 12:43	Started:	8/14/24 09:15	Started:	8/14/24 09:50	Started:	8/14/24 12:05
Finished:	8/14/24 09:00	Finished:	8/14/24 09:45	Finished:	8/14/24 12:00	Finished:	8/14/24 14:45
By:	OOLUJIMI	By:	DDO	By:	DDO	By:	DDO
Comments		Comments		Comments		Comments	

Comments:

Reviewed By: TW Date: 08/23/24

Chain of Custody

Relinquished By:	Date:	Extracts Examined
Received By:	Date:	Yes No



Analytical Results

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: 07/24/24 08:40
Date Received: 07/26/24 11:00

Sample Name: Biosolid
Lab Code: E2400879-001

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.030g

Date Analyzed: 09/01/24 01:50
Date Extracted: 8/13/24
Instrument Name: E-HRMS-08
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P641687

Data File Name: P641697
ICAL Date: 08/02/24

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	1.68	3.93			1
1,2,3,7,8-PeCDD	ND	U	0.190	19.6			1
1,2,3,4,7,8-HxCDD	ND	U	0.301	19.6			1
1,2,3,6,7,8-HxCDD	ND	U	0.268	19.6			1
1,2,3,7,8,9-HxCDD	ND	U	0.274	19.6			1
1,2,3,4,6,7,8-HpCDD	3.07		0.259	0.259	1.09	1.000	1
OCDD	16.2JK		0.410	39.3	0.72	1.000	1
2,3,7,8-TCDF	ND	U	1.32	3.93			1
1,2,3,7,8-PeCDF	ND	U	0.491	19.6			1
2,3,4,7,8-PeCDF	ND	U	0.457	19.6			1
1,2,3,4,7,8-HxCDF	0.283BJK		0.142	19.6	0.57	1.000	1
1,2,3,6,7,8-HxCDF	0.460BJ		0.148	19.6	1.36	1.000	1
1,2,3,7,8,9-HxCDF	1.14JK		0.235	19.6	1.68	1.000	1
2,3,4,6,7,8-HxCDF	ND	U	0.165	19.6			1
1,2,3,4,6,7,8-HpCDF	2.05JK		0.203	19.6	1.26	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.256	19.6			1
OCDF	3.83JK		0.679	39.3	0.45	1.006	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: 07/24/24 08:40
Date Received: 07/26/24 11:00

Sample Name: Biosolid
Lab Code: E2400879-001

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.030g

Date Analyzed: 09/01/24 01:50
Date Extracted: 8/13/24
Instrument Name: E-HRMS-08
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P641687

Data File Name: P641697
ICAL Date: 08/02/24

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	1.68	3.93			1
Total Penta-Dioxins	ND	U	0.190	19.6			1
Total Hexa-Dioxins	ND	U	0.280	19.6			1
Total Hepta-Dioxins	3.07J		0.259	19.6	1.09		1
Total Tetra-Furans	ND	U	1.32	3.93			1
Total Penta-Furans	ND	U	0.474	0.474			1
Total Hexa-Furans	0.460J		0.167	19.6	1.36		1
Total Hepta-Furans	1.18J		0.227	19.6	1.01		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: 07/24/24 08:40
Date Received: 07/26/24 11:00

Sample Name: Biosolid
Lab Code: E2400879-001

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.030g

Date Analyzed: 09/01/24 01:50
Date Extracted: 8/13/24
Instrument Name: E-HRMS-08
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P641687

Data File Name: P641697
ICAL Date: 08/02/24

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	807.491	40		25-164	0.77	1.019
13C-1,2,3,7,8-PeCDD	2000	962.774	48		25-181	1.59	1.176
13C-1,2,3,4,7,8-HxCDD	2000	962.306	48		32-141	1.36	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1020.534	51		28-130	1.36	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	861.419	43		23-140	1.01	1.065
13C-OCDD	4000	1491.125	37		17-157	0.89	1.141
13C-2,3,7,8-TCDF	2000	785.164	39		24-169	0.73	0.992
13C-1,2,3,7,8-PeCDF	2000	903.553	45		24-185	1.61	1.136
13C-2,3,4,7,8-PeCDF	2000	934.565	47		21-178	1.63	1.167
13C-1,2,3,4,7,8-HxCDF	2000	1053.471	53		26-152	0.53	0.972
13C-1,2,3,6,7,8-HxCDF	2000	926.337	46		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	768.495	38		29-147	0.50	1.008
13C-2,3,4,6,7,8-HxCDF	2000	910.354	46		28-136	0.50	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	792.012	40		28-143	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	804.064	40		26-138	0.42	1.078
37Cl-2,3,7,8-TCDD	800	789.900	99		35-197	NA	1.020

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: 07/24/24 08:40
Date Received: 07/26/24 11:00

Sample Name: Biosolid
Lab Code: E2400879-001

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Toxicity Equivalency Quotient

Analyte Name	Result	DL	MRL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	1.68	3.93	1	1	
1,2,3,7,8-PeCDD	ND	0.190	19.6	1	1	
1,2,3,4,7,8-HxCDD	ND	0.301	19.6	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.268	19.6	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.274	19.6	1	0.1	
1,2,3,4,6,7,8-HpCDD	3.07	0.259	0.259	1	0.01	0.0307
OCDD	16.2	0.410	39.3	1	0.0003	0.00486
2,3,7,8-TCDF	ND	1.32	3.93	1	0.1	
1,2,3,7,8-PeCDF	ND	0.491	19.6	1	0.03	
2,3,4,7,8-PeCDF	ND	0.457	19.6	1	0.3	
1,2,3,4,7,8-HxCDF	0.283	0.142	19.6	1	0.1	0.0283
1,2,3,6,7,8-HxCDF	0.460	0.148	19.6	1	0.1	0.0460
1,2,3,7,8,9-HxCDF	1.14	0.235	19.6	1	0.1	0.114
2,3,4,6,7,8-HxCDF	ND	0.165	19.6	1	0.1	
1,2,3,4,6,7,8-HpCDF	2.05	0.203	19.6	1	0.01	0.0205
1,2,3,4,7,8,9-HpCDF	ND	0.256	19.6	1	0.01	
OCDF	3.83	0.679	39.3	1	0.0003	0.00115
Total TEQ						0.246

2005 WHO TEFs, ND = 0

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid
Sample Name: Biosolid
Lab Code: E2400879-001

Service Request: E2400879
Date Collected: 07/24/24 08:40
Date Received: 07/26/24 11:00
Units: Percent
Basis: NA

Total Solids

Analysis Method: ALS SOP
5.3865g

Date Analyzed: 08/16/24 12:24
NA
E-Balance-01

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Solids	12.7		-	-			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2400438-01

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.012g

Date Analyzed: 08/22/24 12:53
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P549704

Data File Name: P549706
ICAL Date: 01/19/24

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.275	0.499			1
1,2,3,7,8-PeCDD	0.153JK		0.104	2.50	2.36	1.000	1
1,2,3,4,7,8-HxCDD	0.210JK		0.109	2.50	0.86	1.001	1
1,2,3,6,7,8-HxCDD	ND	U	0.0971	2.50			1
1,2,3,7,8,9-HxCDD	ND	U	0.101	2.50			1
1,2,3,4,6,7,8-HpCDD	0.111K		0.0284	0.0284	0.77	1.000	1
OCDD	0.441JK		0.0609	4.99	0.70	1.000	1
2,3,7,8-TCDF	ND	U	0.322	0.499			1
1,2,3,7,8-PeCDF	ND	U	0.105	2.50			1
2,3,4,7,8-PeCDF	ND	U	0.0974	2.50			1
1,2,3,4,7,8-HxCDF	0.0657JK		0.0147	2.50	0.64	1.000	1
1,2,3,6,7,8-HxCDF	0.0550JK		0.0159	2.50	0.49	1.000	1
1,2,3,7,8,9-HxCDF	0.0634JK		0.0231	2.50	0.22	1.000	1
2,3,4,6,7,8-HxCDF	0.0507JK		0.0173	2.50	2.66	1.000	1
1,2,3,4,6,7,8-HpCDF	0.0751JK		0.0102	2.50	0.65	1.001	1
1,2,3,4,7,8,9-HpCDF	0.131JK		0.0122	2.50	0.77	1.000	1
OCDF	ND	U	0.213	4.99			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2400438-01

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.012g

Date Analyzed: 08/22/24 12:53
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI

Data File Name: P549706
ICAL Date: 01/19/24

Blank File Name: P549706
Cal Ver. File Name: P549704

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	ND	U	0.275	0.499			1
Total Penta-Dioxins	ND	U	0.104	2.50			1
Total Hexa-Dioxins	ND	U	0.102	2.50			1
Total Hepta-Dioxins	ND	U	0.0284	2.50			1
Total Tetra-Furans	ND	U	0.322	0.499			1
Total Penta-Furans	ND	U	0.101	0.101			1
Total Hexa-Furans	ND	U	0.0173	2.50			1
Total Hepta-Furans	ND	U	0.0111	2.50			1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: EQ2400438-01

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.012g

Date Analyzed: 08/22/24 12:53
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P549704

Data File Name: P549706
ICAL Date: 01/19/24

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1188.560	59		25-164	0.81	1.020
13C-1,2,3,7,8-PeCDD	2000	1676.505	84		25-181	1.65	1.179
13C-1,2,3,4,7,8-HxCDD	2000	1367.773	68		32-141	1.33	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1514.284	76		28-130	1.35	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1505.378	75		23-140	1.06	1.066
13C-OCDD	4000	2639.362	66		17-157	0.91	1.139
13C-2,3,7,8-TCDF	2000	1230.290	62		24-169	0.77	0.993
13C-1,2,3,7,8-PeCDF	2000	1773.301	89		24-185	1.62	1.138
13C-2,3,4,7,8-PeCDF	2000	1855.385	93		21-178	1.60	1.170
13C-1,2,3,4,7,8-HxCDF	2000	1847.531	92		26-152	0.52	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1634.774	82		26-123	0.53	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1535.282	77		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1600.939	80		28-136	0.51	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1593.017	80		28-143	0.44	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	1759.224	88		26-138	0.44	1.079
37Cl-2,3,7,8-TCDD	800	791.894	99		35-197	NA	1.020



Accuracy & Precision

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Analyzed: 08/22/24
Date Extracted: 08/13/24

Duplicate Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Units: ng/Kg
Basis: Dry
Analysis Lot: 851890

Lab Control Sample
EQ2400438-02

Duplicate Lab Control Sample
EQ2400438-03

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2,3,4,6,7,8-HpCDD	88.8	98.5	90	93.1	99.5	94	70-140	5	50
1,2,3,4,7,8-HxCDD	100	98.5	102	101	99.5	101	70-164	<1	50
1,2,3,6,7,8-HxCDD	86.6	98.5	88	88.3	99.5	89	76-134	2	50
1,2,3,7,8,9-HxCDD	92.0	98.5	93	95.9	99.5	96	64-162	4	50
1,2,3,7,8-PeCDD	86.7	98.5	88	89.2	99.5	90	70-142	3	50
2,3,7,8-TCDD	16.9	19.7	86	16.7	19.9	84	67-158	1	50
OCDD	188	197	96	188	199	94	78-144	<1	50
1,2,3,4,6,7,8-HpCDF	98.6	98.5	100	97.6	99.5	98	82-122	1	50
1,2,3,4,7,8,9-HpCDF	87.5	98.5	89	88.2	99.5	89	78-138	<1	50
1,2,3,4,7,8-HxCDF	79.3	98.5	81	81.2	99.5	82	72-134	2	50
1,2,3,6,7,8-HxCDF	85.9	98.5	87	84.1	99.5	84	84-130	2	50
1,2,3,7,8,9-HxCDF	86.9	98.5	88	88.4	99.5	89	78-130	2	50
1,2,3,7,8-PeCDF	89.6	98.5	91	91.9	99.5	92	80-134	3	50
2,3,4,6,7,8-HxCDF	87.1	98.5	88	91.8	99.5	92	70-156	5	50
2,3,4,7,8-PeCDF	89.3	98.5	91	87.6	99.5	88	68-160	2	50
2,3,7,8-TCDF	17.4	19.7	89	17.4	19.9	88	75-158	<1	50
OCDF	232	197	118	234	199	118	63-170	<1	50

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Analyzed: 08/22/24
Date Extracted: 08/13/24

Lab Control Sample Summary

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet

Units: ng/Kg
Basis: Dry
Analysis Lot: 851890

EQ2400438-02

Analyte Name	Result	Spike Amount	% Rec	% Rec Limits
1,2,3,4,6,7,8-HpCDD	88.8	98.5	90	70-140
1,2,3,4,7,8-HxCDD	100	98.5	102	70-164
1,2,3,6,7,8-HxCDD	86.6	98.5	88	76-134
1,2,3,7,8,9-HxCDD	92.0	98.5	93	64-162
1,2,3,7,8-PeCDD	86.7	98.5	88	70-142
2,3,7,8-TCDD	16.9	19.7	86	67-158
OCDD	188	197	96	78-144
1,2,3,4,6,7,8-HpCDF	98.6	98.5	100	82-122
1,2,3,4,7,8,9-HpCDF	87.5	98.5	89	78-138
1,2,3,4,7,8-HxCDF	79.3	98.5	81	72-134
1,2,3,6,7,8-HxCDF	85.9	98.5	87	84-130
1,2,3,7,8,9-HxCDF	86.9	98.5	88	78-130
1,2,3,7,8-PeCDF	89.6	98.5	91	80-134
2,3,4,6,7,8-HxCDF	87.1	98.5	88	70-156
2,3,4,7,8-PeCDF	89.3	98.5	91	68-160
2,3,7,8-TCDF	17.4	19.7	89	75-158
OCDF	232	197	118	63-170

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2400438-02

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.155g

Date Analyzed: 08/22/24 20:08
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P549704

Data File Name: P549715
ICAL Date: 01/19/24

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	16.9		0.398	0.492	0.82	1.001	1
1,2,3,7,8-PeCDD	86.7		0.124	2.46	1.64	1.000	1
1,2,3,4,7,8-HxCDD	100		0.0751	2.46	1.34	1.000	1
1,2,3,6,7,8-HxCDD	86.6		0.0703	2.46	1.34	1.000	1
1,2,3,7,8,9-HxCDD	92.0		0.0711	2.46	1.28	1.007	1
1,2,3,4,6,7,8-HpCDD	88.8		0.156	0.156	1.05	1.000	1
OCDD	188		0.879	4.92	0.94	1.000	1
2,3,7,8-TCDF	17.4		0.474	0.492	0.66	1.001	1
1,2,3,7,8-PeCDF	89.6		0.135	2.46	1.47	1.001	1
2,3,4,7,8-PeCDF	89.3		0.130	2.46	1.43	1.000	1
1,2,3,4,7,8-HxCDF	79.3		0.0228	2.46	1.18	1.000	1
1,2,3,6,7,8-HxCDF	85.9		0.0253	2.46	1.14	1.000	1
1,2,3,7,8,9-HxCDF	86.9		0.0331	2.46	1.13	1.000	1
2,3,4,6,7,8-HxCDF	87.1		0.0292	2.46	1.14	1.000	1
1,2,3,4,6,7,8-HpCDF	98.6		0.468	2.46	0.99	1.000	1
1,2,3,4,7,8,9-HpCDF	87.5		0.558	2.46	0.98	1.000	1
OCDF	232		0.548	4.92	0.89	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2400438-02

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.155g

Date Analyzed: 08/22/24 20:08
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI

Data File Name: P549715
ICAL Date: 01/19/24

Blank File Name: P549706
Cal Ver. File Name: P549704

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	16.9		0.398	0.492	0.82		1
Total Penta-Dioxins	86.7		0.124	2.46	1.64		1
Total Hexa-Dioxins	279		0.0720	2.46	1.34		1
Total Hepta-Dioxins	88.8		0.156	2.46	1.05		1
Total Tetra-Furans	17.4		0.474	0.492	0.66		1
Total Penta-Furans	181		0.133	0.133	1.47		1
Total Hexa-Furans	339		0.0271	2.46	1.18		1
Total Hepta-Furans	186		0.510	2.46	0.99		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Lab Control Sample
Lab Code: EQ2400438-02

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.155g

Date Analyzed: 08/22/24 20:08
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P549704

Data File Name: P549715
ICAL Date: 01/19/24

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1432.533	72		25-164	0.79	1.020
13C-1,2,3,7,8-PeCDD	2000	1852.482	93		25-181	1.59	1.180
13C-1,2,3,4,7,8-HxCDD	2000	1491.290	75		32-141	1.37	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1650.397	83		28-130	1.23	0.994
13C-1,2,3,4,6,7,8-HpCDD	2000	1614.191	81		23-140	1.10	1.066
13C-OCDD	4000	3049.387	76		17-157	0.90	1.140
13C-2,3,7,8-TCDF	2000	1460.079	73		24-169	0.79	0.994
13C-1,2,3,7,8-PeCDF	2000	2051.253	103		24-185	1.59	1.138
13C-2,3,4,7,8-PeCDF	2000	2054.843	103		21-178	1.64	1.170
13C-1,2,3,4,7,8-HxCDF	2000	2109.569	105		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1890.934	95		26-123	0.53	0.975
13C-1,2,3,7,8,9-HxCDF	2000	1926.153	96		29-147	0.52	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1743.862	87		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1832.864	92		28-143	0.46	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	2014.798	101		26-138	0.45	1.079
37Cl-2,3,7,8-TCDD	800	964.601	121		35-197	NA	1.021

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2400438-03

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.052g

Date Analyzed: 08/22/24 20:57
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI

Data File Name: P549716
ICAL Date: 01/19/24

Blank File Name: P549706
Cal Ver. File Name: P549704

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	16.7		0.215	0.497	0.79	1.001	1
1,2,3,7,8-PeCDD	89.2		0.0737	2.49	1.59	1.000	1
1,2,3,4,7,8-HxCDD	101		0.0295	2.49	1.28	1.000	1
1,2,3,6,7,8-HxCDD	88.3		0.0278	2.49	1.25	1.000	1
1,2,3,7,8,9-HxCDD	95.9		0.0280	2.49	1.32	1.007	1
1,2,3,4,6,7,8-HpCDD	93.1		0.0879	0.0879	1.05	1.000	1
OCDD	188		0.566	4.97	0.90	1.000	1
2,3,7,8-TCDF	17.4		0.277	0.497	0.67	1.001	1
1,2,3,7,8-PeCDF	91.9		0.140	2.49	1.41	1.001	1
2,3,4,7,8-PeCDF	87.6		0.130	2.49	1.44	1.000	1
1,2,3,4,7,8-HxCDF	81.2		0.0155	2.49	1.21	1.000	1
1,2,3,6,7,8-HxCDF	84.1		0.0167	2.49	1.15	1.000	1
1,2,3,7,8,9-HxCDF	88.4		0.0218	2.49	1.16	1.000	1
2,3,4,6,7,8-HxCDF	91.8		0.0197	2.49	1.15	1.000	1
1,2,3,4,6,7,8-HpCDF	97.6		0.415	2.49	1.00	1.000	1
1,2,3,4,7,8,9-HpCDF	88.2		0.499	2.49	1.01	1.000	1
OCDF	234		0.997	4.97	0.88	1.005	1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2400438-03

Units: ng/Kg
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.052g

Date Analyzed: 08/22/24 20:57
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P549704

Data File Name: P549716
ICAL Date: 01/19/24

Native Analyte Results

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
Total Tetra-Dioxins	16.7		0.215	0.497	0.79		1
Total Penta-Dioxins	89.2		0.0737	2.49	1.59		1
Total Hexa-Dioxins	285		0.0284	2.49	1.28		1
Total Hepta-Dioxins	93.1		0.0879	2.49	1.05		1
Total Tetra-Furans	17.4		0.277	0.497	0.67		1
Total Penta-Furans	180		0.135	0.135	1.41		1
Total Hexa-Furans	347		0.0182	2.49	1.21		1
Total Hepta-Furans	186		0.454	2.49	1.00		1

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client: Eastern Analytical, Inc.
Project: EAI ID# 282628
Sample Matrix: Sludge, Solid

Service Request: E2400879
Date Collected: NA
Date Received: NA

Sample Name: Duplicate Lab Control Sample
Lab Code: EQ2400438-03

Units: Percent
Basis: Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analysis Method: 1613B
Prep Method: Method Soxhlet
Sample Amount: 10.052g

Date Analyzed: 08/22/24 20:57
Date Extracted: 8/13/24
Instrument Name: E-HRMS-07
GC Column: DB-5MSUI
Blank File Name: P549706
Cal Ver. File Name: P549704

Data File Name: P549716
ICAL Date: 01/19/24

Labeled Standard Results

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	% Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1505.409	75		25-164	0.79	1.019
13C-1,2,3,7,8-PeCDD	2000	1931.040	97		25-181	1.61	1.179
13C-1,2,3,4,7,8-HxCDD	2000	1577.049	79		32-141	1.30	0.991
13C-1,2,3,6,7,8-HxCDD	2000	1655.508	83		28-130	1.29	0.993
13C-1,2,3,4,6,7,8-HpCDD	2000	1712.945	86		23-140	1.03	1.066
13C-OCDD	4000	3130.267	78		17-157	0.92	1.140
13C-2,3,7,8-TCDF	2000	1567.357	78		24-169	0.79	0.993
13C-1,2,3,7,8-PeCDF	2000	2103.445	105		24-185	1.61	1.138
13C-2,3,4,7,8-PeCDF	2000	2238.932	112		21-178	1.62	1.169
13C-1,2,3,4,7,8-HxCDF	2000	2184.596	109		26-152	0.52	0.972
13C-1,2,3,6,7,8-HxCDF	2000	2019.928	101		26-123	0.52	0.974
13C-1,2,3,7,8,9-HxCDF	2000	2030.980	102		29-147	0.51	1.008
13C-2,3,4,6,7,8-HxCDF	2000	1873.104	94		28-136	0.52	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1958.763	98		28-143	0.45	1.041
13C-1,2,3,4,7,8,9-HpCDF	2000	2164.912	108		26-138	0.44	1.078
37Cl-2,3,7,8-TCDD	800	1051.770	131		35-197	NA	1.020

ANALYTICAL SERVICES, INC.

Microbiological Testing, Research and Consulting

130 Allen Brook Lane, Williston, VT 05495 USA
800.723.4432 / 802.878.5138
www.analyticalservices.com

September 10, 2024

Jennifer Laramie
Eastern Analytical
25 Chennell Drive
Concord, NH 03301

Project # 72867

Dear Kim,

Enclosed please find the results of the analyses performed on the sample(s) received in our laboratory on July 26, 2024.

This report contains three (3) pages, including this cover page and the Chain of Custody forms. The results reported herein apply only to the samples included in this report, as received at Analytical Services, Inc. (ASI). These results were generated under ASI's laboratory quality system; any deviations or nonconformances are noted. This report shall not be reproduced, except in full, without written permission from ASI.

Comments: NA

Thank you for using ASI for your testing needs. If you have any questions, or if we may be of further service, please contact us at any time.

Sincerely,
ANALYTICAL SERVICES, INC.


Harry D. Christman, PhD (for)
Technical Director

HDC/hdc

ANALYTICAL SERVICES, INC.
Microbiological Testing, Research and Consulting

Client:

Jennifer Laramie
 Eastern Analytical
 25 Channel Drive
 Concord, NH 03301

130 Allen Brook Lane, Williston, VT 05495 USA
 800.723.4432 / 802.878.5138
 www.analyticalservices.com

ASI Project ID: 72867
 Date Collected: 7/24/2024
 Sample Receipt: 7/26/2024

Analytical Results

Client Sample ID	ASI Sample ID	Date/Time Collected	Parameter	Amount Analyzed	Result	Date/Time Analyzed	
						Start	End
Biosolid EA# 282628	72867-01	7/24/2024 8:40	Enteric Virus	4.63 g Dry Weight	<1 PFU / 4.63 g Dry Weight	8/8/2024 9:57	8/29/2024 10:05
			Total Solids	28.80 g Wet Weight	13.01%	8/8/2024 10:27	8/9/2024 8:25

g = Grams; MPN = Most Probable Number; PFU = Plaque Forming Units

Methods Used under 40CFR Part 503

Enteric Viruses (Solids): ASTM Method D 4994-96, 1996, US EPA Manual of Methods for Virology, EPA600/4-84/013 (R-10), EPA 625/R-92/013 App. H, Enteric Viruses
 - Freeze Date: 6/7/24/2024 16:00 (Eastern Analytical). Sample aliquots were received frozen at ASI and remained so for up to 14 days from collection while cells were propagated for virus analysis (ref: US EPA EPA625/R-92/013, Table 9.2).
 Percent Solids: APHA, AWWA, WEF, Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, Washington, DC, Method 2540G, Modified (ASI uses overnight drying prior to dry weight measurement rather than shorter drying times that have to be repeated until a constant dry weight measurement is obtained; ASI is certified for this modification under TUNNELAC by FL-DCH).
 Exceptions/Notes:
 None

2/3

CHAIN-OF-CUSTODY RECORD



Eastern Analytical, Inc.
Professional Laboratory and Drilling Services

Sample ID _____ Date Sampled Matrix _____

aParameters

EAI ID# **286628**

Page 1

Sample Notes

Biosolid | 7/24/2024 | sludge | Subcontract - Enteric Virus
08:40

282628

0.1° Frozen
IR
2

EAI ID# **286628**

Project State: NH

Project ID: 848

Results Needed: Preferred Date: Standard

QC Deliverables

RUSH Due Date: _____

☒ A ☐ A+ ☐ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com

Company Analytical Services Inc.

Address 130 Allen Brook Lane

Address Williston, VT 05495

Account #

Phone # 800-723-4432

PO #:

EAI ID# *282628*

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGA

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

1/26/24 0855

Relinquished by

Date/Time

Received by

Relinquished by

Date/Time

Received by

Eastern Analytical, Inc. 51 Antim Ave Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damage arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees



Thursday, August 01, 2024

Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Project ID: 286628
SDG ID: GCR26899
Sample ID#s: CR26899

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in cursive script, reading "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

August 01, 2024

SDG I.D.: GCR26899

Project ID: 286628

Client Id	Lab Id	Matrix
BIOSOLID	CR26899	SLUDGE



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

August 01, 2024

FOR: Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Sample Information

Matrix: SLUDGE
Location Code: EASTANAL-NH
Rush Request: Standard
P.O.#: US0543822157

Custody Information

Collected by:
Received by: SR1
Analyzed by: see "By" below

<u>Date</u>	<u>Time</u>
07/24/24	8:40
07/25/24	15:12

Laboratory Data

SDG ID: GCR26899
Phoenix ID: CR26899

Project ID: 286628
Client ID: BIOSOLID

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	13		%		07/25/24	CV	SW846-%Solid
Total Cyanide (SW9010C Distill.)	< 3.85	3.85	mg/Kg	1	07/30/24	DK/KL1	SW9012B
Tot.Org.Carbon	223000	100	mg/kg	1	07/31/24	EG	L. Kahn
Tot.Org.Carbon Preparation	Completed				07/26/24	EG	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

August 01, 2024

Reviewed and Released by: Anil Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



QA/QC Report

August 01, 2024

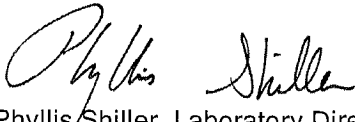
QA/QC Data

SDG I.D.: GCR26899

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 742003 (mg/Kg), QC Sample No: CR27063 50X (CR26899)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.52	<0.52	NC	109			105			80 - 120	30
QA/QC Batch 742885 (%), QC Sample No: CR27889 (CR26899)													
Tot.Org.Carbon	BRL	0.1		3.41		90.9						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference


Phyllis Shiller, Laboratory Director
August 01, 2024

Thursday, August 01, 2024

Criteria: None

State: NH

Sample Criteria Exceedances Report

GCR26899 - EASTANAL-NH

SampleNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis
								Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

August 01, 2024

SDG I.D.: GCR26899

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

1.5% WCLP

Page 1

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damage arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

customer.service@easternanalytical.com



Eastern Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

282628

01/11/2021

Date/Time

Composites need start
and stop dates/times

Matrix

Parameters and Sample Notes

of containers

Sample IDs	Date/Time	Matrix	Parameters and Sample Notes	# of containers
Biosolid	7/24 0840	sludge Grab or Comp	SoTotDy/V8260/ABN/ICPMets.As.Cd.Cr.Cu.K.P.Pb.Mo.Ni.Se.Zn.Sb.Be.Ag.Tl.Hg.Ca.Mg.Fe. Na/Pest/PCB/NO3NO2/TKN/NH3/TION/Cyant/DioxFurSol1613SubALSTX/EntericVirusSubASIT/OCSolSubPELTVS/CI SolAsRecpH/TS	8

☐ Sampler confirms ID and parameters are accurate	Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEOH Na ₂ S ₂ O ₃ ICE	Dissolved Sample Field Filtered ☐

Trip Blank	7/24 0840	sludge Grab or Comp	SoTotDy/V8260	1

☐ Sampler confirms ID and parameters are accurate	Circle preservative/s: HCL HNO ₃ H ₂ SO ₄ NaOH MEOH Na ₂ S ₂ O ₃ ICE	Dissolved Sample Field Filtered ☐

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 848

Project Name Biosolids Test | July 2024

State NH

Client (Pro Mgr) Curtis Slayton

Customer Seabrook, Town of - Sewer

Address PO Box 456

City Seabrook NH 03874

Phone 474-8012 Fax 474-8014

Email: cslayton@seabrooknh.org

Direct 603-474-9921

Results Needed by: Preferred date

Notes:

Reporting Options

☒ HC ☐ NO FAX ☐ PO# verbal

☒ EDD PDF ☐ Partial FAX ☐ Quote#:

☒ EDD email ☐ PDF Invoice

☐ PDF prelim, NO FAX ☐ EQUIS

☐ e-mail Login Confirmation

Samples Collected by: Duane E. White Ice Y ☒ N ☐

Relinquished by: 7/24/24 12:57 Received by: 7/24/24 12:57

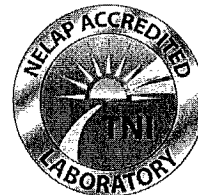
Date/Time 7/24/24 3:20

Relinquished by: 7/24/24 3:20 Received by: 7/24/24 3:20

Date/Time 7/24/24 3:20

Relinquished by: 7/24/24 3:20 Received by: 7/24/24 3:20

Daumanic Fucile
Seabrook, Town of - Sewer Department
PO Box 456
Seabrook, NH 03874



Laboratory Report for:

Eastern Analytical, Inc. ID: 288682
Client Identification: Biosolids
Date Received: 10/31/2024

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and Pennsylvania (68-06263). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

11.20.24
Date



SAMPLE CONDITIONS PAGE

EAI ID#: 288682

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Temperature upon receipt (°C): **4.7**

Received on ice or cold packs (Yes/No): **Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
288682.01	Cake 1	10/31/24	10/31/24 08:50	sludge	14.6	Adheres to Sample Acceptance Policy
288682.02	Cake 2	10/31/24	10/31/24 08:50	sludge		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.



LABORATORY REPORT

EAI ID#: 288682

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Client Sample ID: Cake 1
Lab Sample ID: 288682.01
Matrix: sludge
Date Sampled: 10/31/24
Date Received: 10/31/24

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Method	Analyst
Solids Total	14.3	1	1	Percent	11/5/24	16:03	2540G-11	SRG
Solids Total Volatile	91.7	7	7	Percent	11/5/24	16:03	2540G-11	SRG
Chloride	910	80	8	mg/kg	11/4/24	14:59	9056A	SRG
Nitrate/Nitrite-N	83	40	8	mg/kg	11/4/24	14:59	9056A	SRG
Ammonia-N	3700	30	7	mg/kg	11/12/24	14:50	4500NH3D-11	PHA
Total Organic Nitrogen	85300	5	7	mg/kg	11/13/24	11:02	CALC	PEN
TKN	89000	2000	21	mg/kg	11/12/24	20:37	4500N _{org} C/NH3D-11	GRS
pH	6.31	0.1	1	SU	11/1/24	15:30	9045D	PHA
Paint Filter (Free Liquid)	Absent			None	11/14/24	16:28	9095	PEN

Cake 1: Due to the sample matrix, the pH method was modified to add approximately 10g of sample to 20mL of water.



QC REPORT

EAI ID#: 288682

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Solids Total	< 1	NA	NA	Percent	11/5/24			2540G-11
Solids Total Volatile	< 1	NA	NA	Percent	11/5/24			2540G-11
Chloride	< 10	190 (100 %R)	190 (100 %R) (0 RPD)	mg/kg	11/4/24	90 - 110	15	9056A
Nitrate/Nitrite-N	< 5	36 (94 %R)	35 (94 %R) (0 RPD)	mg/kg	11/4/24	90 - 110	15	9056A
Ammonia-N	< 5	41 (103 %R)	43 (110 %R) (6 RPD)	mg/kg	11/12/24	90 - 110	20	4500NH3D-11
TKN	< 100	1500 (106 %R)	1500 (106 %R) (0 RPD)	mg/kg	11/12/24	90 - 110	20	4500N _{org} C/NH3D-11
pH	NA	8.02 (100 %R)	7.94 (99 %R) (1 RPD)	SU	11/1/24	7.91 - 8.09	10	9045D

*// Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



LABORATORY REPORT

EAI ID#: 288682

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Client Sample ID: Cake 1

Lab Sample ID: 288682.01

Matrix: sludge

Date Sampled: 10/31/24

Date Received: 10/31/24

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time	Method	Analyst
Arsenic	3.8	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Calcium	16000	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Cadmium	0.55	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Chromium	22	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Copper	520	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Iron	5200	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Iron	5200	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Lead	8.8	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Magnesium	4900	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Mercury	0.21	0.05	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Molybdenum	6.5	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Nickel	29	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Phosphorus	23000	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Potassium	7300	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Selenium	3.4	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Sodium	1800	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Sodium	1800	100	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS
Zinc	540	0.5	25	SolTotDry	mg/kg	11/9/24	4:46	6020B	DS



QC REPORT

EAI ID#: 288682

Client: **Seabrook, Town of - Sewer Department**

Client Designation: **Biosolids**

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.5	39 (97 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Calcium	< 100	420 (96 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Cadmium	< 0.5	36 (91 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Chromium	< 0.5	38 (96 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Copper	< 0.5	38 (96 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Iron	< 100	430 (98 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Lead	< 0.5	38 (94 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Magnesium	< 100	470 (108 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Mercury	< 0.1	0.39 (99 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Molybdenum	< 0.5	38 (95 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Nickel	< 0.5	39 (98 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Phosphorus	< 100	430 (107 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Potassium	< 100	470 (108 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Selenium	< 0.5	41 (104 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Sodium	< 100	480 (109 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B
Zinc	< 5	39 (97 %R)	NA	mg/kg	11/9/24	80 - 120	20	6020B

*! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.



Tuesday, November 12, 2024

Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Project ID: 288682
SDG ID: GCR98774
Sample ID#s: CR98774

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in cursive script that reads "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

November 12, 2024

SDG I.D.: GCR98774

Project ID: 288682

Client Id	Lab Id	Matrix
CAKE 2	CR98774	SLUDGE



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



Analysis Report

November 12, 2024

FOR: Attn: Front Office
Eastern Analytical
51 Antrim Ave
Concord, NH 03301

Sample Information

Matrix: SLUDGE
Location Code: EASTANAL-NH
Rush Request: Standard
P.O.#: US0543822157

Custody Information

Collected by:
Received by: B
Analyzed by: see "By" below

<u>Date</u>	<u>Time</u>
10/31/24	8:50
11/04/24	14:37

Laboratory Data

SDG ID: GCR98774
Phoenix ID: CR98774

Project ID: 288682
Client ID: CAKE 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	14.7	0.05	%		11/05/24		SW846-%Solid
Total Solids @ 104C	14.7	0.1	%	1	11/05/24	KL1/EC	SM2540B-15
Tot.Org.Carbon	409000	100	mg/kg	1	11/11/24	EG	L. Kahn
Tot.Org.Carbon Preparation	Completed				11/04/24	EG	

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

November 12, 2024

Reviewed and Released by: Anil Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102



QA/QC Report

November 12, 2024

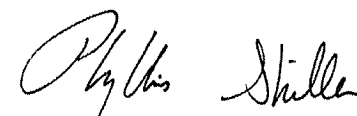
QA/QC Data

SDG I.D.: GCR98774

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 756935 (%), QC Sample No: CR98499 (CR98774)													
Total Solids	BRL	0.1	6.03	5.97	1.00	100						85 - 115	30
QA/QC Batch 757763 (mg/kg), QC Sample No: CR98774 (CR98774)													
Tot.Org.Carbon	BRL	100	409000	391000	4.50	103						75 - 125	30
Comment:													
Additional criteria matrix spike acceptance range is 75-125%.													

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference
- (ISO) - Isotope Dilution


Phyllis Shiller, Laboratory Director
November 12, 2024

Criteria: None

State: NH

Sample Criteria Exceedances Report

GCR98774 - EASTANAL-NH

SampleNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units
*** No Data to Display ***								

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

November 12, 2024

SDG I.D.: GCR98774

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

CHAIN-OF-CUSTODY RECORD



Sample ID _____ Date Sampled _____ Matrix _____ aParameters _____ Sample Notes _____

Cake 2 | 10/31/2024 | sludge | Subcontract - TOC Lloyd Kahn (PEL) | 08:50

98774

1x 402 jar (KD)

EAI ID# 288682 Project State: NH Project ID: 848

Company Phoenix Environmental Labs
Address 587 East Middle Turnpike
Address Manchester, CT 06040
Account #
Phone # (860) 645-1102

Results Needed: Preferred Date: Standard

QC Deliverables RUSH Due Date: _____
☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP
Notes about project:
Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

PO #: US0543822157 EAI ID# 288682

Data Deliverable (circle)
Excel NH EMD Equis MEGA

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: Joe Palmer Date/Time: 10-31-24 06:40 Received by: [Signature]
Relinquished by: [Signature] Date/Time: 10-31-24 10:45 Received by: [Signature]
Relinquished by: [Signature] Date/Time: 11/14/24 14:37 Received by: [Signature]

Eastern Analytical, Inc. 51 Antrim Ave Concord, NH 03301 Phone: (603) 228-0525 1-800-287-0525 customerservice@easternanalytical.com
As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damage arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

CHAIN-OF-CUSTODY RECORD

288682

SEABROOK

Date/Time
Composites need start
and stop dates/times

Matrix

Parameters and Sample Notes

of containers

Cake 1

10/31
0850

sludge
Grab or Comp

SoITotDry/ICPMets, As, Cd, Cr, Cu, K, P, Pb, Mo, Ni, Se, Zn, Fe, Ca, Mg, Na, Hg, Fe, Na/NO3NO2/TKN/TONTVS/CIN/H3
SoIASRec/pH/TS/PfFtr

2

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL, HNO₃, H₂SO₄, NaOH, MEOH, Na₂S₂O₄, ICE

Dissolved Sample Field Filtered ☐

Cake 2

10/31
0850

sludge
Grab or Comp

SoITotDry/TOCsotSubPEL

1

☐ Sampler confirms ID and parameters are accurate

Circle preservative/s: HCL, HNO₃, H₂SO₄, NaOH, MEOH, Na₂S₂O₄, ICE

Dissolved Sample Field Filtered ☐

Please ensure this auto COC is accurate, adheres to permit or sampling requirements for this sampling event, and modify as necessary.

EAI Project ID 848

Project Name Biosolids

State NH

Client (Pro Mgr) Daumanic Fucile

Customer Seabrook, Town of - Sewer

Address PO Box 456

City Seabrook NH 03874

Phone 474-8012

Fax 474-8014

Email: DFucile@seabrooknh.org

Direct (603) 395-6223

Results Needed by: Preferred date _____
Notes:

Reporting Options

- ☐ HC ☐ NO FAX ☐ PO# verbal
☒ EDD PDF ☐ Partial FAX ☐ Quote#: 1013056
☒ EDD email ☐ PDF Invoice
☐ PDF prelim, NO FAX ☐ EQUIS
☐ e-mail Login Confirmation

Temp 47°C
Ice Y ☒ N ☐

Samples Collected by: DF

MA 10/31/24 10/31/24 Seabrook

Relinquished by: Sam 10/31/24 14:15 Received by: [Signature]

QC deliverables
☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Relinquished by: [Signature] Date/Time: 10/31/24 14:15 Received by: [Signature]

September 15, 2022

Mr. Evan Kelley
Casella Organics
755 Banfield Rd
Suite 201
Portsmouth, NH 03801

RE: Katahdin Lab Number: SP4718
Project ID: PFAS Sampling Seabrook
Project Manager: Mr. Darrian Lewry
Sample Receipt Date(s): August 25, 2022

Dear Mr. Kelley:

Please find enclosed the following information:

- * Laboratory results from subcontracted analysis (es)
- * Chain of Custody (COC)
- * Login Report

A copy of the Chain of Custody is included in the paginated report. If requested, the original COC is attached as an addendum to this report.

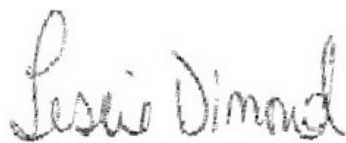
Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to <http://www.katahdinlab.com/cert> for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,
KATAHDIN ANALYTICAL SERVICES



Leslie Dimond - Quality Assurance Officer

09/15/2022

Date

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-96284-1

Client Project/Site: SP4718

For:

Katahdin Analytical Services
600 Technology Way
Scarborough, Maine 04074

Attn: Darrian Lewry



Authorized for release by:

9/15/2022 7:28:56 AM

Stephen Gordon, Senior Project Manager
(412)525-0071

Stephen.Gordon@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Katahdin Analytical Services SP4718 page 0000002 of 0000021

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Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



Stephen Gordon
Senior Project Manager
9/15/2022 7:28:56 AM

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Definitions/Glossary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Job ID: 410-96284-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative 410-96284-1

Receipt

The sample was received on 8/31/2022 10:11 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

PFAS

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Detection Summary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Client Sample ID: DEWATERED SLUDGE

Lab Sample ID: 410-96284-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid	6.4		4.0	1.3	ng/g	1		✱	537 (Mod)	Total/NA
Perfluorooctanoic acid	3.5	J	4.0	1.3	ng/g	1		✱	537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Client Sample ID: DEWATERED SLUDGE

Lab Sample ID: 410-96284-1

Date Collected: 08/25/22 08:55

Matrix: Solid

Date Received: 08/31/22 10:11

Percent Solids: 14.1

Method: 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid	ND		13	2.7	ng/g	☼	09/13/22 10:19	09/14/22 02:13	1
Perfluorooctanesulfonic acid	6.4		4.0	1.3	ng/g	☼	09/13/22 10:19	09/14/22 02:13	1
Perfluorooctanoic acid	3.5 J		4.0	1.3	ng/g	☼	09/13/22 10:19	09/14/22 02:13	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 PFBS	80		27 - 179				09/13/22 10:19	09/14/22 02:13	1
13C8 PFOA	69		26 - 159				09/13/22 10:19	09/14/22 02:13	1
13C8 PFOS	76		41 - 154				09/13/22 10:19	09/14/22 02:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	85.9		1.0	1.0	%			09/01/22 08:28	1

Isotope Dilution Summary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Method: 537 (Mod) - EPA 537 Isotope Dilution

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	C3PFBS (27-179)	C8PFOA (26-159)	C8PFOS (41-154)
410-96284-1	DEWATERED SLUDGE	80	69	76
LCS 410-295269/2-B	Lab Control Sample	94	86	92
MB 410-295269/1-B	Method Blank	96	78	90

Surrogate Legend

C3PFBS = 13C3 PFBS

C8PFOA = 13C8 PFOA

C8PFOS = 13C8 PFOS

QC Sample Results

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Method: 537 (Mod) - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-295269/1-B

Matrix: Solid

Analysis Batch: 295249

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 295269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid	ND		2.0	0.40	ng/g		09/13/22 10:19	09/14/22 01:17	1
Perfluorooctanesulfonic acid	ND		0.60	0.20	ng/g		09/13/22 10:19	09/14/22 01:17	1
Perfluorooctanoic acid	ND		0.60	0.20	ng/g		09/13/22 10:19	09/14/22 01:17	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 PFBS	96		27 - 179				09/13/22 10:19	09/14/22 01:17	1
13C8 PFOA	78		26 - 159				09/13/22 10:19	09/14/22 01:17	1
13C8 PFOS	90		41 - 154				09/13/22 10:19	09/14/22 01:17	1

Lab Sample ID: LCS 410-295269/2-B

Matrix: Solid

Analysis Batch: 295249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 295269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid	22.1	20.9		ng/g		95	54 - 130
Perfluorooctanesulfonic acid	23.1	21.7		ng/g		94	61 - 126
Perfluorooctanoic acid	25.0	22.9		ng/g		92	59 - 131
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3 PFBS	94		27 - 179				
13C8 PFOA	86		26 - 159				
13C8 PFOS	92		41 - 154				

QC Association Summary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

LCMS

Analysis Batch: 295249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96284-1	DEWATERED SLUDGE	Total/NA	Solid	537 (Mod)	295304
MB 410-295269/1-B	Method Blank	Total/NA	Solid	537 (Mod)	295304
LCS 410-295269/2-B	Lab Control Sample	Total/NA	Solid	537 (Mod)	295304

Prep Batch: 295269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96284-1	DEWATERED SLUDGE	Total/NA	Solid	537 (mod)	
MB 410-295269/1-B	Method Blank	Total/NA	Solid	537 (mod)	
LCS 410-295269/2-B	Lab Control Sample	Total/NA	Solid	537 (mod)	

Cleanup Batch: 295304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96284-1	DEWATERED SLUDGE	Total/NA	Solid	Extract Aliquot	295269
MB 410-295269/1-B	Method Blank	Total/NA	Solid	Extract Aliquot	295269
LCS 410-295269/2-B	Lab Control Sample	Total/NA	Solid	Extract Aliquot	295269

General Chemistry

Analysis Batch: 291873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96284-1	DEWATERED SLUDGE	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Client Sample ID: DEWATERED SLUDGE
Date Collected: 08/25/22 08:55
Date Received: 08/31/22 10:11

Lab Sample ID: 410-96284-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	291873	UVJN	ELLE	09/01/22 08:28

Client Sample ID: DEWATERED SLUDGE
Date Collected: 08/25/22 08:55
Date Received: 08/31/22 10:11

Lab Sample ID: 410-96284-1
Matrix: Solid
Percent Solids: 14.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	537 (mod)			295269	PR5J	ELLE	09/13/22 10:19
Total/NA	Cleanup	Extract Aliquot			295304	PR5J	ELLE	09/13/22 11:19
Total/NA	Analysis	537 (Mod)		1	295249	QD9Y	ELLE	09/14/22 02:13

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maine	State	2019012	03-12-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (Mod)	537 (mod)	Solid	Perfluorobutanesulfonic acid
537 (Mod)	537 (mod)	Solid	Perfluorooctanesulfonic acid
537 (Mod)	537 (mod)	Solid	Perfluorooctanoic acid
Moisture		Solid	Percent Moisture

Eurofins Lancaster Laboratories Environment Testing, LLC

Method Summary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Method	Method Description	Protocol	Laboratory
537 (Mod)	EPA 537 Isotope Dilution	EPA	ELLE
Moisture	Percent Moisture	EPA	ELLE
537 (mod)	EPA 537 Isotope Dilution	EPA	ELLE
Extract Aliquot	Preparation, Extract Aliquot	None	ELLE

Protocol References:

EPA = US Environmental Protection Agency
None = None

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Katahdin Analytical Services
Project/Site: SP4718

Job ID: 410-96284-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-96284-1	DEWATERED SLUDGE	Solid	08/25/22 08:55	08/31/22 10:11

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410-96284 Chain of Custody

ELLE

-contract Laboratory Chain of Custody

Page: 1 of 1

Client: Katahdin Analytical Services	Contact: Mr. Darrian Lewry	Email: dlewry@katahdinlab.com		Phone #: (207) 874-2400	
Address: 600 Technology Way	City: Scarborough	State: Maine	Zip: 04074	Project Name:	
KAS WO #: SP4718	Quote #:	Purchase Order #: SP4718		TAT: Std Verbal TAT:	
RPT Level:	Reporting Format:	EDD:		Analysis: PFAS*	Analysis: RO
Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.
DEWATERED SLUDGE	25-AUG-22 08:55	SL	1	4pc	-
Relinquished By:	Date/Time:	Received By:			
[Signature]	8/30/22 1430	Debra A. Bryan 8-31-22 10:11			
Comments: Please upload results to Massachusetts database * PFOA, PFOS, PFBS					

MB

4.4

Login Sample Receipt Checklist

Client: Katahdin Analytical Services

Job Number: 410-96284-1

Login Number: 96284

List Number: 1

Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: <u>Casella</u>	KAS PM: <u>DL</u>	Sampled By: <u>KAS</u>
Project: <u>PFAS</u>	KIMS Entry By: <u>MLV</u>	Delivered By: <u>KAS</u>
KAS Work Order#: <u>SP4718, SP4719, SP4720</u> <u>SP4721</u>	KIMS Review By: <u>[Signature]</u>	Received By: <u>RD</u>
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.:

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		/			
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?	/				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		/			Temp (°C): <u>5.2</u> Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:				/	
Aqueous: No bubble larger than a pea?				/	
Soil/Sediment:				/	
Received in airtight container?	/			/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved?				/	
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH - pH <2				/	
Sulfide - >9				/	
Cyanide - pH >12				/	
11. Bottleware Prepped on:					
* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.					

Aug. 26, 2022

08:57 AM

Login Number: SP4718

Account: CASELLA001

Casella Organics

Project:

Primary Report Address:

Evan Kelley

Casella Organics

755 Banfield Rd

Suite 201

Portsmouth, NH 03801

evan.kelly@casella.com

Primary Invoice Address:

George Belmont

Casella Organics

Hawk Ridge Compost Facility

73 Reynold Road

Unity, ME 04988

george.belmont@casella.com

Report CC Addresses:

Invoice CC Addresses:

Quote/Incoming:

Login Information

ANALYSIS INSTRUCTIONS	:	subbed to ELLE
CHECK NO.	:	
CLIENT PO#	:	
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	5.2
DELIVERY SERVICES	:	KAS
EDD FORMAT	:	KAS064QC-XLS
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	MLV
PM	:	DL
PROJECT NAME	:	PFAS Sampling Seabrook
QC LEVEL	:	I
REPORT INSTRUCTIONS	:	email report to Jeff McBurnie
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

Aug. 26, 2022

08:57 AM

Login Number: SP4718

Account: CASELLA001

Casella Organics

Quote/Incoming:

Project:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SP4718-1	DEWATERED SLUDGE	25-AUG-22 08:55	25-AUG-22		06-SEP-22		
Sample Comments:							
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Notes</i>		<i>Bottle Type</i>		
Solid	S PFC-SUB				4oz Glass		
Solid	S SAMPLING						

Total Samples: 1

Total Analyses: 2

George Belmont
Casella Organics
Hawk Ridge Compost Facility
73 Reynold Road
Unity, ME 04988

Katahdin Lab Number: SQ3068
Project Name: PFAS Sampling
Project Manager: Darrian Lewry
Sample Receipt Date(s): June 16, 2023

The following information is enclosed:

- * Laboratory results from subcontracted analysis (es)
- * Chain of Custody (COC)
- * Login Report

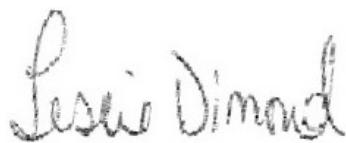
A copy of the Chain of Custody is included in the paginated report. If requested, the original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to <http://www.katahdinlab.com/cert> for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.



Leslie Dimond - Quality Assurance Officer

07/21/2023

Date

ANALYTICAL REPORT

PREPARED FOR

Attn: Darrian Lewry
Katahdin Analytical Services
600 Technology Way
Scarborough, Maine 04074

Generated 7/21/2023 9:47:35 AM

JOB DESCRIPTION

SQ3068

JOB NUMBER

410-131350-1

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
7/21/2023 9:47:35 AM

Authorized for release by
Stephen Gordon, Senior Project Manager
Stephen.Gordon@et.eurofinsus.com
(412)525-0071

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.



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Definitions/Glossary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Job ID: 410-131350-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative 410-131350-1

Receipt

The sample was received on 6/20/2023 9:30 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

PFAS

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Detection Summary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Client Sample ID: SLUDGE Lab Sample ID: 410-131350-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid	10		2.2	0.73	ng/g	1		✧	EPA 537 (Mod)	Total/NA
Perfluorooctanoic acid	4.6		2.2	0.73	ng/g	1		✧	EPA 537 (Mod)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Client Sample ID: SLUDGE

Lab Sample ID: 410-131350-1

Date Collected: 06/16/23 10:20

Matrix: Solid

Date Received: 06/20/23 09:30

Percent Solids: 13.8

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid	ND		7.3	1.5	ng/g	☼	06/30/23 03:38	07/15/23 23:46	1
Perfluorooctanesulfonic acid	10		2.2	0.73	ng/g	☼	06/30/23 03:38	07/15/23 23:46	1
Perfluorooctanoic acid	4.6		2.2	0.73	ng/g	☼	06/30/23 03:38	07/15/23 23:46	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 PFBS	130		27 - 179				06/30/23 03:38	07/15/23 23:46	1
13C8 PFOA	106		26 - 159				06/30/23 03:38	07/15/23 23:46	1
13C8 PFOS	113		41 - 154				06/30/23 03:38	07/15/23 23:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	86.2		1.0	1.0	%			06/26/23 08:13	1

Isotope Dilution Summary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	C3PFBS	C8PFOA	C8PFOS					
		(27-179)	(26-159)	(41-154)					
410-131350-1	SLUDGE	130	106	113					
LCS 410-392512/2-B	Lab Control Sample	119	109	112					
LCSD 410-392512/3-B	Lab Control Sample Dup	121	108	110					
MB 410-392512/1-B	Method Blank	110	114	112					
Surrogate Legend									
C3PFBS = 13C3 PFBS									
C8PFOA = 13C8 PFOA									
C8PFOS = 13C8 PFOS									

QC Sample Results

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Method: EPA 537 (Mod) - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-392512/1-B

Matrix: Solid

Analysis Batch: 396950

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 392512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid	ND		1.0	0.20	ng/g		06/30/23 03:38	07/15/23 23:09	1
Perfluorooctanesulfonic acid	ND		0.30	0.10	ng/g		06/30/23 03:38	07/15/23 23:09	1
Perfluorooctanoic acid	ND		0.30	0.10	ng/g		06/30/23 03:38	07/15/23 23:09	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3 PFBS	110		27 - 179				06/30/23 03:38	07/15/23 23:09	1
13C8 PFOA	114		26 - 159				06/30/23 03:38	07/15/23 23:09	1
13C8 PFOS	112		41 - 154				06/30/23 03:38	07/15/23 23:09	1

Lab Sample ID: LCS 410-392512/2-B

Matrix: Solid

Analysis Batch: 396950

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 392512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid	22.1	16.7		ng/g		75	54 - 130
Perfluorooctanesulfonic acid	23.1	18.4		ng/g		80	61 - 126
Perfluorooctanoic acid	25.0	20.0		ng/g		80	59 - 131
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3 PFBS	119		27 - 179				
13C8 PFOA	109		26 - 159				
13C8 PFOS	112		41 - 154				

Lab Sample ID: LCSD 410-392512/3-B

Matrix: Solid

Analysis Batch: 396950

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 392512

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid	22.1	16.6		ng/g		75	54 - 130	1	30
Perfluorooctanesulfonic acid	23.1	18.8		ng/g		81	61 - 126	2	30
Perfluorooctanoic acid	25.0	19.8		ng/g		79	59 - 131	1	30
Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits						
13C3 PFBS	121		27 - 179						
13C8 PFOA	108		26 - 159						
13C8 PFOS	110		41 - 154						

QC Association Summary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

LCMS

Prep Batch: 392512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-131350-1	SLUDGE	Total/NA	Solid	EPA 537 (Mod)	
MB 410-392512/1-B	Method Blank	Total/NA	Solid	EPA 537 (Mod)	
LCS 410-392512/2-B	Lab Control Sample	Total/NA	Solid	EPA 537 (Mod)	
LCSD 410-392512/3-B	Lab Control Sample Dup	Total/NA	Solid	EPA 537 (Mod)	

Cleanup Batch: 392979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-131350-1	SLUDGE	Total/NA	Solid	Extract Aliquot	392512
MB 410-392512/1-B	Method Blank	Total/NA	Solid	Extract Aliquot	392512
LCS 410-392512/2-B	Lab Control Sample	Total/NA	Solid	Extract Aliquot	392512
LCSD 410-392512/3-B	Lab Control Sample Dup	Total/NA	Solid	Extract Aliquot	392512

Analysis Batch: 396950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-131350-1	SLUDGE	Total/NA	Solid	EPA 537 (Mod)	392979
MB 410-392512/1-B	Method Blank	Total/NA	Solid	EPA 537 (Mod)	392979
LCS 410-392512/2-B	Lab Control Sample	Total/NA	Solid	EPA 537 (Mod)	392979
LCSD 410-392512/3-B	Lab Control Sample Dup	Total/NA	Solid	EPA 537 (Mod)	392979

General Chemistry

Analysis Batch: 390597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-131350-1	SLUDGE	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Client Sample ID: SLUDGE
Date Collected: 06/16/23 10:20
Date Received: 06/20/23 09:30

Lab Sample ID: 410-131350-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	390597	UVJN	ELLE	06/26/23 08:13

Client Sample ID: SLUDGE
Date Collected: 06/16/23 10:20
Date Received: 06/20/23 09:30

Lab Sample ID: 410-131350-1
Matrix: Solid
Percent Solids: 13.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	EPA 537 (Mod)			392512	X5YV	ELLE	06/30/23 03:38
Total/NA	Cleanup	Extract Aliquot			392979	X5YV	ELLE	07/01/23 21:28
Total/NA	Analysis	EPA 537 (Mod)		1	396950	DQV6	ELLE	07/15/23 23:46

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Maine	State	2019012	03-12-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 537 (Mod)	EPA 537 (Mod)	Solid	Perfluorobutanesulfonic acid
EPA 537 (Mod)	EPA 537 (Mod)	Solid	Perfluorooctanesulfonic acid
EPA 537 (Mod)	EPA 537 (Mod)	Solid	Perfluorooctanoic acid
Moisture		Solid	Percent Moisture

Method Summary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Method	Method Description	Protocol	Laboratory
EPA 537 (Mod)	EPA 537 Isotope Dilution	EPA	ELLE
Moisture	Percent Moisture	EPA	ELLE
EPA 537 (Mod)	EPA 537 Isotope Dilution	EPA	ELLE
Extract Aliquot	Preparation, Extract Aliquot	None	ELLE

Protocol References:

EPA = US Environmental Protection Agency
None = None

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Katahdin Analytical Services
Project/Site: SQ3068

Job ID: 410-131350-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-131350-1	SLUDGE	Solid	06/16/23 10:20	06/20/23 09:30

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



Client: Katahdin Analytical Services	Contact: Darrian Lewry		Email: dlewry@katahdinlab.com			Phone #: (207) 874-2400		
Address: 600 Technology Way	City: Scarborough		State: Maine		Zip: 04074	Project Name:		
KAS WO #: SQ3068	Quote #:		Purchase Order #:			TAT:		
RPT Level:	Reporting Format:		EDD:			Verbal TAT:		
Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.	Analysis: PFAS Filtered? Y/N	Analysis: Filtered? Y/N	Analysis: Filtered? Y/N
SLUDGE	16-JUN-23 10:20	SL	1	4°C	no	X		
Relinquished By: <i>[Signature]</i>	Date/Time: 6/19/23 1515		Received By: Debra A. Bya 6-20-23 09:30					
Comments: Biosolid sample								

40

Raw 44 Corr: 44

JK

7/21/2023

Login Sample Receipt Checklist

Client: Katahdin Analytical Services

Job Number: 410-131350-1

Login Number: 131350

List Number: 1

Creator: Arroyo, Haley

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	

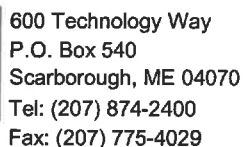
Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: <u>Casella</u>	KAS PM: <u>DL</u>	Sampled By: <u>KAS</u>
Project: <u>Seabrook N/H</u>	KIMS Entry By: <u>JCB</u>	Delivered By: <u>KAS</u>
KAS Work Order#: <u>SQ 3068</u>	KIMS Review By: <u>ADM</u>	Received By: <u>MLK</u>
	Labeled By: <u>MLK</u>	
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.: <u>6/16/23 1205</u>

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		/			
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?	/				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		/			Temp (°C): <u>2.4</u> Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:					
Aqueous: No bubble larger than a pea?				/	
Soil/Sediment:					
Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved?					
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				/	
Sulfide – >9				/	
Cyanide – pH >12				/	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.



600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

LAB USE ONLY		Work Order # ~~602064~~ 503068	
		Katahdin Project Number	
Remarks:			
Shipping Info:		FEDEX	UPS
Airbill No:		CLIENT	
Temp C	Temp Blank	Intact	Not Intact

COMMENTS:

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.

Login Number: SQ3068

Account: CASELLA001

Casella Organics

Project:

Primary Report Address:

George Belmont

Casella Organics

Hawk Ridge Compost Facility

73 Reynold Road

Unity, ME 04988

george.belmont@casella.com

Primary Invoice Address:

George Belmont

Casella Organics

Hawk Ridge Compost Facility

73 Reynold Road

Unity, ME 04988

george.belmont@casella.com

Report CC Addresses:

Invoice CC Addresses:

Quote/Incoming:

Login Information

ANALYSIS INSTRUCTIONS :
CHECK NO. :
CLIENT PO# :
CLIENT PROJECT MANAGE :
CONTRACT :
COOLER TEMPERATURE : 2.4
DELIVERY SERVICES : KAS
EDD FORMAT : KAS064QC-XLS
ISM INSTRUCTIONS :
LOGIN INITIALS : JCB
PM : DL
PROJECT NAME : PFAS Sampling
QC LEVEL : I
REPORT INSTRUCTIONS : report to afox@lowellma.gov
SDG ID :
SDG STATUS :
TEMPLATE :
VERBAL TAT :

Jun. 19, 2023

09:32 AM

Login Number: SQ3068

Account: CASELLA001

Casella Organics

Quote/Incoming:

Project:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SQ3068-1	SLUDGE	16-JUN-23 10:20	16-JUN-23		28-JUN-23		
Sample Comments:							
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Notes</i>		<i>Bottle Type</i>		
Solid	S PFC-SUB				250mL Plastic		
Solid	S SAMPLING						

Total Samples: 1

Total Analyses: 2

Daumanic Fucile
274 NH-286
Seabrook, NH 03874

Katahdin Lab Number: SR4668
Project Name: PFAS Sampling
Project Manager: Darrian Lewry
Sample Receipt Date(s): August 28, 2024

The following information is enclosed:

- * Report of Analysis (Analytical and/or Field)
- * Quality Control Data Summary
- * Chain of Custody (COC)
- * Login Report

A copy of the Chain of Custody is included in the paginated report. If requested, the original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to <http://www.katahdinlab.com/cert> for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.



Jennifer Prescott - Quality Assurance Officer

09/23/2024

Date

TECHNICAL NARRATIVE

Organics Analysis

The sample of Work Order SR4668 was analyzed in accordance with “Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS”, EPA 821/R-24-001, January 2024, and/or for the specific methods listed below or on the Report of Analysis.

1633 Analysis

Sample SR4668-1 had low recoveries for the extracted internal standards (EIS): M-NetFOSE-D9 and M-NMeFOSE-D7 that were outside of the method acceptance limits. The client was contacted.

There were no other protocol deviations or observations noted by the organics laboratory staff.

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

- U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.
- Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
- * Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.
- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
- And/or
- J Used for Dual Column analytes when there is a greater than 40% difference for detected concentrations between the two GC/HPLC columns.
- And/or
- J Used for LCS/MS/MS analysis. Per method E1633, if the EIS recovery is <5% but has a S/N ≥ 20:1, the analyte result may have some utility as an estimated value.
- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
- I Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration (ICAL).
- D Indicates that the flagged compound did not meet DoD criteria in the corresponding Initial Calibration Verification (ICV).
- C Indicates that the flagged compound did not meet DoD criteria in the corresponding opening Calibration Verification (CV).
- V Indicates that the flagged compound did not meet DoD criteria in the corresponding closing Calibration Verification (CV).
- L/LL Indicates that the flagged compound did not meet criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.
- M/MM Indicates that the flagged compound did not meet criteria in the Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) prepared and/or analyzed concurrently with the native sample.
- H Indicates the flagged compound was detected on the primary column but was not detected on the confirmation column therefore the compound is not reported as a positive detection. (SW846 8330A/B only)

KATAHDIN ANALYTICAL SERVICES - Cross-Reference of PFA Analytes

Analyte Name	Abbreviation	CAS Number
Perfluoroalkyl carboxylic acids		
Perfluorobutanoic acid	PFBA	375-22-4
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUnA	2058-94-8
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorotridecanoic acid	PFTTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTeDA	376-06-7
Perfluoroalkyl sulfonic acids, Acid Form		
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluoropentanesulfonic acid	PFPeS	2706-91-4
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorononanesulfonic acid	PFNS	68259-12-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorododecanesulfonic acid	PFDoS	79780-39-5
Fluorotelomer sulfonic acids		
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	4:2FTS	757124-72-4
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	6:2FTS	27619-97-2
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	8:2FTS	39108-34-4
Perfluorooctane sulfonamides		
Perfluorooctanesulfonamide	PFOSA	754-91-6
N-methyl perfluorooctanesulfonamide	NMeFOSA	31506-32-8
N-ethyl perfluorooctanesulfonamide	NEtFOSA	4151-50-2
Perfluorooctane sulfonamidoacetic acids		
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
Perfluorooctane sulfonamide ethanols		
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7
N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2
Per- and Polyfluoroether carboxylic acids		
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1
Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6
Ether sulfonic acids		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	756426-58-1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	113507-82-7
Fluorotelomer carboxylic acids		
3-Perfluoropropyl propanoic acid	3:3FTCA	356-02-5
2H,2H,3H,3H-Perfluorooctanoic acid	5:3FTCA	914637-49-3
3-Perfluoroheptyl propanoic acid	7:3FTCA	812-70-4

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U	Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client. <u>Note:</u> All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.				
E	Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.				
J	Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).				
I-7	The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.				
A-4	Please refer to cover letter or narrative for further information.				
H_	Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.				
	H1 - pH	H2 - DO	H3 - sulfite	H4 - residual chlorine	
T1	The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.				
T2	The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.				
M1	The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.				
M2	The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.				
R1	The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).				
MCL	Maximum Contaminant Level	NL	No limit	NOD	No Odor Detected
NFL	No Free Liquid Present	FLP	Free Liquid Present	TON	Threshold Odor Number
D-1	As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21 st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results <u>may</u> not be reportable for compliance purposes.				
D-2	The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.				
D-3	The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results <u>may</u> not be reportable for compliance purposes.				
D-4	The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results <u>may</u> not be reportable for compliance purposes.				
D-5	The seed control factor did not meet the method criteria of greater than 2.0 mg/L of dissolved oxygen (DO) uptake over the five day period of incubation. The dilution closest to meeting the criteria was used to estimate the seed control factor.				
X1	The weight difference between dry weights after measuring a third dry weight is greater than 0.001 g. [TS-AQ, TSS, TDS]				
X2	The weight difference between dry weights after measuring a third dry weight is greater than 0.05 g. [TS-ME]				
- DM-003 – Revision 9 – 11/01/2023

Report of Analytical Results

SDG: SR4668
Lab ID: SR4668-1
Client ID: SLUDGE
Matrix: SL
Lab File ID: 2LC01844

Sample Date: 28-AUG-24
Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Report Date: 18-SEP-24
Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
% Solids: 13.

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
11Cl-PF3OUdS	U	7.96	ng/g	1	.8	7.96	2.30
3:3FTCA	U	9.94	ng/g	1	1	9.94	3.70
4:2 FTS	U	7.96	ng/g	1	.8	7.96	2.86
5:3FTCA	U	49.7	ng/g	1	5	49.7	8.75
6:2 FTS	U	7.96	ng/g	1	.8	7.96	1.20
7:3FTCA	U	49.7	ng/g	1	5	49.7	7.17
8:2 FTS	U	7.96	ng/g	1	.8	7.96	2.34
9Cl-PF3ONS	U	7.96	ng/g	1	.8	7.96	2.15
ADONA	U	7.96	ng/g	1	.8	7.96	1.50
GenX (HFPO-DA)	U	7.96	ng/g	1	.8	7.96	1.81
NEtFOSA	U	1.99	ng/g	1	.2	1.99	0.666
NEtFOSAA		3.27	ng/g	1	.2	1.99	0.597
NEtFOSE	U	19.9	ng/g	1	2	19.9	6.88
NFDHA	U	3.98	ng/g	1	.4	3.98	0.537
NMeFOSA	U	1.99	ng/g	1	.2	1.99	0.696
NMeFOSAA		4.02	ng/g	1	.2	1.99	0.676
NMeFOSE	U	19.9	ng/g	1	2	19.9	7.01
PFBA	U	7.96	ng/g	1	.8	7.96	1.63
PFBS	J	0.603	ng/g	1	.2	1.99	0.507
PFDA		12.6	ng/g	1	.2	1.99	0.517
PFDaA		4.13	ng/g	1	.2	1.99	0.905
PFDoS	U	1.99	ng/g	1	.2	1.99	0.626
PFDS	U	1.99	ng/g	1	.2	1.99	4.57
PFEESA	U	3.98	ng/g	1	.4	3.98	0.776
PFHpA	U	1.99	ng/g	1	.2	1.99	0.398
PFHpS	U	1.99	ng/g	1	.2	1.99	0.547
PFHxA	J	1.66	ng/g	1	.2	1.99	0.457
Total PFHxS	U	1.99	ng/g	1	.2	1.99	0.0696
PFMBA	U	3.98	ng/g	1	.4	3.98	0.816
PFMPA	U	3.98	ng/g	1	.4	3.98	1.17
Total PFNA	J	1.04	ng/g	1	.2	1.99	0.139
PFNS	U	1.99	ng/g	1	.2	1.99	0.527
Total PFOA		5.15	ng/g	1	.2	1.99	0.278
PFOS		9.00	ng/g	1	.2	1.99	0.587
PFOSA	U	1.99	ng/g	1	.2	1.99	0.318

Report of Analytical Results

SDG: SR4668
Lab ID: SR4668-1
Client ID: SLUDGE
Matrix: SL
Lab File ID: 2LC01844

Sample Date: 28-AUG-24
Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Report Date: 18-SEP-24
Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
% Solids: 13.

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
PFPeA	J	2.22	ng/g	1	.4	3.98	0.835
PFPeS	U	1.99	ng/g	1	.2	1.99	0.368
PFTeDA	U	1.99	ng/g	1	.2	1.99	0.925
PFTTrDA	J	1.12	ng/g	1	.2	1.99	0.537
PFUnA		2.90	ng/g	1	.2	1.99	0.378
M-4:2 FTS-13C2		156.	%				
M-6:2 FTS-13C2		107.	%				
M-8:2 FTS-13C2		269.	%				
M-GenX-13C3 (HFPO-DA)		66.2	%				
M-NEtFOSAA-D5		132.	%				
M-NEtFOSA-D5		40.2	%				
M-NEtFOSE-D9	*	6.91	%				
M-NMeFOSAA-D3		130.	%				
M-NMeFOSA-D3		51.5	%				
M-NMeFOSE-D7	*	9.30	%				
M-PFBA-13C4		97.2	%				
M-PFBS-13C3		73.4	%				
M-PFDA-13C6		91.2	%				
M-PFDoA-13C2		87.2	%				
M-PFHpA-13C4		85.1	%				
M-PFHxA-13C5		71.3	%				
M-PFHxS-13C3		95.2	%				
M-PFNA-13C9		92.9	%				
M-PFOA-13C8		86.5	%				
M-PFOS-13C8		91.4	%				
M-PFOSA-13C8		82.5	%				
M-PFPeA-13C5		41.2	%				
M-PFTeDA-13C2		55.5	%				
M-PFUnA-13C7		76.2	%				

Method Blank Summary

Lab Name : Katahdin Analytical Services
Lab File ID : 2LC01839
Instrument ID : LCMS-2
Matrix : SL
Extraction method : 1633

SDG : SR4668
Lab Sample ID : WG358663-1
Date Extracted : 04-SEP-24
Date Analyzed : 05-SEP-24
Time Analyzed : 16:14

This Method Blank applies to the following samples and QC samples:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG358663-2	2LC01840	09/05/24	16:27
Laboratory Control S	WG358663-3	2LC01841	09/05/24	16:39
SLUDGE	SR4668-1	2LC01844	09/05/24	17:17

Report of Analytical Results

SDG: SR4668
Lab ID: WG358663-1
Client ID: Method Blank
Matrix: SL
Lab File ID: 2LC01839

Sample Date: N/A
Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Report Date: 18-SEP-24
Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
11Cl-PF3OUdS	U	2.31	ng/g	1	.8	8.00	2.31
3:3FTCA	U	3.72	ng/g	1	1	10.0	3.72
4:2 FTS	U	2.88	ng/g	1	.8	8.00	2.88
5:3FTCA	U	8.80	ng/g	1	5	50.0	8.80
6:2 FTS	U	1.21	ng/g	1	.8	8.00	1.21
7:3FTCA	U	7.21	ng/g	1	5	50.0	7.21
8:2 FTS	U	2.35	ng/g	1	.8	8.00	2.35
9Cl-PF3ONS	U	2.16	ng/g	1	.8	8.00	2.16
ADONA	U	1.51	ng/g	1	.8	8.00	1.51
GenX (HFPO-DA)	U	1.82	ng/g	1	.8	8.00	1.82
NEtFOSA	U	0.670	ng/g	1	.2	2.00	0.670
NEtFOSAA	U	0.600	ng/g	1	.2	2.00	0.600
NEtFOSE	U	6.92	ng/g	1	2	20.0	6.92
NFDHA	U	0.540	ng/g	1	.4	4.00	0.540
NMeFOSA	U	0.700	ng/g	1	.2	2.00	0.700
NMeFOSAA	U	0.680	ng/g	1	.2	2.00	0.680
NMeFOSE	U	7.05	ng/g	1	2	20.0	7.05
PFBA	U	1.64	ng/g	1	.8	8.00	1.64
PFBS	U	0.510	ng/g	1	.2	2.00	0.510
PFDA	U	0.520	ng/g	1	.2	2.00	0.520
PFDaA	U	0.910	ng/g	1	.2	2.00	0.910
PFDoS	U	0.630	ng/g	1	.2	2.00	0.630
PFDS	U	4.60	ng/g	1	.2	2.00	4.60
PFEESA	U	0.780	ng/g	1	.4	4.00	0.780
PFHpA	U	0.400	ng/g	1	.2	2.00	0.400
PFHpS	U	0.550	ng/g	1	.2	2.00	0.550
PFHxA	U	0.460	ng/g	1	.2	2.00	0.460
Total PFHxS	U	0.0700	ng/g	1	.2	2.00	0.0700
PFMBA	U	0.820	ng/g	1	.4	4.00	0.820
PFMPA	U	1.18	ng/g	1	.4	4.00	1.18
Total PFNA	U	0.140	ng/g	1	.2	2.00	0.140
PFNS	U	0.530	ng/g	1	.2	2.00	0.530
Total PFOA	U	0.280	ng/g	1	.2	2.00	0.280
PFOS	U	0.590	ng/g	1	.2	2.00	0.590
PFOSA	U	0.320	ng/g	1	.2	2.00	0.320

Report of Analytical Results

SDG: SR4668
Lab ID: WG358663-1
Client ID: Method Blank
Matrix: SL
Lab File ID: 2LC01839

Sample Date: N/A
Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Report Date: 18-SEP-24
Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
% Solids: N/A

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
PFPeA	U	0.840	ng/g	1	.4	4.00	0.840
PFPeS	U	0.370	ng/g	1	.2	2.00	0.370
PFTeDA	U	0.930	ng/g	1	.2	2.00	0.930
PFTTrDA	U	0.540	ng/g	1	.2	2.00	0.540
PFUnA	U	0.380	ng/g	1	.2	2.00	0.380
M-4:2 FTS-13C2		88.2	%				
M-6:2 FTS-13C2		93.0	%				
M-8:2 FTS-13C2		88.9	%				
M-GenX-13C3 (HFPO-DA)		79.4	%				
M-NEtFOSAA-D5		117.	%				
M-NEtFOSA-D5		63.2	%				
M-NEtFOSE-D9		71.7	%				
M-NMeFOSAA-D3		108.	%				
M-NMeFOSA-D3		63.8	%				
M-NMeFOSE-D7		68.5	%				
M-PFBA-13C4		95.2	%				
M-PFBS-13C3		75.3	%				
M-PFDA-13C6		81.9	%				
M-PFDoA-13C2		69.3	%				
M-PFHpA-13C4		81.8	%				
M-PFHxA-13C5		79.0	%				
M-PFHxS-13C3		85.8	%				
M-PFNA-13C9		84.4	%				
M-PFOA-13C8		80.2	%				
M-PFOS-13C8		82.4	%				
M-PFOSA-13C8		78.1	%				
M-PFPeA-13C5		73.8	%				
M-PFTeDA-13C2		50.9	%				
M-PFUnA-13C7		85.5	%				

LCS Recovery Report

Lab ID: WG358663-2
Client ID: LCS1
SDG: SR4668
LCS File ID: 2LC01840
Report Date: 18-SEP-24

Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
Matrix: SL

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
11Cl-PF3OUdS	89.0	15.1	13.4	ng/g	45-160
3:3FTCA	90.8	20.0	18.2	ng/g	45-130
4:2 FTS	92.3	15.0	13.8	ng/g	60-150
5:3FTCA	84.0	100.	84.0	ng/g	60-130
6:2 FTS	83.8	15.2	12.7	ng/g	55-200
7:3FTCA	79.2	100.	79.2	ng/g	60-150
8:2 FTS	92.3	15.4	14.2	ng/g	70-150
9Cl-PF3ONS	93.5	14.9	13.9	ng/g	70-150
ADONA	87.8	15.1	13.2	ng/g	70-160
GenX (HFPO-DA)	92.9	16.0	14.9	ng/g	70-145
NEtFOSA	89.9	4.00	3.60	ng/g	70-140
NEtFOSAA	82.7	4.00	3.31	ng/g	65-165
NEtFOSE	85.4	40.0	34.2	ng/g	70-135
NFDHA	93.1	8.00	7.45	ng/g	60-155
NMeFOSA	87.7	4.00	3.51	ng/g	70-155
NMeFOSAA	91.9	4.00	3.68	ng/g	65-155
NMeFOSE	89.4	40.0	35.7	ng/g	70-140
PFBA	89.7	16.0	14.4	ng/g	70-140
PFBS	83.9	3.55	2.98	ng/g	65-145
PFDA	84.6	4.00	3.38	ng/g	70-155
PFDaA	104.	4.00	4.17	ng/g	70-150
PFDoS	58.7	3.87	2.27	ng/g	25-160
PFDS	92.4	3.86	3.57	ng/g	40-155
PFEESA	81.3	7.14	5.80	ng/g	70-140
PFHpA	85.1	4.00	3.40	ng/g	65-145
PFHpS	95.9	3.81	3.65	ng/g	65-155
PFHxA	87.9	4.00	3.52	ng/g	65-140
Total PFHxS	91.1	3.65	3.32	ng/g	60-150
PFMBA	92.2	8.00	7.37	ng/g	60-150
PFMPA	82.7	8.00	6.61	ng/g	30-140
Total PFNA	86.4	4.00	3.46	ng/g	70-155
PFNS	81.9	3.84	3.14	ng/g	55-140
Total PFOA	94.4	4.01	3.79	ng/g	70-150
PFOS	96.3	3.72	3.58	ng/g	65-160
PFOSA	85.7	4.00	3.43	ng/g	70-140
PFPeA	85.2	8.00	6.82	ng/g	60-150

LCS Recovery Report

Lab ID: WG358663-2
Client ID: LCS1
SDG: SR4668
LCS File ID: 2LC01840
Report Date: 18-SEP-24

Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
Matrix: SL

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
PFPeS	82.4	3.76	3.10	ng/g	55-160
PFTeDA	114.	4.00	4.56	ng/g	65-150
PFTTrDA	92.8	4.00	3.71	ng/g	65-150
PFUnA	88.0	4.00	3.52	ng/g	70-155
M-4:2 FTS-13C2	83.4				40-165
M-6:2 FTS-13C2	89.3				40-215
M-8:2 FTS-13C2	78.9				40-275
M-GenX-13C3 (HFPO-DA)	76.8				40-130
M-NEtFOSAA-D5	84.3				40-150
M-NEtFOSA-D5	64.0				10-130
M-NEtFOSE-D9	66.0				15-130
M-NMeFOSAA-D3	81.3				40-135
M-NMeFOSA-D3	68.6				10-130
M-NMeFOSE-D7	63.9				20-130
M-PFBA-13C4	95.8				8-130
M-PFBS-13C3	68.2				40-135
M-PFDA-13C6	81.0				40-130
M-PFDoA-13C2	67.1				40-130
M-PFHpA-13C4	76.6				40-130
M-PFHxA-13C5	74.0				40-130
M-PFHxS-13C3	80.3				40-130
M-PFNA-13C9	79.1				40-130
M-PFOA-13C8	75.8				40-130
M-PFOS-13C8	73.5				40-130
M-PFOSA-13C8	74.6				40-130
M-PFPeA-13C5	68.7				35-130
M-PFTeDA-13C2	51.0				20-130
M-PFUnA-13C7	86.2				40-130

LCS Recovery Report

Lab ID: WG358663-3
Client ID: LCS2
SDG: SR4668
LCS File ID: 2LC01841
Report Date: 18-SEP-24

Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
Matrix: SL

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
11Cl-PF3OUdS	77.9	94.3	73.4	ng/g	45-160
3:3FTCA	78.7	125.	98.4	ng/g	45-130
4:2 FTS	85.9	93.7	80.5	ng/g	60-150
5:3FTCA	71.8	625.	449.	ng/g	60-130
6:2 FTS	72.2	95.1	68.7	ng/g	55-200
7:3FTCA	70.5	625.	440.	ng/g	60-150
8:2 FTS	77.0	96.0	73.9	ng/g	70-150
9Cl-PF3ONS	80.5	93.3	75.1	ng/g	70-150
ADONA	75.2	94.5	71.1	ng/g	70-160
GenX (HFPO-DA)	81.7	100.	81.7	ng/g	70-145
NEtFOSA	81.3	25.0	20.3	ng/g	70-140
NEtFOSAA	72.5	25.0	18.1	ng/g	65-165
NEtFOSE	75.1	250.	188.	ng/g	70-135
NFDHA	82.3	50.0	41.1	ng/g	60-155
NMeFOSA	78.9	25.0	19.7	ng/g	70-155
NMeFOSAA	73.4	25.0	18.3	ng/g	65-155
NMeFOSE	79.3	250.	198.	ng/g	70-140
PFBA	77.5	100.	77.5	ng/g	70-140
PFBS	75.0	22.2	16.6	ng/g	65-145
PFDA	78.8	25.0	19.7	ng/g	70-155
PFDaA	77.5	25.0	19.4	ng/g	70-150
PFDoS	52.0	24.2	12.6	ng/g	25-160
PFDS	74.6	24.1	18.0	ng/g	40-155
PFEESA	72.4	44.6	32.3	ng/g	70-140
PFHpA	74.4	25.0	18.6	ng/g	65-145
PFHpS	77.6	23.8	18.5	ng/g	65-155
PFHxA	77.0	25.0	19.2	ng/g	65-140
Total PFHxS	75.7	22.8	17.3	ng/g	60-150
PFMBA	79.8	50.0	39.9	ng/g	60-150
PFMPA	70.4	50.0	35.2	ng/g	30-140
Total PFNA	75.7	25.0	18.9	ng/g	70-155
PFNS	75.1	24.0	18.0	ng/g	55-140
Total PFOA	78.6	25.0	19.6	ng/g	70-150
PFOS	80.2	23.2	18.6	ng/g	65-160
PFOSA	72.6	25.0	18.2	ng/g	70-140
PFPeA	74.3	50.0	37.2	ng/g	60-150

LCS Recovery Report

Lab ID: WG358663-3
Client ID: LCS2
SDG: SR4668
LCS File ID: 2LC01841
Report Date: 18-SEP-24

Extract Date: 04-SEP-24
Extracted By: ASC/SD
Extraction Method: 1633
Lab Prep Batch: WG358663

Analysis Date: 05-SEP-24
Analyst: ASC
Analysis Method: 1633
Matrix: SL

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
PFPeS	73.5	23.5	17.3	ng/g	55-160
PFTeDA	70.0	25.0	17.5	ng/g	65-150
PFTTrDA	68.6	25.0	17.1	ng/g	65-150
PFUnA	74.7	25.0	18.7	ng/g	70-155
M-4:2 FTS-13C2	84.5				40-165
M-6:2 FTS-13C2	94.7				40-215
M-8:2 FTS-13C2	89.5				40-275
M-GenX-13C3 (HFPO-DA)	82.4				40-130
M-NEtFOSAA-D5	98.2				40-150
M-NEtFOSA-D5	73.4				10-130
M-NEtFOSE-D9	66.7				15-130
M-NMeFOSAA-D3	92.4				40-135
M-NMeFOSA-D3	76.9				10-130
M-NMeFOSE-D7	66.7				20-130
M-PFBA-13C4	96.4				8-130
M-PFBS-13C3	73.0				40-135
M-PFDA-13C6	79.6				40-130
M-PFDoA-13C2	73.5				40-130
M-PFHpA-13C4	81.2				40-130
M-PFHxA-13C5	78.8				40-130
M-PFHxS-13C3	85.2				40-130
M-PFNA-13C9	82.4				40-130
M-PFOA-13C8	80.8				40-130
M-PFOS-13C8	83.5				40-130
M-PFOSA-13C8	83.4				40-130
M-PFPeA-13C5	74.4				35-130
M-PFTeDA-13C2	53.8				20-130
M-PFUnA-13C7	86.2				40-130

Report of Analytical Results

Lab Sample ID: SR4668-1

Client ID: SLUDGE

SDG: SR4668

Report Date: 06-SEP-24

<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>							
SL	28-AUG-24 10:55	28-AUG-24							
Parameter	Result	Adj PQL	Adj MDL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Solids	13. %	1.0	1.0	SW846 3540C	WG358477	03-SEP-24 09:10	SW846 3540C	30-AUG-24	

Quality Control Report

Blank Sample Summary Report

Total Solids

QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	Units	PQL
WG358477	SW846 3540C	03-SEP-24	30-AUG-24	100	%	1.0

Quality Control Report
Laboratory Control Sample Summary Report

Total Solids

Laboratory Sample ID	Sample Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amount	Result	Recovery (%)	Acceptance Range	RPD
WG358477-2	LCS	WG358477	03-SEP-24	30-AUG-24	%	90	90.	100	90-110	

Katahdin Analytical Services, LLC.

Sample Receipt Condition Report

Client: <u>Case 11a</u>	KAS PM: <u>DL</u>	Sampled By: <u>KAS</u>
Project:	KIMS Entry By: <u>JCB</u>	Delivered By: <u>KAS</u>
KAS Work Order#: <u>SR4666-4669</u>	KIMS Review By: <u>ML</u>	Received By: <u>MLV</u>
	Labeled By: <u>JCB</u>	
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.: <u>8/28/24 1445</u>

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		/			
2. Chain of Custody present in cooler?	/				
3. Chain of Custody signed by client?	/				
4. Chain of Custody matches samples?	/				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		/			Temp (°C) <u>4.4</u> Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?	/				Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	/				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	/				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				/	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:				/	
Aqueous: No bubble larger than a pea?				/	
Soil/Sediment:				/	
Received in airtight container?				/	
Received in methanol?				/	
Methanol covering soil?				/	
D.I. Water - Received within 48 hour HT?				/	
7. Trip Blank present in cooler?				/	
8. Proper sample containers and volume?	/				
9. Samples within hold time upon receipt?	/				
10. Aqueous samples properly preserved?				/	
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH - pH <2				/	
Sulfide - >9, no headspace				/	
Cyanide - pH >12				/	
11. Bottleware Prepped on:					
* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.					

600 Technology Way
P.O. Box 540
Scarborough, ME 04070
Tel: (207) 874-2400
Fax: (207) 775-4029

Chain of Custody

Client: Seabrook WWTP		Contact: Daumanic Fucile		Phone #: ()		Fax #:							
Address: 274 NH-286		Seabrook		State: NH		Zip Code: 03874							
Purchase Order #:		Proj. Name/No.: PFAS sampling		Katahdin Quote #:									
Bill (if different than above):				Address:									
Sampler (Print/Sign): Michael VanLuvender/				Copies To:									
LAB USE ONLY		Work Order # SR4668		Analysis and Container Type									
Remarks:		Katahdin Project Number		Preservatives									
				Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N		
Shipping Info:		FEDEX		UPS		CLIENT							
Airbill No:													
Temp C		Temp Blank		Intact		Not Intact							
*	Sample Description	Date/Time Collected	Matrix	No. of Containers									
	Sludge	8/28/2024 1055	SL	2	1	1							
COMMENTS:													
Relinquished By:		Date/Time	Received By:		Relinquished By:		Date/Time		Received By:				
Michael VanLuvender		8/28/24 1445											
Relinquished By:		Date/Time	Received By:		Relinquished By:		Date/Time		Received By:				

The terms and conditions on the following page hereof shall govern services, except when a signed contractual agreement exists.



Katahdin Analytical Services

Login Chain of Custody (In01)

Page: 1 of 2

Aug. 28, 2024

06:53 PM

Login Number: SR4668

Account: SEABROOKWWTP001

Seabrook WWTP

Project: PFAS Sampling

Primary Report Address:

Daumanic Fucile

274 NH-286

Seabrook, NH 03874

dfucile@seabrooknh.org

Primary Invoice Address:

Daumanic Fucile

274 NH-286

Seabrook,NH 03874

dfucile@seabrooknh.org

Report CC Addresses:

Invoice CC Addresses:

Quote/Incoming:

Login Information

ANALYSIS INSTRUCTIONS	:	
CHECK NO.	:	
CLIENT PO#	:	
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	4.4
DELIVERY SERVICES	:	KAS
EDD FORMAT	:	
ISM INSTRUCTIONS	:	
LOGIN INITIALS	:	JCB
PM	:	DL
PROJECT NAME	:	PFAS Sampling
QC LEVEL	:	
REPORT INSTRUCTIONS	:	Daumanic Fucile
SDG ID	:	
SDG STATUS	:	
TEMPLATE	:	
VERBAL TAT	:	

Aug. 28, 2024

06:53 PM

Login Number: SR4668

Quote/Incoming:

Account: SEABROOKWWTP001

Seabrook WWTP

Project: PFAS Sampling

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Due Date	Verbal Due Date	Mailed
SR4668-1	SLUDGE	28-AUG-24 10:55	28-AUG-24		09-SEP-24		
Sample Comments:							
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Notes</i>		<i>Bottle Type</i>		
Solid	S 1633-SLUDGE	25-SEP-24			4oz HDPE Jar		
Service	S EQUIPMENT						
Service	S REPORTING						
Service	S SAMPLING						
Solid	S TS	27-SEP-24			2oz Glass		
Service	S WASTE-DISPOSAL						

Total Samples: 1

Total Analyses: 6

ANALYTICAL REPORT

PREPARED FOR

Attn: Daumanic Fucile
Seabrook Department of Public Works
PO BOX 456
Seabrook, New Hampshire 03874

Generated 9/12/2025 4:06:32 PM

JOB DESCRIPTION

Seabrook Biosolids

JOB NUMBER

475-10519-1

Eurofins Concord

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Ashley Breen, Project Manager
Ashley.Breen@et.eurofinsus.com
Designee for
Alison Blay, Project Manager
Alison.Blay@et.eurofinsus.com
(603)228-0525

Case Narrative

Client: Seabrook Department of Public Works
Project: Seabrook Biosolids

Job ID: 475-10519-1

Job ID: 475-10519-1

Eurofins Concord

Job Narrative 475-10519-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 8/19/2025 1:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Concord

Sample Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook Biosolids

Job ID: 475-10519-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
475-10519-1	Biosolids	Solid	08/19/25 08:40	08/19/25 13:30	New Hampshire

- 1
- 2
- 3
- 4
- 5
- 6

Client Sample Results

Client: Seabrook Department of Public Works
Project/Site: Seabrook Biosolids

Job ID: 475-10519-1

Client Sample ID: Biosolids

Date Collected: 08/19/25 08:40

Date Received: 08/19/25 13:30

Lab Sample ID: 475-10519-1

Matrix: Solid

Percent Solids: 13.6

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	700		77	mg/Kg	✱	08/21/25 14:03	1	ALS
Nitrate Nitrite as N	<39		39	mg/Kg	✱	08/21/25 14:03	1	ALS

Method: 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Arsenic	5.0		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Calcium	15000		100	mg/Kg	✱	08/26/25 16:12	6.25	DS
Cadmium	<0.51		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Copper	360		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Chromium	20		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Iron	4600		100	mg/Kg	✱	08/26/25 16:12	6.25	DS
Potassium	7300		100	mg/Kg	✱	08/26/25 16:12	6.25	DS
Molybdenum	5.9		0.51	mg/Kg	✱	08/27/25 15:39	6.25	DS
Sodium	1600		100	mg/Kg	✱	08/26/25 16:12	6.25	DS
Nickel	18		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Mercury	0.19		0.10	mg/Kg	✱	08/26/25 16:12	6.25	DS
Phosphorus	25000		100	mg/Kg	✱	08/26/25 16:12	6.25	DS
Lead	8.3		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Selenium	2.4		0.51	mg/Kg	✱	08/26/25 16:12	6.25	DS
Zinc	530		5.1	mg/Kg	✱	08/26/25 16:12	6.25	DS

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Nitrogen, Kjeldahl (4500 NH3 D)	78000		720	mg/Kg	✱	08/26/25 20:15	1	EWG
Total Organic Carbon (9060)	66000		300	mg/Kg		09/06/25 05:39	1	P684
Free Liquid (9095B)	Absent			NONE		08/25/25 11:33	1	PEN
Nitrogen, Total Organic (Nitrogen,Org)	76000		740	mg/Kg	✱	08/26/25 20:15	1	GRS
Total Solids (SM 2540G)	14		1.0	%		08/21/25 17:04	1	SRG
Total Volatile Solids (SM 2540G)	75		1.0	%		08/21/25 17:04	1	SRG

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (9045D)	6.15		0.10	SU		08/20/25 09:48	1	PHA
Ammonia-N (SM 4500 NH3 D)	1900		360	mg/Kg	✱	08/28/25 10:55	1	PHA

Accreditation/Certification and Definitions Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook Biosolids

Job ID: 475-10519-1

Laboratory: Eurofins Concord

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Hampshire	NELAP	1012	01-20-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
4500 NH3 D	SM4500Norg_C	Solid	Nitrogen, Kjeldahl
6020B	3051A	Solid	Phosphorus
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Nitrogen,Org		Solid	Nitrogen, Total Organic
SM 2540G		Solid	Total Solids
SM 2540G		Solid	Total Volatile Solids
SM 4500 NH3 D		Solid	Ammonia-N

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Hampshire	NELAP	2730	01-10-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
9060		Solid	Total Organic Carbon

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
MRL	Method Reporting Limit

Eurofins Concord

Accreditation/Certification and Definitions Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook Biosolids

Job ID: 475-10519-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
SDL	Sample Detection Limit
SDL	Sample Detection Limit
SDL	Sample Detection Limit
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

MATRIX: A-Air; S-Soil, GW-Ground Water; SW-Surface Water; DW-Drinking Water;
WW-Waste Water
PRESERVATIVE: H-HCl, N-HNO₃, S-H₂SO₄, Na-NaOH, M-MeOH

TURN AROUND TIME

24hr*	48hr*
3-4 Days*	
5 Day	7 Day
10 Day	

***Pre-approval Required**

REPORTING OPTIONS
PRELIMS: YES OR NO

ELECTRONIC OPTIONS
PDF EXCEL
EQUIS

OTHER _____

QA/QC REPORTING

	A	B	C
MA MCP			
TEMP	5.0 °C		
ICE?	☒ YES ☐ NO		

PROJECT MANAGER: _____
 COMPANY: _____
 ADDRESS: _____
 CITY: _____ STATE: _____ ZIP: _____
 PHONE: _____ EXT. _____
 E-MAIL: _____
 CREDIT NAME: _____

See bottle order for tests.

SANP(S)S:	Durmanic Fucile
RELINQUISHED BY:	Mintonsk
DATE:	8-17-25
TIME:	09:10
RECEIVED BY:	Sally Kelly
DATE:	8-17-25
TIME:	13:30
RELINQUISHED BY:	Sally Kelly
DATE:	8-17-25
TIME:	13:30
RECEIVED BY:	Giff
DATE:	
TIME:	
RELINQUISHED BY:	
DATE:	
TIME:	

SAMPLER(S): Dynamic Fucile

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
William T. Lusk	8/18/25	0910	Sally Kelly
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Sally Kelly	8-19-25	13:30	arf

SITE HISTORY: _____
SUSPECTED CONTAMINATION: _____
FIELD READINGS: _____

FIELD READINGS:

RELINQUISHED BY: _____ DATE: _____ TIME: _____ RECEIVED BY: _____

U


Eurofins
Environment Testing
 51 Antrim Avenue | CONCORD, NH 03301 | TEL. 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: Lab Copy GREEN: Customer Copy)

- 1
- 2
- 3
- 4
- 5
- 6

Bottle Order Information

Bottle Order Seabrook Biosolids
Bottle Order # 2192
Request From Client 7/29/2025
Date Order Posted 7/29/2025 11 53.58AM
Order Status: Ready To Process
Prepared By Alison Blay
Deliver By Date 7/31/2025 11 59:00PM
Lab Project Number 47502660
PWSID

Order Completion Information

Creator Alison Blay
Filled by
Sent Date.
Sent Via
Tracking #

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
1	1	1	Soil jar 4oz - clear glass	None	9060 - Local Method	Solid	Normal		
1	1	1	Soil jar 8oz clear glass	None	9096B Paint Filter	Solid	Normal		
1	0	0	No Container	None	Nitrogen Org - TON	Solid	Normal		
1	1	1	Soil jar 4oz clear glass	None	6020B - (MOD) Custom List	Solid	Normal		
					2540G - Total Solids	Solid	Normal		
					4500NH3_D_TKN - (MOD) Copy	Solid	Normal		
1	1	1	Soil jar 4oz clear glass	None	SMA500NH3_D Local Method	Solid	Normal		
1	1	1	Soil jar 4oz - clear glass	None	9056A_ORGFM_28D - Chloride	Solid	Normal		
1	1	1	Soil jar 4oz clear glass	None	9056A_ORGFM_48H - NO3NO2	Solid	Normal		
1	1	1	Soil jar 4oz clear glass	None	9045D Local Method	Solid	Normal		

Total Bottle Summary**Bottle Type Description**

Normal

No Container

Soil jar 4oz clear glass

Soil jar 8oz clear glass

Preservative

None

None

None

Bottle Count

6

0

5

1

Total Bottles.

6

Notes to Field Staff:

Scan QR code for field
sampler instructions

Health and Safety Notes:

Preservative

Comment

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

- 1
- 2
- 3
- 4
- 5
- 6

ANALYTICAL REPORT

PREPARED FOR

Attn: Kelly O'Connell
Casella Organics Inc
755 Banfield Rd.
Suite 201
Portsmouth, New Hampshire 03801

Generated 9/11/2025 2:07:39 PM

JOB DESCRIPTION

Seabrook - Landfill | Seabrook, NH WWTP

JOB NUMBER

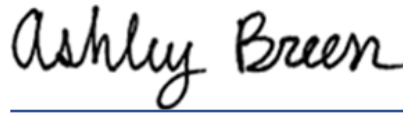
475-11246-1

Eurofins Concord

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
9/11/2025 2:07:39 PM

Authorized for release by
Ashley Breen, Project Manager
Ashley.Breen@et.eurofinsus.com
(603)228-0525

Case Narrative

Client: Casella Organics Inc
Project: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Job ID: 475-11246-1

Eurofins Concord

Job Narrative 475-11246-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 8/28/2025 5:41 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 23.7°C.

Receipt Exceptions

The Chain of Custody was received without any analyses selected. Per client all analysis needed.

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA

Method 8100: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: sludge (475-11246-1). The reporting limits (RLs) have been adjusted proportionately.

Method 8100: Surrogate recovery for the following sample was outside control limits: sludge (475-11246-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Concord

Sample Summary

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
475-11246-1	sludge	Solid	08/28/25 09:35	08/28/25 17:41	New Hampshire

- 1
- 2
- 3
- 4
- 5
- 6
- 7

Client Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Client Sample ID: sludge

Lab Sample ID: 475-11246-1

Date Collected: 08/28/25 09:35

Matrix: Solid

Date Received: 08/28/25 17:41

Method: 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
1,4-Dichlorobenzene	<20		20	ug/L		09/05/25 16:00	20	AMF
1,2-Dichloroethane	<20		20	ug/L		09/05/25 16:00	20	AMF
Chlorobenzene	<20		20	ug/L		09/05/25 16:00	20	AMF
Tetrachloroethene	<20		20	ug/L		09/05/25 16:00	20	AMF
Carbon tetrachloride	<20		20	ug/L		09/05/25 16:00	20	AMF
Chloroform	<20		20	ug/L		09/05/25 16:00	20	AMF
Benzene	<20		20	ug/L		09/05/25 16:00	20	AMF
Vinyl chloride	<20		20	ug/L		09/05/25 16:00	20	AMF
1,1-Dichloroethene	<10		10	ug/L		09/05/25 16:00	20	AMF
2-Butanone (MEK)	<200		200	ug/L		09/05/25 16:00	20	AMF
Trichloroethene	<20		20	ug/L		09/05/25 16:00	20	AMF

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	09/05/25 16:00	20	AMF
Toluene-d8 (Surr)	103		70 - 130	09/05/25 16:00	20	AMF
4-Bromofluorobenzene (Surr)	99		70 - 130	09/05/25 16:00	20	AMF

Method: 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
1,4-Dichlorobenzene	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
Pyridine	<5.0		5.0	ug/L		09/08/25 18:33	1	JMR
Hexachlorobenzene	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
2,4-Dinitrotoluene	<2.0		2.0	ug/L		09/08/25 18:33	1	JMR
3/4-Methylphenol	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
Hexachloroethane	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
Hexachlorobutadiene	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
Pentachlorophenol	<5.0		5.0	ug/L		09/08/25 18:33	1	JMR
2,4,6-Trichlorophenol	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
2-Methylphenol	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
2,4,5-Trichlorophenol	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR
Nitrobenzene	<1.0		1.0	ug/L		09/08/25 18:33	1	JMR

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
2,4,6-Tribromophenol (Surr)	81		15 - 110	09/08/25 18:33	1	JMR
2-Fluorophenol (Surr)	33		15 - 110	09/08/25 18:33	1	JMR
2-Fluorobiphenyl (Surr)	58		30 - 130	09/08/25 18:33	1	JMR
p-Terphenyl-d14 (Surr)	56		30 - 130	09/08/25 18:33	1	JMR
Nitrobenzene-d5 (Surr)	53		30 - 130	09/08/25 18:33	1	JMR
Phenol-d6 (Surr)	23		15 - 110	09/08/25 18:33	1	JMR

Method: 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Heptachlor epoxide	<5.0		5.0	ug/L		09/10/25 16:42	1	MB
Chlordane (technical)	<10		10	ug/L		09/10/25 16:42	1	MB
Lindane (gamma-BHC)	<5.0		5.0	ug/L		09/10/25 16:42	1	MB
Endrin	<5.0		5.0	ug/L		09/10/25 16:42	1	MB
Methoxychlor	<5.0		5.0	ug/L		09/10/25 16:42	1	MB
Heptachlor	<5.0		5.0	ug/L		09/10/25 16:42	1	MB
Toxaphene	<50		50	ug/L		09/10/25 16:42	1	MB

Eurofins Concord

Client Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Client Sample ID: sludge

Date Collected: 08/28/25 09:35

Date Received: 08/28/25 17:41

Lab Sample ID: 475-11246-1

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
DCB Decachlorobiphenyl (Surr)	74		30 - 150	09/10/25 16:42	1	MB
Tetrachloro-m-xylene	70		30 - 150	09/10/25 16:42	1	MB

Method: 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Arsenic	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Barium	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Cadmium	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Chromium	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Lead	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Selenium	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Silver	<0.10		0.10	mg/L		09/08/25 15:05	10	DS
Mercury	<0.010		0.010	mg/L		09/08/25 15:05	10	DS

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Ignitability (1030)	Pass			NONE		09/04/25 12:42	1	GRS
Free Liquid (9095B)	Absent			NONE		09/05/25 10:32	1	SP

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (9045D)	6.97		0.10	SU		09/04/25 16:39	1	SP

Client Sample ID: sludge

Date Collected: 08/28/25 09:35

Date Received: 08/28/25 17:41

Lab Sample ID: 475-11246-1

Matrix: Solid

Percent Solids: 14.5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
PCB-1016	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1221	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1232	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1242	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1248	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1254	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1260	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1262	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB
PCB-1268	<1.5		1.5	mg/Kg	☆	09/03/25 17:12	1	MB

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
Tetrachloro-m-xylene	104		30 - 150	09/03/25 17:12	1	MB
DCB Decachlorobiphenyl (Surr)	102		30 - 150	09/03/25 17:12	1	MB

Method: 8100 - Total Petroleum Hydrocarbons

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
C9-C40	25000		5000	mg/Kg	☆	09/03/25 16:07	1	EEC

Surrogate	%Recovery	Qualifier	Limits	Analyzed	Dil Fac	Analyst
p-Terphenyl-d14 (Surr)	0	S1-	30 - 130	09/03/25 16:07	1	EEC

Eurofins Concord

Client Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Client Sample ID: sludge
Date Collected: 08/28/25 09:35
Date Received: 08/28/25 17:41

Lab Sample ID: 475-11246-1
Matrix: Solid
Percent Solids: 14.5

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst	
Cyanide, Reactive (Lab SOP)	<5.8		5.8	mg/Kg	☼	09/04/25 17:10	1	PHA	
Sulfide, Reactive (Lab SOP)	<58		58	mg/Kg	☼	09/04/25 17:10	1	PHA	

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 475-14263/8

Matrix: Solid

Analysis Batch: 14263

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<1.0		1.0	ug/L			09/05/25 10:59	1
1,2-Dichloroethane	<1.0		1.0	ug/L			09/05/25 10:59	1
Chlorobenzene	<1.0		1.0	ug/L			09/05/25 10:59	1
Tetrachloroethene	<1.0		1.0	ug/L			09/05/25 10:59	1
Carbon tetrachloride	<1.0		1.0	ug/L			09/05/25 10:59	1
Chloroform	<1.0		1.0	ug/L			09/05/25 10:59	1
Benzene	<1.0		1.0	ug/L			09/05/25 10:59	1
Vinyl chloride	<1.0		1.0	ug/L			09/05/25 10:59	1
1,1-Dichloroethene	<0.50		0.50	ug/L			09/05/25 10:59	1
2-Butanone (MEK)	<10		10	ug/L			09/05/25 10:59	1
Trichloroethene	<1.0		1.0	ug/L			09/05/25 10:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		09/05/25 10:59	1
Toluene-d8 (Surr)	102		70 - 130		09/05/25 10:59	1
4-Bromofluorobenzene (Surr)	98		70 - 130		09/05/25 10:59	1

Lab Sample ID: LCS 475-14263/4

Matrix: Solid

Analysis Batch: 14263

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	20.0	21.4		ug/L		107	70 - 130
1,2-Dichloroethane	20.0	18.7		ug/L		93	70 - 130
Chlorobenzene	20.0	20.7		ug/L		104	70 - 130
Tetrachloroethene	20.0	21.1		ug/L		105	70 - 130
Carbon tetrachloride	20.0	20.0		ug/L		100	70 - 130
Chloroform	20.0	19.3		ug/L		96	70 - 130
Benzene	20.0	19.4		ug/L		97	70 - 130
Vinyl chloride	20.0	19.0		ug/L		95	70 - 130
1,1-Dichloroethene	20.0	19.2		ug/L		96	70 - 130
2-Butanone (MEK)	20.0	14.3		ug/L		71	40 - 160
Trichloroethene	20.0	19.6		ug/L		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
Toluene-d8 (Surr)	102		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 475-14263/5

Matrix: Solid

Analysis Batch: 14263

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	20.0	21.6		ug/L		108	70 - 130	1	20
1,2-Dichloroethane	20.0	19.5		ug/L		98	70 - 130	5	20
Chlorobenzene	20.0	21.5		ug/L		108	70 - 130	4	20
Tetrachloroethene	20.0	22.6		ug/L		113	70 - 130	7	20

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 475-14263/5

Matrix: Solid

Analysis Batch: 14263

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon tetrachloride	20.0	21.3		ug/L		107	70 - 130	7	20
Chloroform	20.0	20.2		ug/L		101	70 - 130	5	20
Benzene	20.0	20.6		ug/L		103	70 - 130	6	20
Vinyl chloride	20.0	20.6		ug/L		103	70 - 130	8	20
1,1-Dichloroethene	20.0	20.6		ug/L		103	70 - 130	7	20
2-Butanone (MEK)	20.0	16.5		ug/L		83	40 - 160	15	20
Trichloroethene	20.0	21.0		ug/L		105	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	103		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 475-14259/1-A

Matrix: Solid

Analysis Batch: 14263

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<20		20	ug/L			09/05/25 15:36	20
1,2-Dichloroethane	<20		20	ug/L			09/05/25 15:36	20
Chlorobenzene	<20		20	ug/L			09/05/25 15:36	20
Tetrachloroethene	<20		20	ug/L			09/05/25 15:36	20
Carbon tetrachloride	<20		20	ug/L			09/05/25 15:36	20
Chloroform	<20		20	ug/L			09/05/25 15:36	20
Benzene	<20		20	ug/L			09/05/25 15:36	20
Vinyl chloride	<20		20	ug/L			09/05/25 15:36	20
1,1-Dichloroethene	<10		10	ug/L			09/05/25 15:36	20
2-Butanone (MEK)	<200		200	ug/L			09/05/25 15:36	20
Trichloroethene	<20		20	ug/L			09/05/25 15:36	20

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		09/05/25 15:36	20
Toluene-d8 (Surr)	103		70 - 130		09/05/25 15:36	20
4-Bromofluorobenzene (Surr)	99		70 - 130		09/05/25 15:36	20

Method: 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 475-14388/1-A

Matrix: Solid

Analysis Batch: 14506

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14388

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
Pyridine	<5.0		5.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
Hexachlorobenzene	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
2,4-Dinitrotoluene	<2.0		2.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
3/4-Methylphenol	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
Hexachloroethane	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 475-14388/1-A

Matrix: Solid

Analysis Batch: 14506

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14388

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
Pentachlorophenol	<5.0		5.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
2,4,6-Trichlorophenol	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
2-Methylphenol	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
2,4,5-Trichlorophenol	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1
Nitrobenzene	<1.0		1.0	ug/L		09/08/25 09:24	09/08/25 15:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	74		15 - 110	09/08/25 09:24	09/08/25 15:42	1
2-Fluorophenol (Surr)	30		15 - 110	09/08/25 09:24	09/08/25 15:42	1
2-Fluorobiphenyl (Surr)	53		30 - 130	09/08/25 09:24	09/08/25 15:42	1
p-Terphenyl-d14 (Surr)	55		30 - 130	09/08/25 09:24	09/08/25 15:42	1
Nitrobenzene-d5 (Surr)	49		30 - 130	09/08/25 09:24	09/08/25 15:42	1
Phenol-d6 (Surr)	21		15 - 110	09/08/25 09:24	09/08/25 15:42	1

Lab Sample ID: LCS 475-14388/2-A

Matrix: Solid

Analysis Batch: 14506

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14388

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	25.0	11.3		ug/L		45	40 - 140
Pyridine	25.0	9.30		ug/L		37	15 - 140
Hexachlorobenzene	25.0	20.2		ug/L		81	40 - 140
2,4-Dinitrotoluene	25.0	16.9		ug/L		68	40 - 140
3/4-Methylphenol	50.0	24.6		ug/L		49	30 - 130
Hexachloroethane	25.0	10.7		ug/L		43	40 - 140
Hexachlorobutadiene	25.0	13.5		ug/L		54	40 - 140
Pentachlorophenol	50.0	31.5		ug/L		63	30 - 130
2,4,6-Trichlorophenol	50.0	33.8		ug/L		68	30 - 130
2-Methylphenol	50.0	23.2		ug/L		46	30 - 130
2,4,5-Trichlorophenol	50.0	35.0		ug/L		70	30 - 130
Nitrobenzene	25.0	14.3		ug/L		57	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	80		15 - 110
2-Fluorophenol (Surr)	28		15 - 110
2-Fluorobiphenyl (Surr)	52		30 - 130
p-Terphenyl-d14 (Surr)	58		30 - 130
Nitrobenzene-d5 (Surr)	49		30 - 130
Phenol-d6 (Surr)	20		15 - 110

Lab Sample ID: LCSD 475-14388/3-A

Matrix: Solid

Analysis Batch: 14506

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14388

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	25.0	12.4		ug/L		49	40 - 140	9	20
Pyridine	25.0	9.57		ug/L		38	15 - 140	3	20

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 475-14388/3-A

Matrix: Solid

Analysis Batch: 14506

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14388

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorobenzene	25.0	20.4		ug/L		82	40 - 140	1	20
2,4-Dinitrotoluene	25.0	17.6		ug/L		70	40 - 140	4	20
3/4-Methylphenol	50.0	26.6		ug/L		53	30 - 130	8	20
Hexachloroethane	25.0	11.7		ug/L		47	40 - 140	9	20
Hexachlorobutadiene	25.0	14.7		ug/L		59	40 - 140	8	20
Pentachlorophenol	50.0	32.0		ug/L		64	30 - 130	1	20
2,4,6-Trichlorophenol	50.0	35.3		ug/L		71	30 - 130	4	20
2-Methylphenol	50.0	25.4		ug/L		51	30 - 130	9	20
2,4,5-Trichlorophenol	50.0	36.3		ug/L		73	30 - 130	4	20
Nitrobenzene	25.0	15.5		ug/L		62	40 - 140	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	79		15 - 110
2-Fluorophenol (Surr)	32		15 - 110
2-Fluorobiphenyl (Surr)	55		30 - 130
p-Terphenyl-d14 (Surr)	59		30 - 130
Nitrobenzene-d5 (Surr)	53		30 - 130
Phenol-d6 (Surr)	22		15 - 110

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 475-14662/1-A

Matrix: Solid

Analysis Batch: 14681

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14662

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide	<0.050		0.050	ug/L		09/10/25 10:16	09/10/25 15:44	1
Chlordane (technical)	<0.10		0.10	ug/L		09/10/25 10:16	09/10/25 15:44	1
Lindane (gamma-BHC)	<0.050		0.050	ug/L		09/10/25 10:16	09/10/25 15:44	1
Endrin	<0.050		0.050	ug/L		09/10/25 10:16	09/10/25 15:44	1
Methoxychlor	<0.050		0.050	ug/L		09/10/25 10:16	09/10/25 15:44	1
Heptachlor	<0.050		0.050	ug/L		09/10/25 10:16	09/10/25 15:44	1
Toxaphene	<0.50		0.50	ug/L		09/10/25 10:16	09/10/25 15:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	68		30 - 150	09/10/25 10:16	09/10/25 15:44	1
Tetrachloro-m-xylene	68		30 - 150	09/10/25 10:16	09/10/25 15:44	1

Lab Sample ID: LCS 475-14662/4-A

Matrix: Solid

Analysis Batch: 14681

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide	0.500	0.416		ug/L		83	40 - 140
Lindane (gamma-BHC)	0.500	0.402		ug/L		80	40 - 140
Endrin	0.500	0.469		ug/L		94	40 - 140
Methoxychlor	0.500	0.442		ug/L		88	40 - 140
Heptachlor	0.500	0.359		ug/L		72	40 - 140

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 475-14662/4-A

Matrix: Solid

Analysis Batch: 14681

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14662

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	61		30 - 150
Tetrachloro-m-xylene	69		30 - 150

Lab Sample ID: LCSD 475-14662/5-A

Matrix: Solid

Analysis Batch: 14681

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14662

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Heptachlor epoxide	0.500	0.405		ug/L		81	40 - 140	3	20
Lindane (gamma-BHC)	0.500	0.397		ug/L		79	40 - 140	1	20
Endrin	0.500	0.463		ug/L		93	40 - 140	1	20
Methoxychlor	0.500	0.447		ug/L		89	40 - 140	1	20
Heptachlor	0.500	0.366		ug/L		73	40 - 140	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	66		30 - 150
Tetrachloro-m-xylene	67		30 - 150

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 475-13962/1-A

Matrix: Solid

Analysis Batch: 14050

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 13962

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1221	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1232	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1242	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1248	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1254	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1260	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1262	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1
PCB-1268	<0.017		0.017	mg/Kg		09/02/25 13:31	09/03/25 13:58	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
Tetrachloro-m-xylene	103		30 - 150	09/02/25 13:31	09/03/25 13:58	1
DCB Decachlorobiphenyl (Surr)	106		30 - 150	09/02/25 13:31	09/03/25 13:58	1

Lab Sample ID: LCS 475-13962/2-A

Matrix: Solid

Analysis Batch: 14050

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13962

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	0.133	0.148		mg/Kg		111	40 - 140
PCB-1260	0.133	0.155		mg/Kg		116	40 - 140

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 475-13962/2-A

Matrix: Solid

Analysis Batch: 14050

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 13962

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene	104		30 - 150
DCB Decachlorobiphenyl (Surr)	109		30 - 150

Lab Sample ID: LCSD 475-13962/3-A

Matrix: Solid

Analysis Batch: 14050

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 13962

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	0.133	0.148		mg/Kg		111	40 - 140	0	30
PCB-1260	0.133	0.157		mg/Kg		117	40 - 140	1	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene	105		30 - 150
DCB Decachlorobiphenyl (Surr)	110		30 - 150

Method: 8100 - Total Petroleum Hydrocarbons

Lab Sample ID: MB 475-14032/1-A

Matrix: Solid

Analysis Batch: 14038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14032

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C40	<30		30	mg/Kg		09/03/25 09:06	09/03/25 11:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14 (Surr)	107		30 - 130	09/03/25 09:06	09/03/25 11:08	1

Lab Sample ID: LCS 475-14032/2-A

Matrix: Solid

Analysis Batch: 14038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14032

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C9-C40	80.0	70.2		mg/Kg		88	30 - 160

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl-d14 (Surr)	112		30 - 130

Lab Sample ID: LCSD 475-14032/3-A

Matrix: Solid

Analysis Batch: 14038

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 14032

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C9-C40	80.0	71.7		mg/Kg		90	30 - 160	2	30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl-d14 (Surr)	126		30 - 130

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 475-14268/1-A

Matrix: Solid

Analysis Batch: 14517

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14268

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Barium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Barium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Barium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Cadmium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Cadmium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Chromium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Lead	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Selenium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Selenium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Selenium	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Silver	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Silver	<0.10		0.10	mg/L		09/05/25 08:17	09/08/25 13:49	100
Mercury	<0.010		0.010	mg/L		09/05/25 08:17	09/08/25 13:49	100
Mercury	<0.010		0.010	mg/L		09/05/25 08:17	09/08/25 13:49	100

Lab Sample ID: LCS 475-14268/2-A

Matrix: Solid

Analysis Batch: 14517

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 14268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	2.05		mg/L		102	80 - 120
Barium	2.00	1.98		mg/L		99	80 - 120
Barium	2.00	1.95		mg/L		97	80 - 120
Barium	2.00	2.07		mg/L		104	80 - 120
Cadmium	2.00	2.00		mg/L		100	80 - 120
Cadmium	2.00	2.03		mg/L		101	80 - 120
Chromium	2.00	2.10		mg/L		105	80 - 120
Lead	2.00	1.92		mg/L		96	80 - 120
Selenium	2.00	2.23		mg/L		111	80 - 120
Selenium	2.00	2.01		mg/L		100	80 - 120
Selenium	2.00	2.06		mg/L		103	80 - 120
Silver	2.00	2.01		mg/L		100	80 - 120
Silver	2.00	2.06		mg/L		103	80 - 120
Mercury	0.100	0.0990		mg/L		99	80 - 120
Mercury	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: MB 475-14269/1-A

Matrix: Solid

Analysis Batch: 14517

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 14269

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Barium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Barium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Barium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Cadmium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Cadmium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Chromium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 475-14269/1-A
Matrix: Solid
Analysis Batch: 14517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14269

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Selenium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Selenium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Selenium	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Silver	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Silver	<0.10		0.10	mg/L		09/05/25 08:18	09/08/25 15:42	100
Mercury	<0.010		0.010	mg/L		09/05/25 08:18	09/08/25 15:42	100
Mercury	<0.010		0.010	mg/L		09/05/25 08:18	09/08/25 15:42	100

Lab Sample ID: LCS 475-14269/2-A
Matrix: Solid
Analysis Batch: 14517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.00	1.99		mg/L		99	80 - 120
Barium	2.00	2.05		mg/L		102	80 - 120
Barium	2.00	1.98		mg/L		99	80 - 120
Barium	2.00	2.01		mg/L		101	80 - 120
Cadmium	2.00	1.99		mg/L		100	80 - 120
Cadmium	2.00	1.96		mg/L		98	80 - 120
Chromium	2.00	1.99		mg/L		100	80 - 120
Lead	2.00	2.02		mg/L		101	80 - 120
Selenium	2.00	2.14		mg/L		107	80 - 120
Selenium	2.00	2.03		mg/L		101	80 - 120
Selenium	2.00	2.02		mg/L		101	80 - 120
Silver	2.00	2.00		mg/L		100	80 - 120
Silver	2.00	2.01		mg/L		101	80 - 120
Mercury	0.100	0.108		mg/L		108	80 - 120
Mercury	0.100	0.110		mg/L		110	80 - 120

Method: 9045D - pH

Lab Sample ID: LCDSRM 475-14212/9
Matrix: Solid
Analysis Batch: 14212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
pH	8.00	7.90		SU		98.8	98.1 - 101.9	1	

Lab Sample ID: LCSSRM 475-14212/1
Matrix: Solid
Analysis Batch: 14212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
pH	8.00	7.86		SU		98.3	98.1 - 101.9

Eurofins Concord

QC Sample Results

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Method: 9045D - pH (Continued)

Lab Sample ID: 475-11246-1 DU
Matrix: Solid
Analysis Batch: 14212

Client Sample ID: sludge
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
pH	6.97		6.92		SU		0.7	10

Method: Lab SOP - Reactive Cyanide by Spectrophotometer

Lab Sample ID: MB 475-14308/1-A
Matrix: Solid
Analysis Batch: 14314

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14308

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<1.0		1.0	mg/Kg		09/04/25 16:40	09/04/25 17:10	1

Lab Sample ID: LCS 475-14308/2-A
Matrix: Solid
Analysis Batch: 14314

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14308

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	100	35.9		mg/Kg		36	0 - 73

Method: Lab SOP - Reactive Sulfide by Spectrophotometer

Lab Sample ID: MB 475-14308/1-A
Matrix: Solid
Analysis Batch: 14320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14308

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<10		10	mg/Kg		09/04/25 16:40	09/04/25 17:10	1

Lab Sample ID: LCS 475-14308/3-A
Matrix: Solid
Analysis Batch: 14320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14308

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	20.0	<50		mg/Kg		58	9 - 160

Accreditation/Certification and Definitions Summary

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Laboratory: Eurofins Concord

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Hampshire	NELAP	1012	01-20-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8270E	3510C	Solid	3/4-Methylphenol
Lab SOP	7.3.4	Solid	Cyanide, Reactive
Lab SOP	7.3.4	Solid	Sulfide, Reactive
Moisture - 2540		Solid	Percent Solids

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
MRL	Method Reporting Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Accreditation/Certification and Definitions Summary

Client: Casella Organics Inc
Project/Site: Seabrook - Landfill | Seabrook, NH WWTP

Job ID: 475-11246-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
SDL	Sample Detection Limit
SDL	Sample Detection Limit
SDL	Sample Detection Limit
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

- 1
- 2
- 3
- 4
- 5
- 6
- 7

- 1
- 2
- 3
- 4
- 5
- 6
- 7

ANALYTICAL REPORT

PREPARED FOR

Attn: Daumanic Fucile
Seabrook Department of Public Works
PO BOX 456
Seabrook, New Hampshire 03874

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JOB DESCRIPTION

Seabrook
Seabrook Biosolids 47502660

JOB NUMBER

475-18227-1

Eurofins Concord

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Drinking Water and Wastewater Northeast, LLC Project Manager.

Authorization



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Authorized for release by
Ashley Breen, Project Manager
Ashley.Breen@et.eurofinsus.com
Designee for
Sarah Lesniak, Project Manager
Sarah.Lesniak@et.eurofinsus.com
(603)228-0525

Case Narrative

Client: Seabrook Department of Public Works
Project: Seabrook

Job ID: 475-18227-1

Job ID: 475-18227-1

Eurofins Concord

Job Narrative 475-18227-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 12/29/2025 2:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. Analyses were listed on COC, but individual samples were not designated for specific analyses. The client was contacted, and the laboratory was provided analysis requested.

HPLC/IC

Method 9056A_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for sample Seabrook (475-18227-1) were outside control limits for one or more analytes. See QC Sample Results for detail. The associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 9056A_ORGFM_48H - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for sample Seabrook (475-18227-1) were outside control limits for one or more analytes. See QC Sample Results for detail. The associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Concord

Sample Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook

Job ID: 475-18227-1
SDG: Seabrook Biosolids 47502660

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
475-18227-1	Seabrook	Solid	12/29/25 08:45	12/29/25 14:00	New Hampshire

Client Sample Results

Client: Seabrook Department of Public Works
Project/Site: Seabrook

Job ID: 475-18227-1
SDG: Seabrook Biosolids 47502660

Client Sample ID: Seabrook

Date Collected: 12/29/25 08:45

Date Received: 12/29/25 14:00

Lab Sample ID: 475-18227-1

Matrix: Solid

Percent Solids: 12.3

Method: 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Chloride	1400	F1	88	mg/Kg	☼	01/02/26 16:14	1	ALS
Nitrate Nitrite as N	<44	F1	44	mg/Kg	☼	01/02/26 16:14	1	ALS

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
Nitrogen, Kjeldahl (4500 NH3 D)	89000		750	mg/Kg	☼	01/05/26 19:18	1	EWG
Free Liquid (9095B)	Absent			NONE		01/02/26 08:55	1	PEN
Nitrogen, Total Organic (Nitrogen,Org)	84000		810	mg/Kg	☼	01/05/26 19:18	1	SEC
Total Solids (SM 2540G)	12		1.0	%		12/31/25 10:34	1	SP
Total Volatile Solids (SM 2540G)	88	B	1.0	%		12/31/25 10:34	1	SP

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Analyzed	Dil Fac	Analyst
pH (9045D)	6.0		0.1	SU		12/30/25 11:04	1	SP
Ammonia-N (SM 4500 NH3 D)	5000		370	mg/Kg	☼	01/08/26 13:58	1	SP

Accreditation/Certification and Definitions Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook

Job ID: 475-18227-1
SDG: Seabrook Biosolids 47502660

Laboratory: Eurofins Concord

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Hampshire	NELAP	1012	01-20-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
4500 NH3 D	SM4500Norg_C	Solid	Nitrogen, Kjeldahl
Moisture - 2540		Solid	Percent Moisture
Moisture - 2540		Solid	Percent Solids
Nitrogen,Org		Solid	Nitrogen, Total Organic
SM 2540G		Solid	Total Solids
SM 2540G		Solid	Total Volatile Solids
SM 4500 NH3 D		Solid	Ammonia-N

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
MRL	Method Reporting Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

Accreditation/Certification and Definitions Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook

Job ID: 475-18227-1
SDG: Seabrook Biosolids 47502660

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
SDL	Sample Detection Limit
SDL	Sample Detection Limit
SDL	Sample Detection Limit
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Method Summary

Client: Seabrook Department of Public Works
Project/Site: Seabrook

Job ID: 475-18227-1
SDG: Seabrook Biosolids 47502660

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	EET ENC
4500 NH3 D	Nitrogen, Total Kjeldahl	SM	EET ENC
9045D	pH	SW846	EET ENC
9095B	Paint Filter	SW846	EET ENC
Moisture - 2540	Percent Moisture	SM	EET ENC
Nitrogen,Org	Nitrogen, Organic	EPA	EET ENC
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET ENC
SM 4500 NH3 D	Ammonia	SM	EET ENC
DI Leach	Deionized Water Leaching Procedure	ASTM	EET ENC
SM4500Norg_C	Preparation, Nitrogen -Total Kjeldahl	SM	EET ENC

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET ENC = Eurofins Concord, 51 Antrim Avenue, Concord, NH 03301, TEL (603)228-0525

CHAIN-OF-CUSTODY RECORD

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

Page _____ of _____

FOR LAB USE ONLY



475-18227 COC

NOTES
MEOH VIAL #

OF CONTAINERS

Seabrook

12/29/25 0845

S G

SAMPLING
DATE/TIME
*IF COMPOSITE,
INDICATE BOTH
START & FINISH
DATE/TIME

MATRIX (SEE BELOW)
GRAB/*COMPOSITE

524.2 MTBE ONLY
8260 624
1,4 DIOXANE
8021
8015 GRO
MAVPH
8270 625
ABN PAH
EDB DBCP
TPH8100 LI L2
8015 DRO
MAEPH
PEST 608
PCB 8082
OIL & GREASE 1664
TPH 1664
TC1P 1311 ABN METALS
VOC PEST HERB
BOD CBOD
TS TSS TDS
BA CI F SO₄
NO₃ NO₂ NH₃ TN
T. PHOS. O. PHOS.
T. RES. CHLORINE
SPEC. CON. T. ALK.
COD PAENOLS TOC DOC
REACTIVE CYANIDE
FLASHPOINT IGNITABILITY
TOTAL COLIFORM E. COLI
ENTEROCOCCI
HETEROTROPHIC PLATE COUNT
DISSOLVED METALS (LIST BELOW)
TOTAL METALS (LIST BELOW)

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER;
WW-WASTE WATER
PRESERVATIVE: H-HCL; N-HNO₃; S-H₂SO₄; Na-NaOH; M-MEOH

PROJECT MANAGER: Alison Bly
COMPANY: Seabrook Wastewater
ADDRESS: 274 R+ 286 STATE: NH ZIP: 03874
CITY: Seabrook
PHONE: 603-395-6223 EXT.:
E-MAIL: dfucile@seabrooknh.org
SITE NAME: Seabrook
PROJECT #: Seabrook Biosolids 47502660
STATE: NH MA ME VT OTHER:
REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR
GWP, OIL FUND, BROWNFIELD OR OTHER:
QUOTE #: P.O. #:

QA/QC REPORTING

A B C

MA MCP

TEMP. 48 °C
ICE? YES NO

REPORTING OPTIONS
PRELIMS: YES OR NO

ELECTRONIC OPTIONS
PDF EXCEL EQUIS OTHER

TURN AROUND TIME

24hr* 48hr*

3-4 Days*

5 Day 7 Day

10 Day

*Pre-approval Required

METALS: 8 RCRA 13 PP FE, MN PB, CU

OTHER METALS:

SAMPLES FIELD FILTERED? ☐ YES ☐ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

SITE HISTORY:

SUSPECTED CONTAMINATION:

FIELD READINGS:



Environment Testing
Eastern Analytical

51 Andrim Avenue | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: Lab Copy YELLOW: Customer Copy)