Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	CCME FAL	MDMER	0	1	2	3	4	5	6	7	8	9
Date			Effective	12-Aug-20	19-Aug-20	26-Aug-20	02-Sep-20	09-Sep-20	16-Sep-20	23-Sep-20	30-Sep-20	07-Oct-20	14-Oct-20
LIMS			01-Jun-2021	10105-AUG20	10144-AUG20	10222-AUG20	10007-SEP20	10091-SEP20	10154-SEP20	10232-SEP20	10315-SEP20	10021-OCT20	10132-OCT20
Hum Cell Leachate Vo	mL	-	-	975	969	818	984	995	1018	1007	476	512	550
pH	no unit	6.0-9.5	-	**5.49**	**4.64**	**5.30**	**5.96**	**4.95**	**5.86**	**5.11**	**4.77**	**5.19**	**5.36**
Acidity	mg/L as $CaCO_3$	-	-	7	10	7	3	4	2	4	5	5	4
Alkalinity	mg/L as $CaCO_3$	-	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	-	-	5	22	20	26	26	24	27	43	46	42
SO_4	mg/L	-	-	1.6	6.7	6.9	10	9.6	9.2	9.3	24	20	15
F	mg/L	0.12	-	< 0.06	< 0.06	< 0.06	---	< 0.06	---	---	---	< 0.06	---
NH_3+NH_4	as N mg/L			<0.1	<0.1	<0.1	---	<0.1	---	---	---	---	---
Un-Ionized NH_3	as N mg/L	0.020	0.50	0.000	0.000	0.000	---	0.000	---	---	---	---	---
Hg	mg/L	0.000026	-	< 0.00001	< 0.00001	0.00001	---	< 0.00001	---	---	---	< 0.00001	---
Ag	mg/L	0.00025	-	< 0.00005	< 0.00005	< 0.00005	---	< 0.00005	---	---	---	< 0.00005	---
Al	mg/L	0.005@pH<6.5	-	**0.007**	**0.039**	**0.006**	---	**0.022**	---	---	---	**0.058**	---
As	mg/L	0.005	0.10	< 0.0002	0.0002	< 0.0002	---	< 0.0002	---	---	---	< 0.0002	---
Ba	mg/L	-	-	0.00018	0.00021	0.00028	---	0.00056	---	---	---	0.00115	---
Be	mg/L	-	-	< 0.000007	< 0.000007	< 0.000007	---	< 0.000007	---	---	---	0.000019	---
B	mg/L	1.5	-	0.004	< 0.002	0.004	---	0.002	---	---	---	0.004	---
Bi	mg/L	-	-	< 0.000007	< 0.000007	< 0.000007	---	0.000020	---	---	---	< 0.000007	---
Ca	mg/L	-	-	0.20	0.80	1.45	---	2.41	---	---	---	4.60	---
Cd	mg/L	0.00009	-	0.000009	0.000007	0.000025	---	0.000055	---	---	---	**0.000203**	---
Co	mg/L	-	-	0.000038	0.000123	0.000306	---	0.000653	---	---	---	0.00177	---
Cr	mg/L	-	-	0.00014	< 0.00008	< 0.00008	---	< 0.00008	---	---	---	< 0.00008	---
Cu	mg/L	0.002	0.10	0.0003	0.0006	0.0004	---	0.0013	---	---	---	**0.0059**	---
Fe	mg/L	0.3	-	0.008	0.010	0.017	---	0.033	---	---	---	0.106	---
K	mg/L	-	-	0.056	0.082	0.077	---	0.083	---	---	---	0.138	---
Li	mg/L	-	-	0.0001	< 0.0001	0.0001	---	0.0001	---	---	---	0.0002	---
Mg	mg/L	-	-	0.027	0.093	0.174	---	0.274	---	---	---	0.457	---
Mn	mg/L	-	-	0.00421	0.0167	0.0345	---	0.0581	---	---	---	0.117	---
Mo	mg/L	0.073	-	0.00017	0.00020	0.00009	---	0.00005	---	---	---	0.00013	---
Na	mg/L	-	-	0.85	1.34	1.46	---	1.13	---	---	---	1.28	---
Ni	mg/L	0.03	0.25	0.0002	0.0003	0.0005	---	0.0008	---	---	---	0.0017	---
P	mg/L	-	-	< 0.003	< 0.003	< 0.003	---	< 0.003	---	---	---	< 0.003	---
Pb	mg/L	0.001	0.08	0.00001	< 0.00001	0.00003	---	0.00004	---	---	---	0.00003	---
Sb	mg/L	-	-	< 0.0009	< 0.0009	< 0.0009	---	< 0.0009	---	---	---	< 0.0009	---
Se	mg/L	0.001	-	< 0.00004	< 0.00004	0.00005	---	0.00004	---	---	---	0.00007	---
Si	mg/L	-	-	0.35	1.44	1.92	---	2.48	---	---	---	2.07	---
Sn	mg/L	-	-	0.00014	0.00013	0.00016	---	0.00014	---	---	---	0.00009	---
Sr	mg/L	-	-	0.00159	0.00135	0.00142	---	0.00298	---	---	---	0.00547	---
Th	mg/L	-	-	< 0.0001	< 0.0001	< 0.0001	---	< 0.0001	---	---	---	< 0.0001	---
Ti	mg/L	-	-	0.00009	< 0.00005	< 0.00005	---	< 0.00005	---	---	---	0.00006	---
Tl	mg/L	0.0008	-	< 0.000005	< 0.000005	< 0.000005	---	< 0.000005	---	---	---	< 0.000005	---
U	mg/L	0.015	-	0.000002	0.000006	0.000022	---	0.000007	---	---	---	0.000040	---
V	mg/L	-	-	0.00006	0.00003	< 0.00001	---	< 0.00001	---	---	---	< 0.00001	---
W	mg/L	-	-	0.00003	0.00007	0.00003	---	< 0.00002	---	---	---	0.00004	---
Y	mg/L	-	-	0.000017	0.000006	0.000014	---	0.000047	---	---	---	0.000500	---
Zn	mg/L	0.007	0.40	0.005	**0.012**	**0.013**	---	**0.016**	---	---	---	**0.049**	---

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	CCME FAL	MDMER	10	11	12	13	14	15	16	17	18	19
Date			Effective	21-Oct-20	28-Oct-20	04-Nov-20	11-Nov-20	18-Nov-20	25-Nov-20	02-Dec-20	09-Dec-20	16-Dec-20	23-Dec-20
LIMS			01-Jun-2021	10196-OCT20	10254-OCT20	10019-NOV20	10077-NOV20	10124-NOV20	10162-NOV20	10018-DEC20	10070-DEC20	10162-DEC20	10185-DEC20
Hum Cell Leachate Vol	mL	-	-	471	386	490	498	422	386	465	511	510	512
pH	no unit	6.0-9.5	-	**4.73**	**5.00**	**4.96**	**4.82**	**5.28**	**4.75**	**5.22**	**4.73**	**4.73**	**4.64**
Acidity	mg/L as $CaCO_3$	-	-	6	6	5	5	6	8	6	6	5	6
Alkalinity	mg/L as $CaCO_3$	-	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	-	-	53	60	35	33	39	53	34	37	37	40
SO_4	mg/L	-	-	19	21	12	9.7	13	16	10	11	11	12
F	mg/L	0.12	-	---	---	< 0.06	---	---	---	< 0.06	---	---	---
NH_3+NH_4	as N mg/L			---	---	---	---	---	---	---	---	---	---
Un-Ionized NH_3	as N mg/L	0.020	0.50	---	---	---	---	---	---	---	---	---	---
Hg	mg/L	0.000026	-	---	---	< 0.00001	---	---	---	< 0.00001	---	---	---
Ag	mg/L	0.00025	-	---	---	< 0.00005	---	---	---	< 0.00005	---	---	---
Al	mg/L	0.005@pH<6.5	-	---	---	**0.064**	---	---	---	**0.059**	---	---	---
As	mg/L	0.005	0.10	---	---	0.0004	---	---	---	< 0.0002	---	---	---
Ba	mg/L	-	-	---	---	0.00122	---	---	---	0.00166	---	---	---
Be	mg/L	-	-	---	---	0.000027	---	---	---	0.000029	---	---	---
B	mg/L	1.5	-	---	---	0.003	---	---	---	0.002	---	---	---
Bi	mg/L	-	-	---	---	< 0.000007	---	---	---	< 0.000007	---	---	---
Ca	mg/L	-	-	---	---	3.06	---	---	---	2.99	---	---	---
Cd	mg/L	0.00009	-	---	---	**0.000180**	---	---	---	**0.000143**	---	---	---
Co	mg/L	-	-	---	---	0.00168	---	---	---	0.00172	---	---	---
Cr	mg/L	-	-	---	---	< 0.00008	---	---	---	< 0.00008	---	---	---
Cu	mg/L	0.002	0.10	---	---	**0.0094**	---	---	---	**0.0095**	---	---	---
Fe	mg/L	0.3	-	---	---	0.118	---	---	---	0.110	---	---	---
K	mg/L	-	-	---	---	0.139	---	---	---	0.143	---	---	---
Li	mg/L	-	-	---	---	< 0.0001	---	---	---	0.0002	---	---	---
Mg	mg/L	-	-	---	---	0.324	---	---	---	0.311	---	---	---
Mn	mg/L	-	-	---	---	0.0833	---	---	---	0.0775	---	---	---
Mo	mg/L	0.073	-	---	---	0.00069	---	---	---	< 0.00004	---	---	---
Na	mg/L	-	-	---	---	0.84	---	---	---	0.75	---	---	---
Ni	mg/L	0.03	0.25	---	---	0.0013	---	---	---	0.0011	---	---	---
P	mg/L	-	-	---	---	< 0.003	---	---	---	< 0.003	---	---	---
Pb	mg/L	0.001	0.08	---	---	0.00011	---	---	---	< 0.00001	---	---	---
Sb	mg/L	-	-	---	---	< 0.0009	---	---	---	< 0.0009	---	---	---
Se	mg/L	0.001	-	---	---	0.00010	---	---	---	0.00008	---	---	---
Si	mg/L	-	-	---	---	2.54	---	---	---	1.09	---	---	---
Sn	mg/L	-	-	---	---	0.00007	---	---	---	< 0.00006	---	---	---
Sr	mg/L	-	-	---	---	0.00492	---	---	---	0.00557	---	---	---
Th	mg/L	-	-	---	---	< 0.0001	---	---	---	< 0.0001	---	---	---
Ti	mg/L	-	-	---	---	< 0.00005	---	---	---	< 0.00005	---	---	---
Tl	mg/L	0.0008	-	---	---	< 0.000005	---	---	---	< 0.000005	---	---	---
U	mg/L	0.015	-	---	---	0.000069	---	---	---	0.000023	---	---	---
V	mg/L	-	-	---	---	0.00003	---	---	---	< 0.00001	---	---	---
W	mg/L	-	-	---	---	0.00012	---	---	---	< 0.00002	---	---	---
Y	mg/L	-	-	---	---	0.000537	---	---	---	0.000158	---	---	---
Zn	mg/L	0.007	0.40	---	---	**0.048**	---	---	---	**0.044**	---	---	---

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	CCME FAL	MDMER	20	21	22	23	24	25	26	27	28	29	30
Date			Effective	30-Dec-20	06-Jan-21	13-Jan-21	20-Jan-21	27-Jan-21	03-Feb-21	10-Feb-21	17-Feb-21	24-Feb-21	03-Mar-21	10-Mar-21
LIMS			01-Jun-2021	10240-DEC20	10025-JAN21	10066-JAN21	10142-JAN21	10207-JAN21	10018-FEB21	10044-FEB21	10166-FEB21	10262-FEB21	10020-MAR21	10120-MAR21
Hum Cell Leachate Vol	mL	-	-	517	498	515	472	507	513	502	502	490	519	535
pH	no unit	6.0-9.5	-	**4.51**	**4.56**	**4.67**	**4.58**	**4.55**	**4.82**	**4.59**	**4.74**	**4.55**	**4.77**	**4.42**
Acidity	mg/L as $CaCO_3$	-	-	7	7	6	5	8	5	6	6	7	7	9
Alkalinity	mg/L as $CaCO_3$	-	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	-	-	47	44	43	36	44	38	41	38	41	41	49
SO_4	mg/L	-	-	12	12	13	13	13	11	12	13	12	12	12
F	mg/L	0.12	-	< 0.06	---	---	---	< 0.06	---	---	---	< 0.06	---	---
NH_3+NH_4	as N mg/L			---	---	---	---	---	---	---	---	---	---	---
Un-Ionized NH_3	as N mg/L	0.020	0.50	---	---	---	---	---	---	---	---	---	---	---
Hg	mg/L	0.000026	-	< 0.00001	---	---	---	< 0.00001	---	---	---	< 0.00001	---	---
Ag	mg/L	0.00025	-	< 0.00005	---	---	---	< 0.00005	---	---	---	< 0.00005	---	---
Al	mg/L	0.005@pH<6.5	-	**0.132**	---	---	---	**0.251**	---	---	---	**0.298**	---	---
As	mg/L	0.005	0.10	< 0.0002	---	---	---	< 0.0002	---	---	---	< 0.0002	---	---
Ba	mg/L	-	-	0.00222	---	---	---	0.00301	---	---	---	0.00302	---	---
Be	mg/L	-	-	0.000055	---	---	---	0.000081	---	---	---	0.000084	---	---
B	mg/L	1.5	-	0.003	---	---	---	0.005	---	---	---	< 0.002	---	---
Bi	mg/L	-	-	< 0.000007	---	---	---	< 0.000007	---	---	---	< 0.000007	---	---
Ca	mg/L	-	-	2.93	---	---	---	3.34	---	---	---	3.01	---	---
Cd	mg/L	0.00009	-	**0.000242**	---	---	---	**0.000407**	---	---	---	**0.000433**	---	---
Co	mg/L	-	-	0.00203	---	---	---	0.00235	---	---	---	0.00205	---	---
Cr	mg/L	-	-	< 0.00008	---	---	---	< 0.00008	---	---	---	0.00032	---	---
Cu	mg/L	0.002	0.10	**0.0253**	---	---	---	**0.0500**	---	---	---	**0.0655**	---	---
Fe	mg/L	0.3	-	0.295	---	---	---	**0.431**	---	---	---	**0.437**	---	---
K	mg/L	-	-	0.158	---	---	---	0.145	---	---	---	0.182	---	---
Li	mg/L	-	-	0.0002	---	---	---	0.0003	---	---	---	0.0003	---	---
Mg	mg/L	-	-	0.308	---	---	---	0.270	---	---	---	0.209	---	---
Mn	mg/L	-	-	0.0880	---	---	---	0.0965	---	---	---	0.0875	---	---
Mo	mg/L	0.073	-	0.00028	---	---	---	0.00016	---	---	---	0.00601	---	---
Na	mg/L	-	-	0.64	---	---	---	0.65	---	---	---	0.83	---	---
Ni	mg/L	0.03	0.25	0.0010	---	---	---	0.0011	---	---	---	0.0007	---	---
P	mg/L	-	-	< 0.003	---	---	---	< 0.003	---	---	---	< 0.003	---	---
Pb	mg/L	0.001	0.08	0.00013	---	---	---	0.00050	---	---	---	0.00040	---	---
Sb	mg/L	-	-	< 0.0009	---	---	---	< 0.0009	---	---	---	< 0.0009	---	---
Se	mg/L	0.001	-	0.00009	---	---	---	0.00017	---	---	---	0.00016	---	---
Si	mg/L	-	-	4.66	---	---	---	5.06	---	---	---	4.12	---	---
Sn	mg/L	-	-	< 0.00006	---	---	---	0.00007	---	---	---	< 0.00006	---	---
Sr	mg/L	-	-	0.00718	---	---	---	0.00704	---	---	---	0.00917	---	---
Th	mg/L	-	-	< 0.0001	---	---	---	< 0.0001	---	---	---	< 0.0001	---	---
Ti	mg/L	-	-	< 0.00005	---	---	---	< 0.00005	---	---	---	< 0.00005	---	---
Tl	mg/L	0.0008	-	< 0.000005	---	---	---	< 0.000005	---	---	---	< 0.000005	---	---
U	mg/L	0.015	-	0.000130	---	---	---	0.000150	---	---	---	0.000169	---	---
V	mg/L	-	-	< 0.00001	---	---	---	< 0.00001	---	---	---	0.00010	---	---
W	mg/L	-	-	< 0.00002	---	---	---	0.00002	---	---	---	< 0.00002	---	---
Y	mg/L	-	-	0.00122	---	---	---	0.00238	---	---	---	0.00288	---	---
Zn	mg/L	0.007	0.40	**0.055**	---	---	---	**0.079**	---	---	---	**0.082**	---	---

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	CCME FAL	MDMER	31	32	33	34	35	36	37	38	39	40
Date			Effective	17-Mar-21	24-Mar-21	31-Mar-21	07-Apr-21	14-Apr-21	21-Apr-21	28-Apr-21	05-May-21	12-May-21	19-May-21
LIMS			01-Jun-2021	10150-MAR21	10256-MAR21	10314-MAR21	10031-APR21	10114-APR21	10171-APR21	10199-APR21	10023-MAY21	10057-MAY21	10155-MAY21
Hum Cell Leachate Vo	mL	-	-	533	512	488	534	520	504	499	538	509	526
pH	no unit	6.0-9.5	-	**4.68**	**4.60**	**4.58**	**4.48**	**4.52**	**4.56**	**4.64**	**4.35**	**4.51**	**4.53**
Acidity	mg/L as $CaCO_3$	-	-	8	9	7	6	9	8	7	8	8	7
Alkalinity	mg/L as $CaCO_3$	-	-	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	-	-	37	40	42	42	39	36	35	38	40	40
SO_4	mg/L	-	-	11	12	12	11	11	11	14	14	17	13
F	mg/L	0.12	-	---	< 0.06	---	---	---	< 0.06	---	---	---	< 0.06
NH_3+NH_4	as N mg/L			---	---	---	---	---	---	---	---	---	---
Un-Ionized NH_3	as N mg/L	0.020	0.50	---	---	---	---	---	---	---	---	---	---
Hg	mg/L	0.000026	-	---	< 0.00001	---	---	---	< 0.00001	---	---	---	0.00001
Ag	mg/L	0.00025	-	---	< 0.00005	---	---	---	< 0.00005	---	---	---	< 0.00005
Al	mg/L	0.005@pH<6.5	-	---	**0.431**	---	---	---	**0.370**	---	---	---	**0.393**
As	mg/L	0.005	0.10	---	< 0.0002	---	---	---	0.0002	---	---	---	< 0.0002
Ba	mg/L	-	-	---	0.0041	---	---	---	0.00329	---	---	---	0.00325
Be	mg/L	-	-	---	0.00011	---	---	---	0.000076	---	---	---	0.000078
B	mg/L	1.5	-	---	0.003	---	---	---	< 0.002	---	---	---	< 0.002
Bi	mg/L	-	-	---	< 0.000007	---	---	---	< 0.000007	---	---	---	< 0.00001
Ca	mg/L	-	-	---	3.33	---	---	---	2.45	---	---	---	2.00
Cd	mg/L	0.00009	-	---	**0.00060**	---	---	---	**0.000434**	---	---	---	**0.00037**
Co	mg/L	-	-	---	0.0023	---	---	---	0.001809	---	---	---	0.00171
Cr	mg/L	-	-	---	< 0.00008	---	---	---	< 0.00008	---	---	---	< 0.00008
Cu	mg/L	0.002	0.10	---	**0.101**	---	---	---	**0.0930**	---	---	---	**0.102**
Fe	mg/L	0.3	-	---	**0.554**	---	---	---	**0.427**	---	---	---	**0.351**
K	mg/L	-	-	---	0.129	---	---	---	0.131	---	---	---	0.083
Li	mg/L	-	-	---	0.0003	---	---	---	0.0005	---	---	---	0.0002
Mg	mg/L	-	-	---	0.222	---	---	---	0.146	---	---	---	0.123
Mn	mg/L	-	-	---	0.0979	---	---	---	0.0694	---	---	---	0.0626
Mo	mg/L	0.073	-	---	< 0.00004	---	---	---	< 0.00004	---	---	---	0.00013
Na	mg/L	-	-	---	0.59	---	---	---	0.75	---	---	---	0.34
Ni	mg/L	0.03	0.25	---	0.0009	---	---	---	0.0010	---	---	---	0.0004
P	mg/L	-	-	---	< 0.003	---	---	---	< 0.003	---	---	---	< 0.003
Pb	mg/L	0.001	0.08	---	0.00058	---	---	---	0.00045	---	---	---	0.00054
Sb	mg/L	-	-	---	< 0.0009	---	---	---	< 0.0009	---	---	---	< 0.0009
Se	mg/L	0.001	-	---	0.00013	---	---	---	0.00008	---	---	---	0.00011
Si	mg/L	-	-	---	5.97	---	---	---	4.40	---	---	---	3.64
Sn	mg/L	-	-	---	0.00007	---	---	---	< 0.00006	---	---	---	< 0.00006
Sr	mg/L	-	-	---	0.0070	---	---	---	0.00561	---	---	---	0.00454
Th	mg/L	-	-	---	< 0.0001	---	---	---	< 0.0001	---	---	---	< 0.0001
Ti	mg/L	-	-	---	< 0.00005	---	---	---	< 0.00005	---	---	---	< 0.00005
Tl	mg/L	0.0008	-	---	< 0.000005	---	---	---	< 0.000005	---	---	---	< 0.000005
U	mg/L	0.015	-	---	0.00023	---	---	---	0.000162	---	---	---	0.000166
V	mg/L	-	-	---	< 0.00001	---	---	---	< 0.00001	---	---	---	< 0.00001
W	mg/L	-	-	---	< 0.00002	---	---	---	0.00002	---	---	---	< 0.00002
Y	mg/L	-	-	---	0.0041	---	---	---	0.00342	---	---	---	0.00373
Zn	mg/L	0.007	0.40	---	**0.096**	---	---	---	**0.066**	---	---	---	**0.061**

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	CCME FAL	MDMER	41
Date			Effective	26-May-21
LIMS			01-Jun-2021	10230-MAY21
Hum Cell Leachate Vo	mL	-	-	501
pH	no unit	6.0-9.5	-	**4.58**
Acidity	mg/L as $CaCO_3$	-	-	10
Alkalinity	mg/L as $CaCO_3$	-	-	< 2
Conductivity	µS/cm	-	-	38
SO_4	mg/L	-	-	15
F	mg/L	0.12	-	---
NH_3+NH_4	as N mg/L			---
Un-Ionized NH_3	as N mg/L	0.020	0.50	---
Hg	mg/L	0.000026	-	---
Ag	mg/L	0.00025	-	---
Al	mg/L	0.005@pH<6.5	-	---
As	mg/L	0.005	0.10	---
Ba	mg/L	-	-	---
Be	mg/L	-	-	---
B	mg/L	1.5	-	---
Bi	mg/L	-	-	---
Ca	mg/L	-	-	---
Cd	mg/L	0.00009	-	---
Co	mg/L	-	-	---
Cr	mg/L	-	-	---
Cu	mg/L	0.002	0.10	---
Fe	mg/L	0.3	-	---
K	mg/L	-	-	---
Li	mg/L	-	-	---
Mg	mg/L	-	-	---
Mn	mg/L	-	-	---
Mo	mg/L	0.073	-	---
Na	mg/L	-	-	---
Ni	mg/L	0.03	0.25	---
P	mg/L	-	-	---
Pb	mg/L	0.001	0.08	---
Sb	mg/L	-	-	---
Se	mg/L	0.001	-	---
Si	mg/L	-	-	---
Sn	mg/L	-	-	---
Sr	mg/L	-	-	---
Th	mg/L	-	-	---
Ti	mg/L	-	-	---
Tl	mg/L	0.0008	-	---
U	mg/L	0.015	-	---
V	mg/L	-	-	---
W	mg/L	-	-	---
Y	mg/L	-	-	---
Zn	mg/L	0.007	0.40	---

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Summary of ABA Test Data

Parameter	Units	Ref No.: 10139-JUL20
Sulphur (S)	%	0.536
Sulphide (S^{-})	%	0.50
NP	t $CaCO_3$/1000 t	4.5
CO_3 NP	t $CaCO_3$/1000 t	1.5

Leachate Parameters Measured

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µS/cm	SO_4 mg/L
0	975	5.49	7	<2	5	1.6
1	969	4.64	10	<2	22	6.7
2	818	5.30	7	<2	20	6.9
3	984	5.96	3	<2	26	10
4	995	4.95	4	<2	26	9.6
5	1018	5.86	2	<2	24	9.2
6	1007	5.11	4	<2	27	9.3
7	476	4.77	5	<2	43	24
8	512	5.19	5	<2	46	20
9	550	5.36	4	<2	42	15
10	471	4.73	6	<2	53	19
11	386	5.00	6	<2	60	21
12	490	4.96	5	<2	35	12
13	498	4.82	5	<2	33	9.7
14	422	5.28	6	<2	39	13
15	386	4.75	8	<2	53	16
16	465	5.22	6	<2	34	10
17	511	4.73	6	<2	37	11
18	510	4.73	5	<2	37	11
19	512	4.64	6	<2	40	12
20	517	4.51	7	<2	47	12

Acid Generation [1]

SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %
1.6	1.6	0.01	0.01
6.5	8.1	0.04	0.05
5.6	13.7	0.04	0.09
9.8	23.5	0.07	0.16
9.6	33.1	0.06	0.22
9.4	42.5	0.06	0.28
9.4	51.8	0.06	0.35
11.4	63.2	0.08	0.42
10.2	73.5	0.07	0.49
8.3	81.7	0.06	0.54
8.9	90.7	0.06	0.60
8.1	98.8	0.05	0.66
5.9	104.7	0.04	0.70
4.8	109.5	0.03	0.73
5.5	115.0	0.04	0.77
6.2	121.2	0.04	0.81
4.7	125.8	0.03	0.84
5.6	131.4	0.04	0.88
5.6	137.0	0.04	0.91
6.1	143.2	0.04	0.95
6.2	149.4	0.04	1.00

Acid Neutralization [1]

NP Consumption $CaCO_3$, g/t/wk	Cumulative NP Depletion %	Cumulative CO_3 NP Depletion %
1.63	0.04	0.11
6.76	0.19	0.56
5.88	0.32	0.95
10.25	0.54	1.63
9.95	0.77	2.30
9.76	0.98	2.95
9.76	1.20	3.60
11.90	1.46	4.39
10.67	1.70	5.10
8.59	1.89	5.68
9.32	2.10	6.30
8.44	2.29	6.86
6.13	2.42	7.27
5.03	2.53	7.60
5.71	2.66	7.99
6.43	2.80	8.41
4.84	2.91	8.74
5.86	3.04	9.13
5.84	3.17	9.52
6.40	3.31	9.94
6.46	3.46	10.37

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] *Calculated values*

Summary - Weeks 0 to 20

Maximum Value	5.96	10	2	60	24	11.4	-	0.08	-	11.90	-	-
Minimum Value	4.51	2	<2	5	1.6	1.6	-	0.01	-	1.63	-	-
Average Value	4.92	6	2	36	12	7.1	-	0.05	-	7.41	-	-

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	Ref No.: 10139-JUL20
Sulphide ($S^{=}$) Remaining	%	0.50
NP Remaining	t $CaCO_3$/1000 t	4.3
CO_3 NP Remaining	t $CaCO_3$/1000 t	1.3

Leachate Parameters Measured | ***Acid Generation*** [1] | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µS/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative NP Depletion %	Cumulative CO_3 NP Depletion %
21	498	4.56	7	<2	44	12	6.0	155.4	0.04	1.04	6.23	3.60	10.79
22	515	4.67	6	<2	43	13	6.7	162.1	0.04	1.08	6.97	3.75	11.25
23	472	4.58	5	<2	36	13	6.1	168.2	0.04	1.12	6.39	3.89	11.68
24	507	4.55	8	<2	44	13	6.6	174.8	0.04	1.17	6.87	4.05	12.14
25	513	4.82	5	<2	38	11	5.6	180.4	0.04	1.20	5.88	4.18	12.53
26	502	4.59	6	<2	41	12	6.0	186.5	0.04	1.24	6.28	4.32	12.95
27	502	4.74	6	<2	38	13	6.5	193.0	0.04	1.29	6.80	4.47	13.40
28	490	4.55	7	<2	41	12	5.9	198.9	0.04	1.33	6.13	4.60	13.81
29	519	4.77	7	<2	41	12	6.2	205.1	0.04	1.37	6.49	4.75	14.24
30	535	4.42	9	<2	49	12	6.4	211.5	0.04	1.41	6.69	4.90	14.69
31	533	4.68	8	<2	37	11	5.9	217.4	0.04	1.45	6.11	5.03	15.10
32	512	4.60	9	<2	40	12	6.1	223.5	0.04	1.49	6.40	5.17	15.52
33	488	4.58	7	<2	42	12	5.9	229.4	0.04	1.53	6.10	5.31	15.93
34	534	4.48	6	<2	42	11	5.9	235.2	0.04	1.57	6.12	5.45	16.34
35	520	4.52	9	<2	39	11	5.7	241.0	0.04	1.61	5.96	5.58	16.73
36	504	4.56	8	<2	36	11	5.5	246.5	0.04	1.64	5.78	5.71	17.12
37	499	4.64	7	<2	35	14	7.0	253.5	0.05	1.69	7.28	5.87	17.60
38	538	4.35	8	<2	38	14	7.5	261.0	0.05	1.74	7.85	6.04	18.13
39	509	4.51	8	<2	40	17	8.7	269.7	0.06	1.80	9.01	6.24	18.73
40	526	4.53	7	<2	40	13	6.8	276.5	0.05	1.84	7.12	6.40	19.20

[1] *Calculated values*

Summary - Weeks 0 to 40

Maximum Value	5.96	10	2	60	24	11.4	-	0.06	-	12	-	-
Minimum Value	4.35	2	<2	5	1.6	1.6	-	0.01	-	1.6	-	-
Average Value	4.71	6	2	38	12	6.7	-	0.04	-	7.03	-	-

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
M-LGO CNP DPL	1000

Changes to Head Sample after 40 Weeks [1]

Parameter	Units	Ref No.: 10139-JUL20
Sulphide ($S^{=}$) Remaining	%	0.49
NP Remaining	t $CaCO_3$/1000 t	4.2
CO_3 NP Remaining	t $CaCO_3$/1000 t	1.2

Leachate Parameters Measured

Weekly Leach	Volume Collected	pH	Acidity	Alkalinity	Conductivity	SO_4
No.	mL	units	$CaCO_3$ eq. mg/L	$CaCO_3$ eq. mg/L	µS/cm	mg/L
41	501	4.58	10	<2	38	15

Acid Generation [1]

SO_4 Production Rate	Cumulative SO_4 Production	Weekly $S^{=}$ Depletion	Cumulative $S^{=}$ Depletion
g/t/wk	g/t	%	%
7.5	284.0	0.05	1.89

Acid Neutralization [1]

NP Consumption	Cumulative NP Depletion	Cumulative CO_3 NP Depletion
$CaCO_3$, g/t/wk	%	%
7.83	6.57	19.72

[1] *Calculated values*

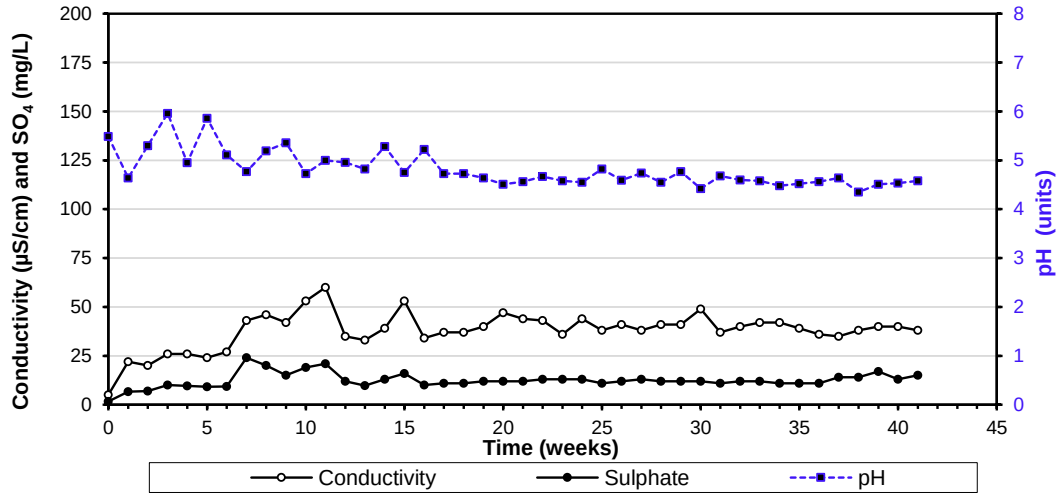
Summary - Weeks 0 to 60

Maximum Value	5.96	10	2	60	24	11.4	-	0.06	-	11.90	-	-
Minimum Value	4.35	2	<2	5	1.6	1.6	-	0.01	-	1.63	-	-
Average Value	4.57	6	2	38	12	6.8	-	0.05	-	7.04	-	-

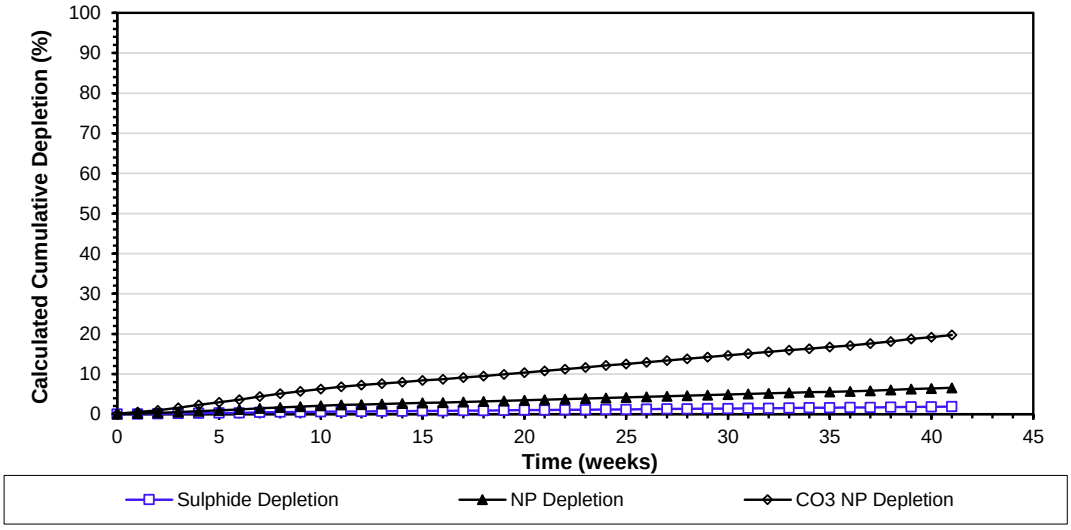
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - M-LGO CNP DPL



Cumulative Sulphide and NP Depletion M-LGO CNP DPL

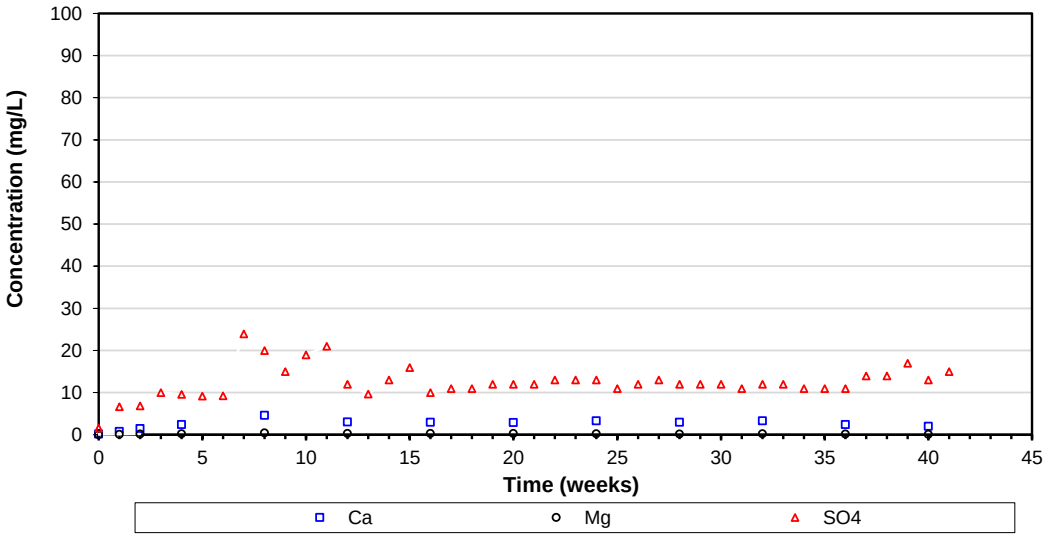


Note: NP depletion calculated based on sulphate assay.

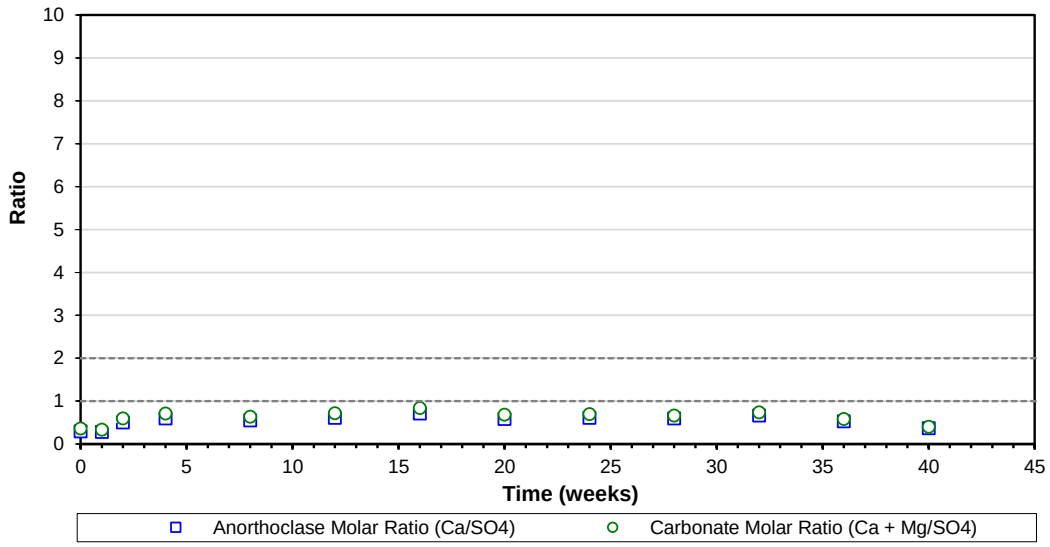
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL



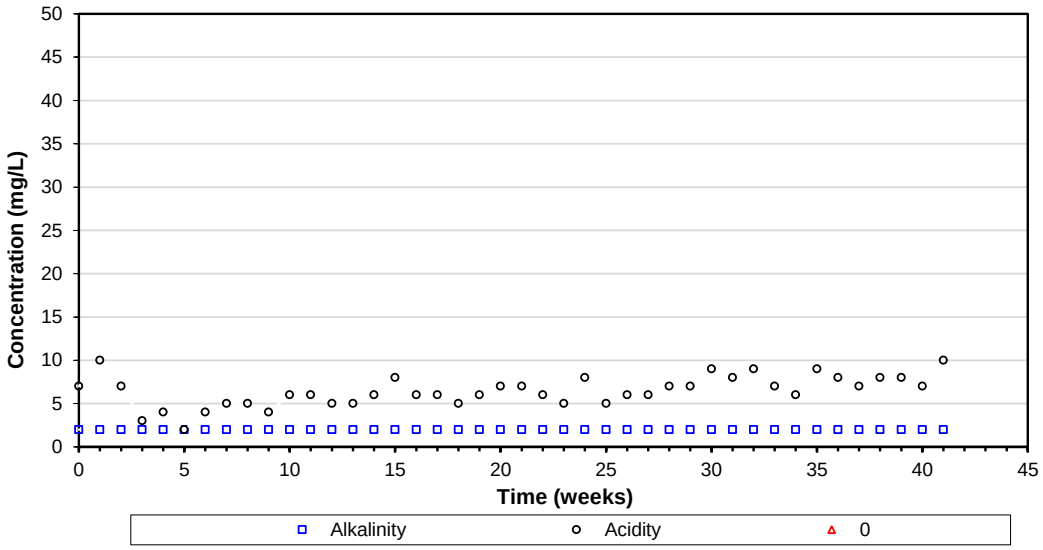
Carbonate (Ca + Mg/SO 4) and Anorthoclase (Ca/SO 4) Molar Ratios M-LGO CNP DPL



TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

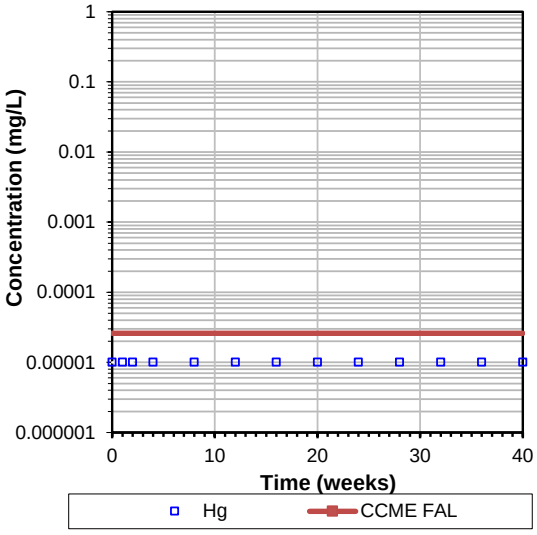
Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL

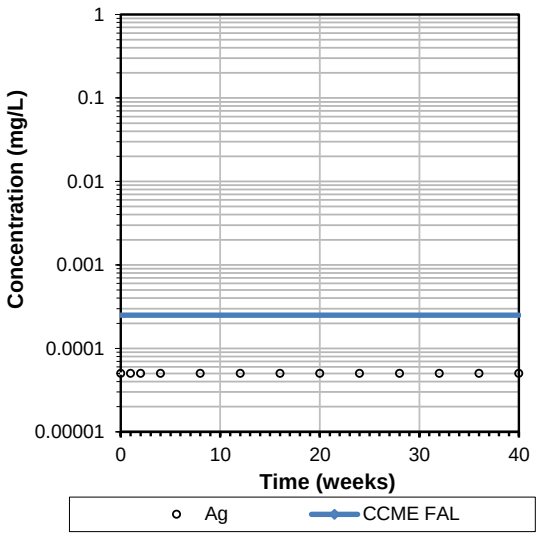


TEST REPORT

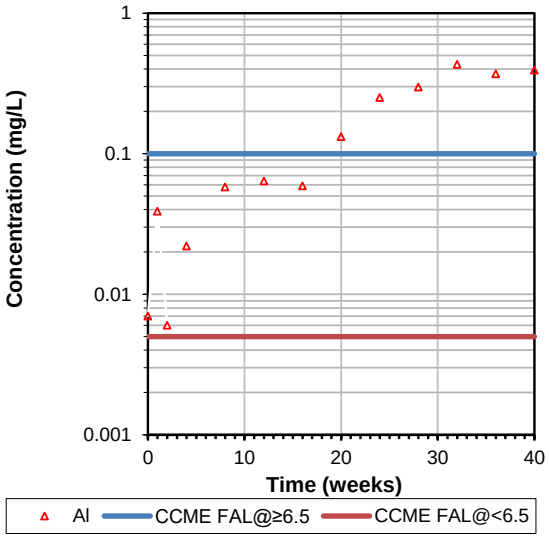
Humidity Cell Test (ASTM D 5744-96)

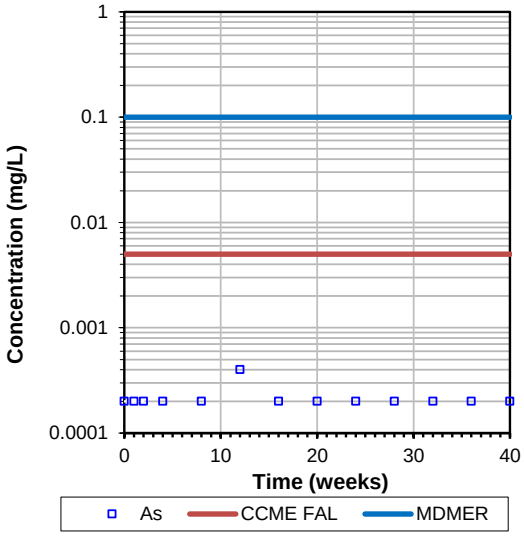
Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL





Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL

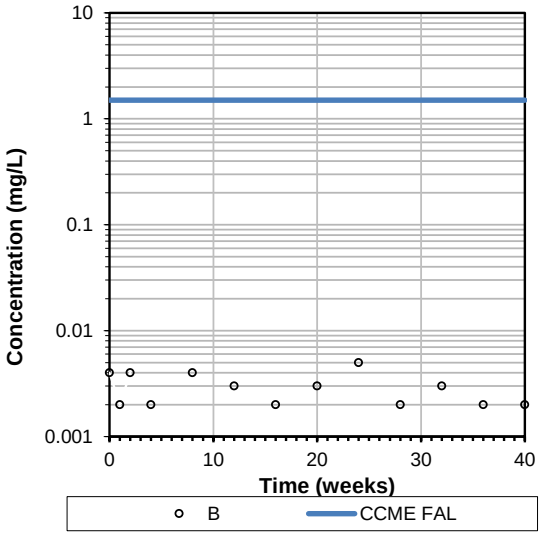


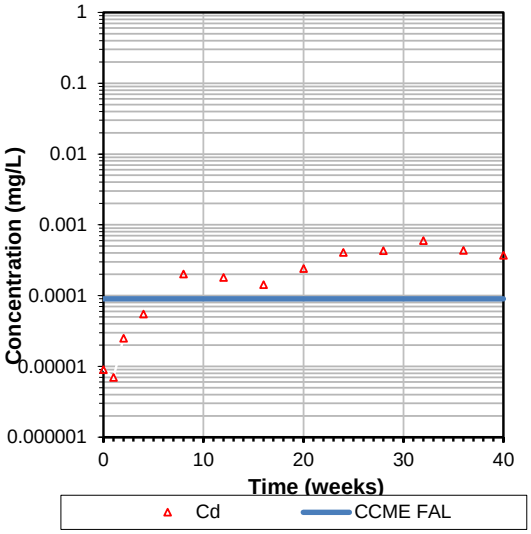


TEST REPORT

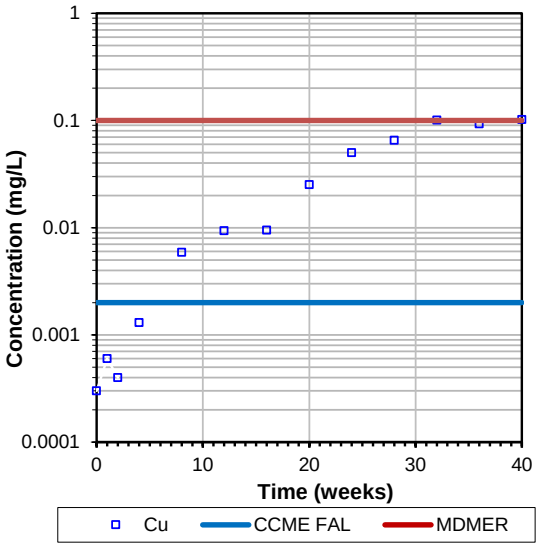
Humidity Cell Test (ASTM D 5744-96)

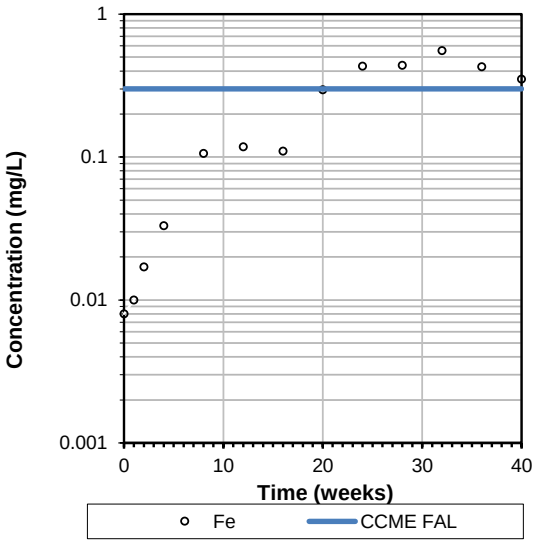
Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL





Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL

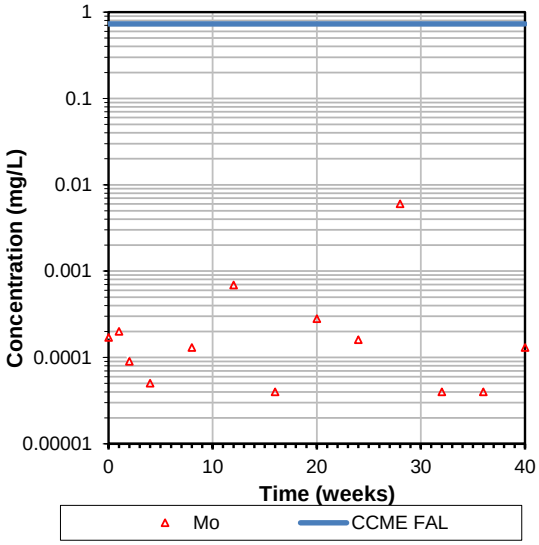


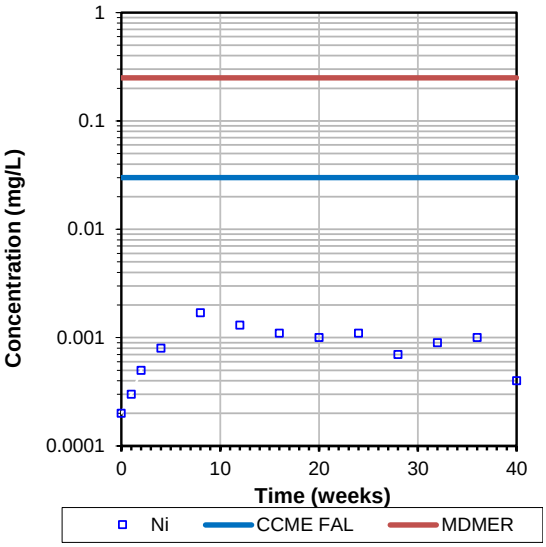


TEST REPORT

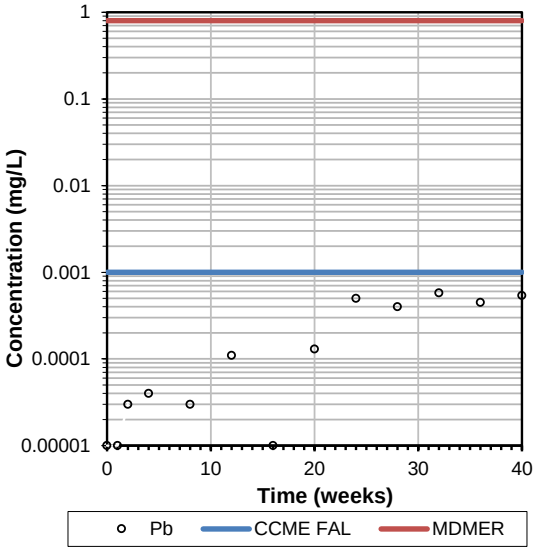
Humidity Cell Test (ASTM D 5744-96)

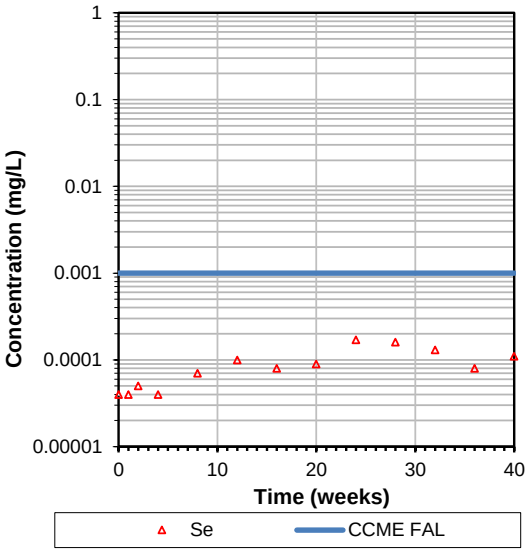
Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL





Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL

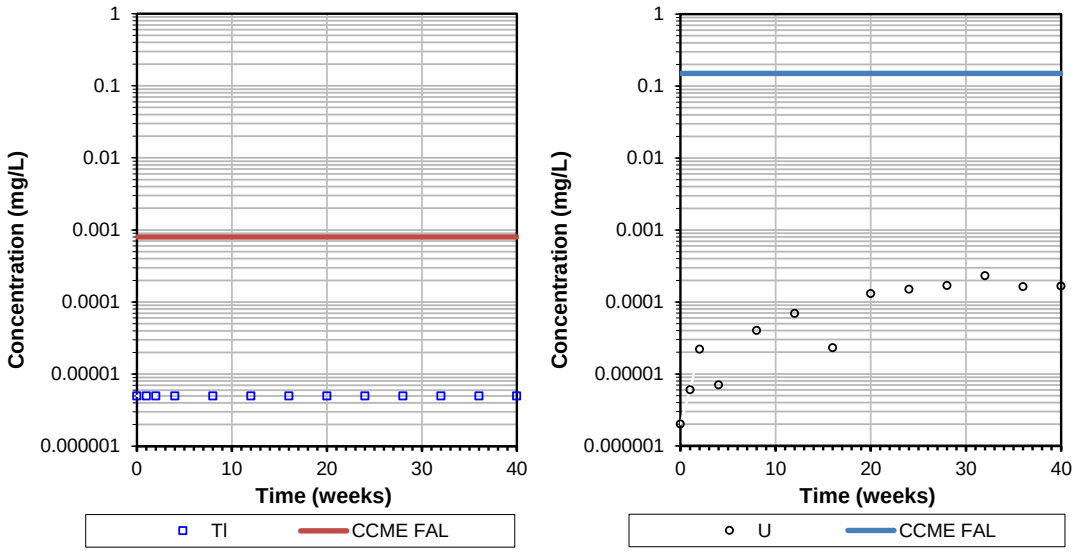




TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL



Selected Parameters in Weekly Humidity Cell Leachate M-LGO CNP DPL