ASX RELEASE

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Ticket
ASX: TSL

Final Results from 2022 Resource Infill and Extension Drilling Program

Final results from the resource infill and extension drilling program completed in August ([1]***ASX :TSL 25th of August 2022***) at the Mannar Heavy Minerals Project have been received. These represent analyses of Total Heavy Mineral (THM%) from 1,659 samples from 165 RC aircore drill holes (Table 1 and Appendices 1 and 2). Results have now been received from all of the 315 holes drilled in the completed program (Figures 1 and 2) . Results from the program have previously been reported ([2]***ASX :TSL 29th April 2022,*** [3] ***ASX:TSL 19th October 2022***).

As previously announced to the market ([4]***ASX : TSL 4th of January 2022***), the planned program was for about 300 holes with a target depth of 12m deep for a total meterage of around 3,600m (Figure 1). The primary objective of the drilling was to convert more of the resource in the high-grade zone from an inferred to indicated mineral resource category by decreasing the RC aircore drill line separation from a nominal 400m to 200m.

The program was contained within the 8 square kilometre high grade resource zone as outlined in the initial scoping study ([5]***ASX:TSL 16th of June 2020***) (Figures 1 and 2). Mineralisation extends from the surface down to depths of up to 12m. This high-grade zone contains a mineral resource of 93Mt at 5.24%THM of which 32% is in the indicated category (Table 2). It represents 35% of the total current mineral resource estimate for the project of 265Mt at 4.38%THM (Table 3)([6]***ASX :TSL 24th of September 2020***). The results from this program continue to demonstrate the expected grade continuity and are being used to provide an updated resource statement of this high grade zone that will form the basis for a more advanced scoping study analysis. The updated resource statement is expected to be finalised shortly.

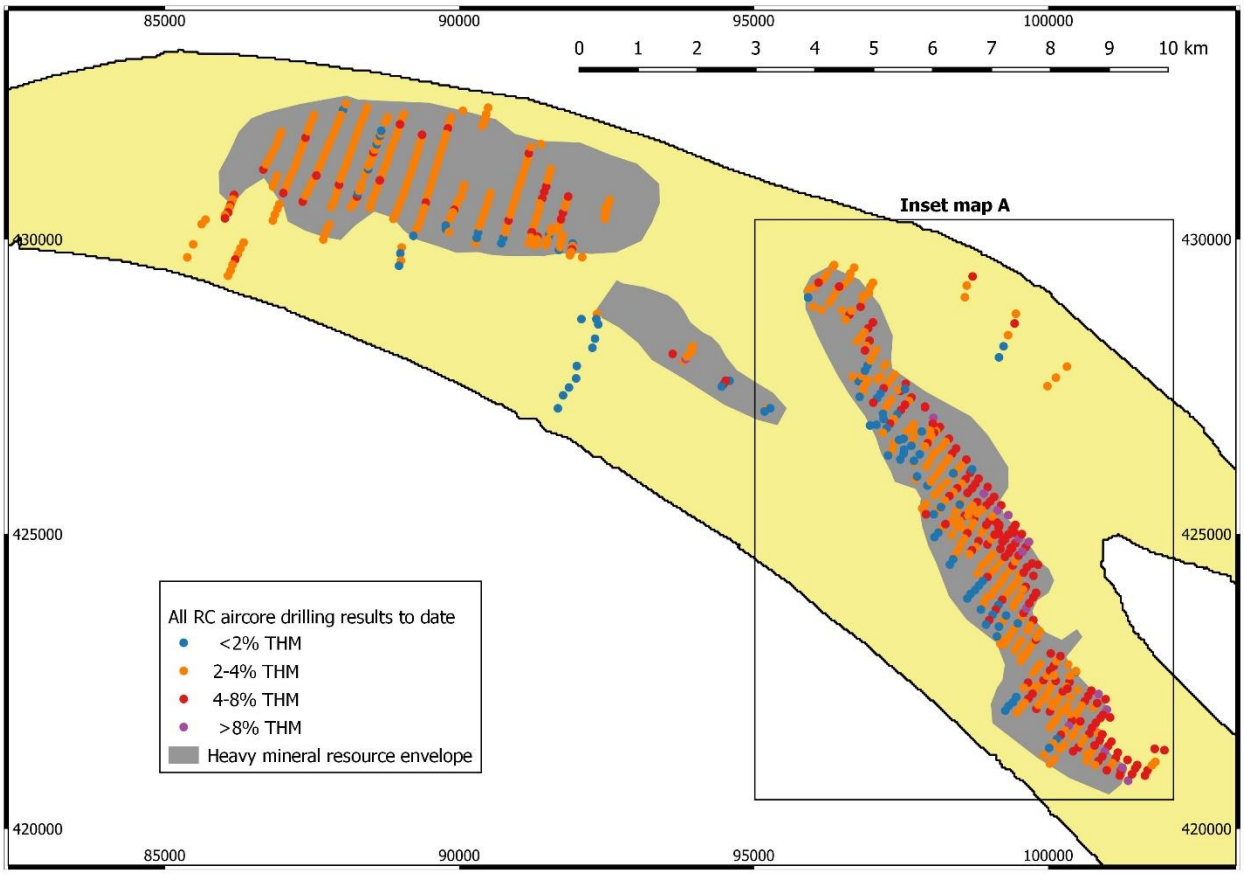

Figure 1 All RC aircore drilling results for the Mannar Heavy Minerals Project. Inset map A shown in Figure 2 with just latest results.

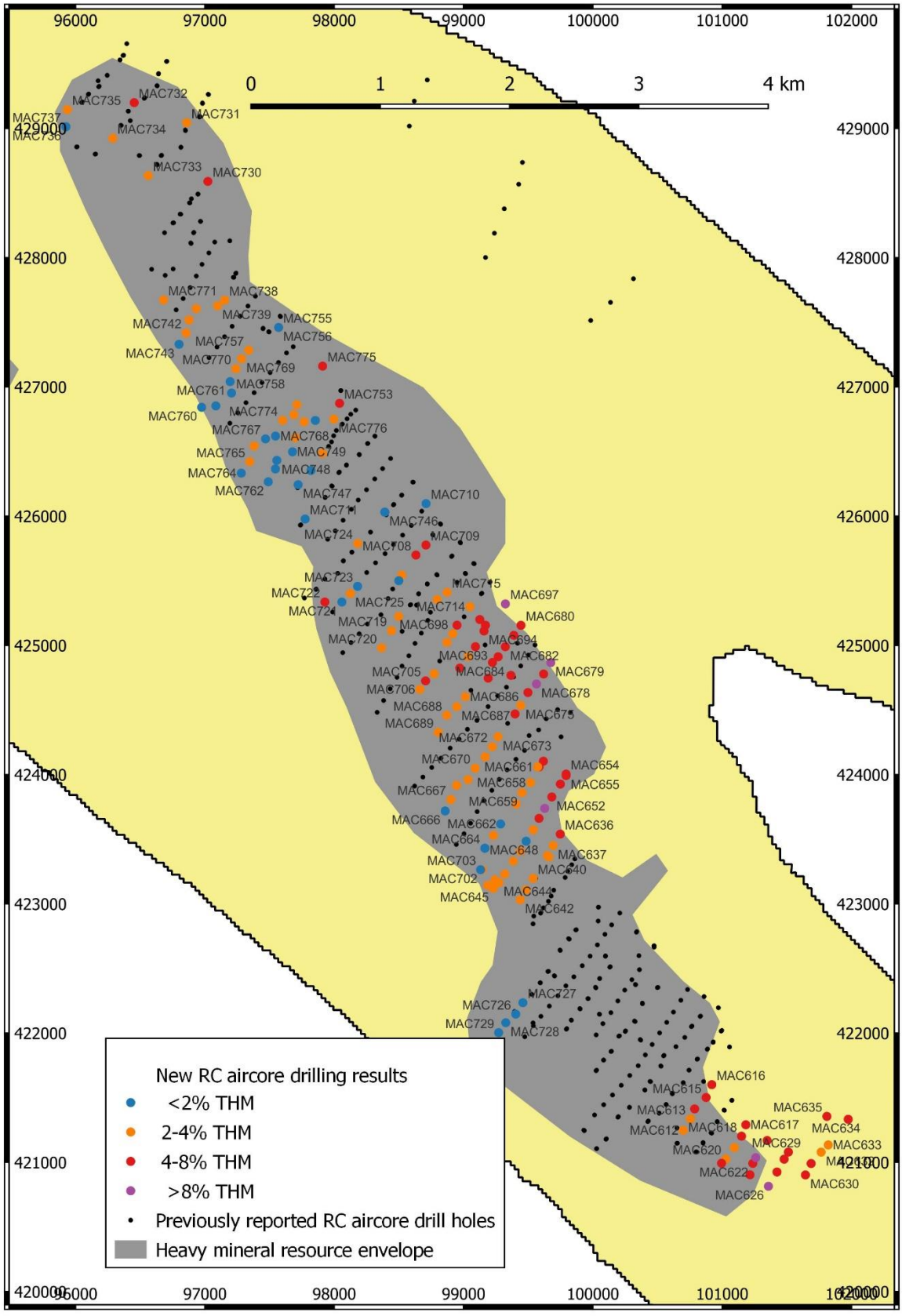

Figure 2 RC aircore drill holes being reported here for the first time (see Table 1 below and Appendices 1 and 2).

Table 1 Intercepts in excess of 2% Total Heavy Minerals from the 165 holes being reported here for the first time.

BH ID	WGS84 N	WGS84 E	Fr m	To m	>2% THM	Int. m
MAC612	9.0004	79.8706	0	9	2.88	9
MAC613	9.0012	79.8711	0	9	2.93	9
MAC614	9.0019	79.8714	0	9	4.89	9
MAC615	9.0027	79.8722	0	10	5.08	10
MAC616	9.0036	79.8726	0	9	5.82	9
MAC617	9.0008	79.8750	0	8	5.07	8
MAC618	9.0000	79.8747	0	8	5.14	8
MAC619	8.9992	79.8742	0	9	3.51	9
MAC620	8.9984	79.8736	0	7	3.94	7
MAC621	8.9981	79.8733	0	9	6.90	9
MAC622	8.9981	79.8755	0	9	4.31	9
MAC623	8.9985	79.8757	0	9	8.12	9
MAC624	8.9973	79.8753	0	9	5.04	9
MAC625	8.9997	79.8765	0	10	7.87	10
MAC626	8.9965	79.8766	0	8	8.02	8
MAC627	8.9975	79.8772	0	8	5.50	8
MAC628	8.9984	79.8777	0	12	5.85	12
MAC629	8.9989	79.8780	0	7	7.76	7
MAC630	8.9973	79.8792	0	12	5.48	12
MAC631	8.9981	79.8796	0	8	5.69	8
MAC632	8.9989	79.8803	0	7	2.52	7
MAC633	8.9994	79.8808	0	5	3.74	5
MAC634	9.0012	79.8822	0	12	4.82	12
MAC635	9.0014	79.8807	0	8	4.94	8
MAC636	9.0211	79.8619	0	8	4.67	8
MAC637	9.0203	79.8614	0	7	2.98	7
MAC638	9.0196	79.8610	0	10	3.45	10
MAC639	9.0195	79.8611	0	8	2.39	8
MAC640	9.0180	79.8600	0	9	2.63	9
MAC641	9.0172	79.8595	0	10	2.42	10
MAC642	9.0165	79.8591	0	11	2.18	11
MAC643	9.0183	79.8580	0	6	3.05	6
MAC644	9.0177	79.8576	0	1	2.73	1
MAC645	9.0173	79.8572	0	11	2.11	11
MAC646	9.0192	79.8586	0	9	3.10	9
MAC648	9.0199	79.8591	0	9	2.29	9
MAC649	9.0214	79.8600	0	9	2.34	9
MAC650	9.0222	79.8604	0	9	4.46	9
MAC651	9.0229	79.8608	0	9	9.90	9
MAC652	9.0237	79.8613	0	10	6.21	10
MAC653	9.0246	79.8619	0	9	7.07	9
MAC654	9.0253	79.8623	0	9	4.04	9
MAC655	9.0252	79.8623	0	7	5.50	7

BH ID	WGS84 N	WGS84 E	Fr m	To m	>2% THM	Int. m
MAC656	9.0262	79.8607	0	10	6.46	10
MAC657	9.0258	79.8604	0	10	4.23	10
MAC658	9.0247	79.8598	0	9	2.75	9
MAC659	9.0240	79.8592	0	9	3.34	9
MAC660	9.0232	79.8588	0	9	2.92	9
MAC661	9.0258	79.8603	0	9	2.15	9
MAC663	9.0210	79.8572	0	9	3.00	9
MAC667	9.0235	79.8542	0	1	3.85	1
MAC668	9.0245	79.8546	0	1	2.64	1
MAC669	9.0249	79.8554	0	1	3.58	1
MAC670	9.0257	79.8559	0	1	2.55	1
MAC671	9.0265	79.8566	0	9	3.49	9
MAC672	9.0272	79.8571	0	9	3.07	9
MAC673	9.0279	79.8575	0	9	3.41	9
MAC674	9.0295	79.8587	0	9	5.84	9
MAC675	9.0301	79.8591	0	9	3.30	9
MAC676	9.0310	79.8596	0	9	4.47	9
MAC677	9.0323	79.8607	0	9	5.80	9
MAC678	9.0316	79.8602	0	8	8.02	8
MAC679	9.0331	79.8612	0	8	8.38	8
MAC680	9.0357	79.8591	0	9	7.05	9
MAC681	9.0350	79.8586	0	9	7.21	9
MAC682	9.0342	79.8580	0	9	7.45	9
MAC683	9.0335	79.8575	0	9	5.91	9
MAC684	9.0331	79.8571	0	9	7.28	9
MAC685	9.0320	79.8568	0	9	4.09	9
MAC686	9.0307	79.8552	0	9	2.86	9
MAC687	9.0300	79.8546	0	9	2.62	9
MAC688	9.0294	79.8539	0	8	3.14	8
MAC689	9.0282	79.8533	0	2	2.12	2
MAC690	9.0322	79.8584	0	9	4.55	9
MAC691	9.0327	79.8548	0	9	5.87	9
MAC692	9.0335	79.8554	0	9	2.88	9
MAC693	9.0342	79.8559	0	9	4.83	9
MAC694	9.0353	79.8565	0	9	5.10	9
MAC695	9.0357	79.8566	0	9	5.36	9
MAC696	9.0361	79.8562	0	9	5.94	9
MAC697	9.0372	79.8580	0	9	8.85	9
MAC698	9.0351	79.8543	0	8	2.75	8
MAC699	9.0345	79.8539	0	9	3.49	9
MAC700	9.0179	79.8573	0	9	2.49	9
MAC701	9.0175	79.8568	0	9	2.01	9
MAC702	9.0186	79.8564	0	9	2.15	9
MAC704	9.0323	79.8530	0	9	2.92	9
MAC705	9.0318	79.8524	0	8	4.61	8

BH ID	WGS84 N	WGS84 E	Fr m	To m	>2% THM	Int. m
MAC706	9.0312	79.8520	0	9	2.83	9
MAC707	9.0392	79.8507	0	9	3.33	9
MAC708	9.0406	79.8517	0	9	4.45	9
MAC709	9.0413	79.8524	0	9	4.27	9
MAC712	9.0357	79.8546	0	10	4.73	10
MAC713	9.0375	79.8532	0	9	3.05	9
MAC714	9.0370	79.8555	0	9	2.63	9
MAC715	9.0380	79.8539	0	9	2.41	9
MAC716	9.0388	79.8505	0	9	2.39	9
MAC718	9.0363	79.8505	0	1	2.97	1
MAC719	9.0353	79.8500	0	9	2.62	9
MAC720	9.0341	79.8493	0	5	3.87	5
MAC722	9.0373	79.8453	0	1	4.34	1
MAC724	9.0414	79.8476	0	2	2.84	2
MAC725	9.0379	79.8471	0	9	2.34	9
MAC730	9.0667	79.8370	0	11	5.10	11
MAC731	9.0708	79.8355	0	12	3.34	12
MAC732	9.0722	79.8318	0	10	5.46	10
MAC733	9.0671	79.8328	0	12	3.14	12
MAC734	9.0697	79.8303	0	11	2.90	11
MAC735	9.0717	79.8271	0	2	3.57	2
MAC738	9.0584	79.8382	0	10	2.12	10
MAC739	9.0580	79.8377	0	1	3.97	1
MAC740	9.0578	79.8362	0	1	2.61	1
MAC741	9.0570	79.8357	0	1	2.21	1
MAC742	9.0561	79.8355	0	1	2.02	1
MAC750	9.0488	79.8432	0	9	2.38	9
MAC751	9.0499	79.8438	0	9	2.72	9
MAC753	9.0512	79.8463	0	9	6.46	9
MAC754	9.0477	79.8451	0	9	2.74	9
MAC755	9.0565	79.8420	0	9	3.81	9
MAC757	9.0549	79.8399	0	9	2.01	9
MAC765	9.0471	79.8400	0	2	2.88	2
MAC766	9.0482	79.8403	0	2	2.44	2
MAC769	9.0543	79.8394	0	1	3.90	1
MAC770	9.0536	79.8390	0	1	3.66	1
MAC771	9.0584	79.8339	0	1	2.48	1
MAC772	9.0511	79.8433	0	9	2.72	9
MAC773	9.0504	79.8431	0	9	2.17	9
MAC774	9.0500	79.8423	0	1	2.05	1
MAC775	9.0538	79.8451	0	9	7.61	9
MAC776	9.0501	79.8459	0	9	3.60	9

Resource Category	Volume (Mm^3)	Tonnes (M)	Thm %	Silt %	Ovz %	Ilm %	Leu %	Rut %	Zir %	Gar %
Indicated	16.96	29.51	7.25	0.75	20.39	3.25	0.62	0.1	0.12	0.9
Inferred	36.07	63.05	4.29	0.99	25.10	1.80	0.33	0.07	0.08	0.47
Total	53.03	92.56	5.24	0.92	23.60	2.27	0.42	0.08	0.09	0.61

Table 2 Mineral resource estimate for a higher grade zone contained within the resources tabulated below for a 2% (THM) lower cut off. Previously reported to the ASX in full compliance with the JORC 2012 requirements see below [5].

Resource Category	Volume (Mm^3)	Tonnes (M)	Thm %	Silt %	Ovz %	Ilm %	Leu %	Rut %	Zir %	Gar %
Indicated	37.78	66.14	5.54	0.83	11.63	2.48	0.46	0.1	0.1	0.51
Inferred	113.62	198.79	3.99	1.06	17.56	1.77	0.3	0.08	0.1	0.3
Total	151.4	264.93	4.38	1.00	16.08	1.95	0.34	0.08	0.10	0.35

Table 3 Mineral Resource Estimate based on a lower cut off of 2% (THM). Previously reported to the ASX in full compliance with the JORC 2012 requirements see below [5].

Ends-

The Board of Directors of Titanium Sands Ltd authorised this announcement to be given to the ASX.

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Footnotes

[1] Previously reported to ASX: 25th of August 2022, "Mannar Island Drilling Program Completed"
[2] Previously reported to ASX:29th April 2022, "Resource Drilling Program Shows Encouraging first results"
[3] Previously Reported to ASX: 19th October 2022, "Consistent Results From Infill and Extension Drilling"
[4] Previously reported to ASX: 4th of January, "Resource Infill and Extension Drilling Program Commences"
[5] Previously reported to ASX: 16th June 2020 "Scoping Study Confirms Potential for Major Dredging Project"
[6] Previously Reported to the ASX 24th of September 2020 "Project update and garnet added to resource update"

Competent Persons Statements

Except where indicated, exploration results above have been reviewed and compiled by James Searle BSc (hons), PhD, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy, with over 37 years of experience in metallic and energy minerals exploration and development, and as such has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Searle is the Managing Director of Titanium Sands Limited and consents to the inclusion of this technical information in the format and context in which it appears.

Compliance Statement

This report includes information (Table 2 and 3) that relates to Exploration Results and Mineral Resources prepared and first disclosed under JORC Code 2012. The information was extracted from the Company's previous ASX announcement as follows:
*Released to the ASX 24/9/2020 "**'Project update and garnet added to resource estimate**".*
This announcements is available to view on the Company's website www.titaniumsands.com.au

The Company confirms that it is not aware of any new information or data that materially affect the information included in the relevant market announcement and, in the case of estimates of the Company's Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply with respect to the resource block model and total heavy mineral content and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the relevant original market announcements.

This report includes new exploration results and Appendix 3 contains information in compliance with JORC 2012 requirement for reporting of exploration results. Appendix 1 contains tables of all drill hole collar positions in the current program and Appendix 2 all drill hole assay results being reported in this announcement.

Forward Looking Statements
This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "expect," "intend," "may", "potential," "should", "further" and similar expressions are forward-looking statements. Although the Company believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that further exploration will result in additional Mineral Resources.

Appendix 1

Collar files for all new drill hole results contained in this announcement.

DH ID	WGS84 N	WGS84 E	Depth m
MAC612	9.000435	79.87061	12
MAC613	9.001212	79.87108	12
MAC614	9.001851	79.87144	12
MAC615	9.002726	79.87219	12
MAC616	9.003601	79.87259	12
MAC617	9.000846	79.87495	12
MAC618	8.999964	79.87466	12
MAC619	8.999224	79.87419	12
MAC620	8.998426	79.87364	12
MAC621	8.998064	79.87328	12
MAC622	8.998102	79.87546	12
MAC623	8.998456	79.8757	12
MAC624	8.997342	79.87533	12
MAC625	8.999732	79.87651	10
MAC626	8.996485	79.87663	12
MAC627	8.997548	79.87721	12
MAC628	8.998418	79.87769	12
MAC629	8.99887	79.87798	12
MAC630	8.99729	79.8792	12
MAC631	8.998112	79.87961	12
MAC632	8.998949	79.88027	12
MAC633	8.999445	79.88076	12
MAC634	9.001244	79.88224	12
MAC635	9.0014	79.88066	12
MAC636	9.021134	79.86189	12
MAC637	9.020337	79.86141	12
MAC638	9.019596	79.86096	12
MAC639	9.019547	79.86106	12
MAC640	9.01803	79.86002	12
MAC641	9.017242	79.85952	12
MAC642	9.016472	79.85908	12
MAC643	9.01828	79.85797	12
MAC644	9.01768	79.85762	12
MAC645	9.017256	79.85721	12
MAC646	9.01915	79.85862	12
MAC647	9.019851	79.85908	12
MAC648	9.020589	79.85947	12
MAC649	9.021384	79.86	12
MAC650	9.022163	79.86037	12
MAC651	9.022916	79.86083	12
MAC652	9.02369	79.86133	12

DH ID	WGS84 N	WGS84 E	Depth m
MAC653	9.02455	79.86193	12
MAC654	9.025254	79.8623	12
MAC655	9.025244	79.8623	10
MAC656	9.026228	79.86069	10
MAC657	9.025753	79.86036	12
MAC658	9.024656	79.85977	12
MAC659	9.024022	79.85917	12
MAC660	9.02324	79.8588	12
MAC661	9.02576	79.86035	10
MAC662	9.021814	79.85775	9
MAC663	9.02096	79.85722	9
MAC664	9.020095	79.85657	12
MAC665	9.020076	79.85658	12
MAC666	9.022685	79.85381	12
MAC667	9.023547	79.85418	12
MAC668	9.024543	79.85463	10
MAC669	9.024916	79.85537	9
MAC670	9.02571	79.8559	9
MAC671	9.026485	79.85658	11
MAC672	9.027206	79.85705	9
MAC673	9.02789	79.85754	9
MAC674	9.029468	79.85866	9
MAC675	9.030137	79.8591	9
MAC676	9.030971	79.85965	9
MAC677	9.03234	79.86071	9
MAC678	9.03156	79.86017	9
MAC679	9.03308	79.86123	9
MAC680	9.0357	79.85909	9
MAC681	9.03497	79.85857	9
MAC682	9.03421	79.85803	9
MAC683	9.033471	79.85755	9
MAC684	9.033079	79.85715	9
MAC685	9.03198	79.85675	9
MAC686	9.03068	79.85517	9
MAC687	9.03004	79.85457	9
MAC688	9.02938	79.85391	9
MAC689	9.02824	79.85326	9
MAC690	9.032198	79.85836	9
MAC691	9.03273	79.85484	9
MAC692	9.033484	79.8554	9
MAC693	9.034162	79.85589	9
MAC694	9.035261	79.85654	9
MAC695	9.035656	79.85658	9
MAC696	9.036148	79.85616	9

DH ID	WGS84 N	WGS84 E	Depth m
MAC697	9.0372	79.85799	9
MAC698	9.035053	79.8543	9
MAC699	9.034498	79.85389	9
MAC700	9.01788	79.85732	9
MAC701	9.017528	79.85682	9
MAC702	9.018607	79.85639	9
MAC703	9.018597	79.85631	9
MAC704	9.032272	79.85296	9
MAC705	9.03178	79.85236	9
MAC706	9.031215	79.85195	9
MAC707	9.03923	79.85071	9
MAC708	9.0406	79.85174	9
MAC709	9.041327	79.8524	9
MAC710	9.044221	79.85243	9
MAC711	9.043141	79.8439	9
MAC712	9.03573	79.8546	12
MAC713	9.03747	79.85323	9
MAC714	9.037027	79.85547	9
MAC715	9.03796	79.85391	9
MAC716	9.03877	79.85049	9
MAC717	9.03877	79.85049	9
MAC718	9.03629	79.8505	9
MAC719	9.03527	79.85	9
MAC720	9.034146	79.8493	9
MAC721	9.03727	79.84652	9
MAC722	9.03727	79.84528	9
MAC723	9.0384	79.84764	9
MAC724	9.041389	79.84763	9
MAC725	9.037919	79.84709	9
MAC726	9.008548	79.85882	9
MAC727	9.009277	79.8593	9
MAC728	9.007945	79.85808	9
MAC729	9.007223	79.85757	9
MAC730	9.066675	79.837	12
MAC731	9.07077	79.8355	12
MAC732	9.072171	79.83181	12
MAC733	9.067121	79.83277	12
MAC734	9.069732	79.83026	12
MAC735	9.071666	79.8271	12
MAC736	9.07053	79.82698	12
MAC737	9.07053	79.82698	12
MAC738	9.058369	79.83824	12
MAC739	9.058014	79.83769	12
MAC740	9.057783	79.8362	12

DH ID	WGS84 N	WGS84 E	Depth m
MAC741	9.057038	79.83573	12
MAC742	9.056134	79.83555	12
MAC743	9.055336	79.83498	12
MAC744	9.046474	79.84432	11
MAC745	9.043645	79.84949	9
MAC746	9.043645	79.84949	9
MAC747	9.045538	79.84344	9
MAC748	9.047234	79.84195	9
MAC749	9.047789	79.84301	9
MAC750	9.048791	79.84325	9
MAC751	9.049891	79.84384	9
MAC752	9.049979	79.84457	9
MAC753	9.051176	79.84632	9
MAC754	9.047687	79.84505	9
MAC755	9.056467	79.84203	9
MAC756	9.056467	79.84203	9
MAC757	9.054905	79.83992	9
MAC758	9.051893	79.83867	9
MAC759	9.050988	79.83756	9
MAC760	9.05086	79.8366	9
MAC761	9.052655	79.8386	9
MAC762	9.04573	79.84126	9
MAC763	9.046631	79.8418	9
MAC764	9.046277	79.83941	9
MAC765	9.047126	79.83995	9
MAC766	9.04816	79.84032	9
MAC767	9.0487	79.84111	9
MAC768	9.04887	79.84178	9
MAC769	9.05426	79.83943	9
MAC770	9.05363	79.83896	9
MAC771	9.05843	79.83393	9
MAC772	9.051058	79.84332	9
MAC773	9.0504	79.84307	9
MAC774	9.050043	79.84229	9
MAC775	9.053793	79.84509	9
MAC776	9.050086	79.84591	9

Appendix 2
All RC aircore assay results reported here for the first time

BH ID	From m	To m	THM%
MAC612	0	1	6.61
MAC612	1	2	1.74
MAC612	2	3	1.31
MAC612	3	4	1.35
MAC612	4	5	2.03
MAC612	5	6	3.07
MAC612	6	7	3.43
MAC612	7	8	3.82
MAC612	8	9	2.59
MAC612	9	10	1.21
MAC612	10	11	1.20
MAC612	11	12	1.21
MAC613	0	1	5.12
MAC613	1	2	3.28
MAC613	2	3	1.69
MAC613	3	4	2.18
MAC613	4	5	3.13
MAC613	5	6	2.86
MAC613	6	7	2.18
MAC613	7	8	3.28
MAC613	8	9	2.61
MAC613	9	10	1.73
MAC613	10	11	1.28
MAC613	11	12	1.39
MAC614	0	1	12.95
MAC614	1	2	6.15
MAC614	2	3	3.41
MAC614	3	4	2.52
MAC614	4	5	4.45
MAC614	5	6	3.44
MAC614	6	7	4.30
MAC614	7	8	4.48
MAC614	8	9	2.28
MAC614	9	10	0.79
MAC614	10	11	1.06
MAC614	11	12	0.79
MAC615	0	1	12.34
MAC615	1	2	6.02
MAC615	2	3	4.14
MAC615	3	4	2.40

BH ID	From m	To m	THM%
MAC615	4	5	4.60
MAC615	5	6	5.20
MAC615	6	7	5.06
MAC615	7	8	4.95
MAC615	8	9	3.94
MAC615	9	10	2.17
MAC615	10	11	0.50
MAC615	11	12	0.86
MAC616	0	1	12.12
MAC616	1	2	5.17
MAC616	2	3	4.82
MAC616	3	4	4.58
MAC616	4	5	5.50
MAC616	5	6	6.27
MAC616	6	7	4.21
MAC616	7	8	5.66
MAC616	8	9	4.06
MAC616	9	10	1.23
MAC616	10	11	1.24
MAC616	11	12	0.16
MAC617	0	1	7.06
MAC617	1	2	3.16
MAC617	2	3	3.08
MAC617	3	4	4.77
MAC617	4	5	6.09
MAC617	5	6	7.32
MAC617	6	7	5.93
MAC617	7	8	3.14
MAC617	8	9	1.44
MAC617	9	10	1.49
MAC617	10	11	1.44
MAC617	11	12	0.56
MAC618	0	1	13.14
MAC618	1	2	5.85
MAC618	2	3	5.70
MAC618	3	4	0.50
MAC618	4	5	1.50
MAC618	5	6	4.76
MAC618	6	7	7.02
MAC618	7	8	2.68

BH ID	From m	To m	THM%
MAC618	8	9	1.48
MAC618	9	10	0.83
MAC618	10	11	1.14
MAC618	11	12	1.20
MAC619	0	1	5.88
MAC619	1	2	4.41
MAC619	2	3	1.33
MAC619	3	4	1.76
MAC619	4	5	1.80
MAC619	5	6	4.29
MAC619	6	7	4.61
MAC619	7	8	4.07
MAC619	8	9	3.43
MAC619	9	10	1.29
MAC619	10	11	2.19
MAC619	11	12	1.06
MAC620	0	1	9.02
MAC620	1	2	1.53
MAC620	2	3	2.23
MAC620	3	4	3.73
MAC620	4	5	4.78
MAC620	5	6	2.73
MAC620	6	7	3.53
MAC620	7	8	0.82
MAC620	8	9	0.91
MAC620	9	10	0.61
MAC620	10	11	1.08
MAC620	11	12	NSR
MAC621	0	1	18.46
MAC621	1	2	20.86
MAC621	2	3	3.62
MAC621	3	4	2.86
MAC621	4	5	4.45
MAC621	5	6	3.54
MAC621	6	7	2.18
MAC621	7	8	3.85
MAC621	8	9	2.30
MAC621	9	10	1.22
MAC621	10	11	1.18
MAC621	11	12	1.24
MAC622	0	1	6.66
MAC622	1	2	4.56
MAC622	2	3	2.03
MAC622	3	4	2.43

BH ID	From m	To m	THM%
MAC622	4	5	5.50
MAC622	5	6	6.16
MAC622	6	7	3.84
MAC622	7	8	5.03
MAC622	8	9	2.56
MAC622	9	10	1.82
MAC622	10	11	1.33
MAC622	11	12	1.23
MAC623	0	1	9.42
MAC623	1	2	22.93
MAC623	2	3	7.74
MAC623	3	4	4.64
MAC623	4	5	7.57
MAC623	5	6	6.50
MAC623	6	7	6.89
MAC623	7	8	5.07
MAC623	8	9	2.37
MAC623	9	10	1.57
MAC623	10	11	1.64
MAC623	11	12	1.27
MAC624	0	1	8.68
MAC624	1	2	10.19
MAC624	2	3	1.99
MAC624	3	4	3.05
MAC624	4	5	4.36
MAC624	5	6	4.61
MAC624	6	7	5.36
MAC624	7	8	4.72
MAC624	8	9	2.46
MAC624	9	10	0.82
MAC624	10	11	0.44
MAC624	11	12	0.65
MAC625	0	1	25.48
MAC625	1	2	9.94
MAC625	2	3	4.73
MAC625	3	4	6.95
MAC625	4	5	9.95
MAC625	5	6	6.83
MAC625	6	7	7.19
MAC625	7	8	3.21
MAC625	8	9	1.69
MAC625	9	10	2.77
MAC626	0	1	10.68
MAC626	1	2	16.94

BH ID	From m	To m	THM%
MAC626	2	3	5.02
MAC626	3	4	5.55
MAC626	4	5	8.59
MAC626	5	6	7.62
MAC626	6	7	7.40
MAC626	7	8	2.37
MAC626	8	9	1.63
MAC626	9	10	0.78
MAC626	10	11	0.67
MAC626	11	12	2.04
MAC627	0	1	3.60
MAC627	1	2	2.89
MAC627	2	3	4.05
MAC627	3	4	7.74
MAC627	4	5	8.64
MAC627	5	6	7.68
MAC627	6	7	7.14
MAC627	7	8	2.23
MAC627	8	9	1.05
MAC627	9	10	2.17
MAC627	10	11	1.16
MAC627	11	12	0.29
MAC628	0	1	7.66
MAC628	1	2	10.35
MAC628	2	3	6.44
MAC628	3	4	6.20
MAC628	4	5	9.58
MAC628	5	6	10.42
MAC628	6	7	1.64
MAC628	7	8	7.96
MAC628	8	9	2.13
MAC628	9	10	0.73
MAC628	10	11	1.24
MAC628	11	12	5.81
MAC629	0	1	6.42
MAC629	1	2	10.86
MAC629	2	3	3.35
MAC629	3	4	7.07
MAC629	4	5	9.24
MAC629	5	6	10.12
MAC629	6	7	7.28
MAC629	7	8	1.57
MAC629	8	9	1.15
MAC629	9	10	0.96

BH ID	From m	To m	THM%
MAC629	10	11	0.92
MAC629	11	12	2.07
MAC630	0	1	14.20
MAC630	1	2	6.69
MAC630	2	3	6.04
MAC630	3	4	7.91
MAC630	4	5	8.91
MAC630	5	6	7.38
MAC630	6	7	3.78
MAC630	7	8	1.39
MAC630	8	9	2.06
MAC630	9	10	2.19
MAC630	10	11	1.95
MAC630	11	12	3.27
MAC631	0	1	14.22
MAC631	1	2	6.09
MAC631	2	3	6.40
MAC631	3	4	4.07
MAC631	4	5	4.32
MAC631	5	6	4.20
MAC631	6	7	3.75
MAC631	7	8	2.45
MAC631	8	9	1.52
MAC631	9	10	2.03
MAC631	10	11	1.78
MAC631	11	12	2.22
MAC632	0	1	4.24
MAC632	1	2	1.48
MAC632	2	3	1.64
MAC632	3	4	3.59
MAC632	4	5	1.27
MAC632	5	6	2.53
MAC632	6	7	2.86
MAC632	7	8	1.89
MAC632	8	9	1.63
MAC632	9	10	1.25
MAC632	10	11	0.67
MAC632	11	12	2.04
MAC633	0	1	6.07
MAC633	1	2	2.80
MAC633	2	3	4.09
MAC633	3	4	2.54
MAC633	4	5	3.22
MAC633	5	6	1.13

BH ID	From m	To m	THM%
MAC633	6	7	2.51
MAC633	7	8	1.92
MAC633	8	9	1.45
MAC633	9	10	0.98
MAC633	10	11	0.78
MAC633	11	12	0.45
MAC634	0	1	12.37
MAC634	1	2	12.70
MAC634	2	3	11.13
MAC634	3	4	4.06
MAC634	4	5	2.96
MAC634	5	6	2.26
MAC634	6	7	2.08
MAC634	7	8	2.07
MAC634	8	9	1.64
MAC634	9	10	2.31
MAC634	10	11	2.07
MAC634	11	12	2.21
MAC635	0	1	11.30
MAC635	1	2	10.36
MAC635	2	3	5.35
MAC635	3	4	1.93
MAC635	4	5	3.09
MAC635	5	6	3.06
MAC635	6	7	2.32
MAC635	7	8	2.12
MAC635	8	9	1.42
MAC635	9	10	1.98
MAC635	10	11	1.92
MAC635	11	12	1.23
MAC636	0	1	8.20
MAC636	1	2	4.43
MAC636	2	3	1.92
MAC636	3	4	7.04
MAC636	4	5	5.32
MAC636	5	6	4.74
MAC636	6	7	3.37
MAC636	7	8	2.33
MAC636	8	9	1.76
MAC636	9	10	0.95
MAC636	10	11	0.93
MAC636	11	12	1.00
MAC637	0	1	5.31
MAC637	1	2	2.66

BH ID	From m	To m	THM%
MAC637	2	3	1.15
MAC637	3	4	2.27
MAC637	4	5	3.18
MAC637	5	6	3.59
MAC637	6	7	2.66
MAC637	7	8	0.50
MAC637	8	9	2.92
MAC637	9	10	2.46
MAC637	10	11	2.08
MAC637	11	12	0.79
MAC638	0	1	11.12
MAC638	1	2	3.38
MAC638	2	3	2.24
MAC638	3	4	1.82
MAC638	4	5	2.57
MAC638	5	6	1.97
MAC638	6	7	2.33
MAC638	7	8	2.23
MAC638	8	9	3.81
MAC638	9	10	3.04
MAC638	10	11	0.51
MAC638	11	12	0.77
MAC639	0	1	1.84
MAC639	1	2	2.88
MAC639	2	3	0.80
MAC639	3	4	1.68
MAC639	4	5	2.94
MAC639	5	6	2.31
MAC639	6	7	2.75
MAC639	7	8	3.96
MAC639	8	9	1.78
MAC639	9	10	1.05
MAC639	10	11	0.83
MAC639	11	12	0.89
MAC640	0	1	2.66
MAC640	1	2	3.66
MAC640	2	3	1.44
MAC640	3	4	3.29
MAC640	4	5	1.46
MAC640	5	6	2.67
MAC640	6	7	2.39
MAC640	7	8	3.72
MAC640	8	9	2.40
MAC640	9	10	1.28

BH ID	From m	To m	THM%
MAC640	10	11	1.44
MAC640	11	12	1.78
MAC641	0	1	2.84
MAC641	1	2	2.44
MAC641	2	3	1.04
MAC641	3	4	1.58
MAC641	4	5	2.86
MAC641	5	6	2.82
MAC641	6	7	3.07
MAC641	7	8	2.76
MAC641	8	9	2.70
MAC641	9	10	2.06
MAC641	10	11	1.57
MAC641	11	12	1.78
MAC642	0	1	2.95
MAC642	1	2	1.49
MAC642	2	3	1.62
MAC642	3	4	1.40
MAC642	4	5	2.52
MAC642	5	6	1.73
MAC642	6	7	2.05
MAC642	7	8	3.31
MAC642	8	9	2.85
MAC642	9	10	1.66
MAC642	10	11	2.38
MAC642	11	12	1.94
MAC643	0	1	5.10
MAC643	1	2	2.60
MAC643	2	3	1.88
MAC643	3	4	2.09
MAC643	4	5	4.05
MAC643	5	6	2.58
MAC643	6	7	NSR
MAC643	7	8	3.07
MAC643	8	9	1.90
MAC643	9	10	1.50
MAC643	10	11	1.73
MAC643	11	12	1.42
MAC644	0	1	2.73
MAC644	1	2	1.47
MAC644	2	3	0.35
MAC644	3	4	1.36
MAC644	4	5	2.64
MAC644	5	6	1.91

BH ID	From m	To m	THM%
MAC644	6	7	1.81
MAC644	7	8	2.15
MAC644	8	9	2.28
MAC644	9	10	2.16
MAC644	10	11	1.44
MAC644	11	12	1.34
MAC645	0	1	2.10
MAC645	1	2	2.58
MAC645	2	3	0.65
MAC645	3	4	1.35
MAC645	4	5	2.55
MAC645	5	6	1.65
MAC645	6	7	1.65
MAC645	7	8	3.50
MAC645	8	9	2.37
MAC645	9	10	2.49
MAC645	10	11	2.31
MAC645	11	12	1.85
MAC646	0	1	5.15
MAC646	1	2	4.61
MAC646	2	3	2.70
MAC646	3	4	1.88
MAC646	4	5	2.20
MAC646	5	6	2.55
MAC646	6	7	3.20
MAC646	7	8	3.02
MAC646	8	9	2.61
MAC646	9	10	1.77
MAC646	10	11	1.02
MAC646	11	12	0.51
MAC647	0	1	0.89
MAC647	1	2	0.38
MAC647	2	3	0.34
MAC647	3	4	1.16
MAC647	4	5	1.50
MAC647	5	6	1.61
MAC647	6	7	1.56
MAC647	7	8	2.84
MAC647	8	9	2.84
MAC647	9	10	1.06
MAC647	10	11	1.13
MAC647	11	12	0.68
MAC648	0	1	2.79
MAC648	1	2	2.47

BH ID	From m	To m	THM%
MAC648	2	3	0.58
MAC648	3	4	1.43
MAC648	4	5	2.58
MAC648	5	6	2.11
MAC648	6	7	2.33
MAC648	7	8	3.45
MAC648	8	9	2.86
MAC648	9	10	0.79
MAC648	10	11	0.63
MAC648			0.00
MAC649	0	1	3.14
MAC649	1	2	2.00
MAC649	2	3	1.00
MAC649	3	4	2.05
MAC649	4	5	2.54
MAC649	5	6	1.60
MAC649	6	7	2.23
MAC649	7	8	3.65
MAC649	8	9	2.84
MAC649	9	10	0.62
MAC649	10	11	1.26
MAC649	11	12	0.73
MAC650	0	1	8.67
MAC650	1	2	6.93
MAC650	2	3	3.06
MAC650	3	4	3.60
MAC650	4	5	6.68
MAC650	5	6	4.23
MAC650	6	7	2.14
MAC650	7	8	2.74
MAC650	8	9	2.13
MAC650	9	10	1.33
MAC650	10	11	0.75
MAC650	11	12	0.63
MAC651	0	1	35.58
MAC651	1	2	19.43
MAC651	2	3	10.52
MAC651	3	4	5.03
MAC651	4	5	4.10
MAC651	5	6	4.02
MAC651	6	7	3.51
MAC651	7	8	3.95
MAC651	8	9	2.92
MAC651	9	10	1.52

BH ID	From m	To m	THM%
MAC651	10	11	1.19
MAC651	11	12	1.63
MAC652	0	1	14.41
MAC652	1	2	9.48
MAC652	2	3	4.36
MAC652	3	4	6.10
MAC652	4	5	5.27
MAC652	5	6	4.23
MAC652	6	7	4.91
MAC652	7	8	5.70
MAC652	8	9	3.78
MAC652	9	10	3.85
MAC652	10	11	1.21
MAC652	11	12	1.59
MAC653	0	1	9.33
MAC653	1	2	16.36
MAC653	2	3	5.54
MAC653	3	4	5.29
MAC653	4	5	7.48
MAC653	5	6	4.73
MAC653	6	7	6.06
MAC653	7	8	5.22
MAC653	8	9	3.63
MAC653	9	10	1.85
MAC653	10	11	NSR
MAC653	11	12	1.63
MAC654	0	1	2.14
MAC654	1	2	2.57
MAC654	2	3	2.88
MAC654	3	4	5.75
MAC654	4	5	7.66
MAC654	5	6	5.39
MAC654	6	7	3.71
MAC654	7	8	2.32
MAC654	8	9	3.96
MAC654	9	10	1.51
MAC654	10	11	0.98
MAC654	11	12	2.01
MAC655	0	1	8.06
MAC655	1	2	4.07
MAC655	2	3	4.62
MAC655	3	4	5.21
MAC655	4	5	7.17
MAC655	5	6	5.00

BH ID	From m	To m	THM%
MAC655	6	7	4.39
MAC655	7	8	0.94
MAC655	8	9	1.71
MAC655	9	10	2.43
MAC656	0	1	19.63
MAC656	1	2	12.54
MAC656	2	3	3.96
MAC656	3	4	4.78
MAC656	4	5	5.70
MAC656	5	6	3.97
MAC656	6	7	4.21
MAC656	7	8	3.34
MAC656	8	9	4.06
MAC656	9	10	2.46
MAC657	0	1	8.33
MAC657	1	2	4.24
MAC657	2	3	3.94
MAC657	3	4	2.64
MAC657	4	5	5.49
MAC657	5	6	4.38
MAC657	6	7	4.31
MAC657	7	8	3.77
MAC657	8	9	3.15
MAC657	9	10	2.09
MAC657	10	11	1.30
MAC657	11	12	1.10
MAC658	0	1	1.66
MAC658	1	2	1.92
MAC658	2	3	0.91
MAC658	3	4	2.32
MAC658	4	5	4.93
MAC658	5	6	3.29
MAC658	6	7	3.40
MAC658	7	8	4.13
MAC658	8	9	2.16
MAC658	9	10	1.67
MAC658	10	11	1.00
MAC658	11	12	0.66
MAC659	0	1	1.82
MAC659	1	2	3.69
MAC659	2	3	1.67
MAC659	3	4	5.04
MAC659	4	5	5.95
MAC659	5	6	4.01

BH ID	From m	To m	THM%
MAC659	6	7	2.91
MAC659	7	8	2.84
MAC659	8	9	2.13
MAC659	9	10	1.70
MAC659	10	11	0.72
MAC659	11	12	0.66
MAC660	0	1	6.45
MAC660	1	2	3.87
MAC660	2	3	1.19
MAC660	3	4	1.30
MAC660	4	5	2.71
MAC660	5	6	2.10
MAC660	6	7	2.51
MAC660	7	8	4.07
MAC660	8	9	2.04
MAC660	9	10	0.83
MAC660	10	11	0.93
MAC660	11	12	0.61
MAC661	0	1	2.26
MAC661	1	2	2.32
MAC661	2	3	1.61
MAC661	3	4	1.42
MAC661	4	5	3.39
MAC661	5	6	1.60
MAC661	6	7	1.27
MAC661	7	8	2.16
MAC661	8	9	3.31
MAC661	9	10	0.96
MAC662	0	1	1.56
MAC662	1	2	1.38
MAC662	2	3	0.63
MAC662	3	4	1.21
MAC662	4	5	1.55
MAC662	5	6	1.61
MAC662	6	7	3.99
MAC662	7	8	1.67
MAC662	8	9	1.93
MAC663	0	1	4.50
MAC663	1	2	4.83
MAC663	2	3	0.57
MAC663	3	4	2.94
MAC663	4	5	3.06
MAC663	5	6	1.71
MAC663	6	7	2.22

BH ID	From m	To m	THM%
MAC663	7	8	3.95
MAC663	8	9	3.19
MAC664	0	1	1.82
MAC664	1	2	0.77
MAC664	2	3	0.36
MAC664	3	4	2.11
MAC664	4	5	2.76
MAC664	5	6	1.11
MAC664	6	7	1.83
MAC664	7	8	2.90
MAC664	8	9	2.96
MAC664	9	10	1.33
MAC664	10	11	1.49
MAC664	11	12	1.17
MAC665	0	1	1.55
MAC665	1	2	0.80
MAC665	2	3	0.48
MAC665	3	4	1.29
MAC665	4	5	2.03
MAC665	5	6	1.86
MAC665	6	7	1.87
MAC665	7	8	3.20
MAC665	8	9	3.26
MAC665	9	10	2.53
MAC665	10	11	1.77
MAC665	11	12	1.57
MAC666	0	1	1.02
MAC666	1	2	0.80
MAC666	2	3	0.51
MAC666	3	4	1.79
MAC666	4	5	3.26
MAC666	5	6	2.06
MAC666	6	7	1.50
MAC666	7	8	2.78
MAC666	8	9	1.99
MAC666	9	10	0.99
MAC666	10	11	0.79
MAC666	11	12	0.84
MAC667	0	1	3.85
MAC667	1	2	1.79
MAC667	2	3	0.62
MAC667	3	4	1.68
MAC667	4	5	2.63
MAC667	5	6	2.20

BH ID	From m	To m	THM%
MAC667	6	7	1.68
MAC667	7	8	3.05
MAC667	8	9	2.80
MAC667	9	10	1.06
MAC667	10	11	1.51
MAC667	11	12	1.28
MAC668	0	1	2.64
MAC668	1	2	0.54
MAC668	2	3	1.66
MAC668	3	4	2.11
MAC668	4	5	1.55
MAC668	5	6	1.22
MAC668	6	7	2.00
MAC668	7	8	2.83
MAC668	8	9	2.97
MAC668	9	10	0.81
MAC669	0	1	3.58
MAC669	1	2	1.59
MAC669	2	3	0.31
MAC669	3	4	2.74
MAC669	4	5	1.51
MAC669	5	6	2.35
MAC669	6	7	1.92
MAC669	7	8	1.74
MAC669	8	9	2.67
MAC670	0	1	2.55
MAC670	1	2	1.65
MAC670	2	3	1.09
MAC670	3	4	1.59
MAC670	4	5	1.47
MAC670	5	6	2.21
MAC670	6	7	2.42
MAC670	7	8	2.93
MAC670	8	9	2.08
MAC671	0	1	7.26
MAC671	1	2	1.51
MAC671	2	3	1.86
MAC671	3	4	4.78
MAC671	4	5	4.55
MAC671	5	6	2.77
MAC671	6	7	3.05
MAC671	7	8	3.57
MAC671	8	9	2.08
MAC671	9	10	0.95

BH ID	From m	To m	THM%
MAC671	10	11	1.13
MAC672	0	1	6.64
MAC672	1	2	1.94
MAC672	2	3	1.35
MAC672	3	4	2.54
MAC672	4	5	2.15
MAC672	5	6	3.54
MAC672	6	7	3.30
MAC672	7	8	4.07
MAC672	8	9	2.07
MAC673	0	1	6.17
MAC673	1	2	2.82
MAC673	2	3	2.74
MAC673	3	4	3.67
MAC673	4	5	4.78
MAC673	5	6	3.53
MAC673	6	7	2.29
MAC673	7	8	2.51
MAC673	8	9	2.20
MAC674	0	1	13.62
MAC674	1	2	11.62
MAC674	2	3	3.95
MAC674	3	4	4.77
MAC674	4	5	3.73
MAC674	5	6	3.83
MAC674	6	7	3.70
MAC674	7	8	4.03
MAC674	8	9	3.35
MAC675	0	1	4.69
MAC675	1	2	3.00
MAC675	2	3	2.80
MAC675	3	4	3.33
MAC675	4	5	3.86
MAC675	5	6	3.28
MAC675	6	7	2.75
MAC675	7	8	2.98
MAC675	8	9	3.01
MAC676	0	1	6.18
MAC676	1	2	3.61
MAC676	2	3	4.96
MAC676	3	4	5.04
MAC676	4	5	6.00
MAC676	5	6	4.68
MAC676	6	7	4.71
MAC676	7	8	2.85
MAC676	8	9	2.17
MAC677	0	1	8.29
MAC677	1	2	2.80
MAC677	2	3	4.27
MAC677	3	4	8.87
MAC677	4	5	8.53
MAC677	5	6	7.80
MAC677	6	7	5.77
MAC677	7	8	3.33
MAC677	8	9	2.58
MAC678	0	1	8.63
MAC678	1	2	11.43
MAC678	2	3	7.08
MAC678	3	4	10.39
MAC678	4	5	9.46
MAC678	5	6	7.33
MAC678	6	7	5.14
MAC678	7	8	4.68
MAC678	8	9	1.74
MAC679	0	1	14.15
MAC679	1	2	8.59
MAC679	2	3	8.09
MAC679	3	4	9.62
MAC679	4	5	8.06
MAC679	5	6	7.86
MAC679	6	7	6.77
MAC679	7	8	3.88
MAC679	8	9	1.58
MAC680	0	1	15.47
MAC680	1	2	11.80
MAC680	2	3	6.25
MAC680	3	4	5.24
MAC680	4	5	7.54
MAC680	5	6	4.53
MAC680	6	7	5.29
MAC680	7	8	3.96
MAC680	8	9	3.39
MAC681	0	1	15.31
MAC681	1	2	10.56
MAC681	2	3	4.62
MAC681	3	4	5.59
MAC681	4	5	7.21
MAC681	5	6	6.97

BH ID	From m	To m	THM%
MAC681	6	7	5.03
MAC681	7	8	5.13
MAC681	8	9	4.45
MAC682	0	1	8.76
MAC682	1	2	11.38
MAC682	2	3	11.10
MAC682	3	4	10.12
MAC682	4	5	6.77
MAC682	5	6	5.53
MAC682	6	7	7.29
MAC682	7	8	3.08
MAC682	8	9	3.03
MAC683	0	1	7.82
MAC683	1	2	2.99
MAC683	2	3	6.84
MAC683	3	4	12.15
MAC683	4	5	6.06
MAC683	5	6	5.96
MAC683	6	7	3.20
MAC683	7	8	5.09
MAC683	8	9	3.04
MAC684	0	1	11.85
MAC684	1	2	9.99
MAC684	2	3	11.68
MAC684	3	4	8.13
MAC684	4	5	7.70
MAC684	5	6	5.59
MAC684	6	7	2.52
MAC684	7	8	3.67
MAC684	8	9	4.36
MAC685	0	1	13.63
MAC685	1	2	2.95
MAC685	2	3	2.34
MAC685	3	4	3.72
MAC685	4	5	4.48
MAC685	5	6	2.97
MAC685	6	7	2.24
MAC685	7	8	2.31
MAC685	8	9	2.13
MAC686	0	1	6.60
MAC686	1	2	1.55
MAC686	2	3	1.61
MAC686	3	4	2.81
MAC686	4	5	1.31

BH ID	From m	To m	THM%
MAC686	5	6	3.04
MAC686	6	7	2.88
MAC686	7	8	3.47
MAC686	8	9	2.44
MAC687	0	1	3.27
MAC687	1	2	1.10
MAC687	2	3	0.89
MAC687	3	4	2.12
MAC687	4	5	3.69
MAC687	5	6	3.02
MAC687	6	7	3.50
MAC687	7	8	3.39
MAC687	8	9	2.56
MAC688	0	1	4.75
MAC688	1	2	1.80
MAC688	2	3	2.58
MAC688	3	4	3.45
MAC688	4	5	3.34
MAC688	5	6	2.92
MAC688	6	7	2.63
MAC688	7	8	3.64
MAC688	8	9	1.51
MAC689	0	1	0.92
MAC689	1	2	3.32
MAC689	2	3	0.75
MAC689	3	4	1.23
MAC689	4	5	1.54
MAC689	5	6	1.42
MAC689	6	7	2.57
MAC689	7	8	2.51
MAC689	8	9	2.65
MAC690	0	1	15.41
MAC690	1	2	2.02
MAC690	2	3	6.14
MAC690	3	4	2.72
MAC690	4	5	3.32
MAC690	5	6	2.97
MAC690	6	7	2.18
MAC690	7	8	3.86
MAC690	8	9	2.34
MAC691	0	1	16.71
MAC691	1	2	11.72
MAC691	2	3	6.10
MAC691	3	4	2.53

BH ID	From m	To m	THM%
MAC691	4	5	3.72
MAC691	5	6	2.97
MAC691	6	7	3.00
MAC691	7	8	2.55
MAC691	8	9	3.50
MAC692	0	1	4.28
MAC692	1	2	1.04
MAC692	2	3	2.56
MAC692	3	4	2.51
MAC692	4	5	4.43
MAC692	5	6	2.96
MAC692	6	7	2.51
MAC692	7	8	2.95
MAC692	8	9	2.67
MAC693	0	1	8.05
MAC693	1	2	10.02
MAC693	2	3	4.76
MAC693	3	4	3.62
MAC693	4	5	4.30
MAC693	5	6	3.70
MAC693	6	7	2.26
MAC693	7	8	3.41
MAC693	8	9	3.32
MAC694	0	1	10.48
MAC694	1	2	3.62
MAC694	2	3	1.66
MAC694	3	4	5.22
MAC694	4	5	7.94
MAC694	5	6	4.29
MAC694	6	7	4.28
MAC694	7	8	4.46
MAC694	8	9	3.95
MAC695	0	1	8.47
MAC695	1	2	5.32
MAC695	2	3	3.50
MAC695	3	4	5.58
MAC695	4	5	5.14
MAC695	5	6	5.93
MAC695	6	7	5.09
MAC695	7	8	5.47
MAC695	8	9	3.78
MAC696	0	1	9.16
MAC696	1	2	7.91
MAC696	2	3	6.52
MAC696	3	4	5.65
MAC696	4	5	5.95
MAC696	5	6	4.28
MAC696	6	7	3.80
MAC696	7	8	5.28
MAC696	8	9	4.93
MAC697	0	1	17.21
MAC697	1	2	13.86
MAC697	2	3	5.64
MAC697	3	4	9.85
MAC697	4	5	8.29
MAC697	5	6	8.05
MAC697	6	7	8.19
MAC697	7	8	4.63
MAC697	8	9	3.91
MAC698	0	1	2.61
MAC698	1	2	1.06
MAC698	2	3	1.10
MAC698	3	4	4.14
MAC698	4	5	3.40
MAC698	5	6	3.34
MAC698	6	7	4.28
MAC698	7	8	2.04
MAC698	8	9	NSR
MAC699	0	1	2.91
MAC699	1	2	3.55
MAC699	2	3	2.17
MAC699	3	4	2.93
MAC699	4	5	3.31
MAC699	5	6	3.14
MAC699	6	7	2.02
MAC699	7	8	7.51
MAC699	8	9	3.85
MAC700	0	1	1.73
MAC700	1	2	0.91
MAC700	2	3	0.49
MAC700	3	4	5.43
MAC700	4	5	2.41
MAC700	5	6	3.45
MAC700	6	7	1.78
MAC700	7	8	3.06
MAC700	8	9	3.20
MAC701	0	1	1.93
MAC701	1	2	2.93

BH ID	From m	To m	THM%
MAC701	2	3	0.61
MAC701	3	4	1.20
MAC701	4	5	1.76
MAC701	5	6	1.97
MAC701	6	7	1.43
MAC701	7	8	3.30
MAC701	8	9	2.92
MAC702	0	1	2.49
MAC702	1	2	1.64
MAC702	2	3	0.60
MAC702	3	4	1.43
MAC702	4	5	2.41
MAC702	5	6	2.06
MAC702	6	7	1.83
MAC702	7	8	3.53
MAC702	8	9	3.39
MAC703	0	1	1.01
MAC703	1	2	1.91
MAC703	2	3	0.87
MAC703	3	4	1.73
MAC703	4	5	1.52
MAC703	5	6	2.67
MAC703	6	7	2.01
MAC703	7	8	1.23
MAC703	8	9	3.61
MAC704	0	1	5.60
MAC704	1	2	4.09
MAC704	2	3	1.36
MAC704	3	4	2.73
MAC704	4	5	3.32
MAC704	5	6	1.78
MAC704	6	7	2.11
MAC704	7	8	3.14
MAC704	8	9	2.16
MAC705	0	1	15.21
MAC705	1	2	3.54
MAC705	2	3	3.62
MAC705	3	4	3.71
MAC705	4	5	2.48
MAC705	5	6	2.66
MAC705	6	7	2.79
MAC705	7	8	2.89
MAC705	8	9	NSR
MAC706	0	1	4.88

BH ID	From m	To m	THM%
MAC706	1	2	0.76
MAC706	2	3	1.93
MAC706	3	4	3.44
MAC706	4	5	3.12
MAC706	5	6	2.20
MAC706	6	7	1.26
MAC706	7	8	3.22
MAC706	8	9	4.66
MAC707	0	1	5.49
MAC707	1	2	4.63
MAC707	2	3	1.03
MAC707	3	4	2.06
MAC707	4	5	2.17
MAC707	5	6	2.21
MAC707	6	7	2.91
MAC707	7	8	4.59
MAC707	8	9	4.89
MAC708	0	1	12.67
MAC708	1	2	7.47
MAC708	2	3	2.03
MAC708	3	4	2.88
MAC708	4	5	3.45
MAC708	5	6	1.94
MAC708	6	7	2.75
MAC708	7	8	3.26
MAC708	8	9	3.58
MAC709	0	1	11.53
MAC709	1	2	3.28
MAC709	2	3	2.88
MAC709	3	4	3.31
MAC709	4	5	3.89
MAC709	5	6	2.51
MAC709	6	7	3.82
MAC709	7	8	3.89
MAC709	8	9	3.34
MAC710	0	1	1.95
MAC710	1	2	2.38
MAC710	2	3	0.30
MAC710	3	4	1.39
MAC710	4	5	1.98
MAC710	5	6	1.39
MAC710	6	7	1.10
MAC710	7	8	3.00
MAC710	8	9	3.29

BH ID	From m	To m	THM%
MAC711	0	1	1.24
MAC711	1	2	0.27
MAC711	2	3	0.48
MAC711	3	4	0.73
MAC711	4	5	1.48
MAC711	5	6	1.02
MAC711	6	7	0.96
MAC711	7	8	2.39
MAC711	8	9	2.11
MAC712	0	1	13.29
MAC712	1	2	9.14
MAC712	2	3	0.71
MAC712	3	4	2.11
MAC712	4	5	5.08
MAC712	5	6	4.15
MAC712	6	7	2.60
MAC712	7	8	3.84
MAC712	8	9	3.58
MAC712	9	10	2.79
MAC712	10	11	1.92
MAC712	11	12	1.25
MAC713	0	1	6.07
MAC713	1	2	2.88
MAC713	2	3	1.97
MAC713	3	4	1.75
MAC713	4	5	2.71
MAC713	5	6	1.92
MAC713	6	7	2.51
MAC713	7	8	3.74
MAC713	8	9	3.91
MAC714	0	1	2.62
MAC714	1	2	1.88
MAC714	2	3	1.43
MAC714	3	4	1.68
MAC714	4	5	2.41
MAC714	5	6	2.43
MAC714	6	7	3.23
MAC714	7	8	3.43
MAC714	8	9	4.54
MAC715	0	1	2.39
MAC715	1	2	1.02
MAC715	2	3	1.34
MAC715	3	4	2.60
MAC715	4	5	2.69

BH ID	From m	To m	THM%
MAC715	5	6	1.75
MAC715	6	7	2.53
MAC715	7	8	3.68
MAC715	8	9	3.66
MAC716	0	1	2.66
MAC716	1	2	1.72
MAC716	2	3	0.77
MAC716	3	4	2.19
MAC716	4	5	3.16
MAC716	5	6	2.51
MAC716	6	7	1.68
MAC716	7	8	2.75
MAC716	8	9	4.04
MAC718	0	1	2.97
MAC718	1	2	1.72
MAC718	2	3	0.91
MAC718	3	4	1.68
MAC718	4	5	1.62
MAC718	5	6	1.22
MAC718	6	7	1.19
MAC718	7	8	2.53
MAC718	8	9	2.37
MAC719	0	1	6.75
MAC719	1	2	1.79
MAC719	2	3	1.71
MAC719	3	4	2.00
MAC719	4	5	2.55
MAC719	5	6	1.77
MAC719	6	7	2.11
MAC719	7	8	1.98
MAC719	8	9	2.98
MAC720	0	1	9.80
MAC720	1	2	3.07
MAC720	2	3	1.18
MAC720	3	4	2.42
MAC720	4	5	2.87
MAC720	5	6	1.92
MAC720	6	7	1.20
MAC720	7	8	2.44
MAC720	8	9	1.88
MAC721	0	1	1.92
MAC721	1	2	1.27
MAC721	2	3	0.35
MAC721	3	4	0.83

BH ID	From m	To m	THM%
MAC721	4	5	2.45
MAC721	5	6	1.32
MAC721	6	7	2.26
MAC721	7	8	2.13
MAC721	8	9	1.12
MAC722	0	1	4.34
MAC722	1	2	0.51
MAC722	2	3	1.16
MAC722	3	4	1.95
MAC722	4	5	2.77
MAC722	5	6	1.47
MAC722	6	7	1.57
MAC722	7	8	2.16
MAC722	8	9	2.68
MAC723	0	1	1.73
MAC723	1	2	0.90
MAC723	2	3	0.71
MAC723	3	4	1.18
MAC723	4	5	1.93
MAC723	5	6	1.13
MAC723	6	7	1.64
MAC723	7	8	2.61
MAC723	8	9	2.48
MAC724	0	1	3.60
MAC724	1	2	2.09
MAC724	2	3	0.78
MAC724	3	4	1.69
MAC724	4	5	1.46
MAC724	5	6	0.02
MAC724	6	7	1.94
MAC724	7	8	3.07
MAC724	8	9	2.76
MAC725	0	1	4.23
MAC725	1	2	1.17
MAC725	2	3	0.74
MAC725	3	4	2.81
MAC725	4	5	2.39
MAC725	5	6	2.25
MAC725	6	7	2.57
MAC725	7	8	2.56
MAC725	8	9	2.34
MAC726	0	1	1.34
MAC726	1	2	0.27
MAC726	2	3	0.18

BH ID	From m	To m	THM%
MAC726	3	4	0.66
MAC726	4	5	1.66
MAC726	5	6	0.76
MAC726	6	7	1.27
MAC726	7	8	1.06
MAC726	8	9	2.77
MAC727	0	1	1.91
MAC727	1	2	0.69
MAC727	2	3	0.43
MAC727	3	4	1.17
MAC727	4	5	1.79
MAC727	5	6	0.83
MAC727	6	7	0.91
MAC727	7	8	5.05
MAC727	8	9	3.14
MAC728	0	1	1.61
MAC728	1	2	0.45
MAC728	2	3	0.69
MAC728	3	4	1.32
MAC728	4	5	1.43
MAC728	5	6	1.82
MAC728	6	7	2.46
MAC728	7	8	4.09
MAC728	8	9	3.28
MAC729	0	1	0.75
MAC729	1	2	0.19
MAC729	2	3	0.40
MAC729	3	4	0.88
MAC729	4	5	1.63
MAC729	5	6	1.31
MAC729	6	7	3.32
MAC729	7	8	1.97
MAC729	8	9	3.85
MAC730	0	1	12.83
MAC730	1	2	11.04
MAC730	2	3	5.04
MAC730	3	4	4.82
MAC730	4	5	4.60
MAC730	5	6	3.99
MAC730	6	7	2.75
MAC730	7	8	2.22
MAC730	8	9	1.97
MAC730	9	10	3.16
MAC730	10	11	3.62

BH ID	From m	To m	THM%
MAC730	11	12	1.94
MAC731	0	1	5.98
MAC731	1	2	6.15
MAC731	2	3	3.54
MAC731	3	4	4.60
MAC731	4	5	4.06
MAC731	5	6	2.71
MAC731	6	7	0.83
MAC731	7	8	1.94
MAC731	8	9	3.85
MAC731	9	10	1.61
MAC731	10	11	2.43
MAC731	11	12	2.40
MAC732	0	1	15.45
MAC732	1	2	6.78
MAC732	2	3	4.46
MAC732	3	4	6.09
MAC732	4	5	5.93
MAC732	5	6	5.33
MAC732	6	7	1.25
MAC732	7	8	3.68
MAC732	8	9	2.48
MAC732	9	10	3.15
MAC732	10	11	1.90
MAC732	11	12	1.43
MAC733	0	1	2.94
MAC733	1	2	2.03
MAC733	2	3	0.38
MAC733	3	4	1.52
MAC733	4	5	3.46
MAC733	5	6	2.74
MAC733	6	7	3.01
MAC733	7	8	6.47
MAC733	8	9	4.98
MAC733	9	10	4.52
MAC733	10	11	3.30
MAC733	11	12	2.31
MAC734	0	1	4.13
MAC734	1	2	5.24
MAC734	2	3	1.60
MAC734	3	4	2.39
MAC734	4	5	2.44
MAC734	5	6	3.07
MAC734	6	7	2.77
MAC734	7	8	2.89
MAC734	8	9	2.62
MAC734	9	10	2.53
MAC734	10	11	2.26
MAC734	11	12	1.51
MAC735	0	1	3.02
MAC735	1	2	4.12
MAC735	2	3	1.15
MAC735	3	4	1.24
MAC735	4	5	1.35
MAC735	5	6	1.39
MAC735	6	7	1.14
MAC735	7	8	1.84
MAC735	8	9	2.26
MAC735	9	10	3.01
MAC735	10	11	2.61
MAC735	11	12	1.60
MAC736	0	1	1.09
MAC736	1	2	0.92
MAC736	2	3	0.63
MAC736	3	4	1.10
MAC736	4	5	1.76
MAC736	5	6	0.95
MAC736	6	7	1.31
MAC736	7	8	2.30
MAC736	8	9	2.80
MAC736	9	10	3.14
MAC736	10	11	1.88
MAC736	11	12	1.29
MAC738	0	1	1.51
MAC738	1	2	1.20
MAC738	2	3	0.55
MAC738	3	4	0.77
MAC738	4	5	1.73
MAC738	5	6	1.25
MAC738	6	7	1.12
MAC738	7	8	3.11
MAC738	8	9	4.08
MAC738	9	10	5.88
MAC738	10	11	1.99
MAC738	11	12	1.52
MAC739	0	1	3.97
MAC739	1	2	0.83
MAC739	2	3	0.38

BH ID	From m	To m	THM%
MAC739	3	4	0.89
MAC739	4	5	1.33
MAC739	5	6	1.24
MAC739	6	7	0.65
MAC739	7	8	3.46
MAC739	8	9	3.58
MAC739	9	10	2.83
MAC739	10	11	1.79
MAC739	11	12	1.55
MAC740	0	1	2.61
MAC740	1	2	1.91
MAC740	2	3	1.06
MAC740	3	4	0.96
MAC740	4	5	0.72
MAC740	5	6	0.52
MAC740	6	7	0.46
MAC740	7	8	4.18
MAC740	8	9	4.04
MAC740	9	10	3.46
MAC740	10	11	2.11
MAC740	11	12	1.47
MAC741	0	1	2.21
MAC741	1	2	0.54
MAC741	2	3	0.34
MAC741	3	4	1.27
MAC741	4	5	0.82
MAC741	5	6	1.02
MAC741	6	7	1.23
MAC741	7	8	2.83
MAC741	8	9	3.75
MAC741	9	10	2.32
MAC741	10	11	1.94
MAC741	11	12	1.44
MAC742	0	1	2.02
MAC742	1	2	1.34
MAC742	2	3	0.63
MAC742	3	4	1.21
MAC742	4	5	1.28
MAC742	5	6	0.97
MAC742	6	7	1.29
MAC742	7	8	3.89
MAC742	8	9	3.44
MAC742	9	10	2.68
MAC742	10	11	1.81

BH ID	From m	To m	THM%
MAC742	11	12	2.76
MAC743	0	1	0.81
MAC743	1	2	0.55
MAC743	2	3	0.25
MAC743	3	4	0.86
MAC743	4	5	0.63
MAC743	5	6	0.52
MAC743	6	7	1.12
MAC743	7	8	2.68
MAC743	8	9	3.30
MAC743	9	10	1.87
MAC743	10	11	1.54
MAC743	11	12	1.78
MAC744	0	1	1.67
MAC744	1	2	0.68
MAC744	2	3	0.45
MAC744	3	4	0.78
MAC744	4	5	1.15
MAC744	5	6	1.64
MAC744	6	7	0.95
MAC744	7	8	2.27
MAC744	8	9	2.68
MAC744	9	10	1.98
MAC744	10	11	3.23
MAC745	0	1	NSR
MAC745	1	2	NSR
MAC745	2	3	NSR
MAC745	3	4	NSR
MAC745	4	5	NSR
MAC745	5	6	NSR
MAC745	6	7	NSR
MAC745	7	8	NSR
MAC745	8	9	NSR
MAC746	0	1	0.87
MAC746	1	2	1.17
MAC746	2	3	0.71
MAC746	3	4	0.88
MAC746	4	5	1.27
MAC746	5	6	1.45
MAC746	6	7	1.18
MAC746	7	8	1.76
MAC746	8	9	3.46
MAC747	0	1	1.75
MAC747	1	2	1.27

BH ID	From m	To m	THM%
MAC747	2	3	0.82
MAC747	3	4	0.84
MAC747	4	5	1.10
MAC747	5	6	1.04
MAC747	6	7	1.56
MAC747	7	8	2.80
MAC747	8	9	2.69
MAC748	0	1	1.38
MAC748	1	2	2.55
MAC748	2	3	0.67
MAC748	3	4	0.66
MAC748	4	5	1.08
MAC748	5	6	1.23
MAC748	6	7	0.91
MAC748	7	8	2.76
MAC748	8	9	3.39
MAC749	0	1	1.12
MAC749	1	2	0.58
MAC749	2	3	0.79
MAC749	3	4	1.63
MAC749	4	5	1.55
MAC749	5	6	1.65
MAC749	6	7	1.30
MAC749	7	8	2.46
MAC749	8	9	3.82
MAC750	0	1	3.63
MAC750	1	2	0.98
MAC750	2	3	1.39
MAC750	3	4	1.56
MAC750	4	5	2.51
MAC750	5	6	1.45
MAC750	6	7	1.78
MAC750	7	8	4.03
MAC750	8	9	4.14
MAC751	0	1	4.16
MAC751	1	2	2.66
MAC751	2	3	1.37
MAC751	3	4	1.78
MAC751	4	5	2.33
MAC751	5	6	2.47
MAC751	6	7	1.69
MAC751	7	8	3.18
MAC751	8	9	4.82
MAC752	0	1	1.93

BH ID	From m	To m	THM%
MAC752	1	2	0.66
MAC752	2	3	0.97
MAC752	3	4	2.53
MAC752	4	5	2.17
MAC752	5	6	1.53
MAC752	6	7	1.80
MAC752	7	8	2.34
MAC752	8	9	2.17
MAC753	0	1	16.53
MAC753	1	2	9.34
MAC753	2	3	4.67
MAC753	3	4	5.94
MAC753	4	5	6.63
MAC753	5	6	4.29
MAC753	6	7	3.85
MAC753	7	8	3.93
MAC753	8	9	2.95
MAC754	0	1	4.38
MAC754	1	2	2.90
MAC754	2	3	1.45
MAC754	3	4	2.13
MAC754	4	5	1.67
MAC754	5	6	1.66
MAC754	6	7	2.12
MAC754	7	8	3.90
MAC754	8	9	4.50
MAC755	0	1	3.01
MAC755	1	2	3.91
MAC755	2	3	3.60
MAC755	3	4	2.77
MAC755	4	5	4.66
MAC755	5	6	6.18
MAC755	6	7	4.91
MAC755	7	8	3.02
MAC755	8	9	2.25
MAC757	0	1	0.81
MAC757	1	2	0.64
MAC757	2	3	0.86
MAC757	3	4	1.37
MAC757	4	5	1.53
MAC757	5	6	1.71
MAC757	6	7	1.96
MAC757	7	8	6.37
MAC757	8	9	2.86

BH ID	From m	To m	THM%
MAC758	0	1	0.17
MAC758	1	2	0.30
MAC758	2	3	0.16
MAC758	3	4	0.54
MAC758	4	5	1.15
MAC758	5	6	0.88
MAC758	6	7	0.88
MAC758	7	8	1.51
MAC758	8	9	4.07
MAC759	0	1	0.39
MAC759	1	2	0.56
MAC759	2	3	0.36
MAC759	3	4	0.94
MAC759	4	5	0.77
MAC759	5	6	1.11
MAC759	6	7	1.41
MAC759	7	8	3.37
MAC759	8	9	3.14
MAC760	0	1	1.75
MAC760	1	2	1.30
MAC760	2	3	0.65
MAC760	3	4	1.54
MAC760	4	5	0.98
MAC760	5	6	0.71
MAC760	6	7	1.16
MAC760	7	8	2.52
MAC760	8	9	3.50
MAC761	0	1	1.04
MAC761	1	2	1.29
MAC761	2	3	0.98
MAC761	3	4	1.54
MAC761	4	5	1.47
MAC761	5	6	0.88
MAC761	6	7	0.87
MAC761	7	8	2.93
MAC761	8	9	3.09
MAC762	0	1	0.91
MAC762	1	2	0.66
MAC762	2	3	0.60
MAC762	3	4	1.44
MAC762	4	5	1.73
MAC762	5	6	1.55
MAC762	6	7	1.46
MAC762	7	8	2.97

BH ID	From m	To m	THM%
MAC762	8	9	2.91
MAC763	0	1	0.26
MAC763	1	2	1.23
MAC763	2	3	1.00
MAC763	3	4	1.12
MAC763	4	5	2.21
MAC763	5	6	0.73
MAC763	6	7	0.97
MAC763	7	8	2.14
MAC763	8	9	3.30
MAC764	0	1	0.65
MAC764	1	2	0.97
MAC764	2	3	0.54
MAC764	3	4	0.73
MAC764	4	5	1.06
MAC764	5	6	1.34
MAC764	6	7	2.44
MAC764	7	8	1.08
MAC764	8	9	0.70
MAC765	0	1	2.25
MAC765	1	2	3.50
MAC765	2	3	0.99
MAC765	3	4	1.03
MAC765	4	5	1.97
MAC765	5	6	1.17
MAC765	6	7	0.86
MAC765	7	8	2.30
MAC765	8	9	2.95
MAC766	0	1	2.23
MAC766	1	2	2.66
MAC766	2	3	0.86
MAC766	3	4	1.25
MAC766	4	5	1.09
MAC766	5	6	0.86
MAC766	6	7	1.19
MAC766	7	8	2.54
MAC766	8	9	2.96
MAC767	0	1	1.67
MAC767	1	2	1.66
MAC767	2	3	0.84
MAC767	3	4	0.43
MAC767	4	5	0.80
MAC767	5	6	0.63
MAC767	6	7	0.89

BH ID	From m	To m	THM%
MAC767	7	8	1.87
MAC767	8	9	3.08
MAC768	0	1	1.65
MAC768	1	2	0.89
MAC768	2	3	0.74
MAC768	3	4	1.10
MAC768	4	5	1.03
MAC768	5	6	1.00
MAC768	6	7	2.37
MAC768	7	8	1.31
MAC768	8	9	3.51
MAC769	0	1	3.90
MAC769	1	2	0.65
MAC769	2	3	0.39
MAC769	3	4	1.07
MAC769	4	5	1.37
MAC769	5	6	1.32
MAC769	6	7	1.69
MAC769	7	8	3.21
MAC769	8	9	3.92
MAC770	0	1	3.66
MAC770	1	2	1.65
MAC770	2	3	0.60
MAC770	3	4	1.41
MAC770	4	5	1.04
MAC770	5	6	1.06
MAC770	6	7	1.34
MAC770	7	8	3.20
MAC770	8	9	3.93
MAC771	0	1	2.48
MAC771	1	2	1.12
MAC771	2	3	0.66
MAC771	3	4	0.90
MAC771	4	5	1.07
MAC771	5	6	0.53
MAC771	6	7	1.46
MAC771	7	8	4.00
MAC771	8	9	3.27
MAC772	0	1	6.35
MAC772	1	2	3.58
MAC772	2	3	2.03
MAC772	3	4	1.48

BH ID	From m	To m	THM%
MAC772	4	5	1.88
MAC772	5	6	2.23
MAC772	6	7	1.46
MAC772	7	8	2.76
MAC772	8	9	2.71
MAC773	0	1	2.23
MAC773	1	2	0.63
MAC773	2	3	0.75
MAC773	3	4	2.41
MAC773	4	5	2.39
MAC773	5	6	2.10
MAC773	6	7	1.52
MAC773	7	8	3.11
MAC773	8	9	4.41
MAC774	0	1	2.05
MAC774	1	2	1.05
MAC774	2	3	1.54
MAC774	3	4	2.19
MAC774	4	5	1.85
MAC774	5	6	1.83
MAC774	6	7	1.38
MAC774	7	8	3.00
MAC774	8	9	3.11
MAC775	0	1	11.39
MAC775	1	2	14.56
MAC775	2	3	6.88
MAC775	3	4	2.95
MAC775	4	5	5.52
MAC775	5	6	7.08
MAC775	6	7	9.02
MAC775	7	8	7.65
MAC775	8	9	3.41
MAC776	0	1	10.02
MAC776	1	2	5.42
MAC776	2	3	2.36
MAC776	3	4	1.66
MAC776	4	5	2.89
MAC776	5	6	2.96
MAC776	6	7	2.12
MAC776	7	8	1.64
MAC776	8	9	3.36

Appendix 3
JORC TABLES sections 1 and 2

The drilling was undertaken by Sri Lankan geologists from the Sri Lankan Geological Survey and Mines Bureau Technical Services (GSMBTS) and a drilling team directed by Dr James Searle Managing Director of The Company, BSc (hons), PhD, a Member of the Australian Institute of Mining and Metallurgy. Dr Searle is responsible for the compiled JORC compliance tabulated below as well as the technical summaries and descriptions contained in the body of this announcement. Dr Searle has over 37 years of experience in metallic and energy minerals exploration and development, and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Searle consents to inclusion of this information in the format and context in which it appears.

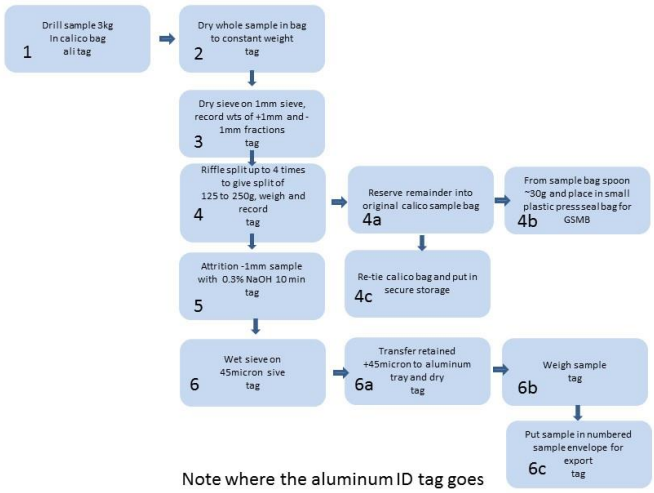
Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement	• 100% of recovered sample collected and bagged at drill site. • Sample interval down hole every 1.0m above the water table and every 1m below the water table or part interval. • Sampling was only undertaken down to depth where water influx into the hole was considered such that it compromised the sample accuracy. • Visual logging of heavy minerals was however carried out to the termination depth of the hole. Total heavy mineral content supported by hand lenses, settling bottles and panning dish. • Previous experience indicates that the site geologist can with a high degree of certainty judge if the sample has significant heavy mineral concentration, which in this deposit is considered to be over 2% Total Heavy Mineral

Criteria	Explanation	Commentary
	tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple	• Tractor mounted RC aircore running HQ rods and inner tubes. • Face sampling bit. • Cyclone outlet sample collection. • System air purged each sample interval. • Air supply kept to a minimum to ensure efficient removal of sample from the bit face with minimal surrounding draw. • Sample recoveries for each sample interval noted.

Criteria	Explanation	Commentary
	or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• All holes vertical. • Material being drilled unconsolidated and only very locally lightly cemented.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Weight of sample recovered logged against estimate of 100% recovery weight.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or	• Recovered samples logged in standardized format for all relevant visual parameters including sediment, rounding, sorting etc. • Logging of visual parameters qualitative but referenced to standard parameter sheets. • All drill hole samples logged at drill site. • No sampling where water influx created slurrying of sample.

Criteria	Explanation	Commentary
	quantitative in nature. Core (or costean, channel, etc.) photography. • The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.*	Sample preparation procedures being undertaken: • Dried samples weighed and sieved to remove oversize (>1mm). • Oversize weighed. • Sub sample of 125 to 250g riffle split. • 12 chute riffle splitter. Sample loaded evenly into splitter on top of removable baffle to ensure optimal split across the splitter. • Sample deslimed (<45 micron). • Sample dried to constant weight and reweighed. • Custody chain of samples maintained from drill site to controlled storage.

Criteria	Explanation	Commentary
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	The initial drying (at between 80 to 105 degrees C via gas oven), de-sliming and oversize removal was conducted at the site Prep Facility on Mannar Island. The procedures are shown below.  Analytical work on the tetra bromoethane (TBE) based THM determination and subsequent magnetic separation work will be done by Scientific Services C.C., Cape Town. XRF work was done on the fractions of the magnetic separation samples • The determination of THM % sample concentrate using TBE at a specific gravity (SG) of 2.95, are as follows: • TBE is placed into the glass flask up to the indicated mark. • Place approximate 1 scoop of sample into the flask. • Wash down the sides of the flask and impeller with TBE to ensure all material is in the TBE. • Run the mixer for about 10 seconds. • Wash down again to ensure no material is 'hung'. • Run the impeller mixer repeatable in 10 second bursts until sure that all heavies have been liberated. • Allow to stand for 5-10 minutes or until no more material cascades to bottom. • Once the discharge pipe is clear of suspended material release the tube to allow the concentrate to be captured in the filter paper. Store this labeled filter paper.

Criteria	Explanation	Commentary
		• Process any remaining sample as above ensuring no concentrate is lost. • Finally flush out the floats by opening the tube and allowing the floats to fall into filter paper – allow this to stand capturing all the TBE which will be reused at a later stage. • Wash all concentrates and floats thoroughly with acetone to reclaim as much TBE as possible. • After the concentrate filter is acetone rinsed and dried, transfer the concentrate very carefully into a bag by opening the filter paper ensuring nothing is lost. • Place the floats into the waste drums unless specified by the client to do otherwise. • Check the SG of the TBE with the density tracers provided and re-use as appropriate.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Verification procedures to be undertaken. 1. Independently supervised repeat drilling will twin between 5 and 10% of holes showing significant heavy mineral mineralisation. 2. One in 20 duplicate samples from splitting and sample preparation submitted for separate analysis.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Drill collars located using GPS WGD84 to an accuracy typically of better than + or- 5m • Topographic control to be determined from subsequent DTM tie in.

Criteria	Explanation	Commentary
	• *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• With this latest infill drilling program nominal drill hole coverage is now holes 50m apart on lines 200m apart. • The grade continuity derived from this drill hole spacing is now judged sufficient to support a mineral resource estimate at least in substantial part to an indicated resource category. • No sample composting.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a*	• Shoreline concentrated heavy minerals when preserved by net coastal progradation seaward form strands of mineralisation that can vary from 10s to hundreds of metres wide but many hundreds or metres and kilometres long. Drill lines are therefore optimally oriented across the trend direction of the paleo shoreline positions. Drill hole spacing along the lines were designed to find HM strands as narrow as 25 to 50m wide. Separation of the drill lines along the paleo shoreline orientations reflects the much greater along shore dimensions of any potentially economic strands. • The RC aircore drilling below the dune and strand line deposit is intersecting near beach and nearshore shallow water current sorted and concentrated heavy mineral bearing sands and silts.

Criteria	Explanation	Commentary
	sampling bias, this should be assessed and reported if material.	
Sample security	• *The measures taken to ensure sample security.*	• Custody of samples documented, and integrity of packaging monitored.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Duplicated sample splits and samples from twinned holes will be used to demonstrate QA/QC

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Granted exploration licenses. • 5% royalty to vendor. • 5% state royalty regime if exported, 4% not exported..
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Acknowledged in referenced announcements.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Holocene to Modern coastal sand deposit hosted heavy mineral sands

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • *easting and northing of the drill hole collar*
	  • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  • *dip and azimuth of the hole*
	  • *down hole length and interception depth*
	  • *hole length.*
		• Tabulation of all drill hole information contained within Appendices 1 and 2, above, with the exception of RL which will be provided later when a DTM is available. At this time collar elevation is considered not material due to the lack of significant elevation changes over the area.

Criteria	Explanation	
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Intercepts calculated on the basis of total heavy mineral grades greater than or equal to visually estimated 2% total heavy mineral. • No aggregation of sub grade results into reported intercepts.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Heavy mineral zones in beach sediments are flat or only very shallowly dipping. All drill holes were vertical.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Plans of drill hole locations historical and subject of this announcement are provided. • Sectional representations above showing the relationship of previously defined near surface resources and the current RC aircore drilling..
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	• All holes being reported on drilled on the controlled tenure with locations shown in Figures 1 and 2 in the main text of the announcement. Collar positions and intercepts listed in Appendices 1 and 2

Criteria	Explanation	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Not applicable.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further drilling may test further lateral and depth extensions of the areas of mineralisation defined to date. • Results from this program will be used to provide and updated resource statement for the resource zone drilled, which will provide the basis for a more advanced scoping study analysis.