22 September 2023

High grade assays and large widths show Bencubbin emerging as a potential significant rare earths discovery

Grades of up to 7,243ppm TREO from latest drilling within intercepts up to 79m wide; plus positive project-wide auger results indicate strike potential of 22km; Metallurgical test work to commence

Highlights

- **Latest assays from the Bencubbin Rare Earths Project in WA reveal thickest and highest-grade intersections to date with near-surface results of:**
    - **79m @ 1,576ppm TREO from 32m including 8m @ 7,243ppm TREO;**
    - **40m @ 1,628ppm TREO from 8m; and**
    - **19m @ 1,959ppm TREO from 4m including 4m @ 4,743ppm TREO**
- **This is in addition to previously announced results of:**
    - **23m @ 1,862ppm TREO from 12m including 12m @ 2,405ppm TREO;**
    - **34m @ 1,276ppm TREO from 8m including 4m @ 2,112ppm TREO; and**
    - **25m @ 1,117ppm TREO from 32m, including 9m @ 1,608ppm TREO**
- **Project wide auger results highlight widespread anomalism of >500ppm TREO close to surface over 22km, including results up to 1,686ppm TREO 2km from the nearest drill hole**
- **Additional air core drilling has been designed on a project scale to follow up and confirm widespread anomalism identified in the auger**
- **Samples will be collected in line with leading REE metallurgist ANSTO's recommendations for the Company to conduct initial metallurgical test work at Bencubbin**
- **Majors, including Rio Tinto and IGO, are actively exploring for REE in the same area, with IGO's Lake Campion project established specifically to target clay-hosted REEs**
- **Bencubbin rare earths exploration is being conducted in parallel with Cygnus' extensive lithium exploration program in James Bay, Canada; Separate teams assigned to lithium and rare earths**

Cygnus Managing Director David Southam said: "These are the latest in a string of highly promising rare earths results at Bencubbin. It is still early days in the discovery but we can see the project has significant potential and that's why we are about to start metallurgical tests. While our clear focus remains on lithium in James Bay, Quebec, we are going to pursue Bencubbin with the aim of establishing its true full value".

"Our small dedicated Australian team will now focus on some follow-up air core drilling while samples are being sent for very important metallurgical test work".

Cygnus Metals Limited (ASX:CY5) is pleased to announce more high grade assays from recently completed air core and auger drilling at the Bencubbin Rare Earths Project in WA.

During July, the Company completed an additional 63 air core drill holes and 96 auger holes in the north-east of the Bencubbin Project (800km^2) to expand the drill coverage and test the scale of REE enrichment across a major granitic body. Recent results have returned some of the thickest and high grade results to date in a thick clay profile which is mineralised from the near surface. Recent results include:

- **79m @ 1,576ppm TREO from 32m including 8m @ 7,243ppm TREO;**
- **40m @ 1,628ppm TREO from 8m; and**
- **19m @ 1,959ppm TREO from 4m including 4m @ 4,743ppm TREO.**

These results are in addition to the previously reported assays (refer ASX releases dated 7 and 20 June 2023) which include:

- 23m @ 1,862ppm TREO from 12m including 12m @ 2,405ppm TREO;
- 19m @ 1,541ppm TREO from 8m, including 11m @ 1,960ppm TREO and 4m @ 2,356ppm TREO;
- 34m @ 1,276ppm TREO from 8m including 4m @ 2,112ppm TREO; and
- 25m @ 1,117ppm TREO from 32m, including 9m @ 1,608ppm TREO.

Results from air core drilling has signifcantly increased the scale of mineralisation by almost doubling the known strike length to now cover 4.5km, which remains open. Importantly, the mineralisation continues to demonstrate consistent near-surface grades in association with the magnetic margin of a major granitic body believed to be the potential source of mineralisation.

Results from auger drilling across the greater project area have successfully identifed widespread anomalism over 22km with all auger lines returning grades of >500ppm TREO with up to 1,686ppm TREO intersected over 2km from the nearest drill hole. Results of >500ppm in the top 1-3m is highly anomalous and indicates the rare earth system is much larger than the current area that has been drilled with air core.

Follow Up Exploration

Follow-up air core drilling is pending final government approval and is designed to test for scale, including and beyond the 22km long auger anomaly defined along the magnetic granite margin. The regional program has been designed with 100m spaced holes over 3.5 - 4.5 km spaced lines and will enable Cygnus to test the potential scale of a REE resource at Bencubbin.

Metallurgy is planned to be completed through industry leader ANSTO Minerals, the Australian Nuclear Science and Technology Organisation, which has extensive experience in REE processing. An initial project has been developed through ANSTO to test the leachability of the rare earth elements and other critical metal byproducts such as gallium (Ga) and scandium (Sc). Initial results are expected to take 16 weeks from reciept of samples at ANSTO in Sydney.

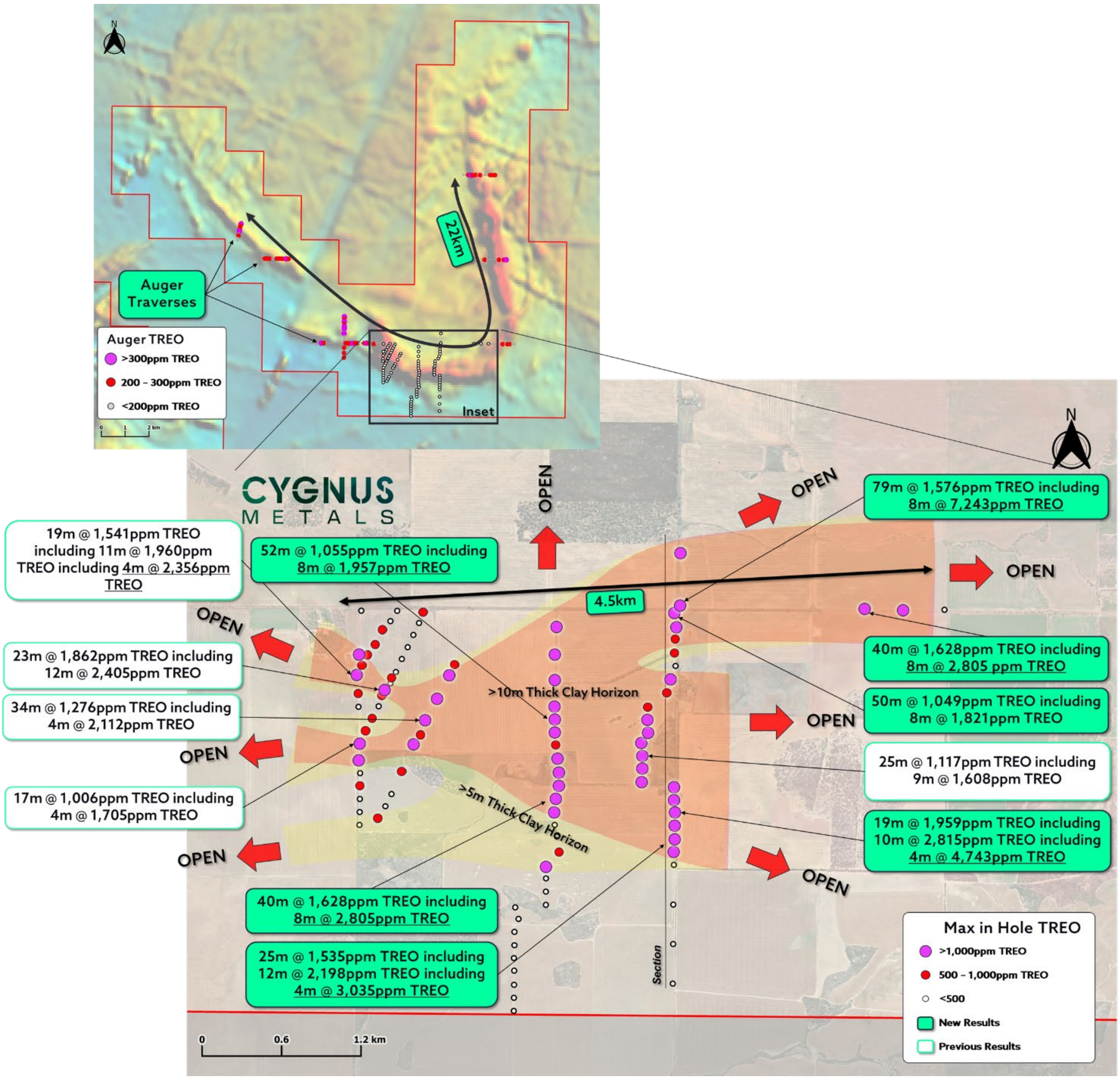

Figure 1: Current limited drill coverage over distInct 22km long magnetic anomaly with completed auger traverse. Inset – thick (>10m) clay horizon at >1000ppm TREO over 2.6km of strike and 2km width.

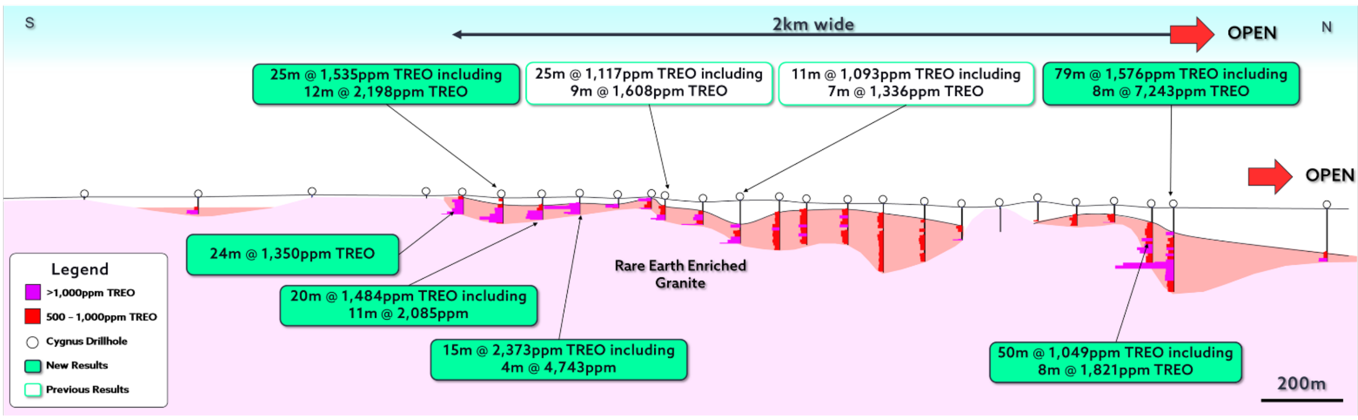

Figure 2: Significant clay profile up to 79m developed over rare earth enriched granite. Mineralisation is high grade and near surface with very low stripping. Vertical exaggeration x2.

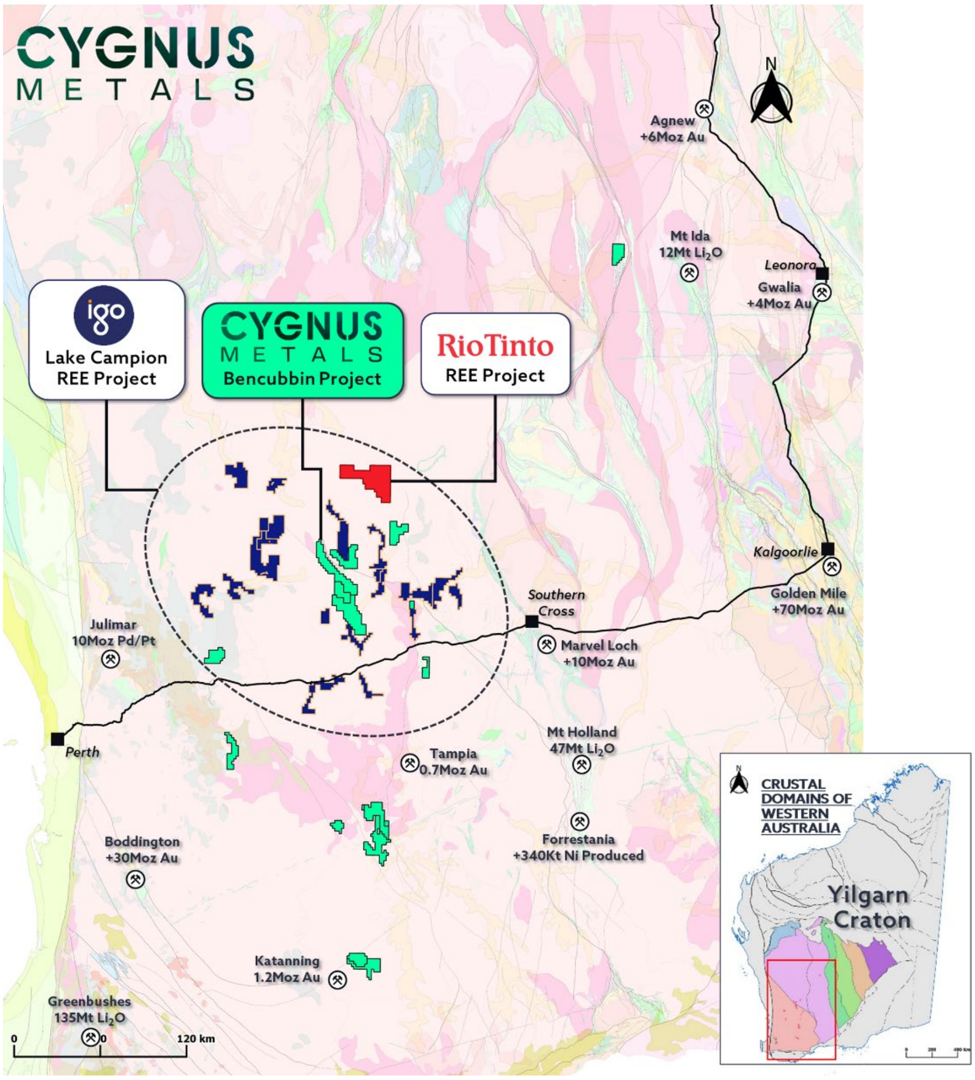

Figure 3: The location of the Bencubbin Project relative to IGO's Lake Campion Project and Rio Tinto's REE Project. This area is considered highly prospective for clay hosted rare earths.

For and on behalf of the Board

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About Cygnus Metals

Cygnus Metals Limited (ASX: CY5) is an emerging exploration company focussed on advancing the Pontax Lithium Project (earning up to 70%) and the Auclair Lithium Project in the world class James Bay lithium district in Canada, as well as the Bencubbin Lithium Project and Snake Rock Project in Western Australia. The Cygnus Board of Directors and Technical Management team has a proven track record of substantial exploration success and creating wealth for shareholders and all stakeholders in recent years.

Cygnus Metals' tenements range from early-stage exploration areas through to advanced drill-ready targets.

Competent Persons Statements

The information in this announcement that relates to exploration results is based on and fairly represents information and supporting documentation compiled by Mr Duncan Grieve, a Competent Person who is a member of The Australasian Institute of Geoscientists. Mr Grieve is the Chief Geologist and a full-time employee of Cygnus Metals and holds shares in the Company. Mr Grieve has sufficient experience relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Grieve consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

The information in this announcement that relates to previously reported Exploration Results has been previously released by Cygnus Metals in its ASX Announcements dated 7 June 2023 and 20 June 2023, and Cygnus Metals is not aware of any new information or data that materially affects the information in the said announcements. The Company confirms that the form and context in which the Competent Persons’ findings are presented have not been materially modified from the original market announcements.

APPENDIX A –Details of Air Core Drill holes

Coordinates given in GDA94 MGA Zone 50.

Hole ID	East	North	RL	Azimuth	Dip	EOH
WBAC0035	594170	6581251	337	0	-90	64
WBAC0036	594174	6581354	342	0	-90	67
WBAC0037	594173	6581449	335	0	-90	105
WBAC0038	594174	6581548	338	0	-90	111
WBAC0039	594176	6581752	333	0	-90	98
WBAC0040	594180	6581950	343	0	-90	130
WBAC0041	594183	6582154	336	0	-90	115
WBAC0042	592700	6581949	311	0	-90	20
WBAC0043	592690	6581646	329	0	-90	5
WBAC0044	592689	6581544	333	0	-90	3
WBAC0045	592699	6581147	343	0	-90	17
WBAC0046	592701	6581043	348	0	-90	12
WBAC0047	592700	6580945	352	0	-90	10
WBAC0048	592699	6580848	355	0	-90	13
WBAC0049	592698	6580749	360	0	-90	19
WBAC0050	592696	6580652	362	0	-90	6
WBAC0051	593154	6581340	344	0	-90	48
WBAC0052	593105	6581258	346	0	-90	51
WBAC0053	594200	6581150	343	0	-90	79
WBAC0054	594207	6581051	336	0	-90	66
WBAC0055	594204	6580953	340	0	-90	81
WBAC0056	594172	6580852	339	0	-90	48
WBAC0057	594171	6580747	343	0	-90	20
WBAC0058	594170	6580652	344	0	-90	3
WBAC0059	594186	6580564	300	0	-90	1
WBAC0060	594202	6580449	350	0	-90	1
WBAC0061	594106	6580348	349	0	-90	2
WBAC0062	594104	6580248	353	0	-90	2
WBAC0063	594103	6580148	351	0	-90	1
WBAC0064	594103	6580048	351	0	-90	2
WBAC0065	593872	6580029	348	0	-90	1
WBAC0066	593897	6579942	346	0	-90	3
WBAC0067	593866	6579844	344	0	-90	3
WBAC0068	593866	6579743	342	0	-90	6
WBAC0069	593862	6579646	342	0	-90	15
WBAC0070	593864	6579551	340	0	-90	4
WBAC0071	593863	6579444	339	0	-90	2
WBAC0072	593862	6579346	337	0	-90	8
WBAC0073	593861	6579247	338	0	-90	6
WBAC0074	594872	6581346	345	0	-90	55
WBAC0075	594869	6581454	345	0	-90	55

Hole ID	East	North	RL	Azimuth	Dip	EOH
WBAC0076	594873	6581547	344	0	-90	90
WBAC0077	595008	6581655	343	0	-90	75
WBAC0078	595045	6581753	339	0	-90	43
WBAC0079	595082	6581853	339	0	-90	32
WBAC0080	595079	6581952	346	0	-90	25
WBAC0081	595082	6582053	342	0	-90	27
WBAC0082	595084	6582152	342	0	-90	23
WBAC0083	595081	6582251	339	0	-90	75
WBAC0084	595114	6582308	339	0	-90	111
WBAC0085	595118	6582709	337	0	-90	69
WBAC0086	596505	6582284	345	0	-90	51
WBAC0087	596804	6582277	345	0	-90	40
WBAC0088	597112	6582277	350	0	-90	27
WBAC0089	595071	6580939	351	0	-90	14
WBAC0090	595075	6580853	351	0	-90	13
WBAC0091	595072	6580752	353	0	-90	23
WBAC0092	595072	6580654	351	0	-90	28
WBAC0093	595070	6580550	351	0	-90	33
WBAC0094	595069	6580446	354	0	-90	24
WBAC0095	595069	6580350	355	0	-90	4
WBAC0096	595065	6580050	354	0	-90	19
WBAC0097	595064	6579752	352	0	-90	22
WBAC0098	595061	6579453	353	0	-90	49

APPENDIX B – Significant intercepts

A cut-off grade of 800ppm TREO was applied and a maximum of 4m of internal dilution was allowed. TREO and MREO are rounded to the nearest whole number and MREO assays are rounded to one decimal place. Significant intersections include all intervals greater than 800ppm TREO.

Hole ID	From	To	Interval	TREO	MREO	Pr_6O_{11}	Nd_2O_3	Tb_4O_7	Dy_2O_3
WBAC0035	12	16	4	972	181.6	18.4	10.4	18.4	10.4
&	60	64	4	873	173.9	73.7	53.7	73.5	53.7
WBAC0036	24	28	4	807	147.2	18.3	11	18.3	11
WBAC0036	44	66	22	960	177	73.8	50.5	73.8	50.5
including	60	66	6	1326	277.7	211.4	153.6	211.4	153.6
WBAC0037	**40**	**92**	**52**	**1055**	**218**	**111.2**	**69.3**	**111.2**	**69.3**
including	**60**	**68**	**8**	**1957**	**432.5**	**298.5**	**158.7**	**298.5**	**158.7**
WBAC0038	32	52	20	849	191.8	36.4	19	36.4	19
including	32	40	8	1287	290.4	54.8	26.8	54.8	26.8
WBAC0038	96	100	4	964	195.1	25.2	21.6	25.2	21.6
WBAC0039	32	48	16	1077	193.8	49.9	30.7	49.9	30.7
&	68	76	8	833	179.9	100.4	53.9	100.4	53.9
WBAC0040	44	52	8	985	203.6	57.8	31.2	57.8	31.2
&	64	84	20	926	231.4	149.8	78.5	149.8	78.5
WBAC0041	**76**	**108**	**39**	**1024**	**286.4**	**207.7**	**151.9**	**266.4**	**151.9**

Hole ID	From	To	Interval	TREO	MREO	Pr_6O_{11}	Nd_2O_3	Tb_4O_7	Dy_2O_3
including	**80**	**92**	**12**	**1543**	**331.5**	**251.9**	**165.7**	**289.5**	**165.7**
WBAC0042	**4**	**19**	**15**	**1188**	**266.4**	**79.8**	**50.1**	**94.3**	**50.1**
WBAC0045	12	17	5	1170	413.6	72.9	60.6	77.4	60.6
WBAC0051	16	24	8	878	210.7	102.4	60.8	122.6	60.8
&	44	47	3	823	166.5	55.5	44	55.5	44
WBAC0052	4	8	4	851	163.6	20.1	9.4	20.1	9.4
&	36	51	15	1105	231.6	92.4	63.4	101.2	63.4
WBAC0053	44	79	35	863	184.2	118.9	272.3	253.9	272.3
including	68	79	11	1092	218.6	214.9	318.6	275.1	318.6
WBAC0054	52	66	14	1133	279.4	55.3	57.2	60.8	57.2
WBAC0055	36	81	45	948	202.9	40	41	51.6	41
including	40	64	24	1029	226.4	43.9	43.1	52.8	43.1
WBAC0056	**8**	**48**	**40**	**1628**	**418**	**161.5**	**96.9**	**181.6**	**96.9**
including	**24**	**32**	**8**	**2805**	**642.4**	**233.7**	**115.6**	**232.8**	**115.6**
WBAC0057	**0**	**20**	**20**	**1382**	**274.9**	**48.1**	**33**	**58.4**	**33**
including	**4**	**12**	**8**	**2169**	**339.3**	**40.2**	**21.2**	**43.9**	**21.2**
WBAC0061	1	2	1	1089	231.6	30.3	22.3	30.3	22.3
WBAC0074	8	54	46	868	181.8	78.5	51.2	81.4	51.2
WBAC0075	8	54	46	830	187.7	80.6	44.1	91.1	44.1
WBAC0076	16	20	4	809	201.6	75.6	30	75.6	30
&	40	44	4	806	177	69.2	41	69.2	41
WBAC0078	42	43	1	1246	263.6	255.9	164.3	255.9	164.3
WBAC0081	16	20	4	933	155.5	10.1	3.5	10.1	3.5
&	26	27	1	814	155.9	29.4	16.2	29.4	16.2
WBAC0082	12	23	11	877	229.5	132.1	165.2	241	165.2
WBAC0083	**24**	**74**	**50**	**1049**	**239.2**	**143.5**	**240.6**	**308.3**	**240.6**
including	**40**	**60**	**20**	**1389**	**314.7**	**241**	**290.1**	**363.6**	**290.1**
including	**52**	**60**	**8**	**1821**	**361.7**	**393.6**	**371.9**	**434**	**371.9**
WBAC0084	**32**	**111**	**79**	**1576**	**604.1**	**740**	**802.7**	**1428.5**	**802.7**
including	**72**	**80**	**8**	**7243**	**1131.5**	**1701.5**	**949.9**	**1725.4**	**949.9**
WBAC0085	64	69	5	1120	222.1	72.2	59.4	72.7	59.4
WBAC0086	32	51	19	853	183.1	62.3	83	100.5	83
including	36	44	8	1151	243.9	101.6	109.2	129.9	109.2
WBAC0087	16	39	23	865	197.4	40.1	43.3	67.7	43.3
including	24	32	8	1310	256.3	25	10.8	27.8	10.8
WBAC0089	**0**	**14**	**14**	**1150**	**322.5**	**148.9**	**122.1**	**179.1**	**122.1**
WBAC0090	4	13	9	1019	322.6	177.6	150.7	207.2	150.7
WBAC0091	**4**	**23**	**19**	**1959**	**657**	**456.6**	**346.8**	**503.6**	**346.8**
including	**12**	**22**	**10**	**2815**	**784.9**	**578.8**	**392.4**	**597**	**392.4**
including	**12**	**16**	**4**	**4743**	**1077.7**	**820.7**	**484.9**	**820.7**	**484.9**
WBAC0092	**8**	**28**	**20**	**1484**	**430.2**	**240.8**	**217.7**	**291**	**217.7**
including	**16**	**27**	**11**	**2085**	**481.4**	**252.1**	**205.6**	**302.8**	**205.6**
WBAC0093	**8**	**33**	**25**	**1535**	**392.6**	**181.8**	**179.7**	**245.9**	**179.7**
including	**20**	**32**	**12**	**2198**	**500.9**	**263**	**207.6**	**284.1**	**207.6**

Hole ID	From	To	Interval	TREO	MREO	Pr_6O_{11}	Nd_2O_3	Tb_4O_7	Dy_2O_3
including	24	28	4	3035	650.6	388.6	268.5	388.6	268.5
WBAC0094	0	24	24	1350	389.6	192	209.6	269.8	209.6
including	16	24	8	1881	489.6	282	255.8	319.2	255.8
WBAC0097	12	22	10	1081	263.4	50.6	39.1	54.3	39.1
including	16	21	5	1524	302.2	60.5	44.5	61.1	44.5

MREO = $Pr_6O_{11} + Nd_2O_3 + Tb_4O_7 + Dy_2O_3$

TREO = $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O$

APPENDIX C – Auger Results

All auger holes with max TREO in hole reported

Sample ID	Easting	Northing	Elevation	TREO
RC196761	596063	6589374	350.5	80.1
RC196762	596168	6589365	351.8	115.1
RC196763	596266	6589366	355.5	469.5
RC196764	596365	6589351	357.6	506.6
RC196765	596455	6589351	357.6	408.4
RC196766	596567	6589365	351.5	252.7
RC196767	596660	6589362	358.6	153.0
RC196768	596763	6589360	353.5	340.1
RC196769	596868	6589364	359.8	153.6
RC196771	596965	6589360	363.1	197.6
RC196772	597065	6589356	357.2	173.5
RC196773	597188	6589361	368.2	460.0
RC196774	597292	6589359	367	399.0
RC196775	597391	6589360	379.8	226.7
RC196746	596854	6585806	345.8	183.0
RC196747	596951	6585807	344.7	304.2
RC196749	597056	6585806	352	159.7
RC196750	597160	6585805	353.5	100.3
RC196751	597258	6585805	353	101.8
RC196752	597353	6585807	342.7	113.7
RC196755	597452	6585808	354.4	137.1
RC196756	597555	6585802	343.3	253.3
RC196757	597659	6585801	355.1	167.0
RC196758	597758	6585802	359.6	209.2
RC196759	597860	6585801	359.2	564.8
RC196726	597204	6582265	337.1	119.9
RC196728	597306	6582267	349.8	151.7
RC196732	597410	6582263	353.1	104.7
RC196733	597505	6582261	355.2	156.3

Sample ID	Easting	Northing	Elevation	TREO
RC196735	597611	6582257	360.4	97.2
RC196737	597706	6582261	348.5	253.7
RC196738	597802	6582262	356	122.5
RC196740	597909	6582256	341.4	237.5
RC196742	598001	6582261	353.4	381.2
RC196743	598106	6582263	366.1	119.9
RC196745	598209	6582258	360.3	113.5
RC196697	589999	6582306	313.6	149.9
RC196698	589999	6582306	311.6	96.3
RC196696	590101	6582305	320.8	1201.8
RC196694	590205	6582304	313.7	213.5
RC196695	590205	6582304	311.7	250.2
RC196692	590305	6582305	324.3	170.2
RC196691	590519	6582299	320.1	124.2
RC196688	590613	6582298	318.7	151.0
RC196686	590723	6582299	320.4	104.7
RC196684	590820	6582296	311	110.8
RC196682	590925	6582300	310.6	127.1
RC196680	591014	6582294	294.1	169.3
RC196677	591117	6582300	315.3	277.9
RC196675	591219	6582291	324.7	471.4
RC196673	591312	6582299	329.4	396.9
RC196672	591418	6582293	323.1	507.2
RC196669	591517	6582302	318.4	383.4
RC196668	591595	6582298	326.5	304.5
RC196666	591694	6582302	327.3	188.6
RC196665	591798	6582299	328.8	113.4
RC196664	591898	6582301	333.1	403.2
RC196662	592002	6582301	322.5	549.5
RC196661	592095	6582305	328.3	202.7
RC196659	592205	6582302	333.5	196.4
RC196658	592293	6582269	299.9	217.1
RC196657	592397	6582297	331.1	167.2
RC196656	592500	6582303	312.3	189.0
RC196655	592598	6582296	326.3	184.6
RC196725	591064	6583413	324.7	506.0
RC196724	591065	6583313	326.4	423.6
RC196723	591062	6583206	319.4	1686.3
RC196720	591061	6583099	312.7	452.6
RC196719	591062	6583006	314.3	650.0

Sample ID	Easting	Northing	Elevation	TREO
RC196717	591061	6582905	323.4	704.5
RC196715	591059	6582807	315.4	163.7
RC196713	591054	6582706	319.3	1444.4
RC196712	591054	6582604	311.9	185.8
RC196709	591051	6582509	310.5	195.3
RC196707	591045	6582409	324.1	167.8
RC196705	591050	6582109	310.3	443.2
RC196702	591047	6581895	315.9	393.9
RC196699	591046	6581695	332	340.0
RC196787	587723	6585854	308.5	259.6
RC196789	587823	6585856	306.9	228.5
RC196791	587927	6585852	305.5	275.7
RC196792	588030	6585854	308.8	152.5
RC196795	588130	6585854	310.7	168.0
RC196797	588222	6585850	313.7	250.3
RC196785	588326	6585854	312.2	244.8
RC196783	588425	6585849	312.5	208.4
RC196781	588524	6585844	314.8	275.4
RC196777	588626	6585839	295.9	573.3
RC196776	588722	6585839	305	445.5
RC196808	586758	6587409	319.1	167.9
RC196807	586727	6587308	312	535.0
RC196806	586699	6587219	308.7	259.4
RC196805	586678	6587114	311.9	400.6
RC196803	586659	6587014	312.6	535.0
RC196802	586635	6586919	311.4	117.2
RC196801	586623	6586820	306	254.6
RC196799	586604	6586726	304	160.6
RC196798	586581	6586621	302.3	88.1

APPENDIX D

Bencubbin AC Drilling- 2012 JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg 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.*	• Samples from AC drilling were collected in one metre intervals in a bucket at the rig with a cyclone-mounted cone splitter, and placed on the ground in a pre - cleared area • Four metre composites were then collected by spear sampling individual AC samples and loaded into a numbered calico bag • QAQC samples consisting of standards inserted into the sample sequence at a rate of 1 in 25 • Each AC sample (whether composite or individual split) weighed approximately one to three kilograms • All AC samples were sent to ALS Laboratories in Perth for crushing and pulverising to produce a 25 gram sample charge for analysis by fire assay. Multi-Element Ultra Trace method combining a four-acid digestion with ICP-MS instrumentation, performed with a combination of ICP-AES & ICP-MS. • 4m composite sample pulps were then tested for multielement including REE with ICP-AES & ICP-MS at ALS utilising ME-MS61R and bottom of hole samples were tested with a borate fusion followed by ICP-MS utilising ICP-MS81r • Drill holes were logged and sampled by a qualified and experienced Cygnus Gold geologist
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Sampling including QAQC was done under Cygnus Metals standard procedures • The laboratory also applied their own internal QAQC protocols
	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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	• AC holes were sampled over 1m intervals by cone-splitting • All samples are pulverised at the lab to 85% passing -75µm to produce a 25g charge for Fire Assay with an ICP-AES finish • Bottom of hole Samples were Assayed for Multielement through a four acid digest and MEMS61 • Bottom of hole Samples were assayed for REE through Borate fusion and MEMS81R • Composite clay/weathered samples were Assayed for Multielement through a four acid digest and MEMS61r • Samples are analysed by ALS Laboratories in Perth

Criteria	JORC Code explanation	Commentary
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Air core drilling with a blade bit was completed to "refusal", giving 1-2m of fresh bedrock sample • Drill holes were vertical • The program was supervised by experienced Cygnus Metals geologists
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.*	• One metre samples were collected in buckets via a cyclone on the rig • Sample recovery was estimated visually and was generally around 80-90% but may be as low as 30-40% in some near surface samples
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.*	• Samples were wet sieved and logged for colour, weathering, grain size, major lithology (where possible) along with any visible alteration, sulphides or other mineralisation • The entire hole is logged by experienced geologists employed by Cygnus Metals using Cygnus Metals' logging scheme • The level of detail is considered sufficient for early stage exploration of the type being undertaken here
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• Geological logging of core is qualitative and descriptive in nature • All chip trays are photographed
	The total length and percentage of the relevant intersections logged.	• All holes are logged over their entire length
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.*	• Samples were composited over 4m intervals with a 1m 'end of hole' sample also collected • Samples were generally dry • All samples were prepared at the ALS Laboratory in Perth. All samples were dried and pulverised to 85% passing 75µm and a sub sample of approximately 200g retained. A nominal 25g charge was used for the fire assay analysis. The procedure is industry standard for this type of sample and analysis • Sample sizes are considered appropriate given the particle size and the need to keep 4m samples below a targeted 3kg weight which meet the targeted grind size using LMS mills used in sample preparation by ALS

Criteria	JORC Code 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.*	• Samples were analysed using ALS method ME-MS61r which is a four-acid digest with an ICP-MS or ICP-OES finish depending on the element being reported with Cygnus requesting analyses for 48 elements and REE's. Four acid digestion is considered a 'near total' digest • Bottom of hole samples are potentially more resistive and thus assaying was conducted by ALS Geochemistry Perth using a lithium borate fusion at 1025 deg C followed by nitric + hydrochloric + hydrofluoric acid digestion of the melt and ICP-MS finish for a 32 element suite including the REEs and Y (ALS method ME-MS81)
	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.	• None used
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Laboratory QC procedures involve the use of internal certified reference material as assay standards, along with blanks, duplicates and replicates • Cygnus has submitted a mix of Certified Reference Materials (CRMs) and blanks at a rate of five per 100 samples • Umpire checks are not required for early stage exploration projects
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	• Significant results are checked by the Project Geologist and Exploration Manager
	The use of twinned holes.	• No drill holes were twinned
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• All field logging is carried out on a laptop digital software. Logging data is submitted electronically to the Database Manager based in Perth. Assay files are received from the lab electronically and all data is stored in the Company's SQL database managed by Expedio Ltd in Perth
	Discuss any adjustment to assay data.	• There were no adjustments to the assay data
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.*	• AC collars were located by handheld GPS, which are considered accurate to ±3m in Northing and Easting
	Specification of the grid system used.	• The grid system used is MGA94 Zone 50 (GDA94)
	Quality and adequacy of topographic control.	• Drill hole locations were determined by handheld GPS with a nominal accuracy of +/- 5 metres
	Data spacing for reporting of Exploration Results.	• Drill hole spacing is varied for each hole initially at 100m with some areas reduced to 50m • Spacing between lines is 250m, 400m and 1500m

Criteria	JORC Code explanation	Commentary
Data spacing and distribution		• The spacing is considered appropriate for this type of early exploration
	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.	• No resource estimation is made
	Whether sample compositing has been applied.	• Samples were composited over 4m intervals except for the 'end of hole' sample, which is a single, 1m sample of the last metre of drilling
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.*	• Drilling was vertical due to no known dip of stratigraphy. Clay horizons are horizontal and therefore vertical drill holes would provide the most unbiased sample
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Clay horizons are interpreted to be horizontal, no bias is considered to have been introduced by the drilling orientation
Sample security	*The measures taken to ensure sample security.*	• Samples are placed in calico bags which are placed in larger polyweave bags and transport to the laboratory in Perth by the supervising Cygnus geologist. Sample dispatches are accompanied by supporting documentation, signed by the site project geologist, which outline the submission number, number of samples and preparation/analysis instructions • Drill holes are logged prior to being sampled • ALS maintains the chain of custody once the samples are received at the preparation facility, with a full audit trail available via the ALS Webtrieve site
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• Sampling and assaying techniques are considered to be industry standard. At this stage of exploration, no external audits or reviews have been undertaken

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
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 drill holes reported here were all drilled within E70/5617 (Welbungin) which is owned 100% by Cygnus • The landownership within E70/5617 is mostly freehold with the exception of small reserves set aside by the government for infrastructure or nature conservation • Cygnus has Land Access Agreements according to the *Mining Act 1978* (WA) with the underlying landowners that own the ground • Cygnus has signed a standard Indigenous Land Use Agreement (ILUA) for E70/5169
	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.	• The Welbungin tenement (E70/5617) is in good standing with the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS). Cygnus is unaware of any impediments for exploration on this licence
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• No historical exploration has been completed on the tenement for REE deposits
Geology	*Deposit type, geological setting and style of mineralisation.*	• The Welbungin REE Project is located within granitic basement of the western Yilgarn Craton. Numerous pegmatite occurrences are known within the Mukinbudin district and the GSWA maps show pegmatite zones in the adjacent tenure on the Bencubbin (SH50-11) 1:250,000 geological map sheet. Recent geological interpretation from GSWA indicates numerous types of granites are present in the region. Cygnus Metals is exploring for ionic clay hosted REE enriched deposit • Several large pegmatite bodies have been mapped and, in many instances, quarried for either quartz or feldspar; these include the Mukinbudin pegmatite, Karloning pegmatite, Gillet's (Couper's) pegmatite and Cosh's (Whyte's North) pegmatite. These pegmatites are all intruding a quartz-monzonite host
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.*	• All requisite drill hole information is tabulated elsewhere in this release. Refer Appendix A of the release

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>Data aggregation methods</td><td>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</td><td>

Significant intersections given in Appendix 2 are weighted averages and a cut off grade of 800ppm TREO was applied with a maximum internal dilution of 4m allowed
Metal equivalents have not been applied
Standard conversion factors for elements have been used and are tabulated below

<table>
<tr><td>La_2O_3</td><td>1.173</td><td>Tb_4O_7</td><td>1.176</td></tr>
<tr><td>CeO_2</td><td>1.228</td><td>Dy_2O_3</td><td>1.148</td></tr>
<tr><td>Pr_6O_{11}</td><td>1.208</td><td>Ho_2O_3</td><td>1.146</td></tr>
<tr><td>Nd_2O_3</td><td>1.166</td><td>Er_2O_3</td><td>1.143</td></tr>
<tr><td>Sm_2O_3</td><td>1.16</td><td>Tm_2O_3</td><td>1.142</td></tr>
<tr><td>Eu_2O_3</td><td>1.158</td><td>Yb_2O_3</td><td>1.139</td></tr>
<tr><td>Gd_2O_3</td><td>1.153</td><td>Lu_2O_3</td><td>1.137</td></tr>
<tr><td></td><td></td><td>Y_2O_3</td><td>1.27</td></tr>
</table>

MREO = Pr_6O_{11} + Nd_2O_3 + Tb_4O_7 + Dy_2O_3
TREO = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O

</td></tr>
<tr><td></td><td>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.</td><td>

Intersection lengths and grades for all holes are reported as a down-hole, length weighted average of grades above a cut-off 800 TREO and may include ‘internal waste’ below that cut-off.
TREO: sum of CeO2, Dy2O3, Er2O3, Eu2O3, Gd2O3, Ho2O3, La2O3, Lu2O3, Nd2O3, Pr6O11, Sm2O3, Tb4O7, Tm2O3 and Y2O3
MREO = sum of Pr6O11 + Nd2O3 + Tb4O7 + Dy2O3

</td></tr>
<tr><td></td><td>The assumptions used for any reporting of metal equivalent values should be clearly stated.</td><td>

No metal equivalents are reported

</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
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 (eg 'down hole length, true width not known').*	• The geometry of the clay layers is interpreted from the limited data as flat and these intersections are interpreted as true thickness • Mineralised intercepts are assumed to be true width with drill holes drilled vertically
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.*	• Included elsewhere in this release. Refer figures in the body text • These images are deemed appropriate for the level of exploration completed
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 to avoid misleading reporting of Exploration Results.*	• All results with total assays are reported
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.*	• None
Further work	*The nature and scale of planned further work (eg 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.*	• Cygnus Metals intends to effectively test the extent of this REE clay enrichment once required government approvals are completed • Further work will include mapping, sampling and is likely to include additional air core drilling